GEOCHEMICAL REPORT

on the

MUN 1 - 80 MINERAL CLAIMS

YA 12387 - 450; YA 12487 - 493

Lat. 60°10'N; Long. 131°19'W.

Map 105B/3

WATSON LAKE, YUKON

by

J.C. STEPHEN

090446

March 1979

Work Done: July 11 - Aug. 28, 1978
By: J.C. Stephen Explorations Ltd.
Funded by: D.C. Syndicate

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

$1500.00

J.B. Craig

Resident Geologist or
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

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GEOCHEMICAL REPORT ON THE

MUN 1 - 80 MINERAL CLAIMS

INTRODUCTION

The MUN claim group was staked in March 1977 to cover a tungsten anomaly indicated by silt sampling on the north contact of the Seagull batholith.

During the summer of 1977 geological mapping, check silt sampling and some soil and talus sampling was carried out on the claim group. Results of this work were described in "Geological, Geochemical Report on the MUN 1-80 Mineral Claims" submitted in March 1978. During this program several small skarn zones were found which contained zinc and minor tungsten mineralization. In the vicinity of these skarns small pieces of float were found which fluoresced bright yellow. The mineralization causing the fluorescence was subsequently identified as malayaite and led to analysis of samples for tin content. A strong tin anomaly was indicated by silt samples more or less coincident with the tungsten anomaly.

The amount of mineralization located in outcrop during 1977 was not considered adequate to explain the strong geochemical anomalies and, in 1978, a second program of soil, talus and rock geochemical sampling was carried out in search of additional mineralization.

LOCATION AND ACCESS

Figure I Location Map

The claim group is situated approximately ten miles north west of Swift River at Mile 733 Alaska Highway. Due to the rugged topography access has been entirely by helicopter.

TOPOGRAPHY AND DRAINAGE

A relatively large creek flows north through the claim group and empties into the west end of Munson Lake. This creek is at an elevation of 4000 to 4400 feet in the central part of the claim group. On either side steep ridges rise to elevations of 6300 to 6500 feet.

Small tributary streams drain cirques which have developed on the flanks of these steep ridges and some small ponds and lakes lie within these cirques. Formation of the cirques appears to have been partially controlled by east-west faulting. The tributary streams are particularly anomalous for tungsten and tin in the south west portion of the claim group.

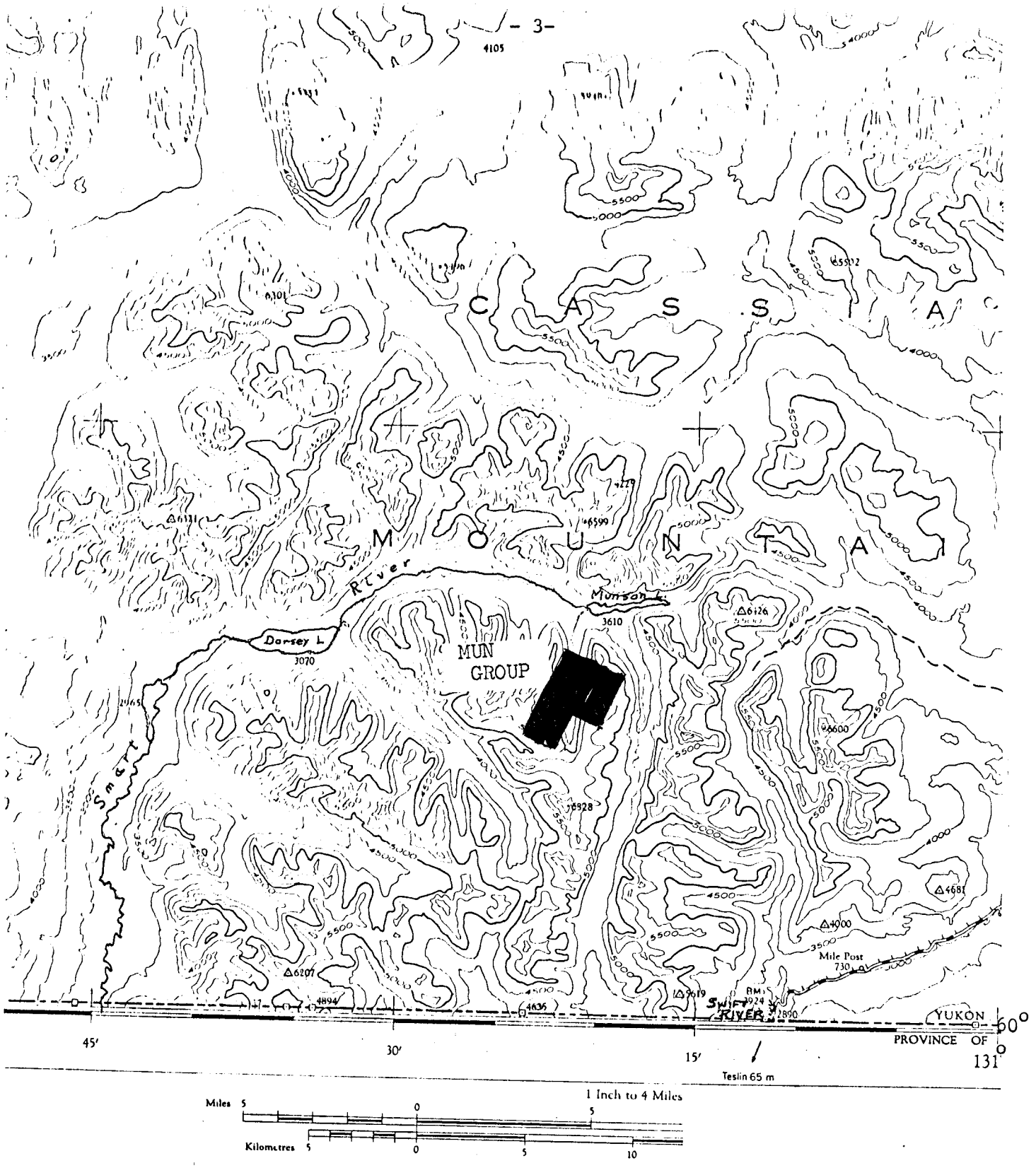

FIGURE 1.

LOCATION MAP
MUN GROUP

REGISTER OF CLAIMS

Figure 2 Group Sketch

NAME	RECORD NUMBERS	WORK PREVIOUSLY RECORDED TO	NEW WORK BEING SUBMITTED
MUN 1- 8	YA12387 - 394	March 7/80	-
9-16	YA12395 - 402	"	-
17-23	YA12403 - 409	March 7/79	Two years to Mar 7/81
24	YA12410	"	One year to Mar 7/80
25	YA12411	"	Two years to Mar 7/81
26-32	YA12412 - 418	"	One year to Mar 7/80
33,35,37,39	YA12419,21,23,25	"	One year to Mar 7/80
34,36,38,40	YA12420,22,24,26	"	Two years to Mar 7/81
41	YA12427	"	One year to Mar 7/80
42	YA12428	"	Two years to Mar 7/81
43-48	YA12429 - 434	"	One year to Mar 7/80
49-56	YA12435 - 442	March 7/80	-
57-64	YA12443 - 450	March 7/80	-
65-72	YA12478 - 485	March 21/80	-
73-80	YA12486 - 493	March 21/80	-

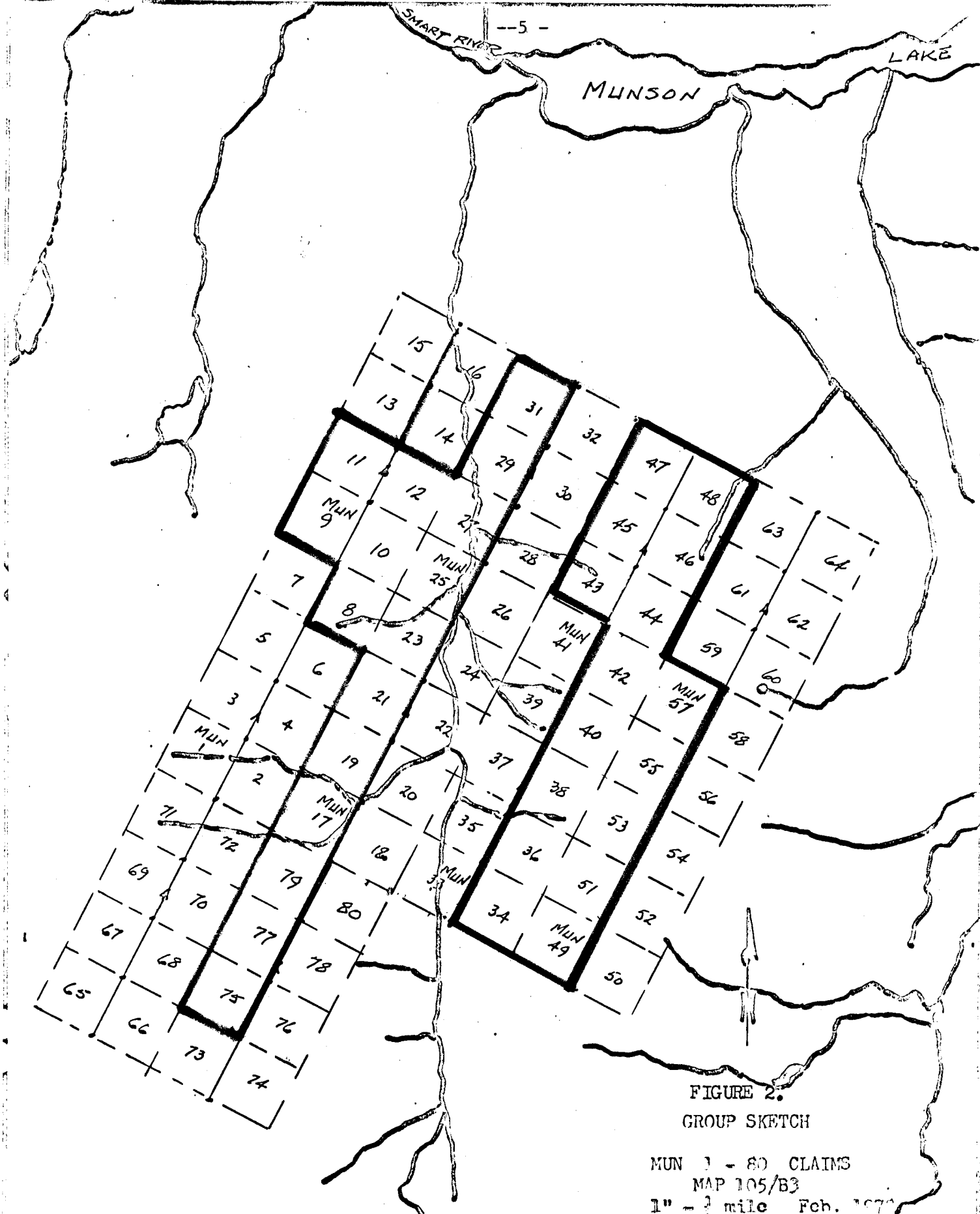

FIGURE 2.

GROUP SKETCH

MUN 1 - 80 CLAIMS
MAP 105/B3
1" = ½ mile Feb. 1979
Revised - March 1979

GEOLOGY

The 1" - 4 mile G.S.C. Map 10-1960 Wolf Lake is the main reference available for the regional geology. According to that map the claim group covers an area of Upper Devonian and Lower Mississippian sediments along the north contact of the Upper Cretaceous Seagull batholith.

The sediments have been mapped on the property as a south dipping sequence of quartzite, siltstone, argillite, hornfels, limestone and silicified limestone. Zones of skarn have developed in impure limey sections of the sedimentary sequence.

Interbedded with the sediments are volcanic formations consisting primarily of tuff and lapilli tuff. Some flows occur.

The intrusive rocks are primarily biotite quartz monzonite or granite of the Seagull batholith. Bodies of older quartz diorite and gabbro occur near the contact of the Seagull batholith in the southern part of the claim group. Younger alaskite dykes cut the intrusives and the sediments.

East west trending vertical faults offset the granite and sediments. Movement is indicated to be down on the north side but no data is available to indicate possible lateral movement. This is thought to be relatively small.

1978 PROGRAM

SUMMARY

Work on the MUN claims in 1978 was directed toward investigation of zones thought to be favourable for tin and tungsten mineralization. The zinc occurrences are considered too small to warrant further work. Skarn horizons in particular were examined since the malayaite float was in close proximity to these zones and considerable tin mineralization was known in skarn close to other portions of the Seagull batholith.

The east west fault zones were examined in search of possible greisen zones favourable for tin mineralization.

The Seagull batholith was examined in some areas and talus was sampled for possible tin or tungsten content.

Soil, talus and rock samples were collected as shown on Maps I and II with this report. Most of these samples were analysed for zinc, tungsten and tin but some of the rock specimens were analysed for several other elements.

Although anomalous amounts of zinc, tungsten and tin are present, particularly in the south west corner of the property, no significant mineralization was found.

GEOCHEMISTRY

SOIL AND TALUS SAMPLING

A total of 336 soil and talus samples were analysed for the following elements.

	NUMBER OF SAMPLES	DETERMINATIONS ZINC	TUNGSTEN	TIN	LEAD
Fine Fractions	227	227	225	226	-
Coarse Fractions	109	80	92	109	17
Totals	336	307	317	335	17

METHOD

Samples were taken along tape and compass traverses generally following the contour of the main ridges on the east and west sides of the main north flowing creek. Soil horizons in some areas were fairly well developed and the 'B' horizon was sampled. Where soil horizons were not developed the finest material available was collected. Where this material consisted of primarily rock fragments the samples were classed as 'talus'.

Samples were forwarded to the base camp where they were dried and seived through a 48 mesh screen. The -48 mesh material is classed as the 'fine fraction' for all samples and, in the case of the talus samples, the +48 mesh material was retained as the 'coarse fraction'. No further screening for size was done.

Samples were forwarded to Chemex Labs in North Vancouver where they were all pulverized to -200 mesh before analysis. This step is advisable to avoid segregation of heavy minerals in the sifted samples. More consistant geochemical values are thus obtained.

RESULTS

Figures 3, 4 and 5 are 'scatter plots' of the values obtained for zinc, tungsten and tin from samples for which both fine and coarse fractions were analysed.

For zinc, Figure 3, the fine fraction samples give generally higher results than do the coarse fractions. Fines average 392 ppm Zn, and the coarse average 217 ppm Zn. Values of 300 ppm and greater are colored yellow on Maps I and II. These are concentrated in the vicinity of known skarn deposits.

For tungsten, Figure 4, the mean of the fine fraction results is 29.8, and for the coarse fraction is 31.1 ppm W. This close correlation is indicated by the population shown in Figure 4. An exception is sample 63 which ran 210 ppm W in fines and +800 ppm W in the coarse fraction. Values greater than 20 ppm W are shown in green on Maps I and II but only values over about 100 ppm should, in fact, be considered anomalous. Sample 63, together with some other high values, occurs down slope from a mapped skarn on MUN 75. A second zone of high values occurs near the north side of MUN 77. No apparently anomalous values occur in the east cirque north west of Peak D.

The tin values, Figure 5, average 47 ppm Sn in fines and 56 ppm Sn in coarse fractions. Values of 20 ppm and greater are shown in red on Maps I and II. Only values greater than 100 ppm probably should be considered anomalous and, at that level, only the zone on MUN 75 and 77 shows a significant anomaly. Some mineralized float was reported in this vicinity in 1977 but could not be relocated later in that season

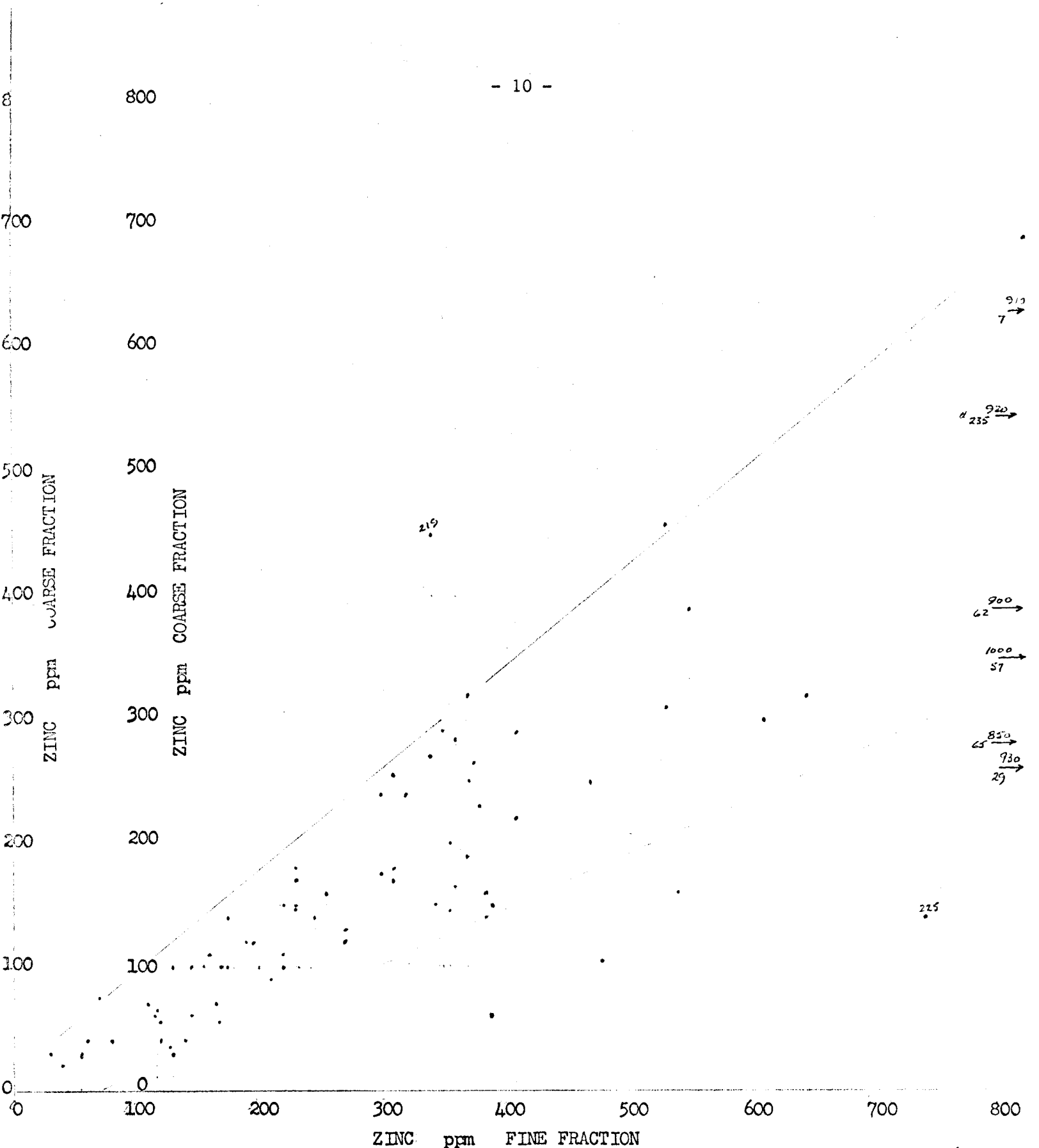

FIGURE 3.

MUN CLAIM GROUP 105B/3
ZINC RESULTS
COMPARISON OF COARSE AND FINE FRACTIONS
March 1979

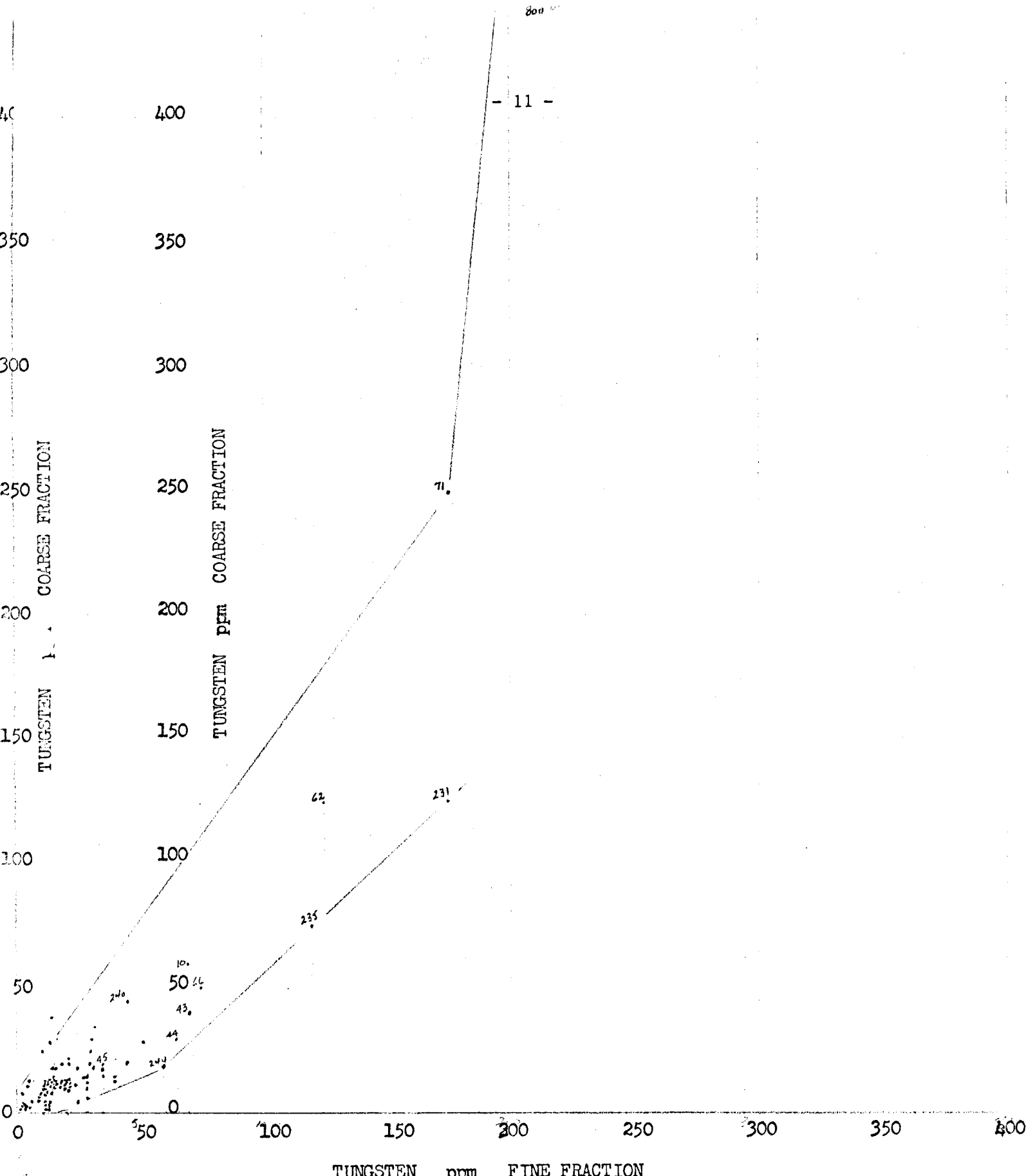

FIGURE 4.

MUN CLAIM GROUP 105B/3
TUNGSTEN RESULTS
COMPARISON OF COARSE AND
FINE FRACTIONS
March 1979

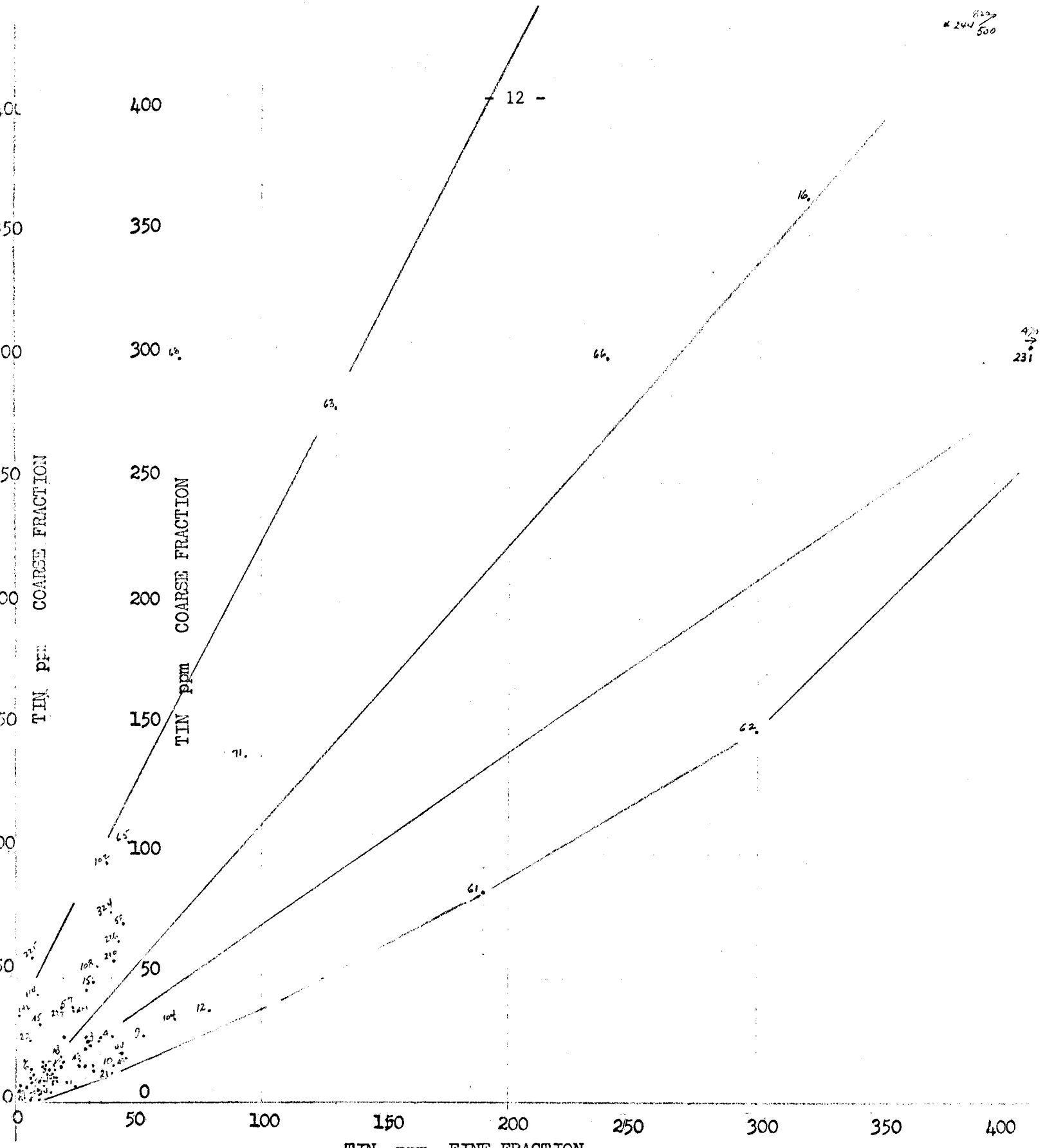

FIGURE 5.

MUN CLAIM GROUP 105B/3
TIN RESULTS
COMPARISON OF COARSE AND
FINE FRACTIONS
March 1979

On MUN 45 the new sampling returned only one 'kick' of 24 ppm Sn which is somewhat down hill from the 1977 samples which ran 15 - 75 ppm Sn. It is possible some further sampling should have been done further up hill but prospecting of the ridges in that area failed to find anything of interest.

ROCK GEOCHEMISTRY

Rock specimens were collected at several sites indicated on Maps I and II by sample numbers. These were run for various elements as listed in Table I.

TABLE I

MUN - ROCK GEOCHEMISTRY

SAMPLE NUMBER	DESCRIPTION	ELEMENTS Zn	W	Sn	Cu	Pb	Ag	Au	Nb	Ta	U
29036	Epidote garnet skarn with sphalerite	+4000	-	40	22	-	.6	-10ppb			
29047	Heavy sphalerite, galena	10.6%	-	10	-	2300	.96oz	-			
53501	Light green garnet skarn			1							
53503	Fract.diorite/tourmaline and quartz			30							
66501	Narrow greisen type qtz vein	60		5							
66503	Tourmaline in white qtz vein			30							
66519	Qtzite with minor hematite			6							
66520	Limestone,yellow fluor	174	-	19	-	12					
66521	Limestne,minor sphal	+4000	-	1	-	20					
66522	Pale green skarn			1							
66523	Rusty garnet skarn		2	1							
66524	Rusty,silicified,pyrr, py,cpy	14	-	1	505						
66525	Dark green skarn			6							

SAMPLE NUMBER	DESCRIPTION	ELEMENTS									
		Zn	W	Sn	Cu	Pb	Ag	Au	Nb	Ta	U
66593	Granite	-	-	2					100	-50	
66594	Rusty granite, bright green and orange fluorescence			3					100	-50	20
66595	Rusty greenish greisen			1							
66596	Dark limonite	+4000	2	2	-	34					
66597	Garnet skarn, cpy, sphal	2250	-	1	58						
66598	Talus fines from fault; east cirque			14					60	50	
66599	Magnetite, barite skarn		4	18							

No significant tin or tungsten was found in any of the zones sampled. The green fluorescence in sample 66594 is probably due to secondary uranium minerals. Similar green fluorescence was observed on the GULL claims and in the sediments east of Dorsey Lake.

L.A. Dick reports (verbal communication) identifying cassiterite in coarse dark green skarn on MUN 79 near where one of the malayaite floats was found.

OBSERVATIONS

Soil and talus samples were taken on lines crossing the granite-limestone contact on MUN 40,42,55,57 where it was thought earlier sampling may have been too high on the hillside. Although anomalous values are indicated for zinc approximately on the projected position of skarn horizons there is no indication of an important tin or tungsten anomaly.

Samples taken along the ridge to the north, along the east side of the valley, failed to enlarge on results previously obtained. Rock geochem results in the area gave negative results.

Along the west side of the valley soil geochem indicates the approximate position of some zinc bearing skarn horizons but no significant tin or tungsten appears to be present.

South of the East cirque soil and talus samples were taken well into the garnite area. A few isolated values were obtained for zinc, tungsten and tin but none are very high. The source of these values is in doubt. The cliff walls are extremely steep and some minor mineralization may occur in east west trending fracture zones. Most of the granite, however, is massive and well jointed, and the rusty appearance may be due more to biotite than to sulphides.

The only anomaly of some merit occurs in the south west part of the claims on MUN 75 - 80. These values are probably a reflection of the small skarn zones mapped along the cirque wall above the small lakes and at the top of the ridge.

CONCLUSIONS

There has been insufficient direct examination of the main east west fault zones for possible greisen development.

Although some tin is probably present the skarn zones in the northern and eastern parts of the claim group are essentially barren and no further work is proposed.

The anomaly in the south west part of the claim group merits further examination in view of the distribution of tin values and identification of cassiterite in skarn by L.A. Dick. Any favourable looking zones should be chip sampled for assay. If results are essentially negative it is recommended the claim group be abandoned.

Respectfully submitted,
J.C. Stephen Explorations Ltd.
for D.C. Syndicate

J.C. Stephen Manager

FOR LEGEND SEE MAP 2

MAP 2

MAP 1

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J.C. STEPHEN EXPLORATIONS LTD.

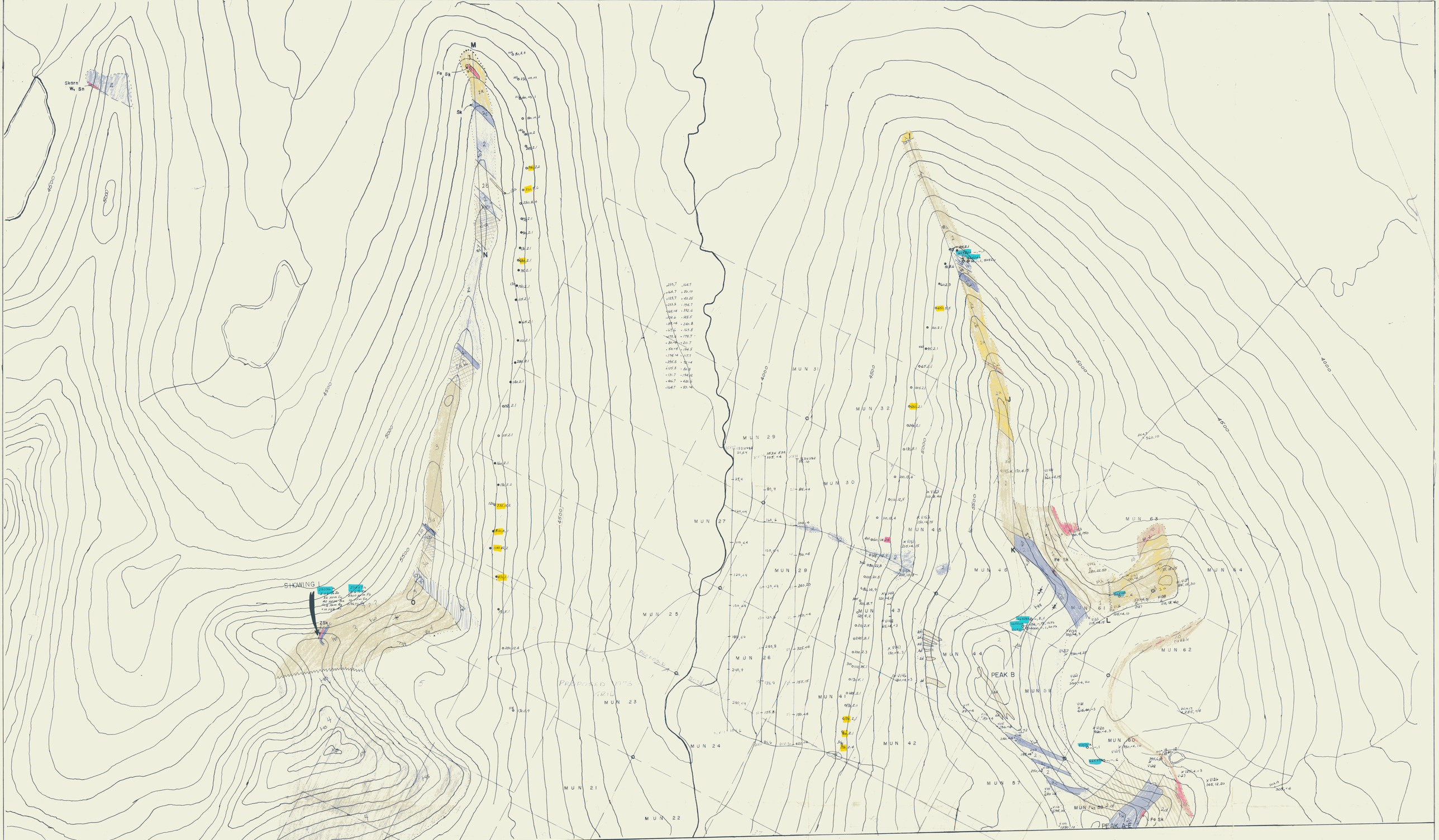
D.C. SYNDICATE
MUN CLAIM GROUP

GEOLOGY AND GEOCHEMISTRY

105 B/3W

500 250 0 feet 500 1000 Sept/77

MAP 1



SYMBOLS

- LIMIT OF OUTCROP, OVERBURDEN OR TALUS
- SYNCLINE
- CONTACT
- INFERRED CONTACT
- FAULT
- POSTULATED FAULT
- BEDDING, VERTICAL
- SK CALC SILICATE SKARN
- SSK SCHEELITE BEARING SKARN
- ZSK ZINC BEARING SKARN
- TSK TIN BEARING SKARN
- FESK IRON BEARING SKARN
- 112,712 TALUS, SOIL OR SILT SAMPLE Zn,W,Sn p.p.m.

LEGEND

- 1 SILTSTONE, argillaceous, thinly laminated, rusty
  - 1a QUARTZITE, thinly laminated, rusty
  - 1b LIMESTONE, white, coarsely crystalline
  - 1c SILICIFIED LIMESTONE, quartzite interbeds
- 2 LIMESTONE, white, coarsely crystalline
  - 2a LIMESTONE, SILTSTONE, QUARTZITE, tuffaceous interbeds
  - 2b QUARTZITE, rusty
  - 2c SILICIFIED LIMESTONE
  - 2d SILTSTONE, argillaceous, dark grey
- 3 TUFF, LAPILLI TUFF, SILTSTONE
  - 3a TUFFACEOUS SEDIMENT, TUFF, LAPILLI TUFF
  - 3b LIMESTONE, tuff interbeds
  - 3c LIMESTONE, SILICIFIED LIMESTONE
- 4 META TUFF, META SEDIMENTS
- 5 SILTSTONE, argillaceous, dark grey, rusty
- 6 SILICIFIED LIMESTONE, LIMESTONE
- 7 SILTSTONE, HORNFELS, ARGILLITE, rusty
- 8 GABBRO TO DIORITE
- 9 QUARTZ DIORITE
- 10 LEUCO QUARTZ MONZONITE TO GRANITE
  - 10a ALASKITE DYKES

MAP 2

MAP 1

N

J.C. STEPHEN EXPLORATIONS LTD.

D.C. SYNDICATE
MUN CLAIM GROUP

GEOLOGY AND GEOCHEMISTRY

105 B/3W

500 250 0 feet 500 1000 Sept/77