

REPORT ON STADIA MAPPING
AND SAMPLING PROGRAM

MUN 1 - 80

YA 12387 - 450; YA 12478 - 493 MINERAL CLAIMS

MAP 105B/3

Latitude 60°10'N;

Longitude 131°19'W

WATSON LAKE MINING DIVISION

YUKON

by

J.C. STEPHEN

Work Done August 1979

February 1980

By J.C. Stephen Explorations Ltd.

Funded by D.C. Syndicate

090565

This report has been examined by the
Geological Examination Unit and is recom-
mended to the Department to be consider-
ed as representing work to the amount of
\$ 5,400.00

J. A. Morin

Geological Engineer or
Mining Engineer

Considered as presentation work under
Section 84 of the Quartz Mining Act.

B. R. Baxter

Supervising Mining Recorder

for Commissions of Yukon Territory

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REPORT ON STADIA MAPPING
AND SAMPLING PROGRAM

MUN 1 - 80

MINERAL CLAIMS

INTRODUCTION AND SUMMARY

During 1978 a program of talus sampling was conducted on the MUN 1 - 80 which outlined a strong tin anomaly in the south west portion of the claim group. (Geochemical Report on the MUN 1 - 80 Mineral Claims, March 1979). This anomaly is located south of small skarn zones which contain sphalerite, scheelite and malayaite and is located upstream from the original silt anomalies which were the cause of staking the claim group. Only preliminary mapping had been done and an occurrence of malayaite bearing float had been reported.

The 19~~80~~⁷⁹ program was intended to:-

- (a) check sample the main anomalous talus sites
- (b) survey and map the zone at 1" - 100'
- (c) chip sample outcrops in the vicinity of the anomaly for geochemical determination of tin content.

It was expected tin would be associated with one or another rock type and that geological mapping would indicate the extent of the favourable rock. During mapping fractured, rusty quartzitic sediments with minor sulphide mineralization and various types of skarn were considered to be the most favourable rocks. Extensive chip sampling was done.

When sample results were received an almost total lack of tin mineralization was indicated. Check analysis of talus samples has been done since which indicates variations in the type of material originally sampled. Some tin is indicated in skarn material but no source of significant tin content has been located. Talus sampling on the south west slope of the mountain indicates no significant anomalies.

Further investigation is proposed in an effort to isolate the source of the tin found in portions of the talus slope.

LOCATION AND ACCESS

The MUN 1 - 80 claims are located approximately 10 miles north west of Swift River (Mile 733, Alaska Highway). Munson Lake lies to the north of the claim block as shown on Figure I.

Claim names and grouping applied for in this assessment report are shown on Figure II.

The claim group is approximately bisected by a north trending valley which may represent a zone of weakness or faulting. Elevations range from 3800 feet in the valley at the north boundary to 6300 feet on the peak in the south west part of the claim group.

Access to the property during 1979 was entirely by helicopter from Swift River.



FIGURE I
LOCATION MAP
MUN GROUP

REGISTER OF CLAIMS

FIGURE II GROUP SKETCH

<u>NAME</u>	<u>RECORD NUMBERS</u>	<u>WORK PREVIOUSLY RECORDED TO</u>
MUN 1 - 16	YA 12387 - 402	March 7, 1980
17 - 23	YA 12403 - 409	March 7, 1981
24	YA 12410	March 7, 1980
25	YA 12411	March 7, 1981
26 - 33	YA 12412 - 419	March 7, 1980
34	YA 12420	March 7, 1981
35	YA 12421	March 7, 1980
36	YA 12422	March 7, 1981
37	YA 12423	March 7, 1980
38	YA 12424	March 7, 1981
39	YA 12425	March 7, 1980
40	YA 12426	March 7, 1981
41	YA 12427	March 7, 1980
42	YA 12428	March 7, 1981
43 - 64	YA 12429 - 450	March 7, 1980
65 - 80	YA 12478 - 493	March 21, 1980

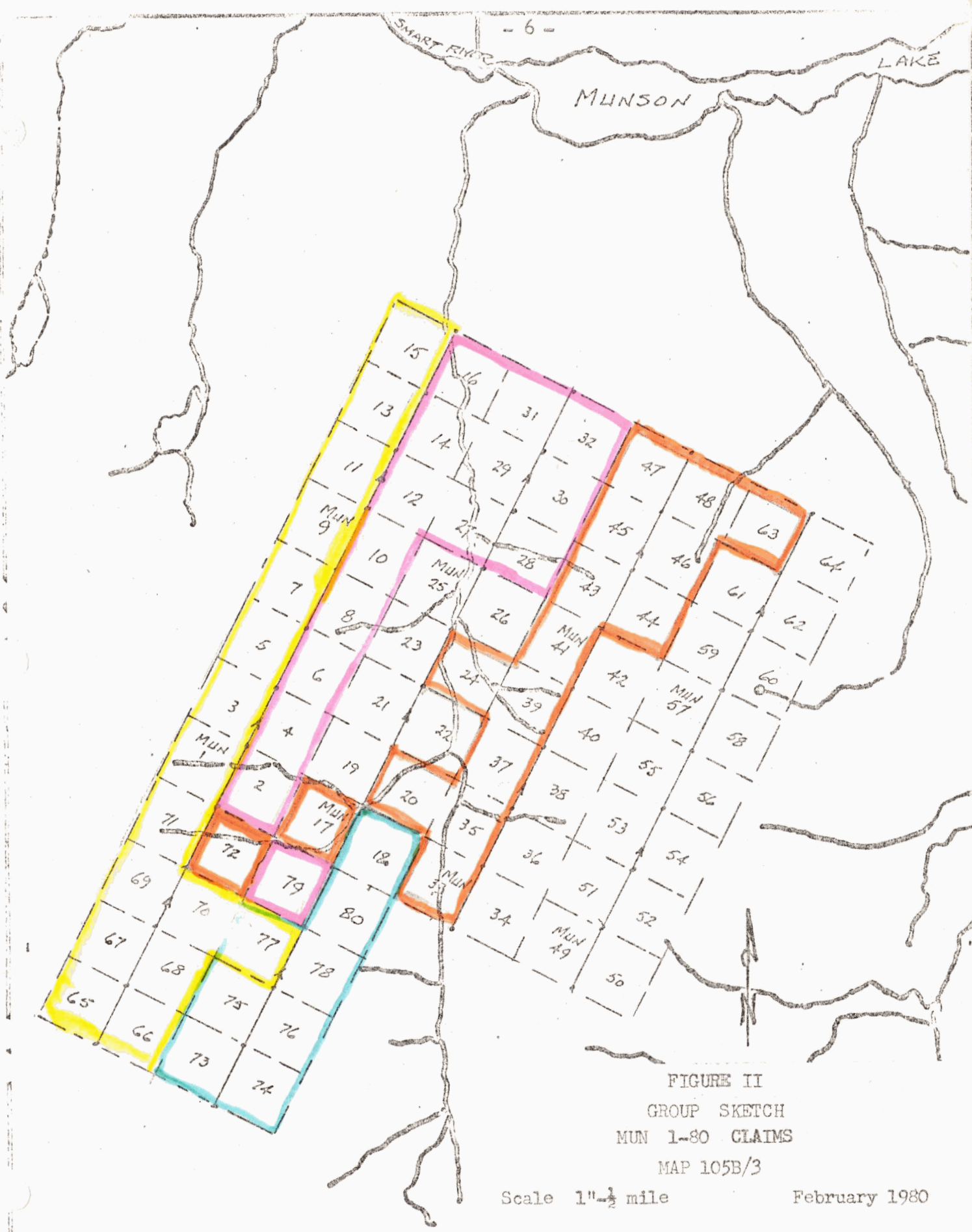


FIGURE II
GROUP SKETCH
MUN 1-80 CLAIMS
MAP 105B/3

Scale 1" = 1/2 mile

February 1980

TALUS ANOMALY

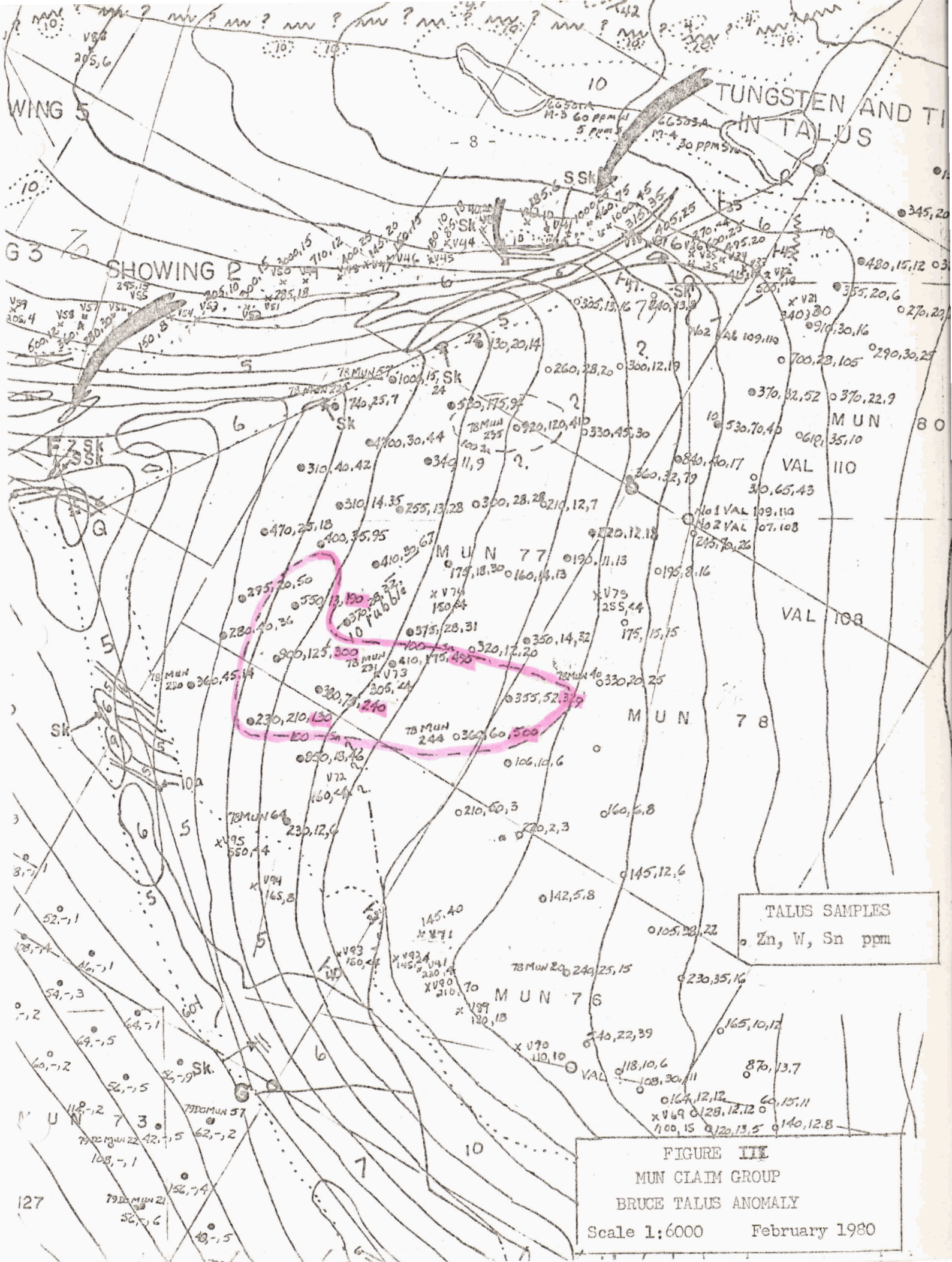
1978 RESULTS

Figure III depicts the 1978 talus anomaly as it was shown on Map I Geology and Geochemistry submitted with "Geochemical Report on the MUN 1 - 80 Mineral Claims, March 1979". Locations were as indicated by tape and compass survey. Samples consisted of the finest grained material readily available at each location.

Values for the original seven anomalous samples were:-

<u>Sample No.</u>	<u><48 mesh</u>			<u>>48 mesh</u>		
	<u>Zinc</u>	<u>Tungsten</u>	<u>Tin</u>	<u>Zinc</u>	<u>Tungsten</u>	<u>Tin</u>
61	550	13	190	390	13	85
62	900	125	300	390	125	150
63	230	210	130	150	800	280
66	380	75	240	230	50	300
231	410	175	490	220	125	305
244	360	60	500	-	18	820
16	355	52	320	200	28	365

Sample material was pulverized to 200 mesh before analysis.



1979 PROCEDURE

Talus sample locations had been marked by wires with small plastic flags inscribed with the sample numbers. Not all of these could be found in 1980 but those located are shown on Map I: Geology 1" - 100'. At each sample site located a five foot radius was examined for rock types and a chip sample was taken from each rock type. In addition a sample was taken of the finest rock fragments available to be picked up by hand. These samples were analysed for zinc and tin and results are shown in Table I. Each site was examined by ultra violet lamp, no significant scheelite or malayaite was found at these points.

- 10 -
TABLE I
CHECK TALUS SAMPLING

<u>1978</u>	<u>78 D.C. MUN LOCATIONS</u>						
<u>SAMPLE</u>	<u>66</u>	<u>62</u>	<u>61</u>	<u>16</u>	<u>8</u>	<u>244</u>	<u>71</u>
Sn	240	300	190	320	105	500	94
Zn	380	900	550	355	700	360	530
W	75	125	13	52	28	60	175

1979 FINES

Sn	68	115	110	240	1	20	24
Zn	270	470	430	176	66	240	260

INTRUSIVE FRAGMENTS

Sn				9		11	
Zn				32		36	

SKARN FRAGMENTS

Sn	1	1		2	29	10 72	1 3
Zn	152	66		56	250	92 260	40 180

RUSTY SEDIMENTS

Sn	2	1	1	3		2	1
Zn	66	84	46	42		66	38

LIMESTONE, PARTLY SKARNED

Sn		3				75	
Zn		152				1550	

CHERTY SEDIMENT (RHYOLITE?)

Sn			2				
Zn			58				

UNIDENTIFIED FRAGMENTS

Sn				>1000			
Zn				20			

TALUS RESEARCH

Check determinations in duplicate were made for tin by Chemex Labs and a third check was made after rigorous drying of the samples at no cost to D.C. Syndicate. All values checked within acceptable tolerances. It was then evident that there were significant differences in the character of the samples collected. Analysis was made for tin, loss on ignition and % iron on a selection of samples. Results are shown as Table II.

The following differences are indicated:-

- (1) the 1978 samples were of the finest material available and in several cases it was noted that the samples were collected from mossy or grassy portions of the mountain slope. Many of these could be more accurately described as soil samples.

The 1979 talus fines were small 1/8" - 1/2" rock fragments from the 5 foot radius after larger rock fragments had been removed to facilitate collection.

- (2) as a result of sampling technique the 1978 samples average 8.94% organic as indicated by L.O.I. as compared to 3.97% for the 1979 samples.
- (3) the 1978 samples average 5.585% Fe as compared to 4.27% in the 1979 samples
- (4) those samples, No's 8 and 244, with the most significant differences in tin values also have significant differences in L.O.I. and Fe%. Other differences are generally of the same sense though not so marked. These differences may have important implications in locating the source of the tin.



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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50572A

INVOICE NO. 34538

RECEIVED

ANALYSED

T A B L E I I



MEMBER
CANADIAN TESTING
ASSOCIATION

CERTIFIED BY:

SURVEY PROCEDURE

The east facing talus slopes which encompass the main anomalies were surveyed by stadia methods and are plotted on Map I Geology 1" - 100'. Claim posts, rock outcrops, some contacts, talus sample locations and topography were surveyed. The survey commenced at No. 1 post MUN 79, 80 and was oriented in accordance with a north bearing established by Brunton compass. Check shots were taken on overlapping stations periodically to ensure control. Closures, for plotting purposes at this scale, were remarkably accurate for stadia on these relatively steep slopes. Credit is due Henry Awmack for careful work.

Stadia points were marked by flagging and will not survive the elements for long. Instrument stations were marked by flagging but were also painted and should be evident for two or three years.

Initial elevations were set arbitrarily to coincide as closely as possible to 1:50,000 scale map contours.

ROCK CHIP SAMPLING

PROCEDURE

Rock outcrop areas in the vicinity of the main tin anomaly have been surveyed by stadia and are shown on Map I. These outcrop areas were examined and lines were painted across the most continuous rock exposures. These lines were marked off at intervals of 3 to 20 feet depending on rock type, mineralization and fracturing. Rock chip samples were then taken from each of these intervals. Samples consisted of a two to five pound collection of fine rock chips taken by hammer, or hammer and moil, from the exposed rock surface at regular intervals within the sample interval.

RESULTS

Locations of sampled lines are shown on Map I and sample results are listed in the following Tables III and IV.

CONCLUSIONS

No significant tin content is indicated on these chip sample lines. Traces of tin are evident in skarn on lines E and F in Table III and one anomalous sample occurs in tuffaceous sediments on line F.

Table IV lists results of short sample sections from skarn zones in the north east part of MUN 79. No mineralization of ore grade is indicated.

T A B L E III
MUN CHIP SAMPLES

SAMPLE LINE A

<u>SAMPLE NO.</u>	<u>LOCATION</u>	<u>Sn ppm</u>	<u>Zn ppm</u>	<u>W ppm</u>	<u>ROCK TYPE</u>
84751	0 -11' S. of St 32	1	86		Rusty quartzite
84752	0 -14' N. of St 32	1	52		Fine gr. Intrusive

SAMPLE LINE B

84753	0 -19' S. of St 34	1	124	1	Skarn
84776	0 - 8' S. of St 35	1	58	1	Rusty Quartzite
84777	19-25' S. of St 35	1	184	1	Rusty Quartzite

SAMPLE LINE C

84754	0 -16' S. of H-13	2	58	14	Fine gr. Intrusive
84755	0 -23' N. of H-13	5	48		Fine gr. Intrusive

SAMPLE LINE D

84756	0 -12' S.25' above H-12	1	92		Rusty Quartzite
84757	12-27' S. of H-12	1	68		" " + volcanics
84778	27-40'	1	74	4	" " "
84779	40-52'	5	48	4	Rusty volcanics
84758	52-70'	4	54		" "
84759	70-88'	2	42		" "
84780	88-108'	3	126	12	" "
84760	108-122'	5	74		" "
84781	122-142'	1	350	1	Calc-silicate skarn
84761	142-154'	3	102		Dark green skarn
84762	154-173'	1	74		Pale skarn, Siliceous seds.

TABLE III CONT'D

SAMPLE LINE E

<u>SAMPLE NO</u>	<u>LOCATION</u>	<u>Sn ppm</u>	<u>Zn ppm</u>	<u>W ppm</u>	<u>ROCK TYPE</u>
84763A	48' N of HIT o' - 6'S	1	52		Skarn & rusty sediments
84782A	HIT 48 - 60'	2	76	5	Rusty sediments
84764A	60 - 66	1	32		Rusty sediments
84783A	66 - 69	3	182	1	Skarn, andesite
84765A	69 - 81	2	34		Rusty tuuf sediments pyrite
84784A	88 - 96	1	44	1	Rusty tuuf sediments
84766A	195 - 206	1	68		Rusty tuuf sediments
84785A	206 - 218	1	44	1	Rusty tuuf sediments
84767A	224 - 236	1	34		Rusty tuuf sediments
84768A	236 - 247	1	50		Rusty tuuf sediments
84786A	251 - 266	1	70	2	Rusty tuuf sediments
84769A	266 - 280	2	52		Rusty tuuf sediments
84787A	280 - 299	29	590	2	Light colored skarn
84788A	299 - 305	7	106	6	Limestone
84770A	305 - 320	2	56		Skarn, tuffaceous sediments
84789A	320 - 334	3	188	6	Siliceous skarn, siliceous seds
84777A	334 - 345	160	178		Skarn
84772A	345 - 365	1	82	10	Calc silicate skarn
84790A	365 - 380	2	72	1	Calc silicate skarn
84773A	380 - 400	1	66	15	White silicious sediments

TABLE III CONT'D

SAMPLE LINE F

<u>SAMPLE NO.</u>	<u>LOCATION</u>	<u>Sn ppm</u>	<u>Zn ppm</u>	<u>W ppm</u>	<u>ROCK TYPE</u>
84791	H-22 0 - 7'S	1	120	1	Silicious skarn
84774	7 - 12	12	130	1	Dark green skarn
84775	12 - 22	1	86	2	Rusty sediments and skarn
84651	H-22 0 - 15N	65	345		Rusty tuffaceous sediments
84652	15 - 30	6	106		Rusty tuffaceous sediments
84653	30 - 45	7	82		Rusty tuffaceous sediments
84654	45 - 60	5	76		Rusty tuffaceous sediments
84655	60 - 70	2	92		Rusty tuffaceous sediments
847656	70 - 85	2	80		Rusty tuffaceous sediments
847657	85 - 100	1	106		Rusty tuffaceous sediments
84796	100 - 115	1	132	12	Rusty tuffaceous sediments
84796	115 - 130	1	126	1	Rusty tuffaceous sediments
84794	130 - 146	1	76	1	Rusty tuffaceous sediments
84793	146 - 162	3	94	2	Rusty tuffaceous sediments
84792	162 - 177	4	94	1	Rusty tuffaceous sediments
84797	216 - 228	1	114	1	Rusty quartzite - cherty
84658	228 - 237	1	76		Rusty tuffaceous sediments
84798	237 - 248	3	50	1	Rusty tuffaceous sediments

TABLE III CONT'D

SAMPLE LINE G

<u>SAMPLE NO.</u>	<u>LOCATION</u>	<u>Sn ppm</u>	<u>Zn ppm</u>	<u>W ppm</u>	<u>ROCK TYPE</u>
84659	77'Wof H-6 0 - 15'S	1	60		Rusty tuffaceous sediments
84799	26 - 30	1	124	1	Rusty tuffaceous sediments
84660	79 - 89	1	52		Rusty tuffaceous Volcanics
84800	89 - 99	1	92	1	Rusty tuffaceous sediments
84661	112 - 127	1	172		Rusty tuffaceous sediments
84676	127 - 140	1	86		Rusty tuffaceous volcanics
84662	140 - 155	1	92		Rusty tuffaceous sediments
84677	155 - 170	1	136		Rusty tuffaceous sediments
84663	170 - 185	1	58		Rusty tuffaceous sediments
84678	185 - 200	1	98		Rusty tuffaceous sediments
84664	200 - 215	1	68		Rusty tuffaceous sediments
84679	215 - 230	1	70		Rusty tuffaceous sediments
84665	230 - 245	1	62		Rusty tuffaceous sediments
84680	245 - 260	2	78		Rusty tuffaceous sediments
84666	260 - 270	3	116		Rusty tuffaceous sediments

SAMPLE LINE H

84681	78DC MUN65 96S - 110S	1	430		Skarn white siliceous
84667	110 - 123S	1	110		Skarn white siliceous

Sample 84674, Table IV is from an east striking fracture zone in granite. This zone consists of near vertical fractures striking N 75° E which control the shape of the granite outcrops. Quartz, tourmaline (schorl) and small amounts of arsenopyrite occur along the zone. This system is part of an east striking fault structure which trends across the property and is exposed on the peaks to the east.

Miscellaneous talus samples listed in Table IV are from various types of skarn from several talus runs on MUN 79. These talus runs develop from skarn exposures which are generally thin and whose dip slope approximate the slope of the talus covered hillside. Ultra violet lamping of these talus areas shows scattered scheelite and malayaite mineralization but no large zones of significant mineralization were located.

T A B L E IV

NORTH EAST MUN 79

<u>SAMPLE NO.</u>	<u>LOCATION</u>	<u>Sn ppm</u>	<u>Zn ppm</u>	<u>W ppm</u>	<u>ROCK TYPE</u>
84669	15'E of C14 0 - 3'	25	330	8	Skarn
84682	30'SE of C14 0 - 2'	17	184	80	Thin laminated skarn
84670	40'NW of J8 0 - 6'	21	2400	1	Skarn and quartz vein
84671	J7 0 - 7N	33	260	10	Skarn
84672	7 - 21N	5	106	1	Skarn and tuffaceous sediments
84673	38 - 41N	18	435	4	Skarn
84674	16W 2 + 50 S of Upper Lake	220	16	5	Granite with arseno

MISCELLANEOUS TALUS SAMPLES

53524	SE MUN 79, NE MUN 77	>1000	-	>400	Rusty skarn collected by G.S.W. Bruce. Composite of four samples showing scheelite and malayaite.
53525	SE MUN 79, NE MUN 77	5		4	Limestone garnet skarn collected by G.S.W. Bruce. No flourescence
53526	SE MUN 79, NE MUN 77	380		200	Composite of small rusty skarn fragments. Little fine scheelite Collected by G.S.W. Bruce
53527	SE MUN 79, NE MUN 77	120	>4000	>400	Composite of larger rusty skarn pieces. Hydrozincite, rare scheelite, arseno collected by G.S.W. Bruce.
53528	SE MUN 79, NE MUN 77	19	170	60	Small rusty siliceous talus with galena by G.S.W. Bruce 0.6 ppm Ag 12 ppm Pb
53529	SE MUN 79, NE MUN 77	27		7	JCS Dark red garnet and epidote skarn talus
53530	SE MUN 79, NE MUN 77	87		275	JCS Dark green fibrous skarn talus
53532	Unit 4	45		6	JCS Light siliceous skarn with sulphides.
53531	SE MUN 79, NE MUN 77	4		20	Pale green and pink siliceous skarn talus.

1979 TALUS SAMPLING

Three lines of talus samples were taken along the trend of the south west slope of the mountain to the west of the Bruce anomaly. Results are shown on Figure IV at 1:6000.

Of the 57 samples thirteen returned values over 100 ppm zinc with a high of 230 ppm. These results are relatively low although slightly anomalous.

Tin values above 10 ppm were obtained at only two locations with a high of 24 ppm. No anomaly is indicated.

Tungsten values were not determined. Sample sites were examined by ultraviolet light and no scheelite was found.

GEOLOGY

<u>ROCK TYPES</u>	<u>MAP I</u>
	5 Seagull Batholith - quartz monzonite
	4 Skarn
	3 Limestone
	2 Quartzite, siltstone, argillite
	2a Chert, pale siliceous sediments
	1 Volcanics, flows dykes, tuff

VOLCANICS Unit 1

West of the twin lakes in the cirque in the northern part of Map I a west trending linear structure filled with talus and overburden separates tuffaceous volcanics on the north from phases of the Seagull batholith to the south. Between the lakes outcrops of volcanics cap the higher ridges but are probably underlain at very shallow depth by the batholith.

The volcanics are relatively massive, dark green tuffs, breccia and lapilli tuffs. They are relatively unaltered in appearance with indistinct to locally well developed bedding.

The small exposures mapped as Unit 1 in the centre of MUN 79 are thin and interbedded with sediments. They are intermixed with argillaceous sediments and much of the talus in the area was described as tuffaceous argillite.

Near the north side of MUN 75 an exposure of volcanics includes possible flows, fairly massive tuff and some coarse grained green volcanic sandstone.

QUARTZITE, SILTSTONE, ARGILLITE Unit 2

The greater part of this unit consists of a fine grained grey siliceous quartzite to argillaceous quartzite with small amounts of fine disseminated pyrite. This rock occasionally contains minor pyrrhotite and chalcopyrite and weathers a light to fairly dark rusty color.

The rock is generally hard and brittle fairly thin bedded and cut by many fine fractures.

The siltstone variety is fine grained, relatively massive black rock which weathers very dark brown. Very fine pyrite mineralization is sparsely disseminated.

Argillite is a grey to black thin bedded rock, sometimes sheared, interbedded with or gradational to other varieties. It is commonly rusty weathering particularly along bedding planes.

In the south portion of the area mapped a sequence of relatively pure quartzites overlies beds of skarn, chert and limestone. This quartzite is generally light to white in color, hard fine grained and massive.

2a Chert This is a fine grained highly siliceous chert which may grade into the pure quartzites or into "silicified" limestone and pale calc silicate skarn. No petrographic work has been done on these rocks.

LIMESTONE Unit 3

Grey to white limestone constitutes a relatively small proportion of the rock units mapped. The limestone is normally dirty grey in color and thinly bedded. Locally relatively pure limestone, white and massive occurs. Much of the white weathering rock on the cliff face above the twin cirque lakes and in the south portion of the area mapped consists of unit 2a with interbeds of thin bedded limestone.

SKARN Unit 4

Skarn is poorly exposed and quite variable in nature. It may be almost white in color and gradational into Unit 2a as along the strong skarn zone in sharp contact with unit 2 in the south portion of the area mapped. Within this zone classed as skarn are local narrow zones of dark green diopside skarn.

Locally the skarn occurs as thin beds in sharp contact with limestone as in the south east corner of MUN 77.

Most beds appear as dark green diopside to dark brown highly garnetiferous material as thin beds associated with units 2 and 2a. Some material is relatively light to bright green epidote rich skarn.

In general the rusty dark medium to fine grained skarns were the most likely to carry tin tungsten values (Table IV) but even after extensive UV lamping of skarn talus it was not possible to pick mineralized material with any assurance.

The most persistent bed is the siliceous light colored skarn in sharp contact with unit 2 which trends from survey point 34

through points H - 14, 21, 23; I - 5, 21, 27 in the south part of MUN 77. This bed contains local disseminations of pyrite, pyrrhotite and chalcopyrite, narrow beds of dark diopside skarn and lenses of limestone.

Although incompletely outlined there is a possible fold in this bed and below survey point I - 12 a small amount of light brown gossan occurs which has not been sampled. This should be investigated.

Along the east side of MUN 79 at the granite contact coarse micaceous, dioritic looking, black rock occurs which locally contains abundant fluorite. Some of this fluorite exhibits bright orange fluorescence.

SEAGULL BATHOLITH Unit 5

Intrusive rocks in the area mapped consist almost entirely of granite to quartz-monzonite of the Seagull batholith. The rock is generally of medium grain with less than 5% mafics and is fresh in appearance.

Locally finer grained phases occur near contacts with the sediments although no separate phase or rock type is indicated.

Above the east lake near survey points L7 to L10 the quartz monzonite contains well rounded dark grey medium grained diorite fragments ranging from fist size to about 18 inch diameter.

The Seagull intrusive is massive but contains three sets of joints, one of which is relatively flat. Near the south side of MUN 77 some of these joints are filled with schorl and minor quartz. Numerous granitic fragments along the talus slope show similar tourmaline mineralization.

West of the west cirque lake a fairly strong fracture system occurs. Quartz, tourmaline, kaolin and small amounts of arsenopyrite occur in this zone which is probably part of an east west trending fault zone.

No significant greisen development has been found in the granitic rocks. Examination was made most closely at the topographically high points of the intrusive such as near the south boundary of MUN 77 where the contact is at elevation 5625'; along the north-east side of MUN 79 where the contact is at 5100 to 5200' and near the central north boundary of MUN 79 where the intrusive reaches nearly 5000'. To the west on lines 14+00 and 16+00W granitic outcrops occur at about 5200' elevation. In no case was tin mineralization located and, in general, the intrusive is fresh, fine to medium grained, jointed but generally not unusual in character.

STRUCTURE

The sequence of quartzitic sediments, siltstones, limestone and cherts contains relatively minor amounts of volcanic and tuffaceous material. Skarns of various types have developed on certain horizons.

The sedimentary sequence has been intruded, probably quite passively by the Seagull batholith. Only rarely do dykes cut the sediments and no xenoliths of sedimentary rock have been seen in the intrusive.

The sediments are locally contorted but in general appear to strike south westerly and dip south easterly. There is a tendency for relatively large areas of talus, such as skarn, to develop

from what appear to be thin source beds because the talus slope is nearly a dip slope. This situation is true to about the south margin of the surveyed area where some minor folding is indicated which may be of importance.

Late faulting, with apparently only moderate movement, strikes east-west through the twin lakes area in the cirque near the north margin of the area surveyed. Volcanics lie north of this fault and monzonite to the south but it is possible the movement is small. Local vertical and horizontal adjustment appears to have taken place on joints as shown by the offsets along the granitic - sedimentary contact on the east side of MUN 79.

1980 PROGRAM PROPOSAL

Chip sampling in 1979 failed to find a source for the strong tin-tungsten anomaly. Examination of the map indicates some skarn horizons have not been chip sampled. During 1980 -

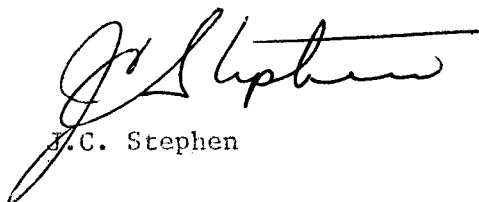
- (1) each identifiable skarn horizon should be re located and carefully sampled,
- (2) the gossan near survey point I-12 should be re located, if necessary trenched, and sampled,
- (3) several small gullys trend westerly through the talus area. These are filled with rubble and produce gaps in the 1979 sampling and mapping. These are to be trenched by hand digging and blasting to expose fresh surfaces.

Sampling will proceed on the assumption that these may represent zones of fracturing which may be mineralized and could provide a source for the anomalous tin.

In the north east corner of the MUN claim group anomalous tin values were obtained on both sides of the main ridge. This area is to be re-examined and sampled in detail.

Respectfully submitted

J.C. Stephen Explorations Ltd.



J.C. Stephen

STATEMENT OF EXPENDITURE

Wages and Fees - Field Work

<u>Name</u>	<u>Dates</u>	<u>Rate</u>	<u>Amount</u>
A. Stanta	Aug. 21 - 27 inc.	\$1300/M+15%	\$337.00
H. Awmack	Aug. 21 - 27 inc.	\$1300/M+15%	\$337.00
S. McFarland	Aug. 21 - 27 inc.	\$1300/M+15%	\$337.00
M. Seifert	Aug. 21 - Sept. 1 inc.	\$1300/M+15%	\$578.00
J.C. Stephen	Aug. 21 - Sept. 1 inc.	\$100/Day	<u>\$1200.00</u>
			\$ 2,789.00

Camp Costs

45 man days @ \$10.00	450.00
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Helicopter

August 21	\$412.50
August 31	<u>600.00</u>
	1,012.50

Transit Rental

78.00

Assays and Geochem

<u>Talus</u>	<u>For</u>	<u>Invoice #</u>	<u>Amount</u>
79 DC MUN 1-57	Zn Sn	32672	\$314.93
79 DC MUN 61,62, 66, 16, 8, 71, 244	Zn Sn	32737	see below
<u>Rock Chips</u>			
67301 - 311	Zn Sn	32733	82.88
67312,84755-760	Zn Sn	32816	38.68
67313-320; 84651-681	Zn Sn	32737	
751-754; 772-800	Zn Sn	32737	474.09
84761-771	Zn Sn	32718	60.78
84672-74, 682	Zn Sn W	part of 33325	<u>30.00</u>

1,001.36

Report Preparation

Drafting	M. Seifert	December 2 days @ \$60.	\$120.00
	J.C. Stephen	February 14,15 @ \$100.	<u>200.00</u>
			\$ <u>320.00</u>
	Total Expenditure		\$ 5,650.86

Method of Distribution of Costs

<u>Claim</u>	<u>% Area Covered by Survey</u>	<u>Assigned Valuation</u>
MUN 77	100	\$ 1,662.02
MUN 79	100	1,662.02
MUN 80	10	166.20
MUN 78	10	166.20
MUN 18	20	332.40
MUN 17	50	831.01
MUN 72	<u>50</u>	<u>831.01</u>
	340	\$ 5,650.86

Grouping Figure II

<u>Claims Worked On</u>	<u>Value</u>	<u>Additional Claims Grouped</u>	<u>Total Applied</u>
MUN 77	\$ 1,662.	1,3,5,7,9,11,13,15,65-71	\$ 1,600.00
MUN 79	1,662.	2,4,6,8,10,12,14,16,26-32	\$ 1,600.00
MUN 18,78,80	664.	73 - 76	\$ 600.00
MUN 17, 72	1,662.	20,24,33,35,37,39,41 43 - 48; 63	\$ 1,600.00
Cash in lieu of Work	MUN 49 - 62, 64		\$ 1,500.00

A P P E N D I X I

STATEMENT OF QUALIFICATIONS

J.C. STEPHEN

Ass. Member British Institute of Engineering Technology 1951

Member Canadian Institute of Mining and Metallurgy

EXPERIENCE

<u>DATES</u>	<u>POSITION</u>	<u>COMPANY</u>
1947 - 49	Engineering staff	Central Patricia Gold Mines Ltd.
1949 - 50	Geology student	Univ. of Alberta
1950 - 51	Geological staff	Eldorado Mining & Refining (1944) Ltd.
1951	Engineering staff	Madsen Red Lake
1952	Geological staff	Hasaga Gold Mines Ltd.
1953 - 55	Engineering and Geological staff	Pickle Crow Gold Mines Ltd.
1955 - 56	Exploration staff	Combined Developments Ltd.
1956 - 59	Associate and field man	Jay-Kay Syndicate R.G. Crosby and Assoc.
1960 - 62	Senior construction Inspector	Haddin, Davis & Brown Ltd.
1962 - 68	Exploration staff	Mastodon Highland Bell Mines Ltd.
1968 - 76	Exploration Sup't NBC, LUC, DC Synd's	Bacon & Growhurst Ltd.
1977 -	Manager President	D.C. Syndicate J.C. Stephen Explorations Ltd.

STATEMENT OF QUALIFICATIONS

I, Angie Stanta am a candidate for Honours Bachelor of Science, University of Windsor, 1980.

Employment experience included the following:-

May - September 1979 - Geologist with J.C. Stephen Explorations Ltd. North Vancouver, B.C.

June - September 1978 - Assistant to Chief Geophysicist, Husky Oil Operations, Calgary, Alberta.

July 23, 1979

Angie Stanta

RESUME

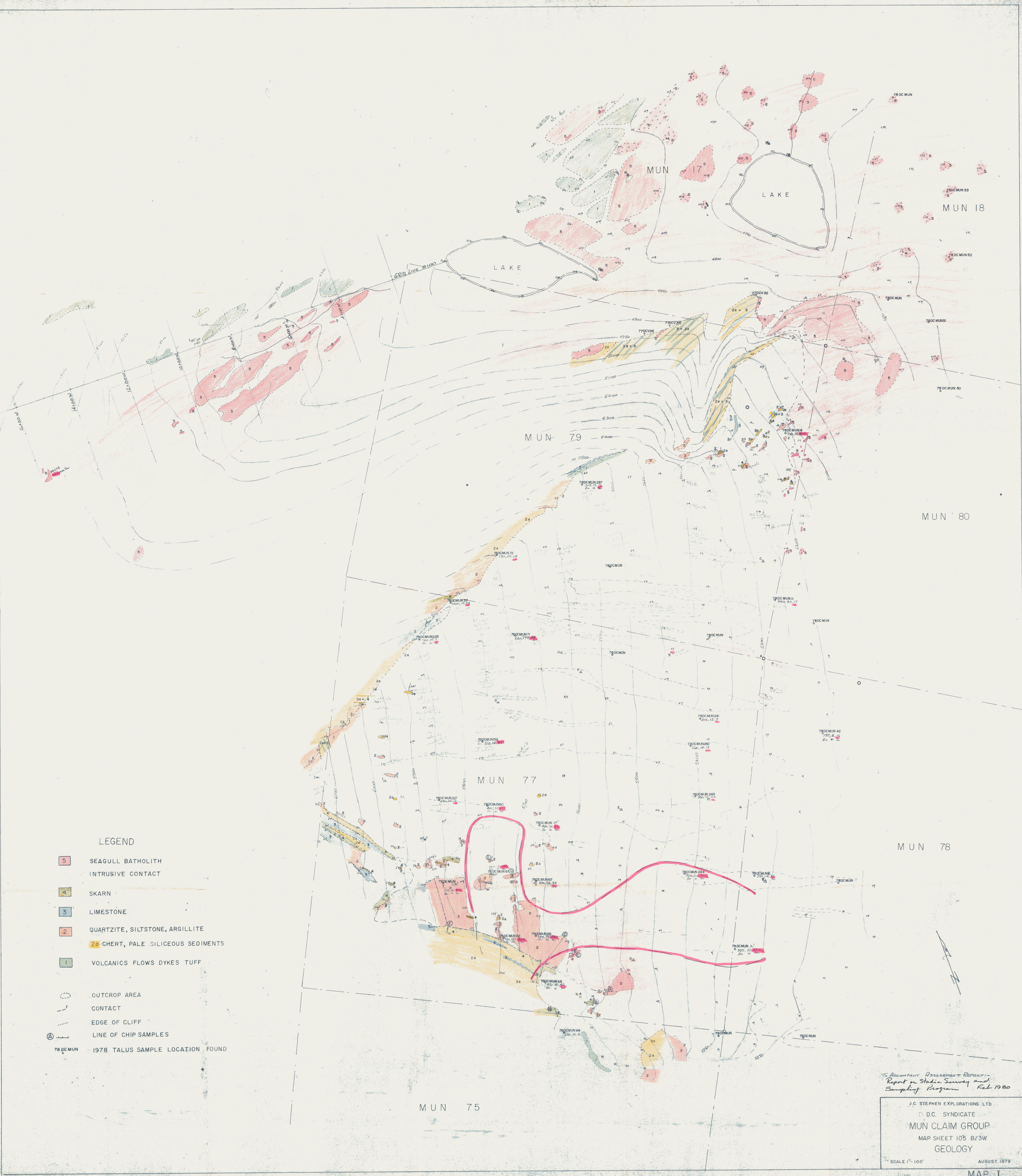
SUSAN McFARLAND

EDUCATION

BIRCHMOUNT PARK COLLEGIATE, SCARBOROUGH, ONTARIO GRADE 13
UNIVERSITY OF TORONTO B.Sc GEOLOGY MAJOR 1979

EXPERIENCE

MAY - SEPT 1976 RESEARCH ASSISTANT DEPT. GEOLOGY U OF T.
MAY - SEPT 1977 MAPPING ASSISTANT, ONTARIO DIVISION OF MINES
MAY - SEPT 1978 CAMPBELL CHIBOUGAMAU MINES/ CCH RESOURCES
 MAYO AREA, YUKON
SEPT 1978 - MARCH 1979 ONTARIO GEOLOGICAL SURVEY, TORONTO
MAY - JULY 1979 CLAYMORE RESOURCES, EDMONTON
JULY - AUGUST 1979 J.C. STEPHEN EXPLORATIONS LTD.



LEGEND

- 5 SEAGULL BATHOLITH
- INTRUSIVE CONTACT
- 4 SKARN
- 3 LIMESTONE
- 2 QUARTZITE, SILTSTONE, ARGILLITE
- 2a CHERT, PALE SILICEOUS SEDIMENTS
- 1 VOLCANICS FLOWS DYKES TUFF
- OUTCROP AREA
- CONTACT
- EDGE OF CLIFF
- LINE OF CHIP SAMPLES
- 78 DCMUN 1978 TALUS SAMPLE LOCATION FOUND

To Accompany Assessment Report
Report on Static Survey and
Sampling Program Feb 1980

J.C. STEPHEN EXPLORATIONS LTD.
D.C. SYNDICATE
MUN CLAIM GROUP
MAP SHEET 105 B/3W
GEOLOGY

SCALE 1" = 100'
AUGUST 1979
MAP 1