

1981 REPORT ON THE
SIN CLAIM GROUP
DORSEY LAKE AREA
MAP NO. 105 B/3

by

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September 1981

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1981 Report on the
SIN CLAIM GROUP
Dorsey Lake Area
105 B/3

SUMMARY AND CONCLUSIONS

A strong and extensive tin anomaly in talus on the north side of Brock Cirque was investigated by check analysis, check talus sampling, mapping, trenching and rock sampling. Greisen zones are indicated with 0.02% to 0.10% tin content. Tonnage and grade potential are limited and no further work is recommended.

A fairly extensive skarn development occurs at the north west corner of the SIN claim group. This was investigated by mapping, trenching and rock sampling. Tin grades are much lower than expected and no significant tungsten is indicated. Low grade and limited tonnage potential indicate no further work is warranted.

Exploration of other zones of alteration and fracturing on and near the property failed to find mineralization of economic interest.

It is recommended the option on the SIN property be relinquished.

INTRODUCTION

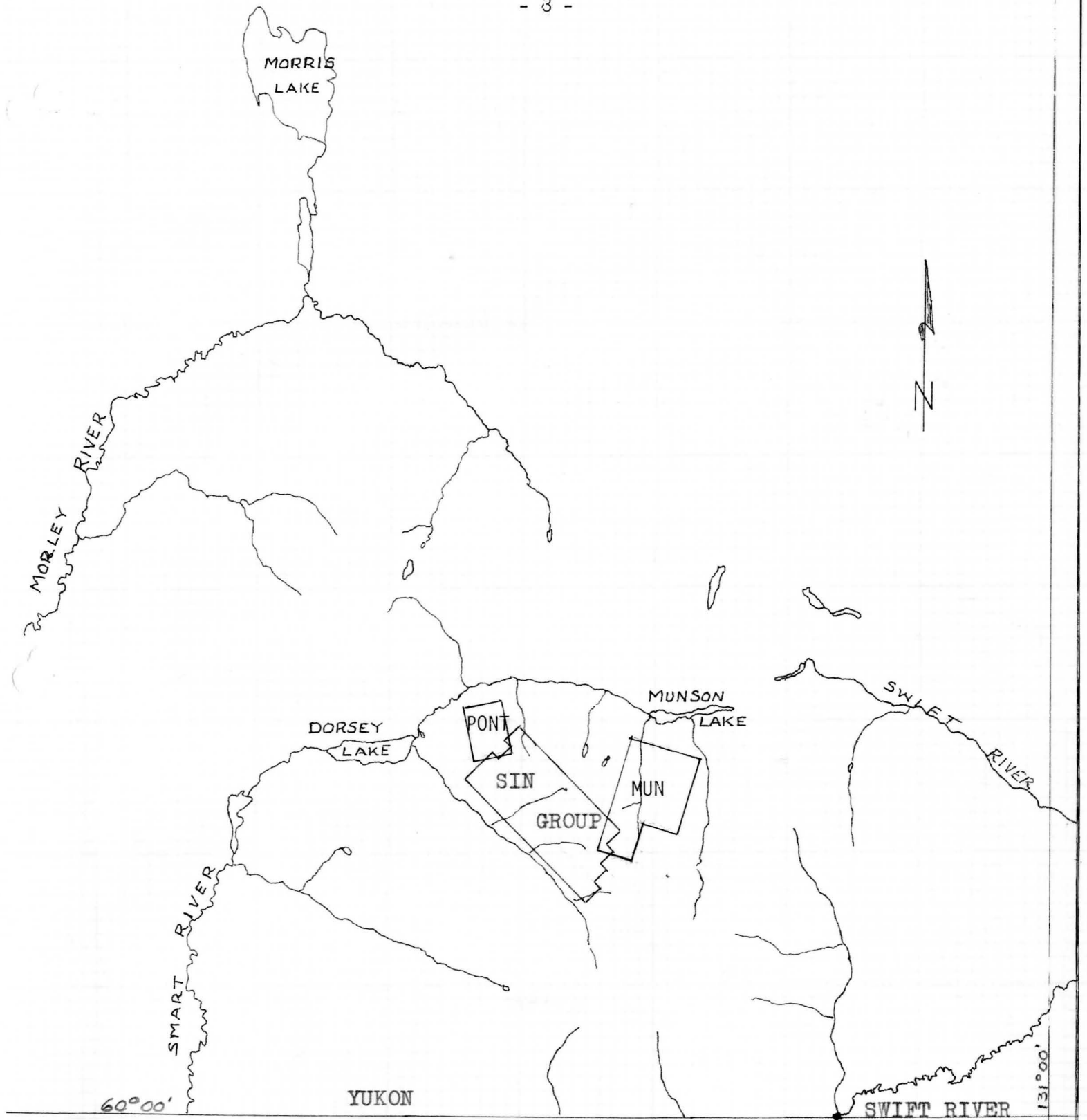
The SIN claim group was staked in 1978 by Welcome North Mines Ltd and McCrory Holdings (Yukon) Ltd and was operated by Dupont-Duval Joint Venture (Klinkit Project) 1978, 1979 under an option agreement.

Early in 1981 the claim group was returned to Welcome North and McCrory Holdings. Data was submitted to J.C. Stephen Explorations Ltd on behalf of D.C. Syndicate and after check analysis of talus samples an option of the property was recommended. This report describes work during the summer of 1981.

LOCATION AND ACCESS

The SIN group is located near the north contact of the Seagull batholith north west of Swift River, Yukon within map sheet 105B/3, see Figure 1. The claims trend north westerly between the D.C. Syndicate's MUN claim group and Dupont-Duval's PONT claim group covering volcanics and sediments intruded by two bodies of the Brock intrusive and the Seagull batholith.

Fly camps were established at three locations on the claim group with the main site being on SIN 107 in the central Brock Cirque valley. This location is 13 miles (21 km) north west of Swift River (Mile 733) on the Alaska Highway. Access to the property was entirely by helicopter from Swift River.



YUKON
BRITISH COLUMBIA

INDEX MAP
SIN CLAIM GROUP
105 B/3
1:250,000 Aug 1981

FIGURE 1

PROPERTY OWNERSHIP AND STATUS

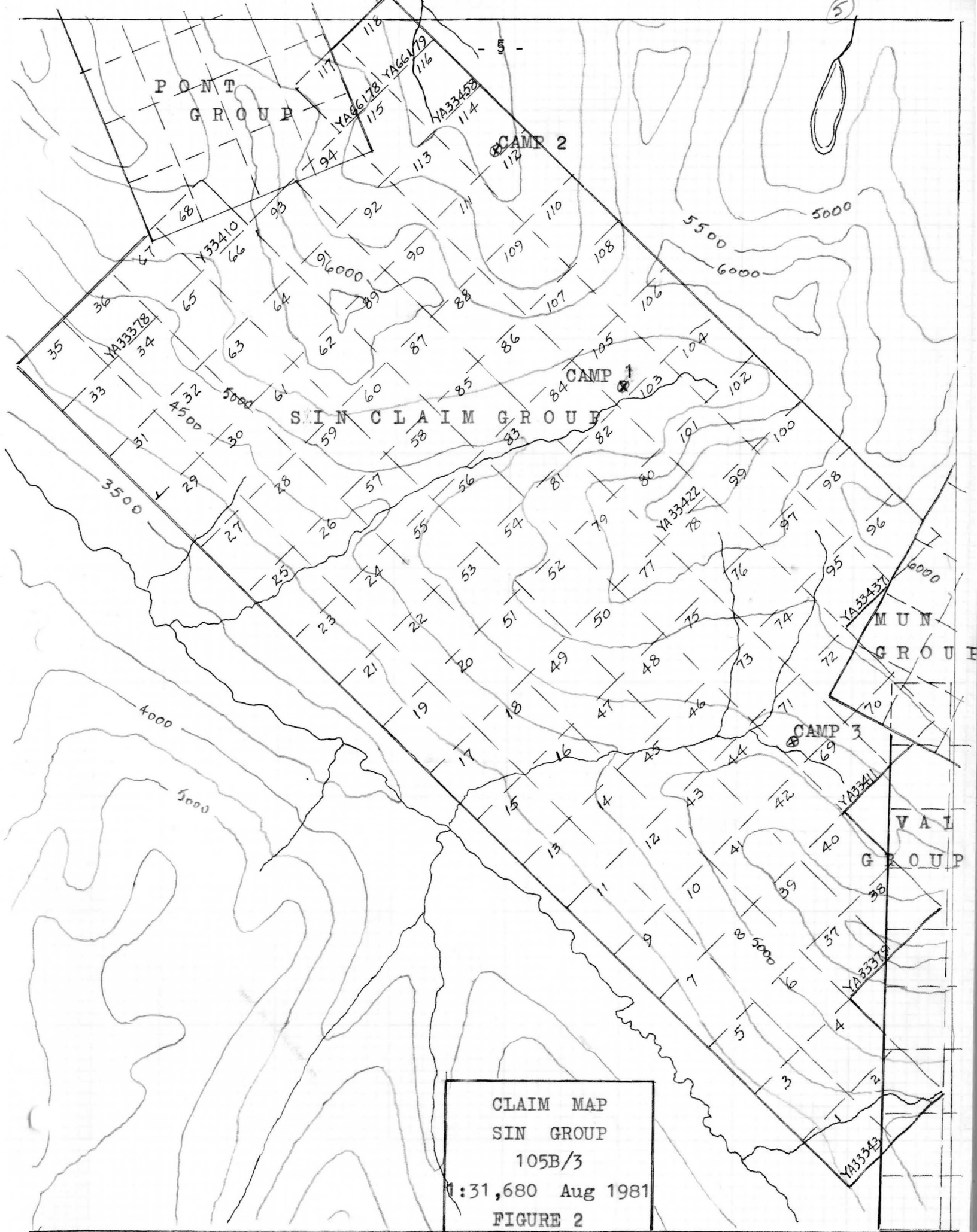
The SIN claim group consists of the SIN 1- 116 mineral claims staked by McCrory Holdings in 1978 as listed below. Two additional claims were staked in 1981 as the SIN 117 and 118 to cover apparently open ground at the north west corner of the property, see Figure 2 Claim Map.

Work on the SIN claim group during 1981 was conducted by J.C. Stephen Explorations Ltd. on behalf of D.C. Syndicate under a letter of agreement between the Syndicate and Welcome North Mines Ltd.

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>	<u>Recorded Owner</u>
SIN 1 -116	YA 33343-456		
SIN 117,118	YA 66178,66179	July 15, 1982	Eleanor Sidey

Tagged claim posts located during mapping are indicated on the accompanying geology map.

Assessment work is to be filed for a minimum of one year as a result of physical work (trenching) done on the SIN group while held under option by D.C. Syndicate.



CLAIM MAP
 SIN GROUP
 105B/3
 1:31,680 Aug 1981
 FIGURE 2

HISTORY AND PREVIOUS WORK

There is no recorded history of exploration on the ground covered by the SIN claims prior to reconnaissance by D.C. Syndicate in 1977 and exploration of the property by Dupont-Duval in 1978 and 1979.

D.C. Syndicate had obtained moderately anomalous tin values in creeks draining north from the SIN area into Smart River and had prospected the area during part of the 1977 season. Minor malayaite mineralization had been located on ground now held by Dupont-Duval as the PONT 'B' claims and on ground previously staked as the MAY 1 and 2 claims. No exploration had been conducted south of the height of land located in the north portion of the SIN claim group.

Exploration of the claim group by Dupont-Duval is described in "Report of Geological and Geochemical Surveys on SIN Project" by G. Ditson dated January 1980. A copy of this report was supplied to J.C. Stephen Explorations Ltd. by Welcome North Mines Ltd. in January 1981. A geology map which accompanied that report, with some revisions, is included in this report as Map I.

Geology

Three main rock units were described by G. Ditson in her report on the SIN group. These consist of "(1) sedimentary and volcanic rocks of the Sylvester group (2) two large bodies of intrusive rock referred to as the Brock intrusions, and (3) the Seagull batholith."

Sylvester group rocks consist of mixed quartzite, limestone, argillite and chert (M2) and overlying argillaceous sedimentary, volcano-sedimentary and volcanic rocks (M3).

The Brock intrusions are described with discussion of their possible origin and field relationships.

Post Brock dykes and the Seagull batholith are similarly described.

In general it was concluded that the Sylvester group rocks consisted of a mainly sedimentary sequence overlain by a primarily volcanic sequence. These formations were intruded by the Brock intrusives which are themselves intruded by pyroxene porphyry and andesitic dykes. The complex is intruded and underlain by the Seagull batholith.

Geochemistry

G. Ditson's report describes a talus sample reconnaissance of the north facing cirques north of SIN and grid soil sampling of the talus anomaly on south facing slopes in the Brock Cirque. High tin geochemical values were reported but prospecting and sampling failed to locate a source.

1981 Program

Check Geochemical Analysis

Upon submission of data by Welcome North a series of talus sample pulps were requested for check tin analysis by Chemex Labs Ltd. Forty five samples were involved and comparative results are shown in Table I and Figure III.

TABLE I



CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LTD;
1459 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8110195-001-A
INVOICE # : 18110195
DATE : 12-FFB-81
P.O. # : NONE
DC SYNDICATE

Sample description	Prep code	Sn ppm	Dupont XRF		Sn ppm		
			Sn ppm	Sn ppm			
6048 B	214	26	--	35	--	250	--
6049 B	214	22	--	25	--	175	--
6050 B	214	24	--	26	--	-	--
6051 B	214	8	--	12	--	95	--
6052 B	214	6	--	7	--	-	--
6053 B	214	19	--	20	--	350	--
4236 B	214	1	--	1	--	175	--
4237 B	214	2	--	1	--	95	--
4238 B	214	2	--	4	--	175	--
4239 B	214	17	--	22	--	-	--
4240 B	214	1	--	2	--	300	--
4241 B	214	3	--	5	--	-	--
4242 B	214	430	--	470	--	250	--
4243 B	214	1	--	1	--	575	--
4244 B	214	1	--	1	--	675	--
4245 B	214	1	--	1	--	325	--



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LTD;
1458 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8110162-001-A
INVOICE # : I8110162
DATE : 12-FEB-81
P.O. # : NONE
D.C. SYNDICATE

Sample description	Prep code	Sn ppm	Sn		DuPont XRF	
			ppm	ppm	Sn ppm	
B-527	214	31	--	39	--	500
B-532	214	20	--	30	--	425
B-533	214	2	--	2	--	275
B-555	214	91	--	97	--	425
B-556	214	235	--	245	--	400
B-557	214	210	--	295	--	575
B-1243	214	4	--	4	--	350
B-1244	214	51	--	39	--	450
B-1245	214	37	--	44	--	575
B-1246	214	46	--	35	--	275
B-1247	214	10	--	13	--	225
B-1248	214	11	--	9	--	145
B-1249	214	12	--	11	--	350
B-1250	214	150	--	185	--	70
B-1252	214	2	--	2	--	-
B-1253	214	1	--	1	--	650
B-1254	214	1	--	1	--	325
B-1255	214	6	--	4	--	-
B-1256	214	2	--	1	--	15
B-1257	214	2	--	1	--	-
B-1258	214	1	--	1	--	500
B-2182/	214	6	--	7	--	225
B-2183/	214	7	--	8	--	300
B-2184/	214	3	--	4	--	225
B-2191	214	4	--	3	--	175
B-2192	214	6	--	4	--	325
B-2193	214	2	--	4	--	200
B-2194	214	71	--	78	--	425
B-2195	214	30	--	42	--	225

Hart Bickler

Certified by



It is evident from these results that there is very little correlation between the Chemex tin values and the Dupont XRF tin values. Some significant values occur in the main anomalous zone however and constitute a prospecting target.

Upon agreement in principle of option terms on the SIN property request was made for pulps of all talus samples. Approximately 100 additional samples were located by Dupont in their warehouse storage but not all of the samples desired were immediately available.

Available pulps were analysed for Sn, W, As and Zn. Results are plotted on maps II and III. The locations of these samples are revised in accordance with original field sketches found with the Dupont stored samples. Values may be compared with the original Dupont values for Sn, Mo, W, on Map IV.

MAIN TALUS ANOMALY

The main talus anomaly remains essentially centred on the fault zone postulated by Dupont and is indicated by an elongated zone of +100 ppm Sn. Tungsten values are relatively low. Zinc values are anomalous with a high of 460 ppm. The zinc and arsenic anomalous values conform generally to the anomalous tin values.

During the 1981 work program two lines of talus samples were collected on contours along the trend of the main anomaly and were analysed for tin, and arsenic. High tin values were obtained which confirm location of the main anomaly.

WEST ANOMALY

Dupont analysis indicated an area of anomalous tin to the south west of the main anomaly near the mapped Seagull contact. Check analysis showed only a few scattered values and as a result only a cursory examination was made. No evidence was found of significant values or structures.

HEADWALL ANOMALY

Limited prospecting and silt sampling were done around the headwall of the Brock Cirque. Silt sample values were too low to indicate substantial mineralization and only low values were obtained in check talus sampling.

GEOLOGICAL MAPPING AND PROSPECTING

No attempt was made to systematically map the property geology but work was done in several areas resulting in partial revision of the Dupont geological map. See Map I.

Traverses were made along the trend of the main talus anomaly and up several shallow gullies where a fair percentage of outcrop was available. Most of the exposed Brock intrusive appeared relatively fresh with prominent east west trending joints. It was evident, however, that weak to moderate greisen type alteration occurred associated with this jointing. In the vicinity of a near vertical face on SIN 108 east of the anomaly these zones appear as narrow vein-joints with up to 20 cm widths of quartz, tourmaline, fluorite, mica, etc. mineralization. A sample of this material ran 84 ppm Sn. In the vicinity of the talus anomaly these zones are several feet wide and include veins up to one metre wide with tourmaline, fluorite etc. mineralization within wider zones of discoloration and alteration. Some spotty arsenopyrite mineralization is evident.

Trenching was done on vein and alteration zones within the talus anomaly area as described below.

Within the Brock intrusive are several irregular narrow andesitic dykes which have sharp contacts and are not apparently mineralized. In the gully just west of Trench 8 fragments of a peculiar pyroxene porphyry dyke are abundant. No outcrop of this rock type was found and it was not possible to trace the dyke (?) down either the north or south slopes. Assay of a specimen (27583) returned 0.01% Sn <0.01% WO₃.

It has been noted that the talus anomaly is centred on the location of this pyroxene porphyry dyke, the postulated fault, and relatively strong east west jointing and veining with alteration. There is some indication that jointing in Brock intrusive dips 75° S in the lower outcrops to the south, gradually steepens and changes to a north dip in the upper portion of the geochemical anomaly along a prominent line of change in the character of the talus slope.

Up slope the Brock intrusive is in contact with tuffs and volcano sediments of M-3. There is no apparent skarning nor evident unusual alteration of the volcanics. They are unusual only in that they strike 320° and dip 70° north. Along the spur to the mountain peak these volcanics are contorted and resume their usual south dip at the peak and along the ridge to the north. It is likely the north dips, and complicated folding down the west slope, are due to disruption during emplacement of the Brock intrusive. The north dip of jointing in the Brock would be parallel to the local north dip of the volcanics though the intrusive contact transects bedding in tuffs.

The north trending ridge consists of primarily basic volcanics with zones of quartz, tourmaline and fluorite above the indicated high in the Seagull intrusive. The upper parts of the Seagull in this area are locally pegmatitic and rise as short dykes which degenerate into pegmatite and quartz veining along east west fracture zones at the top of the ridge.

To the north beyond two east trending fault zones, thin beds of limestone are complexly folded. Volcanic agglomerates and breccias, folded with the limestone, are skarned producing thin irregular garnet epidote skarn zones. No significant mineralization was located.

Near the north west boundary of the property a remnant of limestone with associated quartzites and siltstone is intruded by Brock and Seagull granites. The structure is complex but appears to be of limited size. Skarn is developed to varying degree and a substantial amount of magnetite skarn is present. The zone extends below the talus west of the limits shown on the map. This zone was thought to provide a significant area for tin mineralization. No actual contact was found between Seagull and Brock intrusives.

In the north east portion of the claim group weak greisen type alteration was found in fracture zones approximately along the trend of the east striking MUN fault. Arsenopyrite occurs in outcrops of the Seagull intrusive. The zones continue up into the volcanics of the M-3 formation but no mineralization is evident. Trenching was done on portions of these zones.

TRENCHING PROGRAM

McCrorry Holdings (Yukon) Ltd. were contracted to conduct trenching of several zones of mineralization and alteration along generally east west trending zones on the SIN claims. Trenches were laid out after local mapping and were cleaned out for sampling and examination after blasting. Chip samples were taken as continuously as rock exposure would permit while talus and soil samples were collected from those trenches which failed to reach bed rock.

Fly camps for the trenching crew and supporting geological crew were moved and supplied by helicopter. A deisel compressor was used to supply compressed air for drilling on most rock trenches. This required more helicopter support but greatly speeds up drilling production.

North west Skarn Zone Trenching SIN 115 - 118 Claims

Figures 4 and 5 show location of trenches SIN 1 to 4 with local geology, profiles of the trenches, sample numbers and assay results for tin and tungsten.

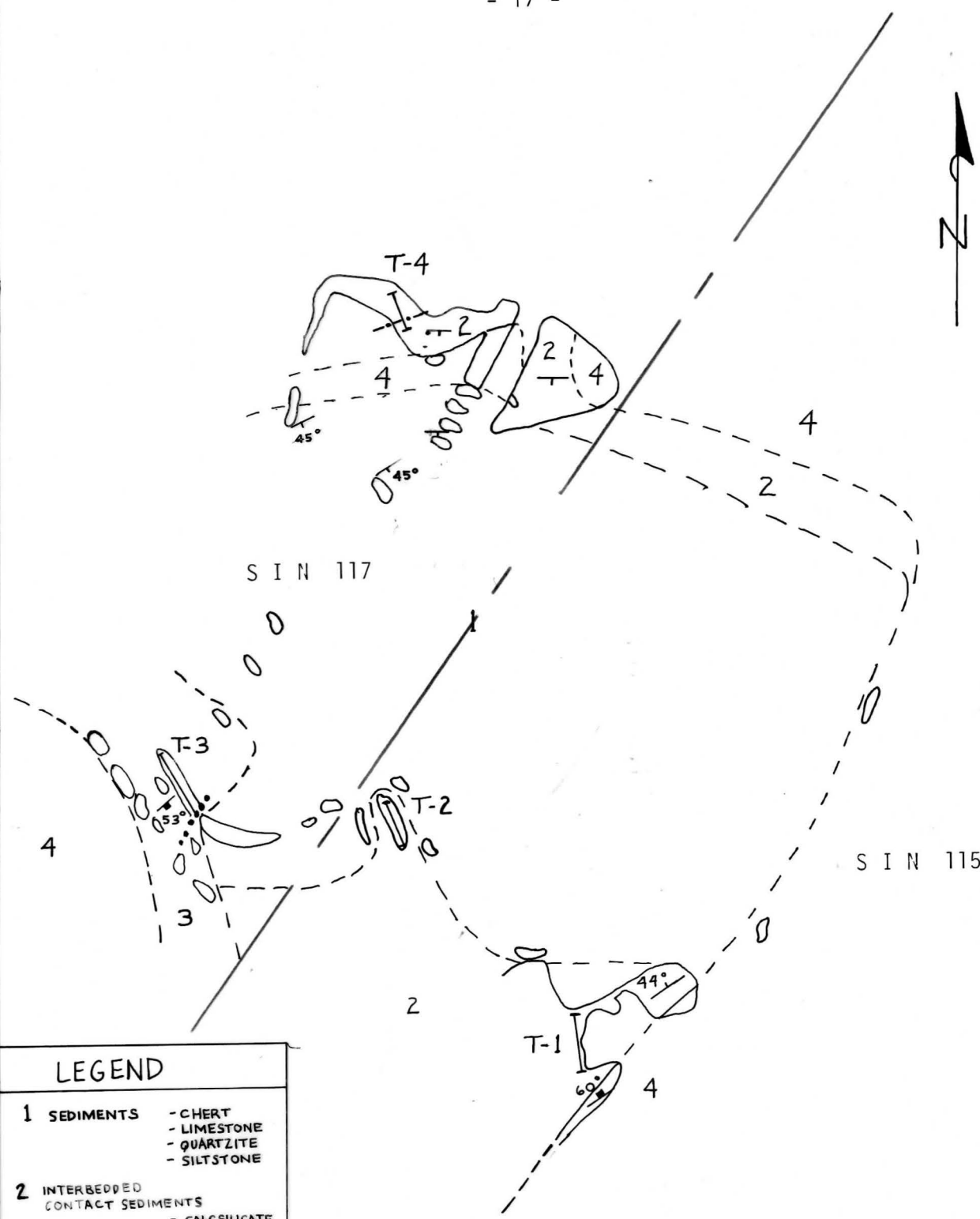
The following descriptions are taken from field notes and results. Trenches SIN 1 to SIN 4 are located in about 150,000 square feet of exposed sediments, meta sediments and skarn bounded on three sides by Brock and Seagull intrusives. The west area was not mapped and extent of possible skarn in that direction is not known.

Trench 1 is about 6 feet north of the contact of the intrusive and sedimentary rocks. It is 32 feet long trending 242°. The trench is in a zone of contact sediments and three samples were taken in medium grey, chloritic, siliceous skarn. A small zone of weakly disseminated chalcopyrite was found at the north end of the trench.

No significant assay values were obtained for tin, tungsten, silver or copper.

Trench 2 is in the same zone of contact sediments as Trench 1. Two samples were taken in this 30 foot long trench. Both samples were of pale green calc-silicate. Limestone outcrop occurs close to the trench.

Sample 25904C assayed 0.20% Sn, 0.01% WO_3 , 0.01% Cu and 0.01 oz Ag. Values for sample 25905C were 0.01 or less than 0.01%.



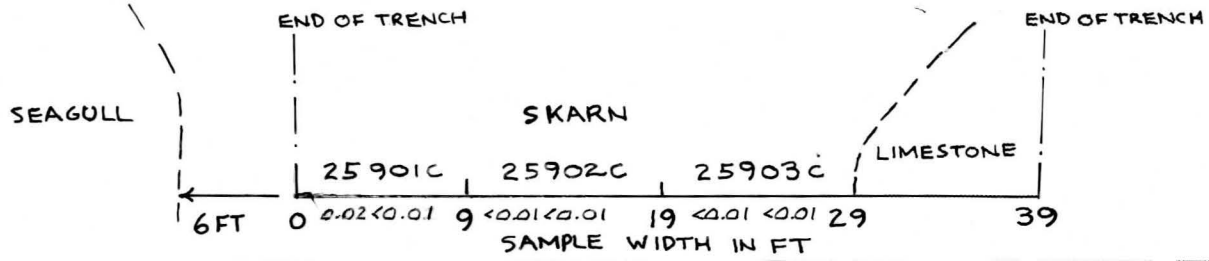
LEGEND

- 1 SEDIMENTS
 - CHERT
 - LIMESTONE
 - QUARTZITE
 - SILTSTONE
- 2 INTERBEDDED CONTACT SEDIMENTS
 - CALCISILICATE
 - CHERT
 - LIMESTONE
 - QUARTZITE
 - SILTSTONE
 - SKARN
- 3 SKARN
- 4 FELSIC INTRUSIVE
- T-1 ——— TRENCH
- GULLEY WITH MAGNETIC FLOAT
- - - - SHEAR ZONE WITH CALCITE AND QUARTZ, IRON AND MALACHITE STAINING

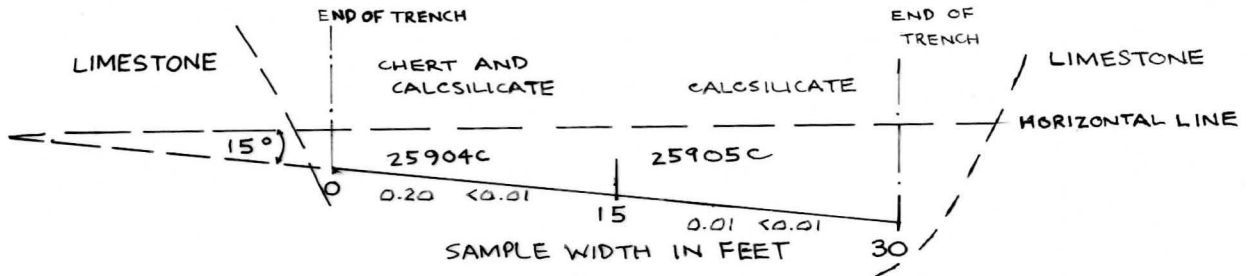
J.C. STEPHEN EXPLORATIONS LTD
 SIN PROJECT
 N.W. SKARN ZONE
 GEOLOGY & TRENCHES
 Scale 1:1200
 AUG. 1981

FIGURE 4

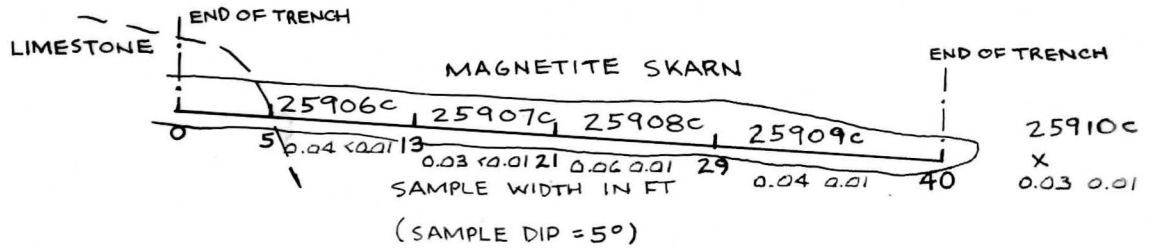
TRENCH 1 → 352 - 18 -



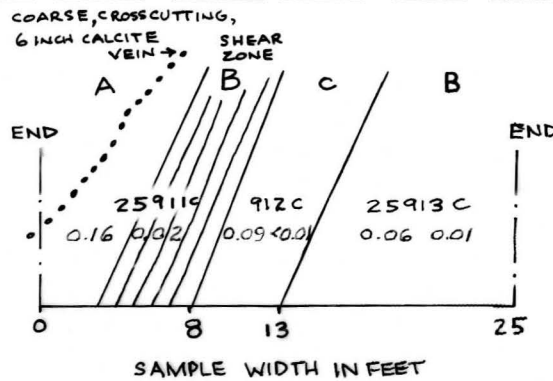
TRENCH 2 → 338



TRENCH 3 → 326



TRENCH 4 → 096



LEGEND

- A PALE GREY-GREEN CHERTY SILTSTONE OR CALC SILICATE
 - B MEDIUM GRAY SILTSTONE
 - C MEDIUM GRAY SKARN WITH FINE GRAINED MASSES OF RED GARNET AND GREEN DIOPSIDE
- 25901c ROCK CHIP SAMPLE NUMBER
0.04-0.01 ASSAY VALUE Sn, WO₃ %

J.C. STEPHEN EXPLORATIONS LTD
SIN PROJECT
PROFILE OF TRENCHES 1-4
N. W. SKARN ZONE

Scale 1:120

AUG. 1981

FIGURE 5

Trench 3 is a 40 foot long trench located in a magnetite skarn. The south end of the trench begins at the contact between limestone and skarn and follows the trend of the skarn bed. A fifth sample (25910C) was taken five feet north of the trench in moderately magnetic skarn. Full extent of the skarn has not been mapped.

Considering the appearance of the skarn assay values were very disappointing with the highest tin value 0.06% Sn over 8 feet. Two values of 0.07 oz/ton Ag were received for samples 25909 and 910C. Values for copper and tungsten were 0.01% or less.

Trench 4 is about 300 feet north of trench 3. It is a 25 foot trench in an interbedded contact sediment zone very close to the Seagull intrusive contact. The samples are principally in siltstone. Trace to weakly disseminated chalcopyrite and arsenopyrite are found in the trench along with some malachite stain.

Sample 25911C assayed 0.16% Sn over 8 feet. The trench averaged 0.098% Sn across 25 feet. Values up to 0.07 oz/ton silver, 0.03% Cu and 0.02% W_3O_3 accompany the tin.

Main Talus Zone SIN 105 - 108 Claims

Figures 6 and 7 indicate location of trenches 5 to 8 with trench profiles and tin, tungsten assays.

Trench 5 is located near the nose of the eastern Brock intrusive. The trench is at the contact between the Brock intrusive and the intruded volcanic rock. A small ultra basic dyke is found to the east of the trench.

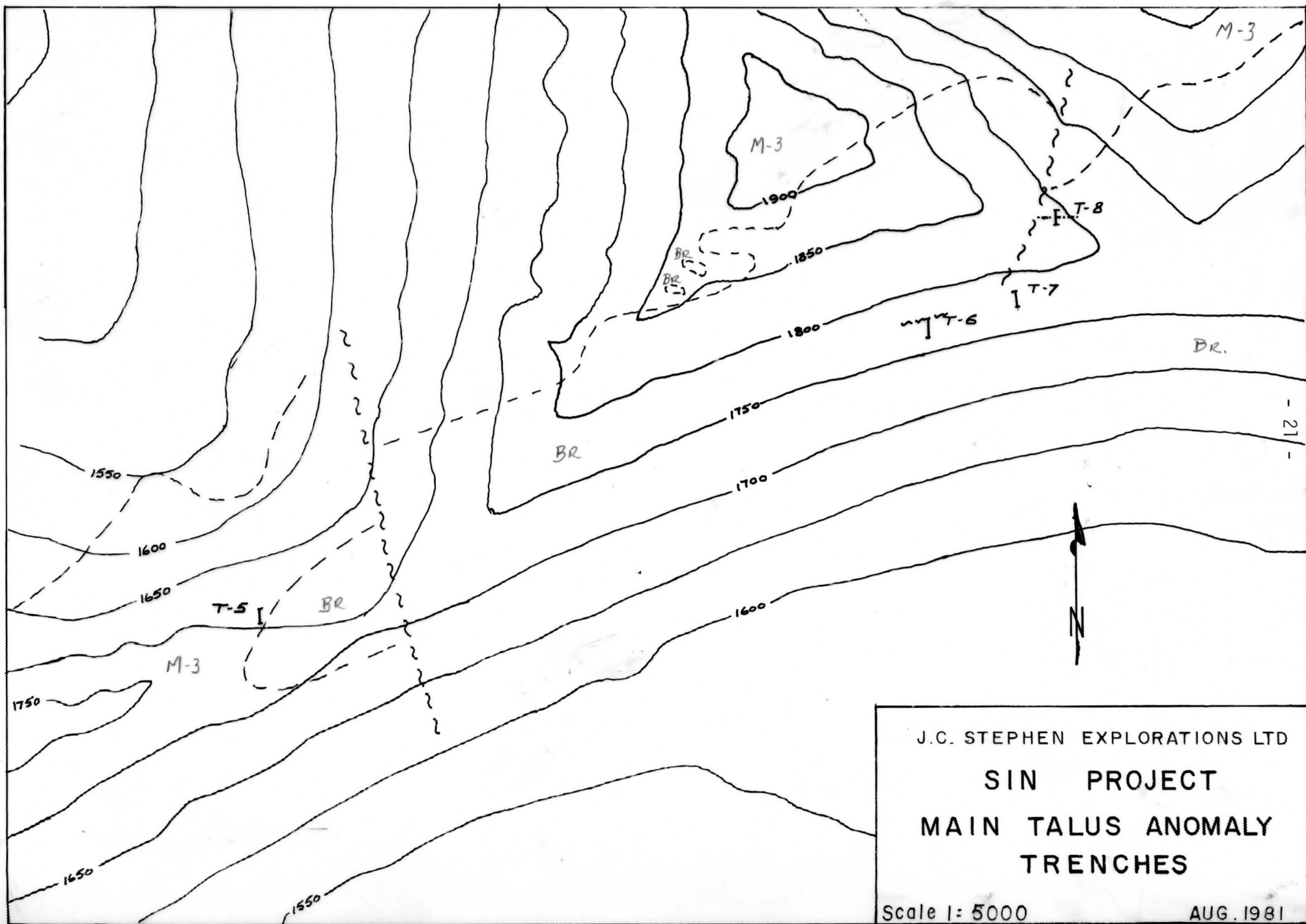
The volcanic is cherty andesite or dacite. A 15 foot contact zone consists of volcanic breccia fragments in Brock matrix. This zone has trace disseminated pyrrhotite, arsenopyrite and specularite.

All values for Sn, W_3 , Ag and Cu were 0.01% or less except for one value of 0.03 oz Ag.

Trench 6 is located about 1800 feet west of trench 5 and is entirely in Brock monzonite. The trench includes a greisen zone which is exposed for 19 feet and extends to the north of the trench below talus. Moderately disseminated traces of galena, chalcopyrite and arsenopyrite were found in the zone. The highest tin assay is 0.07% across 6.5 feet. Sample 25922C gave 1.14 oz Ag/ton across 6.5 feet.

Trench 7 is about 300 feet east of trench 6. It is 30 feet long in a poorly exposed outcrop area. The trench is probably entirely in Brock intrusive although a six foot interval had volcanic and Brock rubble in it. This interval was not deep enough to sample properly and no sample was taken. A small rusty kaolinized zone occurs in the trench but no mineralization was found.

Sample 25930C returned 0.09% Sn, 0.04 oz Ag per ton across 9 feet.



J.C. STEPHEN EXPLORATIONS LTD
SIN PROJECT
MAIN TALUS ANOMALY
TRENCHES

Scale 1: 5000

AUG. 1981

FIGURE 6

Trench 8 is in a saddle near the gully presumed to mark the position of a north trending fault. The trench is in Brock intrusive but includes a three foot tourmaline quartz vein. The vein appears to strike and dip parallel to the prominent regional east trending jointing. Minor realgar and orpiment were found in the vein. The Brock intrusive is altered (lime green feldspar alteration, kaolinization and manganese staining) with alteration decreasing away from the vein. A three foot zone beside the vein has minor tourmaline, azurite and malachite.

Sample 25926C assayed 0.10% Sn, 0.38 oz Ag, and 0.11% Cu across 3 feet. Other values in the trench were negligible.

East Alteration Zone Trenches 9,10,11,

These trenches are located in a valley east of the head of Brock cirque within volcanic rocks a short distance above the contact with the Seagull batholith. The MUN fault zone, see air photo Map V passes close to this area.

Trench 9 This is a 36 foot long trench in amygdaloidal basalt. Three 12 foot long samples were taken. Only one of these contained a trace of disseminated pyrite.

Assay values for tin tungsten and copper were all less than 0.01%. Values of 0.02, 0.03 and 0.04 oz silver per ton were received.

Trench 10 is about 200 feet north of Trench 9. It is also in amygdaloidal basalt. A four foot tourmaline breccia zone is found near the north end of the trench. It strikes about 120° and may be on strike with a four foot Brock dyke to the west. Only trace disseminated pyrite or chalcopyrite was found in the breccia zone.

Assay values for tin tungsten and copper were all 0.01% or less. Silver values were 0.01 and 0.02 oz per ton.

Trench 11 is about 1100 feet north east of trench 9 in a grassy south sloping hill. Bed rock was not obtained and soil samples were taken across this trench.

Geochemical values for tin,tungsten,copper and silver were below anomalous levels.

PEAK

25932C

80, 1, 3.1, 10, 600
Sn W Ag Au Cu

30°

SIN 78

BASALTIC
TALUS



T-10

BASALTIC
TALUS



T-11

1100 FT
ON SIN 99

T-9

BASALTIC RUBBLE
AND OUTCROP

LEGEND

- === BROCK DYKE
- //// AREA OF NW TRENDING QUARTZ VEINS AND LENSES
- TOURMALINE BRECCIA ZONE

T-9 — TRENCH

J.C. STEPHEN EXPLORATIONS LTD

SIN PROJECT

EAST ALTERATION ZONE

GEOLOGY & TRENCHES

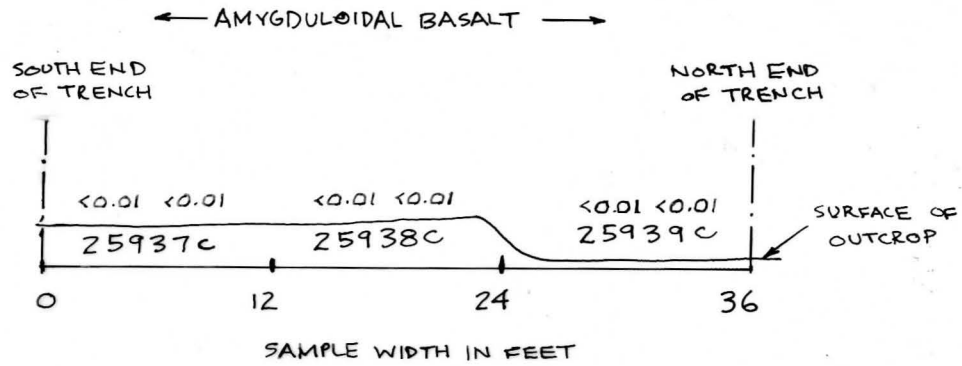
Scale 1:1200

AUG 1981

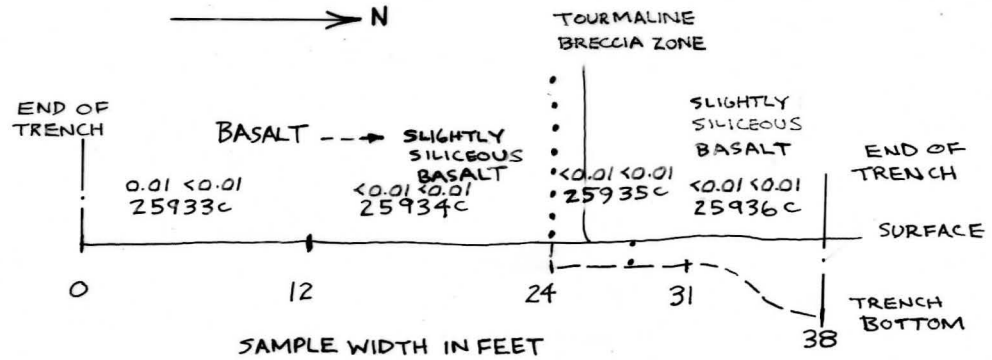
FIGURE 8

TRENCH 9

- 26 - → O10

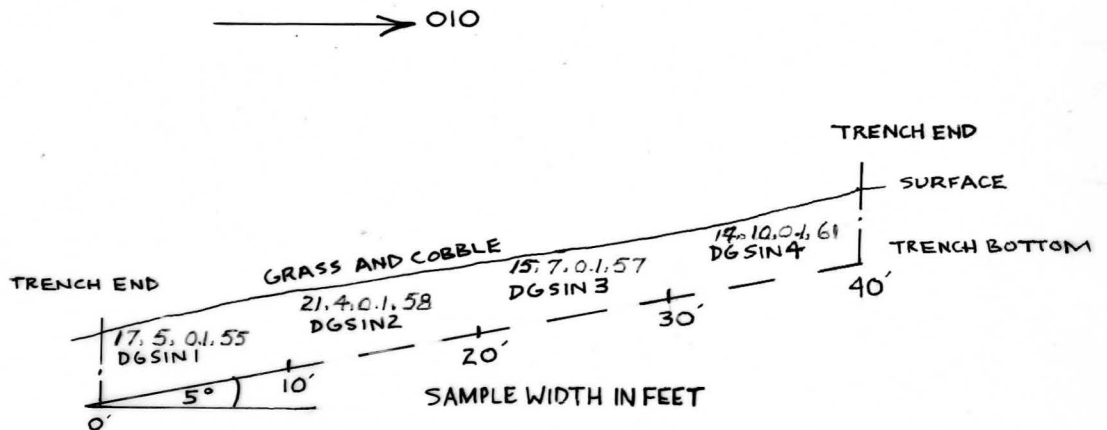


TRENCH 10



25933c ROCK CHIP SAMPLE
0.01 0.01 ASSAY VALUE Sn W %

TRENCH 11



DGSIN 2 TALUS SAMPLE
17.5, 0.1, 55 Sn, W, Ag, Cu ppm.

J.C. STEPHEN EXPLORATIONS LTD
SIN PROJECT
EAST ALTERATION ZONE
PROFILE OF TRENCHES 9-11

Scale 1: 120

AUG 1981

FIGURE 9

CONCLUSIONS AND RECOMMENDATIONS

Extensive silt, soil and talus sampling on the SIN claim group has indicated anomalous levels of tin tungsten arsenic and zinc. Investigation of the anomalous areas for tin mineralization has not been successful in finding economic mineral grades.

The skarn zones in the north west portion of the claim group return grades up to 0.20% Sn in certain areas. The sedimentary-skarn package is surrounded by intrusive rocks and tonnage potential is limited. This, coupled with very low grades indicates only low potential.

Prospecting on the ridge north of the central portion of SIN group encountered skarn, greisen and quartz tourmaline veining above local pegmatitic phases of the intrusive. No significant values were obtained and the structures are of very limited extent.

On the main talus anomaly fairly extensive greisen type alteration follows east striking joint and fracture zones. The best assay obtained, in the quartz, tourmaline vein, was 0.10% tin. Values obtained in talus approximate the best grades and appear to represent rock geochemical values for the area. The grade indicated is too low for commercial consideration. These zones are very similar to those on the Dupont Plateau zone on the DU claims although sulphide mineralization is not as intense here.

Investigation of axinite garnet skarn south of Brock cirque and of greisen type alteration along MUN fault failed to find tin or tungsten mineralization of note.

It is recommended that the option on the SIN claims not be retained.

Respectfully submitted,
J.C. Stephen Explorations Ltd.

J.C. Stephen

JCS/ms

A P P E N D I X I

SAMPLE RECORDS

NTS 105B 3/W

SAMPLER O'Connor, Sidney

PROJECT D.C. Syndicate SIN Group

LINE

AIR PHOTO No. A 11412153

SAMPLE NUMBER	LOCATION	ROCK TYPE	ALTERATION	MINERALIZATION	STRIKE / DIP	ADDITIONAL REMARKS	APPARENT WIDTH	ASSAYS		GEOCHEM	
								TRUE WIDTH	Sn	As.	
(1) 81 DCFT-1	north west of Valley Brook intrusion	monzonite				float, minor occurrences of greisen and tourmaline		9	360		
(2) 81 DCFT-2	300 ft west of ①	monzonite				rusty float with radiating tourmaline		47	380		
(3) 81 DCFT-3	200 ft west of ②	soil	A horizon 1 1/2" sand to silt sized particles, moss grass and ground cover	C horizon sampled 7", 15% organics, talus boulders of qtz monzonite		medium brown in colour, steep slope with grass		7	650		
(4) 81 DCFT-4	200 ft west of ③	soil	A horizon 3" silt to sand sized particles, and willows, schistose float	C horizon sampled 12", 20% organic, schistose float found 120' to the west of #3		medium brown in colour, steep slope with grass		8	125		
(5) 81 DCFT-5	200 ft west of ④	soil	A horizon 5" sized particles, qtz monzonite float with redbrown soil	C horizon sampled 6", 45% organics steep slope with grass and willows, felsic material		medium brown in colour, steep slope with grass and willows		130	155		
(6) 81 DCFT-6	200 ft west of ⑤	soil	A horizon 3" sized particles, willows	C horizon sampled 10", 40% organics, steep slope with grass and		medium brown in colour, silt		52	370		
(7) 81 DCFT-7	200 ft west of ⑥	quartz monzonite				mixture of sandy medium brown soil and fine talus, steep slope, felsic Brook intrusive, 10% organics		7	240		
(8) 81 DCFT-8	200 ft west of ⑦	monzonite				via sample area, mixture of brown soil and fine talus		7	260		
(9) 81 DCFT-9	200 ft east of ①	quartz monzonite				rusty rubble and minor occurrence of tourmaline		11	910		
(10) 81 DCFT-10	227 ft east of ①	qtz. monzonite				mixed medium brown soil and fine talus, rubble and boulders of qtz monzonite		24	800		
(11) 81 DCFT-11	200 ft east of ⑩	qtz. monzonite				rusty zone, red brown sandy soil and talus		220	71000		
(12) 81 DCFT-12	200 ft. east of ⑪	qtz monzonite				medium brown sandy soil and felsic talus, mixed, willows, below scudde		365	110		
(13) 81 DCFT-13	238' from claim post, north of DCFT-12	qtz monzonite				red brown soil and talus mixed, sand to pebble sized particles		250	205		
(14) 81 DCFT-14	200 ft west of ⑬	qtz monzonite				red brown C horizon soil and sand to pebble sized talus		100	70		
(15) 81 DCFT-15	200 ft west of ⑭	qtz monzonite				rubble, sand and talus mixed		45	280		
(16) 81 DCFT-16	200 ft west of ⑮	qtz monzonite				above claim post, butts to medium brown sand sized particles and talus		56	71000		
(17) 81 DCFT-17	200 ft west of ⑯	qtz monzonite				very fine talus, felsic butts to red brown		60	185		
(18) 81 DCFT-18	200 ft west of ⑰	qtz monzonite				dark brown soil and sand to pebble sized talus, purple green volcanic float		78	300		
(19) 81 DCFT-19	200 ft west of ⑱	qtz monzonite				medium brown soil, sand sized talus, grassy slope galena - pyrite in rubble		540	260		
(20) 81 DCFT-20	200 ft west of ⑲	qtz monzonite				extreme rusting in area, talus is dark brown soil mixed with sandy pebble sized particles		930	71000		

sized particles

A P P E N D I X I I

CERTIFICATES OF ANALYSIS



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CERT. # : A8110244-001-A
INVOICE # : I8110244^{72.93}
DATE : 19-FEB-81
P.O. # : NONE

ORIG. ON A8110162;A8110195

Sample description	Prep code	Fe %	As ppm	L.O.I. %			
B-527	214	3.40	200	10.0	--	--	--
B-555	214	2.35	135	4.0	--	--	--
B-556	214	1.90	300	2.0	--	--	--
B-557	214	1.95	300	2.0	--	--	--
B-1244	214	3.10	40	4.0	--	--	--
B-1245	214	3.90	200	22.0	--	--	--
B-1246	214	3.90	50	10.0	--	--	--
B-1250	214	2.10	100	0.5	--	--	--
B-2194	214	3.30	100	12.0	--	--	--
B-2195	214	1.95	50	6.0	--	--	--
6048-B	214	2.10	30	42.0	--	--	--
4242-B	214	1.45	1750	0.5	--	--	--

SIN



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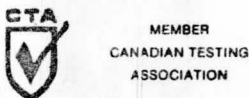
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CERT. # : A8110162-001-A
INVOICE # : 18110162
DATE : 12-FEB-81
P.O. # : NONE
D.C. SYNDICATE

SIN

Sample description	Prep code	Sn ppm	Sn ppm				
B-527	214	31	39	--	--	--	--
B-532	214	20	30	--	--	--	--
B-533	214	2	2	--	--	--	--
B-555	214	91	97	--	--	--	--
B-556	214	235	245	--	--	--	--
B-557	214	210	295	--	--	--	--
B-1243	214	4	4	--	--	--	--
B-1244	214	51	39	--	--	--	--
B-1245	214	37	44	--	--	--	--
B-1246	214	46	35	--	--	--	--
B-1247	214	10	13	--	--	--	--
B-1248	214	11	9	--	--	--	--
B-1249	214	12	11	--	--	--	--
B-1250	214	150	185	--	--	--	--
B-1252	214	2	2	--	--	--	--
B-1253	214	1	1	--	--	--	--
B-1254	214	1	1	--	--	--	--
B-1255	214	6	4	--	--	--	--
B-1256	214	2	1	--	--	--	--
B-1257	214	2	1	--	--	--	--
B-1258	214	1	1	--	--	--	--
B-2132	214	6	7	--	--	--	--
B-2133	214	7	8	--	--	--	--
B-2134	214	3	4	--	--	--	--
B-2131	214	4	3	--	--	--	--
B-2132	214	6	4	--	--	--	--
B-2133	214	2	4	--	--	--	--
B-2134	214	71	78	--	--	--	--
B-2135	214	30	42	--	--	--	--



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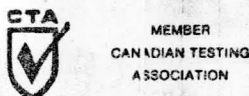
CERT. # : A8110195-001-A
INVOICE # : I8110195
DATE : 12-FEB-81
P.O. # : NONE
DC SYNDICATE

SN

Sample description	Prep code	Sn ppm	Sn ppm						
6048 B	214	26	--	35	--	--	--	--	--
6049 B	214	22	--	25	--	--	--	--	--
6050 B	214	24	--	26	--	--	--	--	--
6051 B	214	8	--	12	--	--	--	--	--
6052 B	214	6	--	7	--	--	--	--	--
6053 B	214	18	--	20	--	--	--	--	--
4236 B	214	1	--	1	--	--	--	--	--
4237 B	214	2	--	1	--	--	--	--	--
4238 B	214	2	--	4	--	--	--	--	--
4239 B	214	17	--	22	--	--	--	--	--
4240 B	214	1	--	2	--	--	--	--	--
4241 B	214	3	--	5	--	--	--	--	--
4242 B	214	430	--	470	--	--	--	--	--
4243 B	214	1	--	1	--	--	--	--	--
4244 B	214	1	--	1	--	--	--	--	--
4245 B	214	1	--	1	--	--	--	--	--

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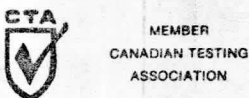
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SIN

CERT. # : A8110789-001-A
INVOICE # : I8110789
DATE : 30-APR-81
P.O. # : NONE
SIN PROJECT

Sample description	Prep code	Zn ppm	As ppm	W ppm	Sn ppm		
0513 B	214	215	55	9	48	--	--
0514 B	214	184	59	15	50	--	--
0515 B	214	162	110	14	58	--	--
0516 B	214	385	285	10	118	--	--
0517 B	214	106	275	6	51	--	--
0518 B	214	124	195	20	38	--	--
0519 B	214	192	255	1	4	--	--
0520 B	214	78	24	1	18	--	--
0521 B	214	146	295	2	50	--	--
0522 B	214	118	63	1	260	--	--
0523 B	214	475	250	2	210	--	--
0524 B	214	230	150	1	20	--	--
0525 B	214	200	75	1	66	--	--
0526 B	214	134	77	2	53	--	--
0528 B	214	695	285	7	24	--	--
0529 B	214	1550	135	9	355	--	--
0530 B	214	114	88	3	14	--	--
0531 B	214	128	460	12	395	--	--
0534 B	214	275	315	1	7	--	--
0535 B	214	132	195	10	370	--	--
0536 B	214	64	100	1	8	--	--
0537 B	214	92	160	1	53	--	--
0545 B	214	350	145	4	64	--	--
0546 B	214	310	240	3	91	--	--
0547 B	214	2950	375	5	335	--	--
0548 B	214	60	30	5	2	--	--
0549 B	214	134	14	14	2	--	--
1265 B	214	320	39	1	4	--	--
2185 B	214	106	14	1	8	--	--
2186 B	214	134	36	1	10	--	--
2187 B	214	145	22	1	17	--	--
2188 B	214	165	20	1	8	--	--
2189 B	214	120	9	1	10	--	--
2190 B	214	95	7	1	6	--	--
3530 B	214	475	150	20	105	--	--
3531 B	214	330	63	1	20	--	--
3532 B	214	205	12	1	1	--	--
3533 B	214	82	25	1	4	--	--
3534 B	214	16	7	1	1	--	--
3535 B	214	94	35	1	2	--	--

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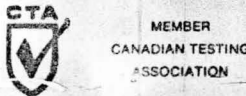
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CERT. # : A8110789-002-A
INVOICE # : I8110789
DATE : 30-APR-81
P.O. # : NONE
SIN PROJECT

Sample description	Prep code	Zn ppm	As ppm	W ppm	Sn ppm		
3536 B	214	350	415	9	17	--	--
3537 B	214	156	29	1	8	--	--
3538 B	214	675	43	1	18	--	--
3539 B	214	310	57	1	4	--	--
3540 B	214	260	365	1	54	--	--
3541 B	214	166	125	1	47	--	--
3542 B	214	82	92	1	290	--	--
3543 B	214	114	55	1	14	--	--
3544 B	214	50	43	1	4	--	--
3545 B	214	50	27	1	100	--	--
3546 B	214	56	70	1	3	--	--
3547 B	214	70	60	1	24	--	--
3548 B	214	68	35	1	6	--	--
3549 B	214	56	30	1	10	--	--
3550 B	214	360	150	1	120	--	--
3552 B	214	100	30	6	1	--	--
3553 B	214	385	35	1	1	--	--
3554 B	214	102	30	1	1	--	--
3555 B	214	64	50	1	1	--	--
3556 B	214	82	35	1	1	--	--
3557 B	214	94	145	1	2	--	--
3558 B	214	64	80	1	1	--	--
3559 B	214	70	70	1	1	--	--
3560 B	214	80	55	1	1	--	--
3561 B	214	78	75	1	2	--	--
3562 B	214	96	80	1	1	--	--
3563 B	214	30	30	1	1	--	--
3564 B	214	78	50	1	1	--	--
3565 B	214	240	60	1	2	--	--
3566 B	214	92	45	2	2	--	--
3567 B	214	156	70	30	5	--	--
3568 B	214	72	45	50	12	--	--
3569 B	214	144	75	20	8	--	--
3570 B	214	50	55	1	1	--	--
3571 B	214	38	50	1	1	--	--
3572 B	214	36	110	1	1	--	--
3573 B	214	32	30	1	1	--	--
3574 B	214	54	25	1	1	--	--
3575 B	214	36	35	1	2	--	--
3576 B	214	34	20	1	1	--	--

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 V7J 1E9

CERT. # : A8110789-003-A
 INVOICE # : 18110789
 DATE : 30-APR-81
 P.O. # : NONE
 SIN PROJECT

Sample description	Prep code	Zn ppm	As ppm	W ppm	Sn ppm		
3577 B	214	30	25	1	2	--	--
3578 B	214	50	25	1	1	--	--
3579 B	214	16	30	1	1	--	--
3580 B	214	38	30	1	1	--	--
3581 B	214	26	35	1	2	--	--
3582 B	214	46	35	1	1	--	--
3583 B	214	28	45	30	1	--	--
3584 B	214	22	45	1	1	--	--
3585 B	214	22	25	1	1	--	--
3586 B	214	34	30	1	1	--	--
3587 B	214	82	35	1	2	--	--
3588 B	214	70	35	1	6	--	--
3589 B	214	66	25	1	3	--	--
3590 B	214	38	45	1	2	--	--
3591 B	214	166	45	1	2	--	--
3592 B	214	46	25	1	1	--	--
3593 B	214	62	25	1	1	--	--
3594 B	214	114	30	30	3	--	--
3595 B	214	62	25	1	2	--	--
3596 B	214	90	30	1	3	--	--
3597 B	214	68	22	1	3	--	--
3598 B	214	94	24	1	2	--	--
3599 B	214	112	39	1	5	--	--
3600 B	214	72	33	1	8	--	--
3601 B	214	64	32	1	4	--	--
3602 B	214	94	24	1	3	--	--
3603 B	214	100	38	1	35	--	--
3604 B	214	162	38	1	2	--	--
3605 B	214	70	160	3	80	--	--
3606 B	214	46	38	2	16	--	--
3607 B	214	30	11	1	1	--	--
3608 B	214	54	22	2	1	--	--
3609 B	214	70	16	1	3	--	--
3610 B	214	64	27	2	6	--	--
3611 B	214	58	23	1	3	--	--
3612 B	214	66	27	2	6	--	--
3613 B	214	84	57	2	8	--	--
3614 B	214	62	27	4	2	--	--
6041 B	214	158	99	6	410	--	--
6042 B	214	124	43	13	180	--	--

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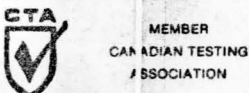
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V7J 1E9

CERT. # : A8110789-004-A
INVOICE # : I8110789
DATE : 30-APR-81
P.O. # : NONE
SIN PROJECT

Sample description	Prep code	Zn ppm	As ppm	W ppm	Sn ppm		
6043 B	214	76	20	8	40	--	--
6044 B	214	100	25	10	20	--	--
6045 B	214	134	29	15	32	--	--
6046 B	214	166	48	12	32	--	--
6047 B	214	144	29	7	82	--	--
6054 B	214	370	24	2	5	--	--
6055 B	214	148	10	35	13	--	--
6056 B	214	144	6	7	13	--	--
6057 B	214	130	12	15	27	--	--
6058 B	214	136	15	1	16	--	--
6059 B	214	215	63	4	48	--	--
6060 B	214	56	17	2	9	--	--
6061 B	214	50	27	1	8	--	--
6062 B	214	104	14	2	16	--	--
6063 B	214	60	12	1	9	--	--
6064 B	214	86	38	1	3	--	--
6065 B	214	355	39	2	6	--	--
6066 B	214	370	53	4	7	--	--
6067 B	214	540	97	11	18	--	--
6068 B	214	685	36	7	12	--	--
6069 B	214	310	36	14	6	--	--
6070 B	214	192	29	4	7	--	--
6071 B	214	26	9	1	3	--	--



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CERT. # : A8111853-001-A
INVOICE # : I8111853
DATE : 10-JUL-81
P.O. # : NONE
D.C. SYNDICATE

SIN GROUP

Sample description	Prep code	AS ppm	Sn ppm				
81-DCU-1	203	330	9	--	--	--	--
81-DCU-2	203	410	47	--	--	--	--
81-DCU-3	203	340	7	--	--	--	--
81-DCU-4	203	280	8	--	--	--	--
81-DCU-5	203	80	130	--	--	--	--
81-DCU-6	203	220	52	--	--	--	--
81-DCU-7	203	220	7	--	--	--	--
81-DCF-8	203	25	7	--	--	--	--
81-DCF-9	203	19	11	--	--	--	--
81-DCF-10	203	120	24	--	--	--	--
81-DCFT-01	203	360	220	--	--	--	--
81-DCFT-02	203	380	365	--	--	--	--
81-DCFT-03	203	650	250	--	--	--	--
81-DCFT-04	203	125	100	--	--	--	--
81-DCFT-05	203	155	45	--	--	--	--
81-DCFT-06	203	370	56	--	--	--	--
81-DCFT-07	203	240	60	--	--	--	--
81-DCFT-08	203	260	78	--	--	--	--
81-DCFT-09	203	910	540	--	--	--	--
81-DCFT-10	203	800	930	--	--	--	--
81-DCFT-11	203	>1000	590	--	--	--	--
81-DCFT-12	203	110	210	--	--	--	--
81-DCFT-13	203	205	74	--	--	--	--
81-DCFT-14	203	70	87	--	--	--	--
81-DCFT-15	203	280	64	--	--	--	--
81-DCFT-16	203	>1000	250	--	--	--	--
81-DCFT-17	203	185	100	--	--	--	--
81-DCFT-18	203	300	180	--	--	--	--
81-DCFT-19	203	260	150	--	--	--	--
81-DCFT-20	203	>1000	>1000	--	--	--	--
81-DCFT-21	203	230	220	--	--	--	--
81-DCFT-22	203	100	340	--	--	--	--
81-DCFT-23	203	510	300	--	--	--	--
81-DCFT-24	203	275	31	--	--	--	--
81-DCFT-25	203	115	69	--	--	--	--
81-DCFT-26	203	45	22	--	--	--	--
81-DCFT-27	203	50	16	--	--	--	--
81-DCFT-28	203	165	35	--	--	--	--
81-DCFT-29	203	370	44	--	--	--	--
81-DCFT-30	203	340	47	--	--	--	--

Certified by *Hart Bickler*



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CANADIAN TESTING
ASSOCIATION

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LTD;
1458 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8111853-002-A
INVOICE # : I8111853
DATE : 10-JUL-81
P.C. # : NONE
D.C. SYNDICATE

SIN GROUP

Sample description	Prep code	AS ppm	Sn ppm				
81-DCFT-31	203	295	10	--	--	--	--
81-DCFT-32	203	160	2	--	--	--	--
81-DCFT-33	203	310	2	--	--	--	--
81-DCFT-34	203	140	2	--	--	--	--
81-DCGT-1	203	260	26	--	--	--	--
81-DCGT-2	203	145	35	--	--	--	--

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V7J 1E9

CERT. # : A8111867-001-A
INVOICE # : 18111867
DATE : 09-JUL-81
P.O. # : NONE
D.C. SYNDICATE

SIN GROUP

Sample description	Prep code	AS ppm	Sn ppm				
27572C	205	9	84	--	--	--	--
27573C	205	90	460	--	--	--	--
27574C	205	16	150	--	--	--	--

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CERTIFICATE OF ASSAY

D : STEPHEN, J.C. EXPLORATION LTD;
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NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112297-001-A
INVOICE # : 18112297
DATE : 28-JUL-81
P.O. # : NONE
D.C. SYNDICATE

Sample description	Prep code	Cu percent	Zn percent	WO3 percent	Sn percent	Au (FA) oz/t	
25530 C	207	--	0.12	0.01	--	--	--
25531 C	207	--	3.84	0.02	--	--	--
27575 C	207	--	--	0.01	0.13	--	--
27576 C	207	--	--	0.01	0.05	--	--
27577 C	207	<0.01	--	0.01	<0.01	<0.003	--
27578 C	207	--	--	0.05	0.03	--	--
27579 C	207	0.18	--	0.01	0.27	<0.003	--
27580 C	207	0.01	--	<0.01	0.17	<0.003	--

S/S
N.W.

B. Stewart

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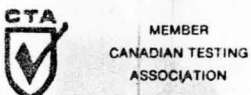
CERTIFICATE OF ANALYSIS

O : STEPHEN, J.C. EXPLORATION LTD;
1458 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112702-001-A
INVOICE # : 18112702
DATE : 12-AUG-81
P.O. # : NONE
D.C. SYNDICATE

Sample description	Prep code	Pb ppm	Zn ppm	AS ppm	W ppm	Sn ppm	
25565 C	205	--	--	--	70	4	--
25566 C	205	--	--	--	--	>1000	--
25567 C	205	--	--	--	1	20	--
27585 C	205	--	--	>1000	--	>1000	--
27586 C	205	--	--	48	--	3	--
27587 C	205	--	--	33	1	1	--
27588 C	205	--	--	25	1	2	--
27589 C	205	80	>10000	--	--	10	--
27590 C	205	--	--	36	--	10	--
27591 C	205	--	--	29	--	15	--
27592 C	205	--	--	33	--	3	--

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CANADA V7J 2G1
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CERTIFICATE OF ASSAY

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NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112703-001-A
INVOICE # : I8112703
DATE : 22-AUG-81
P.O. # : NONE
D.C. SYNDICATE

Sample description	Prep code	Cu percent	Zn percent	WO3 percent	Sn percent		
25564 C	208	0.30	0.02	--	0.01	--	--
27583 C	208	--	--	<0.01	0.01	--	--
27584 C	208	--	--	<0.01	0.17	--	--

Bl. Swaites

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TELEX: 043-52597

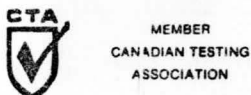
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CERTIFICATE OF ANALYSIS

O : STEPHEN, J.C. EXPLORATION LTD;
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NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112879-001-A
INVOICE # : I8112879
DATE : 18-AUG-81
P.O. # : NONE
SIN AND MUN

Sample description	Prep code	Cu ppm	Ag ppm	W ppm	Sn ppm		
DG SIN 1	203	55	0.1	5	17	--	--
DG SIN 2	203	58	0.1	4	21	--	--
DG SIN 3	203	57	0.1	7	15	--	--
DG SIN 4	203	61	0.1	10	14	--	--
DG MUN 1	203	43	0.1	19	53	--	--
DG MUN 2	203	54	0.3	70	92	--	--
DG MUN 3	203	65	0.4	145	64	--	--
DG MUN 4	203	69	0.4	185	74	--	--
DG MUN 5	203	67	0.1	150	165	--	--
DG MUN 6	203	125	0.1	320	410	--	--
DG MUN 7	203	105	0.1	205	270	--	--
DG MUN 8	203	115	0.3	640	90	--	--



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CERTIFICATE OF ASSAY

O : STEPHEN, J.C. EXPLORATION LTD;
1450 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112880-001-A
INVOICE # : 18112880
DATE : 17-AUG-81
P.O. # : NONE
SIN AND MUN

Sample description	Prep code	Cu percent	WO3 percent	Sn percent	Ag (FA) oz/t		
25933 C	207	<0.01	<0.01	0.01	0.01	--	--
25934 C	207	<0.01	<0.01	<0.01	0.01	--	--
25935 C	207	<0.01	<0.01	<0.01	0.01	--	--
25936 C	207	<0.01	<0.01	<0.01	0.02	--	--
25937 C	207	<0.01	<0.01	<0.01	0.02	--	--
25938 C	207	<0.01	<0.01	<0.01	0.04	--	--
25939 C	207	<0.01	<0.01	<0.01	0.03	--	--
25940 C	207	<0.01	<0.01	<0.01	<0.01	--	--
25941 C	207	<0.01	0.02	<0.01	<0.01	--	--
25942 C	207	<0.01	<0.01	<0.01	<0.01	--	--
25943 C	207	<0.01	<0.01	<0.01	0.03	--	--

B. Swates

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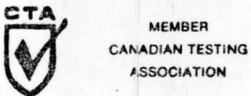
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CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LTD;
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V7J 1E9

CERT. # : A8112881-001-A
INVOICE # : I8112881
DATE : 18-AUG-81
P.O. # : NONE
SIN AND MUN

Sample description	Prep code	Cu ppm	Ag ppm	Au -(AA) ppb	W ppm	Sn ppm	
25932 C	205	600	3.1	10	1	80	--
25944 C	205	36	0.2	--	29	2	--
25945 C	205	19	1.9	--	40	11	--
25946 C	205	53	0.7	--	10	17	--
25947 C	205	45	0.1	--	1	2	--
25948 C	205	9	0.1	--	25	6	--
25949 C	205	30	0.1	--	7	12	--
25950 C	205	13	0.1	--	6	6	--
25951 C	205	35	0.1	--	8	10	--



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CERTIFICATE OF ASSAY

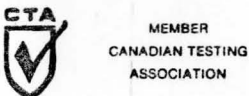
O : STEPHEN, J.C. EXPLORATION LTD;
1458 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112914-001-A
INVOICE # : I8112914
DATE : 17-AUG-81
P.O. # : NONE
SIN

Sample description	Prep code	Cu percent	W03 percent	Sn percent	Ag (FA) oz/t		
25914 C	207	<0.01	<0.01	0.01	0.03	--	--
25915 C	207	<0.01	<0.01	<0.01	<0.01	--	--
25916 C	207	<0.01	<0.01	0.01	0.01	--	--
25917 C	207	<0.01	<0.01	<0.01	<0.01	--	--
25918 C	207	<0.01	<0.01	0.01	0.01	--	--
25919 C	207	<0.01	<0.01	0.03	0.04	--	--
25920 C	207	<0.01	<0.01	0.07	0.28	--	--
25921 C	207	<0.01	<0.01	0.03	0.30	--	--
25922 C	207	0.01	<0.01	0.04	1.14	--	--
25923 C	207	<0.01	0.03	0.01	0.01	--	--
25924 C	207	<0.01	<0.01	0.01	<0.01	--	--
25925 C	207	<0.01	<0.01	<0.01	<0.01	--	--
25926 C	207	0.11	<0.01	0.10	0.38	--	--
25927 C	207	0.10	<0.01	0.02	<0.01	--	--
25928 C	207	0.03	<0.01	<0.01	<0.01	--	--
25929 C	207	<0.01	<0.01	0.01	<0.01	--	--
25930 C	207	0.01	<0.01	0.09	0.04	--	--
25931 C	207	<0.01	<0.01	0.01	<0.01	--	--

B. Swartz

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CERTIFICATE OF ASSAY

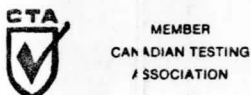
O : STEPHEN, J.C. EXPLORATION LTD;
1458 RUPERT ST;
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8112916-001-A
INVOICE # : I8112916
DATE : 17-AUG-81
P.O. # : NONE
SIN CLAIMS

Sample description	Prep code	Cu percent	W03 percent	Sn percent	Ag (FA) oz/t		
25901 C	207	<0.01	<0.01	0.02	0.02	--	--
25902 C	207	<0.01	<0.01	<0.01	0.01	--	--
25903 C	207	<0.01	<0.01	<0.01	0.01	--	--
25904 C	207	<0.01	<0.01	0.20	0.01	--	--
25905 C	207	<0.01	<0.01	0.01	<0.01	--	--
25906 C	207	<0.01	<0.01	0.04	0.04	--	--
25907 C	207	<0.01	<0.01	0.03	0.05	--	--
25908 C	207	<0.01	0.01	0.06	0.05	--	--
25909 C	207	<0.01	0.01	0.04	0.07	--	--
25910 C	207	<0.01	0.01	0.03	0.07	--	--
25911 C	207	0.02	0.02	0.16	0.07	--	--
25912 C	207	<0.01	<0.01	0.09	0.02	--	--
25913 C	207	0.03	0.01	0.06	0.06	--	--

R. Swaiter

.....
Registered Assayer, Province of British Columbia



SIN PROJECT

FINANCIAL REPORT

<u>Item</u>	<u>Expenditure</u>
FOOD	\$ 686.41
CLAIM RECORDING & ASSESSMENT RECORDING	667.50
GEOCHEMISTRY	3,647.81
SUB-CONTRACTS	7,449.55
SALARIES & BENEFITS	4,222.67
WORKERS' COMPENSATION	151.51
TOOLS AND SUPPLIES	8.59
BLUEPRINTING, DRAFTING & SUPPLIES	197.69
AIRCRAFT RENTAL	5,246.00
TRUCK RENTAL	88.00
VEHICLE OPERATING COSTS	25.60
TRAVEL	201.87
TELEPHONE, POSTAGE	122.02
INSURANCE	36.84
J.C. STEPHEN EXPLORATIONS LTD. SERVICES	1,784.04
OVERHEAD	<u>559.34</u>
	\$ 25,095.44

LEGEND

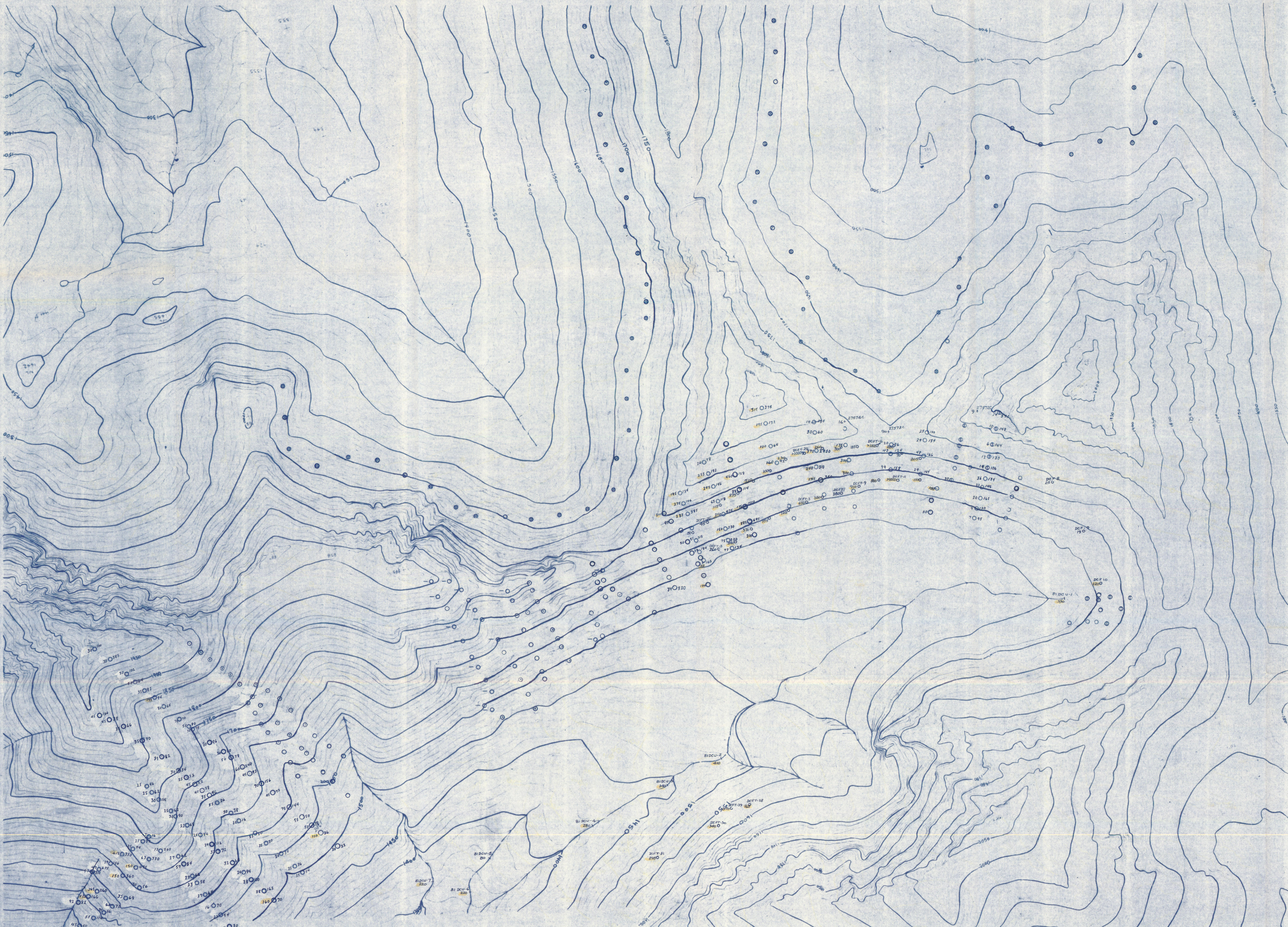
As/Zn SOIL SAMPLE STATION WITH VALUES FOR As/Zn IN P.P.M. (- INDICATES BELOW DETECTION LEVEL)

SOIL SAMPLE STATION WITH VALUE FOR

NOTE ALL VALUES DETERMINED BY CHEMEX

DCFT-12 120 D 1981 TALUS SAMPLE

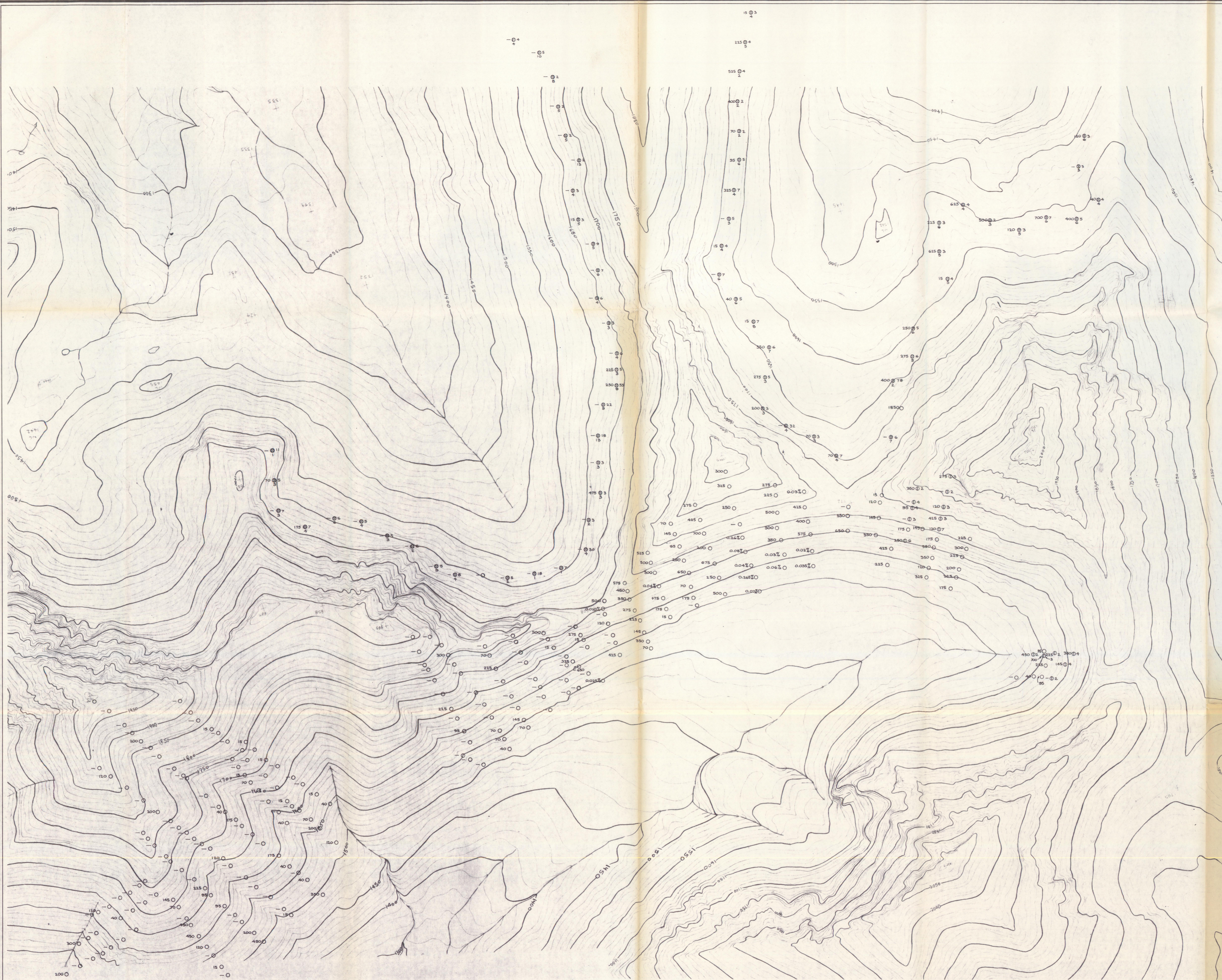
DC-U-2 210 X 1981 SILT SAMPLE



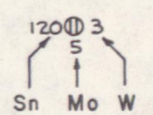
J. C. STEPHEN EXPLORATIONS LTD.
SIN PROJECT
As/Zn GEOCHEMISTRY
 DORSEY RANGE, YUKON TERRITORY

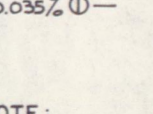
1:5000 SCALE

MAPPED BY: S.H.B.	REVISED: AUGUST, 1981	H.T.S. No. 105 B
DATE: JUL. 78		ACCT No. 358-21
DRAWN BY: S.H.B./R.M.B.		DRWG. No. SL-78-00
DATE: APR. 78		



LEGEND

 SOIL SAMPLE STATION
 WITH VALUES FOR Sn/W/Mo IN P.P.M.
 (- INDICATES BELOW DETECTION LEVEL)

 SOIL SAMPLE STATION
 WITH VALUE FOR Sn IN PERCENT

NOTE: ALL VALUES FOR Sn DETERMINED BY XRF

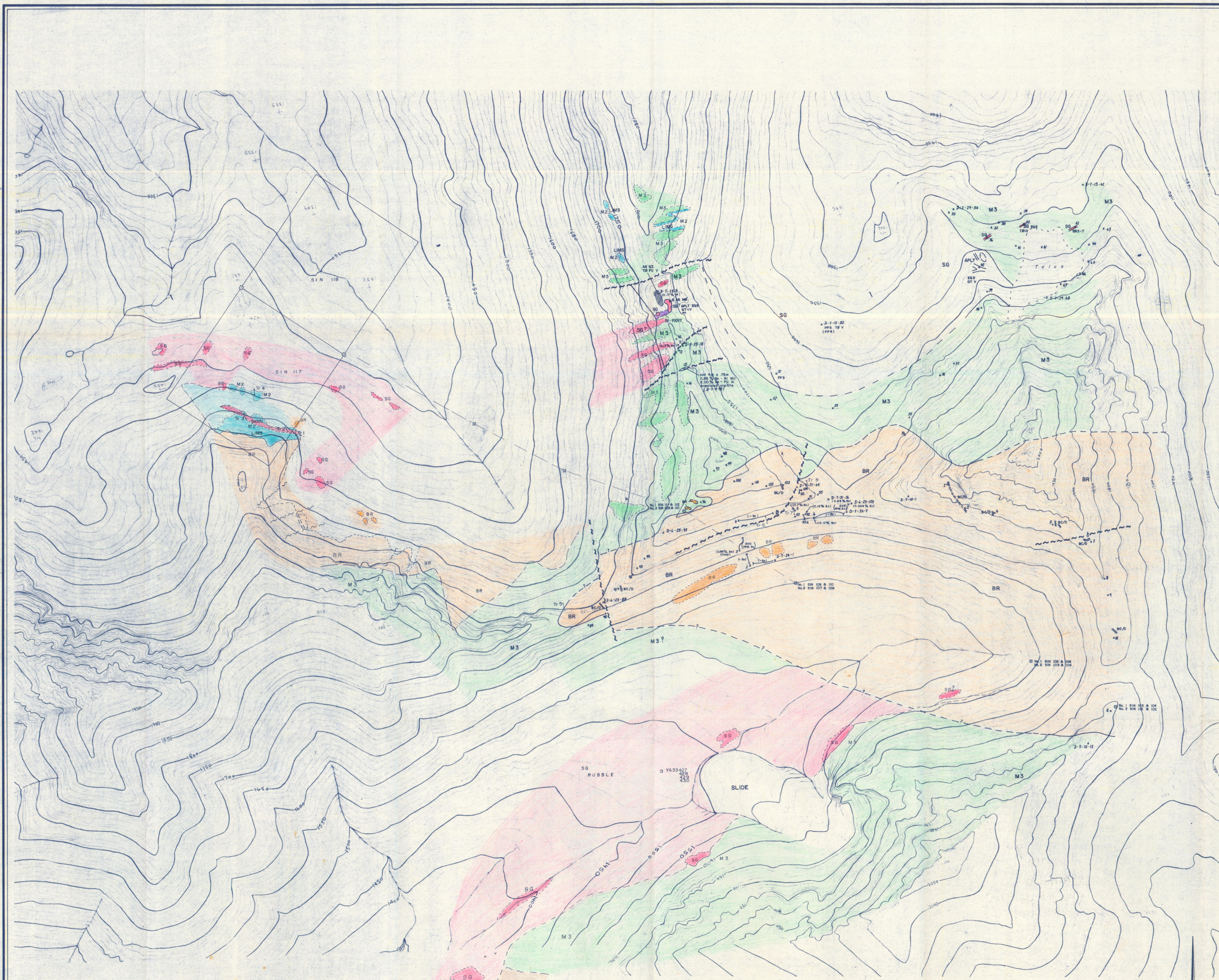
COUPONT EXPLORATION
CANADA

**KLINKIT JOINT VENTURE
SIN PROJECT
Mo/Sn/W GEOCHEMISTRY
DORSEY RANGE, YUKON TERRITORY**

1:5000
SCALE

MAPPED BY: S.M.D.	REVISED: M.S.	N.T.S. No.: 105 B
DATE: JUL. 78		ACCT No.: 388-21
DRAWN BY: C.M.K., R.W.		DRWG. No.: KL 78-09
DATE: DEC. 78		

MAP IV



- LEGEND**
- CRETACEOUS OR TERTIARY**
- SG SEAGULL BATHOLITH
 - EQ2 (or 3,4,5,6) - average crystal size
 - PP2 (or 3,4,5) - groundmass crystal size
 - BR2 - 7 - variation in crystal size
 - APLT - APLITE
- JURASSIC - CRETACEOUS (?)**
- CR CASSIAR - RAM STOCK
- PERMIAN - MESOZOIC**
- DIGR DIORITE
 - PXNT PYROXENITE
 - BTXNT BIOTITE PYROXENITE
 - PERD PERIDOTITE
 - BC/D BASIC DYKE
 - BR BROCK INTRUSIONS
- MISSISSIPPIAN (PENNSYLVANIAN ?)**
- M3 UPPER SYLVESTER GROUP
 - ARGL ARGILLITE
 - ANVC ANDESITIC VOLCANIC ROCKS
 - VCSD VOLCANO-SEDIMENTARY ROCKS
 - VLCG VOLCANO-CLASTIC ROCKS
 - SCHS SCHIST
 - M2 LOWER SYLVESTER GROUP
 - LIMS LIMESTONE
 - MARL MARL
 - SLAT SLATE
 - ARGL ARGILLITE
 - SHAL SHALE
 - QZLT QUARTZITE
 - CONG CONGLOMERATE
 - CHRT CHERT
 - VOLC VOLCANIC
 - SKRN SKARN
 - SULF SULFIDE HORIZON
 - ARGZ ARGILLACEOUS QUARTZITE
 - BRXX BRECCIA
 - GNIS GNEISS
 - SCHS SCHIST
- AGE UNKNOWN**
- DB/D DIABASE DYKE
 - PXDK PYROXENE - PORPHYRY DYKE
 - RYDK RHYOLITE DYKE

- SYMBOLS**
- EDGE OF TALUS
 - OUTCROP
 - CONTACT OBSERVED
 - CONTACT APPROXIMATE
 - CONTACT ASSUMED
 - CONTACT GRADATIONAL
 - FAULT (showing direction of movement)
 - ALTERATION AREA
 - BEDDING-INCLINED, VERTICAL
 - JOINTING-INCLINED, VERTICAL
 - FOLIATION-INCLINED, VERTICAL
 - VEIN-INCLINED, VERTICAL
 - AREA OF SMALL VEINS
 - ANTICLINE - UPRIGHT, OVERTURNED
 - AXIAL PLUNGE
 - GOSSANED AREAS
 - GEOLOGY / ROCK SAMPLE STATION
 - THIN SECTION
 - TRACE ELEMENT / WHOLE ROCK ANALYSES
 - THIN SECTION & TRACE ELEMENT / WHOLE ROCK ANALYSES
 - CHIP SAMPLE
 - Rock A (Rock B) ROCK A more frequent than ROCK B
 - GULLY
 - CREEK
 - CLAIM POST

ABBREVIATIONS

MINERALS	DESCRIPTORS
AS ARSENOOPYRITE	BLK BLACK
AX AXINITE	EQ EQUIANGULAR
BI BIOTITE	FEL FELDSPATHIC
CA CALCITE	G\$ GREISEN
CH CHALCEDONY	GSD GOSSANED
CT CASSITERITE	IB INTERBEDDED
CU COPPER	LIM LIMY
FU FLUORITE	MSS MASSIVE
GA GARNET	PD POD
GL GALENA	PEB PEBBLY
GR GRAPHITE	PG PERMATITIC
HB HORNBLende	PP PORPHYRITIC
HE HEMATITE	SD SEDIMENTARY
IL ILLITE	SIF SILICIFIED
LT LIMONITE	SR SERIATE
MG MAGNETITE	VC VOLCANOCLASTIC
MN MANGANESE	/D DYKE
MB MOLYBDENITE	mc MIAROLITIC CAVITIES
MS SERICITE	v VEIN
MU MUSCOVITE	<v MICROVEIN
OX OXIDES	w/ WITH
PX PYROXENE	
PY PYRITE	
QC QUARTZ (CHERT)	
QT QUARTZ & TOURMALINE	
QZ QUARTZ	
SL SPHALERITE	
SUL SULFIDE	
T\$ TOURMALINE	

NOTE:
Sn VALUES IN % ARE MIN-EN ASSAYS

COURTNEY EXPLORATION
CANADA

**KLINKIT JOINT VENTURE
SIN PROJECT
GEOLOGY**
DORSEY RANGE, YUKON TERRITORY

1:6000
SCALE

MAPPED BY: S.M.D. REVISED: N.T.S. No. 108 B
DATE: JUN-JUL 79 REVISION: 1981 ACCT No. 538-21
DRAWN BY: S.M.K., K.L.A. DATE: NOV. 78 DRWG. No. KL 78-58

LEGEND

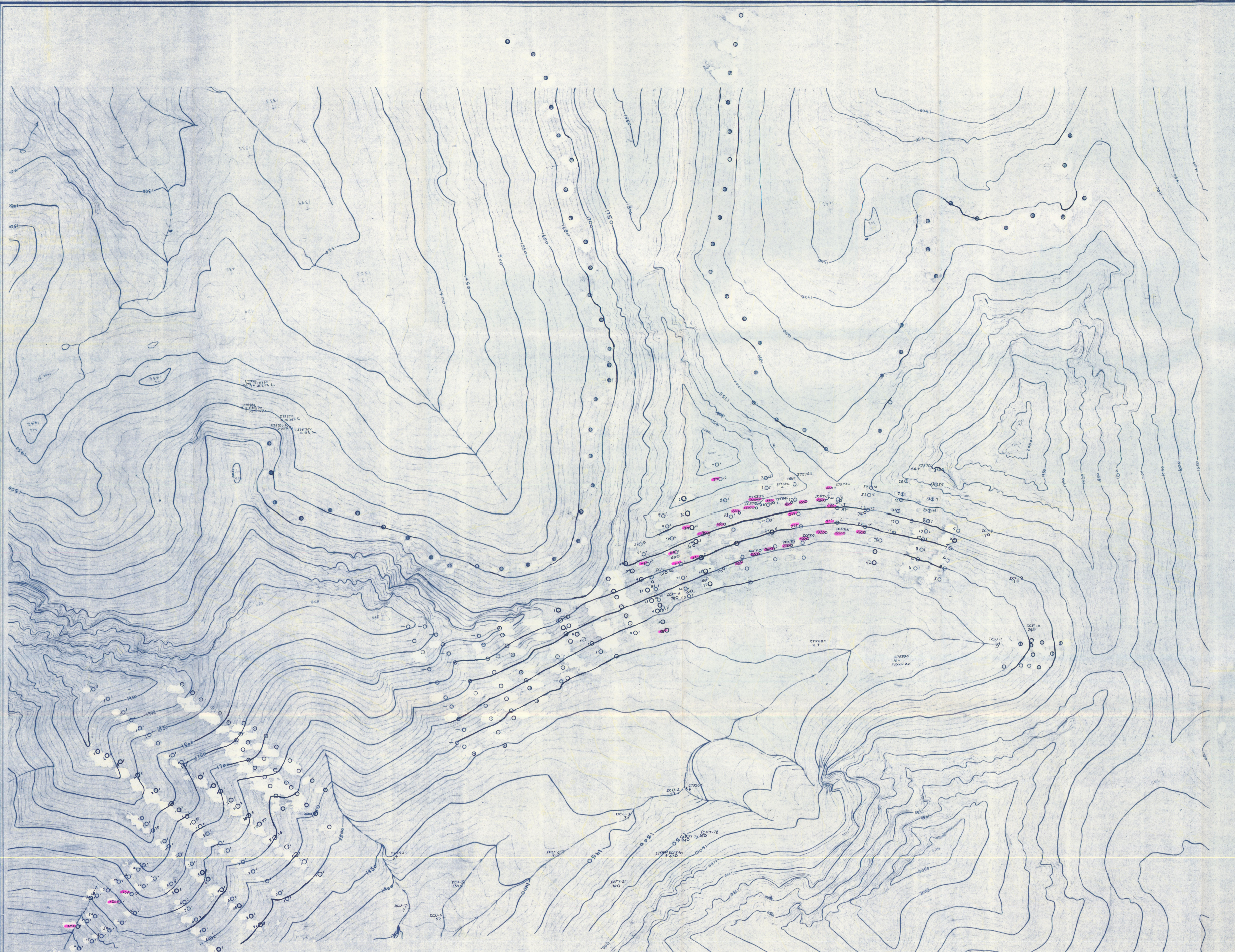
SOIL SAMPLE STATION WITH VALUES FOR Sn/W IN P.P.M. (- INDICATES BELOW DETECTION LEVEL)

SOIL SAMPLE STATION WITH VALUE FOR

NOTE: ALL VALUES DETERMINED BY CHEMEX

DCFT-12 1981 TALUS SAMPLE

DCU-2 1981 SILT SAMPLE



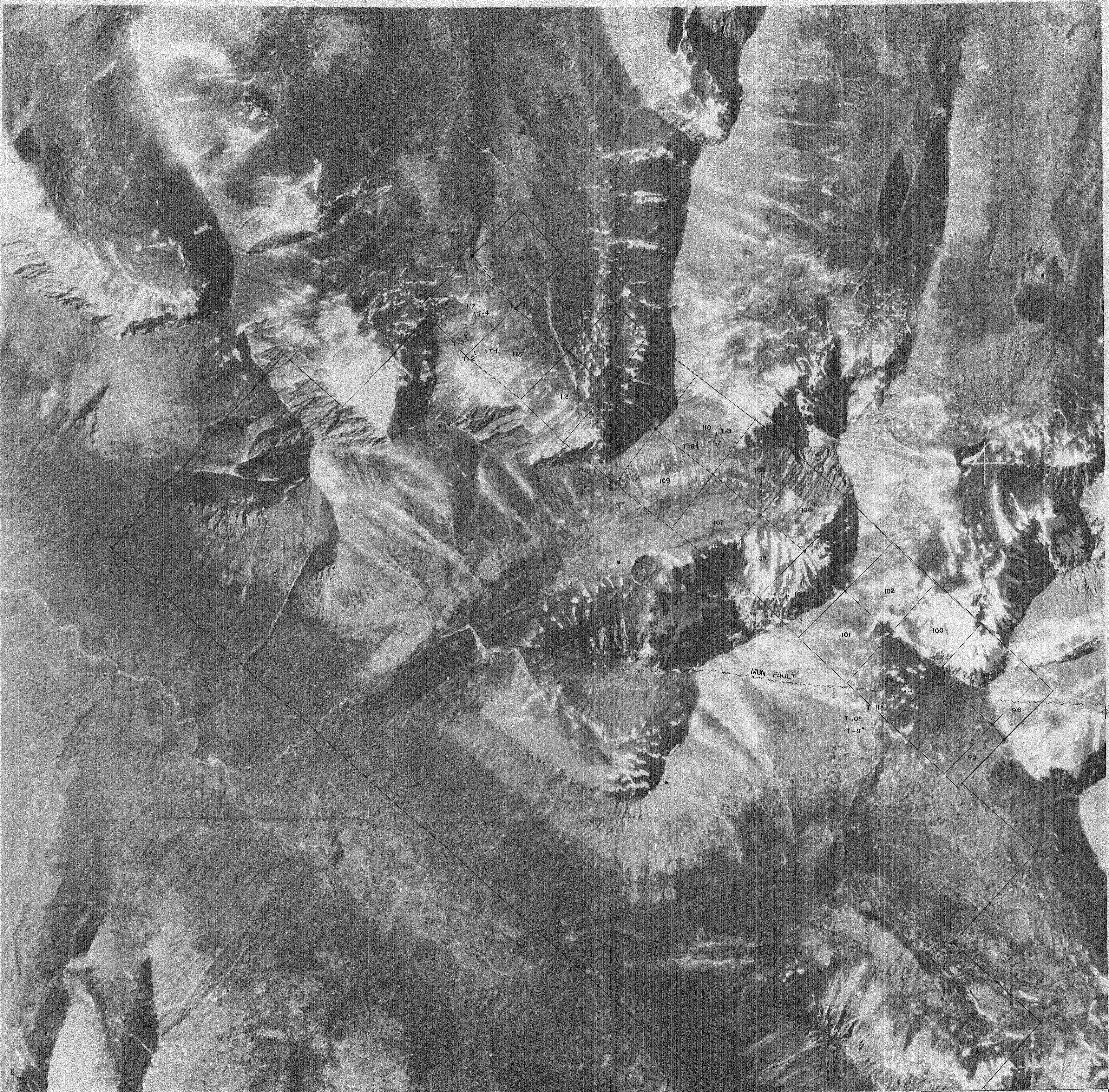
J. C. STEPHEN EXPLORATIONS LTD.
SIN PROJECT
Sn/W GEOCHEMISTRY
 DORSEY RANGE, YUKON TERRITORY

1:8000
 SCALE

MAPPED BY: A.M.D.	REVISED: August 1981	N.T.S. No.: 105 B
DATE: Aug. 78		ACCT. No.: 355-21
DRAWN BY: S.M.R., K.L.A.		DRWG. No.: SL 79-59
DATE: Aug. 78		

DCFT-32
20 20

NTS 105 B
DMS. 09.46.73.33
KLUHIT I.V
PHOTOMONTAGE SIN AREA
SCALE 1:10,000



REGISTRATION FOR SOUTH SHEET

REGISTRATION FOR SOUTH SHEET



SIN PROJECT
SIN CLAIM GROUP
NTS 105 B3
SCALE 1:10,000
SEPT 1981