OM83-8-JV-73

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

THE FOLLOWING HAVE BEEN PREVIOUSLY SUBMITTED:

1. DDH 3115-19 (FIRST PART OF HOLE) → SEE: FOSTER 0025 MINING RECORDER, REPORT OF WORK #54-1983

2. DDH 3115-21, 3115-22, 3115-23, 3115-24 → SEE: FOSTER 0027 MINING RECORDER REPORT OF WORK #66-1984

3. DDH 3115-27, 3115-28 → SEE: FOSTER 0026 MINING RECORDER, REPORT OF WORK #11-1984

4. GEOLOGY MAP SHEET 2 OF 3 → SEE: FOSTER 0028, #1

010

SULPETRO MINERALS LIMITED

GEOLOGICAL MAPPING and DIAMOND DRILLING

FOSTUNG JOINT VENTURE

Foster Township Espanola, Ontario

REPORT for ONTARIO MINERAL EXPLORATION PROGRAM

NTS 41-I-4

A.W. Beecham
22 December 1983

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INTRODUCTION

An ongoing programme of exploration at Fostung by Sulpetro (and its predecessors) and joint venture partner, Union Carbide Corporation has been in operation since 1979. The work done in 1983 in conjunction with the Ontario Mineral Exploration Program, OM 83-JV-73 consisted firstly of 1532.5 metres (5028 ft) of diamond drilling and detailed stratigraphic studies on the main low grade W-Mo-Cu skarn deposits and secondly geological mapping and prospecting on the Augusta Lake group, a property lying adjacent and to the NE of the main Fostung holdings.

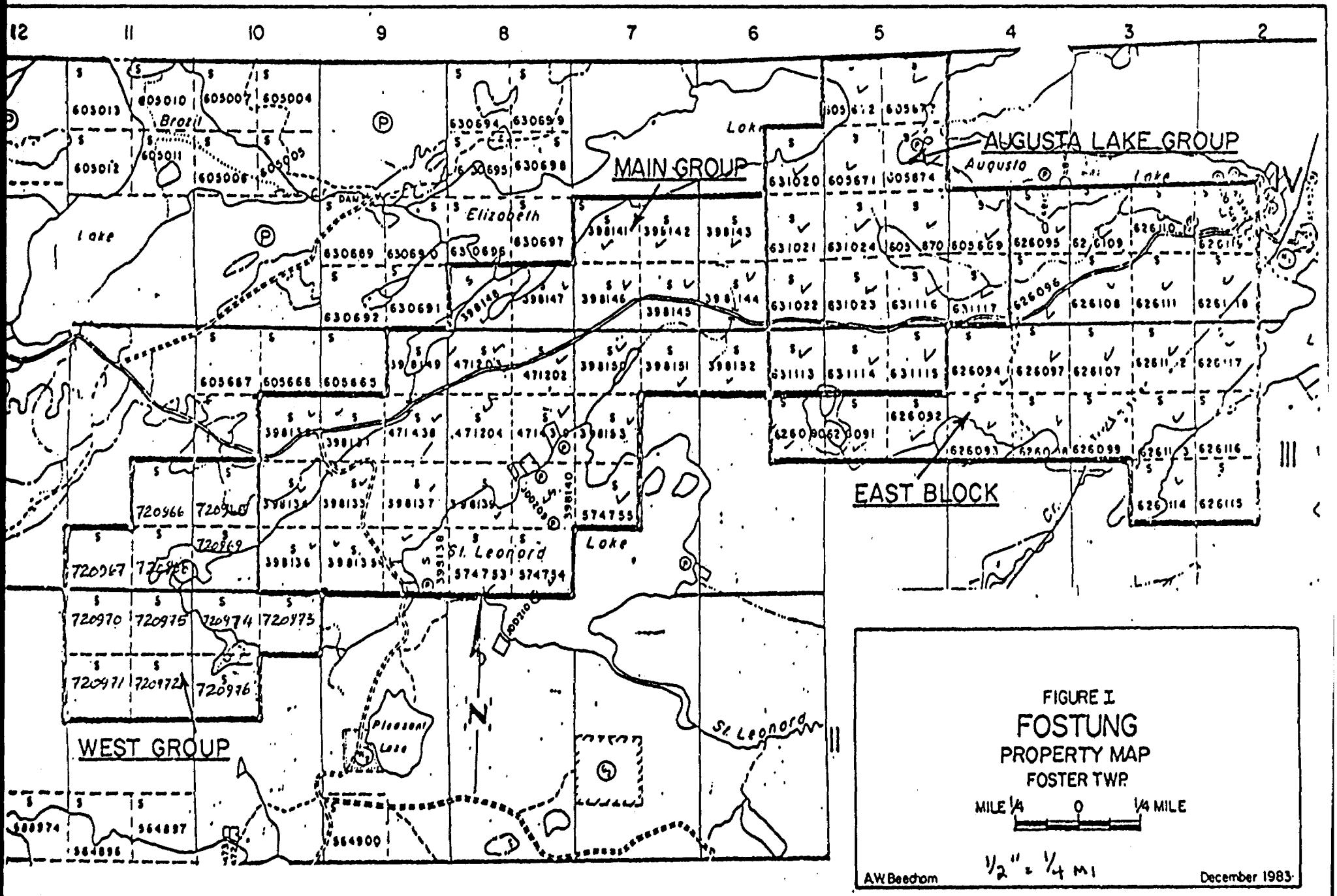
Property Description:

The holdings consist of 82 contiguous claims stretching from lot 11 Con II to lot 2 Con. IV of Foster Township. See Fig. 1. All of the claims are held jointly by Sulpetro and Union Carbide. The main group of claims were acquired by option agreements with Messrs T. Tamminen and W. Alanen and by staking by Union Carbide. These options have been exercized. Peripheral groups were added by Sulpetro (and predecessor St. Joseph Explorations) mainly by staking. However, the Augusta Lake group was acquired in March 1982 by an option agreement with T. Tamminen. This option (to purchase) has not been exercized.

Location and Access:

Fostung lies 10 km east of the town of Espanola. Access is excellent. A good gravel road to the West Bay of Lake Panache runs the length of the property and passes within 200 metres of all the important showings. A branch from this road to Hannah and Stratton Lakes crosses the western part of the property from NW to SE.

...../2


12
11
10
9
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3
2
MAIN GROUP
AUGUSTA LAKE GROUP
EAST BLOCK
WEST GROUP
Lake
Broil
Elizabeth
Augusta
St. Leonard
Pleasant Lake
St. Leonard
N
FIGURE I
FOSTUNG
PROPERTY MAP
FOSTER TWP.
MILE 1/4 0 1/4 MILE
1/2" = 1/4 MI
A.W. Beedom
December 1983

Topography and Surficial Deposits:

The area is relatively rugged with abundant outcrop. Local relief exceeds 50 metres. A prominent topographic high known as Breccia Hill is located in the western part of the property. To the NE, Nipissing Diabase forms prominent rocky hills along the SE shore of Elizabeth Lake and between Elizabeth and Augusta Lakes. There is a northeast grain due to formational trends, but this is modified by valleys due to faults in at least 3 different directions.

Thin, discontinuous till covers the lower areas and depressions. Some of this has been water-worked as evident from local occurrence of gravel.

Previous Work:

Since the discovery of scheelite in 1966 by R.M. Ginn while exploring for Texas Gulf, the area has been explored intermittently by various mining companies including; Texas Gulf, Cerro Corporation, Vangulf, St. Joseph Explorations, Union Carbide and the Joint Venture of Sulpetro and Union Carbide. The work consisted of prospecting, mapping, various geophysical surveys, soil geochemistry and 34 drill holes. This is described in more detail by Robinson (1979) and Scratch (1982).

On the Augusta Lake group considerable old trenching and some diamond drilling was done on the pyritic amphibolite (skarn) at Line 9E/0+35mN. This was presumably done for either copper and nickel or gold.

Regional Geology:

The area is underlain by various formations of the Proterozoic, Huronian Supergroup. These formations in ascending

stratigraphic order are; the Mississagi quartzites, the Bruce conglomerates, the Espanola calcareous siltstones, quartzites and limestones and the Serpent quartzites. The Nipissing Diabase forms regional sheets which are mainly sill-like. The sediments and Nipissing Diabase are folded into NE-SW to E-W open folds. Three direction of faults, NE-SW, NW-SE and EW disrupt the formations. Late diabase dykes cut the sediments and Nipissing Diabase.

The Fostung skarns are developed in what are believed to be the upper calcareous part of the Espanola Lower Siltstone Member, as described for Merritt Township by Card (1978). The skarns are located on the NW limb of the St. Leonard anticline (or the SE limb of the Elizabeth Lake syncline) adjacent to a prominent strike fault known as the St. Leonard fault in Card's work and at Fostung referred to as the Base Line Fault. The fault is characterized by the occurrence of quartz stockworks-breccias and locally by albitite bodies.

The skarning event has affected the 2150 m.y. Nipissing Diabase, but is cut by late diabase dykes. Contrary to Card's hypothesis, the skarns are not thought to be related to the nearby Nipissing Diabase sheet, but to an as yet undiscovered, buried felsic intrusive intermediate in age between the Nipissing Diabase and the late diabase, i.e. between 2150 and about 1400 m.y.

GEOLOGICAL MAPPING, AUGUSTA LAKE

These claims contain the NE strike extension of the rocks that host the main Fostung deposits. A quartz stockwork

body similar to the occurrence in the main Fostung claims at Breccia Hill was known from Card's (1976) work to be located at the west end of Augusta Lake. It was to investigate the area around the stockwork, that the ground was acquired. The thinking was that such stockworks might be an expression cf a buried felsic intrusive, the presence of which combined with the carbonate-rich Espanola Formation rocks could form a favourable skarn setting.

Structural Geology:

The structural setting, as with the lithology is a continuation of that seen at Fostung. Strikes are about 050° with dips 50 to 70° NW. Almost all top indicators are also to the NW.

Three sets of faults are recognized. The first of these are NE-SW trending ones, the most prominent of which is a fault marked by a prominent valley running 50 to 200 m grid south of the base line. It is referred to here as the St. Leonard Fault as it appears to be the main stratigraphic disruption in the area. South of this fault are relatively pure quartzites with only minor siltstone layers, whereas to the north, the rocks are dominantly quartzites with calcareous quartzites and numerous siltstone beds.

There is conflicting evidence for the existance of the Base Line Fault which is recognized on the main Fostung group as the south boundary of the Espanola Formation. It should cross the (grid) NW part of the Augusta Lake grid at about 200 to 160 m N of the base line. However, there is no conspicuous topographic expression at the south contact of the main carbonate unit and at 9+40E/1+60N an unbroken contact is observed. In conflict with this is the observation that just south of the carbonate unit there

is an abrupt 25° change in strike of the beds, suggesting a structural break. It seems possible that there is a fault not at the actual contact of the carbonate unit, but a short distance to the SE. within the quartzite sequence. This possibility was not recognized and checked for in the field.

As on the main property, considerable south side downward movement is inferred from the relative positions of the Serpent and Espanola Formations on the St. Leonard and, if it exists here, the Base Line Fault.

A second set of faults strike about 110° to 130° and are recognized south of the BL. between L10E and 11E, and at L7E north of the BL. There is no obvious relationship of the one known tungsten showing at L9E/0+35N with these cross faults as is the case on the main property.

A third set of faults, EW striking ones, is exemplified by the Tulloch Lake fault which has an apparent right-hand strike offset of the Nipissing Diabase of 300 to 350 m.

Lithology and Stratigraphy:

Except for areas underlain by Nipissing Diabase, the dominant rock type is feldspathic quartzite which on the fresh surface is mostly grey. The weathered rind, however, varies from pink to white, probably depending upon the pyrite content and degree of silicification. South of the St. Leonard Fault, the quartzites contain only sparse, thin beds of non-calcareous siltstone and are believed to be Serpent Formation.

Northward from the St. Leonard Fault are the following assemblages:

1. 140 m (approximately strat. thickness) of quartzite with calcareous quartzite, non-calcareous siltstone and one skarned siltstone unit;
2. 70 m of orthoquartzites;
3. 40 m of quartzite with interbedded siltstone;
4. 20 m of calcareous siltstone and silty limestone;
5. 50 m quartzite with minor siltstone;

Units 4 and 5 are obviously Espanola Formation, but the stratigraphic position of units 1 to 3 is not known because as described above, there is uncertainty as to whether or not they are in fault contact with definite Espanola Formation.

The 20 m carbonate unit traced across lines 7E to 10E at 175N is relatively unskarned and reacts to dilute HCL. However, the apparent offset of this unit north of the Tulloch Lake Fault is more siliceous and less reactive to acid. At 12+80E/0+20S, biotite and some green calc-silicates are developed in it.

Quartz stockworks and breccia shown by Card (1976) as an area about 150 x 300 m are here mapped as being restricted to a small triangle about 80 x 30 m just north of Augusta Lake on L15E. The stockworks contain up to 25% vein quartz in strongly silicified, light-brown to orange weathering quartzite. However, the area of silicification is considerably larger; opalescent patches of fine silicification affects rocks up to 200 m west of the stockwork and south of the stockwork, a distinctive honey comb-like weathering pattern appears to mark a sizeable area of silicification along fine intersecting hair-line fractures. No mineralization is associated with the stockwork.

An amphibole-rich skarn up to 10 m thick is developed within a contorted, biotitic siltstone about 30 m north of the BL on lines 8E to 9+50E. This had been mapped as an amphibolite dyke on government map, but because of its intimate interlayering and gradational contacts with the siltstone, it is thought to be a skarn.

No attempt has been made to map variations within the main part of the Nipissing Diabase sheet although various textures such as coarse diabasic, varitextured have been noted. At the north contact of the sheet between lines 9E and 10E, a medium grained rock was mapped as granodiorite. This may be a granophyric differentiate.

Economic Geology:

No significant mineralization outcrops in or adjacent to the quartz stockwork-breccia.

Anomalous amounts of finely disseminated pyrite occur within about 140 m thickness of quartzites, calcareous quartzites and siltstones just north of the St. Leonard Fault. Concentrations are, however, only locally more than ½%. At the north contact of this 140 m unit, an amphibolitic skarn contains from 2 to 10% pyrite with some pyrrhotite, a trace of chalcopyrite, and a little scheelite. The scheelite occurs on joint planes and as very lean disseminations where the skarn is apparently thickened by a small 'S' fold. The concentrations of scheelite are thought too minor to be of significance.

Organic soil samples were collected on a small, 50 m E-W by 12.5 m NS grid over an area 50 to 100 m NS by 400m EW covering the above described skarn. Most of the samples analyzed 2 ppm or less and there is no reflection of shallow, sub-cropping mineralization.

The main carbonate units of the Espanola Formation appear unskarned and unmineralized except at 12+80E/0+20S where patches of disseminated pyrite occur in weakly developed skarn.

Night prospecting with ultra,violet lamps was done over most of the main Espanola carbonates, over minor concentrations of pyrite in the area between the base line and the St. Leonard Fault, over the quartz stockwork on L14 to 15E and,in detail,over the amphibole skarn.

Some weakly pyritic quartzites at the east end of the area (L20E and BL) on the north shore of Augusta Lake were noted only at the end of the field season and were neither mapped nor prospected.

The Augusta Lake grid appears to lie well outside the main Fostung''skarn system'. The volume of scheelite in amphibolite skarn is economically insignificant and does not warrant further exploration.

DIAMOND DRILLING, MAIN PROPERTY

The main purpose of the 1983 drill programme was to drill-off at about 60 m spacing the remaining 600 m strike length of untested skarn between the main low grade zone (the F-33-10 Zone)

and Breccia Hill. It was hoped that this would appreciably extend the tonnage potential of the deposit. Six holes, 3115-22 to 3115-27, were drilled in this effort. However, except in drill holes 3115-22 & 23, the grades were too low to be of possible economic interest and this programme was therefore somewhat curtailed.

Secondary aims were to test magnetic and IP anomalies in skarned Espanola Formation west of Breccia Hill (drill hole 3115-21), and to deepen hole 3115-19 on the Breccia Hill albitite to test the 'intrusive' for porphyry-style mineralization. In addition, because of reducing the main part of the programme, it was possible to deepen 2 holes (3115-14 & 8) in the F-33-10 zone in an attempt to test the basal limestone of the Espanola Formation, and to drill one fill-in hole to varify grades in the best part of the F-33-10 Zone.

Summaries of the drilling results are given in the following sections. The reader is referred to the drill logs, Appendix I for more details.

Drill Hole 3115-21 (Section 8W):

This area had been somewhat downgraded by additional mapping and night lamping just prior to drilling. However, one short hole was drilled to test an IP-magnetic response under a swamp. The geophysical anomalies are caused by minor pyrrhotite in calc-silicate rocks, but only negligible amounts of scheelite are present. The drill hole did, however, establish that the Base Line Fault has a steep south dip which was important in testing for deeper members of the Espanola Formation farther east.

Drill Hole 3115-19 (Section 11E):

This hole was deepened from 98.1 to 186.5 m. However, within only a few metres of drilling, the albitite-quartz breccia gave way to quartzites. Some very minor amounts of chalcopyrite, molybdenite and fluorite are present in tiny quartz veins, but no pervasive alteration is present and there is no encouragement for the existance of a porphyry system.

Drill Hole 3115-22 (Section 33E):

This first hole to test the skarn zones between Breccia Hill and the main F-33-10 encountered fair widths of low grade tungsten mineralization. Significant assays are summarized below:

From	To	Core Length (m)	$\%WO_3$
4.3	9.5	5.2	0.13
21.0	29.5	8.5	0.157
43.7	49.5	5.8	0.277
57	61	4.0	0.106
69.5	84.3	14.8	0.168
106.6	108.6	2.0	0.685
126.8	145.3	18.5	0.220

Drill Hole 3115-23 (Section 33E):

This was drilled 'in front' of #22 to complete a section across the skarns. Further values were cut in #23, but much narrower than in #22. Of possible significance for underground mining potential is a mineralized argillite bed cut from 115.9 to 117.4 metres. Significant assays are listed below:

From	To	Core Length	$\%WO_3$
33.5	42.5	9.0 m	0.108
65.2	68.2	3.0	0.35
115.9	117.4	1.5	2.75

Drill Hole 3115-24 (Section 29+50E):

Only short sections of moderate to low grade tungsten were cut as follows:

From	To	Core Length	$\%WO_3$
40.5	44.5	4.0 m	0.13
49	50	1.0	0.41
54.4	56.5	2.1	0.52

Drill Hole 3115-25 (Section 27E):

Significant assays are as follows:

From	To	Core Length	$\%WO_3$
16.4	19.5	3.1	0.209
40.1	41.8	1.7	0.39
123.5	126.0	2.5	0.164
141.5	144.0	2.5	0.17

Drill Hole 3115-26 (Section 24E):

Only a few short, low grade sections were encountered.

Drill Hole 3115-27 (Section 21E):

A wide section of very low grade material corresponding to the down dip projection of the Ginn zone was cut as follows:

From	To	Core Length	%WO_3
51.3	78.3	27.0 m	0.08

Drill Hole 3115-14 (Section 51E):& 3115-8 (Section 54E):

Drill hole 3115-21, west of Breccia Hill indicated that the Base Line Fault (which forms the southeast boundary of the Espanola Formation at Fostung) dips steeply south instead of north as previously thought. In addition, studies of unskarned sections of the Espanola Formation elsewhere in the area indicated that the main scheelite deposits at Fostung are hosted by the upper part of the Lower Siltstone Member according to Card's (1978) subdivision. Hence, it was reasoned that as the formation dips north and the fault south, progressively deeper units of the formation would be found at greater depths. Holes 3115-14 and 8 were therefore deepened in search of the basal limestone in the hope of finding higher grade skarns. Both holes, however, hit the Base Line Fault before reaching the limestone. These holes did, however, confirm the steep south dip of the Base Line Fault and hole #8 cut dykes of porphyritic granite at depth south of the fault, strongly suggesting that the skarns are related to a buried granite and not the Nipissing Diabase. The granite dykes carry some molybdenite.

Significant assays are as follows:

Drill hole	From	To	Core Length	%WO_3	%MoS_2
3115-14	275.2	278.3	3.1	0.87	
3115-8	530.6	531.2	0.6		0.06

Drill Hole 3115-28 (Section 55E):

This hole is typical of and confirms the grade of the widest and best grade mineralization of the F-33-10 zone. Assays are as follows:

From	To	Core Length	$\%WO_3$
36.4	41.3	4.9	0.19
59.3	84.8	25.5	0.28
90.8	104.3	13.5	0.266
123.8	150.8	27.0	0.208
156.8	180.8	24.0	0.193

CONCLUSIONS and RECOMMENDATIONS

The main mineralizing system at Fostung does not appear to extend west of Breccia Hill. In fact, there appears to be no potential for shallow low grade material west of section 30E. The possibility of medium to high grade material exists in the F-33-10 area at depths below about 475 metres where it is expected that skarned equivalents of the Espanola Limestone exist. However, more stratigraphic studies are necessary before undertaking such deep drilling. In particular, it is necessary to resolve if there are large thicknesses of quartzite underlying the carbonate units as may be the case on the Augusta Lake grid.

GEOLOGICAL ASSOCIATION OF CANADA
A. W. BEECHAM
14/3/84
FELLOW

A. W. Beecham

14 Mar. 1984

REFERENCES

CARD K.D.
(1976) Geol. Espanola - White Fish Area, Dist. Sudbury Geosc. Rep. 131; Ont. Div. Mines.

(1978) Geol. Sudbury - Manitoulin Area; Dist. Sudbury; & Manitoulin; Rep. 166 Ont. Geol. Survey.

ROBINSON DOUGLAS
(1979) Assessment Report on Geological Work; Fostung Property, Foster Twp. Dist. Sudbury; St. Joseph Explorations.

SCRATCH R.B.
(Jan. 1982) Fostung J.V. Foster Twp; Report of Field Work for 1981; Sulpetro Minerals Limited.

APPENDIX II

STATEMENT OF EXPENSES

Analytical Costs	$ 8,631.85
Diamond Drilling	100,239.44
Food and Lodging	5,992.94
Gas, Oil and Travel	2,377.20
Miscellaneous	1,304.46
Salaries	52,296.18
Telephone	589.28
	$171,431.35

I certify that, to the best of my knowledge and belief, the above figures are true and correct.

Graeme M. Gordon, R.I.A.
Treasurer/Controller

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #8 (deepening)

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
FOSTUNG	FOSTER TWP, ONT.	Collar - 143°	August 10/1983
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3115	Lot 8 Con III	Collar - -58°	August 15/1983
CLAIM NO.	CO-ORDINATES.	LENGTH	DRILLED BY
S-471202	5880.15N; 8505.12E	368.20 to 537.67	N. Morissette
GRID NO. 1979 ft Grid 100'W of L55E;8+04N		COLLAR ELEV. 1502.36 *	LOGGED BY D. Miller

CORRECTED DIP TESTS

ACID			
411.5	-52		
469.4	-50		
533.4	-49		

LOCATION SKETCH OF HOLE

TROPARI	UNCORR.	CORR.
533.4 m	163	155.5

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH
			OBJECTIVES:- Hole deepended from 368.20 m; B Q core. to test lower part Espanola formation.				
368.20	425.6		DARK GREY BROWN CALC-SILICATE (altered siltstone)				
			Mainly dark brown with minor medium grey-green alteration bands and numerous pale grey alteration spots; occasional quartz-po-py veins to 3 cm thick at 0-70°, veins rarely carry moly and scheelite; good core throughout; hard, but most can be scratched with knife. Banding: 45°-50° at (360.20-382.5), 60° at (398-410).				
			Few specks of scheelite associated with quartz-calcite veins or alteration banding at :				
			373.2, (374.5-374.7), (375.4-375.7), 375.9, 376.8	4208	374.5	376.2	1.7
			378.4, 379.0, (381.6-381.8) 386.7, 387.7, 388.9, 398.8, 400.7, 415.6, 416, 416.5, 418.0, (422.8-424.0)				
			SULPHIDES: Overall about 1% as disseminations and associated with veining.				
			ACID REACTION: Weak or absent in matrix, good in hair line fractures. (369.8-371.5) Dark grey green, slightly coarser grained than adjacent rock- originally f-g sandstone.				
			(375.4-375.9), (376.2-376.8) Pale to dark grey green alteration bands.				
			(397.7-398.0) Medium grey, siliceous and brecciated.				
			(398.6-406.2) Quartz veins carry minor sph., cp, along with po and py, minor galena at 400.7; some muscovite with quartz veins.				
			413.6 - 30° slip healed with 5 mm of quartz, muscovite, moly, sph. and pyrite.				

* On first test tropari flipped over but azimuth probably okay: on further tests tropari would not lock and acid test done instead.

ASSAYS GEOCHEM ANALYSES

	% WO_3	ppm Mo	ppm Cu	ppm Ag
4208	.140	5	360	4.0

DOWN HOLE CO-ORDINATES

Depth	x-(140°) along sect.	y vert to sect	z normal to sect + at 2x
collar	0	0	0
30.5	16.1	25.8	0.9
91.4	48.3	77.5	3.5
152.4	82.2	128.1	7.4
213.4	116.0	178.6	11.8
274.3	157.4	227.9	17.2
335.3	187.7	276.6	22.6
388.7	219.5	319.0	29.3
440.5	250.6	359.8	36.4
501.4	288.6	406.4	46.0
537.67	311.4	433.7	52.3

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
368.2	425.6		(Cont'd)								
			(414.7-419.0) 2-3% f-g py-po associated with hair-line fracture network.								
			(419.0-425.6) Increasing grey-green alteration bands, some pale brown breccia fragments.								
			(417.7-417.9) 5 cm quartz vein of 20° with po-moly-dusting of po grains outward from veins.								
			424.3 3 mm sph.-py vein at 20°.								
425.6	427.5		PALE GREY-GREEN-PINK CALC-SILICATE (altered siltstone)								
			Pale grey-green with pale pink alteration and breccia fragments, also minor dark green actinolite alteration - mainly at 426.3-426.7; good core; hard but can be scratched with knife; very sparse local f-g py; no acid reaction in matrix, reaction in fractures.	4209	425.8	427.3	1.5	.078	22	61	1.5
			Minor scheelite at 425.8, (426.1-426.6).	4210	427.3	428.8	1.5	.004	<1	60	1.0
			Prominent 30° calcite-chlorite healed slips at 425.9 and 426.7.								
427.5	428.9		DARK GREEN CALC-SILICATE (altered siltstone)								
			Dark green with minor pale gren-green alteration bands; f-g, fairly hard, good core; very minor py and scheelite; good core; moderate acid reaction.								
428.9	435.3		PALE GREY-GREEN CALC-SILICATE (altered siltstone/f-g sandstone)								
			Pale grey green with dark bands and remnant patches; 50° banding; fairly hard; good core, acid reaction in fine fractures.	4211	430.3	431.7	1.4	.046	7	4	1.0
				4212	431.7	433.0	1.3	.092	34	2	1.0
			Fair scheelite at (431.7-433.0), (434.5-435.3)	4213	433.0	434.5	1.5	nil	2	5	0.5
			Few specks at (429.9-431.2)	4214	434.5	435.3	0.8	.022	8	40	1.0
435.3	436.9		LIGHT AND DARK GREEN GREY CALC-SILICATE (altered siltstone)								
			Light green grey with dark green grey alteration minerals as patches and along fractures; soft with good acid reaction; banding at 40°-45°.	4215	436.5	438.0	1.5	.018	3	110	1.5
			Scheelite: Few specks at 436.6 and 436.8								
			Sulphides: Very minor f-g py.								
			Other: Vesuvianite crystals at 436.9.								

SULPETRO MINERALS LIMITED

DRILL LOG HOLE NO. 3115 #8

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
436.9	439.9		LIGHT GREEN GREY CALC-SILICATE (altered siltstone) As preceding, but fewer dark bands and patches; banding at 45°-50°; moderately hard; moderate reaction with acid; good core. Scheelite: few specks to 439.6. Sulphides: very sparse f-g py.					
439.9	440.9		LIGHT TO MEDIUM GREY QUARTZITE? Light to medium grey; f-g, hard, siliceous; good core. Scheelite: 1 speck at 440.6 Sulphides: sparse f-g py.					
440.9	445.3		LIGHT TO DARK GREY QUARTZITE Light to dark grey, moderately hard to hard, about 30% micaceous bands (muscovite); acid reactions on several fine calcite healed fractures; local brecciation with dark grey quartz vein filling; core becoming fracturered with graphitic and chlorite healed slips; minor moly on slip faces; no scheelite. Sulphides - 3% fine to m-g py associated with micaceous zones and quartz veining; very minor cp and moly.					
445.3	450.6		QUARTZITE Similar to preceding but lighter colored muscovite finer grained and less sulphides; blocky core broken along fractures into pieces less than 12 cm; acid reaction on fine hair fractures; no scheelite. Sulphides: Minor f-g py, cp and Moly. 447.9 Prominent 20° slip with moly and graphite coating. 449.1 5 cm brecciation with graphic slips at 60° 450.1 2 moly healed fractures at 45° with 1 cm quartz vein; some grains of moly outward from fracture.					

SULPETRO MINERALS LIMITED

DRILL LOG HOLE NO. 3115 #8

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
450.6	450.73		FELDSPAR PORPHYRY DYKE Medium grey aphanitic matrix with euhedral to anhedral white feldspar crystals to 2 mm: contacts broken; some greenish altered muscovite or feldspar.					
450.73	460.9		QUARTZITE Light grey, minor brown; f-g, hard, siliceous, quartz-muscovite mixture; increase in quartz veins (total about 5%); acid reaction on fine hair fractures; fair core broken to pieces 18 cm or less; no scheelite. Sulphides: Very minor py, and rare moly mainly associated with quartz veins. (451.2-451.4) Medium grey muscovite, quartz feldspar dyke. (455.9-456.03) Dyke as above - more porphyritic texture with white feldspar - locally euhedral, 45° contact with moly coated fracture. (460.7-460.9) Quartz vein.					
460.9	467.3		FAULT ZONE Badly broken core, light to dark grey quartzite some quartz veins, locally leached; core ranges from 6 cm pieces to chips; numerous fractures mainly coated with chlorite but a few with moly and graphite; no scheelite. 461.9 - 4 cm soft clayey graphitic gouge. Core recovery in fault zone hard to estimate because extent of breakage - probably about 60%. Sulphides: Approximately 1% py mainly associated with quartz veining; some moly on slip faces and disseminations in quartz veins.					
467.3	472.1		QUARTZITE Hard light grey green quartzite with about 20% dark brown altered siltstone; quartzite has a few white quartz pebbles to 1 cm; numerous fine calcite veins and some matrix material react with acid; much muscovite in quartzite; fair core.					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			(cont'd)								
			Scheelite: speck at 472.								
			Sulphides: Minor py, very minor moly.								
			467.3-467.5 Moly on slip faces at 0°-10°.								
472.1	473.5		QUARTZ VEIN								
			White to grey, numerous fine fractures, good core; minor py and moly.								
			472.1 Contact at 10° with muscovite.								
			473.5 Contact at 25° with moly healed slip.								
473.5	473.8		CALC-SILICATE								
			Brown grey, soft, fairly unaltered strong acid reaction, 20° banding: good core: no scheelite.								
473.8	479.3		CALC-SILICATE AND QUARTZITE	4216	473.8	475.3	1.5	.052	9	960	1.5
				4217	475.3	475.8	0.5	.012	2	490	1.0
			Medium grey muscovite rich quartzite with inter-	4218	475.8	476.8	1.0	nil	43	160	1.0
			layered pale grey green to dark brown grey calc-sili-	4219	476.8	477.7	0.9	.180	19	740	1.5
			cate: darker rock is spotted with pale mineral: 25°	4220	477.7	478.9	1.2	.072	170	920	3.0
			banding: good core in pieces to 0.3 m: occasional	AVG	476.8	478.9	2.1	.118	105	843	2.4
			quartz-muscovite vein: lighter colored rock reacts moderately to acid.								
			Scheelite: Fair scheelite at (473.8-474.6), (476.8-477.7) and (478.5-478.9) associated with lighter colored rock: minor scheelite at (474.6-475.6) and (476.8-477.7).								
			Sulphides: About 3% py associated with better scheelite sections: very minor py in darker rock: some py-po and minor cp in quartz veins.								
479.3	483.1		MUSCOVITE QUARTZ FELDSPAR INTRUSIVE								
			Pale greenish grey to pinkish: f-g granular aggregate of quartz feldspar and muscovite: same subhedral white feldspar crystals but mostly anhedral: contacts at 10°-25°, with 2 cm quartz veins at each contact: no acid reaction.								

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #8 — SHEET 6 OF 9

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			(cont'd)					
			Scheelite: few speck visible.					
			Sulphides: Minor (Less than 1%) disseminated pyrite - rare moly.					
			Quartz veins: Several up to 4 cm - carry py, minor cp and moly.					
			481 - quartz vein with good disseminated moly.					
483.1	484.2		CALC-SILICATE AND QUARTZITE					
			Light and dark grey green, quartzite muscovite rich; weak acid reaction; moderately hard..					
			Scheelite: Few specks (483.8-483.9)					
			Sulphides: Minor disseminated and in 2 cm quartz vein with muscovite selvages.					
484.2	485.1		MUSCOVITE QUARTZ FELDSPAR INTRUSIVE					
			As 479.3-483.1 but finer grained; contacts at 10^{0} - 25^{0}, some chilling.					
			Scheelite: non visible					
			Sulphides: Minor disseminated moly and py.					
			Quartz veins: Few with py and moly. Moly on slip face at 25^{0} at 485.1.					
485.1	485.8		QUARTZITE					
			Light grey green; minor disseminated py; week acid reaction; no visible scheelite.					
485.8	486.7		MUSCOVITE QUARTZ FELDSPAR INTRUSIVE					
			As (479.3-483.1) contacts at 10^{0}-20^{0}.					
			Sulphides: Minor disseminated moly and py.					
			Quartz veins: Four, one with muscovite selvages; veins 5 mm-1 cm thick, with py and very sparse local moly. (Moly estimated to be less than 0.05% Mo)					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
486.7	497.3		CALC-SILICATE QUARTZITE Mainly dark grey green calc-silicate minor light grey green alteration: some interlayered light grey green quartzite; severl small pinkish-grey granitic stringers cutting rocks at 0°-40°, about 10% of section; calc-silicates and quartzites hard to moderately soft with weak acid reaction. Scheelite: None visible Sulphides: Very minor moly disseminated in granitic stringers, quartz veins and on some slip faces; minor disseminated pyrite and along quartz veins. (495.1-495.4) Breccia with granitic quartz, and siltstone fragments to 3 cm.								
497.3	508.4		DYKE DIABASE Dark grey, f-m-g, anhedral light grey plagroclase phenocrysts; strongly magnetic (magnetite), chilled over 10 cm at contacts; contacts about 30°.								
508.4	512.4		QUARTZITE Light grey to brown; f-g: hard; acid reaction only in fine calcite healed fractures which are very few; banding at 30°. Scheelite: Minor scheelite at 512.0-512.2. Sulphides: Rare disseminated f-g py except near scheelite where about 3% present; minor f-g moly associated with quartz veining. Quartz veins: Occasionalquartz veins ranging from 1 mm to 2 cm; carry minor po and moly; larger veins have muscovite selvages.								
512.4	526.2		QUARTZITE AND CALC-SILICATE Light grey green to dark brown; comprises interlayered quartzite and brown to greenish altered siltstone; brown alteration probably biotite: variable hardness with darker sections being softer; weak or absent acid reaction accept in fine calcite hair fractures (few) and in grainy greenish altered sections; banding 30°.	4221 4222	512.0 513.5	513.5 514.6	1.5 1.1	.018 .056	16 400	810 550	1.0 1.5

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Mo	GEOCHEM ANALYSES ppm Cu	Ag
			(Cont'd)							
			Scheelite: A little at (513.9-514.6), (525.9-526.0) and (518.3-518.7); very fine-grained.							
			Sulphides: Local f-g disseminated pyrite to 5% but variable and about 1% on average: moly, py, po and minor cp associated with quartz veins: best moly at 521.4-521.6 with quartz vein about 2% MoS_2.							
			Quartz veins: Occasional small veins to 3 cm and 3 larger veins, largest at 517.6-518.0; some with muscovite selvages; core angles on quartz mainly greater than 30 but some lower.							
			Other: Fluorite on fracture at 518.6.							
526.2	530.6		CALC-SILICATE							
			Mainly dark brown (biotite) spotted with 1cm or less pale grey minerals; minor banded quartzite (30 - 40); generally moderately soft (easily knife scratchable); weak or absent acid reaction.							
			No scheelite visible.							
			Sulphides: Minor disseminated f-g py.							
			Quartz veins: Very few, some with muscovite selvages.							
530.6	531.2		MUSCOVITE QUARTZ FELDSPAR INTRUSIVE	4223	530.6	531.2	0.6	.04	190	.5
			Green grey altered by greenish mineral (epidote/clay ?) moderately soft; weak acid reaction, f to c grained with occasional subhedral feldspar to 2 cm; contacts 30 and 45 .							
			Sulphides: Carries minor moly; f-g. disseminated with pyrite.							
			Quartz veins: 5 mm quartz veins at contacts.							
531.2	537.67		QUARTZITE AND CALC-SILICATE							
			Light green grey, dark brown, dark grey, hard to moderately hard; f-g; about to weak acid reaction; local 40 banding.							

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #8

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			(Cont'd)					
			Scheelite: 1 speck at 535.8.					
			Sulphides: Minor moly on a few slip faces; minor py - mainly associated with quartz veins - some po as well.					
			Quartz veins: A few quartz veins, some up to 4 cm thick; some with muscovite; some brecciation and quartz healing.					
	537.67		END OF HOLE					
			D C Miller, B.A. Sc.					
			PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. C. MILLER					

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #14 deepening

PROPERTY: FOSTUNG	TP OR AREA: FOSTER TWP., ONT	AZIMUTH: 140° (collar)	DATE STARTED: August 4/1983
PROJECT: 3115	LOT & CONC.	DIP: -45 (collar)	DATE COMPLETED: August 9/1983
CLAIM NO.: S-471202	CO-ORDINATES (metres): 5813.69N; 8513.19E *	LENGTH: 220.68 - 327.66 m	DRILLED BY: N. Morrisette
GRID NO.: 1979 ft Picket Line	L53E; 6+00N	COLLAR ELEV.: 1504.19 *	LOGGED BY: D. Miller

CORRECTED DIP TESTS

Depth	dip	cor. Az	uncor. Az
109.73	-45°	145.5	153°
219.46	-44°	147.0	154.5°
280.42	-42°	147.5	155°
320.04	-40°	158	165.5°

LOCATION SKETCH OF HOLE

* 1980 transit survey coord. system.

METRES FROM	METRES TO	SECTION	DESCRIPTION
			OBJECTIVES:- Hole deepened from 724 ft. (220.68 m). To test lower part Espanola Formation.
220.68	221.3		DARK GREY CALC-SILICATE (altered siltstone)
			Dark grey; some rusty coatings; hard broken core; minor v-f-g po and py along fine fractures; Core loss: 15 cm core recovered.
221.3	222.6		DARK GREY CALC-SILICATE (altered siltstone)
			As preceding except better core-broken into 13 cm pieces or smaller, no core loss: hard, siliceous, several fractures at 0°-45° ; several very fine quartz-calcite healed fractures carrying minor scheelite, po, py and traces of cp; core breaks along these fractures.
222.6	223.9		DARK-MEDIUM GREY CALC-SILICATE (altered siltstone)
			Dark and medium grey bands at 50° ; softer than preceding but still quite hard; lighter bands are slightly grainy; very sparse v-f-g po, py and cp along very fine fractures, local very sparse scheelite.
223.9	224.1		VEIN ZONE
			Several small quartz veins (to 2 cm) trending at 70° carry scheelite, po, py and traces of cp; some mica-calcite veining; host is siliceous, dark calc-silicate.

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
4196	222.6	224.1	1.5	.026	3	180	1.5
4197	224.1	225.6	1.5	.070	10	350	3.5

DOWN HOLE CO-ORDINATES

Depth	x-140°	y-vert+	z-230°
collar	0	0	0
55 m	38.89	38.89	0
165 m	116.31	116.67	7.46
250 m	117.00	175.72	14.91
300 m	213.84	209.18	19.76
327.66 m	233.99	226.95	26.30

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #14 —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
224.1	227.0		DARK GREY CALC-SILICATE (altered siltstone) Dark grey; v-f-g; siliceous, hard; numerous quartz-calcite veins at various angles carrying v-f-g po, cp, and py - overall about 1% sulfides; very minor scheelite.								
227.0	228.9		DARK GREY AND MEDIUM GREY GREEN CALC-SILICATE (altered siltstone) Dark grey and medium grey green bands at 60°, lighter colors predominant; f-g grainy texture; softer than preceding; po, py, traces of cp along fractures and small quartz veins, less fractures and quartz veins than preceding; less than 1% total sulphides; very minor scheelite at 227.0-227.4; some actinolite-tremolite.								
228.9	229.5		SILICIFIED ZONE Light-dark grey, several quartz veins to 2 cm; sharp contact at 228.9 at 75°, contact at 229.5 gradational; po, cp and py associated with smaller quartz veins at 70° and other angles; very sparse scheelite.								
229.5	231.0		DARK GREY CALC-SILICATE (altered siltstone) Dark grey; v-f-g; siliceous, hard; numerous fine quartz-calcite veins criss-crossing and at various angles, some larger quartz veins to 1 cm; po, py, cp associated with veins, less than 1% sulphides; some chlorite, muscovite, actinolite alteration along veins.								
231.0	232.7		DYKE Medium green grey, f-m-g, anhedral white-grey feldspar, minor quartz, chloritized mafics, chilled over 30 cm at 231.0; contacts at 70°; dyke carries 1% ± f-g po, py with fair cp on fractures - po disseminated and on fractures; minor scheelite at 231.0-231.4.	4198	231.0	232.7		nil	4	620	1.0

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
232.7	233.7		DARK GREY CALC-SILICATE (altered siltstone)					
			As 229.5-231.0; no scheelite;					
233.7	234.0		DYKE					
			As 231.0-232.7· finer grained; 70° contact at 233.7.					
234.0	235.0		MEDIUM GREY GREEN CALC-SILICATE (altered siltstone)					
			Medium grey green, moderately hard to very hard; v-f-g po, py and cp along few fine quartz-calcite fractures; actinolite-tremolite on fresh break.					
235.0	236.7		DYKE					
			Dark to medium grey green; similar to dyke at 231.0-232.7 but finer grained 1-2% v-f-g po, cp, py on fine fractures and as disseminations; contacts sharp at 60°; very minor scheelite.					
236.7	237.9		MEDIUM GREY CALC-SILICATE (altered siltstone)					
			Mainly medium grey with a few darker bands at 45°-60°; f-g grainy texture; 1-2% v-f-g py, po, cp as disseminations and along fine fractures; minor scheelite associated with veining; actinolite-tremolite on fresh break.					
237.9	238.5		SILICIFIED ZONE					
			Light to medium grey green, very siliceous quartz bands at 70°-85°; very minor scheelite associated with finer veins; very sparse po, py and cp.					
238.5	241.5		DARK GREY SILICEOUS CALC-SILICATE (altered siltstone)					
			Dark grey; v-f-g; hard, siliceous; numerous very fine criss-crossing quartz-calcite veins and a few larger ones to 1 cm; veins carry v-f-g py, po and cp; no scheelite.					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
241.5	243.1		DARK AND MEDIUM GREY CALC-SILICATE (altered siltstone) Dark, v-f-g: moderately hard (can be scratched with knife) bands are being altered and replaced by f-g grainy medium grey green bands: banding at 85°: less fractures and fine quartz-calcite veining than preceding: minor py and po along veins and as disseminations (less than 1%): actinolite-tremolite on fresh break.								
243.1	245.7		DARK GREY SILICEOUS CALC-SILICATE (altered siltstone) Dark and medium grey, similar to 238.5-241.5, very hard dense, numerous branching fine quarz-calcite veins carry minor scheelite locally along with v-f-g py, po, and cp.								
245.7	248.9		DARK AND MEDIUM GREY CALC-SILICATE (altered siltstone) As 241.5-243.1 preceding: lighter material is replacing darker material, banding at various angles but mainly about 80°: minor quartz veining with minor associated scheelite, po, and py; actinolite-tremolite on fresh break.	4199 4200	245.7 247.2	247.2 248.9	1.5 1.7	nil .014	2 6	160 300	0.5 1.0
248.9	251.6		DARK GREY BROWN CALC-SILICATE (altered siltstone) Dark grey brown, dense, v-f-g, can be scratched by knife: several fine veins and fractures but less than in previous silicified units: py, po and minor cp associated with fine quartz-calcite veins and as disseminations: weak 45° banding: no scheelite: core in pieces 15 cm or less, commonly broken along low angle fractures.								
251.6	252.8		DARK GREY BROWN AND MEDIUM GREY GREEN CALC-SILICATE (altered siltstone) As 245.7-248.9, about 60% lighter alteration replacing darker rock: lighter altered rock was fine								

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			(Cont'd) grainy texture; greenish grains are radiating actinolite crystals and chlorite altered actinolite (tremolite); minor po, py and cp as disseminations and along fine quartz-calcite healed fractures; core broken to less than 15 cm pieces; alteration banding about 80°.					
252.8	255.8		SILICIFIED CALC-SILICATE (altered siltstone) Grey to brown grey, dense siliceous, very hard; brownish rock being silicified and partly replaced by silica; grainy texture and fine speckled appearance in light colored alteration in due to growth and alteration of actinolite-tremolite crystals; rare py and po disseminated along fine quartz-calcite fractures (less ½%); alteration banding at 80° ±. Brownish color due to biotite alteration ?					
255.8	256.7		DARK GREY BROWN AND MEDIUM GREEN GREY CALC-SILICATE As (251.6-257.8). Minor py, po and traces of cp; alteration banding at 80°; about 80% light colored rock; some low angle fractures and broken core; no scheelite.					
256.7	259.5		SILICIFED CALC-SILICATE As (252.8-255.8); several small quartz veins up to 3 cm at various angles, some with (muscovite?) haloes; minor py, po and cp mainly associated with quartz veining - py dominant - total less than 1%; 80° alteration banding; considerable broken core associated with low angle fractures; no scheelite.					
259.5	261.3		BROWN GREY CALC-SILICATE (altered siltstone) Brown grey, dense, v-f-g, brown grey; as 256.7-259.5 preceding but softer - can be scratched with knife; more calcareous; minor broken core at (259.2-259.5) and (260.5-261) associated with low angle fractures. Minor po, py and cp associated with fine quartz calite veins; minor scheelite at 260.5.					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #14

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
261.3	262.4		DYKE	4207	261.2	262.4	1.2	.12	120	620	1.0
			Medium grey green with anhedral white feldspar; f-g contact at 261.3 at 45° with 10 cm of brecciation and silicification: py, po and traces amounts of dark grey soft metallic mineral associated with po; some scheelite associated with fractures and quartz veins; minor broken core associated with low angle fractures;								
262.4	263.1		SILICIFIED ZONE								
			Grey to pink quartz feldspar breccia zone, minor dark grey remnant silicates and greenish actinolite-chlorite masses; minor fine py, po and some scheelite.								
263.1	270.4		DARK GREY BROWN CALC-SILICATE (altered siltstone)								
			Mainly dark brown grey to medium grey with minor green grey alteration bands at 80°; generally about knife hardness or softer; a few quartz veins 1 to 8 cm and many fine quartz calcite veins and fractures, several at low angles causing minor broken core; very minor po and py mostly along veining; very minor associated scheelite.								
			(263.3-263.9) White quartz vein with minor py, po cp, bismuth? (native) and fluorite.								
			(270.1) 2 cm quartz po-py vein with (native bismuth?)								
270.4	272.3		SILICA BRECCIA								
			Dark to light grey to dark brown grey with some softer greenish actinolite-chlorite altered remnants; some brownish biotite altered remnants; very minor py and scheelite; generally broken core associated with low angle fractures.								

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
272.3	273.7		BRECCIA ZONE Dark grey brown to medium grey: similar to preceding but softer: some banding at 60° near 273: minor py-po in fine fractures: minor scheelite.								
273.7	275.2		QUARTZ BRECCIA ZONE Various greys and greenish tones: mainly quartz fragments to several cm fractured and healed by quartz and darker minerals (graphite) minor fluorite, some fine sericite ? alteration associated with quartz: minor scheelite.								
275.2	275.9		BANDED CALC-SILICATE (altered argillite) Dark to medium grey banded, bands 1 cm or less at 50°: bands brecciated and fractured with heavy very fine pyrite along fractures sub parallel to banding - carries good f-g scheelite, core generally fairly soft: numerous white calcite healed fractures: some graphite.	4201	273.7	275.2	1.5	nil	110	200	1.0
				4202	275.2	276.7	1.5	1.27	200	840	3.0
				4203	276.7	278.3	1.6	.500	500	750	3.0
				4204	278.3	278.9	0.6	.006	62	230	<0.5
				AVG	275.2	278.3	3.1	.873	355	794	3.0
275.9	276.7		QUARTZ BRECCIA ZONE As 273.7-275.2 minor calc-silicate remnants with f-g pyrite, minor fluorite.								
276.7	278.3		BANDED CALC-SILICATE (altered argillite) As (275.2-275.9) banding at 30°-50° local good grade scheelite associated with heavy fine pyrite mineralization along fine fractures subparallel to banding.								
278.3	279.8		QUARTZ BRECCIA ZONE As (273.7-275.2) minor py, traces of cp, broken core at (279.2-279.8).								

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METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
279.8	281.2		QUARTZITE (FAULT ZONE) Pale greenish grey, f-g; very hard, aggregate of quartz and micaceous grains (mainly quartz) minor fine py and cp; bandly broken core, pieces less than 4 cm. Recovery: 279.80-280.11 = 0.31 Recov. = 0.20 280.11-280.26 = 0.15 Recov. = 0.15 280.26-280.41 = 0.15 Recov. = 0.15 280.41-281.02 = 0.61 Recov. = 0.20 281.02-281.20 = 0.18 Recov. = 0.18					
281.2	281.6		QUARTZ VEIN Grey mottled; broken core; 3% py; slickensided chlorite healed fractures at 0°-20°; Recovery = 0.30 m.					
281.6	282.7		QUARTZITE As (279.8-281.2) Broken core 45° fracture with Moly ? or graphite coated slickensides· several low angle fractures with chlorite slickensides· recovery about 95%. 282.6 - 3 cm quartz vein.					
282.7	283.2		DYKE Dark brown grey, moderately soft, f-g anhedral feldspar and quartz: 1% ± disseminated py broken core; slickensided fractures at 0°-90°; considerable carbonate alteration of feldspars.					
283.2	283.6		QUARTZITE As (279.8-281.2) broken core, smooth slickensided fractures at 0°-30°; about 75% recovery; minor py and cp.					

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METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
283.6	283.8		QUARTZ VEIN AND QUARTZITE As (281.2-281.6), some quartzite remnants; about 3% py with traces of moly and cp; good core.								
283.8	285.3		DYKE Medium grey brown as (282.7-283.2), about 3% disseminated py and po and in fine veins; minor scheelite.	4205	284.1	285.3	1.2	.028	6	1400	2.5
285.3	286.0		QUARTZ VEIN BRECCIA Grey mottled, brecciated; minor py and moly along fine fractures.								
286.0	286.2		DYKE Dark grey aphanitic matrix spotted with 1 mm pyroxene phenocrysts; some small dark feldspar lathes. 80° contact at 286.2; some broken core with 20° slickensided fracture.								
286.2	287.2		QUARTZITE As (279.8-281.2); virtually no sulphides; several chlorite healed slickensided fractures at 30°-50°; broken core.								
287.2	287.7		QUARTZ VEIN Grey mottled, as (281.2-281.6); some m-g muscovite developed locally along fractures; minor moly and black hard mineral (very fine grained), some moly and graphite slickensides at 10° at 287.7.								

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METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
287.7	290.5		QUARTZITE As (279.8-281.2), broken core; slickensided fractures at various angles. (288.2-288.5), two quartz veins to 6 cm with graphite-chlorite healed fractures. 288.5 Fault at 20° with graphitic gouge over 1 mm. 290.4 Quartz breccia - 20° foliation.								
290.5	291.2		DYKE Dark brown grey - as (282.7-283.2); 2% f-g py along fine veins and fractures; several fine white carbonate veins; chlorite healed slips mainly at 45°-70° - good core. 290.7 4 cm quartz-py vein at 70°, minor cp and fluorite.								
291.2	291.8		QUARTZITE As (279.8-281.2) muscovite near 281.2.								
291.8	291.95		QUARTZ VEIN Light medium grey mottled; coarse muscovite on fractures, some moly on slip at 291.95.								
291.95	294.8		DYKE Similar to (282.7-283.2) but locally lighter colored and with euhedral hornblende crystals; 2% finely disseminated pyrite; good core; minor scheelite at (291.95-292.4).	4206	291.95	295.95	1.0	.058	100	960	2.0

ANALYSES:

WO_3 - X.R.F. Assay

Mo, Cu, Ag: D.C.P.

X-Ray Assay Lab.
Don Mills, Ontario

SULPETRO MINERALS LIMITED

DRILL LOG HOLE NO. 3115 #14

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
294.8	299.0		QUARTZITE As (279.8-281.2) good core: very sparse pyrite: vague local 30° banding with darker bands (biotite ?) becomes daker (and impurer) towards 299.0; generally minor f-g py mainly associated with occasional quartz vein. 296.1 - 10 cm quartz vein. 298.1 - 4 cm quartz vein 0°-20°. 296.9 - sharp 45° chlorite healed slip. 297.3 - sharp 20° chlorite graphite healed slip.					
299.0	302.7		BIOTITE ? HORNFELS (Impure quartz sandstone) Brown to grey quartz, biotite and muscovite: several quartz veins to 4 cm at various angles: minor py: several small slips mainly at 50°-70°.					
302.7	303.3		GREY MOTTLED QUARTZ VEIN First contact at 40° with py smeared on chlorite slickensides, second contact at 25°.					
303.3	305.7		QUARTZITE AND BIOTITE ? HORNFELS (quartz sandstone) Similar to (302.7-303.3) but more siliceous: vague alteration banding at 25°.					
305.7	306.2		GREEN GREY QUARTZITE Minor brown biotite patches, minor pyrite with fine quartz veins.					
306.2	307.9		BIOTITE ? HORNFELS As 299-302.7 above. 308.3 - 15 cm quartz vein at 15° - muscovite selvages - minor scheelite: minor py. 307.2-307.9 spotted with muscovite clusters to 1 cm.					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #14

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
307.9	308.6		QUARTZITE Pale grey green; minor muscovite; minor pyrite.					
308.6	309.3		BIOTITE HORNFELS Brown biotite, 45° banded with light grey green minerals (muscovite-quartz). As (308.2-307.9); very sparse py.					
309.3	310.2		QUARTZITE As (307.9-308.6); very sparse py.					
310.2	310.7		QUARTZ VEIN: Grey mottled with muscovite on contacts at 40° and 20°; minor py - cp.					
310.7	312.0		BIOTITE HORNFELS Similar to (308.2-307.8) alteration banding (green grey and dark brown at 40°); minor pyrite.					
312.0	323.8		QUARTZITE - MINOR HORNFELS Mainly light grey green, some browns and dark greys: coral alteration banding at 45°, minor pyrite. Darker biotitic sections at (313.0-313.6), (315.5-315.9), (316.9-318.6). Pinkish at (323-323.8). A few small quartz veins at various angles, some with coarse muscovite; brecciated at (323.6-323.8) with a network of fine dark chlorite veins.					

SULPETRO MINERALS LIMITED

DRILL LOG HOLE NO 3115 #14

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
323.8	327.66		DYKE (diabase) Dark grey, fine to m-g anhedral crystals of feldspar and mafics; fairly strongly magnetic (magnetite) few if any sulphides; contact at 45° - chilled over 10 cm and brecciated over 2 cm.					
	327.66		END OF HOLE D. C. Miller, B.A.Sc. D. C. MILLER					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115-19 SHEET — OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS ppm W	ppm Mo	ppm Cu	ppm Au	TiO_2
				3914	20.73	20.96	0.23	<20	3	55	5	.486
				3913	25.5	25.9	0.4	<20	3	815	2	.446
				3915	26.5	26.83	0.33	<20	<1	330	19	.310
				3916	79.2	79.52	0.32	<20	4	400	5	.406
				3917	79.52	79.92	0.42	<20	3	11	<2	.433
				3918	83.5	83.83	0.33	<20	3	6	2	.187
				3919	89.07	90.23	1.16	<20	21	11	3	.226

ANALYTICAL TECHNIQUE

W	X.R.F. (Geochem)
Mo	D.C.P.
Cu	D.C.P.
Au	F.A.D.C.P.
TiO_2	X.R.F. (Geochem)

X-Ray Assay Laboratory
Don Mills, Ontario

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115-19

METRES FROM	METRES TO	SECTION	DESCRIPTION

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS ppm Zr	ppm Nb	ppm R.E.
3913	25.5	25.9	0.4m	80	<10	150
3914	20.73	20.96	0.23	110	10	150
3917	79.5	79.92	0.42	80	10	100
3919	89.07	90.23	1.16	80	<10	200

ANALYTICAL TECHNIQUE

Zr, Nb & R.E. (Rare Earths, Semi-quantitative) by X.R.E.

X-Ray Assay Laboratory
Don Mills, Ontario

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115-19 (DEEPENING)

PROPERTY: FOSTUNG	TP OR AREA: FOSTER	AZIMUTH:	DATE STARTED: 19/7/83	CORRECTED DIP TESTS: collar 90°
PROJECT: 3115	LOT & CONC.: SE¼; N½ Lot 9 Con. III	DIP: -90°	DATE COMPLETED: 12/7/83	76.2 90°
CLAIM NO.: S-471438	CO-ORDINATES.: 4931.40N; 7588.68E *	LENGTH: 98.1-186.54 length drilled 1983	DRILLED BY: N. MORISSETTE	152.4m 90°
GRID NO.: 1979 Picket Line	103 feet grid W. of L12E(ft); 3+74N(ft)*	COLLAR ELEV.: 1543.7 88.44m	LOGGED BY: A.W. BEECHAM	

LOCATION SKETCH OF HOLE

* 1980 transit survey grid

NOTE: Collar elevation 1983 est. at 0.9m below 1981 collar.

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:- To test Breccia Hill albitite and quartz breccia zone for porphyry style mineralization.					
			NOTE: End of original hole reported to be 100.6 m but start of deepening at 98.1 m. Partly due to different level of set-up.					
98.1	99.1		SILICEOUS ALBITITE Massive med. grained lt. grey rock almost entirely quartz and feldspar					
99.1	104.5		QUARTZ VEIN White and grey mottled. STRUCTURE: Sections broken core at 100.3 and 101.4. Banding and q.v. At bottom at 12°. REMARKS: 20 cm lt. brown - grey qtzite inclusion at 101.3 Feldspathic streaks at bottom may be altered albitite. Med grey later quartz at bottom. MINERALIZATION: Isolated tr's Py on fractures	4025	100	101	1.0	GEOCHEM ANALYSES: ppm W: 65; ppm Mo: 2; ppm Cu: 13; ppb Au: <2
104.5	129.0m		BROWN FELDSPATHIC QTZITE & GREY ORTHOQUARTZITE Interbedded med. grained very feldspar-rich (in places over 50% feldspar) arenite with grey med-fine grained orthoquartzite.					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115-19

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	GEOCHEM ANALYSES ppm W	ppm Mo	ppm Cu	ppb Au
			STRUCTURE: Massive to well bedded:								
			25° at 106 m 19° at 112								
			20° at 116 17° at 112								
			113.4 - minor gouge on 45° fracture								
				4026	109.0	110.0	1.0	27	2	800	<2
			VEINS: Minor white-grey quartz veinlets here and there.	4027	110.0	111.0	1.0	12	2	230	<2
			109.1 - 1 cm milky qtz with blebs Po-Cp, parallel to core.								
			116 - 5 mm grey qtz - minor Po								
			118-128 - 2-3 mm qtz veins nearly parallel or at 40°	4028	118	119	1.0	12	3	420	<2
			with a little white f.sp Po and Cp and tr	4029	119	120	1.0	9	6	430	<2
			MoS_2 and tr scheelite at 119.3 and 119.7	4030	120	121.1	1.1	10	3	240	<2
			- with minor Cp Po tr Fluorite at 124.4								
			ALTERATION: Some lt. brown bleaching- probably silication along some fractures and qtz veins.								
129.0	156.0		DK. GREY FELDSPATHIC QUARTZITE								
			Med-c.g. rounded quartz sand grains set in finer (sand) qtz ± feldspar matrix. Some of qtz grains are blue.								
			A few light brown sections at top.								
			STRUCTURE: Sections here and there thinly bedded as follows: 129.8 m - 15° 142 - 10°								
			145 - 6° 150 - 17°								
			Minor sections broken core at 129.5, at 136 with 60 cm grind at 140-141 with a little gouge due to fract. parallel to core.								
			ALTERATION. Relatively fresh, unaltered except some grey brown, bleached, mottled sections near top and bottom.								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115-19

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	GEOCHEM ANALYSES ppm W	ppm Mo	ppm Cu	ppb Au
			VEINS: Minor amounts of fine white-grey qtz and qtz + white f.sp veins at angles of 5-10° and at 45-50°. Most contain Po and a little Cp and varying amounts of Py. Best developed between 130 and 138 where there is a vein at least every ½ m.	4031	130	131	1	9	2	94	<2
				4032	131	132	1	10	2	82	<2
			Better veins as follows:								
			131.5 - 1 cm thick at 40° with Po Cp								
			135.5 - 2 cm thick vuggy with at 30°								
			136.9 - 3 cm with epidote? at 45°	4033	140	141	1	9	2	120	<2
			152.5 - 10-12 cm grey qtz with heavy blebs Py and a little Cp and gouge at 40°								
			MINERALIZATION: See 'VEINS'. Also a little diss'd Po ±Py here and there away from veins	4034	150	151	1	8	1	46	<2
				4035	152	152.4	0.4	11	6	>4000	7
156.0	160.3		LT. GREY-GREEN FELDSPATHIC QUARTZITE								
				4036	159	160	1.0	7	<1	100	<2
			Med-sand size. Lt. grey sections moderately calcareous and green section weakly calc-silicated - unit was probably originally a calcareous sandstone.								
			STRUCTURE: Well bedded 15-20°								
			MINERALIZATION: Speckled with 1-2° diss'd Po								
160.3	168		PORPHYRITIC DIABASE DYKE								
			Dk green med-f.g. 1% 1-3 mm f.sp phenox.								
			MINERALIZATION & VEINS: A little diss'd and blebs Po at contacts extending into wallrock and with milky white 8 mm qtz vein at 165 m.								
			STRUCTURE: Cts. at 60-65°. A little gouge on 45° fract. at 164.2.								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115-19

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	GEOCHEM ANALYSES ppm W	ppm Mo	ppm Cu	ppb Au
			ALTERATION: Streaks and hair-line veinlets of epidote throughout.								
168	180		GREY FELDSPATHIC QUARTZITE								
			Med-fine sand size, but with slightly coarser sand grains in finer matrix. Look relatively pure quartz but probably f.sp contant well over 10%-calcareous blotchy sections between 175.5 and 180 m.								
			STRUCTURE: Bedding poorly developed (or thick) at 15° at 176 m.	4037	170	171	1.0	5	1	63	2
			Incipient brecciation in first metre.								
			VEINS: 1 cm qtz + Po blebs at 45° at 172.7 m.								
			MINERALIZATION: ½ m vuggy and Py'c at 170.4. Minor Py here and there on fractures.								
180	186.54		DK. GREY FELDSPATHIC QUARTZITE								
			Identical to 129-156	4038	180	181	1.0	12	2	26	160
			MINERALIZATION: tr Py as films on fractures								
			STRUCTURE: Incipient breccia at 182.					ANALYSES:			
	186.54		END OF HOLE					W - neutron activation			
			GENERAL NOTES: No conclusive evidence whether or not 'porphyry system' mineralization present. Minor quartz Po-Cp-Mo veins could suggest very weak system.					Mo, Cu - D.C.P.			
								Au - fire assay + D.C.P.			
			Quartzite assemblage is 'guessed' to be upper member of Espanola Formation. This is based on presence of some calcareous and calc-silicated beds and fact that rock not nearly as pure a quarzite as seen in Serpent Formation.								
			A.W. BEECHAM 22/7/1983								

A.W. Beecham 16/3/84

GEOLOGICAL ASSOCIATION OF CANADA A.W. BEECHAM 16/3/84 FELLOW

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #25

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
FOSTUNG	FOSTER TWP, ONT.	(Layout 138)	22/7/83
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
3115	Lot 8+9 Con. III	-45.5	25/7/1983
CLAIM NO. S-471438 (29m) S-471204 (121.87m)	CO-ORDINATES. 5334.49N; 7884.32E *	LENGTH 150.87 m	DRILLED BY N. Morissette
GRID NO. 1979 Ft Picket Line	L27+00E; (7+80N)	COLLAR ELEV. 1527.52 *	LOGGED BY A.W. Beecham

CORRECTED DIP TESTS

Depth	Mag Az	Tr Az	Dip
collar			-45.5
.61	149.0	141.5	-43.0
134	152.5	145	-42.0

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION
0	3.04	
3.04	4.3	
4.3	5.6	
5.6	9.6	

* 1980 Transit Survey Grid

DESCRIPTION

OBJECTIVES:- Test I.P. Magnetic anomalies L27E and East end of Ginn showing.

CASING

PALE GREEN AND DARK GREEN CALC-SILICATES

In proportion of 60:40 respectively. Pale green contains 50% or more quartz grains-fine sand size with f-g intersticial green pyroxenes. Dark phase is fine actinolite-rich and some epidote nearly massive hornfels.

STRUCTURE: Well banded at 65°.

MINERALIZATION: tr Scheelite in pale green phase.

GREY ORTHO QUARTZITE

Medium grey f-g (sand) relatively massive. Speckled with scattered white felspars.

REMARKS: This is identical to quartzite bed hit at 18 m in d.h. 3115 #24.

PALE GREEN AND WITH DARK GREEN CALC-SILICATES AND GARNET SKARN

As above. 15-20% formed of wisps and layers to 5 cm 1-3 mm pale brown-red garnets in quartz-rich matrix and pyroxene. Posibly some idocrase-sparse brown(?) striaed crystals mixed with garnet.

SAMPLE NO.	FROM	TO	LENGTH
			DOWN HOLE CO-ORDINATES
Depth		x -140	y (vert) z (+230)
collar		0	0 0
30 m		21.0 m	21.4 m -0.7 m
97 m		70.0 m	67.1 0.5
150.87		109.9	103.1 4.0

ASSAYS

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ... ppm Mo	Cu	Ag
			STRUCTURE: Well banded at 75°-80°. A little fracturing at 15°-20° and some broken core.								
			MINERALIZATION: Blebs, diss. Po +Sphalerite up to 6-7% over 10 cm. Moderately weak diss. scheelite associated with garnet Po.	4086	6	7.5	1.5	.016	73	150	4.0
				4087	7.5	9	1.5	.032	19	360	5.0
				4088	9	10.5	1.5	nil	9	97	2.5
			REMARKS: 0.6 m section dark green calc-silicate at top.								
9.6	18.4		PALE WITH MINOR DARK GREEN CALC-SILICATE; MINOR GARNET SKARN								
			As above. Some of pale green phase relatively quartz-rich. 12.6-13.3 20% wisps garnet skarn.								
			STRUCTURE: A few fractures at 15°-20°. Well banded at 65°-80°.								
				4089	10.5	12	1.5	nil	140	93	1.0
			MINERALIZATION: Diss. and scattered small blebs Po here and there throughout best conc. with garnet. tr MoS_2 here and there. Possibly a little dark sphalerite. Weak discontinuous diss. scheelite.	4090	12	13.5	1.5	.046	52	120	5.0
				4091	13.5	15	1.5	nil	17	95	1.0
				4092	15	16.4	1.4	.006	42	100	1.5
				4093	16.4	17.4	1.0	.40	430	760	8.5
				4094	17.4	18.4	1.0	.028	35	280	6.0
			REMARKS: 14.1-18 - 40% dark green phase.								
			VEINS: 2 cm grey mottled quartz with Po a little scheelite and MoS_2.	AVG	16.4	19.5	3.1	.209	150	1260	8.6
18.4	40.0		ALTERED PALE GREEN CALC-SILICATE WITH DARK GREEN CALC-SILICATE, MINOR GARNET SKARN								
			As above. About 15% dark phase. Pale calc-silicate has crackled structure with fine veins, flecks of light grey-white quartz feldspathic material. In other places fragments are quartz feldspar and matrix is pale green calc-silicate. Minor sections pale garnet skarn as follows: 18.4-19.4; 26 m; 27.4; 0.30m at 29 m; at 33.5 30 cm at 35.5 m; 37.4; 38.9. Some pervasive calcite.								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #25

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	ASSAYS % FROM	ASSAYS % TO	ASSAYS % LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			STRUCTURE: A few fractures at 15 with minor broken core. Part is well banded at 60°.	4095	18.4	19.5	1.1	.20	54	2600	11.0
				4096	19.5	21.0	1.5	.004	390	120	1.5
				4097	21.0	22.3	1.3	.006	130	510	2.0
			VEINS: 10 cm mottled grey quartz + Po. Mo, Cp + 5 cm selvage heavy Po at 21.5 m.	4098	25.5	27.0	1.5	.02	68	290	3.0
				4099	27.0	28.5	1.5	.11	110	280	2.5
				4100	28.5	29.5	1.0	.054	48	600	3.5
			MINERALIZATION: Moderate Diss. scheelite with Po over short sections-mainly with garnet skarn. A little Cp and Mo here and there with Po. Very yellow fluor.	4101	33.2	34.7	1.5	.034	12	190	1.5
				4102	34.7	36.2	1.5	.072	64	460	4.0
			at 22.8 possibly powellite.	4103	36.2	37.7	1.5	nil	15	210	1.0
				4104	37.7	39.2	1.5	.052	44	200	2.5
			REMARKS: Quartzite beds or (silicified zones?) 30.1-30.5.	4105	39.2	40.1	0.9	.012	300	69	1.0
				4106	40.1	41.8	1.7	.39	740	1800	5.0
				4107	41.8	43.3	1.5	.018	120	88	3.5
40.0	41.8		GARNET SKARN								
			Dark red-brown medium-coarse garnets with quartz, some pyroxene.								
			MINERALIZATION: 4-7% diss. and blebs Po, some Py and Cp. Godd diss. MoS_2 in places. Good diss. scheelite.								
41.8	47.7		ALTERED PALE GREEN CALC- SILICATE								
			Light green and grey m-f-g speckled with porphyroblastic aspect and with light grey quartz feldspar streaks.								
			STRUCTURE: Thin streaky banding from 60° at top to 40° near bottom.								
			ALTERATION: Much of unit with strong pervasive calcite (presumably this is an alteration and not primary as, in most pale green calc-silicate seems to have formed from dark green actinolitic hornfels which no where contains calcite). Near lower Ct. contains patches of bright green calc-silicates (diopside) similar to that in adjacent quartz-bx.								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #25

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			MINERALIZATION: Only a trace of scheelite here and there. Some fine yellow fluor. Mo scheelite or powellite at 43.4.								
47.7	62.8		QUARTZ BRECCIA AND INCLUSIONS CALC-SILICATE Light grey to dark blue grey mottled vein quartz with about 50% inclusions of mainly pale green calc-silicate rocks. Calc-silicate inclusions predominate towards contacts with a predominantly quartz middle portion. ALTERATION: Calc-silicate fragments in lower portion are rounded with reaction runs of bright green calc-silicate and dark core. These fragments all strongly calcite altered. MINERALIZATION: 49.1 tr Cp at 48.1. Most of unit nearly barren except for bottom 1 m which contains a little scheelite (in quartz vein) with 8% Po as blebs veinlet over 30 cm.	4108	61.7	62.6	0.9	.078	120	320	3.5
			REMARKS: 47.7-49.8 Light grey vein quartz 49.8-50.7 Dark green altered calc-silicated clastic rock with quartzgrains. 50.7-52.8 Angular bx mainly light green calc-silicates and quartz matrix. 52.8-56.5 Mainly light grey vein quartz. 56.5-59.2 Mainly dark grey quartz and numerous calc-silicate including with reaction veins. 59.2-61.4 Altered light green calc-silicate 61.4-62.5 Vein quartz and Po, scheelite 62.5-62.8 Altered calc-silicate. At 53.8-54.9 m rosettes of chloritized biotite as rims around and streaks in calc-silicate clast s .								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #25

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
62.8	76.0		GREY FELSPATHIC QUARTZITE WITH DARK GREEN CALC-SILICATE					
			Dark grey to light grey in places. Mostly medium grained sand-size. Has sub greywacke texture with quartz grains set in slightly finer quartz felspar matrix. Dark green calc-silicate more abundant downward making up about 50% of lower half of unit.					
			STRUCTURE: Massive (thickly bedded?) to thinly bedded at 80°. Numerous sections broken core due to fracturing 20°-0° to core axis. Probably does not mark significant fault. Upper contact with calc-silicate not faulted. Small cross beds vaguely outline at 74.3 m.					
			MINERALIZATION: tr Py on fractures.					
			REMARKS: Speckled appearance of some beds towards bottom due to slight alteration of feldspar. This unit looks very similar to feldspathic grey quartzites below quartz bx-albititecomplex in d.h. 3115 #19.					
76.0	85.7		DIABASE DYKE (KEWEENAWAN TYPE) WITH QUARTZITE					
			Medium dark grey, med-grained core and f-g towards contacts. Most of dyke is moderately magnetic.					
			STRUCTURE: Massive contacts vague at 60°-70°.					
			VEINS: 77.0 m - 1 cm quartz epidote Po-35 . 78.5 m - 3 cm grey calcite and chl. 81.2 m - 5 cm mottled light grey quartz minor Po tr Mo - 45°.					
			MINERALIZATION: A little diss. Po 81.3					
			REMARKS: 80.4-81.2 and 81.5-82.9 inclusions of quartzite.					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
85.7	92.0		GREY, FELDSPATHIC QUARTZITE WITH DARK GREEN CALC-SILICATE								
			As above diabase dyke. Dark calc-sections 20 cm - 1 m.								
			ALTERATION: Moderately strong pervasive calcite.								
			STRUCTURE: Strong fracture at 10°.								
92.0	100.8		DARK GREEN CALC SILICATES WITH FELDSPAR QUARTZITE								
			As above unit but dominantly calc-silicate. Calc-silicate is a medium to fine grenite with granular texture and abundant calc-silicate minerals (not identified) in matrix. Last quartzite bed at 100.3.								
			STRUCTURE: Nearly massive, uniform.								
			VEINS AND MINERALIZATION: 93.0-97.5 m - fine quartz calc-silicate veins parallel to 05 to core. They have up to 2 cm bleached, silicated margin and carry a little scheelite and tr native Bi.	4109	93.0	94.0	1.0	.002	27	53	1.0
100.8	103.0		PALE GREEN CALC-SILICATE WITH DARK GREEN CALC-SILICATE								
			60% pale green fine grained quartz diopside (?) rock interlayered on with 40% dark green actinolite-rich rock (hornfels).								
			STRUCTURE: Well banded at 75°-80°.								
103.0	116.7		DARK GREEN CALC-SILICATE (ACTINOLITE) MINOR PALE GREEN CALC-SILICATE								
			Dark actinolite-rich m-g to f-g. About 5%, 0.5-2 cm streaks and layers (one up to 30 cm) of pale green calc-silicate.								
			STRUCTURE: Dark green massive pale green layers at 70°-75°.								

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			VEINS AND MINERALIZATION: 108.2, two 1 cm veins at 75° of quartz calc-silicate, white feldspar with MoS_2 scheelite and tr Bi. Tr scheelite in light grey calc-silicate at 112.2 and 114.7 moderate diss. scheelite over 8 cm at 115 m.								
			REMARKS: 15 cm black diabase at 107.2 at 80° to core.								
116.7	121.1		PALE GREEN AND DARK GREEN CALC-SILICATE								
			As above. Light phase very pale and nearly a f-g quartzite light green to light grey.								
			ALTERATION: Moderately weak pervasive calcite.								
			MINERALIZATION: Minor scheelite with 2-3 mm quartz veinlets at 118.9 at 10°. Moderate diss. scheelite in minor incipient garnet (or feldspar) skarn from 119.1-119.4.	4110	120	121	1.0	.062	9	490	2.0
121.1	127.3		PALE GREEN CALC-SILICATE AND MINOR DARK GREEN CALC-SILICATE AND GARNET SKARN								
			Pale green is very fine grained, soft green and featureless quartz-rich in places with some beds quartzite at 122.8. Dark green m-g actinolite sections up to 50 cm - 25% of unit. Pale red to medium red weakly developed garnet skarn garnet no 15-20% of rock. About ½ garnet skarn between 121.1-121; fair garnet skarn some with dark green amphibole, from 123.6-124.1 pale red garnet skarn 126-126.4 and 127.1-127.3. Some of pink mineral may be feldspar.								
			STRUCTURE: Well banded at 70°-75°.								
			ALTERATION: Strong calcite alteration of scheelite and garnet bearing sections.								

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			MINERALIZATION: Short sections up to 10-20 cm of moderate strong diss. scheelite with a few % Po, minor Py and Cp, mainly in garnet-bearing parts, but also medium green skarn and a little with quartz veinlets.	4111	121	122	1.0	.006	2	140	1.0
				4112	122	123.5	1.5	nil	14	99	1.0
				4113	123.5	124.5	1.0	.26	130	390	4.5
				4114	124.5	126.0	1.5	.10	69	100	1.5
				4115	126	127.5	1.5	.05	33	170	1.5
127.3	138.3		PALE GREEN (SILICEOUS) CALC-SILICATE AND DARK GREEN CALC-SILICATE	AVG	123.5	126.0	2.5	.164	93	216	2.7
			As above. Relatively siliceous and fine grained. 15% dark green f-g granular rock.								
			STRUCTURE: Thin bedding perserved in pale sections, at 60°-75°. Some delicate x-beds at 130.2 but tops of beds uncertain.								
			MINERALIZATION: A little scheelite associated with Po sphalerite at top and from 129.6-130.2.	4116	127.5	129	1.5	nil	29	61	1.0
				4117	129	130.5	1.5	.098	47	32	1.0
138.3	143.0		GARNET SKARN WITH PALE GREEN CALC-SILICATE								
			A quartz-garnet pyroxene rock and a dark mafic, only well developed in places. Garnet content varies from 20-maximum of 60%. Alternating with pale green sections calc-silicate some dark green calc-silicate as follows:								
			138.3-139.3 Mainly garnet skarn	AVG	141.5	144.0	2.5	.17	31	314	1.7
			139.3-141.9 Mainly pale green calc-silicate.								
			141.9-143 Garnet skarn pale green calc-silicate.								
			STRUCTURE: Well bedded (calc-silicate) at 55°-60°.	4118	137.8	138.3	0.5	nil	5	44	0.5
				4119	138.3	139.8	1.5	.110	80	260	2.0
			MINERALIZATION: Moderately strong diss. scheelite and an few % Po and tr Cp in garnet skarn sections.	4120	139.8	141.5	1.7	.024	27	72	1.0
				4121	141.5	143.0	1.5	.250	30	310	1.5
				4122	143.0	144.0	1.0	.062	32	320	2.0
143.0	150.87		PALE GREEN AND DARK GREEN CALC-SILICATES	4123	144	144.5	0.5	nil	48	44	1.0
			As above about 70:30 pale and dark phased respectively some pale green material has clearly cross-cut original bedding.								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #25

METRES FROM	METRES TO	SECTION	DESCRIPTION
			STRUCTURE: Banding at 70°. A few fracture at 25° - 30°.
			VEINS: 20 cm white grey quartz with tr Py at 20° to core at 150.3.
			MINERALIZATION: Moderate to locally strong diss. scheelite with up to 6% Po and a little Cp. Po and Cp diss. with out scheelite.
			REMARKS: 148-149 short sections with minor garnet and medium green, spotted in place probably hedenbergite bearing skarns.
	150.87 metres		END OF HOLE
			A.W. Beecham 27/7/83

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
4124	147.5	148	0.5	nil	28	35	0.5
4125	148.0	149	1.0	.15	9	710	2.0
4126	149	149.5	0.5	nil	45	15	0.5

ANALYSES:

WO_3 - X.R.F. Assay

Mo, Cu, Ag - D.C.P.

X-Ray Assay Laboratory
Don Mills, Ontario

GEOLOGICAL ASSOCIATION OF CANADA
A. W. BEECHAM
16/3/84
FELLOW

SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #26

PROPERTY: FOSTUNG	TP OR AREA: FOSTER TWP., ONT.	AZIMUTH: 140°	DATE STARTED: 25/7/83
PROJECT: 3115	LOT & CONC.: 9; III	DIP: -445°	DATE COMPLETED: 30/7/83
CLAIM NO.: S-471438	CO-ORDINATES.: 5283.71; 7810.73 E	LENGTH: 176.78	DRILLED BY: N. Morissette
GRID NO.: 1979 ft Grid L24E;	Approximately 7+90N	COLLAR ELEV.: 1533.22 *	LOGGED BY: A.W. Beecham

CORRECTED DIP TESTS

Depth	MagAz	tr Az	Dip
collar		140	44.5
76 m	336**		-45°
122 m	154	146.5	-45°
158 m	332**		-43

LOCATION SKETCH OF HOLE

** rdg in core barrel because of blocked bit.

* 1980 transit survey system.

METRES FROM	METRES TO	SECTION	DESCRIPTION
			OBJECTIVES:- Test magnetic anomaly skarn zone west end Ginn showing.
0	1.22		CASING
1.22	10.8		PALE GREEN CALC-SILICATE WITH DARK GREEN SILTSTONE MINOR LIGHT BROWN GARNET SKARN Pale green phase is f-g relatively siliceous mottled with felsic alteration, light green-grey-brown 15% sections dark green massive siltstone only slightly calc-silicated. 10-15% short sections up to 10 cm with pale brown to pale red garnets with strongly calcite alteration. STRUCTURE: Streaky banding at 40°-50°. MINERALIZATION: Sections in most places not more than 10 cm of weak-moderate disseminations of scheelite, Po, tr Cp in places and sphalerite (2-3% Sphalerite 6.7-7.0 m). Scheelite mainly with altered garnet section and with medium grey-green skarn. VEINS: 7.5 m - 2 cm at 30° dark grey and brown quartz calcite with 2 cm carbonated Chl. selvage and about 5% elongated grain medium grey arsenide. (Does not look like arsenopyrite)
10.8	18.3		DARK GREEN CALC-SILICATE (SILTSTONE) MINOR PALE GREEN CALC-SILICATE F-g medium fine (siltstone) dark grey green quartz, feldspar rich, granular texture weakly calc-silicated fine clastic, ~10% short irregular sections pale green calc-silicate.

SAMPLE NO.	FROM	TO	LENGTH	WO3 %	Mo ppm	Cu ppm	Ag ppm
4127	2.7	4.2	1.5	.020	35	260	2.0
4128	4.2	5.7	1.5	.018	68	470	2.5
4129	5.7	7.2	1.5	.140	24	650	4.0
4130	7.2	8.7	1.5	.006	39	530	3.5
4131	8.2	10.2	1.5	.098	7	440	2.0
AVG	5.7	10.2	4.5	.081	23	540	3.2

DOWN HOLE	CO-ORDINATES x (-140)	y (vert)	z (+230)
Depth collar	0	0	0
38m	27.1	26.6	0
99m	70.2	69.8	2.5
140	99.0	98.8	5.8
176.78	125.6	123.8	9.3

ASSAYS — GEOCHEM ANALYSES

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			STRUCTURE: Thin bedding at 60°-65°.								
			VEINS: 18.8 m - 17 cm grey mottled quartz with 5% MoS_2 over 2 cm and tr scheelite in wall rock.								
			MINERALIZATION: Minor diss. Po in pale green phase.	4132	16.5	17	0.5	nil	110	60	3.0
18.3	22.2		MIXED PALE GREEN AND DARK GREEN CALC-SILICATES								
			As above - about 60-40 light and dark.								
			STRUCTURE: Thin banding in places 50-70°.								
			MINERALIZATION: 2-3% diss. Po tr Cp and weak discontinuous scheelite in light grey phases.	4133	20	21.5	1.5	.056	11	1400	3.0
			ALTERATION: Abundant calcite associated with sulphides.								
			REMARKS: Massive grey calcareous massive quartzite 20.0-21.5 m.								
22.2	31.1		SPECKLED PALE GREEN CALC-SILICATES + GARNET SKARN								
			(Diopside Hedenbergite + Garnet Skarn) Pale green phase as above except speckled with up to 35% dark green, 1-3 mm pyroxenes? About 25-35% wisps and sections up to 30 cm of pale red garnet pyroxenes quartz skarn.								
			VEINS: 28.2-8 cm mottled light grey quartz, minor MoS_2 at 35°. 28.9-12 cm grey mottled quartz, tr MoS_2 at 40°. 30.7-0.5 cm light grey quartz tr scheelite at 40°.	4134	21.5	23.0	1.5	.002	5	760	3.5
				4135	23.0	24.5	1.5	.078	59	730	4.5
			MINERALIZATION: Both garnet skarn pale green calc-silicate well mineralized with Po +spalerite tr Cp dissemination. Blebs with concentrations up to 8%/10 cm tr MoS_2 here and there in skarn-away from q.v.	4136	24.5	26.0	1.5	nil	10	370	1.5
				4137	26.0	27.5	1.5	.230	110	440	5.5
				4138	27.5	29.0	1.5	.040	140	150	5.0
				4139	29.0	30.5	1.5	.044	21	650	4.0
				4140	30.5	32.0	1.5	.010	15	510	7.0

SULPETRO MINERALS LIMITED

DRILL LOG HOLE NO. 3115 #26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
31.1	33.5		PALE GREEN AND DARK GREEN CALC-SILICATE								
			As above.								
			ALTERATION: Bottom 0.5 m silicated or a quartzite bed. Dark section silicated.								
			MINERALIZATION: tr Scheelite at 32.1 m.								
33.5	37.7		DIABASE (KEWEENAWAN TYPE)								
			Dark green ophitic texture m-g core and f-g borders. Strongly magnetic.								
			STRUCTURE: Upper contact, bleached and altered at 50°. Lower contact conformable at 40°.								
			VEINS: 33.5-33.9 Wispy white 0.5-1 cm quartz + a little Mo Cp at 20°.								
			35.4-15 cm at 40 mottled grey black quartz + calcite.								
			37.1-12 cm mottled grey-white quartz and minor white fsp tr Mo. - 60°.	4157	33.5	34.0	0.5	nil	660	1400	2.5
37.7	42.0		PALE WITH DARK GREEN CALC-SILICATE + GARNET SKARN								
			37.7-38.5 Pale green calc-silicate								
			38.5-39.1 Garnet skarn with moderate to very strong diss. scheelite + 3-5% diss. and blebs Po. and minor Cp.	4158	38.5	39.1	0.6	.34	62	2400	11.0
			39.1-39.4 Pale green calc-silicate.								
			39.4-39.8 Diabase dyke.								
			39.8-41.8 Mixed pale green and dark green calc-silicate.	4159	41.5	42.5	1.0	.062	71	290	1.0
			41.8-42 Garnet skarn with scheelite and Po.								
42.0	46.7		DIABASE DYKE (KEWEENAWAN TYPE)								
			As above. Weakly fsp. pyric.								
			STRUCTURE: Contacts at 45° and 35°.								

. SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % MoO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			VEINS: 0.5 cm quartz Po Py trCp tr Mo 42-42.3 and at 43.9.								
46.7	60.9		LIGHT AND DARK GREEN CALC-SILICATE + MINOR GARNET SKARN								
			Light and dark phase in proportion 65-35 respectively Light phase relatively siliceous. Dark phase is actinolite-rich hornfels (or skarn); 50.2-51 - 15% wisps and layers garnet skarn; 53.7. Minor garnet skarn.								
			STRUCTURE: Well layered at average 50°. A few fractures at 50°-20°.								
			ALTERATION: Strong pervasive calcite in and around skarn, and in some incipiently bx. sections.								
			VEINS: At 57.4-8cm grey mottled quartz at 50°.								
			MINERALIZATION: From 48-54 discontinuous Po mineralization streaks and diss. with concentration up to 5-8%/10 cm. Po accompanied by short weak to strong diss. of scheelite only in garnetiferous sections. There is considerable Po without any scheelite (unusual in F-33-10 zone) 52.7-53 0.5%-1% diss. MoS_2. 59.2 tr MoS_2.	4141	50	51.5	1.5	.058	120	390	3.0
				4142	51.5	53	1.5	.100	190	150	1.5
				4143	53	54	1.0	.054	73	510	5.0
				AVG	50	54	4.0	.073	135	330	2.9
60.9	63.0		GARNET SKARN								
			About 60%, 0.5 cm-20 cm garnet rich layers, intercalated and intersticial in bx-like structure, with pale green calc-silicate, C.g. in places. May contain some idocrase?								
			MINERALIZATION: Fair discontinuous scheelite and 3-5% streaks diss. Po. Minor to good diss. MoS_2 here and there. 5% MoS_2/ 3 cm at 61.4. Minor sphalerite.	4144	60.4	60.9	0.5	.012	160	56	2.0
				4145	60.9	62.4	1.5	.098	460	250	6.0
				4146	62.4	63.9	1.5	.140	160	330	3.5
				4147	63.9	64.4	0.5	nil	54	140	1.0
63.0	73.9		LIGHT AND DARK CALC-SILICATE	AVG	60.9	63.9	3.0	.119	310	290	4.8
			As above. 60:40 proportions. Ragged contacts between dark and light phases + light phase seem to cross cut original banding.								

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			STRUCTURE: Alignment dark wispy and banding at 45°.								
			MINERALIZATION: A little diss. scheelite in top 1 m with medium grey material, and with fsp. or altered garnet zone from 66.7-67.4.	4148	66.6	67.6	1.0	.016	33	150	1.0
73.9	125.7		GREY FELDSPATHIC QUARTZITE WITH DARK GREEN CALC-SILICATE								
			Med. grey m-f-g quartzite with beds 25% dark green sand-silt size sediment with intersticial dark calc-silicate in part actinolite but most places too fine to identify. A few sections with coarse-gritty beds here and there - partly made conspicuous by bleaching (alteration)								
			STRUCTURE: Most is mottled and poorly (or thickly) bedded; bedding at 60-75°. Some coarse graded (?) beds at 96-110-112 - (tops not obvious). Numerous sections broken core, result from fractures at 0-15 to core; 74:75 m, 77.5-78; 82-84.5; at 107.5 , at 112.3 at 114.5.								
			VEINS, ALTERATION: White silicated zones along fractures here and there up to 2 cm wide, some with minor Po.								
			81.0 2-3 cm grey quartz vein with 4% Cp over 3 cm								
			95.8 - 60° 0.5-1.0 cm q.v. + zoned plagiacl.								
			96.0 - 40° 2 cm quartz vein tr Po, Cp.								
			99.9 - 30° 2 cm white silicated zone tr MoS_2								
			104.8-105.1 1-3 cm quartz, chl. veins, at 35°-40° with Po, Cp, sphalerite and Mo.								
			112 1-4 m quartz vein, minor MoS_2 at 10°.								
			117.9 5 cm grey quatz 1-2% scheelite 45°.								
			118.2 5 cm white, silicated fsp. zone at 20°.								
			121.7 1 cm white quartz at 45° minor MoS_2.								
			124.2 4 cm white quartz at 60° minor Po.								
			MINERALIZATION: ~~Scattered grains Po here and~~ there. Light Py on joints and fractures. tr ~~scheelite~~ in minor quartz veinlets at 119.2 m and at 124.0 m.								

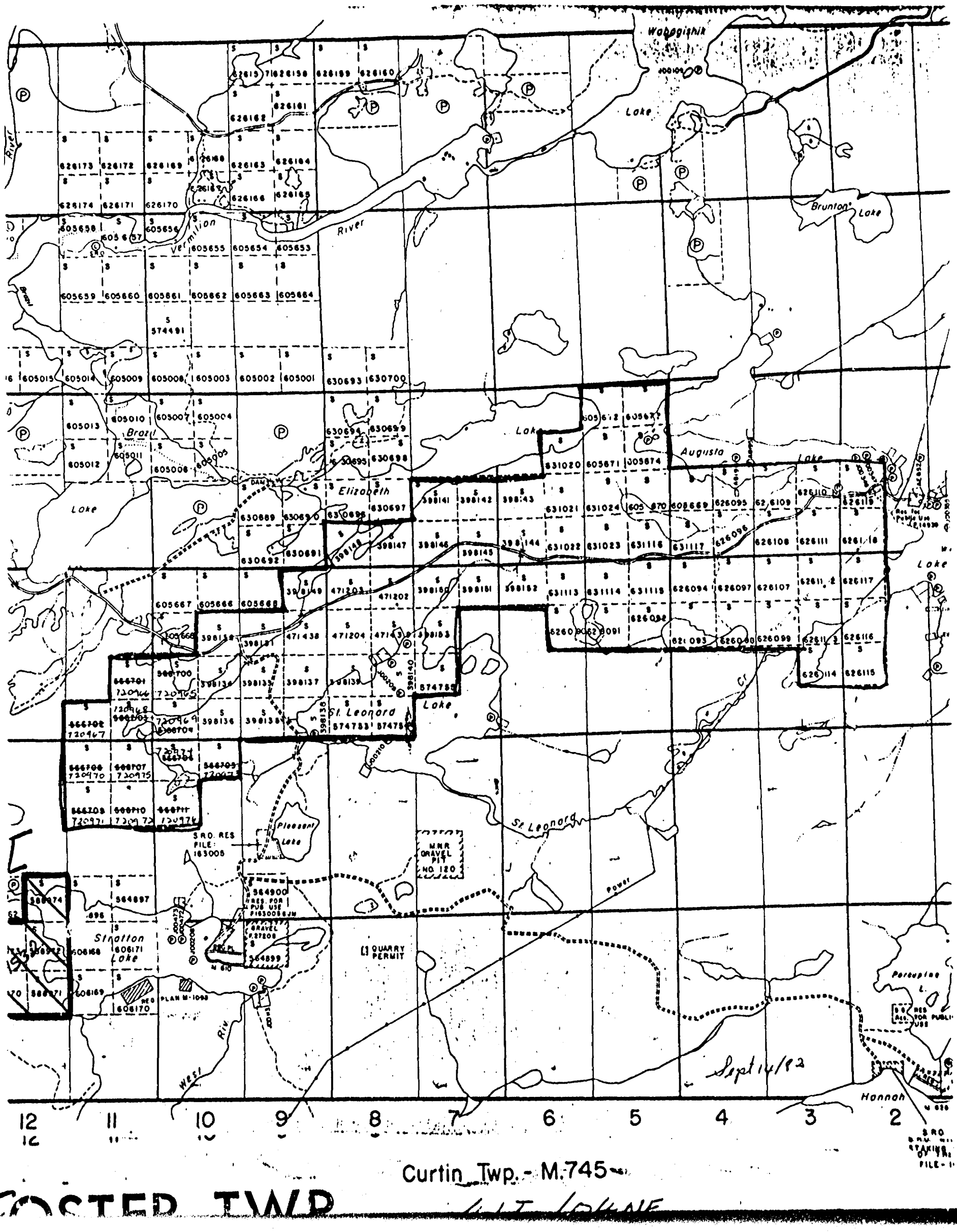
SULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO. 3115 #26 — SHEET 6 OF 8

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			REMARKS: Dominantly dark green calc-silicate 103-106.9; 117.3-122.5. Contact at 125.7 in this hole corresponds to 100.8 in 3115 #25. Actual Contact in both cases marked by dark green argillite bed.								
125.7	142.4		DARK GREEN WITH LIGHT GREEN CALC-SILICATE (ACTINOLITE SKARN)								
			Med.-fine grained. Composed mainly of rossettes of actinolite, quartz and feldspar. Light green (diopside? skarn) from thin streaks partings up to 30 cm sections. Dark green 75% pale green 25%.								
			STRUCTURE: Well banded 60°-70°.								
			ALTERATION: Red, blotchy-vein like feldsp. 131.3-132.7 m.								
			VEINS: 132.7 light grey quartz at 45°. 136.1 5-10cm grey quartz with minor diss. MoS_2 at 20°.								
			MINERALIZATION: tr sphalerite at 134.5 in quartz diopside veinlets tr sphalerite at 135 in diopside veinlet.								
			REMARKS: Upper contact put at first good streak of diopside (light green calc-silicate) skarn. Probably equivalent to Harrison's banded actinolite rock.								
142.4	146.1		LIGHT GREEN AND DARK GREEN CALC-SILICATE								
			As previous unit, except proportion 65-35 light to dark.								
			MINERALIZATION: Minor scheelite in q.v. and diss. in pale green calc. Minor diss. sphalerite at 145.5.	4149	142	143	1.0	.002	25	15	<0.5

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
146.1	147.1		LIGHT GREEN WITH DARK GREEN CALC-SILICATE + MINOR GARNET SKARN								
			As above. Minor wisps pale red garnet skarn.								
			MINERALIZATION: Discontinuous diss. scheelite with minor Po in garnet skarn and light green calc-silicate.	4150	146	147	1.0	.036	19	89	1.0
147.1	150.5		QUARTZITES-SILICEOUS CALC-SILICATE								
			147.1-148.4 Light grey lightly calc-silicated + med. grey ortho quartzites, minor garnet.								
			148.4-149.3 Grey orthoquartzite.								
			149.3-150.4 As between 148.4-149.3.								
			MINERALIZATION: tr diss. Po.								
150.5	173.0		LIGHT GREEN AND DARK GREEN CALC-SILICATE + GARNET SKARN								
			About 15% dark green calc-silicate. Dark phase relatively quartz fsp. rich with dark green calc-silicate matrix some of which is actinolite. Light green phase in fine sand-silt with pale green (diopside?) matrix.								
			Garnet skarn is pale red, med. grained as wisps								
			short sections:								
			151.0-152 65% garnet skarn								
			153-155.3 50% garnet skarn								
			157.2-157.8 Garnet skarn								
			158.1-158.6 50% garnet skarn								
			160.0-161.2 Garnet skarn								
			162.5-168.3 15-20% skarn								
			170.0-170.8 Garnet skarn								
			STRUCTURE: Well banded 65^0-75^0.								
			Numerous sections broken core due to fractures from 0-15° to core. as follows: 157, 160.5, 162-163, 168-172.5.								

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 3115 #26 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % WO_3	GEOCHEM ANALYSES ppm Mo	Cu	Ag
			VEINS: A few thin mm-1cm grey quartz-diopside veins at 10-20°. Most carry minor Po.								
			158.3-158.5 grey quartz veinlet up to 1.5 cm at 45 .								
			161.4 1 cm light grey quartz minor scheelite at 20°.								
			ABTERATION: Mineralized (sulphide and scheelite) and garnet bearing sections have moderate pervasive calcite.								
				4151	151	152.5	1.5	.054	29	56	1.0
			MINERALIZATION: Minor Py, sphalerite +Po in garnet skarn. Scheelite bearing sections from 151-158.5 tr Po elsewhere. Minor diss. MoS_2 at 160.7. Weak, discontinuous diss. scheelite from 150.8-158.5, at 165.7-170.7 and 171.5-171.8 m.	4152	152.5	154	1.5	.008	36	46	2.0
				4153	154	155.5	1.5	.002	110	89	1.0
				4154	155.5	157	1.5	nil	48	44	0.5
				4155	157	158.5	1.5	.030	7	50	1.0
				4156	171	172.5	1.5	.024	16	40	1.0
173.0	176.78		FELDSPATHIC QUARTZITE								
			Light grey, clear medium sand size.								
			STRUCTURE: Fairly massive, no bedding. Strong fracturing at 30° and at 50°.					ANALYSES:			
								WO_3: X.R.F. Assay			
			ALTERATION: Light brown patches and speckles in places mark moderate calcite alteration (could be primary)					Mo, Cu, Ag: D.C.P. Geochem			
								X-Ray Assay Lab. Don Mills, Ontario			
	176.78		END OF HOLE								
			A.W. Beecham								
			GENERAL COMMENTS: Disappointing hole with no wide sections of even .1% WO_3 even though fairly abundant garnet skarn. Pale green calc-silicate rock in this hole seems slightly more quartz-rich than F-33-10 zone, and proportionally less diopside (?). Garnet skarns are mostly pale and there is considerable garnet with very little or no scheelite. Appreciable Po without scheelite. A little bit of sphalerite here and there throughout. Get impresion that there is in general, mineral (& metal) zoning with best scheelite associated with Po + Cp assemblage with sphalerite peripheral.								



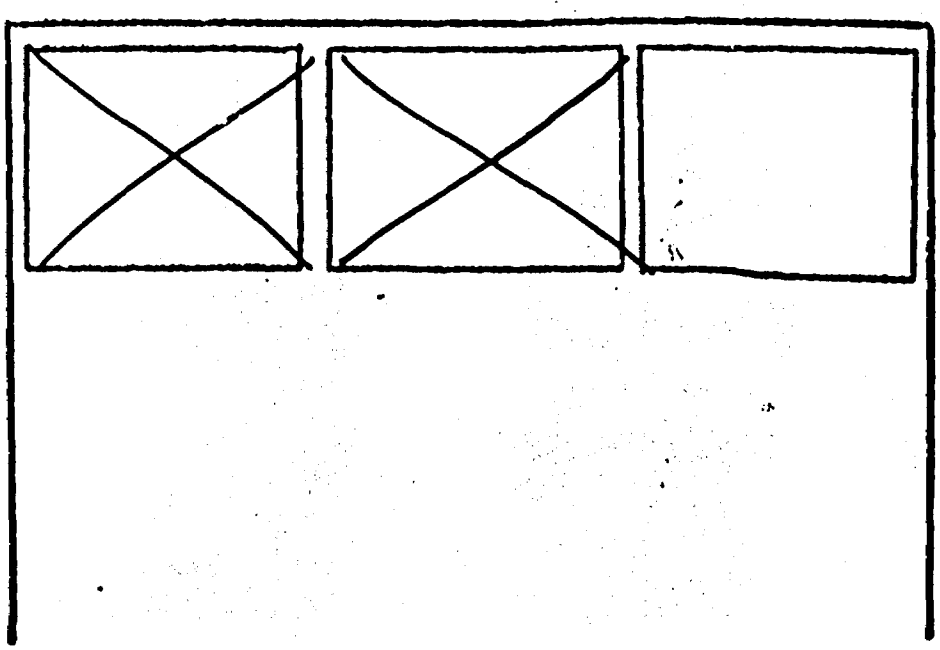
Curtin Twp. - M.745

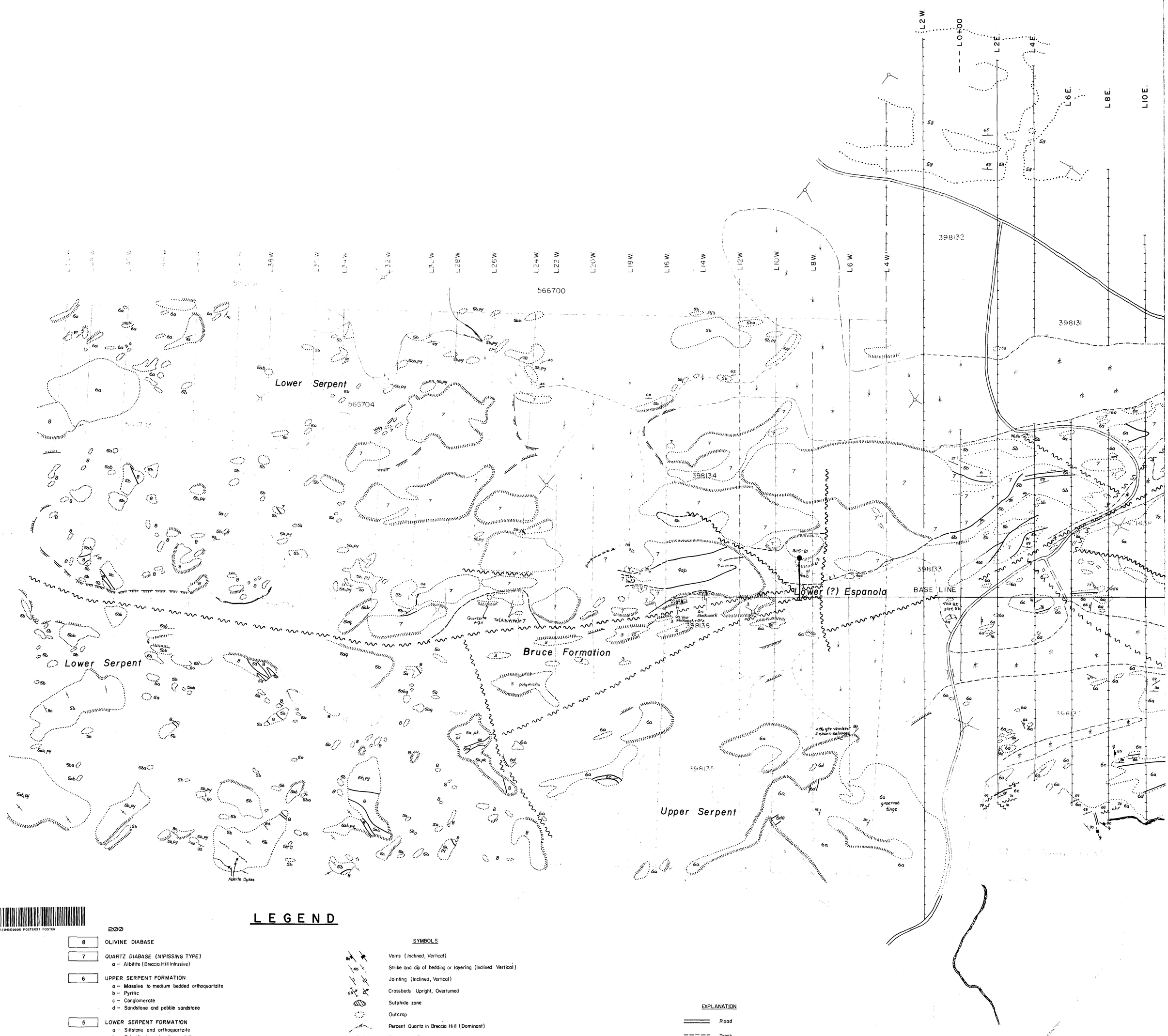
FOSTER TWP

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

FOSTER-0031

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE (X)





LEGEND

200

8	OLIVINE DIABASE
7	QUARTZ DIABASE (NIPISSING TYPE) a – Albitite (Breccia Hill Intrusive)
6	UPPER SERPENT FORMATION a – Massive to medium bedded orthoquartzite b – Pyritic c – Conglomerate d – Sandstone and pebble sandstone
5	LOWER SERPENT FORMATION a – Siltstone and orthoquartzite b – Calcsilicate and orthoquartzite c – Conglomerate d – Sandstone and pebble sandstone
4	UPPER ESPANOLA FORMATION a – Pale green calcsilicate b – Dark green calcsilicate c – Grossular calcsilicate d – White calcsilicate e – Banded actinolite calcsilicate
3	BRUCE CONGLOMERATE

MINERALIZATION

W	Tungsten	Mo	Molybdenum
Zn	Zinc	q	Quartz vein
Cu	Copper	Mal	Malachite
po	Pyrrhotite	py	Pyrite
Carb	Carbonate vein		Trench

SYMBOLS

- Veins (Inclined, Vertical)
- Strike and dip of bedding or layering (Inclined Vertical)
- Jointing (Inclined, Vertical)
- Crossbeds Upright, Overturned
- Sulphide zone
- Outcrop
- Percent Quartz in Breccia Hill (Dominant)
- Fault ; possible
- Fault ; probable
- Fault ; defined
- Minor shear, with strike and dip
- 6a — Geological unit
- '6a' — Geological unit in Breccia Hill (Dominant)
- Lineation
- Minor fold
- Geological contact ; approximate, defined
- Quartz stockwork
- Overturned Anticline
- Overturned Syncline

EXPLANATION

- Road
- Track
- Swamp, stream
- Lake edge
- Claim post

Geology modified by : A.W Beecham, J.Trammell, 1983.

A.W. Beecham 15/2/84

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FIG. 3.

LEGEND

- QB — Quartz breccia, stockworks
  - (Q) altered country rock, inclusions
- Dp — Diabase dykes, mainly feldspar porphoritic (Keweenawan Type)
- GD? — Medium-fine grained "granodiorite", or granophyre? (Nipissing Type?)
- D — Diabase (Nipissing Type)
  - cg coarse grained
  - v variegated textured
  - q quartz bearing
  - mg medium-fine grained
- Q — Quartzites, sandstones
  - o ortho
  - sg subgreywacke
  - f feldspathic
  - s silty
- Qc — Calcareous quartzites
- S — Siltstone, non-calcareous
- Sc — Calcareous siltstones
  - fb thin bedded
- L — Limestone
  - s siliceous limestone
- CS — Calc-silicate rocks, skarn
- AM — Amphibolite, amphibole skarn

ABBREVIATIONS

gn	Green	gy	Grey
pk	Pink	w	White
Gos.	Gossan	py	Pyrite
qv	Quartz vein	W	Tungsten mineralization, sheelite
po	Pyrrhotite		
fr	Fractured	lt	Light
blds	Boulders	sil	Silicification

SYMBOLS

- Outcrop, small outcrop
- Geological contact
- Bedding : dip, top of bed
- Fractures / joints : inclined, vertical
- Foliation
- Silicification
- Breccia
- Fault
- Scarp
- Talus
- Trench, pit
- Glacial striae

Geology by: A.W.Beecham, D.C.Miller, L.Stoliker
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GEOLOGY	KUYPERS	Geology plotted only	09/02/84
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SULPETRO MINERALS LIMITED

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FIG. 2.

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14/8/1986