Diamond Drilling

31D16SW0006 18 GLAMORGAN

010

Township GLAMORGAN

Report Nº 18

Work performed by: ST. JOSEPH EXPLORATIONS LIMITED

Claim Nº	Hole Nº	Footage	Date	Note
EO 469946	S-75	162 m	Feb/79	(1)
EO 469954	S-76	99 m	Feb/79	(2)
EO 469958	S-77	102 m	Feb/79	(3)

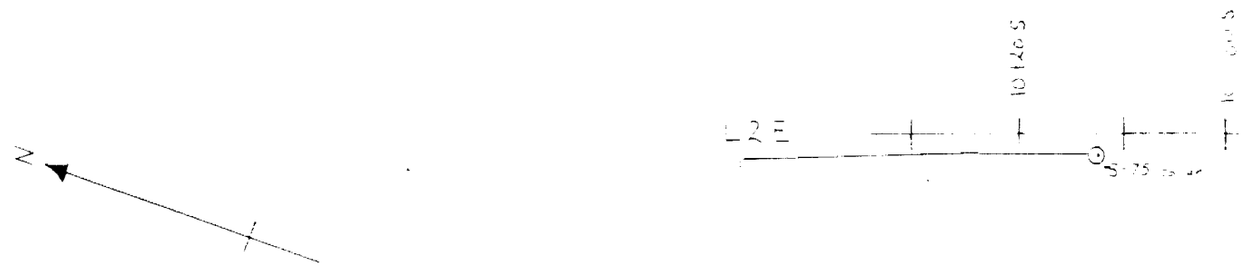
Notes: (1) # 65-79

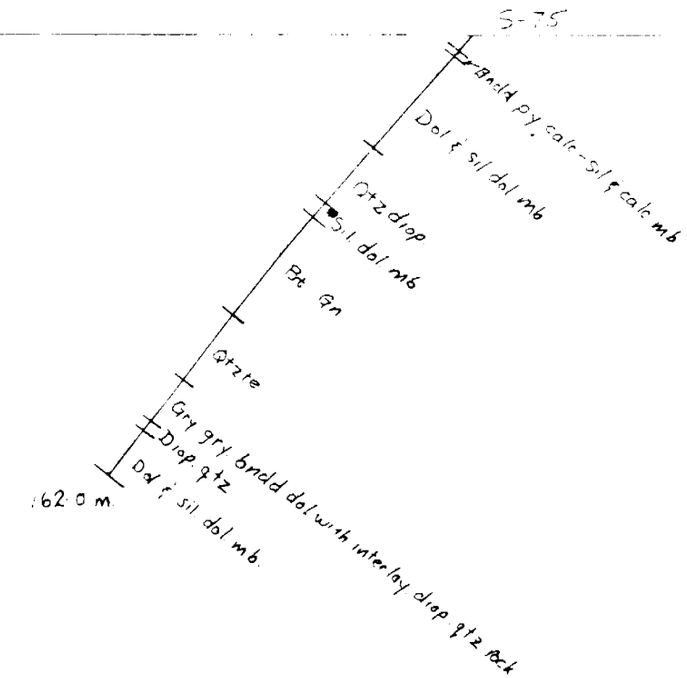
(2) # 66-79

(3) # 67-79

HOLE NO. S-75

SECTION Plan of Hole





ST. JOSEPH EXPLORATIONS LIMITED

PROPERTY Salerno Lake

GRID East Grid

CO-ORD. 10+43 S 1+94 E

SCALE 1:2000

ST JOSEPH EXPLORATIONS LIMITED — DRILL LOG — HOLE NO. S-75

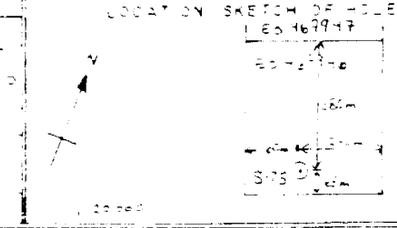
Tropari

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
SALERNO LAKE	Glamorgan	340°	February 20, 1979
PROJECT 3188	LOT & CONC Conc. I, Lot 5	DIP -50°	DATE COMPLETED February 22, 1979
CLAIM NO EO 469946	CO-ORDINATES 10+43S	LENGTH 162m	DRILLED BY St. Lambert Drilling
GRID NO EAST	1+94E	COLLAR ELEV	LOGGED BY D. Robertson

CORRECTED TEST TESTS

Depth	MBrg	TBrg	Dip
99m	348°	338°	-53°

LOCATION SKETCH OF HOLE



METRES FROM	METRES TO	SECTION 1"=	DESCRIPTION	SAMPLE NO	FROM	TO	LENGTH	ASSAYS
			OBJECTIVE: TO TEST A SOIL GEOCHEMICAL ANOMALY					
0.0	3.2		OVERBURDEN					
3.2	3.5		Banded Pyritic Calc. Silicate - blackish brown, v.f.g., well developed v.fine banding. V.f.g. py-po 10%.					
3.5	3.8		Calcitic Marble - buff to lt.salmon pink. f.to m.g. Spotty serp. Dissem. py-po oxidized & dissem phlog. Minor dol. marble.					
3.8	9.0		Grey Dolomitic Marble - med.grey, f.to m.g., very weakly banded. Finely dissem thru out unit is phlog. (~10%). Minor calcite. Spotty lenses of serp. traces of diop. (mm scale) narrow bands of graphitic-rich dol. marble, random. 5.9-6.0 - short section of quartz & diop. Finely dissem py-po 1%.					
9.0	17.0		Dolomitic Marble and Silicated Dolomitic Marble - Intermixing of a (1) lt.grey to off-white, f.to m.g. dol. marble w/variable sections: 9.0- 9.2 - a highly oxidized phlogopitic grey dol. marble; 10.8-11.1 - a very calcitic & phlogopitic short section w/serp'n alter'n.; 11.6-11.9 - a serpentinized section of dol. marble w/narrow seams of phlog.; 12.3-12.4 - section of pred. biotite & phlogopite					

METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO	FROM	TO	LENGTH	ASSAYS
9.0	17.0	(cont'd)	and a (2) off-white to lt.grey, f.to m.g., mottled, silicated dolomite w/darker grey sections of diop. 10-15%. Dissem py-po 1-2% also concentrated clots. Specks of sphalerite @ 11.2 & 11.3, assoc. w/incr. conc. of py-po (2%).					
17.0	17.7		Grey Dolomitic Marble - med. grey, f.to m.g., somewhat mottled. Minor serp. & diop. & traces of calcite. Dissem. py-po 2%, 17.2-17.4 & 17.6-17.7 - est.trace Zn finely dissem. grains of sphalerite (est. ½% Zn @ 17.2-17.4) Gradational to next unit.					
17.7	38.0		Dolomitic Marble and Silicated Dolomitic Marble - off-white to lt.grey, f.to m.g. Unit in sections is weakly silicated while other sections are weakly phlogopitic. Short random sections are quite calcitic. 19.8-20.2 - altered section w/concentrations of phlog. and serpentine. Gradational into next unit.					
38.0	39.2		Grey Dolomitic Marble - med.grey, f.to m.g., somewhat mottled. Patches and seams of serp'n, minor calcite. The unit is somewhat weakly silicated. Py-po 1-2%.					
39.2	61.2		Quartz Diopside Rock - pale green to buff-cream, generally f.g. w/c.g. sections. Very f.g. pale green diop.-quartz. Minor serp. patches. Locally find short sections of phlog concentration. Finely dissem phlog sections create a buff-cream coloured diop section and are generally calcitic. Dissem. py-po 1-2% with random conc. clots. 45.9-46.1 - a well banded quartz diopside rock 48.3-49.3 - quite a phlogopitic enriched quartz diop. rock.					

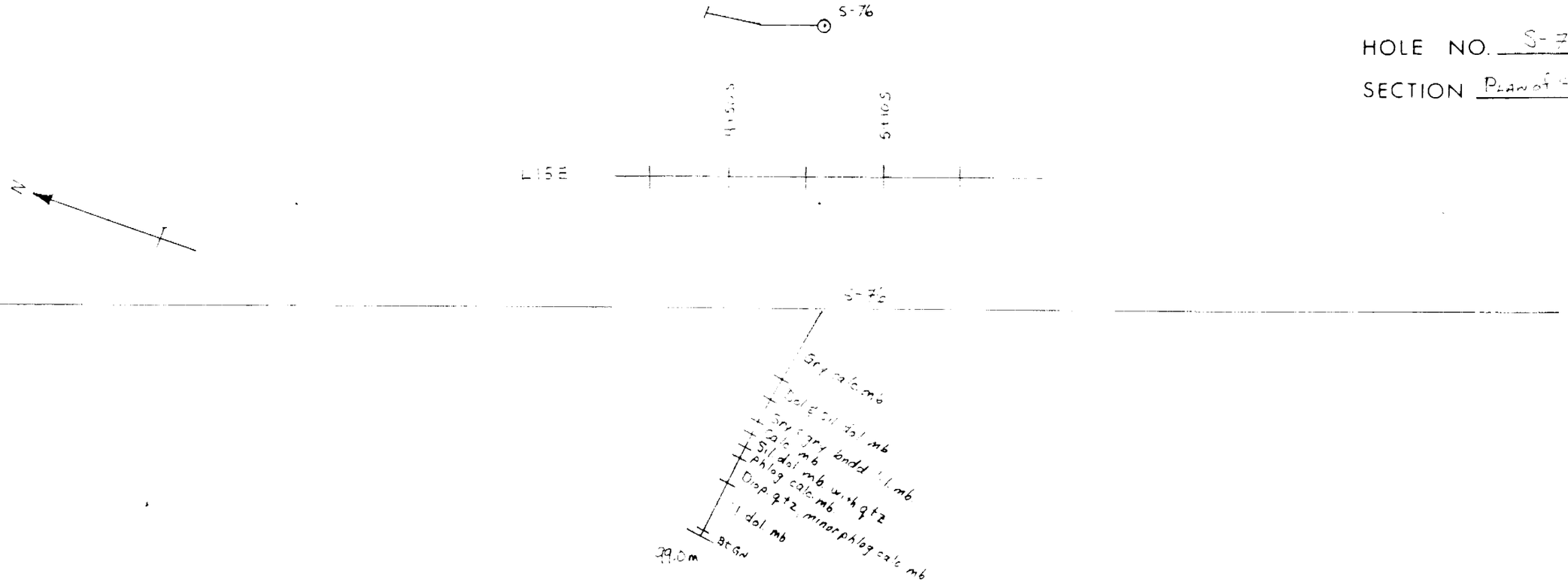
METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO	FROM	TO	LENGTH	ASSAYS
61.2	66.7		Silicated Dolomitic Marble - white to buff-beige, f. to m.g. 50% of unit is a white sil. dol. marble while 50% is a beige weakly phlogopitic silicated dol. to dol. marble w/ minor serp. patches. Thru out unit dissem py-po 1%, locally clots.					
66.7	67.5		Altered Rock - comprising of serp and greasy green anhydrite(?). Minor phlog. Dissem py-po. This altered rock grades into a Bt Gneiss and 67.2-67.5 the altered rock has granitic inclusions.					
67.5	102.0		Bt. Gneiss - f.to c.g. gneissocity plane at 75°-80°. Pred. K & plag feld 50-60% w/quartz 5-15% Bt.25-50%. Dissem. thru unit & clots of py-po. Thru the unit is noted variability owing to varying percentages of Bt vs feldspars. Sections of the gneiss are altered with saussuritized fled's (greenish colour) also pegmatitic feld clots random thru unit as well as occas. quartz clots.					
102.0	123.7		Micaceous Quartzite (Aplite) - v.f.g. quartzite - granitic in nature(?). Variable colour. 5-30% mica - both biotite-phlogopite. 10-50% quartz. 20-40% K & plag. felds. Dissem py-po 1-2%. Sections of unit have saussuritized feld. C.A. of gneissocity 80°. Short pegmatitic feld sections. Gradational to next unit.					
123.7	126.0		Quartzite - smokey quartz colour w/irreg. bands of green serp'n or saussurite. M.g. 5-10% biotite-phlogopite. Dissem. py-po 1%.					
126.0	141.0		Grey to Grey Banded Dolomitic Marble w/Intermixed Banded Diopside Quartz Rock buff-white-beige to grey, f.to m.g., fair banding. C.A. variable about 70°. An intricate intermixing of diop & quartz. Minor calcite. Short sections of incr. phlogopite content. Occas. quartz patches. Dissem. py-po 1%.					

ST JOSEPH EXPLORATIONS LIMITED DRILL LOG HOLE NO. S-75

METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO	FROM	TO	LENGTH	ASSAYS
126.0	141.0	(cont'd)	mm to cm scale bands & swirls of: 1) f.g. diop. 2) f.g. quartz 3) f.g. diop-quartz 4) f.g. quartz-diop. 5) altered material-serp'n-quartz 140.0-141.0 - increasingly altered rock - highly serpentinized.					
141.0	145.7		Diopside and Quartz Rock - smokey-grey, m.to c.g., minor alter'n patches of serp, diop. rock. w spotty and wormy quartz patches which are smokey in colour and m.to c.g. Occas. specks of py-po.					
145.7	162.0		Dolomitic and Silicated Dolomitic Marble - the dolomitic marble is generally lt.grey, f.to m.g., somewhat mottled. Random patches of greenish serp'n. Minor calcite. Traces of py-po. Finely dissem. graphite. Minor diop. The silicated dolomitic marble is variable in colour from off-white to grey, f.to c.g. mottled. Diop 5-20% a darker grey colour. Patchy green serp. & serp sections i.e. 161.0-161.2. Traces of finely dissem graphite and occassional py-po.					
162.0			END OF HOLE - casing pulled, no cement. Core recovery - near 100%.					

HOLE NO. S-76

SECTION Plan of Hole



ST. JOSEPH EXPLORATIONS LIMITED

PROPERTY Salerno Lake

GRID East Grid

CO-ORD. 15+59 E 4+87 S

SCALE 1:2000

ST JOSEPH EXPLORATIONS LIMITED — DRILL LOG — HOLE NO. S-76

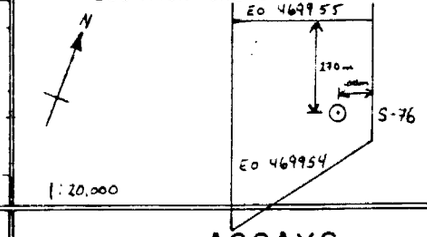
Tropari

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
SALERNO LAKE	GLAMORGAN TWP.	340	February 23, 1979
PROJECT	**LOT & CONC.**	**DIP**	**DATE COMPLETED**
3188	Conc. I, Lot 8	-60°	February 26, 1979
CLAIM NO.	**CO-ORDINATES.**	**LENGTH**	**DRILLED BY**
EO 469954	15+59E	99m	St. Lambert Drilling
GRID NO.		**COLLAR ELEV.**	**LOGGED BY**
EAST GRID	4+87S		Alar Soever

CORRECTED ~~XXXX~~ TESTS

Depth	MBrg	TBrg	Dip
99m	-64	351	341

LOCATION SKETCH OF HOLE



METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION
			OBJECTIVE: TO TEST SOIL GEOCHEMICAL ANOMALY AND WEAK I.P. ANOMALY
0.0	2.9		OVERBURDEN
2.9	20.0		Mottled Light Grey Calcitic Marble - lt.grey, c.g.to m.g. towards base, mottled to weakly banded, minor f.g. diss graphite, py. Locally highly phlogopitic patches with minor quartz, f.g. py, calc. sil. C.A. ~60°. 15.5 - small patch of granitic material, quartz, pink feldspar and bio., po. 18.8-19.1 - patch of black f.g. pyritic calc. silicate, large books of mica.
20.0	21.7		Pale Green to Buff Calcitic Marble with Quartz - (~10%) c.g. w/minor f.g. diss phlogopite and small patches of quartz, minor diss py. 20.4-21.0 - quartz-rich section up to 15% quartz
21.7	24.1		Calcitic Marble w/Bands of Pyritic Calc.Silicate & Banded Diopside-Quartz. White to pale grey c.g. calcitic marble, phlogopitic w/minor f.g. diss py. 22.4-22.6 - bands of f.g. pyritic calc.silicate. 23.0-23.4 - banded quartz-diopside w/large patches of py-po. ~10% combined py-po, f.g. pyritic calc.silicate @ 23.4.

SAMPLE NO	FROM	TO	LENGTH

ASSAYS

#79-64

ST JOSEPH EXPLORATIONS LIMITED DRILL LOG HOLE NO. S-76

METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
24.1	26.3		Grey Graphitic Calcitic Marble - f.g. to m.g. in places weakly banded, ~10% graphite, 2-3% py. Phlogopitic w/small lt. green serp.patches. 25.8-26.3 - patches of pegmatitic material mixed in with marble.					
26.3	27.3		Pegmatite - c.g. 65% Kspar & Plag, 30% quartz <5% hblde.					
27.3	30.2		Grey Calcitic Marble w/Pegmatitic Patches - same as 24.1-26.3 but w/20% patches of pegmatitic material C.A. 70°-75°. Pegmatite from 27.8-28.1, 29.1-29.3, 29.4-29.5.					
30.2	33.0		White Coarse Grained Dolomite - white, c.g., minor py, phlog.Locally phlogopitic patches, few small pale green serpentine patches. 32.4-32.7 - patch of pegmatitic material					
33.0	39.6		Silicated Dolomite - white to very pale lt.grey, c.g. with 20% patches of lt.grey c.g. diopside. ~1% diss py, minor phlog in places. 34.0-34.5 - bright red hemititic? 37.2-37.8 - section of m.g. grey banded dolomite minor diss py, phlog.					
39.6	45.3		Interbanded White to Pale Grey and Grey Banded Dolomite white to pale grey, c.g., dolomite, minor py w/sections of grey banded 41.6-42.6, 43.0-43.9. Grey banded is f.to m.g. w/f.g. diss py? tr graphite & diss phlog C.A. 55°060° 43.3-43.6 - bands of f.g. pale buff-green quartz-rich calc. silicate. 44.7-45.0 - pyritic 10% py in bands. LOST CORE - 0.1m -- 21-24m.					

ST JOSEPH EXPLORATIONS LIMITED DRILL LOG HOLE NO. S-76

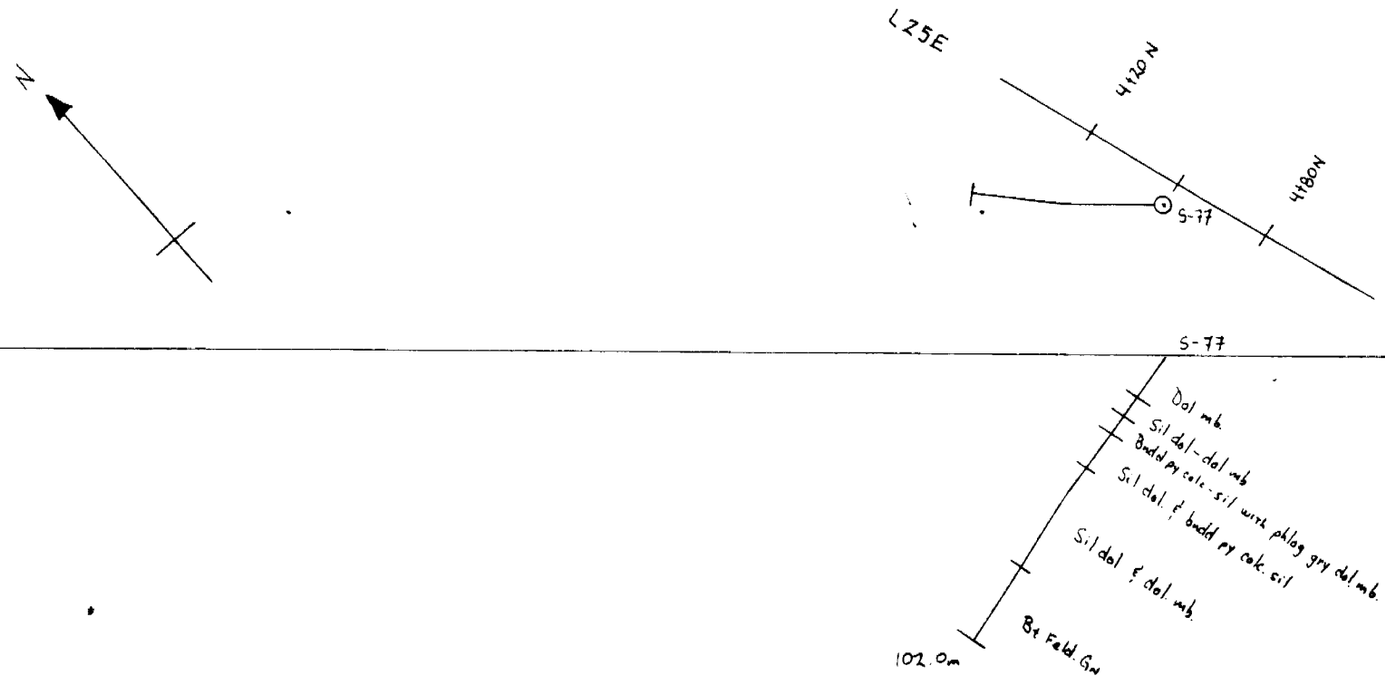
METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO	FROM	TO	LENGTH	ASSAYS
45.3	49.7		Mottled Grey Dolomitic Marble - lt. to med.grey, f.to m.g. w/lighter coloured calcitic patches. Very slightly silicated, few c.g. of diopside, minor diss py-po. Tr f.g. diss sphalerite in thin bands. Tr Zn @ 45.7-46.0, 46.6, 46.8, 48.2-48.4, 48.5-49.1, 49.5-49.6, best at 45.7-46.0 <1% over 0.3m.					
49.7	55.0		Phlogopitic Calcitic Dolomite - pale grey to buff, m.g. calcitic dolomite, f.g. diss phlog throughout, also as patches & bands of c.g. phlogopite, 2-3% f.g. diss py. 57.0-57.3 - band of quartz rimmed on both sides by bands of phlog.					
55.0	58.1		Diopside-Quartz Rock - poorly to well banded, banding is is in places highly contorted, central section is 60% qtz, 40% v.f.g. pale green diopside. C.A.80°-85°. Very fine bands of diopside & qtz interlayered, minor diss py. 55.0-55.6 - 57.6-58.1 - pale green to grey, m.to c.g., diopside w/patches of c.g. phlog. books.					
58.1	59.2		Silicated Calcitic Dolomite - pale buff to white, m.g. phlogopitic, 30% m.g. white to pale grey c.g. diop.					
59.2	60.4		Massive Diopside - v.f.g. white, locally few coarser grains of c.g. pale grey diopside, minor diss py 59.2-59.7.					
60.4	61.8		Silicated Dolomite - white, c.g. slightly calcitic w/30% patches of c.g. grey diop. mixed with f.g. pale green diop. F.g. pale green diop. has v.f.g. tremolite needles mixed in.					
61.8	64.9		Phlogopitic Calcitic Dolomite - m.g. pale grey to buff, f.g. diss phlog + locally patches of c.g. books of					

ST JOSEPH EXPLORATIONS LIMITED DRILL LOG HOLE NO. S-76

METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
64.9	69.0		Diopside-Quartz Rock - 85% pale green f.g. diopside. 5% irreg. shaped patches of grey qtz. 5% patches of pink salmon coloured c.g. calcite. 5% patches of c.g. diopside. Locally patches that are phlogopitic w/f.g. diss phlog.					
69.0	71.2		Banded Pyritic Calc.Silicate - lt. to dk. grey banded pyritic calc.silicates locally thin phlogopitic bands. C.A. 65°-70°. V.f.g. diss py-po.					
71.2	76.1		Diopside-Quartz - 70% f.to c.g. pale green diopside. 10% patches of c.g. lt. grey diopside. 5% bands of quartz (mostly 73.3-73.9). 5% phlogopitic patches. Locally diss py-po.					
76.1	93.9		Silicated Dolomitic Marble - white to very pale grey, c.g., tremolitic , up to 20% f.g. tremolite needles in places. Locally phlogopitic bands, minor diss py. Few small patches of c.g. grey diopside towards base.					
93.9	94.8		Light Grey Dolomitic Marble - m.g. lt. grey, 2-3% diss py-po, minor diss graphite.					
94.8	97.7		Altered Silicated Dolomite (RZ) - silicated dolomite w/patches of c.g. vari-coloured diopside, locally tremolitic, also highly phlogopitic patches & serp. diopside, patches of pink calcite.					
97.7	99.0		Biotite Gneiss - 30% biotite, 20% quartz & 50% plag & Kspar. Large pink feldspar phenocrysts in a finer matrix, plane of gneissocity ~70°.					
99.0			END OF HOLE - pulled casing, no cement.					
			Lost core - 0.1m - 21-24m.					

HOLE NO. S-77

SECTION PLAN of HOLE



ST. JOSEPH EXPLORATIONS LIMITED

PROPERTY SALERNO LAKE

GRID EAST GRID

CO-ORD. 4+50N 24+93E

SCALE 1:2000

GLAMORGAN # 67-79

ST JOSEPH EXPLORATIONS LIMITED — DRILL LOG — HOLE NO. S-77

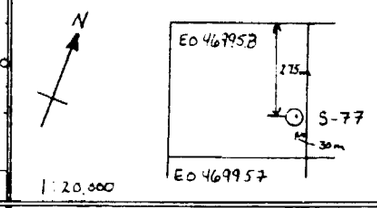
Tropari

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
SALERNO LAKE	GLAMORGAN TWP.	310°	February 27, 1979
PROJECT 3188	LOT & CONC.	DIP -55°	DATE COMPLETED February 28, 1979
CLAIM NO. EO 469958	CO-ORDINATES. 4+50N	LENGTH 102m	DRILLED BY St. Lambert Drilling
GRID NO. EAST	24+93E	COLLAR ELEV.	LOGGED BY D. Robertson

CORRECTED ~~DIP~~ TESTS

Depth	MBrg	TBrg	Dip
102m	326°	316°	-58°

LOCATION SKETCH OF HOLE



METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO	FROM	TO	LENGTH	ASSAYS
			OBJECTIVE: TEST SOIL GEOCHEMISTRY ANOMALY AND I.P. ANOMALY					
0.0	1.6		Overburden					
1.6	14.6		Dolomitic Marble - buff-white to pale grey, f.to m.g. Calcitic. Minor diopside-quartz, v.f.g. Finely dissem phlogopite & patches of phlogopite. Traces of dissem py-po. 2.3-4.8 - section of micaceous dolomitic marble - mica - both biotite and phlogopite (2-7%) Serp. patches & dissem Fe sulphides. Minor f.g. diop. w/local quartz knots. 9.4-10.0 - short section of calcitic marble and short intervals of calcitic marble thru section. 12.0-14.6.					
14.6	15.7		Calcitic Marble - salmon pink to brick red, f.to m.g. Oxidized section of phlogopitic calcitic marble. Minor serp. patches & traces of oxidized Fe sulphides.					
15.7	16.5		Silicated Dolomitic Marble - off-white, f.to m.g., fetid. Minor serpentinization of entire section with large patches of greasy serp. alter'n. Dissem py-po 2%. Minor phlogopite.					
[illegible].5	17.6		Micaceous Altered Dolomitic Marble - dark greenish brown, f.to m.g., swirled texture. Rock is pred. biotite & phlogopite 70% w/m.g. dolomite xsls. Serp. alter'n patches. Dissem py-po 1% [illegible]					

ST JOSEPH EXPLORATIONS LIMITED DRILL LOG HOLE NO. S-77

METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
17.6	23.6		Weakly Silicated Dolomitic Marble - Dolomitic Marble - off-lt.grey, f.to m.g., somewhat mottled, locally fetid. Minor phlog and calcite. Locally get sections of incr. diop content, the diop. being a darker grey colour. Serp'n alter as patches generally. Dissem. py-po 1-2%, locally get concentrated clots. 21.1-21.3 - a short section of pred. serp'n-calcite+ phlog.					
23.6	23.9		Banded Pyritic Calc. Silicate - dark brownish grey, v.f.g, well banded. C.A. 70°. Finely dissem py-po 10-15%. Abundant phlog v. .g. (<mm scale) bands of graphitic calc. silicate.					
23.9	29.0		Phlogopitic Grey Dolomitic Marble - pale to med.grey, f.to m.g., weak banding. Dissem phlog & traces of py-po w/local incr. concentrations of phlog-biotite. Minor serp and serp+phlog patches & elangated lenses.					
29.0	35.5		Silicated Dolomitic Marble - off-white to pale grey, m.g., locally fetid, somewhat mottled. Minor serp. patches. Traces of dissem phlogopite and py-po (<1%). 34.8-35.5 - diopside rock w/patchy serp. alter'n & phlogopite seams & dissem py-po 1-2%.					
35.5	37.5		Banded Pyritic Calc.Silicate - black to dark brown-grey, v.f.g., well banded. C.A. 80°. v.f.g. dissem py-po 10%. Very fine graphitic lamellae of calc. silicate. Local minor calcite veinlets discordant.					
37.5	41.5		Dolomitic Marble - pale grey, f.to m.g., weakly silicated. Minor diop. 2-5% usually darker grey colour. Minor serp. patches assoc. w/calcite. Dissem. traces of py+po. Occassional narrow seams of phlog.					

ST JOSEPH EXPLORATIONS LIMITED DRILL LOG HOLE NO. S-77

METRES FROM	METRES TO	SECTION 1" =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % Zn
41.5	42.1		Banded Pyritic Calc.Silicate - similar to section 35.5-37.5.					
42.1	57.4		Intermixed Silicated Dolomitic and Dolomitic Marble - the silicated dol. marble is pale greenish white to lt.grey, generally f.to m.g. Serp. patches & swirls. Traces of phlog. Dissem. py-po 1%. The dol. marble is lt. to med.grey, m.g., phlogopitic - dissem & concentrated seams. Dissem py-po <1%. 45.6-46.0 - short sections pred. phlogopite. Minor calcite & dol. Dissem Fe sulphide <½%. 51.1-51.4 - thick bands of quartz in the sil. dol. marble. Traces Zn mineralization. Specks of sphalerite @ 50.9, 51.5, 51.8, 52.8. Finely dissem grains in grey dol. marble. Est. ½% Zn	3312	55.2	55.9	0.7	0.54
57.4	77.0		Silicated Dolomitic Marble - pale grey, m.g., slightly mottled - weakly fetid locally. Minor phlog and serp'n patches & seams. Dissem py-po 1-2% w/local concentrated clots. Diop as darker grey patches. 5-30%. Occassional traces of tremolite. 65.2-67.0 - weakly silicated dol. marble to dol. marble. Traces Zn mineralization thru this section, get very erratic spatterings of dissem sphalerite. Est <½%.					
77.0	102.0		Biotite Feldspar Gneiss - a granitic unit comprising of: 10-20% quartz - 5-30% biotite-phlogopite. 50-70% combined K & phlog feld's. The gneissic unit is variable depending on proportions of constituent. Occas. traces of Fe sulphides. Locally get pegmatitic sections and quartz knots. 98.0-102.0 - the units is more aplitic.					
102.0			END OF HOLE - casing pulled, no cement. Core recovery - near 100%.					