520728

REPORT ON EXPLORATION WORK DURING 1983

SPANISH MOUNTAIN PROPERTY

CLAIMS INVOLVED:

Don 1-4	4 Units
Mar 1	15 Units
Peso	9 Units
Jul 2	9 Units
My Fr.	1 Unit
Apr Fr.	1 Unit

CARIBOO MINING DIVISION

N.T.S.	93 A/11
Lat:	52° 36'
Long:	121° 33'

Owner: Diana V. Mickle

Work Completed for: Canadian Minerals Joint Venture 1980

Author: David St. C. Dunn

Date: September 27, 1983

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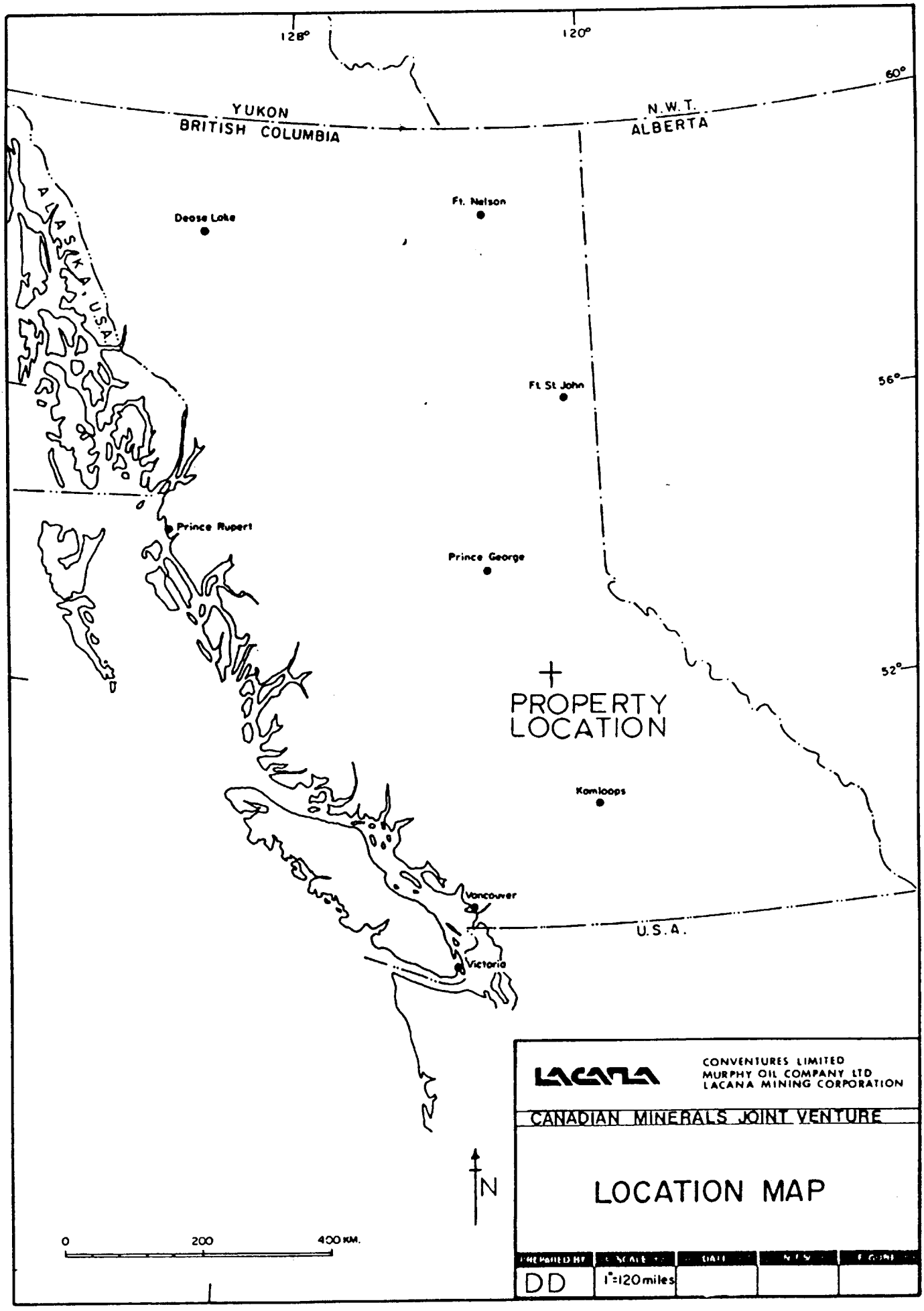
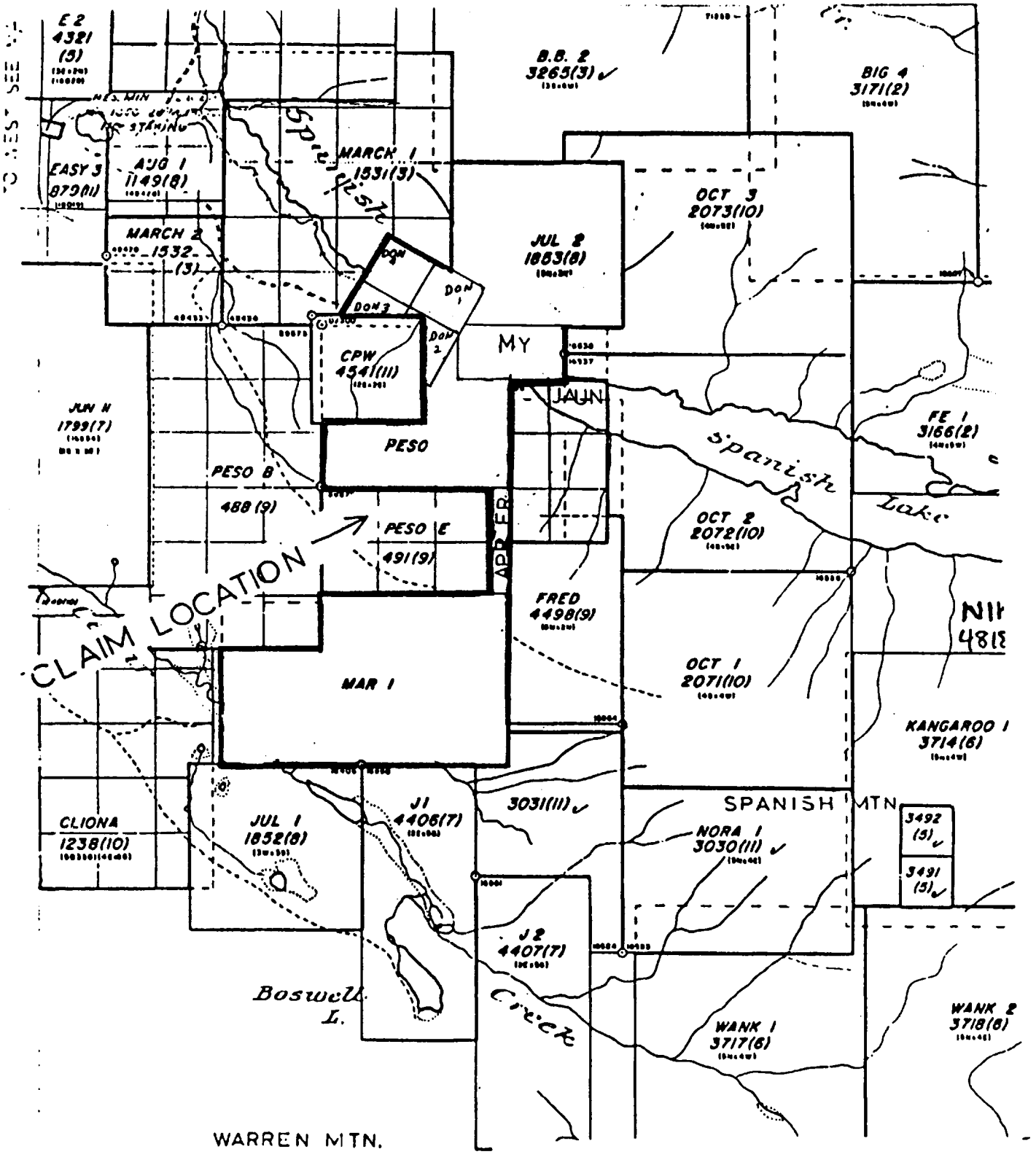
SUMMARY

Lacana Ex. (1981) Inc. optioned the Spanish Mountain group of claims on behalf of the Canadian Minerals Joint Venture 1980, based on the geological potential for a large tonnage disseminated gold deposit in the area. Numerous samples taken before the option agreement was signed returned gold values in the 0.05 oz/t range. An extensive soil sampling program was carried out which outlined 3 major anomalous areas and 27 other areas with one or more samples greater than 100ppb Au. Geological mapping and a VLF survey indicated that most of these anomalies were associated with shear zones. All anomalies were tested by backhoe trenching or hand trenching. Where bedrock was reached sporadic gold values in the .01 oz/t to .05 oz/t range were encountered in assays of continuous chip samples.

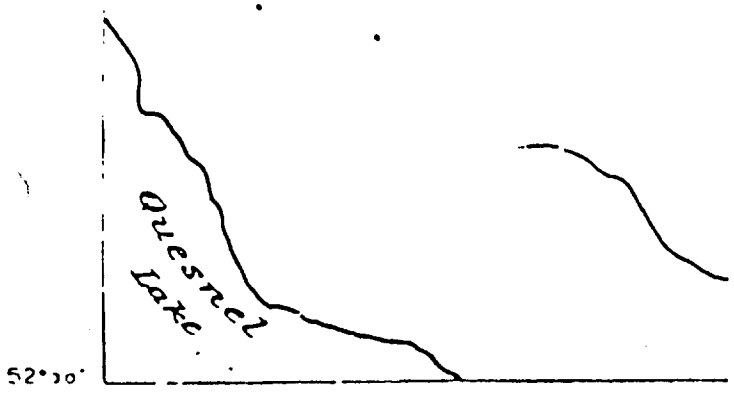
RECOMMENDATIONS

The extensive development program carried out on the Spanish Mountain property did not outline any areas of economic gold mineralization at present gold prices. It is recommended that a small VLF survey and rock sampling program be carried out on the adjoining C.P.W. claims to outline and test the strongest V.L.F. anomaly encountered. This program would be carried out contingent on permission being obtained from the owner's to do so. The program should take approximately 10 man days to complete. Further work in the area would be dependent on positive results being obtained in this program.


128°
120°
60°
YUKON
BRITISH COLUMBIA
N.W.T.
ALBERTA
ALASKA, U.S.A.
Deose Lake
Ft. Nelson
Ft. St. John
56°
Prince Rupert
Prince George
52°
PROPERTY
LOCATION
Kamloops
Vancouver
U.S.A.
Victoria
N
0
200
400 KM.
LACANA
CONVENTURES LIMITED
MURPHY OIL COMPANY LTD
LACANA MINING CORPORATION
CANADIAN MINERALS JOINT VENTURE
LOCATION MAP
DD
1"=120 miles



DEPARTMENT OF MINES
AND PETROLEUM
RESOURCES



MINERAL CLAIM MAP 93A/11 W(M)
CARIBOU MINING DIVISION

INTRODUCTION

Location and Access (cf.pages 2,3 and Fig. 1)

The Spanish Mountain group of claims is located on the N.W. slope of Spanish Mountain, straddling Spanish Creek and the western tip of Spanish Lake, and on the S.W. slope of the adjacent unnamed mountain to the north. Terrain is moderately rugged topography in the foothills of the Goose Range. Elevations range from 920m to 1,400 m.

Access is from Likely, 2.5 km towards Kiethley Creek then right on Forestry road 1300. This is an all weather logging haul road. Proceed 4 km on this road then, approximately 1 km E of Hepburn Lake, turn left. Follow this road .5 km to the north then turn right and follow the property access road 2 km to the main showings. The property access road is a deteriorated logging road and may require a four wheel drive vehicle.

Claim Status (cf. page 3)

Claim status is summarized in the table below:

Claim	Record No.	No. of Units	Owner	M.D.
Don 1	1383 (12)	1	Diana V. Mickle	Cariboo
Don 2	1384 (12)	1	Diana V. Mickle	Cariboo
Don 3	1385 (12)	1	Diana V. Mickle	Cariboo
Don 4	1386 (12)	1	Diana V. Mickle	Cariboo
Peso	467 (9)	9	Diana V. Mickle	Cariboo
Jul 2	1853 (8)	9	Diana V. Mickle	Cariboo
My	4861 (5)	1	Diana V. Mickle	Cariboo
Mar 1	4716 (3)	15	Darrel L. Johnson	Cariboo
Apr Fr.	4771 (4)	1	Robert E. Mickle	Cariboo

History

This area has been worked intermittently for both placer and lode gold deposits since the time of the Cariboo Gold Rush.

The most recent work was carried out in 1981 by Robert E. Mickle and Norsemont Mine Ltd. This work consisted mainly of stripping the main showings with a D-7 and D-8 cat and digging numerous backhoe pits in the area of the main showings. Most of this work is shown on Figs. 4 and 5.

WORK PROGRAMME

Line Cutting

A Base Line was cut with powersaws and picketed at a bearing of 285° on the north side of Spanish Lake and Creek A parellel Tie line was similarly cut approximately 500m to the north of the Base Line. Two perpendicular Cross Lines were cut and picketed. One at 50+00W from 10+00N to 10+00S and the other at 55+00W from Base Line to 2+75S. (See Figs. 1-3, 7).

Soil Sampling

An orientation soil survey was carried out. This consisted of the analysis of -80mesh, +80--10 mesh, and +10 mesh fractions of samples taken from the A,B,C, soil horizons and underlying rock in two mineralized areas and two unmineralized areas. The presence of gold was determined before hand by panning. Au and Sb were found to have the best contrast of the elements analyzed. (Au, Ag, Cu, Pb, Zn, As, Hg, Sb, Te).

900 Soil samples were taken in the B- horizon where available and C-horizon where no B-horizon was available. Approximately 2% of samples were A-horizon samples where neither B nor C horizon could be reached. Samples were taken on a 100 m line spacing with 25 m sampling interval. Linespacing was reduced to 50 m in highly anomalous areas.

The samples were analyzed by Chemex Labs. Ltd. for Au and Sb by drying and sieving samples to -80 mesh, followed by wet extraction and atomic absorption analysis. The MIBK extraction method was used for Au on 10 gm splits of samples. A pre-concentration procedure was used for Sb. Detection limits were ± 10ppb for Au and ±100 ppb for Sb. (See Figs. 2 and 3).

Rock Sampling

179 rock samples were taken in the area of the main showings. To accomplish this, picket lines were run through the main showings parallel to the Base Line and cross lines were run every 10 m. Trenches were dug along these cross lines and continuous chip samples were taken every 2 m with more selective samples taken in areas of variable lithology. (See Fig. 4,5,6).

Rock samples were analyzed for Au by Chemex Labs. Ltd. by fire assay with atomic absorption finish. The samples were dried and crushed to -20 mesh, then a 500 gm split ground to -100 mesh. A one assay ton split was taken from the 500 gms and a fire assay bead prepared. This bead was dissolved and run for Au using atomic absorption analysis. Detection limits were ±5 ppb.

VLF Survey

A VLF Survey was carried out using a Crone Radem. The Cutler Maine Station was used. Readings were taken every 25m on the same grid that soil sampling was carried out on. 22.5 line km of VLF survey were run. (See Figs. 10,11).

Geological Mapping

The area mapped, which includes the majority of the claim block, is underlain by undifferentiated Upper Triassic black shale, slate, and argillite, sillite, micritic limestone and limey sandstone according to G.S.C. O.F. 920. These units were divided for the purpose of mapping as follows.

Unit

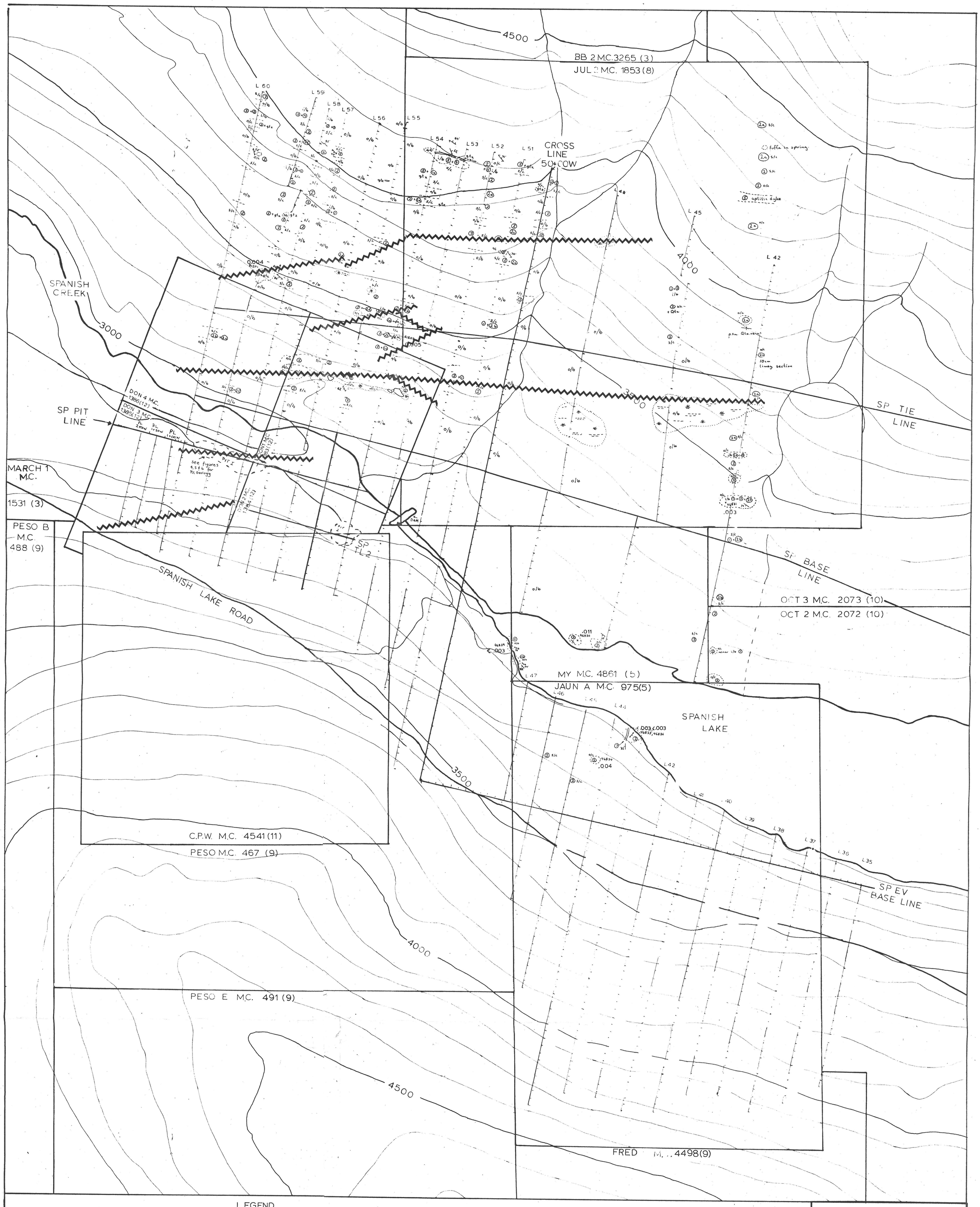
1	Feldspar Porphyry Andesite Tuff and Flow
1a	Spotty siliceous Andesite Tuff
2	Rusty Foliated Phyllite
2a	Argillite
2b	Graphitic Argillite
2c	Silicified Argillite
2d	Carbonate Horizons - generally boundinaged with 1 cm erratic quartz stringers
2e	Graphitic Phyllite
2f	Silicified Graphitic Phyllite
2g	Fault Gouge
3	Massive Vesicular Andesite Agglomerate
4	Siltstone - thinly laminated, grey weathering
5	Granitic - Aplitic dykes
6	Rhyodacite - associated Andesite
7	Gabbro Dyke
QV	Quartz Vein

In general, the strike of bedding parallels the strike of the most prominent foliation. The majority of these strikes vary from 100° to 130°. Dips are generally steep varying from 70° S to 50° N. A series of minor thrust faults is inferred from geomorphology and zones of quartz veining. These faults parallel bedding strike on the south facing slope north of Spanish Lake and Creek and are parallel to regional structures. The major regional structure mapped on G.S.C. O.F. 920 is a N.W. trending thrust fault with the upthrust block to the S.W. This fault is approximately 10 km to the N.E. of the mapped area. (See Fig. 1).

Trenching

All anomalies of greater than 100 ppb were trenched. Where access was possible a "2010" John Deere Cat was used. Roads were built using a loader bucket and trenches cut down hill using an attachable backhoe. Where access for the cat was not available trenches were blasted with ANFO and Forcite and hand dug. 450 m of backhoe trenching and 150 m of hand trenching were completed Where bedrock was reached, 2 m continuous chip samples were taken across foliation. Assays are plotted on the Trench and Main Showing Maps in the back pockets.

Approximately 25% of anomalous samples were found to be underlain by glacial material. Test holes were dug to 2 m by hand and 3 m by backhoe. If no bedrock was reached these sites were abandoned. (See Fig. 7, 8, 9).



LEGEND

- 30° bedding
- 70° foliation
- 20° folding ~arrow points down plunge
- 30° cleavage
- outcrop
- contact
- o/c outcrop
- s/c subcrop
- o/b overburden
- 41614 / 41613 sample site OZ / TON Au
- fault

1 Feldspar porphry andesite tuff & flow
1a Spotty silicious andesite tuff
2 Rusty foliated phyllite
2a Argillite
2b Graphitic argillite
2c Silicious argillite
2A Carbonate horizons ~ generally with boudinage & ~1cm qtz. stringers
2e Graphitic phyllite
3 Massive vesicular andesite agglomerate
4 Siltstone - thinly laminated, grey weathering
5 Granitic aplitic dykes
6 Rhyodacite, asst. andesite
7 Gabbro dyke

0 100 200 300
50 150 250
SCALE IN METRES

inches 0 1 2
0 1 2 3 4 5 centimetres

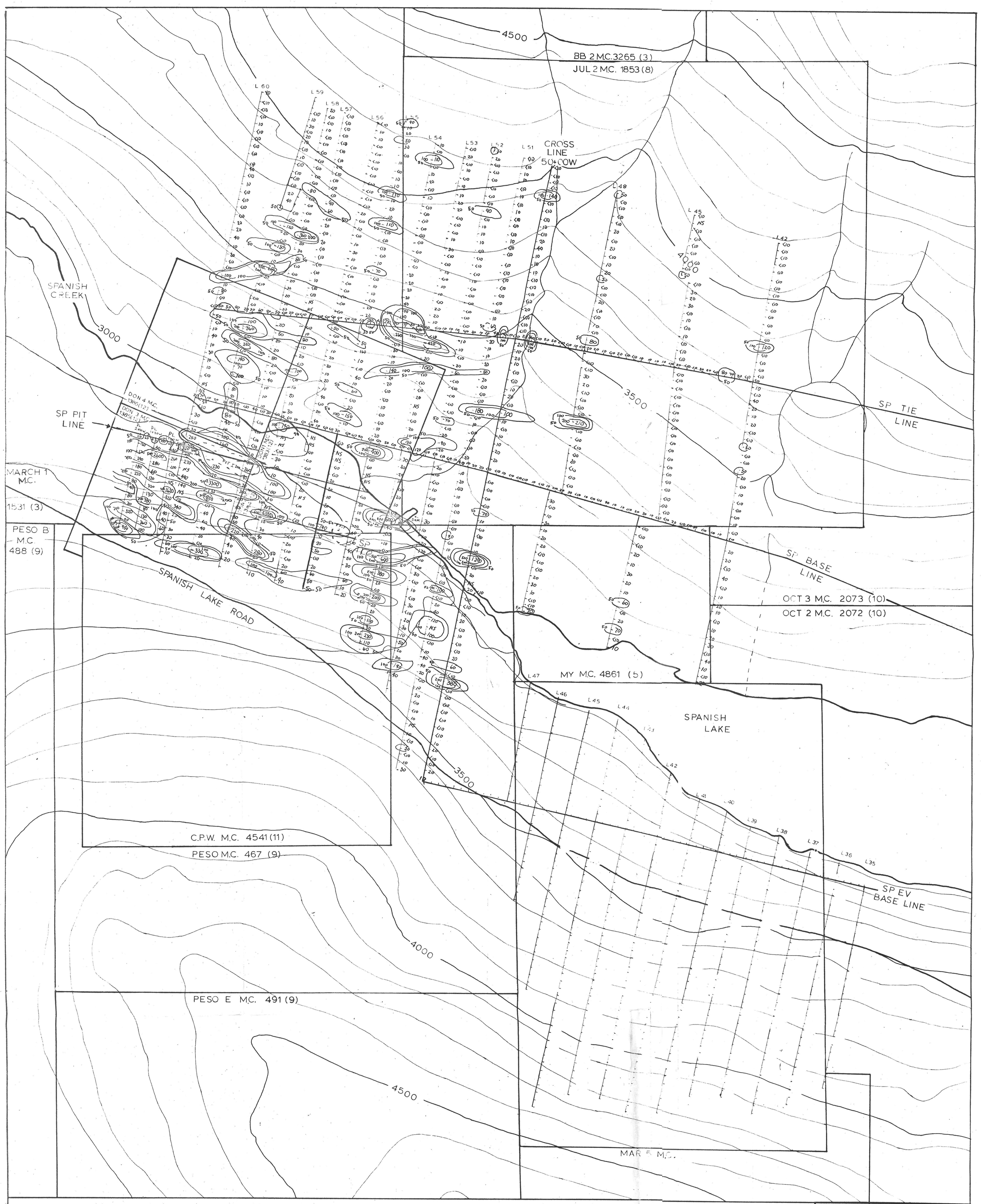
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

LACANA
MURPHY OIL COMPANY LTD.
CONVENTURES LTD.
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN
GEOLOGY

PREPARED BY	SCALE	DATE	N.T.S. SHEET	FIGURE
L.B.	1:5000	07/83	93A/11	1



0 100 200 300
50 150 250
SCALE IN METRES

LEGEND
CONTOURS
50 ppb
100 ppb
200 ppb
500 ppb

inches
centimetres

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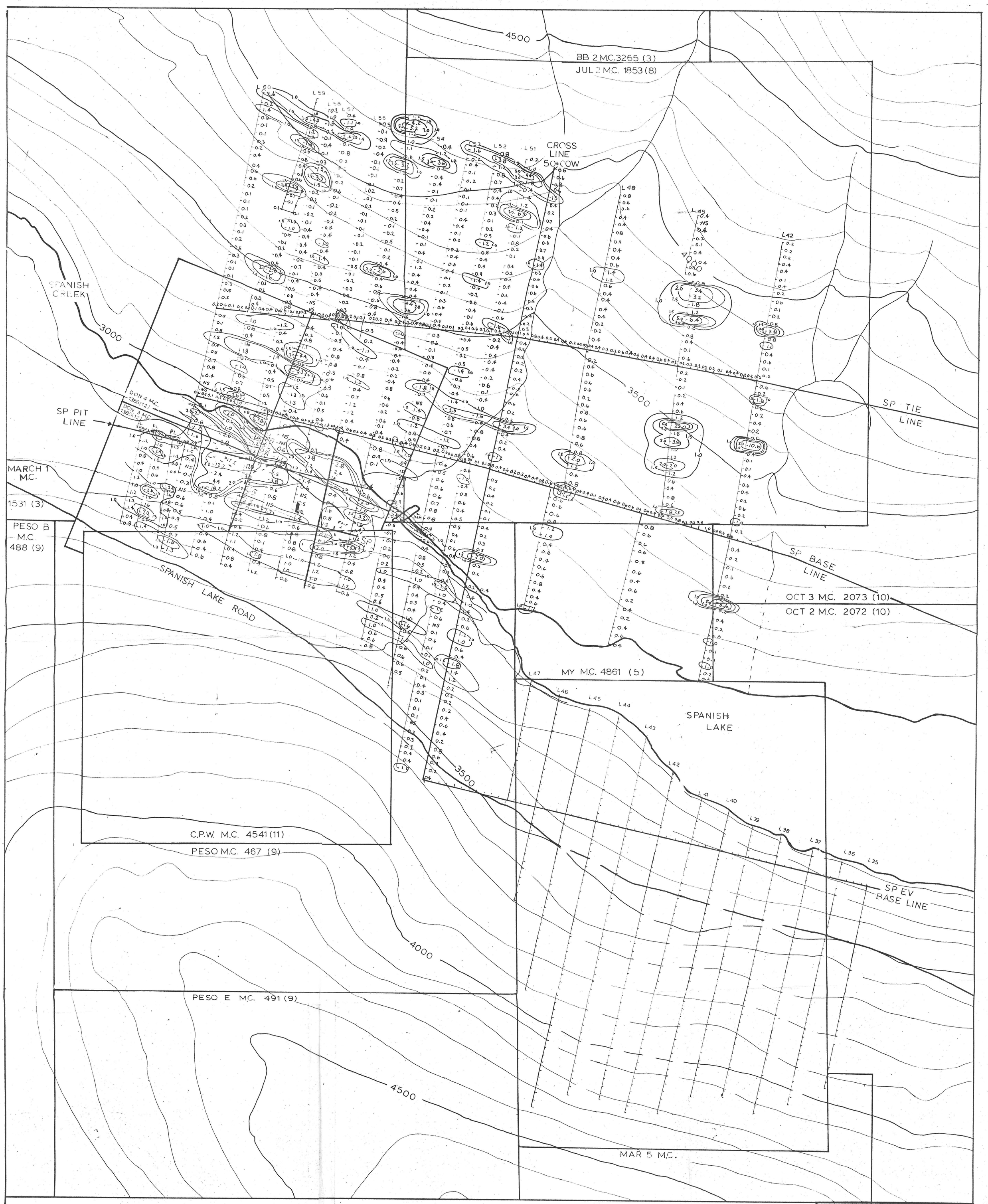
SPANISH MOUNTAIN
Au ppb

PREPARED BY	SCALE	DATE	N.T.S. SHEET	FIGURE
L.B	1:5000	07/83	93A/11	2



0 100 200 300
50 150 250
SCALE IN METRES

LEGEND
CONTOURS
1.0 ppm
1.5 ppm
2.0 ppm
5.0 ppm

inches
0 1 2
0 1 2 3 4 5
centimetres

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BRITISH COLUMBIA GEOLOGICAL SURVEY

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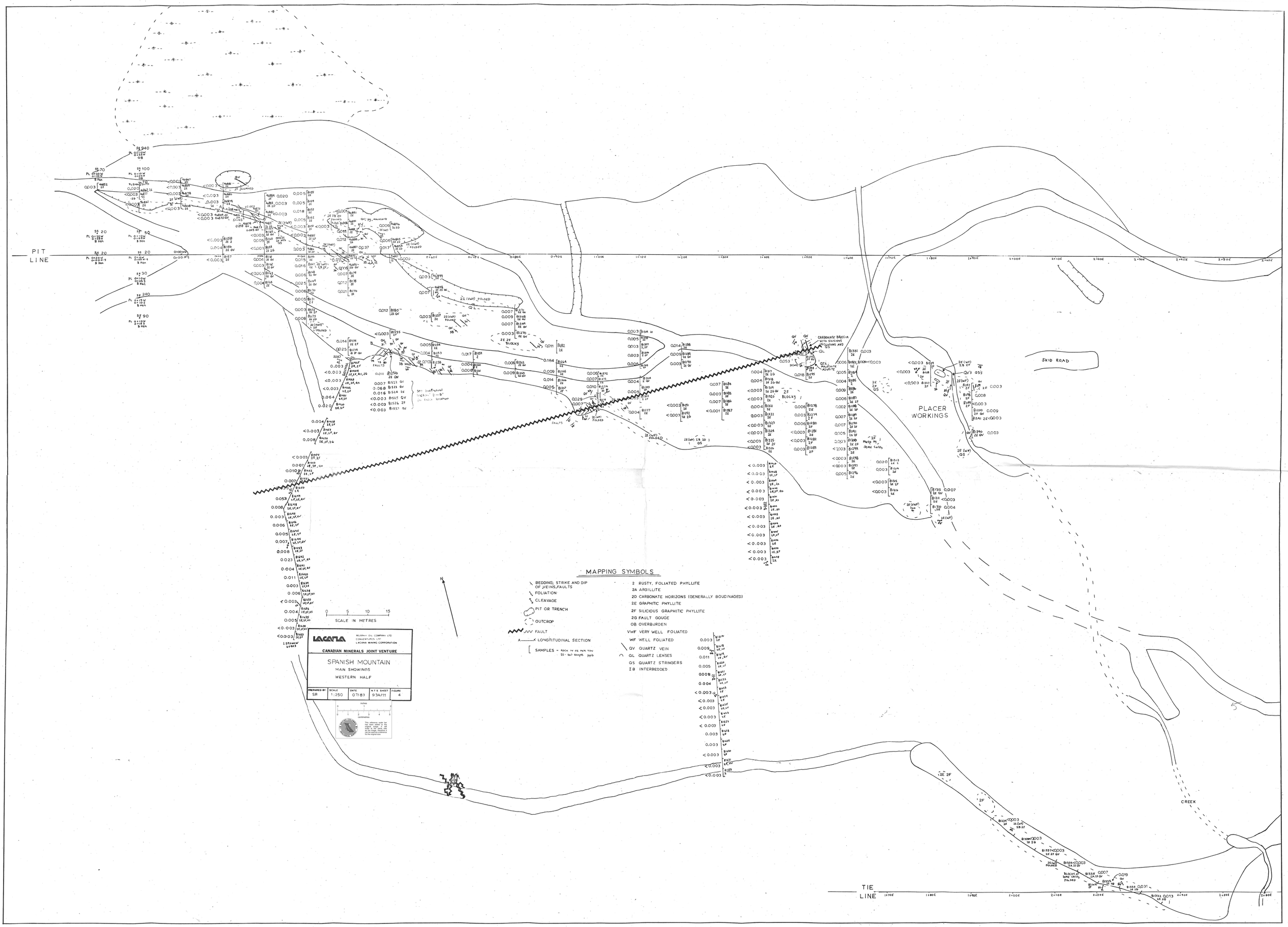
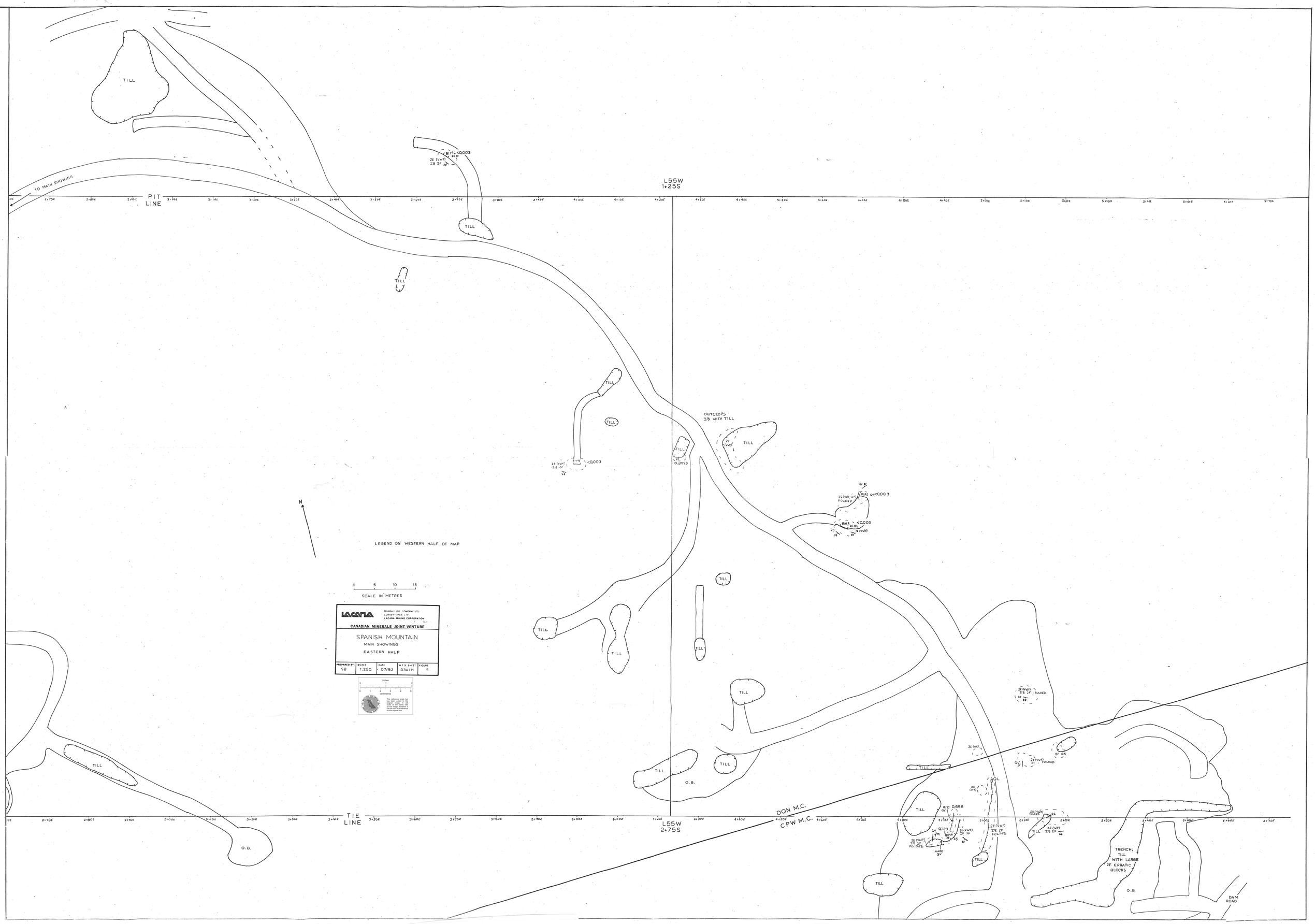
CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN
Sb ppm

PREPARED BY	SCALE	DATE	N T S SHEET	FIGURE
L.B	1:5000	07/83	93A/11	3


PIT LINE
TIE LINE
PLACER WORKINGS
SKID ROAD
CREEK
CARBONATE BRECCIA WITH SULFIDE INCLUSIONS AND QS
QTZ. MALACHITE
FAULTS
MAPPING SYMBOLS
BEDDING; STRIKE AND DIP OF VEINS, FAULTS
FOLIATION
CLEAVAGE
PIT OR TRENCH
OUTCROP
FAULT
LONGTITUDINAL SECTION
SAMPLES - ROCK IN OZ PER TON
SS - Soil Sample ppb
2 RUSTY, FOLIATED PHYLLITE
2A ARGILLITE
2D CARBONATE HORIZONS (GENERALLY BOUDINAGED)
2E GRAPHITIC PHYLLITE
2F SILICIOUS GRAPHITIC PHYLLITE
2G FAULT GOUGE
OB OVERBURDEN
VWF VERY WELL FOLIATED
WF WELL FOLIATED
QV QUARTZ VEIN
QL QUARTZ LENSES
QS QUARTZ STRINGERS
IB INTERBEDDED
SCALE IN METRES
0 5 10 15
LACANA
MURPHY OIL COMPANY LTD.
CONSOLIDATED LTD.
LACANA MINING CORPORATION
CANADIAN MINERALS JOINT VENTURE
SPANISH MOUNTAIN
MAIN SHOWINGS
WESTERN HALF
PREPARED BY SR
SCALE 1:250
DATE 07/83
N.T.S. SHEET 93A/11
FIGURE 4


TILL
TO MAIN SHOWING
PIT LINE
L55W
1+25S
2+70E
2+80E
2+90E
3+00E
3+10E
3+20E
3+30E
3+40E
3+50E
3+60E
3+70E
3+80E
3+90E
4+00E
4+10E
4+20E
4+30E
4+40E
4+50E
4+60E
4+70E
4+80E
4+90E
5+00E
5+10E
5+20E
5+30E
5+40E
5+50E
5+60E
5+70E
OUTCROPS IS WITH TILL
2E (VWF) IS 2F SLUMPED
2E (VWF) IS 2F FOLDED
2E (VWF, WF) FOLDED
2E (VWF) IS 2F FOLDED
2E (WF) FOLDED
2E (WF)
2F QS
2E (VWF) IS 2F FOLDED
2E (VWF) IS 2F
2E (WF) IS 2F
2E (WF) IS 2F
MUDDY GV
O.B.
TIE LINE
L55W
2+75S
DON M.C.
CPW M.C.
TRENCH; TILL WITH LARGE 2F ERRATIC BLOCKS
DAM ROAD
N
LEGEND ON WESTERN HALF OF MAP
0 5 10 15
SCALE IN METRES
LACANA
MURPHY OIL COMPANY LTD
CONVENTURES LTD
LACANA MINING CORPORATION
CANADIAN MINERALS JOINT VENTURE
SPANISH MOUNTAIN
MAIN SHOWINGS
EASTERN HALF
PREPARED BY SB
SCALE 1:250
DATE 07/83
N.T.S. SHEET 93A/11
FIGURE 5
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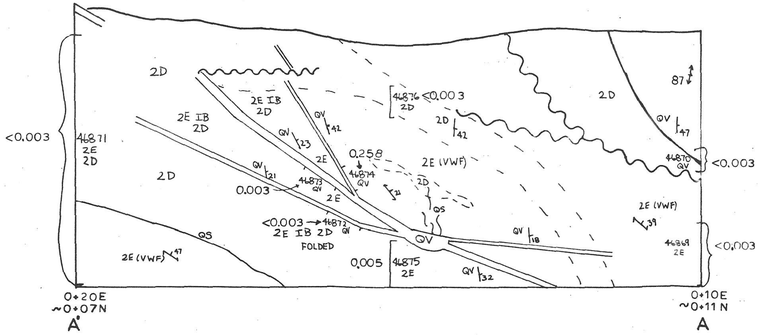
SECTION ONE: LONGTITUDINAL SECTION OF OUTCROP LOCATED BETWEEN PL 0+10E AND 0+20E



LEGEND

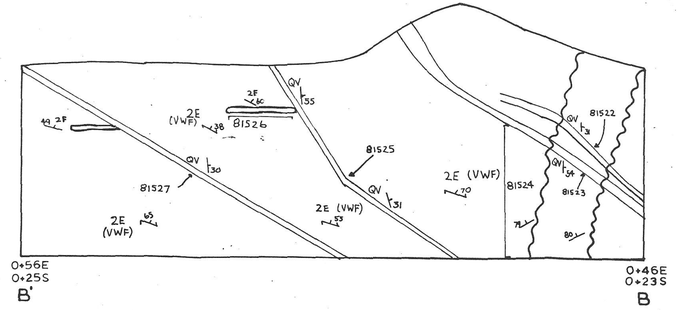
- BEDDING; STRIKE AND DIP OF VEINS, FAULTS
- FOLIATION
- CLEAVAGE
- FAULT (GOUGE)
- CARBONATE HORIZONS
- [SAMPLES oz/ton

- 2D CARBONATE HORIZONS (GENERALLY BOUDINAGED)
- 2E GRAPHITIC PHYLLITE
- VWF VERY WELL FOLIATED
- IB INTERBEDDED
- QV QUARTZ VEIN
- QS QUARTZ STRINGER
- 2F SILICIOUS GRAPHITIC PHYLLITE

0 1 2 3 4

SCALE IN METRES

SECTION TWO: LONGTITUDINAL SECTION OF OUTCROP LOCATED BETWEEN PL 0+46E AND 0+56E



inches

0 1 2

0 1 2 3 4 5

centimetres

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BRITISH COLUMBIA GEOLOGICAL SURVEY

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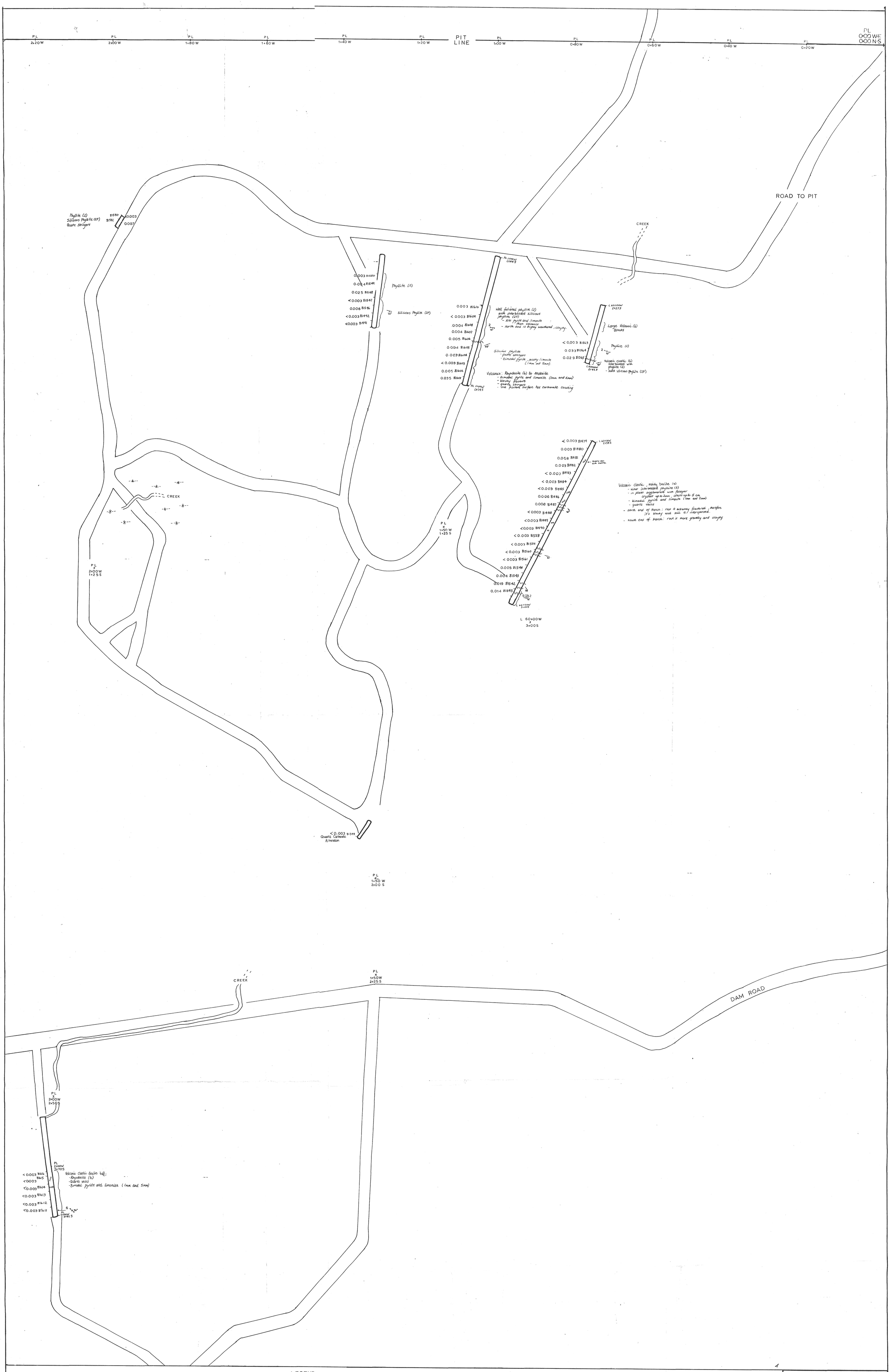
CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN

LONGTITUDINAL SECTIONS IN MAIN SHOWING

PREPARED BY	SCALE	DATE	N T S SHEET	FIGURE
SB	1:50	07/83	93A/11	6


PIT LINE
PL 2+20W
PL 2+00W
PL 1+80W
PL 1+60W
PL 1+40W
PL 1+20W
PL 1+00W
PL 0+80W
PL 0+60W
PL 0+40W
PL 0+20W
PL 0+00W-E 0+00N-S
ROAD TO PIT
CREEK
Phyllite (2)
Siliceous Phyllite (2F)
Quartz stringers
81540
81541
0.003
0.007
0.003 81550
0.004 81549
0.025 81548
<0.003 81547
0.006 81546
<0.003 81492
<0.003 81491
Phyllite (2)
Siliceous Phyllite (2F)
PL 1+00W 0+75S
0.003 81610
<0.003 81609
0.004 81608
0.004 81607
0.005 81606
0.004 81605
0.003 81604
<0.003 81603
0.005 81602
0.035 81601
PL 1+00W 0+75S
Well foliated phyllite (2) with interbedded siliceous phyllite (2F)
- less pyrite and limonite than volcanics
- north end is highly weathered, clayey.
Siliceous phyllite
- quartz stringers
- bimodal pyrite, mostly limonite (1mm and 5mm).
Volcanics: Rhyodacite (6) to Andesite
- bimodal pyrite and limonite (1mm and 5mm)
- blocky fracture
- quartz stringers
- one fractured surface has carbonate coating
L 60+00W 2+27S
Large Volcanic (6) Blocks
<0.003 81563
0.033 81564
0.029 81565
Phyllite (2)
Volcanic clastic (6) interbedded with phyllite (2)
- some siliceous phyllite (2F)
L 60+00W 2+92S
<0.003 81479
0.003 81480
0.008 81481
0.003 81482
<0.003 81483
<0.003 81484
<0.003 81485
0.006 81486
0.008 81487
<0.003 81488
<0.003 81489
<0.003 81490
<0.003 81558
<0.003 81559
<0.003 81560
<0.003 81561
0.005 81544
0.004 81543
0.019 81542
0.014 81545
L 60+00W 2+58S
Quartz zone with carbonate
Volcanic clastic, mainly dacite (6)
- minor interbedded phyllite (2)
- in places agglomerate with feldspar crystals up to 2mm, clasts up to 5 cm.
- bimodal pyrite and limonite (1mm and 5mm)
- quartz veins
- north end of trench: rock is extremely fractured, therefore it's blocky and soil is interspersed.
- south end of trench: rock is more gravelly and clayey
L 60+00W 3+00S
PL x 1+50 W 1+25 S
PL x 2+00W 1+25 S
<0.003 81399
Quartz Carbonate Alteration
PL x 1+50 W 2+00 S
CREEK
PL x 1+50W 2+25 S
DAM ROAD
PL x 2+00W 2+50S
PL 2+00W 2+70S
Volcanic clastic dacite tuff;
- Rhyodacite (6)
- Quartz veins
- Bimodal pyrite and limonite (1mm and 5mm)
<0.003 81616
<0.003 81615
<0.003
<0.003 81614
<0.003 81613
<0.003 81612
<0.003 81611
6
PL 2+00W 2+82 S
LEGEND
FOLIATION
BEDDING
SHEAR ZONES
81963 SAMPLE SITES
2 RUSTY FOLIATED PHYLLITE
2F SILICIOUS (GRAPHITIC) PHYLLITE
6 RHYODACITE-ANDESITE
QUARTZ VEINS
SHEAR ZONE
0 5 10 15 20
SCALE IN METRES
N
LACANA
CONVENTURES LIMITED
MURPHY OIL COMPANY LTD
LACANA MINING CORPORATION
CANADIAN MINERALS JOINT VENTURE
SPANISH MT.
BACKHOE TRENCHES
(SOUTH SIDE)
PREPARED BY S.B.
SCALE 1:250
DATE 8/83
N.T.S. 93A/11
FIGURE 7

Key

- trenches
- × rock sample
- cat roads
- swamp
- ⊙ legal corner post

Legend

- 2 rusty phyllite
- 2b graphitic argillite
- 2c siliceous argillite
- 2e graphitic phyllite
- 2f siliceous phyllite
- qt. quartz
- V.G. visible gold

inches 0 1 2
0 1 2 3 4 5 centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

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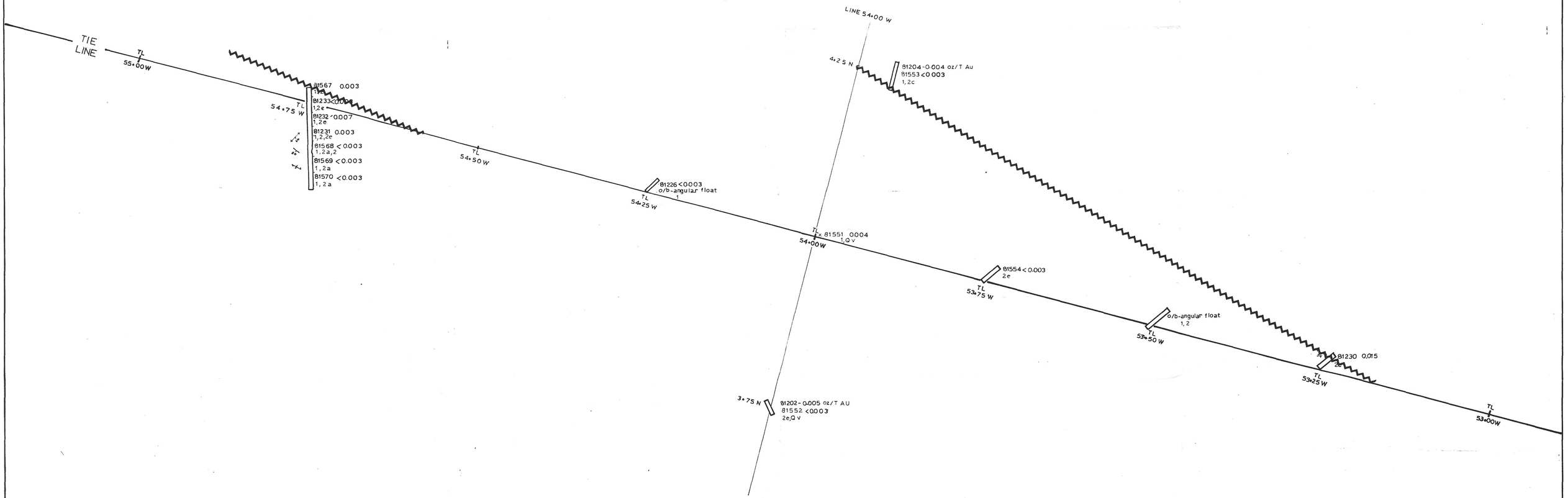
CANADIAN MINERALS JOINT VENTURE

SPANISH MTN. ROCK SAMPLES+TRENCHES NORTH SIDE

(values in ounces/ton Au)

PREPARED BY	SCALE	DATE	N.T.S.	FIGURE
D.T.	1:5000	8/83	93A/11	8



LEGEND

TL	TIE LINE	o/b	OVERBURDEN
	TRENCH	1	VOLCANICLASTIC
12345	SAMPLED TRENCH	2	RUSTY FOLIATED PHYLLITE
x	SAMPLE-2 METER CHIP	2a	ARGILLITE
10	BEDDING	2c	SILICEOUS ARGILLITE
10 20	FOLIATION, VERTICAL FOLIATION	2e	GRAPHITIC PHYLLITE
10 20	CLEAVAGE	Qv	QUARTZ VEIN
	FAULT		

0 5 10 15 20 25

SCALE IN METERS

inches 0 1 2

0 1 2 3 4 5 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

BRITISH COLUMBIA GEOLOGICAL SURVEY

LACANA

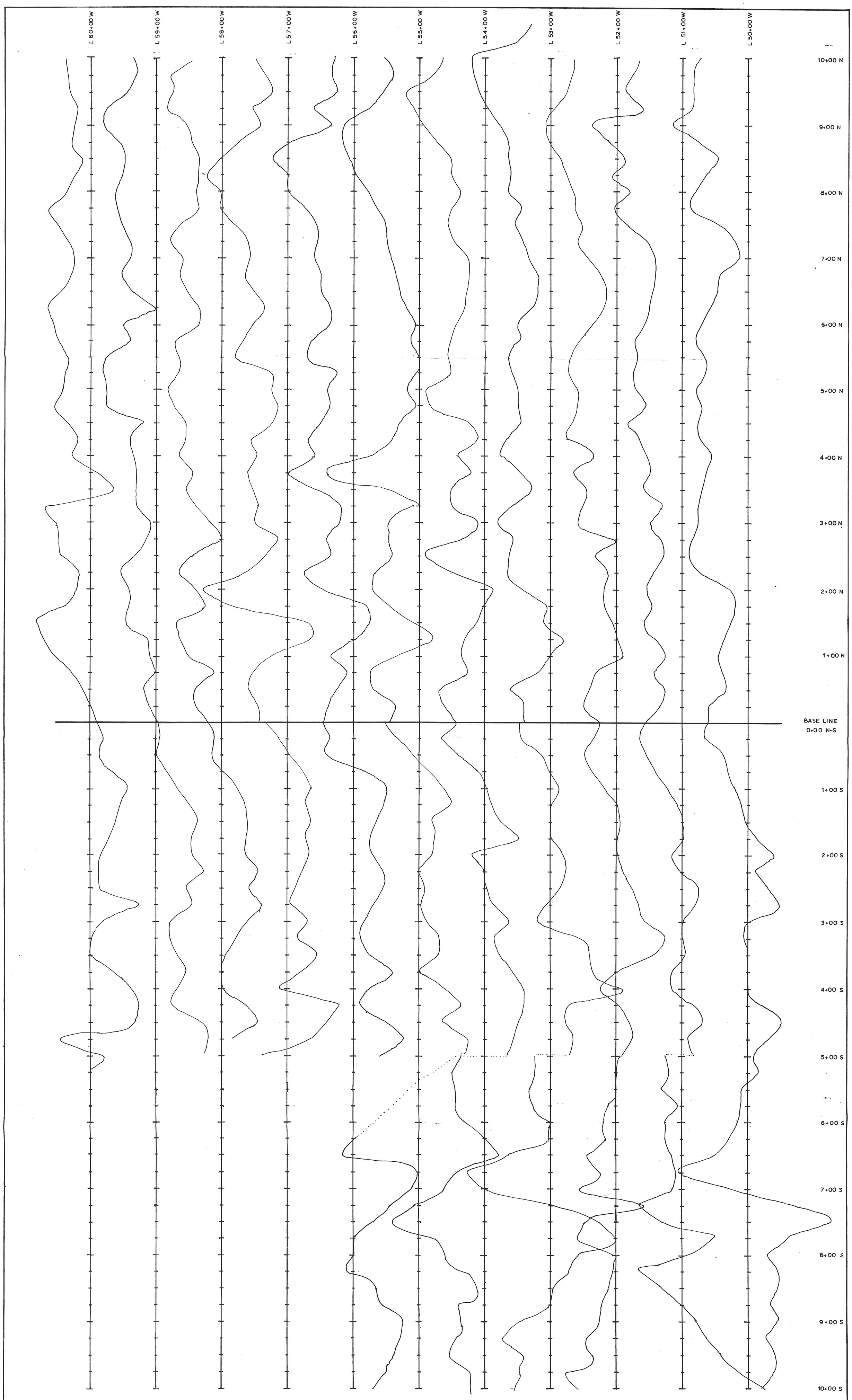
CONVENTURES LIMITED
MURPHY OIL COMPANY LTD
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SPANISH MT.

TRENCHES TIE LINE 54+00 W

DRAWN BY	SCALE	DATE	N.T.S.	FIGURE
C.B.	1:250	8/83	93 A/11	9



West +20 +10 0 -10 -20 East

VLF DIP SCALE (deg.)

Operator Faced North-East
Cutler Maine used

0 50 100

SCALE IN METERS

inches 0 1 2

0 1 2 3 4 5 centimetres

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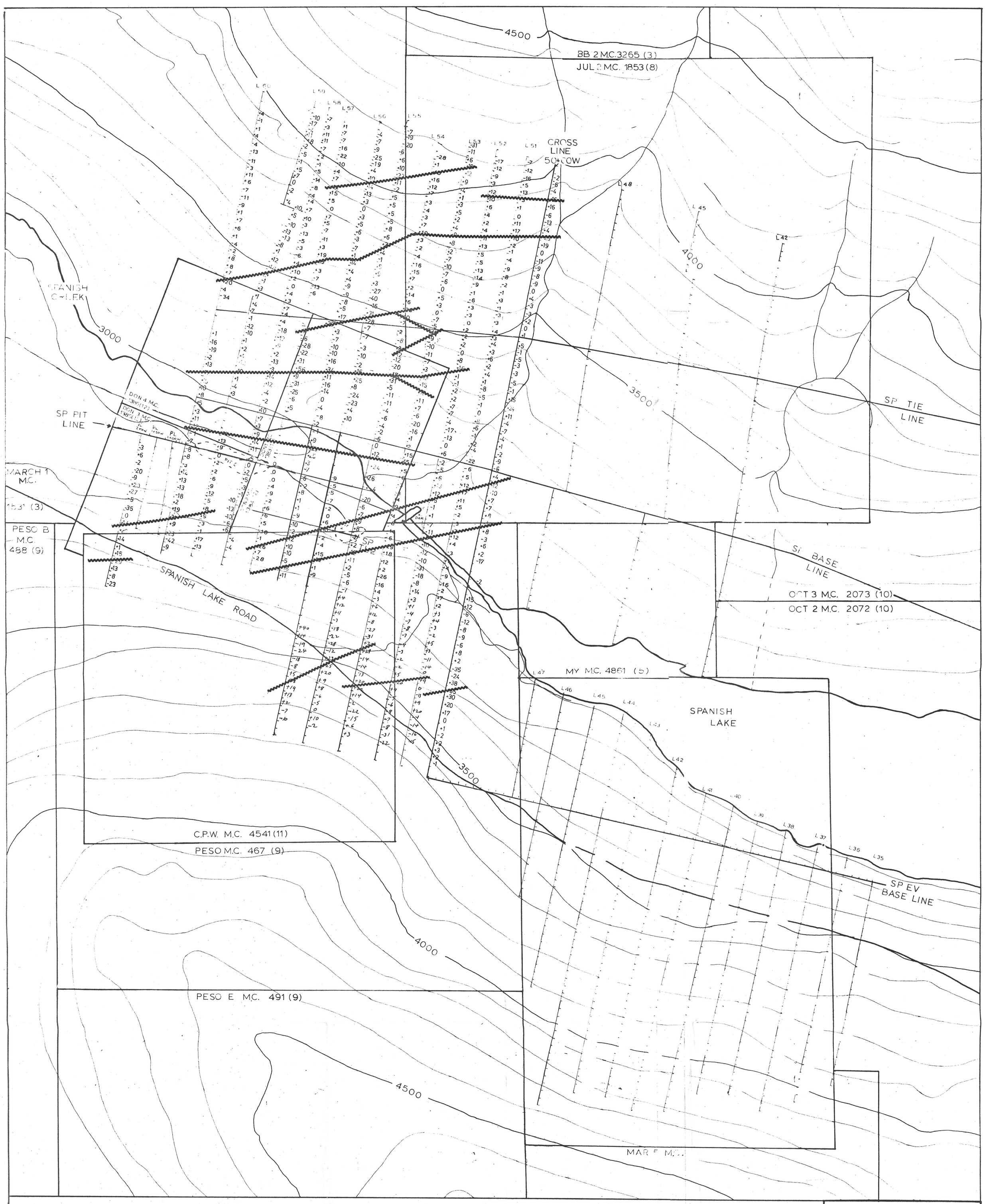
BRITISH COLUMBIA GEOLOGICAL SURVEY

LACANA MINING CORPORATION

SPANISH MT.

PROFILES OF V.L.F.

PREPARED BY	SCALE	DATE	N.T.S.	FIGURE
C.B.	1:2500	9/83	93A/11	10



0 100 200 300
50 150 250
SCALE IN METRES

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

INSTRUMENT: CRONE GEOPHISICS RADEM VLF
OPERATOR: L. KILLOUGH
DATA IS FRASER FILTERED
DENOTES CROSS-OVER

LACANA
MURPHY OIL COMPANY LTD
CONVENTURES LTD
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN

VLF SURVEY

PREPARED BY	SCALE	DATE	N T S SHEET	FIGURE
LK	1:5000	07/83	93A/11	11