REPORT ON

LINE CUTTING

SOIL SAMPLING

ROCK SAMPLING

VLF SURVEY

GEOLOGICAL MAPPING

ON THE

DON 1, DON 2, DON 3, DON 4, MAR 1

PESO, JUL 2, MY, APR Fr.

MINERAL CLAIMS

CARIBOO M.D.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

N.T.S. 93A/11
Lat: 52° 36'
Long: 121° ~~28'~~ 27'

Lacana Mining Corporation
David Dunn, B. Sc.
July 27, 1983

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SUMMARY

Lacana Mining Corporation has been exploring the Spanish Mountain group of claims including the Don 1-4 M.C., Peso M.C.,Jul 2 M.C., and My M.C. since May of 1983 attempting to accurately delineate previously known gold mineralization. This report describes work undertaken between May 2, 1983 and July 28, 1983.

7.65 km of picketed Base Lines, Tie Line and Cross Lines were cut to provide accurate references for surveys. 900 soil samples were taken and analyzed for Au and Sb. 179 rock samples were taken in the area of the main showings and analyzed for Au. These showings were geologically mapped at a scale of 1:250. The whole of the claim block was geologically mapped at a scale of 1:5,000. 22.5 km of VLF survey was run.

CONCLUSIONS AND RECOMMENDATIONS

The soil sampling has shown some strong gold anomalies, in places coincident with silicified argillite. These areas should be stripped to bedrock by backhoe or blasted, hand trenched and sampled.

INTRODUCTION

Location and Access

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 920 m 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 east to the main showings. The property access road is a deteriorated logging road and may require a four wheel drive vehicle.

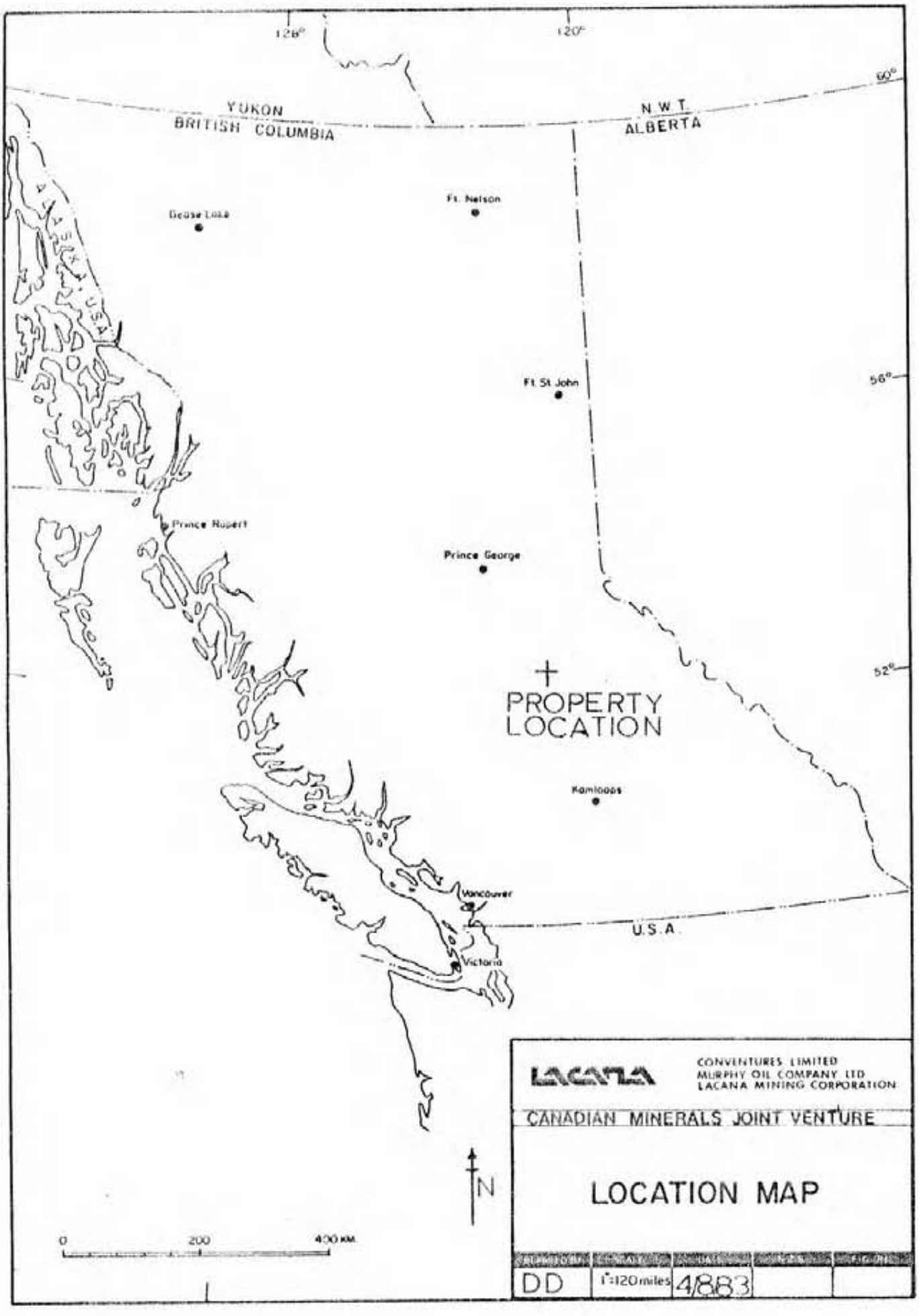
Claim Status

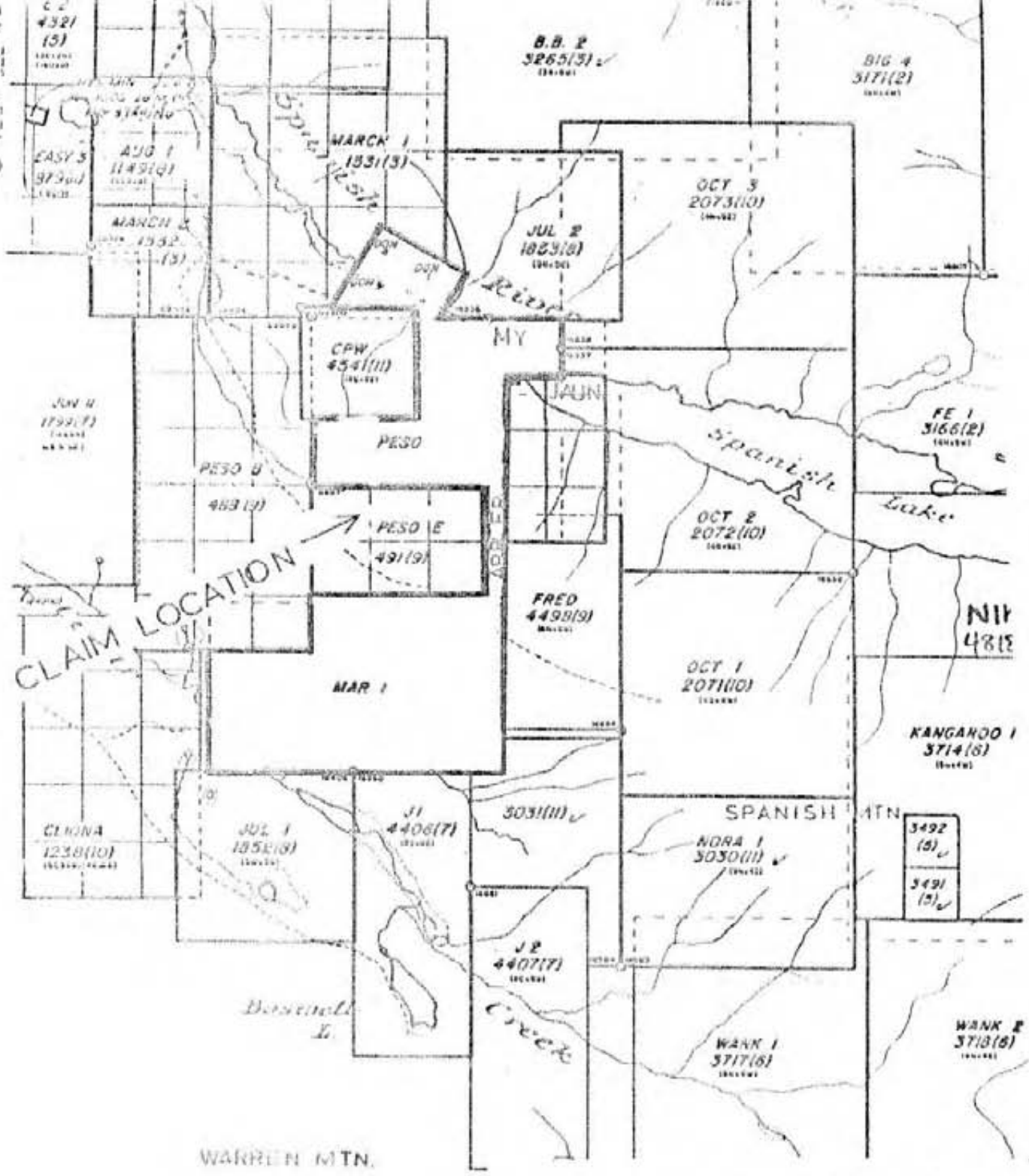
Claim status is summarized in the table below:

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 and


126°
120°
60°
YUKON
BRITISH COLUMBIA
N.W.T.
ALBERTA
Ft. Nelson
Dease Lake
ALASKA (U.S.A.)
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
DRAWN BY
SCALE
DATE
PROJECT
FIGURE
DD
1":120 miles
4/83



DEPARTMENT OF MINES
AND PETROLEUM
RESOURCES

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

1982 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 trenches in the area of the main showings. Most of this work is shown on Figs. 4 & 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 parallel Tie Line was similarly cut approximately 500 m to the north of the Base Line. Two perpendicular Cross Lines were cut and picketed, one at 50+00W from 10+00 N to 10+00S and the other at 55+00W from Base Line to 2+75S.
(See Figs. 1-3, 7)

Soil Sampling

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. Line-spacing 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-concentrating procedure was used for Sb. Detection

limits were ± 10 ppb for Au and ± 100 ppb for Sb. (See Figs. 2 & 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 then 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 25 m on the same grid that soilsampling was carried out on. 22.5 line km of VLF survey was run.

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)

APPENDIX I

STATEMENT OF COSTS

1. Line Cutting, May 2 to May 31, 1983

Wages:	D. Dunn (Supervision)	15 days @ $150		$ 2,250.00
	J. Buckler	30 days @ $100		3,000.00
	D. Tupper	15 days @ $ 80		1,200.00
	L. Killough	30 days @ $ 80		2,400.00
	C. Bishop	30 days @ $ 65		1,950.00
	S. Bishop	30 days @ $ 60		1,800.00
Room and Board:		150 days @ $ 30		4,500.00
Trucks:	B.C. 23-40-JC	15 days @ $ 90		1,350.00
	B.C. HKW-986	30 days @ $ 90		2,700.00
				$ 21,150.00

2. Soil Sampling, June 1 to June 30, 1983

Wages:	D. Dunn (Supervision)	5 days @ $150		$ 750.00
	J. Buckler	30 days @ $100		3,000.00
	D. Tupper	30 days @ $ 80		2,400.00
	L. Killough	30 days @ $ 80		2,400.00
	C. Bishop	15 days @ $ 65		975.00
Room and Board:		110 days @ $ 30		3,300.00
Trucks:	B.C. 23-40-JC	15 days @ $ 90		1,350.00
	B.C. HKW-986	30 days @ $ 90		2,700.00
Analysis:		900 samples @ $ 8.25		7,425.00
				$ 24,300.00

3. Rock Sampling, Geological Mapping (Main Showings) June 1 to June 30, 1983

Wages:	S. Bishop	30 days @ $ 60	$ 1,800.00
Room and Board:		30 days @ $ 30	900.00
Sample Analysis:		179 samples @ $ 11.25	2,013.75
			$ 4,713.75

4. VLF Survey July 1 to July 27, 1983

Wages:	L. Killough	26 days @ $ 80	$ 2,080.00
Room and Board:		26 days @ $ 30	780.00
Instrument rental		26 days @ $ 20	520.00
			$ 3,380.00

. . . . cont'd

5. Geological Mapping, July 1 to July 27, 1983

Wages:	D. Dunn (Supervision)	5 days	@	$150	$ 750.00
	J. Buckler	10 days	@	$100	1,000.00
	D. Tupper	20 days	@	$ 80	1,600.00
	C. Bishop	20 days	@	$ 65	1,300.00
					$ 4,650.00

TOTAL $ 58,193.75

APPENDIX II

STATEMENT OF QUALIFICATIONS

DAVID ST. C. DUNN

1. I graduated from the University of British Columbia with a B. Sc. in geology in the Fall of 1980.

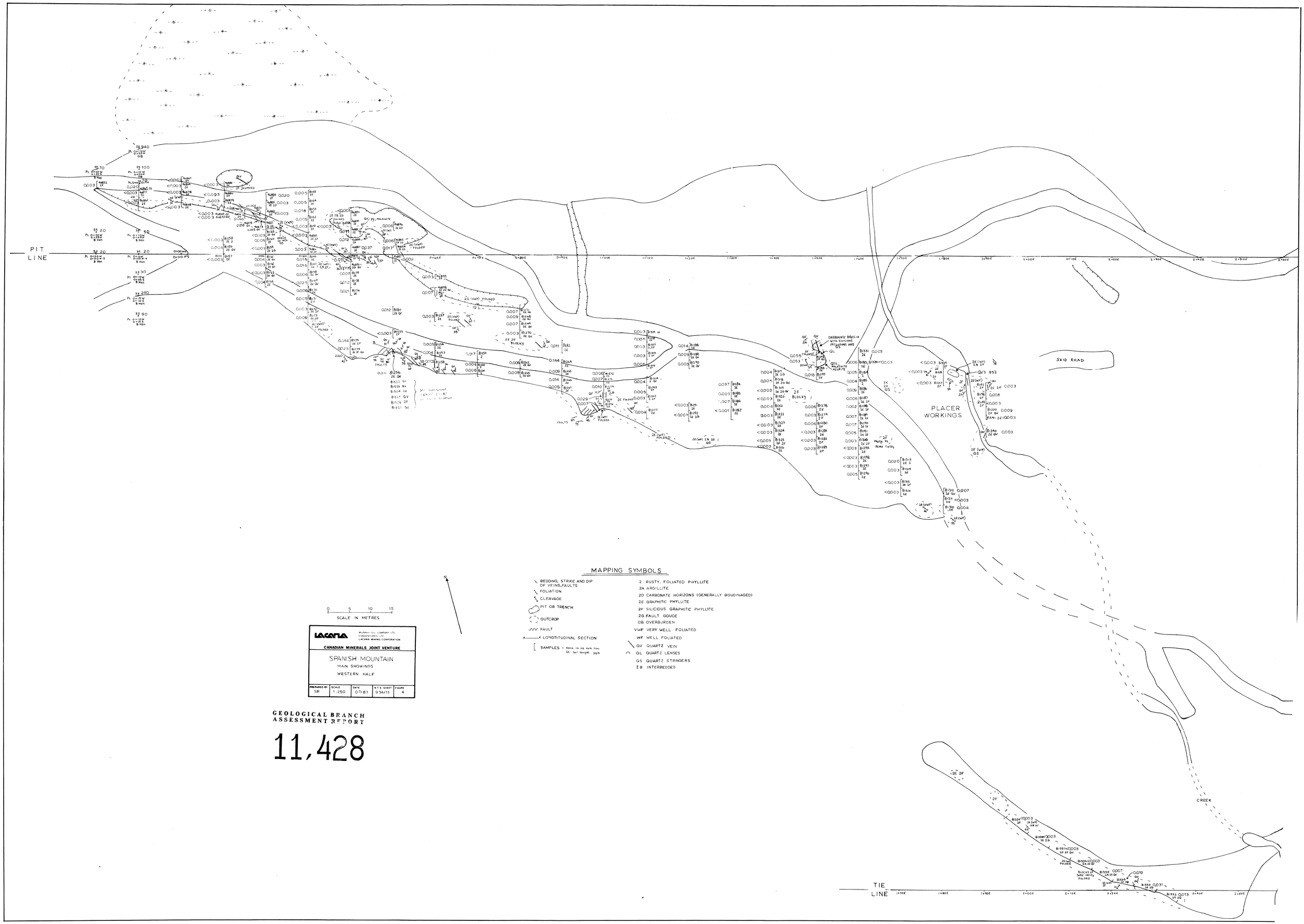
2. I have been employed as a geologist by AMAX Minerals Exploration May 1980 to September 1980, Esso Minerals Canada September 1980 to December 1980, Ager Berretta and Associates March 1981 to December 1981, and Lacana Mining Corp. March 1982 to present.

3. I have, previous to the former, worked for seven seasons in the mineral exploration business in Canada and Australia.

4. I am an affiliate member of the Association of Exploration Geochemists.

5. I am a member of the Geological Association of Canada.

David St. C. Dunn, Geologist



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 WESTERN HALF				
PREPARED BY: SB	SCALE: 1:250	DATE: 07/83	N.T.S. SHEET: 93A/11	FIGURE 4

MAPPING SYMBOLS

BEDDING; STRIKE AND DIP OF VEINS, FAULTS
FOLIATION
CLEAVAGE
PIT OR TRENCH
OUTCROP
FAULT
A——A' 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

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

BB 2 M.C. 3265 (3)

JUL 3 M.C. 1853 (8)

4500

4000

3500

3000

CROSS LINE 50+00W

SP TIE LINE

SP PIT LINE

SP TL2

Si BASE LINE

SP EV BASE LINE

L 60 L 59 L 58 L 57 L 56 L 55 L 54 L 53 L 52 L 51 L 48 L 45 L 42 L 41 L 40 L 39 L 38 L 37 L 36 L 35

SPANISH CREEK

SPANISH LAKE ROAD

SPANISH LAKE

MARCH 1 M.C. 1531 (3)

PESO B M.C. 488 (9)

DON 4 M.C. 1386(12)

DON 3 M.C. 1385(12)

DON 1 M.C. 1383(12)

DON 2 M.C. 1384(12)

See figures 4,5 & 6 for Pit Geology

PIT

DAM

OCT 3 M.C. 2073 (10)

OCT 2 M.C. 2072 (10)

MY M.C. 4861 (5)

C.P.W. M.C. 4541 (11)

PESO M.C. 467 (9)

PESO E M.C. 491 (9)

MAY M.C. 4860 (5)

2a s/c

tuffs in spring

2a s/c

2 s/c

2 o/c

3 aplitic dyke

2a o/c

0.1m Qtz veins

10cm limey section

glacial o/b

46830 46829 46835 46834

LEGEND

30° bedding
70° foliation
20° folding (arrow points down plunge)
30° cleavage

o/c outcrop
s/c subcrop
o/b overburden
41614 / 41613 sample site

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

0 100 200 300
50 150 250
SCALE IN METRES

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

LACANA MINING CORPORATION (NOW ALANA MINING CORPORATION)

CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN

GEOLOGY

PREPARED BY	SCALE	DATE	N.T.S. SHEET	FIGURE
			93A	1

4500

BB 2 M.C. 3265 (3)

JUL 3 M.C. 1853 (8)

CROSS LINE 50+COW

L 60 L 59 L 58 L 57 L 54 L 53 L 48 L 45 L 42

3000

3500

4000

4500

SP PIT LINE

SP TIE LINE

SP BASE LINE

SP EV BASE LINE

DON 4 M.C. 1386 (12)

DON 3 M.C. 1385 (12)

DON M.C. 1383 (12)

MARCH 1 M.C. 1531 (3)

PESO B M.C. 488 (9)

SPANISH LAKE ROAD

OCT 3 M.C. 2073 (10)

OCT 2 M.C. 2072 (10)

MY M.C. 4861 (5)

SPANISH LAKE

C.P.W. M.C. 4541 (11)

PESO M.C. 467 (9)

PESO E M.C. 491 (9)

MAR 5 M.C.

0 100 200 300
50 150 250
SCALE IN METRES

LEGEND

CONTOURS
50 ppb
100 ppb
200 ppb
500 ppb

N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN
Au ppb

PREPARED BY	SCALE	DATE	N.T.S. SHEET	FIGURE
LB	1:5000	07 84	93A/11	2

4500

BB 2 M.C. 3265 (3)

JUL 1 M.C. 1853 (8)

CROSS LINE 50+00W

L 48

L 45

L42

4000

SPANISH CREEK

3000

DON 4 M.C. 1380 (2)

DON 3 M.C. 1379 (2)

SP FIT LINE

3500

SP TIE LINE

MARCH 1 M.C.

1531 (3)

PESO B M.C. 488 (9)

SPANISH LAKE ROAD

SP BASE LINE

OCT 3 M.C. 2073 (10)

OCT 2 M.C. 2072 (10)

MY M.C. 4861 (5)

L47 L46 L45 L44 L43 L42 L41 L40 L39 L38 L37 L36 L35

SPANISH LAKE

SP EV BASE LINE

C.P.W. M.C. 4541 (11)

PESO M.C. 467 (9)

4000

PESO E M.C. 491 (9)

4500

MAR E M.C.

0 100 200 300
50 150 250
SCALE IN METRES

LEGEND

CONTOURS

1.0 ppm
1.5 ppm
2.0 ppm
5.0 ppm

N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

LACANA

MURPHY OIL COMPANY LTD.
CONVENTURES LTD.
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN
Sb ppm

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

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

N

LEGEND ON WESTERN HALF OF MAP

0 5 10 15
SCALE IN METRES

LACANA — MURPHY OIL COMPANY LTD. CONSTELLATION LTD. LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

SPANISH MOUNTAIN
MAIN SHOWINGS
EASTERN HALF

PREPARED BY	SCALE	DATE	N.T.S. SHEET	FIGURE
SB	1:250	07/83	93A/11	5

TO MAIN SHOWING

PIT LINE

TIE LINE

L55W 1+25S

L55W 2+75S

DON M.C.

CPW M.C.

TILL

O.B.

OUTCROPS IB WITH TILL

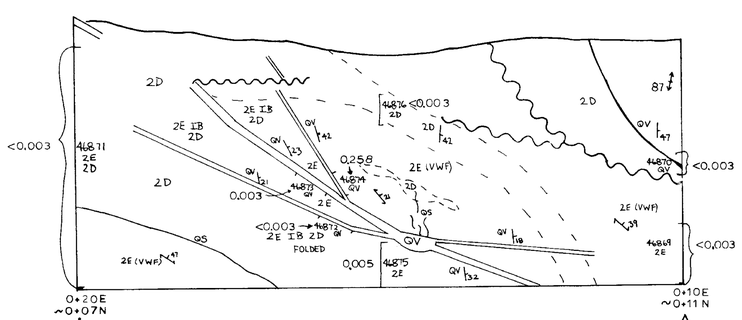
TRENCH; TILL WITH LARGE 3F ERRATIC BLOCKS

DAM ROAD

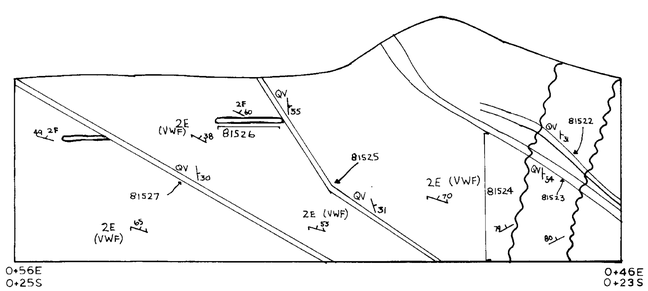
GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428

SECTION ONE: LONGTITUDINAL SECTION OF OUTCROP LOCATED BETWEEN PL 0+10E AND 0+20E



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



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

LACANA
MURPHY OIL COMPANY LTD
CONVENTURES LTD
LACANA MINING CORPORATION

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

4500

BB 2 MC 3255 (3)
JUL 1 MC. 1853 (8)

CROSS LINE 50+00W

L48

L45

L42

4000

3000

SPANISH CREEK

SPLIT LINE

3500

SI TIE LINE

SI BASE LINE

OCT 3 MC. 2073 (10)
OCT 2 MC. 2072 (10)

MARCH 1 M.C.

PESO B M.C. 488 (9)

SP 2 TL 2

SPANISH LAKE ROAD

MY M.C. 4861 (5)

SPANISH LAKE

3500

C.P.W. M.C. 4541 (11)
PESO M.C. 467 (9)

4000

PESO E M.C. 491 (9)

4500

SP EV BASE LINE

0 100 200 300
50 150 250
SCALE IN METRES

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

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	7

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,428