

83-#310 -#11383

Geophysical, Geochemical Report

CHARLEMAGNE OIL & GAS LTD.

on the

PJ CLAIMS

Texada Island, B.C.  
Nanaimo M.D. N.T.S. 92F/9  
49°41'N, 124°26'W

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,383**

Prepared by

R. Wares, P. Eng.  
Vancouver, B.C.

June 1, 1983

## SUMMARY

A short geophysical and geochemical programme was conducted on the PJ claims, located 1.8 kms. east of Gillies Bay, Texada Island.

The claim group comprises four, two post claims. The property is located in the Nanaimo Mining Division in map sheet 92 E/9 W.

The survey was conducted on a flagged and chained grid, and totalled 1.5kms of survey lines.

The survey used a VLF-EM-16, with the Seattle station. The objective of the survey was to determine if any extensions could be located of a narrow vein that had been the subject of a previous investigation. This narrow vein carried minor gold mineralization in a 0.7m quartz vein.

The survey showed that the vein was of limited extent. Other conductive zones in the area showed no signs of mineralization. Gully soil samples gave no indication of the presence of economic mineralization.

TABLE OF CONTENTS

1.1	Location, Access	-----	I
1.2	Topography	-----	I
1.3	Claim Status	-----	I
1.4	Previous Work	-----	I
2.0	Regional Geology	-----	4
3.0	Geology of the PJ Claim Group	-----	5
4.0	Geophysical Work	-----	6
5.0	Geochemical Work	-----	7
6.0	Summary, Conclusions	-----	8
A.1	Statement of Costs	-----	A1
A.2	Statement of Qualifications	-----	A2
Fig. 1	Location	-----	2
Fig. 2	Claim Map	-----	3
Fig. 3	VLF Data	-----	back pocket
Fig. 4	Filtered VLF Data	-----	" "
Fig. 5	Geological Interpretation	-----	" "

### 1.1 LOCATION, ACCESS

The PJ claims are located on Texada Island, 80 km northwest of Vancouver, B.C. (Figure 1). Access to the island is by ferry from Powell River. Access to the claim group is from Gillies Bay situated on the west coast of the island. The claim group is reached by a 1.8 km gravel road immediately east of the Gillies Bay Post Office.

### 1.2 TOPOGRAPHY

The claim group is located from 50m to 350m (Figure 2). The lower part of the property, below 150m, and between the showing and Gillies Bay has been logged in the past five years and is covered by logging slash. The rest of the property comprises second growth hemlock and cedar with scattered zones of primary timber cover.

### 1.3 CLAIM STATUS

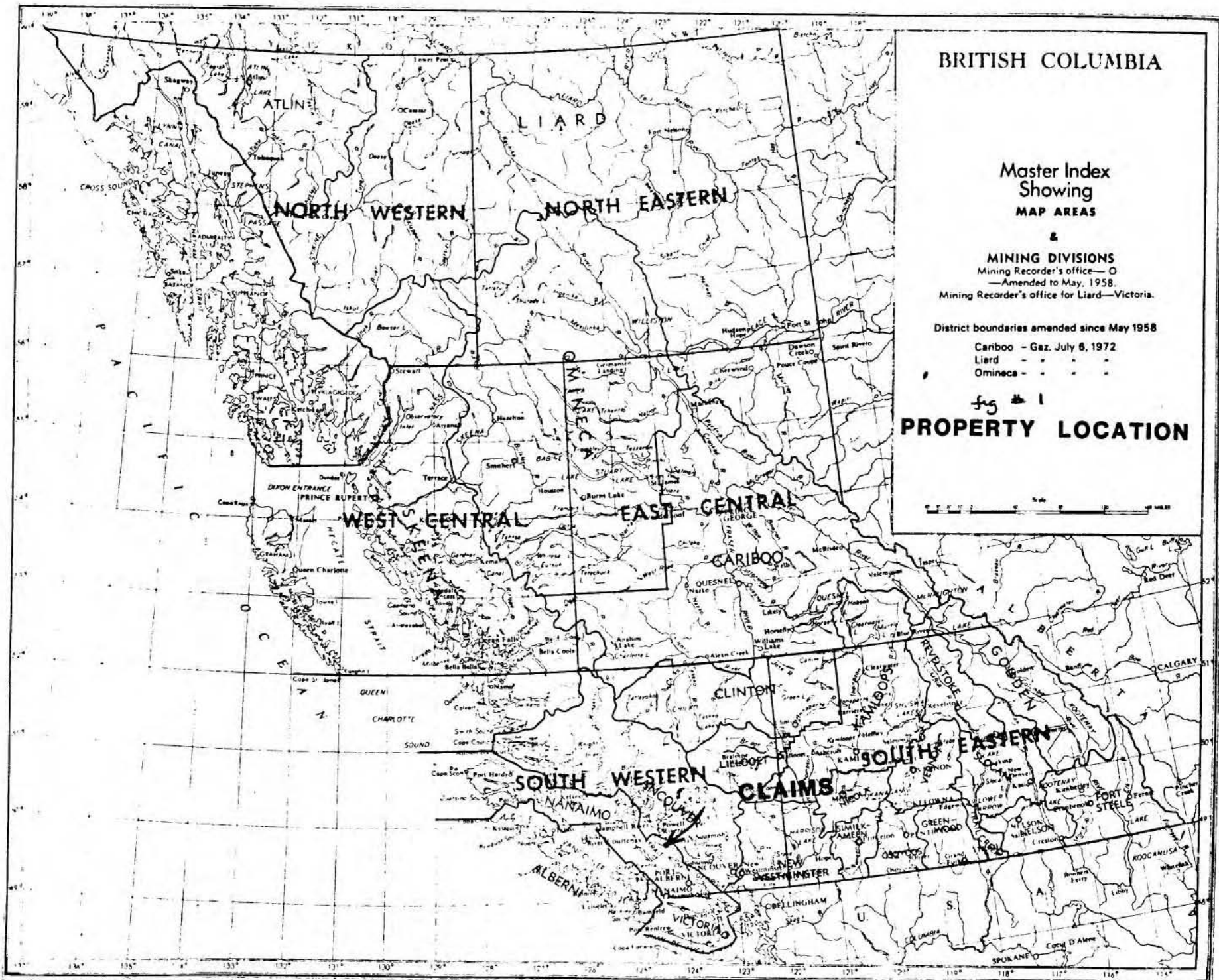
The PJ claim group is located in the Nanaimo Mining Division. The claim group comprises two separate claim groupings (Figure 3).

PJ #1-4  
Rec #957, 958, 959, 960  
Record Date 16th July,

### 1.4 PREVIOUS WORK

Previous claim in the area were investigated by trenching. The physical work opened up a number of small trenches on a gold prospect known to have been first located in the late 1920's.

The trench area was sampled in 1982 as part of an earlier investigation of the PJ claims.



**BRITISH COLUMBIA**

**Master Index  
Showing  
MAP AREAS**

**&  
MINING DIVISIONS**  
Mining Recorder's office—O  
—Amended to May, 1958.  
Mining Recorder's office for Liard—Victoria.

District boundaries amended since May 1958  
Cariboo - Gaz. July 6, 1972  
Liard - - - - -  
Omineca - - - - -

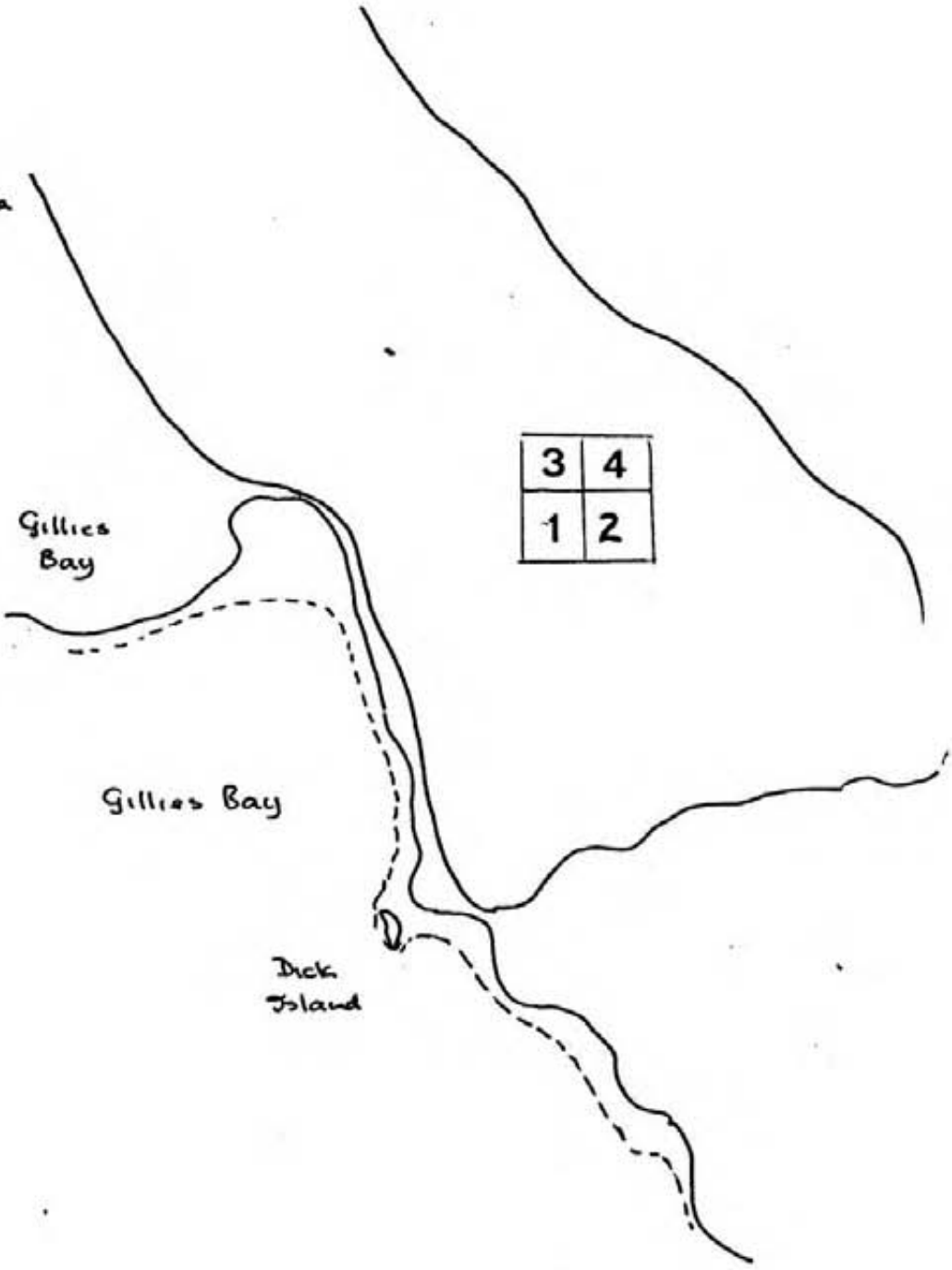
fig # 1

**PROPERTY LOCATION**





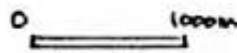
10  
Vananda



Gillies Bay

Dick Island

3	4
1	2



<b>CHARLEMAGNE OIL GAS LTD.</b>	
<b>CLAIM MAP</b>	
Project: PJ	Drawn: RW
Date: Jan 1983	Approved:
Scale: 1:50,000	Revised:
N.T.S.	Figure:

## 2.0 REGIONAL GEOLOGY

The geology of Texada Island is relatively simple at the broad scale but more complex at the small scale. The southern part of the island is underlain by a small sequence of Sicker Group rocks of Permian Age. These are overlain by a thick sequence of Triassic Basalts of the Karmutsen Group. This thick series of basalts is overlain by Triassic limestones of the Quatsino Formation. The units in Texada are transected by a close network of fault zones. Cutting the Karmutsen basalts are a number of igneous stocks ranging in composition from quartz monzonite to quartz diorite.

Mineral deposits on Texada Island are varied in their setting and character. The units that have been of economic interest in the past have been the skarn iron-copper deposits that, until recent years, were mined to the northwest of Gillies Bay. In the northern part of the island, a number of small igneous stocks were the locus of gold-copper mineralization. These were mined in the early part of the century. A number of small gold veins in shear zones have been actively prospected over a number of years but none have been of sufficient grade or size to warrant production. Though active prospecting continues on Texada Island, there is no current mineral production (outside the production of industrial minerals).

### 3.0 GEOLOGY OF THE PJ CLAIM GROUP

The lower areas of the PJ claim group are poorly exposed, being covered with a variable assemblage of till and marine clays. Above an elevation of 150m, exposure is variable but greater, comprising strongly jointed porphyritic basalts. No dips or flow tops could be ascertained on the property.

The mineralization on the property is exposed in a narrow vein of limited strike length located 5m east of the No. 1 post of the PJ #1 and 2. The vein had previously been explored by a number of prospect pits.

The vein strikes N25 W with a dip of 75 to the east. The vein ranges from 0.1m to 0.5m in width and is exposed over a strike length of 45m. The vein comprises a crudely banded quartz vein with minor carbonate present. The core portion of the vein, 7cm wide, carries sphalerite and galena, generally erratic in distribution but occasionally forming thin lenses.

The vein passes laterally to a rusty shear with no evidence of lead or zinc mineralization. Minor pyrite is occasionally present. No visible gold was observed in any samples.

Not all the prospect pits reveal evidence of mineralization. Some were inaccessible for examination and are water filled.

The vein appears to disappear to the north where the control fracture curves to the north. No evidence of vein material was observed along the face of this fracture. To the south of the prospect pits, no evidence of a continuation of the vein could be observed.



#### 4.0 GEOPHYSICAL WORK

A small survey was carried out, using flagged and chained grid lines.

The objective of the geophysical survey was to identify the control structures related to the vein carrying minor gold values. The survey utilised a VLF-EM-16, with Seattle as the station used.

The VLF data (Figure 3) was treated using the Fraser filter method (Figure 4).

The data reveals elongate but irregular conductive zones from 150N, 100W to 150S, 25E. The highest filtered values occur at 150N, 75W, 100N, 12&50W and 50N, 50E. The profiles (Figure 3) suggest a structure that dips to the west.

The known vein system is the locus of a weak conductor but appears to be overprinted by the response from the higher response fractures. The highest response, on the basis of this survey, is where fracture systems intersect (Figure 5).

5.0 GEOCHEMICAL WORK

A number of gully soil samples were collected to determine if extensions of the vein system were present.

The samples were analysed by Chemex Labs for Cu, Pb, Zu, Ag, and Au (atomic absorption).

The samples (Figure 5) failed to clearly indicate any extension of the PJ vein system.

Both Ag and Au values showed a low range of values, none of which could be described as anomalous.

The range of Cu, Pb and Zu values likewise showed a low but variable range. The vein on the PJ claims carries weak galena and sphalerite and vein extensions would have been expected to give rise to some anomalous dispersion patterns.

The geology of the central part of the PJ claims (Figure 5), consists of variably jointed basalts of the Karmutsen group. No flow taps or distinctive breccia horizons were recognized. The major shear zones trend north westerly, with subordinate NE trending joints. The PJ vein system (at D,O) trends N10° W. It could not be traced for more than 45m and the control shear, for 150m.

The PJ vein appears, on the above evidence to be a restricted tension joint developed from NW and NE trending conjugate shear system.

6.0 SUMMARY AND CONCLUSIONS

- A) The PJ vein system is a narrow, weakly auriferous vein that is exposed over a 45m strike length.
- B) On surface, the vein passes into a rusty shear that cannot be traced for more than 150m.
- C) A VLF survey outlines a weak response from the vein system but is overprinted by the response from the regional shear system.
- D) Gully soil sampling does not suggest that any comparable vein systems of economic interest are present in the regional conjugate fault systems.
- E) The claim group does not appear to have any economic potential at present. The claims should be kept in good standing.



Vancouver  
June 6, 1983

R. Wares, P. Eng.

A.1 STATEMENT OF COSTS

R. Wares, Dec. 18, 19th - 2 days @ \$200.00 per day	\$400.00
Equipment Rental, 3 days @ \$25.00 per day	\$ 75.00
Accommodation, R. Wares, Dec 18 and 19th	\$ 68.00
Meals, etc.	\$ 35.00
Ferry Transport, Vancouver to Texada Island	\$ 37.50
Vehicle Rental, \$30.00 per day, 30¢ per km, 300 kms	\$160.00
Geochemical Assays	\$ 34.00
Map Preparation, Jan 20 1983, 3 hrs at \$30 per hour	\$ 90.00
Typing, June 4th and 5th 1983	\$ 35.00
	-----
Total.....	\$934.50

A total of \$800.00 to be applied to the PJ claims.

R. Wares, P. Eng.



A.2 STATEMENT OF QUALIFICATIONS

I, Roy Wares, with business address in Vancouver, British Columbia DO HEREBY CERTIFY THAT:

1. The facts presented herein were based upon a visit to the property and the sampling carried out.
2. The claims appear to have been staked in accord with the regulations governing the staking of claims in the Province of British Columbia.
3. I am a graduate of the University of Aberdeen with a B. Sc. (Hons) degree in Geology, and Queen's University, Kingston, Ontario, Canada with a degree of M.Sc in Geology.
4. I am a registered Professional Engineer with the Association of Professional Engineers of the Province of British Columbia.
5. I have practised various levels of my profession in Canada for approximately eighteen years.
6. I have no interest in the securities of Charlemagne Oil and Gas Ltd., nor do I expect to receive any

DATED at the City of Vancouver, in the Province of British Columbia, this 6th day of June, 1983.





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : SHADOW MINE DEVELOPMENT

BOX 2042  
SQUAMISH, B.C.  
V0N 3G0

# DUPLICATE

CERT. # : A8214924-001-  
INVOICE # : 18214924  
DATE : 4-JAN-83  
P.O. # : NONE

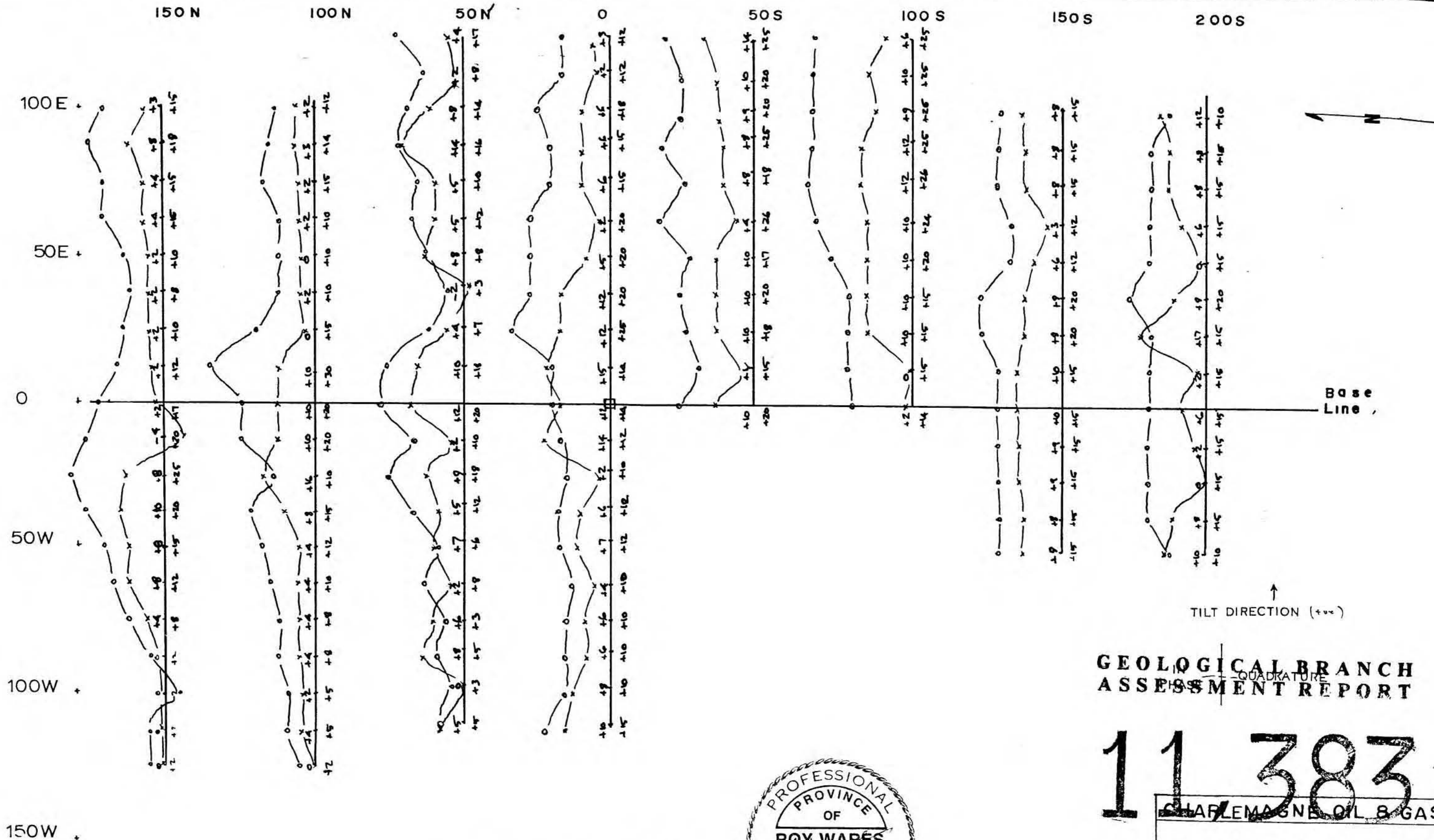
ATTN: GREG CARRIER

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
S-1	201	147	10	53	0.3	<10	--
S-2	201	126	14	174	0.1	<10	--
S-3	201	85	16	157	0.2	<10	--
S-4	201	122	4	46	0.3	<10	--
S-5	201	260	9	134	0.6	10	--
S-6	201	78	7	116	0.4	<10	--



MEMBER  
CANADIAN TESTING  
ASSOCIATION

Certified by .../Hart Bickler...



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11383**

CHARLEMAINE OIL & GAS LTD

VLF EM 16 DATA

Project : Gil	Drawn : fw
Date : Jan 1983	Approved :
Scale : 1:1250	Revised :
NTS :	Figure : 3

TO ACCOMPANY REPORT DATED 1/6/83  
BY R. WARES, P. ENG.



SEATTLE

23-2 KLS?

150N

100N

50N

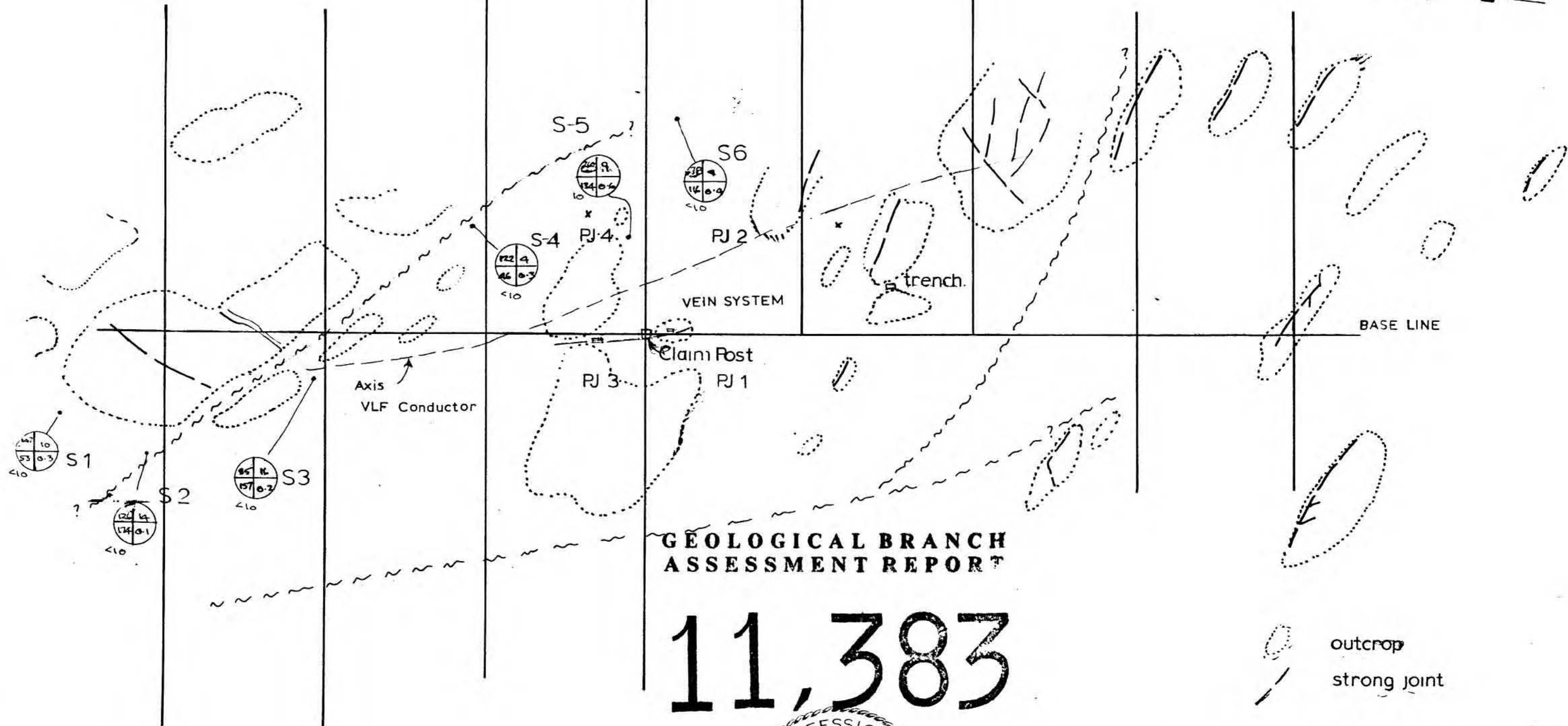
0

50S

100S

150S

200S



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,383**

○ outcrop  
- strong joint

0 25 50m

Cu Pb  
Zn Ag P.P.M.

TO ACCOMPANY REPORT DATED 1/6/83  
BY R. WARES, P. ENG.

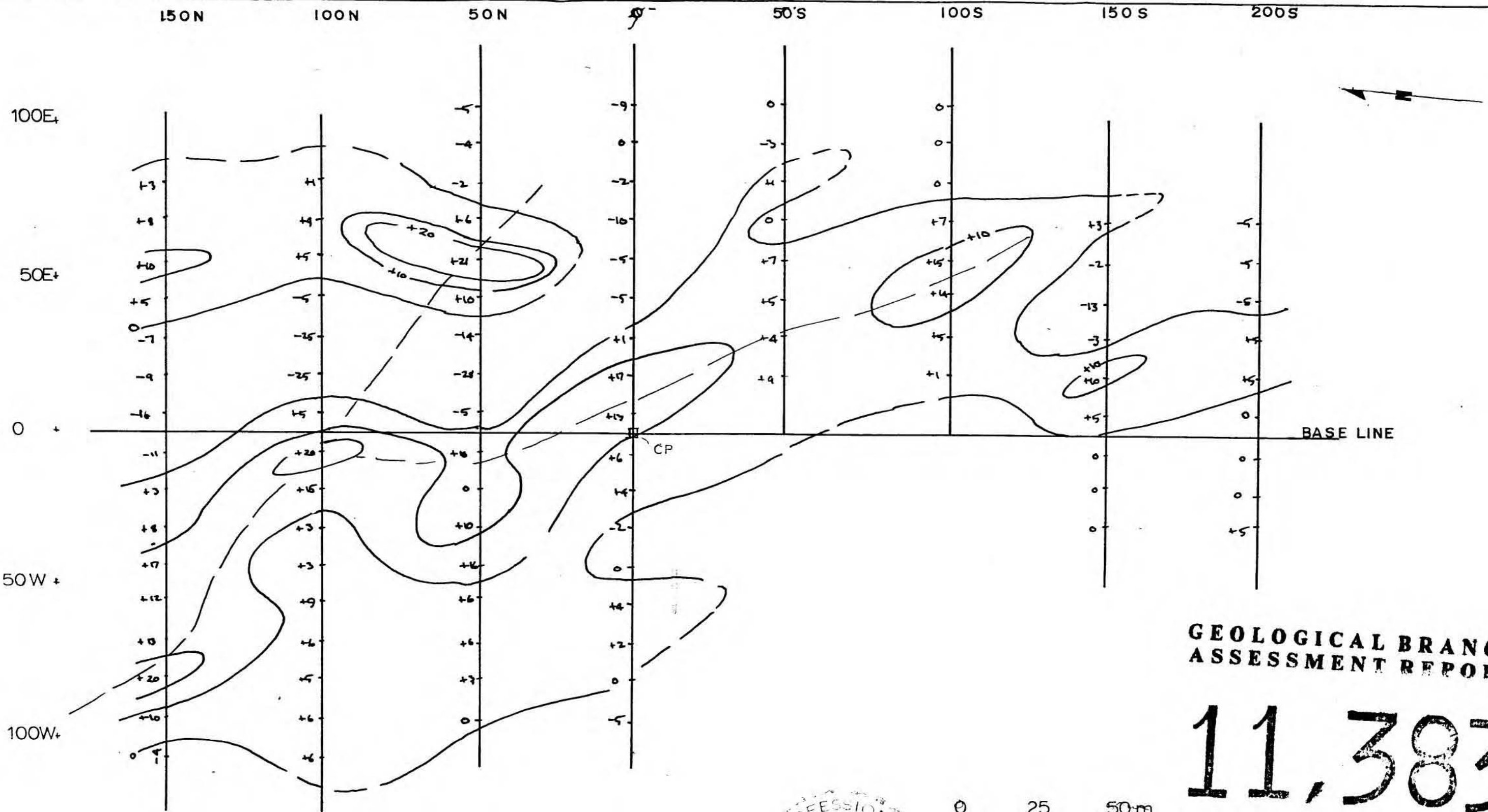


CHARLEMAGNE OIL & GAS LTD

GEOLOGICAL INTERPRETATION

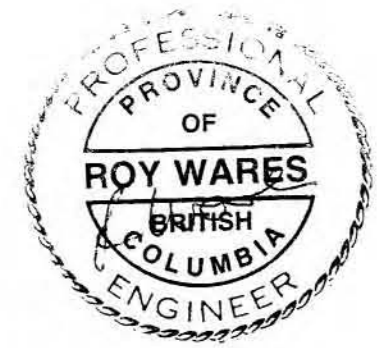
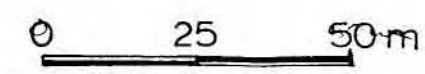
PROJECT : Gil	DRAWN : RW
DATE : Jan 1983	APPROVED :
SCALE : 1:1250	REVISED :
NTS : 92F/9W	FIGURE : 5





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,383**



TO ACCOMPANY REPORT DATED 1/6/83  
BY R. WARES, P. ENG.

CHARLEMAGNE OIL GAS LTD	
Filtered VLF-EM-16	
Project: Gil	Drawn : RW
Date : Jan 1983	Approved :
Scale : 1:1250	Revised :
NTS 92F/9W	Fig. : 4

100E+  
50E+  
0 +  
50W +  
100W+  
150W+

150N 100N 50N 0 50'S 100S 150S 200S

BASE LINE

CP