orginal

GEOPHYSICAL REPORT

ON THE

RB 5 MINERAL CLAIM

NICOLA MINING DIVISION

FOR

DEVON INDUSTRIES INC

MAP SHEET 921/2E

CO-ORDINATES: 50°05' N, 120° 36' W



W.G. Timmins Exploration & Development Ltd Columbia Geophysical Services Ltd

TABLE OF CONTENTS

SUMMARY	Ρ.	AGE
INTRODUCTION	••••••	1
PROPERTY		1
PROPERTY LOCATION AND ACCESS	• • • • • • • •	1
LOCATION MAP	• • • • • • • •	2
CLAIM MAP	• • • • • • •	3
TOPOGRAPHY AND TIMBER	• • • • • • • • •	4
WATER AND POWER		4
CLIMATE	•••••	5 .
HISTORY		5
SUPPLIES		5
TRANSPORTATION	• • • • • • •	5
GENERAL GEOLOGY		6
GEOLOGY OF THE PROPERTY		6
LEGEND		8 .
GEOPHYSICAL SURVEY PROCEDURE		9
MAGNETOMETER SURVEY	1	0
ANALYSED SURVEY DATA	1	0
CONCLUSIONS AND RECOMMENDATIONS	3 1	1
CERTIFICATE T. ROLSTON	11	3
CERTIFICATE W.G. TIMMINS	1	4
REFERENCES	1	5 • •
INSTRUMENTATION AND THEORY		
GEOLOGIC SKETCH MAP	МАР	POCKET
VLF-EM SURVEY FIELD STRENGTH DA		
VI.F-EM SURVEY 20 METER	млъ	POCK ETT

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

VLF-EM	SURVEY	40	METER		MAP	POCKET
						• ,
VLF-EM	SURVEY	60	METER	• • • • • • • • • • • • • • • • • • • •	MAP	POCKET

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

SUMMARY

The RB 5 mineral claim held by Devon Industries., and located about 15 km southeast of Merritt, B.C. is underlain by rocks of the Triassic Nicola Group and lower Cretaceous Kingsvale Group. Intrusive plugs and stocks occur in proximity to the claim. Rocks mapped by G. Richmond B.Sc. in November, 1980 on a traverse through the property are volcanic and sedimentary rocks.

A VLF-EM ground survey was conducted over the property by Columbia Geophysical Services Ltd during November - December 1980. Due to magnetic storm conditions magnetics were not carried out. The survey has outlined a series of northerly trending anomalies which appear to be mapping lithological changes, fault contacts, flows and shear zones.

No target areas are defined as further geological and geophysical detail is required.

Veinlets of disseminated copper mineralization were noted in andesitic volcanics in the eastern section of the property during reconnaissance mapping.

A geological mapping programme and magnetometer survey over the entire claim is recommended.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

INTRODUCTION

A VLF-EM survey was conducted over the RB 5 mineral claim by Columbia Geophysical Services Ltd during November - December 1980.

Information in this report was obtained from various government and private reports covering the area, and from the VLF-EM data obtained from Columbia Geophysical Services and from a geological reconnaissance conducted over the claim by G. Richmond B.Sc. during November 1980.

PROPERTY

The property consists of one located mineral claim comprised of 20 units. Particulars are as follows:

Claim Name	Record No.	Expiry Date
RB 5	880	May, 1981.

Any legal aspects to the property are beyond the scope of this report.

LOCATION AND ACCESS

The claim is located 15 km southeast of Merritt, B.C. at

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

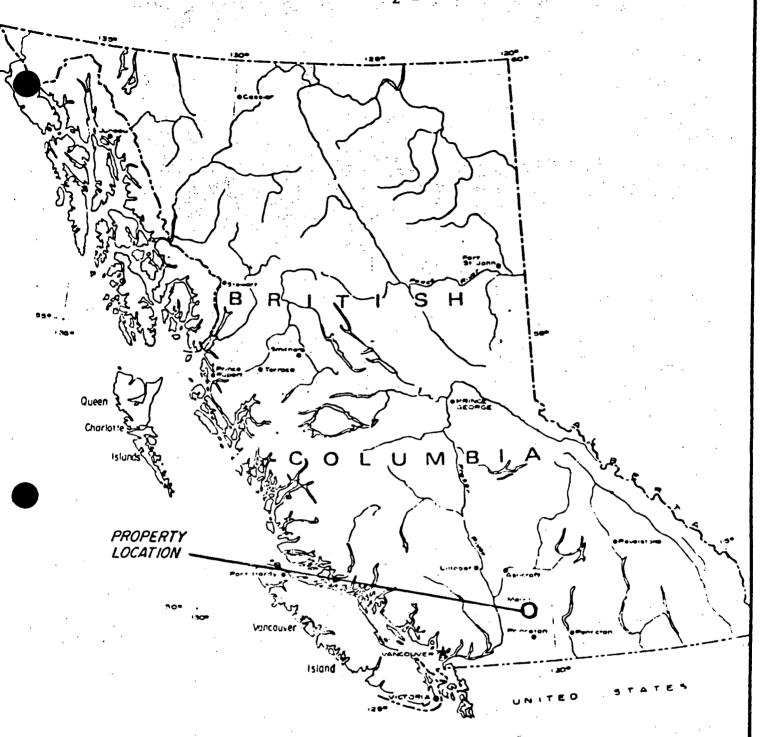
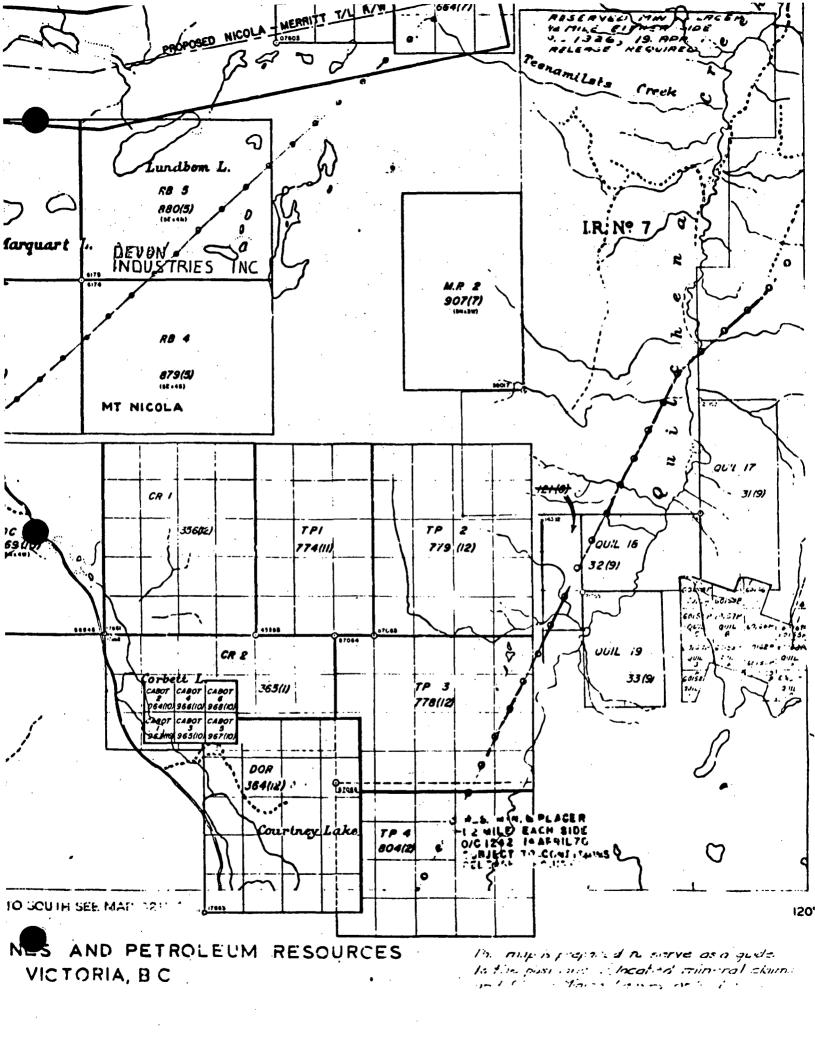


FIG. I.

DEVON INDUSTRIES INC

LOCATION MAP

Mues 100 100 200 Miles



Lundbom Lake. The Merritt - Princeton Highway No. 5 passes within 2 km of the property.

Access to the property is provided by a gravel road branching east from the highway about one kilometer north of Mathew Lake, and by four wheel drive road from Lundbom Lake.

TOPOGRAPHY AND TIMBER

The topography is one of gently rolling hills and upland pasture. Elevations range from 1200 meters to 1500 meters. Stands of coniferous trees are scattered throughout the area.

WATER AND POWER

Sufficient water should be available from ponds and streams for all phases of exploration.

A power line passes through the claim group from the southwest to the northeast.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

CLIMATE

Winters are cold with moderate snowfall whereas the summer months are warm to hot with light precipitation.

HISTORY

There is no known history of work on the property with the exception of a survey grid placed by Columbia Geophysical Services Ltd., in June, 1980, and reconnaissance geological mapping by G. Richmond B.Sc. employed by W.G. Timmins Exploration and Development Ltd., in November 1980.

A deposit of copper mineralization is reported to occur on the CR l claim 2 km to the south.

SUPPLIES

Most supplies would be available from Merritt or Kamloops B.C.

TRANSPORTATION

Rail service is located in Merritt and good daily truck transportation is available in the area.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

GENERAL GEOLOGY

A northerly trending band of Triassic Nicola rocks ranging from twelve to thirty-five kilometers wide stretches from near the U.S. border in the south to beyond Kamloops Lake in the north. Within the Nicola group, which is comprised of volcanic flows, conglomerates, argillites, tuffs, breccias and limestones, are more recent formations of sedimentary rocks as well as stocks and plugs of Jurassic Coast and Copper Mountain intrusives. The Nicola Group is host to numerous copper occurrences.

The RB 5 claim is at the northern end of the Aspen Grove Copper Camp where numerous copper showings have been located since the early 1900's.

GEOLOGY OF THE PROPERTY

The RB 5 mineral claim lies in an area which was mapped by Cockfield (1947) as being underlain by rocks of the upper Triassic Nicola Group and the Miocene or earlier Coldwater Beds. More recent mapping by Preto (1975) published in Preto and Northcote (1977). indicates that the claim area is underlain in part by rocks of the central belt of the upper Triassic Nicola Group and in part by rocks of the lower Cretaceous Kingsvale Group.

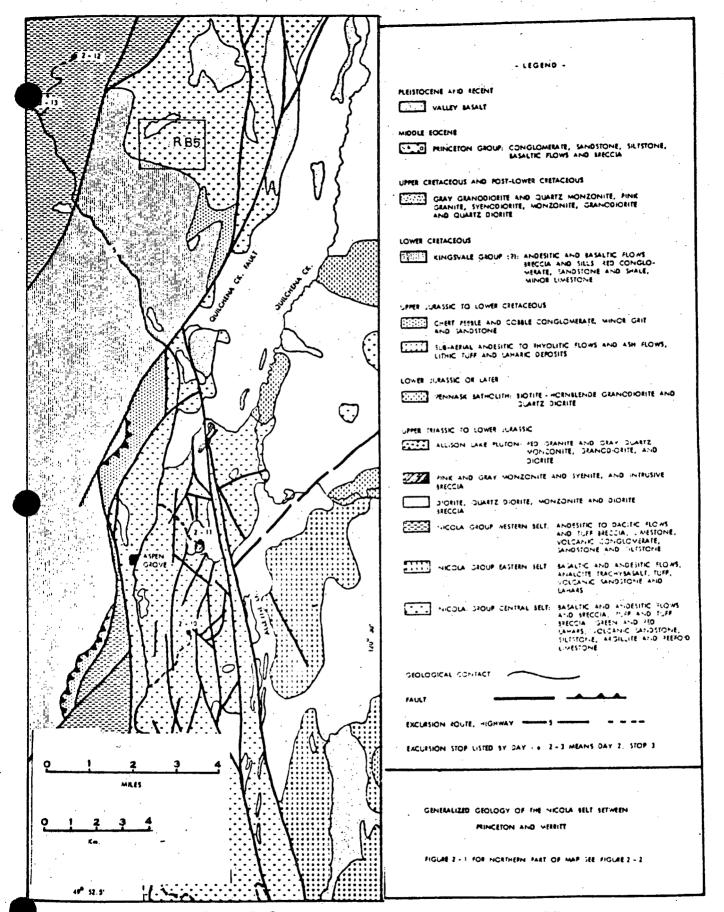
A traverse by G. Richmond of W.G. Timmins Exploration and

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

Development Ltd over a portion of the claim, following the power line right of way, was made on November 9, 1980. Most of the rocks mapped on this traverse were volcanic and sedimentary rocks and chert. Only toward the eastern edge of the claim on this traverse are there outcrops of green andesite that is undoubtedly Nicola Group. In places this andesite contains minute stringers of pyrite and chalcopyrite. It would appear that the Kingsvale Group in this area extends further to the north and east than is shown in the map by Preto and Northcote, (1977).

Strikes in the area appear to be generally northerly, as reflected in the VLF-EM results; in addition, there is considerable shearing, possibly related to the Quilchena Creek Fault, which lies some 2 km to the east of the property. This shearing is strong enough in places to cut cleanly across granitic and chert cobbles in the conglomerate. Details of the traverse appear on a map accompanying this report.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.



Adapted from Preto and Northcote, 1977

GEOPHYSICAL SURVEY PROCEDURE VLF-EM SURVEY

During the months of November - December 1980, a ground VLF Electro-Magnetic survey was conducted over the grid on the RB 5 claim (20 units). The grid lines are spaced at 100 meters and the EM survey was conducted at 200 meter line spacing with 20 meter stations. Three baselines are positioned in a north-south direction with the cross lines running east-west. The survey was carried out by a two man crew of Columbia Geophysical Services Ltd., Burnaby B.C. using a Sabre Model 27 VLF-EM receiver tuned to 18.6 KHZ Transmitter located at Arlington, Wash. U.S.A. This transmitting station was selected due to its orientation in line with the property lithology and strong field strength. The field strength and dip angle was measured at each survey station and recorded in the field. A Fraser filter method was applied to the dip angle data at 20 meters, 40 meters and 60 meters to indicate depth, and the results plotted on map scale 1:5000 and contoured at +5 degree intervals, as only the positive anomalies have significance in outlining EM conductors. The survey totalled 24 line km.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

MAGNETOMETER SURVEY

A magnetometer survey was not carried out over the claim due to magnetic storm activity.

ANALYSED SURVEY DATA

The EM data was first plotted in graph from:

- (a) Dip angle data to show (cross over) conductors.
- (b) Filtered data at 20 meter intervals to show near surface conductors.
- (c) Filtered data at 40 meter intervals to show conductors at depth.
- (d) Filtered data at 60 meter intervals for greater depth.

The VLF-EM survey has outlined a series of parallel north - south trending anomalies most easily observed on the 40 meter Fraser filter map. The conductive zones are measured in the range of 20° dip angles.

The series of anomalous zones appear to be mapping lithological changes, fault contacts, flows and shear zones.

No definite target areas are apparent from the survey without the advantage of additional magnetic and geological detail.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

CONCLUSIONS AND RECOMMENDATIONS

The RB 5 mineral claim held by Devon Industries Inc., and located about 15 km southeast of Merritt, B.C. is underlain by rocks of the Triassic Nicola Group and lower Cretaceous Kingsvale Group. Intrusive plugs and stocks occur in proximity to the claim. Rocks mapped by G. Richmond, B.Sc. in November, 1980 on a traverse through the property are volcanic and sedimentary rocks.

A VLF-EM ground survey was conducted over the property by Columbia Geophysical Services Ltd during November - December 1980. Due to magnetic storm conditions magnetics were not carried out. The survey has outlined a series of northerly trending anomalies which appear to be mapping lithological changes, fault contacts, flows and shear zones.

No target areas are defined as further geological and geophysical detail is required.

Veinlets of disseminated copper mineralization were noted in andesitic volcanics in the eastern section of the property during reconnaissance mapping.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

It is recommended that a geological survey and magnetometer survey be carried out over the entire property.

Respectfully submitted,

W.G. Timmins P. Geol. W.G. Timmins Exp & Dev Ltd.

T. Rolston.

Columbia Geophysical Services Ltd.

May 4, 1981.

Columbia geophysical supplies Itd.

7050 HALLIGAN STREET, BURNABY, B.C. V5E 1R6

Phone: (604) 526-1732 or (604) 687-6871

CERTIFICATE OF QUALIFICATIONS

I, Tom Rolston, of 7050 Halligan Street, Burnaby, B.C. have actively been engaged in my profession since 1953 and state as follows:

- 1. 11 years with the R.C.A.F. as Instrument and Electronic Technician with crew supervisory capacity in various electronic and instrumentation systems.
- Two years with Kerr-Addison Mines Ltd. as Electronic Technician servicing, repairing and maintaining various type of geophysical instruments, with two seasons as Field Supervisor and Geophysical Instrument Operator in mining exploration, including airborne and ground geophysical surveys, geochemical surveys, geophysical and geochemical drafting and mapping.
- 3. 10 years with Geotronics Surveys Ltd. as Field Supervisor of geophysical and geochemical surveys and Instrument Operator of various geophysical instruments such as airborne and ground systems magnetometer, electromagnetic, gravity meter, self-potential meter, scintillometer and induced polarization.
- 4. The past 15 years contracting geophysical survey in close association with mining engineers for various mining companies.
- 5. President and Manager of Columbia Geophysical Services Ltd.

DATED at Burnaby, British Columbia this. /day of 500 1981.

Tom Rolston, Geophysical Operator and Project Geophysicist

For: Columbia Geophysical Services Ltd.

CERTIFICATE

- I, WILLIAM G. TIMMINS maintaining offices at 502-900-6th Avenue S.W. Calgary Alberta do hereby certify that:
- 1. I am a geologist having been practising my profession for seventeen years.
- 2. I am a graduate of the Provincial Institute of Mining, Haileybury, Ontario, and have attended Michigan Technological University, Houghton, Michigan.
- 3. I am a member in good standing of the Association of Professional Engineers of British Columbia, and of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4. I have no interest direct or indirect in the property or securities of Devon Industries Inc., nor do I expect to receive any such interest.
- 5. This report is based on private and government reports, a geological reconnaissance conducted by G. Richmond of W.G. Timmins Exploration & Development Ltd in November 1980, and an analysis of VLF-EM data from a survey conducted by Columbia Geophysical Services Ltd during November December, 1980.

Dated at Calgary, Alberta the 4th day of May, 1981.

W.G. Timmins P. Geol. Consulting Geologist.

IN. A Francis

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

REFERENCES

- Cockfield, W.E. Geology and Mineral Deposits of Nicola Map Area, British Columbia. Geological Survey of Canada Memoir 249, 1961.
- Sookochoff. L. Geological Report on the D'or Property for Cornwall Petroleum and Resources Ltd.,
 November 30, 1978.
- Tough. T.R., P. Eng., Geological Report on the TP l
 claim Nicola Mining Division, British Columbia
 for Sutherland Resources Ltd., February 11, 1980.
- Timmins, W.G. P. Geol. Geological Report on the TP 4
 claim, Nicola Mining Division, British Columbia,
 for Tanjo Industries Ltd., October, 1980.
- Rice H.M.A. Geology and Mineral Deposits of the Princeton Map Area, British Columbia, Geological Survey of Canada Memoir 243, 1960.
- Preto. V.A. and Northcote. K.E. Geological Association of Canada, Society of Economic Geologists, Joint Annual Meeting, Field Trip No. 5 Nicola Volcanics Plutons and Mineral Deposits, April 27 May 1, 1977.
- Sookochoff L.P. Eng Geological Report on the Nicola Property for Brigade Resources Ltd, April 28th, 1980.
- Timmins P. Geol. Geophysical Report on the RB 2 claim,
 Nicola Mining Dovision, British Columbia, for
 Brigade Resources Ltd. February 22, 1981.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

Tough. T.R. P. Eng. - Geological Report on the CR No. 2 claim, Nicola Mining Division, British Columbia for Cameron Resources Ltd., October 10, 1978.

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

APPENDIX I

INSTRUMENTATION & THEORY

Magnetic Survey

The magnetic data was detected, using a nuclear free precession proton magnetometer manufactured by Sabre Electronic Instruments Ltd. of Burnaby B.C. This measures the total count of the earth's magnetic field intensity with a sensitivity of one gamma. The data is recorded on a 12 cm analog strip chart.

Only two commonly occurring minerals are strongly magnetic; magnetite and pyrrhotite. Hence magnetic surveys are used to detect the presence of these minerals in varying concentration. Magnetic data are also useful as a reconnaissance tool for mapping geologic lithology and structure, since different rock types have different background amounts of magnetite or mafic minerals.

VLF-Electromagnetic Survey

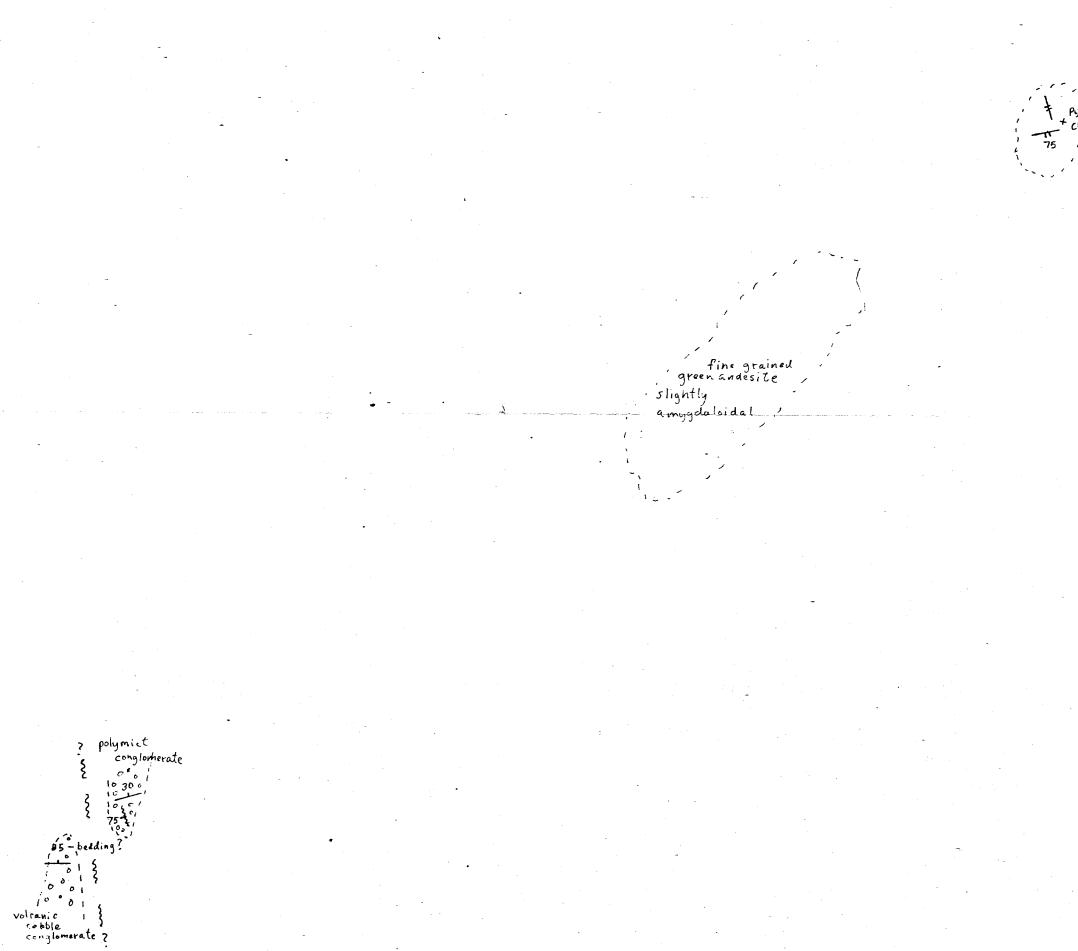
A VLF-EM receiver manufactured by Sabre Electronic Instruments Ltd. of Burnaby BC. was used for the VLF-EM survey. The transmitter used was NLK Arlington (Seattle) Washington, U.S.A. transmitting at 18.6 KHz. This station transmission was used due to its orientation in line with the geological structure on this property and very good signal strength. Measurement taken on this survey was variation in the horizontal component of the signal field strength. Because of its EM frequency,

W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD. CONSULTING GEOLOGISTS

the VLF-EM can pick up conductors caused by electrolyte-filled fault or shear zones and porous horizons, graphite, carbon-aceous sediments, lithological contacts as well as sulphide bodies.

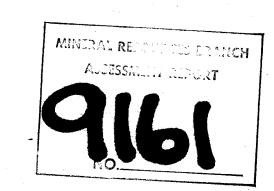
W. G. TIMMINS EXPLORATION & DEVELOPMENT LTD.

(Details in report subr	OCHEMICAL nitted as per section 5,6, crement must be part of the space below.)	r 7 of regulations.)		
50 L K m survey grid @ \$	一、一、松林的人		\$ 2,500.00	
25 L Km geophysical VLF-		» \$150.00	3,750.00	"是一种"。
with geological mapping		The state of the s		
			2,500.00	
		TOTAL OF C AND D	8,750.00	
Who was the operator (provided	Name Devon	Industries Inc.		
the financing)?	1015 -	470 Granville	Street,	
Sandra San San San San San San San San San Sa	Address	Jer, B.C.		
	vancou			
Portable Assessment Credits (PAC) Withdra	awal Request		AMOUNT	
Amount to be withdrawn from owner(s) account	(s):			
· · · · · · · · · · · · · · · · · · ·				
	Name of O	wner		
(May be no more than 30 per cent 1		a to recurrent the same		
of value of the approved work submitted as assessment work in 2.		·····································		
C and (or) D.)				
4.	neg.			217 24 34 (4)
Company of the Compan		TOTAL WITHDRAWAL		100
		333		in de de la companya de la companya La companya de la co
TOTAL	OF C AND LOOP D P	LUE BAC WITHDBAWAL		11.5
TOTAL	OF CAND (OR) DP	LUS PAC WITHDRAWAL].:\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
1 wish to apply \$ 6 , 000 . 00	OF C AND (OR) D P	A second	M	
	. of this work to the clair	ns listed below.) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
I wish to apply \$ 6 , 000	. of this work to the clair	ns listed below.		17 (T
I wish to apply \$ 6,000.00. (State number of years to be applied Apply 3 years work to	of this work to the clair to each claim, its month o	ns listed below. f record, and identify each clai)
I wish to apply \$ 6 , 000 • 00. (State number of years to be applied	of this work to the clair to each claim, its month o	ns listed below. f record, and identify each clai		
I wish to apply \$ 6,000.00. (State number of years to be applied Apply 3 years work to	of this work to the clair to each claim, its month o	ns listed below. f record, and identify each clai		
I wish to apply \$ 6,000.00. (State number of years to be applied Apply 3 years work to	of this work to the clair to each claim, its month o	ns listed below. f record, and identify each clai)
I wish to apply \$ 6,000.00. (State number of years to be applied Apply 3 years work to	of this work to the clair to each claim, its month o	ns listed below. f record, and identify each clai		
I wish to apply \$ 6,000.00. (State number of years to be applied Apply 3 years work to	of this work to the clair to each claim, its month o	ns listed below. f record, and identify each clai		
I wish to apply \$ 6,000.00. (State number of years to be applied Apply 3 years work to	of this work to the clair to each claim, its month of 80(5). 20. uni	ns listed below.		
(State number of years to be applied Apply 3 years work to RB 5 claim, record #8	of this work to the clair to each claim, its month of 80(5). 20. uni	ns listed below. f record, and identify each clai t.s.	m by name and record no.	
(State number of years to be applied Apply 3 years work to RB 5 claim, record #8	sessment credit (PAC) accorded from the approved value	t.S. Dunt(s).	m by name and record no.	
(State number of years to be applied Apply 3 years work to RB 5 claim, record #8	of this work to the clair to each claim, its month of 80(5). 20. uni	t.S. Dunt(s).	m by name and record no.	
(State number of years to be applied Apply 3 years work to RB 5 claim, record #8	sessment credit (PAC) accorded from the approved value	t.S. Dunt(s).	m by name and record no.	
(State number of years to be applied Apply 3 years work to RB 5 claim, record #8	sessment credit (PAC) accorded from the approved value	t.S. Dunt(s).	m by name and record no.	
(State number of years to be applied Apply 3 years work to RB 5 claim, record #8	sessment credit (PAC) accorded from the approved value	t.S. Dunt(s).	m by name and record no.	
Value of work to be credited to portable as (May only be credit Incomper(s) name. 1. 2. 3. In operator(s) name. 1.	sessment credit (PAC) accorded from the approved value	t.S. Dunt(s).	m by name and record no.	
Value of work to be credited to portable as (May only be credited 1. (May only be credited 2. 3.	sessment credit (PAC) accorded from the approved value	t.S. Dunt(s).	m by name and record no.	



125/6/ ted lahar breccia

relymict treccia





DEVON INDUSTRIES INC. RB5 CLAIM NICOLA M.D. MERRITT AREA B.C.

GEOLOGIC SKETCH MAP

SCALE=1:5000 DATE, MAY, 1981 MAP SHEET# NTS# 921/2E

50 attitude of bedding

\$75 attitude of joints and cleavage

340 attitude of fault or shear

W. G. TIMMINS EXPLORATION AND DEVELOPMENT LIMITED

