ASSESSMENT REPORT

ON THE

RB #3 MINERAL CLAIM (20 UNITS)

RECORD NO. 894(6)

MARQUARTT LAKE AREA

NICOLA MINING DIVISION

MERRITT, BRITISH COLUMBIA

N. Lat. 50°05'

W. LONG. 120°39'

for

PUMPER PETROLEUM INC.
Suite 980
789 West Pender Street
Vancouver, British Columbia



bу

DONALD W. TULLY, P. ENG.

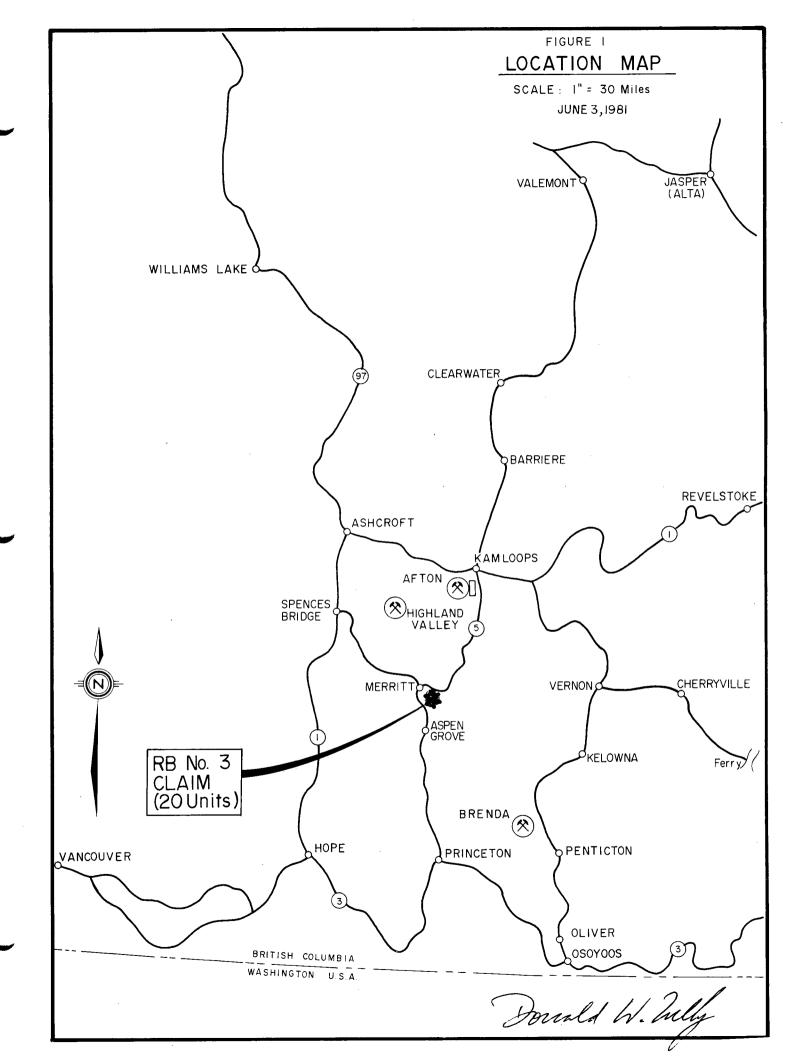
June 3, 1981

West Vancouver, B.C.

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Time-Cost Distribution



INTRODUCTION

This report was prepared pursuant to a request by the Directors of Pumper Petroleum Inc., Suite 980, 789 West Pender Street, Vancouver, British Columbia.

The purpose of this report is to summarize and evaluate the results of the 1980 program of mineral exploration on the RB #3 mineral claim.

The field work was examined on June 28, 1980. The period of the field work was June 10 through June 28, 1980.

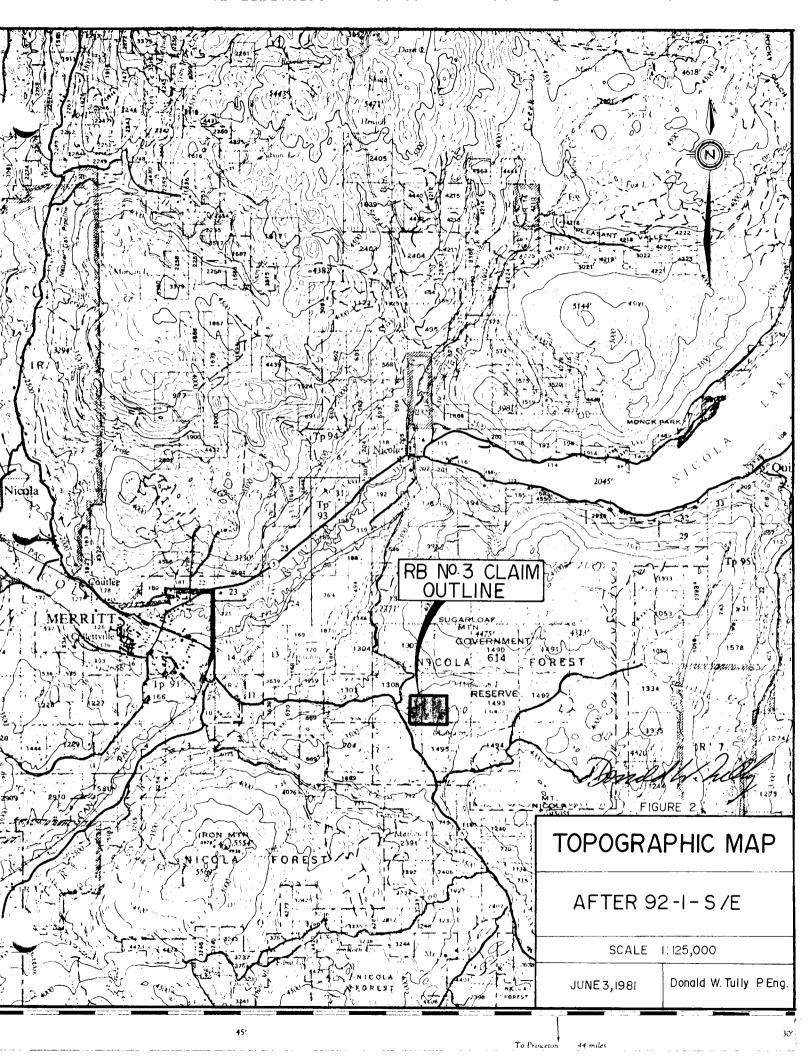
A program of exploration is recommended to prepare the indicated mineral target areas for further development.

SUMMARY AND CONCLUSIONS

The RB #3 mineral claim comprises twenty units located some eight kilometres east of Merritt, British Columbia. Highway 5 traverses the southwest corner of the claim area (Figures 1 and 2).

The claimed ground is generally open and rolling in aspect. The present land use is grazing and is
popular with local residents for recreational activities.
The claim area is considered to be environmentally sensitive.

The RB #3 property has been previously staked as part of the numerous staking rushes that have occurred in this area over the past three decades. Since most of the land area, except the northern sector of the claim,



is overburden, the ground has not been thoroughly explored. A few small test-pits were found in the northwest area of the claim.

Three zones of apparent electromagnetic conductors were indicated during survey over the claim area. These have been designated Zone "A", "B" and "C". Magnetic intensity tended to coincide with the electromagnetic conductivity in both Zones "A" and "C".

Further development by diamond drill testing of the indicated anomalous zones is recommended.

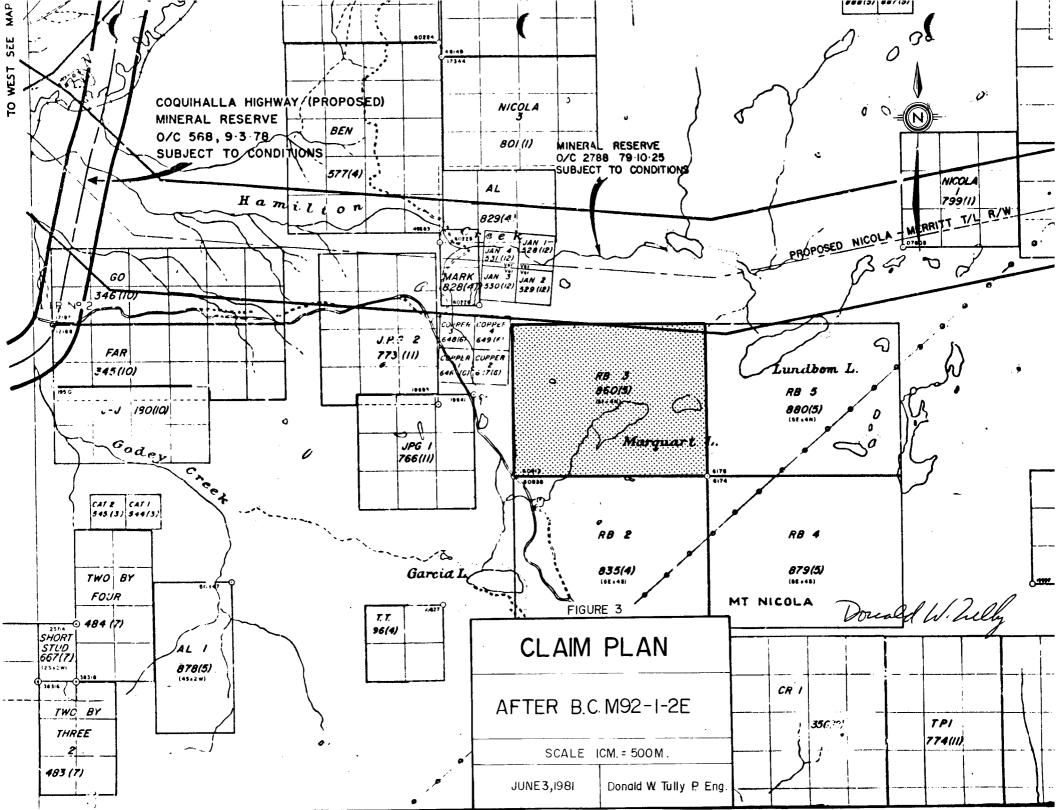
PROPERTY - LOCATION, ACCESS, PHYSIOGRAPHY

The property consists of twenty claim units located on the east side of Highway 5 and some eight kilometres east of the Town of Merritt, British Columbia in the Nicola Forest Government Reserve (Figure 2).

Surface lots numbered 1493, 1494 and 1495 occupy much of the claim area. A recreation camp site is located on the east boundary of the property at Lundbom Lake. Much of the land is open with a rolling topographic aspect and is presently used for grazing purposes.

Road access by motor vehicle is available over most of the claim area.

Elevations vary from 3,600 feet (± 1,100 metres) to about 4,200 feet (± 1,200 metres) above sea-level over the ground. The topographic features trend towards the northeast.



Water for any immediate industrial needs is available under permit from Marquartt Lake and several smaller ponds within the claim area. A creek flows southwesterly draining the claimed ground in the area just south of the legal corner post.

CLAIMS

The RB #3 Mineral claim, containing twenty units totalling 500 hectares of land, is located east of Merritt, along Highway 5 in the Nicola Mining Division, British Columbia.

Information on file with the Government Agent in Merritt on June 9, 1980 was as follows:

Claim Name	<u>Units</u>	Record No.	Record Date	Recorded Holder
RB #3	4x5 = 20	894(6)	June 3, 1981	R. Balbo

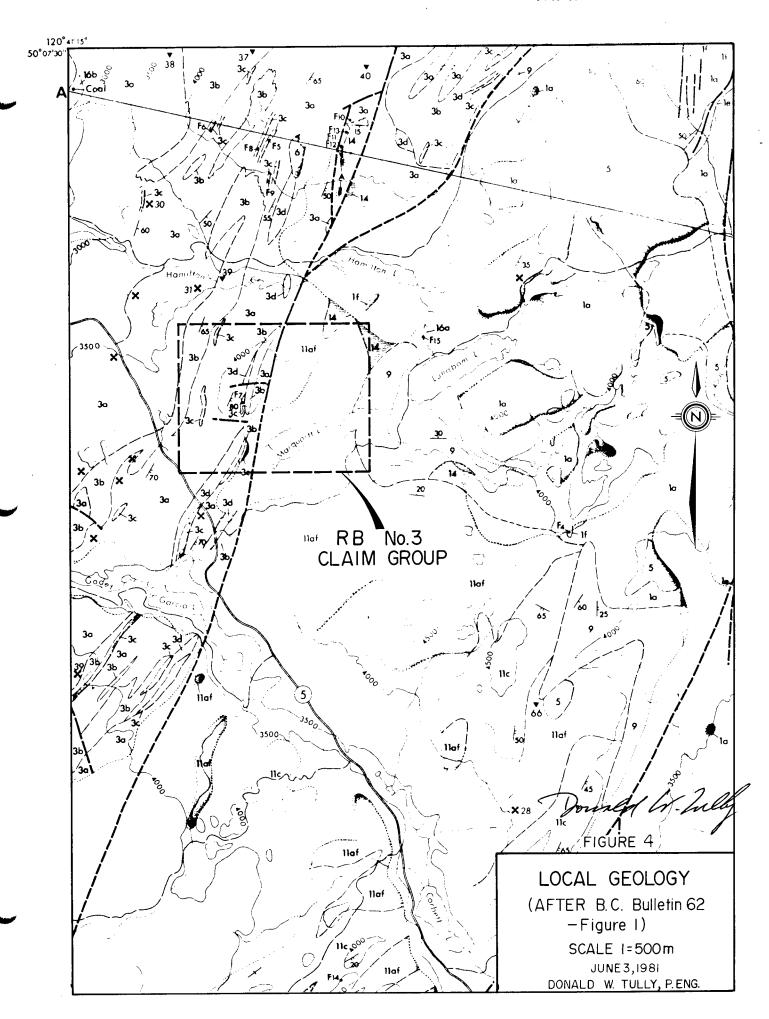
The RB #3 mineral claim is shown on British Columbia mineral claim map 92-I-2E (Figure 3).

The ownership of surface lots numbered 1493, 1494 and 1495 has not been searched.

HISTORY - PREVIOUS DEVELOPMENT

The claim area has been staked on many occasions over the period during and since the discovery of the Craig-mont Mine to the west in the Merritt area.

Several test-pits of ancient vintage were noted



in the northwest sector along the north boundary of the claim area in sheared and pyritized Nicola volcanics carrying scattered veinlets of quartz.

REFERENCES

Geological Survey of Canada Memoir 249

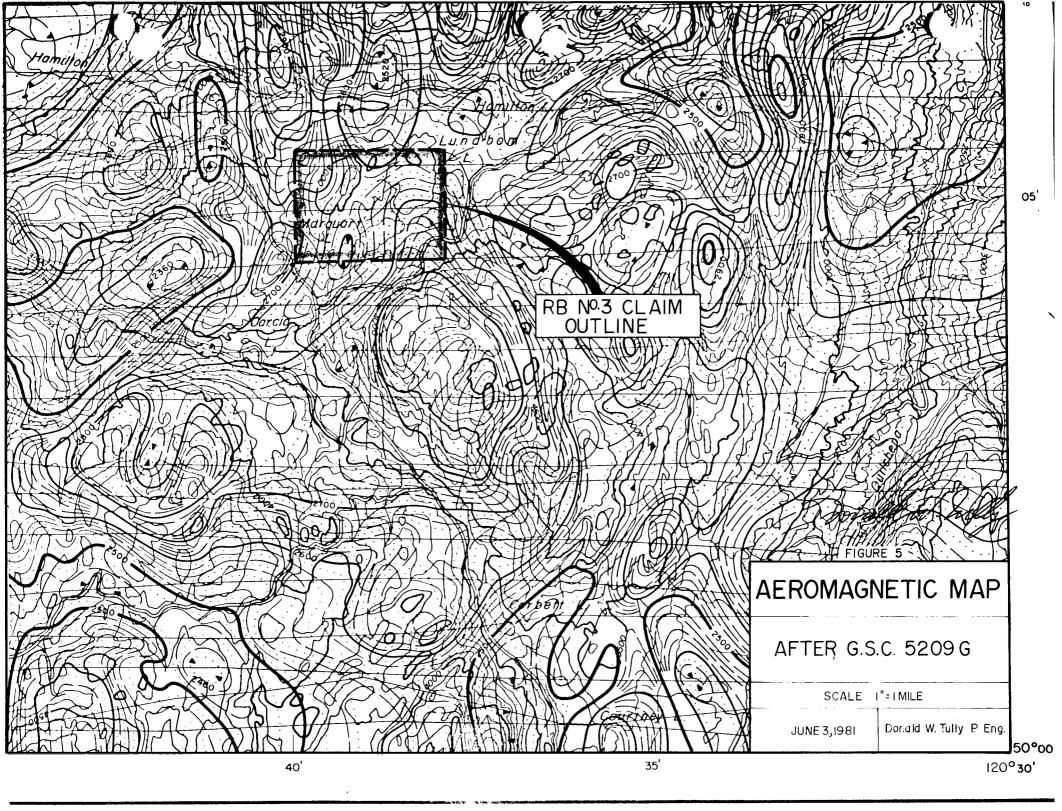
B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 69

Report on the RB #3 Mineral claim (20 units) by Donald W. Tully, P.Eng., dated June 9, 1980

REGIONAL AND LOCAL GEOLOGICAL SETTING

Two lithological units underlay the claim area. These are Nicola greenstone and volcanic fragmental rocks and an overlying outlier of Jura-Cretaceous volcanics and sediments. A tentative timetable of geologic formations and events is as follows:

Formation	<u>Description/Event</u>	Age
Sand, gravel, loam	(Unconsolidated)	Quaternary
	(Erosional unconformity)	
Kingsvale Group	Red to brown coloured basic lava flows	Lower Creta- ceous
	(Folding, faulting and related tectonic activity)	
Sedimentary Horizon (Coldwater Series?)	Conglomerate and pel- itic sediments	Late Jurassic



Formation

Description/Event

Age

(Erosional unconformity with folding, faulting and related tectonic activity)

Nicola Group of volcanics and intercalated sedimentary horizons

Greenstone, tuffs, agglomerates and lacustrine sediments

Upper Triassic

The older Nicola volcanics are highly sheared and fractured (Figure 4). These rocks have been truncated by a northeast trending fault zone that traverses the west sector of the claim area and forms a line of demarcation between the Nicola and Kingsvale groups (Figure 4). The Kingsvale Group of rocks on the east side of the fault zone appears to have been down-faulted. A rock-cut on the east side of Highway 5 about 400 metres north of the legal corner post has excellent exemplification of northeast striking and southeast dipping shear patterns in the Nicola.

MINERALIZATION

There is no known economic mineralization on the RB #3 mineral claim.

Sparse pyrite, limonite and fine quartz veinlets were noted in test-pits in the northwest part of the claim area in Nicola volcanics and are probably related to the pattern of shearing noted along the east side of Highway 5 near the legal corner post.

Aeromagnetic map 5209G (Figure 5) indicates two magnetic low areas on the claimed ground within a north-

northeasterly trend which reflects the basement geological structure.

RESULTS OF THE 1980 PROGRAM OF COMBINED (VLF) ELECTROMAGNETIC AND MAGNETOMETER SURVEYING

Period - Personnel

The survey was carried out during the period June 10 through June 28, 1980 by P. Mooney and M. Mooney, Post Office Box 2027, Kelowna, British Columbia.

Survey Control

Survey control was by chain and compass commencing at the Legal Corner Post of the RB #3 mineral claim located at the southwest corner of the claim. Survey lines were run in an east-west direction from two base-lines established at 750E and 1750E in the centre of the claim in a north-south direction. Survey stations were marked along each line at 50-metre intervals with red flagging according to the position of the station location.

In-phase and out-of-phase (quadrature) readings and magnetometer readings were taken at each station location. Magnetometer readings were taken at the base stations and used to make diurnal corrections to the magnetometer readings taken each day.

Each person of the two-man crew carried an instrument at either end of the chain during the survey.

A total of 25.95 line-kilometres of survey were

completed during the period of the survey.

1) (VLF) Electromagnetic Survey

A Ronka EM-16 electromagnetic instrument No. 89 was used during the survey. The readings are shown on Figure 6. The profiles are plotted on Figure 7.

Electromagnetic and magnetic readings were taken at 50-metre intervals along east-west lines at 200-metre intervals controlled by chain and compass.

An EM-16 electromagnetic instrument was used to measure the in-phase and out-of-phase (quadrature) conductivity over the claim area. Three apparent electromagnetic conductor zones of potential merit were indicated from the survey and have been designated as follows:

Zone "A"

A northwest trending zone of strong apparent electromagnetic conductivity occurs between L1600N - 1350E, 1450E through L1800 - 1000E, 1150E through L2000N-900E, 1000E in the north central sector of the claim area.

Zone "B"

In the southwest part of the property a north-west striking zone of anomalous apparent electromagnetic responses appear on L400N at 450E and 650E through L600N-300E, 450E with indications the zone may continue to L800N.

Zone "C"

This zone occurs in the northeast corner of the claim area. The strike is indicated to be northwesterly

commencing on L1800N-2150E to 2350E and trending towards L2000N-2200E, 2300E.

2) Magnetometer Survey

A Coni-Mag Magnetometer instrument No. 00147 was used during the survey. The readings are shown on Figure 6.

The results of the magnetometer survey readings were isomagnetically contoured at 200 gamma intervals on Figure 7. Total magnetic relief varied between 16,913 and 19,138 gammas over the claim area.

Zones "A" and "C"

Although the magnetic intensity is moderate the trend tends to confirm the electromagnetic response.

Zone "B"

A magnetic "Low" occupies this zone of apparent electromagnetic conductivity.

Relatively higher magnetic response occurs in the south-southeast boundary area of the claim near a hydro-electric power line.

RECOMMENDATIONS

A program of mineral exploration is recommended to further test the indicated anomalous geophysical target zones for mineral potential.

The perimeter of the claim should be surveyed to

establish the area of ownership. Ownership of the surface rights should also be ascertained because of the environmental sensitivity of the claim area. It may be necessary to obtain agreements from the landowners to continue a program of mineral development.

Diamond drilling is proposed to test Zones "A", "B" and "C".

Respectfully submitted,

June 3, 1981

Donald W. Tully, P. Eng.

CERTIFICATE

I, DONALD WILLIAM TULLY, of the Municipality of West Vancouver, Province of British Columbia, hereby certify as follows:

- 1) I am a Consulting Geologist with an office at Suite 102, 2222 Bellevue Avenue, West Vancouver, British Columbia.
- 2) I am a registered Professional Engineer in the Provinces of British Columbia and Ontario.
- 3) I graduated with a degree of Bachelor of Science, Honours Geology, from McGill University in 1943.
- 4) I have practiced my profession for thirty-five years.
- 5) I have no direct, indirect or contingent interest in the RB #3 mineral claim, Record No. 894(6) or the securities of PUMPER PETROLEUM INC., nor do I intend to receive any interest.
- 6) This report dated June 3, 1981 is based upon a personal knowledge from property examinations in this area and from a personal field examination on June 28, 1980.
- 7) Written permission is required from the writer to publish this report dated June 3, 1981 in any Prospectus or Statement of Material Facts.

DATED at West Vancouver, British Columbia, this 3rd day of June 1981.

Donald W. Tully, P. Eng., Consulting Geologist

Donald W. helly

APPENDIX

DENU MINES AND DEVELOPMENT LTD.

INVOICE NO.: 30-10	5316 FLEMING STREET VANCOUVER, B.C.
DATE: June 30th, 1980	V5P 3E9
REF. R. B. 3 Claims Merrit, B.C.	Telephones: (604) 321-0074 (604) 327-2834
To: Pumper Petroleum #820-789 West Pender Street Vancouver . B.C.	

DATE	DESCRIPTION	HOURS	RATE	TOTAL
Junel-	O PERIMETER SURVEY	-		\$ 600.00
	32.5 Kilometers Recon Mag & E.M.			
	Survey 200x50M. Grid 3 \$125. KM			\$4,062.5
	5KM of Baseline @ 125.Km			
	Camp & Truck Rental			\$ 300.0
	2/40			
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		Т	OTAL	4,962.5

\(\frac{\pi}{2} \) = 28 \(\frac{\pi}{2} \) = 3 \(\frac{\pi}{2} \) = 1 \(\ LAKE \$-11 \$\frac{1}{8} \cdot -9 \\ \text{0} \cdot -10 \\ \text{0} \\ \ +40° | +20° — \$\frac{1}{4} \frac{15}{15} \frac{15}{15} \frac{1}{15} \fr LAKE +20° — \$ 12 \$\text{\$\t 8 -3 & 0 & -10 & -10 & +24 & +31 & 8 +22 & 9 +18 & 411 & 8 +28 & 8 +3 & 415 & 6 +19 & 6 +13 & 8 +12 & 6 +13 & 8 +13 & 8 +13 & 8 +13 & 8 +13 & 8 +14 & 6 +13 & 8 +14 & 6 +13 & 8 +14 & 6 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & 8 +13 & 8 +14 & -40° |---60° └ $\begin{array}{c} 2 + 1 \\ 1 + 2$ +20° | +60° [--No. Co. +40° — 86. 10 8 +16 8 +2 8 -10 1 -7 1 8 -18 8 -10 8 -16 8 -18 8 -10 8 -16 8 -18 +20° PUMPER PETROLEUM INC. 17369 - MAGNETOMETER READING ELECTROMAGNETIC (VLF) - MAGNETOMETER STATION (FLAGGED) - LOCATION BY CHAIN AND COMPASS +3 QUADRATURE READING SURVEY READINGS IW/4S (CLAIM UNIT POST) N-PHASE PROFILES (VERTICAL) RB No.3 CLAIM No.894(6)-20Units O LCP (LEGAL CORNER POST) QUADRATURE PROFILE (VERTICAL) MARQUARTT LAKE AREA ==== LOGGING ROAD FIELD WORK PERIOD :- JUNE 10 - JUNE 28,1980 NICOLA, M.D. MERRIT, BRITISH COLUMBIA ---- TRAIL (LOW) MAGNETIC DEPRESSION CONTOUR INSTRUMENT USED -> --> CREEK RONKA (VLF) EM-16 No. 89 -O-O- APPARENT ELECTROMAGNETIC CONDUCTOR ZONE CONI-MAG MAGNETOMETER No. 00147 DATE: JUNE 3,1981 DONALD W. TULLY, P. ENG. MAGNETOMETER BASE STATION Drawn from information believed to be NOTE: ALL LOCATIONS ARE NOT GUARANTED AND ARE SUBJECT TO B.C.L. SURVEY reliable but not guaranteed.

