GEOPHYSICAL AND PRELIMINARY GEOLOGICAL REPORT

PRIME CLAIM GROUP
SIMILKAMEEN MINING DIVISION
NICOLA MINING DIVISION

92H - 16W
49°45'N 120°28'W

ON BEHALF OF
PIPER PETROLEUMS LTD.

by

G.C. GUTRATH, P.Eng.
ATLED EXPLORATION MANAGEMENT LTD.
June 1979

Name	Units	Record No.	Expiry Date
Prime #1	8	323 (5)	May 20, 1979
Prime	16	47 (5)	May 20, 1979

TABLE OF CONTENTS

INTRODUCTION.....1

PERSONNEL.....1

WORK COMPLETED.....1

- Grid Survey
- Outcrop Geology
- Magnetometer Survey

LOCATION AND ACCESS.....2

PHYSIOGRAPHY.....2

CLAIMS.....2

GEOLOGY.....3

- General
- Property
- Grid Area

MAGNETIC SURVEY.....5

- Instrumentation
- Method
- Results

COMMENTS & RECOMMENDATIONS.....6

ENGINEER'S CERTIFICATE.....7

MAPS

Magnetic Values Map	1:2500
Magnetic Contours	1:2500
Preliminary Geology Map	1:2500

INTRODUCTION

The work was carried out during two periods between August 24, 1978 and May 17, 1979. The geophysical work consisted of a magnetometer survey and preliminary outcrop geology. Outcrops were examined in conjunction with the magnetometer survey but additional outcrop mapping is required to complete the geology.

PERSONNEL

G. C. Gutrath, P. Eng., Geologist
D. Gutrath, Assistant

WORK COMPLETED

Grid Survey

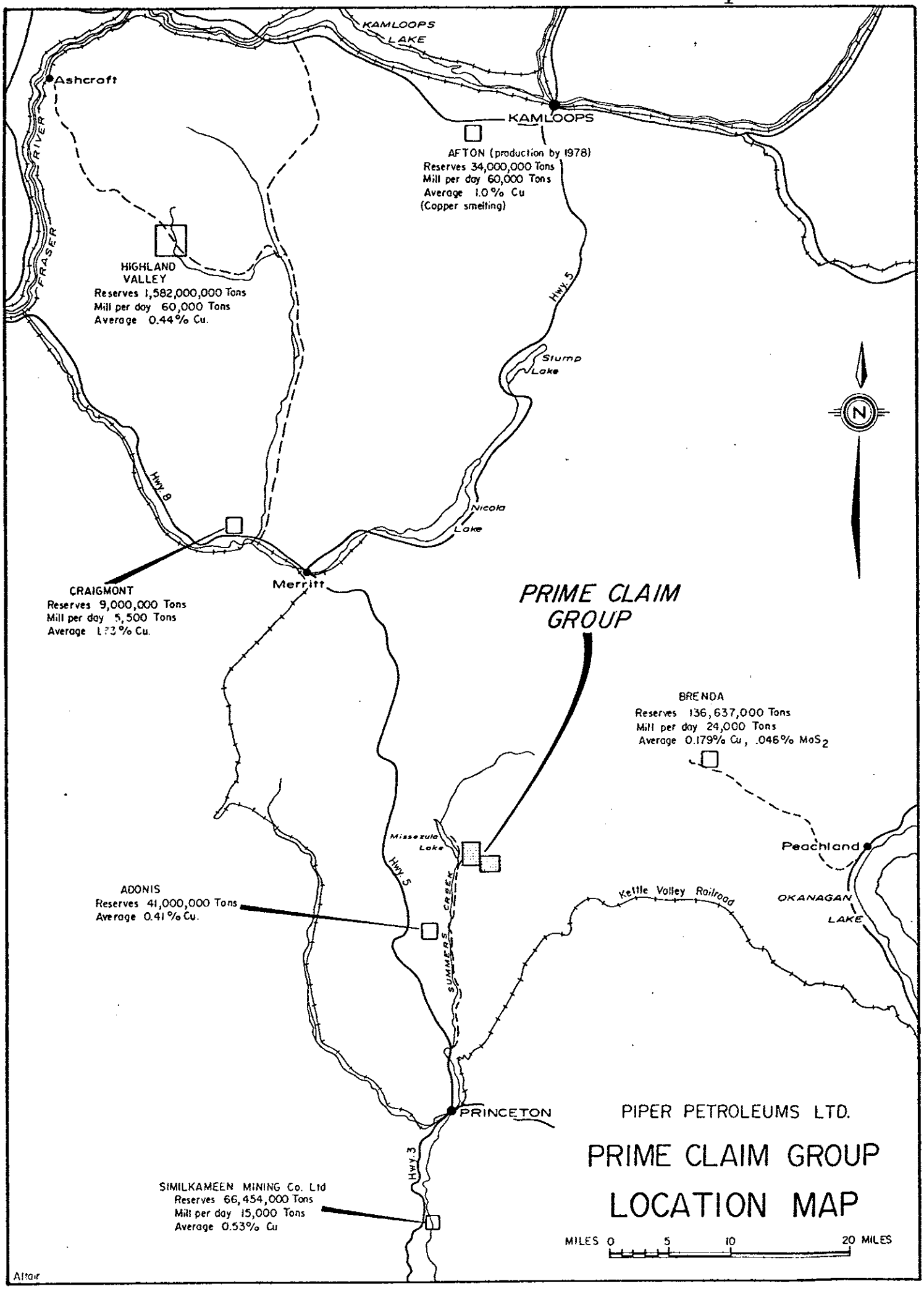
Existing grid lines were resurveyed and stations located at 20 m. intervals. The baseline is at N75°W and is 1200 m. long. There are 11 crosslines at 125 m. intervals totalling 13,650 m.

Outcrop Geology

The outcrops were examined in conjunction with the magnetometer survey. The outcrops were plotted on a map scale of 1:2500. Detailed outcrop geology of a trench area mapped in 1978 was transposed onto the grid.

Magnetometer Survey

The crosslines were surveyed using a Sharpe MF1 magnetometer. Readings were taken at 20 m. intervals on the crosslines.


KAMLOOPS LAKE
Ashcroft
FRASER RIVER
KAMLOOPS
AFTON (production by 1978)
Reserves 34,000,000 Tons
Mill per day 60,000 Tons
Average 1.0% Cu
(Copper smelting)
HIGHLAND VALLEY
Reserves 1,582,000,000 Tons
Mill per day 60,000 Tons
Average 0.44% Cu.
Hwy. 5
Stump Lake
N
Hwy. 8
Nicola Lake
CRAIGMONT
Reserves 9,000,000 Tons
Mill per day 5,500 Tons
Average 1.73% Cu.
Merritt
PRIME CLAIM GROUP
BRENDA
Reserves 136,637,000 Tons
Mill per day 24,000 Tons
Average 0.179% Cu, .046% MoS2
Missezula Lake
Peachland
Hwy 5
ADONIS
Reserves 41,000,000 Tons
Average 0.41% Cu.
SUMMERS CREEK
Kettle Valley Railroad
OKANAGAN LAKE
PRINCETON
Hwy.3
SIMILKAMEEN MINING Co. Ltd
Reserves 66,454,000 Tons
Mill per day 15,000 Tons
Average 0.53% Cu
PIPER PETROLEUMS LTD.
PRIME CLAIM GROUP
LOCATION MAP
MILES 0 5 10 20 MILES

Altair

LOCATION AND ACCESS

The property is located in south-central British Columbia 22 airmiles north of the community of Princeton. The approximate co-ordinates of the property are 49° 45' north latitude and 128° 28' west longitude.

The property can be reached from Princeton by taking the Merritt Highway north for 8 miles and then turning north on the Missezula Lake gravel road for 18 miles. A number of gravel roads in fair condition gives good access to the majority of the property from the Missezula Lake road.

PHYSIOGRAPHY

The Prime Group covers the eastern slope of the Summers Creek Valley from Summers Creek at an elevation of 3200 feet to a rolling plateau area at an elevation of 4400 feet.

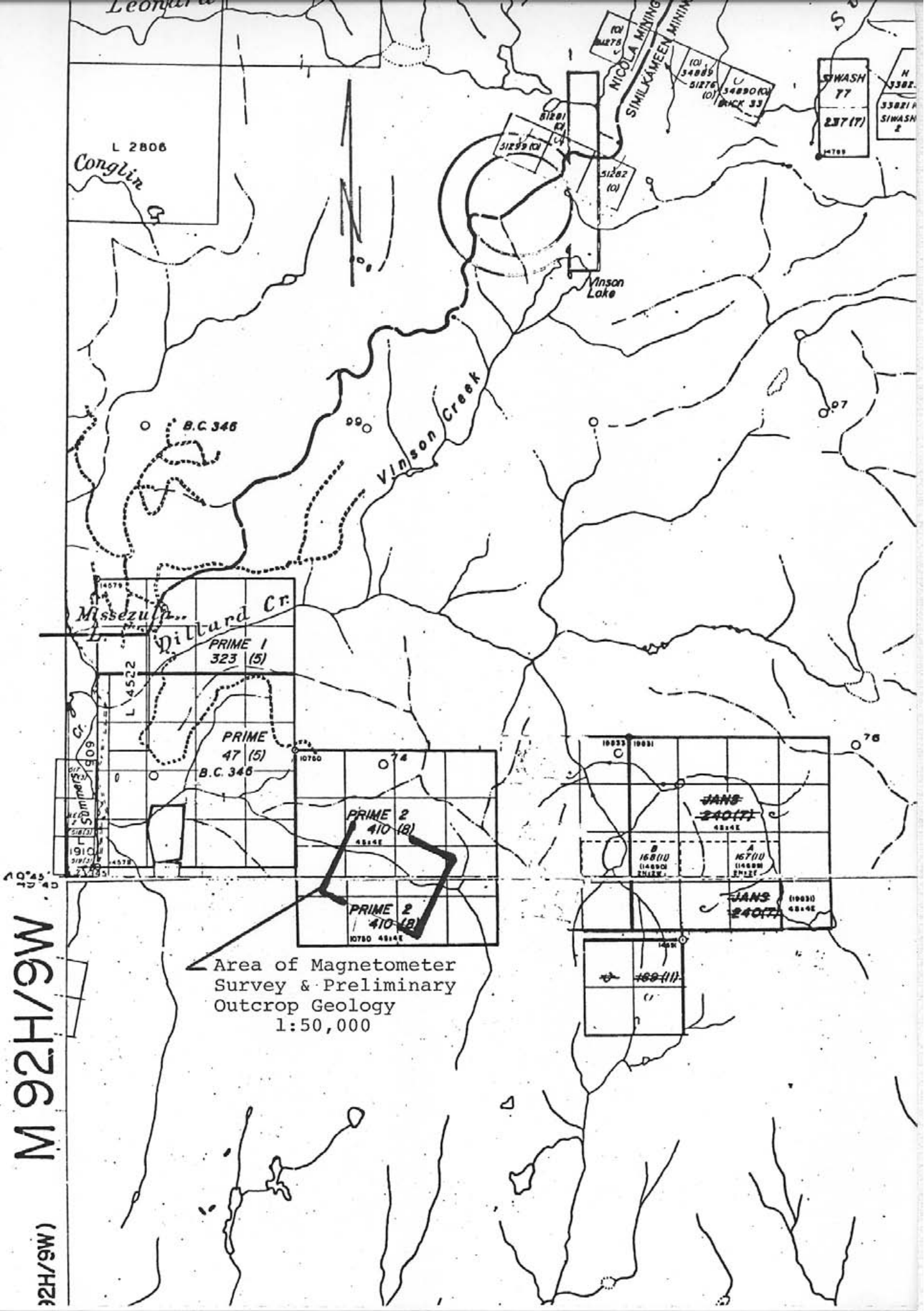
The claims are covered by a thick stand of fir and jackpine.

There is ample water on the property for drill requirements.

CLAIMS

Name	Units	Record No.	Expiry Date
PRIME #1	8	323 (5)	May 20, 1979
PRIME	16	47 (5)	May 20, 1979

The Prime claim is located in the Similkameen Mining Division and Prime #1 claim is located in the Nicola Mining Division.


L 2806
Conglin
Vinson Lake
Vinson Creek
B.C. 346
Missezula
Dillard Cr.
PRIME 1
323 (5)
L 4522
PRIME
47 (5)
B.C. 346
PRIME 2
410 (8)
PRIME 2
410 (8)
Area of Magnetometer
Survey & Preliminary
Outcrop Geology
1:50,000
M 92H/9W
92H/9W)

GEOLOGY

General

The Princeton-Missezula Lake area is underlain by Nicola Group sediments, andesitic flows, and related volcanics of Triassic age.

This group is within a downfaulted block bounded by major north to northwest striking faults and bordered by Coast Range intrusive rocks of Jurassic age. This fault block has been cut by numerous smaller faults and by a wide range of dikes.

Property

The Prime and Prime #1 are underlain by Nicola Group andesitic flows, tuffs, agglomerates and limestone.

These rocks are located within an embayment of the Okanagan granodiorite batholith that lies to the east of the property. Dikes, sills and small stocks of varying composition cut the Nicola Group rocks in the property area.

The rocks have been moderately to highly altered and fractured as a result of the extensive northwest and northeast striking shear zones that are widely distributed throughout the claim group. The claims are bordered on the west by the major north trending Summers Creek fault.

Numerous copper-pyrite occurrences have been located on the property related primarily to areas of fractured andesite and diorite rock types.

The claim area is largely covered by this glacial overburden resulting in bulldozer trenching being an effective way to expose bedrock.

3(B)

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1024-355 Burrard Street,
VANCOUVER, B.C. V6C 2G8

PRIME GROUP CLAIMS

GENERAL GEOLOGY
Scale 1 inch = 2 miles

Grid Area

Andesite is the predominant rock type in the trench area centered on the base line between LO and LIE. The dark grey-green andesite is in contact with a light grey dacite and the north side of the trench area near station, 160 miles N on LIE. The dacite is only slightly fractured and altered as compared with the andesite that is normally highly fractured, epidotized and carries from 1% to 10% pyrite.

The volcanics have been intruded by a hornblende diorite intrusive. The typical intrusive diorite has a medium grained, holocrystalline ground mass with random oriented hornblende phenocrysts. However, it is often much finer grained and altered with the appearance of dioritized andesite.

A fresh unaltered feldspar porphyry dike cuts both the andesite and the diorite.

There is very little outcrop in the balance of the area that has not been trenched. The majority of the outcrop on L3E to 6E have been identified as fine grained diorite that may be in large part dioritized andesite. Epidote stringers were noted on L6E-320MN and L4E-560MS.

Chalcopyrite and secondary malochite is related to chlorite and epidote alteration in the altered andesite and diorite. The chalcopyrite content varies from trace to 1% and is associated with 1% to 10% pyrite, and from 5% to 15% magnetite.

MAGNETIC SURVEY

Instrumentation

The Sharpe MF1 magnetometer measures the vertical force variations of the earth's natural magnetic field and displays them in gammas on a meter having 5 ranges for a total of ±100,000 gammas.

The unit is light in weight, is fully portable, has excellent temperature stability, has negligible drift or orientation error and is of rugged construction.

Method

The survey was executed using a Sharpe MF1 magnetometer which is hand held and levelled using a bubble-level on the face of the instrument.

Readings were taken at a constant height above ground facing one direction using the most sensitive scale possible.

The new lines to the northwest of the old grid were tied into this grind by means of an extended baseline as noted on the contour map. The line extensions at the southwest corner of the grid were tied into the end station readings with sufficient overlap.

A nearby base-station was read at the beginning and end of each day for the day-to-day correlation and to monitor any possible magnetic storms.

Results

There are three magnetic features that are apparent:

1. On the north side of the baseline there is an east-west series of linear highs from 2,000 to 3,200 gammas. From the present geological information there is no explanation for the anomalies and there appears to be no direct correlation with the copper mineralization in the trench area between line 0 and 1E.

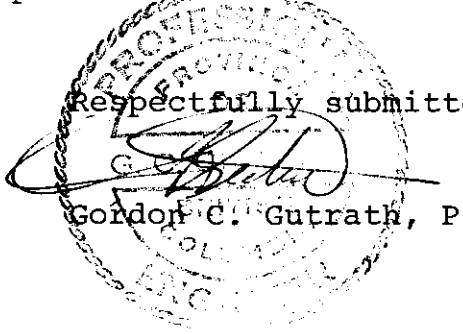
2. There is a magnetic low along 4E-south. This feature may be related to a northerly trending fault-shear zone but this has not been confirmed by the geological mapping.

3. On L4W from 560 south to the end of the line there is an anomalous area from 2,000 to 2,820 gammas. This anomaly does not extend to the east and there are no grid lines to the west so dimensions of the anomaly are unknown. The cause of the anomaly is unknown.

COMMENTS & RECOMMENDATIONS

The magnetic anomalies located by the survey require more detailed investigation to determine if they are associated with copper mineralization.

It is recommended that the outcrop geology be mapped in greater detail and if necessary bulldozer trench be done to expose outcrop in the anomalous areas.



Respectfully submitted

Gordon C. Gutrath, P.Eng.

GCG:jd

ENGINEER'S CERTIFICATE

I, GORDON C. GUTRATH, of 3880 Selkirk Street in the City of Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. That I am a consulting geologist with a business address of 1640-1066 West Hastings Street, Vancouver, B.C. V6E 3X2.

2. That I am a graduate of the University of British Columbia where I obtained my B.Sc. in geological science in 1960.

3. That I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers in the Province of British Columbia.

4. That I have practiced my profession as a geologist for the past sixteen years, and

5. That I am a director and shareholder of Piper Petroleums Ltd.

Gordon C. Gutrath, B.Sc., P.Eng.

DATED at the City of Vancouver, Province of British Columbia this 30 day of June, 1979.

Mack Printers & Stationers Ltd.
Form No. 145. Statutory Declaration

CANADA
PROVINCE OF
BRITISH COLUMBIA

TO WIT:

IN THE MATTER OF

COST INCURRED IN CARRYING OUT MAGNETOMETER SURVEY AND PRELIMINARY GEOLOGICAL MAPPING ON THE PRIME CLAIM GROUP.

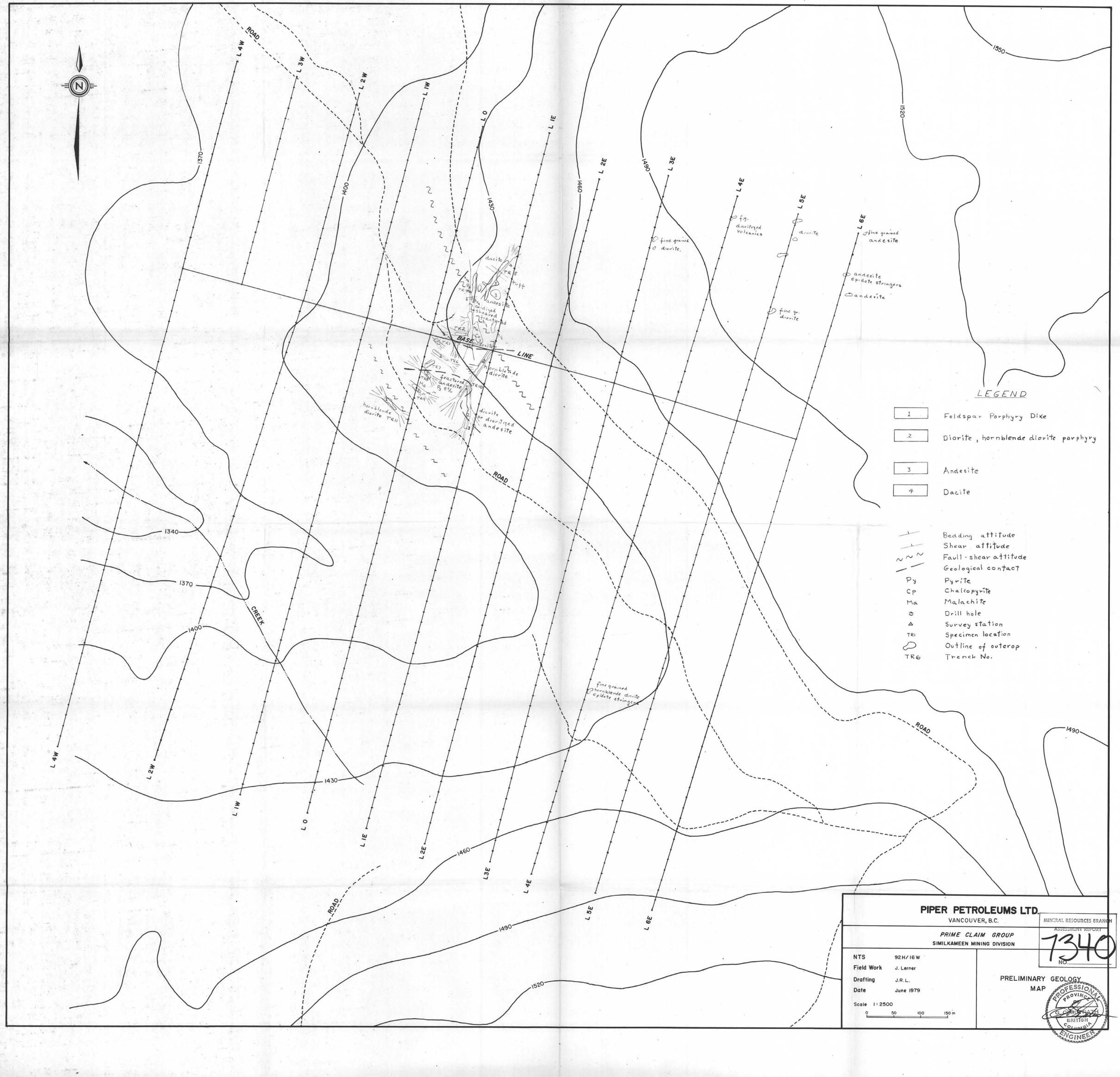
I, GORDON C. GUTRATH of 3880 Selkirk Street, in the City of Vancouver, in the Province of British Columbia do solemnly declare

that GORDON C. GUTRATH, P.ENG., carried out magnetometer survey and preliminary geological mapping on the Prime Claim Group at a cost of $2,400.00.

AND I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath, and by virtue of the CANADA EVIDENCE ACT.

DECLARED before me
at Vancouver
in the Province of British Columbia,
this 25th day of July
A. D. 19 79

.....
~~A Notary Public in and for the Province of British Columbia~~
A Commissioner for taking Affidavits for British Columbia.



LEGEND

1	Feldspar Porphyry Dike
2	Diorite, hornblende diorite porphyry
3	Andesite
4	Dacite
	Bedding attitude
	Shear attitude
~~	Fault - shear attitude
	Geological contact
Py	Pyrite
Cp	Chalcopyrite
Ma	Malachite
⊙	Drill hole
△	Survey station
TR1	Specimen location
	Outline of outcrop
TR6	Trench No.

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VANCOUVER, B.C.

PRIME CLAIM GROUP
SIMILKAMEEN MINING DIVISION

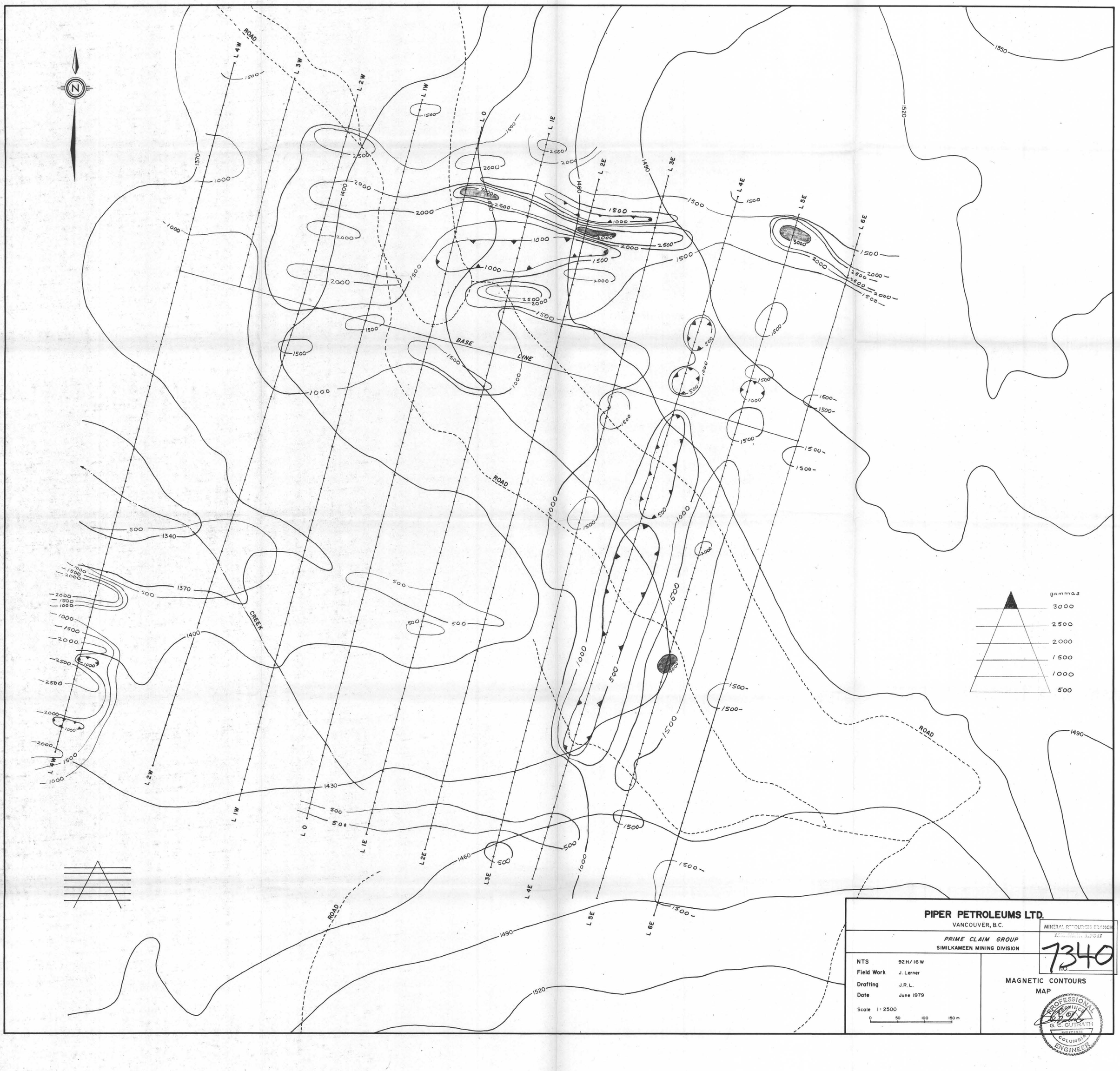
NTS	92H/16W
Field Work	J. Lerner
Drafting	J.R.L.
Date	June 1979

Scale 1:2500
0 50 100 150 m

PRELIMINARY GEOLOGY MAP

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 7340

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. G. McLEOD



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0 50 100 150 m

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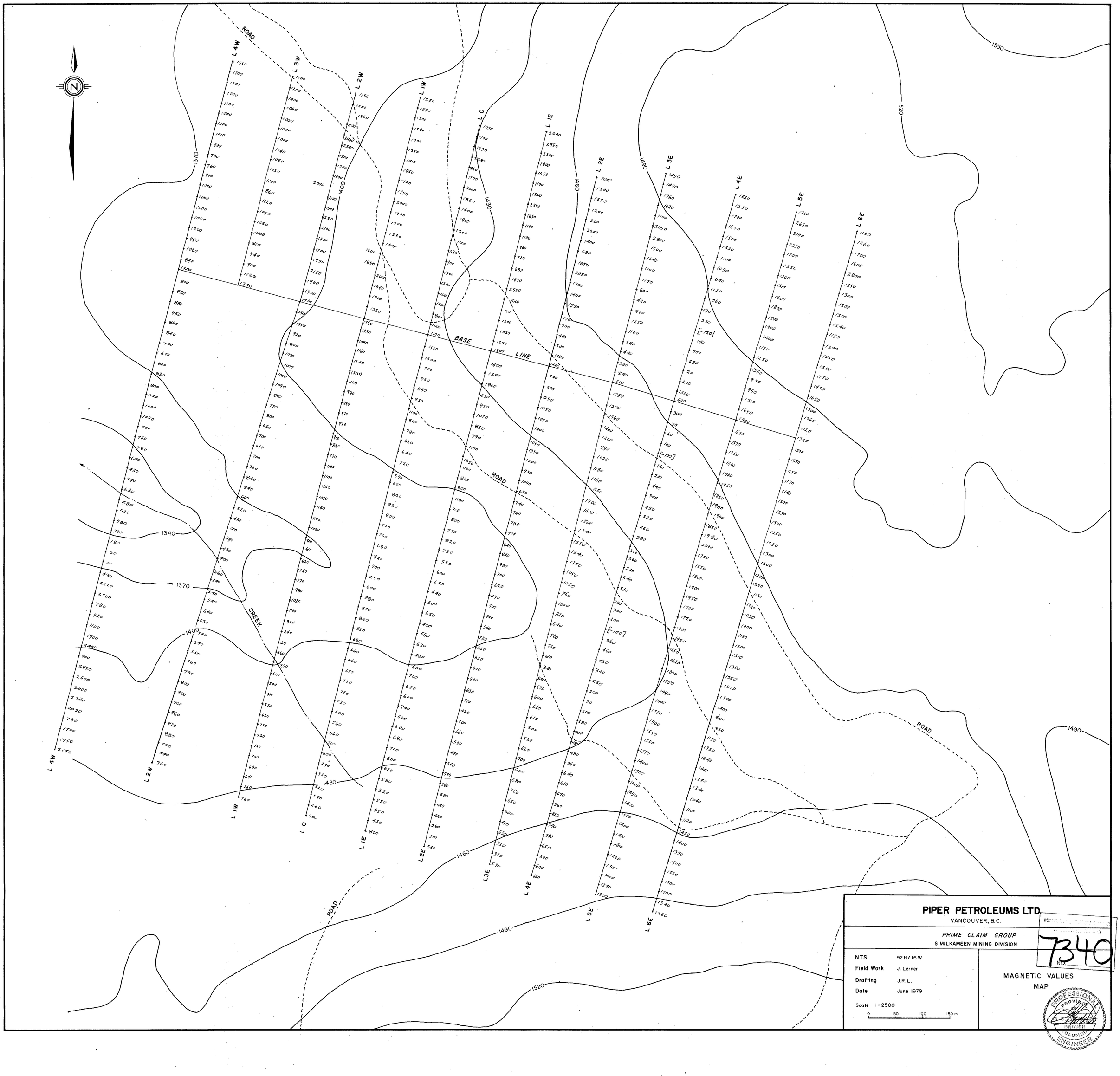
MAGNETIC CONTOURS
MAP

PROFESSIONAL ENGINEERING
G. C. GUTRATH
BRITISH COLUMBIA
ENGINEER



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0 50 100 150 m

MAGNETIC VALUES MAP

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