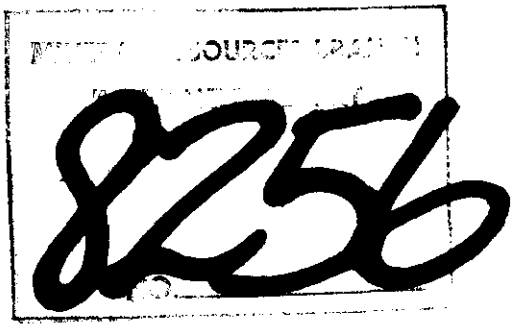
TRENCHING AND GEOLOGICAL REPORT

PRIME and HG I CLAIMS

SIMILKAMEEN MINING DIVISION



By

J. Nebocat

July 28, 1980

LOCATION: 40 kilometers north of Princeton, B. C.
Latitude 49° 44', Longitude 120° 30'
N.T.S. 92 H/9 W, 16 W

CLAIMS OWNED BY: Piper Petroleums Limited, Edward Mullin

WORK DONE BY: Newmont Exploration Of Canada Limited

WORK DONE BETWEEN: June 12, 1980 and July 7, 1980

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LOCATION, ACCESS, TOPOGRAPHY

The Prime and HG 1 claims are located in the Thompson Plateau of south-central British Columbia. The claims are centred approximately 4 kilometers south of Missezula Lake and are bordered to the west by Summers Creek. The property spans N.T.S. sheets 92 H/9 W and 92 H/16 W (49° 44' latitude, 120° 30' longitude).

Access is by the Missezula Lake road which branches off Highway 5, 8 kilometers north of Princeton, B. C. The distance off Missezula Lake from Highway 5 is 30 kilometers over a good but winding gravel road. The HG 1 and Prime claims can be reached by a 3 kilometer 4-wheel-drive road that branches to the east from the main road about 1.5 kilometers south of Missezula Lake. The road ends approximately 400 meters north of the HG 1 claim.

The terrain on the Prime and HG claims varies from the steeply incised Summers Creek valley on the western border (slopes up to 45°) to gently rolling hills towards the east. Elevations vary from 975 meters (3200') ASL at the valley floor to 1550 meters (5100') ASL near the east-central part of the claims. The property is forested with jackpine and fir, with lesser spruce and deciduous types.

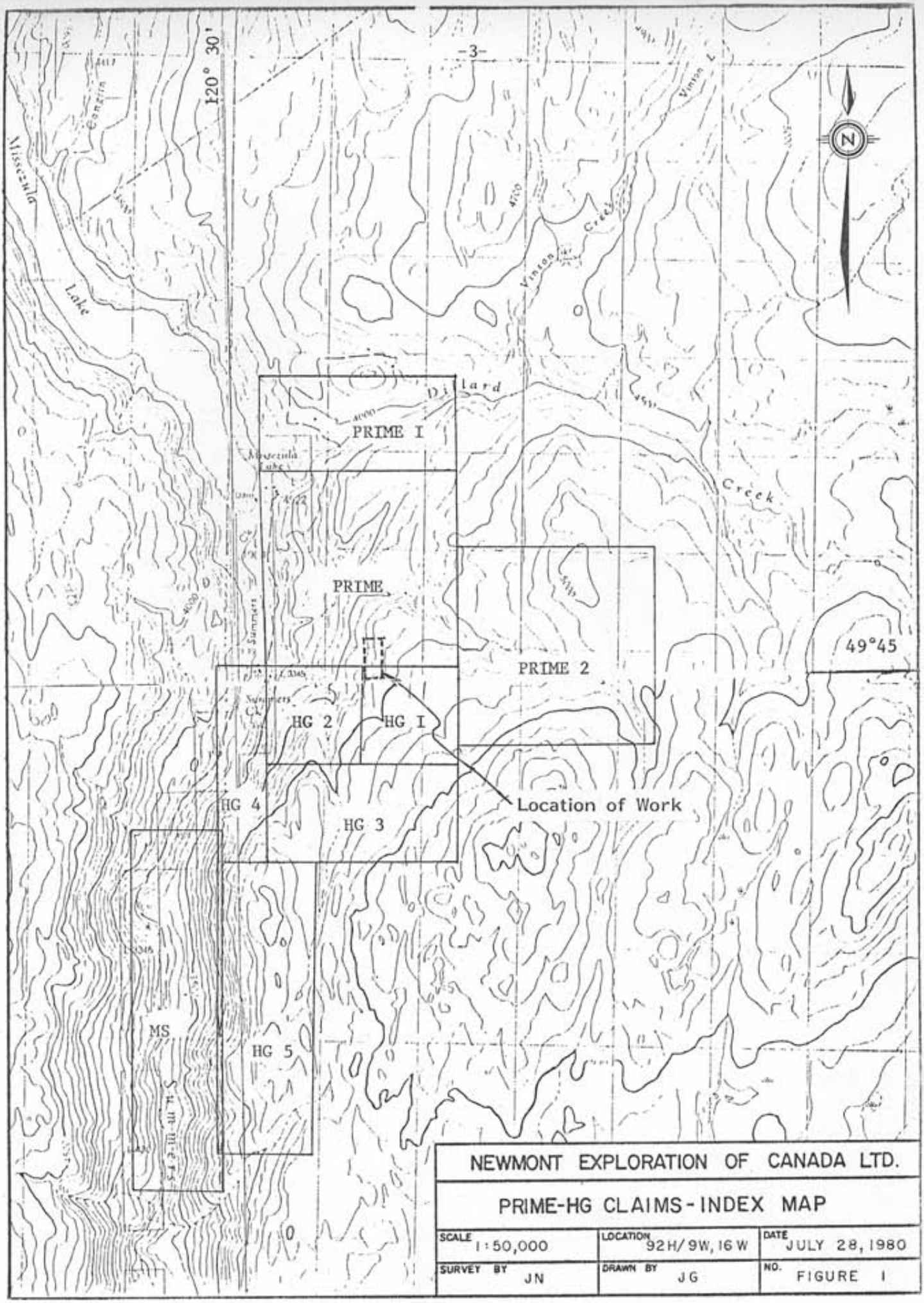
HISTORY

The Prime, Prime 1 and Prime 2 claims are owned by Piper Petroleums Limited. The claims cover what was previously known as the "Primer Group" on which occur copper showings in fractured and altered volcanics and quartz-deficient intrusives of the Nicola Group.

A similar showing was found on the claim boundary between the Prime and HG 1 claims by Ed Mullin in 1979.

CLAIMS

The Prime and HG 1 claims are recorded in the Similkameen Mining Division. Work was carried out on the Prime and HG 1 claims.



NEWMONT EXPLORATION OF CANADA LTD.

PRIME-HG CLAIMS - INDEX MAP

SCALE 1:50,000	LOCATION 92H/9W, 16W	DATE JULY 28, 1980
SURVEY BY JN	DRAWN BY JG	NO. FIGURE 1

SUMMARY OF WORK

Three existing cat trenches put in by Ed Mullin in 1979 were lengthened and deepened plus two new trenches were put in by Newmont Exploration of Canada Limited between July 2 and July 4, 1980. An attempt was made to get a cat in to the property on June 12, 1980 but wet ground conditions prohibited access.

A road approximately 100 meters long by 4 meters wide was built from an existing 4-wheel-drive road to the cat trail put in by Ed Mullin in 1979 (see Figure 2).

3250 square meters of trenching was done on the Prime - HG I claims with approximately 1650 square meters (51%) of it being done on the Prime claim. The 400 square meters of road building was done entirely on the Prime claim. The trenches are mainly 1 to 2 m deep.

The trenches were surveyed by use of a brunton compass and a nylon chain. Stations were located with 2" by 2" wooden stakes and were labelled and painted. The trenches were located in relation to the grid baseline established along the claim boundary in 1979. The trenches lie within an area of 32,000 square meters (3 hectares), and they were geologically mapped at a scale of 1:500.

GEOLOGY

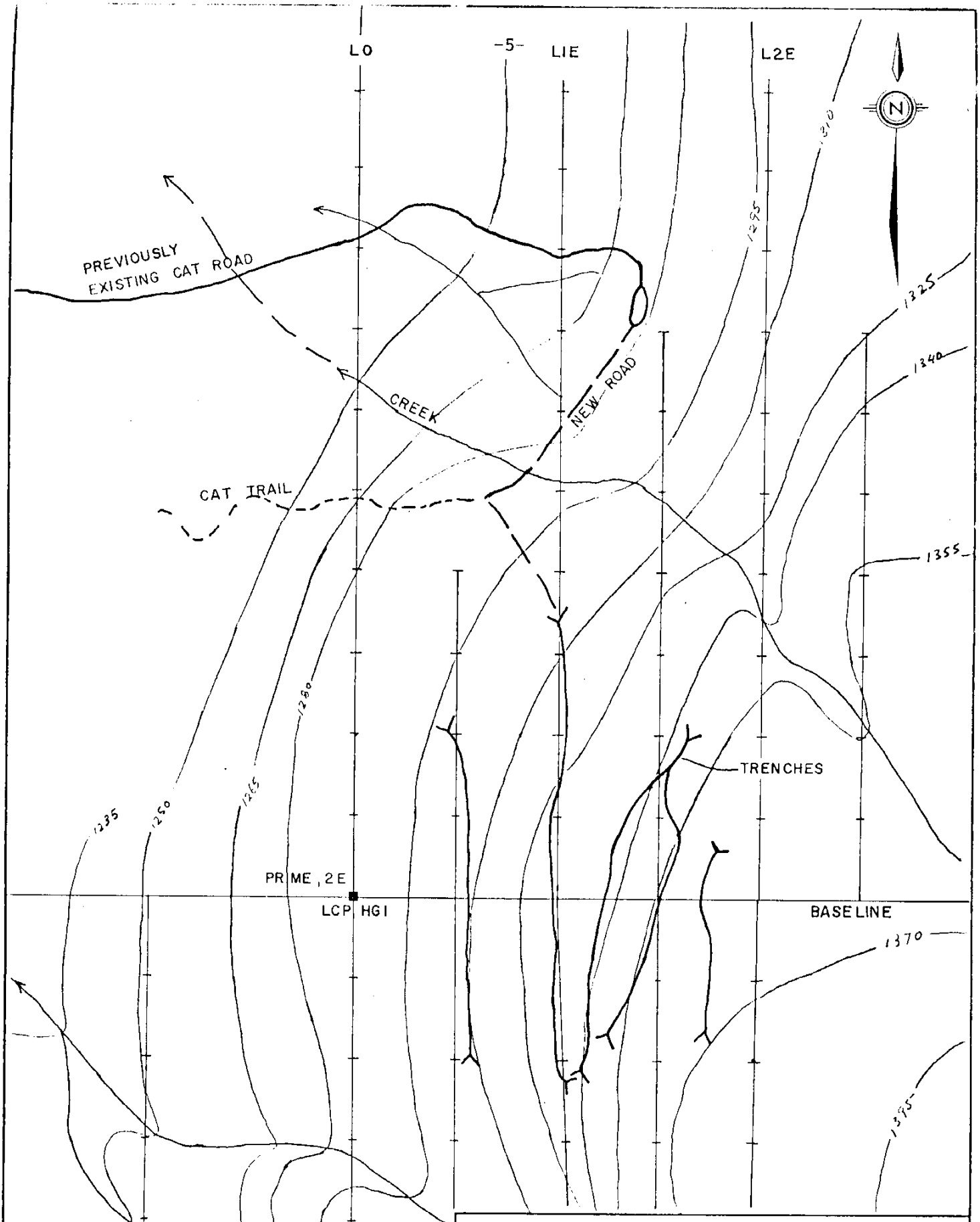
General

The Prime and HG I claims are underlain by an assemblage of intermediate volcanic and quartz-deficient intrusive rocks of the Nicola Group. Large scale faulting played a major structural role in the area and may have been conducive to copper mineralization.

Trench Geology

A complexly faulted assemblage of massive syenite porphyry, altered and mineralized syenite porphyry and a generally fresh hornblende porphyry diorite occurs in the trenches.

A massive, pink hornblende syenite porphyry occurs in the northern end of all five trenches. The syenite is generally unaltered except for minor chloritization of hornblende. Small grains of magnetite occur locally.



NEWMONT EXPLORATION OF CANADA LTD.

PRIME-HG CLAIMS, TRENCH LOCATION MAP

SCALE	LOCATION	DATE
1:2500	92H/9W, 16W	JULY 28, 1980
SURVEY BY JN	DRAWN BY JG	NO. FIGURE 2

CI 241 – N.E.C.

Sharp fault planes in narrow gouge zones separate the massive unaltered syenite porphyry, the altered and mineralized syenite porphyry, altered intrusive rock and the hornblende diorite from each other.

The altered, mineralized intrusive is extremely friable, fractured and kaolinized. Its pinkish-grey matrix and local remnant K feldspar. phenocrysts suggest it to be of syenitic origin.

A tan brown to yellow, highly kaolinized intrusive rock of uncertain origin occurs in trench 3 and is in fault contact with the mineralized syenite to the north and south. Disseminated pyrite and limonite coatings on fractures occurs throughout.

A generally massive, locally fractured, dark greyish-green hornblende diorite porphyry occurs in trenches 4 and 5 and a minor amount at the south end of trench 1. Where fractured, the diorite is extensively veined with a fleshy-pink zeolite, probably laumontite, and pyrolusite.

Disseminated pyrite occurs locally but the rock is essentially unaltered and unmineralized. The fresh surfaces on small clasts in fracture zones are quite recognizable as diorite.

Large zones of faulting have locally reduced rock to a yellowish clay gouge where original composition and texture is unrecognizable. This occurs in the north end of trench 4, the middle of trench 5 and at the south end of trench 1. Because of its uncertain origin the fault gouge has been grouped with unit 3 (see Map 1).

MINERALIZATION

Significant copper mineralization occurs in the altered syenite porphyry, predominantly in the form of the oxides malachite, neotocite and azurite.

Malachite coats fractures quite evenly throughout the altered syenite with no evidence of preference to zones or select fracture sets. Azurite is concentrated within narrow fault bounded zones (1 meter to 3 meters) in trenches 2 and 3.

Neotocite occurs as small pitchy black masses throughout the mineralized syenite and to a minor extent in the unmineralized rock

where it has migrated across a fault interface.

Chalcopyrite occurs primarily as disseminations with minor fracture filling occurring locally. Again, no pattern is established to the mineralization which occurs randomly throughout the syenite.

Disseminated bornite was seen in one location only, approximately 8 meters south of station E' in trench 2.

Small amounts of malachite, neotocite and chalcopyrite mineralization occur in the fractured diorite in trench 4. It occurs in close proximity to a series of north-west trending faults and was probably remobilized along them from the altered syenite porphyry. Leakage of copper oxides across fault contacts from mineralized to "unmineralized" syenite is seen in trenches 2 and 3.

STRUCTURE

The rocks exposed in the trenches vividly display the effects of fault displacement as indicated by the knife sharp contacts between units along faults. Several blocks of barren and mineralized syenite, diorite and altered intrusive exist within the trenched area as a result of these faults. Most of the faults have very steep dips but range from 35° to vertical.

Good exposure of faults in the trenches has helped in interpreting a sequence of events but displacement and direction is unknown and can only be assumed. The sharp contacts between the altered, mineralized syenite and the fresh unmineralized phase clearly indicates that the faulting here is post mineral but may have started in pre-mineral and during mineralizing events. From the evidence seen in the trenches the author has interpreted a sequence of events as follows:

(1) Faulting along a northwest-southeast trend displaced the various apophyses of the intrusive as witnessed in the trenches.

(2) A northeast-southwest trend later cut these northwest-southeast panels into blocks as indicated near station C',

trench 2; and at station E, trench 5; and station 0, trench 4.

(3) A series of north-south trending faults striking from 010° AZ to 020° AZ displace these blocks along them. Clearly defined faults and geologic units do not continue along their projections from trench to trench.

Fault 020°/72 SE south of station Y, trench 3 does not outcrop along its northern projection. This suggests that there may have been later movement along the older faults and, not necessarily in the same sequence.

It is suggested that the north-south trending faults are reflections of movement along the Summers Creek fault system which occurs about 1 kilometer west of here.

CONCLUSIONS

Bulldozer trenching has disclosed a disseminated copper prospect that was previously known by only a few pieces of mineralized rubble. Detailed geological mapping has defined the intrusive phases with their various mineral associations, and also a complex fault system.

John Nebocat

Vancouver, B. C.
July 28, 1980

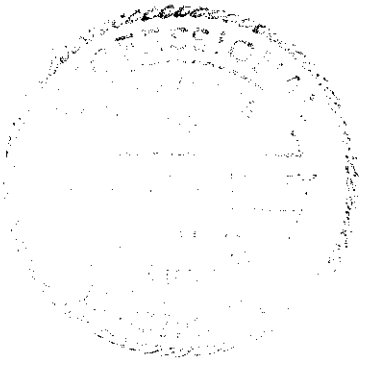
STATEMENT OF QUALIFICATIONS

I, John Nebocat, do hereby certify that:

1. I am a geological technician presently employed by Newmont Exploration of Canada Limited.
2. I am a graduate of the British Columbia Institute of Technology (Diploma of Technology, 1974).
3. I have supervised the caterpillar trenching and carried out the surveying and geological mapping described in this report.

John Nebocat

I, Terrence N. Macauley, do hereby certify that I supervised the work described in this report.



T. N. Macauley, P. Eng.
Exploration Manager
Western Division
NEWMONT EXPLORATIONS
OF CANADA LIMITED

STATEMENT OF COSTS

Personnel	Dates (1980)	Office Days	Field Days	Total Days	Daily Wage	Cost
Geological Technician	June 12; July 2-7; July 23-25	3	7	10	$84	$ 840.00
Assistant	June 12; July 2-7; July 23-25	3	7	10	58	580.00
Accommodations	7 Days between June 12, 1980 and July 7, 1980 @ $28.00/day					196.00
Food						130.00
Fuel						50.00
4 x 4 Vehicle Rental	7 days between June 12, 1980 and July 7, 1980 @ $28.00/day					196.00
Report Typing, Printing, etc.						100.00
						$2,092.00

Cost Allocation:

Prime Claim: (4/7 of field costs and 1/2 of office costs) Total: $1,165.00

HG I Claim: (3/7 of field costs and 1/2 of office costs) Total: $927.00

L0 L0 + 50E L1E L1+25 E L1+50 E L1+75E

140 N 120 N 100 N 80 N 60 N 40 N 20 N 20 S 40 S 60 S

BL

PRIME CLAIM

PRIME 2E CLAIM LINE

LCP HG 1

HG 1 CLAIM

GRID SURVEY: HIP-CHAIN AND COMPASS

TRENCH SURVEY: TAPE AND COMPASS
STATIONS LOCATED IN RELATION TO GRID BASE-LINE

ELEVATION IN Metres

TRENCH 1

TRENCH 2

TRENCH 3

TRENCH 4

TRENCH 5

0 5 10 15 20 25 metres

SCALE 1:500

LEGEND

4 MEDIUM-GRAINED, GREYISH-GREEN, HORNBLENDE DIORITE PORPHYRY. WEAKLY MINERALIZED WHERE SHEARED. ZEOLITE OCCURS AS VEINS THROUGHOUT.

3 ALTERED ROCK OF UNDEFINED INTRUSIVE ORIGIN. KAOLINIZED, FRIABLE, PYRITIC AND EXTENSIVELY COATED WITH LIMONITE AND HEMATITE ALONG FRACTURES; FAULT GOUGE.

2 ALTERED SYENITE PORPHYRY. FLESHY PINK, FRIABLE AND KAOLINIZED. MINERALIZED WITH MALACHITE, NEOTOCITE, AZURITE, CHALCOPYRITE, MINOR BORNITE.

1 GENERALLY MASSIVE, PINK HORNBLENDE SYENITE PORPHYRY. FRESH, UNMINERALIZED, MINOR CHLORITE ALTERATION OF HORNBLENDE.

FAULT PLANE: INCLINED , VERTICAL

FAULT ZONE, UNCERTAIN STRIKE AND DIP

A SURVEY STATION

CPY CHALCOPYRITE
PY PYRITE
AZ AZURITE
MAL MALACHITE
NEO NEOTOCITE
BN BORNITE
CAL CALCITE
ZEO ZEOLITE
MN PYROLUSITE
LIM LIMONITE

MAP 1

NEWMONT EXPLORATION OF CANADA LTD.		
PRIME-HG CLAIMS TRENCH GEOLOGY		
SIMILKAMEEN MINING DISTRICT, B.C.		
NTS: 92H/9W, 16W	DATE: JULY 28, 1980	DRAWN BY: JG, JN