GEOLOGICAL AND GEOCHEMICAL REPORT

INEZ CLAIMS

N.T.S. 82-E-5 W

By: J. Nebocat

PROPERTY SUBMITTAL
C. I. Brett

15 sheets

GEOLOGICAL AND GEOCHEMICAL REPORT

INEZ CLAIMS

OSOYOOS MINING DIVISION

By

J. Nebocat

January 18, 1980

LOCATION:	11.5 Kilometers north of Keremeos, B.C. Latitude 49° 18.5', Longitude 119° 48' N.T.S. 82E/5W
CLAIMS OWNED BY:	Charles I. Brett
WORK DONE BY:	Newmont Exploration of Canada Limited
WORK DONE BETWEEN:	May 22 and May 23, 1979

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LOCATION, ACCESS AND TOPOGRAPHY

The Inez Group is located 11.5 kilometers north of Keremeos, B.C. Access is via Highway 3A either 15 km north from Keremeos, B.C., or 35 km southwest from Penticton, B,C. A gravel road branches from Highway 3A southeasterly to Twin Lakes. A 1 km trail leads to the showing from the gravel road approximately 1 km from its junction with the highway.

The trail climbs from 700 m ASL to 870 m ASL. Relief on the property is in the order of 400 m.

The ground is open and is covered extensively with bunch grass and lesser small deciduous shrubs. Widely spaced Ponderosa Pine and Yellow Fir occur throughout.

HISTORY

The showing was first discovered by Ben E. Williams of Keremeos, B.C. in March, 1953 and was staked as the "Williams" claims. Twelve pits and trenches were put in by the owner at that time.

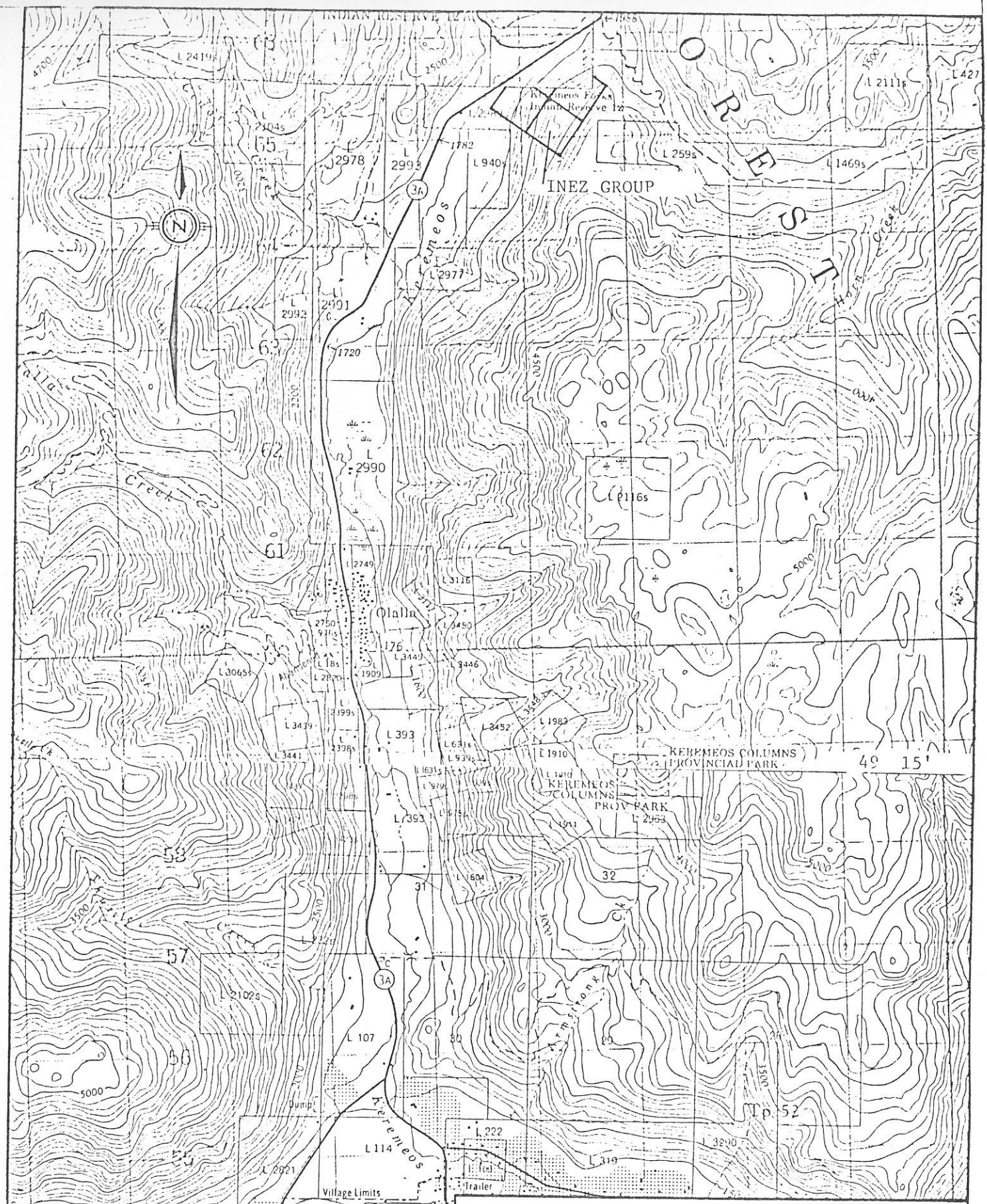
Kelowna Mines Hedley Ltd. drove an adit on the property at a later date. The property was obtained by Mr. Brett in 1970 who has held it since then.

SUMMARY OF WORK

On May 22 and May 23, 1979 the author, a senior assistant and two junior assistants did soil sampling, geologic mapping and took rock samples of the showing. A grid was established using a compass and a nylon tape. Stations were marked with orange flagging tape. The lines were spaced 50 m with 25 m stations along them. Elevations were measured at each station with Thommen pocket altimeters. Sixty-three soil samples, eight rock assay and three rock geochem samples were taken.

CLAIMS

The Inez Group is recorded in the Osoyoos Mining Division. The group consists of four claims: the Inez 1 and Inez 2, the Gwen 3 and Gwen 4, record numbers 26116B to 26119B respectively. The work was done on the Inez 1 and Gwen 4 claims.



NEWMONT EXPLORATION OF CANADA LTD.		
INDEX MAP – INEZ CLAIMS		
SCALE 1:50,000	LOCATION 82 E / 5w	DATE JAN. 18, 1980
SURVEY BY J. NEBOCAT	DRAWN BY J. NEBOCAT	NO. FIGURE 1

GEOLOGY

Medium-grained biotite-quartz monzonite of the Upper Triassic Similkameen Batholith intrudes Pennsylvanian-Permian volcanic and sedimentary rocks of the Shoemaker and Old Tom Formations. Post-intrusive faults locally separate the intrusion, Old Tom and Shoemaker Formations from each other. A northeasterly trending fault forms a bench and gully on the property and may represent the contact between the Old Tom and Shoemaker Formations (Bostock, Map 628A, 1941).

An iridescent blue-grey weathering quartz-diopside skarn is overlain by a buff coloured orthoquartzite and massive greenstone with minor hornfels. The succession appears to dip gently southwest but no visible bedding was seen. The thickness of the skarn is unknown and is truncated to the west and east by faults. A maximum surface strike length is estimated at 80 m.

MINERALIZATION

Coarse-grained powellite-scheelite and finer-grained scheelite crystals occur in the skarn and to a lesser extent in the overlying quartzite. The trenches were not lamped by the author; hence, a possible zonation or concentration of mineralization in the skarn was not ascertained. The assays did not show a wide range of values (see figure 3) and were generally low (0.10% WO_3 to 0.44% WO_3).

Molybdenite and chalcopyrite were noted in the skarn in the easternmost trench and flakes of molybdenite occur in the quartz monzonite in the westernmost trench.

Sericite and limonite alteration occurs along the fault which separates the intrusive from the skarn. The quartz monzonite shows minor amounts of argillic alteration and limonite coatings.

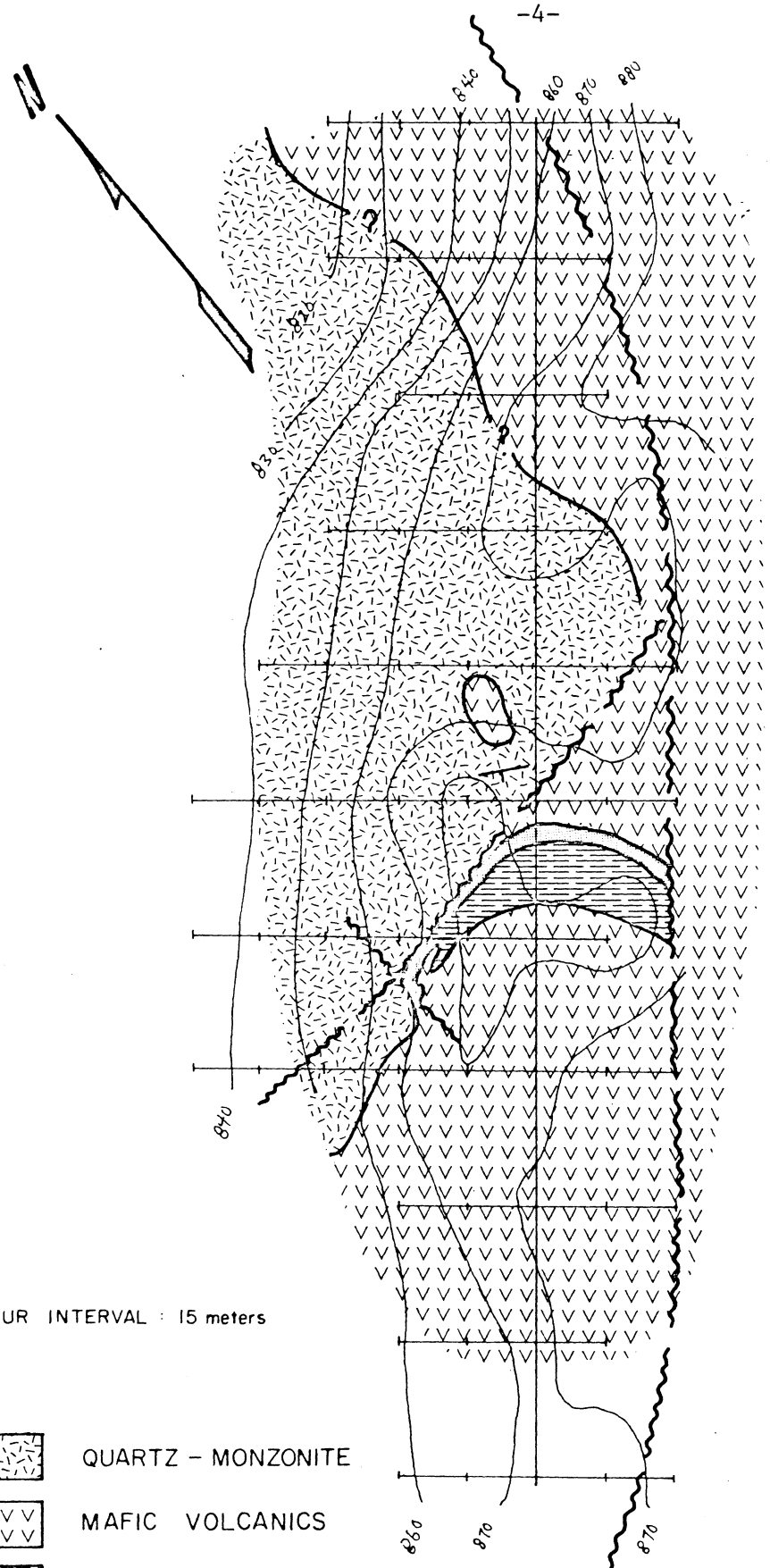
GEOCHEMISTRY

Field Procedure

Soil samples were taken at all 25 m stations where possible. The B horizon was sampled with a mattock and trowel at an average depth of 15 cm. The samples were collected in kraft paper envelopes. The A horizon was generally shallow or non-existant (less than 5 cm.).

Samples were generally good but some were in areas with considerable talus.

Rock assay and rock geochem samples were taken in the trenches exposing



CONTOUR INTERVAL : 15 meters

QUARTZ - MONZONITE

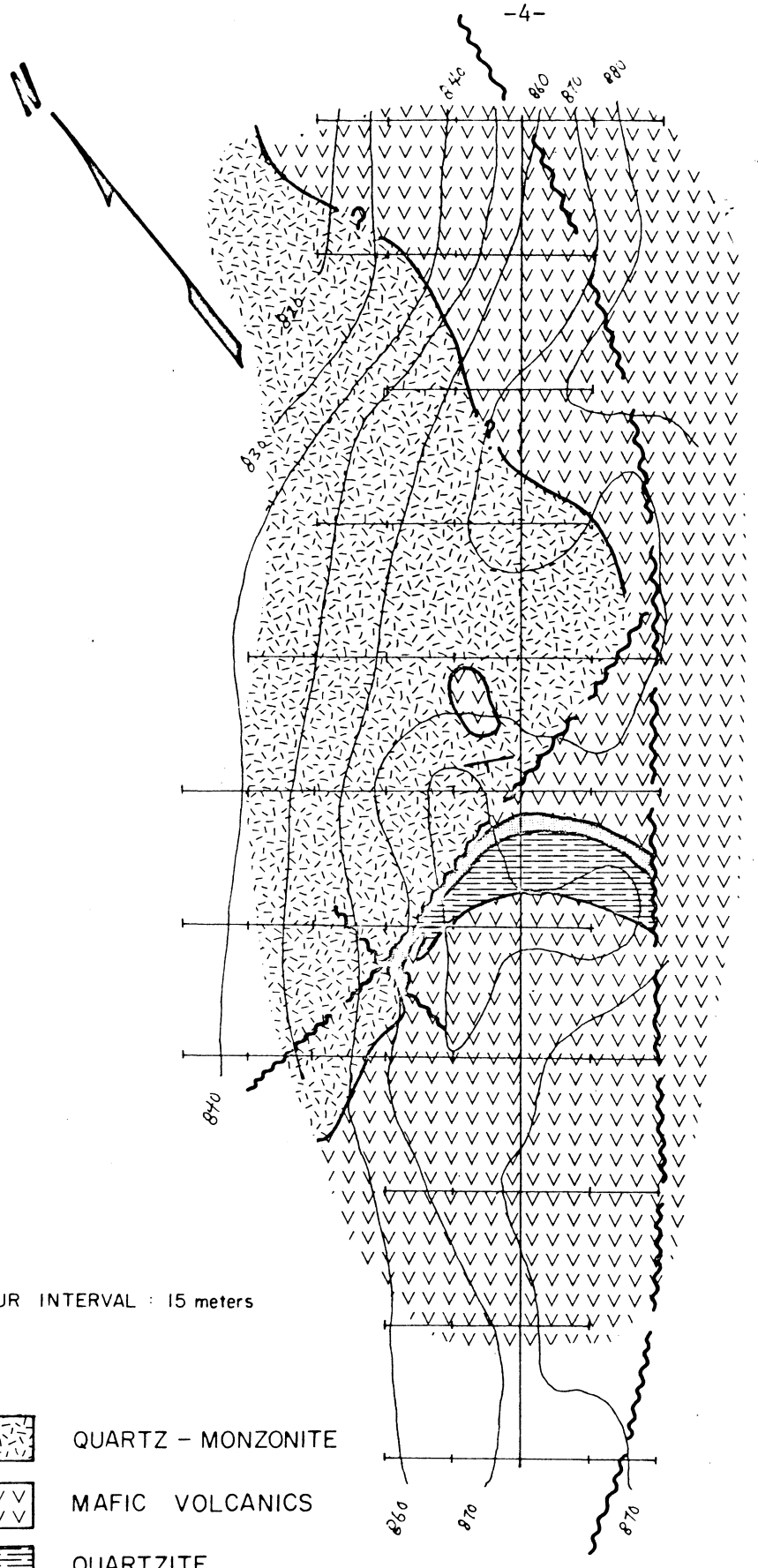
MAFIC VOLCANICS

QUARTZITE

SKARN

NEWMONT EXPLORATION OF CANADA LTD.

INEZ GROUP - GEOLOGY



CONTOUR INTERVAL : 15 meters

QUARTZ – MONZONITE

MAFIC VOLCANICS

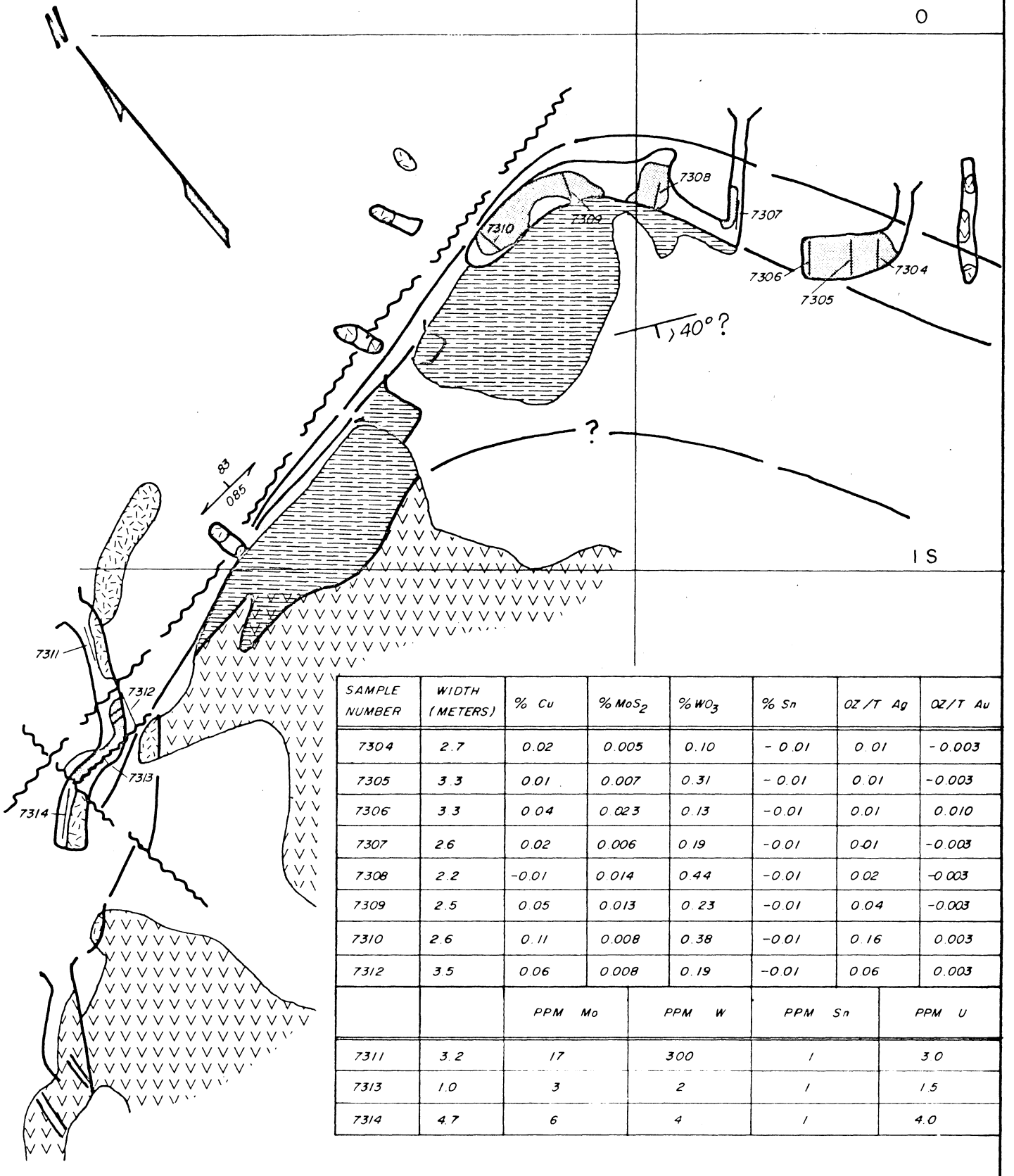
QUARTZITE

SKARN

0 25 50 M.

NEWMONT EXPLORATION OF CANADA LTD.		
INEZ GROUP – GEOLOGY		
SCALE 1 : 2500	LOCATION 82 E / 5w	DATE JAN 18, 1980
SURVEY BY J. NEBOCAT	DRAWN BY J. NEBOCAT	NO. FIGURE 2

NCI 241 – N.E.C.



SAMPLE NUMBER	WIDTH (METERS)	% Cu	% MoS_2	% WO_3	% Sn	OZ/T Ag	OZ/T Au
7304	2.7	0.02	0.005	0.10	- 0.01	0.01	- 0.003
7305	3.3	0.01	0.007	0.31	- 0.01	0.01	-0.003
7306	3.3	0.04	0.023	0.13	-0.01	0.01	0.010
7307	2.6	0.02	0.006	0.19	-0.01	0.01	-0.003
7308	2.2	-0.01	0.014	0.44	-0.01	0.02	-0.003
7309	2.5	0.05	0.013	0.23	-0.01	0.04	-0.003
7310	2.6	0.11	0.008	0.38	-0.01	0.16	0.003
7312	3.5	0.06	0.008	0.19	-0.01	0.06	0.003

		PPM Mo	PPM W	PPM Sn	PPM U
7311	3.2	17	300	1	3.0
7313	1.0	3	2	1	1.5
7314	4.7	6	4	1	4.0

NEWMONT EXPLORATION OF CANADA LTD.

INEZ GROUP - GEOLOGY & ASSAYS

SCALE	LOCATION	DATE
1 : 500	82 E/5w	JAN. 18, 1980
SURVEY BY J. NEBOCAT	DRAWN BY J. NEBOCAT	NO. FIGURE 3

NCI 241 — N.E.C.

mineralization. Sample weights varied from 2 Kg to 5 Kg.

Laboratory Procedure

The samples were prepared and analyzed by Chemex Labs Ltd. in North Vancouver, B.C. The soils were dried in their envelopes and then sieved through a -80 mesh screen. For analysis a 1 gm sample of the -80 mesh fraction was put in a tube, subjected to hot digestion for 2 to 3 hours in a mixture of 3 ml of 70% perchloric acid and 2 ml of nitric acid, diluted to 25 ml with distilled water, mixed and the sediment allowed to settle. The solute was then analyzed by atomic absorption. Rock geochemical samples were pulverized to 100 mesh and then treated the same as soils.

For tungsten a 0.20 gm sample of the -80 mesh fraction was fused with potassium bisulplate and leached with hydrochloric acid. The reduced form of tungsten is then complexed with toluene 3, 4, dithiol and visually compared with standards.

For tin a 1.00 gm sample is sintered with ammonium iodide and then leached with dilute hydrochloric-ascorbic acid solution. The complex is then analyzed by atomic absorption.

Rock assay samples are analyzed the same as rock geochem samples except for gold and silver which are analyzed by fire assay.

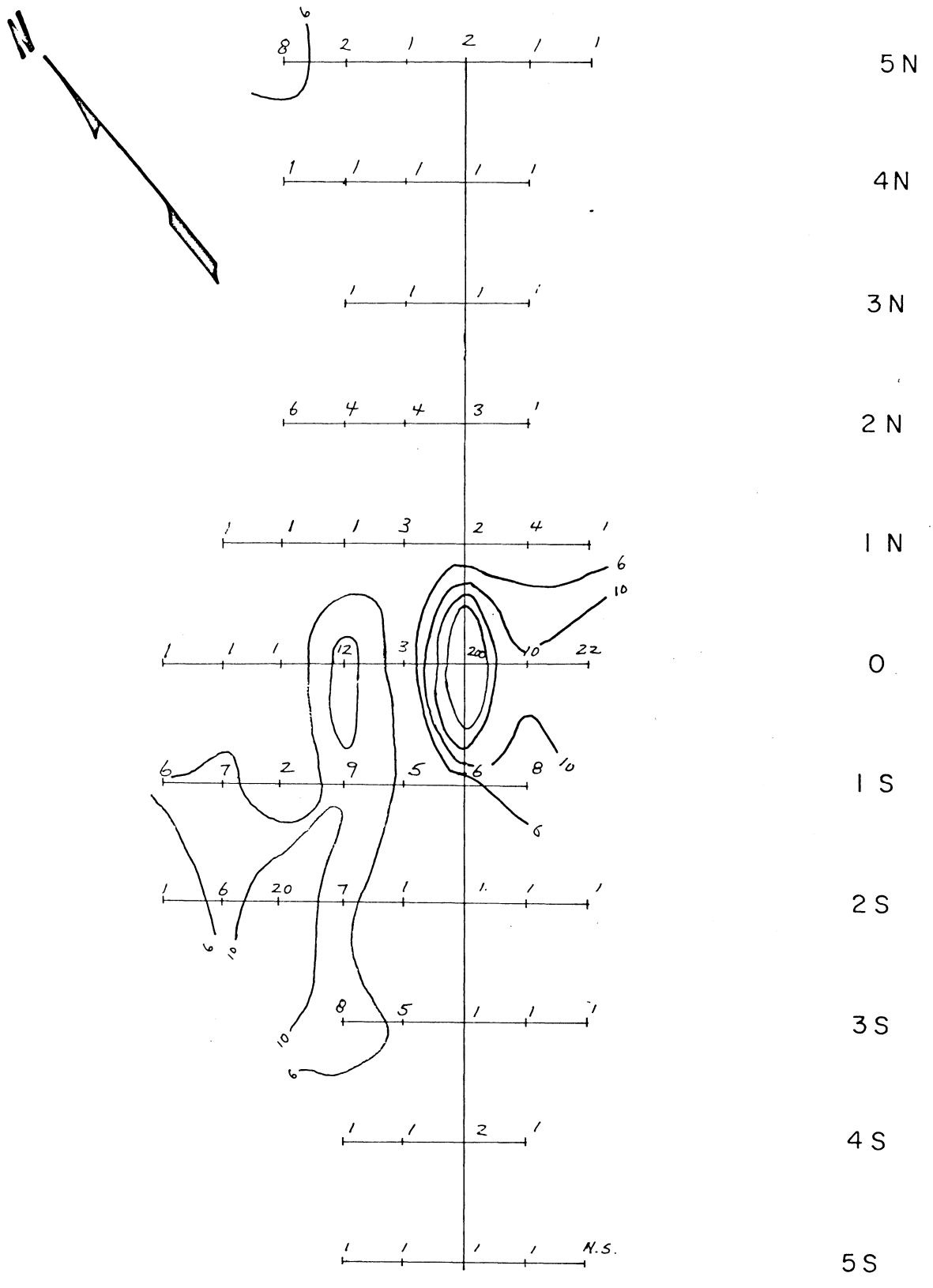
RESULTS

Tungsten (Fig. 4)

A high value of 200 ppm W in soils occurs 15 m. north of the central part of the showing, coincidental with the projection of the fault separating the intrusive from the skarn and volcanics. The anomaly is covered by overburden. Higher values of 6 ppm to 20 ppm occur roughly coincidental with the intrusive-skarn contact and partly within the intrusive body.

Molybdenum (Fig. 5)

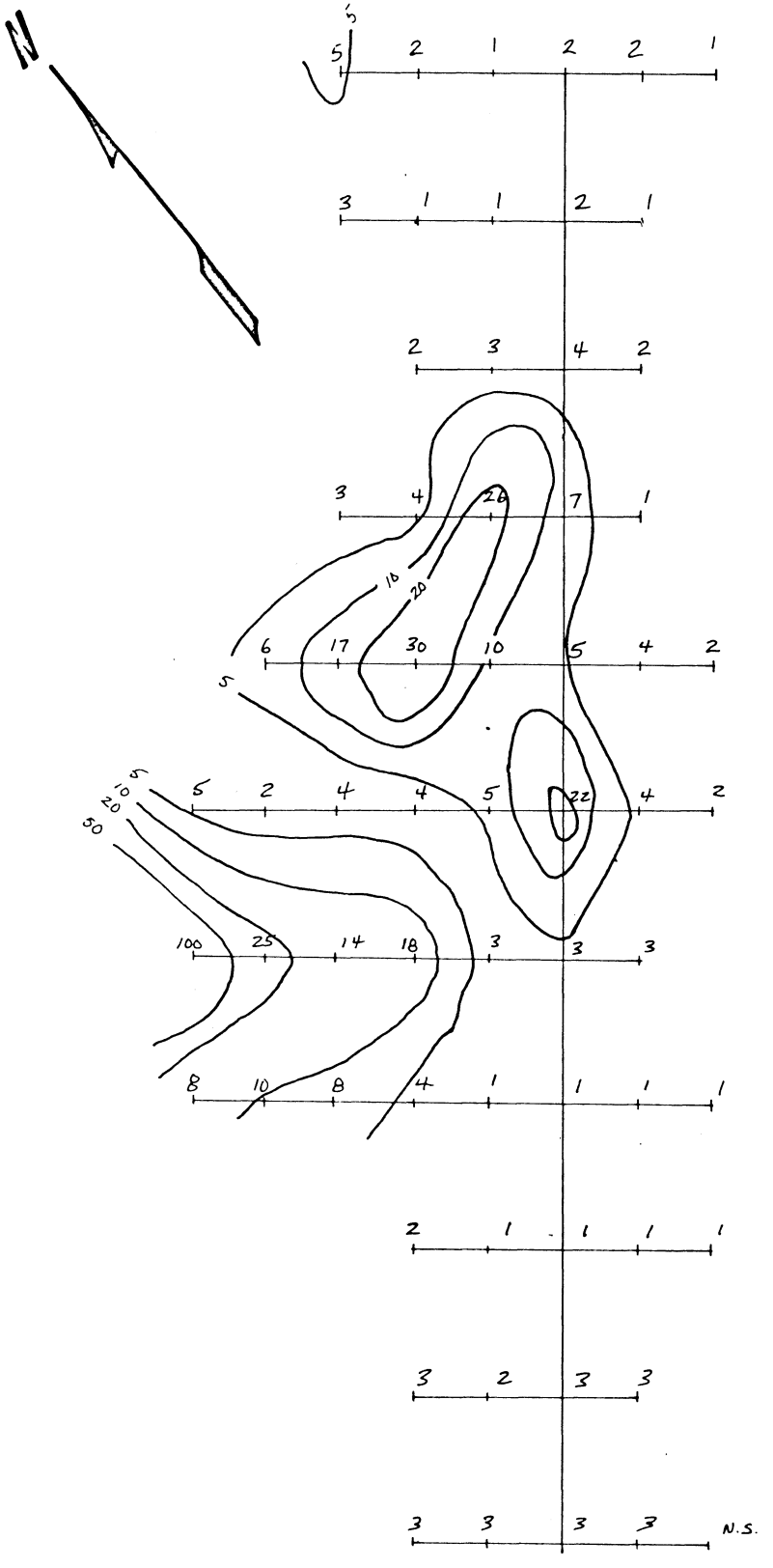
Anomalous Mo values occur within the quartz monzonite. Two distinct anomalies exist; one between line 0 and line 3N with values from 5 ppm to 30 ppm and, the other to the southwest between line 0 and line ~~25~~ 2S with values ranging from 5 ppm to 100 ppm.



0 25 50 M

NEWMONT EXPLORATION OF CANADA LTD.		
INEZ GROUP - PPM W IN SOIL		
SCALE 1 : 2500	LOCATION 82 E / 5w	DATE JAN. 18, 1980
SURVEY BY J NEBOCAT	DRAWN BY J NEBOCAT	NO. FIGURE 4

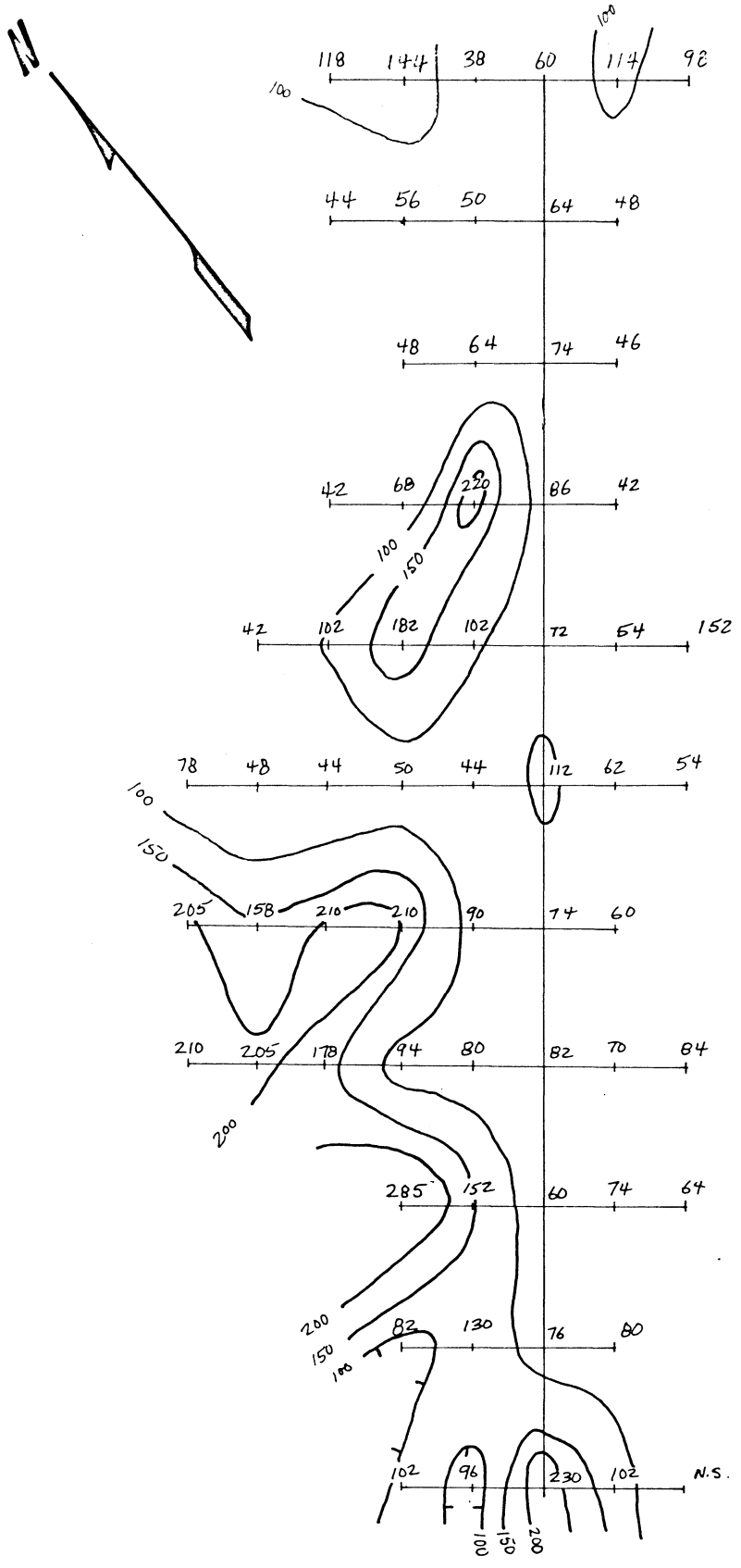
NCI 241 — N.E.C.



0 25 50 M.

NEWMONT EXPLORATION OF CANADA LTD.		
INEZ GROUP - PPM Mo IN SOIL		
SCALE 1 : 2500	LOCATION 82 E / 5w	DATE JAN. 18, 1980
SURVEY BY J. NEBOCAT	DRAWN BY J. NEBOCAT	NO. FIGURE 5

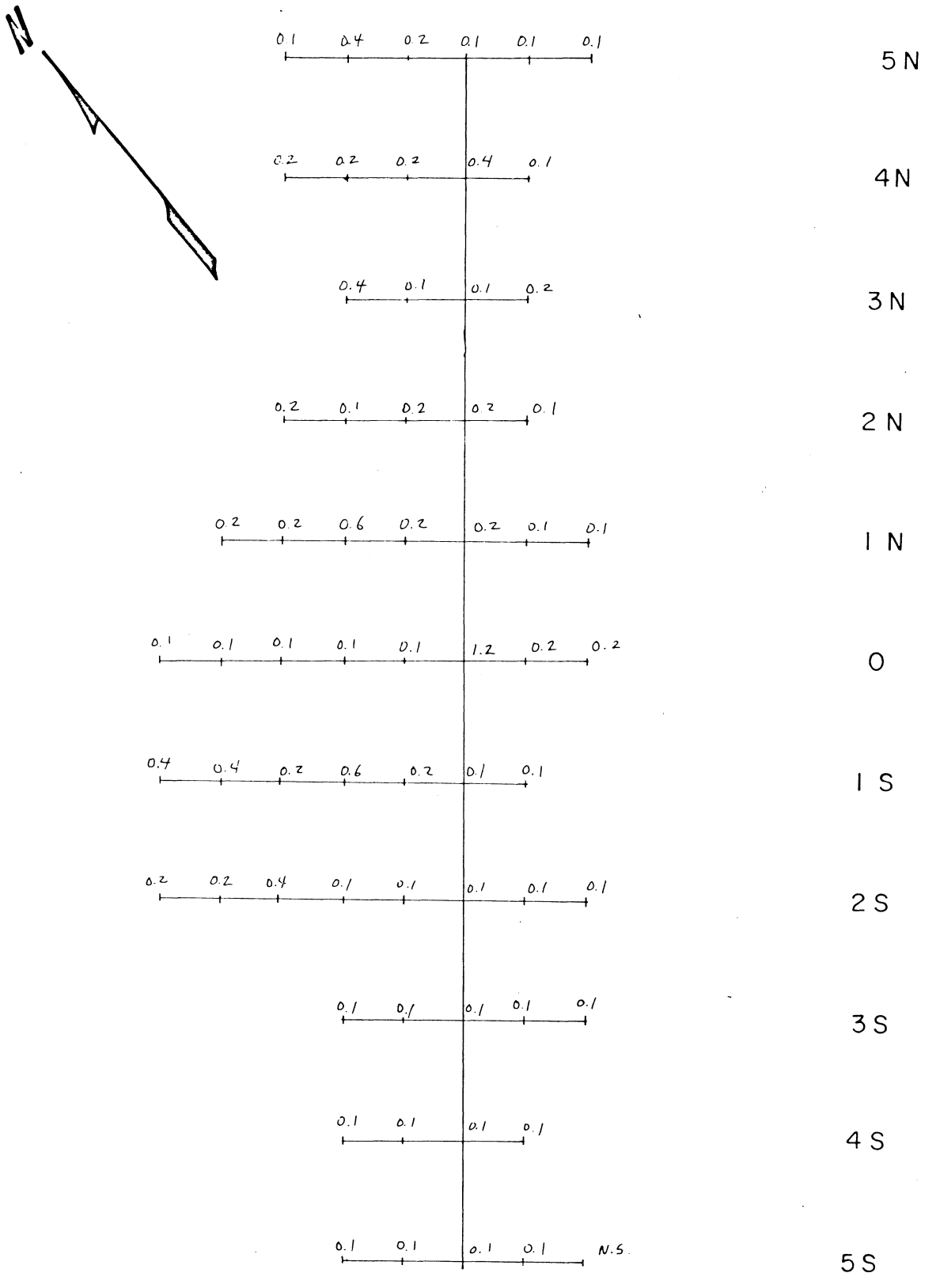
NCI 241 – N.E.C.



0 25 50 M.

NEWMONT EXPLORATION OF CANADA LTD.		
INEZ GROUP - PPM Cu IN SOIL		
SCALE 1 : 2500	LOCATION 82 E / 5w	DATE JAN. 18, 1980
SURVEY BY J NEBOCAT	DRAWN BY J NEBOCAT	NO. FIGURE 6

NCI 241 - N.E.C.



0 25 50 M

NEWMONT EXPLORATION OF CANADA LTD.		
INEZ GROUP - PPM Ag IN SOIL		
SCALE 1 : 2500	LOCATION 82 E / 5w	DATE JAN 18, 1980
SURVEY BY J. NEBOCAT	DRAWN BY J. NEBOCAT	NO. FIGURE 7

NCI 241 — N.E.C.

Copper (Fig. 6)

Values up to 285 ppm occur in an area west of the baseline between line 1S and line 5S. They are found in soils overlying the intrusive and the volcanics. A small anomaly (182 ppm, 220 ppm) exists coincidently with the northernmost Mo anomaly.

Silver (Fig. 7)

Silver values are very low except for a single sample which ran 1.2 ppm on the baseline at line 0. A 22 ppm Mo and 200 ppm W value also occurs at this site.

INTERPRETATION

The tungsten values are attributed to mineralization along the intrusive contact with skarn and volcanics. A rock geochem yielded a value of 300 ppm W in the quartz monzonite and may indicate a high W background in the intrusion.

Traces of flake molybdenite occur in the intrusive in the westernmost trench and as a fine-grained peppering in skarn in the easternmost trench. The northern Mo anomaly occurs wholly within the intrusive and is unexplained.

Minor chalcopyrite was noted in the skarn but does not account for the anomalous Cu values in the intrusive and the volcanics. Part of the anomaly in the quartz monzonite coincides with the Mo Anomaly. The anomalous copper over the volcanics may be due to high background.

CONCLUSIONS

1. A tungsteniferous skarn occurs over an 80 meter strike length and is truncated by a fault and an intrusive contact to the west and by a fault to the east.
2. Soil geochemistry shows no significant tungsten values in area other than those associated with known showings.
3. Anomalous molybdenum values with some anomalous copper occur within the quartz monzonite.

RECOMMENDATIONS

1. Further soil geochemistry should be carried out to the west to explore for molybdenum mineralization in the intrusive and along its contact.
2. Detailed mapping and prospecting should be done across the eastern fault to check for a possible upslope displacement of the skarn horizon.

3. Pending the results of the work mentioned in the first two recommendations, the only way to further test the skarn horizon is by diamond drilling.

John Nebocat

STATEMENT OF QUALIFICATIONS

I, John Nebocat, do hereby certify that:

1. I am a geological technician presently employed by Newmont Exploration of Canada Ltd.

2. I am a graduate of the British Columbia Institute of Technology (Diploma of Technology, 1974).

3. I have supervised and carried out the geochemical survey and the geological mapping described in this report.

John Nebocat

I, Terrence N. Macauley, do hereby certify that the work described in this report was done under my direction.

T. N. Macauley, P. Eng.