5177

Report on Geological, Geochemical and Geophysical Surveys plus Diamond Drilling

on the

92H/9E

Lori 1-3, 4,5-6, 7-14, 15, 16-18, 19-26, 27, 28-33; Jon 1-7, Lucy 1-44, 45-50; Lu 1-5; CM 1-12; Bruce 1-10 mineral claims
49°40'N 120°02'W

by

J.D.Knauer, Geologist/Geochemist

Noranda Exploration Company, Limited

Osoyoos and Similkameen Mining Divisions

October 1974

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COMBINED GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL AND DIAMOND DRILLING REPORT OF THE CRO-MUR PROPERTY

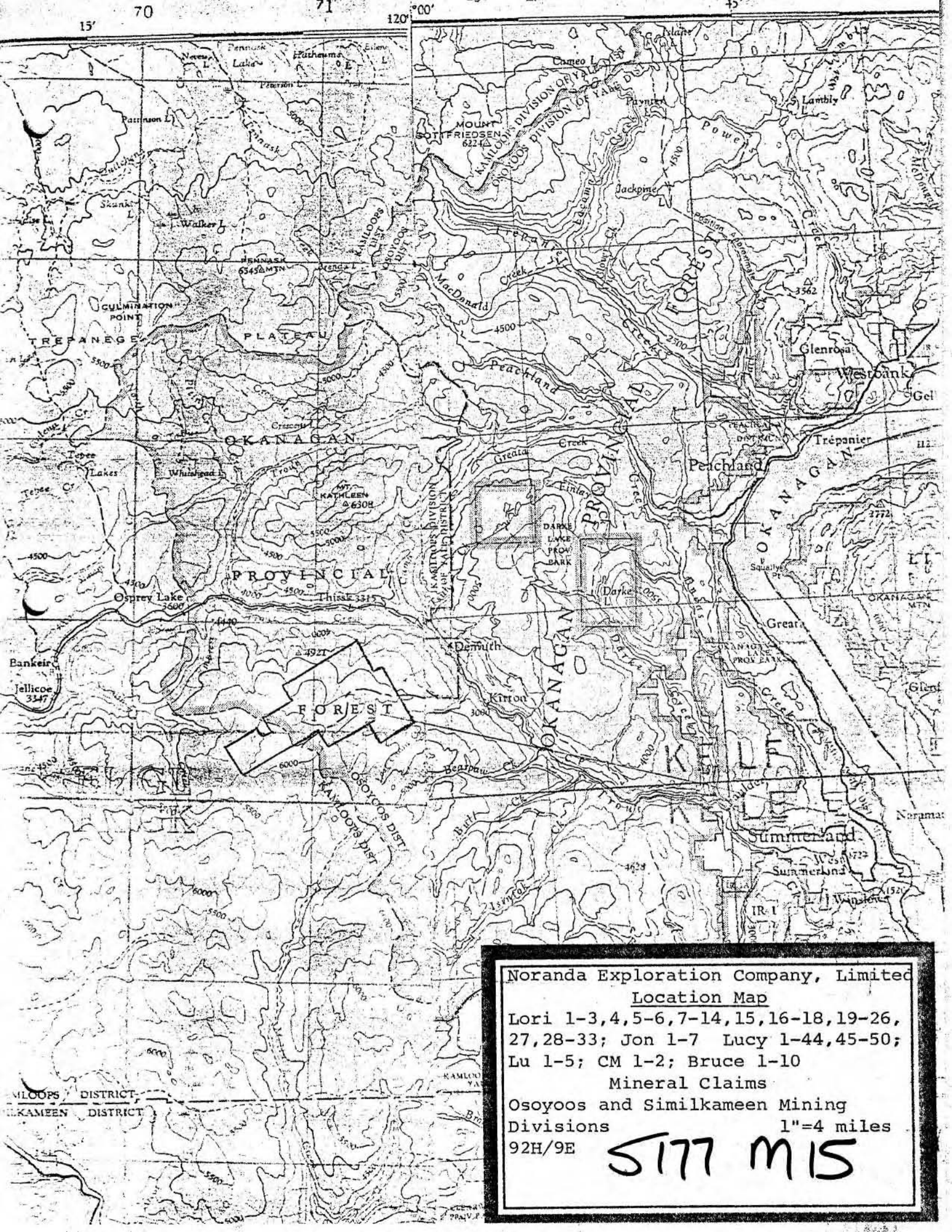
Introduction

The claims referred to in this report are registered in the name of Cro-Mur Mining and Exploration and were explored under an option agreement to Noranda Exploration Company, Limited (No Personal Liability). The property consists of 117 contiguous mineral claims in the Osoyoos and Similkameen Mining Divisions, British Columbia.

Claim Names:	Record Numbers:
Lori 1-3	30920-22
Lori 4	30924
Lori 5-6	30929-30
Lroi 7-14	28426-33
Lori 15	30041
Lori 16-18	40517-19
Lori 19-26	30042-49
Lori 27	30173
Lori 28-33	40571-76
Jon 1-7	28434-40
Lucy 1-44	40832-75
Lucy 45-50	40882-87
Lu 1-5	41054-58
CM 1-12	31076-87
Bruce 1-10	31089-98

The Cro-Mur property is located approximately 17 miles N75^{o}W of Summerland, British Columbia and 2 miles south of Thirsk, British Columbia near the headwaters of Lost Chain Creek which flows northeasterly into Trout Creek (Figure 1).

The property can be reached via two access roads, one leading to the eastern portion of the property, the other to the western claims, by travelling on the gravel road which follows the Canadian Pacific Railroad line between Princeton and Summerland, British Columbia.


Noranda Exploration Company, Limited
Location Map
Lori 1-3,4,5-6,7-14,15,16-18,19-26,
27,28-33; Jon 1-7 Lucy 1-44,45-50;
Lu 1-5; CM 1-2; Bruce 1-10
Mineral Claims
Osoyoos and Similkameen Mining
Divisions 1"=4 miles
92H/9E
5177 M15

The turn-off leading to the eastern portion of the property is approximately 18 miles from Summerland or 43 miles from Princeton near Kirton, British Columbia. A four wheel-drive vehicle is needed at this point to ford Trout Creek and for other sections of the 7 miles to the camp site. During high water it was impossible to ford Trout Creek therefore a helicopter was used to fly in men and equipment and supplying the camp. Access to the western portion of the property is by logging road which leaves the main gravel road near Bankeir, British Columbia passing the west end of Chain Lake. The distance from the main road to the claims is approximately 13 miles. A two-wheel drive vehicle can be used on this road during the summer and fall.

Topography and Vegetation

Relief in the region of the Cro-Mur property is about 3,000 feet. The major drainages (Trout Creek to the north, Hayes Creek on the west and McNutty Creek and the Similkameen River to the south) cut broad channels to 2000 feet deep. Inter channel areas form broad rounded mountains, ridges and knolls between 5000 and 6500 feet in elevation.

The Cro-Mur property itself is between 4400 and 6300 feet in elevation. Rounded ridges trend northeast-southwest and eastwest (southeast and northeast corners).

The property is forested with mainly fir and lodge pole pine much of it being second growth in the old burn areas. Alder and thick undergrowth dominate the low-lying and drainages areas along slopes.

Geological, geochemical, geophysical surveys, grid preparation and diamond drilling were carried out by Noranda Exploration Company, Limited during the period June 3 - September 6, 1974. The work was performed by a crew of up to eight field men under the technical guidance of L.Bradish(Geophysical), B.Fairbank(Geological) and J.Knauer(Project Supervisor).

Grid Preparation

Control for the geological, geochemical and geophysical surveys was provided by the development of a grid system started by establishing a true north chain and compass base line designated 200E. The base line was blazed, flagged and stations marked at 200 foot intervals for an overall length of 11,000 feet. An additional base line (6,200 feet in length) was needed for control on the western side of the property at 120E. Perpendicular to the base lines, grid lines of varying lengths were laid out at 800 foot intervals. The grid lines were compassed, chained and flagged with stations marked every 200 feet. Tie lines were used for control of the grid lines running north-south at 3,000 foot intervals east and west from the base lines. A total of 44.75 miles of lines were prepared.

Geology

Reconnaissance geological mapping at a scale of 1"=1000' was carried out initially in the area of the claim group by J.Knauer and I.Saunders using existing claim lines and physical features principally streams as a means of control.

Following the establishment of the grid system, detailed geological mapping (scale 1"=400') was completed by B.Fairbank and J.Knauer.

Regional Geology(H.M.A.Rice,G.S.C. Mem. 243, 1960):

The major rock type in the area of the property is described as the "red" granodiorite phase of the Coast intrusions. The "red" phase compared to the older "white" and the younger "grey" granodiorite is variable in texture, siliceous granite, granodiorite and quartz diorite. Zenoliths, phenocrysts of orthoclase are common characteristics. Regional glaciation in the area is from north to south.

Property Geology

Due to the overburden cover, outcrop is scarce on the claim group west of the 140E tie line. Geological mapping (1"=400') was completed over that portion of the property covered by Noranda's grid east of tie line 140E and north of line 164N, covering an area 9,000'x12,000' centered on the camp site at B.L. 200E-200N. The best rock exposures were found in the southeastern flanks of ridges.

Rock Types

Three variations of granitic rocks predominate:

1. granitic feldspar porphyry
2. medium-grained quartz monzonite to granodiorite
3. fine-grained quartz monzonite to granodiorite.

Feldspar porphyry is characterized by pinkish, subhedral potash feldspar phenocrysts up to 1 inch long. The medium-grained

groundmass is composed of plagioclase (25-35%), potash feldspar (20-30%), quartz (15-25%) and mafics (10-25%). Biotite is the main mafic mineral with subordinate pyroxene sometimes present. Sphene, magnetite and pyrite are accessory minerals. Feldspar porphyry with abundant phenocrysts grades through porphyry with only rare phenocrysts to coarse-grained inequigranular granites of similar composition. Inclusions of fine-grained basic clots rich in biotite and plagioclase (altered zenoliths) are fairly common.

Light coloured medium-grained rocks grade from quartz monzonite to granodiorite composed of plagioclase(30-45%), potash feldspar (20-35%), quartz (30%), biotite and subordinate pyroxene (less than 3%), and magnetite (accessory). In general, mafic minerals are much less common in the medium-grained rocks than in the porphyry described in the previous paragraph. Texture is uniformily allotriomorphic-granular with average grain size approximately 0.1 inches.

Fine-grained quartz monzonite/granodiorite is distinguished from medium-grained quartz monzonite/granodiorite by grain size only. The composition and texture are very similar (except for grain size), i.e. quartz-rich, mafic-poor, allotriomorphic-granular rocks with grain size in the order of 0.02 inches.

Distribution and Relationships

Mapping was complicated by numerous rock type changes over short distances.

All three rock types described previously are found on all parts of the mapped area, however, some generalizations can be made. In the eastern portion of the grid (magnetically high), feldspar porphyry and coarse-grained inequigranular granite are the main rock types over large areas of outcrop. In the west and south central areas, outcrops of both feldspar porphyry and medium-grained quartz monzonite/granodiorite are found with contacts generally trending N-S to NE-SW. These are cut by fine-grained dykes. Two sizeable areas where medium and fine-grained rocks predominate and porphyry is conspicuously absent are 1) 188-198N, approx. 198-202E and 2) 228-244N, 200-218E.

There is conflicting evidence regarding the time sequence of medium-grained quartz monzonite/granodiorite and feldspar porphyry. Porphyry dykes cut medium-grained rocks near the hand trench showing (286N, 202+50E). Feldspar porphyry contains rare inclusions of medium-grained quartz monzonite/granodiorite in core from DDH CM-1. These relationships suggest that the porphyry is younger than the medium-grained rocks. At other locations however (e.g. DDH CM-1 and cliff between lines 180-188N at 224E), medium-grained dykes cut porphyry. At base line 200E, 170-180N, medium-grained and porphyritic rocks occur as thick alternating "beds". It is probable that the medium-grained quartz monzonite/granodiorite and the feldspar porphyry evolved contemporaneously over a period of geologic time.

Fine-grained dykes cut both medium-grained quartz monzonite/granodiorite and feldspar porphyry and appear to be a late phase.

Speculations on Origin of the Granitic Rocks

Some geological features are present at Cro-Mur that suggest a metamorphic origin (granitization) for at least part of the rocks.

1. Hetrogeneous nature of outcrops with large scale composition layering, i.e. alternating thick bands of feldspar porphyry and medium-grained quartz monzonite/granodiorite.
2. Small scale composition layering; alternating felsic and mafic streaks.
3. Inclusions and clots of dark, basic fine-grained rock (reconstituted zenoliths?) made up of biotite and plagioclase and rare zenoliths of sandstone in feldspar porphyry.
4. Local crude foliation of mafics and allignment of feldspar "phenocrysts" in feldspar porphyry.
5. Plagioclase rimming some microcline "phenocrysts".
6. Elongated soil anomalies (Mo, WO_3) roughly parallel to the trend of geologic contacts and major joints.
7. Partially granitized sediments surrounded and embayed by granitic rock at one location approximately 5 miles east of camp near the access road on the switchback section. Here dark, fine-grained unaltered sandstone grades into coarse-grained granitic rock over approximately 30 feet. Partially metamorphosed sediments are layered and granitic rocks are foliated.

Some of the above observations can be explained by assimilation of basic wall rock by granitic magma or may be simply contact effects. A granitization of bedded rocks theory seems favourable because of the observed features (i.e., over the entire mapped area and beyond).

"Red granodiorites" (corresponding to "feldspar porphyry" described in this report) are described as part of the Coast Intrusions by Rice in G.S.C. Memoir 243. He concludes from field observations that the red granodiorite is, at least in part, metamorphic and speculates that the porphyritic phase as a whole may be a result of widespread granitization rather than magmatic injection.

Structure

The main structural features include joints and local shear zones. Prominant joints strike N30+10°E, with near vertical dips. A second set strikes N10°W-NS with near vertical dips. Other joint orientations are not consistent except locally but most have strikes between due N and due E with varying dips.

Local shear zones strike NS to N45°E with vertical dips. Shearing results in allignment of mafics and more intense weathering of outcrops. No sulphides other than a normal amount of pyrite were seen in shear zones except at one location (hand trench MoS_2 show - 186N, 202+50E).

Dry N-S trending gulleys may reflect structural features (joints, shears of faults). Some of these (e.g. 184-188N, 170-190E) cut across the height of land in areas of shallow overburden and do not appear to be caused by glaciation or stream erosion.

Mineralization and Alteration

Molybdenite occurs at several locations on the property.

The main showing is exposed by hand trenches at 186N, 202+50E. MoS_2 occurs as plates and scales disseminated throughout the rock with pyrite in sheared ($0^{\circ}/72^{\circ}$) medium and fine-grained granodiorite near a contact with feldspar porphyry to the east. The mineralized zone (0.1% MoS_2) is about 55 feet long with an average width of 10 feet. The host rock, notably the fine-grained granodiorite, is locally moderately silicified and weathered to a light brown colour.

Minor isolated occurrences of molybdenite are found at:

1. 181+20N, 196+70E — traces of MoS_2 at one location only in fine-grained granodiorite; local silicification; iron stain.

2. 191N, 200E — minor spotty disseminated MoS_2 in locally silicified fine-grained granodiorite; iron stain.

3. 193N, 203+75E — disseminated MoS_2 and pyrite in weakly propylitized medium-grained granodiorite; local silicification.

4. 237N, 203+60E — minor disseminated MoS_2 at one location only in locally silicified fine-grained granodiorite; iron stain, hematite stain.

All occurrences of molybdenite seen are in medium and/or fine-grained granodiorite. Mineralization is generally accompanied by silicification of the host rock and iron oxide stain.

Fluorescent minerals are common on the property especially in the hand trench (186N, 202+50E), road trench (immediately north of hand trenches), and helipad (between helipad at 190+20N, 204+60E and road to east) areas. The brightest fluorescence is lime green

(unidentified) and light yellow (powellite). Disseminated minerals fluorescing the blue-white colour of scheelite but lacking in brilliance and clarity are common. Two grab samples taken by J.Knauer from the helipad area assayed in the order of 0.5% WO_3. Follow-up sampling including bulk and grab samples failed to duplicate the original high assays.

Best alteration is in an area referred to as the "pegmetite area" due to the presence of small, spotty, quartz-feldspar pegmatite bodies. This area extends approximately 150 feet west from the trench parallel to the road at 190N, 207+20E. The original texture of the rock has been destroyed by pervasive silicification and moderate propylitic (chlorite, epidote, calcite) alteration.

Elsewhere on the property, alteration is weak and/or very restricted. No extensive quartz veining or stockwork is present.

Geochemical Stream Sediment Survey

All stream sediments were analyzed for copper, zinc and molybdenum in the Noranda Exploration Company, Limited laboratory, located at 1050 Davie Street, Vancouver 5, B.C. The analyst was R.Mower. The samples were analyzed for tungsten in the Bondar-Clegg and Company Limited laboratory, located at 1500 Pemberton Ave., North Vancouver, British Columbia.

Sampling Method

Samples were obtained by collecting the finest transported material available - preferably silt, from the centre portion of the

creek, away from the creek banks. The samples were placed in "hi Wet Strength 3½"x 6 1/8" Open End" envelopes and the sample number and collectors initials marked on the envelopes with indelible felt pen. Stream sediments were taken wherever possible on all main drainages and their tributaries within the claim boundaries. The sample interval varied but was approximately one sample every 500 feet if possible. Sample locations were tied into the grid system.

Laboratory Determination Method

The samples were first placed in a drying cabinet for a period of 24 to 48 hours. The sample material is then screened and sifted to obtain a -80 mesh fraction.

The determination procedure for soluable copper, lead, and zinc is as follows:

0.200 grams of the -80 mesh material is digested with 5 ml. of 0.5 NHCl to a boil for 25 minutes. The sample is brought back to 5 ml. with 0.5 NHCl after cooling. A Varian Techtron Model AA-5 Atomic Absorption Spectrophotometer was used to determine the parts per million copper, zinc and lead content in each sample.

The determination procedure for total molybdenum is as follows: 0.200 grams of the -80 mesh material is digested in 2 ml. of $HClO_4$ and 0.5 ml. of HNO_3 for approximately four hours. Following digestion, each sample is diluted to 5 ml. with demineralized H_2O. A Varian Techtron Model AA-5 Atomic Absorption Spectrophotometer was used to determine the parts per million lead and molybdenum content in each sample.

The theory of Atomic Absorption Spectrophotometer is fully described in the literature and will not be described in this report.

The determination procedure for total tungsten is as follows:

The -80 mesh material is pulverized to obtain a finer fraction (~150). From the finer material 0.200 grams are fused in a sodium carbonate flux. The sample is then subjected to an aqueous leach, homogenized and allowed to settle for 24 hours. Following the 24 hour settling time a 1 ml aliquot is taken and reduced with stannous chloride and complexed with ammonium thiocyanate. The complex is then put into an organic phase and colorimetrically compared with both synthetic and matrix standards.

Presentation of Results

Results of the stream sediment survey are presented in Drawing Nos. 3-13 of this report; plan maps (scale 1"=400') showing copper, zinc, molybdenum and tungsten in parts per million.

Discussion of Results

The majority of the stream sediment results for copper, zinc, lead and tungsten shown on Drawing Nos. 3-13 fall in the background range for these elements. Above background molybdenum values were encountered from four drainage areas within the survey. Area one, located in the central portion of the eastern grid, can be explained by the observation of molybdenum mineralization in outcrop. The second area between 140E and 170E was not explained by detailed geology, however, outcrop is sparse. No source was discovered to explain the high molybdenum stream sediment values in creeks on the western grid. The creeks have manganese coated boulders and gravel,

and possibly the manganese may be scavenging molybdenum from groundwater giving rise to higher than normal values in the stream sediments.

Geochemical Soil Survey

All soils were analyzed for copper, zinc, molybdenum in the Noranda Exploration Company, Limited laboratory, located at 1050 Davie Street, Vancouver 5, B.C. Analyst was R.Mower. The samples were analyzed for tungsten in the Bondar-Clegg and Company Limited laboratory, located at 1500 Pemberton Ave., North Vancouver, B.C.

Sampling Method

Samples were obtained by digging holes with a shovel to a depth when feasible where the visible C horizon or sub-outcrop was encountered. The B and C horizons were sampled where horizon development could be distinguished. Where this was not possible or if on bedrock with very little soil only one sample of the best material available was taken. The samples were placed in "Hi Wet Strength Kraft 3½"x 6 1/8" Open End" envelopes and the grid station was marked on the envelopes with indelible felt pen. Soil samples were taken at 200 foot intervals along the grid lines.

Laboratory Determination Method

The samples are first placed in a drying cabinet for a period of 24 to 48 hours. The sample material is then screened and sifted to obtain a -80 mesh fraction.

The determination procedure for total copper, zinc and molybdenum is as follows:

0.200 grams of the -80 mesh material is digested in 2 ml. of $HClO_4$ and

0.5 ml. of HNO_3 for approximately four hours. Following digestion, each sample is diluted to 5 ml. with demineralized H_2O. A Varian Techtron Model AA-5 Atomic Absorption Spectrophotometer was used to determine the parts per million copper, lead, zinc, and molybdenum content in each sample.

The Theory of Atomic Absorption Spectrophotometer is fully described in the literature and will not be described in this report.

The determination procedure for total tungsten is as follows: 0.200 grams of the -80 mesh material is fused in a sodium carbonate flux. The sample is then subjected to an aqueous leach, homogenized and allowed to settle for 24 hours. Following the 24 hour settling time a 1 ml aliquot is taken and reduced with ammonium thiocyanate. The complex is then put into an organic phase and colorimetrically compared with both synthetic and matrix standards.

Presentation of Results

Results of the soil survey are presented in Drawing Nos. 3-13 of this report; plan maps (scale 1"=400') showing copper, zinc, molybdenum and tungsten in parts per million.

Discussion of Results

Background and anomalous values for molybdenum, zinc and copper are as follows:

	Background	Anomalous
Molybdenum	< 2 to 7 ppm	20 - 320 ppm
Zinc	< 10 to 70 ppm	150 - 600 ppm
Copper	< 10 to 30 ppm	75 - 320 ppm

Anomalous values for the above three elements are indicated on Drawings 3-5, 7-9, and 11-13.

Drawings will be discussed separately for the individual elements.

Drawing No.3 Molybdenum

Weak to moderate molybdenum values were encountered on the eastern grid. A NE-SW trend showing narrow somewhat elongated anomalies are developed if the very low order values including some threshold values are considered. There is a similar trend to the rock types in these areas and this may have a direct relationship with certain units containing a slightly higher molybdenum content than others. The area centered around 200E-200N with known molybdenite mineralization was not expanded by the soil survey. The scattered anomalous values and trends were checked by detailed geology indicating no new molybdenite mineralization in any of the exposed outcrop. Many of the higher values occur in seepage areas and may be directly related to an accumulation of molybdenum in the organic material.

Drawing No.4 - Copper

Anomalous copper values near 200E-200N correspond with anomalous molybdenum values. However only a trace amount of chalcopyrite was seen in a trench within this anomaly. An anomaly on lines 180N and 188N between 170E T.L. and the 200 E B.L. cannot be correlated with any known copper mineralization.

Drawing No.5 - Zinc

The zinc anomalies occur north of 220N and have an elongated north-south orientation. The largest anomaly lies east of the 200E B.L. north of 228N. There appears to be no direct relationship

between the high zinc values and the molybdenite mineralization in the central portion of the grid.

Drawing No.6 - Tungsten

Tungsten was run on the soil samples because of its relationship with molybdenum and minor pegmatite dykes noted near the molybdenite showings. A direct correlation was found in some cases between the tungsten and molybdenum values particularly near known mineralization. Tungsten is however one of the hardest elements to obtain reproducable results, therefore check samples were re-run and in many cases different results were obtained. Any interpretation of these results should take this point into consideration as it is felt very little reliabilty can be placed in the plotted results.

Drawing No.7 - Molybdenum

Two anomalous areas occur on the western grid. The largest anomaly lies north of 148N west of the 120E B.L. The second smaller anomaly is on line 140N near the 60 E T.L. The two anomalies lie in areas of swamps, side hill seepage and are void of outcrop. No explanation for the high molybdenum values can be given with the present information.

Drawings No.s 8,9, and 10 - Copper-zinc

No anomalous copper values were indicated and only two zinc values were anomalous on the western grid. The same comments apply to tungsten as were discussed in Drawing No.6.

Drawings 11, 12 and 13

Lines 140N, 148N and 156N are southerly extensions of the eastern grid. The seven scattered molybdenum values were checked and were in areas of little or no outcrop and no mineralization was found. Copper and zinc values all fell within background or threshold ranges.

Mag Survey

Method

Two Scintrex MF-2 fluxgate magnetometers were used to conduct the magnetometer survey.

To obtain a reading, the instrument is levelled with the aid of a levelling bubble, thus ensuring the fluxgate element is vertical, the relative, vertical magnetic intensity is then measured.

The instruments were adjusted prior to the survey so that the average readings, or background were recorded on the most sensitive scale of the instrument. The accuracy is $\pm$ 10%.

Readings were corrected for the diurnal variations of the magnetic field by tying into the base line (200E BL)) as often as possible. The diurnal drift can then be computed graphically and suitable corrections applied to the raw data.

The readings were taken every 100'. Pacing was necessary for every alternate reading as the grid stations were 200' apart.

A total of 112,400 feet were surveyed.

Presentation of Results

A contour map of 1"=400' scale, with a contour interval of 200 gammas is shown on the (enclosed) grid map (Drawing No.14).

Discussion of Results

The magnetic contour map shows a moderate N-S trend particularly in the east half of the grid. A weak gradient of approximately 500γ extends in an east-west direction. The map also shows low amplitude-high frequency changes along the gradient.

The background value is approximately 800γ with a relief of 800γ.

Diamond Drilling

Two diamond drill holes, with a total footage of 1,001 feet were completed on the Lori 3 and Lori 4 claims during the period extending from August 21, 1974 to September 6, 1974. Drilling was under contract to H.Allen Diamond Drilling Limited, Box 1397, Merritt, British Columbia. A B.B.S-1 Diamond Drill with BQ wireline equipment was used to bore the holes.

Drill core is stored in wooden boxes, placed in a rack at the Noranda campsite located on the Lori 2 mineral claim.

Concluding Remark

Upon completion of the programme described in this report, the Cro-Mur property was returned to Cro-Mur Mining and Exploration by Noranda Exploration Company, Limited (No Personal Liability).

James D.Knauer
Geologist/Geochemist

SEP 9 1974

9 1974

Chro-Mer

Contract ~~Chromium~~ Property

Between: NORANDA EXPLORATIONS CO. LTD.,
1050 Davie Street - P.O. Box 2380,
Vancouver, B.C.

(Hereinafter referred to as the "COMPANY" of the First Part.)

And: H. ALLEN DIAMOND DRILLING LTD.,
Box 1397,
Merritt, B.C.

(Hereinafter referred to as the "CONTRACTOR" of the Second Part.)

A. THE CONTRACTOR COVENANTS AND AGREES:

1. That all holes shall be drilled with BQ wireline equipment providing a core approximately 1 7/16" in diameter.

2. That the Contractor shall use his best endeavour to complete all holes according to the wishes of the Company, but should rock conditions prevent successful completion of the hole, the Contractor is not obliged to complete the same, but shall be paid for such incomplete holes at contract rates for the completed footage.

3. Contractor supplies his own transportation and accomodation.

4. Contractor will not charge for moving between drill sites up to a distance of 1000 ft., moves beyond this distance charged at cost.

B. THE COMPANY COVENANTS AND AGREES:

1. That payment for the herein described work shall be $8.50 per foot for core drilling and $12.00 per foot for drilling overburden.

2. Cementing drill holes will be charged to the Company at cost plus 10%. Cost of labour being union rates. Cost of equipment rental during cementing $20.00 per day.

Contract - Chromium property continued.....

B. 3 Casing which is non-recoverable charged to the Company.

4. Cost of moving drill equipment in and out of this job will be $250.00.

5. The Contractor will supply a small cat for prepairing drill sites and moving equipment. Cost of supplying this cat charged to the Company.

IN WITNESS WHEREOF these presents have been executed by the parties hereto, this_____ day of_____, A.D. 1974.

NORANDA EXPLORATIONS CO. LTD. H. ALLEN DIAMOND DRILLING LTD.

_____ _____

_____ _____

APPENDIX A

Drill Logs and Assay Certificates

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 1 of 9 Hole No. CM-1

Core Size: BQ

Lat. 190+11N	Elev.	Dip -45°	Collared Aug.21/74	Logged by Fairbank/Knauer
Dep. 207+07E	Depth 497'	Bearing 270°	Completed Aug.25/74	

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3
0-7		overburden							
7-20	90%	silicified granitic feldspar porphyry(?) -light grey green -pervasive moderate silicification obscures original texture -weak to moderate propylitic alt'n. (chlorite, epidote, calcite), mafics partially chloritized. -biotite, pyroxene less than 5%	Si, Ep	-weathered (iron oxide) to 28 feet -fragmented, moderately fractured pyrite disseminated and on fractures, minor disseminated magnetite, traces of very fine disseminated MoS_2	0.1 py tr MoS_2	7-20 P7001	13'	0.007	tr
20-30	95%	21-24 coarse felsic sectn. rare fine-grained mafic inclusions (plag-40%, biotite 60%)	Si, Ep, Chl	minor pyrrhotite	.15 py tr MoS_2	20-28 P7002	8'	0.005	0.01
30-40	100	34-40 local secondary biotite	Si, Ep, Chl	32 pyrite disseminated	.15 py tr MoS_2	28-37.5 P7003	9.5'	0.011	0.01
40-50	100		Si, Chl, Ep		.15 py tr MoS_2	37.5-47 P7004 47-56	9.5'	0.003	tr
50-60	97%		Si, Chl, Ep	minor pyrrhotite 56-66 rock fragmented, minor manganese on fractures	.15 py	P7005 56-65	9'	0.001	tr

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR | Sheet No. 2 of 9 | Hole No. CM-1

Project No. 43-J | N.T.S. 92H/9E | Core Size: BQ

Lat. 190+11N | Elev. | Dip -45° | Collared Aug.21/74 | Logged by: Fairbank/Knauer

Dep. 207+07E | Depth 497' | Bearing 270° | Completed Aug.25/74

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3
0-70	100	63-66 strong propylitic alt'n(fine-grained chlorite,calcite). feldspar kaolinized.	Si Ca Chl Ep	63-66 decrease in pyrite over chloritized sectn. pyrite disseminated and on fractures	tr py -	P7006 65-73.5 P7007	9' 8.5	0.001	tr
0-80	100	72 feldspar porphyry.pink k-spar phenocrysts to 1" length mafics (biotite, pyroxene) to 20%	Bi Si		.15 py tr	73.5-83		0.005	0.01
		72-78 secondary biorite? 78-86 partially silicified			MoS_2	P7008	9.5	0.007	0.01
0-90	100	feldspar porphyry(as above) 81.5-83 fresh leucocratic equigranular medium-gr. granodiorite	Bi Ep	pyrite disseminated.Only rate fractures	.1 py -	83-92.5 P7009	9.5		
		86-90 minor epidote with pyrite secondary biotite?	Chl						
0-100	100	92 feldspar porphyry -local weak to mod.silicification			.1 py	92.5-102 P7010		0.007	0.01
		-weak chlorite,epidote -mafic biotite and subordinate pyroxene to 15% partially chloritized			-				
00-110	100		Si Chl	minor pyrrhotite, magnetite	.1 py	102-111.5 P7011	9.5		

NORANDA EXPLORATION CO. LTD.

Property: CRO-MUR | Sheet No. 3 of 9 | Hole No. CM-1

Project No. 43-J N.T.S. 92H/9E | Core Size: BQ

Lat.	Elev.	Dip	Collared	Logged by: Fairbank/Knauer
Dep.	Depth	Bearing	Completed	

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	WO_3		
110-120	100		Si, chl	tr magnetite fine-grained pyrite mainly disseminated, minor py on fractures. 116	tr py -	111.5 -121 P7012	9.5				
120-130	100	120 silicified feldspar porphyry -pervasive silicification obscures original texture	Si, chl, ep	Minor tight fracturing. minor magnetite 129 fragmented sections,	.1 py	121-130.5					
		(chlorite, epidote) -light grey-green, mafics chloritized		local manganese stain & oxidation on fractured surfaces. tr molybdite?	-	P7013	9.5	0.001	0.01		
130-140		accessory sphene 137-141 aplitic and megnetitic fragments	Si, chl, ep	disseminated pyrite 137-141 rock fragmented 2' core missing	.1 py -	130.5 -141 P7014	10.5				
140-150		147 fine-gr. leucocratic aplitic granodiorite - 3% mafics (biotite) chloritized - partially silicified	Si, chl, ep	141 disseminated pyrite 147 well fractured, tr. fine-gr disseminated MoS_2 and pyrite	.01 py tr MoS_2 tr py tr MoS_2	141-151 P7015 151-159 P7016	10' 8'	0.054	0.01		
160-170	90%	fine-gr. leucocratic granodiorite -light grey -weak silicification	Si	well fractured (clean fractures) 166 dendritic pyrolusite	tr py	159-170 P7017	11'				
170-180	95%	169 weak kaolinite	Si, Kao	170 rock fragmented 174 minor iron oxide, mangenese on some fr. surfaces	tr py	170-180 P7018	10'				

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 4 of 9 Hole No. CM-1

Core Size: BQ

Logged by: Fairbank/Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
180-190	95%	184 fresh fine-gr leucocratic granodiorite - light grey -mafic biotite less than 2%		183	tr py -	P7019	10'	0.001	0.01		
190-200	90%	193 fine-gr.granodiorite - very weak kaolinite		193 rock fragmented, manganese, iron oxide, minor yellow oxide on fracture surfaces	tr py -	P7020	10'				
200-210	100	203-207 weak silicification 207 feldspar porphyry quartz up to 25% is smoke grey -feldspars up to 75% are tinted light green (saussuritized) -~~mafics (biotite, pyroxene~~ less than 5% -minor brown garnet (fine-grained)		204 moderately fractured 207 disseminated pyrite	tr py -	P7021	10'				
210-220	100				.1 py	P7022	10'	0.004	0.01		
220-230	100	223 feldspar porphyry - quartz smoky grey -feldspars fresher (local weak saussuritization) -mafics less than 10% -minor brown garnet (fine-grained)		222 rock competent (not fractured)	.05 py -	P7023	10'				
230-240	100				tr py -	P7024	10'				

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR

Project No. 43-C N.T.S. 92H/9E

Sheet No. 5 of 9 Hole No. CM-1

Core Size: BQ

Logged by: Fairbank/Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
240-250	100	FELDSPAR PORPHYRY(pheno-crysts to lin) -quartz to 20%,greasy and/ or smoky grey	Sa	fractures 1/1-2 ft. pyrite, chlorite on some fractures, disseminated pyrite	- tr py	P7025	10'	0.001	tr		
		-feldspars 70%,local weak saussuritization -mafics(biotite,pyroxene) 10%									
250-260	100	251-256 medium grained equigranular leucocratic quartz monzonite to granodiorite			- tr py	P7026	10'				
260-270	100	264 3" medium grained quartz monzonite to granodiorite		264 iron oxide over 2" fracture zone	- tr py	P7027	10'				
270-280	100	270 fine grained,sugar textured,leucocratic granodiorite		270 moderately fractured (1-3/ft)iron oxide, manganese on some fractures.Pyrite diss-							
				iminated,rare very fine gr. disseminated MoS_2 ? and magnetite	tr MoS_2 .05 py	P7028	10'	0.001	tr		
280-290	70%	287 tube didn't lock 10' of core missing		287 285-287 well fractured tube didn't lock, 10' of core missing	tr MoS_2 .05 py	P7029	10'				
290-300	30%	297 FELDSPAR PORPHYRY (as above) see 240'		297 competent rock; minor fractures, pyrite in fractures & disseminated rare very fine magnetite	- tr py	P7030	10'				

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Property CRO-MUR | Sheet No 6 of 9 | Hole No. CM-1

Project No. 43-C N.T.S. 92J/9E | Core Size: BQ

Lat. | Elev. | Dip | Collared | Logged by: Fairbank/Knauer

Dep. | Depth | Bearing | Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
0-310	97%	- minor intermingled small areas of med.grained granodioritic rock(40% qtz,50%plag)	Sa	307 iron oxide on fractures	- .05 py	P7031	10'	0.001	tr		
		306-309.5 fine-gr.leucocratic granodiorite.weak saussuritization of feldspar									
0-320	100	assessory garnet	Sa	315 1 foot fracture zone, iron oxide,manganese on fractures	- .05 py	P7032	10'				
0-330	100	FELDSPAR PORPHYRY -weak saussuritization gradational change to: 327 FELDSPAR PORPHYRY(fresh)	Sa	Competent rock, minor fracturing.Local vague alignment of mafics(in consistent) Minor pyrite mainly		P7033	10'				
0-340		-pink K-spar phenocrysts to 1" -medium grained groundmass(qtz 15%,plag 40%,		disseminated with minor epitote. Tr.Magnetite.	.1 py -	P7034	10'	0.001	tr		
		K-spar 30%,biotite 15%) -minor intermingled areas medium gr.mafic poor, QUARTZ MONZONITE to									
0-350	100	GRANODIORITE			.05 py -	P7035	10'				
0-360	85%	357.5 med.gr.leucocratic, fresh(biotite approx.2%) QUARTZ MONZONITE		357.5 minor pyrrhotite, magnetite moderately fractured	.05 py -	P7036	10'				

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR

Project No. 43-C N.T.S. 92H/9E

Sheet No. 7 of 9 Hole No. CM-1

Core Size: BQ

Logged by: Fairbank/Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
360-370	90%	361.5 fresh FELDSPAR PORPHYRY 367 med.gr.leucocratic, fresh QTZ MONZONITE		minor magnetite disseminated pyrite confined to PORPHYRY	tr py -	P7037	10'	0.001	tr		
370-380	95%	-light grey, pink -equigranular -quartz 30% K-spar 35%, plag 35%, biotite less than 2% 380-385 weak kaolinite		trace magnetite	- -	P7038	10'				
380-390	97%	385 FELDSPAR PORPHYRY -relatively fresh local weak saussuritization		380 well fractured trace pyrite(disseminated)	tr py -	P7039	10'				
390-400	50%			minor magnetite(disseminated) tr.pyrite(disseminated) tr very fine MoS_2 ?	tr py tr MoS_2	P7040	10'	0.001	tr		
400-410	97%	FELDSPAR PORPHYRY(fresh) -light grey, med.gr.groundmass -light pink K-spar phenocrysts to 3/4 inches -mafics(biotite, pyroxene) to 15%		Competent rock-minor tight fractures -minor disseminated magnetite, rare pyrite	tr py -	P7041	10'				
410-420					tr py -	P7042	10'				
420-430	100			minor disseminated magnetite and pyrite 1 speck chalcopyrite	tr py -	P7043	10'	0.001	tr		

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 8 of 9 Hole No. CM-1

Core Size: BQ

Logged by: Fairbank/Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3
430-440	100	438.5 med.gr. equigranular, light grey, (leucocratic biotite less than 2%), fresh QUARTZ MONZONITE		438 minor magnetite	tr PY -	P7044	10'	0.004	tr
440-450	100				- -	P7045	10'	0.003	tr
450-460	100				- -	P7046	10'	0.004	tr
460-470	100	463 FELDSPAR PORPHYRY (fresh) as above (400-438.5)		463 minor disseminated magnetite. Pyrite disseminated and on some tight fractures with epidote. MoS_2 on 2 fractures (468-469).	.05 py tr MoS_2	P4047	10'	0.006	tr
470-480	100				.05 py -	P7048	10'	0.005	tr
480-490	100	FELDSPAR PORPHYRY -fresh -light grey medium gr. groundmass -~~light pink K-spar phenocrysts~~ to 3/4 " -mafics (biotite, pyroxene) to 15%		Competent rock - minor tight fractures. - pyrite mainly disseminated with minor epidote, minor disseminated magnetite	.05 py -	P7049	10'	0.009	tr

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Property CRO-MUR

Project No. 43-J N.T.S. 93H/9E

Sheet No. 9 of 9 Hole No. CM-1

Core Size: BQ

Logged by: Fairbank/Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
490-497	100	↓ accessory granet 496-4" of med.gr. leucocratic quartz ↓ monzonite		↓ ↓	tr py -	P7050	7'	0.006	tr		
END OF HOLE											

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Property: CRO-MUR | Sheet No. 1 of 8 | Hole No. CM-2

Project No. 43-J | N.T.S. 92H/9E | Core Size: BQ

Lat. 186+34N	Elev.	Dip -45°	Collared Aug.26/74	Logged by: Fairbank, Knauer
Dep. 204+27E	Depth 504'	Bearing 270°	Completed Sept.6/74	

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3	ASSAYS	ASSAYS
0-12		overburden									
12-20	70%	12-14 med.gr.leucocratic biorite.QUARTZ MONZONITE to GRANODIORITE -iron oxide with some biotite 14 FELDSPAR PORPHYRY - mainly fresh - local crude foliation		Moderately fractured + local weathering of feldspars, biotite to 38' iron oxide, py on fracture surface, disseminated pyrite, fine-gr. minor disseminated magnetite	tr py -	P7051	8'	0.003	tr		
20-30	95%				.05 py -	P7052	10'				
30-40	97%	36 small zenolith of fine-gr.dark rock 38-42 mod.silicification weak propylitic alt'n (chlorite, epidote, calcite)	Si Ch Ep	manganese on some fractures with pyrite and iron oxide	.05 -	P7053	10'	0.004	tr		
40-50	90%	44 med.gr.leucocratic, biorite apprx.4%) QUARTZ ~~MONZONITE~~ - iron oxide from mafics		manganese on some fractures with pyrite and iron oxide ~~no pyrite in medium-gr. section~~	tr py -	P7054	10'				
50-60	90%	55 FELDSPAR PORPHYRY -feldspars tinted green (saussuritized) -mafics (biotite, pyroxene) fresh	Sa	increase in pyrite at 56'	.05 py -	P7055	10'				

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Property: CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 2 of 8 Hole No. CM-2

Core Size: BQ

Logged by: Fairbank/Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
60-70	97%	68 FELDSPAR PORPHYRY -fresh -feldspar phenocrysts to 3/4 inches	Sa	chlorite on some fract. 70 increased competency (1 fract./3 ft)	.05 py -	P7056	10'	0.004	tr		
70-80	100	- mafic biotite, pyroxene up to 20%		Iron oxide on fractures Disseminated py, minor disseminated magnetite	.1 py -	P7057	10'				
80-90	100	FELDSPAR PORPHYRY - mainly fresh, minor epidote with pyrite -some clots of fine-gr.	Bi ?	Fracture density approx. 1-2/3 ft. Minor disseminated magnetite. Py disseminated and on fractures.	.05 py -	P7058	10'				
90-100	100	biotite (secondary) 90-sericite on fracture local crude foliation	Ka Bi ?	85 reddish-orange oxide on fracture 89-90 reddish orange pale yellow oxide, weak dolomite with fractures	.1 py -	P7059	10'	0.004	tr		
100-110	100	local crude foliation	Bi ? Ep	104 iron oxide on fracture surface	.15 py -	P7060	10'				
110-120	97%	113 6" section-med.gr. equigranular GRANITE to QUARTZ MONZONITE	Bi ?	a few pieces of core are slightly heavier than normal	.2 py -	P7061	10'				
120-130	100	126 med.-gr. equigranular leucocratic QUARTZ MONZONITE -mafics (mainly biodite) less than 3% -qtz 35%, K-spar 35% plag 30%		126 fract. density approx. 1/3' decrease in pyrite 126 minor yellow oxide surrounding fine-gr. non-magnetic, metallic mineral (MoS_2)?	.05 py tr MoS_2?	P7062	10'	0.004	tr		

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Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 3 of 8 Hole No. CM-2

Core Size: BQ

Logged by: Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	ASSAYS WO_3		
130-140	100	local slight brn tint (iron oxide- surrounds some mafic grains, and/or diffuse thru rock		135 minor disseminated magnetite	tr py tr MoS_2?	P7063	10'	0.004	tr		
40-150	100			140 rock competent, minor fractures -minor disseminated magnetite	- -	P7064	10'				
50-160	100				- -	P7065	10'				
60-170	100	Medium gr. equigranular leucocratic qurtz monz. mafics (mainly biotite. less than 3%, quartz 35%, K-spar 35%, plag 30% Local slight brown tint (iron oxide?) diffuse throughout rock/chlorite on fracture		Minor pyrite on fractures with iron oxide and manganese minor disseminated magnetite chlorite on some fractures	tr py -	P7066	10'	0.003	tr		
70-180	100				tr py -	P7067	10'				
80-190	100			decrease in iron oxide. no pyrite visible	- -	P7068	10'				
90-200	100			Increase again at 191' in iron oxide manganese and minor pyrite on fractures. Also chlorite, magnetite dis. and on fractures	tr py -	P7069	10'	0.003	tr		

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Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 4 of 8 Hole No. CM-2

Core Size: BQ

Logged by: Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS Mo	WO_3		
0-210	98%			Increased fracturing, fragmented 203-206½	-	P7070	10'				
0-220	98%				-	P7071	10'				
0-230	98%	Minor sericite at 228' possibly on some fract.	Si	Slight increase in pyrite	tr py -	P7072	10'	0.003	tr		
0-240	97%	232.4'-234' small feldspar porphyry dyke sericite and secondary biotite chlorite iron stain & pyrite	Si Bi	tr. pyrite 232.4'-234' increased fracturing fragmented 234-237½'	tr py -	P7073	10'				
0-250	100	Med. gr. equigranular leucratic qtz monzonite mafics (mainly biotite) less than 3% with a few minor variations	Si Bi	Less magnetite, minor iron oxide and some manganese on fractures chlorite on fractures 246-247' intense fractures	-	P7074	10				
0-260	97%	Local slight brown tint (iron oxide) thru 255' diffuse through chlorite possibly some qtz on minor fract. some minor secondary biotite poss. sericite on fract. & diss. (weak propylitic alt'n)	Si Bi		tr py -	P7075	10				

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Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 5 of 8 Hole No. CM-2

Core Size: BQ

Logged by: Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS
260-270	98%	(weak propylitic alt'n) stronger alt'n beginning 266-270 chlorite & biotite sericite kaolin	Si Si	More intense fracturing 266-270' (loss of iron oxide on fractures	- -	P7076	10'	
270-280	100	Alt'n beginning at 266' ends at 273' rock becomes more fresh less fracturing		(intense fracturing ends at 273'.Only chlorite on fractures after 273' plus kaolin	- -	P7077	10'	
280-290		Kaolin and chlorite on fractures			- -	P7078	10'	
290-300	85%				- -	P7079	10'	
300-310	15%	Either intensely fract. from 301-313 or tube didn't lock.starting 301 rock more altered	Si ?	fault? 301-313	- -	P7080	10'	
310-320	90%	plag.green very obvious thu 319 then rock more fresh with only minor alt'n on fractures	Si		tr py -	P7081	10'	
320-330	100	Med.gr.equigranular leucocratic qtz monz.mafics (mainly biotite)less than 3% often less than 2% loc.	Si Si	trace magnetite chlorite on fractures	- -	P7082	10	
		alt'n of plagioclase(greenish)chl.on fractures minor kaolin,possibly some sericite and biotite						

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Property: CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 6 of 8 Hole No. CM-2

Core Size: BQ

Logged by: J. Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS
330-340	100	5"pegmetite dyke at 229' (sericite, K-feldspar, sec. biotite) some fractures 1/8" qtz veins	Si, Bi	trace of pyrite 338-340'	tr py -	P7083	10'	
340-350	100	more alt'n 345-348' minor sericite, sec. biotite and incr. in chlorite	Si, Bi	evidence of small shear at 346'. More fractures 346-348'	tr py -	P7084	10'	
350-360	100	weak propylitic alt'n	Si, Bi	pyrite on fractures and disseminated, more chlorite	tr py -	P7085	10'	
360-370	100	361-366' shearing heavier chlorite, rock greenish color	Si, Bi	chlorite on fracture and disseminated	- -	P7086	10'	
370-380	50%	373-380' poor recovery possible shear zone	Si, Bi		- -	P7087	10'	
380-390	98	minor 1/16-1/8" qtz veins in fractures	Si, Bi		- -	P7088	10'	
390-400	100	decrease in chl. rock has lost green appearance	Si, Bi	decrease in chlorite	- -	P7089	10'	
400-410	100	med.gr.equigranular leucocratic qtz monz. mafics (mainly biotite) less than 3% often less than 2%.	Si, Bi	pyrite and magnetite disseminated and on fr. Hematite? questionable trace of Mo. Chlorite	1-2% py tr MoS_2	P7090	10'	

NORANDA EXPLORATION CO. LTD.

Property CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 7 of 8 Hole No. CM-2

Core Size: BQ

Logged by: J.Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS
400-410 cont'd		Localized altn' of plag. (greenish) chl in fract. minor kaolin. some sericite & sec. biotite on fractures & disseminated.		on fractures and disseminated				
410-420		weak propylitic alt'n	Si, Bi,	Magnetite disseminated and on fratures pyrite in 1/8" qtz veins. chl same as above	tr py -	P7091	10'	
420-430	100		Si, Bi,	Magnetite and chlorite same as above	- -	P7092	10'	
430-440	99	a few minor 1/8" veins on fractures	Si, Bi,		- -	P7093	10'	
440-450	90	small shear 444-445	Si, Bi,	trace pyrite	tr py -	P7094	10'	
450-460	90	broken from 455½-459' poss. tube didn't lock	Si, Bi,	trace pyrite	tr py -	P7095	10'	
460-470	78	broken from 460½ 467 poor recov. may be tube again. 6" at 467-467½	Si, Bi,		- -	P7096	10'	
470-480	98	incr. fresh biot. 6" incr. chlorite & biotite. 470'-470½'	Si, Bi,		- -	P7097	10'	

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Property: CRO-MUR

Project No. 43-J N.T.S. 92H/9E

Sheet No. 8 of 8 Hole No. CM-2

Core Size: BQ

Logged by: J.Knauer

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS
480-490	30	med.gr.equigranular leucocratic qtz monz.mafics(mainly biotite)less than 2%. Localized alt'n.plagioclase	Si Bi	chlorite & magnetite appears to be starting into fault at 481 very broken hardly any recovery thru 490	- -	P7098	10'	
		(greenish)chlorite in fract. minor kaolin.some sericite & sec.biotite on fract. & disseminated						
490-500	40	fault thru 501'.guage and no recovery 498' change of rock type to feldspar porphyry	?	poor recovery	- -	P7099	10'	
500-504	98	feldspar porphyry pink K-spar phenocrysts to incl. mafics (biotite,pyroxene, 20-30%.Zenoliths of fine-grained dark rock.biotites fresh?chlorite,epidote around pyrite (saussuritized)	cl Si Bi ?	pyrite on fractures and disseminated trace of chalcopyrite.chlorite on fractures.magnetite	py 2%+ tr Cu -	P7100	10'	
		END OF HOLE						

To: Nanda Explorations Co.

PAGE No. 1

REPORT No A24 - 636

DATE: Sept. 4, 1974

BONDAR-CLEGG & COMPANY LTD.

CERTIFICATE OF ASSAY

Box 2380
Vancouver, B. C. V6B 3W7

Samples submitted: Aug. 30, 1974
Results completed: Sept. 4, 1974

I hereby certify that the following are the results of assays made by us upon the herein described core samples.

MARKED	GOLD		SILVER	Mo	WO_3						TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
P 7001				0.007	trace						
7002				0.005	0.01						
7003				0.011	0.01						
7004				0.003	trace						
7005				0.001	trace						
7006				0.001	trace						
7007				0.005	0.01						
7008				0.007	0.01						
7010				0.007	0.01						
7013				0.001	0.01						
7016				0.054	0.01						
7019				0.001	0.01						
7022				0.004	0.01						
7025				0.001	trace						
7028				0.001	trace						
7031				0.001	trace						
7034				0.001	trace						
7037				0.001	trace						
7040				0.001	trace						
7043				0.001	trace						

Registered Assayer, Province of British Columbia

To: (randa

PAGE No. 1

REPORT No A74 - 657

DATE: Sept. 6, 1974

BONDAR-CLEGG & COMPANY LTD.

CERTIFICATE OF ASSAY

Box 2380
Vancouver, B.C.
V6B 3W7

Samples submitted: Sept. 3/74
Results completed: Sept. 6/74

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Mo	WO_3						TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
P 7044				0.004	trace						
7045				0.003	trace						
7046				0.004	trace						
7047				0.006	trace						
7048				0.005	trace						
7049				0.009	trace						
7050				0.006	trace						
7051				0.003	trace						
7053				0.004	trace						
7056				0.004	trace						
7059				0.004	trace						
7062				0.004	trace						
7063				0.004	trace						
7066				0.003	trace						
7069				0.003	trace						
7072				0.003	trace						

Registered Assayer, Province of British Columbia

APPENDIX B

Statement of Costs

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: CRO-MUR

TYPE OF REPORT: Geology

(a) Employees: B Fairbank, G. Fenton, N. Hopkins, J. Knauer, L. Reinertson G. Robertson, J. Saunders
Number of days: 89
Dates worked: Between June 3 and Aug 28, 1974

(b) Average cost per day $ 49.14
Total cost $49.14 X 89 $ 4,373.46

(c) Cost of food & accomodation $ 930.26

(d) Cost of transportation
i. During work period
type: Truck
cost: 347.42
ii. To and from Claims from within B.C.
cost: 700.99 1,048.41

(e) Cost of aircraft
i. Fixed wing:
ii. Helicopter: 1,872.40 1,872.40

(f) Cost of instruments
i. Rental:
ii. Supplies

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation: 150.00

(i) Other: Rock Assay 1,276.00
Radio Communications 55.35
Camp Supplies & Equip. 251.53 1,682.88

TOTAL $10,057.41

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: CRO-MUR

TYPE OF REPORT: Diamond Drilling

(a) Employees: B. Fairbank, J. Knauer, S. Ritchie
Number of days: 32
Dates worked: Between Aug 21 and Sept 6, 1974

(b) Average cost per day $ 38.26
Total cost $ 38.26 X 32 — $ 1,224.32

(c) Cost of food & accomodation — $ 318.45

(d) Cost of transportation

i. During work period
type: Truck
cost: 439.28

ii. To and from Claims from within B.C.
cost: 10.10 — 449.38

(e) Cost of aircraft

i. Fixed wing:

ii. Helicopter:

(f) Cost of instruments

i. Rental:

ii. Supplies

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation: 150.00

(i) Other:

H. Allen Diamond Drilling	-	10,549.00
Hobbs - re drill setups	-	1,305.00
Robson re cot rental	-	657.50
Nor-Mar- 70E-Water haulage	-	281.90
Drill Supplies	-	99.02

12,892.42

TOTAL $15,034.57

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: CRO-MUR

TYPE OF REPORT: Geophysics

(a) Employees: L. Bradish, G. Fenton
Number of days: 16
Dates worked: Between July 16 and July 31, 1974

(b) Average cost per day $ 34.11
Total cost $ 34.11 X 16 $ 545.76

(c) Cost of food & accomodation $ 267.46

(d) Cost of transportation
i. During work period
type: Truck
cost: 27.20

ii. To and from Claims from within B.C.
cost: 27.20

(e) Cost of aircraft
i. Fixed wing:
ii. Helicopter:

(f) Cost of instruments
i. Rental: 100.00
ii. Supplies 100.00

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation: 100.00

(i) Other:

TOTAL $1,040.42

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: CRO-MUR

TYPE OF REPORT: Line Preparation

(a) Employees: G. Fenton, R. Gourley, N. Hopkins, M. Lewis, G. Robertson
Number of days: 48
Dates worked: Between June 28 and July 31, 1974

(b) Average cost per day $ 25.02
Total cost $ 25.02 X 48 $ 1,200.96

(c) Cost of food & accomodation $

(d) Cost of transportation
i. During work period
type: Truck
cost: 25.80

ii. To and from Claims from within B.C.
cost: 25.80

(e) Cost of aircraft
i. Fixed wing:
ii. Helicopter:

(f) Cost of instruments
i. Rental:
ii. Supplies 287.15 287.15

(g) Cost of geochem analysis (details attached):

(h) Cost of report preparation:

(i) Other: Flogging 192.89 192.89

TOTAL $1,706.80

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Cro - Mur

TYPE OF REPORT: Geochem

(a) Employees: B.Fairbank. G. Fenton, R. Gourley, H. Hopkins, M. Lewis, G.Robertson, I. Saunders
Number of days: 105
Dates worked: Between Jun 23 and Aug 30, 1974

(b) Average cost per day $ 23.55
Total cost $23.55 X 105 $ 2,472.75

(c) Cost of food & accomodation $ 333.08

(d) Cost of transportation
i. During work period
type: Truck
cost: 167.95

ii. To and from Claims from within B.C.
cost: 341.64 509.59

(e) Cost of aircraft
i. Fixed wing:
ii. Helicopter: 542.76 542.76

(f) Cost of instruments
i. Rental:
ii. Supplies

(g) Cost of geochem analysis (details attached): 4,557.40

(h) Cost of report preparation: 100.00

(i) Other:

TOTAL 8,515.58

NORANDA EXPLORATION COMPANY, LIMITED

(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT: CRO-MUR

	ELEMENT	NO. OF DETERMINATIONS	COST PER DETERMINATION	TOTAL
NORANDA LAB	Cu	1723	$0.75	$1,292.25
	Zn	1723	0.15	258.45
	Mo	1723	0.15	258.45
	Pb	135	0.15	20.25
	W	100	2.00	200.00
COMMERCIAL LAB	W	984	2.50	2,460.00
		68 sample preparations	1.00	68.00
				$4,557.40

APPENDIX C

Statement of Qualifications

STATEMENT OF QUALIFICATION

I, James D. Knauer of the City of Vancouver, Province of British Columbia, do certify that:

1. I have been an employee of Noranda Exploration Company, Limited since August, 1964.
2. I am a graduate of the University of New Mexico with a Bachelor of Science Degree in Geology.
3. I am a member of the Geochemical Society, the Canadian Institute of Mining and Metallurgy and the Association of Exploration Geochemists.
4. I have held the position of Geologist/Geochemist for Noranda Exploration Company, Limited since August 1964.

James D. Knauer
Geologist/Geochemist
Noranda Exploration Company, Limited
(No Personal Liability)

STATEMENT OF QUALIFICATIONS

I, Brian Fairbank of the City of Vancouver, Province of British Columbia do certify that:

1. I have been employed as a geologist by Noranda Exploration Company, Limited since May, 1973.

2. I am a graduate of the University of British Columbia with a Bachelor of Applied Science in Geology (1973).

3. I am a member of the Canadian Institute of Mining and Metallurgy.

Brian Fairbank

Brian Fairbank
Geologist
NORANDA EXPLORATION COMPANY, LIMITED
(No Personal Liability)

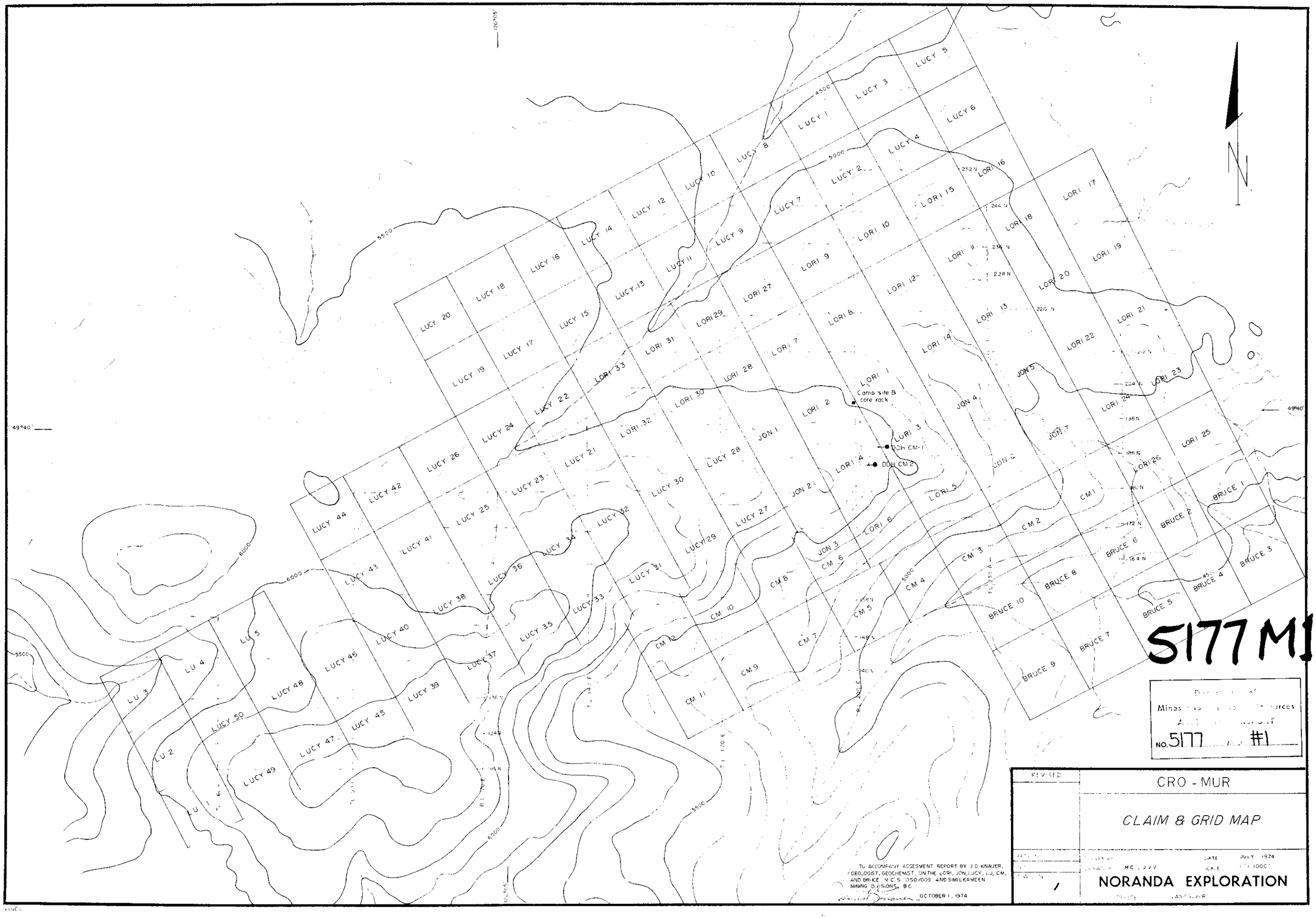
STATEMENT OF QUALIFICATION

I, Lyndon C. Bradish of the City of Vancouver, Province of British Columbia, do certify that:

1. I have been an employee of Noranda Exploration Company, Limited since May, 1973.
2. I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geophysics.
3. I am a member of the Canadian Institute of Mining and Metallurgy.
4. I have held the position of Geophysicist for Noranda Exploration Company, Limited since May, 1973.

L. Bradish

L.Bradish
Geophysicist
Noranda Exploration Company,Limited
(No Personal Liability)



5177 M1

Mines ... Resources
... Branch
No. 5177 #1

REVISED

CRO - MUR

CLAIM & GRID MAP

DATE JULY 1974
SCALE 1" = 1000'
DRAWN H.C., J.V.V.

NORANDA EXPLORATION

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S 050/005 AND SIMILKAMEEN MINING DIVISIONS, B.C.

OCTOBER 1, 1974

LEGEND

Rock outcrop area

Gulley

Stream

Road and/or trench

Claim post

Helicopter landing

GEOLOGY

Feldspar porphyry and/or coarse grained inequigranular granite.

Medium and/or fine grained leucocratic quartz monzonite to granodiorite

Shear, fracture (inclined, vertical)

Joint (inclined, vertical, 3D attitude)

MoS2 mineralization (outcrop, float)

200E BL

L 252 N

L 244 N

L 236 N

L 228 N

L 220 N

L 212 N

L 204 N

L 196 N

L 188 N

L 180 N

L 172 N

L 164 N

140E TL

170E TL

200E BL

230E TL

260E TL

N

camp & core rock

CP No 1, LORI 3,4
No 2, LORI 1,2

CP No 2, RAM 9

CP No 1, JON 2
No 2, JON 1

DDH CM-1

DDH CM-2

CP No 1, ANN 5,6
No 2, ANN 3,4

hand trenches

CP No 1, LUCY 27,28

CP, ANN FR 3

CP No 1, JON 3
No 2, JON 2

CP No 1, LUCY 29,30
No 2, LUCY 27,28

CP No 1, ANN 37,38

CP No 1, LUCY 31,32
No 2, LUCY 29,30

CP No 1, CM 5,6
No 2, CM 4

CP No 1, BRUCE 9,10
No 2, BRUCE 7,8

CP No 2, BRUCE 9,10

CP No 1, BRUCE 5,6

CP No 1, BRUCE 7,8
No 2, BRUCE 5,6

TO ACCOMPANY ASSESSMENT REPORT BY J.D KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LOR, JON, JOY, LU, CM, ANC, BRUCE NO. 2 CLAIMS AND SIM LIKAMEEN MINING DIVISIONS, B.C.

OCTOBER 1, 1974

Department of Mines and Petroleum Resources
Assessment Report
NO. 5177 map #2a

5177

M2a

REVISED	CRO – MUR
	GEOLOGY
	Magnetic Declination - 22°
	PROJECT:
PROJ. Nº 43	SURVEYED BY: J.K., B.F. DATE: JULY 1974
N.T.S. 92H/9E	DRAWN BY: SCALE: 1" = 400'
DWG. Nº 2	NORANDA EXPLORATION CO. LTD.
	OFFICE: VANCOUVER

LEGEND

Rock outcrop area

Gulley

Stream

Road and/or trench

■ C.P. Claim post

□ H.P. Helicopter landing

GEOLOGY

Feldspar porphyry and/or coarse grained inequigranular granite.

Medium and/or fine grained leucocratic quartz monzonite to granodiorite

60 Shear, foliation (inclined, vertical)

60 Joint (inclined, vertical, dip unknown)

x e MoS_2 mineralization (outcrop, float)

200 E BL

L. 252 N

L 244 N

L. 236 N

L 228 N

L 220 N

L 212 N

L 204 N

L 196 N

L 188 N

L 180 N

L 172 N

L 164 N

140E TL

170E TL

200E BL

230E TL

260 E TL

N

Temp B core rock

CP No 1, LORI 3,4
No 2, LORI 1,2

CP No 1, JON 2
No 2, JON 1

CP No 1, ANN 5,6
No 2, ANN 3,4

CP No 1, LUCY 27,28

CP No 1, LUCY 29,30
No 2, LUCY 27,28

CP No 1, ANN 37,38

CP No 1, LUCY 31,32
No 2, LUCY 29,30

CP, ANN FR 3

CP No 1, JON 3
No 2, JON 2

CP No 1, CM 5,6
No 2, CM 4

CP No 2, RAM 9

CP No 1, BRUCE 5,6

CP No 1, BRUCE 7,8
No 2, BRUCE 5,6

CP No 1, BRUCE 9,10
No 2, BRUCE 7,8

CP No 2, BRUCE 9,10

DDH CM-1

DDH CM-2

hand trenches

Grab samples across upper part of hand trenches

Grab samples across middle and lower parts of hand trenches

GRAB SAMPLES with fluorescence between helipad and road

Mo %	WO_3 %
0.14	0.01
0.11	Tr
0.17	Tr
0.019	0.01
0.040	0.02
0.072	0.01
0.17	0.01
0.017	Tr
0.16	Tr
0.17	0.02
0.22	0.01
0.095	Tr

WO_3	Sn	Mo
0.048	0.003	0.008
0.65	0.003	0.009

Assays in %
0.001 Mo
0.01 WO_3

CHIP, GRAB, COMPOSITE AND FLOAT SAMPLES

TO ACCOMPANY ASSESSMENT REPORT BY J.D. KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C.

OCTOBER 1, 1974

Mines Branch
Assessment Report
NO. 5177 #26

5177
M26

REVISED	CRO – MUR
	GEOLOGY
	Magnetic Declination - 22°
	PROJECT:
PROJ Nº 43	SURVEYED BY: J.K., B.F. DATE: JULY 1974
N.T.S. 92H/9E	DRAWN BY: SCALE: 1" = 400'
DWG. Nº 2	NORANDA EXPLORATION CO. LTD.
	OFFICE: VANCOUVER

260 E T.L.

170E T.L.

200E B.L.

230E T.L.

TOTAL MOLY

O > 20 PPM

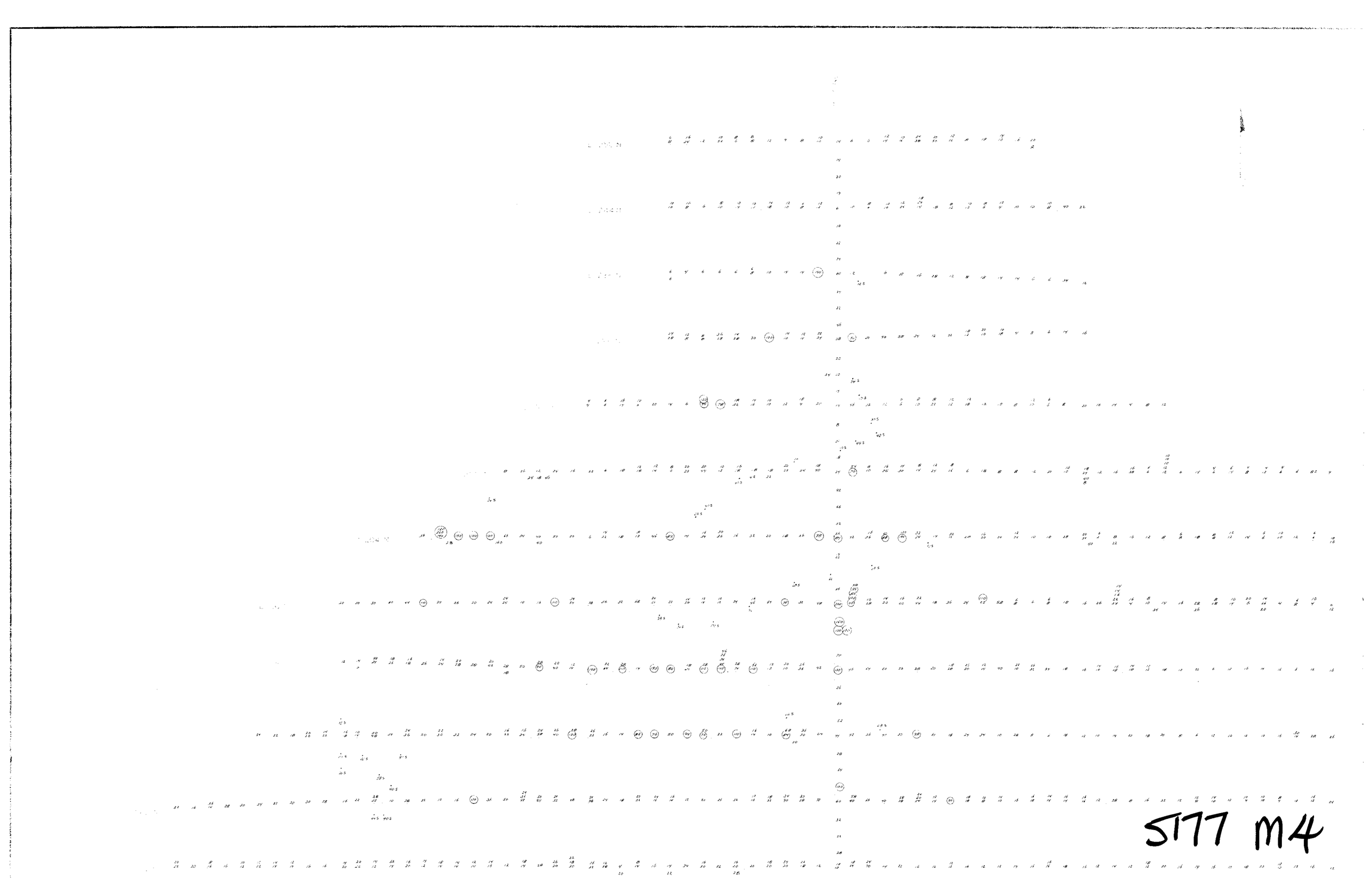
— > 25 PPM

TO ACCOMPANY ASSESMENT REPORT BY J.D KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORLJON, LUCY 1,2, CM, AND BRUCE M.C.'S OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C

OCTOBER 1, 1974

5177 M3

REVISED	CRO — MUR
	GEOCHEMICAL SURVEY
	MOLY
	IN PPM
	Magnetic Declination - 22°
NO. 5177 MAP #3	PROJECT:
PROJ. Nº	SURVEYED BY: DATE: July 23/74
N.T.S. 92H/9E	DRAWN BY: A.V.V SCALE: 1" = 400'
DWG. Nº 3	NORANDA EXPLORATION CO. LTD.
	OFFICE: VANCOUVER



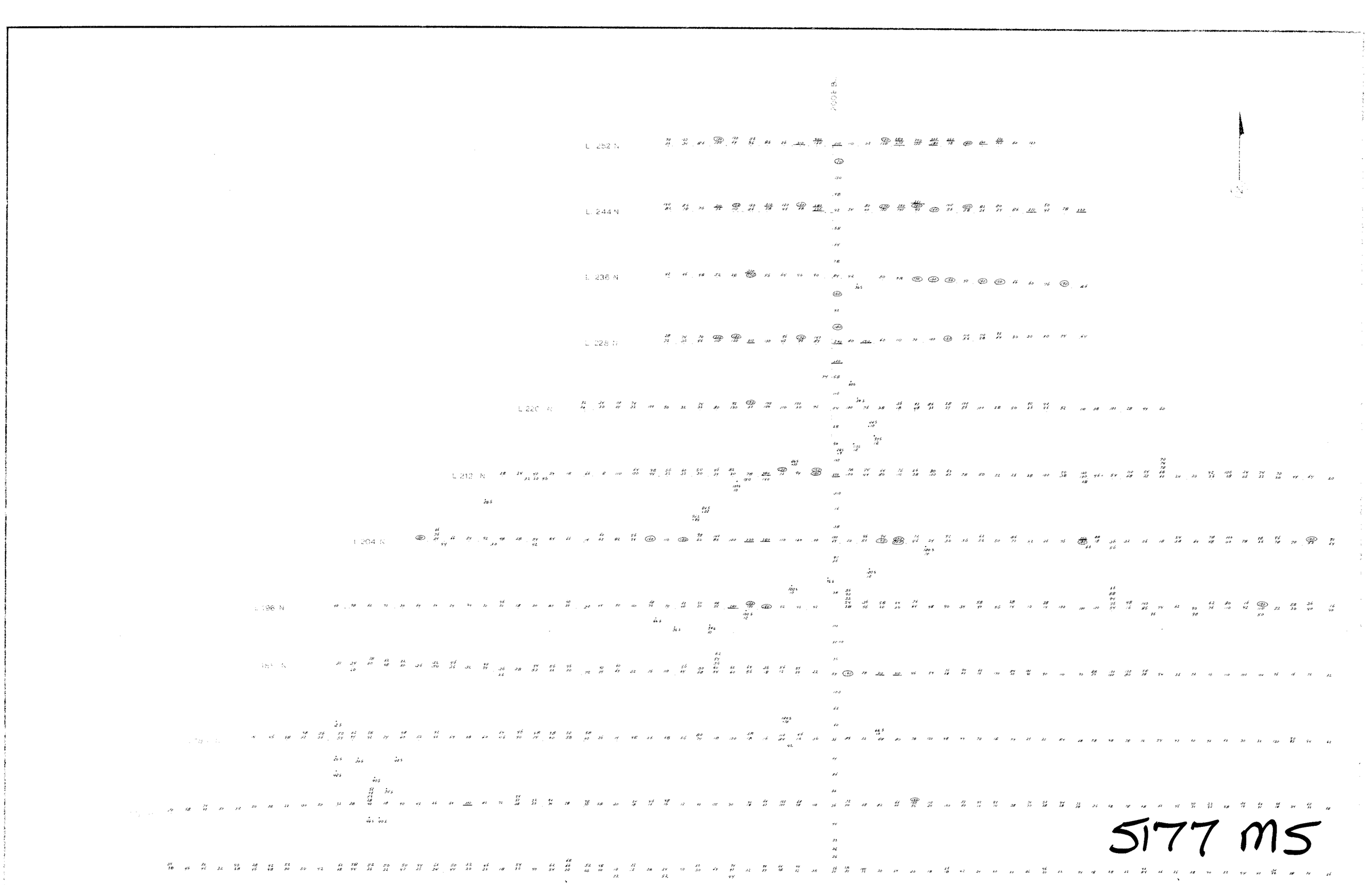
TOTAL COPPER
0 7 75 PPM

TO ACCOMPANY ASSESMENT REPORT BY J.D KNAUER, GEOLOGIST
GEOCHEMIST, ON THE LOR, JON, LUCY, LU, CM, AND BRUCE MC'S
OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C.
OCTOBER 1, 1974

GEOCHEMICAL SURVEY
COPPER
IN P.P.M.

July 23/74

5177 M4



TOTAL ZINC

○ 7150 PPM

_ > 200 PPM

TO ACCOMPANY ASSESMENT REPORT BY J.D KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORI, JON, LUCY, LIL, OM, AND BRADE MC'S OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C.
OCTOBER 1, 1974

Mineral Claims Assessment Report
NO. 5177 #5

GEOCHEMICAL SURVEY
ZINC
IN PPM

July 23/74

5

5177 MS

200E BL

L. 252 N

L. 244 N

L. 236 N

L. 228 N

L 220 N

L 212 N

260 E TL

L 204 N

L 196 N

L 188 N

L 180 N

L 172 N

L 164 N

140E TL

170E TL

200E BL

230E TL

TO ACCOMPANY ASSESMENT REPORT BY JO KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORI, JON, LUCY, LD, CM, AND BRUCE MC'S GROUPS AND SILMILKAMEEN MINING DIVISIONS, BC

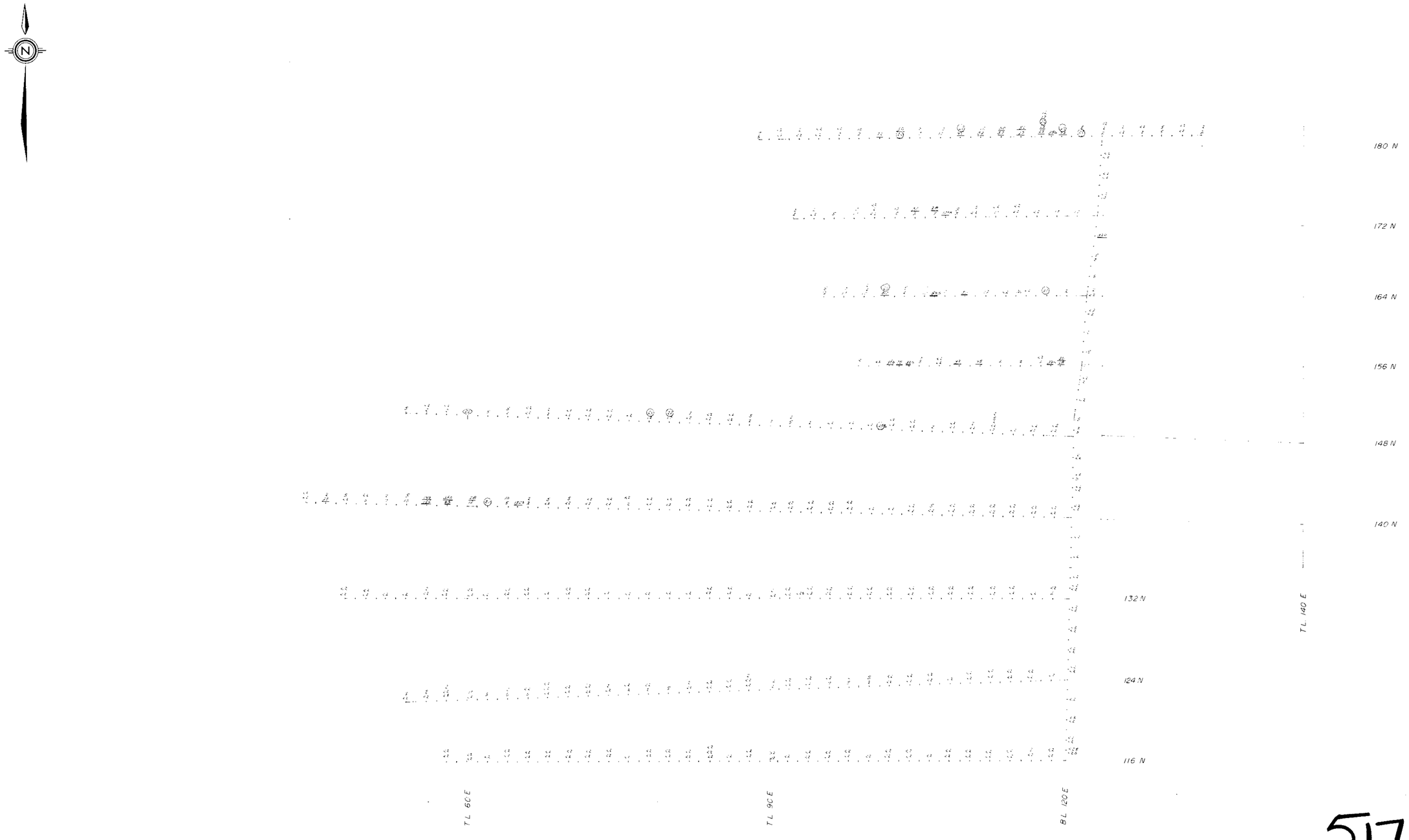
OCTOBER 1, 1974

NO denotes 'NOT DETECTED'
IS denotes 'INSUFFICIENT SAMPLE'

Received
Mines and Petroleum Resources
Assessment Report
NO. 5177 MAP #6

5177 M6

REVISED	CRO – MUR
	GEOCHEMICAL SURVEY
	TUNGSTEN
	IN PPM Magnetic Declination – 22°
	PROJECT:
PROJ. Nº	SURVEYED BY: DATE: July 29/74
N.T.S. 92H/9E	DRAWN BY: A.D.Y. SCALE: 1" = 400'
DWG. Nº 6	NORANDA EXPLORATION CO. LTD.
	OFFICE: VANCOUVER



5177 M7

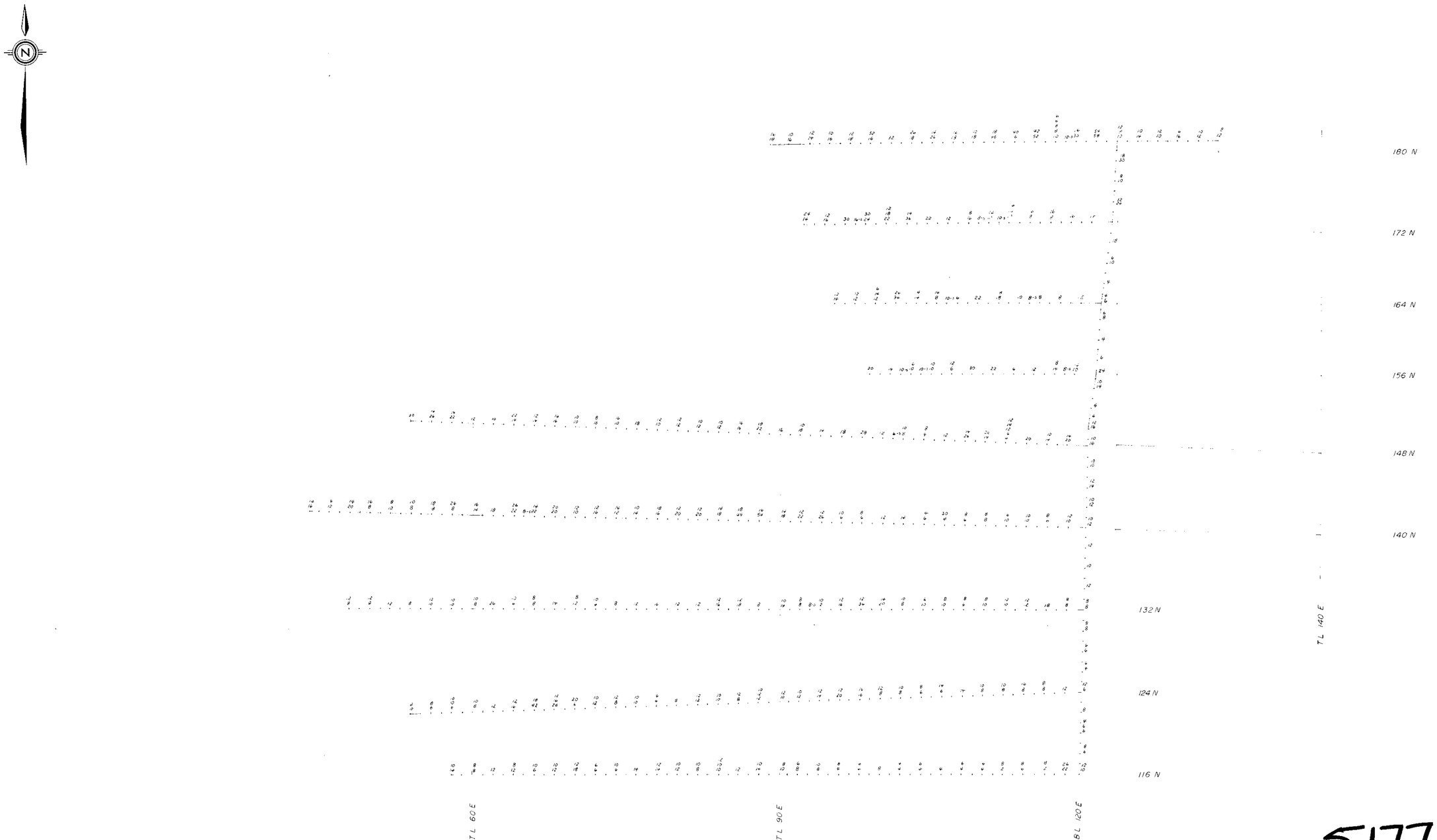
NOTE
GRIDS DO NOT MATCH
LINE 140E WAS USED TO TIE THE TWO GRIDS TOGETHER

TOTAL MOLY
(a) > 20 PPM
24 > 25 PPM

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORI JON LUCY LU CM AND BRUCE MC'S OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C.

OCTOBER 1, 1974

REVISED	CRO – MUR
	GEOCHEMICAL SURVEY
	MOLY
	IN PPM.
PROJ No	SURVEY BY: DATE: JULY 1974
N.T.S. 92 H/9E	DRAWN BY J. van Vogest SCALE: 1" = 400'
DWG No 7	NORANDA EXPLORATION
	OFFICE



5177 M8

Department of
5177 M-P #8

NOTE
GRIDS DO NOT MATCH
LINE 140E WAS USED TO TIE THE TWO GRIDS TOGETHER

TOTAL COPPER
0 > 75 PPM

REVISED	
PROJ No	
NTS 92 H/9E	
DWG No 8	

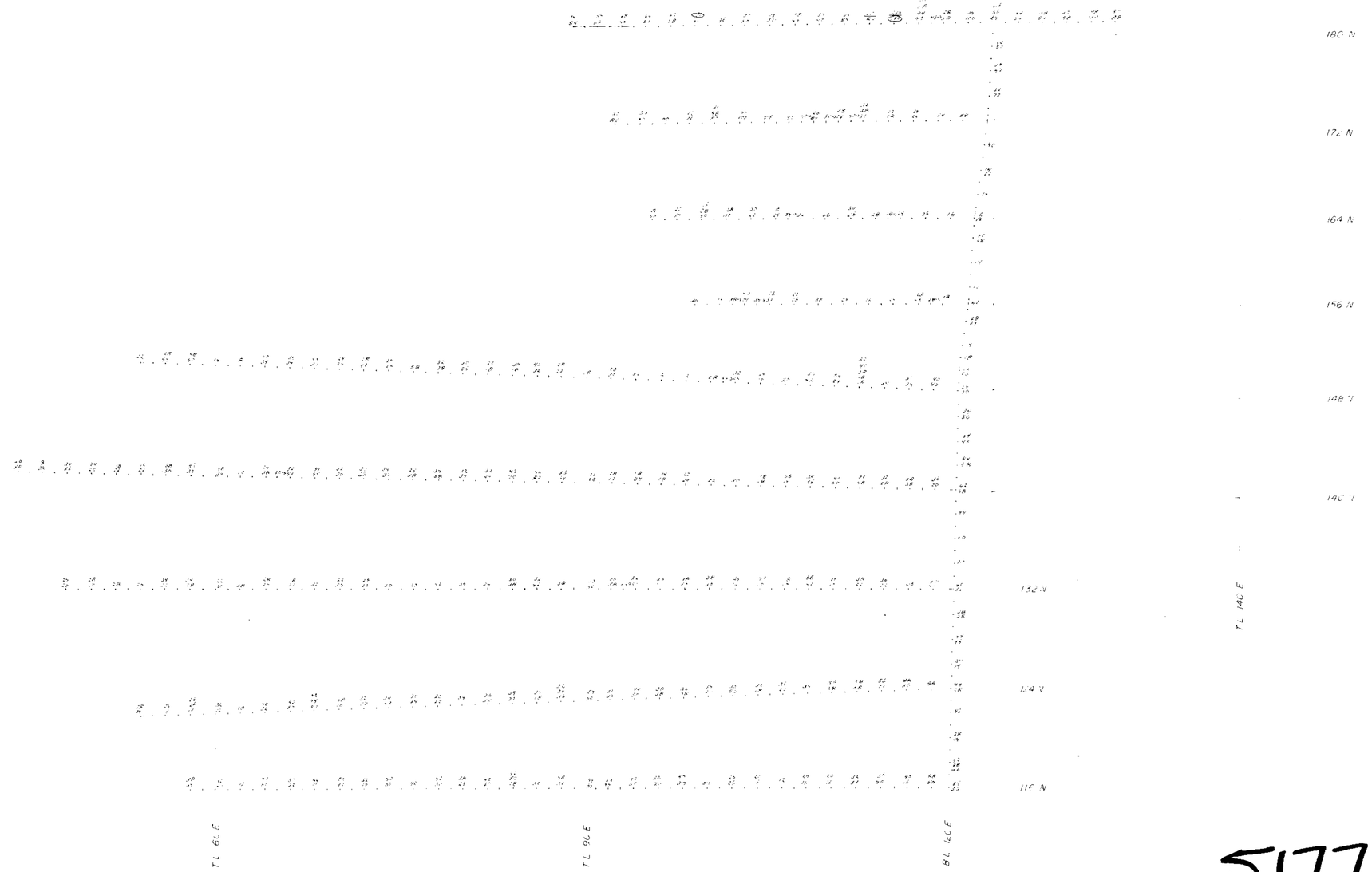
CRO - MUR

GEOCHEMICAL SURVEY
COPPER
IN P.P.M.

SURVEY BY [illegible] DATE JULY 1974
DRAWN BY J. VAN VLIET SCALE 1" = 400'

NORANDA EXPLORATION
OFFICE

TO ACCOMPANY ASSESSMENT REPORT BY J.D. KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LORI, ION, LUCY (1), (2), (3), (4), AND BRUCE M.C.'S OSOYOOS, SIMILKAMEEN MINING DIVISIONS, B.C.



5177 M9

Department of
Mines ... Resources
Assessment Report
No. 5177 Map #9

NOTE
GRIDS DO NOT MATCH
LINE 140E WAS USED TO TIE THE TWO GRIDS TOGETHER

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNALER, GEOLOGIST, GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S 052/005 AND SIMILKAMEEN MINING DIVISIONS, B.C.
OCTOBER 1, 1974

TOTAL ZINC
○ >150 PPM
— >200 PPM
18-5 SMP

REVISED	CRO - MUR
	GEOCHEMICAL SURVEY ZINC IN P.P.M.
PROJ No. N.T.S. 92 H/SE	SURVEY BY ... DATE Aug 1-5 1974
DWG No. 9	DRAWN BY ... DATE ...
	NORANDA EXPLORATION OFFICE

180 N

172 N

164 N

156 N

148 N

140 N

132 N

124 N

116 N

TL 60 E

TL 90 E

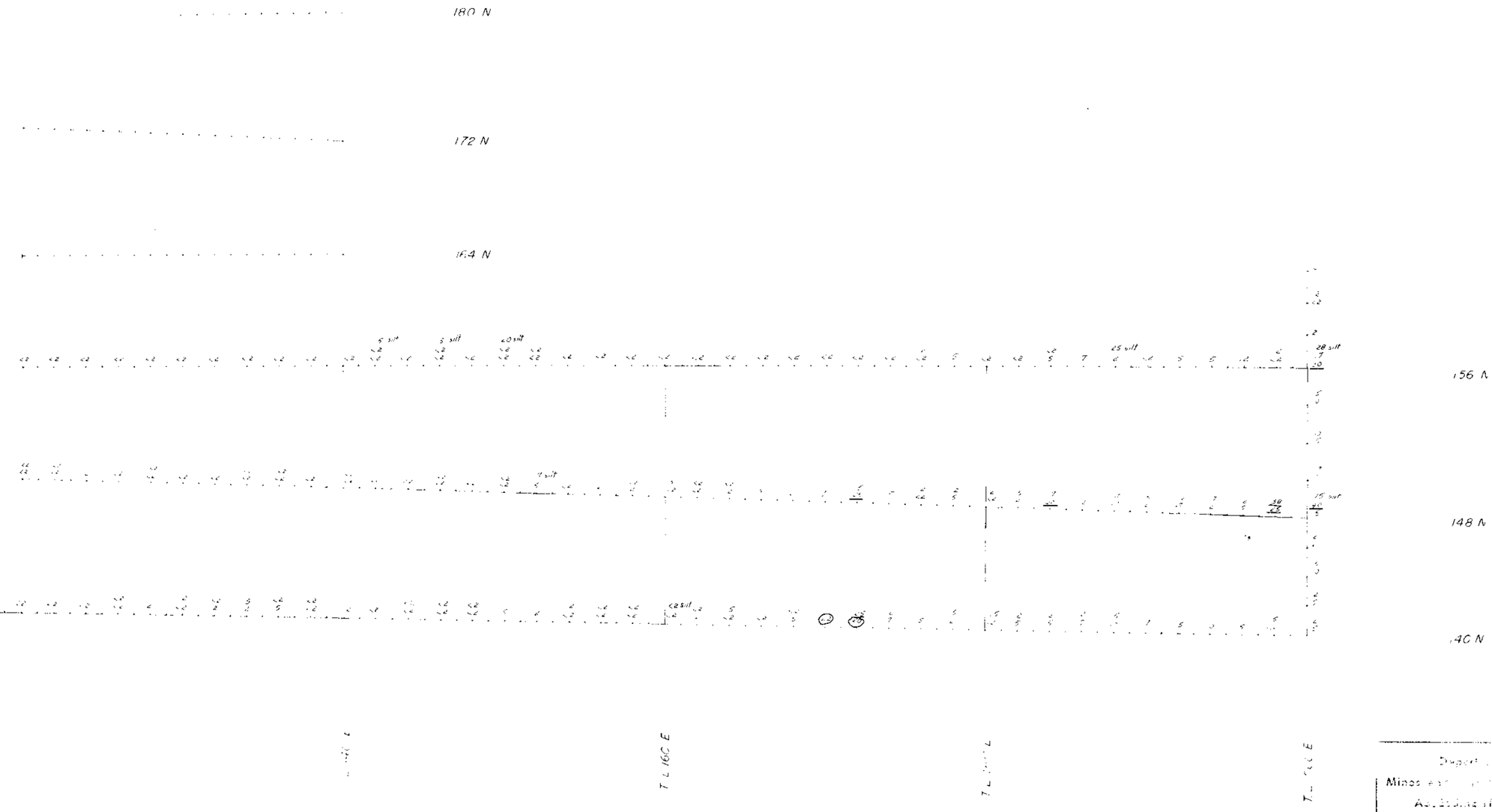
BL 120 E

TL 140 E

5177
M10

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNAUER, GEOLOGIST
GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S
OSOYOOS AND SIMILKAMEEN MINING DIVISION, B.C.
OCTOBER 1, 1974

REVISED	CRO-MUR
	GEOCHEMICAL SURVEY *TUNGSTEN* IN PPM
PROJ No.	SURVEY BY DATE JULY 1974
N.T.S 92 H/8E	DRAWN BY J. van Vloten SCALE 1" = 400'
DWG No 10	NORANDA EXPLORATION OFFICE



TOTAL MOLY
(M) > 20 PPM
(Y) > 25 PPM

5177
M11

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5177 MAP #11

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNAUER, GEOLOGIST GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S OSOYOOS AND S.MILKAMEEN MINING DIVISIONS, B.C.
OCTOBER 1, 1974

REVISED	CRO-MUR
	GEOCHEMICAL SURVEY *MOLY* IN P.P.M.
	DATE JULY 1974
92 H/4E	SCALE 1" = 400'
//	NORANDA EXPLORATION

180 N

172 N

164 N

156 N

148 N

140 N

T.L.140 E

T.L.160 E

T.L.180 E

T.L.200 E

TOTAL COPPER
(xx) > 75 PPM

5177
M12

Mines and [illegible] Resources
ASSESSMENT REPORT
NO. 5177 MAP #12

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNAUER, GEOLOGIST
GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S
OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C.
OCTOBER 1, 1974

REVISED

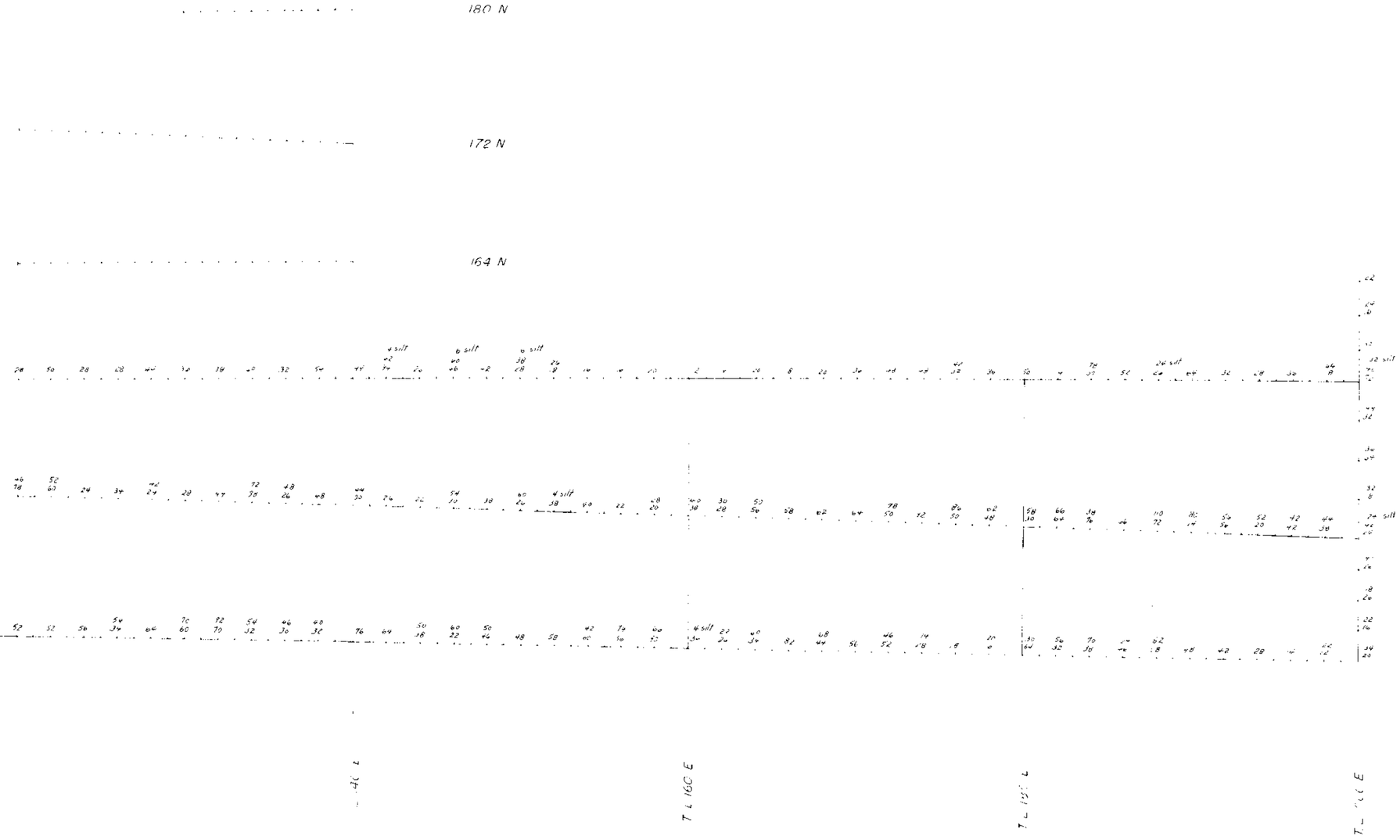
CRO-MUR

GEOCHEMICAL SURVEY
COPPER
IN P.P.M.

PROJ. No.
92H/9E
DWG. No.
12

SURVEY BY
DRAWN BY H.C.
DATE JULY 1974
SCALE 1" = 400'

NORANDA EXPLORATION
DENVER



TOTAL ZINC

(xx) > 150 PPM

xxx > 200 PPM

5177

M13

TO ACCOMPANY ASSESMENT REPORT BY J.D. KNALER, GEOLOGIST, GEOCHEMIST, ON THE LORI, JON, LUCY, LU, CM, AND BRUCE M.C.'S OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B.C.

OCTOBER 1, 1974

REVISED

CRO-MUR

GEOCHEMICAL SURVEY

ZINC

IN P.P.M.

DATE JULY 1974

SCALE 1" = 400'

13

NORANDA EXPLORATION

200 E BL

L 252 N

L 244 N

L 236 N

L 228 N

L 220 N

L 212 N

L 204 N

L 196 N

L 188 N

L 180 N

L 172 N

L 164 N

260 E TL

140 E TL

200 E TL

260 E BL

N

5177
M 14

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5177 MAP #14

TO ACCOMPANY ASSESMENT REPORT BY J D KNAUER, GEOLOGIST, GEOCHEMIST, ON THE LOR-, JON, LUCY, LU, CM, AND BRUCE M C'S
OSOYOOS AND SIMILKAMEEN MINING DIVISIONS, B C
OCTOBER 1, 1974

REVISED

CRO — MUR

MAGNETOMETER SURVEY

PROJECT:

PROJ. Nº

N.T.S. 92-I/9E

DWG. Nº 14

SURVEYED BY: G. FENTON, L. BRADISH DATE: JULY 1974

DRAWN BY: LCB / AC SCALE: 1" = 200'

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