

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,380

12/86

REPORT #3 ON THE TU-CLAIMS
GEOCHEMISTRY, GEOLOGY, TRENCHING

FILMED

AND DRILLING
Kamloops Mining Division
N.T.S. 82M/13E

By: J.N. HELSEN

JANUARY 1986

Lat. 51°48' Long. 119°35.5'

Owner: Andy Horne

Operator: Noranda Exploration Company, Limited

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SUMMARY

The content of this report deals in particular with work carried out during the 1985 field season. This work consisted mainly of the following:

1) geochemical survey: i.e. taking of auger samples along the newly staked claim boundaries, as well as along lines connecting claim boundaries and/or corners.

2) trenching: digging of 15 trenches as a follow up on the information obtained from the previous trenches and geochemical anomalies.

3) diamond drilling: i.e. the collaring of 8 holes in order to substantiate the existence of a scheelite ore zone as suggested from the trench information.

The geochemical survey showed the existence of a few spotty high W values (highest W content 100 ppm), without indication of a trend, however.

On a more local scale (TU-100 claim), the new trenches did not really reveal an extension to the suggested mineralization zone.

The diamond drill holes show that the scheelite mineralization dips steeply to the north and pinches out with depth. The overall length of the zone is much less than 50m and pinches out at less than 30m of depth.

The exaggerated width of the mineralized zone at the surface is believed to have been caused mainly by fluvio glacial action combined by hydromorphic concentration. The mineralized zone is too small and the scheelite grades are too low to be of any further interest.

PROPERTY, DESCRIPTION AND LOCATION

The TU property consists of six claims (Table 1) near Clearwater, 130 km north of Kamloops (Fig. 1).

Table 1. TU - Claims Details.

Name	Units	Record No	Date staked
TU - 3	2	4588	July 21, '83
TU - 100	20	6102	March 28, '85
TU - 200	15	6103	March 28, '85
TU - 300	20	6104	March 28, '85
TU - 400	10	6155	April 12, '85
TU - 500	20	6156	April 12, '85

The property is located at an altitude of about 1700 m above sea level. Eighty percent of the property has a rather flat to gently rolling topography. The northwest corner and the southern edge of the TU claims show steep slopes respectively towards the Raft and Mad River drainage systems.

The L.C.P. is located approximately at S1 47.5'N and 119 35'W and about 7 Km east from the eastern shore of Silence Lake on the NTS 82M/13E mapsheet (Fig. 2).

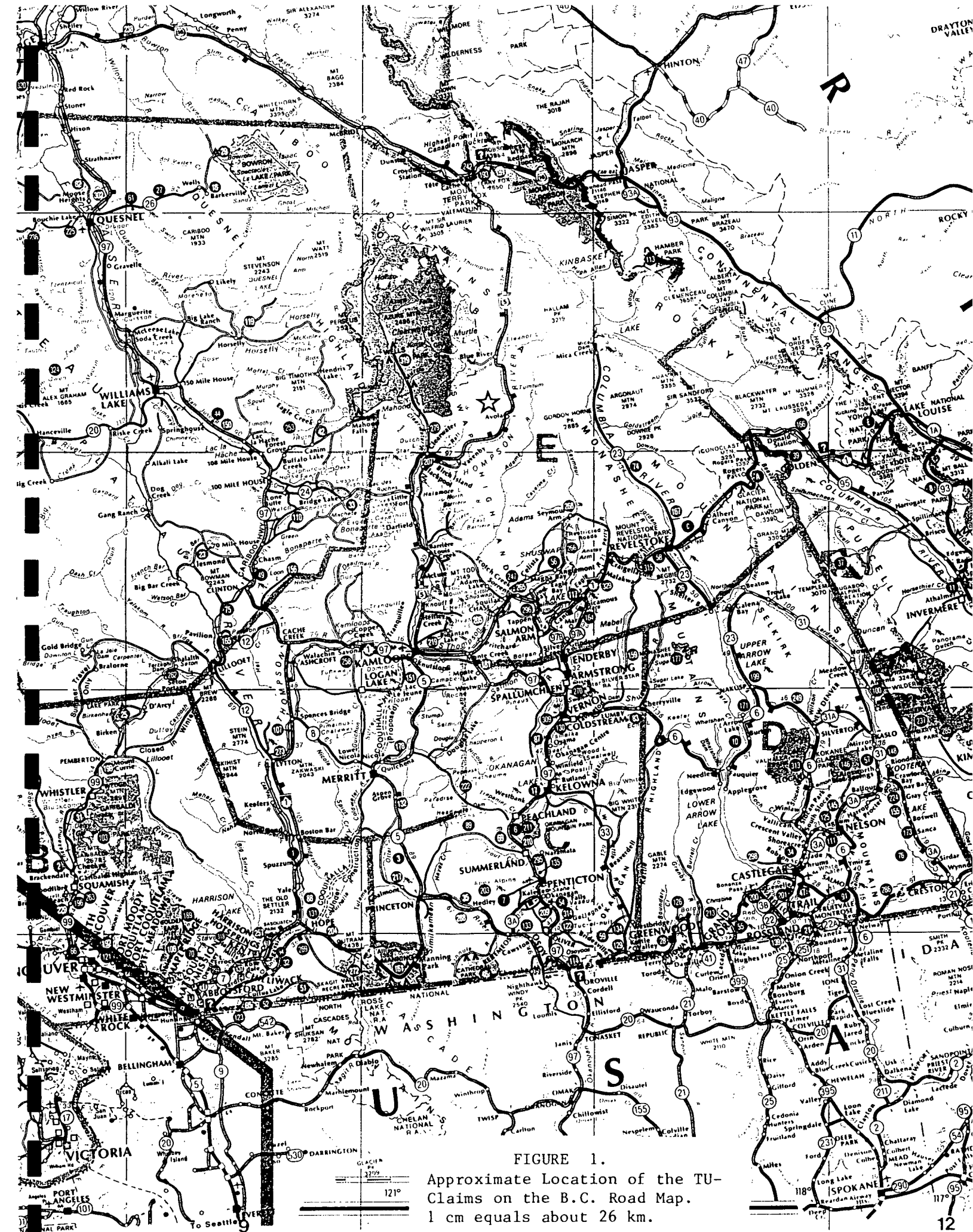


FIGURE 1.
 Approximate Location of the TU-
 Claims on the B.C. Road Map.
 1 cm equals about 26 km.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES

The TU claims are located some 22 Km north of Vavenby, east of Clearwater on the Yellowhead South No. 5 Highway.

In order to get access to the logging road that leads to the property one should leave the highway at the coffeeshop a few kilometers east of Vavenby and follow the Martin creek logging road to a junction just past the 22 Km sign.

The property lies in an active logging area. Valleys are densely forested. Towards the top of the mountain where the claims are located the forest becomes thinner and open areas are more common. The area is also used for free range cattle.

The property lies within a belt of very heavy snowfall.

HISTORY

Mr. Andy Horne, prospector, discovered scheelite float in 1983 along a new logging road. He staked the TU-1, TU-2 and TU-3 claims in 1983 followed by the staking of the TU-4, TU-5 and TU-6 claims in 1984 totalling 16 units.

Sulpetro Minerals Limited carried out a small soil survey over the TU-2 and TU-3 claims at 25 m intervals. Out of 207 samples only 7 showed values greater than 10 ppm tungsten. Subsequently 11 percussion holes were drilled, none of which showed any anomalous values.

A trench dug by Mr. Horne, after the property was dropped by Sulpetro, revealed scheelite in skarn. The property was then optioned by Noranda Exploration Company, Limited late in 1984. A soil grid totalling some 11.4 Km was established and some 500 samples were taken with an auger. On the basis of the anomalous zones discovered trenching was carried out revealing continuation of the mineralization in a easterly direction.

In March 1985 the original TU-1, TU-2, TU-4, TU-5 and TU-6 claims were abandoned and relocated by the staking of the TU-100 and TU-200 claims. At the same time the property was expanded by the staking of the TU-300 claim, and the TU-400 and TU-500 in April 1985. The property consisting now mainly of the Tu-100 and Tu-200 claims (in good standing until 1990) has been returned to Mr. A. Horne.

GEOCHEMISTRY

Evidence from previous soil profiles near the site of the trench dug by Andy Horne (105+00N/100+00E of the Noranda grid), as well as from the poor results from the Sulpetro soil survey, suggested the possibility that tungsten may occur on the property as very small mineral grains close to the bedrock surface, or within the C and/or D horizons. The above facts and the thin glacial overburden are the main reasons for taking auger samples rather than traditional soil samples. Further details are well documented in Report No.2 (1985, Helsen and Bradish).

This procedure of taking auger samples rather than soil samples was continued during the 1985 field season. Consequently a total of about 1100 samples (including some duplicate samples for comparison reasons) were taken and analyzed for tungsten, copper, zinc, lead and occasionally silver. The samples were taken at 50m intervals along the new claim boundaries, as well as along lines within these claims in order to survey the potential of these claims for further mineralization. The W, Zn and Pb results have been plotted on figures #3 , #4 and #5 respectively. An additional 60 samples were collected on the old Noranda grid in order to fill in some gaps as well as to tie the grid in with the new baseline (Fig. 3). All these data are compiled in Appendix II. Some statistical values for the auger samples are given in the table below. These values have been calculated for a batch of 782 samples, excluding those samples collected along the diagonal lines

and the 1984 Noranda grid. The excluded samples, however, do not contain any anomalous values and consequently will not affect significantly the outcome of the statistical values.

Table 2. Statistical Values for 782 Soils.

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	W	Cu	Zn	Ag	Pb
	ppm	ppm	ppm	ppm	ppm
Lowest Value	1	4	10	.2	1
Highest Value	100	900	650	1.2	840
Arith. Mean	5.9	25	64.6	.3	16.4
Arith. Stand. Dev.	8.9	35.5	46.9	.19	32.9
Log. Mean	3.0	20.5	55.3	.27	12.6
Log. Stand. Dev.	.48	.24	.24	.20	.29
Arith. Threshold	23.7	96.1	158.4	.68	82.2

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Tungsten geochemistry: The highest value obtained occurs in the SE corner of the TU-500 claim. It occurs on a steep slope towards the Mad river. The value is spotty and is believed to have been caused by fluvioglacial action. The overall impression with regards to the obtained tungsten results is that there seems to be little potential for additional scheelite mineralization. The location of the 1984 Noranda grid has been drawn on the tungsten geochemistry map (Fig. 3) as a reference for previous reports and later trenching and drilling.

Copper geochemistry: Because the copper results show mostly background values no map has been plotted. Only 12 samples were greater than 100 ppm Cu and of these only one sample was greater than 200 ppm Cu. This high Cu (900 ppm) occurs at location 2500N/1300E (TU-300 claim) and is associated with a high Pb value (840 ppm). W and Zn values are background. The anomaly is spotty.

Zinc geochemistry: About 26 samples have Zn contents greater than 160 ppm, but only 5 have values greater than 300 ppm Zn. The two highest Zn values (500 and 650 ppm) occur respectively at locations 1050N and 1150N on the baseline (Fig. 4). These values can be related to anomalies commented on in a previous report, and are not believed to be very significant.

Lead geochemistry: Three lead values are greater than 100 ppm. The first high Pb value occurs at location 1150N on the baseline and is associated with the high Zn value of 650 ppm and discussed above. The second high Pb value (320 ppm) occurs at station 2300N/2000E. The value is very spotty and has no high values for other elements associated with it. The third high Pb value coincides with the anomalous Cu value just outside the southeast corner of the TU-500 as mentioned above (Fig. 5).

Silver geochemistry: Only a small number of the samples was analyzed for silver. The highest value (1.2 ppm Ag)

occurs at station 1750N/1000E (TU-300 claim). It is a spotty value and is considered insignificant.

In summary, the following can be concluded.

1) A few anomalous values occur for one or two associated elements, but never for all elements analyzed for together i.e. Cu, Pb, Zn, Ag and W.

2) In general, these anomalous values are not really excitingly high. Moreover these values are mostly spotty anomalies without continuation or trend development.

3) The geochemical survey failed to indicate new potential areas for further work. Admittedly, auger sampling may not be ideal for elements like Cu and Zn. Because emphasis, however, was on tungsten targets similar to the one occurring on the Noranda grid, the auger samples suited best as proven on the previous grid.

GEOLOGY

The geology of the area was surveyed by R.Campbell in 1962 and 1963 and published as Map 48 1963 - Adams Lake. According to this map the rocks underlying the property belong to the Shuswap metamorphic complex.

Despite the thin layer of overburden, the amount of outcrop on the property is less than 3 %. Consequently the existing geology map is based on scarce outcrop and information gathered from trenches.

The three main rock types are:

- i) muscovite granite
- ii) biotite gneiss
- iii) quartz mica schist/phyllite

The muscovite granite forms an intrusion virtually dividing the TU-100 claim into three zones according to rock type. The inferred boundary between the biotite gneiss and the granite lies in the western half of the property. Little is known about the potential for mineralization along this contact zone. The boundary between the granite stock and the quartz mica schist on the eastern half of the property is also a predominantly inferred boundary, but more information is available because of data from trenching, outcrop and drilling.

The suggested (Report No.2) overall NW-SE strike of the Pb and W geochemical anomalies on the TU-100 claim definitely relates to the contact between the granite intrusion and the mineralized schist as confirmed by trenches and

drilling data and at surface by the small creek running along the contact zone.

A skarn handspecimen for thin section, #T-5, was taken from the mineralized trench #5 (see below). Strike and dip of the foliation of the skarnified schist could not be measured because of its brittle nature and disturbance caused by the backhoe. In the handspecimen the tungsten mineralization occurs as scheelite crystals, up to 0.5 cm long. Analysis of the thin section reveals the following mineral assembly. Diopside and vesuvianite (idocrase) make up the bulk of the skarn in about equal amounts (85 to 90%). Some tremolite/actinolite minerals (3%) occur mainly as alteration of the pyroxenes. Garnet, although less common, may make up a few percent. Scheelite was not observed in the thin section but in the handspecimen it makes up some 4% of the total surface. Accessory minerals consist of sphene, magnetite or hematite, apatite, quartz and sericitized K-feldspars.

A handspecimen and thin section of the granite (# T-4) from trench #4, shows a muscovite granite with sericitized K-feldspar, microcline, albite, and accessory chloritized biotite with some zircons. The granite ranges from medium to fine grained and frequently changes into a pegmatite like rock of similar composition.

A fault occurs on the Tu-100 claim in which the mica schist has been altered to a several meters wide, soft, chloritized and kaolinized zone, and cutting the contact

between the granite and schist at a sharp angle. This may explain the fact that no extension of the ore zone to the north was found.

No systematic geological mapping was carried out over the rest of the property i.e. the TU-200, TU-300, TU-400 and TU-500 claims because of lack of time. The following generalizations, however, can be made:

1) The whole property i.e. east and south of the TU-100 claim is predominantly covered by a range of quartzites to mica (mainly biotite) quartzites.

2) A granitic intrusion occurs in the central area of the TU-300 and TU-500 claims.

3) At the eastern edge of the TU-500 claim and outside it occurs a small granitic plug (75m in diameter) within quartzitic rocks. Some suspected Sn mineralization proved to be negative, however.

4) Three areas (25 m² in surface) which showed some sulphide minerals were mapped in more detail and analyzed for scheelite and base metals, without encouraging results, however.

TRENCHES

The 2.04 % W03 mineralization over 2m in the hand dug Horne trench combined with the geochemical anomalies encountered on the Noranda grid instigated further trenching in the Fall of 1984. Trenches #1, #2, #3, #4 and #5 were consequently dug with a backhoe on tracks. Heavy snow prevented finishing of trench #4. From trench #5 which showed good mineralization an overall strike for the mineralization was estimated at 295 degrees azimuth. The results of this 1984 work have been duly reported previously (Helsen and Bradish, May 1985).

During the 1985 field season trench #4 was completed and an additional 14 trenches were dug with a John Deer 450 backhoe/bulldozer. The direction of the trenches was chosen so that the strike of mineralization would be cut perpendicularly as much as possible. This, however was not always possible because of slope, swampy areas, valuable timber stands, etc. The results of this work are discussed below. These trenches have been plotted on the figures #5 and #6 and a summary is given in Table 3 below. The geochemical data are in Appendix III.

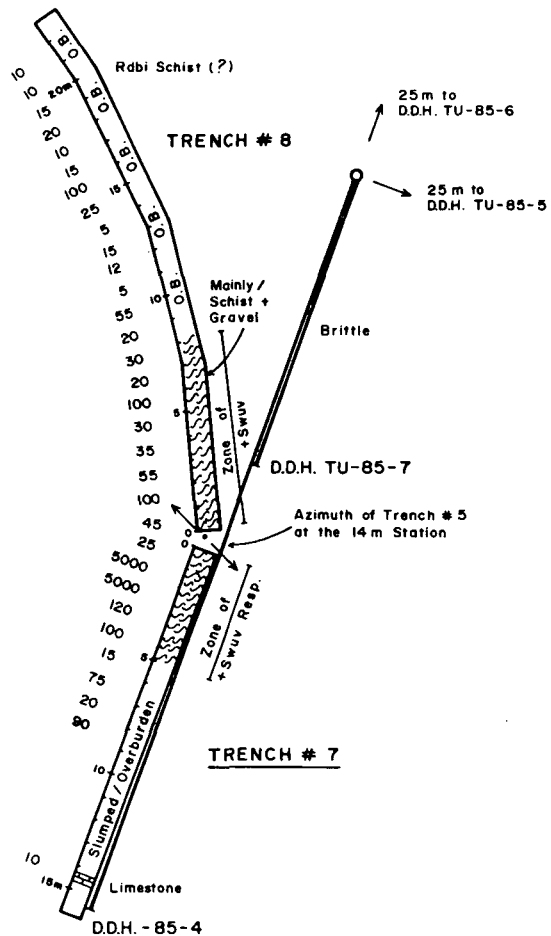
Trench #4 (Fig. 7): This trench has an overall length of 109m. The trench was extended twice in order to find the granite/schist contact. The first section of the trench (93.5m) shows an abrupt transition from muscovite granite into a boulder clay with boulders consisting mostly of

quartzites. No schist was encountered. The second section of this trench was dug after an interruption of about 27m to take advantage of a slight increase in slope. No bedrock was encountered (maximum depth was 3m), rather the boulder clay continues. No positive response was detected with regards to the short wave ultra violet light (hereafter SWUV-response).













Trench #6 (Fig. 8): The overall length is 95m. The trench ends in a wide chloritic alteration/fault zone. The bedrock consists predominantly of mica schists and mica quartzites and all gradations between. Minor folds occur in the schist as well as small barren quartz veins, generally parallel to the foliation.

Trench #5 if continued would eventually have cut trench #6 between the 23m and 26m stations. Consequently the extension of the zone of mineralization should have been found somewhere between the 20m and 50m stations, when taking a possible offset due to faulting into consideration. Not enough positive SWUV-response was found, however, to indicate a continuation of this zone. The highest W values occur between the 31m and 36m stations averaging 76 ppm W over 5m (1m sample intervals). These values most likely reflect W material in glacial clay overlying the bedrock, rather than true mineralization in the bedrock. Grab samples of trench material were taken above the flooded section (between the 36m and 43m stations).

Trench #7 (Fig. 9): Length 16m. Trench #7 was dug in an attempt to relocate the zone of mineralization not found in



LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/Marble
-  Mica Schist: I - Indurated; W - Weathered
C - Crumbly; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  80° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- 575 Values at Midpoint of Each Section Sampled indicate Tungsten Content (in ppm W) for that Section
- 5m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.

NOTE :

The Entire Trench # 7 Collapsed While Sampling up to the 9m Station) at 1m Intervals.

Trench # 8 Was Made Less Deep in Order to Avoid Collapse. After Discovering + Swuv Response the First 12m were Deepend.

Sample Interval is 1m .

SCALE 1:200

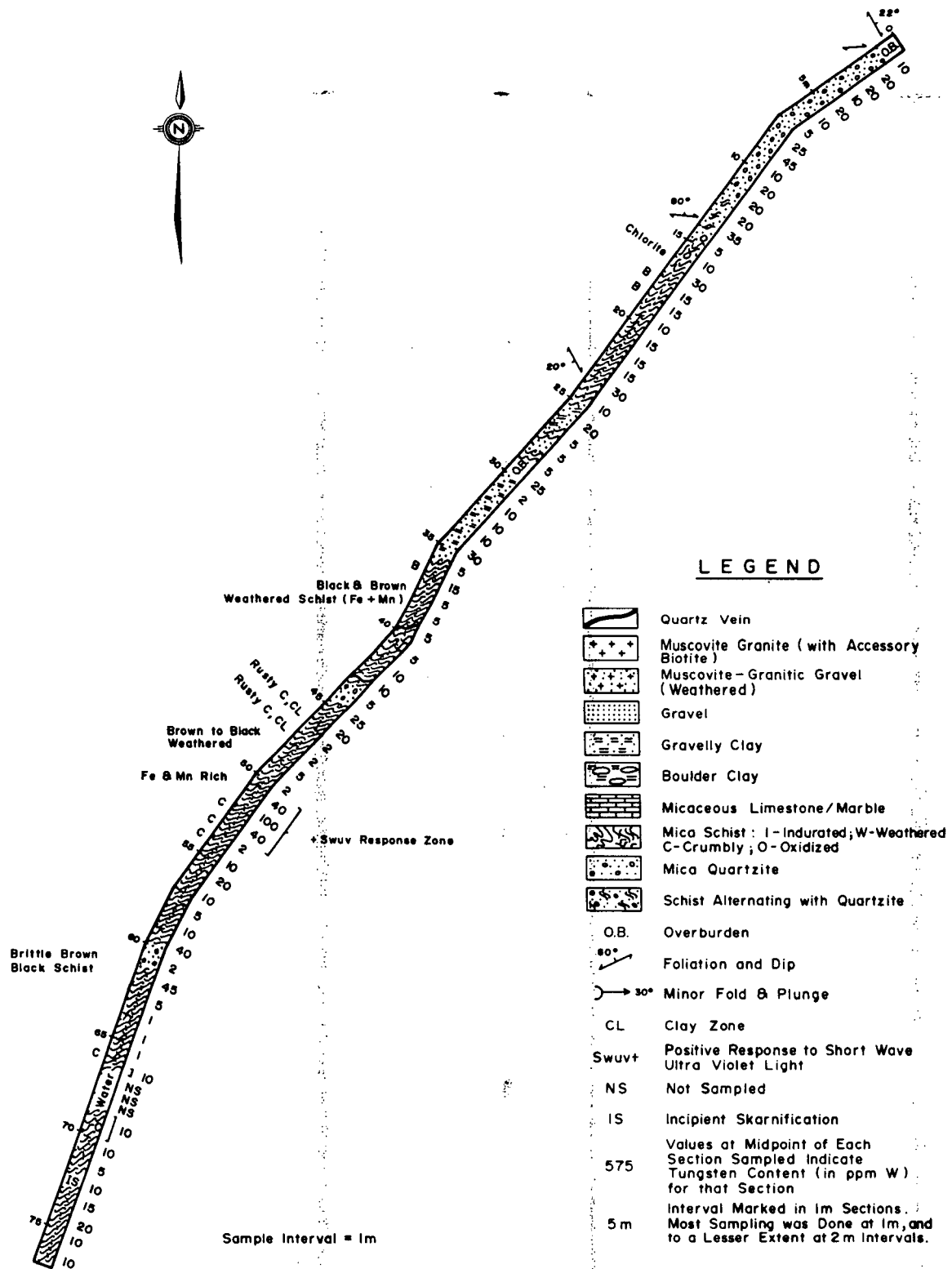


REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCHES: 7, 8	
PROJ No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. 82M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2 m
DWG. No. 9	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

trench #6. Trench #7 connects with trench #5 at the 14m station of trench #5. Sampling was undertaken at 1m intervals but was abruptly stopped because of total collapse of the trench. Some equipment was lost in this collapse. Mineralization (strong SWUV-response), however, was found at the beginning of the trench over a distance of about 4m in a SSW direction. The scheelite occurred in crumbly mica schist accompanied by a few hard skarn bands (thickness of a few cm's). The main rock type is a brittle mica schist with some limestone between the 14 & 15m stations. A later grab sample taken over about 3m (from 1m to 4m station) gave a result of 1800 ppm W.

Trench #8 (Fig. 9): Length of 22m. Because of dangerous ground in the previous trench, this trench initially was not dug deep enough to uncover bedrock and/or scheelite mineralization. Positive results with SWUV light close to the intersection with trench #5, however, led to further deepening of the trench over the first 12m. The overall results are not impressive. The width of the mineralization as revealed by the positive response to the SWUV-light in the trenches #7 and #8 should be about 11m wide at the intersection with trench #5 (14m station).

Trench #9 (Fig. 10): Length of 77m. This trench was dug to investigate geochemical and geophysical anomalies. Positive SWUV-response was found between the 50m and 53m stations. The trench consists of very brittle sericite



LEGEND

- Quartz Vein
- Muscovite Granite (with Accessory Biotite)
- Muscovite-Granitic Gravel (Weathered)
- Gravel
- Gravelly Clay
- Boulder Clay
- Micaceous Limestone/Marble
- Mica Schist: I-Indurated; W-Weathered; C-Crumblly; O-Oxidized
- Mica Quartzite
- Schist Alternating with Quartzite
- O.B. Overburden
- Foliation and Dip
- Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.

Sample Interval = 1m

SCALE 1: 200















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	TU CLAIMS	
	TRENCH 9	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 88
N.T.S. 92 M/135	DRAWN BY: J. SERWIN	SCALE: 1cm = 2m
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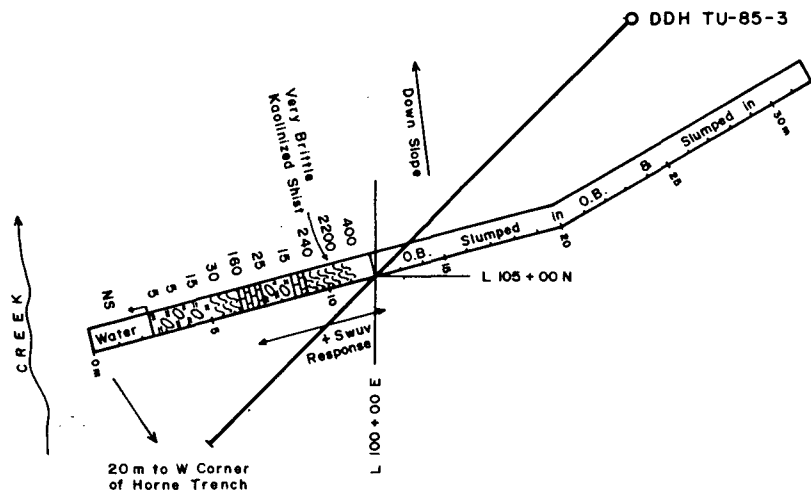
(biotite) schists and quartzites as well as a gravel-clay layer which usually lies on top of the bedrock on the entire property. This gravel-clay with boulders is now believed to be of glacial origin and to be the main source of geochemical anomalies. The positive SWUV-response occurs in strongly oxidized brown to black (Fe and Mn) schists. No skarn was detected in this trench. The highest value for this trench is 100 ppm W.

Trench #10 (Fig.11): Length 32m. This trench was dug parallel but north of the Horne trench. The area is very swampy. Positive SWUV-response was encountered between the 6.5m and 12m stations. This part of the trench was sampled at 1m intervals after thorough cleaning. The other part was checked with SWUV-light but not sampled because of almost instantaneous slumping and flooding. The bedrock consists of brittle mica schists but some limestone beds occur between the 6m and 9m stations. The best mineralization occurs between the 9m and 12m stations with a maximum of 2200 ppm W at the 10m station interval.

Trench #11 (Fig.12): Length of 37m. Trench #11 was dug to follow up an exposure of scheelite (previously called float and wrongly situated on the Report #2 compilation map) in gravel material. Trench #11 showed some positive SWUV-response from the 30m to the 35m station in similar material i.e. granitic gravel. A zone of mineralization might be expected to strike in an East-West direction when the scheelite exposure beside the road is connected with the

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/Marble
-  Mica Schist : I - Indurated; W - Weathered
C - Crumbly ; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  80° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- 575 Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 5m Interval Marked in 1m Sections . Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



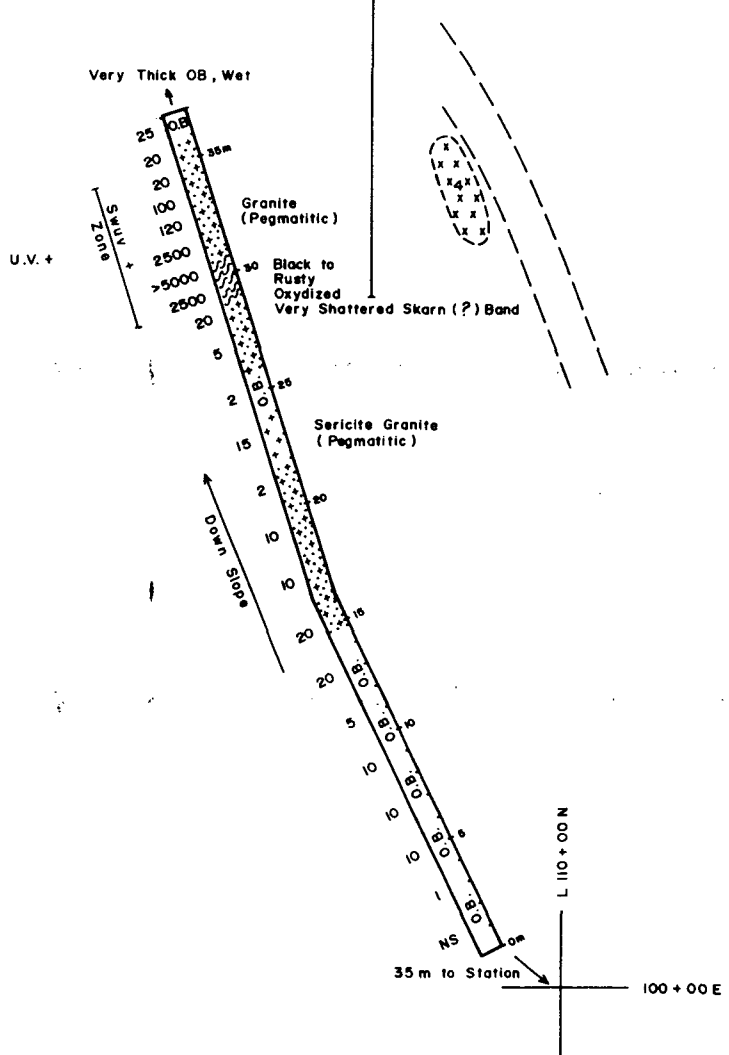
REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 10	
PROJ No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. B2M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2m
DWG. No. 11	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

SCALE 1: 200



Sample Interval = 1m

D.D.H. TU-85-8
To L 110+80N/99+80E



LEGEND

- Quartz Vein
- Muscovite Granite (with Accessory Biotite)
- Muscovite - Granitic Gravel (Weathered)
- Gravel
- Gravelly Clay
- Boulder Clay
- Micaceous Limestone/Marble
- Mica Schist: I-Indurated; W-Weathered; C-Crumblly; O-Oxidized
- Mica Quartzite
- Schist Alternating with Quartzite
- O.B. Overburden
- Foliation and Dip
- Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 5m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.

REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH II	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. 82M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2m
DWG. No. 12	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

VANCOUVER 11920

P.2.A.













scheelite mineralization in the trench. Values greater than 2500 ppm W were obtained in the trench over 3m. This mineralization occurs in a very shattered oxidized schist (with skarn). The rock in the trench, however, consists predominantly of a granitic gravel obviously formed by the weathering of the nearby muscovite granite intrusions.

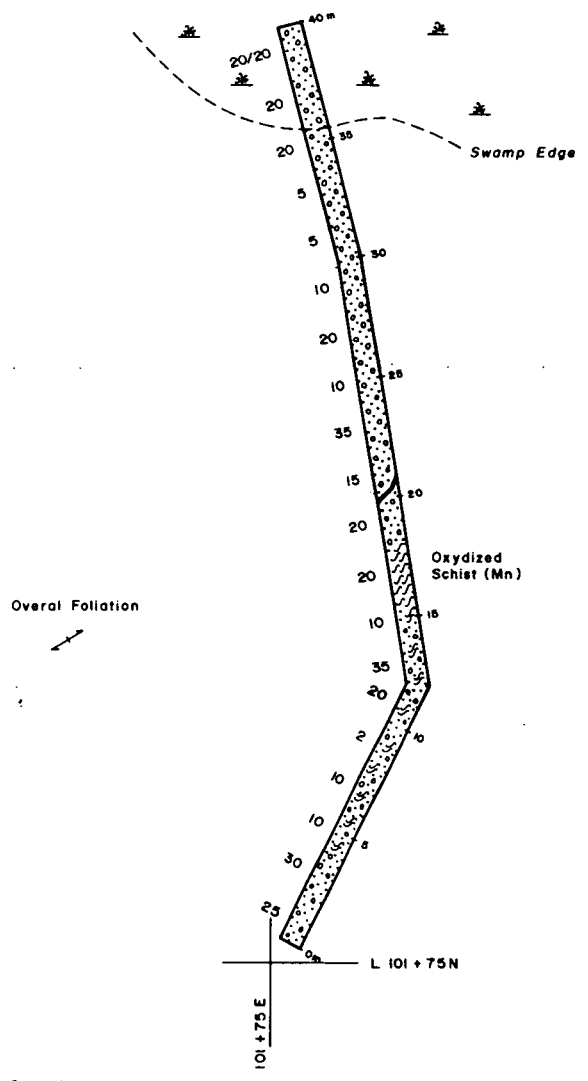
Trench #12 (Fig.13): Length of 40m. Trench #12 was dug on higher ground at the edge of the swamp in predominantly biotite quartzite rocks. No mineralization was detected with SWUV-light. The geochemical anomaly is believed to find its main cause in the accumulation of scheelite crystals in the fluvio-glacial clay overlying the bedrock. This would be compatible with the overall gentle slope towards the east and southeast in this area of the grid.

Trench #13 (Fig.14): Length of 18m. This trench was dug parallel to trench #11 in order to locate the extension of the mineralized zone as suggested from the evidence in trench #11 and the roadside scheelite exposure to the east. Although similarly weathered granite and granitic gravel was found, no positive response whatsoever was received from the SWUV-light.

Trench #14 (Fig.15): Length of 22m. This most northerly trench on the property was dug along a small ridge to find the source for the geochemical anomaly and inferred float to the east. The bedrock consists predominantly of weathered

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/Marble
-  Mica Schist: I - Indurated; W - Weathered; C - Crumbly; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  60° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- 575 Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 5m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



Sample Interval is 2 m

SCALE 1:200















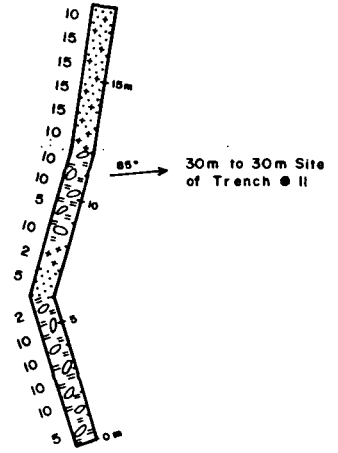
REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 12	
PROJ No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. 82M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2 m
DWG. No. 13	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

VANCAL 1192P

P.J.A.

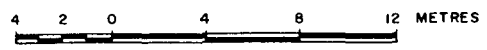
LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/Marble
-  Mica Schist : I - Indurated; W - Weathered
C - Crumbly; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  80° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 575
- 5m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



Sample Interval = 1m













SCALE 1:200

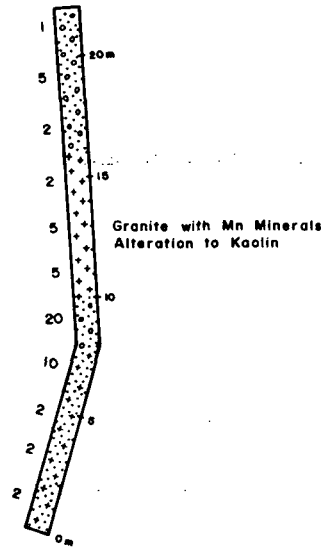


REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 13	
PROJ No. <u>R 31</u>	SURVEY BY: <u>J. HELSEN</u>	DATE: <u>September 85</u>
N.T.S. <u>B2M/13E</u>	DRAWN BY: <u>J. SERWIN</u>	SCALE: <u>1cm = 2m</u>
DWG. No. 14	NORANDA EXPLORATION OFFICE: <u>VANCOUVER</u>	

VANCOUVER 11/28

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite -Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/ Marble
-  Mica Schist : I - Indurated ; W - Weathered
C - Crumbly ; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  80° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 575
- 5 m Interval Marked in 1m Sections . Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



Sample Interval = 2 m

SCALE 1:200



REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 14	
PROJ No <u>R 31</u>	SURVEY BY: <u>J.HELSEN</u>	DATE <u>September 85</u>
N.T.S. <u>B2M/13E</u>	DRAWN BY: <u>J.SERWIN</u>	SCALE: <u>1cm = 2 m</u>
DWG. No. 15	NORANDA EXPLORATION	
	OFFICE: <u>VANCOUVER</u>	

and altered muscovite granite which occasionally becomes pegmatitic, and quartzite. No positive response was received from the SWUV-light.













Trench #15 (Fig.16): Length of 55m. This trench was dug in a NE-SW azimuth in order to find an extension of the mineralization found in Trench #9 and others to the northwest. The trench consists predominantly of schists and quartzites with the occasional small quartz vein generally parallel to the foliation. No positive SWUV-response was received. The slightly higher values for W most likely occur in the glacial clay.

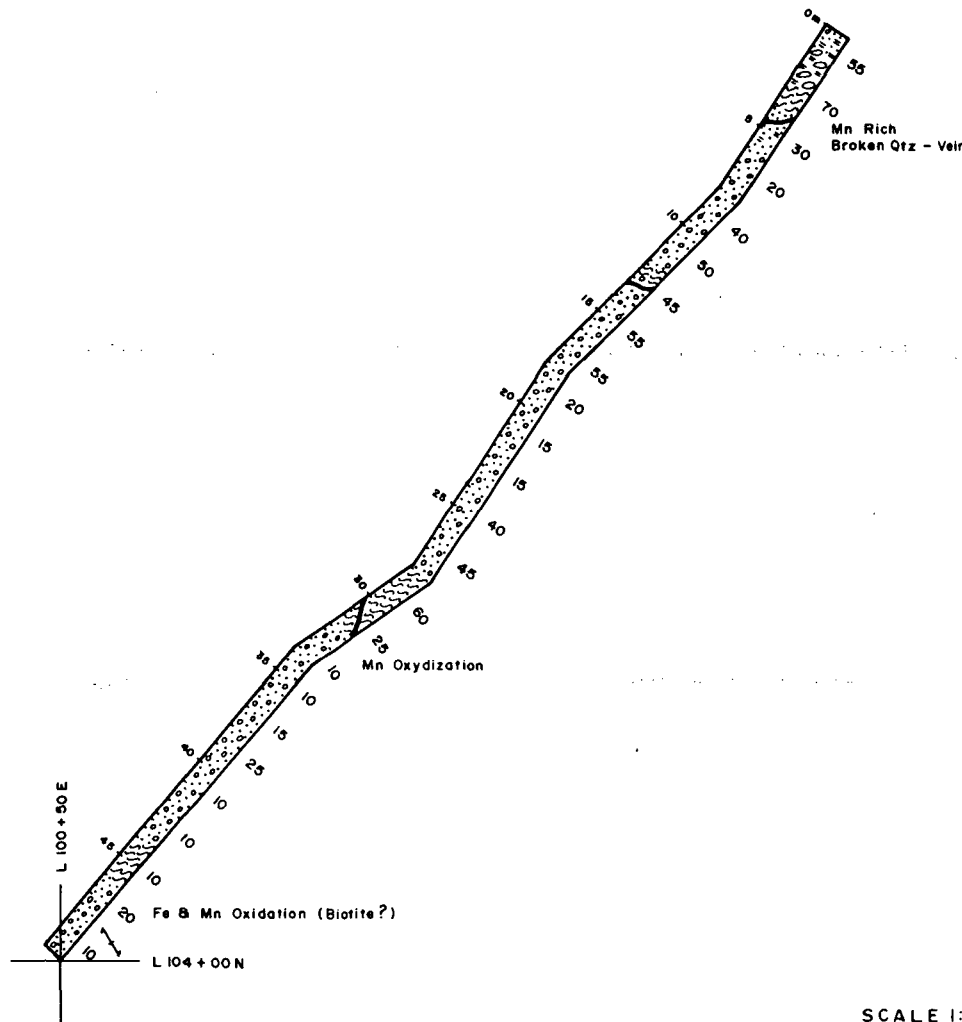
Trench #16 (Fig.17): Length of 22m. This trench was dug on the request of Mr. Horne because of the presence of some mineralized float. The rock consists predominantly of quartzite and schist with occasionally a few limestone beds. No skarn was detected, however, and the SWUV-response was negative for the entire trench.

Trench #17 (Fig.18): Length of 30m. Trench #17 was dug to investigate the coincidence of a geochemical high and a magnetometer anomaly. No positive SWUV-response was obtained except a few specs in the overburden close to the bedrock. Bedrock consists mainly of schists and quartzites with a few small barren quartzveins along foliation planes.

Trench #18 (Fig.19): Length of 21m. This trench was dug north of and parallel to the mineralized Trench #10 in order

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/Marble
-  Mica Schist: I - Indurated; W-Weathered
C-Crumbly; O-Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  80° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 575 Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



SCALE 1: 200















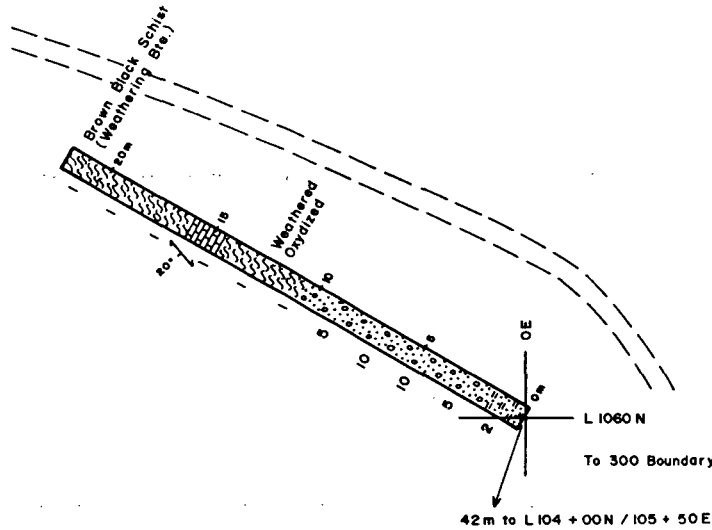
REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 15	
PROJ No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. B2M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2 m
DWG. No. 16	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

VANCOUVER 11825

11825

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone / Marble
-  Mica Schist : I - Indurated; W - Weathered
C - Crumbly ; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  60° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 575 Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.
- 5m















SCALE 1: 200

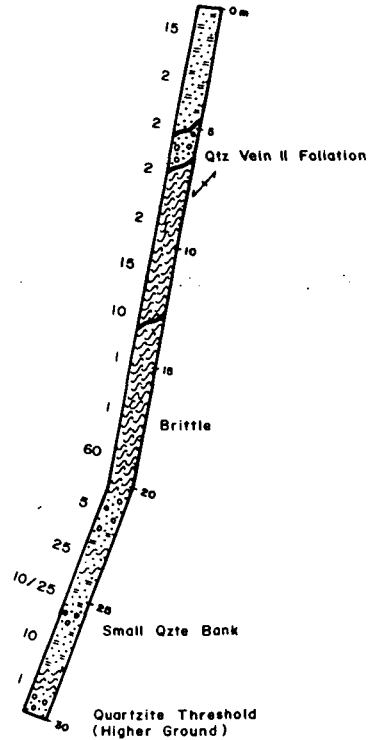


Sample Interval = 2 m

REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 16	
PROJ No. <u>R 31</u>	SURVEY BY: <u>J. HELSEN</u>	DATE: <u>September 85</u>
N.T.S. <u>82M/13E</u>	DRAWN BY: <u>J. SERWIN</u>	SCALE: <u>1cm = 2 m</u>
DWG. No. <u>17</u>	NORANDA EXPLORATION	
	OFFICE: <u>VANCOUVER</u>	

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone/Marble
-  Mica Schist : I - Indurated; W - Weathered
C - Crumbly ; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  60° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 5m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



SCALE 1: 200



Sample Interval = 2 m













REVISED	<h2>HORNE OPTION</h2> <h3>TU CLAIMS</h3> <h2>TRENCH 17</h2>	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. B2M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2 m
DWG. No. 18	<h2>NORANDA EXPLORATION</h2> <p>OFFICE: VANCOUVER</p>	

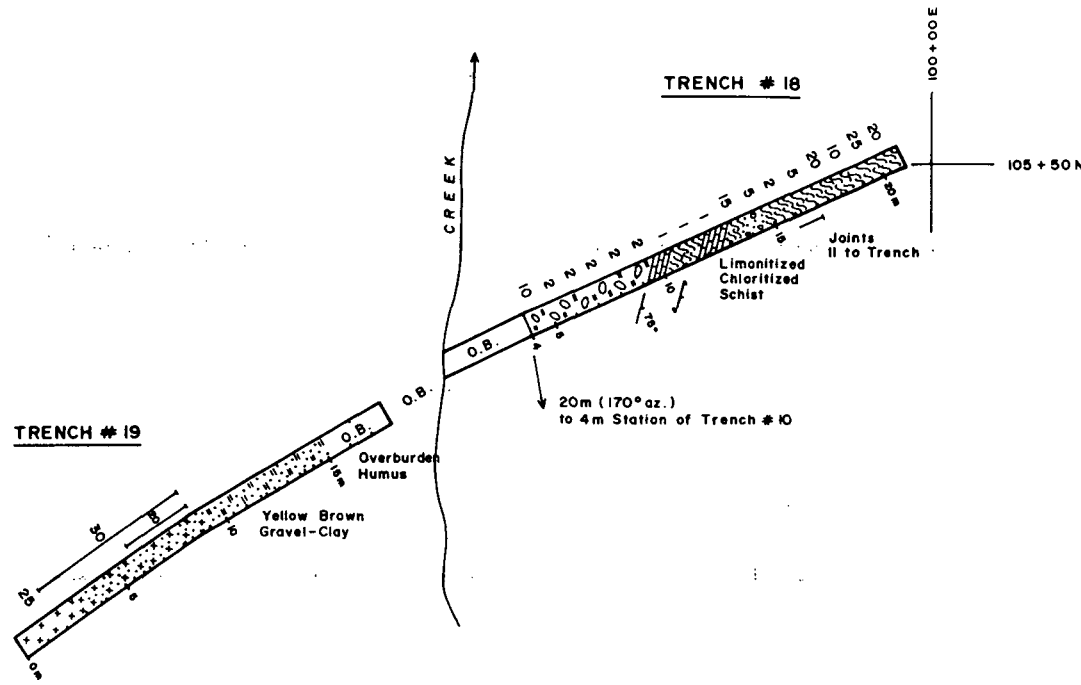
to extend the mineralization zone to the north. Although several beds of limestone/marble were found in very brittle schist, no positive SWUV-response was obtained and skarn is lacking in the trench. The highest value is 25 ppm and most likely occurring in the glacial clay layer.

Trench #19 (Fig.19): Length of 18m. This trench may be considered an extension of Trench #18 at the other side of the creek. The rock in the trench consists predominantly of granite to extremely weathered granite (sand and gravel). No positive SWUV-response was obtained. It is believed that the contact between the mica schist and the granite intrusion does coincide roughly with the creek. This trench was not sampled over specific intervals because of imminent collapse and, therefore, only grab samples were taken.

The information collected from the trenches dug during the 1985 fieldseason is summarized in the table below.

LEGEND

-  Quartz Vein
-  Muscovite Granite (with Accessory Biotite)
-  Muscovite - Granitic Gravel (Weathered)
-  Gravel
-  Gravelly Clay
-  Boulder Clay
-  Micaceous Limestone / Marble
-  Mica Schist : I - Indurated; W - Weathered
C - Crumbly ; O - Oxidized
-  Mica Quartzite
-  Schist Alternating with Quartzite
- O.B. Overburden
-  80° Foliation and Dip
-  30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- 575 Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 5 m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.



Trench # 8 Sample Interval = 1m
 Trench # 9 Dangerous Trench / Grabs on Top

SCALE 1: 200



REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCHES: 18, 19	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. 82M/3E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2 m
DWG. No. 19	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

Table 3. Summary of Trench Information.

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=====
Trench      Length  Sample      SWUV      Comments
#           m       interval    Response
                m              (section)
-----
#4          109      5           neg       No mineralization
#6           95      1           neg       "        "        "
#7           16      1           pos       Miner. from 0-4m
#8           22      1           pos       Miner. from 0-8m
#9           77      1           pos       Miner. from 50-53m
#10          32      1           pos       Miner. from 6.5-12m
#11          37      2           pos       Miner. from 30-35m
#12          40      2           neg       No mineralization
#13          18      1           neg       "        "        "
#14          22      2           neg       "        "        "
#15          50      2           neg       "        "        "
#16          22      2           neg       "        "        "
#17          30      2           neg       "        "        "
#18          21      1           neg       "        "        "
#19          18      grabs       neg       "        "        "
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TOTAL OF 609 METERS OF TRENCHING IN 15 TRENCHES

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DIAMOND DRILLING

Eight diamond drill holes were collared on the property, all of them on the TU-100 claim. Most of them were chosen on the basis of trench information. Table 4 gives a summary of some of the more interesting characteristics of these holes. The drill logs are in Appendix V.

Table 4. Summary of Diamond Drilling Information.










D.D.H.-#	Depth (m)	Dip deg.	Bearing deg.	Location on grid	Best Grade % WO ₃ /m of core
TU-85-1	45.7	-45	225	105+00N 100+16E	0.244%/2.95m
TU-85-2	46.0	-45	45	104+75N 99+90E	No Mineraliz.
TU-85-3	34.7	-45	225	105+35N 100+15E	No Mineraliz.
TU-85-4	45.7	-45	200	105+00N 100+32E	0.49%/2.45m
TU-85-5	48.8	-45	200	104+80N 100+55E	0.017%/2.85m
TU-85-6	22.5	-45	200	105+25N 100+40E	Hole abandoned fault zone
TU-85-7	32.3	-65	200	105+00N 100+32E	0.083%/1.45m
TU-85-8	28.0	-45	180	110+80N 99+80E	0.02%/3.15m

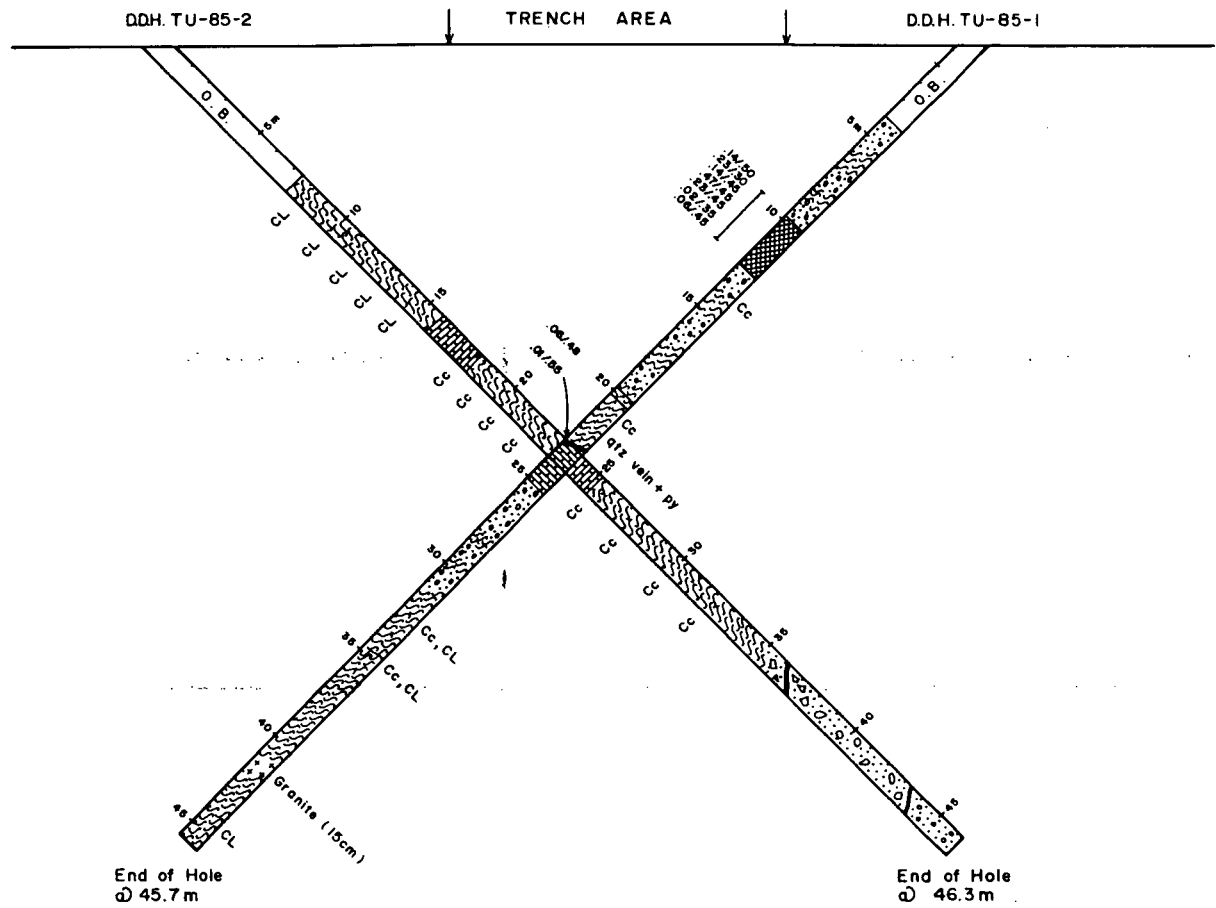
TU-85-1 (Fig.20): This hole was collared to intersect the mineralization at depth as revealed in the Horne, #2 and #5 trenches. Two bands of mineralization were observed in the core with SWUV-light. The main section, a skarn horizon, goes from 9.6m to 12.5m and contains .244% W03. A second scheelite band containing 0.06% W03 occurs from 19.85m to 20.33m. When considering the width of the scheelite mineralization in the trenches i.e. about 14m, the results of this hole indicate a dip to the northwest and pinching out with depth. It also seems reasonable to assume that the mineralization at the surface has been subject to spreading by glacial action and/or concentration by placer effect. This would explain the width of the mineralization at the surface whereas at depth the mineralized bands become more narrow. Although there is some evidence at the bottom of the hole for granitic intrusive rocks, the nearby granite stock was not reached.

TU-85-2 (Fig.20): This hole was collared because no definitive structural measurements could be obtained from the first hole which would help in determining the dip of foliation, bedding and/or mineralization. The response to the SWUV-light was very poor. This hole is considered barren.

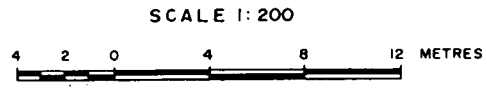
TU-85-3 (Fig.21): The third hole was collared under trench #10 in order to intersect the band of mineralization (Fig.11) at depth. No scheelite was observed in the core with SWUV-light. One sample was taken because of the

LEGEND

-  Quartz Vein
-  Mica - Schist
-  Granite
-  Gravel
-  Mica Quartzite
-  Garnet Skarn
-  Marble (with Varying Amounts of Quartz and Micas)
-  Breccia
-  Clayey Breccia
- Cc Carbonaceous
- CL Clayey
- IS Incipient Skarnification
- OB Overburden
- Py Pyrite
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- .14/.50 .14% WO_3 Over 0.50 m. of Core












REVISED	HORNE OPTION	
	TU CLAIMS	
	D.D.H. TU-85-1, 2	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. 82M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2m
DWG. No. 20	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

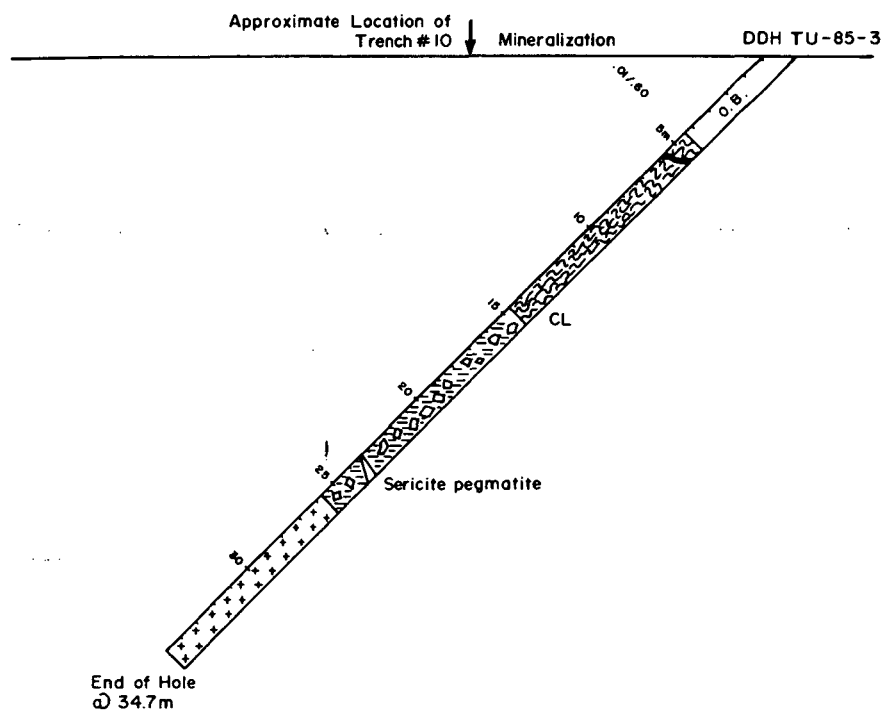


NOTE:
No Scheelite Observed
in DDH.TU-85-2 with Swuv Light

VANCOUVER

LEGEND

-  Quartz Vein
-  Mica - Schist
-  Granite
-  Gravel
-  Mica Quartzite
-  Garnet Skarn
-  Marble (with Varying Amounts of Quartz and Micas)
-  Breccia
-  Clayey Breccia
- Cc Carbonaceous
- CL Clayey
- IS Incipient Skarnification
- OB Overburden
- Py Pyrite
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- .14/.50 .14% WO₃ Over 0.50m. of Core



NOTE :

No Scheelite Observed in DDH TU-85-3

SCALE 1:200



REVISED	HORNE OPTION TU CLAIMS DDH. TU-85-3	
PROJ No. R 31	SURVEY BY: J.HELSEN	DATE: September 85
N.T.S. 82M/13E	DRAWN BY: J.SERWIN	SCALE: 1cm = 2m
DWG. No. 21	NORANDA EXPLORATION OFFICE: VANCOUVER	

VANCOUVER 11875










P.22

presence of skarn. This sample contained 0.01% W_2O_3 . The results of this hole infer that the scheelite mineralization does not continue at depth and, therefore, must be related to glacial dispersion and/or placer effect accumulation.

TU-85-4 (Fig.22): Hole #4 should be regarded in conjunction with hole #7 collared at a steeper angle but at the same location. In this hole scheelite mineralization occurs from 10.7m to 13.7m containing about 3.11% W_2O_3 . This hole was drilled to test the width of the mineralization at the 14m station of trench #5 where it is intersected by the trenches #7 and #8. The true width of the mineralization in the hole i.e. about 1.8m is drastically reduced when compared to the inferred width at the 14m station intersection surface. The mineralization seems to dip to the NNE.

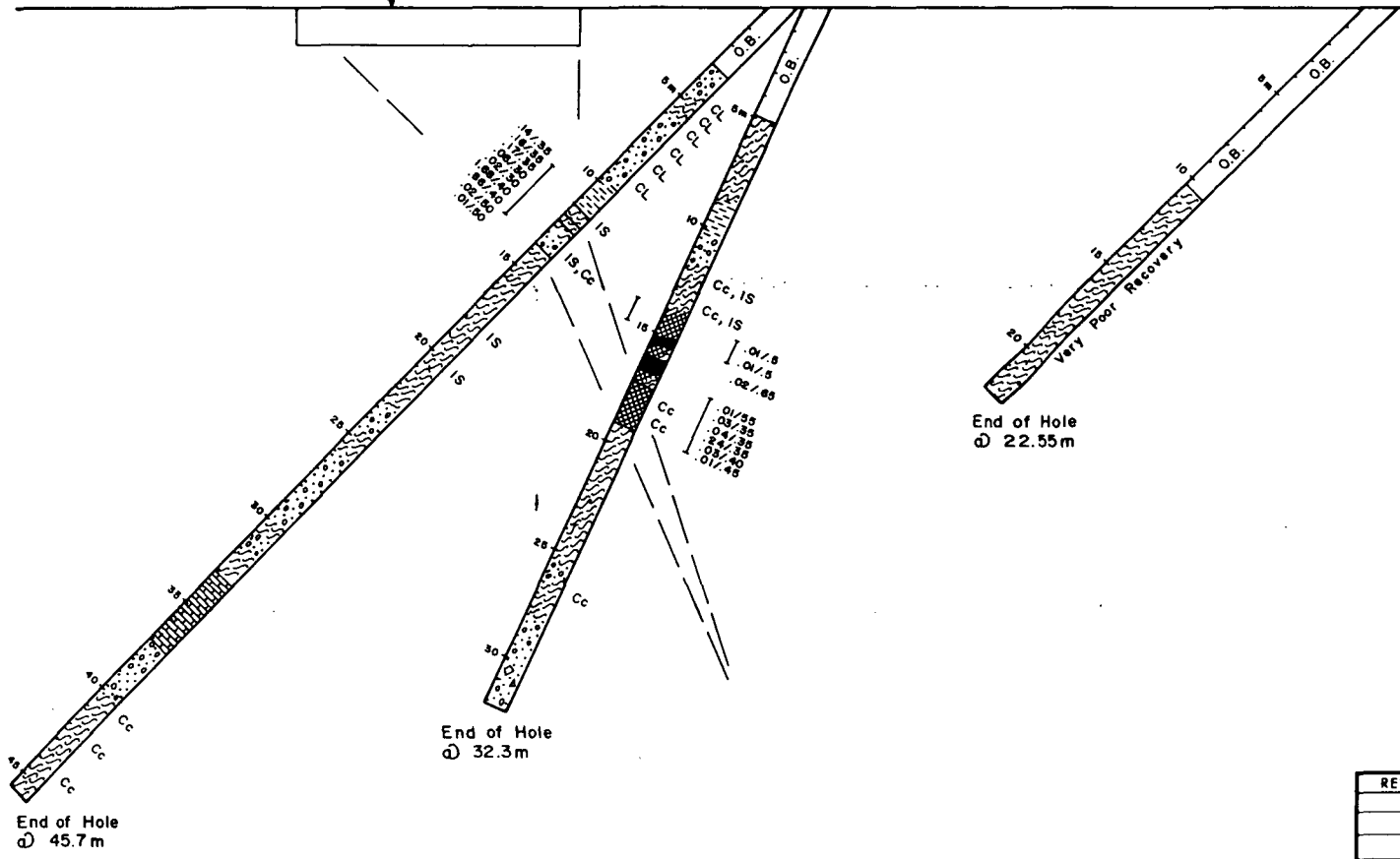
TU-85-5 (Fig.23): Hole #5 was drilled some 25m in an eastsoutheasterly direction from hole #4 in the hope to intersect the potential extension of the mineralization zone as could be expected from the data from trench #5. This hole did not reveal any obvious blue-white scheelite as in some of the trenches and drillcore. Instead a dark yellow tetragonal (?) mineral, generally in small amounts i.e. less than 1%, was observed over the whole length of the core. This yellow mineral was initially believed to be a Mo-rich scheelite variety, but the low Mo contents disprove this assumption. Moreover, the scheelite content in the core is low. The highest grade observed is .017% W_2O_3 over 2.85m.

LEGEND

-  Quartz Vein
-  Mica - Schist
-  Granite
-  Gravel
-  Mica Quartzite
-  Garnet Skarn
-  Marble (with Varying Amounts of Quartz and Micas)
-  Breccia
-  Clayey Breccia
- Cc Carbonaceous
- CL Clayey
- IS Incipient Skarnification
- OB Overburden
- Py Pyrite
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- .14/.50 .14% WO₃ Over 0.50m. of Core

14m Station of Trench # 5 Forming Junction with Trenches # 7 & # 8

D.D.H. TU-85-4 D.D.H. TU-85-7 D.D.H. TU-85-6



End of Hole
∅ 45.7 m

End of Hole
∅ 32.3m

End of Hole
∅ 22.55m

NOTE :

No Scheelite Observed in D.D.H. TU-85-6
This Hole was Abandoned Because of Very Poor Core Recovery Due to a Fault Zone.

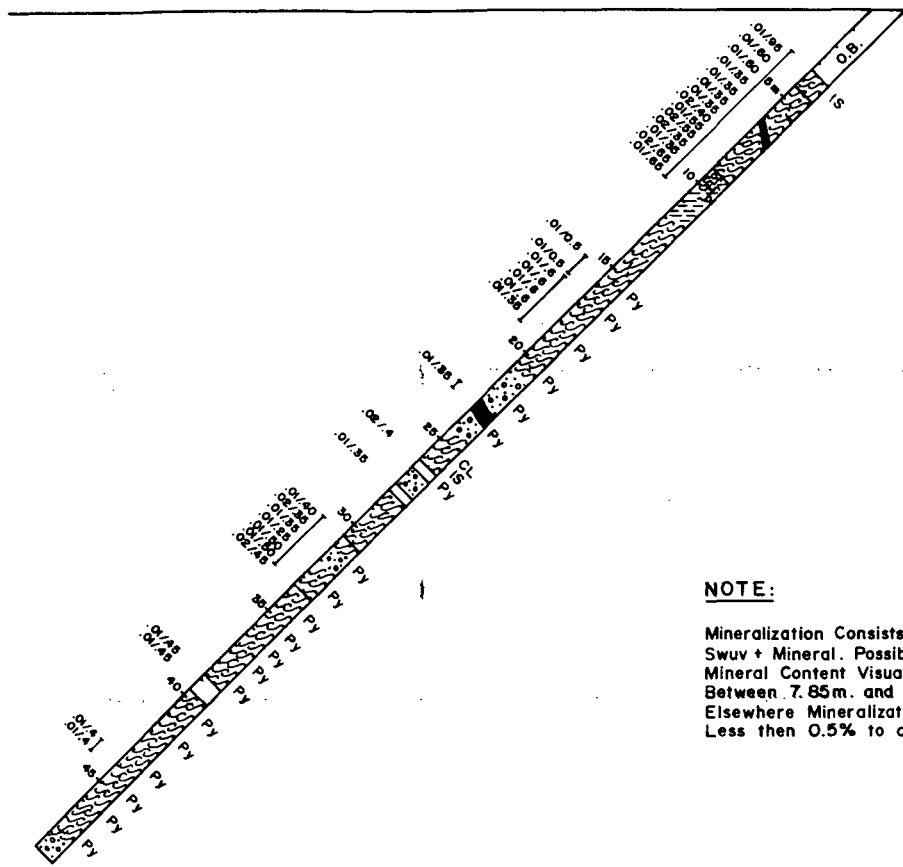
SCALE 1:200



REVISED	HORNE OPTION	
	TU CLAIMS	
	D.D.H. TU-85-4,6&7	
PROJ. No. R 31	SURVEY BY: J.HELSEN	DATE: September 85
N.T.S. R2M13E	DRAWN BY: J.SERWIN	SCALE: 1cm = 2 m
DWG. No. 22	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

VANICAL 11825

DDH. TU-85-5



End of Hole
 ∅ 48.8 m.

NOTE:

Mineralization Consists of a Yellow Swuv + Mineral. Possibly Scheelite. Mineral Content Visually Estimated at 1% Between 7.85m. and 8.75m. of Depth. Elsewhere Mineralization Consists of Less than 0.5% to a Few Crystals.

LEGEND

- Quartz Vein
- Mica - Schist
- Granite
- Gravel
- Mica Quartzite
- Garnet Skarn
- Marble (with Varying Amounts of Quartz and Micaceous)
- Breccia
- Clayey Breccia
- Cc Carbonaceous
- CL Clayey
- IS Incipient Skarnification
- OB Overburden
- Py Pyrite
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- .14/.50 .14% WO₃ Over 0.50m. of Core

SCALE 1:200



REVISED	HORNE OPTION TU CLAIMS DDH. TU-85-5	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 85
N.T.S. 82M/3E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2m
DWG. No. 23	NORANDA EXPLORATION OFFICE: VANCOUVER	

Tin contents are also very low.

TU-85-6 (Fig.22): Hole #6 was chosen to intersect at depth the extension of the scheelite mineralization observed in hole #4 about 25m more to the south. The hole stayed within the heavily chloritized/clay zone resulting in very poor core recovery. The hole was aborted in the end.

TU-85-7 (Fig.22): This hole intersected the band of scheelite mineralization, as expected from hole #4, between 17.2m and 19.1m in skarn. Above this mineralized skarn occurs a barren garnet skarn zone with a few barren quartz veins. This barren zone did not show any response to the SWUV-light either. Both the width and grade of the scheelite mineralization seem to have been further reduced with depth.

TU-85-8 (Fig.24): Hole #8 intersected the band of scheelite mineralization expected to occur between the road showing and trench #11. The hole was stopped after reaching the nearby muscovite granite intrusion. The scheelite occurs in skarn and marble.

In summary, out of eighth holes:

- 1) one hole was aborted.
- 2) five holes contained some scheelite mineralization, but the overall grades are too low to make them economically interesting.
- 3) the ore zone, at the surface estimated to have a width of about 14 m and a strike of about 300 deg..

did not live up to expectations. It dips about 70 deg. NNW and pinches out with depth.

4) the expected extension of the ore zone north of the Horn and #2 trenches did not materialize under trench #10 with hole #3.

5) The expected extension to the south of the Horne and #2 trenches was confirmed by the holes #4 and #7 i.e. some 15m to the south of trench #2.

6) marginal scheelite values were found in hole #5 some 50m east of trench #2. These values, however, do not reflect a further extension of the ore zone. Consequently the ore zone has a length of less than 50m and pinches out at a depth of less than 30m.

The grade of the scheelite mineralization is too low and the overall size of the delineated ore zone much too small to be of any economic interest.

CONCLUSIONS AND RECOMMENDATIONS

Topography:

The topography of the property which is located on the rather flat top of a mountain shows a gentle slope towards the east but steepens greatly towards the north and south. Geochem anomalies on the property are believed to be closely associated with topographical features along, with other factors such as the granitic intrusion forming a dome, the schists forming a depression, as well as depressions formed by creeks. Moreover some creek depressions seem to follow the contacts between either granite and gneiss or granite and schist-skarn.

Geology:

Outcrop amounts to less than 3%. Consequently the geological boundaries are still very speculative, except in areas of trenches or outcrop.

The W mineralization is associated with a diopside-vesuvianite-garnet-tremolite skarn without other substantial mineralization, exception made for some occasional sphalerite.

The intrusion which caused the skarnification and most likely the source of the W mineralization consists of a fine to medium grained muscovite granite occasionally ranging into a muscovite pegmatite.

W-mineralization:

The results of the first five trenches are given in the Report #2. Because of the successful results mainly in trench #2 further trenching was recommended for the 1985 season. The continuation of the ore zone as exposed mainly in trenches #2 and #5 did not materialize. Moreover, the ore zone extended only slightly north of trench #2 as shown in trench #10 but not in the core of DDH TU-85-3. It is believed that the ore zone may have been cut off by the chlorite-kaolinite fault zone in this area.

The small band of scheelite mineralization on the road and in trench #11 did not extend further to the west (trench #13) and was not present in DDH TU-85-8 either.

It is concluded that when tungsten mineralization occurs it is present as small pockets close to the schist granite contact or even in the granite itself. At surface these pockets or wedges of mineralization seem much larger due to fluvio-glacial dispersion. At depth, however, these bands of mineralization pinch out.

The small size and the low grade of these pockets of mineralization do not warrant further work.

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT	DIAMOND DRILLING ON THE TU CLAIMS	DATE
TYPE OF REPORT		
a) Wages:		
No. of Days	30	
Rate per Day	\$ 127.44	
Dates From:	July - December, 1985	
Total Wages	30 x \$ 127.44	\$3,823.30
b) Food and Accomodation:		
No of days	30	
Rate per day	\$ 45.21	
Dates From:	July - December, 1985	
Total Cost	30x \$ 45.21	\$1,356.29
c) Transportation:		
No of days	30	
Rate per day	\$ 32.54	
Dates From:	July - December, 1985	
Total Cost	30 X \$ 32.54	\$ 976.31
d) Instrument Rental:		
Type of Instrument		
No of days		
Rate per day	\$	
Dates From:		
Total Cost	X \$	
Type of Instrument		
No of days		
Rate per day	\$	
Dates From:		
Total Cost	X \$	

f) Analysis		\$1,103.55
(See attached schedule)		
g) Cost of preparation of Report		
Author		\$ 500.00
Drafting		500.00
Typing		100.00
h) Other:		
Contractor		\$26,966.56

Total Cost		\$35,326.01
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e) Unit costs for Diamond Drilling		
No of days	30	
No of units	303.7 m	
Unit costs	116.319	/ m Drilling
Total Cost	303.9 x 116.319	\$35,326.08

NORANDA EXPLORATION COMPANY, LIMITED
(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT:

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL</u>
WO ₃	67	9.00	603.00
Mo	67	1.90	127.30
Au	67	4.50	301.50
Sn	7	3.75	26.25
Multi-Element (30)	7	6.50	45.50
		TOTAL:	<u>\$1,103.55</u> =====

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT	TRENCHING ON THE TU CLAIMS	DATE
TYPE OF REPORT		
a) Wages:		
No. of Days	35	
Rate per Day	\$ 116.87	
Dates From:	July - December, 1985	
Total Wages	35 x \$ 116.87	\$4,090.45
b) Food and Accomodation:		
No of days	35	
Rate per day	\$ 33.00	
Dates From:	July - December, 1985	
Total Cost	35 x \$ 33.00	\$1,155.00
c) Transportation:		
No of days	35	
Rate per day	\$ 36.33	
Dates From:	July - December, 1985	
Total Cost	35 X \$ 36.33	\$1,271.55
d) Instrument Rental:		
Type of Instrument		
No of days		
Rate per day	\$	
Dates From:		
Total Cost	X \$	
Type of Instrument		
No of days		
Rate per day	\$	
Dates From:		
Total Cost	X \$	

f) Analysis \$ 3,427.30
(See attached schedule)

g) Cost of preparation of Report
Author \$ 500.00
Drafting 500.00
Typing 100.00

h) Other: Contractor \$ 7,250.99

Total Cost \$18,295.29

e) Unit costs for / Trenching
No of days 35
No of units 609 m
Unit costs 30.041/m Trench
Total Cost 609 x 30.041 \$18,294.97

NORANDA EXPLORATION COMPANY, LIMITED
(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT:

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL</u>
Cu	337	1.60	539.20
Zn	339	0.60	203.40
Pb	332	0.60	199.20
Ag	5	0.60	3.00
Sn	58	4.25	246.50
W	339	3.75	1,271.25
Au	5	6.50	32.50
Rock Prep.	339	2.75	932.25
		TOTAL:	<u>\$3,427.30</u> =====

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT GEOLOGY & GEOCHEMISTRY ON THE TU CLAIMS DATE
TYPE OF REPORT

a) Wages:

No. of Days 90
Rate per Day \$ 150.23
Dates From: July - December, 1985
Total Wages 90 x \$ 150.23 \$13,520.70

b) Food and Accomodation:

No of days 90
Rate per day \$ 41.94
Dates From: July - December, 1985
Total Cost 90 x \$ 41.94 \$ 3,774.60

c) Transportation:

No of days 90
Rate per day \$ 52,05
Dates From: July - December, 1985
Total Cost 90 X \$52.05 \$ 4,684.50

d) Instrument Rental:

Type of Instrument
No of days
Rate per day \$
Dates From:
Total Cost X \$

Type of Instrument
No of days
Rate per day \$
Dates From:
Total Cost X \$

- | | | |
|--|--|-------------|
| f) Analysis
(See attached schedule) | | \$ 6,850.80 |
| g) Cost of preparation of Report | | |
| Author | | \$ 500.00 |
| Drafting | | \$ 500.00 |
| Typing | | \$ 100.00 |
| h) Other: | | |
| Contractor | | |

Total Cost		\$29,930.60
	36% of Total Cost	\$10,775.02

e) Unit costs for Geochemistry - Geology		
No of days	90	
No of units	1,064	
Unit costs	28.13/ sample	
Total Cost	1,064 x 28.13	\$29,930.60

NORANDA EXPLORATION COMPANY, LIMITED
(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT:

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL</u>
Cu	951	1.60	1,521.60
Zn	951	.60	570.60
Pb	951	.60	570.60
Ag	330	.60	198.00
W	1,064	3.75	3,990.00
		TOTAL:	<u><u>\$6,850.80</u></u>

The above costs represent work carried out on all the TU claims i.e. TU-100, TU-200, TU-300, TU-400 and TU-500 claims. The work to be used for assessment purposes on the TU group (TU-100 and TU-200) forms 36% of the total amount spent on the property. This figure of 36% was arrived at by the following methods after averaging the end results:

1. Comparison of number of units (35) in TU group with the number of claims of the entire property (95) i.e. about 37%.
2. Comparison of number of soils taken on TU group (371) with total number of soils (1064) on the entire property i.e. about 35%.

LIST OF REFERENCES

G.S.C. Map 48-1963, Geology Adams Lake (Seymour Arm, West Half), geology by R.B. Campbell, 1962 & 1963.

J.N.Helsen and L. Bradish, May 1985, Report #2 on the TU-claims, Geochemistry, Geology, Geophysics and Trenching, NTS 82M/13E.

D.C. Miller, december 1983, Geological, Geochemical and Percussion Drill Report, TU-1 to # claims, Sulpetro Minerals Limited. Calgary.

TRM Engineering Ltd., October 1983, Troudor Resources Inc., Silence Lake Project.

A P P E N D I X I

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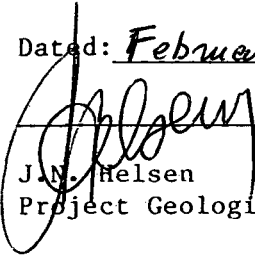
CERTIFICATE

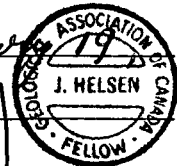
C E R T I F I C A T E

I, J.N. Helsen, of the City of Richmond, Province of British Columbia, do hereby certify that:

1. I am a geologist residing at 3380 Newmore Avenue, Richmond.
2. I graduated from the University of Louvain, Belgium, with a 'Licenciaat in Geologie' in 1968.
3. I am a graduate of McMaster University, Hamilton, Ontario, with a M.Sc. (1970) and a Ph.D (1976) in geology.
4. I have worked in mineral exploration since 1967 and have been practicing my profession since 1978 with Mattagami Lake Exploration, Limited.
5. I have been employed with Noranda Exploration Company, Limited (no personal liability) since 1982.
6. I am a Fellow of the Geological Association of Canada.
7. I supervised the work described in this report.

Dated: February 19 1986


J.N. Helsen
Project Geologist



A P P E N D I X I I

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Geochemical Results

for

Soils

GRID# REC#	TUCTMP LINE	STATION	CU 1A	ZN 1A	FR 1A	AG 1A	W 5P
1	-0001500	-0002500	10.	20.	10.	.2	1.
2		-0002350	14.	24.	14.	.2	5.
3		-0002300	10.	18.	12.	.2	10.
4		-0002250	12.	14.	10.	.2	10.
5		-0002200	36.	66.	2.	.2	5.
6		-0002150	12.	78.	10.	.2	1.
7		-0002100	16.	26.	12.	.2	1.
8		-0002050	14.	26.	12.	.2	1.
9		-0002000	12.	28.	8.	.2	1.
10		-0001950	12.	32.	8.	.2	20.
11		-0001900	22.	66.	14.	.4	1.
12		-0001850	14.	62.	10.	.2	1.
13		-0001800	16.	130.	18.	.4	1.
14		-0001750	12.	50.	12.	.4	1.
15		-0000500	22.	76.	10.		10.
16		-0000450	26.	90.	12.		1.
17		-0000400	22.	66.	12.		1.
18		-0000350	16.	64.	12.		1.
19		-0000300	18.	60.	6.		1.
20		-0000250	18.	52.	10.		1.
21		-0000200	16.	48.	8.		1.
22		-0000150	20.	68.	12.		1.
23		-0000100	28.	140.	12.		1.
24		-0000050	40.	130.	30.		1.
25		-0000000	14.	28.	8.		1.
26	-0001450	-0002500	12.	30.	6.	.2	1.
27		-0000000	16.	52.	8.		1.
28	-0001400	-0002500	10.	20.	10.	.2	2.
29		-0000000	16.	40.	8.		1.
30	-0001350	-0002500	12.	20.	6.	.2	1.
31		-0000000	24.	60.	12.		1.
32	-0001300	-0002500	16.	34.	6.	.2	1.
33		-0000000	18.	44.	16.		1.
34	-0001250	-0002500	68.	66.	18.	.4	1.
35		-0000000	18.	46.	10.		2.
36	-0001200	-0002500	30.	82.	12.	.2	1.
37		-0000000	16.	16.	8.		1.
38	-0001150	-0002500	26.	70.	14.	.2	5.
39		-0000000	18.	60.	10.		10.
40	-0001100	-0002500	14.	44.	8.	.2	1.
41		-0000000	16.	58.	8.		10.
42	-0001050	-0002500	10.	26.	1.	.2	1.
43		-0000000	18.	100.	22.		2.
44	-0001000	-0002500	14.	18.	4.	.2	1.
45		-0000000	28.	90.	14.		10.
46		+0000050	54.	140.	26.		1.
47		+0000100	18.	76.	10.		1.
48		+0000150	18.	60.	6.		1.
49		+0000200	20.	56.	10.		1.
50		+0000250	36.	140.	16.		1.
51		+0000300	18.	68.	12.		10.
52		+0000350	26.	82.	10.		1.
53		+0000400	28.	76.	12.		1.
54		+0000450	42.	92.	20.		1.
55		+0000550	40.	130.	16.		1.
56		+0000600	32.	70.	16.		1.
57		+0000650	62.	100.	22.		1.

GRID#	TUCTMP						
REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
58	-0001000	+0000700	20.	48.	8.		1.
59		+0000750	32.	68.	12.		1.
60		+0000800	32.	64.	12.		1.
61		+0000850	34.	52.	12.		1.
62		+0000900	22.	60.	10.		1.
63		+0000950	24.	64.	16.		1.
64		+0001000	32.	64.	12.		1.
65		+0002000	36.	42.	6.	.4	1.
66		+0002050	44.	82.	12.	.2	1.
67		+0002150	30.	92.	20.	.2	2.
68		+0002200	20.	46.	10.	.2	1.
69		+0002250	18.	76.	4.	.2	1.
70		+0002300	24.	70.	14.	.2	10.
71		+0002350	14.	20.	1.	.2	10.
72		+0002400	14.	56.	6.	.2	2.
73		+0002450	34.	70.	10.	.2	1.
74		+0002500	20.	66.	14.	.2	1.
75	-0000950	-0002500	12.	38.	6.	.2	20.
76		-0000000	18.	48.	10.		2.
77		+0002500	44.	100.	20.	.4	1.
78	-0000900	-0002500	12.	32.	6.	.2	1.
79		-0000000	34.	94.	20.		2.
80		+0002500	18.	58.	10.	.2	1.
81	-0000850	-0002500	14.	32.	6.	.2	2.
82		-0000000	26.	56.	14.		2.
83		+0002500	56.	100.	6.	.4	1.
84	-0000800	-0002500	12.	24.	6.	.2	1.
85		-0000000	24.	72.	16.		1.
86		+0002500	22.	76.	8.	.2	1.
87	-0000750	-0002500	12.	28.	4.	.2	1.
88		-0002000	16.	22.	12.		2.
89		-0001950	16.	28.	16.		2.
90		-0001900	16.	22.	24.		2.
91		-0001850	12.	40.	20.		10.
92		-0001750	20.	30.	24.		1.
93		-0001700	8.	22.	20.		1.
94		-0001650	12.	32.	30.		1.
95		-0001600	14.	34.	26.		1.
96		-0001550	12.	34.	20.		1.
97		-0001500	22.	30.	18.		1.
98		-0001450	18.	38.	22.		1.
99		-0001400	12.	32.	18.		10.
100		-0001350	10.	16.	14.		2.
101		-0001300	10.	40.	26.		10.
102		-0001250	12.	48.	20.		2.
103		-0001200	14.	58.	20.		2.
104		-0001150	18.	70.	26.		5.
105		-0001100	16.	54.	30.		1.
106		-0001050	26.	78.	32.		1.
107		-0001000	18.	72.	26.		2.
108		-0000950	22.	66.	22.		1.
109		-0000900	30.	110.	32.		1.
110		-0000850	18.	72.	36.		2.
111		-0000800	18.	86.	40.		2.
112		-0000750	22.	76.	30.		10.
113		-0000700	20.	60.	44.		2.
114		-0000650	20.	52.	18.		2.

GRID#	TUCTMP REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
	115	-0000750	-0000600	22.	64.	14.		2.
	116		-0000550	24.	56.	10.		5.
	117		-0000500	26.	68.	20.		5.
	118		-0000450	26.	58.	20.		5.
	119		-0000400	24.	60.	12.		10.
	120		-0000350	36.	94.	20.		5.
	121		-0000300	24.	60.	16.		5.
	122		-0000250	20.	78.	14.		5.
	123		-0000200	14.	30.	12.		1.
	124		-0000150	12.	18.	12.		15.
	125		-0000100	22.	44.	14.		5.
	126		-0000050	26.	64.	12.		10.
	127		-0000000	28.	78.	16.		2.
	128		+0000000	42.	110.	26.		1.
	129		+0000050	30.	98.	22.		1.
	130		+0002500	22.	56.	8.	.2	25.
	131	-0000700	-0002500	12.	24.	6.	.2	5.
	132		-0002000	14.	36.	24.		2.
	133		-0001500	14.	42.	20.		1.
	134		-0001000	24.	74.	20.		1.
	135		-0000500	26.	64.	16.		5.
	136		-0000000	18.	56.	10.		2.
	137		+0002500	14.	36.	6.	.2	2.
	138	-0000650	-0002500	14.	46.	4.	.2	15.
	139		-0002000	10.	26.	18.		10.
	140		-0001500	12.	36.	16.		1.
	141		-0001000	20.	52.	14.		1.
	142		-0000500	22.	60.	18.		10.
	143		-0000000	16.	56.	8.		10.
	144		+0002500	18.	52.	4.	.2	1.
	145	-0000600	-0002500	18.	46.	12.	.2	1.
	146		-0002000	10.	20.	14.		1.
	147		-0001500	12.	26.	22.		1.
	148		-0001000	18.	30.	16.		1.
	149		-0000500	30.	56.	12.		1.
	150		-0000000	16.	26.	14.		1.
	151		+0002500	18.	50.	8.	.2	5.
	152	-0000550	-0002500	18.	66.	14.	.2	2.
	153		-0001500	20.	30.	22.		1.
	154		-0001000	16.	48.	20.		2.
	155		-0000500	46.	100.	18.		2.
	156		-0000000	16.	72.	14.		1.
	157		+0002500	34.	100.	12.	.2	1.
	158	-0000500	-0002500	28.	60.	20.		1.
	159		-0002000	16.	26.	24.		1.
	160		-0001500	12.	30.	18.		5.
	161		-0001000	28.	92.	40.		2.
	162		-0000500	22.	58.	12.		10.
	163		-0000000	14.	46.	6.		25.
	164		+0002500	12.	12.	1.	.2	1.
	165	-0000450	-0002500	14.	56.	10.		5.
	166		-0002000	10.	30.	20.		1.
	167		-0001500	16.	26.	18.		10.
	168		-0001000	22.	78.	22.		2.
	169		-0000500	22.	68.	12.		20.
	170		-0000000	22.	54.	18.		1.
	171		+0002500	8.	12.	1.	.2	1.

GRID#	TUCTMP						
REC#	LINE	STATION	CU 1A	ZN 1A	FB 1A	AG 1A	W 5P
172	-0000400	-0002500	12.	52.	12.		5.
173		-0002000	16.	18.	16.		1.
174		-0001500	16.	28.	18.		10.
175		-0001000	16.	68.	18.		10.
176		-0000500	28.	58.	20.		2.
177		-0000000	16.	70.	14.		5.
178		+0002500	10.	12.	2.	.2	I.S.
179	-0000350	-0002500	14.	48.	10.		15.
180		-0002000	10.	20.	18.		1.
181		-0001500	16.	34.	20.		5.
182		-0001000	20.	44.	16.		1.
183		-0000500	42.	130.	24.		2.
184		-0000000	12.	58.	6.		5.
185		+0002500	22.	62.	12.	.2	1.
186	-0000300	-0002500	12.	36.	8.		1.
187		-0002000	10.	24.	18.		1.
188		-0001500	16.	28.	18.		20.
189		-0001000	28.	38.	26.		1.
190		-0000500	32.	72.	14.		5.
191		-0000000	24.	60.	18.		2.
192		+0002500	14.	74.	6.	.2	1.
193	-0000250	-0002500	18.	52.	12.		1.
194		-0002000	12.	20.	18.		1.
195		-0001500	14.	38.	20.		10.
196		-0001000	16.	44.	16.		1.
197		-0000500	36.	70.	20.		5.
198		-0000000	22.	60.	6.		2.
199		+0002500	18.	50.	8.	.2	1.
200	-0000200	-0002500	18.	70.	12.		1.
201		-0002000	12.	30.	14.		1.
202		-0001500	30.	100.	40.		2.
203		-0001000	32.	68.	22.		1.
204		-0000500	24.	68.	14.		15.
205		-0000000	20.	64.	8.		2.
206		+0002500	34.	100.	14.	.2	15.
207	-0000150	-0002500	14.	40.	12.		2.
208		-0002000	18.	38.	16.		1.
209		-0001500	14.	40.	18.		10.
210		-0001000	22.	80.	18.		10.
211		-0000500	20.	48.	16.		15.
212		-0000000	22.	60.	12.		5.
213		+0002500	34.	130.	12.	.2	5.
214		+0004000	10.	48.	12.		100.
215	-0000100	-0002500	14.	56.	6.		1.
216		-0002000	8.	22.	14.		1.
217		-0001500	12.	32.	20.		5.
218		-0001000	24.	50.	20.		1.
219		-0000500	28.	66.	20.		2.
220		-0000000	22.	64.	10.		1.
221		+0002500	30.	100.	18.	.2	1.
222		+0004000	16.	32.	6.		2.
223	-0000050	-0002500	10.	12.	2.		1.
224		-0001500	14.	32.	18.		5.
225		-0001000	28.	62.	18.		1.
226		-0000500	22.	40.	24.		2.
227		-0000000	16.	48.	12.		10.
228		+0002500	36.	140.	52.	.2	1.

GRID: TUCTMP REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
229	-0000050	+0004000	26.	46.	16.		20.
230	-0000000	-0002500	12.	46.	6.		5.
231		-0002300	28.	38.	16.	.2	1.
232		-0002250	8.	24.	14.	.2	5.
233		-0002200	10.	36.	10.	.2	5.
234		-0002150	12.	48.	10.	.2	2.
235		-0002100	14.	44.	18.	.2	1.
236		-0002050	10.	32.	16.	.2	35.
237		-0002000	10.	36.	22.	.2	15.
238		-0001950	12.	46.	10.	.2	2.
239		-0001900	12.	38.	6.	.2	15.
240		-0001850	12.	52.	8.	.2	5.
241		-0001800	10.	32.	8.	.2	1.
242		-0001750	14.	32.	16.	.6	1.
243		-0001700	12.	40.	10.	.2	35.
244		-0001650	12.	50.	18.	.2	10.
245		-0001600	20.	160.	30.	.4	1.
246		-0001550	8.	28.	12.	.2	10.
247		-0001500	14.	48.	12.	.2	5.
248		-0001450	10.	18.	10.	.2	5.
249		-0001400	10.	26.	10.	.2	10.
250		-0001350	12.	36.	8.	.4	5.
251		-0001300	24.	62.	16.	.6	2.
252		-0001250	16.	40.	14.	.4	1.
253		-0001200	12.	42.	8.	.2	2.
254		-0001150	16.	42.	18.	.4	2.
255		-0001100	24.	32.	14.	.4	2.
256		-0001050	12.	44.	14.	.4	5.
257		-0001000	14.	34.	14.	.2	5.
258		-0000950	14.	52.	24.	.2	5.
259		-0000900	16.	74.	36.	.4	10.
260		-0000850	12.	44.	16.	.2	1.
261		-0000800	16.	44.	12.	.4	1.
262		-0000750	18.	52.	12.	.2	5.
263		-0000700	42.	76.	40.	1.0	10.
264		-0000650	28.	84.	20.	.2	5.
265		-0000600	24.	80.	14.	.2	10.
266		-0000550	20.	66.	14.	.2	10.
267		-0000500	26.	66.	16.		10.
268			38.	38.	30.	.2	1.
269		-0000450	16.	66.	12.	.2	5.
270		-0000400	20.	52.	14.	.2	5.
271		-0000350	32.	78.	20.	.2	1.
272		-0000300	54.	92.	26.	.4	5.
273		-0000250	18.	26.	16.	.2	1.
274		-0000200	16.	46.	18.	.2	5.
275		-0000150	18.	50.	12.	.2	10.
276		-0000100	22.	52.	20.	.6	1.
277		-0000050	14.	28.	12.	.2	10.
278		-0000000	26.	80.	18.		2.
279		+0002150	28.	70.	18.		1.
280		+0002200	26.	86.	20.		1.
281		+0002250	42.	150.	26.		2.
282		+0002300	44.	130.	30.		1.
283		+0002350	76.	160.	44.		2.
284		+0002400	38.	110.	18.		2.
285		+0002450	110.	130.	10.		1.

GRID#	TUCTMP					
REC#	LINE	STATION	CU 1A	ZN 1A	PR 1A	AG 1A W 5P
286	-0000000	+0002500	44.	120.	16.	2.
287		+0002550	24.	100.	16.	2.
288		+0002600	40.	98.	28.	2.
289		+0002650	48.	76.	16.	2.
290		+0002700	16.	40.	14.	15.
291		+0002750	16.	84.	12.	20.
292		+0002800	26.	76.	18.	15.
293		+0002850	52.	96.	20.	
294		+0002900	16.	54.	14.	15.
295		+0002950	22.	52.	16.	15.
296		+0003000	30.	100.	16.	5.
297		+0003050	18.	56.	18.	5.
298		+0003100	16.	48.	10.	10.
299		+0003150	26.	78.	14.	15.
300		+0003200	50.	74.	22.	1.
301		+0003250	38.	100.	18.	1.
302		+0003300	12.	30.	8.	1.
303		+0003350	16.	46.	12.	2.
304		+0003400	28.	70.	16.	1.
305		+0003450	14.	40.	12.	2.
306		+0003500	22.	62.	16.	2.
307		+0003550	30.	76.	22.	1.
308		+0003600	34.	48.	24.	1.
309		+0003650	18.	64.	16.	2.
310		+0003700	42.	170.	20.	5.
311		+0003750	22.	52.	14.	5.
312		+0003800	22.	54.	20.	2.
313		+0003850	36.	130.	24.	1.
314		+0003900	22.	66.	20.	2.
315		+0003950	16.	40.	14.	1.
316		+0004000	16.	76.	12.	10.
317	+0000000	+0000000	12.	74.	16.	5.
318			18.	66.	12.	5.
319		+0000050	18.	64.	10.	5.
320		+0000100	16.	58.	6.	5.
321		+0000150	20.	86.	8.	5.
322		+0000200	28.	36.	18.	1.
323		+0000250	16.	58.	16.	1.
324		+0000300	14.	50.	18.	5.
325		+0000350	30.	92.	8.	1.
326		+0000400	14.	32.	10.	1.
327		+0000450	18.	46.	6.	10.
328		+0000500	48.	94.	10.	15.
329		+0000550	28.	54.	14.	1.
330		+0000600	12.	30.	12.	1.
331		+0000650	12.	56.	6.	5.
332		+0000700	12.	40.	16.	5.
333		+0000750	14.	52.	4.	5.
334		+0000800	52.	100.	20.	1.
335		+0000850	16.	58.	14.	1.
336		+0000900	24.	58.	14.	5.
337		+0000950	14.	54.	6.	5.
338		+0001000	16.	50.	8.	1.
339		+0001050	18.	52.	6.	1.
340		+0001100	34.	80.	6.	15.
341		+0001150	30.	78.	8.	5.
342		+0001200	26.	68.	4.	10.

GRID#	TUCTMP REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
	343	+0000000	+0001250	20.	60.	6.		10.
	344		+0001300	12.	36.	6.		2.
	345		+0001350	20.	60.	8.		5.
	346		+0001400	20.	54.	4.		5.
	347		+0001450	16.	60.	8.		10.
	348		+0001500	16.	48.	4.		1.
	349		+0001550	14.	48.	10.		1.
	350		+0001600	16.	58.	14.		1.
	351		+0001650	30.	74.	18.		1.
	352		+0001700	34.	86.	18.		1.
	353		+0001750	24.	62.	16.		2.
	354		+0001800	18.	52.	12.		2.
	355		+0001850	14.	54.	12.		2.
	356		+0001900	20.	76.	16.		1.
	357		+0001950	20.	60.	12.		2.
	358	+0000050	-0002500	10.	48.	6.		1.
	359		-0000500	34.	76.	22.		5.
	360		+0000000	26.	66.	14.		1.
	361		+0001000	18.	46.	10.		2.
	362		+0002000	22.	64.	14.	.2	1.
	363		+0003000	16.	62.	6.		10.
	364		+0004000	14.	52.	8.		10.
	365	+0000100	-0002500	10.	58.	6.		2.
	366		+0000000	26.	80.	8.		5.
	367		+0001000	14.	40.	10.		5.
	368		+0002000	24.	68.	16.	.4	1.
	369		+0003000	20.	32.	6.		10.
	370		+0004000	16.	56.	10.		45.
	371	+0000150	-0002500	38.	46.	38.		2.
	372		+0000000	38.	58.	20.		2.
	373		+0001000	12.	50.	8.		2.
	374		+0002000	28.	74.	12.	.2	1.8.
	375		+0003000	32.	52.	16.		10.
	376		+0004000	10.	40.	8.		50.
	377	+0000200	-0002500	40.	52.	16.		2.
	378		+0000000	10.	50.	10.		10.
	379		+0001000	20.	56.	8.		2.
	380		+0002000	34.	70.	24.	.4	2.
	381		+0003000	22.	88.	10.		10.
	382		+0004000	14.	60.	10.		10.
	383	+0000250	-0002500	6.	20.	6.		10.
	384		+0000000	30.	86.	10.		5.
	385		+0001000	26.	130.	8.		1.
	386		+0002000	34.	50.	12.	.8	2.
	387		+0003000	26.	76.	20.		2.
	388		+0004000	26.	52.	16.		35.
	389	+0000300	-0002500	6.	28.	6.		10.
	390		+0000000	54.	44.	20.		1.
	391		+0001000	36.	120.	10.		2.
	392		+0002000	38.	86.	18.	.4	1.
	393		+0003000	18.	64.	6.		5.
	394		+0004000	20.	58.	14.		15.
	395	+0000350	-0002500	12.	14.	10.		2.
	396		+0000000	16.	50.	12.		1.
	397		+0001000	22.	72.	8.		5.
	398		+0002000	26.	68.	12.	.2	1.
	399		+0003000	32.	100.	12.		1.

GRID#	TUCTMP REC# LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
400	+0000350	+0004000	22.	66.	12.		70.
401	+0000400	-0002500	10.	54.	6.		2.
402		+0000000	18.	56.	12.		2.
403		+0001000	40.	58.	8.		20.
404		+0002000	42.	74.	16.	.4	1.
405		+0003000	22.	62.	10.		1.
406		+0004000	38.	52.	20.		1.
407	+0000450	-0002500	10.	36.	8.		1.
408		+0000000	20.	40.	10.		20.
409		+0001000	130.	250.	32.		5.
410		+0002000	16.	62.	14.	.2	1.
411		+0003000	24.	58.	12.		1.
412		+0004000	74.	100.	28.		2.
413	+0000500	-0002500	12.	46.	10.		5.
414		+0000000	12.	60.	8.		20.
415		+0001000	30.	86.	72.		5.
416		+0002000	24.	62.	14.	.2	2.
417		+0003000	16.	24.	4.		2.
418		+0004000	66.	240.	34.		1.
419	+0000550	-0002500	10.	36.	8.		1.
420		+0000000	66.	140.	36.		20.
421		+0001000	68.	110.	22.		2.
422		+0002000	36.	86.	20.	.6	2.
423		+0003000	18.	48.	14.		1.
424		+0004000	28.	64.	14.		5.
425	+0000600	-0002500	14.	54.	10.		40.
426		+0000000	18.	60.	12.		1.
427		+0001000	16.	62.	12.		10.
428		+0002000	34.	68.	14.	.6	1.
429		+0003000	36.	82.	26.		2.
430		+0004000	20.	48.	14.		25.
431	+0000650	-0002500	12.	54.	10.		1.
432		+0000000	14.	60.	10.		10.
433		+0001000	20.	66.	10.		10.
434		+0002000	36.	88.	30.	.6	1.
435		+0003000	22.	54.	16.		2.
436		+0004000	26.	48.	14.		15.
437	+0000700	-0002500	10.	40.	10.		2.
438		+0000000	24.	30.	24.		20.
439		+0001000	18.	58.	10.		10.
440		+0002000	22.	76.	18.	.2	2.
441		+0003000	16.	32.	10.		5.
442		+0004000	30.	74.	16.		20.
443	+0000750	-0002500	8.	36.	6.		5.
444		+0000000	18.	50.	12.		20.
445		+0001000	14.	44.	10.		2.
446		+0002000	22.	72.	22.	.2	5.
447		+0003000	8.	28.	4.		2.
448		+0004000	22.	64.	16.		25.
449	+0000800	+0000000	14.	60.	12.		15.
450		+0001000	16.	38.	16.		2.
451		+0002000	50.	76.	26.	.6	2.
452		+0003000	12.	30.	12.		1.
453		+0004000	42.	120.	28.		1.
454	+0000850	-0002500	4.	22.	2.		15.
455		+0000000	24.	62.	16.		10.
456		+0001000	14.	38.	16.		30.

GRID#	TUCTMP REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
	457	+0000850	+0002000	28.	74.	20.	.4	5.
	458		+0003000	12.	48.	4.		2.
	459		+0004000	28.	76.	14.		10.
	460	+0000900	-0002500	10.	40.	6.		2.
	461		+0000000	12.	22.	28.		1.
	462		+0001000	40.	120.	12.		1.
	463		+0002000	50.	86.	28.	.6	5.
	464		+0003000	10.	14.	12.		1.
	465		+0004000	38.	100.	20.		10.
	466	+0000950	-0002500	8.	46.	6.		10.
	467		+0000000	10.	48.	6.		1.
	468		+0001000	52.	92.	16.		1.
	469		+0002000	16.	50.	18.	.4	5.
	470		+0003000	16.	42.	12.		1.
	471		+0004000	24.	64.	20.		10.
	472	+0001000	-0002500	6.	22.	4.		5.
	473		+0000000	32.	46.	20.		20.
	474		+0001000	20.	62.	10.		1.
	475		+0002000	28.	50.	18.	.6	5.
	476		+0003000	20.	62.	14.		2.
	477		+0004000	60.	110.	44.		1.
	478	+0001050	-0002500	36.	42.	34.		1.
	479		+0000000	170.	500.	18.		2.
	480		+0001000	18.	34.	10.		2.
	481		+0002000	46.	58.	24.	1.0	1.
	482		+0003000	6.	10.	6.		1.
	483		+0004000	96.	170.	40.		1.
	484	+0001100	-0002500	10.	34.	22.		15.
	485		+0000000	10.	60.	12.		2.
	486		+0001000	12.	32.	6.		5.
	487		+0002000	28.	48.	18.	.6	20.
	488		+0003000	6.	16.	4.		15.
	489		+0004000	58.	130.	38.		1.
	490	+0001150	+0000000	90.	650.	120.		2.
	491		+0001000	20.	62.	10.		5.
	492		+0002000	12.	32.	14.	.2	1.
	493		+0003000	32.	52.	10.		5.
	494		+0004000	28.	80.	22.		1.
	495	+0001200	-0002500	6.	30.	2.		2.
	496		+0000000	20.	76.	20.		1.
	497		+0001000	20.	42.	12.		2.
	498		+0002000	20.	50.	16.	.4	5.
	499		+0003000	10.	30.	4.		10.
	500		+0004000	24.	60.	22.		1.
	501	+0001250	+0000000	18.	34.	20.		1.
	502		+0000050	20.	110.	8.		15.
	503		+0000100					45.
	504		+0000150	18.	36.	10.		5.
	505		+0000200	14.	36.	4.		10.
	506		+0000250	16.	58.	10.		10.
	507		+0000300	6.	20.	1.		15.
	508		+0000350					30.
	509		+0000400	14.	10.	1.		5.
	510		+0000450	16.	24.	12.		5.
	511		+0000500	20.	64.	12.		5.
	512		+0000550	88.	76.	24.		10.
	513		+0000600	44.	30.	16.		10.

GRID#	TUCTMP	STATION	CU 1A	ZN 1A	FR 1A	AG 1A	W 5P
REC#	LINE						
514	+0001250	+0000650	18.	50.	24.		2.
515		+0000700	16.	34.	6.		2.
516		+0000750	38.	74.	18.		1.
517		+0000800	14.	30.	10.		5.
518		+0000850	100.	120.	30.		2.
519		+0000900	24.	110.	6.		10.
520		+0000950	14.	32.	8.		10.
521		+0001000	10.	26.	8.		5.
522			14.	40.	14.		10.
523		+0001050	18.	58.	8.		5.
524		+0001100	20.	110.	16.		5.
525		+0001150	32.	66.	8.		5.
526		+0001200	60.	130.	24.		2.
527		+0001250	16.	44.	10.		5.
528		+0001300	22.	54.	24.		2.
529		+0001350	14.	58.	26.		5.
530		+0001400	16.	36.	14.		10.
531		+0001450	14.	20.	26.		5.
532		+0001500	14.	34.	80.		2.
533		+0001550	16.	48.	18.		10.
534		+0001600	44.	90.	46.		2.
535		+0001650	28.	56.	32.		2.
536		+0001700	26.	36.	18.		1.
537		+0001750	14.	36.	10.		1.
538		+0001800	16.	38.	18.		2.
539		+0001850	12.	34.	20.		10.
540		+0001900	20.	36.	12.		2.
541		+0001950	18.	48.	12.		10.
542		+0002000	16.	46.	12.	.2	5.
543		+0002050	24.	52.	12.		10.
544		+0002100	28.	64.	18.		10.
545		+0002150	34.	72.	22.		1.
546		+0002200	66.	78.	30.		5.
547		+0002250	20.	44.	16.		10.
548		+0002300	26.	58.	24.		1.
549		+0002350	68.	110.	32.		1.
550		+0002400	20.	20.	1.		
551		+0002450	22.	76.	14.		5.
552		+0002500	22.	72.	32.		2.
553		+0002550	16.	22.	12.		2.
554		+0002600	14.	38.	36.		2.
555		+0002650	10.	32.	12.		2.
556		+0002700	16.	18.	16.		
557		+0002750	22.	36.	20.		
558		+0002800	18.	62.	28.		2.
559		+0002850	22.	20.	28.		1.
560		+0002900	26.	22.	32.		1.
561		+0002950	12.	14.	18.		5.
562		+0003000	6.	24.	8.		40.
563			14.	64.	2.		1.
564		+0003050	10.	18.	6.		15.
565		+0003100	12.	36.	6.		25.
566		+0003150	14.	64.	18.		10.
567		+0003200	16.	76.	12.		30.
568		+0003250	6.	22.	8.		5.
569		+0003300	12.	30.	8.		10.
570		+0003350	18.	36.	10.		10.

GRID# REC#	TUCTMP LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
571	+0001250	+0003400	12.	38.	8.		45.
572		+0003450	14.	44.	12.		20.
573		+0003500	12.	28.	10.		2.
574		+0003550	16.	80.	10.		1.
575		+0003600	18.	60.	12.		2.
576		+0003650	18.	40.	10.		1.
577		+0003700	20.	40.	12.		5.
578		+0003750	12.	60.	18.		25.
579		+0003800	24.	82.	12.		2.
580		+0003850	24.	52.	14.		1.
581		+0004000	28.	100.	28.		5.
582	+0001300	-0002500	14.	70.	10.		5.
583		+0000000	12.	42.	10.		1.
584		+0001000	18.	40.	12.		5.
585		+0002000	18.	48.	10.	.2	5.
586		+0003000	16.	42.	14.		5.
587		+0004000	26.	52.	28.		2.
588	+0001350	-0002500	12.	82.	1.		1.
589		+0000000	12.	38.	14.		15.
590		+0002000	14.	40.	12.	.2	2.
591		+0003000	20.	54.	10.		25.
592		+0004000	32.	84.	22.		5.
593	+0001400	+0000000	14.	58.	10.		1.
594		+0001000	16.	52.	6.		2.
595		+0002000	20.	66.	18.	.2	10.
596		+0003000	18.	54.	10.		20.
597		+0004000	18.	48.	20.		1.
598	+0001450	+0000000	24.	90.	12.		1.
599		+0001000	20.	100.	14.		2.
600		+0002000	20.	52.	12.	.2	2.
601		+0003000	16.	48.	6.		20.
602		+0004000	8.	28.	10.		10.
603	+0001500	+0000000	28.	80.	6.		1.
604		+0001000	12.	42.	8.		10.
605		+0002000	20.	42.	16.	.2	2.
606		+0003000	10.	22.	6.		25.
607		+0004000	22.	24.	10.		1.
608	+0001550	+0000000	18.	78.	8.		1.
609		+0001000	20.	78.	4.		2.
610		+0002000	14.	36.	12.	.4	1.
611		+0003000	26.	92.	16.		2.
612		+0004000	36.	130.	24.		5.
613	+0001600	+0000000	16.	52.	8.		5.
614		+0001000	22.	76.	8.		1.
615		+0002000	18.	52.	12.	.6	2.
616		+0003000	20.	52.	10.		5.
617	+0001650	+0000000	12.	74.	8.		5.
618		+0001000	26.	70.	10.		1.
619		+0002000	32.	50.	20.	.4	1.
620		+0003000	14.	48.	10.		10.
621		+0004000	46.	140.	28.		2.
622	+0001700	+0000000	46.	250.	12.		1.
623		+0001000	16.	54.	16.		1.
624		+0002000	30.	76.	16.	.2	2.
625		+0003000	10.	18.	6.		10.
626		+0004000	18.	64.	16.		2.
627	+0001750	+0000000	42.	54.	32.		1.

GRID#	TUCTMP REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
	628	+0001750	+0001000	32.	80.	18.		1.
	629		+0002000	88.	110.	36.	1.2	1.
	630		+0003000	12.	16.	4.		1.
	631	+0001800	+0000000	26.	82.	40.		1.
	632		+0001000	90.	200.	18.		1.
	633		+0002000	58.	96.	28.	.4	2.
	634		+0003000	20.	42.	12.		1.
	635	+0001850	+0000000	24.	82.	18.		1.
	636		+0001000	22.	80.	8.		2.
	637		+0002000	24.	82.	16.	.2	10.
	638		+0003000	16.	44.	12.		2.
	639		+0004000	22.	62.	26.		2.
	640	+0001900	+0000000	24.	78.	20.		5.
	641		+0001000	42.	74.	8.		2.
	642		+0002000	44.	110.	16.	.4	5.
	643		+0003000	14.	38.	10.		25.
	644		+0004000	20.	48.	14.		10.
	645	+0001950	+0000000	14.	64.	12.		2.
	646		+0001000	14.	44.	10.		2.
	647		+0002000	88.	80.	20.	1.0	2.
	648		+0003000	84.	86.	18.		1.
	649		+0004000	24.	88.	24.		1.
	650	+0002000	-0000350	14.	32.	16.		1.
	651		-0000300	28.	92.	20.		1.
	652		-0000250	18.	80.	14.		1.
	653		-0000200	28.	110.	8.		1.
	654		-0000150	30.	92.	10.		30.
	655		-0000100	42.	78.	42.		1.
	656		-0000050	16.	64.	6.		1.
	657		+0000000	12.	76.	8.		2.
	658		+0001000	14.	50.	10.		2.
	659		+0002000	72.	58.	38.	1.0	2.
	660		+0002050	16.	48.	4.		10.
	661		+0002100	14.	56.	6.		1.
	662		+0002150	16.	52.	6.		1.
	663		+0002200	16.	46.	2.		10.
	664		+0002250	26.	60.	8.		2.
	665		+0002300	14.	26.	2.		1.
	666		+0002350	4.	22.	1.		25.
	667		+0002400	66.	22.	10.		1.
	668		+0002450	90.	280.	22.		15.
	669		+0002500	12.	36.	8.		2.
	670		+0002550	24.	64.	8.		1.
	671		+0002600	20.	60.	1.		10.
	672		+0002650	16.	36.	2.		10.
	673		+0002700	20.	120.	1.		10.
	674		+0002750	26.	66.	4.		15.
	675		+0002800	28.	64.	10.		15.
	676		+0002850	64.	220.	32.		1.
	677		+0002900	28.	80.	12.		80.
	678		+0002950	28.	72.	2.		5.
	679		+0003000	36.	92.	8.		1.
	680			18.	50.	12.		1.
	681		+0003050	18.	58.	6.		20.
	682		+0003100	44.	270.	18.		1.
	683		+0003150	16.	70.	2.		15.
	684		+0003200	20.	72.	6.		15.

GRID#	TUCTMP REC#	LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
	685	+0002000	+0003250	130.	140.	22.		2.
	686		+0003300	26.	70.	10.		20.
	687		+0003350	28.	92.	12.		10.
	688		+0003400	56.	140.	14.		1.
	689		+0003450	24.	130.	4.		10.
	690		+0003500	28.	86.	6.		20.
	691		+0003550	48.	84.	6.		10.
	692		+0003600	34.	86.	4.		1.
	693		+0003650	40.	140.	2.		1.
	694		+0003700	32.	92.	8.		25.
	695		+0003750	8.	44.	4.		20.
	696		+0003800	16.	74.	34.		40.
	697		+0003850	22.	140.	12.		70.
	698		+0003900	26.	150.	16.		15.
	699		+0003950	54.	210.	36.		1.
	700		+0004000	30.	84.	22.		1.
	701			30.	84.	20.		1.
	702	+0002050	+0000000	24.	54.	18.		2.
	703		+0001000	16.	52.	10.		10.
	704		+0002000	18.	48.	12.	.2	2.
	705		+0003000	14.	30.	12.		2.
	706		+0004000	26.	70.	16.		10.
	707	+0002100	+0000000	12.	64.	16.		1.
	708		+0001000	10.	36.	12.		15.
	709		+0002000	56.	140.	24.	.4	2.
	710		+0003000	12.	34.	10.		15.
	711		+0004000	26.	80.	14.		1.
	712	+0002150	+0001000	10.	30.	6.		10.
	713		+0002000	26.	110.	16.	.6	2.
	714		+0003000	26.	72.	10.		5.
	715		+0004000	22.	58.	14.		2.
	716	+0002200	+0000000	14.	40.	14.		10.
	717		+0001000	68.	94.	26.		2.
	718		+0002000	28.	54.	22.	.4	2.
	719		+0003000	18.	66.	10.		5.
	720		+0004000	14.	18.	6.		1.
	721	+0002250	+0000000	40.	94.	28.		10.
	722		+0001000	36.	210.	14.		2.
	723		+0002000	24.	54.	68.	.6	2.
	724		+0003000	16.	32.	14.		2.
	725		+0004000	24.	66.	16.		2.
	726	+0002300	+0000000	14.	44.	14.		5.
	727		+0001000	48.	200.	22.		2.
	728		+0002000	120.	160.	320.	.6	1.
	729		+0003000	24.	110.	12.		1.
	730		+0004000	22.	56.	18.		1.
	731	+0002350	+0000000	16.	62.	10.		2.
	732		+0001000	20.	72.	10.		10.
	733		+0002000	12.	46.	16.	.2	2.
	734		+0003000	24.	72.	12.		1.
	735	+0002400	+0001000	14.	66.	12.		5.
	736		+0002000	38.	170.	22.	.2	1.
	737		+0003000	28.	86.	12.		1.
	738		+0004000	34.	86.	18.		10.
	739	+0002450	+0001000	16.	52.	14.		2.
	740		+0002000	22.	66.	16.	.2	1.
	741		+0003000	32.	96.	16.		1.

GRID# REC#	TUCTMP LINE	STATION	CU 1A	ZN 1A	PB 1A	AG 1A	W 5P
742	+0002450	+0004000	26.	60.	19.		1.
743	+0002500	+0000000	8.	44.	10.		1.
744		+0000050	10.	30.	12.		1.
745		+0000100	32.	90.	16.		1.
746		+0000150	28.	86.	22.		2.
747		+0000200	20.	66.	12.		10.
748		+0000250	66.	94.	22.		15.
749		+0000300	28.	52.	12.		5.
750		+0000350	24.	68.	10.		15.
751		+0000400	38.	76.	20.		10.
752		+0000500	29.	72.	20.		10.
753		+0000550	42.	70.	20.		5.
754		+0000600	16.	68.	10.		5.
755		+0000750	24.	72.	14.		20.
756		+0000800	26.	90.	16.		25.
757		+0000850	12.	36.	12.		15.
758		+0000900	18.	74.	14.		20.
759		+0000950	14.	52.	10.		15.
760		+0001000	10.	34.	12.		35.
761		+0001050	16.	38.	10.		15.
762		+0001100	26.	270.	12.		1.
763		+0001150	20.	70.	6.		25.
764		+0001200	16.	66.	10.		2.
765		+0001250	18.	56.	12.		1.
766		+0001300	900.	42.	840.		1.
767		+0001350	14.	40.	24.		15.
768		+0001400	14.	38.	6.		15.
769		+0001450	12.	48.	10.		15.
770		+0001500	44.	84.	18.		2.
771		+0001550	14.	60.	8.		10.
772		+0001600	22.	72.	8.		1.
773		+0001650	20.	80.	8.		2.
774		+0001700	20.	52.	12.		1.
775		+0001750	16.	48.	8.		15.
776		+0001800	24.	70.	14.		15.
777		+0001850	16.	42.	8.		5.
778		+0001900	26.	82.	16.		1.
779		+0001950	110.	450.	28.		2.
780		+0002000	54.	340.	52.		2.
781	-0001500	-0002450	10.	22.	10.	.2	1.
782		-0002400	14.	30.	10.	.2	1.

END OF DATA. 782 SAMPLES PRINTED THIS REPORT.

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: Horne Opt. TU Claims

CODE :8508-036

Project No. : 131 Sheet:1 of 3 Date rec'd:Aug. 7
 Material : Soil Geol.:J.H. Date compl:Aug. 22
 Remarks :

Values in PPM, except where noted.

T. No.	SAMPLE No.	Cu	Zn	Pb	W
94	TU 300NE-100N	26	72	8	15
95	150	24	58	6	15
96	200	30	62	10	10
97	250	20	50	8	5
98	300	36	82	16	5
99	TU 300NE-350N	58	94	20	10
100	CHECK NL-5	26	66	72	
101	TU 300NE-400N	18	44	10	5
102	450	14	32	8	10
103	500	88	66	8	2
104	550	72	62	22	5
105	600	32	46	24	5
106	650	72	70	30	5
107	700	22	26	20	10
108	750	20	66	14	20
109	800	14	28	8	15
110	850	18	64	12	10
111	900	34	44	8	10
112	950	16	60	6	15
113	1000	20	58	10	30
114	1050	22	52	10	20
115	1100	16	36	10	5
116	1150	22	56	14	5
117	1200	18	34	10	10
118	1250	20	56	8	1
119	1300	20	62	6	10
120	1350	10	10	1	2
121	1400	16	40	14	15
122	1450	22	54	8	2
123	1500	18	34	10	10
124	1550	14	36	8	10
125	1600	22	46	14	10
126	1650	18	46	8	5
127	TU 300NE-1700N	24	66	12	10
128	TU 500NE-100N	28	70	10	25
129	150	18	50	12	15
130	200	30	68	20	5
131	250	20	64	8	2
132	300	22	58	10	2
133	350	36	90	16	10
134	400	32	86	12	2
135	450	14	32	8	5
136	500	26	74	12	10
137	550	34	50	20	1
138	600	16	52	12	5
139	650	18	38	6	5
140	700	26	88	16	2
141	TU 500NE-750N	16	48	6	10

T. T. No.	SAMPLE No.	Cu	Zn	Pb	W
142	TU 500NE-800N	14	38	6	10
143	850	20	52	8	10
44	900	16	22	10	<u>5</u>
45	950	20	68	6	<u>5</u>
146	1000	12	38	16	10
47	1050	24	32	24	1
48	1100	18	14	12	1
149	TU 500NE-1150N	24	32	28	<u>2</u>
2	TU 500NE-1200N	14	54	16	10
3	1250	36	22	26	1
4	1600	12	52	8	5
5	1650	14	22	6	2
6	1700	12	28	10	<u>10</u>
7	1750	20	60	10	<u>5</u>
8	1800	28	30	16	2
9	1850	12	40	8	10
10	1900	18	50	6	5
11	1950	12	26	12	<u>5</u>
12	2000	16	28	10	<u>5</u>
13	2050	16	28	10	2
14	2100	16	34	16	25
15	2150	26	28	1	20
16	2200	18	12	4	<u>20</u>
17	2250	34	80	24	1
18	2300	22	60	16	2
19	2350	20	54	8	2
20	2400	24	64	12	1
21	2450	10	22	6	<u>10</u>
22	2500	20	48	6	1
23	2550	16	38	8	1
24	2600	28	84	18	2
25	2650	50	54	26	2
26	2700	30	150	16	1
27	2750	28	150	48	1
28	2800	28	150	26	1
29	TU 500NE-2850N	42	98	36	1
30	TU 500NW-850N	16	40	6	10
31	900	34	62	16	<u>5</u>
32	950	16	22	12	1
33	1000	18	28	18	2
34	1050	16	30	18	2
35	1100	26	50	8	5
36	1150	18	54	10	<u>1</u>
37	1200	30	54	12	<u>5</u>
38	1250	24	44	18	2
39	1300	18	32	10	5
40	1350	10	10	12	5
41	2000	8	12	8	<u>5</u>
42	2050	40	34	32	<u>5</u>
43	2100	20	66	18	2
44	2150	20	54	14	5
45	2200	82	56	32	1
46	2250	14	44	6	<u>2</u>
47	2300	12	28	4	<u>10</u>
48	2350	64	84	16	2
49	2400	12	24	2	10
50	TU 500NW-2450N	24	10	10	1

T. T. No.	SAMPLE No.	Cu	Zn	Pb	W
51	TU 500NW-2500N	14	28	10	2
52	2550	38	96	6	<u>5</u>
53	2600	76	150	42	1
54	2650	36	290	20	2
55	2700	12	50	10	5
56	2750	18	56	20	<u>15</u>
57	2800	16	34	6	5
58	2850	16	48	4	5
59	2900	14	56	8	5
60	2950	10	28	8	10
61	3000	10	16	6	<u>10</u>
62	3050	22	40	10	10
63	3100	18	46	18	1
64	3150	16	46	14	1
65	3200	20	50	12	1
66	3250	62	96	38	10
67	3300	150	100	6	1
68	3350	26	16	14	1
69	TU 500NW-3400N	120	120	78	1

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: Horne

CODE :8508-053

Project No. : 431

Sheet: 1

Date rec'd:Aug. 12

Material : Soil

Geol.:J.H.

Date compl:Aug. 23

Remarks :

Values in PPM, except where noted.

T. No.	SAMPLE No.	Cu	Zn	Pb	W
38	TU 300NW-1700N	38	88	10	1
39	1750	30	68	10	10
140	1800	24	52	8	1
41	1850	28	46	12	1
42	1900	46	48	16	1
143	1950	20	38	8	2
44	2000	12	30	10	1
45	2150	18	50	16	1
146	2200	26	60	16	1
147	2250	10	28	8	1
48	2300	8	20	12	2
49	TU 300NW-2350N	12	34	6	2
2	TU 300NW-2400N	14	44	26	2
3	2450	18	66	6	1
4	2500	50	96	14	1
5	2550	26	74	8	1
6	2600	160	190	14	1
7	2650	54	66	16	1
8	2700	54	200	12	1
9	2800	16	40	6	1
10	TU 300NW-2850N	38	74	12	1
11	TU 300NE-2200N	10	42	14	1
12	2250	16	36	8	1
13	2300	30	44	10	1
14	2400	18	46	10	1
15	2450	22	60	8	1
16	2500	32	56	20	1
17	2550	24	72	10	1
18	2600	20	58	12	1
19	2650	22	38	12	1
20	2700	14	34	20	1
21	2750	18	52	22	1
22	2800	120	330	44	1
23	2850	30	60	16	1
24	2900	18	48	12	1
25	2950	40	74	22	1
26	3000	76	42	16	1
27	3050	16	24	4	1
28	3100	34	56	22	1
29	3150	28	80	10	1
30	3200	48	40	8	1
31	3250	10	26	12	1
32	3300	10	24	12	5
33	3350	12	54	10	1
34	3400	54	230	18	1
35	3450	78	260	40	1
36	3500	24	72	12	20
37	TU 300NE-3550N	26	38	22	1

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
 BURNABY, B.C. V5B 3N1
 TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

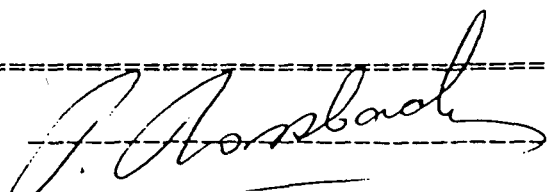
TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.

CERTIFICATE#: 85317
 INVOICE#: 5494
 DATE ENTERED: AUGUST 29, 1985
 FILE NAME: NOR85317
 PAGE # : 1

PROJECT: 431 8508-080
 TYPE OF ANALYSIS: GEOCHEMICAL *KORNE (JH)*

PRE FIX	SAMPLE NAME	PPM W
	10100N - 104.25E	10
	104.50E	10
	104.75E	2
	105.00E	1
	105.25E	2
	105.50E	2
	105.75E	2
	106.00E	2
	106.25E	25
	106.50E	1
	106.75E	1
	107.00E	1
	107.25E	5
	107.50E	2
	107.75E	1
	10200N - 103.75E	30
	104.00E	1
	104.25E	1
	104.50E	5
	104.75E	35
	105.00E	1
	105.25E	1
	105.50E	15
	105.75E	10
	106.00E	1
	106.25E	10
	106.50E	1
	106.75E	1
	107.00E	1
	107.25E	2
	107.50E	1
	10300N - 103.75E	2
	104.00E	20
	104.25E	10
	104.50E	5
	104.75E	1
	105.00E	2
	105.25E	1
	105.50E	1
	105.75E	2

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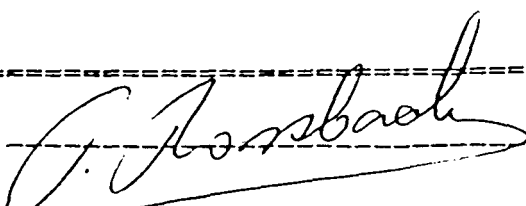
CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.
 PROJECT: 431 8508-080
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85317
 INVOICE#: 5494
 DATE ENTERED: AUGUST 29, 1985
 FILE NAME: NOR85317
 PAGE # : 2

PRE FIX	SAMPLE NAME	PPM W
	10300N - 106.00E	1
	106.25E	10
	106.50E	10
	106.75E	1
	107.00E	1
	107.25E	1
	10400N - 103.25E	1
	103.50E	1
	103.75E	1
	104.00E	25
	104.25E	5
	104.50E	20
	104.75E	20
	105.00E	10
	105.25E	2
	105.50E	2
	105.75E	5
	106.00E	1
	106.25E	1
	TU300 4.75N-1275E	1
	1300E	1
	1325E	20
	4.87N - 12.84E	1
	5N - 1275E	1
	1300E	1
	1325E	5
	5.25N - 1275E	10
	1300E	5
	1325E	35
	TU300 NW 150N	1
	200N	1
	250N	1
	300N	1
	350N	1
	400N	1
	450N	1
	500N	1
	550N	2
	600N	2
	650N	1

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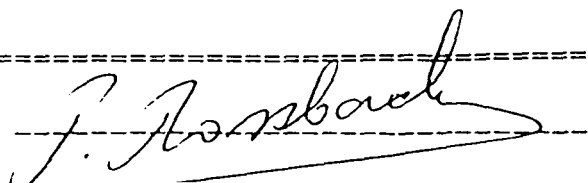
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CERTIFICATE#: 85317
INVOICE#: 5494
DATE ENTERED: AUGUST 29, 1985
FILE NAME: NOR85317
PAGE # : 3

PROJECT: 431 8508-080
TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPM W
	TU300 NW 700N	1
	750N	1
	800N	2
	850N	10
	900N	2
	950N	2
	1000N	1
	1050N	2
	1100N	1
	1150N	1
	1200N	30
	1250N	1
	1300N	2
	1350N	2
	1400N	2
	1450N	5
	1500N	5

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Geochemical Results

for

Trench Samples

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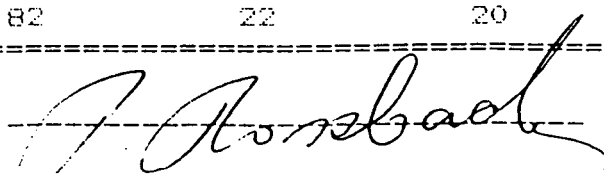
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TO : NORANDA EXPLORATION CO. LTD.
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 PROJECT: 131 8507-046
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85217
 INVOICE#: 5379
 DATE ENTERED: AUGUST 1, 1985
 FILE NAME: NOR85217
 PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Cu	PPM Zn	PPM Pb	PPM W	
TRENCH #4	20-25	4	48	56	2	
	25-30	2	46	32	2	
	30-35	2	52	108	2	
	35-40	4	46	20	2	
	40-45	12	56	18	2	
	45-50	4	42	34	2	
	50-55	4	40	20	2	
	55-61	20	60	38	2	
	61-66	4	42	22	2	
	66-69	2	40	22	2	
TRENCH #6	0- 1	22	72	46	5	
	1- 2	24	66	22	10	
	2- 3	24	72	16	10	
	3- 4	22	88	66	5	
	4- 5	20	68	24	20	
	5- 6	18	82	12	15	
	6- 7	38	104	12	10	
	7- 8	18	84	28	15	
	8- 9	24	100	12	30	
	9-10	18	86	18	10	
TRENCH #6	10-11	30	90	10	10	
	11-12	22	90	14	10	
	12-13	22	78	58	15	
	13-14	26	86	10	30	
	14-15	22	80	16	25	
	15-16	18	76	18	15	
	16-17	14	52	14	10	
	17-18	14	70	8	14	
	18-19	24	78	24	15	
	19-20	14	88	28	40	
TRENCH #6	20-21	10	68	12	10	
	21-22	12	76	6	20	
	22-23	10	76	16	40	
	23-24	12	68	14	10	
	24-25	10	72	16	15	
	25-26	10	76	14	10	
	26-27	12	64	12	20	
	BETWEEN DUPLICATE	26-27	20	98	18	30
	27-28	12	78	10	30	
	27-28	20	82	22	20	

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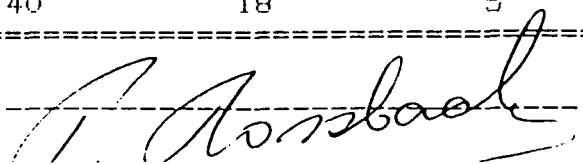
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TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.
 PROJECT: 131 8507-046
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85217
 INVOICE#: 5379
 DATE ENTERED: AUGUST 1, 1985
 FILE NAME: NOR85217
 PAGE # : 2

PRE FIX	SAMPLE NAME	PPM Cu	PPM Zn	PPM Pb	PPM W
TRENCH #6	28-29	32	92	14	25
	29-30	22	82	22	30
	30-31	24	70	20	20
	31-32	26	96	16	75
	32-33	24	90	18	80
	33-34	22	80	20	45
	34-35	18	68	26	80
	35-36	32	90	22	100
	37-43	46	74	30	25
	43-50	24	68	32	10
	41-42	56	48	38	20
	43-44	32	96	36	10
	44-45	64	100	34	5
	45-46	84	96	54	2
	46-47	76	102	48	160
TRENCH #6	47-48	40	138	64	5
	48-49	22	162	38	5
	50-51	12	318	210	10
	51-52	8	248	104	10
	52-53	6	20	6	10
	53-54	18	36	12	10
	54-55	14	28	8	10
	55-56	12	26	14	5
	56-57	28	78	8	2
	57-58	26	72	8	2
	58-59	36	66	10	10
	59-60	36	60	12	30
	60-61	22	56	8	20
	61-62	20	42	10	15
	62-63	28	62	12	10
63-64	26	58	12	15	
64-65	12	36	10	20	
65-66	10	34	12	25	
66-67	16	56	16	20	
67-68	18	66	20	20	
68-69	20	42	18	30	
69-70	8	36	16	30	
70-71	16	42	16	15	
71-72	14	52	16	20	
72-73	12	40	18	5	

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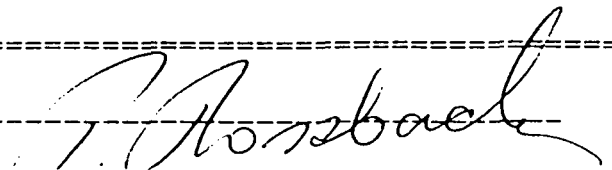
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PROJECT: 131 8507-046
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85217
INVOICE#: 5379
DATE ENTERED: AUGUST 1, 1985
FILE NAME: NOR85217
PAGE # : 3

RE FIX	SAMPLE NAME	PPM Cu	PPM Zn	PPM Pb	PPM W
	TRENCH #6 73-74	12	54	14	15
	74-75	8	40	12	10
	75-76	12	50	12	30
	76-77	16	44	12	20
	77-78	12	40	14	10
	78-80	26	66	26	40
	80-85	24	78	28	5
	85-90	22	58	24	25
	90-95	42	100	22	15
@	68.5	8	42	10	30

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TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.
 PROJECT: 131 8507-066
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85227
 INVOICE#: 5405
 DATE ENTERED: AUGUST 9, 1985
 FILE NAME: NOR85227
 PAGE # : 2

RE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Zn	PPM Pb	PPM W
A	TRENCH #8 11-12		12	60	24	20
A	12-13		8	50	18	15
A	13-14		8	42	18	5
A	14-15		16	68	72	25
A	15-16		16	60	18	100
A	16-17		14	82	12	15
A	17-18		16	66	10	10
A	18-19		22	68	14	20
A	19-20		10	48	12	15
A	20-21		8	40	6	10
A	21-22		12	58	8	10
A	TRENCH #9 0-1		14	32	8	10
A	1-2		18	34	6	20
A	2-3		28	36	8	20
A	3-4		14	32	6	10
A	4-5		10	34	4	20
A	5-6		6	24	10	10
A	6-7		8	36	6	5
A	7-8		14	52	4	25
A	8-9		30	128	12	45
A	TRENCH #9 9-10		12	58	6	10
A	10-11		20	68	6	20
A	11-12		28	90	6	20
A	12-13		16	60	6	20
A	13-14		32	54	8	35
A	14-15		16	34	6	5
A	15-16		20	54	8	10
A	16-17		28	66	8	30
A	17-18		14	50	8	15
A	18-19		26	62	8	15
A	19-20		24	56	8	10
A	20-21		18	62	6	15
A	21-22		18	52	8	15
A	22-23		26	58	10	15
A	23-24		54	52	8	30
A	24-25		26	42	10	10
A	25-26		36	44	10	20
A	26-27		20	40	8	5
A	27-28		38	44	8	5
A	28-29		12	40	10	5

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TO : NORANDA EXPLORATION CO. LTD.
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 VANCOUVER B.C.
 PROJECT: 131 8507-066
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85227
 INVOICE#: 5405
 DATE ENTERED: AUGUST 9, 1985
 FILE NAME: NOR85227
 PAGE # : 3

RE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Zn	PPM Pb	PPM W
A	TRENCH #9 29-30		24	60	12	25
A	30-31		44	58	10	2
A	31-32		36	72	14	10
A	32-33		26	56	10	10
A	33-34		36	60	10	10
A	34-35		26	56	8	30
A	35-36		28	60	8	5
A	36-37		26	68	8	15
A	37-38		26	76	14	5
A	38-39		28	60	8	5
A	39-40		20	48	12	5
A	40-41		10	26	6	5
A	41-42		10	28	6	10
A	42-43		18	24	6	10
A	43-44		14	24	18	5
A	44-45		10	26	8	25
A	45-46		20	32	6	20
A	46-47		44	72	24	2
A	47-48		40	62	22	2
A	48-49		58	72	16	5
A	TRENCH #9 49-50		42	94	14	2
A	50-51		18	104	6	40
A	51-52		20	72	6	100
A	52-53		42	88	16	40
A	53-54		20	66	20	2
A	54-55		14	62	14	10
A	55-56		18	112	42	20
A	56-57		12	50	10	10
A	57-58		14	44	6	5
A	58-59		16	46	6	10
A	59-60		48	66	12	40
A	60-61		58	60	18	2
A	61-62		22	72	8	45
A	62-63		38	100	8	5
A	63-64		68	130	18	1
A	64-65		70	124	14	1
A	65-66		36	66	14	1
A	66-66.5		34	32	10	10
A	68.5-70		38	44	12	10
A	70-71		38	50	14	10

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 PROJECT: 131 8507-066
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85227
 INVOICE#: 5405
 DATE ENTERED: AUGUST 9, 1985
 FILE NAME: NOR85227
 PAGE # : 4

RE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Zn	PPM Pb	PPM W
A	TRENCH #9 71-72		44	32	8	5
A	72-73		54	40	10	10
A	73-74		34	34	8	15
A	74-75		42	36	12	20
A	75-76		30	34	12	10
A	76-77		30	52	10	10
A	TRENCH #10 2.5-3		20	60	14	5
A	3-4		24	60	12	5
A	4-5		36	58	10	15
A	5-6		24	44	224	30
A	6-7		90	62	14	160
A	7-8		98	58	10	25
A	8-9		70	78	10	15
A	9-10		68	94	8	240
A	10-11		94	212	8	2200
A	11-12		110	220	6	400

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TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.
 PROJECT: 131 8507-073
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85237
 INVOICE#: 5406
 DATE ENTERED: AUGUST 9, 1985
 FILE NAME: NOR85237
 PAGE # : 1

RE FIX	SAMPLE NAME	PPM Cu	PPM Zn	PPM Pb	PPM W	PPM Sn
A	TRENCH #11 2-4	26	82	16	1	1
A	4-6	18	60	16	10	1
A	6-8	22	68	14	10	1
A	8-10	18	58	12	10	2
A	10-12	18	52	12	5	2
A	12-14	22	54	10	20	1
A	14-16	24	58	14	20	1
A	16-18	12	54	12	10	1
A	18-20	22	50	12	10	2
A	20-22	12	44	12	2	2
A	22-24	16	96	10	15	2
A	24-26	8	52	12	2	4
A	26-28	10	80	12	5	2
A	28-29	18	108	14	20	2
A	29-30	72	1120	12	2500	22
A	30-31	46	660	8	>5000	20
A	31-32	30	368	10	2500	12
A	32-33	16	200	18	120	1
A	33-34	16	242	14	100	2
A	34-35	12	172	10	20	1
A	35-36	16	148	12	20	1
A	36-37	20	112	24	25	1
A	TRENCH #12 0- 2	24	50	14	25	
A	2- 4	24	66	12	30	
A	4- 6	14	64	8	10	
A	6- 8	34	98	14	10	
A	8-10	16	62	14	2	
A	10-12	22	86	20	20	
A	12-14	24	152	54	35	
A	14-16	12	58	16	10	
A	16-18	16	58	18	20	
A	18-20	10	66	14	20	
A	20-22	10	62	16	15	
A	22-24	10	62	8	35	
A	24-26	16	52	8	10	
A	26-28	12	60	6	20	
A	28-30	18	62	6	10	
A	30-32	12	46	8	5	
A	32-34	12	46	10	5	
A	34-36	22	62	12	20	

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TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.
 PROJECT: 131 8507-073
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85237
 INVOICE#: 5406
 DATE ENTERED: AUGUST 9, 1985
 FILE NAME: NOR85237
 PAGE # : 2

RE FIX	SAMPLE NAME	PPM Cu	PPM Zn	PPM Pb	PPM W	PPM Sn
A	TRENCH #12 36-38	18	66	10	20	
A	GLACIAL DAY 38-40	16	50	10	20	
A	BEDROCK 38-40	24	72	12	20	
A	TRENCH #13 0- 1	6	52	12	5	2
A	1- 2	6	48	10	10	2
A	2- 3	6	46	8	10	1
A	3- 4	4	40	10	10	2
A	4- 5	2	40	12	10	2
A	5- 6	2	40	12	2	2
A	6- 7	2	44	14	5	2
A	7- 8	2	40	12	2	2
A	8- 9	4	42	12	10	2
A	9-10	4	46	12	5	2
A	10-11	4	44	12	10	1
A	11-12	4	42	10	10	1
A	12-13	2	42	10	10	1
A	13-14	4	46	12	15	1
A	14-15	4	42	12	15	1
A	15-16	4	44	12	15	1
A	16-17	4	50	14	15	2
A	17-18	4	48	12	10	1
A	TRENCH #14 0- 2	2	44	22	2	1
A	2- 4	2	38	20	2	1
A	4- 6	2	36	18	2	2
A	6- 8	2	48	14	10	1
A	8-10	10	68	14	20	1
A	10-12	6	44	12	5	1
A	12-14	2	40	14	5	1
A	14-16	6	48	12	2	1
A	16-18	2	40	10	2	2
A	18-20	8	40	10	5	2
A	20-22	16	50	10	1	1

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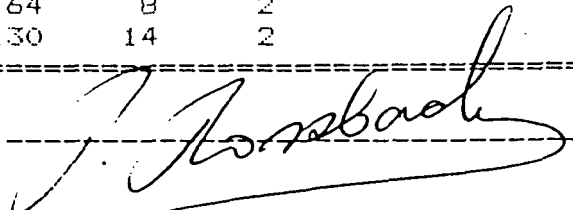
TO : NORANDA EXPLORATION CO. LTD.
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CERTIFICATE#: 85255
 INVOICE#: 5422
 DATE ENTERED: AUGUST 15, 1985
 FILE NAME: NOR85255
 PAGE # : 1

PROJECT: 131 8508-016 Tu d. Tr. 15-19 (JH)
 TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPM W	PPM Sn	PPB Au
A	Trench #15 0- 2m	22		82	20	55		
A	2- 4	30		76	14	70		
A	4- 6	16		64	6	30		
A	6- 8	14		48	6	20		
A	8-10	18		66	12	40		
A	10-12	16		66	12	50		
A	12-14	12		68	8	45		
A	14-16	16		68	6	55		
A	16-18	16		68	4	55		
A	18-20	24		76	4	20		
A	Trench #15 20-22	28		68	8	15		
A	22-24	12		52	6	15		
A	24-26	22		58	4	40		
A	26-28	24		66	8	45		
A	28-30	20		62	6	60		
A	30-32	14		54	6	25		
A	32-34	6		36	4	10		
A	34-36	6		44	4	10		
A	36-38	8		54	6	15		
A	38-40	14		62	8	25		
A	Trench #15 40-42	8		48	8	10		
A	42-44	14		52	6	10		
A	44-46	16		66	4	10		
A	46-48	12		60	4	20		
A	48-50	12		46	4	10		
A	Trench #16 0- 2	46		168	14	2		
A	2- 4	14		122	4	5		
A	4- 6	36		116	2	10		
A	6- 8	12		118	6	10		
A	8-10	22		154	8	5		
A	10-12	38		416	10	1		
A	12-14	46		448	12	1		
A	14-16	48		680	18	1		
A	16-18	58		740	20	1		
A	18-20	64		740	30	1		
A	20-22	122		560	42	1		
A	Trench #17 0- 2	14		66	12	15		
A	2- 4	24		68	10	2		
A	4- 6	18		64	8	2		
A	6- 8	28		130	14	2		

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

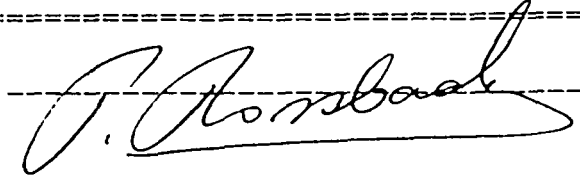
2225 S. SPRINGER AVENUE
 BURNABY, B.C. V5B 3N1
 TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER B.C.
 PROJECT: 131 8508-016
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85255
 INVOICE#: 5422
 DATE ENTERED: AUGUST 15, 1985
 FILE NAME: NOR85255
 PAGE # : 2

FILE FIX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPM W	PPM Sn	PPB Au
	Trench #17 8-10	44		150	12	2		
A	10-12	18		72	10	15		
A	12-14	18		56	8	10		
	14-16	12		88	8	1		
	16-18	18		100	6	1		
A	18-20	18		68	8	60		
	20-22	34		88	12	5		
	22-24	18		74	8	25		
A	24-26a	18		68	8	25		
A	24-26b	24		72	12	10		
	Trench #17 26-28	22		68	14	10		
A	28-30	32		72	10	1		
A	Trench #18 4- 5	22		76	18	10		
	5- 6	26		70	20	2		
	6- 7	24		68	24	2		
A	7- 8	36		76	20	2		
	8- 9	32		74	16	2		
	9-10	28		66	14	2		
A	10-11	26		108	62	1		
A	11-12	32		106	48	1		
	Trench #18 12-13	48		88	38	1		
A	13-14	52		114	10	15		
A	14-15	64		150	20	5		
	15-16	66		144	30	2		
	16-17	54		140	22	5		
A	17-18	70		156	20	20		
	18-19	60		138	48	10		
	19-20	44		126	12	25		
A	20-21	16		98	10	20		
A	Trench #19 0- 2	10		60	12	25	2	
A	6- 9	8		50	12	20	2	
A	2- 9	8		56	18	30	2	
A	Trench #7 grab 1-4	32		156	12	1800	8	
A	Trench #8 grab 0-4	18		264	10	1600	6	
A	76B			38		1	1	
A	77B			68		1	2	
A	821B	14	0.6	62		1		10
A	822B	112	0.8	76		5		10
A	823B	14	0.2	36		1		10
A	824B	8	0.6	164		10		10

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

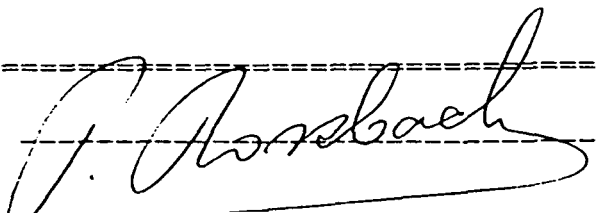
CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER B.C.
PROJECT: 131 8508-016
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85255
INVOICE#: 5422
DATE ENTERED: AUGUST 15, 1985
FILE NAME: NOR85255
PAGE # : 3

PRE FIX	SAMPLE NAME	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPM W	PPM Sn	PPB Au
	825B	74	0.8	64		5		30

CERTIFIED BY :



A P P E N D I X I V

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Analytical Methods

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver.

Preparation of Samples

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for geochemical analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples * from constant volume), are analysed in its entirety, when it is to be determined for gold without further sample preparation.

Analysis of Samples

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.4 g and chemical quantities are doubled relative to the above noted method for digestion.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn can be determined directly from the digest (dissolution) with a conventional atomic absorption spectrometric procedure. A Varian-Techtron, Model AA-5 or Model AA-475 is used to measure elemental concentrations.

Elements Requiring Specific Decomposition Method:

Antimony - Sb: 0.2 g sample is attacked with 3.3 ml of 6% tartaric acid, 1.5 ml conc. hydrochloric acid and 0.5 ml of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the dissolution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.3 g sample is digested with 1.5 ml of perchloric 70% and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL is used to ~~measure~~ arsenic content in the digest.

Barium - Ba: 0.1 g sample digested overnight with conc. perchloric, nitric and hydrofluoric acid; Potassium chloride added to prevent ionization. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest with an AA-475 complete with EDL.

Gold - Au: 10.0 g sample is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with MIBK from the aqueous solution. AA is used to determine Au.

Magnesium - Mg: 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the

range of atomic absorption. The AA-475 with the use of a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot from a perchloric-nitric decomposition, usually from the multi-element digestion, is buffered. The aqueous solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

* N.B. If additional elemental determinations are required on panned samples, state this at the time of sample submission. Requests after gold determinations would be futile.

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

EJvL/ie
March 14, 1984

A P P E N D I X V

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Diamond Drilling

Core Logs

NORANDA EXPLORATION COMPANY LTD.

Date Collected August 13/85		Date Completed August 13/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13			
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 5				
Lat. 105+00N 100+16E		Elev. 1700 m			Dip -45°		45.7 m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		
Dep.		Length 45.7m		Bearing 225°								Dep.		Length		Dip	
												Dep.		Length		Bearing	
From	To	Recovery m/%	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)					
0	3.6	NR	Overburden/Casing														
3.6	4		Overburden														
4	5.7	80%	Quartzite/bte-schist Foliation 140° - 320 compared to foliation plane contains pyrite, cross-cutting foliation plane are veinlets with sulphides and carbonates. Medium grey.	axis core 0-180° at 40° from axis of core.	5%												
5.7	7.3	100%	Biotite schist/quartzite Sulphides along foliation plane and in pods, along creeks and veinlets. Quartz veins, to foliation @ 6.2 m (15 cm wide) this vein contains large muscovite crystals assoc. with pyrite (pegmatite vein)	@ 60° from long ax. of core	5%												
7.3	9.3	3.0 100%	Bio-schist/quartzite from 7.3 to 9.3 Very much same as above.		5%												
9.3	9.6	0.3 100%	Biotite-schist from 9.5 to 9.8 Increase in carbonate veinlets														
9.6	10.1	100%	Garnet-scheelite skarn red brown garnet + scheelite very fractured, abundant clay (kaoline), abundant calcite in fractures and rock. Skarn seem to cut foliation			1%	0080B	0.5 m	.14%	---	2	10					
10.1	10.4	95%	Garnet scheelite skarn Same as above			1%	0081B	0.3 m	.23%	---	2	10					

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 13/85		Date Completed AUGUST 13/85		Core Size NO		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 5		
Lot.	L105 + 00N	Elev.	1700m		Dip	-45°	45.7m	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.
Dep.	100 + 16E	Length	45.7m	Bearing	225°						Dep.	Length	Bearing	TU 85-1	
From	To	Recovery	Description			Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
											WO ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)	
10.4	10.85	95%	Garnet scheelite skarn red brown garnet + scheelite very fractured, abundant clay (kaoline), abundant calcite in fractures and rock. Skarn seem to cut foliation					1%	0082B	0.45 m	.14%	36	2	10	
10.85	11.3	+95%	Garnet scheelite skarn Same as above					1%	0083B	0.45 m	.47%	80	2	10	
11.3	11.75	+95%	Garnet scheelite skarn Same as above					01%	0084B	0.45 m	.23%	--	2	10	
11.75	12.10	+100%	Garnet scheelite skarn Skarn same as above changing into mica quartzite					0.0% (No SWUV) +/	0085B	0.35 m	.02%	--	2	10	
12.10	12.55	+100%	Quartzite/schist with skarn band. Very brittle mica quartzite with 15 cm thick (not SWUV +/ garnet skarn band. This skarnband is cut by calcite vein (1 cm thick). Calcite all over (cracks)					<1% Not SWUV+	0086B	0.45 m	0.06	--	2	10	
12.5	13.41	+100%	Alternating mica schist & mica quartzite, very calcareous, no SWUV +, incipient skarn, Py along foliation & cracks.					<1%							
13.41	14.9	100%	Calcareous quartzite/bio. schist, incipient skarnification, folding in foliation. At 14.4 intensive clay (20 cm) followed by quartz vein. Section changing into biotite schist.			Foliation folding									
14.9	16.5	100%	Calc. mica quartzite No SWUV + qtz vein at 15.4 with clay at both sides, inc. skarnif. Abundant calcite veinlets. Py.					<1%	0.0						

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 13/85		Date Completed AUGUST 13/85		Core Size NO		DIP TESTS				PROPERTY HORNE OPTION			PROJECT No. R-31		N.T.S. No. 82M/13		
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 3 of 5		
Lot. L105 + 00N		Elev. 1700m			Dip -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		Dip		HOLE No.
Dep. 100 + 16E		Length 45.7m		Bearing 225°				-45°		Dep.		Length		Bearing		TU 85-1	
From	To	Recovery	Description			Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
			WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)											
16.46	18.44	100%	<u>Biotite schist</u>	abundant calc. veinlets chlorite to talc. along foliation, cracks. Not SWUV +				<1%	0.0								
18.44	19.00	100%	<u>Biotite - quartzite</u>	calcareous cracks, same as above					0.0								
19.00	19.85	100%	<u>Biotite schist/quartzite</u>	Same as above, less carbonates				<1%									
19.85	20.33	100%	<u>Calcareous chlorite schist</u>	SWUV +, scheelite occurs along foliation plane (placer effect) very clayey, brittle.				<1%	1%	0087B	0.48	0.06	--	2	10		
20.33	21.5	100%	<u>Calcareous Chlorite schist</u>	strongly altered, incip. skarnification along foliation, very brittle			Minor folding	<1%	0								
21.5	21.90	100%	<u>Calc. chlorite schist</u>	Same as above.													
21.90	21.95	100%	<u>Quartz vein with pyrite</u>	parallel to foliation				40%	--	0088B	0.05 m	0.01	--	2	10		
21.95	22.43	100%	<u>Chloritic quartz marble</u>	quartzite with chloritized min. along foliation planes.				1%	--	0089B	0.48 m	0.01	--	2	10		

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 13/85		Date Completed AUGUST 13/85		Core Size NO		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. L105 + 00N		Elev. 1700m		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep. 100 + 16E		Length 45.7m		Bearing 225°						Dep.		Length		Bearing		
From	To	Recovery	Description			Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
				WO ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)									
22.43	24.5	100%	Mica-quartz marble chloritized. Py along foliation planes with a few bands of chlorite (1 to 3 cm) light grey.				<1%	--								
24.5	25.6	95%	Quartz marble light grey with incip. skarnific, weathered Py along foliation planes.				<1%	--								
25.6	28.6	100%	Calcareous chlorite quartzite/quartz marble. Occas. incipient skarnific abundant calcite especially in veinlets and cracks. Occasionally heally chloritized or with eathered pyrite in cracks joints. A few quartz veins.				<1%	--								
28.6	31.7	100%	Mica schist alternating with quartz marble and calcareous quartzite. Strongly chloritized, barren quartz vein at 30.4 m. Small fault zone at bottom of section.				<1%	--								
31.7	34.7	95%	Chlorite schist Very clayey, with minor chloritized quartzite bands. A few barren quartz veins. Much less calcareous than previous sections			Fault zone	<1%	--								
34.7	37.8	100%	Carbonaceous chlorite schist. Very clayey, same as above, strongly chloritized, very brittle.			Fault zone	<1%	--								
37.8	40.8	95%	Chloritized schist Same as above. Carbonate content very variable. At 41.1 m altered sericite granite (15 cm width). No skarn contact.													
40.8	43.9	100%	Chlorite clay schist Same as above. No granite remnants, very brittle.													

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colored AUGUST 13/85		Date Completed AUGUST 13/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION			PROJECT No R-31		N.T.S. No 82M/13			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES								
Lot. L105 + 00N 100 + 16E		Elev. 1700m		Dip -45°		45.7m		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 5 of 5		
Dep.		Length 45.7m		Bearing 225°												HOLE No. TU 85-1		
From	To	Recovery	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
												WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)			
43.9	45.7	95%	Clay - chlorite schist				Same as above.											
			END OF HOLE															
			NOTE: Location 16 m E from L.105+00N/100+00E. Horne Trench (east corner) Trench #5 start (0 m station) @ 7 m from DDH (az.190°)				1.5 m into direction 145° of above grid station.											

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colored August 14/85		Date Completed August 14/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. L.104+75N		Elev. 1700 m		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep. 99+90E		Length 46.0 m		Bearing -45°						Dep.		Length		Bearing		
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS							
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)				
0	4.9	0%	Overburden													
4.9	7.3	5%	Overburden (granitic) Core mainly boulders													
7.3	8.2	90%	Chlorite-graphite schist Carbonaceous, very brittle, very clayey.													
8.2	8.8	50%	Chlorite-graphite schist More clayey than above otherwise the same.													
8.8	10.4	60%	Chlorite graphite schist Pyrite blebs, very clayey.		0.1%											
10.4	11.0	80%	Chlorite graphite schist Very clayey, carbonaceous Py in blebs and along cracks		<1%	--	0090B		0.01	--	2	10				
11.0	12.5	80%	Chlorite graphite schist The same as above.		0.1%											
12.5	15.4	95%	Chlorite graphite schist Very much the same as above but grading into more calcareous rock													

DRILL LOG - 81

Date AUGUST 13 - 20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 14/85		Date Completed AUGUST 14/85		Core Size NO		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 3		
Lat. L104 + 75N 99 + 90E		Elev. 1700m			Dip -45°	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No. TU 85-2		
Dep.		Length 46.0m		Bearing 45°					Dep.	Length	Bearing				
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									WO ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)			
15.4	18.3	95%	Chlorite graphite marble Changing into almost massive chlorite graphite bed at bottom (@ 17.3)	Foliat @ 20° from core axis											
18.3	19.5	95%	Chlorite graphite schist Very clayey with some quartzite remnants.												
19.5	22.6	100%	Carbonaceous chlorite graphite schist. Very brittle.												
22.6	25.6	100%	Carb. chlorite graphite schist to marble. Occ. very brittle. Same as above	Foliation from // to ⊥ to axis of core.											
25.6	28.7	100%	Carb. chlorite graphite schist alternating with more marble rich beds. Occasionally some sericite (minor). Alteration so intense often seems breccia.												
28.7	31.7	100%	Chlorite graphite schist Alternating with (sericite) marble. Very porous. Same as above. Breccia aspect occas.												
31.7	34.7	100%	Chlorite graphite schist to marble, with breccia aspect occasionally.												
34.7	37.8	100%	Chlorite graphite breccia With quartz & marble fragments. At 36.2 20 cm wide quartz vein with calcite veinlets. Otherwise barren.												

DRILL LOG - 81

Date AUGUST 13 - 20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 14/85		Date Completed AUGUST 14/85		Core Size NQ	DIP TESTS				PROPERTY HORNE OPTION			PROJECT No. R-31	N.T.S. No. 82M/13
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 3
Lat. L104 + 75N 99 + 90E		Elev. 1700m			Dip -45°	46m	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip
Dep.		Length 46.0m		Bearing 45°						Dep.	Length	Bearing	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									WO ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)	
37.8	40.8	100%	Fractured sericite quartzite. Very fractured, sheared with a few Py pods. Very weathered.		0.1								
40.8	43.9	100%	Quartzite breccia Talc minerals along cracks.		0.1								
43.9	44.5	100%	Biotite-Py-quartzites		0.1								
44.5	44.75	100%	Quartz vein		0.1								
44.75	46.0	100%	Biotite-Py-quartzite With incipient skarnific, talcy & clay minerals along joints. END OF HOLE		0.1								
NOTE: This hole is			located @ 32.4 m in az. 225° direction from DDH TU-85-1.										

DRILL LOG - 81

Date August 13 - 20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected		Date Completed		Core Size		DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.	
AUGUST 14/85		AUGUST 15/85		NO						HORNE OPTION		R-31		82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 2		
Lot. 105 + 35N		Elev. 1700m			Dip -45°		34.7m		RECORDED		CORRECTED		RECORDED		CORRECTED
Dep. 100 + 15E		Length		Bearing 225°										HOLE No.	
Lat.		Elev.		Dip		34.7m				Dep.		Length		Bearing	
Dep.		Length		Bearing										Tu - 85-3	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									Wo3 (%)	Sn (ppm)	Mo (ppm)	Au (ppm)			
0	4.3		OVERBURDEN												
4.3	4.9	90%	BIOTITE - CHLORITE - TALC SCHIST Incipient skarnification, clay along joints, pyrite along foliation. Quartz vein (10cm) - very brittle.	foliation 40° to core-axis	2.5		0091B	0.6	0.01		2	10			
4.9	6.4	80%	BIOTITE - CHLORITE - TALC SCHIST Sericite quartz vein (25cm) at 5.5m with incipient skarnification. Very brittle		2.5										
6.4	7.3	80%	BIOTITE - CHLORITE - TALC SCHIST Same as above but no quartz veins.		1.0										
7.3	9.0	80%	BIOTITE - CHLORITE - TALC SCHIST Same as above		1.0										
9.0	10.7	95%	BIOTITE - CHLORITE - TALC SCHIST Same as above		1.0										
10.7	12.5	90%	BIOTITE - CHLORITE - TALC SCHIST Same as above		1.0										
12.5	13.7	95%	BIOTITE - CHLORITE - TALC SCHIST Same as above but with some tension gashes (small; of calcite).		1.0										

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 14/85		Date Completed AUGUST 15/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13						
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 2							
Lot. 105 + 35N 100 + 15E		Elev. 1700m			Dip -45°		34.7 m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.				
Dep.		Length		Bearing								Dep.		Length		Bearing		Tu-85-3		
From	To	Recovery	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
												WO ₃ (%)	Sr(ppm)	Mo (ppm)	Au(ppb)					
13.7	16.2	50%	BIOTITE-CHLORITE TALC SCHIST Increasingly becoming brittle, clayey.					< 1%												
16.2	18.6	80%	CLAY BRECCIA ZONE Chloritized quartzite breccia zone changing back into a less clayey chlorite quartzite. Carbonaceous.																	
18.6	19.5	100%	CLAY BRECCIA ZONE Grades into biotite quartzite. Incipient skarnification starting at bottom.																	
19.5	22.6	100%	CLAY BRECCIA ZONE Changing into more chlor- itic graphitic breccia. Cut by granitic dyke at 21.0m.																	
22.6	25.6	100%	CLAY-CHLORITE GRANITE BRECCIA zone interrupted by sericite pegmatite intrusion at about 23.5m (0.7m wide).																	
25.6	28.6	100%	BIOTITE MUSCOVITE GRANITE, with occasionally a few clay horizons.																	
28.7	31.7	100%	BIOTITE MUSCOVITE GRANITE Same as above																	
31.7	34.7	100%	BIOTITE MUSCOVITE GRANITE Same as above																	
			END OF HOLE																	

DRILL LOG - 81

NOTE: Very swampy area. Very difficult setting up Drill.

Used field evidence for lining up drill. Station 105 + 25N with measuring tape falls in trench @ about 15m station
Grid was established with topocain hence difference of ± 10m.

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colored AUGUST 15/85		Date Completed AUGUST 15/85		Core Size NQ	DIP TESTS				PROPERTY HORNE OPTION	PROJECT No. R-31	N.T.S. No. 82M/13		
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				
Lat. L105 + 00N		Elev. 1700m			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	Sheet 1 of 4	
Dep. 100 + 32E		Length 45.7		Dip -45°					Dep.	Length	Bearing	HOLE No. Tu 85-4	
From	To	Recovery	Description		Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
										WO ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)
0	3.05		OVERBURDEN										
3.05	4.3	5%	BIOTITE QUARTZITE Overburden Boulder?										
4.3	5.5	10%	BIOTITE SERICITE SCHIST Overburden boulders?										
5.5	6.7	35%	SERICITE QUARTZITE & CLAY										
6.7	8.5	50%	SERICITE QUARTZITE Very weathered at bottom - clayey. Chlorite along joints.			<1%							
8.5	9.75	42%	SERICITE QUARTZITE Very weathered to chlorite and clay.			<1%							
9.75	10.7	50%	CHLORITE AND CLAY ZONE with some chloritized mica-quartzite.										
10.7	11.05	90%	BIOTITE SERICITE QUARTZITE Chloritized, clay & calcite. Calcite & clay along joints. Very shattered aspect.			<1%	0	0092B	0.35m	0.14	--	2	10

DRILL LOG - 81

Date AUGUST 13 - 20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 15/85		Date Completed AUGUST 15/85		Core Size NO		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 4		
Lot. L105 + 00N 100 + 32E		Elev. 1700m			Dip	RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		Dip	
Dep.		Length 45.7		Bearing					Dep.		Length		Bearing		HOLE No. Tu 85-4
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									W ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)			
11.05	11.40	90%	<u>BIOTITE SERICITE QUARTZITE</u> Incipient skarnification clay (chlorite) and calcite along joints, very shattered aspect, calcareous.		<1%	0%	0093B	0.35m	0.16	--	2	10			
11.40	11.75	90%	<u>BIOTITE SERICITE SCHIST</u> Incipient skarnification visible scheelite along foliation within incipient skarnification. (3 or 4 big crystals). Very shattered aspect.		<1%	0.3%	0094B	0.35m	0.17	--	2	10			
11.75	12.05	90%	<u>BIOTITE SERICITE QUARTZITE</u> Within clay zone very shattered aspect, calcareous.		<1%	0.1%	0095B	0.30m	0.06	--	2	10			
12.05	12.35	90%	<u>BIOTITE SERICITE SCHIST</u> Chlorite along joints ver shattered aspect, calcareous.		<1%	0%	0096B	0.30m	0.02	--	2	10			
12.35	12.75	90%	<u>BIOTITE SCHIST</u> Incipient skarnification slightly stronger (small bands). Chlorite and calcite in joints and cracks, calcareous.		<1%	1%	0097B	0.40m	1.68	--	2	10			
12.8	13.2	95%	<u>SHATTERED Quartzite</u> Incipient skarnification zone of up to 2cm scheelite crystals ± 25cm wide very shattered to brecciated rock. Pods of chlorite.		<1%	1%	0098B	0.4m	0.86	--	2	10			
13.2	13.7	95%	<u>BIOTITE CARBONACEOUS SCHIST</u> Scheelite very fine grained.		<1%	0.5%	0099B	0.5m	0.02	--	2	10			
13.7	14.3	95%	<u>BIOTITE CHLORITE SCHIST</u> No scheelite observed but ± 1% sulphides. Incipient skarnification.		1%	0%	0100B	0.5m	0.01	--	2	10			

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected		Date Completed		Core Size		DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.			
AUGUST 15/85		AUGUST 15/85		NQ		DEPTH		BEARING		ANGLE		HORNE OPTION		R-31		82M/13	
FIELD CO-ORDINATES								RECORDED		CORRECTED		SURVEYED CO-ORDINATES					
Lot. LI05 + 00N 100 + 32E		Elev. 1700m		Dip -45°		45.7				-45°		Lot.		Elev.		Dip	
Dep.		Length 45.7		Bearing 200°								Dep.		Length		Bearing	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
									W ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)					
14.3	16.3	95%	CHLORITE SCHIST Alternating with very shattered mica-quartzite, incipient skarnification. Occasionally very dense chlorite bands.														
16.3	17.5	95%	CHLORITE SCHIST With several quartz veins.														
17.5	19.35	95%	SERICITE BIOTITE SCHIST contains several very shattered quartz veins.		<1%												
19.35	22.4	95%	BIOTITE SERICITE SCHIST Alternating occasionally with quartzite; incipient skarnification. Veinlets cracks and tension gashes (quartz &/or calcite filled) Very shattered rock.		<1%												
22.4	25.45	100%	BIOTITE SERICITE SCHIST Alternating with quartzites. Very shattered rock.		<1%												
25.45	27.4	100%	SERICITE QUARTZITE Very shattered, occasional pods or bands of chlorite and clay.		<1%												
27.4	28.65	95%	BIOTITE SERICITE QUARTZITE Very shattered		<1%												
28.65	29.6	95%	BIOTITE SERICITE QUARTZITE Same as above.		<1%												

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 15/85		Date Completed AUGUST 15/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION			PROJECT No. R-31		N.T.S. No. 82M/13		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						
Lat. L105 + 00N		Elev. 1700m		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		
Dep. 100 + 328		Length 45.7		Bearing 200°						Dep.		Length		Bearing		HOLE No. Tu 85-4	
From	To	Recovery	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
				Wo ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)										
29.6	31.7	95%	BIOTITE SERICITE SCHIST Alternating with sericite quartzites. Very shattered.					<1%									
31.7	33.05	100%	BIOTITE SCHIST Very chloritized leading to massive clay zone. (at bottom of section).				folding in schist	< 1%									
33.05	34.7	100%	BIOTITE QUARTZ MARBLE Strongly chloritized.					<1%									
34.7	37.8	100%	BIOTITE QUARTZ MARBLE Chloritized, incipient skarnification abundant tension gashes cutting foliation @ about right to oblique angles.				Foliation 45° to core axis	< 1%									
37.8	40.8	100%	BIOTITE SERICITE QUARTZITE Alternating with a few bands of very chloritized biotite sericite schist					< 1%									
40.8	42.05	95%	BIOTITE SERICITE SCHIST Very chloritized					<1%									
42.05	43.9	100%	CALCAREOUS BIOTITE SCHIST Strongly chloritized changing into biotite quartz marble.					<1%									
43.9	45.7	95%	CALCAREOUS BIOTITE SCHIST Strongly chloritized.					< 1%									
			END OF HOLE														

DRILL LOG - 61

NOTE: This hole at 16m from 14m station of Trench #5 into direction az. N20. Originally measured to be drilled into 225° Az from L104 + 95E. This had to be changed because of cluster of best timber in area.

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 16/85		Date Completed AUGUST 16/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13			
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 1				
Lat. L105 + 25N		Elev. 1700m			Dip -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		
Dep. L100 + 40E		Length 22.5m		Bearing 200°		Hole abandoned, no test done				Dep.		Length		Bearing		MOLE No. Tu-85-6	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)					
0	10.4		Overburden														
10.4	13.4	65%	Clayzone originally chlorite schist.														
13.4	16.45	33%	Clayzone Same as above														
16.45	17.1	60%	Chlorite schist + quartz vein remnant														
7.1	17.7	70%	Chlorite talc schist becoming more quartzitic.														
17.7	18.9	70%	Talcy chlorite schist														
18.9	19.5	13%	Talcy chlorite schist														
19.5	20.1	15%	Talcy chlorite sericite schist														
20.1	22.5	0%	END OF HOLE														

DRILL LOG - #1

NOTE: Location situated at 25ms into direction N20 from DDH Tu-85 #4

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected		Date Completed		Core Size		DIP TESTS				PROPERTY			PROJECT No.		N.T.S. No.	
AUGUST 15/85		AUGUST 16/85		NO						HORNE OPTION			R-31		82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 8			
Lat. L104 + 80N		Elev. 1700m			Dip -45°		48.8m		RECORDED		CORRECTED		RECORDED		CORRECTED	
Dep. 100 + 55E		Length 48.8m		Bearing 200°										HOLE No.		
										Dep.		Length		TU-85-5		
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS							
									Wo ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)				
0	3.35		OVERBURDEN													
3.35	4.3	95%	BTE. SERIC. TALC SCHIST Talc feel, incipient skarnification. Very chloritized. Wavy to kinky micro-folding. Not certain scheelite, but SWUV + yellow mineral.		1%	0.5% ?	0151B	0.95m	0.01	--	2	10				
4.3	4.9	83%	BTE. SERIC. TALC SCHIST Yellow (short wave + only square or shaped crystals. Could be scheelite with abundant Mo. Estimate of WO ₃ refers to this yellow mineral, incipient skarnification)		1%	0.5%	0101B	0.6m	0.01	--	2	10				
4.9	5.5	83%	BTE. SERIC. TALC SCHIST Same as above		1%	0.5%	0102B	0.6m	0.01	--	2	10				
5.5	5.85	95%	BTE. SERIC. TALC SCHIST Strongly chloritized		1%	0.5%	0103B	0.35%	0.01	--	2	10				
5.85	6.2	95%	BTE. SERIC. TALC SCHIST Same as above		1%	0.5%	0104B	0.35%	0.01	--	2	10				
6.2	6.55	95%	BTE. SERIC. TALC SCHIST Same as above		1%	0.5%	0105B	0.35%	0.01	--	2	10				

DRILL LOG - 01

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colored AUGUST 15/85		Date Completed AUGUST 15/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 8		
Lat. L104 + 80N 100 + 55E		Elev. 1700m			Dip -45°	RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.	Elev.	Dip	HOLE No. TU 85-5		
Dep.		Length 48.8m		Bearing 200°					Dep.	Length	Bearing				
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)			
6.55	6.9	95%	BTE. SERIC. TALC SCHIST S.A.A.	With quartz vein	1%	0.5%	0106B	0.35 m	0.01	---	2	10			
6.9	7.3	95%	BTE SERIC. TALC SCHIST	Chloritized, S.A.A.	Kinky microfolds	1%	0.5%	0107B	0.40 m	0.02	---	2	10		
7.3	7.85	90%	BTE SERIC. TALC SCHIST	Chloritized, S.A.A.		1%	0.5%	0108B	0.55 m	0.05	4	2	10		
7.85	8.4	100%	BTE SERIC. TALC SCHIST	Chloritized, S.A.A.		1%	1.0%	0109B	0.55 m	0.02	4	2	10		
8.4	8.75	100%	BTE SERIC. TALC SCHIST S.A.A.	Strongly chloritized.		2%	1.0%	0110B	0.35 m	0.02	4	2	10		
8.75	9.1	100%	BTE SERIC. TALC SCHIST S.A.A.	Strongly chloritized.		1%	0.5%	0111B	0.35 m	0.01	6	2	10		
9.1	9.75	75%	BTE SERIC. TALC SCHIST	Strongly chloritized folded incip chloritic skarn		1%	0.5%	0112B	0.65 m	0.02	4	2	10		
9.75	10.4	75%	BTE SERIC. TALC SCHIST	S.A.A.		1%	--	0113B	0.65 m	0.01	---	2	10		

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 15/85		Date Completed AUGUST 15/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						
Lat. L104 + 80N		Elev. 1700m			Dip -45°		48.8m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.	Elev.	Dip
Dep. 100 + 55E		Length 48.8m		Bearing 200°								Dep.	Length	Bearing	TU 85-5
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)			
10.4	10.8	75%	CLAY ZONE		1%	---									
10.8	11.3	75%	CHLORITE/CLAY ZONE Chlorite schist.		1%	---									
11.3	12.3	80%	CHLORITE CLAY ZONE Talcy feel, slightly calcareous		1%	---									
12.3	13.4	95%	CHLORITE SCHIST Talcy feel, S.A.A.		1%	---									
13.4	14.6	90%	CHLORITE SCHIST S.A.A.		1%	---									
14.6	15.35	97%	CHLORITE PYRITE SCHIST With pyrite along foliation and at edge of 2 present quartz veins. Some kind of iridescence		3%	---									
15.35	15.85	97%	CHLORITE PYRITE SCHIST S.A.A. Check Py for Au		3%	---	0114B	0.5 m	0.01	---	2	10			
15.85	16.35	97%	CHLORITE PYRITE SCHIST S.A.A.		3%	---	0115B	0.5 m	0.01	---	2	10			

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colliored AUGUST 15/85		Date Completed AUGUST 16/85		Core Size NQ		DIP TESTS				PROPERTY			HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 4 of 8			
Lot. L104 + 80N		Elev. 1700m			Dip -45°	48.8m	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No. TU 85-5				
Dep. 100 + 55B		Length 48.8m		Bearing 200°						Dep.	Length	Bearing						
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS									
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)						
16.35	16.50	97%	CHLORITE PYRITE SCHIST S.A.A.															
16.5	17.1	100%	CHLORITE PYRITE SCHIST Talcy feel		3%	---	0116B	0.6	0.01	---	2	10						
17.1	17.7	100%	CHLORITE PYRITE SCHIST Talcy feel.		3%	---	0117B	0.6	0.01	---	2	10						
17.7	18.3	100%	CHLORITE PYRITE SCHIST Talcy feel		3%	---	0118B	0.6	0.01	---	2	10						
18.3	18.9	100%	CHLORITE PYRITE SCHIST Talcy feel		3%	---	0119B	0.6	0.01	---	2	10						
18.9	19.25	92%	CHLORITE PYRITE SCHIST Talcy feel		3%	---	0120B	0.35	0.01	---	2	10						
19.25	20.7	92%	CHLORITE PYRITE SCHIST Alternating with mica quartzite with inc. smarnification.		<1%	---	---	---										
20.7	22.6	100%	QUARTZITE Changing into seric. quartzite with some pyrite (last 40 cm)		<1%	---	---	---										

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 15/85		Date Completed AUGUST 16/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 5 of 8		
Lat. L104 - 80N		Elev. 1700m			Dip -45°	48.8m	RECORDED	CORRECTED	RECORDED	CORRECTED	-45°	Lat.	Elev.	Dip	HOLE No.
Dep. 100 + 55		Length 48.8m		Bearing 200°							Dep.	Length	Bearing	TU 85-5	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppm)			
22.6	22.85	100%	SERICITE QUARTZITE		1%	---	---	---							
22.85	23.2	100%	QUARTZ VEIN WITH PYRITE		3%	---	0121B	0.35 m	0.01	---		2	10		
23.2	23.37	100%	QUARTZITE		---	---	---	---							
23.37	25.5	100%	PYRITE CHLORITE SCHIST With small quartzite bands		1%	---	---	---							
25.5	26.2	100%	CHLORITE SCHIST Reduced to clay zone		---	---	---	---							
26.2	26.6	100%	CHLORITE PYRITE SCHIST With inc. skarnif.		<1%	<0.5%	0122B	0.4 m	0.02	---		2	10		
26.6	27.65	100%	CHLORITE QUARTZITE		---	---	---	---							
27.65	28.0	100%	CHLORITE PYRITE SCHIST With talcy feel. Very minor indication of scheelite		<1%	<1%	0123B	0.35 m	0.01	---		2	10		

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 15/85		Date Completed AUGUST 16/85		Core Size NQ	DIP TESTS				PROPERTY HORNE OPTION	PROJECT No. R-31	N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat. L104 + 80N		Elev. 1700m			Dip -45°	48.8m	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.
Dep. 100 + 55E		Length 48.8m		Bearing 200°						Dep.	Length	Bearing
										HOLE No. TU 85-5		
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)
20.8	28.5	95%	SERICITE QUARTZITE		--	--	--	--				
28.5	30.6	95%	CHLORITE SERICITE SCHIST Talcy feel		<1%	--	--	--				
30.6	31.1	80%	CHLORITE SERICITE SCHIST Talcy feel S.A.A.		<1%	<5%	0124B	0.4 m	0.01	--	2	10
31.1	31.45	100%	CHLORITE SERICITE QUARTZITE		<1%	<5%	0125B	0.35 m	0.02	--	2	10
31.45	31.80	100%	CHLORITE SCHIST Wavy texture of foliation, talcy		<1%	<0.5%	0126B	0.35 m	0.01	--	2	10
31.80	32.05	100%	CHLORITE PYRITE SCHIST Wavy texture of foliation talcy.		2%	<1%	0127B	0.25 m	0.01	--	2	10
32.05	32.55	100%	CHLORITE PYRITE SCHIST S.A.A.		1%	<0.5%	0128B	0.50 m	0.01	--	2	10
32.55	33.05	100%	CHLORITE PYRITE SCHIST S.A.A.		1%	<0.5%	0129B	0.50 m	0.01	--	2	10

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colored		Date Completed		Core Size		DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.			
AUGUST 15/85		AUGUST 16/85		NQ		FIELD CO-ORDINATES		DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES		Sheet 7 of 8	
Lat. L104 + 80N		Elev. 1700m		Dip -45°		48.8m		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
100 + 55E		Length 48.8m		Bearing 200°												TU 85-5	
From	To	Recovery	Description			Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
											WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)			
33.05	33.5	90%	CHLORITE PYRITE SCHIST S.A.A.				1%	<0.5%	0130B	0.4 m	0.02	--	2	10			
33.5	36.3	100%	CHLORITE TALC PYRITE SCHIST Intercalated by a few 5 to 10 cm wide barren quartz veins. At bottom very brittle and clayey. No evidence of scheelite(?) mineralization				<1%	--									
36.3	38.7	90%	CHLORITE TALC PYRITE SCHIST Also sericite, no evidence for scheelite like minerals			Fold from 45° to parallel to core axis (foliation)	<1%	--									
38.7	39.15	100%	CHLORITE TALC SCHIST Doubtful scheelite(?) present			Wavy texture (small scale)	<1%	<0.5%	0131B	0.45 m	0.01	--	2	10			
39.15	39.6	100%	CHLORITE TALC PYRITE SCHIST S.A.A.				<1%	<0.5%	0132B	0.45 m	0.01	--	2	10			
39.6	40.8	100%	CHLORITE TALC PYRITE SCHIST S.A.A.				<1%	--									
40.8	42.7	90%	CHLORITE TALC PYRITE SCHIST S.A.A., clay zone to bottom. Spotty biotite				<1%	--									
42.7	43.7	100%	CHLORITE PYRITE TALCY SCHIST S.A.A.				<1%	--									

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collied AUGUST 15/85		Date Completed AUGUST 16/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 8	
Lat. L104 + 80N		Elev. 1700m		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep. 100 + 55E		Length 48.8m		Bearing 200°						-45°				TU 85-5	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)			
43.7	44.1	100%	CHLORITE PYRITE TALC SCHIST] Becoming more quartz rich Quartz also in pods. Pyrite in tension gashes vein- lets. Incipient skarnification.		<1%	--	0133B	0.4 m	0.01	--	2	10			
44.1	44.5	100%	CHLORITE PYRITE SCHIST] With quartz pods. S.A.A. Some(?) evidence for scheelite(?) minerals i.e. 4 or 5 crystals.		1%	<0.5%	0134B	0.4 m	0.01	--	2	10			
44.5	45.7	100%	CHLORITE TALC PYRITE SCHIST] Spotty biotite		1%	--	--	--	--						
45.7	48	100%	CHLORITE SCHIST] With 3 small quartz veins becoming very brittle (powder) and clayey.	Small fault zone	<1%	--	--	--	--						
48	48.8	100%	CHLORITE SERICITE QUARTZITE] END OF HOLE		--	--	--	--							
			NOTE: Located @ 25 m into direction Az 110° from DDH TU 85-4.												

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 7/85		Date Completed AUGUST 7/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION			PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot. LI05 + 00N 100 + 32E		Elev. 1700m		Dip -65°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.		
Dep.		Length 32.3m		Bearing 200°						Dep.	Length	Bearing	Tu-85-7			
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS							
									Wg (%)	Sn (ppm)	Mo (ppm)	Au (ppb)				
0	4.9		OVERBURDEN													
4.9	5.5	33%	TALCY BIOTITE CHLORITE SCHIST WITH SERICITE													
5.5	7.3	22%	TALCY BIOTITE CHLORITE SCHIST WITH some quartz vein remnants, some epidote.		1%											
7.3	8.8	17%	BIOTITE CHLORITE SCHIST with clay section		<1%											
8.8	10.1	73%	CLAYZONE originally combination of chlorite schist and quartzite.													
10.1	11.6	73%	CLAYZONE CHANGING TO QUARTZITE at 10.6 (about) quartzite shows incipient skarnification.		1%											
11.6	13.4	100%	CARBONACEOUS QUARTZ PYRITE SCHIST with incipient skarnification.		<1%											
13.4	13.95	100%	CARBONACEOUS QUARTZ PYRITE SCHIST with incipient skarnification.		<1%											

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 7/85		Date Completed AUGUST 7/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION		PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 4		
Lat. L105 + 00N		Elev. 1700m			Dip -65°		32.3		RECORDED		CORRECTED		RECORDED		CORRECTED
Dep. 100 + 32E		Length		Bearing						Lot.		Elev.		Dip	
Dep.		Length		Bearing						Dep.		Length		Bearing	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									W ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)			
13.95	14.48	100%	SKARN CARNET No scheelite seen				0135B	0.5m	0.01	--	2	10			
14.45	14.95	100%	CARNET SKARN/CARBONACEOUS BIOTITE SCHIST mixture No scheelite seen				0136B	0.5m	0.01	--	2	10			
14.95	15.35	100%	BARREN QUARTZ VEIN					0.4m							
15.35	16.00	100%	SKARN - CARB. BIOTITE SCHIST mixture.				0137B	0.65m	0.02	--	2	10			
16.00	16.65	100%	BARREN QUARTZ VEIN												
16.65	17.2	100%	SKARN (about 15cm taken up by pods or vein of quartz(barren)).				0138B	0.55m	0.01	--	2	10			
17.2	17.55	100%	SKARN Scheelite observed			1%	0139B	0.35m	0.03	--	2	10			
17.55	17.90	100%	SKARN/MICA-QUART MARBLE mixture.			2%	0140B	0.35m	0.40	--	2	10			

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected AUGUST 7/85		Date Completed AUGUST 7/85		Core Size NQ		DIP TESTS				PROPERTY HORNE OPTION			PROJECT No. R-31		N.T.S. No. 82M/13		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						
Lot. L105 + 00N 100 + 32E		Elev. 1700m		Dip -65°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		Dip		HOLE No.
Dep.		Length 32.3m		Bearing 200°						Dep.		Length		Bearing		Tu-85-7	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
									W ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)					
17.90	18.25	100%	QUARTZ-MARBLE/SKARN MIXTURE			1%	0141B	0.35m	0.24	--	2	10					
18.25	18.65	100%	SKARN/CARBONACEOUS MICA-SCHIST mixture. (carbonaceous mica-schist bordering on marble). <i>- bordering</i>			<0.5%	0142B	0.40m	0.03	--	2	10					
18.65	19.1	100%	SKARN/CARBONACEOUS MICA-SCHIST mixture. Same as above			<0.5%	0143B	0.45m	0.01	--	2	10					
19.1	19.25	100%	CARBONACEOUS MICA-SCHIST														
19.25	19.40	100%	CHLORITE SCHIST														
19.40	21.00	85%	MICA-QUARTZITE WITH QUARTZ VEINS.														
21.0	22.6	66%	TALCY CHLORITE SCHIST Brittle, several clayey sections and two 10cm wide barren quartz veins.			<1%											
22.6	25.6	50%	TALCY CHLORITE SCHIST Brittle, very clayey.	fault zone													

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared AUGUST 7/85		Date Completed AUGUST 7/85		Core Size NO		DIP TESTS				PROPERTY HORNE OPTION			PROJECT No. R-31		N.T.S. No. 82M/13	
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. L105 + 00N		Elev. 1700m		Dip -65°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep. 100 + 32E		Length 32.3m		Bearing 200°		32.3			-65°		Dep.		Length		Bearing	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS							
									Wo ₃ (%)	Sn(ppm)	Mo(ppm)	Au(ppb)				
25.6	25.8	65%	QUARTZITE Very brittle													
25.8	26.5	65%	CHLORITIC SCHIST/CLAY ZONE													
26.5	28.0	100%	CARBONACEOUS CHLORITE/GRAPHITE SCHIST Very brittle, some incipient skarnification.													
28.0	28.3	100%	BIOTITE-CHLORITE SCHIST		< 1%											
28.3	29.9	95%	QUARTZITE (FERRUGINOUS) 15cm wide barren quartz vein; quartzite very brittle, occasional very clayey fractures filled with calcite.													
29.9	31.7	55%	QUARTZITE BRECCIA Very brittle, occasionally clayey. Although shows some incipient skarnification. Definitely no scheelite.													
31.7	32.3	80%	MICA-QUARTZITE Very brittle.													
			END OF HOLE													

DRILL LOG - 81

Date AUGUST 13-20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collared		Date Completed		Core Size		DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.	
AUGUST 17/85		AUGUST 17/85		NQ						HORNE OPTION		R-31		82M/13	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 3		
Lot. L110 + 80N 90 + 80E		Elev. 1680m			Dip -45°		28m		RECORDED		CORRECTED		RECORDED		CORRECTED
Dep.		Length 28.0m		Bearing 180°										HOLE No.	
Dep.		Length		Bearing						Dep.		Length		TU 85-8	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									WO ₃ (%)	Sr(ppm)	Mn(ppm)	Au(ppb)			
0	4.0		OVERBURDEN												
4	4.3	100%	GRANITE probably boulder												
4.3	6.4	70%	SERICITE QUARTZITE abundant small cracks filled with calcite.												
6.4	6.9	90%	QUARTZITE no scheelite observed												
6.9	7.40	90%	QUARTZITE with incipient sharnif. and 15cm wide skarn/marble band.		<0.1%		0144B	0.45m	0.02	--		2		10	
7.40	7.90	90%	QUARTZ MARBLE very fine grained. The odd scheelite mineral observed.		<0.1%		0145B	0.45m	0.03	--		2		10	
7.9	8.4	90%	QUARTZ MARBLE/SCHIST observed the odd crystal of scheelite.		<0.1%		0146B	0.45m	0.01	--		2		10	
8.4	8.9	90%	QUARTZ GARNET MARBLE best scheelite section present here in layer of ± 5cm.		<1%	<0.1%	0147B	0.45m	0.03	--		2		10	

DRILL LOG - 81

Date AUGUST 13 - 20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Colored		Date Completed		Core Size		DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.			
AUGUST 17/85		AUGUST 17/85		NQ		DEPTH		BEARING		ANGLE		HORNF OPTION		R-31		82M/13	
FIELD CO-ORDINATES								RECORDED		CORRECTED		SURVEYED CO-ORDINATES					
Lat. L110 + 80N		Elev		Dip		28m						Lat.		Elev.		Dip	
99 + 80E		1680m		-45°												HOLE No.	
Dep		Length		Bearing								Dep.		Length		Bearing	
		28.0m		180°												TU-85-8	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
									WO ₃ (%)	Sn (ppm)	Mo (ppm)	Au (ppb)					
8.9	9.4	90%	QUARTZ - GARNET MARBLE a few scheelite crystals.			0.1%	0148B	0.45m	0.01	--	2	10					
9.4	9.9	90%	QUARTZ GARNET MARBLE Same as above. Transition into micaceous py quartzite starts.			0.1%	0149B	0.45m	0.03	--	2	10					
9.9	10.4	90%	MICACEOUS PY QUARTZITE no scheelite observed.				0150B	0.45m	0.01	--	2	10					
10.4	12.8	76%	MICACEOUS QUARTZITE with incipient skarnif (garnet layers, very thin)		<1%												
12.8	13.4	100%	SERICITE GRANITE														
13.4	13.6	100%	SERICITE GRANITE														
13.6	16.5	100%	MICACEOUS GARNET QUARTZITE/SCHIST 10cm wide granite vein. No scheelite		<0.5%												
16.5	19.5	100%	MICACEOUS GARNET QUARTZITE Varying in colour from dark brown grey to almost white, from very thinly banded to almost porphyro- blastic. No scheelite.		<.5%												

DRILL LOG - 81

Date AUGUST 13 - 20/85 Logged By J. HELSEN

NORANDA EXPLORATION COMPANY LTD.

Date Collected		Date Completed		Core Size		DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.			
AUGUST 17/85		AUGUST 17/85		NQ						HORNE OPTION		R-31		82M/13			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of			
Lot. L110 + 80N		Elev. 1680m		Dip -45°		28m		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep. 99 + 80E		Length 28.0m		Bearing 180°												TU-85-8	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
									W03(%)	Sn(ppm)	Mo(ppm)	Au(ppb)					
19.5	20.45	100%	QUARTZITE Same as above Alternating with garnet skarn bands No scheelite observed														
20.45	22.6	100%	GRANITE with 40cm quartzite and garnet skarn in between (21.6 - 22m)														
22.6	25.4	100%	SERICITE GRANITE														
25.4	25.6	100%	SCHIST														
25.6	28.0	100%	KAOLINIZED GRANITE END OF HOLE														

DRILL LOG - 81

Date _____ Logged By _____



Chemex Labs Ltd.

-Analytical Chemists -Geochemists -Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

TU (14)

CERT. # : A8515792-001-A
INVOICE # : I8515792
DATE : 13-SEP-85
P.O. # : NONE
431#08-89/08-77

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

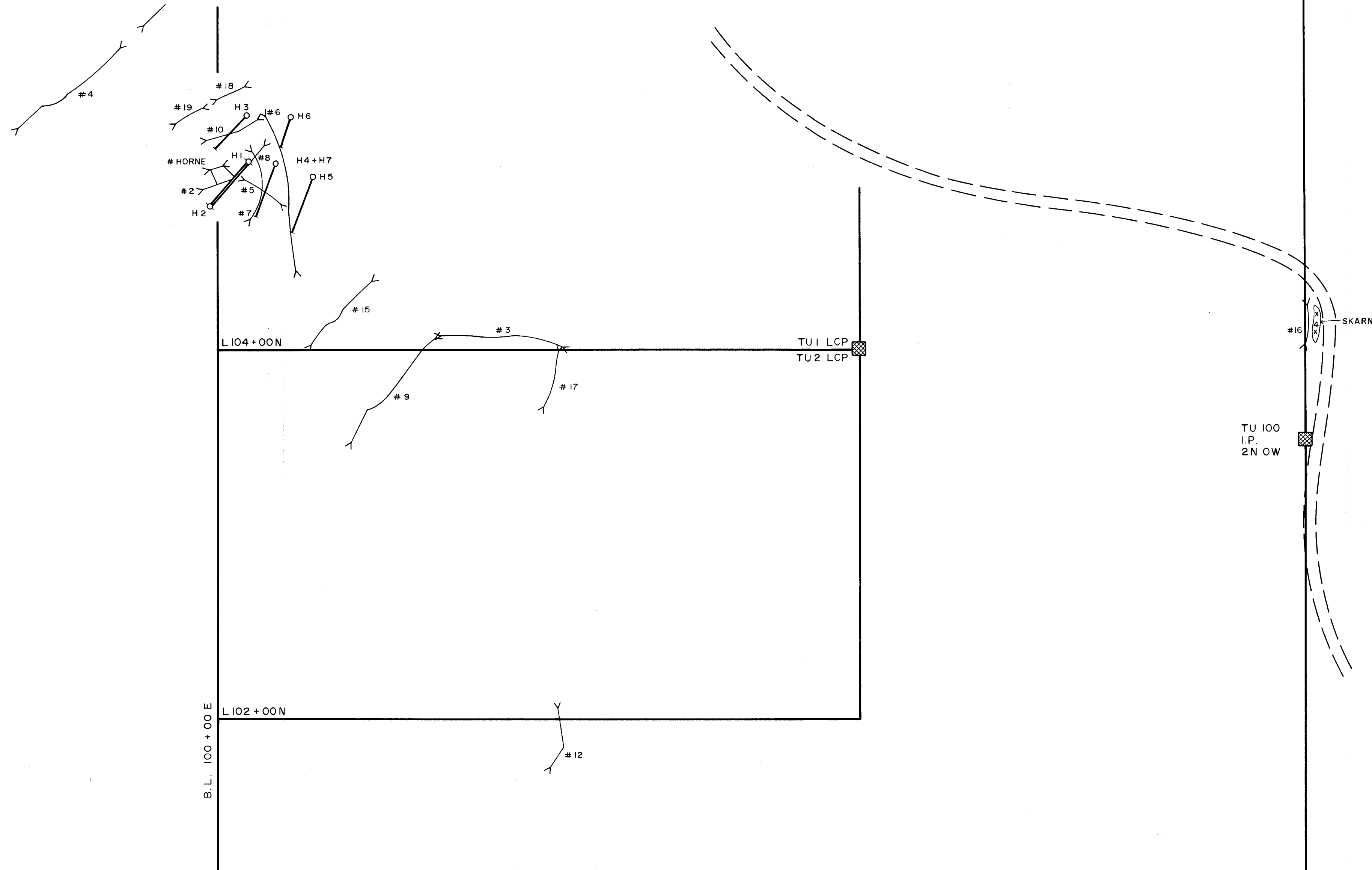
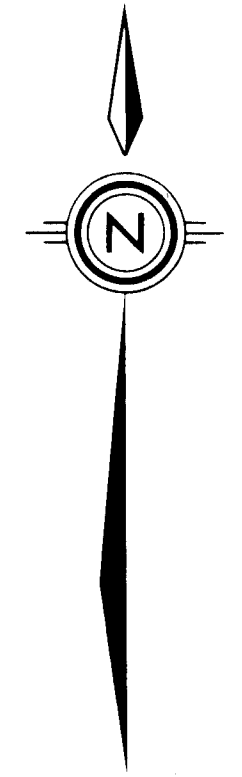
COMMENTS :
CERTIFICATE #85294 & #85310

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Hg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
082	1.19	0.2	10	20	2.0	<2	6.70	8.5	7	44	<1	1.78	10	0.05	<10	0.49	1290	<1	<0.01	16	440	12	<10	24	0.01	<10	<10	19	280	400	--	--
083	1.51	0.2	10	20	2.0	<2	7.45	18.5	9	29	<1	2.38	20	0.05	<10	0.63	1774	<1	<0.01	23	400	14	<10	30	0.01	<10	<10	26	140	780	--	--
108	1.76	0.2	10	110	<0.5	<2	0.07	<0.5	12	106	<1	3.21	<10	0.61	<10	0.89	469	<1	0.02	26	110	10	<10	2	0.09	<10	<10	22	<10	80	--	--
109	1.85	0.2	10	120	<0.5	<2	0.10	<0.5	14	85	<1	3.40	<10	0.61	<10	0.95	476	<1	0.02	30	310	10	<10	3	0.08	<10	<10	23	<10	90	--	--
110	2.15	0.2	<10	170	<0.5	<2	0.06	<0.5	16	99	<1	3.87	<10	0.96	<10	1.10	533	<1	0.03	36	150	6	<10	2	0.16	<10	<10	31	<10	110	--	--
111	1.41	0.2	<10	60	<0.5	<2	0.52	<0.5	15	80	<1	3.43	<10	0.40	<10	0.74	567	<1	0.02	29	120	4	<10	8	0.04	<10	<10	11	<10	90	--	--
112	0.99	0.2	10	30	<0.5	<2	0.15	<0.5	14	47	<1	2.89	<10	0.19	<10	0.54	501	<1	0.01	31	270	8	<10	6	<0.01	<10	<10	3	<10	80	--	--

Certified by *Hart Bickler*

Towards Trenches
11, 13 & 14 (Map # 3)

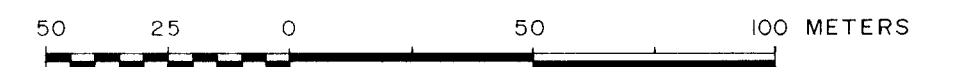
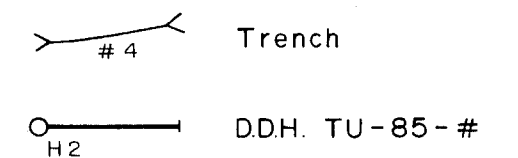
TU - 100



TU - 300

GEOLOGICAL BRANCH
ASSESSMENT REPORT

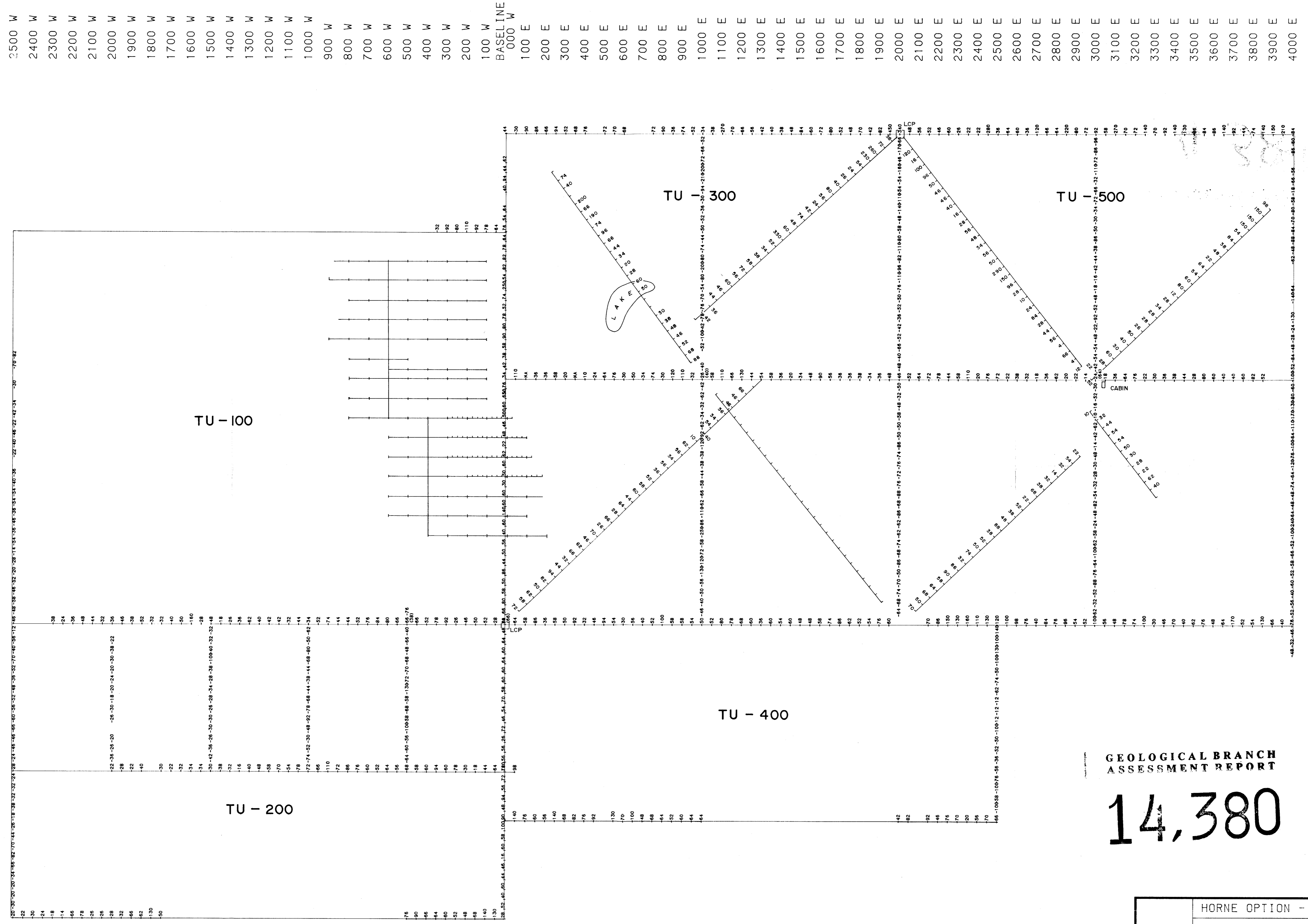
14,380



LCP for TU-100 (4N 5W)
at 940m az. 155°

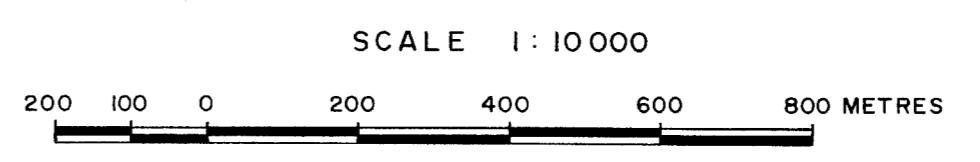
REVISED	HORNE OPTION	
	TRENCH & DIAMOND DRILL HOLE	
	MAP	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 1985
N.T.S. 82M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm equals about 15.6m.
DWG. No. 6	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

2500
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
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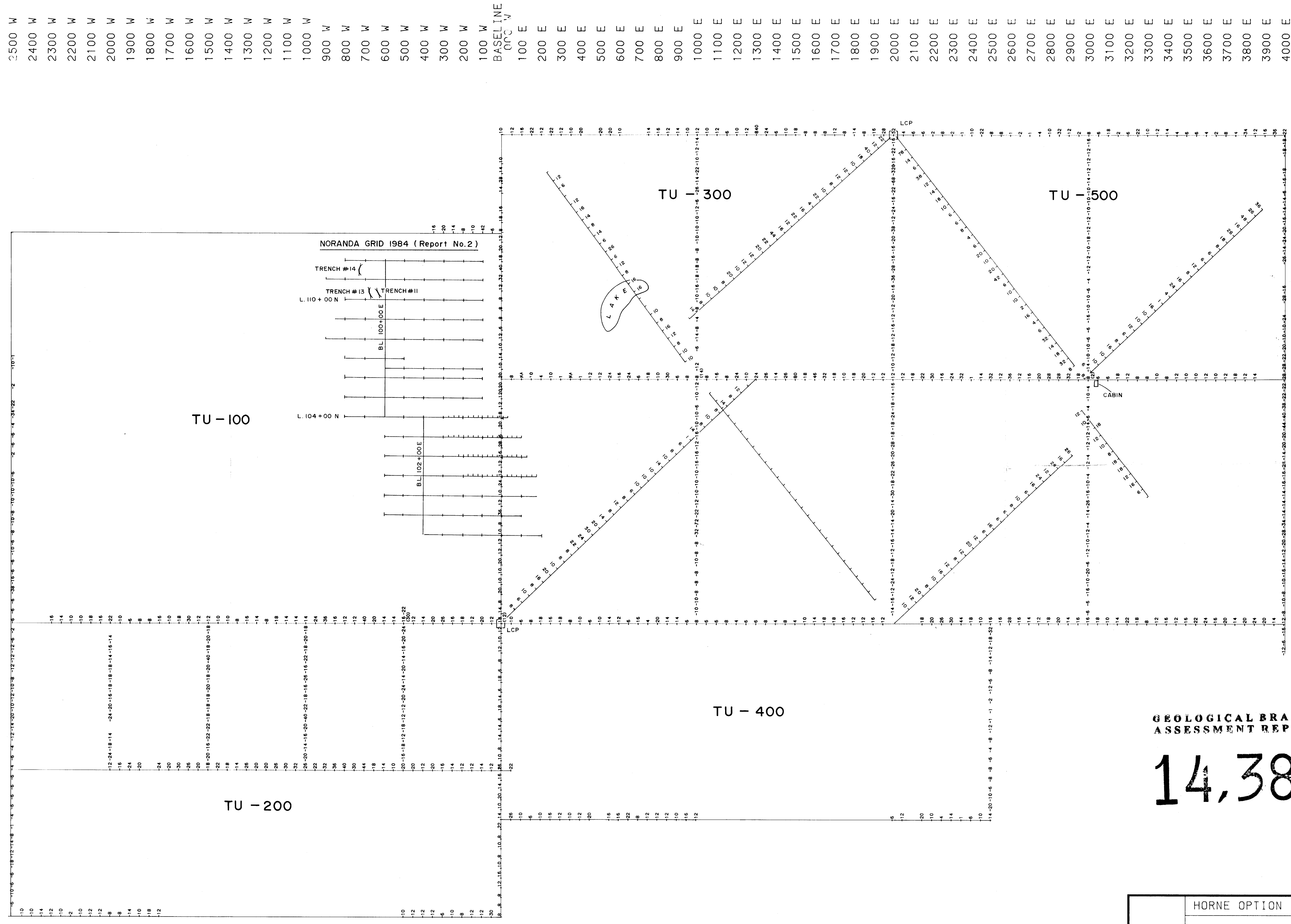
GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,380

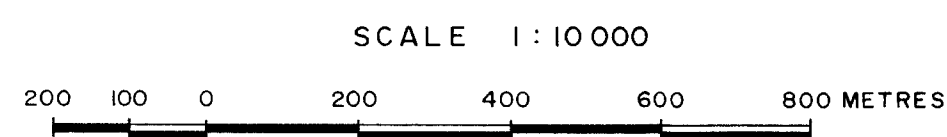


HORNE OPTION - TU CLAIMS	
SOIL GEOCHEMISTRY ZN IN PPM.	
PROJ. NO. 850131	SURVEY BY: J.H./L.S.
DWG. NO. 4	DATE: DEC. 11, 1985
NORANDA EXPLORATION	
OFFICE: VANCOUVER	

1500 5
1000 0
950 0
900 0
850 0
800 0
750 0
700 0
650 0
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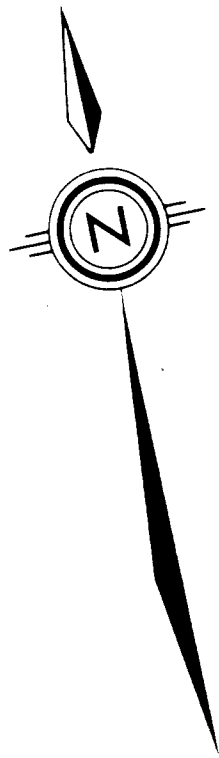
Approximate location of trenches #11, 13 & 14
For other trenches see "Location Map #6"



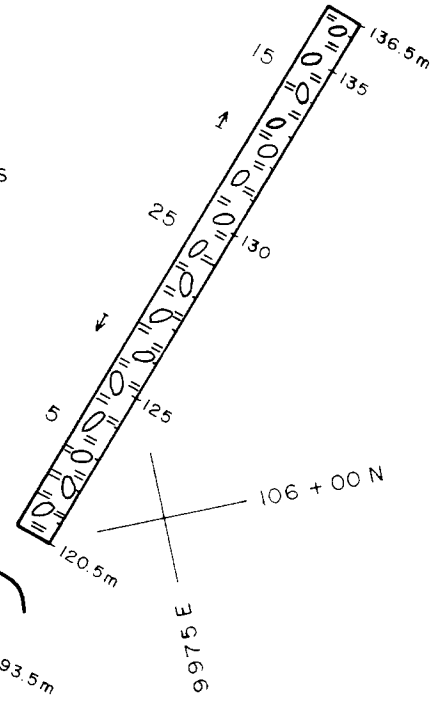
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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HORNE OPTION - TU CLAIMS		
SOIL GEOCHEMISTRY PB IN PPM.		
PROJ. NO. 850131	SURVEY BY: J.H./I.S.	DATE: DEC 11, 1985
A.T.S. 0828/13	DRAWN BY: EDP/YAN	SCALE: 1:10000
DWG. NO. 5	NORANDA EXPLORATION OFFICE: VANCOUVER	



Clay Zone with Sub Rounded Boulders
(Granite & Quartzite) at Maximum
Depth 3m no Bedrock Reached.



Grey Clay Zone with Sub Rounded
Pebbles (Predominantly Quartzitic)
at Station 91m Depth = 3m.

Granite Becomes More Weathered

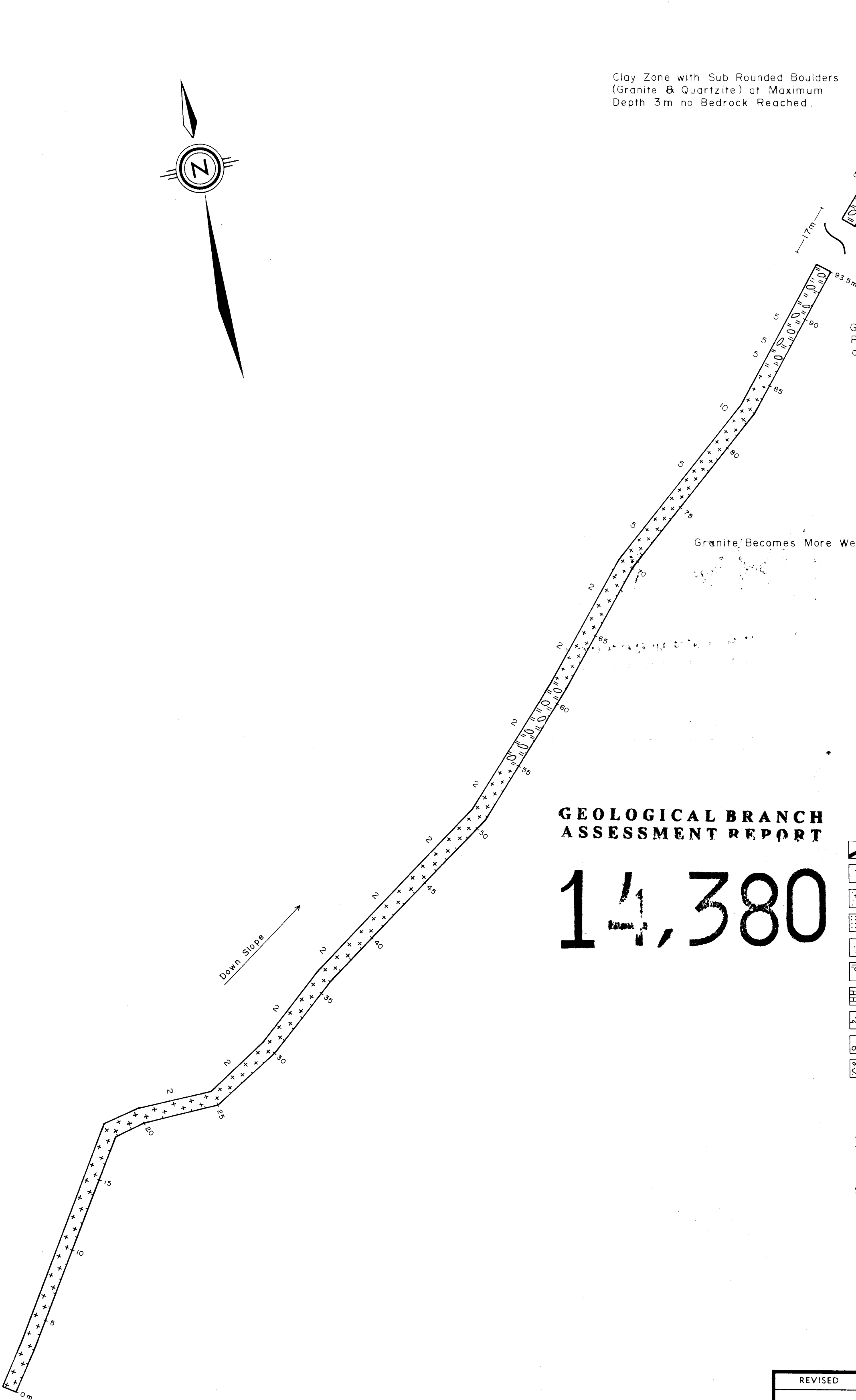
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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LEGEND

- Quartz Vein
- Muscovite Granite (with Accessory Biotite)
- Muscovite - Granitic Gravel (Weathered)
- Gravel
- Gravelly Clay
- Boulder Clay
- Micaceous Limestone/Marble
- Mica Schist: I-Indurated; W-Weathered; C-Crumblly; O-Oxidized
- Mica Quartzite
- Schist Alternating with Quartzite
- O.B. Overburden
- 60° Foliation and Dip
- 30° Minor Fold & Plunge
- CL Clay Zone
- Swuv+ Positive Response to Short Wave Ultra Violet Light
- NS Not Sampled
- IS Incipient Skarnification
- 575 Values at Midpoint of Each Section Sampled Indicate Tungsten Content (in ppm W) for that Section
- 5m Interval Marked in 1m Sections. Most Sampling was Done at 1m, and to a Lesser Extent at 2m Intervals.

Down Slope

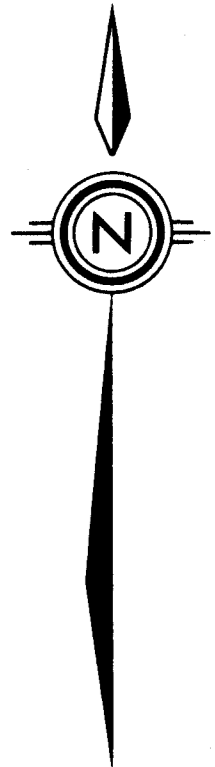


SCALE 1:200

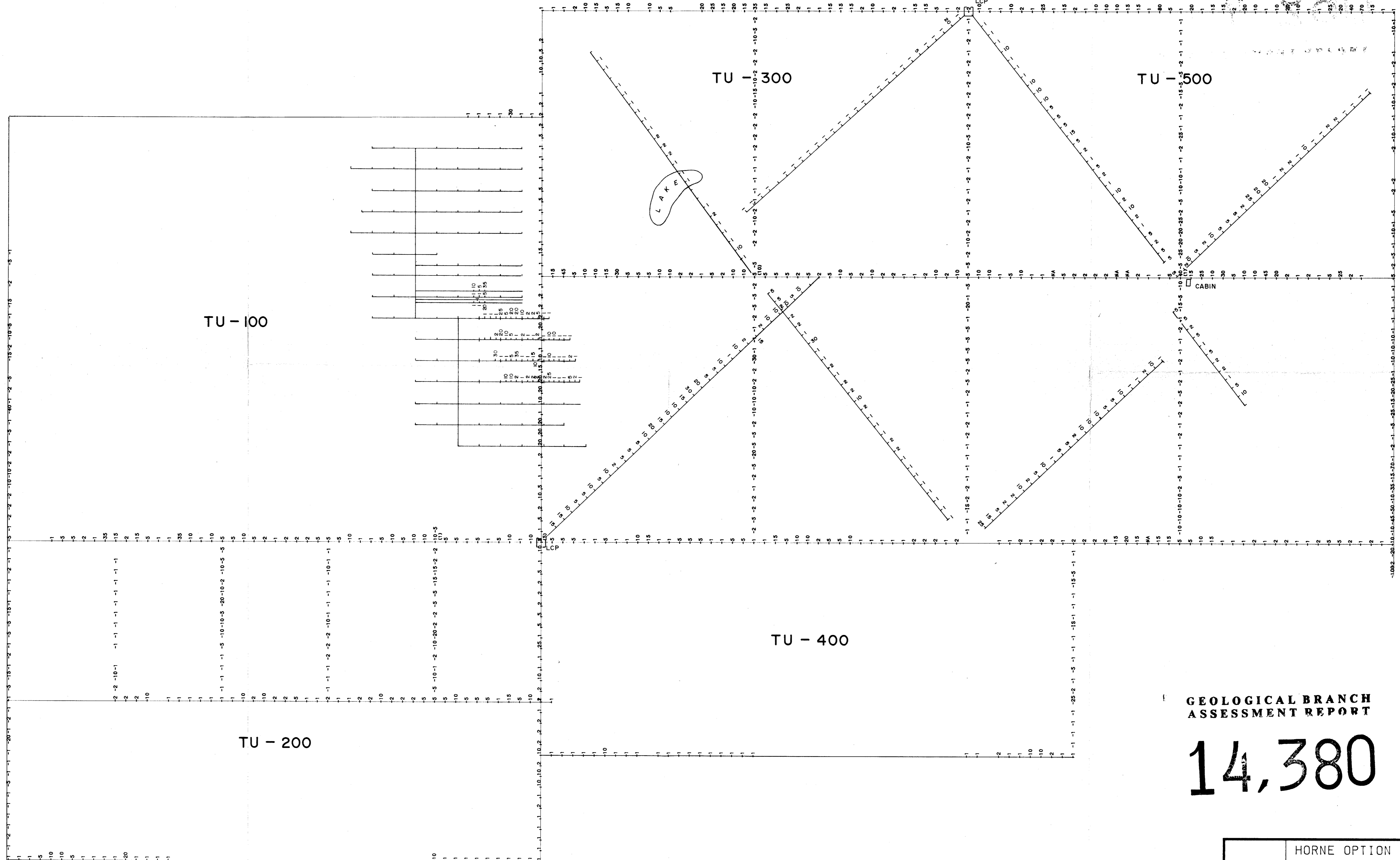


REVISED	HORNE OPTION	
	TU CLAIMS	
	TRENCH 4	
PROJ. No. R 31	SURVEY BY: J. HELSEN	DATE: September 1985
N.T.S. 82M/13E	DRAWN BY: J. SERWIN	SCALE: 1cm = 2m
DWG. No. 7	NORANDA EXPLORATION	
	OFFICE VANCOUVER	

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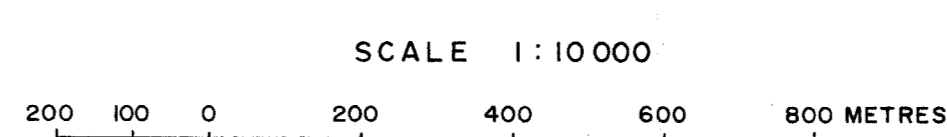


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GEOLOGICAL BRANCH
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HORNE OPTION - TU CLAIMS	
SOIL GEOCHEMISTRY W IN PPM.	
PROJ. NO. 850131	SURVEY BY: J.H./L.S. DATE: DEC. 11, 1985.
S.T.S. 82H/13	DRAWN BY: EDE/AN SCALE: 1:10000
DWG. NO. 3	NORANDA EXPLORATION OFFICE: VANCOUVER