

ARIS SUMMARY SHEET

District Geologist, Nelson

Off Confidential: 89.03.25

ASSESSMENT REPORT 17172

MINING DIVISION: Nelson

PROPERTY: Rachel
 LOCATION: LAT 49 18 00 LONG 117 28 00
 UTM 11 5460691 466071
 NTS 082F06W

CLAIM(S): Rachel 5-6
 OPERATOR(S): Northwind Ventures
 AUTHOR(S): Hall, G.I.

REPORT YEAR: 1987, 51 Pages

COMMODITIES

SEARCHED FOR: Gold, Lead

GEOLOGICAL

SUMMARY: Gold and galena occur in the axial portion of a northwesterly trending folded quartz vein that intrudes granodiorite of the Jurassic Nelson Batholith. The vein has an exposed strike length of 25 metres over widths of 10-40 centimetres. The fold plunges at 20 degrees northwest. Well developed barren steeply dipping north-south fractures are a common feature. Weak argillic alteration is limited to the mineralized quartz vein. Several narrow northerly trending lamprophyre dykes intrude the granodiorite.

WORK

DONE: Geological, Geochemical, Geophysical, Physical

EMGR 22.0 km; VLF
 Map(s) - 1; Scale(s) - 1:2500

GEOL 150.0 ha
 Map(s) - 2; Scale(s) - 1:2500, 1:500

LINE 22.0 km

MAGG 22.0 km
 Map(s) - 1; Scale(s) - 1:2500

ROAD 2.0 km

ROCK 22 sample(s) ;AU,AG,PB,ZN

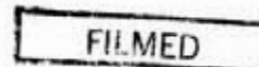
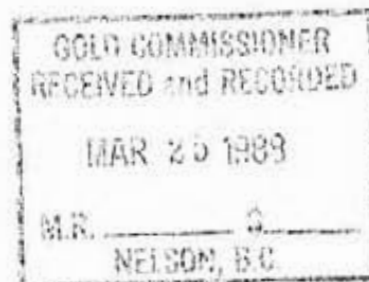
SOIL 718 sample(s) ;AU,AG,PB,ZN
 Map(s) - 2; Scale(s) - 1:2500

MINFILE: 082FSW299

GEOLOGICAL, GEOCHEMICAL
AND GEOPHYSICAL EVALUATION
of the
RACHEL PROPERTY
NTS 82-F/6
Latitude 49°18' North
Longitude 117°28' West
Nelson Mining Division
British Columbia

December 15, 1987

on behalf of
NORTHWIND VENTURES LTD.
Calgary, Alberta



by
G. I. Hall, M.Sc., F.GAC
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GEOLOGICAL BRANCH
ANNUAL REPORT

17.172

SUMMARY

In the late summer and fall of 1987, Taiga Consultants Ltd. completed a geological, geochemical, and geophysical evaluation of the Rachel 5 and 6 claims on behalf of Northwind Ventures Ltd. The Rachel property, containing 750 hectares, is located in the Nelson Mining Division, approximately 22 km southwest of Nelson, British Columbia (NTS 82-F/6 SW) at elevations ranging from 1341 to 2012 m ASL. The property is accessible by a logging road from Highway 3, 4 km west of Salmo, B.C.

Within the Nelson district, numerous high-grade gold occurrences and deposits have been discovered since the early 1800's, in quartz veins and sulphide zones, adjacent to the contact of the Nelson Batholith and Rossland Group volcanics and sediments.

The Rachel property is entirely contained within the Jurassic Nelson Batholith granodiorite. Attention was focused on gold/lead mineralization exposed in an adit from which 15.5 tons of ore grading 1.94 oz/ton gold was produced in 1980.

The quartz vein that hosts the mineralization varies in width from 10 to 40 cm over a northwest trending strike length of 25 m. Mineralization, consisting of galena and gold, is developed in the adit in the axial portion of a fold in the quartz vein. The fold plunges about 20°NW. Gold values of over 7 oz/ton have been reported by others from the quartz vein. Sampling by the writer during geological mapping on the property resulted in gold values up to 1.76 oz/ton Au from the adit.

Several narrow quartz veins with low gold values trend north to northwest in the western part of the property. Geochemical soil samples contain low gold values, while weakly anomalous lead occurs in the alluvial environment.

Contoured results of the magnetometer survey indicate a north-south trending pattern which corresponds to the major jointing and lineament directions in the granodiorite. There are no anomalies of potential economic significance.

A VLF-EM survey that was conducted over the grid was poorly aligned to the only transmitting station available at the time of this work. No major conductors were recorded. However, weakly conductive zones would probably not be detected by this survey because of the poor alignment.

Because of the lack of encouragement from the exploration program, no further work is recommended on the Rachel property at this time.

TABLE OF CONTENTS

INTRODUCTION	1 /
Location and Access	
Property	
Physiography and Glaciation	
REGIONAL GEOLOGY	4 /
HISTORY OF EXPLORATION	8 /
GRID PREPARATION	9 /
PROPERTY GEOLOGY	10 /
SOIL GEOCHEMICAL SAMPLING.	13 /
MAGNETOMETER SURVEY.	14 /
VLF-EM SURVEY.	15 /
CONCLUSIONS.	16 /
RECOMMENDATIONS.	16 /
STATEMENT OF QUALIFICATIONS.	17 /
BIBLIOGRAPHY	18 /
APPENDIX: Summary of Personnel /	
Rock Sample Descriptions	
Statement of Expenditures /	
Certificates of Analyses	

FIGURES

1 Location Map.	2 /
2 Property Map.	3 /
3 Regional Geology.	5 /
4 Aeromagnetic Map.	7 /

MAPS (in pocket)

1 Property Geology	1:2500
2 Detailed Geology	1: 500
3 Gold/Silver Soil Geochemistry	1:2500
4 Lead/Zinc Soil Geochemistry	1:2500
5 Magnetometer Survey	1:2500
6 VLF-EM Survey	1:2500

INTRODUCTION

In the late summer and fall of 1987, Taiga Consultants Ltd. completed an exploration program on the Rachel 5 and 6 claims on behalf of Northwind Ventures Ltd. of Calgary, Alberta. The program consisted of a flagged grid emplacement, geological mapping and rock sampling, soil geochemical sampling, and magnetometer and VLF-EM surveying. Attention was focused on gold/lead mineralization exposed in an adit from which a small amount of gold was produced in 1980.

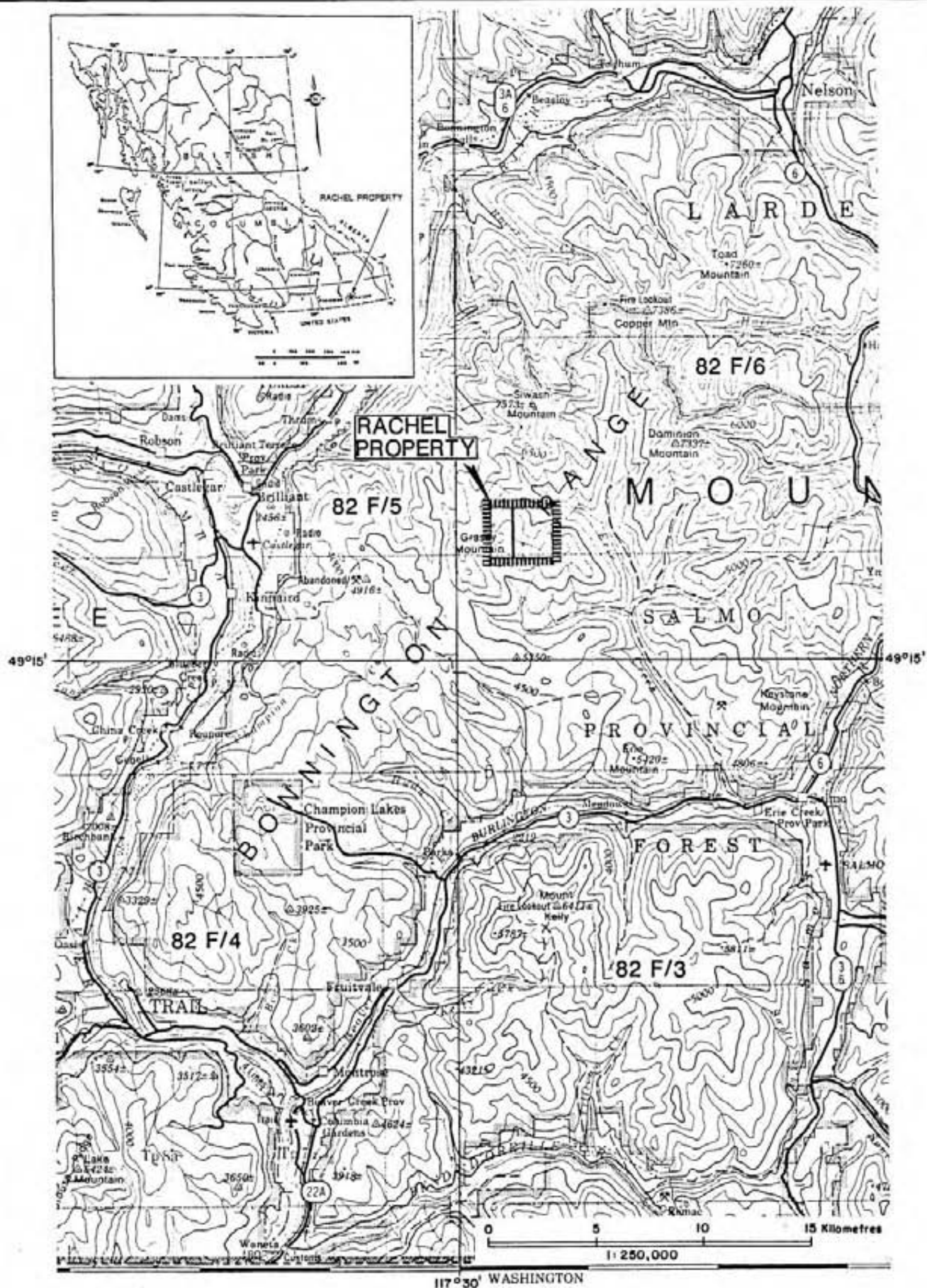
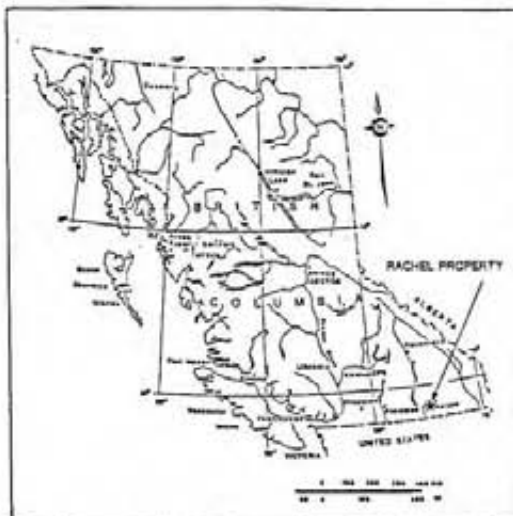
Location and Access

The Rachel property is located 22 km southwest of Nelson, British Columbia on the eastern flank of Grassy Mountain, on NTS map-sheet 82-F/6 SW (Figure 1). Elevations on the property range from 1341 m (4400 ft) ASL at the northeastern corner to 2012 m (6600 ft) ASL along the western boundary. The northeastern corner of the claim block is located at 49°18'44" North latitude and 117°26'03" West longitude.

Access to the property is gained by a logging road that starts from Highway 3 approximately 4 km west of Salmo. The narrow logging road heads north-northwest up the east side of Erie Creek for about 16 km, then west along the north side of Granite Creek for about 3 km. At this point, it heads south across Granite Creek to the centre of the Rachel 5 claim where it ends in a logging landing at an elevation of 1676 m (5500 ft) ASL. A four-wheel-drive logging road, approximately 1.5 km long, heads south from the landing to the top of the ridge near the southern boundary of the Rachel 5 claim at an elevation of 1860 m (6100 ft) ASL.

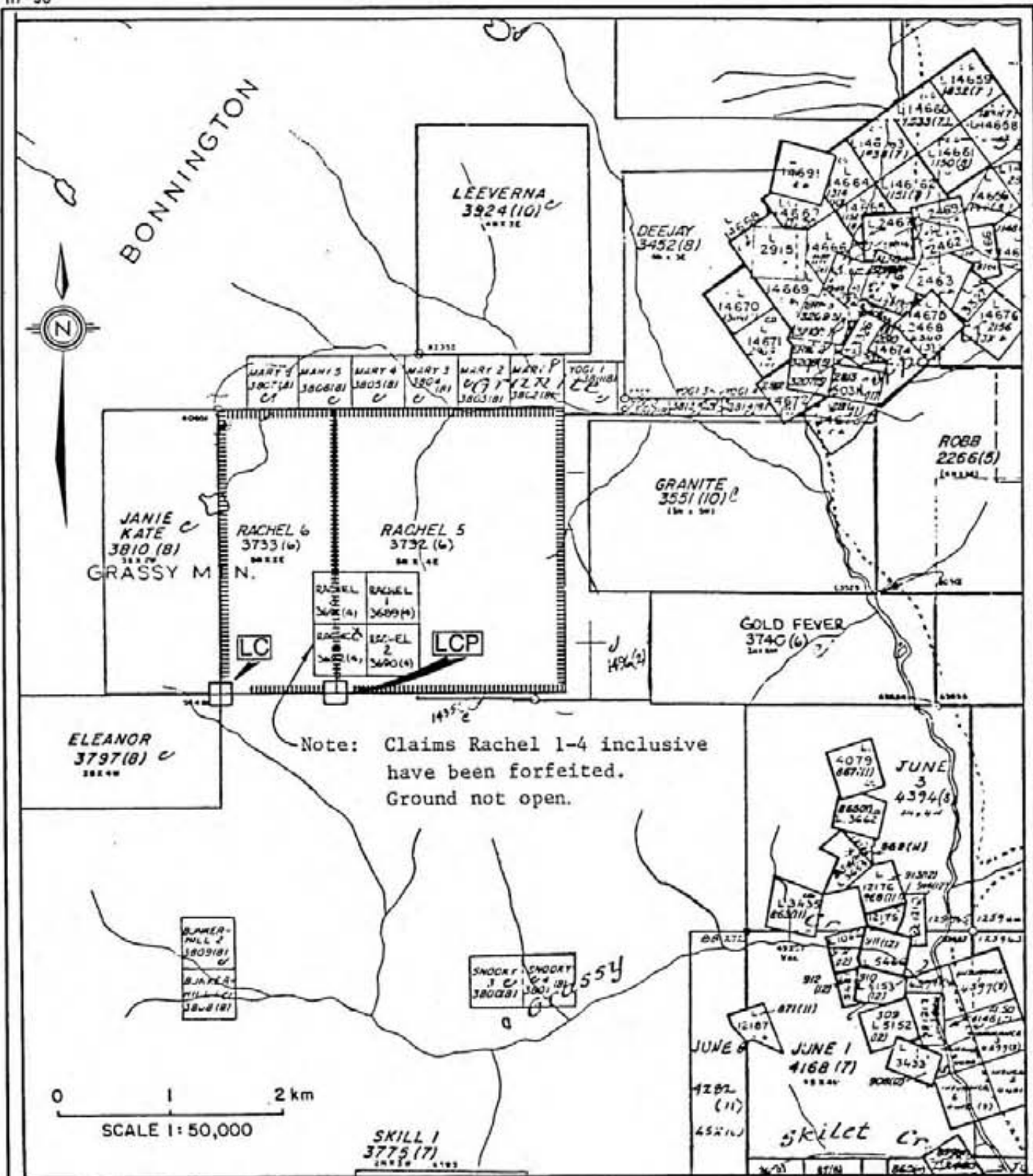
Property

The Rachel property, consisting of the Rachel 5 and 6 mineral claims, is located in the Nelson Mining Division of British Columbia (Figure 2). The



NORTHWIND VENTURES LTD.
 RACHEL PROPERTY LOCATION MAP

FIGURE 1



from : Govt. of B.C., Mineral Claim Map 82 F/6 W(M).

Note: This map is prepared to serve as a guide to the positions of located mineral claims and Placer Mining Leases only. Unsurveyed claims and leases are plotted from locators' sketches and are not guaranteed. Symbol "c" indicates claim has forfeited.

NORTHWIND VENTURES LTD.
PROPERTY MAP

FIGURE 2

property covers approximately 750 hectares (1853 acres) in a single block 3.0km x 2.5 km. The claims are registered in the name of Stuart William Barclay of Nelson, B.C., and a transfer to Northwind Ventures Ltd. is pending. Genesis Resources Corporation can earn up to a 37.5% interest in the property by financing 50% of the proposed 1987 exploration expenditures. Northwind Ventures will act as Operator for the 1987 program. Details of the claims are listed below:

<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Approx Area</u>	<u>Date of Record</u>	<u>Next Assessment Due Date</u>
Rachel 5	3732	20	500 ha	June 6 1984	June 6 1988
Rachel 6	3733	10	250 ha	June 6 1984	June 6 1988

Physiography and Glaciation

The claims are located in the Bonnington Range of the Selkirk Mountains which form an imposing mountain barrier in the area, breached only by the Kootenay River. The range is transected by the valley of Beaver Creek which provides access to the Salmo River valley and the town of Nelson. The southern part of the range, which is underlain by volcanic rocks, contains heavily wooded, rounded mountains; but the northern part, which is underlain predominantly by granite, contains higher more serrated peaks.

The claims are situated near the northeast-central portion of the range on the eastern slopes of Grassy Mountain, and are underlain by granitic rocks of the Nelson Batholith.

The country is rugged but sub-alpine in character with modified cirque basins recognizable at the heads of north-flowing streams that start at high elevations. Sharply defined cirques and cirque lakes are seen only in the granodiorite terrain such as at Grady Lake on the north slope of Grassy Mountain. Here (particularly on northern granodiorite exposures), the stream valleys are conspicuously U-shaped. Elsewhere, particularly on southern exposures, V-shaped valleys (dominantly the result of stream erosion) are the rule.

The topography of the area was considerably influenced by Cordilleran glaciation, with evidence in the form of transported material and erratics, found everywhere but not commonly above 1829 m (6000 ft) ASL. Fragmentary terraces in alluvial material are prominent along Erie Creek and about the mouth of Granite Creek. A drift veneer mantles most of the area, supporting a thick growth of timber and bush. The movement of the Cordilleran ice sheet has been recorded by many measurements of glacial striae and roches moutonée. In all cases, the direction of ice movement was southerly. Valley glaciation appears to have been on a small scale and confined to the headwaters of some of the streams rising at higher elevations.

At one time, the area was heavily forested with white pine, Douglas fir, spruce, hemlock, and cedar; but forest fires and logging operations have largely obliterated any stands of large trees. Consequently, the claims are largely covered by a dense secondary growth of small timber and bush. Much of the land along the ridges above 1676 m (5500 ft) is open grassland.

The climate of the area is pleasant with moderate winters and fairly hot summers. Snowslides are common in seasons of heavy snowfall, especially on over-steepened north-facing rocky slopes. The snow has almost entirely disappeared by the first of June except for small areas on the higher summits, and does not interfere with prospecting until late in October.

REGIONAL GEOLOGY

The area around Ymir was originally mapped by C. W. Drysdale (1917). W. E. Cockfield examined and reported on the mines in the Bonnington-Ymir areas in 1936. R. Mulligan mapped the Bonnington area at a scale of 1 inch = 1/2 mile in 1952. These data were subsequently compiled onto G.S.C. Map 1090A at a scale of 1:253,440 by H. W. Little in 1960. Little (1982) later published Map 1571A from which the following description is excerpted (Figure 3).

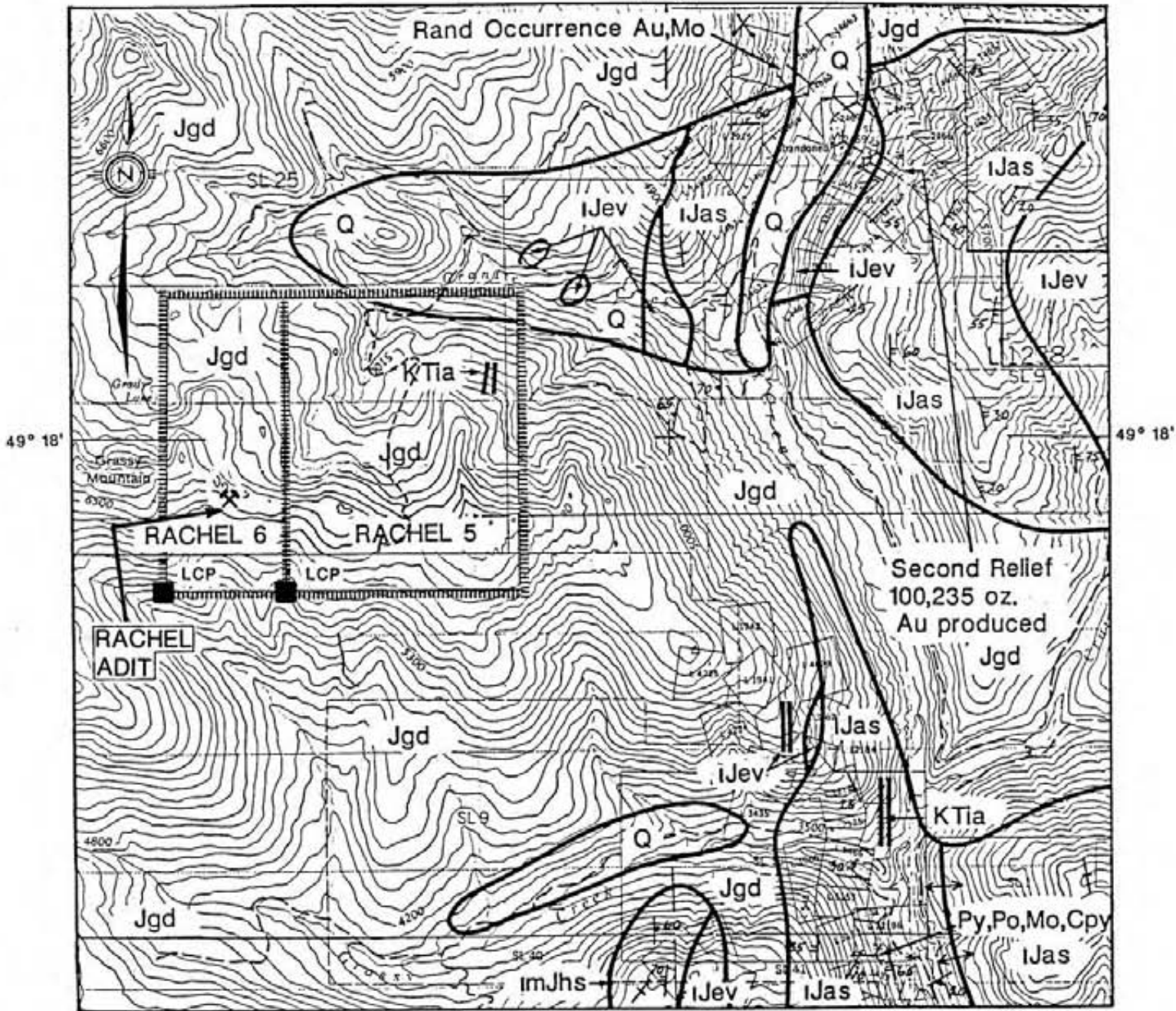
The Bonnington Range area is underlain by the Nelson Batholith, a large Jurassic intrusion which varies in composition from granite to granodiorite. The batholith intrudes the Lower Jurassic Rossland Group which is composed of Elise Formation mafic to intermediate volcanics and Archibald Formation argillaceous sediments. Numerous xenoliths and rafts of Rossland Group rocks have been mapped within the Nelson Batholith. A number of small aplite dykes of Cretaceous to Tertiary age have been mapped as crosscutting older units within the area.

Numerous gold occurrences and deposits have been discovered in the Ymir-Nelson area since the late 1800's. Most of these occurrences are characterized by high-grade gold mineralization in 'quartz fissure' veins. A number of occurrences are located along the margins of the Nelson Batholith either in Rossland Group rocks or within the outer portion of the batholith itself. These occurrences include the Bear, Fern, Second Relief, Harriet, Porto Rico, Drum Lummun, Dora, Rand, and Whitewater (Taiga, 1981), of which significant production was realized from only the Second Relief and the Porto Rico workings. A brief description of the Second Relief (Figure 3) follows.

Second Relief Mine

Northeast striking, steeply northwest dipping veins at the Second Relief Mine are hosted in greenstones intercalated with sediments of the Archibald

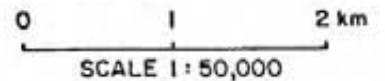
117° 25'



Geology from : G.S.C. Map 1571A,
'Geology, Bonnington Map Area'.

NTS 82 F/6

117° 25'



GEOLOGICAL LEGEND

- QUATERNARY**
- Q** Unconsolidated sediments: till, sand, gravel, silt
- CRETACEOUS AND/OR TERTIARY**
- KTia** Aplite dyke
- JURASSIC AND CRETACEOUS**
- Jgd** Nelson Intrusions: granodiorite, granite, diorite
- JURASSIC: LOWER AND MIDDLE**
- imJhs** Hall Formation: argillite, sandstone, shale, siltstone, conglomerate, some argillaceous quartzite
 - IJev** Elise Formation: andesite and basalt flows and flow breccia, agglomerate, augite porphyry, minor tuff
 - IJas** Archibald Formation: argillaceous and micaceous quartzite, siltstone, argillite, minor tuff

SYMBOLS

- Geological contact (approximate)
- Bedding, tops unknown (inclined, vertical)
- Compositional layering in gneisses: primary
- foliation in igneous rocks (inclined)
- Anticline (approximate)
- Pit and/or Trench
- Adit
- Rosland
- Property Boundary
- Access road

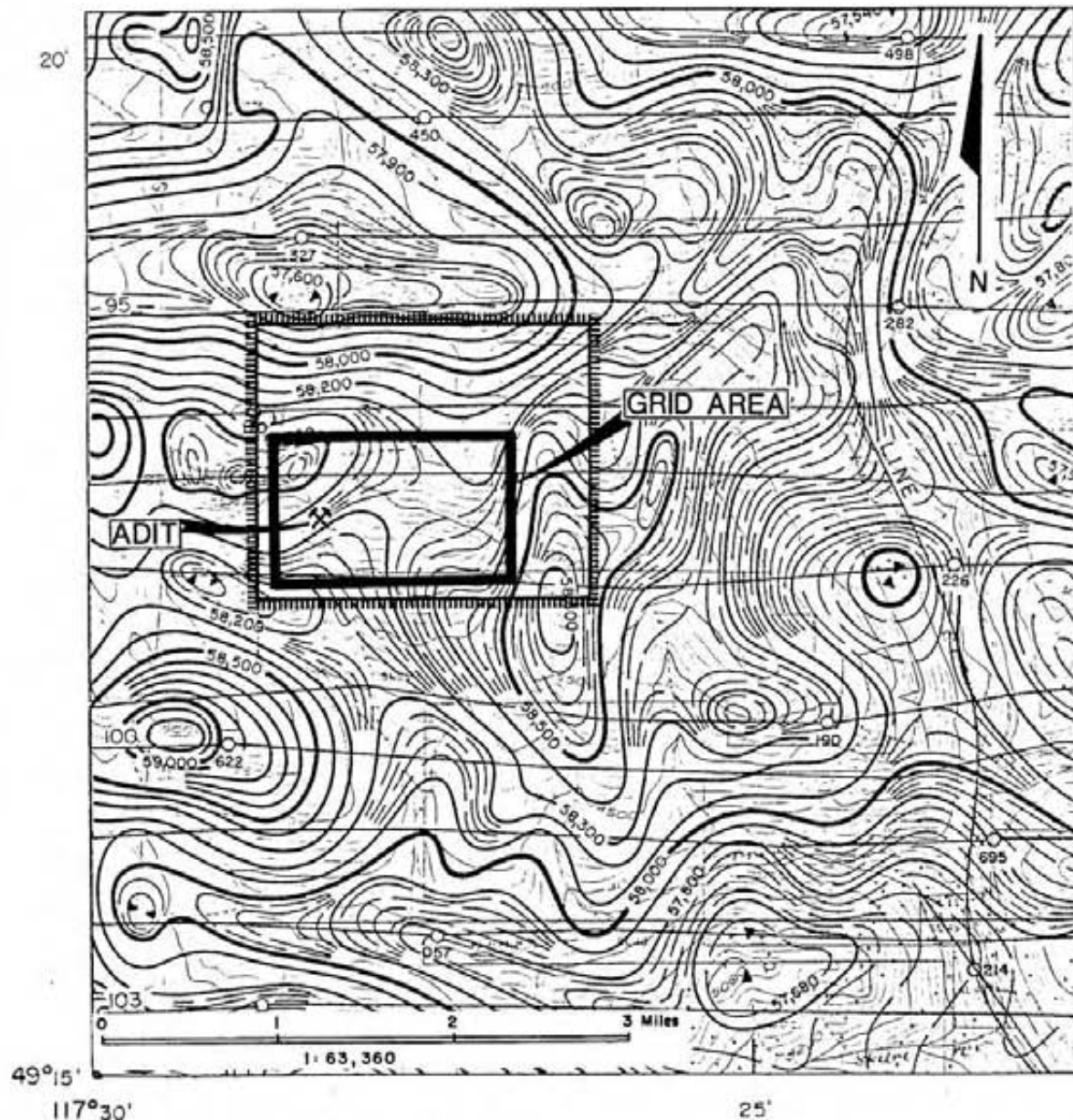
NORTHWIND VENTURES LTD.
REGIONAL GEOLOGY

FIGURE 3

Formation/Ymir Group. Pyrite, pyrrhotite, chalcopyrite, and minor molybdenite occur in a gangue of country rock and quartz, occasionally carrying magnetite, garnet, and epidote. The veins average about 12 g/tonne (0.4 oz/ton) Au, and lose both values and continuity where they pass from competent greenstones into less competent sediments. Recorded production to 1959 was:

	<u>Metric</u>	<u>Imperial</u>
Mined and Milled:	224,398 tonnes	228,000 tons
Gold:	3,117,309 grams	100,235 ounces
Silver:	866,822 grams	27,856 ounces
Copper:	20,206 kg	44,555 pounds
Lead:	1,060 kg	2,338 pounds
Zinc:	147 kg	324 pounds

The aeromagnetic map (Figure 4) shows the property located on the flanks of several surrounding magnetic highs associated with the Nelson Batholith. Regionally, there is no strong correlation of aeromagnetic features with known mineralization such as at the Second Relief, or with enclosed roof pendants of Rossland Group volcanics and sediments.



TAKEN FROM AEROMAGNETIC MAP 8480 G
 GSC - NELSON B2 F/6

NORTHWIND VENTURES LTD.
 AEROMAGNETIC MAP
 RACHEL PROPERTY

FIGURE 4

HISTORY OF EXPLORATION

The auriferous quartz vein which forms the point of interest on the Rachel claims was discovered by Stuart Barclay in 1954. No significant work was carried out on the occurrence until 1980 when Kimberley Gold Resources Inc. mined 15.5 tons of high-grade ore from a small adit located on the south side of the Grassy Mountain peak. The ore was flown out to Nelson via helicopter and shipped to the Cominco Inc. smelter at Trail. The average assay of the shipment was 1.944 oz/ton Au, 7.92 oz/ton Ag, and 9.42% Pb (Santos, 1984).

In 1981, Kimberley Gold Resources Inc. carried out a limited exploration program on a grid centered about the Rachel adit. They completed soil geochemical sampling, VLF-EM surveying, geological mapping, and prospecting (Page, 1981). Only the soil geochemical survey and the geology map were filed for assessment, and so were available to this author. A significant lead anomaly is shown centered around the Rachel adit as well as a lesser lead anomaly located 225 m to the west.

Subsequently, the property was examined and sampled by Cominco Ltd., Aurun Mines Ltd., and Grit Resources Inc. Sampling results of the Cominco Ltd. and Aurun Mines Ltd. investigations are available in Santos' 1984 report for Grit Resources Inc. Gold assays from the adit are very high, ranging from 0.316 to 7.636 oz/ton over narrow widths on the east limb of the vein. The vein is exposed over a strike length of 8 m and is at least 50 cm thick.

No drilling has been done on this property.

GRID PREPARATION

Approximately 22 km of grid and 2 km of mini-grid were established in the southern part of the Rachel property to serve as control for geological mapping, geochemical sampling, and geophysical surveying.

The main grid consists of a 1 km north-south blazed baseline from 10+00S to 20+00S and east-west flagged cross lines at 100 m intervals from 10+00S to 20+00S. Cross lines at 50 m intervals were added from 15+50S to 18+50S. The lines were established with a compass and hip-chain measuring device, and corrected for slope angle. Stations were established at 25 m intervals along the lines.

The mini-grid covers an area 200 m east-west by 100 m north-south, centered at 16+00S/6+25W. Stations are located in a 10 m square grid established with a compass and hip-chain measuring device. The adit is located at 16+30S/6+30W.

PROPERTY GEOLOGY

Geological mapping at a scale of 1:2500 was completed on the main grid (Map 1) and at a scale of 1:500 on the mini-grid established around the adit (Map 2). Outcrop exposure on the grid area is in excess of 50% south of Line 15+50S and on the mini-grid. North of Line 15+50S, exposure is poor because of thick accumulations of soil and talus rubble.

Rocks in the grid areas are composed of medium- to coarse-grained, massive granodiorite, usually with less than 10% hornblende and only a trace of biotite. Grain size of feldspars varies from 3 mm to 1 cm. Orthoclase phenocrysts up to 10 cm square occur in porphyritic phases of the intrusions which show gradational contacts with the more common equigranular phase.

Aplite dykes, while not numerous, were seen in a number of locations cutting the granodiorite. They are leucocratic, very fine-grained, and vary in width from several centimetres to one metre. Sulphide mineralization is absent.

Quartz veins, cutting the granodiorite, are scattered in the western half of the grid area. They occur as single 0.5 to 3.0 cm wide veins generally trending north and dipping steeply. Occasional veins may reach in excess of 30 cm in width, as in the adit and on L.16S/8+50W. Descriptions of quartz veins sampled and assayed are included in the Appendix. Sulphide mineralization is rare on the property, with the exception of galena and traces of pyrite in the quartz vein in the adit. Argillic alteration is weakly developed along the edges of quartz veining and shearing in the vicinity of the adit.

The quartz vein that hosts the galena/gold mineralization varies in thickness from 10 cm at the portal to 40 cm on the east wall of the adit. The vein appears to have been folded from a northwest trend and north dip west of the adit, to just east of north with a west dip along the west wall of the adit, then to a shallow attitude on the east wall. The vein does not appear on surface east of the adit. The fold appears to have given the vein

a plunge of about 20° to the northwest. A very weak, narrow (10 cm) shear zone with iron staining and argillic alteration was mapped at the projected location of the vein on the east side of the adit. A vertical barren fracture can be traced from the crest of the quartz vein in the adit to surface outcrop. Along strike to the northwest, the quartz vein is exposed in several shallow pits for a distance of about 25 m where it reaches a thickness of 30 cm and a dip of 40°NE. Assay values from the adit include 60.4 g/t (1.76 oz/ton) Au from the 15 cm wide ferruginous quartz vein on the east wall of the adit, and 47.2 g/t (1.38 oz/ton) Au from the 10 cm wide quartz vein on the west wall of the adit (Map 2). All other assays for gold from the scattered single narrow quartz veins elsewhere on the grid are less than 2.5 g/t Au.

Several north trending lamprophyre dykes were mapped in the grid area. The widest and best exposed occurs in the northeast corner of the mini-grid where the dyke reaches a width in excess of 5 m. Other exposures are less than 1 m wide. No sulphide or quartz mineralization was seen in these dykes.

Well-developed barren fractures are a common feature in the granodiorite. They are seldom spaced any closer than one metre apart and trend from northeast to northwest, with near north-south directions being the most common. Topographical lineaments trending north-south on the grid appear to reflect the dominant jointing direction.

Mineralization of potential interest consists of gold and galena exposed in the adit at 16+30S/6+30W. Kimberley Gold Resources Inc. shipped 15.5 tons of ore to Trail in 1980, which graded 1.944 oz/ton Au, 7.92 oz/ton Ag, and 9.42% Pb (Santos, 1984). Since then, several companies, including Cominco Ltd., Aurun Mines Ltd., and Grit Resources Inc., have sampled the quartz vein and verified the presence of gold. Four samples were taken by the writer from the quartz vein in the adit. The best assay returned 60.4 ppm Au (1.76 oz/ton) from a 15 cm wide sample of the strongly iron-oxidized material in the quartz vein zone on the east side of the adit (see Map 2 and the Appendix). Galena up to 8 cm thick is exposed for a length of 50 cm in the quartz vein at the north end of the adit. Silver values are expected to

be associated with the galena. The granodiorite in the adit shows only weak argillic alteration, mainly adjacent to the quartz vein. The vein along the west side of the adit is massive, about 10 cm wide, and dips 70°W. In the back of the adit, the quartz vein becomes spongy to crystalline along the axis of the fold that plunges the quartz vein about 20°N. On the east wall of the adit, the quartz vein is both massive and crystalline in places, and contains zones of intense iron oxide alteration, probably of pyrite, up to 20 cm thick. Its attitude here is nearly flat-lying.

SOIL GEOCHEMICAL SAMPLING

A total of 718 soil samples were collected from the grid lines at 25 m spaced intervals. Whenever possible, samples were collected from the top of the B-horizon, approximately 15 cm below the surface. Samples were analyzed for gold, silver, lead, and zinc using standard atomic absorption and assay techniques. Rock samples collected during geological mapping were analyzed for gold and silver.

The highest gold-in-soil value was 36 ppb from 17+50S/5+50W. A 20 cm quartz vein cutting granodiorite was mapped and sampled about 50 m upslope to the north but showed only 14 ppb Au. A re-sample of the original soil sample site gave only 4 ppb Au (Map 3). Several other samples of quartz rubble and pebbles were collected from nearby the anomalous sample site. No anomalies were recorded.

The next highest value was 14 ppb Au which was collected on the down-slope side of the adit dump.

Two sample sites at L.10+00S/7+25W and 7+50W containing 16 and 10 ppb Au respectively were re-sampled with results and 6 and 4 ppb Au respectively. Outcrops in the area are massive, barren granodiorite.

Threshold values for lead and zinc in soils are estimated to be 150 ppm and 200 ppm respectively. Five samples contain values greater than 300 ppm Pb and 350 ppm Zn outside of the mini-grid area. Four of these sites were re-sampled giving results lower than the original values (Map 4). Three of these samples (at 19+00S/1+50W, 18+50S/0+50W, 14+00S/1+75E) were collected from alluvial material deposited in gullies from intermittently flowing streams, perhaps as spring run-off. The anomalous sample at 17+50S/5+50W was re-sampled and showed 370 ppm Pb and 420 ppm Zn. The anomalous sample at 16+00S/8+75W was collected from alluvial material and was not re-sampled. There are abundant granodiorite outcrops upslope which contain several narrow quartz veins that were sampled. Maximum gold value was 572 ppb.

MAGNETOMETER SURVEY

In September 1987, 22 line km of magnetometer survey were completed on the Rachel grid. Total-field magnetic readings were taken with a GeoMetrics G826 magnetometer at 12.5 m spaced intervals along the east-west grid lines. The sensor was carried on the back of the operator. A GeoMetrics G826A base station and Hewlett-Packard recorder were used to measure diurnal magnetic variations, and the field readings were corrected using these data. No magnetic storms were detected during the survey period.

Magnetometer readings are recorded on Map 5 and contoured at 1000-gamma intervals from a base level of 57,000 gammas.

Magnetic susceptibility ranges from 56,168 to 60,610 gammas. Contoured data shows a north-south trend which coincides with the dominant jointing direction and topographical lineaments in the granodiorite, as shown on Map 1 (Geology). Magnetic variation is most intense south of the escarpment which trends west-northwest from L.18+00S/7+00E to L.12+00S/9+50W, where outcrop exposure is greatest. This variation is shown by susceptibility changes of up to 1000 gammas or more in 12.5 m. North of the escarpment, abundant overburden and boulder fields are common, so the sensor on the back of the operator is farther from bedrock and magnetic variations are more subdued.

VLF-EM SURVEY

In September 1987, 22 line km of VLF-EM survey were completed on the Rachel grid, using a Geonics VLF-EM-16 unit. The transmitting station was NLK (Seattle, Washington / 24.8 kHz) on a bearing of 245°. The operator was facing in a direction of 155° to take the readings.

VLF-EM readings are recorded on Map 6 in profile format using a vertical scale of 1 cm = 20°.

No strong conductors were detected during the survey. The east-west grid orientation is poorly aligned to the only transmitting station operating during the survey, resulting in poor coupling between the transmitter and the EM-16 receiver. As a result, weak anomalies if present were not detected. An optimum transmitter location would be north or south of the property.

CONCLUSIONS

As a result of geological mapping, soil geochemical sampling, and VLF-EM and magnetometer surveying on the Rachel property grid, the following conclusions are reached:

1. The galena/gold mineralization exposed in the adit is located at the crest of a single narrow folded quartz vein in unaltered granodiorite. In the grid area of abundant outcrop, there are no other surface expressions of mineralization. The down-plunge extension of mineralization is considered to be minimal.
2. Quartz veining elsewhere in the grid area is very minor.
3. Sulphide mineralization is virtually absent on the property, except in the adit.
4. Soil geochemical sampling results show low values in gold. The areal extent of lead-in-soil anomalies detected during an earlier survey could not be verified. However, there does appear to be weakly anomalous lead in the alluvial environment.
5. Magnetometer survey results show a strong correlation with north-south fracture directions. There are no strong conductive zones in the grid area.

RECOMMENDATIONS

Low gold-in-soil values, the lack of mineralized zones in an area of abundant outcrop, the low gold values from quartz vein samples, and the small size of the known gold showing indicate the low potential for an economic deposit being located on the Rachel property.

It is therefore recommended that no further work be carried out by Northwind Ventures Ltd. on the Rachel property at the present time.

STATEMENT OF QUALIFICATIONS

I, G. Ian Hall, of 5335 Grovehill Road S.W. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a graduate of Michigan Technological University, B.Sc. in Geology (1965), and of the University of Wisconsin - Milwaukee, M.Sc. in Geology (1970).
2. I have been practising my profession continuously since 1965.
3. I am a Fellow of the Geological Association of Canada.
4. I am the author of the report entitled "Geological, Geochemical, and Geophysical Evaluation of the Rachel Property, Nelson Mining Division, British Columbia", dated December 15, 1987.
5. This report was prepared with references to the sources cited in the Bibliography. I carried out the geological mapping on the Rachel property.
6. I do not own or expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of Northwind Ventures Ltd., in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 15th day of December, A.D. 1987.

Respectfully submitted,

PERMIT TO PRACTICE TAIGA CONSULTANTS LTD.	
Signature	<i>G. Ian Hall</i>
Date	<i>Mar. 17/88</i>
PERMIT NUMBER: P 2399	
The Association of Professional Engineers, Geologists and Geophysicists of Alberta	

G. Ian Hall

G. Ian Hall, M.Sc., F.GAC



BIBLIOGRAPHY

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APPENDIX

Summary of Personnel
Rock Sample Descriptions
Certificates of Analysis

SUMMARY OF PERSONNEL

<u>Name/Address</u>	<u>Position</u>	<u>Dates</u>	<u>Man Days</u>
G.I. Hall 5335 Grovehill Road SW Calgary, Alberta	Project Supervisor	Oct-Dec/87	21.0
D.H. Adams 271 Queensland Circle SE Calgary, Alberta	Project Geologist	Sep/87	4.5
K.E. Collard 18 Dalhouse Cres. NW Calgary, Alberta	Geologist	Aug/87	3.5
J.M. Hislop P.O. Box 745 Cranbrook, B.C.	Geophysical Operator	Sep/87 Oct/87	20.0
R.C. Davy 231 - 18th Avenue NE Calgary, Alberta	Geophysical Operator	Aug/87 Sep/87	22.0
I.Q. Young 3609 - 1A Street SW Calgary, Alberta	Geophysical Operator	Aug/87	8.0
M.A. Swanson 10224 - 171A Avenue Edmonton, Alberta	Sampler	Sep/87	13.0
B.S. Vouri 5036 Dalhart Road NW Calgary, Alberta	Sampler	Aug/87	4.0
			<u>96.0 man days</u>

ROCK SAMPLE DESCRIPTIONS

105276	8 cm quartz vein in small pit
105277	
105278	20 cm quartz vein exposed for 0.6 m in pit, in m.g. granodiorite
105279	15 cm quartz vein, strike length 5 m, in m.g. granodiorite
105280	5 cm quartz vein in m.g. granodiorite
105281	15 cm strongly Fe oxide vein gouge, from east wall of adit
105282	10 cm quartz vein along west wall of adit at the north end
105283	10 cm quartz vein on west wall of adit at the mid-point
105284	25 cm quartz vein from east wall of adit
105285	10 cm quartz vein cutting m.g. granodiorite, tr pyrite octahedra
105286	10 cm quartz vein cutting m.g. granodiorite
105287	30 cm quartz vein, iron stained, vuggy, cutting m.g. granodiorite in small pit
105288	2 cm quartz rubble, vuggy crystalline
105289	
105290	35 cm quartz vein cutting m.g. granodiorite
105291	35 cm quartz vein cutting m.g. granodiorite
105292	10 cm quartz vein cutting m.g. granodiorite
105293	5 cm quartz vein cutting m.g. granodiorite
105294	quartz stockwork, veinlets, in argillically altered granodiorite,
105295	over 0.8 m length
105296	8 cm quartz rubble, vuggy, crystalline
105297	3 cm quartz pebble in rusty granodiorite

STATEMENT OF EXPENDITURES

<u>Field Work</u>				
<u>Personnel</u>	<u>Interval</u>	<u>Man/days</u>	<u>Rate</u>	<u>Amount</u>
G.I. Hall, geologist	Oct-Nov/87	13.5	\$350	4,725.00
D.H. Adams, geologist	Sep/87	4.5	\$325	1,462.50
K.E. Collard, geologist	Aug/87	3.5	\$350	1,225.00
J.M. Hislop, geophys.operat.	Sep-Oct/87	20.0	\$190	3,800.00
R.C. Davy, geophys.operator	Aug-Sep/87	22.0	\$190	4,180.00
I.Q. Young, geophys.operat.	Aug/87	8.0	\$190	1,520.00
M.A. Swanson, sampler	Sep/87	13.0	\$190	2,470.00
B.S. Vouri, sampler	Aug/87	4.0	\$190	760.00
				<u>\$20,142.50</u>
<u>Food and Accomodation</u>				
Room and Board in field camp	54 X \$45/day (Aug-Oct/87)			2,430.00
Meals	(Aug 29-Nov 5/87)			1,229.11
Motel	(Oct 30-Nov 5/87)			302.40
<u>Mobilization/Demobilizaton</u>				
Airfare Calgary - Castlegar (2/3 in B.C.)				121.33
Vehicle Rental and fuel	(Aug 22-Nov 5/87)			3,682.90
<u>Disposable Supplies</u>				1,504.09
<u>Instrument & Equipment Rental</u>				
Chainsaw	21 days @ \$ 6			126.00
Geonics VLF-EM/16	6 days @ \$18			108.00
Geometrics G825A Magnetometer	6 days @ \$50			300.00
<u>Laboratory Analyses:</u> Terramin Research Labs Ltd.				7,604.30
<u>Contract Job: Road Construction</u>				
Case 1150 tractor	35.5 hours @ \$65/hr			2,307.50
<u>Post Field Costs</u>				
Project Supervision: J.R. Allan				
Aug'87-Feb'88	3.5 days @ \$400			1,400.00
Report Preparation	7.0 days @ \$350			2,625.00
Secretarial, reproduction, telephone & courier				595.24
Drafting				1,341.75
Handling Charges 12% on Third Party Expenses				<u>1,578.09</u>
				TOTAL \$ 47,158.21
				=====

ANALYTICAL REPORT

Taiga Consultants Ltd.

Rupert Allan

Date : 87/10/16

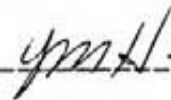
Job #: 87-395A

Project: BC-87-3 Rachel

No. of Samples: 610

Sample Type: Soil

Signed: _____



Job#: 87-395-A	Sample Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
9C-87-3					
Rachel	L 10+00 S 10+00 W	2	0.22	21	57
	9+75	2	0.16	56	39
	9+50	2	0.18	23	65
	9+25	2	0.12	24	46
	9+00	4	0.14	23	58
	8+75	2	0.16	66	69
	8+50 1/2	2	0.16	61	66
	8+50 2/2	2	0.26	32	73
	8+25	2	0.30	25	66
	7+75	2	0.20	52	72
	7+50	16	0.32	48	90
	7+25	10	0.28	85	96
	7+00	2	0.28	66	103
	6+75	2	0.20	25	100
	6+50	4	0.12	65	116
	6+00	2	0.14	44	102
	5+75	4	0.14	37	94
	4+75	2	0.56	27	78
	3+25	4	0.18	61	88
	3+00	2	0.16	98	87
	2+50	4	0.10	33	107
	2+25	2	0.10	29	118
	2+00	2	0.10	81	139
	1+75	2	0.18	32	88
	1+50	4	0.16	86	118
	1+25	6	0.14	41	150
	1+00	2	0.12	31	134
	0+50	4	0.20	40	123
	0+25	2	0.28	38	106
	0+00	2	0.22	60	133
	0+50 E	4	0.36	58	116
	0+75	2	0.44	45	87
	1+75	2	0.12	22	67
	2+00	2	0.30	27	88
	2+25	2	0.24	56	94
	2+50	2	0.28	63	110
	2+75	2	0.18	13	46
	3+00	2	0.14	22	36
	3+25	2	0.20	99	80
	3+50	4	0.14	40	94

Job#:	87-396-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
		L 10+00 S	3+75 E	8	0.16	18	58
			4+00	2	0.10	20	58
			4+75	4	0.10	17	48
			5+00	2	0.20	16	57
			5+25	2	0.34	21	48
			5+50	2	0.14	36	54
			6+00	2	0.10	40	23
			6+50	2	0.12	19	29
			6+75	2	0.10	25	40
			7+25	6	0.14	41	49
			7+50	4	0.12	38	66
			7+75	2	0.30	16	60
			8+75	2	0.16	9	83
			9+00	2	0.44	24	70
			9+50	4	0.17	13	47
			9+75	2	0.20	54	52
			10+00	2	0.28	23	63
		L 12+00 S	10+00 W	2	0.13	59	89
			9+75	2	0.19	22	53
			9+50	2	0.08	12	52
			9+25	6	0.18	78	126
			9+00	2	0.11	35	82
			8+75	2	0.09	19	60
			8+50	2	0.19	38	75
			8+25	2	0.25	29	39
			8+00	2	0.19	19	44
			7+75	4	0.14	19	42
			7+30	2	0.12	26	53
			7+25	2	0.16	23	72
			7+00	2	0.14	14	65
			6+75	2	0.24	15	75
			6+50	2	0.24	39	90
			6+25	2	0.16	58	121
			6+00	2	0.25	13	81
			5+75	6	0.30	34	69
			5+50	2	0.15	79	72
			5+25	2	0.33	21	67
			5+00	2	0.21	13	50
			4+75	2	0.17	20	50
			4+50 1/2	2	0.15	16	54

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm		
	L	12+00	S	4+50	2/2	4	0.34	18	79
				4+25	W	2	0.34	23	49
				4+00		2	0.19	24	71
				3+75	1/2	6	0.32	23	94
				3+75	2/2	4	0.27	71	104
				3+25		2	0.32	38	76
				3+00		2	0.46	25	86
				2+50		2	0.26	65	90
				2+25		2	0.13	65	78
				2+00		2	0.22	19	56
				1+75		4	0.15	21	65
				1+50		2	0.24	30	81
				1+25		2	0.26	20	91
				1+00		2	0.33	33	115
				0+75		4	0.26	28	105
				0+50		4	0.27	26	115
				0+25		6	0.17	74	110
				BL		4	0.20	58	143
				0+25	E	2	0.29	78	118
				0+50		2	0.13	26	102
				0+75		2	0.11	22	94
				1+00		2	0.23	41	113
				1+25		2	0.19	81	167
				1+50		2	0.24	83	170
				1+75		6	0.20	77	182
				2+00		2	0.21	82	109
				2+25		4	0.15	29	74
				2+50		6	0.25	18	157
				2+75		2	0.07	32	49
				3+00		2	0.12	17	44
				3+25		2	0.10	30	73
				3+50		4	0.13	28	69
				3+75		2	0.22	58	60
				4+00		2	0.05	15	33
				4+50		4	0.01	23	63
				4+75		2	0.03	19	66
				5+00		6	0.02	20	57
				5+25		2	0.15	10	59
				5+50		2	0.17	16	76
				5+75		2	0.30	17	51

Job#; 87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L 12+00 S	6+00 E	2	0.21	17	48
		6+25	2	0.09	16	40
		6+50	4	0.12	18	49
		6+75	2	0.31	14	35
		7+00	2	0.09	24	63
		7+25	2	0.16	15	46
		7+50	2	0.35	37	63
		7+75	4	0.36	140	90
		8+00	2	0.20	15	50
		8+25	2	0.20	38	50
		8+50	4	0.26	23	90
		8+75	2	0.28	61	67
		9+00	2	0.23	20	67
		9+25	6	0.18	21	103
		9+50	4	0.38	30	61
		9+75	2	0.18	14	61
		10+00	2	0.21	25	60
	L 13+00 S	8+00 W	2	0.08	23	55
		7+75	2	0.09	19	46
		7+50	2	0.15	25	74
		7+25	4	0.09	20	80
		7+00	4	0.11	17	79
		6+50	2	0.10	26	75
		6+25	2	0.12	26	90
		6+00	4	0.24	55	107
		5+75 1/2	2	0.20	23	95
		5+75 2/2	4	0.16	12	35
		5+50	4	0.18	32	78
		5+25	2	0.18	28	84
		5+00	2	0.42	33	114
		4+75	2	0.38	25	67
		4+50	2	0.36	14	28
		4+25	2	0.28	20	22
		4+00	2	0.14	17	53
		3+75	4	0.14	15	62
		3+25	4	0.18	39	82
		3+00	2	0.16	20	54
		2+75	6	0.18	22	62
		2+25	4	0.40	19	38
		1+75	4	0.18	25	35

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
		L 13+00 S	1+50 W	2	0.12	32	61
			1+00	2	0.28	107	132
			0+50	4	0.16	18	56
			0+25	2	0.32	35	84
			BL	2	0.20	82	111
			0+25 E	2	0.38	73	63
			1+00	2	0.16	26	73
			1+50	2	0.14	28	120
			1+75	2	0.12	44	93
			2+75	2	0.16	79	140
			3+00	6	0.16	56	54
			3+25	2	0.24	76	40
			3+50	2	0.16	42	110
			3+75	2	0.10	31	96
			4+00	2	0.18	20	67
			4+25	2	0.38	18	90
			4+50	2	0.28	30	56
			5+00	4	0.12	36	64
			5+25	2	0.20	19	65
			5+50	2	0.20	22	37
			5+75	2	0.36	91	72
			6+00	2	0.38	19	70
			6+25	4	0.46	28	50
			6+50	2	0.18	22	55
			6+75	8	0.16	13	64
			7+00	4	0.18	17	34
			7+25	2	0.20	23	38
			7+50	2	0.28	22	61
			7+75	2	0.30	24	51
			8+00	2	0.66	26	61
		L 14+00 S	8+00 W	4	0.20	61	74
			7+75	4	0.18	20	89
			7+50	2	0.24	21	37
			7+25	2	0.22	46	92
			7+00	2	0.22	33	60
			6+75 1/2	2	0.10	40	125
			6+75 2/2	2	0.18	16	60
			6+50	4	0.20	30	63
			6+25	2	0.14	22	64
			6+00	2	0.08	29	70

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L	14+00	S				
			5+75	4	0.14	71	80
			5+50	2	0.10	47	156
			5+25	2	0.14	49	143
			5+00	2	0.18	68	103
			4+75	2	0.30	16	51
			4+50	6	0.44	24	89
			4+25	4	0.14	69	31
			4+00	4	0.20	40	37
			3+75	4	0.26	32	74
			3+50	8	0.26	24	43
			3+25	2	0.26	24	49
			3+00	12	0.12	68	90
			2+75	2	0.18	28	109
			2+50	4	0.28	15	69
			2+00	4	0.14	150	162
			1+75	2	0.52	16	75
			1+50	2	0.36	34	70
			1+25	2	0.24	33	94
			1+00	2	0.22	58	122
			0+25	2	0.24	52	51
			0+75	2	0.30	26	89
			1+00	2	0.12	31	70
			1+50	4	0.18	51	99
			1+75	2	0.30	1040	400
			2+00	2	0.38	56	166
			2+25	2	0.16	45	83
			2+75	6	0.10	37	53
			3+75	2	0.26	33	62
			4+00	2	0.10	82	66
			4+25	4	0.14	28	80
			4+50	2	0.10	39	72
			4+75	2	0.14	15	84
			5+00	2	0.10	24	90
			5+50	4	0.14	25	55
			5+75	4	0.12	19	50
			6+00	2	0.20	43	59
			6+25	2	0.14	27	56
			6+50	6	0.14	42	61
			6+75	2	0.16	47	71
			7+00	4	0.12	62	62

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
		L 14+00 S	7+50 E	2	0.20	23	39
			7+75	12	0.16	13	43
			8+00	2	0.10	40	41
		L 15+00 S	0+75 E	2	0.08	14	28
			1+00	2	0.10	25	97
			1+25	2	0.12	16	59
			1+50	2	0.12	32	47
			1+75	2	0.08	12	32
			2+25	2	0.20	58	84
			2+50	2	0.28	21	63
			3+00	2	0.12	62	63
			3+75	4	0.10	28	102
			4+00	4	0.12	68	83
			4+25	2	0.14	31	79
			4+50	2	0.12	25	111
			4+75	2	0.08	53	108
			5+00	2	0.10	35	112
			5+25	2	0.04	36	90
			5+50	2	0.18	24	75
			5+75	4	0.10	20	69
			6+00	2	0.02	17	62
			6+25	6	0.08	46	82
			6+50	2	0.06	21	74
			6+75	2	0.06	53	91
			7+25	4	0.10	15	39
			7+50	2	0.18	21	49
			7+75	2	0.12	19	45
			8+00	8	0.12	25	71
		L 15+50 S	7+75 W	2	0.04	41	113
			7+00	2	0.14	155	890
			5+50	36	1.42	420	550
			5+25	8	0.10	61	146
			5+00	2	0.94	177	250
			4+75	2	0.08	39	115
			4+50	2	0.32	270	170
			4+25	4	0.14	42	93
			4+00	2	0.14	25	91
			3+75	2	0.34	22	52
			3+50	2	0.04	29	73
			3+25	2	0.06	31	41

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
		L 15+50 S	3+00 W	2	0.10	65	105
			2+50	2	0.06	14	90
			2+25	6	0.10	90	127
			2+00	2	0.26	62	170
			1+75 1/2	2	0.22	28	113
			1+75 2/2	2	0.14	83	193
			1+50	4	0.10	25	139
			1+25 1/2	2	0.38	25	142
			1+25 2/2	2	0.14	23	82
			0+75	2	0.06	26	88
			0+50	2	0.10	28	82
			0+50 E	2	0.12	36	156
			0+75	4	0.18	34	81
			1+00	2	0.20	32	91
			1+50	4	0.14	30	144
			1+75	2	0.06	32	98
			2+25	2	0.12	34	94
			2+75	6	0.18	53	94
			3+00	2	0.12	19	52
			3+50	2	0.10	152	99
			3+75	2	0.10	40	92
			4+00	2	0.14	23	71
			4+25	2	0.10	36	58
			4+50	4	0.10	62	106
			4+75	2	0.12	43	92
			5+00	4	0.14	19	64
		L 16+00 S	0+25 E	2	0.14	15	48
			0+50	12	0.18	62	167
			0+75	2	0.20	78	155
			1+00	2	0.30	53	190
			1+75	2	0.10	18	64
			2+25	2	0.12	46	66
			2+50	2	0.16	50	147
			3+50	2	0.14	20	86
			3+75	2	0.10	16	61
			4+00	2	0.38	57	131
			4+25	4	0.12	30	30
			4+50	4	0.08	26	37
			4+75	2	0.12	104	107
			5+00	2	0.06	73	138

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
		L 16+00 S	5+25 E	2	0.12	27	45
			5+50	2	0.14	19	49
			5+75	2	0.10	36	65
			6+00	2	0.10	42	84
			6+25	2	0.08	30	79
			6+50	2	0.10	24	52
			6+75	4	0.12	19	71
			7+00	2	0.12	72	63
			7+25	2	0.12	17	59
			7+75	4	0.22	79	80
			8+00	2	0.14	36	73
		L 16+50 S	8+00 W	12	0.24	65	152
			7+50	2	0.14	23	93
			7+25	2	0.12	24	85
			7+00	2	0.30	35	78
			6+75	4	0.18	102	157
			6+50	14	0.98	3200	2400
			6+25	4	0.42	670	1350
			6+00	4	0.32	149	340
			5+75	2	0.22	46	112
			5+50	2	0.32	57	171
			5+25	2	0.20	32	130
			5+00	2	0.26	76	105
			4+75	2	0.24	106	143
			4+00 1/2	6	0.24	65	106
			4+00 2/2	2	0.20	38	100
			3+75	2	0.48	38	130
			3+50	2	0.34	21	77
			3+25	2	0.20	20	43
			2+75	2	0.18	18	55
			2+50	2	0.20	91	70
			2+25	2	0.18	17	45
			2+00	4	0.32	39	124
			1+75	2	0.34	37	92
			1+50	2	0.12	33	71
			1+25	2	0.58	26	68
			1+00	2	0.18	38	102
			0+75	2	0.12	22	73
			0+50	2	0.16	14	56
			0+25	2	0.22	19	46

TERRAMIN RESEARCH LABS LTD.

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L 16+50 S	0+00	W	2	0.12	16	44
		0+00		2	0.30	21	42
		0+25	E	2	0.18	40	43
		0+50		2	0.22	34	61
		0+75		2	0.18	19	73
		1+00		2	0.24	24	65
		1+25		2	0.14	25	62
		1+50		2	0.28	20	50
		1+75		2	0.20	21	56
		2+00		2	0.86	12	55
		2+25		2	0.28	13	30
		2+50		4	0.12	20	79
		2+75		2	0.18	19	65
		3+00		2	0.16	13	58
		3+25		2	0.22	20	68
		3+50		2	0.12	34	58
		3+75		2	0.16	20	28
		4+25		2	0.32	54	75
		4+50		2	0.32	50	94
		4+75		6	0.14	27	89
	L 17+00 S	5+00		4	0.32	82	106
		0+25	E	2	0.18	30	79
		0+50		2	0.16	37	68
		0+75		2	0.20	26	67
		1+00		4	0.38	27	70
		1+25		2	0.22	30	38
		2+50		2	0.14	38	44
		2+75		2	0.14	19	42
		3+00		4	0.16	21	35
		3+25		2	0.16	18	31
		3+75		2	0.14	54	51
		4+00		2	0.14	18	66
		5+25		2	0.14	36	76
		5+50		8	0.10	47	96
		5+75		2	0.16	67	128
		7+00		2	0.12	18	53
		7+25		2	0.12	60	41
		7+50		2	0.12	16	46
		8+00		2	0.16	35	82
	L 17+50 S	8+00	W	6	0.20	39	139

TERRAMIN RESEARCH LABS LTD.

Job#: 87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L 17+50 S	7+75 W	2	0.12	19	121
		7+50	2	0.06	20	117
		7+25	2	0.16	50	108
		6+75	2	0.16	27	87
		6+50	4	0.10	24	178
		6+25	2	0.22	53	340
		6+00	4	0.14	61	189
		5+75	2	0.20	82	161
		5+00	2	0.20	36	93
		4+50	4	0.16	32	124
		4+25	4	0.20	23	102
		4+00	2	0.16	22	106
		3+75	2	0.26	21	111
		3+50	2	0.28	24	115
		3+25	2	0.26	165	149
		2+75	2	0.08	17	104
		2+50	4	0.16	28	102
		2+25	2	0.14	28	125
		1+00	2	0.04	14	65
		0+75	2	0.16	43	77
		0+50	6	0.18	13	83
		0+25	4	0.14	25	102
		0+25 E	2	0.14	22	68
		0+75	4	0.36	27	51
		1+00	2	0.42	28	57
		1+25	2	0.28	46	63
		1+75	2	0.14	13	32
		2+25	2	0.20	20	43
		2+50	4	0.20	21	51
		2+75	2	0.24	17	44
		3+00	2	0.20	17	29
		3+25	2	0.10	20	83
		3+50	2	0.05	24	71
		3+75	4	0.08	38	74
		4+50	2	0.25	57	70
	L 18+00 S	0+25 E	2	0.12	35	97
		0+75	6	0.33	42	100
		1+00	2	0.45	24	103
		1+25	2	0.07	29	67
		1+50	2	0.15	18	59

Job#: 87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L 18+00 S	1+75 E	2	0.24	26	39
		2+25	2	0.27	17	54
		3+25	2	0.18	18	46
		3+50	2	0.16	28	39
		3+75	2	0.10	53	126
		4+00	6	0.36	22	57
		4+50	4	0.15	17	74
		4+75	2	0.12	15	61
		5+00	2	0.21	23	94
		5+25	2	0.18	27	104
		5+50	2	0.20	30	45
		5+75	2	0.20	20	40
		6+25	2	0.16	27	54
		7+75	2	0.08	27	38
		8+00	2	0.10	21	45
	L 18+50 S	5+00 W	2	0.54	59	280
		4+75	2	0.42	122	114
		4+50	2	0.22	32	112
		4+25	2	0.24	53	93
		4+00	2	0.20	24	73
		3+75	2	0.20	77	121
		3+50	4	0.46	56	107
		3+25	2	0.24	36	124
		3+00	2	0.30	38	112
		2+75	2	0.20	46	165
		2+25	4	0.22	110	178
		2+00	6	0.20	29	168
		1+75	2	0.20	46	160
		1+50	4	0.30	58	149
		1+25	2	0.22	77	148
		0+75	2	0.46	45	128
		0+50	6	1.76	420	640
		0+25	2	1.34	51	120
		0+00	2	0.28	40	165
		0+25 E	2	0.28	96	154
		0+50	4	0.42	33	91
		0+75	4	0.20	41	125
		1+00	2	0.32	46	99
		1+50	4	0.24	31	50
		1+75	2	0.24	54	67

Job#: 87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm	
L 18+50 S	E	2+00	2	0.14	22	49	
		2+25	2	0.20	47	76	
		2+50	4	0.20	29	67	
		3+25	2	0.18	55	96	
		3+50	2	0.36	35	50	
		3+75	2	0.24	15	67	
		4+00	2	0.28	22	63	
		4+25	2	0.22	16	47	
		4+50	2	0.52	27	72	
		4+75	4	2.00	29	85	
	L 19+00 S	W	5+00	2	1.44	49	101
			7+50	2	0.40	26	87
			7+25	4	0.30	40	96
			7+00	2	0.16	23	91
			6+75	2	0.32	52	99
			6+50	2	0.36	45	99
			6+25	2	0.20	59	138
			6+00	2	0.26	27	86
			5+75	2	0.20	117	128
5+50			4	0.20	43	103	
E		5+25	2	0.22	51	103	
		5+00	2	0.18	55	133	
		4+75	2	0.40	18	81	
		4+50	2	0.26	48	135	
		4+25	2	0.18	25	82	
		4+00	2	0.16	23	83	
		3+75	2	0.20	30	98	
		3+50	4	0.20	43	116	
		3+25	4	0.18	72	161	
	3+00	2	0.18	48	108		
	2+75	2	0.18	53	138		
	2+50	2	0.16	24	89		
	2+25	2	0.12	49	132		
	1+50	4	6.00	940	370		
	0+75	6	0.24	65	93		
	0+25	2	0.22	29	90		
	0+00	2	0.26	40	94		
	0+25	2	1.54	84	169		
	0+50	6	0.28	30	97		
0+75	2	0.28	49	93			

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L 19+00	S	1+00 E	10	0.20	40	67
			1+25	2	0.28	28	93
			1+50	4	0.14	17	76
			1+75	2	0.26	17	62
			2+00	2	0.34	29	89
			2+50	2	0.18	16	42
			2+75	2	0.24	18	60
			3+00	4	0.24	13	54
			3+25	2	0.76	10	68
			3+50	2	0.28	27	76
			3+75	2	0.30	19	69
			4+00	2	0.14	13	56
			4+25	2	0.20	18	66
			4+50	2	0.18	52	84
			4+75	4	0.28	31	58
			5+00	2	0.12	22	102
			5+25	2	0.16	23	84
			5+50	2	0.12	22	84
			5+75	2	0.18	46	48
			6+00	2	0.10	14	56
			6+50	2	0.12	13	28
			6+75 1/2	2	0.06	12	98
			6+75 2/2	2	0.12	13	34
			7+00	2	0.08	12	52
			7+25	2	0.06	17	70
			7+50	2	0.10	60	52
			7+75	4	0.14	14	37
			8+00	2	0.16	12	32
	L 20+00	S	8+00 W	6	0.24	16	112
			7+75	6	0.14	79	139
			7+50	4	0.12	25	171
			7+25	2	0.10	81	205
			7+00	2	0.18	76	350
			6+75	2	0.10	75	175
			6+50	2	0.06	43	120
			6+25	2	0.14	20	118
			6+00	2	0.18	24	116
			5+75	4	0.24	80	138
			5+50	2	0.10	58	121
			5+25	2	0.22	80	140

Job#: 87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
	L 20+00 S	5+00 W	2	0.18	77	128
		4+75	4	0.08	116	135
		4+50	6	0.22	62	135
		4+25	2	0.20	63	112
		4+00	2	0.24	32	114
		3+75	2	0.12	81	113
		3+50	2	0.10	33	121
		3+25	6	0.36	44	78
		3+00	2	0.10	30	125
		2+75	2	0.14	24	111
		2+50	4	0.18	27	128
		2+00	4	0.06	19	92
		1+75	2	0.16	68	120
		1+50	2	0.32	40	160
		1+25	2	0.24	49	107
		1+00	8	0.80	61	159
		0+75	4	0.42	77	191
		0+50	2	0.22	39	103
		0+25	6	0.26	63	136
		0+25 E	2	0.74	29	107
		0+75	2	0.28	27	79
		1+00	2	0.14	87	110
		1+25	2	1.26	310	460
		1+50 1/2	2	0.20	36	77
		1+50 2/2	4	0.90	27	152
		1+75	2	0.22	12	65
		2+00	4	0.18	44	75
		2+25	2	0.28	14	65
		2+50	6	0.18	53	83
		2+75	2	0.22	24	80
		3+00	2	0.36	62	83
		3+50	2	0.60	31	133
		3+75	2	0.20	18	72
		4+00	4	0.12	33	73
		4+25	2	0.14	17	62
		4+50	4	0.18	193	113
		4+75	2	0.26	22	68
		5+00	2	0.20	17	56
		5+25	2	0.12	16	74
		5+50	2	0.14	35	64

Job#:	87-395-A	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
		L 20+00 S	5+75 E	2	0.12	34	70
			6+00	2	0.06	19	64
			6+25	4	0.12	44	85
			6+50	2	0.14	21	33
			6+75	2	0.14	41	66
			7+00	2	0.12	21	36
			7+25	2	0.16	20	50
			7+50	6	0.08	115	55
			7+75	4	0.14	15	43
			8+00	2	0.24	18	37

ANALYTICAL REPORT

Taiga Consultants Ltd.

Ian Hall

Date : 87/11/17

Job #: 87-468

Project: BC-87-3

No. of Samples: 22 Rocks

8 Soils

Signed: *Ian Hall*

TERRAMIN RESEARCH LABS LTD.

Job#:	87-468	Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
Proj	BC-87-3	Soil	L 10+00 S 7+50 W	6	0.14	50	79
			L 10+00 S 7+25 W	4	0.26	48	74
			L 14+00 S 1+75 E	2	0.42	680	310
			L 15+00 S 9+25 W	2	0.26	42	75
			L 17+50 S 5+50 W	4	1.82	370	420
			L 18+50 S 0+50 W	2	1.54	220	360
			L 19+00 S 1+50 W	2	7.00	690	330
			L 18+50 S 1+70 W	4	3.70	220	164

	Sample Number	Au ppb	Ag ppm
Rock	105276	4	0.98
	105277	6	0.55
	105278	14	0.38
	105279	4	0.08
	105280	126	0.32
	105281	60400	141.0
	105282	2360	7.60
	105283	47200	109.0
	105284	2220	22.0
	105285	1620	10.4
	105286	38	1.05
	105287	614	12.2
	105288	4	0.09
	105289	6	0.10
	105290	46	2.50
	105291	122	3.20
	105292	96	0.64
	105293	572	0.46
	105294	1720	1.43
	105295	422	1.88
	105296	8	0.05
	105297	4	2.00

ANALYTICAL REPORT

Taiga Consultants

Rupert Allan

Date : 87/09/14

Job #: 87-342

Project: BC-87-3

No. of Samples: 108

Sample Type: Soil

Signed: _____

R. Allan

Job#: 87-342

30-87-3

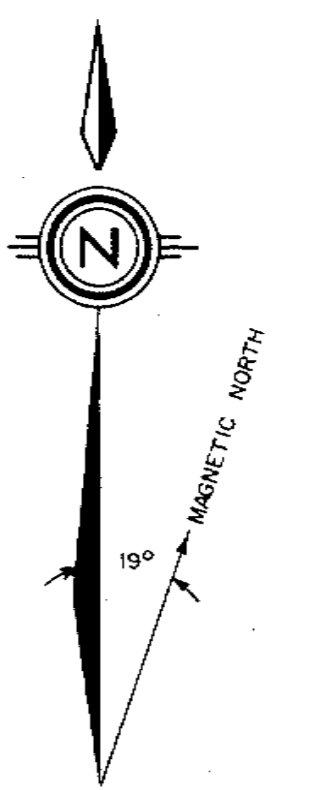
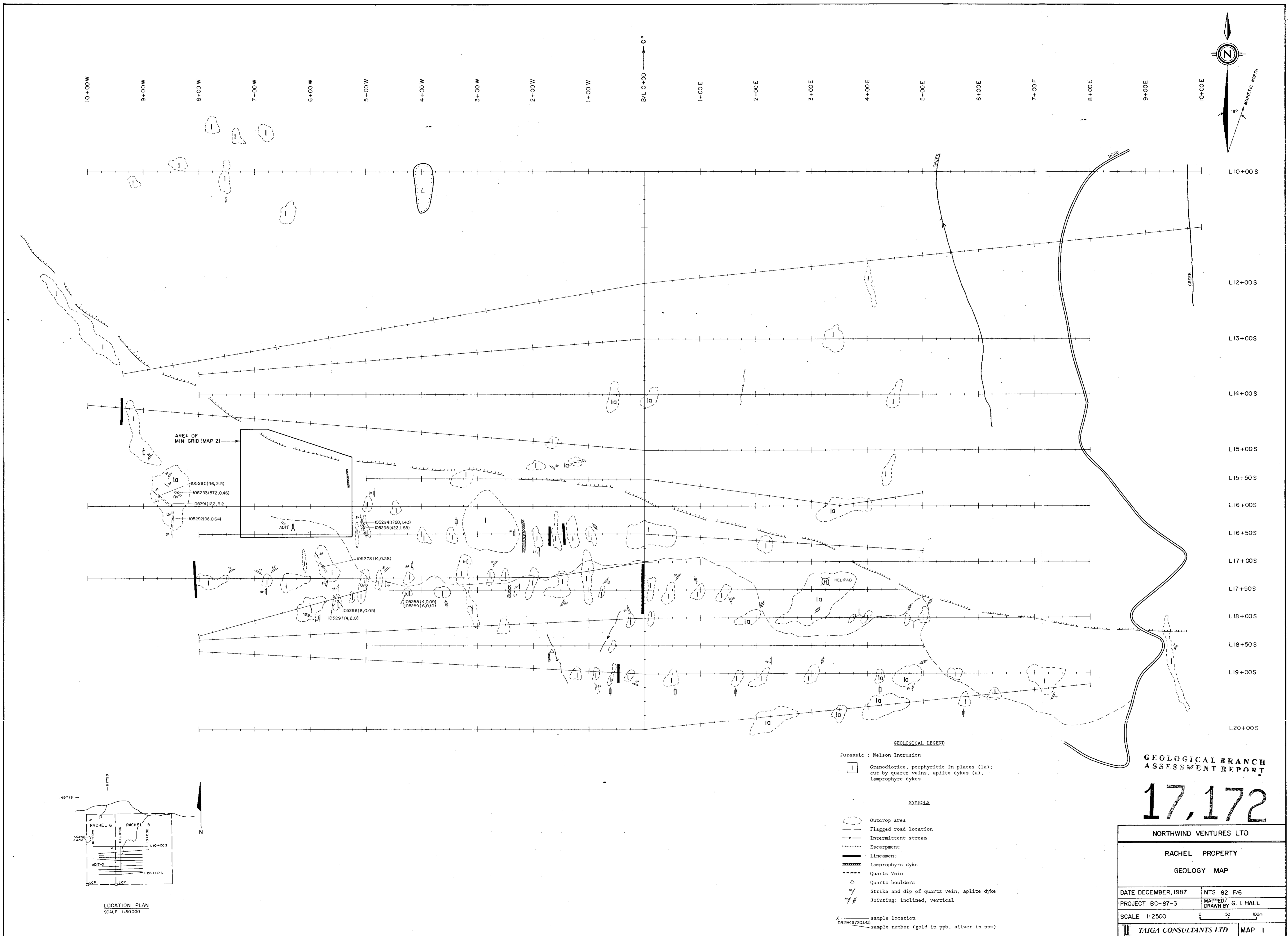
Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
L 15 S	10+00 W	2	0.25	80	107
	9+75	2	0.17	41	70
	9+50	2	0.14	15	78
	9+25	2	0.12	200	135
	9+00	4	0.24	51	114
	8+75	2	0.45	64	117
	8+50	2	0.30	21	57
	8+25	2	0.35	13	47
	8+00	4	0.29	12	50
	7+75	2	0.42	29	90
	7+50	2	0.51	49	74
	7+25	2	0.24	30	64
	7+00	2	0.26	41	79
	6+75	2	0.20	56	98
	6+50	2	0.21	89	157
	6+25	2	0.28	48	290
	6+00	2	0.31	55	390
	5+75	4	0.19	24	144
	5+50	4	0.10	18	88
	5+25	4	0.10	13	50
	5+00	8	0.10	31	50
	4+75	2	0.06	18	79
	4+50	4	0.15	15	31
	4+25	2	0.17	20	54
	4+00	2	0.13	35	58
	3+75	4	0.13	18	75
	3+25	2	0.12	43	32
	3+00	2	0.12	18	78
	2+50	2	0.05	15	94
	2+25	2	0.09	15	95
	2+00	4	0.16	51	157
	1+75	2	0.25	17	114
	1+50	2	0.04	20	82
	1+25	2	0.08	18	97
	0+75	4	0.22	21	78
	0+50	6	0.06	34	58
	0+00	2	0.18	37	74
L 16 S	10+00 W	2	0.15	16	82
	9+75	2	0.23	14	108
	9+50	2	0.13	36	115

Job#: 87-342

Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
L 16 S	9+25 W	2	0.12	78	140
	9+00	4	0.19	81	186
	8+75	4	0.49	360	710
	8+50	6	0.22	153	310
	8+25	2	0.28	63	164
	8+00	2	0.22	41	91
	7+75	4	0.15	47	104
	7+50	4	0.24	18	78
	7+25	4	0.19	210	125
	7+00	2	0.22	118	260
	6+75	2	0.14	53	108
	6+50	2	0.33	64	105
	6+25	6	0.71	260	520
	6+00	2	0.54	64	83
	5+75	4	0.14	31	78
	5+50	4	0.16	76	111
	5+25	4	0.20	68	101
	5+00	4	0.10	21	70
	4+75	2	0.31	29	65
	4+50	2	0.08	29	51
4+00	2	0.10	19	41	
3+75	2	0.17	14	69	
3+50	4	0.30	60	73	
3+25	2	0.09	35	113	
2+50	2	0.23	17	82	
1+75	2	0.23	46	76	
1+00	4	0.28	42	121	
L 17 S	10+00 W	6	0.11	41	87
	9+75	2	0.07	38	139
	9+50	4	0.08	28	91
	9+25	4	0.16	42	183
	9+00	4	0.18	59	94
	8+75	4	0.13	31	143
	8+50	4	0.13	96	210
	8+25	4	0.14	32	132
	8+00	4	0.20	42	150
	7+75	2	0.15	17	87
	7+50	2	0.16	51	93
	7+25	2	0.12	52	99
	7+00	2	0.20	53	164

Job#: 87-342

Sample	Number	Au ppb	Ag ppm	Pb ppm	Zn ppm
L 17 S	6+75 W	4	0.17	16	107
	6+50	4	0.24	52	148
	6+25	2	0.16	20	85
	6+00	2	0.18	30	129
	5+75		0.23	59	260
	5+50	2	0.50	124	240
	5+25	4	0.18	53	124
	5+00	2	0.13	37	128
	4+75	12	0.22	52	97
	4+50	2	0.12	79	141
	4+25	4	0.10	33	118
	4+00	6	0.61	88	120
	3+75	2	0.20	44	132
	6+50	2	0.11	41	115
	3+25	4	0.19	82	133
	3+00	2	0.09	32	148
	2+75	2	0.16	21	113
	2+50	2	0.22	18	109
	2+25	2	0.20	24	114
	2+00	2	0.13	34	108
	1+75	2	0.14	32	116
	1+50	2	0.25	29	71
	1+25	2	0.10	15	82
	1+00	4	0.11	47	74
	0+75	2	0.22	15	74
	0+50	2	0.71	19	109
	0+25	2	0.11	9	81
	0+00	6	0.26	69	60



AREA OF
MINI GRID (MAP 2)

GEOLOGICAL LEGEND

Jurassic : Nelson Intrusion
 [I] Granodiorite, porphyritic in places (1a);
 cut by quartz veins, aplite dykes (a),
 lamprophyre dykes

SYMBOLS

- Outcrop area
- Flagged road location
- Intermittent stream
- Escarpment
- Lineament
- ▬ Lamprophyre dyke
- ==== Quartz Vein
- △ Quartz boulders
- ↘ Strike and dip of quartz vein, aplite dyke
- ↗ Joining: inclined, vertical

x — sample location
 105294(720, 1.43)
 — sample number (gold in ppb, silver in ppm)

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

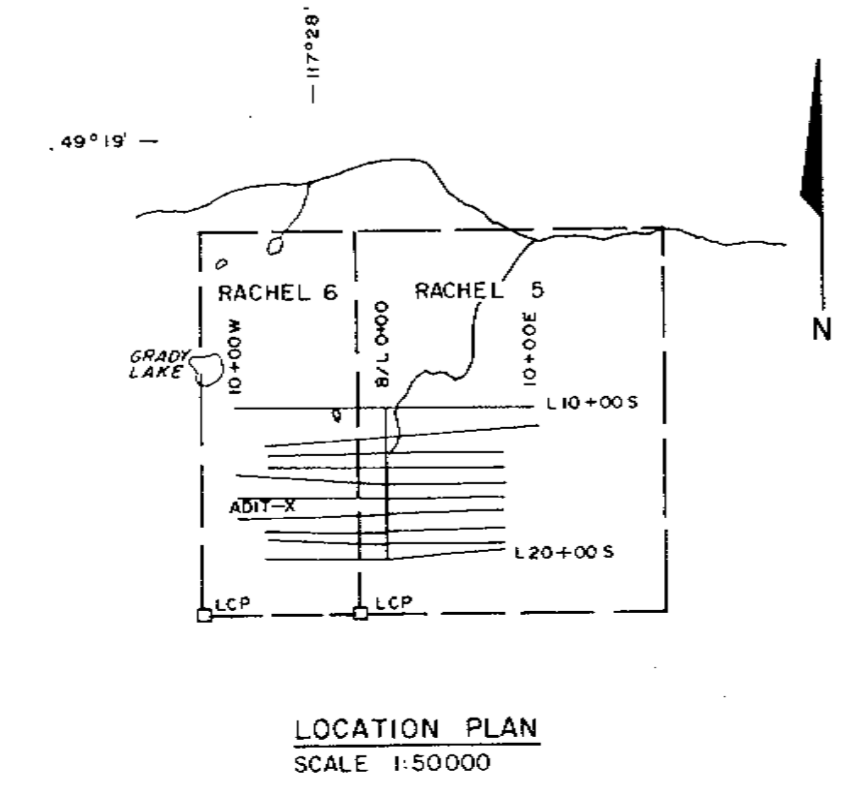
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NORTHWIND VENTURES LTD.

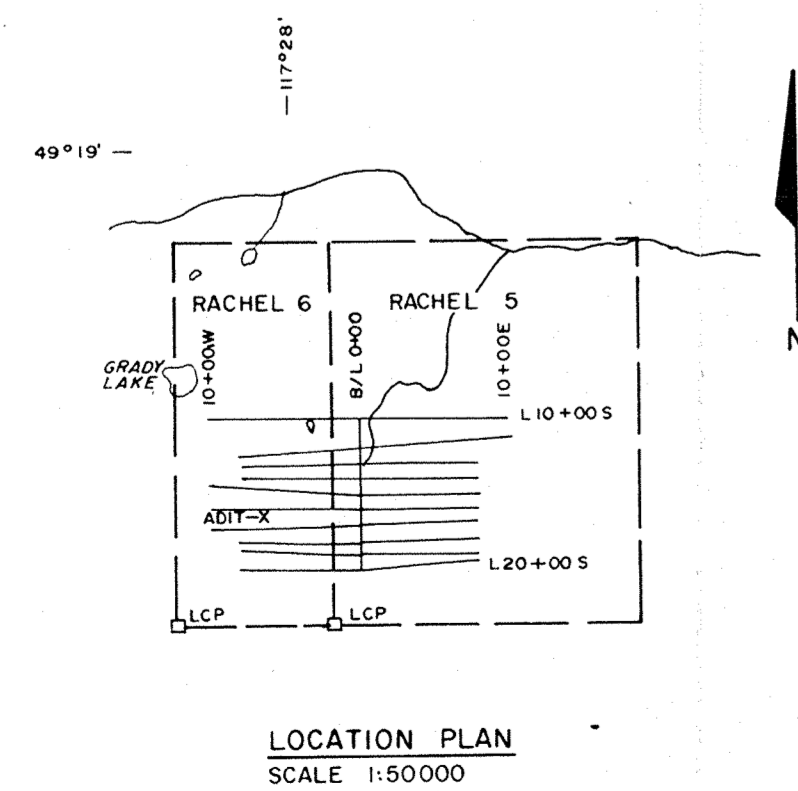
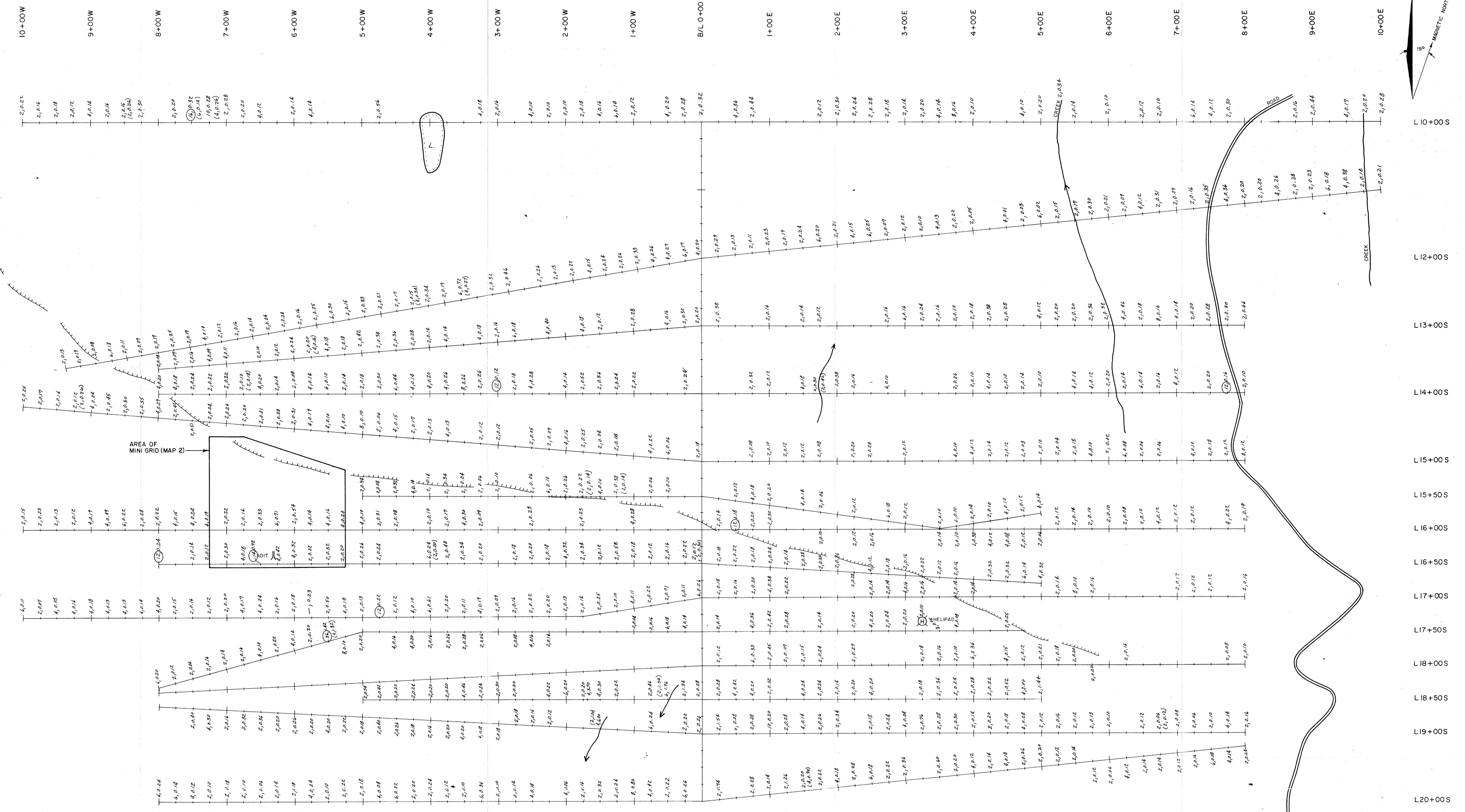
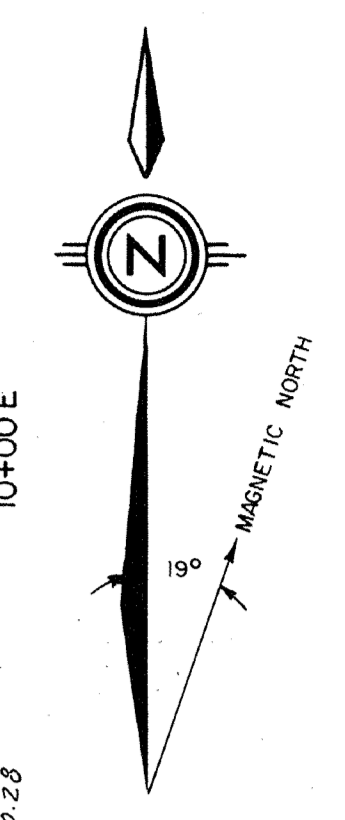
RACHEL PROPERTY

GEOLOGY MAP

DATE DECEMBER, 1987	NTS 82 F/6
PROJECT BC-87-3	MAPPED/DRAWN BY G. I. HALL
SCALE 1:2500	0 50 100m
TAIGA CONSULTANTS LTD	MAP 1





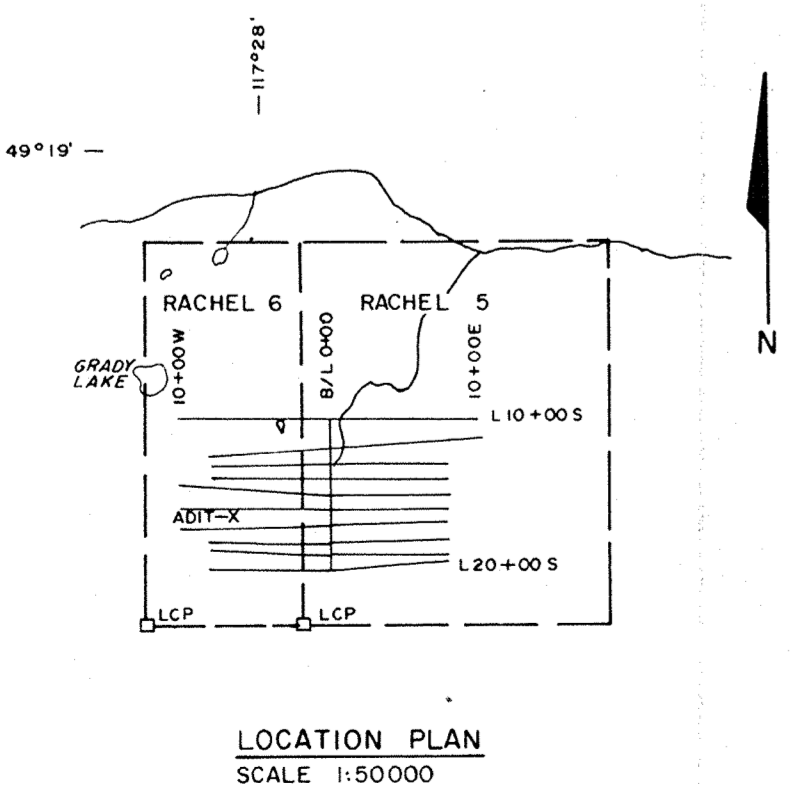
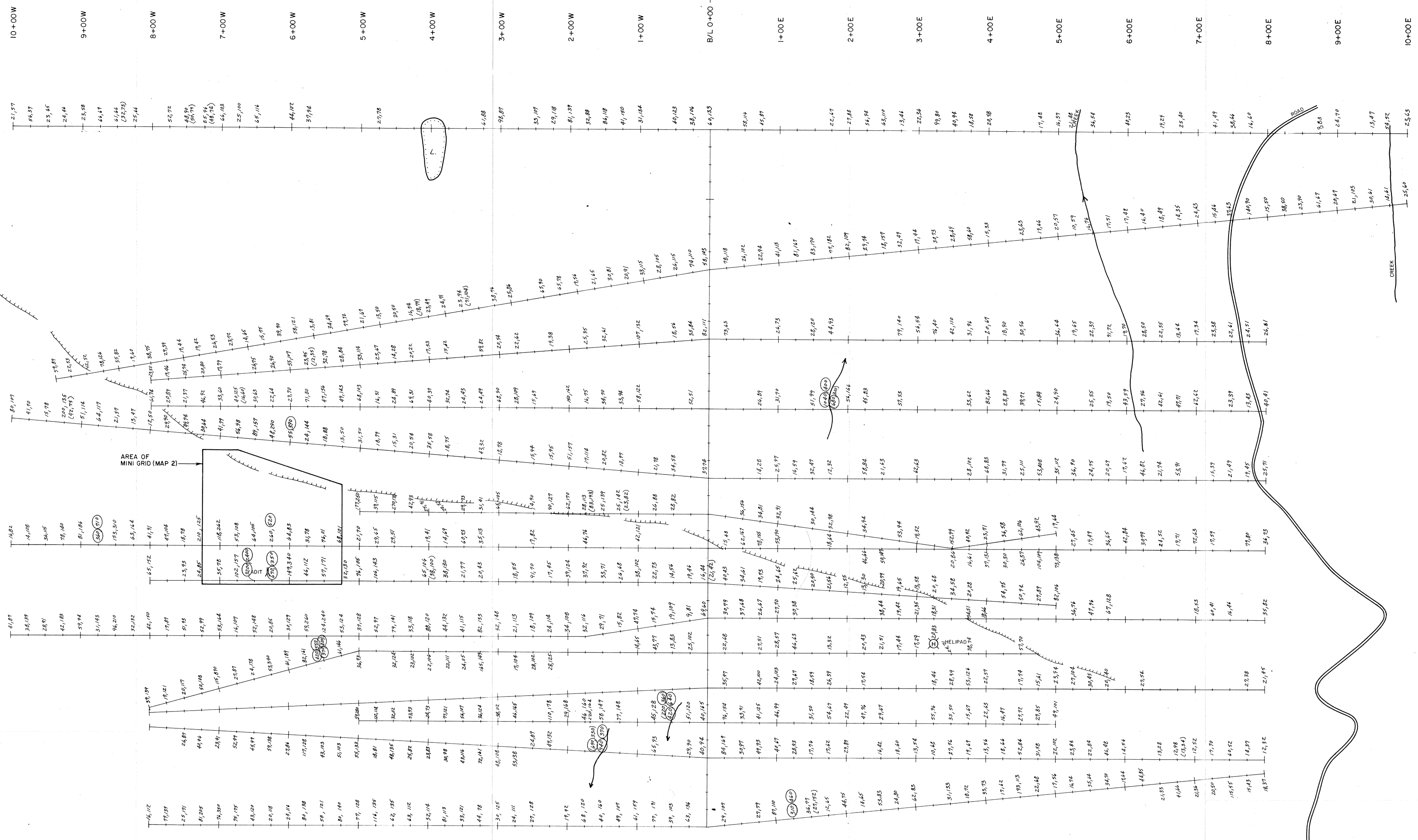
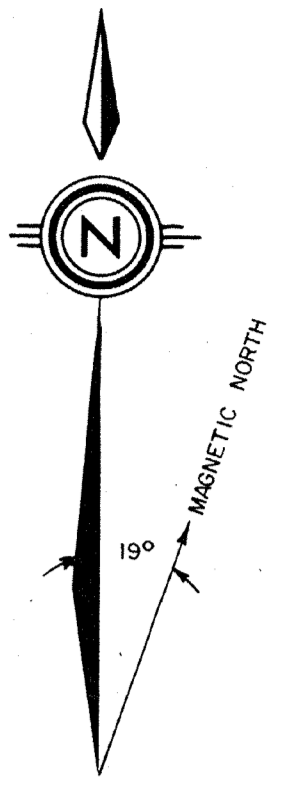


Au (ppb)
 Ag (ppb)
 REPEAT SAMPLE
 GEOCHEMICAL ANALYSIS
 (36) >10 ppb GOLD IN SOIL

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,172

NORTHWIND VENTURES LTD.	
RACHEL PROPERTY	
Au, Ag SOIL GEOCHEMISTRY	
DATE DECEMBER, 1987	NTS 82 F/6.
PROJECT BC-87-3	MAPPED/ DRAWN BY G. I. HALL
SCALE 1:2500	0 50 100m
TAIGA CONSULTANTS LTD	MAP 3

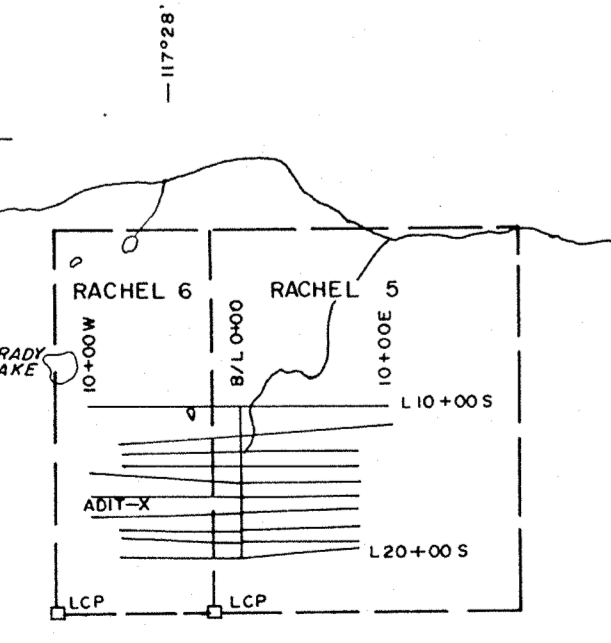
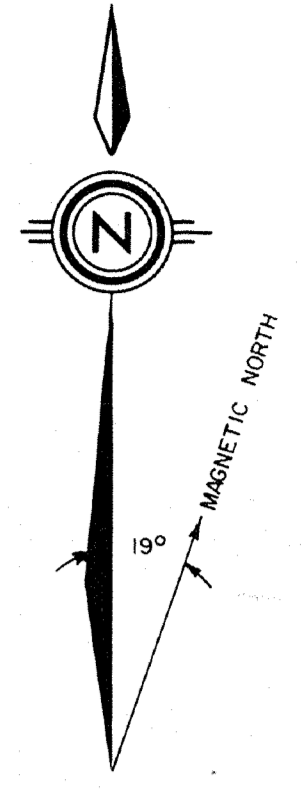
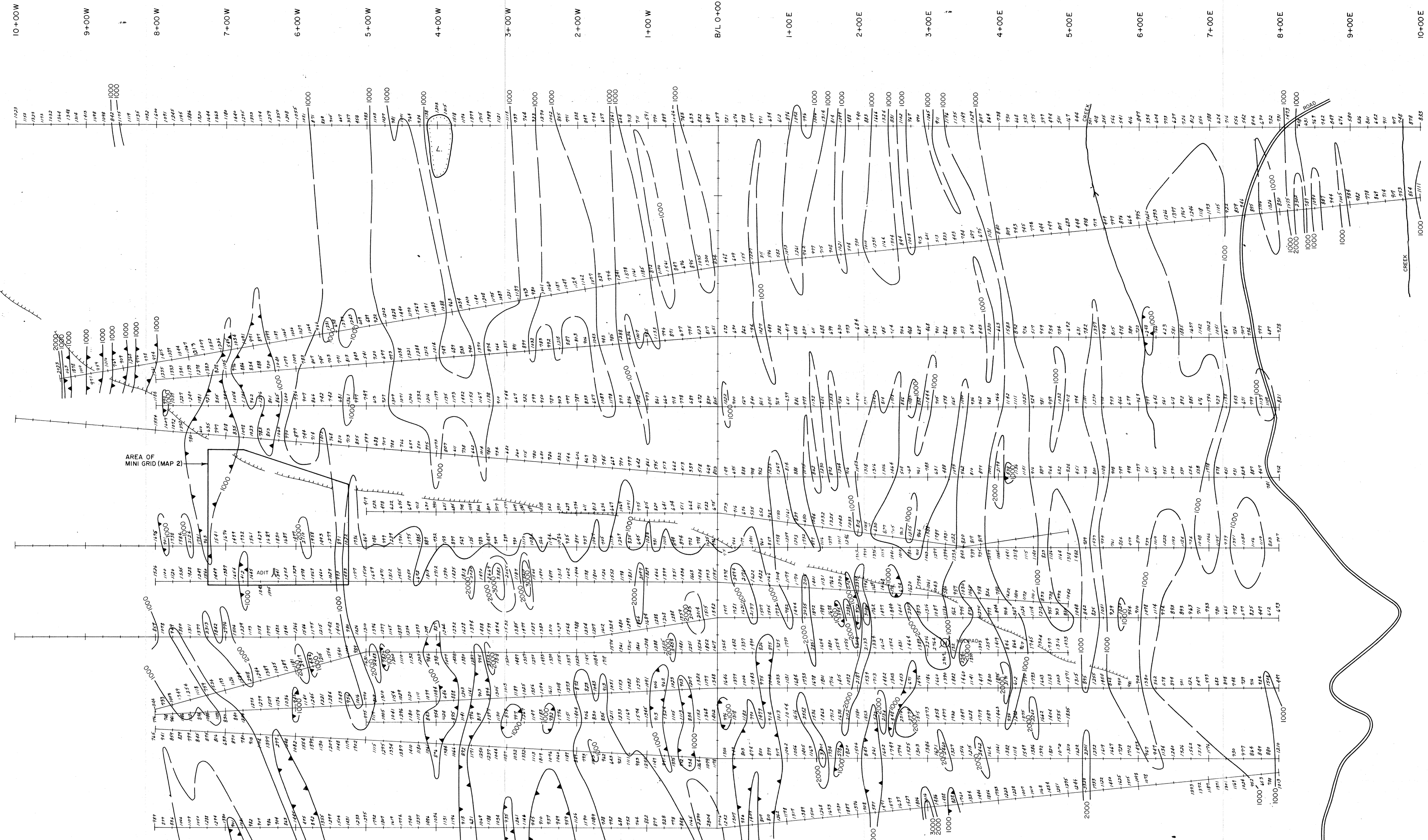


30 (>300 ppm LEAD IN SOIL)
 40 (>350 ppm ZINC IN SOIL)

GEOLOGICAL BRANCH ASSESSMENT REPORT

17,172

NORTHWIND VENTURES LTD.	
RACHEL PROPERTY	
Pb, Zn SOIL GEOCHEMISTRY	
DATE DECEMBER, 1987	NTS 82 F/6
PROJECT BC-87-3	MAPPED/DRAWN BY G. I. HALL
SCALE 1:2500	0 50 100m
TAIGA CONSULTANTS LTD	MAP 4



LOCATION PLAN
SCALE 1:50000

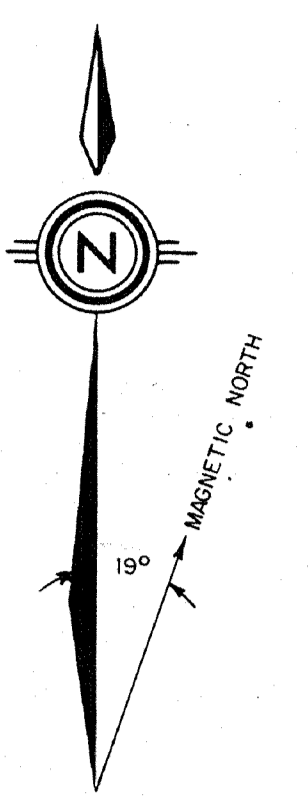
GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,172

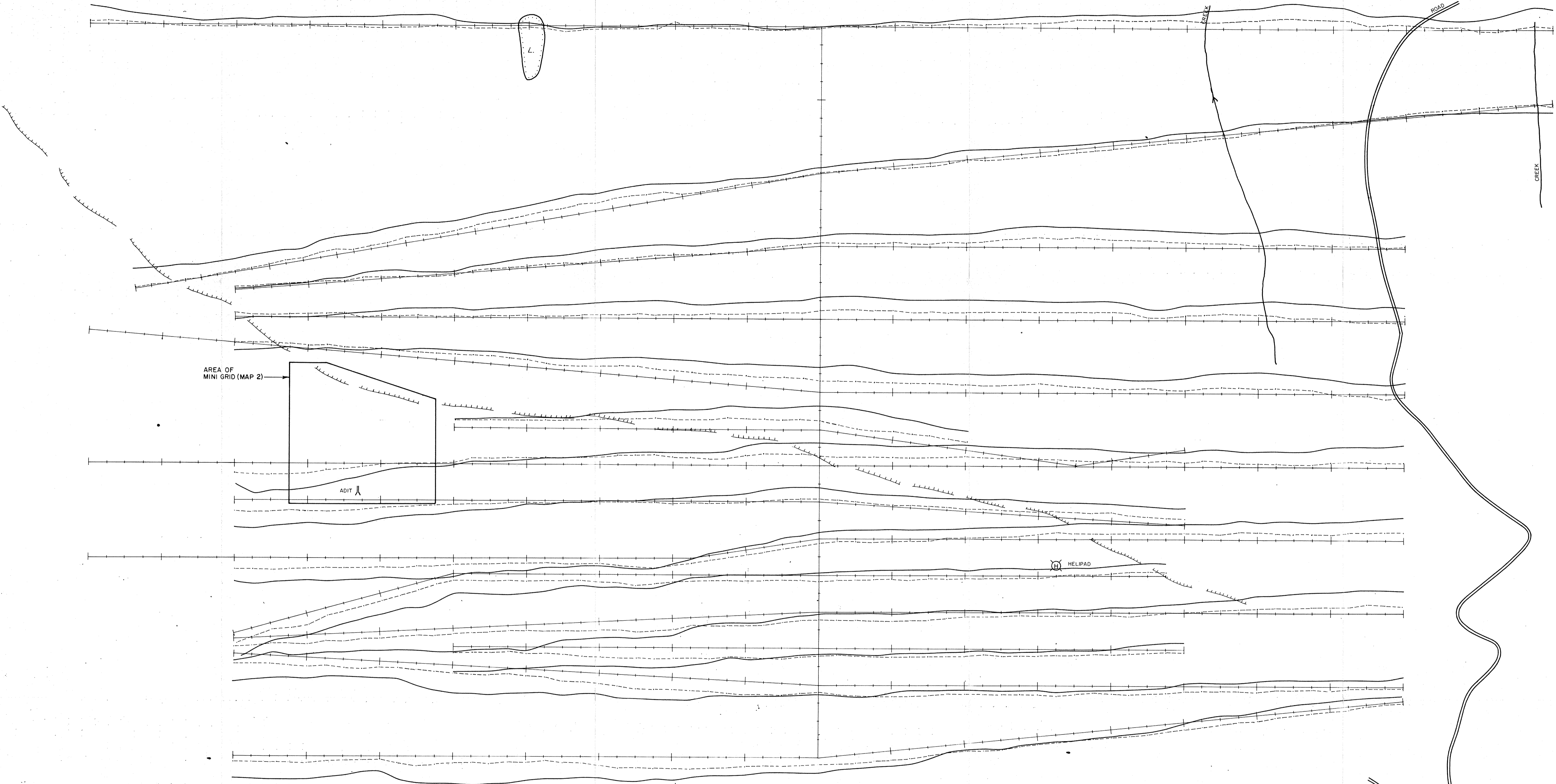
NORTHWIND VENTURES LTD.	
RACHEL PROPERTY	
MAGNETOMETER SURVEY	
DATE DECEMBER, 1987	NTS 82 F/6
PROJECT BC-87-3	MAPPED/DRAWN BY G. I. HALL
SCALE 1:2500	0 50 100m
TAIGA CONSULTANTS LTD	MAP 5

Note: All readings and contour values are 57,000 plus gammas.
Contour interval = 1,000 gammas.

10+00W 9+00W 8+00W 7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W B/L 0+00 1+00E 2+00E 3+00E 4+00E 5+00E 6+00E 7+00E 8+00E 9+00E 10+00E



L 10+00 S
L 12+00 S
L 13+00 S
L 14+00 S
L 15+00 S
L 15+50 S
L 16+00 S
L 16+50 S
L 17+00 S
L 17+50 S
L 18+00 S
L 18+50 S
L 19+00 S
L 20+00 S



AREA OF MINI GRID (MAP 2)

ADIT

HELIPAD

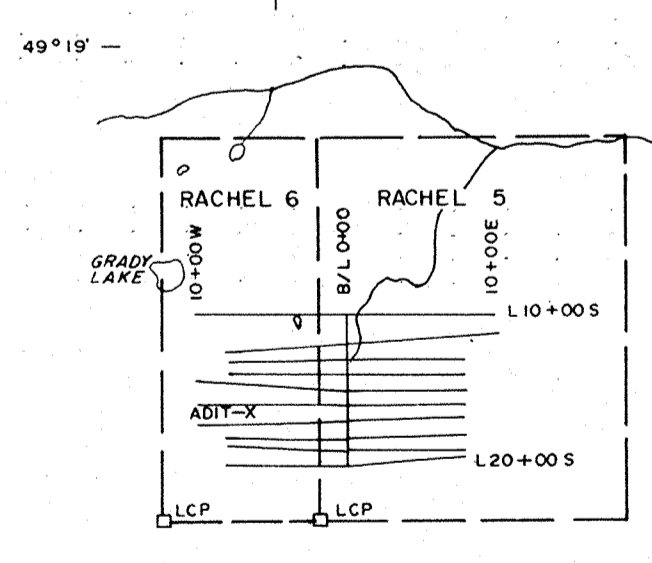
GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,172

NORTHWIND VENTURES LTD.

RACHEL PROPERTY
VLF-EM SURVEY

DATE DECEMBER, 1987	NTS 82 F/6
PROJECT BC-87-3	MAPPED/DRAWN BY G. I. HALL
SCALE 1:2500	0 50 100m
TAIGA CONSULTANTS LTD	MAP 6



LOCATION PLAN
SCALE 1:50000

INSTRUMENT: GEONICS VLF-EM 16
STATION: SEATTLE, WASH.
DIRECTION TO STATION: 245°
OPERATOR: J. HISLOP
PROFILE SCALE: 1cm = 20°

