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## ASSESSMENT REPORT

## GEOPHYSICAL REPORT

ON THE

BDC 3, PARKER 3, TUCK 3 AND GRANITE 3 CLAIMS

NIT NAT PROPERTY

VICTORIA AND ALBERNI MINING DIVISIONS

VANCOUVER ISLAND, BRITISH COLUMBIA

LOCATION

NTS: 92 C/15 LATITUDE: 48 55' 10"

LONGITUDE: 124 33 13"

PREPARED FOR

C.R.C. EXPLORATIONS LIMITED
2197 PARK CRESCENT
COQUITLAM, BRITISH COLUMBIA V3J 6T6

BY

PROMIN EXPLORATIONS LIMITED 2197 PARK CRESCENT COQUITLAM, BRITISH COLUMBIA V3J 6T1

SSESSMENT REPORT

C. W. PAYNE M.Sc. FGAC

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## SUMMARY AND CONCLUSIONS

The Nit Nat property is located 105 kilometres northwest of Victoria and six kilometres west of the west end of Cowichan Lake, Vancouver Island, British Columbia on NTS map sheet 92 C/15. The property consists of four contiguous metric mineral claims totalling 41 units (1025ha) in the Victoria and Alberni Mining Divisions. Access to the property is via well maintained logging roads.

The property is underlain by northwest trending upper Triassic Karmutsen formation basic volcanic rocks overlain by Quatsino Formation limestone. These rocks are in fault contact to the east with Jurassic, Bonanza Group basic to intermediate volcanic rocks. All rocks on the property show some degree of faulting, shearing or brecciation. Quartz/carbonate breccia zones are common in the Bonanza Group volcanic rocks.

Several high grade copper/gold occurrences within the quartz/carbonate breccia zones in Bonanza Group volcanic rocks were discovered and explored on the property over the last 20 years by several companies. C.R.C. Explorations Limited acquired the property to further explore the precious and base metal potential of the previously reported mineral occurrences.

In 1990 a VLF-EM-magnetometer survey was carried out on the property to define areas indicative of massive sulphide mineralization, to aid in location of conductive shear zones and as an aid in geological mapping. A total of 27 kilometres of grid lines were completed and surveyed.

Results of the 1990 exploration program indicates that the VLF-EM and magnetometre surveys worked well in helping to define precious and base metal targets on the property. Three significant targets were defined on the property as follows:

## 1) Tuck Lake Fault Zone

a) coincident VLF-EM anomaly and magnetic low define a fault zone some 2000 metres long by up to 250 metres wide

#### Intercalated Volcanic/Limestone Contact

This target is offset in the middle by a fault.

a) along the eastern flank of, and parallel to the northern volcanic/limestone contact is a strong VLF-EM conductor which maybe caused by sulphide mineralization.

## 3) Quartz/Carbonate Breccia Zones

a) the trench where the high grade (0.93opt) gold sample came from is located adjacent to a 600 metre long weak to moderate VLF-EM conductive zone with a coincident magnetic low.

The writer has outlined a success contingent, phased exploration program to further evaluate precious and base metal targets on the Nit Nat property. A Phase 2 program of detailed geological mapping, prospecting, rock sampling, soil geochemical surveying, VEF-EM and magnetometre surveying, induced polarization survey and trenching is recommended at an estimated cost of \$80,000. Contingent on Phase 2 results, a Phase 3 program of diamond drilling is recommended to test the down dip potential of the mineralization at a cost of \$250,000.

#### INTRODUCTION

The Nit Nat property consists of four claims totalling 41 units in the Victoria and Alberni Mining Divisions, south-central Vancouver Island, British Columbia. The claims were acquired by C.R.C. Explorations Limited to evaluate the economic potential of gold/copper mineral occurrences located on the property. The writer was retained by management of C.R.C. Explorations Limited to confirm the property location and carry out a VLF-EM and magnetometer and recommend a program for further exploration of the property, if warranted.

The writer worked on the Nit Nat property for a total of 22 days during the period April 4, 1990 to May 28, 1990.

This report outlines a success contingent, staged exploration program for further evaluation of the precious and base metal potential of the Nit Nat property.

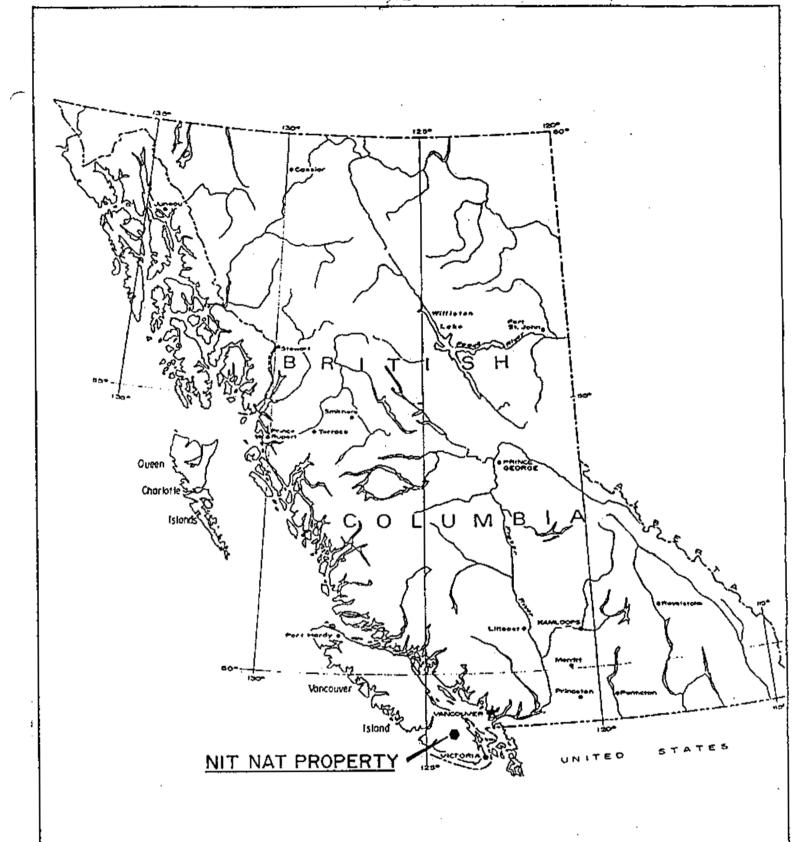
#### LOCATION AND ACCESS (FIGURE 1)

The Nit Nat property straddles the Nitinat River, approximately 105 kilometres northwest of Victoria at the south end of Tuck Lake and six kilometres west of the west end of Cowichan Lake on NTS map sheet 92 C/15. The claim area is centred at  $48^{\circ}$  55' 10' north latitude and  $124^{\circ}$  33' 13' west longitude.

Access is via Highway 18 west from Duncan to Lake Cowichan from where road access extends along the north and south sides of the lake. From Honeymoon Bay, (south side of lake) well maintained logging roads extend for about 24 kilometres to the bridge crossing the Nitinat River. From there another six kilometres of logging road (using a 4 wheel drive cycle) provides easy access to most areas of the claims.

### CLAIMS (FIGURE 2)

The Nit Nat property consists of four contiguous metric mineral claims totalling 41 units (1025a) in the Victoria and Alberni Mining Divisions. Table I provides pertinant claim data for the property.

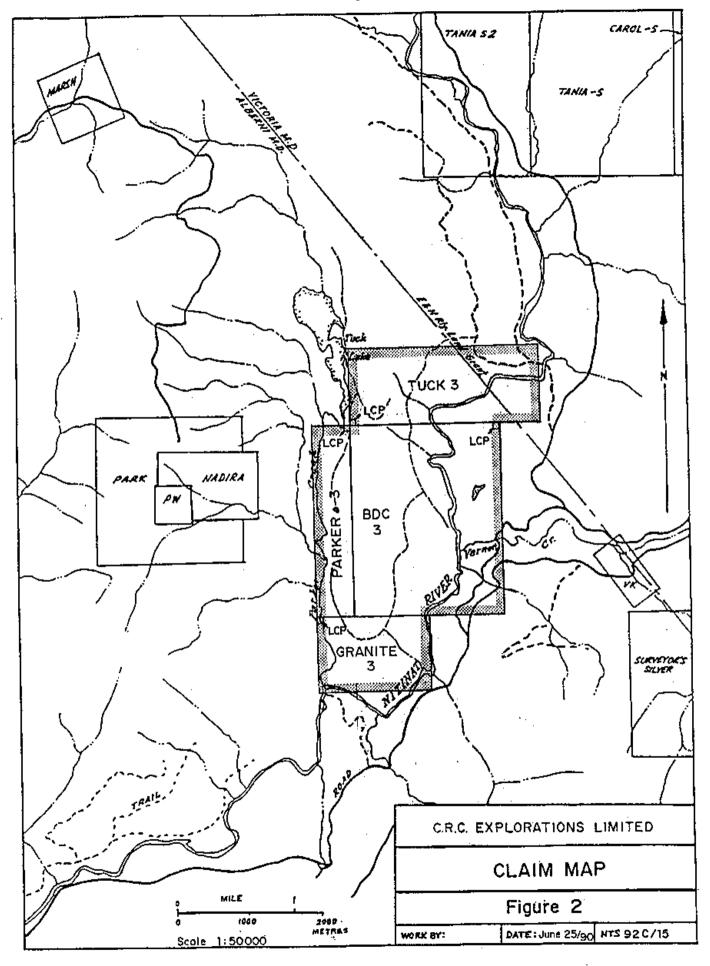


C.R.C. EXPLORATIONS LIMITED

LOCATION MAP

DATE: June 25/90 SCALE:

DRAWING No.



## TABLE I NIT NAT PROPERTY - CLAIMS DATA

NAME	RECORD NO.	NO. OF UNITS	EXPIRY DATE MI	NING DIVISION
BDC 3	2488	20	February 23, 1993*	VICTORIA
PARKER	3 4060	5	April 10, 1993*	ALBERNI
TUCK 3	4059	10	April 10, 1993*	ALBERNI
Granite	3 4061	6	April 10, 1993*	ALBERNI

<sup>\*</sup> Subject to acceptance of 1990 exploration work.

The claims are grouped under group name Nit 1.

#### TOPOGRAPHY AND VEGETATION

Elevations on the property range from about 60 metres in the Nitinat River valley to over 280 metres on the knoll and ridge between the Nitinat River and Parker Creek. The property has approximately 220 metres of relief with moderate slopes except where limestone and volcanic rocks form bluffs.

Vegetation on the property is typical west coast rain forest with marketable second growth hemlock, spruce and cedar. The northern and central parts of the claims allows relatively easy traversing while the southern part of the claims is covered by thick immature stands of deciduous scrub trees.

Proper land use permits will be required before trenching or drill access roads are constructed.

## HISTORY

The original discovery of copper/gold mineralization in the area of the Nit Nat property appears to have been made by prospector Mr W. Deans. Mr Deans has made several discoveries in the area for Cowichan Copper Company. Several of these properties have received basic exploration programs but the claims were allowed to lapse. The area of the Nit Nat property has periodically been restaked and explored by Mr Deans over the past 20 years.

During 1972 and 1973 the Nit 1-4 mineral claims were optioned to Nomad Mines Ltd. who carried out limited trenching and exploration work on the property. The option was terminated in 1974.

In 1980 Mr Deans restaked the Nit and adjoining showings as the Goldex claims. Terramar Resources Corporation optioned the Goldex Property but returned it before the end of 1980. In 1981 Cambridge Development Corporation acquired an option on the property and the

claim group was expanded in 1983. In 1983 a limited exploration program was carried out by Bridgewest Development Corporation (formerly Cambridge Development Corporation) and the property was returned to Mr Deans or allowed to lapse in 1985. The exploration work was carried out by Mr P.A. Christopher Ph.D., P.Eng. who recommended further exploration work on the property. In 1988 the property was optioned to Goldspring Resources Ltd. who carried out re-sampling of the main showings and a limited soil geochemical survey. The property lapsed and was staked by C.R.C. Explorations Limited.

#### 1990 WORK PROGRAM

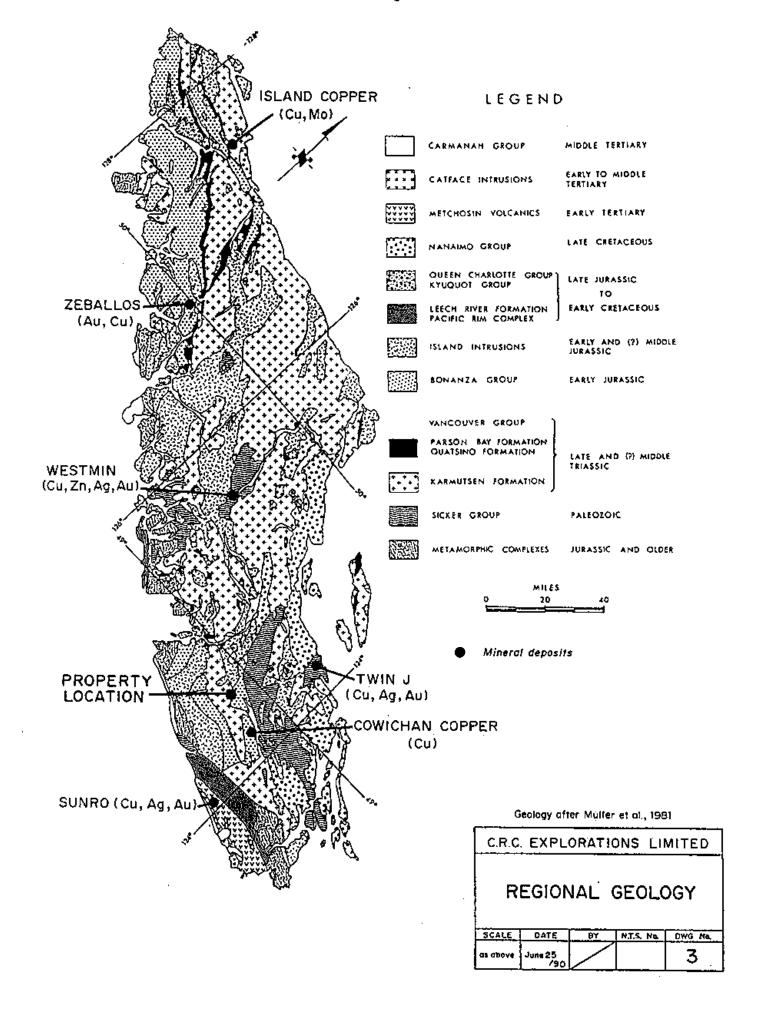
A Phase I exploration program of grid establishment, geological mapping and prospecting, rock sampling, magnetometer, VLF-EM surveying and soil sampling was carried out by Promin Explorations Limited on behalf of C.R.C. Explorations Limited.

The field program commenced April 4, 1990 and was completed May 28, 1990. The writer carried out geological mapping and prospecting of part of the grid area and supervised and helped with the soil sampling crew. The VLF-EM and magnetometer survey was carried out by S.J. Geophysics Ltd. A grid was established on the the property totalling 31 kilometres with grid lines spaced 100 metres apart and stations on the crosslines every 25 metres.

## REGIONAL GEOLOGY (FIGURE 3)

The Nit Nat property is situated in the Insular Belt of the Canadian Cordillera. This zone is one of five main northwest trending tectonic subdivisions and is dominated by Mesozoic igneous, volcanic and limited sedimentary rocks that include the Triassic Vancouver Group (Karmutsen, Quatsino and Parson Bay Formations), Jurassic Bonanza Group and the West Coast Complex grouped as the Island Intrusions.

The general geology of the Cowichan Lake - Nitinat Lake area has been mapped by Fyles (1955), Muller (1982) and Massey and Findley (1987). They show a strong north - south fault zone along Parker Creek truncating both Triassic and Jurassic intrusive, volcanic and sedimentary rocks to the west with similar aged volcanic and sedimentary rocks to the east. A northwest - southeast slay off the Parker Creek fault at Tuck Lake bisects the Nit Nat property. Between the Parker Creek fault and Tuck Lake fault is a northwesterly trending block of Triassic volcanic rocks of the Karmutsen Formation which is overlain by limestone of the Quatsino formation which in turn abuts against and is truncated by the Tuck Lake fault. To the east of the Tuck Lake fault is Jurassic, Bonanza Group volcanic rocks.



## PROPERTY GEOLOGY (FIGURE 4)

The property is underlain to the west of the Tuck Lake fault by northwest trending Triassic, Vancouver Group, Karmutsen Formation volcanic rock and Quatsino Formation limestone, while the eastern part of the claims is underlain by Jurassic, Bonanza Group volcanic rock.

## Vancouver Group

## Karmutsen Formation (uTrK)

The Karmutsen Formation outcrops along the western side of the and consists of northwesterly trending intermediate flows locally intercalated with brecciated horizons up to several metres thick. Generally, outcrops weather a blackbrown colour and form rounded knolls. The rocks are black to dark green on fresh surface and invariably are amygdaloidal and/or porphyritic. Amygdules are generally concentrated near the top of flows indicating tops are in the direction of the overlying limestone. Feldspar and pyroxene phenocrysts can form up to 20% of the rock and occur in clusters or as individual phenocrysts set in a dark green to black aphanitic groundmass. Feldspar phenocrysts are altered to chlorite and epidote and pyroxene phenocrysts have been altered to light green to green hornblende laths up to 2mm in length. Locally the rocks are weakly to moderately magnetic caused by disseminated magnetite (<1% to 2%) and pyrrhotite (<1%). The rocks are also weakly to moderately calcareous with fractured rocks (common on property) showing the strongest reaction to acid.

### Quatsino Formation (uTrQ)

The Quatsino Formation forms in part, the rounded knoll in the southwest grid area and extends northwest across the claims. The rock is massive to thick bedded, micritic limestone. It is cryptocrystalline, grey in colour and is cut by a dense network of white 1mm - 5mm thick veinlets of calcite. Locally, weathered surfaces are grey and rough textured due to secondary silica. In the area of L108+00N; 96+00E karst topography is well developed. No fossils were found in the limestone during mapping.

In the southwestern part of the grid area, L98+00N to L102+00N between stations 90+00E and 95+00E, limestone was found intercalated with altered volcanic rock believed to represent the top of the Karmutsen Formation. On outcrop scale this intercalated sequence is sheared and brecciated. On L101+00N; 94+50E thin (2 metre thick) horizons of black, fetid argillite are found.

## Bonanza Group (IJBv)

Bonanza Group rocks underlie approximately 60% of the eastern part of the property and forms inpart the northwest trending ridge in the west - central part of the claims. Generally, these rocks consist of feldspar-phyric basic to intermediate volcanic rocks intercalated with thin discontinuous lenses of fine grained greygreen tuffaceous rocks. Outcrops weather a maroon to dark green colour while on fresh surface the rocks are mottled maroon to green. Outcrops are usually blocky and broken up. Auto breccias are common but not laterally extensive. This rock type comprises poorly sorted subangular to subrounded fragments in a fine grained slightly darker matrix. Fragments range in size from less than 1 centimetre to 25 centimetres in diameter and can constitute up to of the rock. Fragments are commonly heterolithic with varicoloured feldspar-phyric or amygdaloidal varieties being the Locally, the fragments are chloritized abundant. epidotized while the matrix is relatively unaltered. The flows appear to be remnants of lithified flows which have been brecciated and re-incorporated within subsequent extrusive events.

There is a lack of lithologic continuity between outcrops and distinctive marker horizons are absent. The absence of flow banding, pillows or intraflow sediments together with abundant hematite alteration (maroon colouration) suggests that these rocks were deposited at least in part in a sub-aerial island arc environment.

#### ALTERATION

Propylitization in varying degrees is common throughout the Karmutsen Formation and Bonanza Group volcanic rocks. On outcrop scale this type of alteration occurs as an irregular patchwork with more intense (lighter green) areas. Locally, calcite and quartz veining is common forming a weak to moderate stockwork often with disseminated pyrite and lesser chalcopyrite and pyrrhotite. Within Bonanza Group volcanic rocks strong north to northwest trending breccia zones exhibit strong silicification and form quartz veins ranging from less than 1 centimetre to six metres wide and continue on strike for up to 20 metres before being overburden covered. Angular host rock fragments are common along vein margins. Locally, the more massive vein systems are vuggy with well developed quartz crystal growths lining the cavities. Massive to disseminated pyrite and pyrrhotite with lesser amounts of chalcopyrite and trace galena and sphalerite were observed in the breccia zones.

#### STRUCTURE

Most outcrops on the property show varying degrees of fracturing, jointing or faulting especially within the Bonanza Group volcanic rocks. However, several distinct fault zones cut the rocks on the property. The most prominent structural feature on the property is the Tuck Lake fault. This fault zone trends 3350 across the western part of the property and separates Triassic volcanic and sedimentary rocks on the west from Jurassic volcanic rocks on the east. This fault zone is also well defined on airphotos and can be traced using VLF-EM and magnetometer. In the field the fault zone occupys a topographic low immediately west of the northwest trending ridge through the property. The fault zone ranges from 45 metres to 200 metres in width and extends the full length of the property. A "sense" of movement on this fault was not observed insitu, however shear zones within the Karmutsen volcanic rocks . parallel to this structure exhibit slickenslide surfaces suggesting a left lateral displacement. Lineation on the slickenslide surface suggests there was an inclined component to the movement plunging at approximately 24° to the southeast. The fault zone is not resistant and therefore little exposure of the zone was found other than angular float boulders. The float boulders are sheared, brecciated, silicified and weather a brick red colour with trace disseminated fuchite. The rocks are carrying up to 12% disseminated pyrite, pyrrhotite, trace chalcopyrite and hematite and are believed to be Karmutsen Formation and/or Bonanza Group volcanic rock.

Another fault intersecting the Tuck Lake fault at an acute angle in the southwestern part of the grid area is orientated at 1340 and again can be seen distinctly on airphotos and traced geophysically. Little is known of this structure other than it is located in the area of intercalated and brecciated limestone and volcanic rocks. This fault appears to terminate at the Tuck Lake fault.

## GEOPHYSICAL SURVEY (FIGURE 5)

Approximately 27 kilometres of VLF-EM and magnetometer surveying were completed by S.J. Geophysics Ltd. over the grid with results interpreted by S.J. Visser see Appendix IV for complete report.

Several significant VLF-EM and magnetic anomalies were reported.

1. Both VLF-EM and magnetic data indicate a northerly trending contact zone extending the entire length of the grid separating Bonanza Group volcanic rocks (to the east) and intercalated Karmutsen Formation volcanic rocks and Quatsino Formation limestone (to the west). It is interpreted that a major fault zone is located just east of this contact and is supported by both VLF-EM and magnetic (low) anomalies.

- 2. A strong VLF-EM conductor is located in the southeastern part of the grid and another in the northwestern part. These conductors may be caused by sulphide mineralization.
- 3. Another coincident VLF-EM and magnetic (low) anomaly is located in the southeastern part of the grid and extends some 600 metres in a northerly direction. The cause of this anomaly is unknown.
- 4. The remainder of the VLF-EM anomalies are likely caused by weak conductive shear or fault zones or resistivity contrasts across contacts of differing lithologies.

Craig W/ Payne M.Sc. FGAC

April 10, 1991

#### RECOMMENDATIONS

To further develop this gold, zinc and copper prospect of merit a Phase 2 budget of \$80,000 would be required to carry out detailed geologic mapping and prospecting, soil sampling along strike of known mineralization to the south and north, induced polarization survey to help define the strike extent and down dip potential of known mineralization, trenching mineralized zones and continuation of VLF-EM and magnetometre surveys to aid in geologic mapping and tracing of fault structures.

A Phase 3 budget of diamond drilling would be contingent on results of the Phase 2 exploration program.

Cost estimates are listed below:

## Phase 2

4	
Accommodation/Board	\$7,000
Assay/Geochem.	\$15,000
VLF-EM/Magnetometre survey	\$5,000
Induced Polarization survey	\$16,000
Trenching	\$6,000
Salaries	\$10,000
Geological Mapping/Prospecting	\$10,000
Mobilization/Demobilization	\$5,000
Report	\$5,000
Assessment Filing	\$1,000
TOTAL PHASE 2	\$80,000

## PHASE 3 (Contingent on Phase 2 Results)

Diamond Drilling BQWL, 1800 metres	\$180,000
Assay/Geochem.	\$30,000
Supervision, Support, Transportation,	•
Accommodation/Board, Fuel, Salaries	\$33,000
Report Support	\$5,000
Assessment Filing	\$2,000
TOTAL PHASE 3	\$250,000

Craig W. Payne M.Sc. FGAC

April 10, 1991

## ITEMIZED COST STATEMENT

Geophysical Survey (S.J. Geophysics)

9,452.89

TOTAL

\$9,452.89

Invoices Attached

£

- - -

## SJ GEOPHYSICS LTD.

8081-112th Street Delta, B.C. V4C 4W4 (604) 597-1514 Fax (604) 590-0236



May 30, 1990

Promin Explorations Limited 2197 Park Crescent Coquitlam, B.C. V3J 6T1

## Invoice 053090

Job: Vancouver Island, Mag-VLF May 14, 1990 to May 28, 1990 10 Production days @ \$550/day Dates: Invoice for: \$ 5500.00 2 Mob/demob days @ 75% of \$550/day 825.00 1 Standby day @ 75% of \$550/day 412.50 1 Standby day N/C 11 Days truck rental @ \$50/day 550.00 Expenses \$143.82 plus 15% 165.39 (meals & Ferry)

Total Invoice \$ 7452.89

The advance will be deducted off the final invoice.

Please make cheque payable, within 14 days of invoice, to SJ Geophysics Ltd. at the above address. Interest calculated at the rate of 2% per month on overdue accounts.

Yours Sincerely

Joyce Visser

PAID

NOT 19 20 90 1 10 12 20 1

## SJ GEOPHYSICS LTD.

8081-112th Street Delta, B.C. V4C 4W4 (604) 597-1514 Fax (604) 590-0236

June 11, 1990

Promin Explorations Limited 2197 Park Crescent Coquitlam, B.C. V3J 6T1

Invoice 061190

Job:

Vancouver Island, Mag-VLF

Nit Nat Property

Invoice for:

Writing report and Interpretation \$ 2000.00

Invoice

\$ 2000.00

Less Advance

2000.00

Total Invoice

0.00

Please make cheque payable, within 14 days of invoice, to SJ Geophysics Ltd. at the above address. Interest calculated at the rate of 2% per month on overdue accounts.

Yours\_Sincerely

Joyce Visser

PAID

ON 100

PROJ. 110

PROJ. 230:

## STATEMENT OF QUALIFICATIONS

- I, Craig W. Payne of Coquitlam, B.C. do hereby certify that:
- 1) I am a graduate of Brock University, St. Catharines, Ontario with a Master of Science degree in Geological Sciences, 1979.
- 2. I am a Fellow of the Geological Association of Canada.
- 3. I have practised my profession since 1972.
- 4. I am consulting geologist with Promin Explorations Limited.
- 5. I am the author of the report entitled "Geophysical Report on the Nit Nat Property, Alberni and Victoria Mining Divisions, Vancouver Island, British Columbia", dated: April 10, 1991.

Dated at Coquitlam, B.C. this 10th day of April, 1991.

Respectfully submitted,

Craig W. Payne M.Sc. FGAC

#### REFERENCES

Boyle, R.W., 1979. The Geochemistry of Gold and its Deposits; GSC Bulletin 280.

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Muller, J.E. et al, 1981. Geology and Mineral Deposits of Nootka Sound Map-Area, Vancouver Island, British Columbia; GSC, Paper 80-16.

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# APPENDIX I GEOPHYSICAL REPORT

## MAGNETOMETER AND VLF-EM

SURVEY

ON THE

NIT NAT PROPERTY

FOR

PROMIN EXPLORATIONS LTD.

SURVEY BY

SJ GEOPHYSICS LTD

VICTORIA M.D., B.C.

N.T.S. 92C/15

MAY 1990

Report By Syd Visser SJ Geophysics Ltd.

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## INTRODUCTION

A magnetometer and VLF-EM survey was completed by SJ Geophysics Ltd. personal at the request of Craig Payne, for Promin Explorations LTD., on the Nit Nat property. The Nit Nat property is located near Cowichan, on Vancouver Island in the Victoria M.D., B.C. (N.T.S. 92C/15).

The purpose of the survey was to search for massive sulphides, to aid in the location of conductive shear or fault zones which may have associated mineralization, and to aid in the mapping of local geology.

## INSTRUMENTATION AND FIELD WORK

The field work was performed by Rolf Krawinkel, a geophysicist with SJ Geophysics LTD. during the period of May 14, 1990 to May 28, 1990 which includes 10 production days, 2 standby days and 2 demob days. The standby days were due to shutdown of the Seattle VLF transmitter station. A total of approximately 27 Km, with stations every 12.5M along flagged lines, were surveyed by magnetometer and VLF-EM.

A EDA Omni Plus combined proton precession magnetometer and VLF-EM was used for a field instrument along with a EDA Omni IV proton precession magnetometer as a base station.

Most of the lines were surveyed using the signal from two separate VLF stations (Seattle 24.8 KHz, NLK, Cutler 24.0 KHz, NPM), Both station were used because of the direction of the incoming electromagnetic field to the direction of the grid and possible structures although the poor direction of Cutler makes it difficult to interpret. The signal from Seattle is located at an azimuth of approximately 105 degrees therefore making it ideal for northwest trending structures and the signal from Cutler is located at an azimuth of approximately 90 degrees which is ideal for east trending structures although the line

direction is poor for this trend. The direction of the VLF-EM survey is positive to the north.

All the data was entered into a field computer in the evening and field plots generated on a dot matrix printer. The data was later plotted on translucent bond paper, using a 36 inch pen plotter.

#### DATA PRESENTATION

The Magnetic data, VLF-EM data, filtered VLF-EM data (using a standard four point Fraser filter), and compilation of the magnetic and VLF-EM data are presented on the following plates:

- Plate G1A Magnetometer Survey
  Total Field Profiles
- Plate G1B Magnetometer Survey Contoured Total Field
- Plate G2A VLF-EM Survey (Seattle)
  Dip Angle and Quadrature
- Plate G2B VLF-EM Survey (Seattle)
  Filtered Dip and Total Field
- Plate G2C VLF-EM Survey (Seattle)
  Contoured Filtered Dip Angle
- Plate G3A VLF-EM Survey (Cutler)
  Dip Angle and Quadrature
- Plate G4 Magnetometer and VLF-EM Compilation Map

The VLF-EM data from Cutler was not filtered due to some problems with the sign and poor angle of the station with the line direction. It is believed that part of the sign problem could be due to cross-talk from the strong Seattle station. The frequencies of the two stations are only separated by 0.8 KHz.

## INTERPRETATION AND DISCUSSION

The outline of the magnetic anomalies on the west part of the grid, the magnetic contact between the western and eastern rock units, the axis of VLF-EM anomalies and cross structures inferred from the magnetic and VLF-EM data are shown on Plate G4.

A contact between the volcanics and sedimentary rocks is well defined by the magnetic anomaly, located near the center of the grid at approximately 9600E and striking grid north along the length of the grid. The magnetic response east of this contact is typical of layered volcanic sequences or an intrusive with highly variable magnetite content. West of the contact the magnetic response is generally very constant which is typical of sedimentary rocks. The local magnetic anomalies seen in this area are likely due to local volcanic rock, small magnetite rich intrusive or possibly magnetite rich scarns. The northeast striking cross structure in the south eastern part of the grid is associated with a magnetic low (lineation) and therefore is likely a fault or shear zone where the magnetite has been destroyed. This would be an interesting target area to explore further. The VLF-EM survey would likely not locate a mineralized structure striking at this angle to the grid and the VLF-EM stations.

The majority of the VLF-EM anomalies are structural related (conductivity boundaries and weakly conductive fault or shear zones) and likely not directly due to mineralization. The exception to this are the two parallel short strike length anomalies striking north from line 9700N at approximately 10000E to line 100000N at approximately 9950E. This EM anomaly is located in a area of low magnetic variation within an otherwise highly variable magnetic region. This may be due to a change in geology in this small region or the breakdown of magnetite due to alteration. The weaker anomalies located at approximately 9600E on line

11000N and between lines 9600N and 9900N at approximately 9200E may also be due to mineralization. The very short wavelength EM anomalies noted on the west end of lines 11200N and 11300N, in the data from Cutler, are suspicious and likely due to culture such as logging cables. Because of the angle of the Cutler Tx station to the grid these are likely separate westerly striking short strike length anomalies.

There are two long strike length anomalies that strike across the entire length of the grid at approximately 9600E. The westerly EM anomalies of these two anomalies is like due to the contact between the volcanics to the east and the sedimentary rocks to the west as indicated by the magnetics. The western EM anomaly is likely a weakly conductive fault zone. This fault zone correlates with a magnetic low (lineation). The remainder of the EM anomalies are likely due to faults or shear zones and are usually coincidental with magnetic lows or lineation. Although none of these EM anomalies appear to be due to mineralization they should be correlated to any geochemical and geological information and prospected for any indication of mineralization. coincidental weak VLF-EM anomalies with the magnetic lineation are a good target area for mineralization which may not be massive enough to be detectable by EM methods.

## CONCLUSION

The magnetic and the VLF-EM data both indicate a contact near the center of the grid, between sediments to the west and volcanic rocks to the east, striking the length of the grid. There is a major fault zone located to the east of this contact also striking across the full length of the grid.

A good conductor is located on the south eastern part of the grid, a weaker anomaly on line 10900N between the contact and the major fault and a weaker anomaly on the eastern edge of a magnetic anomaly in the south western part of the grid. These anomalies may be due to sulfide mineralization.

The remainder of the weak EM anomalies are likely due to weakly conductive shear or fault zones or resistivity contrasts across a contact. These weak EM anomalies are interesting areas for prospecting since most of them coincide with magnetic lineations or contacts and therefore could possible be weakly mineralized.

The cross structures are inferred from magnetic lineations or breaks in the EM anomalies. The most interesting cross structure, inferrers from a magnetic low, is the north easterly striking structure in the southeastern part of the grid. If this structure is a conductor it would not be noticeable with the EM survey because of its strike direction.

The geophysical data should be closely correlated with any geological and geochemical data to determine if there is a possibility for mineralization along any of these structures.

Syd Visser F.G.A.C. Geophysicist

SJ Geophysics Ltd.

APPENDIX I

## STATEMENT OF QUALIFICATIONS

- I, Syd J. Visser, of 8081 112th Street, Delta, British Columbia, hereby certify that,
- I am a graduate from the University of British 1} Columbia, 1981, where I obtained a B.Sc. (Hon.) Degree in Geology and Geophysics.
- I am a graduate from Haileybury School of Mines, 1971. 2)
- I have been engaged in mining exploration since 1968. 3)
- I am a Fellow of the Geological Association of Canada. 4)
- This report is based on field work carried out under 5) my direction by personal of SJ Geophysics Ltd. in May 1990.

This report is meant as an append to a property 6) report

> Syd J Visser, B.Sc., F.G.A.C. Geophysicist



# Province of British Columbia Ministry of Energy, Mines and Petroleum Resources MINERAL RESOURCES DIVISION — TITLES BRANCH

## Mineral Tenure Act Sections 25, 26 & 27

STATEMENT OF WORK - CASH PAYMENT

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	SUB-RECORDER RECEIVED	
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## Province of British Columbia Ministry of Energy, Mines and Petroleum Resources

MINERAL RESOURCES DIVISION - TITLES BRANCH

DOCUMENT No. OFFICE USE ONLY

## **Mineral Tenure Act** SECTION 28

## **NOTICE TO GROUP**

INDICATE TYPE OF TITLE	MINEAAL
	(Mineral or Placer)*

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SUB-RECORDER	İ
RECEIVED	
DEC 31 1990	1
M.R. #\$	_
VANCOUVER, B.C.	

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1, Clais W Payne (Name) 2197 Park Cres.	Agent for Randy Hogg (Name)	; Danax Andrewse	
(Address) COQUITLAM, B.C. U3767/	(Addrasa)	; Kanloofs, B.C vzc4	
461-4138 UST 6T1	372-0090	828-236 <del>7</del>	
(Telephone) (Postal Code) Valid subsisting FMC No. 290 985	(Telephone) Valid subsisting FMC No. 29	(Postal Code) 5 /04 , 285 69/	
FMC Code Paya CW	FMC Code Hogg RB	_	
request that the following mineral titles be grouped und	ler group name		
Mining Division VICTORIA + AIBERNIC	Map No. 92 C . 088 ;	926.098	

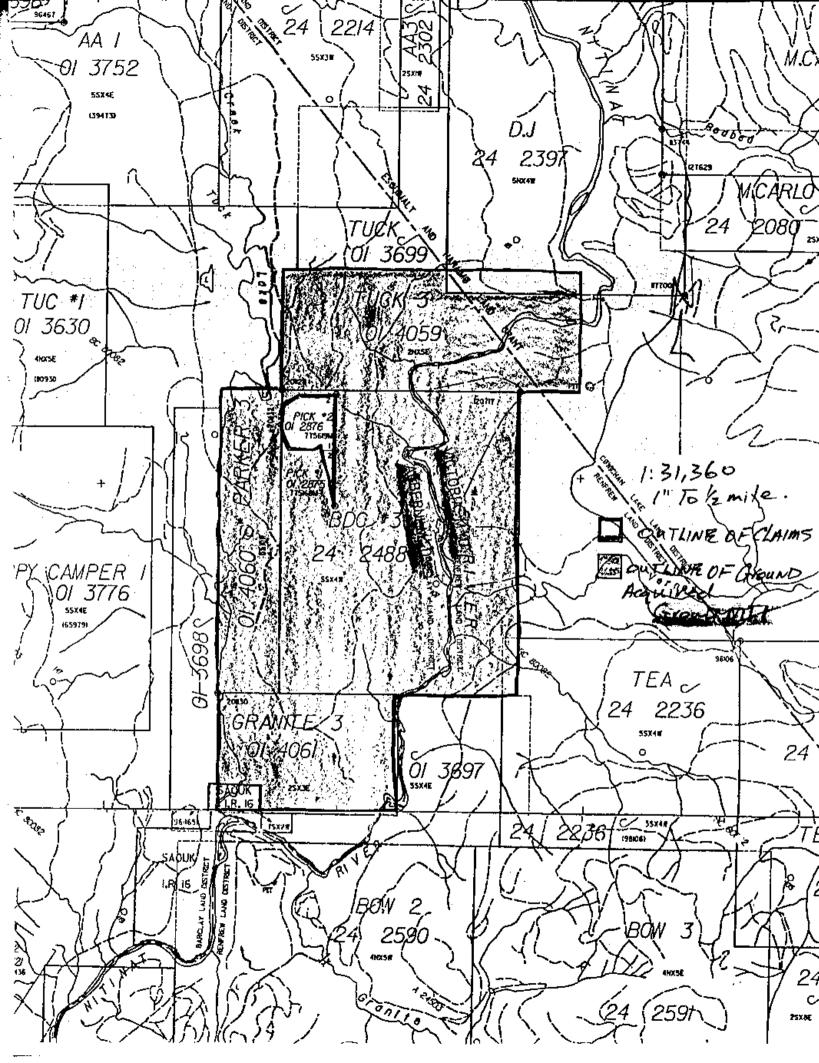
Name of Claim	No. of Units	Title Number
BDC 3 VIC	20	2488
Parker 3 ALB	5	4060
Tuck 3 ALB	10	4059
Granete 3 Alb.	6	406/
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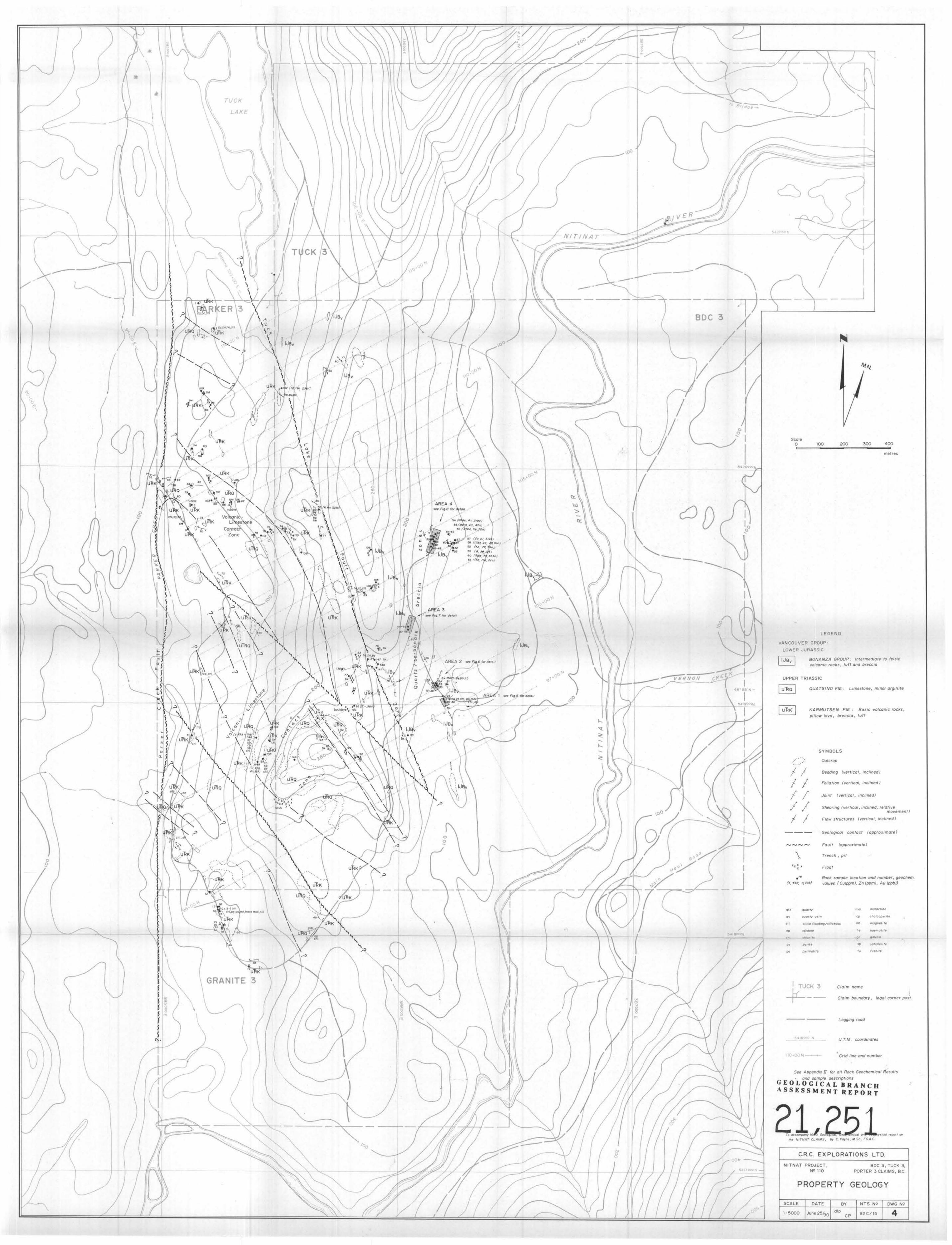
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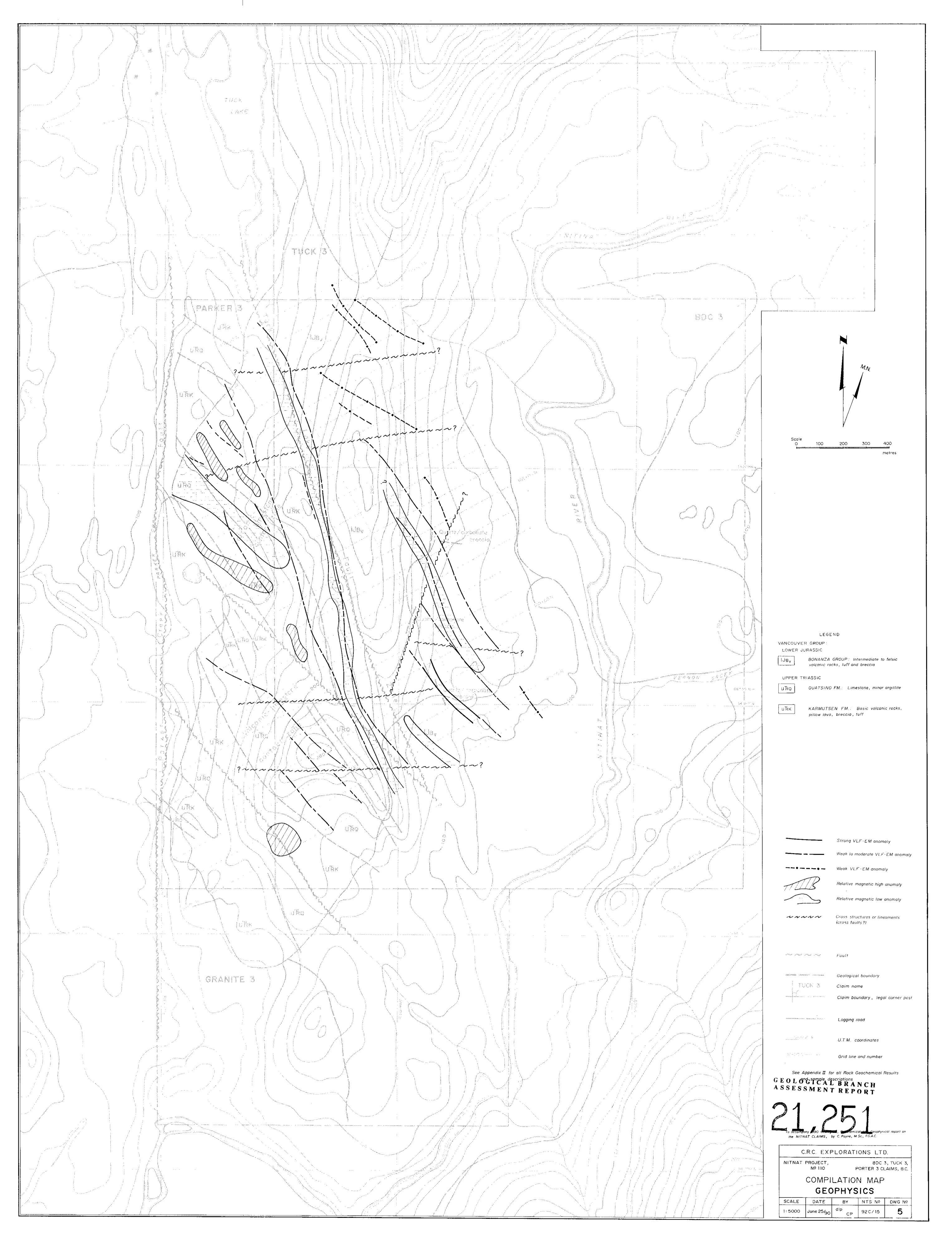
\*Note: Mineral claim(s) and lease(s) cannot be grouped with placer claims and leases

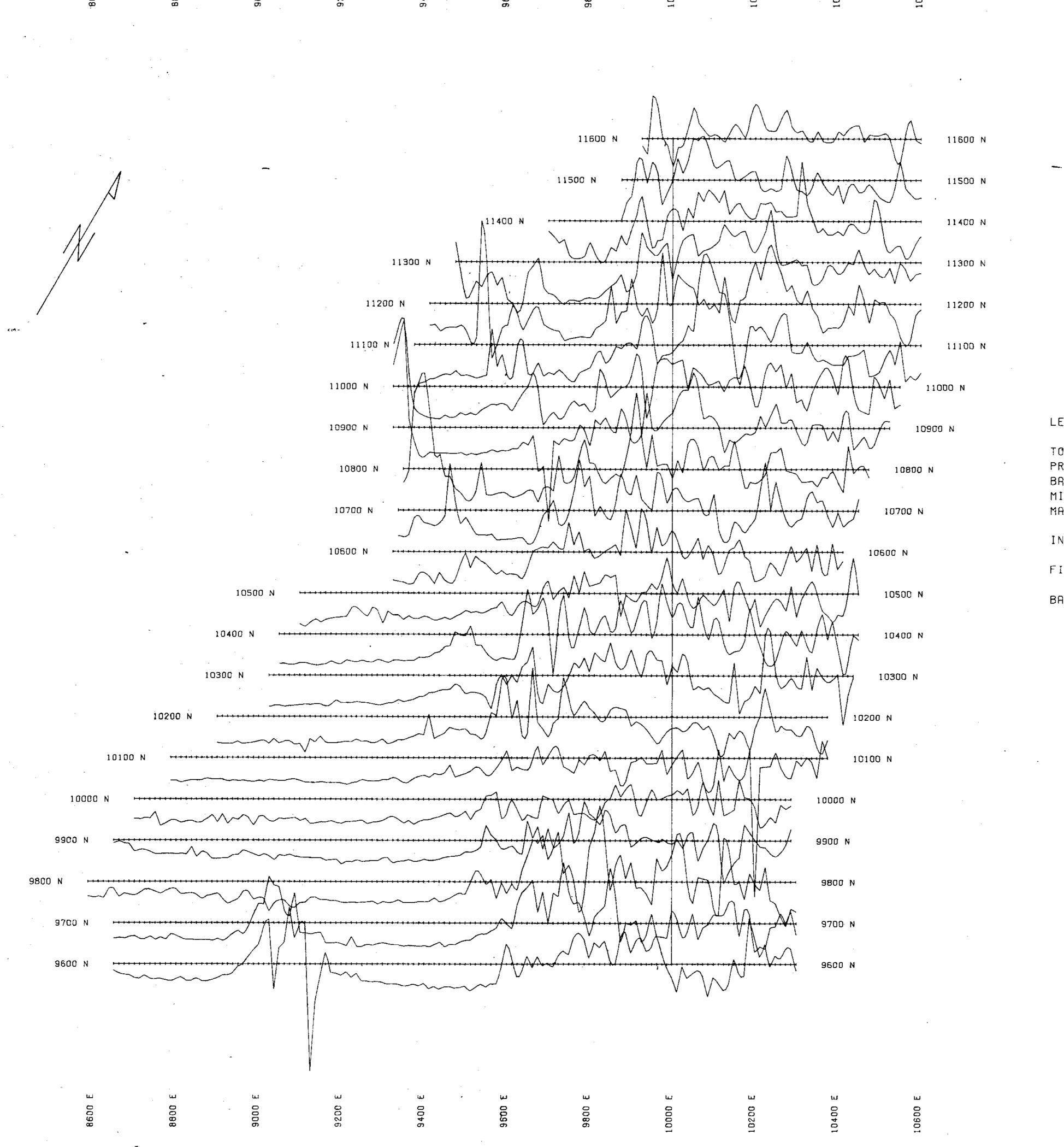
<sup>1</sup>Note: Agent must be authorized in writing

MTL 114 REV. 88/07 M28-2146









## LEGEND

TOTAL FIELD SOLID LINES 300NT/CM PROFILE SCALE: 300 NT/CM BRSE VALUE: 56000 NT MINIMUM VALUE: 53896 NT MAXIMUM VALUE: 57574 NT

## INSTRUMENTATION:

FIELD UNIT: EDA OMNI PLUS PROTON
PRECESSION MAGNETOMETER
BASE STATION: EDA OMNI IV PROTON
PRECESSION MAGNETOMETER

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,251

PROMIN EXPLORATIONS LTD.

NIT NAT PROPERTY

MAGNETOMETER SURVEY

TOTAL FIELD PROFILES

PROJECT 110

VICTORIA. M.D.

N.T.S. 92C/15

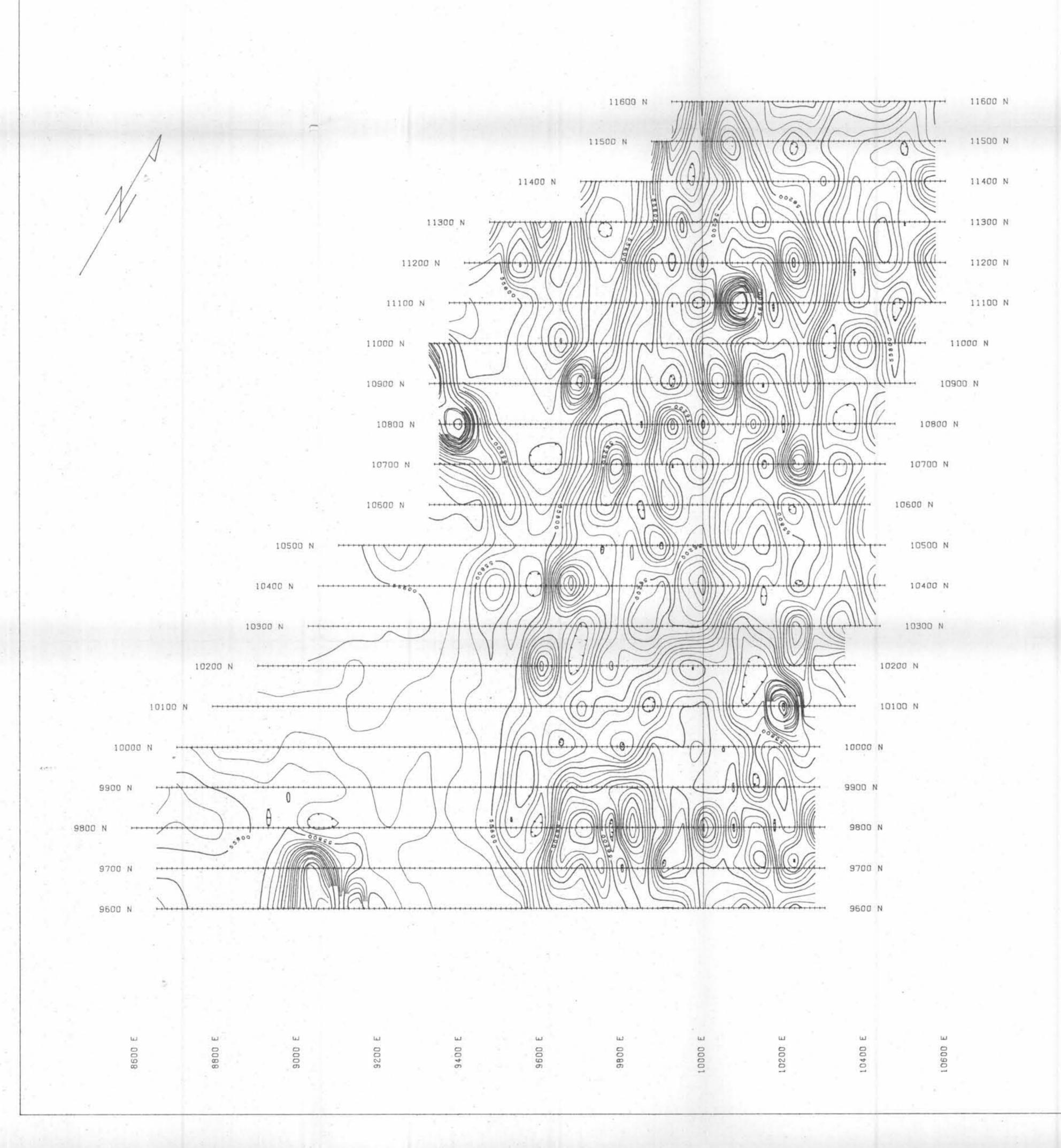
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SCALE IN METRES

MAY 1990

PLATE G1A

SJ GEOPHYSICS LTD.



# LEGEND

CONTOUR INTERVAL: 50 NT
POSTED CONTOUR INTERVAL: 200NT
MINIMUM CONTOUR: 54000 NT
MAXIMUM CONTOUR: 57550 NT

# INSTRUMENTATION:

PRECESSION MAGNETOMETER
BASE STATION: EDA OMNI IV PROTON
PRECESSION MAGNETOMETER

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,251

PROMIN EXPLORATIONS LTD.

NIT NAT PROPERTY

MAGNETOMETER SURVEY

CONTOURED TOTAL FIELD

PROJECT 110

VICTORIA, M.D. N.T.S. 92C/15

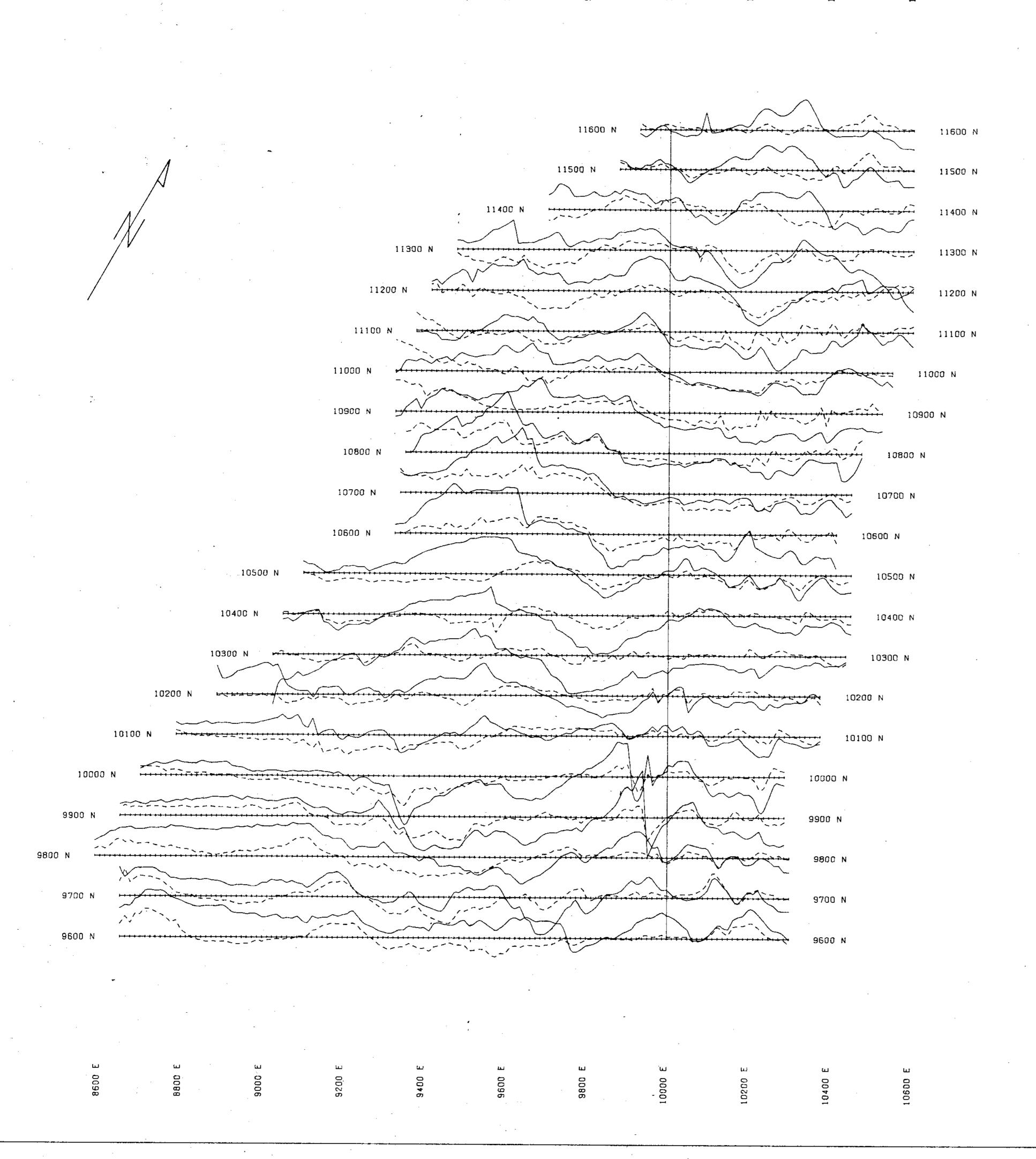
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SCALE IN METRES

MAY 1990 PLATE G1B

SJ GEOPHYSICS LTD.



LEGEND

PROFILES POSITIVE UP

DIP ANGLE - SOLID LINE

PROFILE SCALE: 10% / CM

BASE VALUE: 0%

QUADRATURE - DASHED LINE

PROFILE SCALE: 10% / CM

BASE VALUE: 0%

STATION: JIM CREEK(SEATTLE.24.8 KHZ)

INSTRUMENTATION: EDA OMNI PLUS, VLF-EM SYSTEM

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,251

PROMIN EXPLORATIONS LTD.

NIT NAT PROPERTY

VLF-EM SURVEY

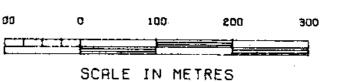
DIP ANGLE AND QUADRATURE

PROJECT 110

VICTORIA. M.D.

N.T.S. 92C/15

SCALE = 1 : 5000



MAY 1990

PLATE G2A

SJ GEOPHYSICS LTD.

