# BRITISH COLUMBIA PROSPECTORS ASSISTANCE PROGRAM PROSPECTING REPORT FORM (continued)

#### **B. TECHNICAL REPORT**

- One technical report to be completed for each project area.
- Refer to Program Requirements/Regulations, section 15, 16 and 17.
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

Name	HODGSON Reference Number P71
Project Locat	PN/COMMODITIES a (as listed in Part A)  Project Area NTS  ROAD ACCESS TO CLAIMS: THEN BY FOOT:
—— Main	modities Searched For
Know	neral Occurrences in Project Area SEPTEMBER OCCURRENCES 92 K 86
1 2 3 4 5 6	PERFORMED  ventional Prospecting (area) LOCAL - MAX 2 HECTARES E. of SEPTEMBER  logical Mapping (hectares/scale)
SIGN Comn	ANT RESULTS es GOLD - 4 MAJOR GEOPHYSKAL TARGETS Claim Name  Flevation 3-400 Fl. GONCX -
Locat	how on map) Lat See was - Long Elevation 3-400 ft. approx - sample type
Descri	of mineralization, host rocks, anomalies <u>Skarn</u> and hydrothermal afteration inevalized Quartz veins on limestone / volcanic contact- pyrite, pyrrotite, chalcopyrite, bornite, pyrolusite and gold- apld values up to 4 02 per ton-

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the Erendern of Information Act.

MEI

# BRITISH COLUMBIA PROSPECTORS ASSISTANCE PROGRAM PROSPECTING REPORT FORM (continued)

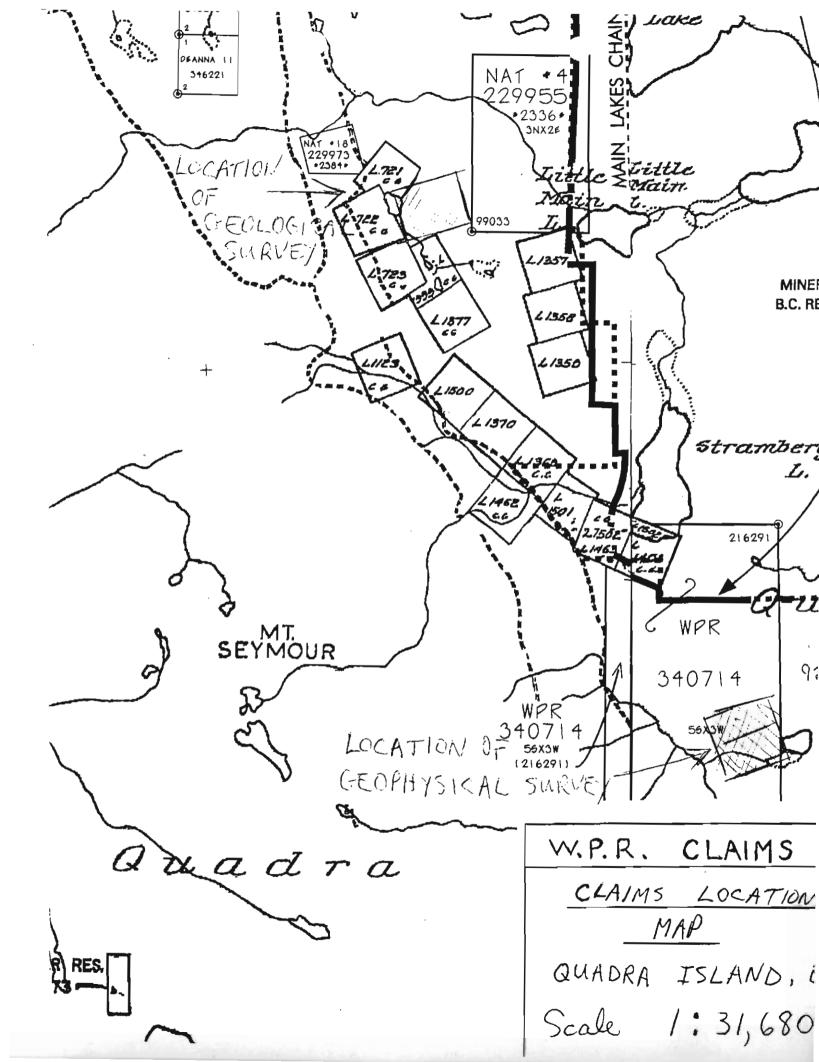
#### **B. TECHNICAL REPORT**

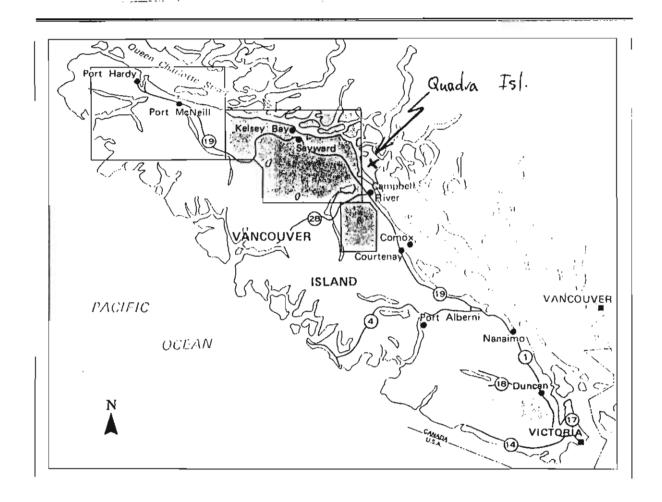
Information Act.

- One technical report to be completed for each project area.
- Refer to Program Requirements/Regulations, section 15, 16 and 17.
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

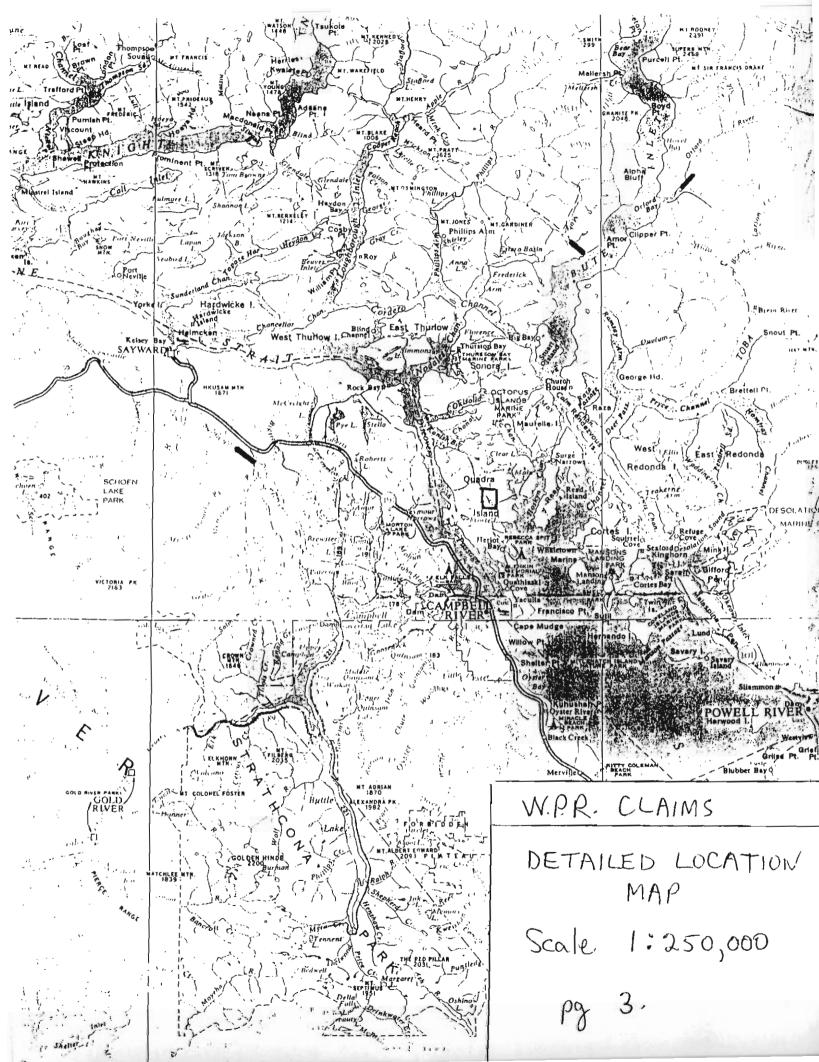
Project Area (as listed in Part A) E. of SAXON LAKE MINFILE Location of Project Area NTS 92 k 2 Lat 50° Description of Location and Access ROAD ACCESS TO GRANTHEN BY FOOT.  Main Commodities Searched For GOLD  Known Mineral Occurrences in Project Area TOY 2 - 92 K 1	THE GARC KONDY
Known Mineral Occurrences in Project Area	07
WORK PERFORMED	07
1. Conventional Prospecting (area)  2. Geological Mapping (hectares/scale) 30 HECTARES - 17  3. Geochemical (type and no. of samples) LINES SPACED 5  4. Geophysical (type and line km)  5. Physical Work (type and amount)  6. Drilling (no., holes, size, depth in m, total m)  7. Other (specify)	o meters.
SIGNIFICANT RESULTS Commodities Claim Nam	ne
Location (show on map) Lat Steen Long Steen Mags-	Elevation 3-400-A. opp
Description of mineralization, host rocks, anomalies  —TRENCHES LOCATED 25 meters  SAXON LAKE  —TRENCHES LOCATED 250 meters	EAST OF N.E. of SAXON LK.
Supporting data must be submitted with this TECHNICAL REPORT	

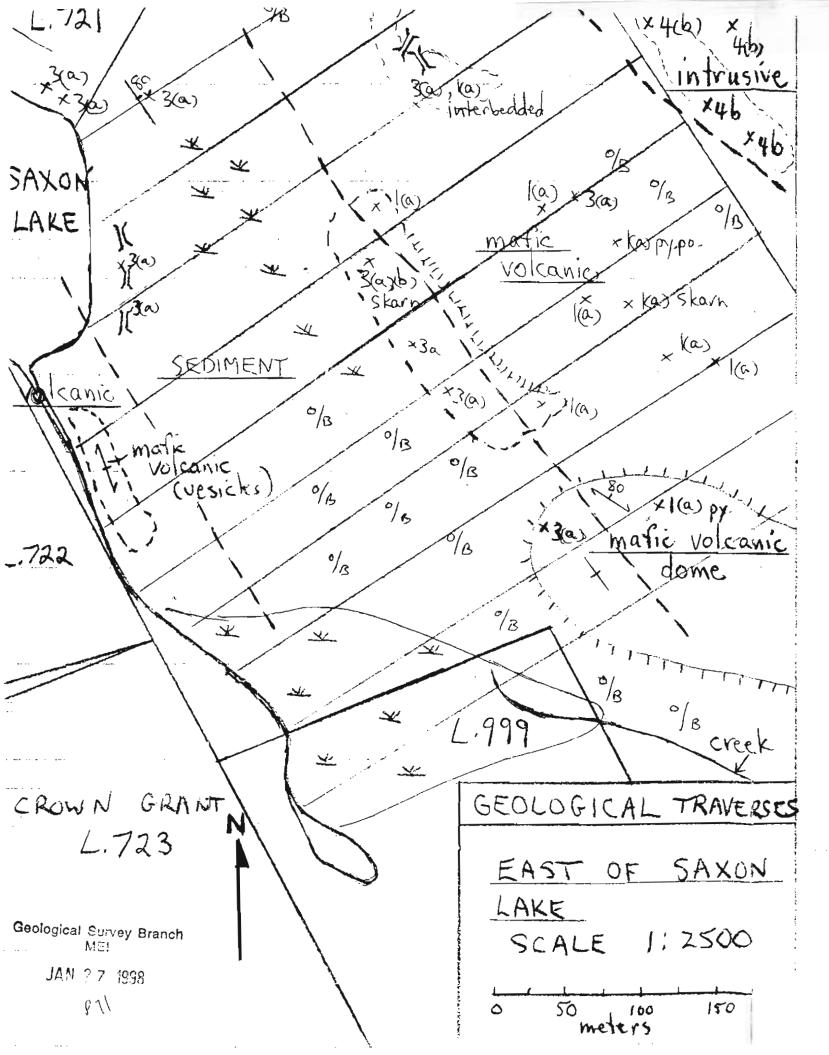
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W.P.R. CLAIMS LOCATION MAP





### LITHOLOGY

## UPPER KARMUTSEN FORMATION

- 1) MAFIC VOLCANIC
  - (a) basalt
  - (b) andesite
- 2) FELSIC VOLCANIC
  - (9) ryolite
  - (b) dacite
- 3) SEDIMENT
  - (a) limestone
  - (b) sandstone (quartzite)

## COASTAL PLUTONIC COMPLEX

- 4 (a) Granite
  - (b) diorite

## MINERALIZATION, ALTERATION

sk skarn

gar garnet

mag magnetite

po pyrrhotite

py pyvite

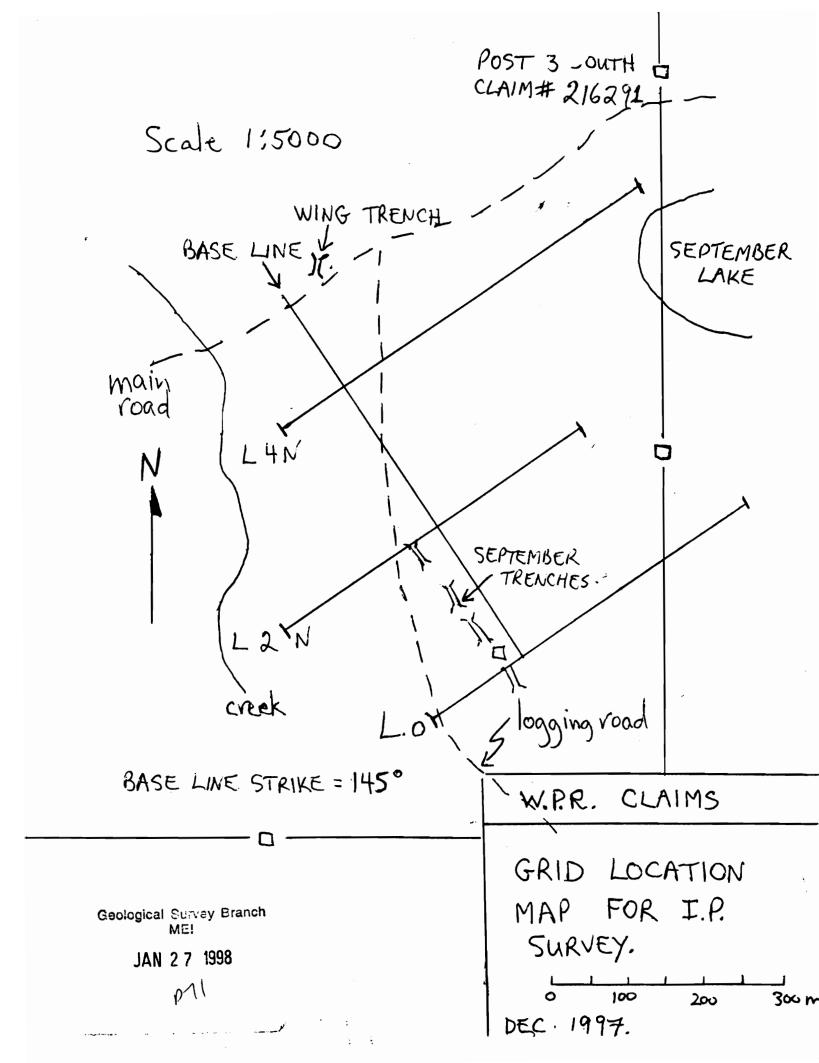
cpy chalcopyrite

sil silicified

ser serecite

. geological contact

() outcrop



#### PACIFIC GEOPHYSICAL LIMITED

#### REPORT ON THE

INDUCED POLARIZATION AND RESISTIVITY SURVEY

ON THE

WPR CLAIMS

NANAIMO MINING DIVISION, BRITISH COLUMBIA

**FOR** 

RAND HODGSON, B.Sc. / WHITE PINE RESOURCES

LATITUDE 50 Deg.,10'N, LONGITUDE 125 Deg.,15'W

NTS: 92K/2

PROPERTY OPERATOR: RAND HODGSON

 $\mathbf{BY}$ 

PAUL A. CARTWRIGHT, P.Geo.

Geophysicist

DATED: DECEMBER 31, 1997

#### SUMMARY

Induced Polarization(IP) and resistivity surveying has been completed on the WPR Claims, Nanaimo M.D., B.C., on behalf of Rand Hodgson and White Pine Resources. A number of anomalous IP Zones, which could be related to economic gold mineralization, are outlined in the data. Physical testing by drilling and/or trenching is recommended to test the sources of these anomalous IP Zones. Additional geophysical surveying has also been recommended to explore the remainder of the property.

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PART	В	ILLUSTRATIONS								
	Indu	ced Polarization Plan Map		•	•	. F	ig	•	1	
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#### 1. INTRODUCTION

An Induced Polarization(IP) and resistivity survey has been completed on the WPR Claims, Nanaimo M.D., B.C., on behalf of Rand Hodgson/White Pine Resources by Pacific Geophysical Ltd.

The geophysical field operations commenced on December 16, 1997, and were finished on December 18, 1997, under the direction of Paul Cartwright, P. Geo., Senior Geophysicist. A total of 1.4125 l.km. of IP and resistivity data were acquired.

#### 2. INSTRUMENT SPECIFICATIONS

An EDA Model IP-6 six channel time domain IP/resistivity receiver using "mode 3 (Td=80ms,M1-M10=4X80ms,3X160ms,3X320ms)", together with a Phoenix Model IPT-1 transmitter and 1.0 kw motorgenerator, that produced a one second on/one second off square wave signal of alternating polarity, were used to make all the IP and resistivity measurements. IP effects were recorded as chargeability in milliseconds while apparent resistivity values were normalized in units of ohm-meters. Dipole-dipole array was utilized to make all of the surface measurements, using an interelectrode distance of 12.5 metres recording five separations, except in the case of Line 0, where 4 separations were recorded.

#### 3. PRESENTATION OF DATA

The induced polarization and resistivity results are shown on the following data plots in pseudo-section format.

<u>Line</u> <u>Electrode Int.</u> <u>Reading Int.</u>(outermost electrodes)

00	12.5 metres	162.5W-250E
200N	12.5 metres	200W-225E
400N	12.5 metres	75W-500E

The following plan map is also included with this report:

Fig.No.1 - 1:5000 scale induced polarization plan map

The IP anomalies are indicated by bars in the manner shown on the Fig.No. 1 plan map legend, as well as on the pseudo-sections. These bars represent the surface projections of the anomalous responses interpreted from the transmitter and receiver electrode locations when the anomalous values were measured, and should not be taken as representing the exact limits of the causative source(s).

#### 4. DISCUSSION OF RESULTS

The reader is referred to Fig. No.1, the induced polarization plan map, which illustrates the induced polarization interpretation. The high background IP and resistivity levels evident over much of the geophysical grid indicate that disseminated metallic mineralization is widespread. However, four zones of increased Induced Polarization (IP) effects have been interpreted in the data recorded on the WPR Claims geophysical grid. These IP zones are discussed in the following paragraphs.

IP Zone A.B.C - These zones are all marked to strike in a northnorthwesterly direction, and are thought to be caused by relatively shallow and narrow zones of increased sulphide content emplaced within the generally well mineralized background rocks. The southern end of IP Zone A is coincident with an old hand dug trench that reportedly exposed gold bearing quartz.

IP Zone D - A somewhat less anomalous, but wider zone is interpreted to be present striking across the northeastern ends of the three grid lines. The eastern margin of IP Zone D is not well defined, particularly in the case of Line 200N, which was truncated by the presence of a small lake. The source of this anomalous IP response is thought to be buried at a depth considerably less than the 12.5 metre dipole length used to make the measurements.

#### 5. CONCLUSIONS AND RECOMMENDATIONS

The present interpretation of the Induced Polarization (IP) and resistivity surveying carried out on the WPR Claims shows four anomalous IP zones, the sources of which may be associated with gold mineralization, as evidenced by the close correlation between IP Zone A and known gold values obtained from a trench.

Therefore, drilling and/or trenching is recommended to initially test the source of IP Zone A. If positive results were to be obtained from this initial test, the other IP Zones should be drilled and/or trenched as well. Additional IP/resistivity surveying is recommended to further evaluate the property.

Pacific Geophyspical Ltd

Paul A. Cartwright

December 31, 1997

#### 6. PERSONNEL

The personnel employed during the data acquisition and reporting stages of the WPR Claims IP/resistivity survey are listed below.

<u>Name</u>	Occupation	<u>Address</u>	<u>Date Employed</u>
P.Cartwrigh	t Geophysicist	4508 W13th Ave., Vancou	ver Dec15-19/97 Dec22-23/97
			Dec30-31/97
I.Jackisch	Geophysicist	424 Somerset St., N. Vanc	ouver Dec15-19/97
D.Helliwell	Geophysicist 4	01-1395 Beach Ave., Vanco	ouver Dec22-23/97
S.Oakley	Geoph. Assis.	Gen. Del. Port Hardy,	B.C. Dec15-19/97
M.Major	Geoph. Assis.	425 E 11th Ave., Vancou	ver Dec15-19/97

PACIFIC GEOPHYSICAL LTD.

Paul A. Cartwri

Dated: December 31, 1997

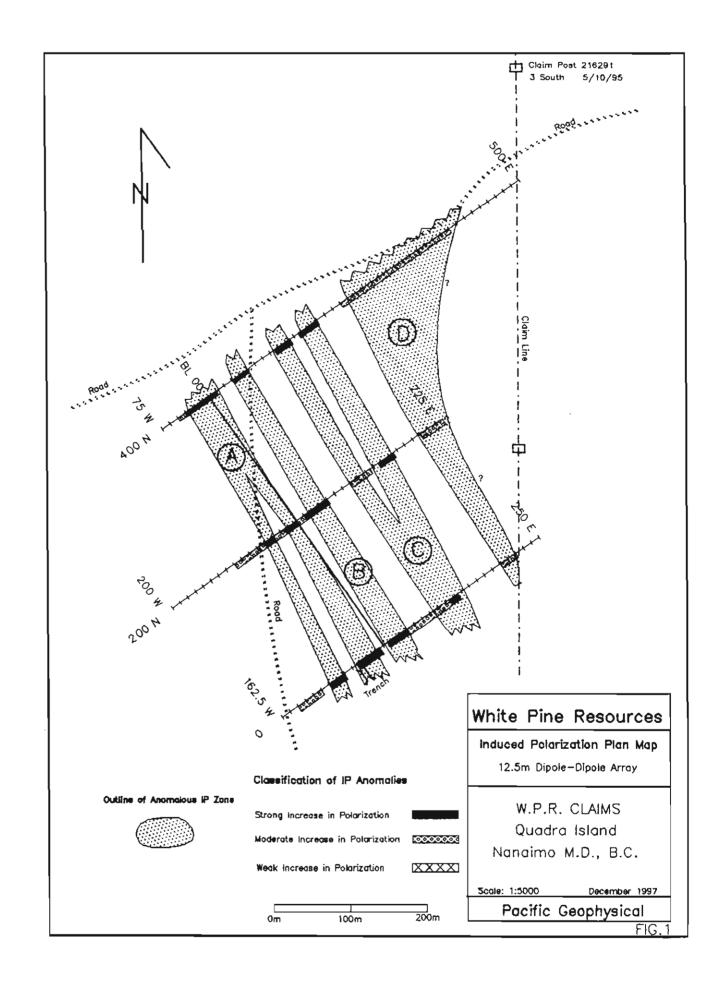
#### 8. CERTIFICATE

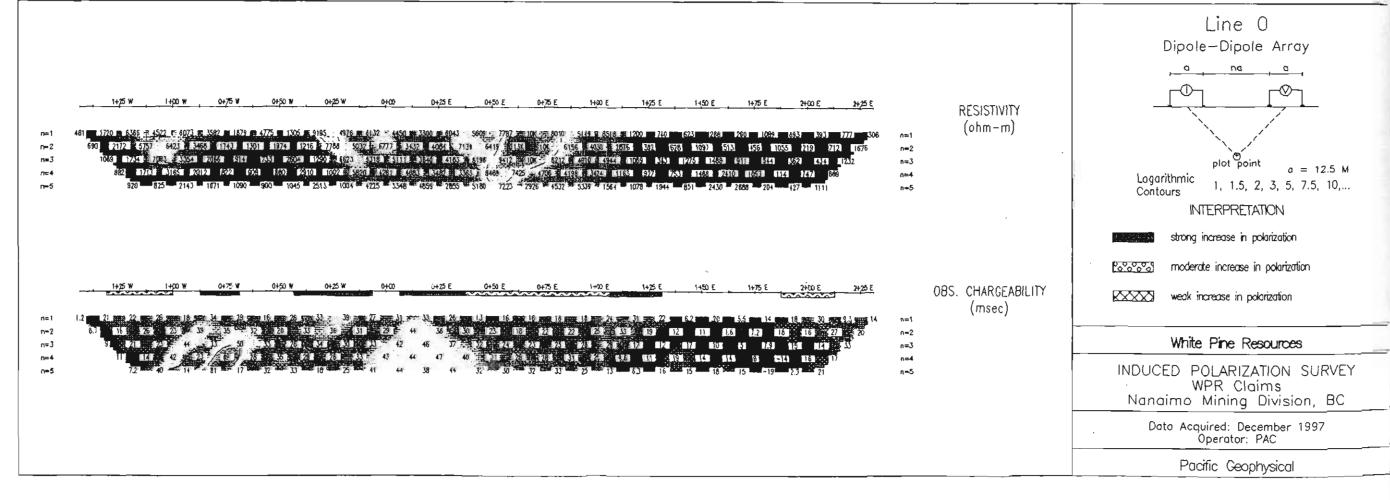
I, Paul A. Cartwright, of the City of Vancouver, Province of British Columbia, do hereby certify:

- I am a geophysicist residing at 4508 West 13th Avenue, Vancouver, British Columbia.
- 2. I am a graduate of the University of British Columbia, with a B.Sc. degree (1970).
- 3. I am a member of the Society of Exploration Geophysicists, and the European Society of Exploration Geophysicists.
- 4. I have been practising my profession for 27 years.
- 5. I am a Professional Geoscientist registered in the Province of British Columbia. I am a Professional Geophysicist registered in the Province of Alberta.

Dated at Vancouver, British Columbia this 31st day of December, 1997.

Paul A. Cartwo sht. P. Geo.

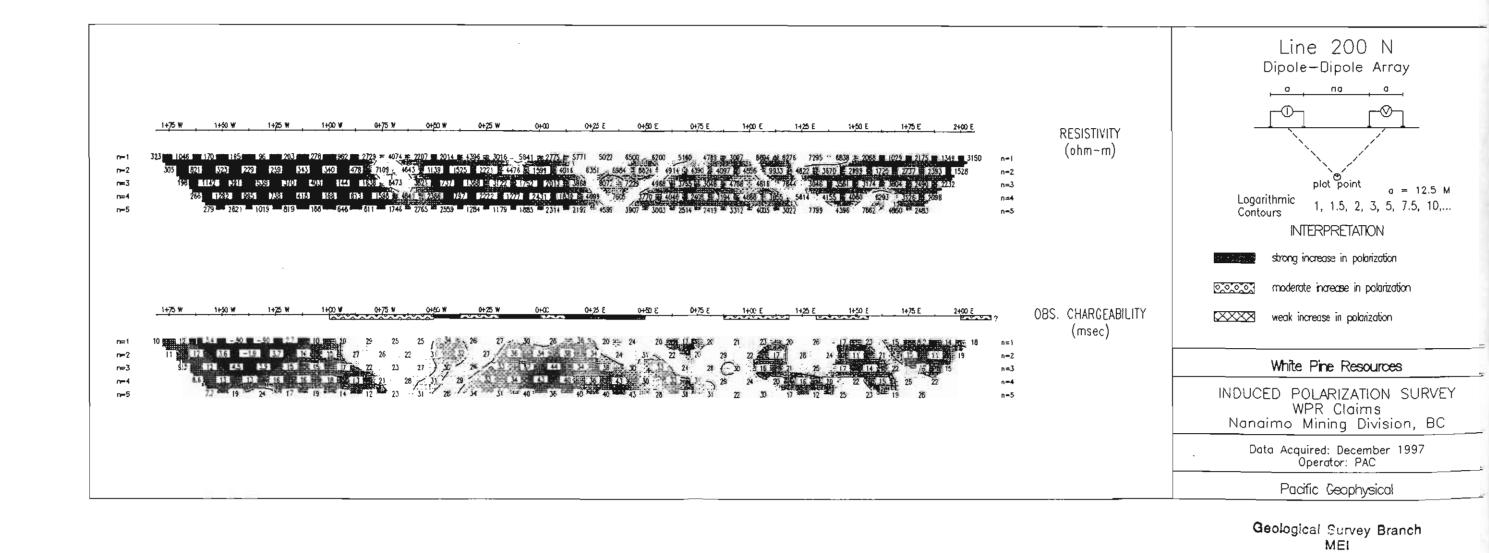




Geological Survey Branch MEI

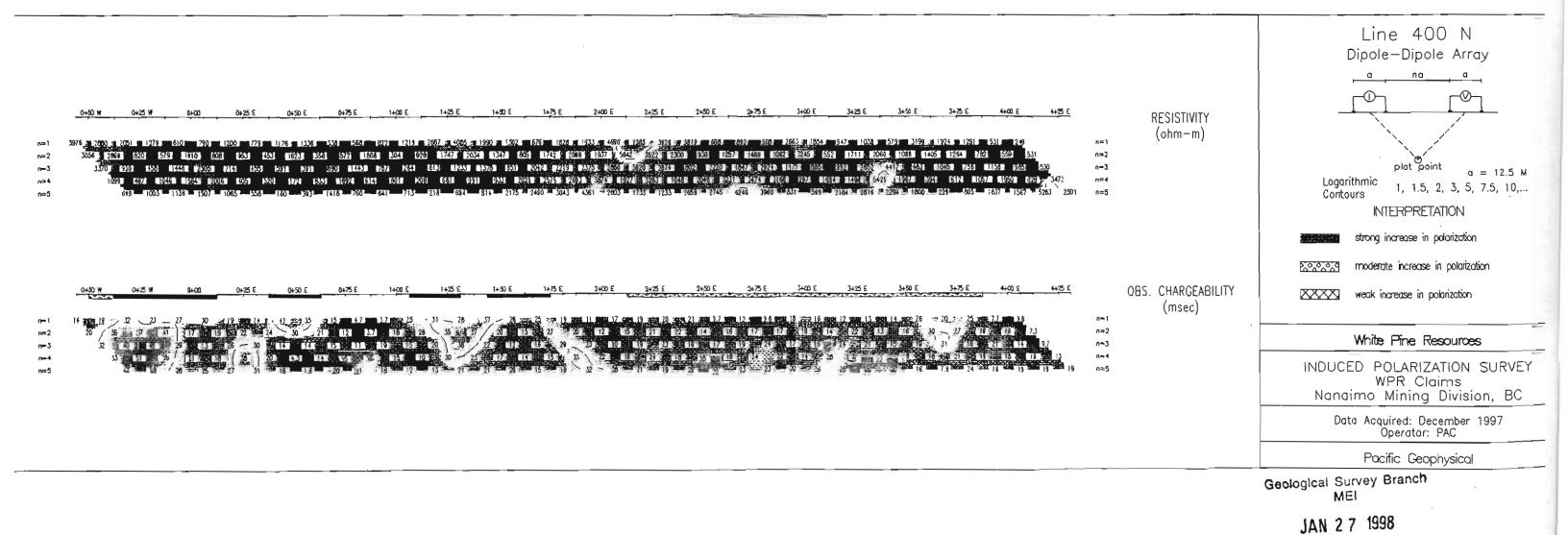
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P11



# PROGRAM PROPOSAL - PART B Location of Proposed Project(s)

Indicate on this map (using an "X") the general location of each of the projects covered by this proposal.



## APPLICATION PART B PROGRAM PROPOSAL

See PROGRAM REQUIREMENTS paragraph 4 for details of information to be submitted. Use extra pages as required.

-> Sel supplementary documents enclose
as well as the following:
Claims location - 145-92K3 E+W.
QUASRA ISLAND
- MEANS OF ACCESS - ROAD FROM CAMPBELL RIVER.
-TAPOET - GOLD IN SKARN
-CLAIMS OWNED BY HOOGSON
- DETAILED PROPOSAL ENCLOSED-
<del></del>



#### Proposed Prospecting Program 1997

The proposed prospecting program for 1997 will be the next step in a systematic approach toward this fertile gold depositional environment. Physical trenching of the known high grade occurrences has failed to increase their dimensions. Since this mineralized zone cannot be discounted, I am proposing to carry out an alternate approach. Based on the recommendations of my 1996 report (enclosed document #9) I propose to carry out detailed geophysics over the delineated gold zone using the induced polarization (I.P.) method.

Because of the cost of the I.P. geophysical method, my strategy will be to do several test traverses over the known occurrences to see if there is any clear response by the I.P. instrument. I have reason to believe that the method will be useful in that there are significant amounts of bedded sulfides in the gold bearing quartz veins.

Also, as part of this program, I propose to traverse and prospect the limestone belt on unstaked ground immediately to the north-west of my W.P.R. claim group. This was the part of my 1996 proposal which I was unable to carry out due to the length of time spent on trenching and sampling inside the claim group.

All old trenches will be located and sampled. A number of old showings in this area are improperly located. Trenches are caved in and in danger of being lost. Known precious metal skarns within the lime belt make this area one of the most promising in the Karmutsen volcanics of the Coast Complex.

"Joy" - 92 K 107

Preliminary sampling returned low gold values only but I wish to return and spend another day prospecting for old trenches I might have missed because of the reported values – 926 g/tonne Au across 30 cm quartz vein (Ministry of Mines Annual Report - 1926) (See also enclosed summary of 1995 prospecting activity in the vicinity of Saxon Lake).

"Trilby" - 92 K 014

P.M.E. Cu skarn 3.5 g/tonne Au, 89 g/tonne Ag, 6% Cu (Ministry of Mines Annual Report, 1916, pg. 345). This showing was not located so another prospecting day is required for a more thorough search.

11

Results and Recommendations

Claim group 1996

The purpose of this program was ocation The purpose of this program was to delineate the rock type/depositional environment and exact location of know high grade gold values associated with the Wing & September occurrence. Preliminary sampling from last years' program by Hodgson indicated values up to 3.15 oz/ton closely associated with chalcopyrite bearing quartz veins.

Detailed prospecting, trenching and sampling in the vicinity of the Wing & September showings have failed to locate the source of these high values. All of the samples greater than 1.0 oz/ton were taken from dump material at the September occurrence. Quartz vein material taken from trench #2 did routinely assay 0.7-1.0 oz/ton (samples 11, 12, 13, 14, 15, 42) but channel sample results failed to correlate with widths with values. The success of the program stems from the identification of a clearly regional gold bearing alteration zone of major dimensions (180 m X 1000 m). Within this zone, mineralized limestone and Karmutsen volcanics are interbedded and control the deposition of enriched quartz veins at the contacts. Stratigraphic control of the quartz veins at limestone/volcanic contacts suggest a syngenetic volcano-sedimentary deposition - possibly the quartz veins are actually re-crystallized siliceous sediments. These bedded quartz veins (cherts??) contain anomalous quantities of pyrite, chalcopyrite, pyrrhotite, arsenopyrite and gold.

Large amounts of overburden has made prospecting difficult. Since this fertile gold depositional environment should not be discounted, alternate methods of exploration must be used.

It is recommended that the identified gold zone deserves the benefit of a detailed geophysical survey using the most sensitive instruments available. e.g. (I.P. induced polarization). Also, a mechanized stripping program would be useful in the immediate vicinity of trench #2 of the September showing.

#### SUPPLEMENTARY DOCUMENTS

1.	Statement	of	Qual	ificati	ions
----	-----------	----	------	---------	------

- 2. Free miner certificate copy
- 3. Copies of previous option agreements negotiated.
- 4. Copies of MINFILES from local occurrences. (unstaked)
- 5. Copy of contract with Sir Sandford Fleming College, School of Natural Resources proof of post-secondary teaching experience.
- 6. Resume
- 7. Location map W.P.R. Claims

92K3 E+W

8. Detailed location maps - current claim maps 9222 - showing present transces.

10. Copy of I.P. estimate from Scott Geophysics Ltd.
(1) - Property map showing proposed IP. traverses.



#### **Statement of Qualifications**

Strange Comments

- I, Rand Hodgson, of 5674 Marlatt Ave., Powell River, B.C. do hereby certify that:
- I hold a Bachelor of Science degree in Geology from the University of Waterloo, Waterloo,
   Ontario, 1977.
- 2.) I have based conclusions and recommendations contained in this report on knowledge gained from eighteen (18) years experience in gold and base metal exploration, and on results of field work on the property.

Rand Hodgson, B.Sc., B.Ed.

RUN DATE: 04/05/96 MINFILE NUMBER: 092K 014 NATIONAL MINERAL INVENTORY: 092K3 A NAME(S): TRILBY Prospect
02203W
50 12 29
125 16 13
Within 1 KM
Located 4 kilometres southeast from Granite Bay and 800 metres east from the logging-railroad (Minister of Mines Annual Report 1916). MINING DIVISION: Nanaimo UTM ZONE: 10 NORTHING: 5564000 EASTING: 338000 LOCATION COMMODITIES: Gold Silver Copper MINERALS MINERALS
SIGNIFICANT: Pyrrhotite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown
ISOTOPIC AGE: Chalcopyrite Hornblende Epidote Hornblende Garnet Skarn -1 : DATING METHOD: Unknown MATERIAL DATED: DEPOSIT CHARACTER: Massive CLASSIFICATION: Skarn TYPE: Cu skarn DIMENSION: 0090 x 0002 STRIKE/DIP: TREND/PLUNGE: Metres HOST ROCK
DOMINANT HOST ROCK: Volcanic STRATIGRAPHIC AGE IGNEOUS/METAMORPHIC/OTHER Vancouver Vancouver Upper Triassic Upper Triassic Mesozoic-Cenozoic Karmutsen Quatsino Coast Plutonic Complex LITHOLOGY: Andesite Granitic Intrusive Limestone Dike HOST ROCK COMMENTS: Skarn mineralization occurs in andesite near granitic contact. Limestone outcrops nearby. GEOLOGICAL SETTING TECTONIC BELT: Insular TERRANE: Wrangell PHYSIOGRAPHIC AREA: Georgia Depression INVENTORY ORE ZONE: DUMP CATEGORY: Assay/analysis SAMPLE TYPE: Grab COMMODITY Silver Gold COMMODITY

Silver
Gold
Copper

REFERENCE: Minister of Mines Annual Report 1916, page 345 CAPSULE GEOLOGY

The area is underlain by Upper Triassic Karmutsen Formation volcanic rocks of the Vancouver Group. These are interbedded with, and overlain to the northeast by a northwest trending belt of Ouatsino Formation limestone (Vancouver Group) known historically as the lime-belt. The Vancouver Group rocks are in fault and/or intrusive contact to the northeast with intrusive rocks of the Juro-Cretaceous Coast Plutonic Complex.

The Triby skarn deposit occurs within a metamorphic zone of grey to green andesitic rock near its contact with granitic intrusive rocks and about 15 metres from a body of limestone. A narrow andesite dyke occurs in the orebody and roughly follows the strike of the ore. The deposit consists of pyrrhotite with associated chalcopyrite occurring in a gangue of quartz, garnetite, epidote and hornblende.

The strike of the orebody is nearly west. The dip varies from 30 degrees south to almost vertical. The orebody is exposed along strike by a series of open cuts for a distance of 90 metres. A 6 metre deep incline shaft sunk on the deposit exposes a 2.4 metre maximum ore thickness.

A grab sample from the dump at the mouth of the shaft assayed 3.43 grams per tonne gold, 89.14 grams per tonne silver and 6.2 per cent copper (Minister of Mines Annual Report 1916).

MINFILE NUMBER: 092K

```
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION MINISTRY OF ENERGY, MINES AND PETROLEUM RESTREAM
RUN DATE: 04/05/96
            MINFILE NUMBER: 092K 107
                                                                                                                                                                                          NATIONAL MINERAL INVENTORY:
                             NAME(S): PLATO, JOY 2
                                                                                                                                                                                                     MINING DIVISION:
                                                                                                                                                                                                                                              Nanaimo
     LOCATION
                                                    Located near the eastern shore of Saxon Lake about 3.5 kilometres southeast of Granite Bay.
                    COMMODITIES: Gold
                                                                                                     Silver
                                                                                                                                                      Zinc
                                                                                                                                                                                                       Copper
MINERA
                                    CANT: Pyrite
IATED: Quartz
I AGE: Unknown
                                                                                                     Pyrrhotite
                                                                                                                                                     Chalcopyrite
  MINERALIZĂTION AĞE
                                                                                                                                                                                             MATERIAL DATED:
                                                                                                     DATING METHOD: Unknown
DEPOSIT
                                              l: Vein
I: Hydrothermal - Epigene
B: Polymetallic veins Ag-Pb-Zn
HOST ROCK
DOMINANT HOST ROCK: Volcanic
STRATIGRAPHIC AGE GROUP VANCOUVER
                                                                                                                                FORMATION
Karmutsen
                                                                                                                                                                                                            IGNEOUS/METAMORPHIC/OTHER
                        LITHOLOGY: Andesite
GEOLOGICAL SETTING
TECTONIC BELT: Insular
TERRANE: Wrangell
                                                                                                                                                                                   PHYSIOGRAPHIC AREA: Georgia Depression
 INVENTORY
                           ORE ZONE: VEIN
                                                                                                                                                                          YEAR: 1926
                                                                                                                                                              Grams per tonne
Grams per tonne
Per cent
                                                      inc
                        COMMENTS: Sample across 30 centimetres.
REFERENCE: Minister of Mines Annual Report 1926
                                                  The area is underlain by Upper Triassic Karmutsen Formation volcanic rocks of the Vancouver Group. These are interbedded with, and overlain to the northeast by a northwest trending belt of Quatsino Formation limestone (Vancouver Group) known historically as the 'limebelt'. The Vancouver Group rocks are in fault and/or intrusive contact to the northeast with intrusive rocks of the Juro-Cretaceous Coast Plutonic Complex.

A pyritic quartz vein from 5 to 45 centimetres wide, strikes 160 degrees and dips 80 degrees. The vein cuts andesite and can be traced for about 100 metres. Two shafts, considerable open cutting, trenching and stripping were done on the prospect prior to 1911. A sample across 30 centimetres assayed 51.43 grams per tonne gold, 10.29 grams per tonne silver and 1 per cent zinc. Another sample over 30 centimetres assayed 926 grams per tonne gold and 103 grams per tonne silver (Minister of Mines Annual Report 1926).

A shear containing pyrite, pyrrhotite and traces of chalcopyrite were examined in 1984 (Assessment Report 12467).
CAPSULE GEOLOGY
```

**BIBLIOGRAPHY** 

EMPR AR \$1926-313 EMPR ASS RPT \$10357, \$12467 EMPR EXPL 1981-270; 1984-236; 1987-C218 EMPR BULL 23: 40 GSC SUM RPT 1913, pp. 53-75 GSC MAP 120A: 480A GSC MAP 120A: 480A GSC OF 463: 480 GSC P 70-1A, pp. 44-49; 71-1A, pp. 31-33; 72-1A, pp. 21-23; 73-1A,

MINFILE NUMBER: 092K 10



