Geophysical (Ronka VLF-EM) Report

on the

PRIDE OF THE WEST

CLAIM GROUP

17,100

for

GEORGE NAKADE

Greenwood Mining Division N.T.S. 82E/2E

February 16, 1988
Vancouver B.C.

Sookochoff Consultants Inc.
Laurence Sookochoff, P.Eng.

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Geophysical (Ronka-EM) Survey

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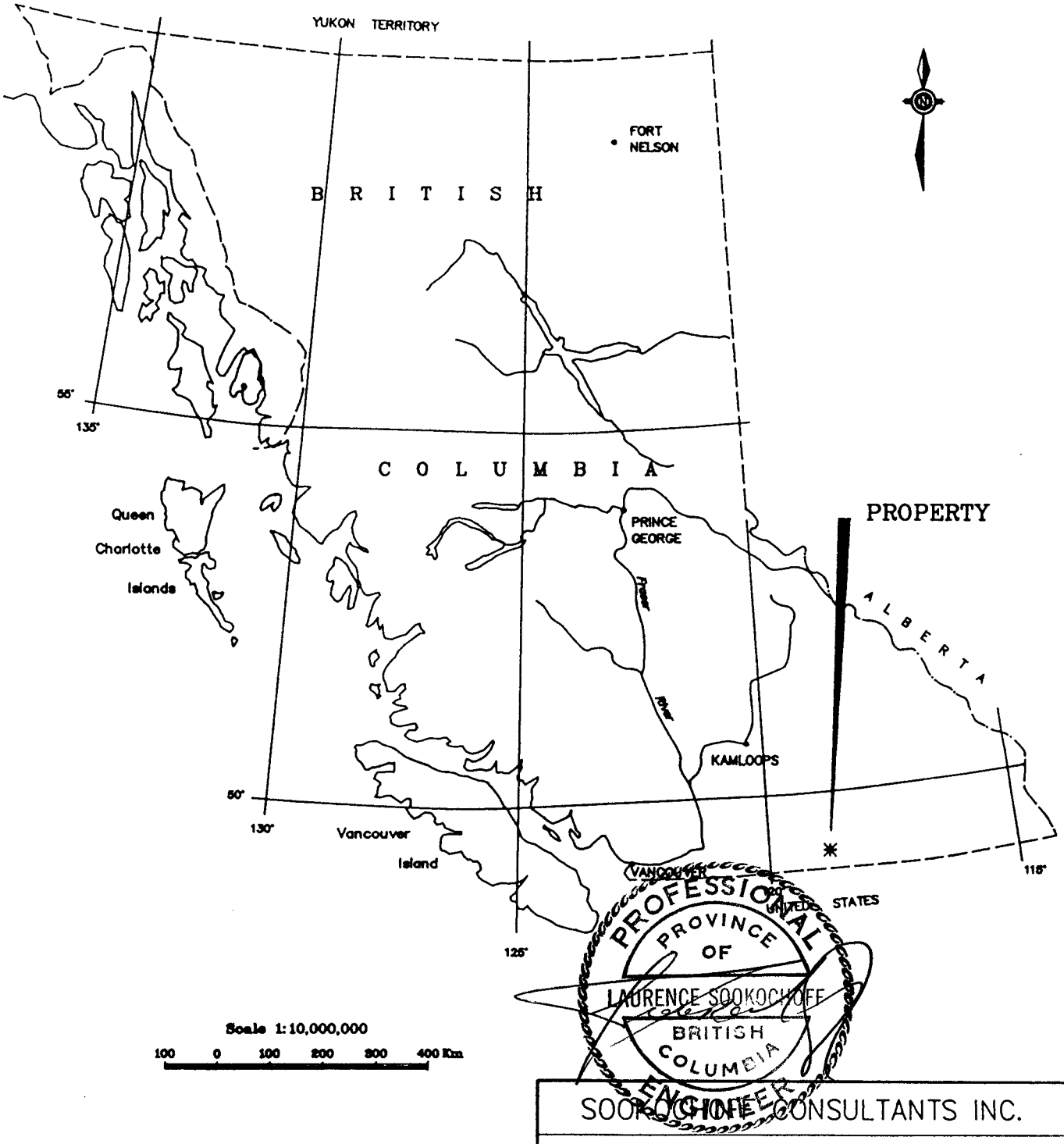
Pride of the West Claim Group

INTRODUCTION

During the 1987 field season a Ronka VLF-EM survey was performed over a portion of the Pride of the West crown granted mineral claim which is included in the four claim Pride of the West claim group.

The purpose of the survey was to locate potential mineral bearing or controlling zones which may contain potentially economic gold-silver-copper values. The structures or zones of mineralization explored for would be mineral bearing northwesterly-trending structures containing gold bearing values associated with massive sulphide and/or quartz zones similar to those that occur on the adjacent Crown and Golden Crown properties.

Information for this report was obtained from work the writer has performed within the Phoenix mining camp since 1975 and more recently from the management of an underground exploration project on the adjacent Golden Crown Consolidated Boundary Exploration Ltd. - Grand Forks Mines Ltd. joint venture.



PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
LAURENCE SOOKOCHOFF

SOOKOCHOFF CONSULTANTS INC.

PRIDE OF THE WEST CLAIM GROUP

GREENWOOD M.D.

LOCATION MAP

Geo-Comp Drawing File: WEST\LOC	DATE: Feb.'88	N.T.S.: 82E/2E	FIGURE: 1

PROPERTY

The property is comprised of four contiguous mineral claims of which three are reverted crown grants and one crown granted. Particulars are as follows.

Claim Name	Lot No.	Record No.	Expiry Date*
Pride of the West	1947	N/A	N/A
Black Bear	1236	2528	December, 1998
Black Bear Fr.	3556	"	"
Bank of England	1235	"	"

The total area of the claim group is 56.42 hectares.

*Upon approval of 10 years assessment work filed on November 18, 1987 for which this report forms a part thereof.

LOCATION AND ACCESS (49 deg. 05 min N, 118 deg. 35 min. W)

The property is located ten air km northwest of Grand Forks and seven air km south of easterly from Greenwood within the historic Phoenix mining camp of southwestern British Columbia.

Access is west from Grand Forks via the No. 3 Highway for 16 km to the Phoenix junction. From the junction to the property, the Phoenix all weather hard surface road is taken for seven km to Phoenix, thence southward for two km along the Lone Star Haulage road which passes through the Black Bear claim. An alternate route is via the Hartford road which also passes through the Black Bear and junctions with the Phoenix road four km from Highway No. 3.

PHYSIOGRAPHY

The property is located within the Midway Range of the Monashee Mountains and the south and covers an area of shallow slopes between Knob Hill to the northwest and topographical high to the southeast. The property area elevation ranges to 1432 meters on the Bank of England claim in the west from 1265 meters on the Pride of the West claim in the east.

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PRIDE OF THE WEST CLAIM GROUP

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CLAIM & INDEX MAP

Geo-Comp Drawing File: west\cla	DATE: Feb.'88	N.T.S.: 82E/2E	FIGURE: 2

WATER AND POWER

Sufficient water for all phases of the exploration program could be available from spring and summer water courses draining northeasterly to Snowshoe Creek. Water would be a rarity on the property during the winter months however, it could be transported from the water filled Snowshoe pit within one km to the north.

A high voltage transmission line passes through the property.

HISTORY

The history of the immediate area dates back to 1891 when large low grade copper deposits were discovered near Phoenix. In 1913 production from the Phoenix area peaked with a virtual shut down on the mines and smelters in 1919. During this period a number of quartz hosted gold-silver deposits were developed not only for the contained precious metal value, but for the silica which was a prime smelter requirement.

On the proximal property, the Winnipeg claim was reported to be the largest gold mine in the Greenwood area producing some 59,000 tons during the period 1900 to 1912. The production was more than all the other gold mines combined in this area. In addition to the extensive development on the Winnipeg claim, similar scale developments with lesser production were made from the Golden Crown claim within 50 meters to the southeast.

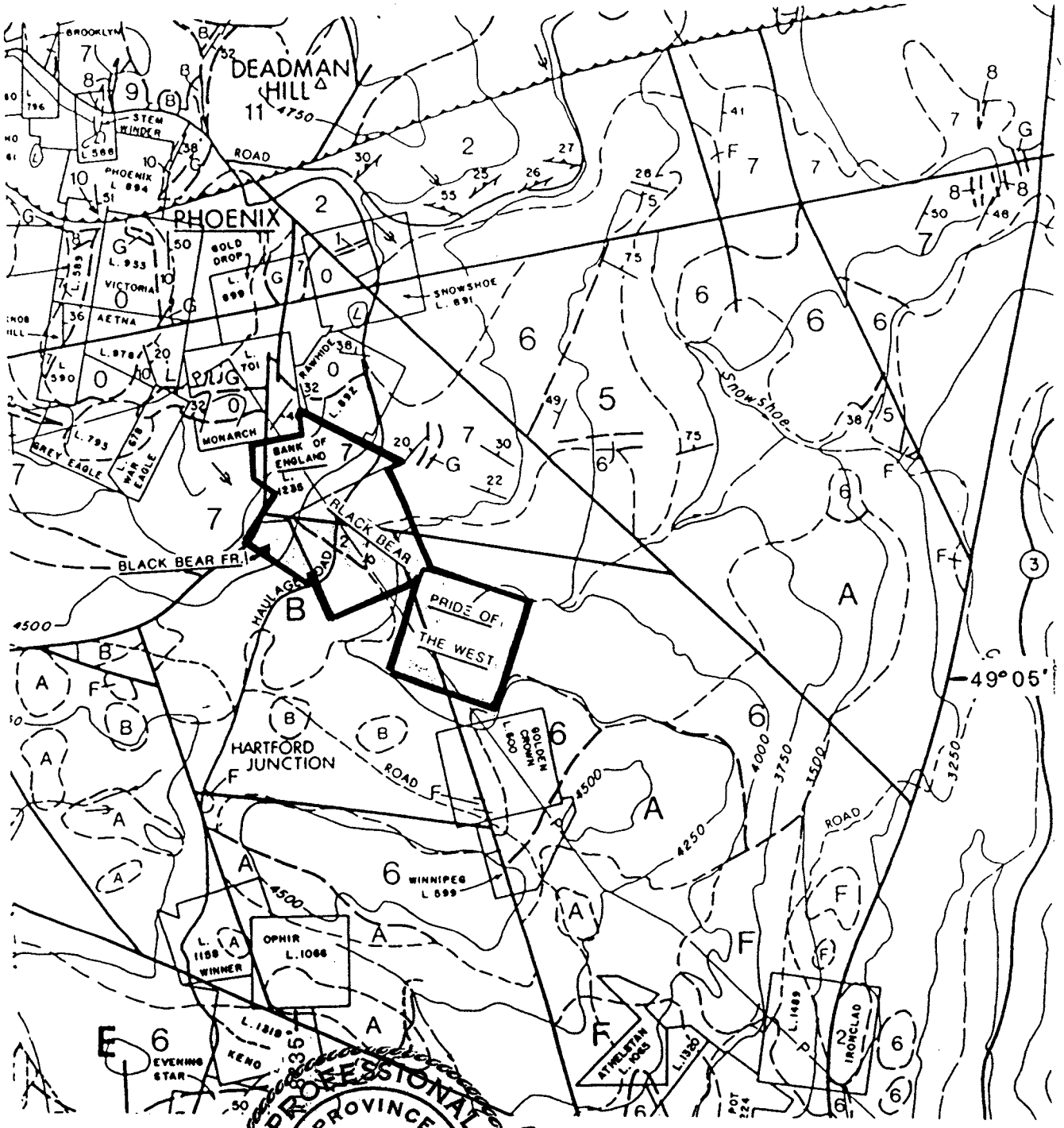
Currently, an underground exploration program is in progress on the Golden Crown claim group. The purpose of the program is reportedly to expose some of the vein systems and to block out additional tonnage to the 75,000 tons of .44 oz/ton Au.

On the Pride of the West claim group numerous pits, shafts and trenches of unknown age are located on the property. These exploratory workings possibly date to the early 1900's when exploration and mining activity in the area was at its peak.

GEOLOGY

In the Greenwood-Phoenix area the oldest rocks of Carboniferous sedimentary strata in association with volcanic flows are intruded by mafic rich and larger felsic igneous bodies. The sedimentary strata include a limestone sequence designated as the Brooklyn Formation and which is host to the Phoenix copper replacement and high grade skarn deposits in the area.

On the proximal Winnipeg-Golden Crown property a major northwesterly trending fault structure is a prime control to at least seven known and/or developed gold-silver-copper veins. Cross structures are a factor in determining vein continuity with reported faults which offset some veins. Veins are also cut by post-mineral dykes.



Scale 1: 25,000

500 0 500 1000 1500

metres

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GEOLOGY MAP

Geo-Comp Drawing File: west\geo	DATE: Feb.'88	N.T.S.: 82E/2E	FIGURE: 3

1908

GEOLOGY OF THE MOUNT ATTWOOD–PHOENIX AREA

N.T.S. 82E/2E

BY G. N. CHURCH

SCALE – 1:25,000

KILOMETRES 1 0 1 2 KILOMETRES

LEGEND

BEDDED ROCKS

TERTIARY

PENTICTON GROUP

MARRON FORMATION

13 PARK RILL MEMBER BROWN MEROCRYSTALLINE ANDESITE, MICRODIORITE

12 NAKPIT LAKE MEMBER TAN TRACHYTE, PULASKITE SILLS AND DYKES

11 YELLOW LAKE MEMBER PURPLE MAFIC PHONOLITE, MONZODIORITE SILLS

10 KETTLE RIVER FORMATION: MOSTLY ARKOSIC SANDSTONE, SOME CONGLOMERATES, AND MINOR RHYOLITE TUFF. (10a) SPRINGBROOK FORMATION: POLYMICTIC CONGLOMERATE

TRIASSIC

BROOKLYN GROUP

9 EMOLT FORMATION: MOSTLY MAROON AND GREEN VOLCANOCLASTICS

8 LIMESTONE AND INTERCALATED ARGILLITE 0 SKARN

7 SHARPSTONE CONGLOMERATE INTERCALATED SANDSTONE AND SHALE

PERMO-CARBONIFEROUS

ATTWOOD GROUP

6 METAVOLCANICS MOSTLY GREENSTONES (METAMORPHOSED BASALTS AND ANDESITES)

5 | 4 (5) BLACK SHALE GREYWACKE (4) LIMESTONE

3 SHARPSTONE CONGLOMERATE CHERT BRECCIA AND SANDSTONE

BASEMENT COMPLEX

KNOB HILL GROUP

2 | 2a (2) METACHERT AND MICA SCHIST (2a) AMPHIBOLITIC SCHIST AND GNEISS.

1 (1) MARBLE

IGNEOUS INTRUSIONS

TERTIARY

H CORYELL: SYENITE, MONZONITE, AND SHONKINITE

G DIORITE, MONZODIORITE PULASKITE

CRETACEOUS

F ULTRABASICS SERPENTINE LISTWANITE

E GREENWOOD AND WALLACE CREEK GRANODIORITE

D CYCLOPS GABBRO

C LEXINGTON QUARTZ FELDSPAR PORPHYRY

TRIASSIC

B MICRODIORITE

A OLD DIORITE

SYMBOLS

GEOLOGICAL BOUNDARY

BEDROCK EXPOSURE

BEDDING, SCHISTOSITY

FAULT, THRUST

GLACIAL STRIAE

FOSSIL LOCALITY

LINE OF CROSS-SECTION A — B

TOPOGRAPHIC CONTOURS (INTERVAL 250 FEET)

POLE LINE, POWER LINE

HIGHWAY, SECONDARY AND COUNTRY ROADS

RAILWAY

STREAM

LAKE

An example of vein continuity is indicated within the Golden Crown workings where a continuous vein is exposed for some 80 meters horizontally with an indicated 100 meter vertical projection. There is no information on the continuity or extent of the Winnipeg vein structure.

The Golden Crown vein occurs predominantly within metavolcanics with associated serpentine adjacent to the hanging wall.

On the adjacent Winnipeg-Golden Crown property mineralization is primarily of pyrrhotite and chalcopyrite with gold and silver values within a veined quartz matrix. Veins, as exposed in numerous pits, trenches and within the Golden Crown workings, are commonly comprised of massive sulphide constituents. Wall rock adjacent to the main vein may be mineralized. Moderate sulphide content with gold-silver-copper values also occurs in localized areas without a definite vein structure.

On the Pride of the West Group Church (1985) indicates a structure extending from the Winnipeg and Golden Crown and trending northerly through the Pride of the West claim and into the Black Bear claim where an east-west fault truncates and terminates the northerly structure.

A northerly trending fault terminates the east-west fault on the Bank of England claim and extends northward southward along the western boundary of the Bank of England claim and the Black Bear Fr. claim.

The claim group is indicated to be underlain by a microdiorite in the west in contact with the Knob Hill Group which is in fault contact with sharpstone conglomerate (Brooklyn Group) on the Black Bear claim.

RONKA VLF-EM SURVEY

Instrumentation and Theory

A Ronka VLF-EM 16 receiver, serial No. 20 was utilized for the VLF-EM survey. The transmitter was Seattle broadcasting at a frequency of 23.4 KHz.

The VLF-EM receiver measures the amount of distortion produced in a primary transmitted magnetic field and a secondary magnetic field which may be induced by a conductive mass such as a sulphide body. The VLF-EM unit - due to its relatively high frequency - can detect low conductive zones such as fault or shear zones, carbonized sediments or lithological contacts.

The major disadvantage of the VLF method, however is that the high frequency results in a multitude of anomalies from unwanted sources such as swamp edges, creek and topographical highs.

Field Procedure

Eight northerly grid lines at 50 meter intervals were utilized for the readings in the survey. The lines were at extended southward for up to 450 meters from a baseline at the powerline traversing the Pride of the West claim. Readings were taken at 12.5 meter intervals. Approximately half of the 3.5 km of survey of the property to the south of the Pride of the West southern boundary which was to test the relative EM response over known mineral zones.

RESULTS

The survey indicated strong conductors in the coverage to the south of the property in an area of known massive sulphide mineralization. A northerly trending conductor along the eastern survey area appears to weaken at the property boundary. However at the projected extension of the anomaly which generally correllates with the fault zone on the geological map (Fig. 3) a number of pits and trenches explore sulphide bearing zones. In this area the powerline interference at the trench sites could have prevented reliable survey results. Presunka reports that the powerline masked the EM 16 results for approximately 100 meters.

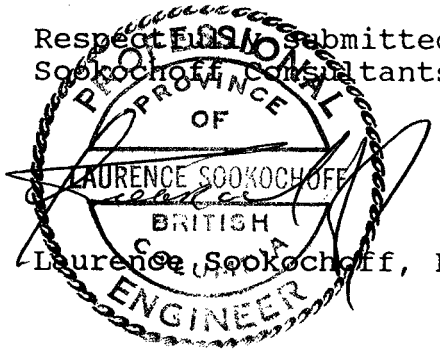
CONCLUSIONS

The Ronka EM survey was effective in delineating known zones of massive sulphide mineralization off the property but was unsuccessful in delineating potential mineral bearing zones over the Pride of the West claim survey area. However, with the powerline interference in an area of former trenching the survey results would not preclude potential massive sulphide zones within the area of interference.

RECOMMENDATIONS

A Ronka EM survey over the unsurveyed area of the Pride of the West claim group is recommended. In addition a magnetometer survey over the entire area would provide correlative information and would not be susceptible to interference from the power line. A geological survey including trench sampling should also be completed to provide information to the interpretation of the surveys.

Respectfully submitted
Sookochoff Consultants Inc.



Laurence Sookochoff, P.Eng.

February 16, 1988
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BIBLIOGRAPHY

KIM, H. - Summary Geological Report and Recommended Tunnelling Program on the Golden Crown Property for Consolidated Boundary Exploration Ltd. and Grand Forks Mines Ltd., April, 1987.

MINISTER OF MINES REPORTS - 1901 p. 870; 1902 p. 1063.

McNAUGHTON, D.A. - Greenwood - Phoenix Area British Columbia, Geological Survey of Canada Paper 45-20, Ottawa 1945.

SOOKOCHOFF, L. - Geological Report on the Winnipeg and Golden Crown for Mundee Mines Ltd. February 7, 1980.

- Diamond Drill Assessment Report on the Crown Group, November 12, 1980.

- 1983 Assessment Report on a Diamond Drill Program on the Golden Crown Property for Consolidated Boundary Exploration Ltd., March 27, 1984.

Geophysical (Ronka-EM) Survey
on the
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Statement of Costs

The field work for the Geophysical survey on the Pride of the West claim group was performed between the dates of August 15, 1987 to October 31, 1987. The field costs and associated costs to the report stage were as follows:

Field

S. Presunka, Geophysicist	
August 17-18, 1987 2 days @ $400/day	$800.00
A. Kim, assistant	
August 17-18, 1987 2 days @ $250/day	500.00
Auto rental and Km 2 days @ $50/day	100.00
Instrument rental 2 days @ $50/day	100.00
Room and Board	
6 man days @ $40/day	240.00
Compilation and Draughting	320.00
Report	440.00
	$2,500.00

CERTIFICATE

I, Laurence Sookochoff, of the city of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist with offices at 609-837 West Hastings St., Vancouver, V6C 1B6

I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.

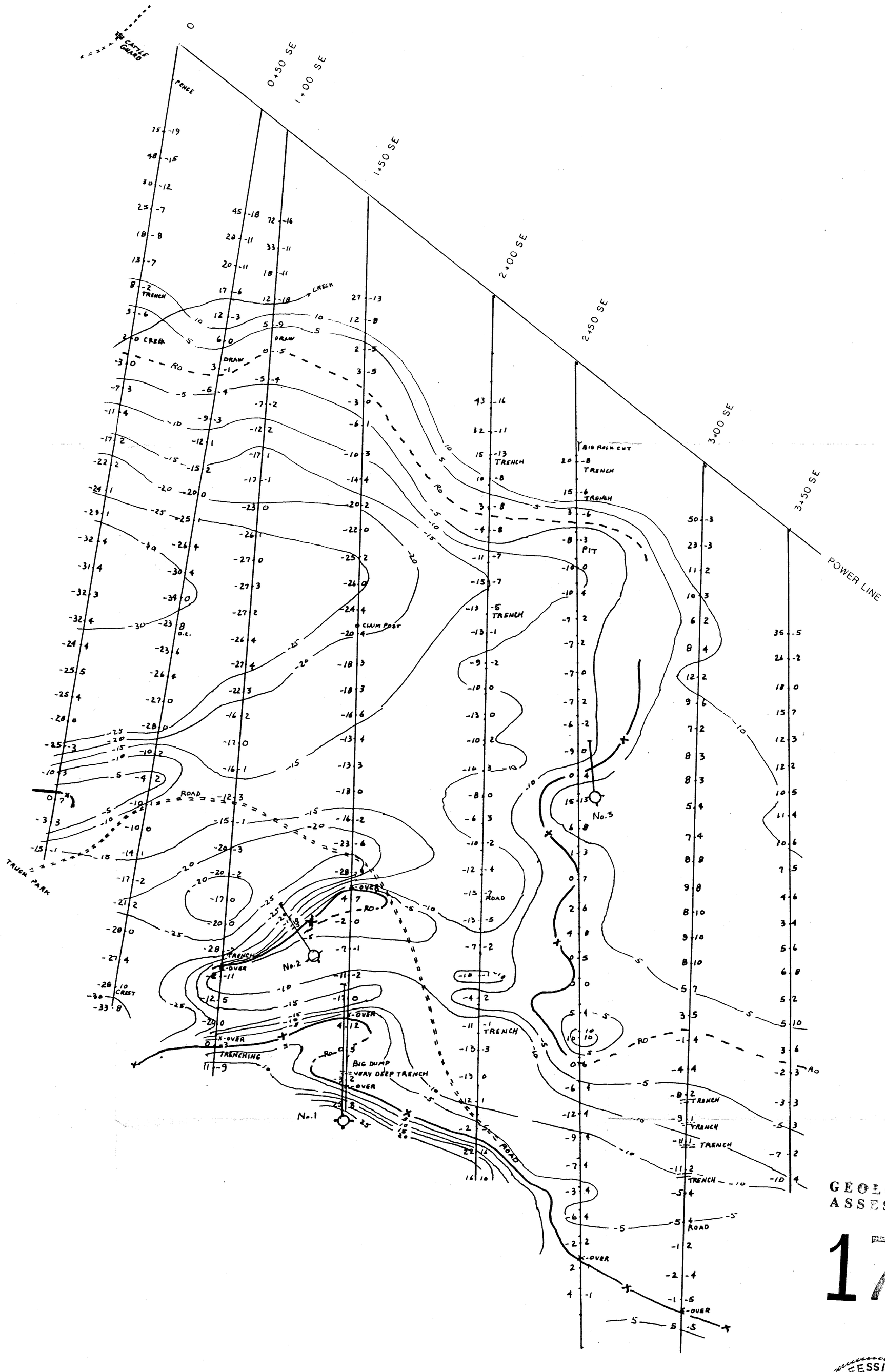
2. I have been practising my profession for the past twenty-two years.

3. I am registered with the Association of Professional Engineers of British Columbia.

4. Information for the accompanying report was obtained from sources cited under Bibliography and from work completed on various properties in the area.

Laurence Sookochoff, P.Eng.
Consulting Geologist

February 16, 1988
Vancouver, B.C.



LEGEND

INST. RONKA EM.16. SERIAL NO.20

V.L.F. ST. 23.4 TILT DIRECTION 020°

INPHASE CONTOURS ——— s ——— s ———

CONDUCTORS ——— x ——— x ———

REVERSE CROSS-OVER — — — RD — — —

V.L.F. ST. 23.4 TILT DIRECTION

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,100

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
LAURENCE SOOKOCHOFF

SCALE 1:1250

0 25 50 75 100
metres

PRIDE OF THE WEST CLAIM GROUP

GREENWOOD M.D.

ELECTROMAGNETIC SURVEY

SCALE:	DATE:	N.T.S.	DRAWN BY:	FIGURE:
1:1250	Feb.'88	82E/2E	GEO-COMP	4

Sookochoff Consultants Inc.