

1980 Assessment Report

Diamond Drilling

Title: CROWN GROUP

Claims: J & R Fr., Hartford, Crown 1-16

Location: Hartford Junction - Greenwood M.D.
82E 2E
49° 05' N 118° 34' W

By: L. Sookochoff, P.Eng.
Pan-American Consultants Ltd.
2602-1055 West Georgia Street
Vancouver, B.C., V6E 3P3

For: Consolidated Boundary Explorations Ltd.
Grand Forks, B.C.

Dates of Work: July 1, 1980 - October 21, 1980

Date of Report: November 12, 1980

8482

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Diamond Drill Report

on the

CROWN GROUP

for

CONSOLIDATED BOUNDARY EXPLORATIONS LTD.

INTRODUCTION

In the 1980 field season, a diamond drill program was carried out on the Crown Group. The purpose of the drilling was to test areas of potential sub-surface mineralization which was indicated to be a magnetic anomaly.

The drilling was carried out during the period of July 1, 1980 - October 21, 1980. The core size is BQ.

The drill core is stored on the property.

PROPERTY

The property is comprised of 23 contiguous claims of which five are reverted crown grants. Particulars are as follows:

<u>Claim Name</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Expiry Date</u>
Golden Crown	2200		
Willie Fr.		2014	January 30, 1981
Crown Fr.		2027	February 6, 1981
Murray Fr.	718 S	1985	January 28, 1981
Silver Star	1550	1926	December 21, 1980
J. & R. Fr.	1059	1865	November 8, 1980
Hartford	1057	1927	December 21, 1980
Hartford Fr.	1061	1928	December 21, 1980
Crown 1-8		^a 1886-1993	January 28, 1981
Crown 9-16		2015-2022	February 6, 1981
Crown 17-19		2202-2204	May 28, 1981
Nellie Cotton		2173	May 13, 1981
Hip Fraction		2199	May 28, 1981
Star Fr.		2201	May 28, 1981

LOCATION AND ACCESS

The property is located 13 km northwest of Grand Forks and within four km of Phoenix. Access is west from Grand Forks via the No. 3 Highway for 16 km to the Phoenix junction. At Hartford junction and near the Phoenix Mine tailings the Hartford road leads to a secondary road branching off to the west. The property is within three km of the junction.

PHYSIOGRAPHY

3.

The property is situated on the southern slope of Knob Hill which is at an elevation of "5,183 feet". The ground covered by the claim group is of moderate to shallow slopes with elevations of up to "5,000 feet" and a relief of "700 feet".

WATER AND POWER

Sufficient water for all phases of the exploration program should be available from water courses on or near the property.

A power transmission line and a telephone line pass 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 predominantly for the silica which was a prime smelter requirement.

Development of the more significant gold and silver prospects was reactivated and developed from 1920 to 1933. With the rise of gold prices in 1933 a number of mines were re-opened.

On the adjacent property, the Winnipeg claim was reported to be the largest gold mine in the Greenwood area producing some 59,000 tons during the period of 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 development with lesser production were made from the adjoining Gold Crown claim.

On the Crown Group of claims, information is sketchy however a 1901 report states that development work comprised of "250 feet of sinking and 150 feet of cross-cutting and drifting on the Hartford were carried out". During the same period "75 feet of shafting and crosscutting" on the J and R claim were reported.

Granby reportedly carried out limited diamond drilling on the present Crown claim group.

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 of the area.

On the adjacent 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.

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 meta-volcanics with associated serpentine adjacent to the hanging wall.

The major northwesterly trending fault structure which hosts the gold-silver-copper bearing veins on the adjoining property is projected to extend to the Crown Group.

On the Crown Group property outcropping of andesites, latites with mafic and dioritic plugs are indicated.

A vein on the Hartford claim of the Crown Group was explored by "200 feet of sinking and about 150 feet of cross-cutting and drifting". On the J and R claim there are "75 feet of shafting and cross-cutting and a body of 4 feet of ore has been developed for 47 feet".

MINERALIZATION

On the adjacent Winnipeg-Golden Crown property mineralization is primarily of pyrrhotite and chalcocopyrite 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.

D.D.H. J.R. 1

Location - On the J & R Fr. claim 300 m N of the
SW corner

Bearing - 203°

Dip - -45°

Length - 183 feet (55 m)

Results - Predominantly a greenstone with diorite dykes and sills, a mineralized section including pyrite pyrrhotite and chalcopyrite occurs in an intersection from 152 feet to 160.5 feet.

D.D.H. J.R. 2

Location - 200 feet (66m) south of D.D.H. 1

Bearing - 023°

Dip - -45°

Length - 214 feet (65 m)

Results - Predominantly greenstone with diorite dykes. A mineralized section including massive pyrite, with pyrrhotite and quartz was intersected from 104 feet to 104.5 feet.

CONCLUSIONS

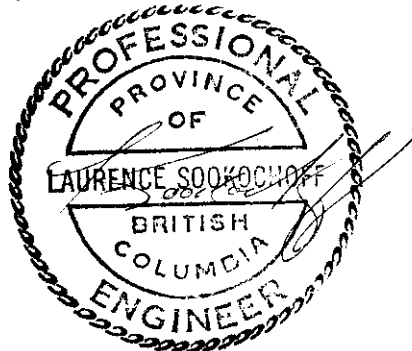
Drill results from the J & R drill program have indicated mineralized vein structures trending at approximately 105° . The veins are hosted by greenstones and diorite, a similar geological environment as the adjacent Golden Crown property where a number of gold bearing veins have been delineated.

As the vein structures on the Crown property are mineral bearing and the zones in this area are known to occur as lenses, the drill intersections could be an expression of a more significant peripheral structure.

RECOMMENDATIONS

It is recommended that a magnetometer survey be completed over the property as a guide to additional diamond drilling.

Respectfully submitted,



Laurence Sookochoff, P.Eng.
Consulting Geologist

November 12, 1980
Vancouver, B.C.

REFERENCES

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 Munde Mines Ltd.,
February 7, 1980

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 the firm of Pan-American Consultants Ltd. of 2602-1055 West Georgia Street, Vancouver, B.C.

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 thirteen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for the accompanying report is based on pertinent publications as cited under references in addition to work the writer has supervised on the property.

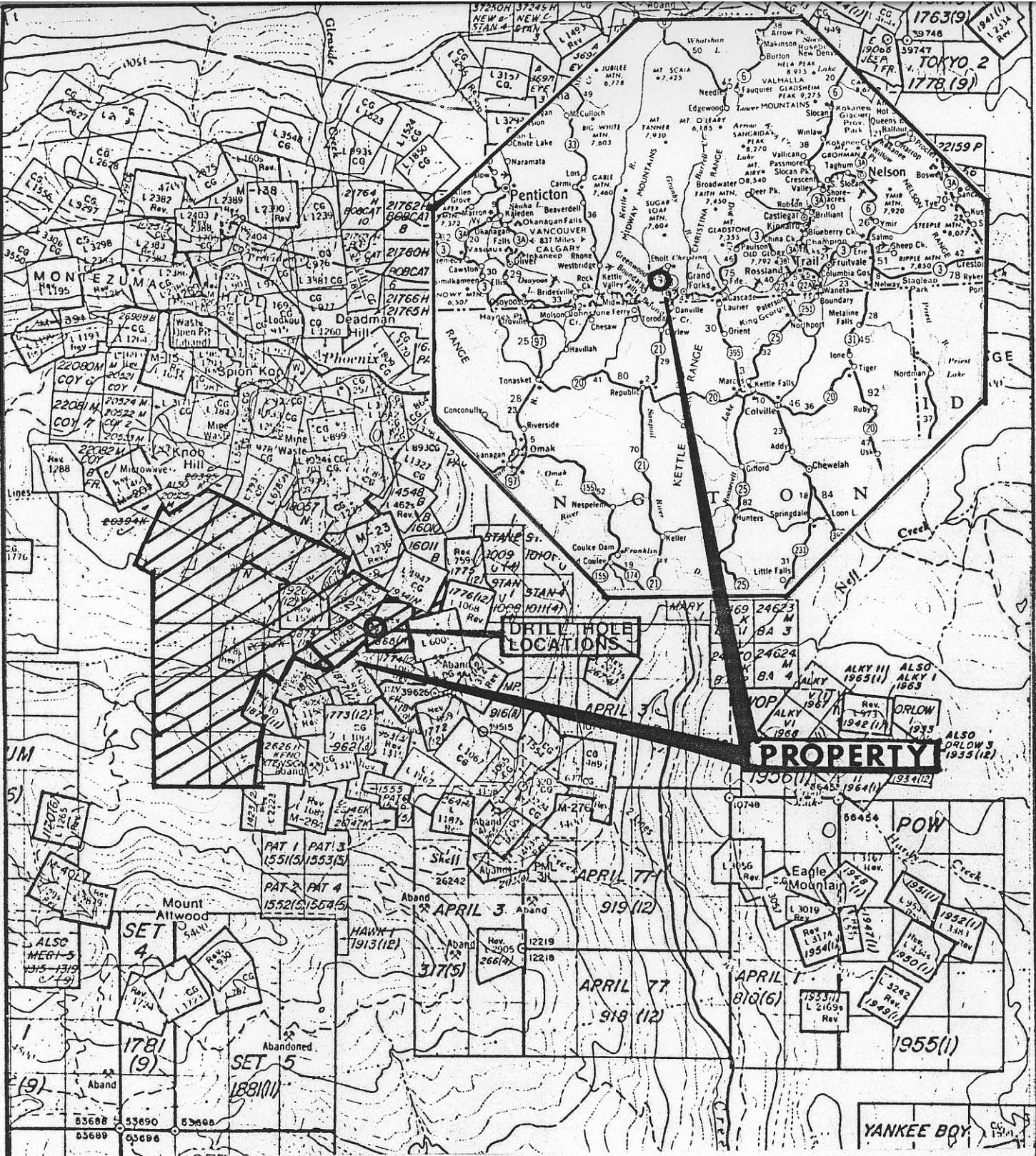
Laurence Sookochoff, P.Eng.
Consulting Geologist

November 12, 1980
Vancouver, B.C.



CERTIFICATE OF COSTS

397	feet of BQ core drilling at \$25 per lineal foot	\$9,825.00
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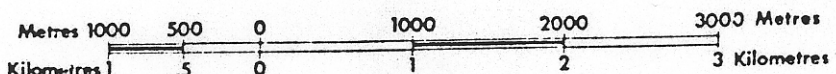
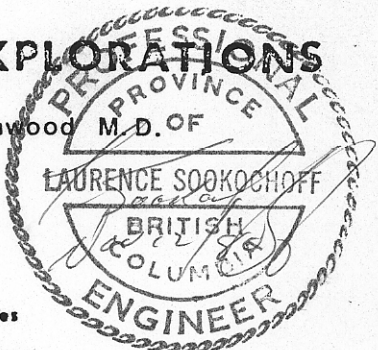


CONSOLIDATED BOUNDARY EXPLORATIONS

CROWN GROUP

Greenwood M.D. OF

LOCATION MAP



November 1980

Property Crown Group

DIAMOND DRILL SAMPLING RECORD

DIP TESTS

Hole No. JR1
Sheet No. _____

Started _____

Bearing 203° Dip at Collar -45° Hor. Comp. _____ Ver. Comp. _____

Finished _____

Location J & R Fraction Elevation _____ Lat. _____ Dept. _____

Logged by L. Sookochoff P.Eng.

Purpose of Hole To test a magnetometer high

Distance		DESCRIPTION	Sample No.	Length Ft.	Core Recovery %	Analysis		PROGRESSIVE TOTALS											
From	To					Au oz/ton	Ag oz/ton	FEET & PER CENT											
0	214	Greenstone - light to dk. green variably silicified, chloritic with lt. pyr. diss. throughout																	
		Diorite grey silicified, nil to lt. arg. alt'n																	
		63-70 @ 65°	104-																
		82-83 @ 45°	104.2	.2			.018	.12											
		133-143																	
		179-188																	
		Mineralized section																	
		104-104.5 massive py. w/ pyrrhotite and qtz.																	
		110 ½" qtz @ 50° - Brec'd @ cont. w/g.s.																	
		214 E.O.H.																	

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NO.

[Handwritten Signature]
November 1980

Property Crown Group

DIAMOND DRILL SAMPLING RECORD

DIP TESTS

Hole No. JR 2

Started

Bearing 023° Dip at Cellar -45° Hor. Comp. Ver. Comp.

Sheet No.

Finished

Location J & R Fraction Elevation Lat. Dept.

Logged by L. Sookchohoff P.Eng.

Purpose of Hole To test a magnetometer high

Distance		DESCRIPTION	Sample No.	Length Ft.	Core Recovery %	Analysis			PROGRESSIVE TOTALS	
From	To					Au oz/ton	Ag oz/ton	Cu %	FEET & PER CENT	
0	17	Overburden								
17	25	Greenstone - highly chloritic with moderate diss. and pods, lenses pyrite. Quartz veinlets @ 45° loc/a	25-27	2.0		.005	.08			
25	30	Diorite - hypidiomorphic granular even medium grained texture hornblende mafics in a granular silicified feldspathic host. Nil to lt argillic alt'n								
		26-28 Moderate argillic alt'n w/py pods & lenses. Contact @ 45°								
30	152	Greenstone as 17-25	152.6	2.0		.018	.32	.065		
		42 diorite allotriomorphic textured feldspar	154.6							
		63-64 Light gray diorite @ 52°								
		82-83 epidote patches	159-	1.6		.04	.50	1.0		
		91-100 Diorite dykes - 5', 1', 1' chloritized mafics. Contact @ 30-45°	160.6							
		105-109 Epidote veinlets & patches, pyrite str.								
		117-118 Quartz @ 60° w/cpy								
		123 Epidote v.l. @ 25°								
		136-143 Diorite dykes								
		143-165 Diorite frg. allot. tex.								
152	160.5	Mineralized zone								
		152-154 Quartz v.l. & stringers py 1.5" massive py., pyrr w/cpy @ 40°								
		159.5-160.5 Two see 1.5" massive sulph. brec'd. & healed w/qtz.								
160.5	183	Greenstone w/heavy blebs of pyrr.								
183		E.O.H.								

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L. Sookchohoff
1/10/50

HARTFORD
L 1057

J & R FRACTION
L 1059

Property boundary of
Golden Crown

GOLDEN CROWN
L 600

JR-1
(-45°
214')

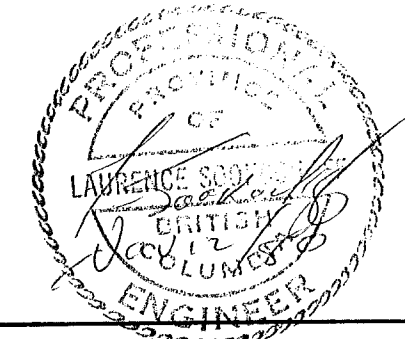
JR-2
(-45°
183')

HARTFORD FR.
L 1061

HARD CASH
L 1062

NABOB
L 1063

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NO.



MAP 2
CONSOLIDATED BOUNDARY EXPLORATIONS
CROWN GROUP GREENWOOD M.D.
DIAMOND DRILL HOLE LOCATION MAP

0 200 feet
0 50 metres
SCALE 1" = 100' NOV. 1980

To accompany Diamond Drill Report on the
Crown Group by L. Spencekott P. Eng. dated Nov. 12, 1980