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Prospecting Report on the KNOB 1 CLAIM

Greenwood Mining Division, B.C.

NTS 82E/2E lat.  $49^{\circ}04'N$  long.  $118^{\circ}37'W$

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**11,980**

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On Behalf of: Granville Resources Corp.  
475 Granville Street  
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October 31, 1983

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## INTRODUCTION

In September and October 1983, a limited exploration program was carried out on the KNOB 1 property. This program consisted of 4.76 kilometers of line cutting; geological mapping at the scale 1:5000, and limited rock geochemical sampling. The purpose of this work was to assess whether the property warrants further detailed exploration.

## PROPERTY

The property consists of one located mineral claim as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
KNOB 1	3287	October 26, 1985

It is currently owned by Granville Resources Corp. There is no record of a previous history of exploration on this property. The legal corner post was inspected in the field, and established on the accompanying location map (Figure 1) with the help of air photos and topographic map NTS 82E/2E.

## LOCATION AND ACCESS

The property is located in the Greenwood Mining Division, five kilometers southeast of Greenwood, fourteen kilometers northwest of Grand Forks, and three kilometers southwest of the formerly producing Phoenix copper mine. Access from Crowsnest Highway #3 is via the old Phoenix Mine road, and then by old but well kept bush roads suitable for standard passenger cars. Geographic co-ordinates are 49° 04' N latitude by 118° 37' longitude.

### PHYSIOGRAPHY

The KNOB 1 claim is situated on the northern slope of Mt. Atwood, between elevations 1220 and 1675 meters. The northern half of the property consists of flat, gently rolling ground, while the southern half slopes steeply to the summit of Mt. Atwood. The area has been partly logged and is covered by deadfall, and a heavy growth of cedar, spruce and balsam. Sparse outcrop occurs mainly on the steeper sidehill.

### LINE CUTTING

A skeletal grid was established to provide a framework for location and geological mapping. An east-west baseline was established 660 meters south of the northern claim line. This baseline extends the width of the claim, a distance of 4000 meters. The line was cut and flagged and stations marked every 50 meters. Four north-south grid lines, at 250 meter intervals, were cut and flagged with stations marked every 50 meters and extending 1000 meters to the south, for a total of 4.76 km. See figure 2.

### GEOLOGY

The district is underlain by an assemblage of late Paleozoic to Early Mesozoic volcanic and sedimentary rocks unconformably overlain by Triassic sediments and minor volcanics. These strata have been intruded by a variety of mafic to alkaline igneous bodies. Small outliers of Tertiary sediments locally overlie the older strata.

In the immediate area of the KNOB 1 claim, Anarchist group of rocks of Permian and/or Pennsylvanian age form the basement. The Anarchist group is comprised of a thick succession of andesitic and dacitic flows, chert, quartzite, argillite and minor limestone, metamorphosed to greenschist facies, and intensely sheared and fractured. These Paleozoic rocks are overlain unconformably by the Triassic Brooklyn formation, consisting of:

1. Clastic units of conglomerate ("sharpstone") with laminar bedded sandstone and siltstone. The conglomerate are composed of chert pebbles, volcanic fragments and/or limestone.
2. Metatuffaceous units resembling chert or graywacke. Possible exhalite facies.
3. Carbonate units ranging from massive limestone (reef breccias?) to banded limestone (algal mats?) with limey shale.

Tuffaceous/exhalite horizons within the Brooklyn formation are exploration targets for massive sulfide mineralization, based on previously discovered mineral deposits in the Phoenix camp. It is also thought that mineralizing events may have accompanied deposition of the Anarchist group.

The geology of the KNOB 1 claim was mapped on a scale of 1:500, as shown on figure 2. Exposed are rocks of the Brooklyn formation; primarily argillites, cherty argillites and cherty tuffs. Near the summit of Mt. Atwood, is a resistant unit of argillite, graywacke and sharpstone conglomerate composed of .5 cm angular chert fragments. The eastern boundary of the property is underlain by white crystalline limestone. Two outcrops of quartz-feldspar-porphyrite trend N 120°, and appear to be intrusive into the enclosing sedimentary rocks. It is possible that rocks outcropping in the northwestern part of the KNOB 1 claim are cherty argillites and massive argillites of the Anarchist formation. Mineralization on the property is exposed in three small pits near line 750W, which cut a quartz vein in argillite. The quartz vein is finely mineralized, with sparse pyrite and possibly arsenopyrite. Five samples for rock geochemical analysis were collected from the KNOB 1 property. Sample locations are plotted on Figure 2, and results appear in the accompanying table.

Geological mapping of this property shows that it is underlain by the Triassic Brooklyn formation, which contains favorable horizons for mineralization. The true potential of this property cannot be assessed without more comprehensive, detailed geologic mapping, and complete geochemical and geophysical surveys, which have proven useful on adjoining properties.

Respectfully submitted.

*D. Runkle, M.Sc.*

D. Runkle, Geologist

ASSAYS

<u>Sample No.</u>	<u>Rock Type</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Mo</u>	<u>As</u>
56080	white crystalline limestone	5	.4	6	5	12	1	2
56081	graywacke	5	.1	21	10	83	1	2
56082	gray quartzite-cherty tuff	5	.2	6	1	31	1	4
56083	quartz vein. from pit	3200	8.3	16	598	64	2	4870
56084	quartz vein from dump	2200	4.5	23	520	297	2	8979

All results are in parts per million except for Au which is in parts per billion.

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## GRANVILLE RESOURCES CORP.

Prospecting Program - KNOB 1 Mineral Claim

October 1, 1983 - October 31 1983

## Statement of Costs

The prospecting program on the Knob 1 mineral claim was carried out from October 1 to October 31, 1983 to the value of the following.

Line cutting D. Hershein 5 days @ \$150	\$ 750.
Prospecting D Runkle 7 days @ \$250.	1750.
Room and board 7 days @ \$60.	420.
Assays	38.
Draughting and printing	225.
Report	600.
Office overhead - Grand Forks	300.
	<u>\$4083.</u>



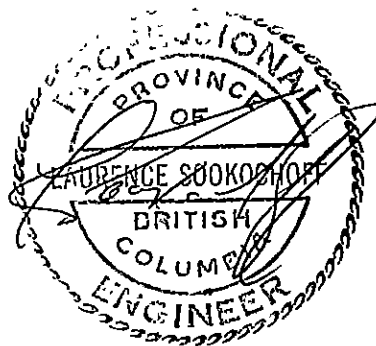
CERTIFICATE

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 311-409 Granville Street, Vancouver, B.C., V6C 1T2.

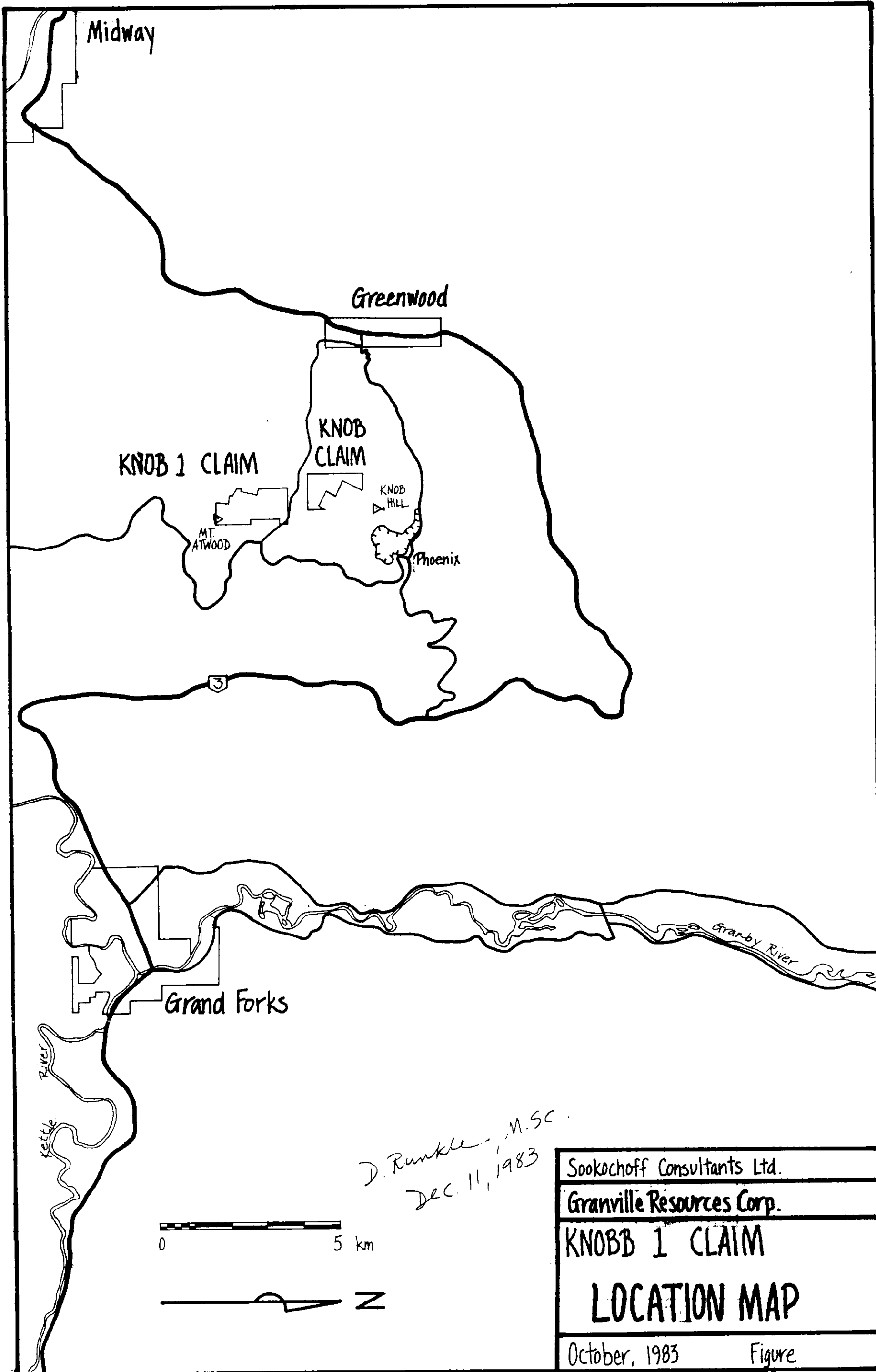
I further certify that:

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 seventeen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for the accompanying report is based on the supervision of the Knob 1 exploration program.
5. I have neither direct, indirect or contingent interest in the property described herein nor in the securities of Granville Resources Corp.



Laurence Sookochoff, P.Eng.  
Consulting Geologist

December 16, 1983  
Vancouver, B.C.



Midway

Greenwood

KNOBB 1 CLAIM

KNOBB CLAIM

MT. ATWOOD

KNOBB HILL

Phoenix

3

Grand Forks

Kettle River

Granby River

D. Runkle M.Sc.  
Dec. 11, 1983

0 5 km

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Sookochoff Consultants Ltd.

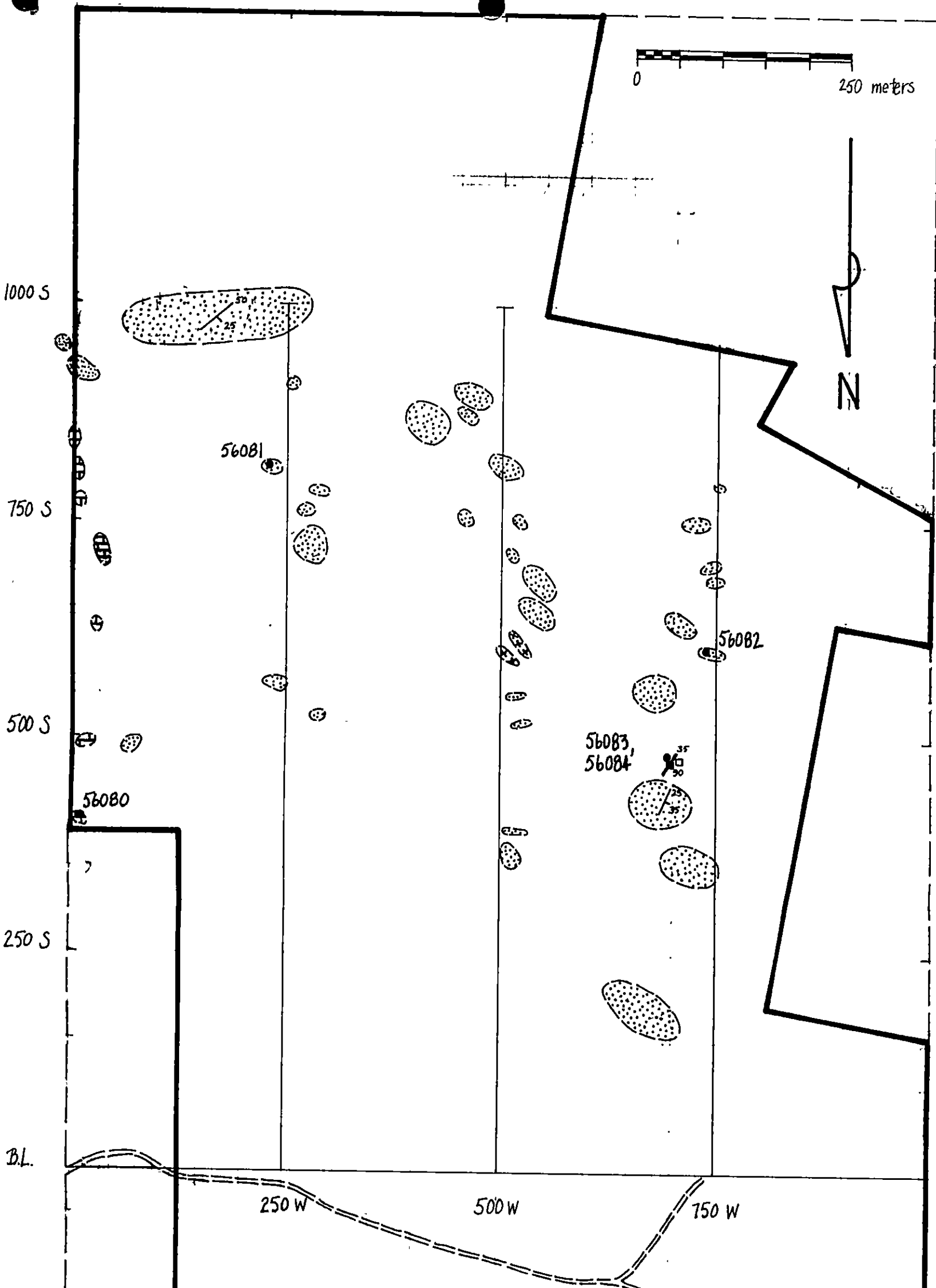
Granville Resources Corp.

KNOBB 1 CLAIM

LOCATION MAP

October, 1983

Figure



**LEGEND**

- claim boundary
- road
- flagged grid line
- outcrop
- pit
- bedding attitude
- trend of quartz vein
- sample location

- limestone
- sedimentary rock
- porphyrite

*D. Runkle  
M.G.C.  
Dec 11, 1983*

Sopkchoff Consultants Ltd.	
Granville Resources Corp.	
<b>NOB 1 CLAIM</b>	
<b>PROPERTY MAP</b>	
October, 1983	Figure 2

L.C.P.