### **GEOLOGICAL ASSESSMENT REPORT FOR THE LOV 19 CLAIM**

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47.111.10世	LOV 19	
	TRIM MAP 082F/049	
	Latitude 49° 30' Longitude 116° 17'	

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**Owner** – Super Group Holdings Ltd. 1805 13<sup>th</sup> Avenue South Cranbrook, B.C. V1C 5Y1

Operator - Same as above

Consultant - Anderson Minsearch Consultants Ltd. 3205 6<sup>th</sup> Street South Cranbrook, B.C. V1C 6K1

Author - Douglas Anderson, P.Eng., Geologist

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GEOLOGICAL SURVEY BRANCH

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## 1

### **GEOLOGICAL REPORT ON THE LOV PROPERTY - CLAIM LOV 19**

### **1.0 Introduction**

The Lov claims are in a mountainous region of southeast British Columbia, more specifically about 38 kilometres due west of the city of Cranbrook (see Figure 1 for location). Access is good via Highway 3/95 and then extensive logging roads which provide truck access to the northern portion of the property in particular. Relief is significant ranging from 1600 to 2300 metres The principal drainage is Hellroaring Creek which drains north into the St.Mary system. The Lov extends north into an east-flowing creek which is tributary to Hellroaring Creek. The mountains are well forested to about 1900 metres with primarily spruce, fir and pine. Logging clear-cuts are present on the lower slopes and such activity continues.

### 2.0 Property Definition, History, and Background Information

The Lov property straddles the height of land between the Hellroaring Creek drainage on the east and the Goat River drainage on the west. It consists of 88 units presently staked on a north-south alignment. The claims are:

Claim Name	Units	<b>Tenure Number</b>	Anniv. Date
Lov 1	20	389329	
Lov 2	20	389330	
Lov 3	1	389331	
Lov 4	1	389332	
Lov 5	1	389333	
Lov 6	1	389334	
Lov 7	1	389335	
Lov 8	1	389336	
Lov 9	1	389337	
Lov 10	1	389338	
Lov 11	1	389339	
Lov 12	1	389340	
Lov 13	1	389341	
Lov 14	1	389342	
Lov 15	1	389343	
Lov 16	1	389344	
Lov 17	1	389345	
Lov 18	1	389346	
Lov 19	12	389778	
Lov 19	20	395992	

The current owner of the claim group is Super Group Holdings Ltd. of Cranbrook, B.C. The claims are illustrated on Figure 2 included.

The exploration history of the property area is quite limited. A minor amount of placer gold mining was done on the west flank in Lovola creek and more significantly in the



10 Km

# LOV PROPERTY

# LOCATION MAP

	 and the second se
NTS: 082F059/049	
SCALE: As shown	FIGURE: I

main Goat river itself. More recent exploration was principally in the mid-1980's when Noranda Exploration led a base metal search in the area. They completed airborne geophysics (mag and EM) and ground searches including some mapping, stream sampling, and a minor amount of soil sampling. It is believed their focus was base metals and without ground encouragement, the program was discontinued. The airborne survey did identify numerous conductors which were attributed to graphite within the Eager argillites.

### 3.00 Summary of Work Done

The work entailed preliminary geological mapping for the northern portion of the Lov property. To appreciate the regional setting, GSC mapping is considered peripherally including the work of Leech (St.Mary Lake, 1957) and Reesor (Grassy Mountain – 1980/81). Mapping was done on the Lov 19 claim and in close proximity to it at a scale of 1:10,000. By no means is this intended to be a detailed account at this scale. The area encompassed about nine square kilometres.

#### 4.00 Geological Report

Some of the creek silt samples in the Lov area are anomalous in gold and panned concentrates contain fine gold. The primary objective for the mapping was to search for a lode gold source but the opportunity for other commodities was recognized.

The Lov 19 is underlain by sedimentary rocks of the Cambrian Eager Formation which are intruded by small stocks and dyke-like bodies of Cretaceous or younger granitic intrusives. The Eager is not well mapped in this region, being described in general by the GSC mappers as grey and dark grey, often highly cleaved argillite and limy argillite. It contains more siltstone and rare bioclastic beds near the base.

At Lov, there are at least two divisions in a predominantly west-dipping section. Conformably above the Cranbrook Quartzites is a lower section of greenish, thin to medium bedded argillites and siltstones (quartzites) with interbedded limestone near the base. Above are more monotonous grey weathering, grey argillites and limy argillites with some siltstones. This section is often highly cleaved with bedding obscured. Pyrite cubes seem widespread but do not contribute to any rusty weathering. This upper division underlies most of the Lov 19 claim but has been subjected to contact metamorphism. The resulting rocks are a fine-grained, massive, hard, dark grey hornfels which often contains fine pyrrhotite which forms a core zone around the small intrusive bodies. Peripheral to the hornfels, at least on the east side, is a massive, grey metasiltstone which contains both pyrite and pyrrhotite.

The contact metamorphism is due to at least four small intrusions of quite coarse crystalline granite to granodiorite. Probably the unroofed parts of a pluton at depth, the granite is locally quite altered with sericite and carbonate alteration. The intrusives can be quite fractured with quartz vein networking. Galena, pyrite, chalcopyrite and molybdenite have been noted in these narrow quartz veins. Some veins in the area contain interesting gold values to 1700ppb Au. Rock sampling and analytical work has been limited to date. Interestingly, the property covers a large, rusty weathering, limonitic zone which

contrasts with the surrounding rocks and is due to widespread pyrite and pyrrhotite in the assemblage surrounding the intrusions.

The structural setting appears simple with the major reverse St. Mary fault limiting the Cambrian rocks on the north. Significant structures having a north or northwest orientation have not been identified but are anticipated due to the alignment of intrusive zones. Folding is noted with north-trending fold axes but definition mapping has not been done.

Mineralization located to date is quite limited. Visible gold has not been noted. Base metal sulfides are restricted to some of the narrow quartz veins found within the intrusions and or in the surrounding sediments. Pyrite and pyrrhotite are most common, with pyrrhotite restricted to the contact metamorphic rocks. Galena, chalcopyrite and lesser molybdenite occur in a moderate percentage of the quartz veins.

### 5.00 Summary and Conclusions

The property is almost entirely underlain by grey and dark grey argillites of the Cambrian Eager Formation. Siltstones and limy argillite sections are present within the Eager, particularly deeper in the section. Pyrite is ubiquitous as crystalline clots within the sediments.

Intruding the Eager Formation are numerous small stocks and dykes of granitic intrusive. Quite coarse crystalline, the granites can be quite altered locally with sericitization and some carbonate alteration. A contact metamorphic halo exists around the intrusions with hornfels and metasiltsones.

Gold occurs in some of the creeks of the area. No visible gold or obvious sources for gold have been noted. The quartz vein networks observed at several locales are one possibility but more work has to be done on the property.

### 6.00 Itemized Cost Statement

Geological Time – mapping four days	@\$300/d = \$1200.00
Transportation – 4x4 truck, four days	a\$45/d = \$ 180.00
480 km	@\$.45/km=\$ 216.00
Map production at 1:10,000	= \$ 139.00
Map plotting – office, 1.25 days	@\$300/d = \$ 375.00
Report writing etc. 1.5 days	a\$300/d = <u>\$ 450.00</u>
Total Cost	= \$2560.00

### 7.00 Author's Qualifications

I, Douglas Anderson, Consulting Geological Engineer, have my office at 3205 6<sup>th</sup>. St. South in Cranbrook, B.C., V1C 6K1.

I graduated from the University of British Columbia in 1969 with a Bachelor of Applied Science in Geological Engineering.

I have practiced my profession since 1969, predominantly with one large mining company, in a number of capacities all over Western Canada. I have been an independent geological consultant for the last four years.

I am a Registered Professional Engineer and member of the Association of Professional Engineers and Geoscientists of B.C., and I am authorized to use their seal which has been affixed to this report.

I am also a Fellow of the Geological Association of Canada.

Dated this 5<sup>th</sup> day of December, 2002

Douglas Anderson, P.Eng., B.A.Sc., FGAC Consulting Geological Engineer



