

PROSPECTING REPORT

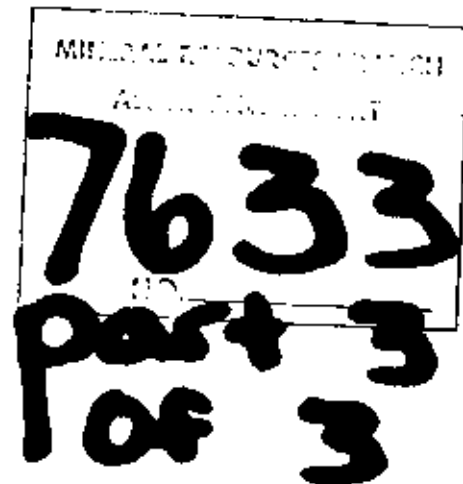
NO. 6 CROWN - GRANTED MINERAL CLAIM L 2905

DOVE MOUNTAIN, OMINECA M.D., B.C., MAP 93L/10

Lat.  $54^{\circ}44'N$

Long.  $126^{\circ}39'W$

Owned by: A. L'Orsa



Anthony L'Orsa

Smithers, B.C.

27 October 1979

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### SUMMARY

Prospecting and preliminary geological mapping were carried out on the No. 6 claim on 21 and 22 August 1979. Gold mineralization associated with pyrite and chalcopyrite is found in quartz-carbonate "veins" in pyroclastic rocks of the Telkwa Formation of the Hazelton Group. Small amounts of Pb, Zn and Bi are also present. Around 1918, 14 tons of ore grading about 2.4 oz./ton Au were shipped from the Chisholm shaft on the claim. Grab samples taken in 1979 yielded up to 2.66 oz./ton Au.

The genesis of these Dome Mountain gold occurrences is uncertain. However, after my brief investigation here I have the impression that the association between mineralization and coarse pyroclastic rocks is not fortuitous. I suspect that more extensive work will demonstrate that the Dome Mountain gold occurrences are volcanogenic and generally strata-bound.

### INTRODUCTION

Prospecting and preliminary geological mapping were carried out on the No. 6 Crown-granted mineral claim (L 2905) on 21 and 22 August 1979. The old survey lines marking the perimeter of the claim were prospected and two pace and compass traverses were run across the claim. In addition, several uncontrolled prospecting traverses were made. Outcrops on the accompanying map are located approximately.

In places the terrain is steep, densely overgrown, and pacing is difficult.

Most of the claim is covered by shallow overburden which supports a variable growth of scrubby balsam fir. However, the outcrops distribution is such that good geological control can be established over most of the claim.

Help extended by Mrs. Herta Hromatka and Mr. Tom Schroeter of the Smithers office of the Ministry of Energy, Mines and Petroleum Resources during the preparation of this report is gratefully acknowledged. I wish to thank Dr. W. Johnson, Chief Analyst and Assayer, Ministry of Energy, Mines and Petroleum Resources, Victoria, for two spectrochemical analyses.

#### LOCATION AND ACCESS

The No. 6 claim is centred at about 1524 m elevation on the south slope of Dome Mountain, approximately 32 km east of Smithers, Omineca Mining Division, B.C.

Access was by Land-Rover via the Woodmere, Paradise (Guess) Lake and Dome Babine Mines roads to the south side of Dome Mountain summit, from which point it takes less than one half hour to walk to the claim.

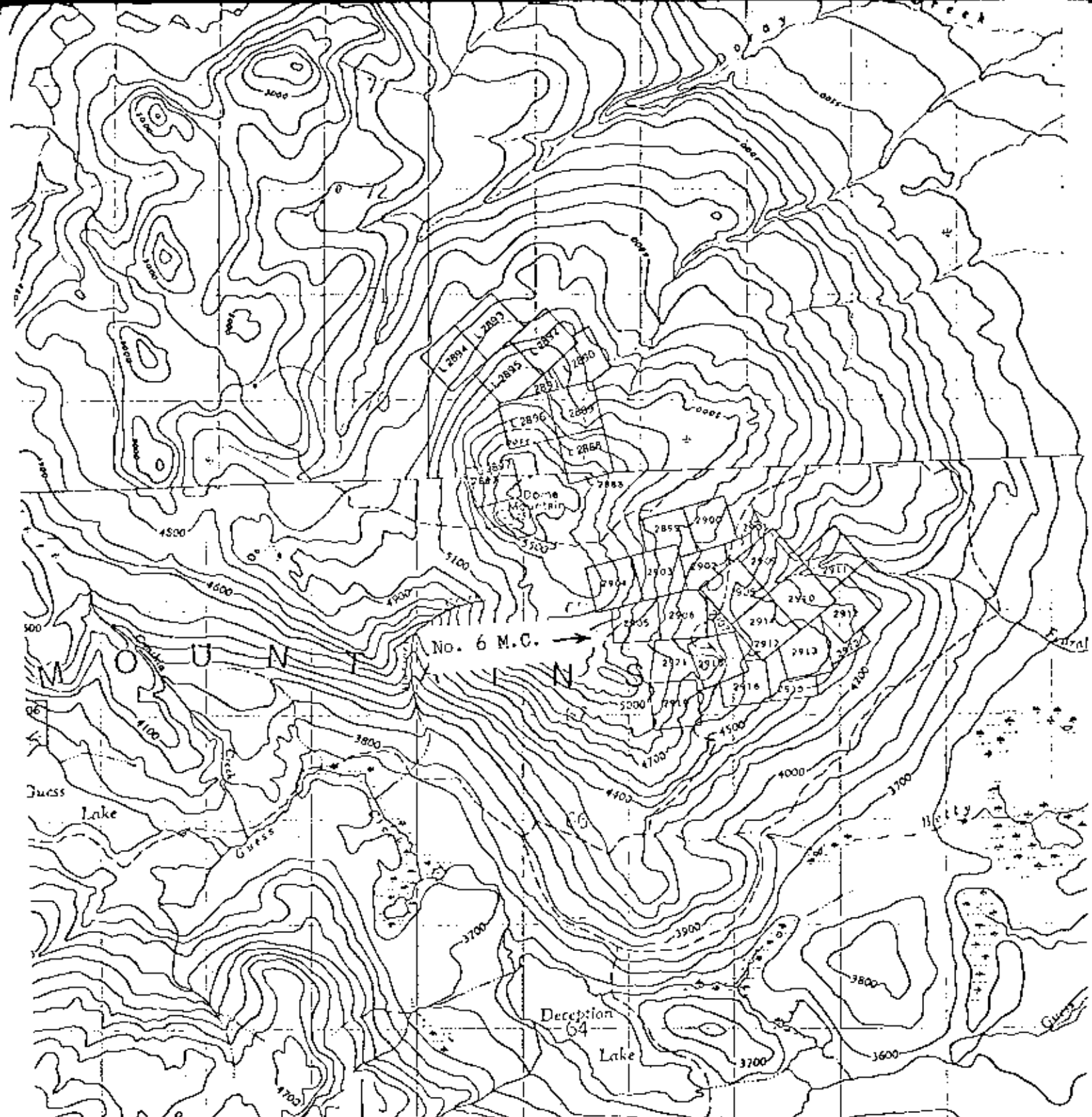
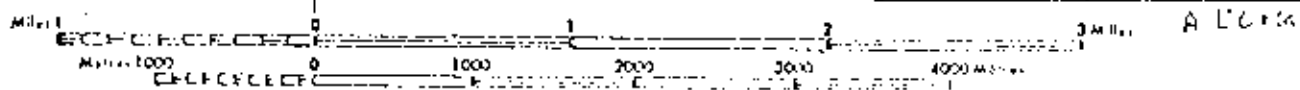


FIGURE 1

DOME MT. CLAIMS	
LOCATION MAP	
Scale 1:50,000	Map 93L/10,15



### HISTORY AND DEVELOPMENT

Gold-bearing veins were discovered on Dome Mountain about 1914. The area covered by the No. 6 claim is approximately that formerly occupied by the Edith claim of the Chisholm group. In 1918 or earlier the Chisholm shaft ( $\pm$  9 m deep) was sunk on this claim and 14 tons of ore grading about 2.4 oz./t Au were shipped (Min. Mines, 1918, p. K124).

The No. 6 claim was staked 4 November 1922 by P. A. Timmermeister for Thomas Heslip. The claim was surveyed in October, 1923 (Rutherford, 1923).

The claims on Dome Mountain, including the No. 6, were taken over in 1923 by the Federal Mining and Smelting Co., who did considerable surface and underground work in the area through their subsidiary the Dome Mountain Gold Mining Co., Ltd. They worked on the adjacent Snowdrop claim and they may have made some of the trenches on the No. 6. Work on the Dome Mountain was halted in 1924 because of poor results, but the Federal Mining and Smelting Co. maintained the claims until 1946.

About 1949 the Dome Mountain claims were acquired by Mr. Karl J. Springer who held them until 1978. During this period the claims were examined by a number of geologists and engineers. The most detailed examination was made by Mr. Gordon Hilchey who mapped and sampled most of the known gold occurrences on the mountain, but not the Chisholm shaft (Hilchey, 1963). A small amount of reconnaissance geochemical and geophysical work was done on the No. 6 claim

ten years later (Armstrong, 1973).

I acquired the reverted No. 6 Crown-granted claim on 8 November 1978.

#### GEOLOGICAL SETTING

The Dome Mountain region is underlain by northwest-striking volcanic and sedimentary rocks of the Hazelton Group. These are intruded by a few small stocks mainly of dioritic composition, not all of which are mapped. Outcrops in the mineralized area consist almost entirely of volcanic rocks of intermediate composition assigned to the Telkwa Formation (Tipper and Richards, 1976).

Dome Mountain is largely a pile of pyroclastic rocks exposed in an eroded northwest-striking anticline. These rocks range from volcanic breccias to very fine-grained water-laid tuffs. The rocks are mainly of intermediate composition and they range from grey to green or red in colour. Massive andesitic rocks, a few siliceous volcanic units, some shaly tuffs, and a very few, small limestone lenses were also noted on the mountain during prospecting in 1979.

Gold is found in apparently strata-bound quartz or quartz and carbonate "veins" with varying amounts of pyrite, chalcopyrite, galena, sphalerite, arsenopyrite and specularite in the pyroclastic sequence. Shearing is generally associated with the mineralization.

### GEOLOGY

The No. 6 claim covers a section of volcanic rocks on the southwest flank of the Dome Mountain anticline. The rocks generally strike northwest and dip moderately to the west.

The rocks can be divided into three assemblages. The oldest are the gold-vein bearing pyroclastic rocks that occupy the northeastern third of the claim. The rocks include volcanic breccias, lapilli tuffs, crystal tuffs ( $\pm$  1 mm plagioclase) and tuffs, that are generally grey to green in colour with minor thin-bedded red tuffs and small tuffaceous limestone lenses at the top of the section. Overlying these rocks and forming prominent outcrops in the central part of the claim is a massive, epidotized, grey-green andesite, commonly cut by quartz-epidote veins. Outcrops in the southern part of the claim include green, grey and red tuffs and a thin (30 cm), sugary, siliceous volcanic bed with minor disseminated pyrite, all of which apparently overlie the massive andesite.

### MINERALIZATION

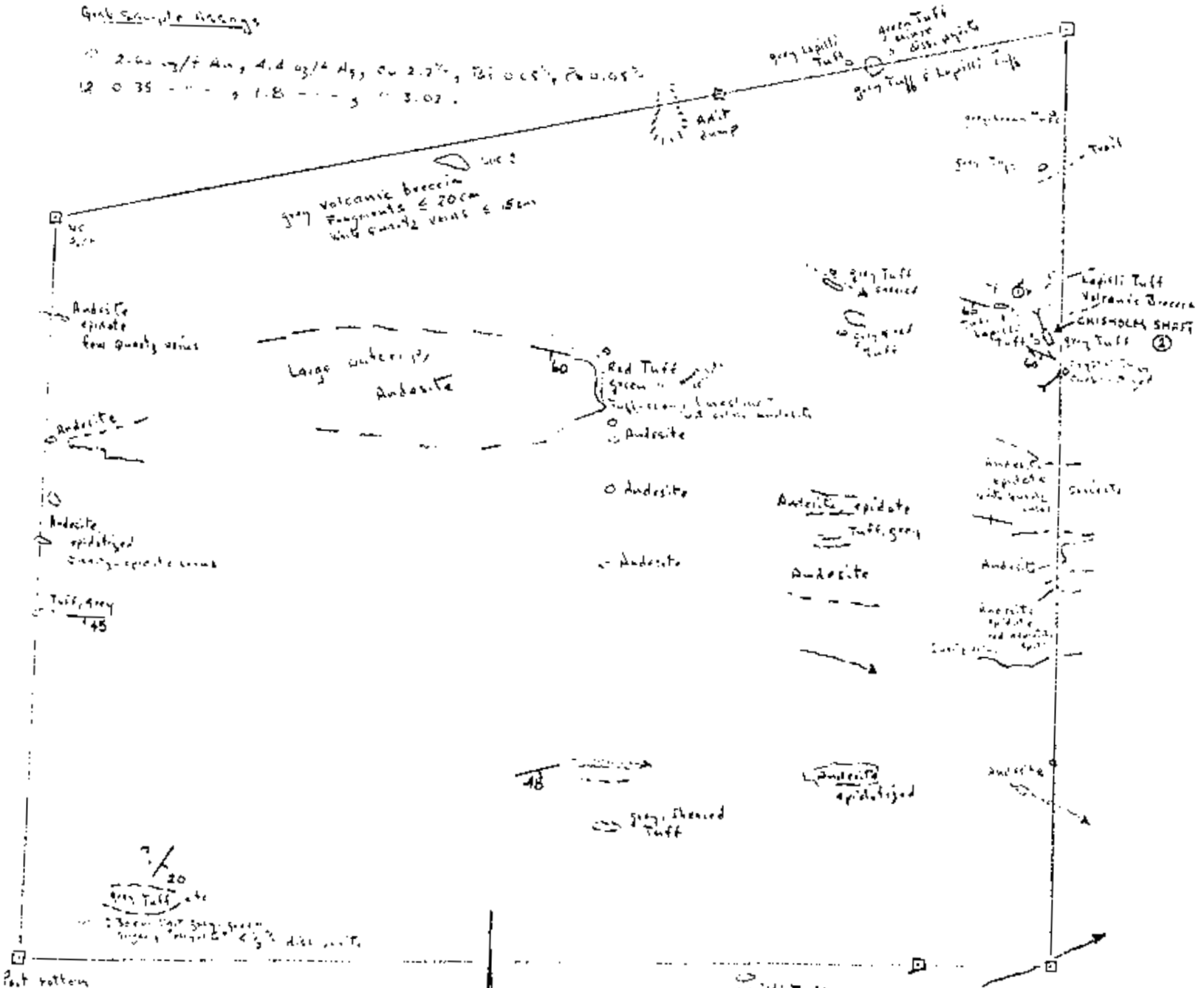
A northwest-striking, strata-bound, quartz-carbonate "vein" generally less than 30 cm in width occurs in sheared and carbonatized grey-green tuff on the northeastern claim boundary. Lapilli tuffs and volcanic breccia outcrop nearby (fig. 2).

The vein carries pyrite, chalcopyrite and very small amounts of galena and sphalerite. Thin, poikilitic pyrite crystals up to 5 mm



Geol. Sample Results

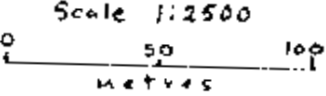
11 2.60 mg/t Au, 4.4 oz/4 Ag, Cu 2.7%, Zn 0.5%, Pb 0.05%  
 12 0.35 " " 1.8 " " 3.02



LEGEND

- Trench
- Bedding
- Shear attitude
- Stream

NO. 6 MINERAL CLAIM  
 Omineca M.D., B.C.  
 PROSPECTING SKETCH MAP  
 A. L'Orsa October, 1979



in width were noted. A grab sample, taken about 20 m northwest of the Chisholm shaft, and containing approximately 40% combined pyrite and chalcopyrite in white and clear quartz assayed 2.66 oz./t Au, 4.4 oz./t Ag, 2.21% Cu, 0.05% Pb, 0.02% Zn and 0.05% Bi. A grab sample taken from the Chisholm shaft dump and containing about 25% combined pyrite and chalcopyrite in white and clear quartz assayed 0.35 oz./t Au, 1.8 oz./t Ag and 3.02% Cu.

The mineralization has been exposed by several shallow trenches as well as the shaft. It appears that this mineralization may be an extension of the Jane vein which is exposed by an adit 220 m to the northwest on the adjacent Snowdrop claim. The rocks between the Chisholm shaft and the Jane adit are obscured by overburden.

Prospecting uncovered no mineralization that had not been found by the early prospectors.

#### REFERENCES

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Geological Survey of Canada, O.F. 351.

A. L'Orsa



ITEMIZED COST STATEMENT, NO. 6 CLAIM

Work:

A. L'Orsa, geologist, 21 and 22 August @ \$150.00/day	\$300.00
A. L'Orsa, report, 27 October @ \$150.00/day	\$150.00

Groceries:

\$ 18.00

Transportation:

Land-Rover 4 x 4, 2 days @ \$28.00/day	\$ 56.00
105.6 km @ 11¢/km	<u>\$ 11.60</u>
	<u><u>\$535.60</u></u>

A. L'Orsa

QUALIFICATIONS

I, Anthony L'Orsa of Smithers, B.C. hereby certify that:

1. I am a graduate of Tulane University, New Orleans, La., U.S.A. with the degree of B.Sc. (1961) and M.Sc. (1964) in geology.
2. I am a Fellow of the Geological Association of Canada and a member of the Society for Geology Applied to Mineral Deposits.
3. I have practised my profession since 1962.

A. L'Orsa