'79 - # 540 - # 7633

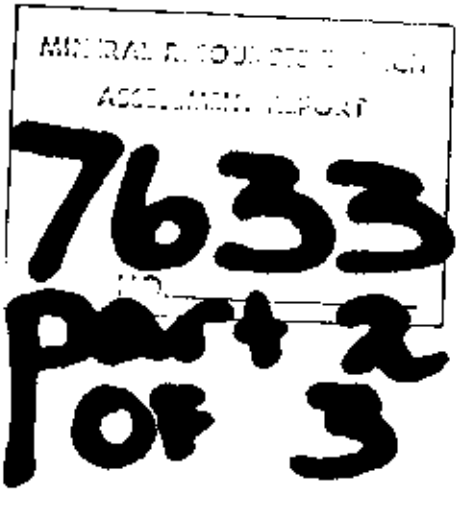
PROSPECTING REPORT

NO. 2 CROWN - GRANTED MINERAL CLAIM, L 2909

DOME MOUNTAIN, OMINECA M.D., MAP 93L/10

Lat. 54°44'30"N Long. 126°37'W

Owned by W. F. McGowan



Anthony L'Orsa

Smithers, B.C.

27 October 1979

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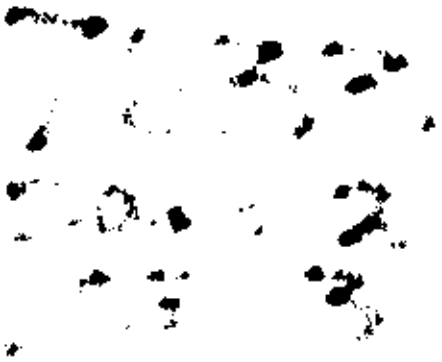


SUMMARY

Prospecting and preliminary geological mapping were carried out on the No. 2 claim on 29 and 30 August 1979. Although there are no known economic mineral exposures at surface on this claim, a vein containing quartz, carbonate, pyrite, galena, sphalerite and small amounts of gold has been found underground. This vein assayed 0.42 oz./t Au across an average width of 76 cm for 38 m. The host pyroclastic rocks are sheared and carbonatized.

The claim is almost entirely covered by overburden. A few outcrops of tuffs, lapilli tuff and massive andesite were found and examined.

DISCUSSION

The genesis of the Dome Mountain gold occurrences is uncertain. I have concluded, after some general prospecting on Dome Mountain in 1979, that the "veins" are most probably volcanogenic, strata-bound and confined to the pyroclastic unit exposed in the Dome Mountain anticline.

At the Forks, the vein explored underground on the No. 2 claim strikes northwest and presumably dips to the northeast, in contrast to the Forks creek exposure which strikes northeast and dips to the southeast. If a strata-bound model is correct, then it appears that the southeastern nose of the Dome Mountain anticline lies on the No. 3

claim and that the underground work on the No. 2 claim may have exposed a continuation of the mineralized bed that outcrops in the creek at the Forks (fig. 2).

This hypothesis is reinforced by the occurrence of massive andesite in the northwestern part of the No. 2 claim. This appears to be the same andesite that overlies the mineralized pyroclastic unit on the Whistler, No. 6 and Hawk claims (e.g. L'Orsa, 1979).

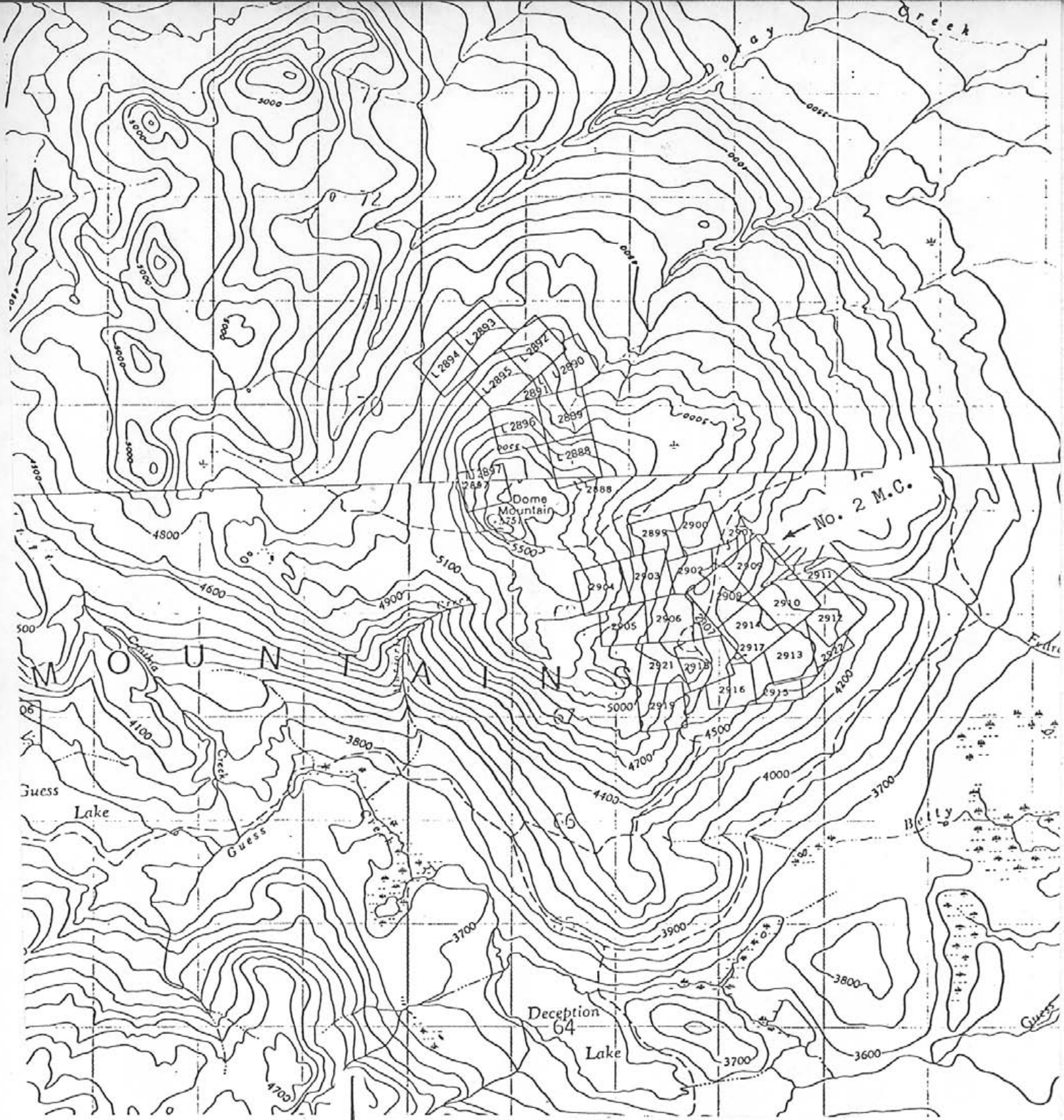
The possibility that the creek vein at the Forks and the vein on the No. 2 claim are epigenetic veins that may intersect along strike was tested in 1923-24, albeit perhaps inadequately.

INTRODUCTION

Prospecting and preliminary geological mapping were carried out on the No. 2 Crown-granted mineral claim (L 2909) on 29 and 30 August, 1979. The old survey lines marking the perimeter of the claim were prospected and some uncontrolled prospecting was done in the interior of the claim. All the legal survey corner posts of the claim were found to be in reasonably good condition.

Aside from some good rock exposures along Federal Creek, outcrops are very rare on the claim. The area supports a heavy growth of balsam fir and spruce.

Help extended by Mrs. Herta Hromatka and Mr. T. Schroeter of the Smithers office of the Ministry of Energy, Mines and Petroleum



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

FIGURE 1

A. L'Orsa

Resources during the preparation of this report is gratefully acknowledged. I also wish to thank Dr. W. Johnson, Chief Analyst and Assaver, Ministry of Energy, Mines and Petroleum Resources, Victoria, for a spectrochemical analysis.

LOCATION AND ACCESS

The No. 2 claim is centred at about 1370 m elevation on the southeastern slope of Dome Mountain, about 14 km east of Smithers, Omineca M.D. The south corner of the claim is beside the Forks of Federal Creek, a few metres from the Forks vein outcrop.

Access was by Land-Rover via the Woodmere, Paradise (Guess) Lake and Dome Babine Mines roads to the old Free Gold camp and then by trail about 1.5 km west to the claim.

HISTORY AND DEVELOPMENT

Gold-bearing veins were discovered on Dome Mountain about 1914. Several small adits and trenches were excavated in the Forks area by George Hazelton and associates and others prior to 1923 when the Federal Mining and Smelting Co. started work here. The No. 2 claim was staked on 4 November 1922 by Thomas Heslin, probably covering about the same area as the old Elizabeth claim of the former Forks group. The claim was surveyed in Oct. 1923 (Rutherford, 1923).

Some quite spectacular assays were reported from the Forks

vein during those early years; e.g. a sample of "black sulphide streak in decomposed ledge" assayed 31.56 oz./t Au. "Hand picked galena ore" assayed 3.5 oz./t Au and 30.62 oz./t Ag (Gaul, 1922).

During 1923 and 1924 the Forks area was the centre of the Federal Mining and Smelting Company's exploration effort on Dome Mountain. In 1923, their subsidiary, the Dome Mountain Gold Mining Company Ltd. sank a three compartment shaft on the No. 3 claim to a depth of 32.6 m from where they did about 150 m of crosscutting and drifting, mostly on the No. 2 claim.

The old mine plans show 5 adits varying from 3 m to 40 m in length, as well as the shaft workings, in place by Sept. 1924. However, that was the end of it. The underground results were disappointing. Work stopped and the equipment was hauled out in 1924. The Federal Mining and Smelting Co. kept 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, at least three of whom contributed some work: Gordon Hilchey 1963 (mapping and sampling), C. M. Armstrong 1973 (reconnaissance geochemistry, E.M. 16 and magnetometer surveys), and B. L. Ristvet 1969 (47 soil samples in Forks area).

The reverted No. 2 Crown-granted mineral claim was acquired by Mr. W. F. McGowan on 8 November, 1978.

GEOLOGICAL SETTING

The Dome Mountain region is underlain by northwest-striking volcanic and sedimentary rocks of the Hazelton Group. These rocks are intruded by a few small stocks mainly of dioritic composition, not all of which are mapped (Tipper and Richards, 1976).

Dome Mountain itself is in large part 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. They are mostly of intermediate composition and they range in colour from grey to green or red. 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 quartz or quartz-carbonate occurrences with varying amounts of pyrite, chalcopyrite, galena, sphalerite, arsenopyrite and specularite in the pyroclastic sequence.

GEOLOGY

Prospecting and reconnaissance mapping here and elsewhere on Dome Mountain suggest that the No. 2 claim lies very close to the southeastern nose of the Dome Mountain anticline. However, there are not many outcrops on this part of the mountain and I have seen only a few of them.

The only extensive rock exposures seen on the claim are

Tipper, H. W. and Richards, T. A., 1976, Smithers, B.C., 93L (Geol. Map): Geol. Survey of Canada, O.F. 351.

A. L'Orsa

ITEMIZED COST STATEMENT

Work:	
A. L'Orsa, geologist, 29 and 30 Aug., 1-1/2 days @ $150.00/day	$225.00
A. L'Orsa, report, 28 October, 1 day	$150.00
Groceries:	$ 14.00
Transportation:	
Land-Rover 4 x 4, 1-1/2 days @ $28.00/day	$ 42.00
112 km @ 11¢/km	$ 12.00
	$443.00

A. L'Orsa

than 1% disseminated pyrite yielded tr. Au, tr. Ag, 0.01% Ni and 0.025% Cr.

REFERENCES

Armstrong, C. M., 1973, Report on the Dome Mountain Property, Smithers Telkwa Area, British Columbia: Unpublished report.

Gaul, A. J., 1922, Report on Dome Mountain Claims, Telkwa, B.C.: Unpublished report.

Hilchey, G. R., 1963, Dome Mountain Gold Property: Unpublished report for K. J. Springer, Vancouver, B.C.

L'Orsa, A., 1979, Prospecting Report, No. 6 Crown-granted mineral claim, Dome Mountain: Assessment Report.

Ministry of Mines, B.C., Ann. Repts. 1918, 1922, 1923 and 1924.

Ristvet, B. L., 1969, Dome Mountain Gold Property, Smithers, B.C.: Unpublished report for Mastodon-Highland Bell Mines Ltd.

Rutherford, J. A., 1923, Survey Field Notes: Gold Commissioner's Office, Smithers, B.C.

Tipper, H. W. and Richards, T. A., 1976, Jurassic Stratigraphy and History of North-Central British Columbia: Geol. Survey of Canada, Bull. 270.

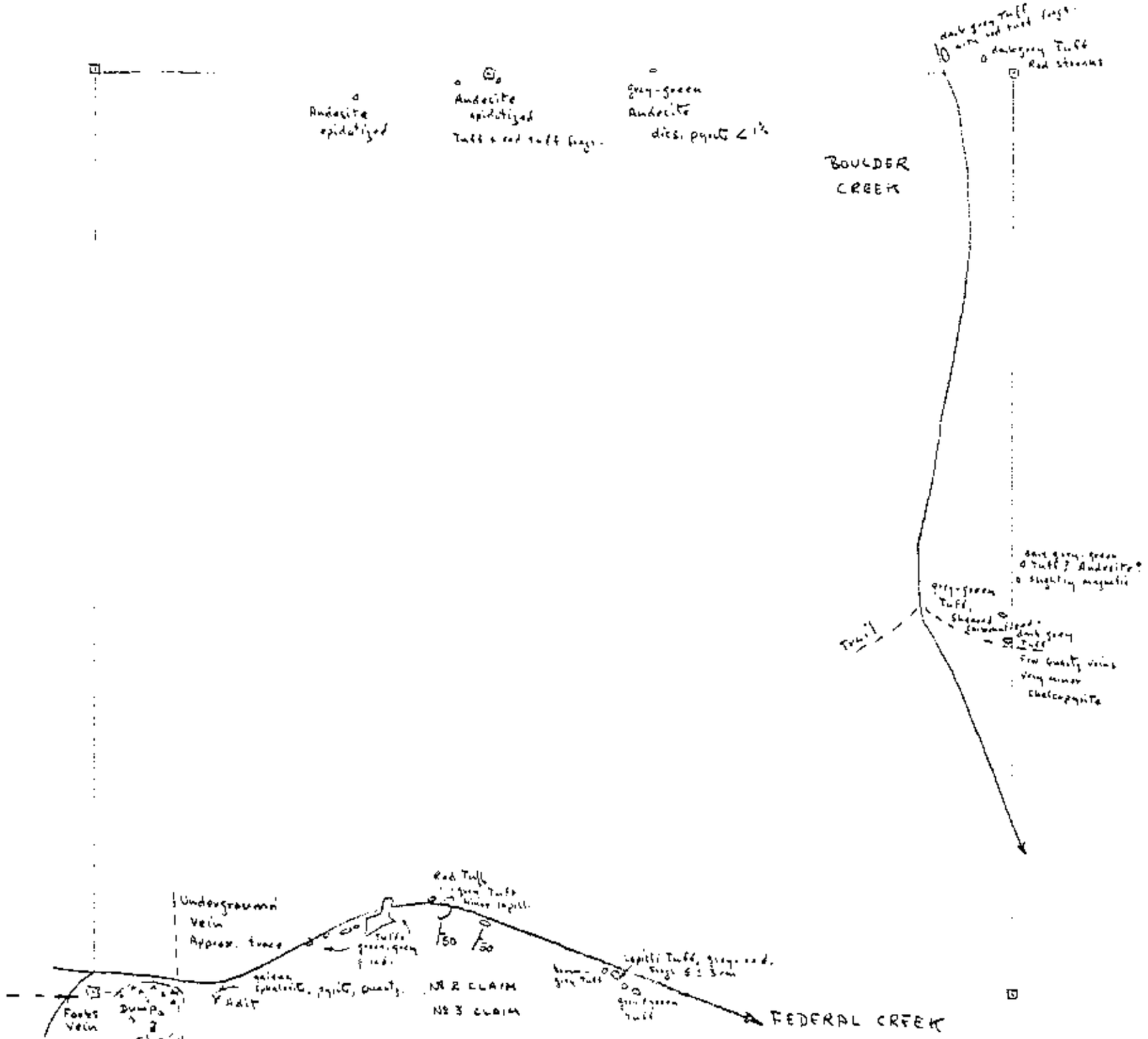
along Federal Creek, starting about 110 m below the Forks, where interbedded red tuffs, grey and green tuffs and minor red lapilli tuff strike northwest and dip moderately to the northeast. Elsewhere on the claim, there are a few small outcrops of grey-green tuff and crystal tuff (plagioclase ± 1 mm) near the northeastern boundary and some red and grey tuffs just north of the north corner. Massive, epidotized andesite is found in a few places in the northwestern part of the claim. A lapilli tuff outcrop was noted a few metres southwest of the claim boundary in the Forks area.

MINERALIZATION

No mineralization is known to outcrop on the claim. However, the south corner post is only about 3 metres from the creek outcrops of the Forks showing. Underground workings extend from the shaft on the adjacent No. 3 claim into the No. 2 claim where a northwest-striking vein was found and explored. This vein assayed 0.42 oz./t Au and 1.6 oz./t Ag across an average width of 76 cm (2.5 ft.) for 38 m (125 ft.) according to a Dome Mountain Gold Mining Co. Ltd. plan dated 2 Sept. 1924. Judging from the shaft dump, the vein contained quartz, carbonate, pyrite and small amounts of galena and sphalerite. The host pyroclastic rocks are sheared and carbonatized. The shaft is now full of ice and the workings are inaccessible.

A spectrochemical analysis of a 700 gram composite sample from the shaft dump comprising sheared and carbonatized rock with less

Figure 2



Scale 1:2500

0 5,0 10,0

Metres

NO. 2 MINERAL CLAIM Omineca M.D., B.C.
PROSPECTING SKETCH MAP A. L'Orsa October, 1979

7633
Pg 1 of 2
Pg 2 of 3

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