

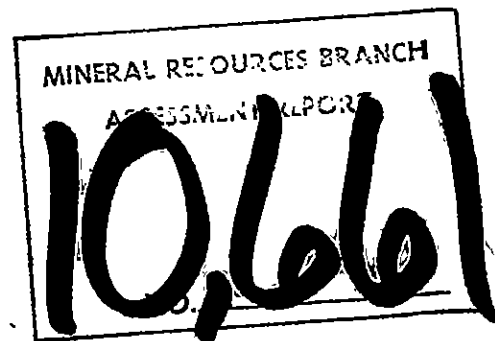
PROSPECTING REPORT ON THE HOOEY CLAIM

(Record Number 1270)

NEW WESTMINSTER MINING DIVISION

Mapsheet 92 H 5/W

Latitude  $49^{\circ} 23' 40''$  - Longitude  $121^{\circ} 50' 50''$



OWNER / OPERATOR

By Barry D. Devlin  
Ryan Exploration Company, Ltd.

July 12, 1982

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## SUMMARY

Mineralized exposures in Cartmell Creek and the surrounding drainages resulted in the staking of the eight unit, Hooey claim. Sphalerite, galena, chalcopyrite, and pyrite were present in shear zones and quartz veins cross-cutting an andesite lapilli tuff. This mineralization appears to be structurally controlled, along a northwesterly trending fault zone. Evaluation of the property during April, 1982 involved preliminary geological mapping at a scale of 1:5,000 and rock chip sampling of mineralized outcrops. Future work will include detailed geological mapping, grid soil sampling, and a VLF-EM-16 geophysical survey.

## INTRODUCTION

The Hooey property was discovered during a regional reconnaissance sampling program carried out by Ryan Exploration Company, Ltd. during the summer of 1981. Mineralized exposures in both Cartmell and Wells Creeks resulted in the staking of the eight unit claim.

The claim is located 90 kilometers (straight-line distance) east of Vancouver on the west side of Harrison Lake, approximately 12 kilometers north of Harrison Hot Springs (see Figures 1 and 2). Topography is characterized by moderate, northwest trending ridges, with the elevation on the property ranging from 10 meters at Harrison Lake to 120 meters on the west side. Access to the property is possible by heading east along Highway 7, approximately 125 kilometers from Vancouver. At Harrison Mills, turn northward for 25 kilometers along a partly paved and well maintained gravel road. A narrow dirt road used for a small scale cedar shake logging operation permits easy access to the principal sulfide mineralized showings.

Following the staking of the claim, attention was devoted to finding additional mineralized showings. Several rock chip samples were taken and small scale (1:5,000) geological mapping was carried out in the major gulleys and along the main access road.

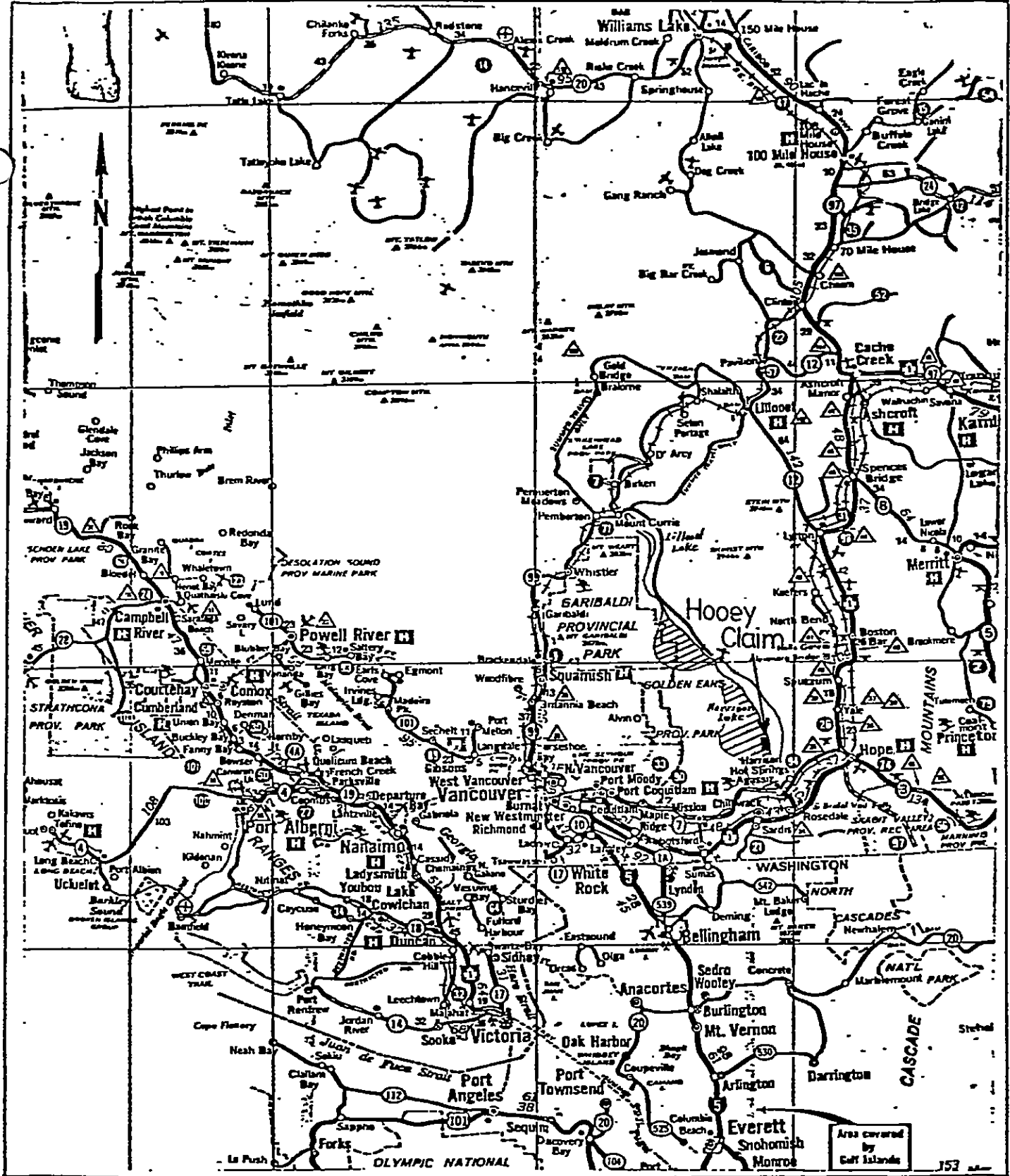
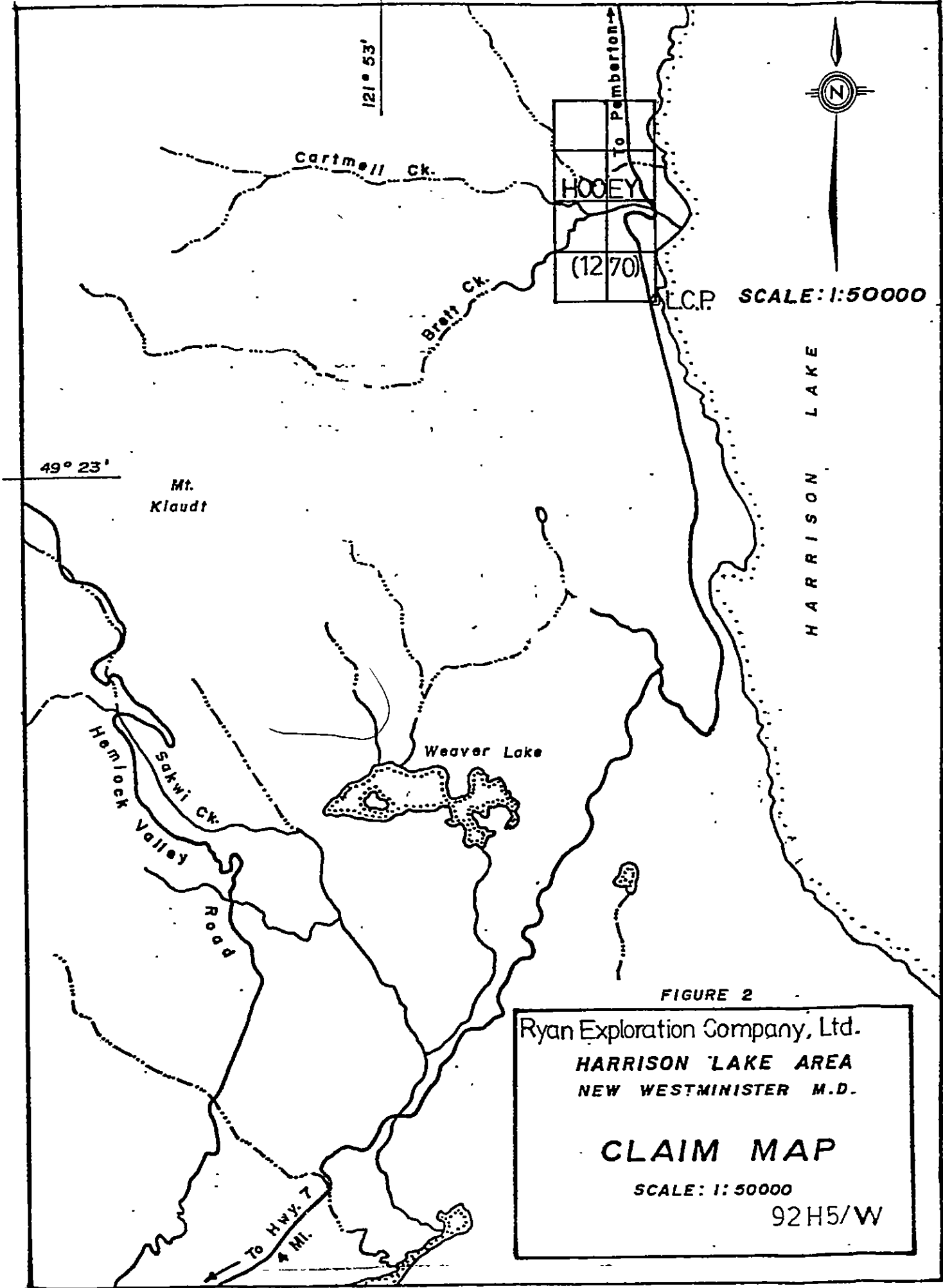


FIGURE 1. Map of Southwestern British Columbia, showing Harrison Lake area and the location of the Hooey claim.





## REGIONAL GEOLOGY

The area is predominantly underlain by the acid to intermediate volcanic sequence of the middle Jurassic Harrison Lake Formation (J.W.H. Monger, GSC Paper 69-47). Pyroclastic rocks appear to exceed flow rocks in abundance. These pyroclastic rocks vary from poorly stratified volcanic breccias to well-bedded tuffs. The flow rocks are characteristically metamorphosed, porphyritic andesites and dacites, containing phenocrysts of plagioclase and commonly of quartz. The beds strike northeasterly and dip moderately to the southeast. A porphyritic dacite and possibly related acid intrusive rocks form the central and western portions of the Harrison Lake Formation. Conformably resting on this unit are basic flow rocks, green tuffs and pillow lavas, which are subsequently overlain by the interbedded sediments of the Echo Island Formation. The Camp Cove "Formation" appears to underlie the volcanic rocks of the Harrison Lake Formation and consist of conglomerate, chert, greywacke, argillite, and tuffaceous units.

The area is transected by large scale faulting, which mimics the regional trends of southwestern BC, especially the Fraser River fault system. Movement along these faults is primarily right-lateral with a possible dip-slip component. Low-grade regional metamorphism is indicated by pervasive zeolite (laumontite) alteration and locally abundant silicification.

## PROPERTY GEOLOGY

### LITHOLOGY

Preliminary mapping on the Hooey claim shows that the area is underlain by sequences of pyroclastic and sedimentary rocks (see Figure 3 in pocket). The sedimentary rocks are fine-grained, black argillites and shales, with some coarser sandstone units. These beds tend to vary in thickness, from thin laminae up to layers several meters thick. Fine-grained, medium-to-light green andesite tuffs containing chloritized andesite lapilli fragments comprise the major unit on the property. The aforementioned pyroclastic unit is usually massive, but displays obvious bedding planes locally. Argillite clasts are frequently observed in the andesite tuffs. Intermediate flow rocks outcrop at various localities on the property and they are usually andesitic or dacitic in composition and locally display feldspar phenocrysts.

### STRUCTURE

The sedimentary and pyroclastic beds have an east-west strike with a variable dip direction. It is possible that the beds form a synclinal structure with an axis running between Wells Creek and Cartmell Creek, parallel to the strike of the beds. A contact between the black, argillaceous unit and the overlying andesite tuffs was the only true stratigraphic relationship observed on the property. As well, small-scale

structures and a major fault on the west side of the property were evident. This major fault possibly aligns with a distinguishable lineament which forms the upper valley of Wells Creek.

#### MINERALIZATION

Sphalerite, galena, chalcopyrite, and pyrite were present in shear zones and quartz veins confined to the andesite tuffs. The extent of these zones was difficult to determine because the mineralization was only found in creek gulleys and the surrounding areas were heavily wooded. However, the mineralization in Cartmell Creek was found again 300 meters due north in Wells Creek. The shear zones or quartz veins averaged 1-2 meters across, with a northwesterly trend. Figure 4 (in pocket) shows the location of samples on the Hooey claim. The values obtained from these samples are shown in Tables 1 and 2.

TABLE 1

## ROCK SAMPLES (Values in ppm)

	<u>Cu</u>	<u>Mo</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Au</u>	<u>As</u>
D 89	685	14	512	368	10.5	<0.02	
D 198	699	<5	3,140	3,570	6.0	0.03	
B 150	114	<5	306	154	2.2	0.26	
B 155	1,114	<5	2,383	6,160	3.4	0.14	
20045	59	<5	<5	172	2.0	<0.02	2
20046	183	<5	286	1,120	2.1	<0.02	5
20047	142	<5	167	830	2.1	0.03	15
20048	1,340	9	4,900	6,800	8.9	0.03	175
20049	214	<5	539	557	2.3	<0.02	17
20050	188	6	994	615	2.7	0.08	108
20051	153	<5	1,170	543	1.5	<0.02	17
20196	12,000	<5	24,300	87,000	19.5	0.08	130
20199	52	60	142	65	3.8	0.14	239
20200	265	12	117	660	1.6	<0.02	39
20251	2,850	<5	15,800	37,500	4.4	0.05	23
20252	5,190	14	12,600	42,600	13.4	0.06	184

TABLE 2

## SILT SAMPLES (Values in ppm)

	<u>Cu</u>	<u>Mo</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Au</u>	<u>As</u>
B 7	31	<5	25	119	1.6	0.03	
B 8	48	<5	29	183	0.3	INS	
B 9	61	<5	32	318	2.0	0.07	
20254	37	<5	27	188	0.9	0.06	33

## DISCUSSION AND CONCLUSIONS

Mineralization on the Hoey claim appears to be structurally controlled. The predominant northwest trending structure on the west side of the property hosts the most substantial sulfide mineralization. The wallrock adjacent to this structure also displays pervasive clay alteration and silicification. Mineralized milky quartz veins also parallel the northwesterly trend. Concentrations of sulfides are restricted to the massive andesite lapilli tuffs and the underlying pyritized black argillaceous sediments may provide a source for the metals. A possible relationship to a massive volcanogenic sulfide body, similar to the one found on the Seneca property, 12 kilometers to the southwest, cannot be ruled out. Rock chip sampling indicated substantial, but local concentrations of zinc, lead, and copper with minor silver values. Gold results were not encouraging. A zone of 16.1 meters was sampled with an average grade of 0.05% Cu, 0.19% Pb, 0.21% Zn, and 0.12 oz/ton Ag. A higher grade shear zone 1.1 meters in width contained within the larger above zone averaged 0.13% Cu, 0.49% Pb, 0.68% Zn, and 0.26 oz/ton Ag.

## RECOMMENDATIONS

Detailed geological mapping should be carried out on the Hooey property. However, a lack of suitable outcrops will hinder proper mapping, therefore, grid soil sampling is necessary. VLF-EM-16 should be used to delineate the major structures and the corresponding sulfide mineralization.

ITEMIZED COST STATEMENT

Wages

<u>Name</u>	<u>Nature of Work</u>	<u>Dates Worked</u>	<u>Total Days</u>	<u>Rate Per Day</u>	<u>Total</u>
Barry Devlin	Field Work	April 26-29	4 days	\$84.00	\$336.00
	Report Writing	July 12	1 day	\$84.00	\$ 84.00
Steve Lau	Field Work	April 26-29	4 days	\$78.00	\$312.00
Total Wages					\$732.00

Food & Accomodation

Harrison Lakeshore Motel	April 26-29	4 days		
8 Man-day @ \$39.00/day				\$312.00

Transportation

Truck \$30.00/day	April 26-29	4 days		\$120.00
Fuel (Gasoline)				\$ 48.00

Analyses

14 Rock Chip Samples analyzed for Cu, Pb, Zn, Mo, Au, Ag, As at \$6.50/sample				\$ 91.00
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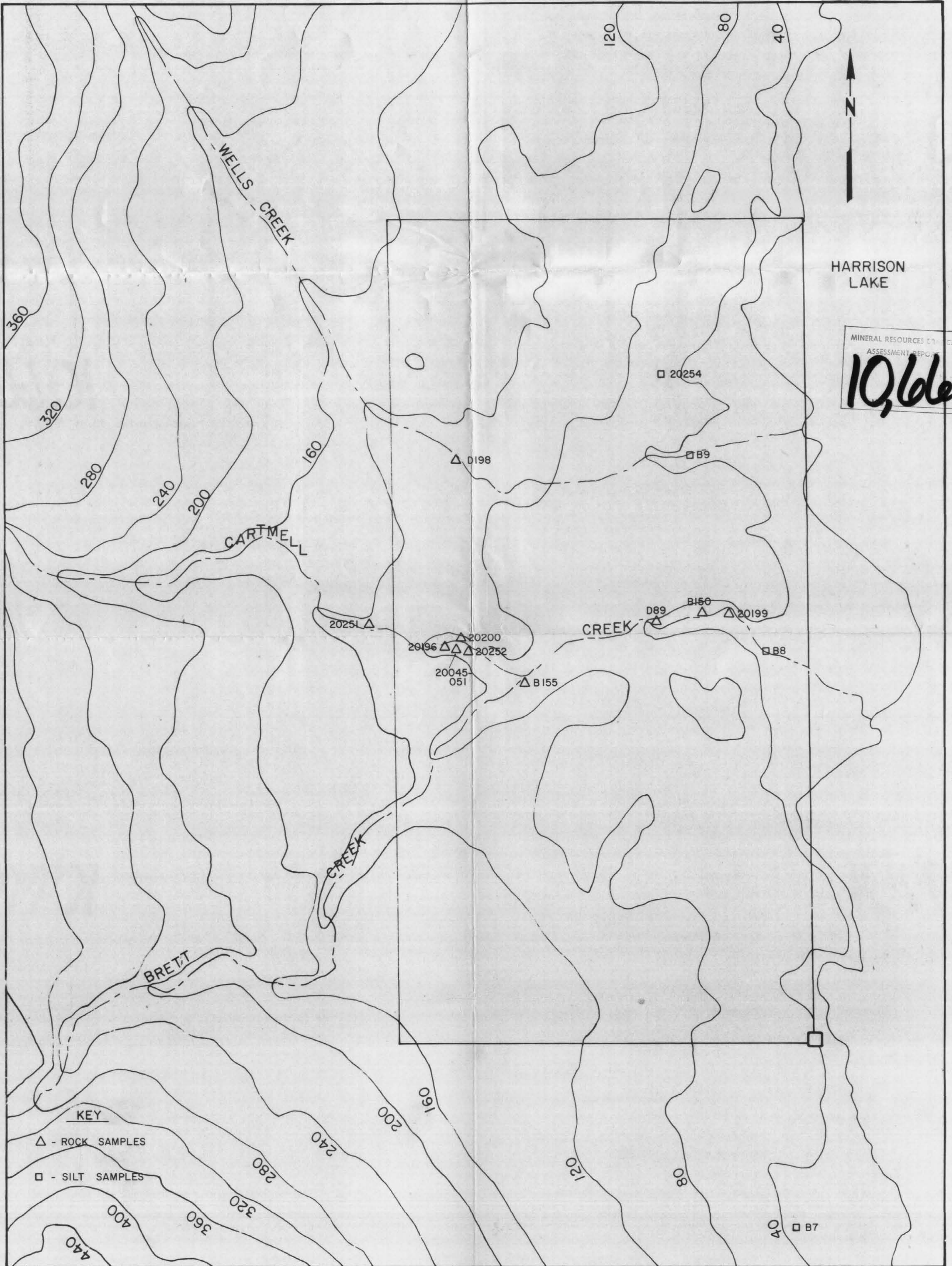
Total Costs \$1,303.00

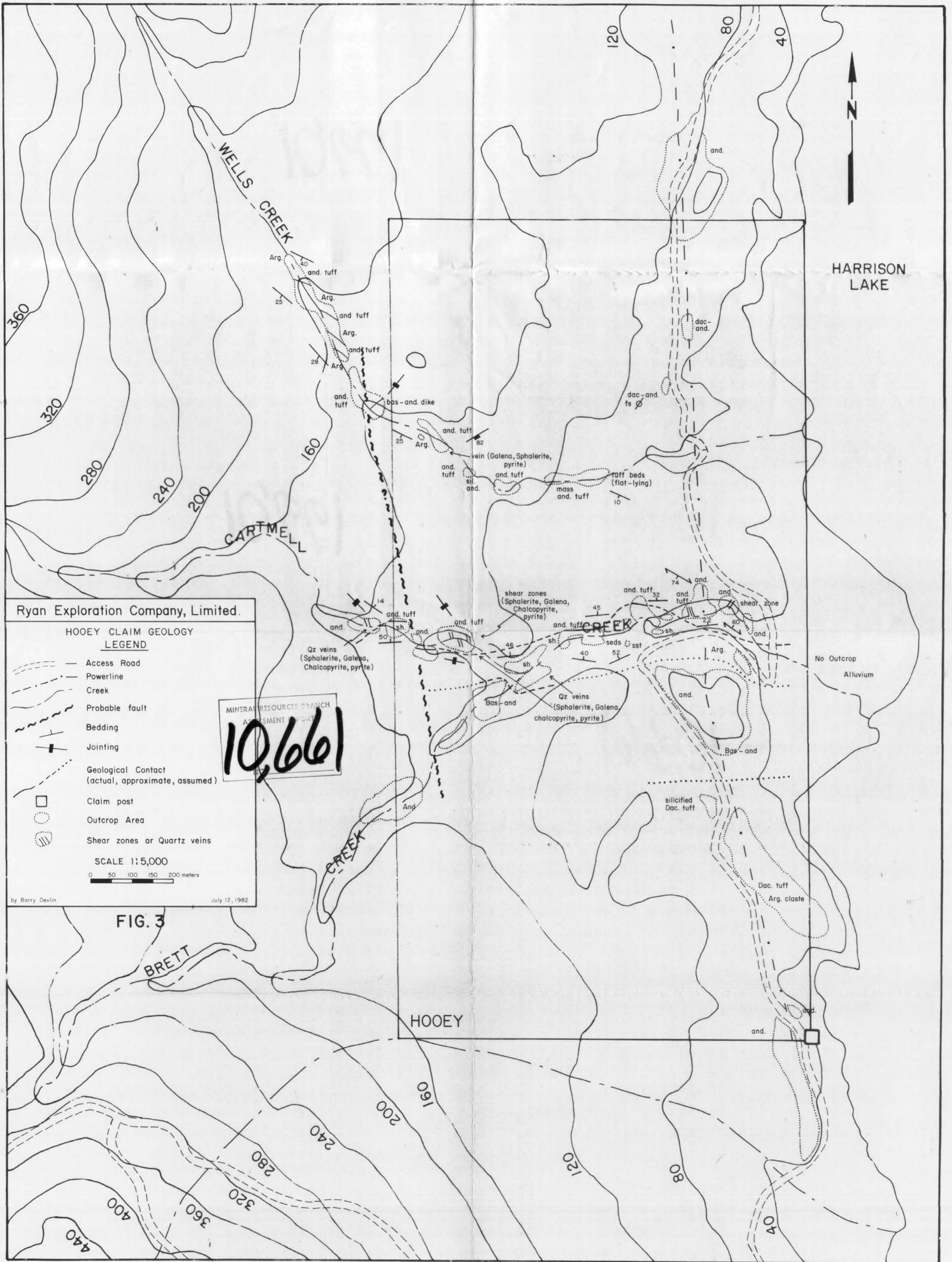
## STATEMENT OF QUALIFICATIONS

I, Barry D. Devlin of #24-3039 East 56th Avenue, Vancouver in the Province of British Columbia, hereby certify that:

1. I obtained a B.Sc. in Honours Geology from the University of British Columbia in 1981.
2. I have worked summers in mineral exploration since 1978.
3. I have been permanently employed by Ryan Exploration Company, Ltd. since May 4, 1981.
4. This report is based on personally working on the Hooey claim during April, 1982.







Ryan Exploration Company, Limited.

HOOEY CLAIM GEOLOGY  
LEGEND

- Access Road
- Powerline
- Creek
- Probable fault
- Bedding
- Jointing
- Geological Contact (actual, approximate, assumed)
- Claim post
- Outcrop Area
- Shear zones or Quartz veins

SCALE 1:5,000  
0 50 100 150 200 meters

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**10,661**

by Barry Devlin July 12, 1982

FIG. 3

HOOEY