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092H/08E

October 25, 1977

President & Directors Grove Exploration Ltd. (N.P.L.) Suite 2002 - 1055 West Georgia Street Vancouver, B.C.

Attn: Messrs. D. Brown and J. Godfrey

Gentlemen:

PROGRESS REPORT #77-1 - EXPLORATION FRENCH MINE PROPERTY, HEDLEY, B.C. SIMILKAMEEN/OSOYOOS MINING DIVISIONS

### GENERAL

This report follows upon the writer's "PROGRESS REPORT #76-1 -EXPLORATION - FRENCH MINE PROPERTY, HEDLEY, B.C. " of date October 25, The current report provides descriptions and results of work accomplished since that date. On the basis of the more recent exploration results, the writer makes some slight revisions to formerly scheduled recommendations and cost estimates. For more comprehensive descriptions of property details, history and past production, geology, and ore reserves and potential, the reader is referred to the writer's original "REPORT - GEOLOGY & ORE POTENTIAL of the FRENCH MINE PROPERTY, HEDLEY, B.C." of date July 26, 1976.

### PROPERTY

The existing mine workings situate at some 4 line-miles southeast of Hedley, B.C. From Highway 3, they are reached via 5½ miles and 1 mile of the Nickel Plate and French mine roads respectively.

The present property comprises 11 Crown-granted mineral claims, and fill-in fractions plus 4 full-sized and 1 fractional claims located during 1976. All are contiguous and together comprise a block of ground, which in areal extent, is quite sufficient to cover all possible extensions of the French ore zone and potential parallel zones of similar gold-silver-copper mineralization within skarny rocks to the north and east of it.

Such labour, equipment, and services as are required for exploration and production operations are all available from relatively local sources and Vancouver B.C.

## HISTORY & PRODUCTION RECORD

The original gold-silver-copper showings were discovered in 1901 and purchased by Mr. French and associates in 1905. The showings were very tentatively explored and developed by several companies and the owners up to 1947. On the basis of the owner's drilling results in 1947 the property was examined by Kelowna Exploration Co. Ltd., and purchased by its successor Kelowna Mines Hedley Ltd. in 1949. The latter operated the mine until 1955, when its parent mine and mill near Hedley were closed for economic reasons. In 1956 Cariboo Gold Quartz Mines acquired a controlling interest in the property and continued development and production, with only local drill exploration, until May, 1961 - due to exhaustion of the then economic ore reserves. The Cariboo company installed a 50 t.p.d. cyanidation mill near Hedley to process ore from the property. Total ore production from 1950-61 amounted to 84,926 tons containing 52,369 troy oz. of gold plus associated silver values - yielding \$1,863,000 in recovered gold and associated silver values. The gold price during this period was \$35 per troy ounce.

## GEOLOGY & MINERALIZATION

The French orebodies comprise manto-like replacements in impure limestones that have been altered to brown-to-green sharn and white,

partly silicated limy rocks. These favourable rocks occur within tuffs, flows, limestone and chert of the regional Nicola group. The orebody is described as relatively flat-lying, E-W elongated spread within a particular horizon of brecciated limestone - also faulted and crumpled along a general E-W axis.

The gold values, which are recoverable by cyanidation, are primarily associated with pyrrhotite, cobaltite, and the tellurides -- hedleyite and joseite. Locally, as at the west end of the orebody gold and silver values are associated with disseminated to massive copper sulphides including the above-noted 'cyanidable' minerals.

To date, the orebody has been stoped over an E-W length of some 700 ft. -- being limited to the west by the French fault zone, and to the east by the Cariboo/Stephens faults. Presently, considerable priority is attached to a major drilling program which would search for the possible (off-set) extension of the ore zone beyond, or eastward of the Cariboo fault. Prior to this, however, the writer favours a continuation of current short-hole drilling program to delineate and assess probable and possible ore extensions southward and westward of the existing stopes.

The ore beds within mined-out, and possibly other parts of the orebody generally ranged between 6 - 10 ft. in thickness. Frequently, however, however, prongs of ore into strong crumple/fracture zones were mined to over-all heights of up to 50 ft. -- resulting in the frequent break-throughs to the surface.

# PROGRESS NOTES - EXPLORATION

October 24 - 31 --- Survey grid base-line and cross-line stations and topography; map bedrock exposures in grid area. Run magnetometer survey over grid and interpret general extent of bedrock alteration. Plot foregoing plus I.P. data @ 1" - 30' & 300' on corrected grid plots.

November 1 - 30 --- Locate main old drillholes over mine section of grid. Complete magnetometer/geological surveys. Up-date map and cross-section drawings. Put down d.d.h. G-1 to 199' @ 150' short of planned depth; driller abandons contract.

June, 1977 --- Make test shipment of truck load of ore from west copper zone to Asarco, Tacoma.

August 1, 1977 --- Carry out short-hole dia. drill exploration of to date probable and possible ore extensions to the west and south of the stoped area - summarized as follows:

Hole no.	Inclin.	Core Interval	Length, ft.	Au.oz/ton	Ag.oz/ton	Cu <sup>8</sup>
2	-85°	3.5-10.0	6.5	0.014	0.01	0.29
3	-55°	29.5-32.5	3.0	0.664	0.20	0.08
4	-45°	28.0-34.9	6.9	0.448	0.12	0.29
5	-90°	8.0-14.0	6.0	0.152	0.45	0.39
		20.0-26.0	6.0	0.094	0.76	0.63
GC -2	-30°	4.0- 9.0	5.0	0.378	0.53	0.50
GC -3	-90°	39.5-47.0	7.5	0.102	0.02	0.03
		53.0-58.0	5.0	0.128	0.13	0.02
GC -6	-90°	0 - 4.0	mineralized	skarn, all	core lost.	
		4.0- 9.0	5.0	0.178	0.18	0.06
		9.0-14.0	5.0	0.204	0.46	0.29
		(14.0-17.4	3.4	0.050	0.78	0.60)

Due to the fact core recoveries obtained with the small drill used lay in the general range of 50%-80%, the arithmetic average of the above gold and silver values adequately defines the average grade of mineralization intersected on extensions beyond the existing stopes. The grade thus computed amounts to: (see next page)

Au @ 0.232 oz/ton, Ag @ 0.28 oz/ton --- exceeding the average grade previously estimated for the West ore block.

### INTERIM SUMMARY

The whole of the 1950-61 production was made at a gold price of \$35.00 oz. During this period millheads averaged 0.62 oz. Au (\$21.70) per ton at a cut-off grade of about 0.30 oz. Au (\$10.50) per ton. With the present gold price of \$162/oz, together with the fact that a new mining operation would utilize the more flexible lower unit cost L.H.D. mining methods, the writer feels that profitable production at an average recovered grade of 0.20 oz. Au/ton and associated silver values (total \$34/ton) should be attainable.

At present gold and silver prices, the ore potential within direct extensions of the one or two ore beds outward of the existing stope walls. To this end the writer, with the assistance of the field crew, layed out some 12 additional 'Winkie' drill holes. The progressive driling results may warrant some substitutions of these.

In view of both the probable and possible ore potential lies in N-S extensions of known ore beds and a (faulted) easterly extension of the ore zone together with the economically favourable situation and character of the property, the writer believes the following recommendations should be implemented.

### RECOMMENDATIONS

STAGE I - Completed

STAGE II - Continue short-hole drilling to test known ore bed extensions.

STAGE III - Carry out detailed I.P. surveys on at least three grid
lines to investigate possible localized targets for drillevaluation of presently unexplored easterly extensions of
the ore zone. On the basis of the existing drilling,
geological and geophysical information, carry out longhole exploration diamond drilling of the possible easterly
extensions of the ore zone.

STAGE IV - Open; contingent on Stage II and III results.

# ESTIMATED COSTS

STAGE II - Funds on hand

STAGE III:-	a)	Re-establish grid stations & extend to 6S & 8N $$	\$ 250
	b)	Detailed I.P. survey, gross 1 line-mile	1,500
n de la compaña	c)	Underground diamond drilling, 1000' @\$15/ft.	15,000
	d)	Surface diamond drilling, 3500' @\$17/ft.	59,500
and the first of the state of	e)	Sampling and assaying	1,000
	f)	Engineering and supervision	7,000
g 1 m sh	g)	Provision overhead, ommissions and	5,750
		contingencies	
			10 <del>11-101-101-101-101-101-101-10</del>
		TOTAL STAGE III	\$90,000

STAGE IV - Open

Respectfully submitted,

W. M. Sharp, P. Eng.

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The Company has on hand approximately \$5,000.00 working capital which will be used to pay general corporate and administrative expenses. If the option granted to the Underwriters is exercised, in whole or in part, the proceeds received therefrom will be applied to carrying out the remainder of the Stage III programme of work on the French Mine claims pursuant to the recommendations of W.M. Sharp, P.Eng., in his attached Report.

None of the proceeds realized from this offering will be spent on any other property, other than the Company's French Mine, without the approval of the Exchange being first received.

5. GIVE THE FULL NAME, HOME ADDRESS AND CHIEF OCCUPATION, THE NUMBER OF SHARES OF THE ISSUER BENEFICIALLY OWNED, DIRECTLY OR INDIRECTLY, BY EACH SENIOR OFFICER OR DIRECTOR OF THE ISSUER AND IF EMPLOYED DURING THE PAST FIVE YEARS THE NAME OF EACH EMPLOYER.

Name, Address and Office held	Chief Occupation	Number of Shares of Company Beneficially owned
DURWARD JAMES BROWN 8571 Alexandra Rd. Richmond, B.C. Director & President	Motel Operator until 1972; since then semi-retired, working part-times field representative various exploration companies. Active director and part-time field representative for Grove since 1973	
JOHN STUART GODFREY 3663 Alexandra Street Vancouver, B.C. Director, Secretary/ Treasurer	Practiced as Accountant with R.P. Godfrey & Co., Vancouver, B.C. until 197 Practiced with McGillivra & Company, Chartered Accounts, Vancouver, B.c. fr. 1973 to 1974. Part-time involved during period in management of various exploration companies. Active in management Grossince 1973	72; ay oun- rom
CARL ROLAND JONSSON 2895 West 47th Avenue Vancouver, B.C. Director	Partner, Tupper, Jonsson Shroff & Zink, Barrister, and Solicitors, Vancouve B.C.; executive various exploration companies	S

6. PARTICULARS OF THE CORPORATE STANDING OF THE COMPANY

The Company was incorporated in British Columbia on July 14th, 1972 by Memorandum and Articles.

The last Annual Report was filed by the Company with the Registrar of Companies as of July 14th, 1977. All filings required to be made by the Company under the Securities Act and Companies Act of British Columbia are up to date.

The last audited Financial Statements of the Company presented to an Annual Meeting of the Company's shareholders, held November 18th, 1976, were audited as at August 31st, 1976.

The Company is engaged in the business of acquiring mineral properties and conducting thereon exploration and development work. There is no business which the Company is prohibited from participating in.

7. THE AUTHORIZED CAPITAL AND ISSUED SHARE CAPITAL OF THE COMPANY.

The authorized capital of the Company consists of 3,000,000 shares with a par value of 50¢ each, of which 1,713,005 have been issued as fully paid.

- 8. THE PRICES AT WHICH SECURITIES OF THE COMPANY HAVE BEEN ISSUED DURING THE PAST YEAR
  - 31,000 shares at 17¢ per share 59,000 shares at 16¢ per share 1,000 shares at 19¢ per share 209,000 shares at 16.5¢ per share
- 9. PARTICULARS OF ANY BONDS, DEBENTURES, NOTES, MORTGAGES, CHARGES, LIENS OR HYPOTHECATIONS OF THE COMPANY.

Nil.

10. PARTICULARS OF IMPORTANT PROPERTIES PRESENTLY OWNED, LEASED, HELD UNDER OPTION OR OPERATED BY THE COMPANY OR ANY SUBSIDIARY THEREOF OR PROPOSED TO BE OWNED, LEASED, HELD UNDER OPTION OR OPERATED BY THE COMPANY OR ANY SUBSIDIARY THEREOF.

The Company presently holds only one important property consisting of the mineral claims comprising what is known as the "French Mine" located near Keremeos, British Columbia. The Company's interests are held by way of an option to purchase, except for one claim consisting of 6 units which the Company owns outright. Details of the option agreement are contained in Item 11.

The property does not contain a known body of commercial ore. During the past year the Company has conducted a programme of exploration work on the claims consisting of geochemical and geophysical surveys, geological mapping, prospecting, approximately 900 feet of diamond drilling, and sampling. The work has cost approximately \$25,000.00.

11. PARTICULARS OF THE COST OF PROPERTIES ACQUIRED BY THE COMPANY OR ANY SUBSIDIARY THEREOF WITHIN THE PAST THREE YEARS OR PROPOSED TO BE ACQUIRED BY THE COMPANY OR ANY SUBSIDIARY THEREOF.

#### A. French Mine

1. The Company holds an option dated March 6th, 1976 from