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# REPORT

ON

PLACER LEASES PL5319 - 5329 AND FCP MINERAL CLAIMS

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# FRENCH CREEK PLACERS LTD.

# REVELSTOKE MINING DIVISION BRITISH COLUMBIA

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VICTORIA, B.C.

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#### SUMMARY

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French Creek Placers Ltd. owns 11 placer leases and 8 mineral claims covering the central and upper French Creek area in the Revelstoke Mining Division of British Columbia.

While the lower reaches of French Creek have yielded significant quantities of coarse placer gold in the past, the leases currently held by French Creek Placers Ltd. have not been systematically tested. There is also little evidence of recent mineral exploration in the French Creek headwaters area.

The writer recommends a program estimated to cost \$200,000.00, consisting of seismic surveys and percussion drilling to test the placer gold potential of the current leases. A \$20,000.00 program of prospecting, geological mapping and geochemistry is also recommended for the FCP mineral claims area.

#### INTRODUCTION

French Creek Placers Ltd. owns 11 Placer leases and 8 2-post Mineral Claims on French Creek in the Revelstoke Mining Division on British Columbia.

This report, prepared at the request of French Creek Placers Ltd., is based on a personal examination of the properties on September 12, 1982, and on a study of various published and private reports.

#### LOCATION AND ACCESS

French Creek, a tributary of Goldstream River, is situated north of Revelstoke and east of the Columbia River in southeastern British Columbia (Figure 1). The Placer leases extend up French Creek between 4.5 and 9 miles northeast of its confluence with Goldstream River and the mineral claims occupy an area below French Glacier at the headwaters of French Creek (Figure 2).

Access to the area is presently by helicopter from Revelstoke, 50 miles south. The lower reaches of French Creek may be reached by a 10 mile four-wheel drive road which branches off Highway 23 (Mica highway) north of Goldstream River (Figure 2). French Creek Placers Ltd. holds the following placer leases and mineral claims (Figures 3 and 4):

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Placer Lease	Record No.	Expiry Date
PL 5319	P21441	October 29, 1984
PL 5320	P21442	October 29, 1984
PL 5321	P21443	October 29, 1984
PL 5322	P21444	October 29, 1984
PL 5323	P21445	October 29, 1984
PL 5324	P21446	October 29, 1984
PL 5325	P21447	October 29, 1984
PL 5326	P21448	October 29, 1984
PL 5327	P21449	October 29, 1984
PL 5328	P21450	October 29, 1984
PL 5329	P21451	October 29, 1984

Mineral Claims	Record No.	Expiry Date
FCP	1342	November 19, 1982
FCP 1	1343	November 19, 1982
FCP 2	1344	November 19, 1982
FCP 3	1345	November 19, 1982
FCP 4	1346	November 19, 1982
FCP 5	1347	November 19, 1982
FCP 6	1348	November 19, 1982
FCP 7	1349	November 19, 1982

### PHYSICAL FEATURES

The area is one of rugged relief, typical of the Selkirk Mountains. Elevations range from 2100 feet at the confluence of French Creek and Goldstream River to more than 8000 feet on French Glacier. Below 6000 feet, steep slopes are heavily timbered with very thick underbrush.

French Creek occupies a hanging valley, rising abruptly from Goldstream River to the Placer leases at 3000 feet elevation where it meanders for several miles through swampy meadows. Between the leases and the mineral claims, elevations again rise sharply 6000 feet to a cirque area with tarn lakes below French Glacier. -1

#### HISTORY

Gold was discovered on French and neighbouring creeks in 1865 and it is reported that by the next year some 8000 to 10,000 people were resident in the area. Much of the activity and production occurred in the first few years and the creeks were dormant until the late 1800's. Periodic activity took place between 1910 and 1922 and from the late 1920's until about 1940.

French Creek was worked by a variety of mining methods including conventional sluicing, hydraulicking and underground drifting on bedrock by way of shafts. The lower reaches of French Creek received virtually all the attention.

Official recorded production (Holland, 1950) is 5405 ounces gold between 1886 and 1945. This figure includes estimates only from the local Gold Commissioner for production prior to 1929. Estimates of total gold production range in value from \$800,000 to a few million dollars, the bulk of this being recovered in 1865 and 1866.

Prospecting for lode deposits began shortly after the discovery of placer gold and gold-quartz veins at the headwaters of McCulloch and Graham Creeks received considerable attention prior to 1900, and more recently in the late 1950's. The discovery of the Goldstream massive sulfide copper-zinc deposit (Noranda Mines Limited) in 1974 sparked intensive exploration in the area and properties on Downie, Carnes and Laforme Creeks, most of which were discovered prior to 1900, received renewed attention.

Various proposals for exploration of the upper meadows area on French Creek apparently did not come to fruition prior to the location of the present Placer leases. In 1981, two seismic profiles were completed by Geotronics Surveys Ltd. (Figure 3). To the writer's knowledge, no previous mineral exploration in the area of the FCP mineral claims has been carried out.

#### GEOLOGY

The French Creek area is underlain by schists and gneisses of the Horsethief Creek Group of late Precambrian age. These rocks have undergone polyphase deformation with attendant high grade regional metamorphism, such that garnet, kyamite and sillimanite are common constituents of most rock types.

Structure is complex, with superposition of two major phases of folding giving rise to the Selkirk Fan structure, the axis of which trends northwesterly through an area north of French Creek headwaters.

Principal rock types seen in French Creek headwaters area are fine to medium-grained quartzbiotite-muscovite schists, locally fissile, which are cut by coarse-grained pegmatites and fine-grained aplites. Compositional layering and schistosities trend northerly and westerly with steep dips to the west and south.

Much of the valley bottom covered by the placer leases is marshy with abundant organic material. Underlying this swampy ground are unconsolidated gravels and sands.

#### MINERALIZATION

French Creek Placers Ltd. holds both placer and mineral claims and the potential for each is discussed separately.

## Placer Leases

The lower section of French Creek has yielded high purity (900 + fine) coarse gold and nuggets in the one to three ounce range. Most gold was recovered from both the valley bottom and benches west of, and parallel to, the present creek bed which is thought to have shifted progressively eastward over time. The presence of large boulders hampered early operations.

Source of the gold has been postulated to be from the Groundhog Basin area between McCulloch and Graham Creeks (Figure 2) where auriferous quartz veins are known.

Two seismic profiles run in 1981 on the placer leases under discussion (Figure 3) show the bedrock surface dipping steeply from the valley walls to a depth of more than 300 feet.

Profile B-B' indicates a bench area developed on bedrock at a depth of about 80 feet and over a horizontal distance of 250 feet before falling off sharply to a depth of more than 300 feet.

This apparent bench area would appear to have the most potential for recoverable concentrations of placer gold, based on history of previous mining downstream and relatively shallow depths to bedrocks.

## Mineral Claims

The eight FCP mineral claims (Figure 4) were located in 1981 to cover several rusty or gossanous areas at the headwaters of French Creek below French Glacier.

The cirque area is underlain by quartzmuscovite-biotite schists which have undergone several periods of deformation, the most recent of which is expressed by an open fold structure about a northwest striking axis.

The principal rusty areas north and west of the tarn lakes (Figure 4) are between 100 and 200 feet wide and appear to be part of the same formation.

Iron staining is due principally to very fine seams of pyrite and breakdown of mafic minerals. West of the southern tarn lake (Figure 4), numerous quartz segregations up to several inches wide are evident.

Four character samples were collected from these rusty areas and analyzed for 30 trace elements by the Inductively Coupled Argon Plasma (ICP) method. Gold was not detected and values for base metals and silver are considered to be background or slightly above when compared to results of Government stream sediment samples from the French Creek area.

No known systematic mineral exploration has been conducted in the area of the present mineral claims.

#### CONCLUSIONS AND RECOMMENDATIONS

1. Placer leases covering the meadows area of upper French Creek, south of the confluence of Graham Creek, may have potential for recoverable quantities of placer gold from the apparent bench area west of the present creek course.

2. Available data indicates that no previous testing of the meadows area has been undertaken.

3. A program to test the placer gold potential, consisting of additional seismic surveying followed by percussion drilling, is recommended.

4. A modest program of prospecting, geological mapping and geochemistry is proposed for the FCP mineral claims.

#### Placer Leases

1. A seismic survey, consisting of three additional profiles between the two previously run profiles (Figure 3), to further define the bench area west of French Creek.

2. 3000 feet of percussion drilling to test bench area with a Nodwell-mounted rig with reverse circulation to obtain adequate samples and to lessen possibility of contamination. The drilling program will require construction of a four mile "cat" road from the present four-wheel drive road to the meadows area.

3. An in-depth evaluation of drilling results to assess economic viability of project.

#### Mineral Claims

1. A two week program of geological mapping, prospecting and rock geochemistry of the French Creek headwaters area, on and adjacent to the FCP mineral claims.

2. Evaluation of results prior to further work being undertaken or the location of additional claims.

# COST STATEMENT

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# PLACER LEASES

1.	Seismic Surveys	\$ 15,000
2.	Percussion Drilling - 3000 feet	120,000
3.	Road Building	10,000
4.	Analytical Costs	6,000
5.	Helicopter Support - 10 hours	6,000
6.	Engineering, supervision	20,000
7.	Contingencies	23,000
	TOTAL	\$200,000

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# MINERAL CLAIMS

1.	Prospecting, geological mapping - Wages - 2 for 15 days	5,000
2.	Engineering, supervision, report preparation	3,000
3.	Analytical costs	3,000
4.	Camp and related support costs	3,000
5.	Helicopter support - 5 hours	3,000
6.	Contingencies	3,000
	TOTAL	\$20,000

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- Brown, Richard L.; Tippett, Clinton P.; Lane, Larry S.; 1978; Stratigraphy, facies changes, and correlations in the northern Selkirk Mountains, southern Canadian Cordillera; Canadian Journal of Earth Sciences; Vol. 15, No. 7, pp. 1129 -1140.
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- Minister of Mines, B.C.; Annual Reports, 1906 1934.
- Wheller, J.D.; 1965; Big Bend Map Area, British Columbia; Geological Survey of Canada, Paper 64-32.

#### CERTIFICATE

I, NICHOLAS C. CARTER, of Victoria, B.C., do hereby certify that:

- 1. I am a geologist registered with the Association of Professional Engineers of British Columbia since 1966.
- I am a graduate of the University of New Brunswick with B.Sc. (1960), Michigan Technological University with M.S. (1962) and the University of British Columbia with Ph.D. (1974).
- 3. I have practised my profession in eastern Canada and the United States and in British Columbia over the past 22 years.
- 4. This report is based on a personal examination of the Placer leases and FCP mineral claims owned by French Creek Placers Ltd. on September 12, 1982, and on research of published and private reports pertaining to the properties and area.
- 5. I have no interest, direct or indirect in Placer leases PL5319 - 5329, the FCP Mineral Claims, or in French Creek Placers Ltd.
- 6. Permission is given to submit this report, as presented, to the Vancouver Stock Exchange and the Superintendent of Brokers in support of a Prospectus or Statement of Material Facts.

N.C. Carter, Ph.D., P.Eng.