## CORDILLERAN ENGINEERING LTD.

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March 1, 1988

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### FAIRFIELD MINERALS LTD.

OKA PROPERTY

OKA 1-11 Claims (178 Units) IRON HORSE Claim ( 6 Units)

CAP

Claim ( 1 Unit )

NTS: 82/E-13W

Osoyoos Mining Division, British Columbia

# 1988 RECOMMENDED EXPLORATION PROGRAM

(DURATION: 12 months: March 1, 1988 to February 28, 1989)

## SUMMARY:

PERIOD:

Field:

May 1 - July 31, 1988

PROGRAM:

Preparation:

Personnel and contracts; Mar. 1 - Apr 30.

Geochemistry:

500 fill-in soil samples; May 1-15.

Geophysics:

Magnetometer & VLF-EM surveys - 40 line kilometres; May 1-15

Access and

Site Preparation:

Road building, drill sites and reclamation. Total of 1 month; May 15-Jun 1 & July 15-31.

Drilling:

Reverse Circulation drilling for 2 months. Estimated 4500 metres (35 holes); Jun 1-Jul 31

- Logging of cuttings

- 3000 geochemical analyses (Au)

- 450 assays (Au)

Data Compilation:

Evaluation of results.

) Aug 1, 1988 to

Final report preparation. ) Feb 28, 1989

COST ALLOCATION:

Drilling
Access & Site Preparation

\$455,000 \$ 30,000 (91%)

Geochemistry (soils) & Geophysics

\$ 15,000

( 6%) (<u>3%</u>)

**Estimated Total:** 

\$500,000

100%

DESCRIPTION:

Detailed on pages 2 to 4

ESTIMATED COST:

Detailed on page 5

## DESCRIPTION OF 1988 RECOMMENDED EXPLORATION PROGRAM

#### INTRODUCTION:

The Oka gold property is located in the Okanagan area of southern British Columbia and is easily accessible by road. The property covers an area of about 4 by 12 kilometres and is 100% owned by Fairfield Minerals Ltd.

The claims are underlain by a pendant of sedimentary, volcanic and dioritic intrusive rocks which are cut by granodiorite. Within the pendant is a 4.5 kilometre-long gold geochemical soil anomaly which transects a sequence of marble, skarn, tuffaceous siltstone and minor limestone boulder conglomerate. This same sequence of rocks is considered to be the most favourable stratigraphic level for economic gold skarn development in the Hedley area to the south.

Near the eastern end of the geochemical feature, in the Iron Horse area, gold mineralization is associated with skarn, massive sulphides and altered diorite dikes and sills in a skarn/marble contact environment over an area of about 400 by 600 metres. Vertical extent of skarn stratigraphy exceeds 100 metres. Other similar centres of gold mineralization may lie at depth in the western portion of the target area.

In 1987 more than 3,000 linear metres of trenching tested areas of anomalous gold soil geochemistry. Gold-bearing skarns and veins were exposed in several widely separated areas. Significant gold values from continuous chip samples in these areas include 1.12 oz/ton across 1.5 metres, 0.16 oz/ton across 3.4 metres, 0.24 oz/ton across 2.0 metres and 0.21 oz/ton across 2.0 metres. Visible gold has been located in one of the showings and a grab sample assayed 11.19 oz/ton gold.

The setting of gold-bearing skarns and diorite sills at Oka is similar to that at the Mascot gold mine located fifty kilometres to the south in the Hedley aree. This mine which commenced production in mid-1987 has open-pittable reserves estimated at 10 million tons grading 0.133 ounces gold per ton. Past production exceeded one million ounces.

The geological similarities of these two properties, plus the widespread occurrence of gold showings, indicate good potential for the discovery of a large, near-surface, open-pittable gold deposit at Oka, with the additional possibility of high-grade zones.

To adequately test this potential, a major program of reverse circulation drilling is proposed. Recommended ancillary work includes soil sampling, magnetometer and VLF-EM surveys and road building.

### DESCRIPTION OF 1988 RECOMMENDED EXPLORATION PROGRAM Cont'd

PROGRAM: (Field period: May 1 - July 31)

### 1. Preparation

Interview and select suitable candidates for key personnel positions. Invite and select contracts for reverse circulation and bulldozer work. (March 1 - April 30)

### 2. Ancillary work

In early May, commence ancillary work including:

(i) Soil Sampling

Collect 500 soil samples at station intervals of 25 metres along lines spaced 25 metres apart. This work would fill-in around anomalous areas which have been partially defined by 1986-87 surveys. Analyse for gold only. Work to be completed before the end of May.

(ii) Access and Site Preparation

Build roads and drill sites in areas of proposed drilling. Work to be completed by the end of May.

(iii) Geophysics

Conduct magnetometer and VLF-EM surveys (by project personnel) over selected areas. Results from the 1987 survey in the Iron Horse area suggest that higher magnetic relief may be reflecting mineralized centres related to dioritic intrusive bodies.

The surveys would cover an area of about 1 by 4.5 kilometres and consist of 40 line-km on 100 by 25 metre and 50 x 25 metre grid spacings. Work to be completed by the end of May.

#### 3. Drilling

A program of reverse circulation drilling on a one 12-hr shift basis to commence June 1 and finish by July 31 is recommended. Reverse circulation drilling has been employed for the last several years at Mascot gold mine and has met with considerable success.

Grid-spaced drilling would be utilized during the initial investigation over the Iron Horse area where it is known that the favourable stratigraphy for economic gold skarn development is present. The hole spacing proposed is 100 metres on north-south fences 100 metres apart. There would be a 50 metre offset of drill centres on alternate fences. This drill pattern, similar to that used at Mascot to test for an open-pittable deposit, would entail drilling 16 vertical holes to an average depth of 100 metres. Total metreage = 1600 metres. Another 4 holes (400 metres) would be drilled to test projections of known surface mineralization at several locations. Total 20 holes = 2000 metres.

Outside of the Iron Horse area, 15 holes (2500 metres) would be drilled to test for similar centres of gold mineralization which may lie at depth in the western portion of the 4.5 kilometre-long gold soil anomaly. It is expected that these holes would average between 150 metres and 200 metres in depth.

4.

# DESCRIPTION OF 1988 RECOMMENDED EXPLORATION PROGRAM Cont'd

# Drilling continued

Collect 3000 drill chip samples (1.5 metre sample length). Log samples and analyse geochemically for gold. Fire assay all anomalous samples for gold (estimated 450 samples).

Data Compilation
 Evaluation of results and final report preparation.

#### APPENDED:

- -Claim Summary at January 7, 1988.
- -Property Location and Regional Geology Map
- -Oka Gold Property Compilation Map
- -Proposed 1988 Drill Plan Iron Horse Area