## **Assessment Report**

# Geophysical Self-Potential Survey

JOAN Placer Claim # 306686

971140 57 000 131 000



## **Assessment Report**

## **Geophysical Self-Potential Survey**

#### JOAN Placer Claim # 306686

## **Property**

The JOAN Placer Claim is in the Cariboo District, Quesnel Mining Division, British Columbia. The claim is located on Slough Creek, 1.3 km west of the West end of Jack of clubs Lake, at 592000 m East, 5881500 m North, NTS 93H4. Access is south from Highway 26 on a logging road for 1 km, hence 50 m west to the initial post.

#### Program

The program was designed to test for carbonaceous horizons within the sedimentary sequence that underlies the property. The soft carbonaceous rocks erode more readily than the surrounding phyllites and may form incised channel ways that could host placer gold. Further, the carbonaceous component acts as an electrochemical cell which enhances the deposition of gold from mobile ground water.

#### Method

The self potential geophysical technique is an efficient method for detecting carbonaceous sediments below overburden cover. A survey was run over the eastern half of the Joan Placer Claim from June 29, 1997 to July 3, 1997. This is the area of the claim where topography is best suited to a Self Potential Survey.

Readings were taken at 5 metre intervals along pre-existing flagged grid lines.

The "long-wise" method was used with the maximum distance between the base

station and the reading station being 100 m. The instrument used was a modified

Sharpe V.P.-6.

Results

The self potential readings are plotted in millivolts on the accompanying survey

plan. Readings have been corrected for variations in base station voltage

potentials. Readings of 80 milivolts or higher indicate possible carbonaceous

material in the sub-surface bedrock and those of 100 milivolts and higher,

probable carbonaceous material in the sub-surface bedrock. The results define

high priority areas for future testing.

W. San Sutderland

Signed

W. Don Sutherland

Geological Engineer

July 7, 1997

## Expenditures:

#### Labour

Instrument Operator 5 days x 200/day 1,000.00

W. D. Sutherland

Cochrane, Alberta

Field Assistant 5 days x 100/day 500.00

J. H. Sutherland

Cochrane, Alberta

## Field Living:

10 man days x 40/day 400.00

Report and map preparation 200.00

Travel:

4x4 pickup truck 1 week x230 <u>230.00</u>

Total \$2,330.00

Dates on which work performed:

June 23, 1997 to July 3, 1997 inclusive.

## **Statement of Qualifications**

- I, W. Don Sutherland of Glenbow Road, R.R. #2 Cochrane, Alberta hereby certify:
- 1. That I am a graduate engineer from the University of Toronto.
- 2. That I hold the degree of Bachelor of Applied Science (BASc) in Mining Geology.
- 3. That my university training included the study of geophysics.
- 4. That my profession is that of Geological Engineer and I have practiced my profession continuously for forty-eight years.
- 5. That I am experienced in the operation of self potential geophysical techniques and results.
- 6. That I personally conducted the survey on which this report is based.

Signed:

W. Don Sutherland, BASc Geological Engineer

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