80-652 #8425

REPORT ON
A GEOPHYSICAL SURVEY

by

P. G. Folk, P. Eng.

on the

AL GROUP
owned by
SILVER STANDARD MINES LTD.

Situated Northwest of Kinaskan Lake
in the
Liard Mining Division

57°45'N 130°20'W

NTS: 104 G/9W

August 1980

Vancouver, B.C.

8425

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
LOCATION AND ACCESS	1
HISTORY	1
SURVEY	2
RESULTS	2
CONCLUSIONS	2
STATEMENT OF EXPENDITURES	3
STATEMENT OF QUALIFICATIONS	4
APPENDIX I - The Self Potential Method	5

MAPS AND FIGURES

	After Page---
INDEX MAP	1
CLAIMS AND GRID	1
SELF POTENTIAL SURVEY	2

INTRODUCTION

This report summarizes work completed by Teck Explorations Ltd. on the Al Group of mineral claims owned by Silver Standard Mines Ltd. The claims cover areas containing copper mineralization in Triassic volcanic and sedimentary rocks intruded by dykes of porphyritic diorite.

A program consisting of an S-P (self-potential) survey was conducted on the claims from August 6 to August 8, 1980. Expenditures incurred are submitted for assessment work credit on behalf of Silver Standard Mines.

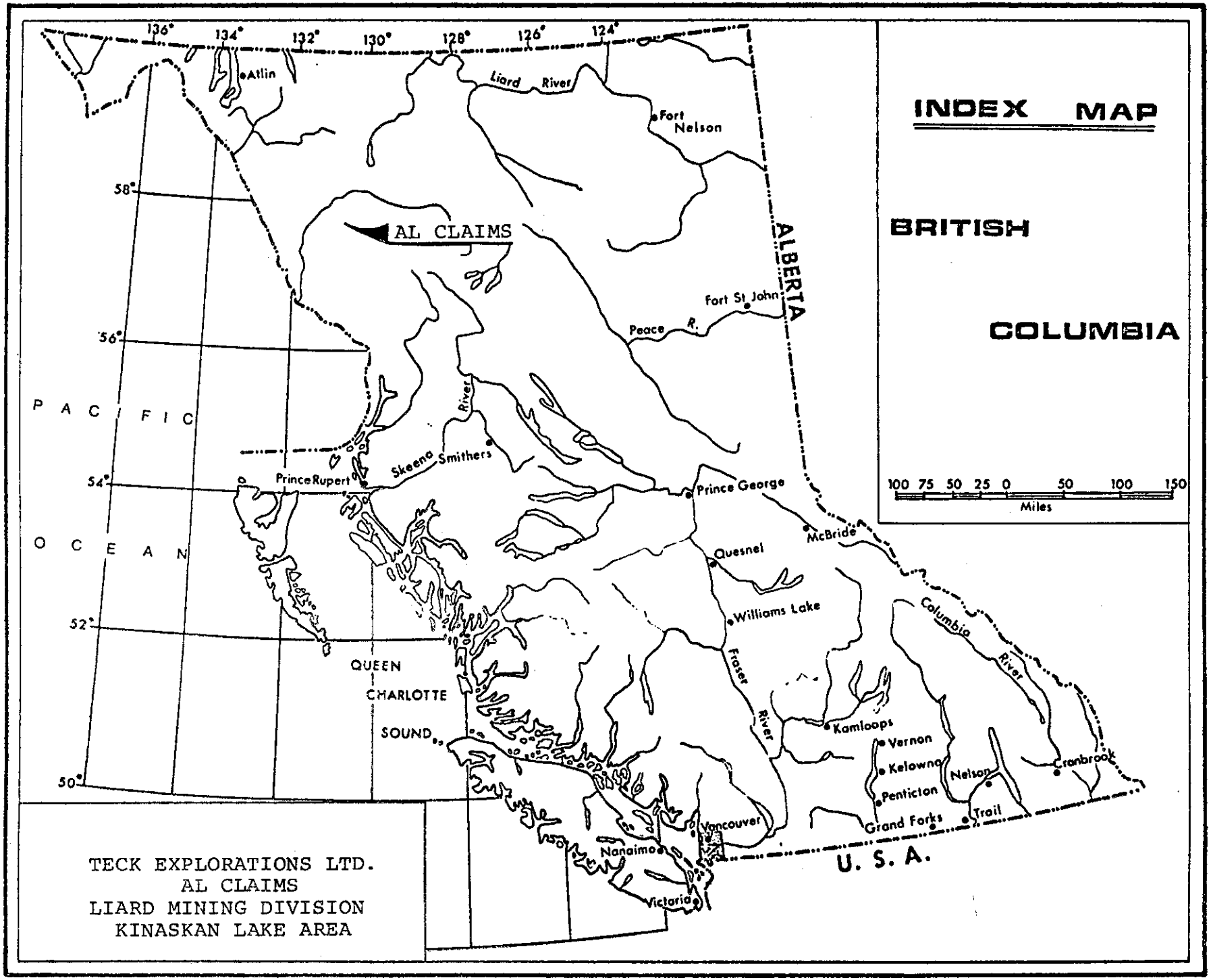
LOCATION AND ACCESS

The property is located in the Liard Mining District about 30km southwest of Iskut. A northwest flowing tributary of Quash Creek starts on the claim group. Access is by helicopter from Iskut which is on the Stewart-Cassiar Highway.

HISTORY

Prospectors for Conwest Exploration Co. Ltd. found and staked showings near Quash Creek in 1964. These claims were eventually allowed to lapse. Silver Standard restaked a part of the original claims in 1970 and did sampling and geological work in 1971 and 1978.

In the summer of 1980, Teck Explorations optioned the claims and did a small amount of geophysical work.


INDEX MAP
BRITISH COLUMBIA
AL CLAIMS
ALBERTA
PACIFIC OCEAN
QUEEN CHARLOTTE SOUND
Atlin
Liard River
Fort Nelson
Fort St John
Peace R.
Skeena River
Prince Rupert
Smithers
Prince George
McBride
Quesnel
Williams Lake
Fraser River
Columbia River
Kamloops
Vernon
Kelowna
Penticton
Nelson
Cranbrook
Grand Forks
Trail
Vancouver
Nanaimo
Victoria
U. S. A.
136° 134° 132° 130° 128° 126° 124°
58° 56° 54° 52° 50°
100 75 50 25 0 50 100 150
Miles
TECK EXPLORATIONS LTD.
AL CLAIMS
LIARD MINING DIVISION
KINASKAN LAKE AREA

SURVEY

A flagged grid was run in the cirque to the east of the main showings in an area of talus and few outcroppings. About 2.5km of line was run comprising six lines at 50m intervals. A Fluke digital multimeter was used to measure the naturally occurring electrical potential difference in the ground between two porous ceramic electrodes 50m apart. The ground was damp during the survey resulting in good connections between the copper sulphate solution in the electrodes and the ground. Voltages in millivolts were recorded and are plotted on the enclosed map at the midpoint between the electrodes.

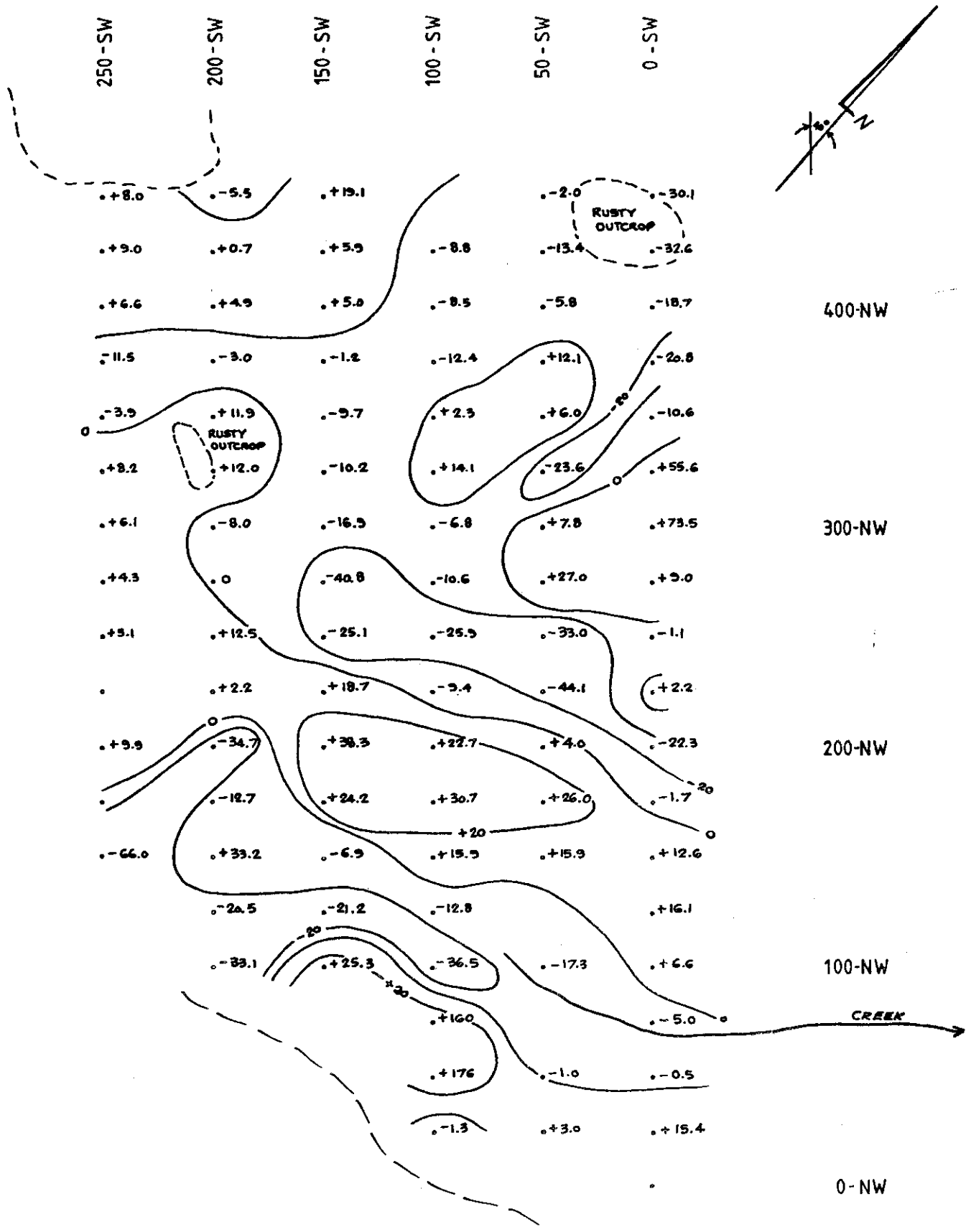
RESULTS

Data is plotted on 25m intervals on the enclosed map and is roughly contoured. Except for two high readings near the cliffs on the southwest of the grid, values are not considered to be high enough to be anomalous. Although the values seem to be consistent and following an east-west trend, the data is inconclusive.

CONCLUSIONS

An east-west trend to the subsurface material is inferred but the survey was not extensive enough to be conclusive.

P. Folk, P. Eng.



AL CLAIMS

QUASH CREEK AREA, LIARD M.D., B.C.

SELF POTENTIAL SURVEY

READINGS IN MILLIVOLTS

0 25 50 75 m

1:2500

STATEMENT OF EXPENDITURES

P. Folk, P. Eng.	3 days @ $100/day	$300.00
M. Kay, Helper	3 days @ $ 62/day	186.00
6 man days room and board @ $15/day		90.00
Bell 206-B helicopter 1.5 hours @ $450/hour including fuel		675.00
Travel $10/day/man		60.00
Freight charges		108.00
Report writing, drafting, etc.		200.00
		$1,619.00

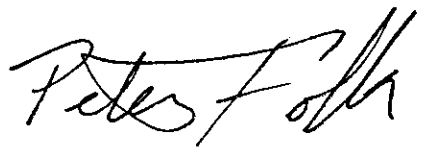
STATEMENT OF QUALIFICATIONS

I, Peter G. Folk, P. Eng., certify that:

1. I graduated with a B.A.Sc. degree in geological engineering from the University of British Columbia in 1971.

2. I have work since graduation as an exploration and mine geologist and engineer at various locations in Canada and the United States.

3. I am a member in good standing of the Association of Professional Engineers of the Provice of British Columbia.



Peter G. Folk, P. Eng.

APPENDIX I

THE SELF POTENTIAL METHOD

The principle upon which this method is based is that a current will be produced where moist ground is in contact with a sulphide ore body. Near the surface the moisture will be of an oxidizing nature and at greater depths - reducing. The effect is like that of a battery - current will flow from the lower part of the ore to the surface thence down the inside of the ore. An electrical difference in potential is thereby generated.

In practice two porous ceramic "pots" filled with a saturated copper sulphate solution into which copper lead wires are placed are planted at regular intervals along a grid. A voltmeter is connected to one lead and to the wire from the other "pot". Theoretically, the "ore" should be outlined by high voltage values.