

REPORT ON

825928

BANK, BANKER AND TEL CLAIMS

BANKS ISLAND

SKEENA M.D.

NTS 103G-8E

for

SPROATT SILVER MINES LTD.

#333, 885 Dunsmuir St.
Vancouver, B.C.

by

J.B. Magee, P.Eng.

R.H. Seraphim,
Ph.D., P.Eng.

April 19, 1977

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LOCATION

40 mi. = 1 inch

LOCATION AND ROAD LAYOUT

0.75 mi. = 1 inch (approx.)

LAYOUT OF DECLINE (BOB)

50 feet = 1 inch

CLAIMS

0.75 mi. = 1 inch

GEOLOGICAL LINEAMENTS

62000 feet = 1 inch

LONGITUDINAL SECTIONS

Bob: 110 feet = 1 inch

Kim-Arseno: 110 feet = 1 inch

Hepler-Discovery: 110 feet = 1 inch

Tel: 20 feet = 1 inch

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

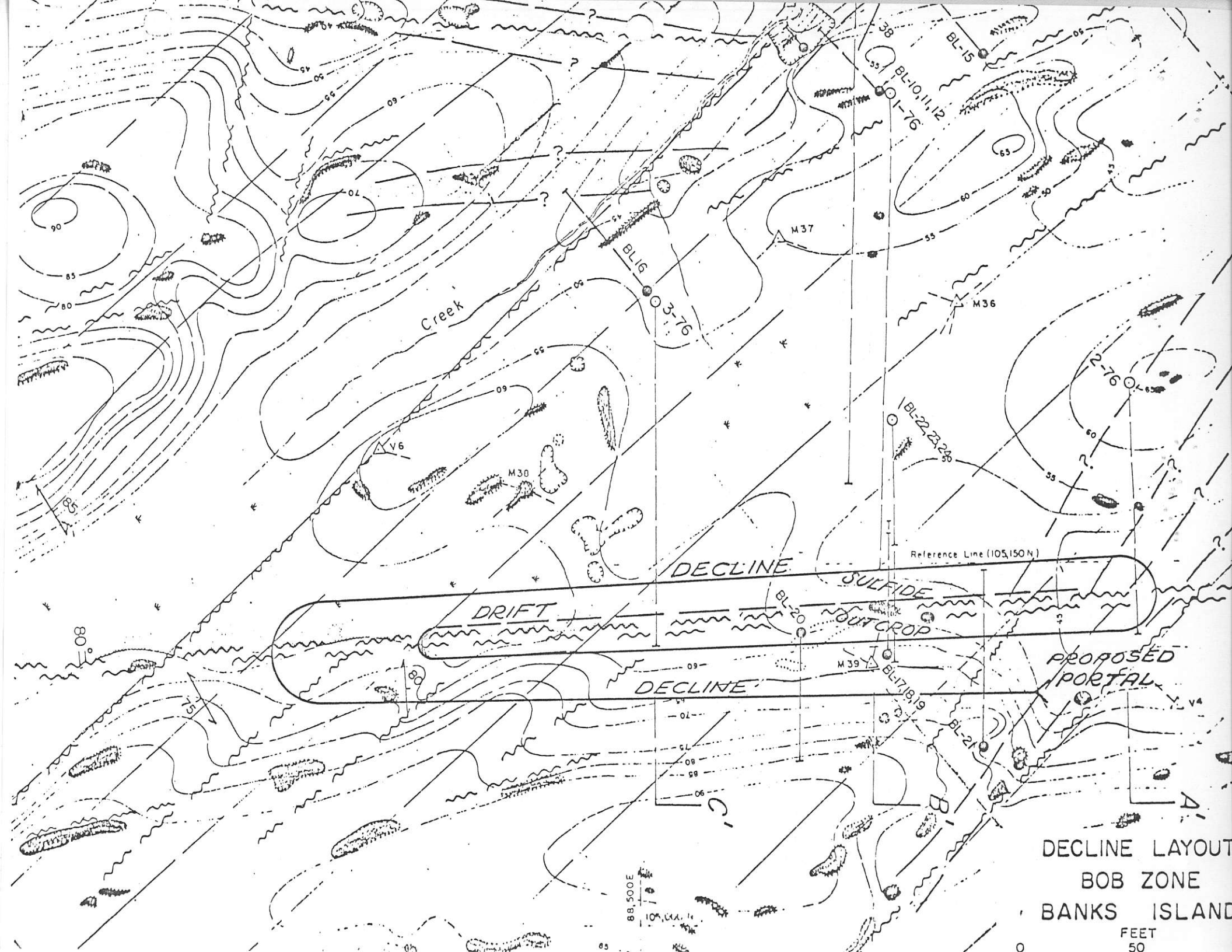
The Bank, Banker, and Tel claims controlled by Sproatt Silver Mines on Banks Island, B.C., cover many gold showings. Assays from surface samples and drill intercepts range from a few tenths of an ounce up to 4 ounces gold in 21 or more showings. Four lodes, the Bob, Tel, Hepler-Discovery and, to a lesser extent, the Kim-Arseno, attract a test by decline tunnels.

The drilling to date, approximately 28,000 feet in 190 holes, is spread over the numerous showings. It provided 230 core samples from 8 different zones. The samples averaged 0.72 oz. gold (uncut) and 1 oz. silver across 2.6 feet. It indicated that portions of at least the four above-named lodes may have much greater grade-widths than the above average and may also have sufficient length to constitute ore shoots. However, accurate evaluation is precluded by inadequate core recovery in crumbly sulfides, acute angles of drill intercepts to lode dip, and an insufficient 'population' of drill intercepts. A decline tunnel is recommended initially on either the Bob or the Tel zone to determine the average grade -- width, length, and if possible, the plunge of the best mineralization.

The choice of which shoot to test first is dependant in part upon access from harbor sites. The determination of the best harbor and thence the easiest road route across the mile or two of flat terraine is currently in progress.

Our investigation has shown that, overall, a decline should be less expensive than a shaft and drift. The layout presented herewith is for the Bob Zone. Similar layouts could be utilized if unforeseen problems make selection of another portal site or even the testing of another zone (such as the Tel) more advantageous.

The value of the mineralization is indicated to be sufficiently high that drifting along its wall and driving short stubs into the lode would be preferable to drifting along the lode itself and diluting or wasting the mineralization. Approximately 1000 lineal feet of decline with a cross section of 8 by 9 feet at a grade of minus 12.5% is planned to cross the lode twice en route to the 125 foot level. A minimum of 500 lineal feet of horizontal drift and crosscut should test the lode at the 125 foot level.



DECLINE LAYOUT
BOB ZONE
BANKS ISLAND

FEET
50

COSTS

The Banks Island Project will cost \$527,069 and require 133 days to complete.

Cost distribution is as follows:

Mobilize -- Camp Installations -- Demobilize	\$ 62,488
Road Construction (cat road only)	39,740
Underground Work	309,306
Air Support	29,969
Administration and Overhead	85,566
	<hr/>
	\$527,069
	<hr/> <hr/>

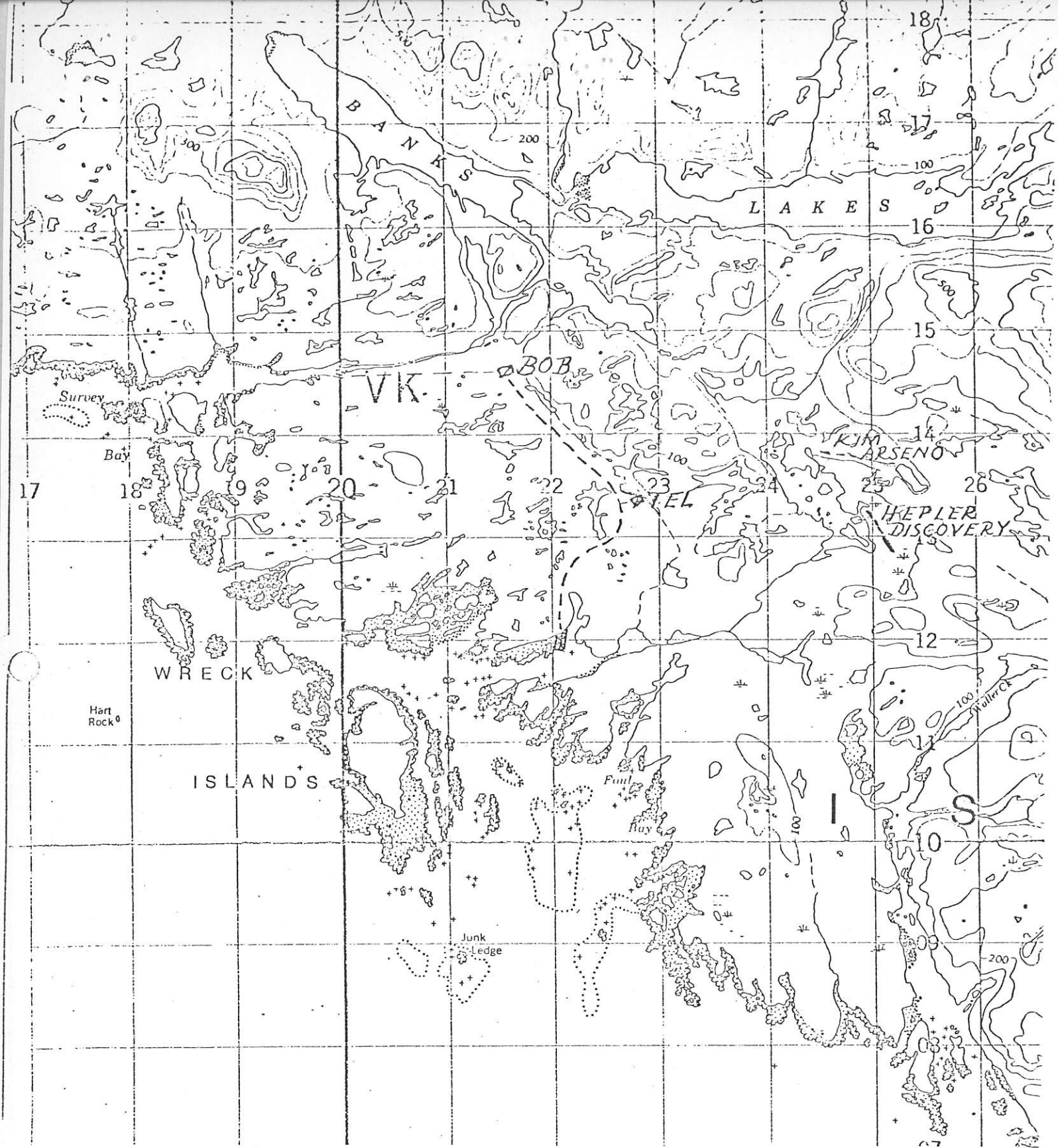
Or

Labour Charges	\$188,255
Supply Charges	107,621
Equipment Rentals	83,790
Transportation & Mobilization	61,837
Administration & Overhead	85,566
	<hr/>
	\$527,069
	<hr/> <hr/>

A detailed analysis leading to the above summary is available at the office of Sproatt Silver or or R.H. Seraphim Engineering Ltd.



MERV ENGINEERING CORP.	
SPROATT SILVER MINES	
LOCATION OF	
BANKS ISLAND PROJECT	
DRAWN BY: J.W.M.	SCALE: 1"=40mi
DATE: MAR. 29, 1977	N.T.S. : 103 & 8 (E)



HERV ENGINEERING CORP.	
SPRATT SILVER MINES PROPOSED	
DOCK, ROAD, SHAFT SITES	
DRAWN BY: J.W.M	SCALE: 1:50,000
DATE: Mar 29, 1977	N.T.S. : 103 G8 (E)

INTRODUCTION

The claimed area was examined by J.B. Magee and R.H. Seraphim under the guidance of J.J. McDougall on March 23, 1977. Seraphim had written a report dated October 30, 1975 on one of the prospects (the Tel) within the area. A folio of maps and several reports by Falconbridge engineers supply comprehensive data on the other prospects, and some of this data is used in the following summary.

CLAIMS

The claims owned by Sproatt are:

<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Tel 23	22031	July 12, 1986
Tel 24	22032	July 12, 1986
Tel 37	22584	Oct. 17, 1986
Tel 38	22585	Oct. 17, 1986

The claims held under option from Falconbridge Nickel Mines Ltd. are listed as follows:

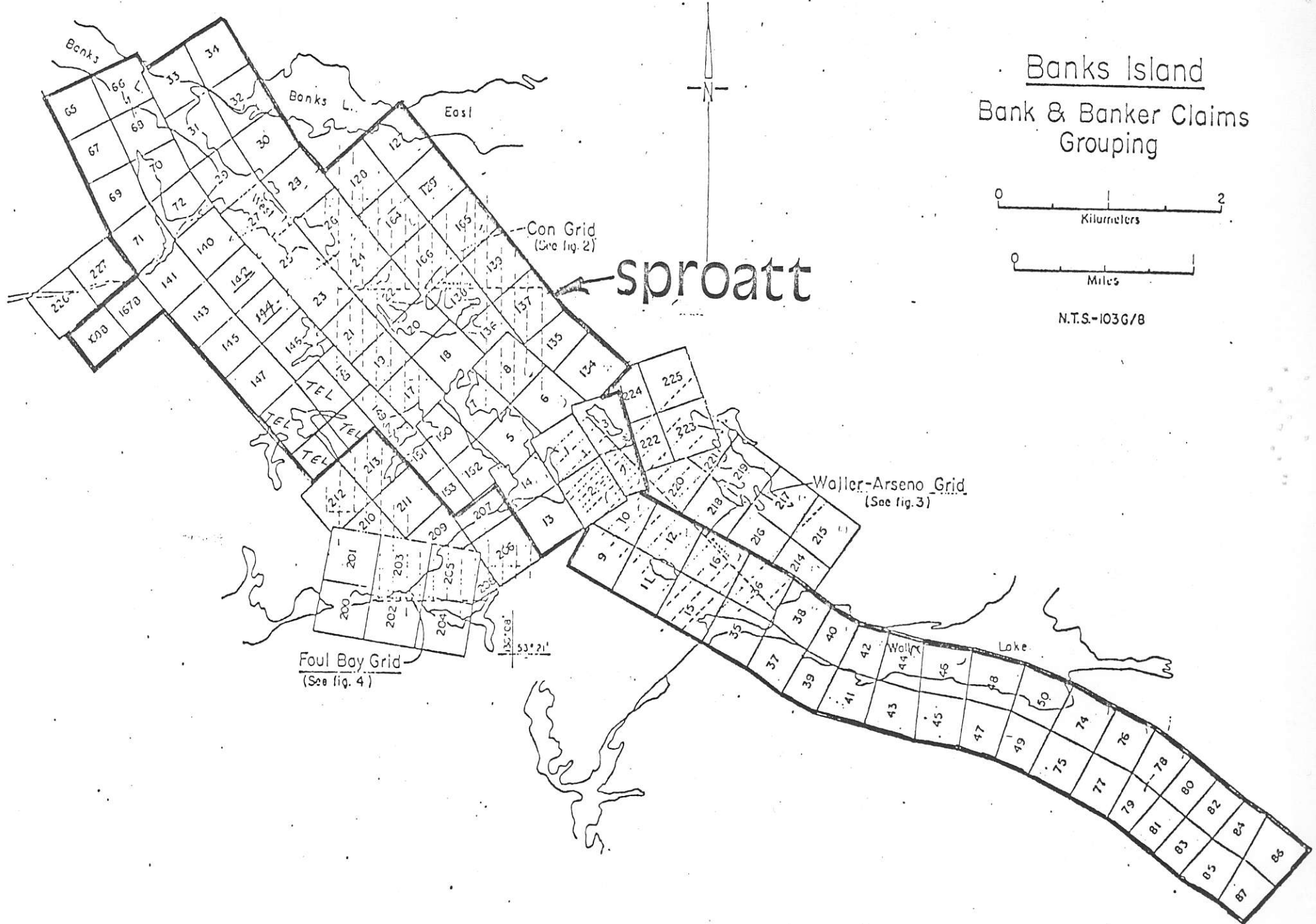
<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Bank #1	19245	July 13, 1983
2	19246	July 13, 1982
3	19247	July 15, 1986
4	19248	July 15, 1982
Banker 5	21653	June 3, 1981
6	21652	June 3, 1987
7	21651	June 3, 1981
8	21650	June 3, 1987
9	21649	June 3, 1981
10	21648	June 3, 1982
11	21647	June 3, 1981
12	21646	June 3, 1983
13	21645	June 3, 1981
14	21644	June 3, 1985
15	21643	June 3, 1981
16	21642	June 3, 1982
17	21641	June 3, 1981
18	21640	June 3, 1981
19	21639	June 3, 1981
20	21638	June 3, 1981
21	21776	June 28, 1981
22	21777	June 28, 1981
23	21778	June 28, 1981
24	21779	June 28, 1982
25	21780	June 28, 1982

<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Banker #65	21820	June 28, 1981
66	21821	June 28, 1981
67	21822	June 28, 1981
68	21823	June 28, 1981
69	21824	June 28, 1981
70	21825	June 28, 1981
71	21826	June 28, 1981
72	21827	June 28, 1981
74	21829	July 8, 1977 *
75	21830	July 8, 1978
76	21831	July 8, 1977 *
77	21832	July 8, 1978
78	21833	July 8, 1977 *
79	21834	July 8, 1978
80	21835	July 8, 1977 *
81	21836	July 8, 1979
82	21837	July 8, 1977 *
83	21838	July 8, 1979
84	21839	July 8, 1977 *
85	21840	July 8, 1979
86	28141	July 8, 1977 *
87	21842	July 8, 1979
127	22606	Oct. 29, 1982
128	22607	Oct. 29, 1982
129	22608	Oct. 29, 1982

* May be allowed to lapse.

<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Banker #134	21902	July 12, 1982
135	21903	July 12, 1982
136	21904	July 12, 1982
137	21905	July 12, 1982
138	21906	July 12, 1982
139	21907	July 12, 1982
140	21908	July 12, 1981
141	21909	July 12, 1981
142	21910	July 12, 1981
143	21911	July 12, 1981
144	21912	July 12, 1981
145	21913	July 12, 1981
146	21914	July 12, 1980
147	21915	July 12, 1980
148	21916	July 12, 1980
149	21917	July 12, 1980
150	21918	July 12, 1980
151	21919	July 12, 1980
152	21920	July 12, 1980
153	21921	July 12, 1980
164	22609	Oct. 29, 1982
165	22610	Oct. 29, 1982
166	22611	Oct. 29, 1982
167-B	24152	Sept. 25, 1980
168-B	24153	Sept. 25, 1980

Mar. 15/77



LOCATION, ACCESS, TOPOGRAPHY

The claims are located on the west side of Banks Island, seventy miles south of Prince Rupert as shown on the accompanying maps. The claimed area has a relief of only a few tens of feet and has numerous small lakes and muskegs. Outcrop occurs as small ridges and knobs of hard fresh rock. Several of the smaller lakes and Banks Lake are suitable for landing small float planes. At least one protected bay close to the claims is used by commercial fishermen to wait out the gales that are common during the winter. This bay may provide a suitable dock site for the proposed exploration and development.

HISTORY

Gold mineralization was discovered in the Hepler-Discovery zone by Ventures Ltd. (Falconbridge) prospectors early in 1960 near Hepler Lake. Subsequent prospecting at intervals resulted in many more discoveries, the most important of which are the Bob, Tel, and Kim-Arseno. Almost all showings have been diamond drilled to depths of up to several hundred feet, but none of the showings have been delimited at depth. Total drilling is approximately 28,000 feet in 190 holes. Exploration by geochemical surveys and self-potential geophysics has been extensive, but most if not all of the showings were found by detailed prospecting.

GEOLOGY

Several septa up to a few hundred feet wide of meta-sedimentary rocks, including limestone, extend northwesterly

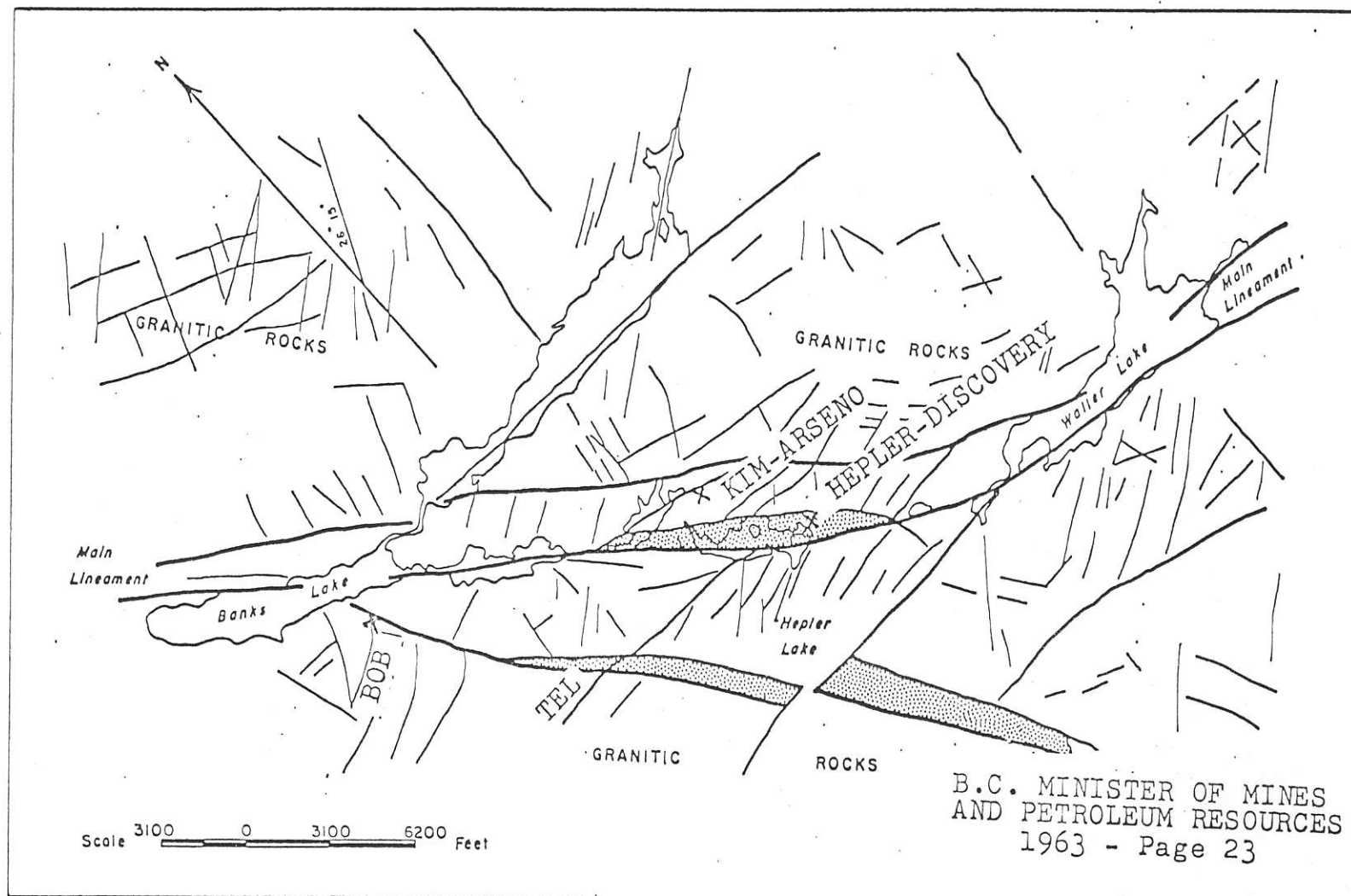


Figure 3. Lineaments on part of Banks Island. Sedimentary belts stippled.

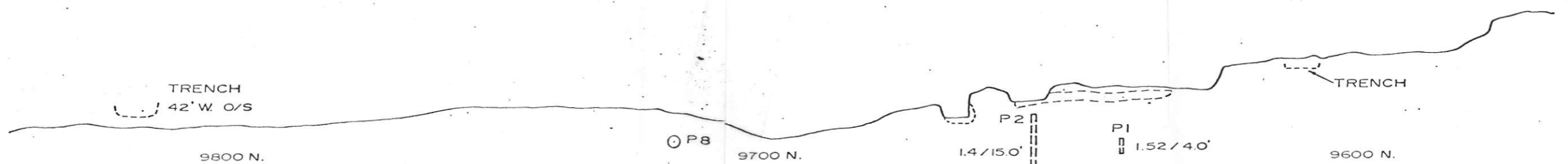
for several miles as shown by Dr. S. Holland of the B.C. Department of Mines in the accompanying sketch from aerial photographs (Minister of Mines and Petroleum Resources Annual Report 1963, page 22). The septa are offset or disrupted by small cross faults. Quartz veining and locally massive sulfide including pyrite, pyrrhotite, sphalerite, arsenopyrite, and galena characterize the gold showings. The gold is erratically distributed; the best grades occur both in the more massive sulfides and in quartz stringer zones with sparse sulfide.

MINERALIZATION

The mineralized bodies, judging by the drilling, have a tendency to pinch and swell but the swells may be at least one or two hundred feet long, and thus sufficient for a stope. The poor core recovery because of crumbly massive sulfide, the acute angles of some of the intercepts to the dip of the lodes, and the wide spacing of intercepts precludes the determination of true grades, widths, lengths and plunges of the four zones tested to date. The longitudinal sections presented in the following pages show the results to date. The intercepts recorded are core lengths; some of them as depicted are several times the true width of the lode.

METALLURGY

Samples from the Bob and Hepler-Discovery zones were tested for gold recovery by Lakefield Research of Canada Limited.



P14
□ 1.56 / 1.9'

P25
□ 0.36 / 1.5'

P6
□ 0.66 / 4.5'

P26
□ 0.20 / 2.0'

P2
□ 1.4 / 15.0'

P3
□ 0.88 / 14.8'

P4
□ 1.16 / 7.5'

P5
□ 1.24 / 1.0'

B5
□ 5.04 / 1.0'
□ 0.25 / 2.5'

B11
□ 1.0 / 19.2'

B14

P9
○

B6
□ 0.4 / 3.5'
□ 1.45 / 47.0'

B7
□ 0.32 / 11'

B13
□ 1.15 / 14.5'

LEGEND

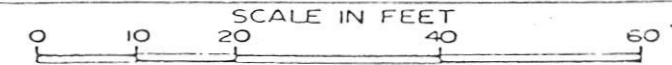
□ Vein and sulphides

1.45 / 47.0' Gold in ozs. / Width in feet

B8
□ 0.68 / 2.0'

SPROATT SILVER MINES LTD.

TEL CLAIMS
BANKS ISLAND, B.C.
LONGITUDINAL SECTION
'A' ZONE



DATE: OCTOBER 1975 DRAWN: Altair

B 15 and B 16

Elev 60'

Sulphide
outcrop

PROPOSED DECLINE

BL 22

0.32 - 4.95

5'

$\frac{2.96}{3'}$

$\frac{0.48}{1.5'}$

DRIFT

Line 2

BL 23

4.00 - 3.80

23'

0.56 -

13.5'

Line 2

Line 2

Line 3

$\frac{3.0}{2.5'} + \frac{1.8}{0.8'}$

Property

BANKS ISLAND GOLD
PROSPECT

Plan

BOB ZONE
LONGITUDINAL SECTION LOOKING N-
EXISTING AND PROPOSED DRILL INT

Scale

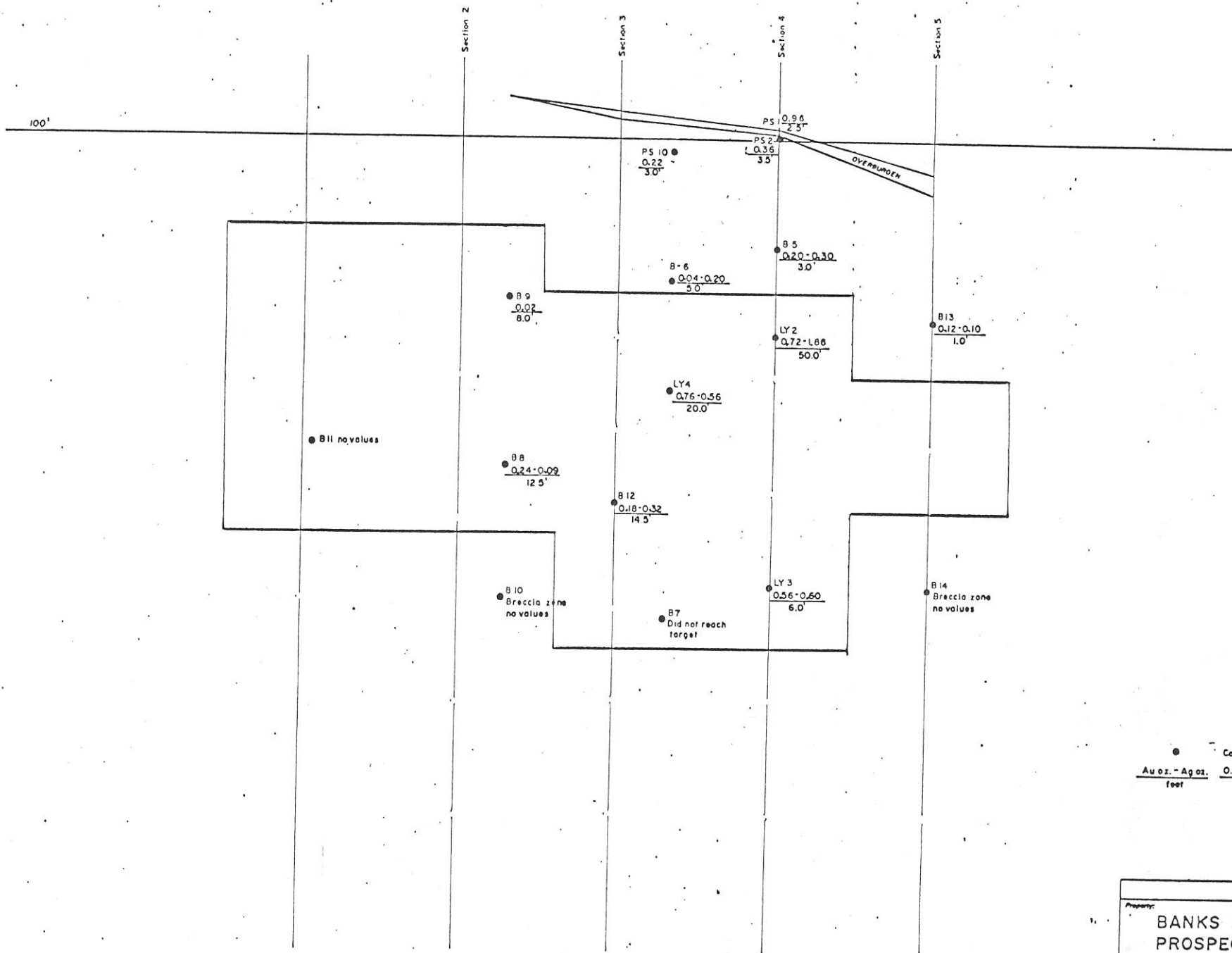
0 50 100 150

Scale in feet

Date: May 24, 1973

Dr

N.T.S. Ref.



● Completed drill holes

$\frac{\text{Au oz.} - \text{Ag oz.}}{\text{feet}} \quad \frac{0.13 - 0.03}{5.0}$

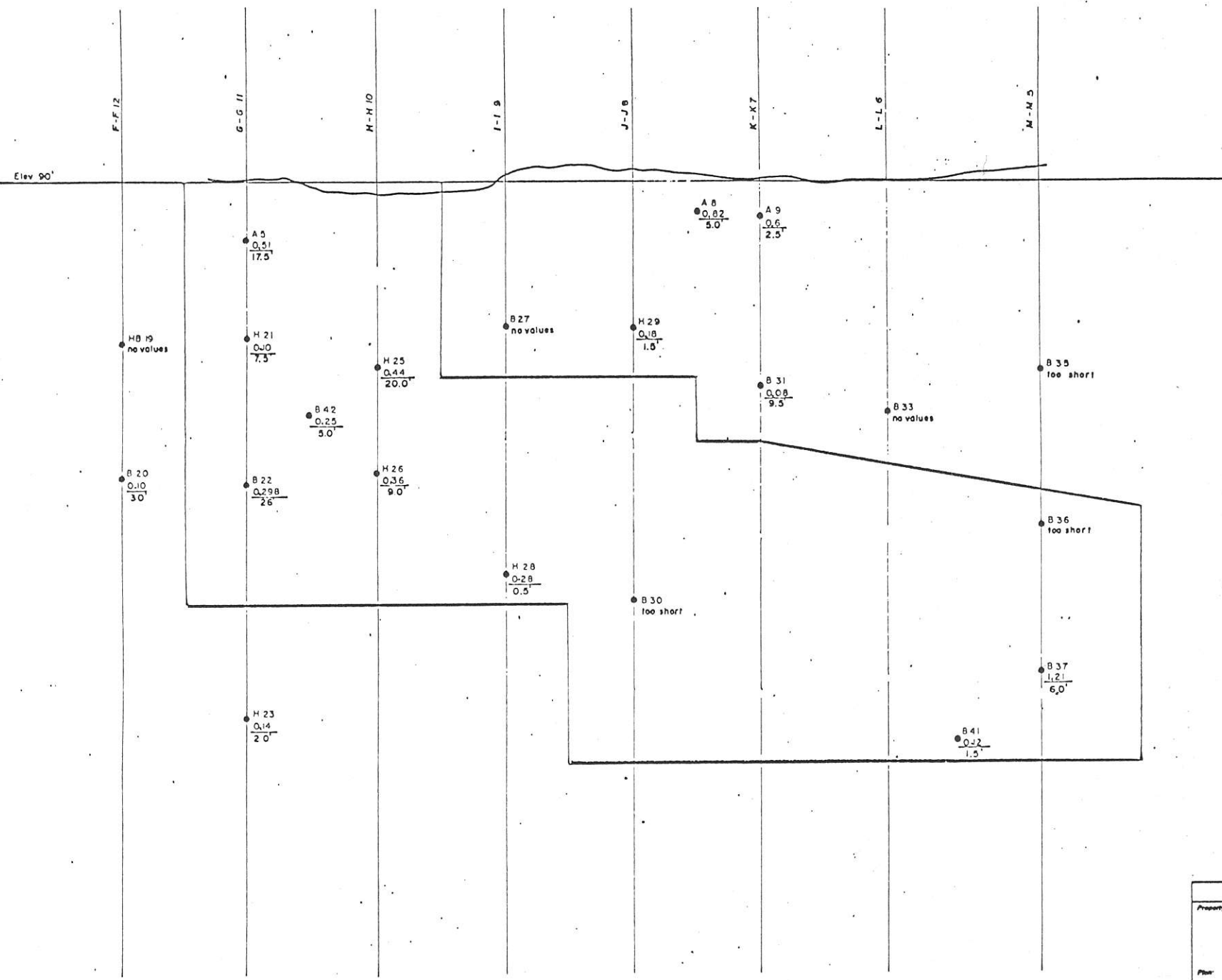
Property: **BANKS ISLAND GOLD PROSPECT**

Plan: **HEPLER - DISCOVERY ZONE**
LONGITUDINAL SECTION - Looking S.W. to
EXISTING AND PROPOSED DDH INTERST

Scale: $\frac{0}{40} \frac{80}{120}$ Feet

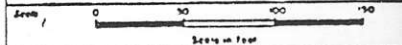
Date: **MAY 16, 1973**

NTS: **Ref**



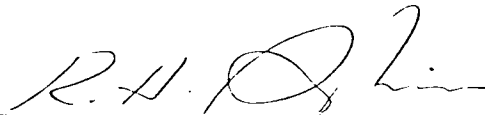
● Existing drill holes
 $\frac{0.23}{50} \frac{\text{Au oz/T}}{\text{Foot}}$

Property: **BANKS ISLAND GOLD PROSPECT**
 Plan: **KIM-ARSENO LAKE ZONE LONGITUDINAL SECTION LOOKING N**
EXISTING AND PROPOSED DRILL HOLES

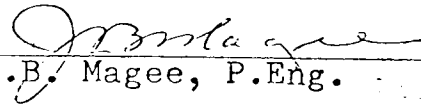


Date: **May 25, 1973** By: **N.T.S. Ref**

Recoveries of over 90% gold and 70% silver were obtained on both samples, but chemical consumption was high in all tests.



R.H. Seraphim, Ph.D., P.Eng



J.B. Magee, P.Eng.

R. H. SERAPHIM ENGINEERING LIMITED
GEOLOGICAL ENGINEERING

316 - 470 GRANVILLE STREET
VANCOUVER, B.C. V6C1V5

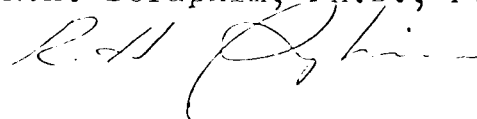
CERTIFICATION

I, Dr. R.H. Seraphim, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a geological engineer residing at 4636 West 3rd Avenue, Vancouver, B.C., and with office at #316, 470 Granville Street, Vancouver, B.C.
2. I am a registered Professional Engineer of British Columbia, I graduated from the University of British Columbia in 1947, and from Massachusetts Institute of Technology in 1951.
3. I have practiced my profession for 30 years.
4. I have no interest, direct or indirect, in the Tel, Bank or Banker claims, or in the securities of Sproatt Silver Mines Ltd., or its affiliates, nor do I expect to receive any.
5. The above information is derived from engineering data in company files, the B.C. Minister of Mines and Petroleum Resources Reports, and an examination of the claim group.
6. Several claim posts were observed by the author and no conflict is known concerning ownership of the claims.
7. I consent to the use of this report in, or in connection with the prospectus, or in a statement of material facts relating to the raising of funds for this project.

Dated at Vancouver, B.C., this 18th day of April, 1977.

R.H. Seraphim, Ph.D., P.Eng.



CERTIFICATION

I, J.B. Magee of the City of Campbell River, Province of British Columbia, hereby certify as follows:

1. I am a geological engineer residing at 1191 Ash Street, Campbell River, B.C.
2. I am a registered Professional Engineer of British Columbia. I graduated from the University of British Columbia in 1947.
3. I have practiced my profession for 30 years.
4. I have no interest, direct or indirect, in the Tel, Bank or Banker claims, or in the securities of Sproatt Silver Mines Ltd., or its affiliates, nor do I expect to receive any.
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