

Box 11

N.T.S. 103-616

XF-70-100-B-10

REPORT

ON

COAST EXPLORATION

1964

====

MINING DIVISION

J. J. McDougall

Geologist

(161671)

REPORT ON
COAST EXPLORATION, 1964

(PROJECTS 103, 117)

J. J. McDougall

VANCOUVER, B.C.

March 1, 1965

C O N T E N T S

	<u>Page</u>
DESCRIPTION OF PROSPECTS	1
A. Vancouver Island	1
B. Lower Coast Area	5
C. North Coast Area	6
PROSPECTING PROPOSALS, 1965	10
 <u>MAPS:</u>	
BCCP /64 - Index Map	Bound
GI 1/64 - Geology	In Pocket
GI 2/64 - Self-Potential Survey	" "

REPORT ON
COAST EXPLORATION, 1964
(PROJECTS 103, 117)

J.J. McDougall

FORWARD

Most of our 1964 coastal exploration was carried out on the previously staked Banks Island claims. However a limited amount of outside work was done at convenient times throughout the summer. The weather was very poor and helicopter work at elevations other than at sea level would not have been too practical. Fortunately we had not planned on too much air work but more prospecting involving the use of the German rubber boat on some of the better located waterways.

Most of the outside exploration is referred to in the enclosed monthly reports and need only be mentioned briefly here. A map (BCCP/64) accompanying this report shows the location of areas to which reference is made.

DESCRIPTION OF PROSPECTS

Iron exploration is summarized in a separate report (1). Individual reports have already been prepared on the (2) Hiller Magnetite and the (3) Churchill Deposits at Zeballos. A short report on the (4) Ecila Magnetic Zone at Alice Lake is also complete and Hans Morris has prepared one on (5) Ikeda where the writer initiated work in the spring.

(A.) On Vancouver Island we looked into copper stains on the cliffs reported by Chris Riley on the upper portion of Tofino Creek (6). The rocks are mainly massive volcanics rather than the hoped-for granitic rock and the copper occurs in the occasional small fracture in

a manner common up and down the coast. No importance is attached to these particular deposits. At Catface (7) we lifted the diesel pump and some of the remaining drill equipment from the upper to the beach camp. A 1964 prospecting camp in the middle of Meares Island (8) was checked but little of interest appears to have been turned up.

Following work on the Hiller Group, Schussler and Cross, chartering a boat from Tahsis, made an attempt to drill a couple test packsack holes in our Kyugot Alunite-Pyrophyllite deposit (9). The locations were picked earlier in the year by the writer on what appeared to be the best drilling rock within reasonable reach of water. However the packsack drill proved unsuitable with only about 35% core recovery being obtained from a 25-foot and a 50-foot hole. A short report and drill logs will be prepared following analysis at a later date.

Ground traverses were made on a small magnetic anomaly in the Quatsino Area (10) in the hope that copper might be present in an associated structural break. On the ground, however, the dip needle registered only about 15% above background and a substantial thickness of what prospectors Schussler and Cross called "conglomerate" sealed off any sign of mineralization. Red Island (11) in the same vicinity was again flown with the MF1 mag and substantial anomalies recorded over it and the adjoining water area to the west. Earlier sampling (1962) had revealed a small copper content and the zone, although currently held by others, is not a write-off until test drilled as copper and iron occurrences of importance do occur along strike. With the MF1 we also re-ran the Jeune Landing copper-iron deposit (12) at

Alice Lake currently being tested by Rio Tinto but could add little to dimensions previously established. Some fair grade bornite with minor molybdenite mineralization was picked up by the drill crew on a fresh road-cut a couple miles west of the Ecila claims (13). The rock type, amygdaloidal basalt, is common but we could find no more copper of interest and concluded that that picked up was an isolated bleb. In the Zeballos-Kaouk area (14) an attempt to locate a "mineralized bluff" was unsuccessful when the prospector, Norman Ray, was unable to identify the locality from the air. Mr. Ray plans on a ground trip before contacting us again. Airmag flights were made around our Klaanch holdings (15) with little new information. Accompanied by the late Mr. Thorne Forrest a copper-magnetite zone on the east side of Tahsis Inlet (16) was examined. The pyrrhotitic-magnetite appears to occur only in small bunches along a metasediment-volcanic contact zone and is of no immediate interest. The Davis Copper (17) was examined by Mickle and a report prepared. Previously recorded magnetic anomalies were ground checked in the Kirman Creek Area (18) but the magnetite found responsible had unknowingly already been staked for a Neil McDiarmid (27/3/64) and earlier (1963) by Highland-Bell. While camped in the area Mickle did discover an unstaked deposit of pyritic magnetite on Upper Storie Creek (19) which may warrant a closer check. (Map in Iron Report). Beyond staking of a few extra claims around Faith Lake (20) (separate report) and drilling of a few packsack holes at Bacon Lake (21) (separate report) little work was done on the Island section out of Campbell River. At Tofino where Alex Smith earlier in the year had examined several of the holdings of

Sunwest Minerals (Bus Hanson) (22), an attempt was made to examine those remaining. However Mr. Hanson thought the zinc deposit on Copper Creek (23) not worth examining while snow remained at higher levels which he would like to prospect. We made an unofficial attempt to land at Hesquiat Lake (24) as Mr. Hanson thought recent work they did should be looked at. However as the water was higher than usual no landing could be made and the only boat available nearby was in a sinking condition. Chess Wallace of Tofino asked that we sample his Tofino Molybdenite (25) occurring west of the Hotel. Before this ground was staked, several of our Catface prospectors went over the showings and were not impressed. However the writer will attempt to at least sample these first opportunity.

1964 activity by others on Vancouver Island was moderate. Lake in the season a few drill holes were put in on the low grade copper deposits at Big Interior Mountain (26). Mike Stadnyk, formerly a geologist at Tasu, is currently working on small and known magnetite-copper deposits around Henderson Lake (27).

Sammy Craig has made a deal on the Sydney Inlet Copper-magnetite (27) which involves logging of the Crown grants and a close look at the mining possibilities. Tofino Gold Mines (28) (New Hamil) were forced to close due to insufficient ore as had Bedwell River Gold (29) (Coppertown) the previous year. Mr. Jackson did no work on Berton River Gold Mines (30). but has made a deal with Bus Hanson involving a small mill at Tofino Inlet with which it is hoped to treat copper ore from the various Sunwest holdings. West of Courtenay Mt. Washington Copper (31) appears to have made a good start despite early snowfall. We should watch proceedings

closely because of the proximity and likeness to Gem Lake as described in previous reports. John Muller of the G.S.C. has centered on this area in his Vancouver Island mapping project and the writer is in touch with him. Small magnetite deposits on the White River (32) near Kelsey Bay are receiving attention and a new company apparently with Al Upton participation has been formed on them. Port Hardy Copper (33) after a change of managers, has been quite silent.

(B.) A small amount of work was done on the Lower Coast Area. Accompanied by Bob Mickle who was familiar with the area, magnetic anomalies on Texada Island (40) were tested. H. Morris had ground examined these earlier in the year. A narrow copper-gold prospect, the North Pole (41) adjoining the Black Prince magnetite, and also examined by H. Morris, was rapidly gone over. On the same trip a contact zone just east of Olson Lake (42) which is a few miles west of central Powell Lake was flown without appreciable results. Pyrrhotite-pyrite skarn specimens collected by the interested prospector ran up to 0.16 Au, 0.1 Ag. This easily accessible zone could stand closer prospecting for copper mineralization. Several miles to the south a logging area known by Mickle to contain some magnetite was flown without encountering anything of interest.

A recce trip up the Southgate (43) and down the Homathko River from Tatlayoko Lake resulted in the discovery of several sulphide deposits void of gold, silver or appreciable copper. However at the same time several interesting mineralized zones were turned up which deserve further prospecting.

An impressive number of quartz veins were found in a several hundred foot wide contact zone south of the Homathko River (44) and a

short report will be prepared on this. Sulphide specimens collected ran as high as 6.54 oz. gold, 4.7 oz. silver although the quartz itself assayed very little. The vein structures are impressive and the 5-mile long section will be properly prospected.

In the vicinity of Drury Inlet (45) a reported magnetic occurrence was flown with only minor deflections being noticed. Remnants of metasediments cut through and exposed by logging operations are highly pyritic and could stand some prospecting.

A ferry flight recce was made of the Kliniklini-Mt. Waddington area (46) with little else than granitic rock having been encountered. Mineralization was supposed to have been readily visible at the 4000-foot elevation west of the head of Knight Inlet (47) but we could find no trace of such. In the Owikeno area a 1000-foot square gob of pyrrhotite and pyrite representing a replaced lens of sediment was noticed at about the 7000-foot level north of the head of the Sheemahant River (48). When lightly loaded on some return trip late in the year a stop would be in order.

An unsuccessful attempt was made to discover magnetics presumed associated with the Kwatna Inlet (48a) copper-magnetite.

(C.) In the North Coast Region exclusive of Banks Island some prospecting was done. Using the helicopter the writer geologized western Trutch Island (49) as well as Aristazabal (W) (50) and the offshore islands (50a) including Rennison, Anderson, Moore, Evers, Conroy and Harvey. Sulphide and quartz mineralization was found and Dave Kimball was put in to better examine these and associated structural features using the rubber boat. Nothing assaying over 0.02 gold could be located and no claims were staked.

Following this a trip was made to Chapple Inlet (51) on Princess Royal Island where air photo interpretation and prior ground observation suggested a prospecting area of interest. A band of limestone was traced 5 - 8 miles northerly from the Inlet and gobs of pyrite and pyrrhotite found along it. Kimball and Alex Smith Jr. were put in and prospected the area for a week. One of the slightly cupriferous pyrrhotite gobs was found to have a few drill holes in it and the remainder contained nothing of value. The two prospectors were then flown by P.W.A. float plane to Anchor Lake (52) some miles to the east and a week was spent searching for continuations of the "on strike" gold-bearing Surf Inlet Gold Mine a few miles to the north. Some pyritic quartz assaying low in gold as well as chalcopyrite-bearing float were discovered in the largely granitic area but nothing of importance was turned up. The crew was then flown 45 miles east to Kitlope Lake (53). They used the rubber boat here, checking for a period of ten days most creek beds as well as pre-determined structural and metamorphic rock type areas of interest. A "prospecting crew" from the east and financed from New York was found already camped on this remote lake just west of the centre of the Coast Range. Using their own Norseman aircraft for supplies, an adit had been collared in barren quartz diorite on what they termed a "gold quartz vein" which our prospectors, invited to have a look, could not locate. It would appear that they thought such work necessary before applying for land for a proposed hunting or fishing lodge. Kitlope Lake produced little of interest although skarn areas and garnet float were found on the southwest tributaries. An additional week was put in at Kim (our name) Lake (54) just south of Gardner Canal and 4 miles east of Kiltuish Inlet but no

mineralization of interest discovered although considerable country on strike with Ecstall River-type sediments was covered.

On eastern Banks Island adjoining quartz-pyrrhotite deposits at Patsy Cove (55) have been recently looked into as a source of silica. Since last examined by the writer in 1954 or 1955, the sulphide showing on Crown granted claims at Patsy Cove has been freshened up. A couple hours was spent re-examining and sampling the deposit previously described. A few picked samples from the south-east side assayed 1.17% copper, 0.10% Zn and trace gold-silver. Those from the northwest (about 100 feet away) ran 2.12% copper, 0.12% zinc, trace gold and 0.1% silver. If the precious metal content was higher, we could afford to follow this locally strong showing with the S.P. A rapid check of trench sampling done on Campania Silica (55a) showed very shallow cuts not deep enough to have escaped surface impurities. The Noble Mountain (56) gold vein on Pitt Island, (well described in government reports) was sampled with the following results: (1) a chip sample across the flattish 6-foot vein at the east end tunnel - Au 0.10, Ag tr; (2) picked 10% S₂ sample from #2 zone 600 feet west of #1 - 0.76 oz. Au, 0.3 oz. Ag; (3) chip sample across 5-foot vein at #2 zone - 0.44 oz. Au, 0.1 oz. Ag.

The sampling marked the approximate extremities as well as the widest portions of the vein. A true average width through this distance is about 1 - 1½ feet and the dip about 20° south into the hill. The pyritic quartz vein is a loner, occupying a faulted flattish joint plane in massive quartz monzonite. It is accompanied on occasion by a finer grained, grayish porphyritic rock. Alteration is extremely local and there is no structure evident which might help enlarge the vein. No important deposit is indicated.

A showing near Salt Lagoon on Porcher Island (57) believed to be that being promoted by Larry Packard, was rapidly examined. A 4-foot width going less than 1% copper assayed 0.02 Au and tr Ag. A stop at the old Surf Point (58) mine showed much of the heavy rail to be in surprisingly good shape, should such ever be required.

Stan Charteris and Steve Presunka did a 1-day geological and self potential survey of the well mineralized Gibson Island copper zinc property (59) south of Prince Rupert and 40 scale maps (#GI/64/1 and #GI/64/2 included in this report) were prepared. The self potential outlined the body exceptionally well showing a +100 MV anomaly about 500 feet long (NS) and 250 feet wide. An apparently unexplored "lobe" to the northwest is indicated but no other bodies in the immediate limestone area are. The sulphide zone on the ground, as shown by the geological map, is fairly well exposed by cuts for about 200 feet. Stan Charteris can prepare a short report at a later date after information on old drill holes is obtained.

Earlier B. C. Government Dept. of Mines (1951 - 1952) reports describing this property show that important mineralization was limited to about 100 feet of strike length but the section shown up by the S.P. work in which the lobe occurs does not appear to have been investigated.

With availability of the helicopter some small quartz veins and rusty zones on the high central portion of Pitt Island (60) were prospected but the most interesting discovery was a few billygoats.

A number of additional recces, generally combined with ferry flights, were made and a number of unrewarding spot checks carried out.

PROSPECTING PROPOSALS, 1965

Included in the Coast Prospecting Proposals for 1965 and shown in more detail on the office Ouija Board are the following:

A. Primarily Prospecting:

- (1) Homathko Gold
- (2) Southeast Alaska
- (3) Coast Range

B. Development and Minor Prospecting:

- (4) Hiller Magnetite
- (5) Churchill Magnetite
- (6) Storie Creek
- (7) RHS Group
- (8) Banks Island
- (9) Beloud Copper Prospect
- (10) Faith Lake

C. Development:

- (11) Windy-Craggy
- (12) O'Connor Gypsum

The crews and equipment required will be approximately the same as last year except that at least three of the prospectors, including Kimball and Mickle, remain in the Homathko Area. Alaska work will of necessity require no prospectors.

Vancouver, B. C.
March 1, 1965.

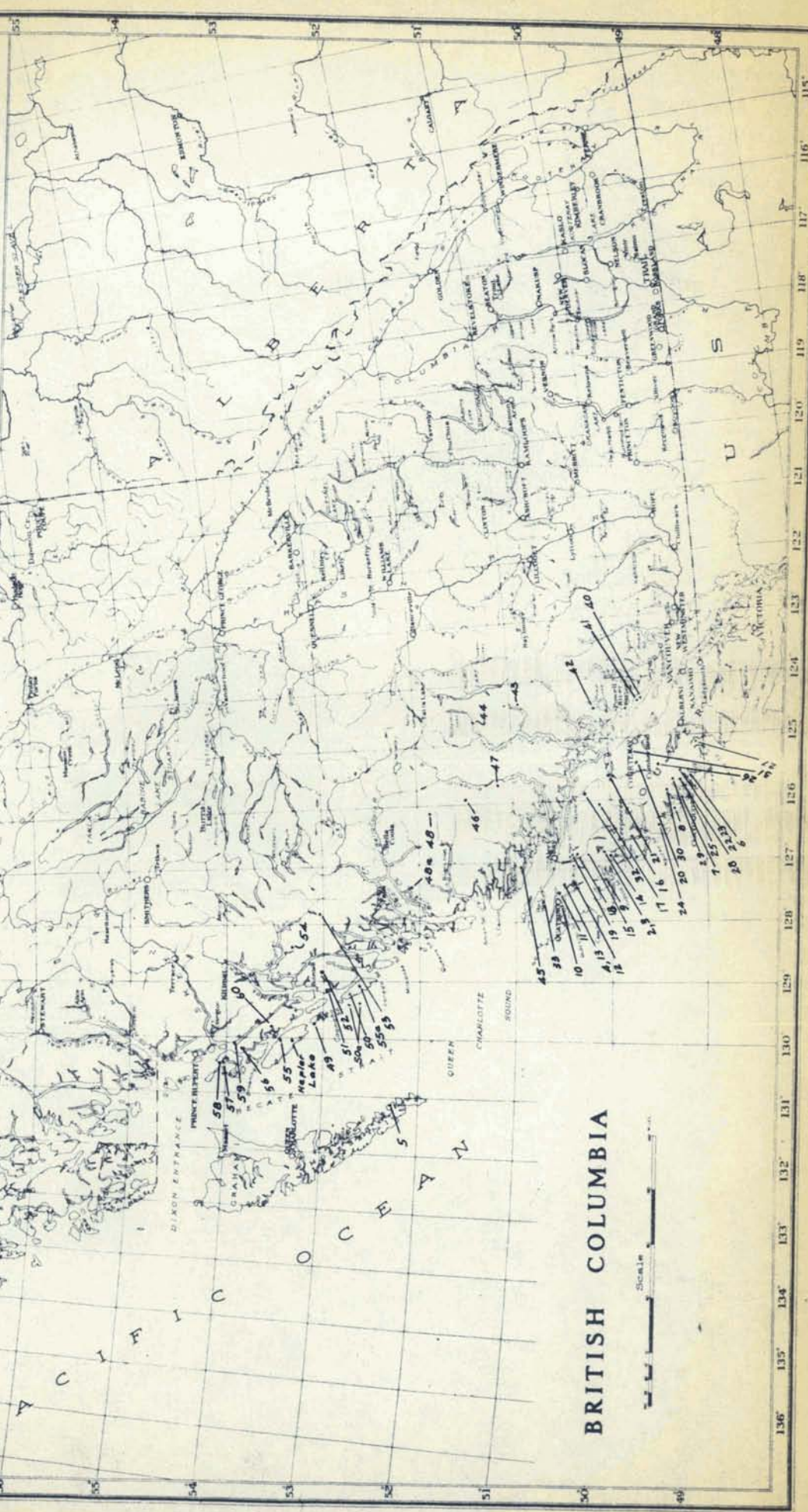
J. J. McDougall
Geologist.



INDEX MAP BCCP/64

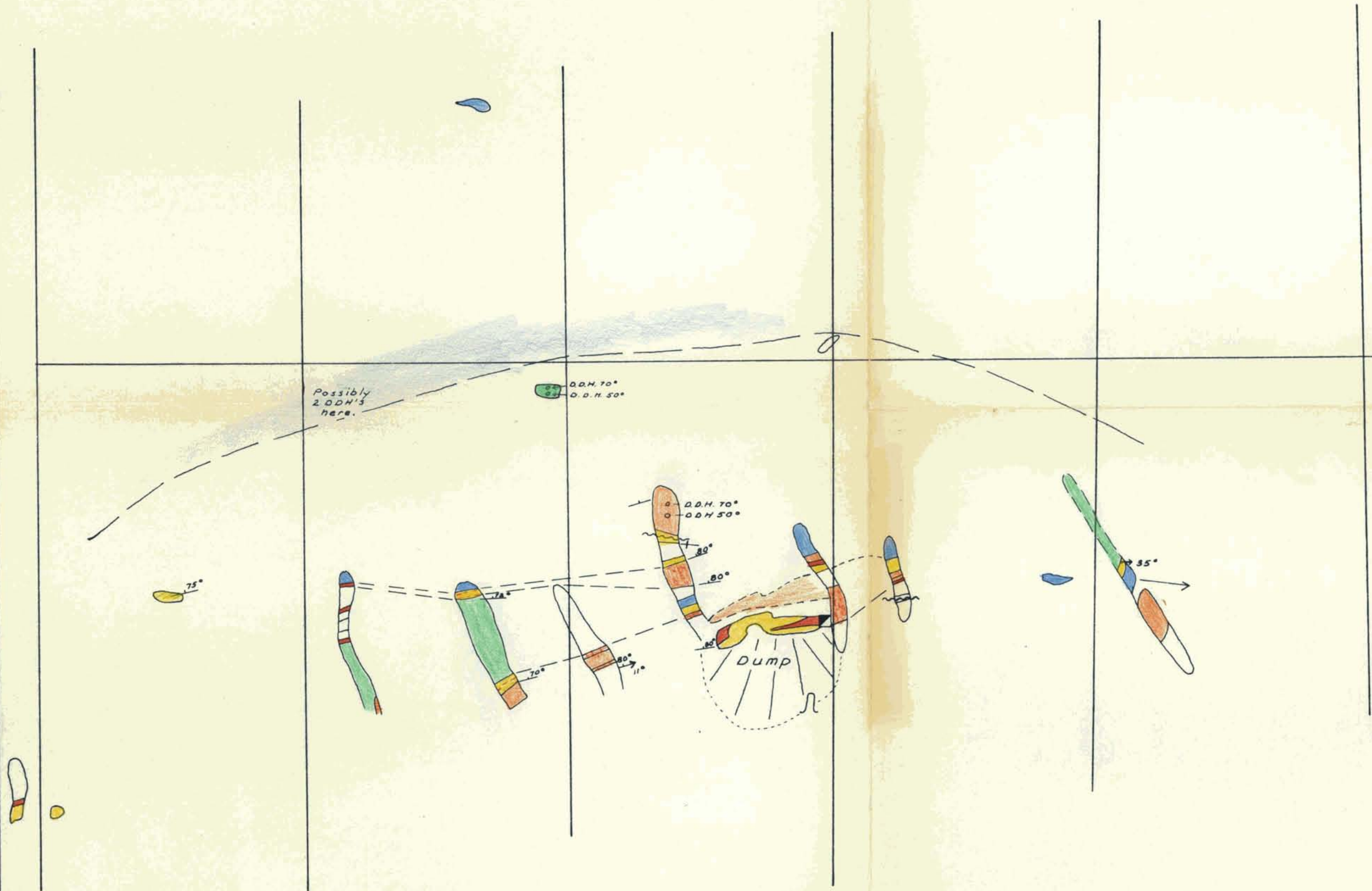
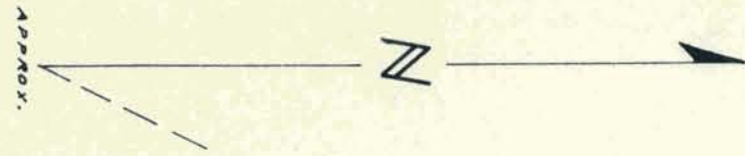
Showing location of
properties and prospects
referred to in 1964
Coast Prospecting
Report.

J.J. McDougall.
Feb. '65



BRITISH COLUMBIA





**GIBSON ISLAND
COPPER ZINC PROSPECT
GEOLOGY**

SCALE: 1 in. to 40 Ft.
 WORK DONE BY: S. Charteris.
 DATE OF WORK: 15 June 64.
 DRAWN BY: S.C., D.H.H.
 DATE: 11 Feb. 65.

- Sulphide mineralization.
(veins disseminated)
- Quartz replacement by skarn.
- Skarn - dioxide - carbonate - garnet.
- Meta-argillaceous rocks.
- Limestone - Marble.

MAP G12-64

NAT. TOPO. 103-G-16

L35

L25

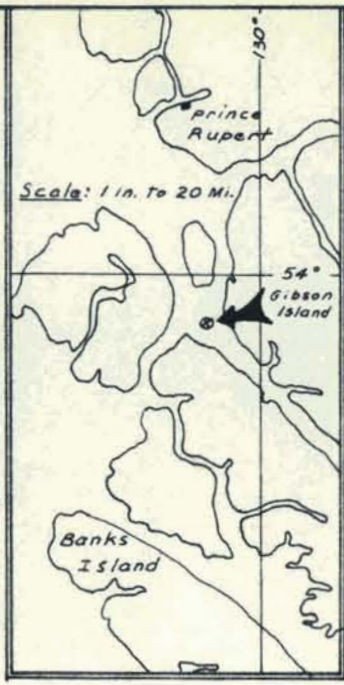
L15

L0

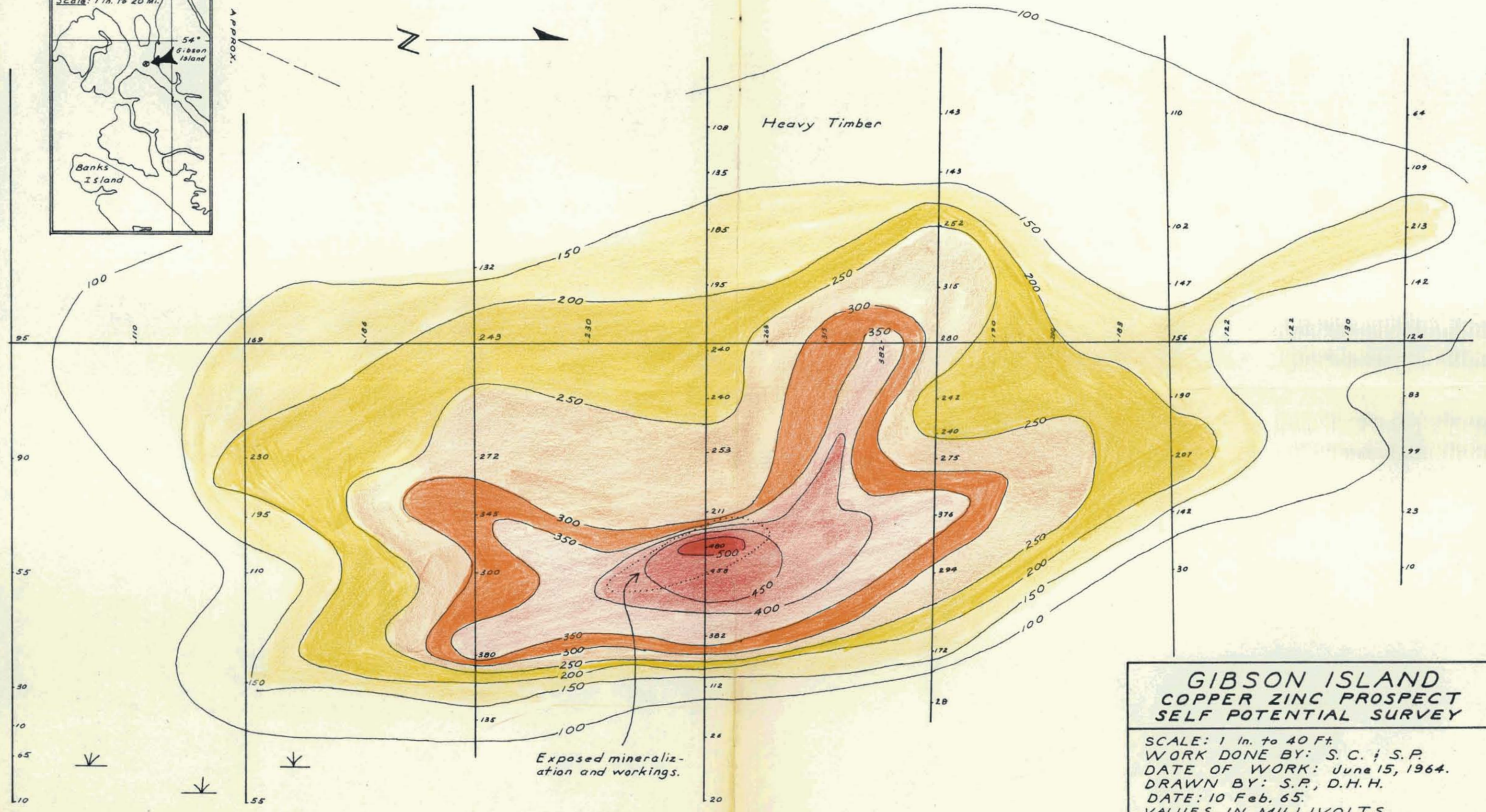
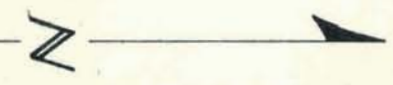
L1N

L2N

L3N



APPROX.



GIBSON ISLAND COPPER ZINC PROSPECT SELF POTENTIAL SURVEY

SCALE: 1 in. to 40 Ft.
WORK DONE BY: S. C. & S. P.
DATE OF WORK: June 15, 1964.
DRAWN BY: S. P., D. H. H.
DATE: 10 Feb. 65.
VALUES IN MILLIVOLTS.

MAP G12-64