

2108

GEOLOGICAL AND GEOCHEMICAL REPORT

MW CLAIMS

LOCATION: Meares Island, approximately three miles northeast of Tofino, B. C., 49°, 125° SE

REPORT BY: P. E. Hirst, P. Eng.

CLAIM OWNER: Fort Reliance Minerals Ltd.

DATE OF WORK: April 12, 1969 to July 12, 1969

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 2108 MAP

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY.....	1
INTRODUCTION.....	1
PROPERTY.....	1
LOCATION, ACCESS, PHYSIOGRAPHY.....	2
HISTORY.....	2
DETAILS OF THE 1969 WORK PROGRAMME.....	3
DETAILS OF THE GEOCHEMICAL SURVEY.....	3
METHOD OF GEOCHEMICAL ANALYSIS.....	3
RESULTS OF THE GEOCHEMICAL SURVEY.....	4
GEOLOGY.....	5
(a) General Statement.....	5
(b) Local Geology.....	5
(i) Sedimentary and Volcanic Rocks.....	5
(ii) Igneous Rocks.....	6
(iii) Kallapa Breccia.....	6
(c) Structure.....	7
(d) Alteration.....	7
(e) Mineralization.....	8
CONCLUSIONS.....	10
APPENDIX "A" - STATEMENT OF COSTS OF THE GEOLOGIC MAPPING AND GEOCHEMICAL SURVEY.....	11
APPENDIX "B" - EVIDENCE OF EXPENDITURE INCURRED.....	12

MAPS IN FOLDER

<u>Plate No.</u>	<u>Title</u>	<u>Scale</u>
#1 1	PROPERTY LOCATION AND INDEX MAP	1:50,000
#2 2	GEOLOGICAL MAP OF THE KALLAPA AREA	1" = 400 feet
#3 3	STREAM SEDIMENT GEOCHEMISTRY	1" = 1,000 feet
#4A 4A	COPPER-MOLYBDENUM SOIL GEOCHEMISTRY - N. Block	1" = 400 feet
#4B 4B	ZINC-ARSENIC SOIL GEOCHEMISTRY - N. BLOCK	1" = 400 feet
#5A 5A	COPPER-MOLYBDENUM SOIL GEOCHEMISTRY - S. BLOCK	1" = 400 feet
#5B 5B	ZINC-ARSENIC SOIL GEOCHEMISTRY - S. BLOCK	1" = 400 feet

SUMMARY:

The Kallapa showing on Meares Island is a probable Tertiary focus of intrusive breccia development and gold-copper-arsenic sulphide mineralization. Soil sampling defines the area of known breccia development and sulphide mineralization with distinct arsenic anomalies. Elsewhere, other broad zones of arsenic anomalies suggest similar prospecting possibilities, but whose significance remains to be determined by further work.

A number of molybdenum in soil and stream sediment anomalies occur within another part of the claim block.

INTRODUCTION:

During November, 1968, Port Reliance Minerals Ltd. optioned the Kallapa gold-copper-silver prospect (covered by four crown granted claims) and staked a large block of surrounding claims.

Subsequently, during the 1969 field season, these properties were assessed by geochemical stream sediment and soil sampling, geological mapping, and prospecting. Additional claims were staked during the early part of the 1969 field season.

This report describes the details and results of the 1969 fieldwork which was done under the general supervision of P. E. Hirst, P. Eng., Consulting Geologist, in cooperation with Mr. J. Bucholz, Geologist, Mr. E. A. Ramsay, P. Eng., Geologist, and Mr. P. C. M. Roberts, P. Eng., Geologist.

PROPERTY:

The Meares Island Property consists of 105 located MW claims and four optioned crown-granted claims. The MW claims are numbered 1, 3 - 11 inclusive, 13 - 51 inclusive, 52 - 73 inclusive, and 78 - 111 inclusive. Corresponding record numbers are 13419 - 13428 inclusive, 13430 - 13468 inclusive, 14769 - 14778 inclusive, 14672 - 14683 inclusive, 14690 - 14705 inclusive, 14684 - 14689 inclusive, and 14923 - 14934 inclusive.

The Crown-granted claims held under option from K. D. Farrell of Port Alberni, B. C., are called Kallapa,

Lot 1299; Shinnick Fraction, Lot 1300; Jack of Clubs, Lot 1301; Golden Gate, Lot 1302.

The above claims have been grouped into three groups as follows:

Group MW-1: 29 claims consisting of MW 25, 29, 31, 62, 63, 67, 69, 78 - 87, 89, and 102 - 111.

Group MW-2: 40 claims consisting of Lots 1299 - 1302, MW 1, 3 - 11, 13 - 25, 32, 33, 35, 40 - 45, 52 - 55.

Group MW-3: 40 claims consisting of MW 26, 28, 30, 34, 36 - 39, 46 - 51, 56 - 61, 64, 66, 68, 70 - 73, 88, 90 - 101.

Portions of claims MW 4 - 8 inclusive appear to be in contravention as they are an apparent oversteaking of a mineral and placer reservation in the vicinity of Arch Bay.

LOCATION, ACCESS, PHYSIOGRAPHY:

The property is situated on Meares Island, about three miles northeast of Tofino, in the Alberni Mining Division. Specific coordinaters are latitude 49° 12' North, longitude 125° 51' West. Easy access to the property is provided by shallow-draft boats from nearby Tofino.

The claims are densely forested with considerable undergrowth of salal and other bushes and are moderately rugged. Elevations range between sea level and 2,500 feet a.s.l.

HISTORY:

The Kallapa property is first mentioned in the 1900 B.C. Minister of Mines report and sustained a small production of 1,512 tons of ore containing 569 ozs. gold, 3,544 ozs. silver, and 60,363 lbs. of copper in the period 1913 - 14. No further work has been done or reported since this date and the workings are now collapsed and overgrown.

DETAILS OF THE 1969 WORK PROGRAMME:

A topographic base map on a scale of 1 inch to 400 feet was prepared by enlarging existing government 1:50,000 contour maps of the area. A tent camp was established on a small inlet near the old Kalappa workings and served as a base for work on the property. Owing to the difficult topography and undergrowth, considerable use had to be made of motor boats for access to various parts of the property.

A series of cut and chained picket lines were established for geological mapping and soil sampling purposes. Soil samples were collected by auger from the "B" horizon, dried at base camp, and shipped to Bondar-Clegg Laboratories in North Vancouver, B. C. for analysis. Stream sediment samples were similarly treated and analyzed.

DETAILS OF THE GEOCHEMICAL SURVEY:

(a) Stream Sediments:

Samples were collected of the finest material available from the active channel of most streams, generally the silt-sized fraction.

(b) Soils:

Samples were collected (at intervals of 100 feet or 200 feet along picket lines) at depths of 6 - 12 inches in the podzolic "B" horizon using a hand auger. A limited number of samples were mainly organic from swampy areas. All samples were placed in standard-sized heavy duty kraft envelopes.

METHOD OF GEOCHEMICAL ANALYSIS:

Samples were dried at the base camp prior to shipping to a commercial laboratory (Bondar-Clegg, North Vancouver, B. C.) for analysis.

Samples as received at the laboratory were screened to minus 80 mesh and a one gram sample was then digested in hot acid (HNO_3 - HCL) from which standard acid solutions were prepared.

Separate aliquots of sample solution were analysed for copper molybdenum, and zinc. A separate one gram sample was digested in hot acid ($\text{HNO}_3 - \text{HClO}_4$) for arsenic determination. Arsenic was determined by a colorimetric procedure whereby a colored organic complex is formed that is indicative of the relative metal content. This is known as the Arsine method. The metal content of the colored organic complex was determined by using a spectrophotometer to obtain the light transmittancy and comparing the values with a standard graph to obtain the respective parts per million.

Copper, molybdenum, and zinc were determined by atomic absorption spectrophotometry. The atomic absorption unit consists of three major components, a hollow cathode lamp (separate lamps for each element), a burner-atomizer, and a monochromator. The test solution is aspirated directly into the burner atomizer, and the respective transmittancy is read directly on a scale expansion unit on the monochromator. The respective metal contents are calculated by comparing the transmittancy with standard curves.

RESULTS OF THE GEOCHEMICAL SURVEY:

Stream sediment results are plotted on the accompanying Stream Sediment Geochemistry map (Plate 3). Color-codes identify the samples and areas containing above background and possibly anomalous values of copper, molybdenum, zinc, and arsenic. The respective anomalous values are approximately four times background and are 100 ppm copper, 12 ppm molybdenum, 200 ppm zinc, and 80 ppm arsenic.

Soil sample results are plotted on accompanying 1" to 400 feet Soil Geochemistry maps for the north and south blocks. Plates 4A and 5A respectively show the copper and molybdenum contents of the soils in the north and south blocks, and plates 4B and 5B respectively show the zinc and arsenic contents of the soils in the north and south blocks.

Arsenic in soil results are contoured on plate 5B for the south block, and copper in soil results are more broadly contoured on plate 5A for the south block. Molybdenum values are locally contoured in a small area of the north block on plate 4A.

GEOLOGY:(a) General Statement:

Meares Island is situated within a part of Vancouver Island that contains a variety of mineral occurrences and intrusive rocks. Some nearby intrusives, principally of quartz dioritic to quartz monzonitic composition, on Catface Mountain, about six miles northwest of the Fort Reliance claims, are of Tertiary age and are the host for important copper and molybdenum deposits. Other Tertiary intrusives occur within the general area and some of these also contain copper and molybdenum mineralization. Some writers have also suggested further links with other significant copper and molybdenum mineralized Tertiary intrusives that occur in a belt extending some fifty miles northeast from Catface Mountain and Meares Island to Mount Washington.

G.S.C. mapping of the general area shows that Meares Island is part of a fairly extensive belt of a generally gneissic and hybrid meta-volcanic sequence of unknown age. Muller of the G.S.C. has suggested that these rocks may be correlative with the Palaeozoic Sicker Group.

(b) Local Geology:(i) Sedimentary and Volcanic Rocks:

The property contains a fairly high proportion of scattered outcrop, and nearly continuous outcrop occurs along the shoreline. Outcrops are generally moss-covered and require extensive scraping to distinguish rock-type. Parts of the southern block (see plate 2) contain little or no outcrop in the vicinity of Sawmill Creek on claims NW 32 - 39 inclusive where there are extensive swampy areas and stream silts and gravels. Although the area has been extensively glaciated, and there is extensive till-cover, it is not believed to be particularly thick in most places. All the property is covered to varying degrees by rotted vegetation and dense thickets of salal and other low bushes.

Most of the geological mapping has been confined to the south block of claims and this is shown on an accompanying 1 inch to 400 feet geological plan (Plate 2). Elsewhere, mapping has been mainly confined to shoreline traverses. Most of the property is underlain by variably metasomatised and migmati-

tized volcanics of uncertain age. The volcanics are mainly of andesitic composition, but locally there are more basic phases. There are all gradations between generally unaltered andesite to fine to coarse-grained meta diorite and migmatite. Locally the meta diorites are weakly foliated and grade imperceptibly into more strongly foliated gneissic rocks of dioritic and/or gabbroic composition, particularly at lower elevations and in the vicinity of the old Kallapa showing. Few bedding attitudes could be observed in the volcanic rocks or their metamorphosed equivalents with the local exception of flow banding in some of the more unaltered andesites. Weak foliation and gneissic banding generally exhibit east to northeasterly strikes and near vertical attitudes.

A prominent band of distinctive thin-bedded siliceous tuffs, locally massive fine-grained tuffs, chert, and occasional thin limestone beds occurs in a number of places on the property and may form a continuous band across the eastern part of the property if it continues across the covered portion of Sawmill Creek in the vicinity of MW 34 - 37 claims. This unit of distinctive lithology may locally attain a width of 1,600 feet in places.

(ii) Igneous Rocks:

Small dykes and sills and irregular bodies of several different lithologies occur on the property. Small irregular bodies of pegmatite, aplite, and fine to medium grained diorite and leuco quartz diorite are widely distributed, but appear to be more prevalent within the basement complex rocks exposed at the lower elevations. Locally there are some intrusive basic diorite phases which are difficult to distinguish from the more prevalent meta diorites.

Light-coloured feldspar porphyry and quartz feldspar porphyry dykes and occasional more irregular bodies occur in all rock types and may be of Tertiary age. They are essentially undeformed. Dyke trends are somewhat diverse but generally occur in the north quadrant. Andesite dykes of probably similar age are fairly common and may have related parental origins to the feldspar porphyry dykes.

(iii) Kallapa Breccia:

This is a very distinctive breccia that occupies a roughly oval-shaped area in the vicinity of the old Kallapa showings. It has approximate surface dimensions of 600 feet (Long N-S axis) by 450 feet wide,

and tends to form precipitous and loose cliff-like outcrops along its western margins. Contacts with surrounding country rocks, principally gneissic meta diorites, are poorly defined in most places.

Although the vertical extent of the breccia is unknown, the diverse nature of the fragments and its surficial geometry suggest that it is a breccia pipe of probably explosive origin that may be related to an igneous intrusion. Fragments in the breccia are principally composed of country rock (gneissic and massive meta diorite), but also include significant amounts of leuco feldspar porphyry, leuco quartz diorite, dacite, and some vein quartz. All fragments are extremely angular and variably sized, locally exceeding 10 feet in diameter. The breccia appears to contain a high proportion of voids and in many cases is seen to be only poorly cemented by minor amounts of quartz, but locally it is well cemented by indurated rock flour (?) and quartz.

The exact composition of the breccia fragments have not yet been determined petrographically nor has the internal structure been studied in any detail to determine if more than one stage of brecciation has occurred. Preliminary staining tests did not indicate any significant K-feldspar content of fragments or matrix in the few samples examined.

(c) Structure:

An aerial photograph study does not indicate any particularly unique features for the localization of the Kallapa breccia pipe. No recognizable landforms correspond with the outline of the breccia. Of possible interest is the intersection of northeast trending lineaments and southeast to south-southeast trending lineaments in the immediate area of the breccia pipe, with the latter series of lineaments closely paralleling the strike of the Kallapa vein system.

Bedding and gneissic banding show variable strikes and dips, generally approximating northeast strikes with steep to near vertical dips being common.

(d) Alteration:

No pronounced zones of hydrothermal alteration were observed on the property. Locally, and particularly in the vicinity of some shear zones, there is a certain amount of chloritic alteration. Some of the fragments within the Kallapa breccia

are strongly altered to aggregates of green clay and carbonate.

Very local developments of epidotic skarns were observed in the limestone-tuff sequence on Hot Creek on MW 46 claim, and these are locally mineralized with chalcopyrite, pyrite, and pyrrhotite. A similar malachite-stained skarn was observed in a single float occurrence on MW 31 claim.

(e) Mineralization:

The principal area of known sulphide mineralization is comprised of a number of narrow and lenticular sulphide mineralized quartz and quartz-carbonate fissure veins that occur within an area of 1,800 feet by 1,200 feet that is referred to as the Kallapa showing. The veins vary from 2 feet to 6 feet wide, are essentially vertical or steeply dipping, and strike in a southeasterly direction. Some of the veins have been partially explored by short adits, and one vein (nos. 2 and 3 adits) has been more extensively explored by underground workings and has yielded 1,500 tons of ore grading 0.37 ozs. gold, 2.3 ozs. silver, and 2% copper.

The veins contain pyrite, pyrrhotite, chalcopyrite, sphalerite, and arsenopyrite, but were not studied in any detail during the 1969 field season. Their main economic interest is in the gold content, and to some extent this is probably a function of the relative arsenopyrite content of the veins. This is illustrated by several assays from the Kallapa breccia and elsewhere. Of particular interest is the high assay of 4.3 ozs. gold from a 2-foot wide quartz-arsenopyrite vein about 300 feet south of the Kallapa breccia.

The Kallapa breccia pipe is roughly centrally located with respect to the above-described veins. In places it contains minor and erratically distributed sulphide mineralization with a general similar mineralogy to that occurring in the quartz veins. The best mineralization observed occurs along the northwest margin of the breccia, in the vicinity of trench samples 3717 to 3720 (see inset map on Plate 2). A total of 15 trenches were excavated by drilling and blasting shallow cuts around the margins of the breccia. Sample results are shown on Plate 2. Pyrrhotite is the most abundant sulphide mineral present, and locally, in samples 3717 and 3720 there is considerable arsenopyrite present. Minor amounts of chalcopyrite occur throughout this interval, but nowhere exceed a grade of 0.08% copper except in hand specimen size. Elevated gold assays of 0.050 oz. and 0.035 ozs. in samples 3720 and 3717 that contain the highest arsenic contents. Minor amounts of sphalerite occur in a number of places with the highest assays in three samples being

0.20%, 0.41% and 0.54% zinc. Minor amounts of a blue fluorescent mineral were observed in a few hand specimens of the breccia. Subsequent analysis for tungsten in samples 3714 - 3720 showed the presence of 0.02% WO_3 in sample 3720 with only traces being present in the other samples. A semi-quantitative spectrographic analysis of samples 3718 and 3720 did not indicate any other elements of commercial interest.

Some aspects of the breccia pipe suggest that it may have been formed essentially at the same time as the emplacement of the surrounding veins. This is based on the fact that similar sulphide mineralization occurs within the breccia as is found in the veins. However, fragments of the vein quartz and sulphide-bearing quartz occurring within the breccia suggest that breccia development may have occurred at a late stage in the mineralization sequence. Most of the sulphide mineralization within the breccia appears to be in the form of cavity filling or disseminations in the matrix, commonly associated with minor quartz; and also as fracture fillings within dacite (?), and as disseminations in all types of fragments.

Scattered sulphide disseminations occur in many places within the sedimentary tuff-limestone unit. This mineralization is principally composed of pyrrhotite and lesser pyrite with rare specks of chalcopyrite, mainly occurring in the more siliceous tuffs and cherts. It is viewed as possibly syngeneetic in origin. Local skarn developments within this unit are mineralized with more abundant chalcopyrite and pyrrhotite, and widths of 3 - 4 feet of copper mineralized skarn were observed on Twin Creek on MW 46 claim in the vicinity of a feldspar porphyry dyke. Scattered copper mineralization, including a 1 foot chalcopyrite-mineralized quartz vein, occur over 500 feet to 600 feet of strike length in this vicinity, locally as disseminations in adjacent andesites and skarn, but nowhere does the mineralization attain any significant width. A single float occurrence of malachite stained skarn was also located on MW 31 claim within the same (or similar) stratigraphic unit. Various assays of sulphide mineralization within this unit did not reveal the presence of any arsenic minerals.

Scattered sparse disseminations of pyrrhotite, pyrite and rare chalcopyrite are to some extent ubiquitous throughout the entire property. Slightly greater amounts of chalcopyrite occur in various rock types towards the headwaters of Applespring Creek and on the northern slopes of Mount Colnett, but nowhere approach a visual grade exceeding 0.05 percent copper in hand specimen size. Occasional small shear zones also contain minor amounts of pyrrhotite, pyrite, and chalcopyrite.

CONCLUSIONS:

The recent discovery of a breccia pipe in the vicinity of the Kallapa gold veins focusses attention on this area as a loci of sulphide mineralization. Some general similarities between this area and other areas of copper-arsenic-gold mineralization associated with porphyries and breccia development elsewhere on Vancouver Island raise the possibility that the Kallapa breccia may be of Tertiary age.

Strong arsenic in soil anomalies outline the area of breccia development and quartz-sulphide veining. Elsewhere, strong arsenic in soil anomalies that occur in the vicinity of Applespring Creek and Sawmill Creek raise the possibility of similar geologic and mineral possibilities, but whose significance remains to be determined by further work.

Similarly, the various molybdenum in soil and stream sediment anomalies that occur in the northern block of claims remain to be assessed by further work.

Respectfully submitted,

P. E. Hirst

P. E. Hirst, P. Eng.

November 20, 1969.

APPENDIX "A"STATEMENT OF COSTS OF THE GEOLOGICAL MAPPING AND GEOCHEMICAL SURVEY

Salaries (as per Appendix "B") includes supervision	\$17,083.30
Geochemical Analysis - 777 samples at \$4.50/sample	3,496.50
Groceries	4,465.21
Camp Construction, supplies and equipment	5,368.65
Rental and maintenance of two motor boats	1,014.00
Drafting and office work re map preparation	1,200.00
Typing	150.00
Overhead - 0.2 (Salaries & Groceries)	4,309.70
	<hr/>
Total	\$37,087.36
	<hr/> <hr/>

Apportionment of Costs:

Geological	\$ 7,800.00
Geochemical	29,287.36

I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act".

DECLARED before me at the *City*)
of *Vancouver*, in the)
Province of British Columbia, this)
27 day of *Nov.* AD. 1969.)

P.S. Hirst

A. Glanville

Sub-mining Recorder

APPENDIX "B"EVIDENCE OF EXPENDITURE INCURRED

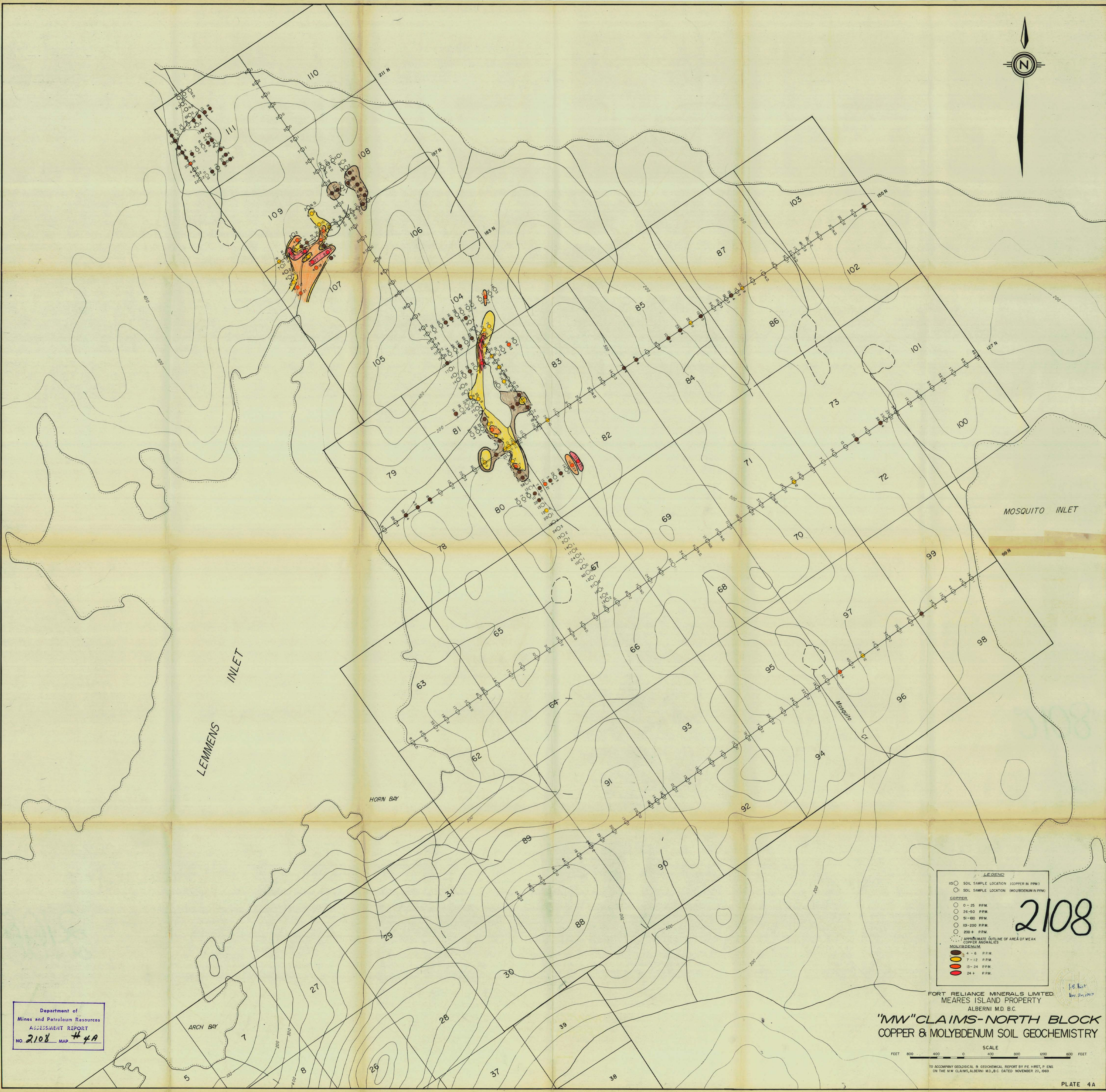
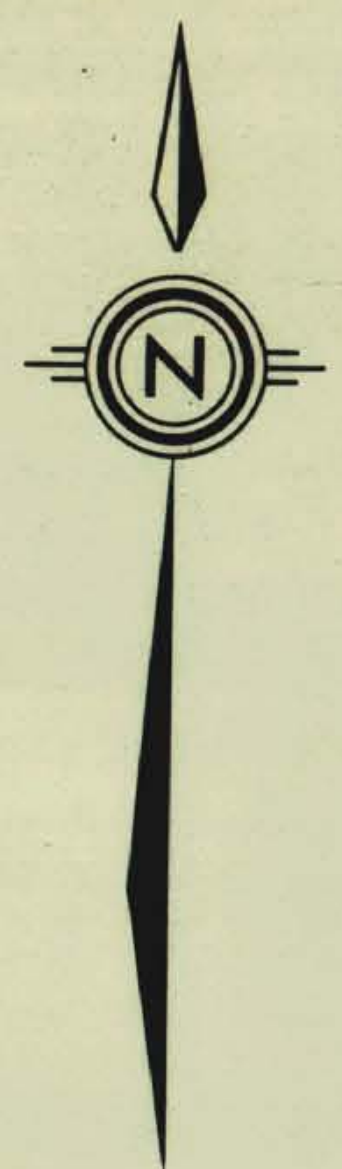
<u>Name</u>	<u>Category</u>	<u>Rate</u>	<u>Days Worked</u>	<u>Period</u>	<u>Total Wage</u>
P.E. Hirst	Consulting Geologist	\$ 90/day	30	May 12 - June 29	\$ 2,700.00
J. Bucholz	Geologist	\$ 75/day	41	Apr.12 - July 12	3,075.00
P.C.M.Roberts	Geologist	\$ 70/day	16	May 22 - June 6	1,120.00
E.A. Ramsay	Geologist	\$ 75/day	12	June 21- July 12	900.00
T. Altenburg	Helper	\$650/mo.	32	Apr.19 - May 20	861.73
H. Bucholz	Helper	\$550/mo.	87	Apr.12 - July 12	1,960.61
W. Gillies	Helper	\$600/mo.	87	Apr.12 - July 12	2,100.00
E. Nichol	Helper	\$550/mo.	51	Apr.12 - June 6	1,108.68
W. Raymond	Helper	\$550/mo.	78	Apr.26 - July 12	1,650.00
B. Kozar	Cook	\$650/mo.	53	Apr.26 - June 20	1,278.00
L. Yerks	Cook	\$550/mo.	12	Jul. 1 - July 12	329.28
					<hr/>
				Total	\$17,083.30
					<hr/> <hr/>

I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act".

DECLARED before me at the *City*)
of *Vancouver*, in the)
Province of British Columbia, this)
27 day of *Nov.* A.D. 1969)

P.-S. Hirst

L. Jeanotte
Subscribing Recorder



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2108 MAP # 4A

LEGEND

- SOIL SAMPLE LOCATION (COPPER IN PPM)
- SOIL SAMPLE LOCATION (MOLYBDENUM IN PPM)

COPPER

- 0 - 25 PPM
- 26 - 50 PPM
- 51 - 100 PPM
- 101 - 200 PPM
- 200+ PPM

○ APPROXIMATE OUTLINE OF AREA OF WEAK COPPER ANOMALIES

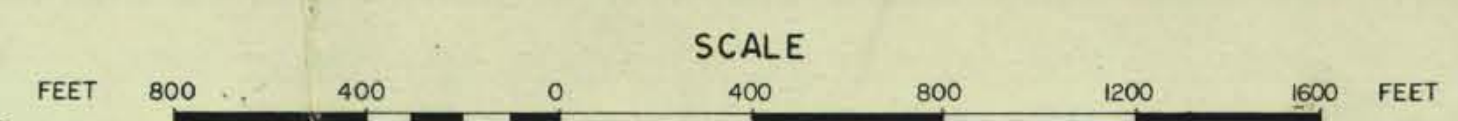
MOLYBDENUM

- 4 - 6 PPM
- 7 - 12 PPM
- 13 - 24 PPM
- 24+ PPM

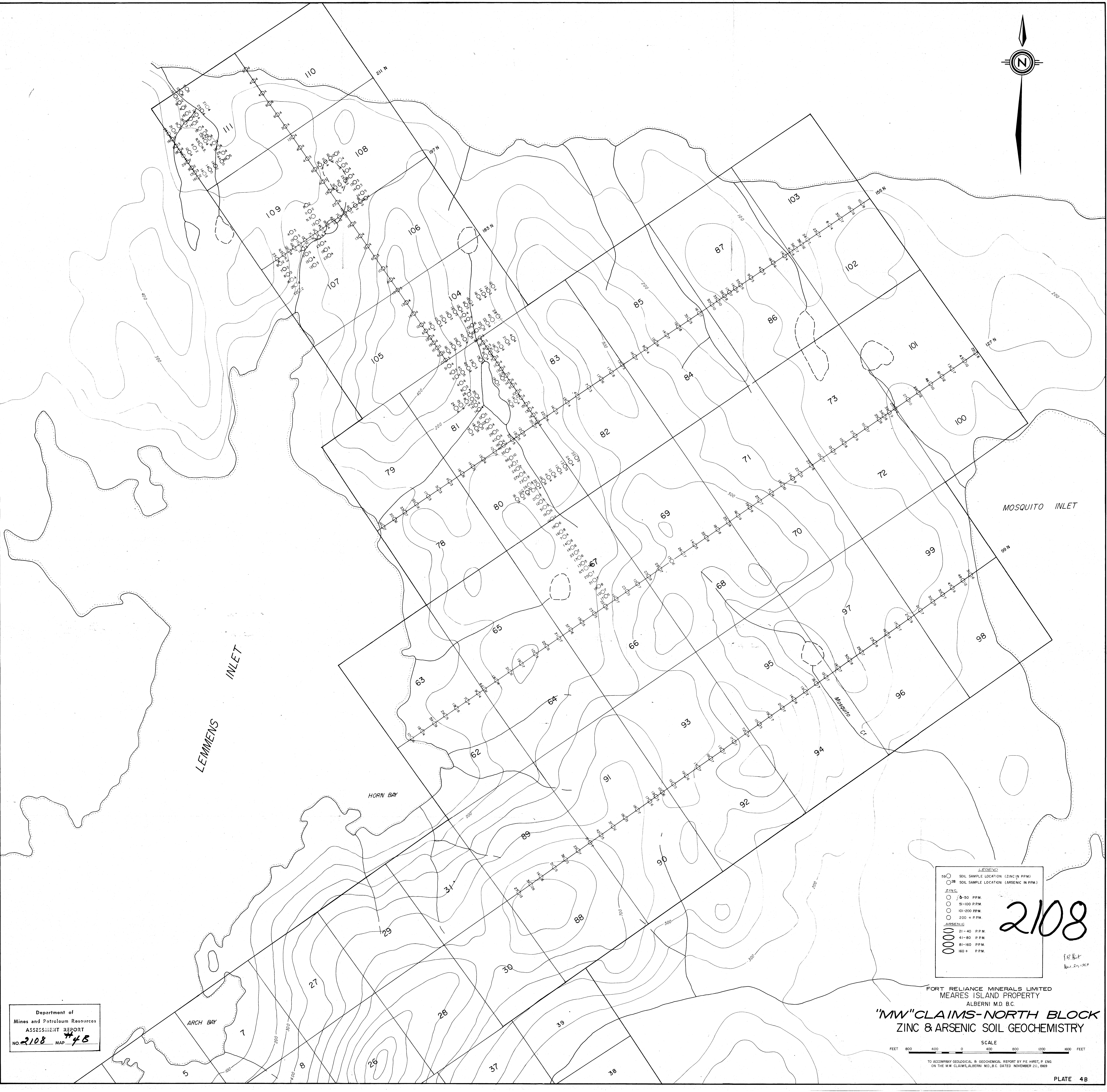
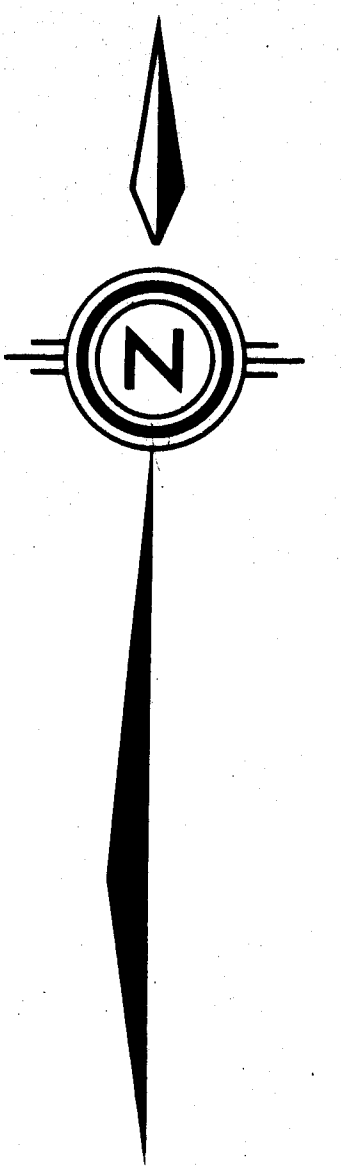
2108

FORT RELIANCE MINERALS LIMITED
MEARES ISLAND PROPERTY
ALBERNI M.D. B.C.

**"MW" CLAIMS - NORTH BLOCK
COPPER & MOLYBDENUM SOIL GEOCHEMISTRY**



TO ACCOMPANY GEOLOGICAL & GEOCHEMICAL REPORT BY PE HIRST, P. ENG.
ON THE M.W. CLAIMS, ALBERNI M.D., B.C. DATED NOVEMBER 20, 1969



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2108 MAP 4B

LEGEND

○ 59 SOIL SAMPLE LOCATION (ZINC IN PPM)
○ 28 SOIL SAMPLE LOCATION (ARSENIC IN PPM)

ZINC

- 0-50 PPM
- 51-100 PPM
- 101-200 PPM
- 200+ PPM

ARSENIC

- 21-40 PPM
- 41-80 PPM
- 81-160 PPM
- 160+ PPM

2108

FORT RELIANCE MINERALS LIMITED
MEARES ISLAND PROPERTY
ALBERNI M.D. B.C.

**"MW" CLAIMS-NORTH BLOCK
ZINC & ARSENIC SOIL GEOCHEMISTRY**

SCALE
FEET 800 400 0 400 800 1200 1600 FEET

TO ACCOMPANY GEOLOGICAL & GEOCHEMICAL REPORT BY P.E. HRST, P. ENG.
ON THE MW CLAIMS, ALBERNI M.D., B.C. DATED NOVEMBER 20, 1969



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2108 MAP #5B

LEGEND

59○ SOIL SAMPLE LOCATION (ZINC IN PPM)
58○ SOIL SAMPLE LOCATION (ARSENIC IN PPM)

ZINC

- 0-50 PPM
- 51-100 PPM
- 101-200 PPM
- 200+ PPM

ARSENIC

- 21-40 PPM
- 41-80 PPM
- 81-160 PPM
- 160+ PPM

2108

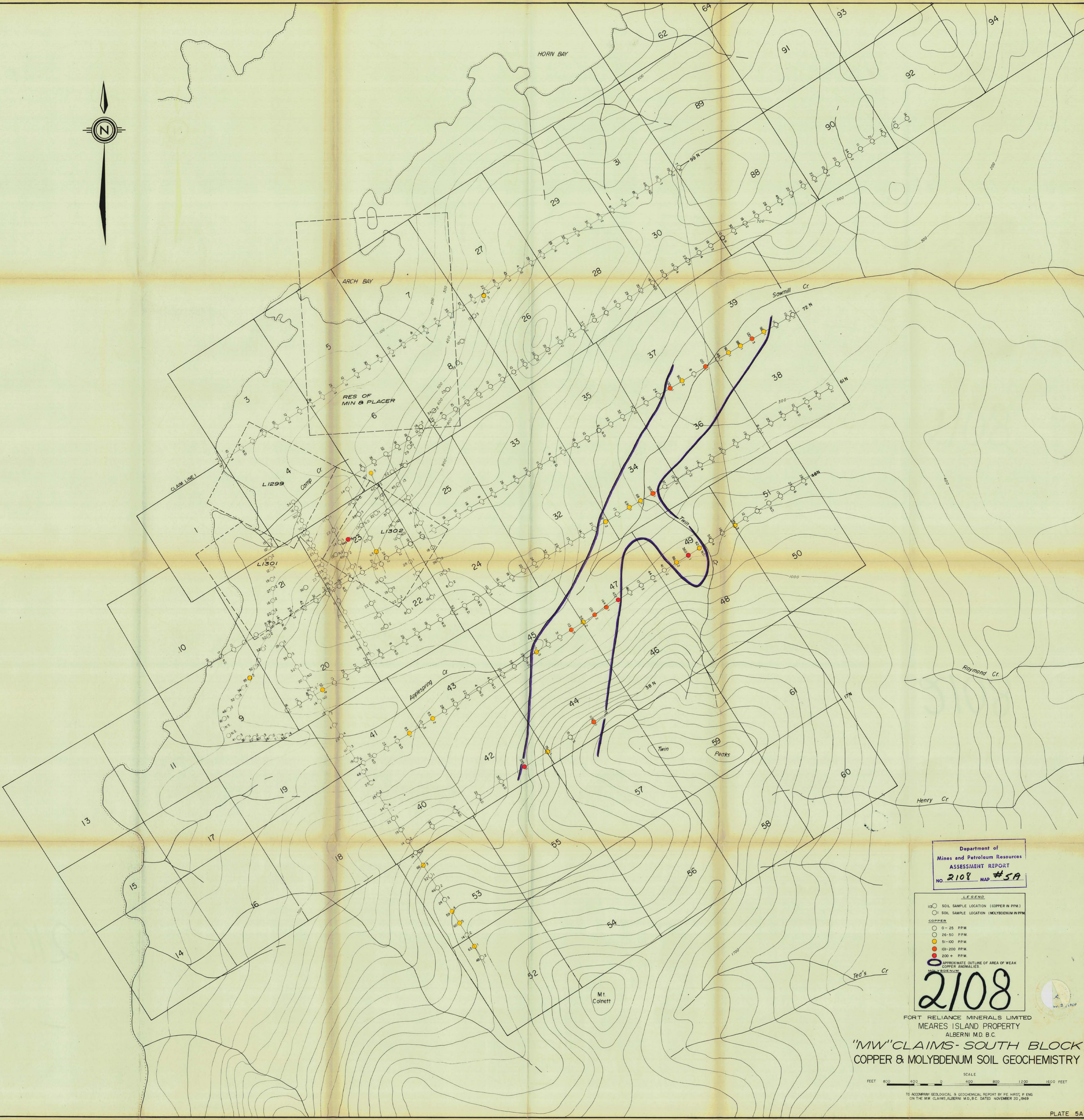
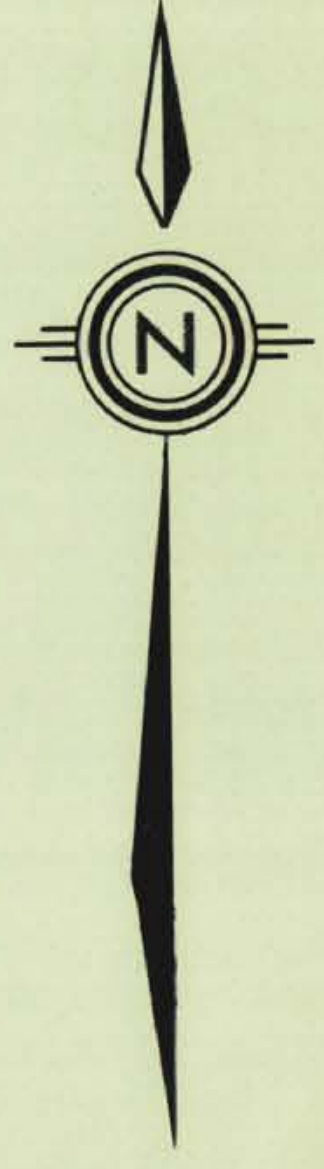
J.B. Kit
Nov 20, 1969

FORT RELIANCE MINERALS LIMITED
MEARES ISLAND PROPERTY
ALBERNI I.D. B.C.

"MW" CLAIMS - SOUTH BLOCK
ZINC & ARSENIC SOIL GEOCHEMISTRY

SCALE
FEET 800 400 0 400 800 1200 1600 FEET

TO ACCOMPANY GEOLOGICAL & GEOCHEMICAL REPORT BY PE WIRRY, P. ENG
ON THE MW CLAIMS, ALBERNI I.D., B.C. DATED NOVEMBER 20, 1969



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2108 MAP #5A

- LEGEND
- SOIL SAMPLE LOCATION (COPPER IN PPM)
 - SOIL SAMPLE LOCATION (MOLYBDENUM IN PPM)
- COPPER
- 0 - 25 PPM
 - 26 - 50 PPM
 - 51 - 100 PPM
 - 101 - 200 PPM
 - 200 + PPM
- APPROXIMATE OUTLINE OF AREA OF WEAK COPPER ANOMALIES
- MOLYBDENUM

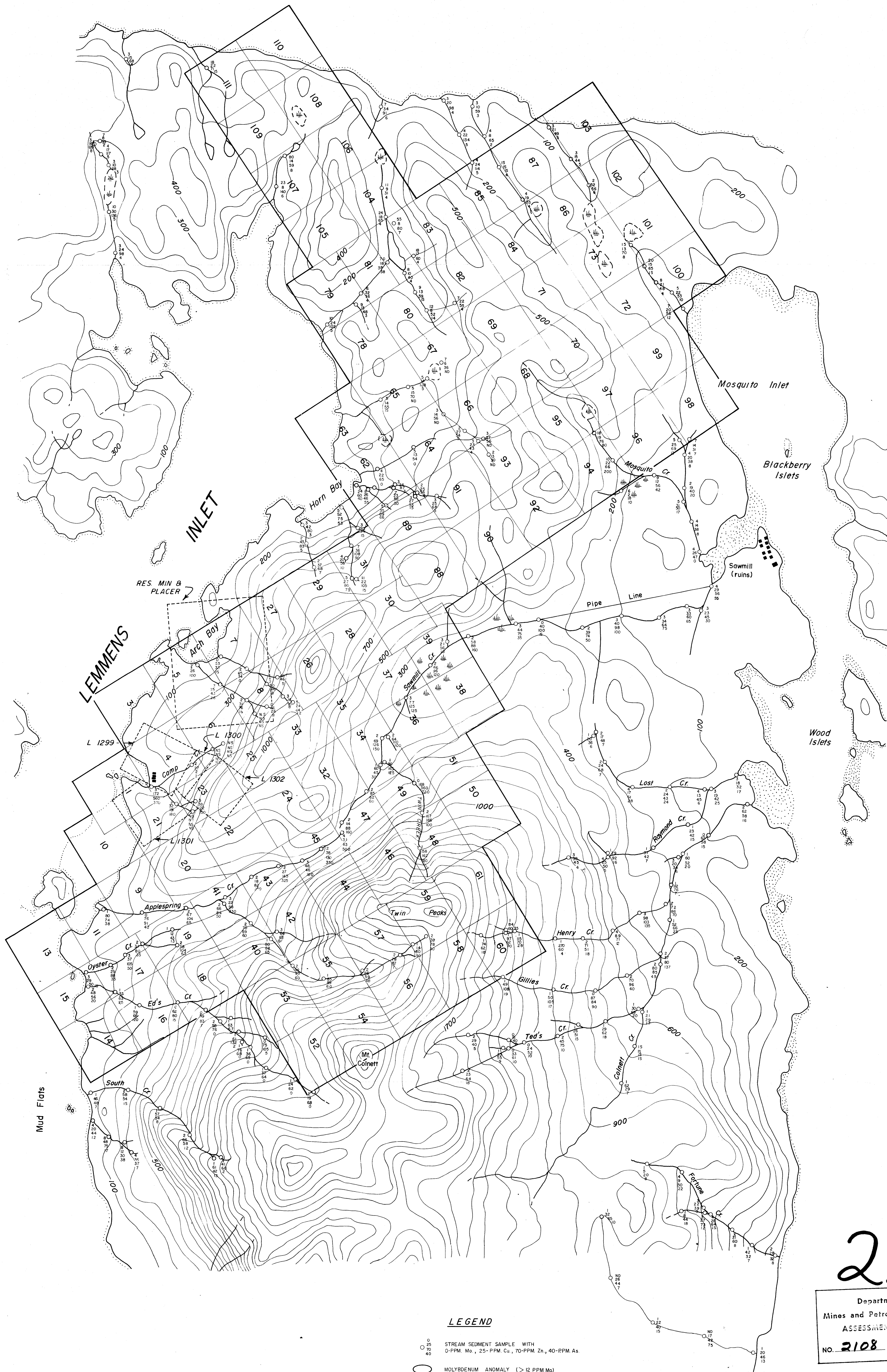
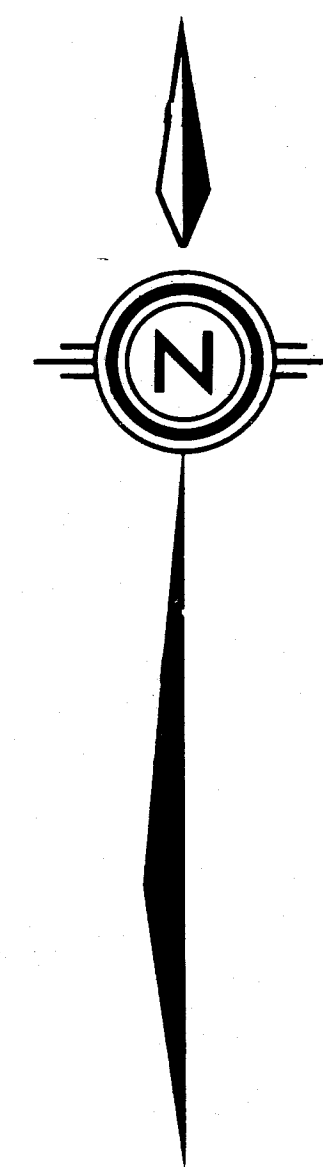
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FORT RELIANCE MINERALS LIMITED
MEARES ISLAND PROPERTY
ALBERNI M.D. B.C.

"MW" CLAIMS - SOUTH BLOCK
COPPER & MOLYBDENUM SOIL GEOCHEMISTRY

SCALE
FEET 800 400 0 400 800 1200 1600

TO ACCOMPANY GEOLOGICAL & GEOCHEMICAL REPORT BY THE WHEAT P. ENG.
ON THE MW CLAIMS, ALBERNI M.D. B.C. DATED NOVEMBER 20, 1969



LEGEND

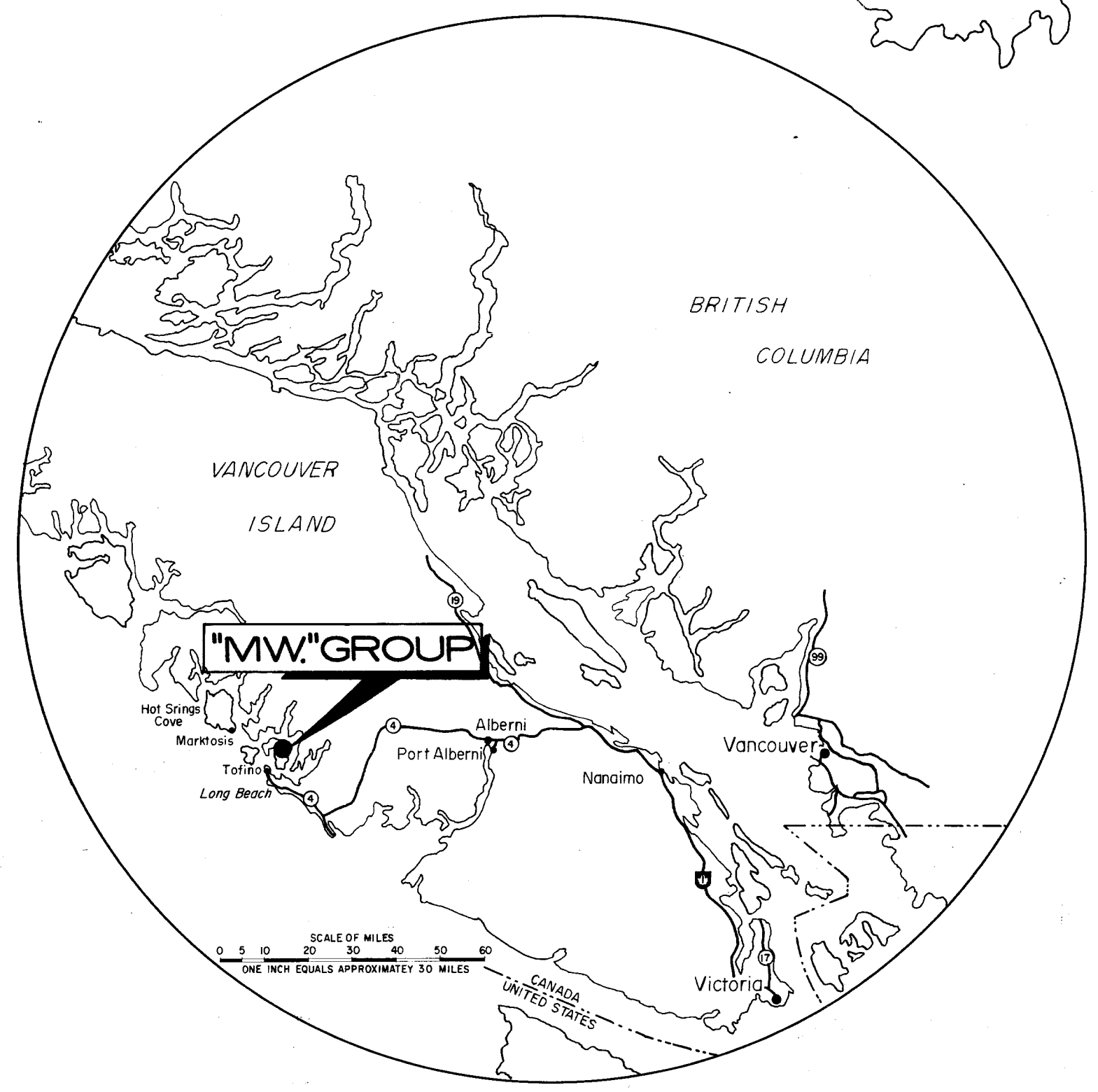
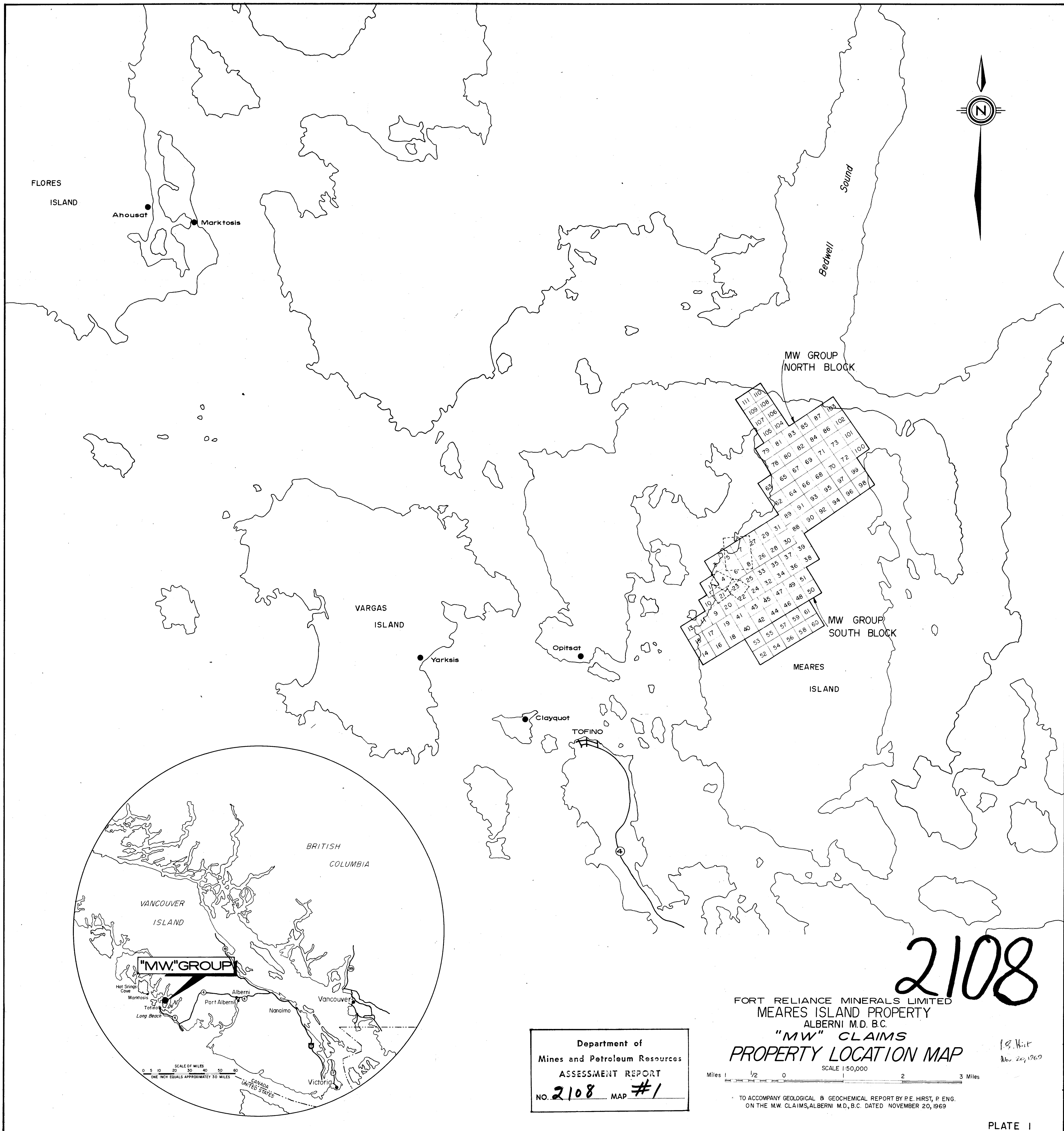
- STREAM SEDIMENT SAMPLE WITH
0-PPM Mo, 25-PPM Cu, 70-PPM Zn, 40-PPM As
- MOLYBDENUM ANOMALY (>12 PPM Mo)
- COPPER ANOMALY (>100 PPM Cu)
- ZINC ANOMALY (>200 PPM Zn)
- ARSENIC ANOMALY (>80 PPM As)

2108

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2108 MAP #3

FORT RELIANCE MINERALS LIMITED
MEARES ISLAND PROPERTY
ALBERNI M.D. B.C.
"MW" CLAIMS
STREAM SEDIMENT GEOCHEMISTRY

SCALE
1000 2000 3000 4000 FEET



2108

FORT RELIANCE MINERALS LIMITED
 MEARES ISLAND PROPERTY
 ALBERNI M.D. B.C.
 "MW" CLAIMS
 PROPERTY LOCATION MAP

J.S. Hirst
 Nov. 20, 1969

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 2108 MAP #1

SCALE 1:50,000
 Miles 1/2 0 2 3

TO ACCOMPANY GEOLOGICAL & GEOCHEMICAL REPORT BY P.E. HIRST, P. ENG.
 ON THE MW CLAIMS, ALBERNI M.D., B.C. DATED NOVEMBER 20, 1969

