1145

GEOLOGICAL AND GEOPHYSICAL REPORT

ON THE

SJO #1, 3-6, 8, 10, Fraction and #12;

16051, 16053-16056, 16058, 16060-16062

SS #5, 7-13, 15; 16073, 16075-16081, 16083

ME 1, 2, Mag #3, 4; 14990-14993

MJ #1, 2; 16085, 16086; GMB #1-9; 16042 -16050

J.L.G., T.S.M., Chuck, JGG Fraction; 16065-16068

EM #1-8; 14707-14714; EM #10, Mag #1, 2;

14716 - 14718; GAM #1; 19096

49°45' NORTH LATITUDE 125°15' WEST LONGITUDE

NANAIMO MINING DIVISION

QUALICUM MINES LTD.

HOLDING COMPANY FOR

MT. WASHINGTON COPPER CO. LTD.

Vancouver, B. C.

December 29, 1967

W. G. Stevenson, P.Eng.

TABLE OF CONTENTS

APPENDIX

INTRODUCTION:

During the 1967 field season I supervised an exploration programme over the property held by Mt. Washington Copper Co. located on Vancouver Island, 13 miles northwest of Courtenay. The exploration programme encompassed prospecting, geological mapping, geochemical sampling and a magnetic and induced potential survey.

This report reviews the geophysical program and summarizes the geology within the area surveyed. It is being submitted in lieu of physical work to accompany an affidavit on application for certificate of work to satisfy the assessment requirements on 49 mineral claims.

PROPERTY AND TITLE:

Because of its location in the Esquimalt and Nanaimo Railroad grant area, title to the base metal mineral rights are held by Canadian Pacific Oil and Gas. They have granted an option on these rights to Mt. Washington over an area of some 11 square miles, and Mt. Washington has staked mineral claims in the name of Qualicum Mines Ltd., to acquire title to the precious metals.

LOCATION AND ACCESS:

Mt. Washington is located on Vancouver Island, 105 miles northwest of Vancouver, at 49°45' North latitude and 125° 15' West Longitude. It is situated 16 miles northwest of Courtenay, a station on the E. & N. Railway at Tidewater. Access is gained over improved roads from Courtenay through a Crown Zellerbach timber licence. The copper smelter of American Smelting and Refining Co. at Tacoma is located 240 miles southerly.

The copper, lead, zinc, silver deposit of Western Mines is located in Strathcona Park near the southern end of Buttle Lake, 19 miles southwest of Mt. Washington. The Argonaut Mine is located 13 miles northwest of Mt. Washington. Shafts and tunnels near Comox Lake, ten to fifteen miles southeasterly from Mt. Washington, mark the position of several dormant coal mines.

HISTORY:

Gold, silver and copper bearing quartz veins were discovered and staked in 1940 by J. M. and R. E. McKay. The Springer interests financed and drove adits on these veins during 1944 and 1945.

Mt. Washington Copper Co. was formed in 1956 by G. C. Murray.

HISTORY: (Continued)

Under an agreement with Noranda Mines Ltd., a major exploration program was conducted during 1957 - 1959. Consolidated Mining and Smelting Company optioned the property and initiated an exploration programme during 1963 and 1964. A copper mill located at Greenwood, B. C., owned by Cumberland Mining Company, was moved to Mt. Washington, and commenced production in 1965. This mill, with a capacity of six hundred tons per day, treated 392,178 tons of ore with an average grade of 1.16% copper, and 0.01 ounces gold, and 0.5 ounces silver per ton, between January 1965 to November 1966.

GEOLOGY:

The oldest rocks exposed on the property are massive thick layered, gently dipping, dark basalts with volcanic tuff and breccia members. This volcanic series, part of the Vancouver Group, extends over a large part of Vancouver Island and over the lower Mainland of British Columbia. The Vancouver Group is subdivided into the Lower Volcanic Horizon named the Karmutsen, and the upper volcanic horizon named the Bonanza, which are separated by the Quatzino Limestone member. This group of Triassic age, is unconformably overlain by gently dipping sandstone, quartzite and shale beds, which contain minor amounts of carbonaceous material here, and which are the host rocks of the coal on Vancouver Island. These overlying sediments, part of the Comox formation are of the Cretaceous Age.

GEOLOGY: (Continued)

Mt. Washington rises to an elevation of 5,215 feet, a distance of twelve miles from the ocean. The Karmutsen volcanic formation covers the lower slopes and the sedimentary Comox formation extends over the upper slopes of the mountain. The core of the mountain is an igneous stock that outcrops over an area of some two square miles, and which intruded the volcanic and sedimentary formations in Tertiary time. This intrusive complex has an irregular shape, elongate in an easterly-westerly direction. A number of porphyry stocks and sills of the Tertiary Age are shown on G. S. C. Geological Map 2-1965 Comox Lake by J. E. Muller, over an area of approximately 140 square miles encompassing Mt. Washington.

The intrusives are pipe-like, possibly representing volcanic vents with associated porphyry sills. One of these, the Gem Lake Prospect, located 7 $\frac{1}{4}$ miles southwesterly from Mt. Washington, is described as a zone of copper mineralization disseminated through a breccia pipe.

The intrusive rocks on Mt. Washington are quartz diorite with associated porphyry and two or more intrusive breccias. These breccias contain an assemblage of angular fragments, both large and small, in a fine matrix of granular quartz, feldspar, and debris from other rocks. Fragments of porphyry are invariably present, accompanied, depending on the adjacent wall rock, by fragments of volcanic rocks, quartzite and shale.

GEOLOGY: (Continued)

The breccias associated with the Mt. Washington intrusive extend easterly along the igneous contact over a distance of several thousand feet. The form shape and extent of this breccia complex is largely unknown.

The most predominant faulting within the Mt. Washington property is southeasterly parallel to the regional Cordilleran trend. Faults with north/south and northwest-southeast strike direction have been mapped in this area. The fault pattern as it affects this area is only imperfectly known. These faults have provided guidance to the emplacement of the intrusive bodies and to the localization of mineralization.

MINERALIZATION:

On the Mt. Washington property mineralization is widespread and can be found in all rock types. This mineralization is essentially pyrite, pyrrhotite, arsenopyrite and chalcopyrite, with variable amounts of gold, silver and molybdenite. Three types of mineralization deposits have been observed:

I. Gently dipping shears containing narrow quartz veins and lenses mineralized with copper sulphides and molybdenum.

II. Massive sulphides containing iron and copper in shear zones cutting the volcanic rocks.

MINERALIZATION: (Continued)

III. Disseminated low grade copper mineralization in diorite, breccias, volcanics, and sediments.

A gently dipping shear zone that contains quartz veins and lenses mineralized with copper has been the source of all production to date. This vein varies between a few inches up to twenty feet thick though averages possibly five feet thick. It occurs near the contact between sedimentary beds and porphyry sills. The quartz veins have been developed in two open pits. The presence of a substantial tonnage of low grade material extending out from these open pits and elsewhere on the property has been indicated by the past work.

Small isolated high grade occurrences of chalcopyrite have been noted in many localities. This mineralization is randomly exposed in all rock types and widely distributed over the property. These occurrences are irregular, discontinuous and of unknown length. They are frequently associated with steeply dipping shear zones.

Disseminated chalcopyrite along with other sulphides has been found within quartz diorite, porphyry, intrusive breccias, the volcanic and sedimentary horizons.

Alteration products, mainly biotite, actinolite, chlorite, epidotite and quartz have been noted. As the altered rocks are generally fractured and often contain copper mineralization the alteration appears to be related to the main period of mineralization.

GEOPHYSICAL PROGRAM:

Magnetic Survey

Five traverse lines were surveyed in the vicinity of the mill with a Torsion Magnetometer having an accuracy of 2 gammas. Readings were taken at 100 foot intervals along these lines. A report dated November 30, 1967 with maps prepared by Dr. D. W. Smellie, P.Eng., Consulting Geophysicist, and marked Appendix "H" is attached.

This report indicated that magnetic variations provide guidance for interpretation of lithology and alteration patterns. As the magnetic low is supported by both geochemical and induced potential responses it provides a guide in searching for sulfide mineralization.

Induced Potential Survey

Five traverse lines in the vicinity of the mill were surveyed with a McPhar I. P. Unit. Readings were taken at 200 foot intervals along these lines. A report with maps, dated December 18, 1967, prepared by McPhar Geophysics Limited and marked Appendix "I" is attached.

The work by McPhar has produced a number of strong I.P. responses, which are typical of the results obtained over metallic mineralization and which warrant further investigation.

Their interpretation shows one zone with variable metallic contents 2,000 feet wide, 3,600 feet long which is coincident with the position of a magnetic high and an area of high copper content in the soil.

GEOPHYSICAL PROGRAM: (Continued)

A number of other strong responses were obtained in the vicinity of the mill, however, the interpretation of this is difficult due to the wide separation of the traverse lines.

One other traverse line was surveyed with the I. P. instrument. This was positioned approximately 2 miles westerly from the mill and 1/2 mile southerly from the open pits. Two strong responses were obtained along this line. Additional surveying will be necessary to properly assess the data

CONCLUSIONS:

1. The geochemical survey in the area of Murex Copper has exposed a band 400 to 1,000 feet wide where the copper content in the soil is anomalously high. This band is circular in outline up to one mile in diameter. The soil within the interior part of this circle has uniformly low copper content.

2. A magnetic high coincides with the perimeter of this zone toward the north.

3. A large strong I. P. anomaly named zone A was developed which coincides with a part of the northern perimeter of the geochemical high and with the magnetic high.

4. Four traverse lines crossed this I. P. anomaly and the I. P. survey does not appear to have extended to the extremities of this zone.

CONCLUSIONS: (Continued)

5. Additional I. P. work is warranted. Traverse lines, parallel with the existing lines should be established midway between the surveyed lines and additional lines should be established toward the east and west beyond the limits of zone A.

6. Five diamond drill holes were put down into the edge of Zone A a number of years ago. These holes exposed wide sections of low grade copper mineralization.

7. The location of the geochemical anomaly coincides with the position of an intrusive breccia and its shape suggests that it represents a volcanic vent.

8. Copper, iron mineralization is exposed 2 miles westerly on an area called the bend.

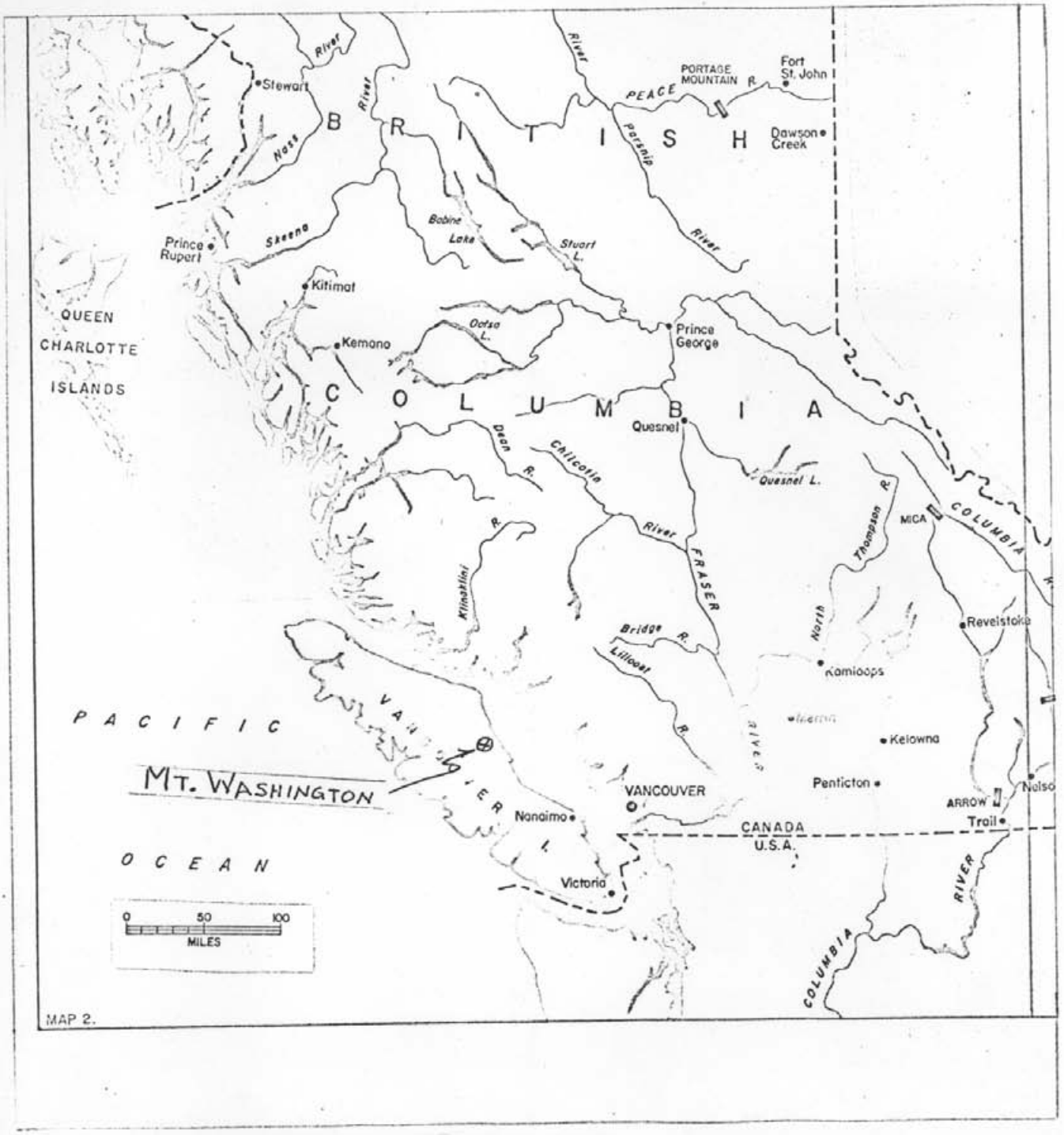
9. An I. P. traverse line crossed this zone and the responses suggest additional exploration is warranted.

Respectfully submitted

W. G. Stevenson, P.Eng.
Consulting Geologist

WGS:mjr

WILLIAM G. STEVENSON, P. Eng.
Consulting Geologist



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

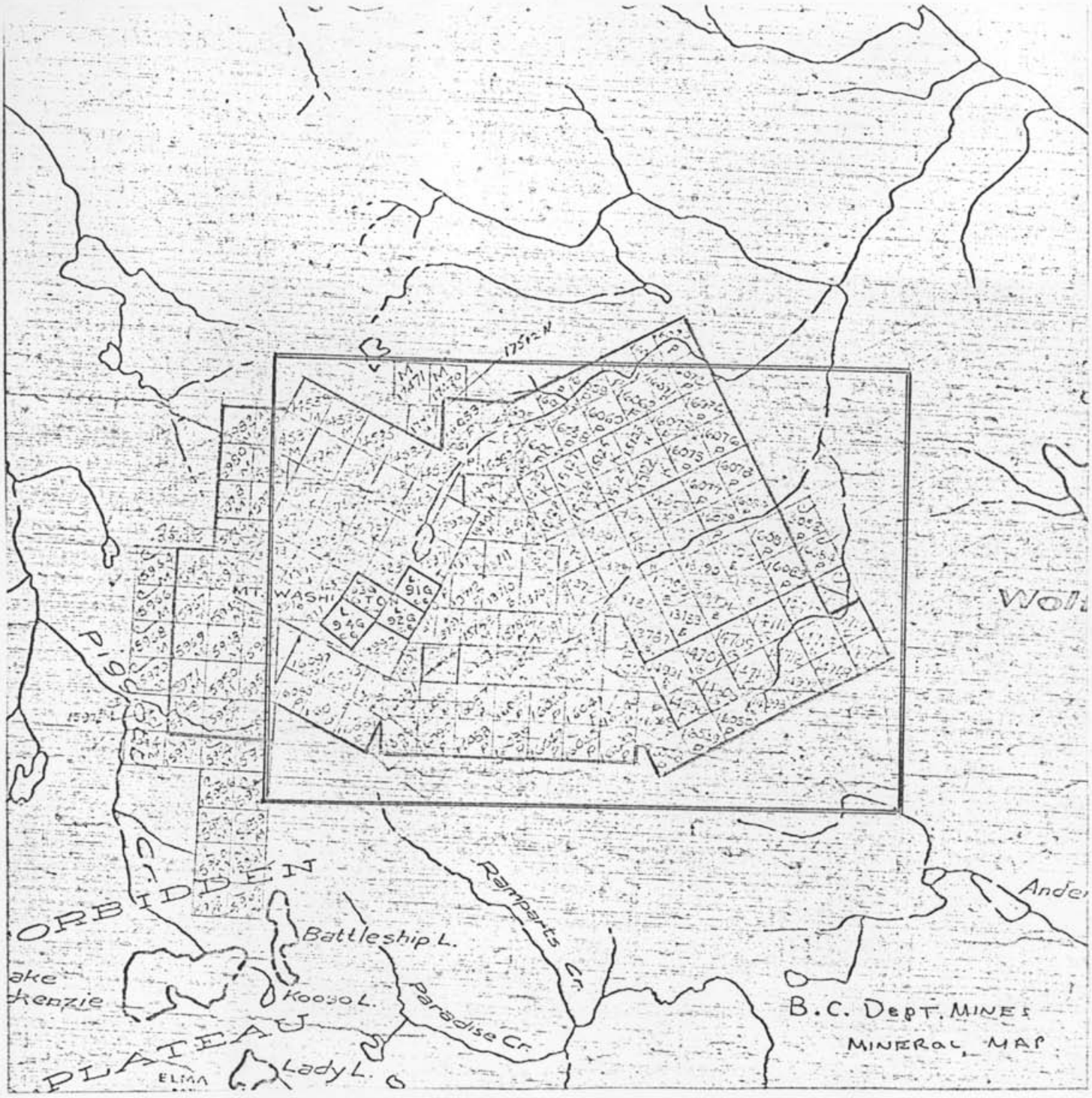
NO. 1145 MAP 1

INDEX MAP
showing location of
Mount Washington Property

Nanaimo Mining Division
British Columbia
Scale 1" = 100 miles

APPENDIX A

WILLIAM G. STEVENSON, P. Eng.
Consulting Geologist



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 1145 PAGE 2

MAP
showing location of
Mineral Claims
Mount Washington Copper Co. Ltd.

Nanaimo Mining Division
British Columbia
Scale 1" = 1 mile

APPENDIX B

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of the geophysical survey over certain mineral claims held by Qualicum Mines Ltd. near Mt. Washington in the Nanaimo Mining Division

I, William G. Stevenson, P. Eng.
Consulting Geologist

of 509 - 475 Howe Street,
Vancouver,

in the Province of British Columbia, do solemnly declare that During 1967 an induced potential survey was accomplished under the terms of a contract with McPhar geophysics of Toronto. Six traverse lines were surveyed with insturment readings collected at 200 foot intervals. A magnetometer geophysical survey was accomplished over five traverse lines with readings made at 100 foot intervals.

I have supervised this exploration program and have compiled a report encompassing this work and the work of McPhar Geophysics and of Dr. Donald Smellie, Consulting Geologist.

The geophysical program was initiated at Mt. Washington on November 4, 1967 and was completed on November 24, 1967.

The Costs to complete the program have been $5,992, as follows:

Wages:

D. F. Parker, Prospector - 550 + 10%/month x 2/3	$ 430.00	
Nov. 15 - 20 - Warren Visia, 31 hours @ 2.50 (Casual)	77.50	
Bill Paisley, 31 hours @ 2.50 (Casual)	77.50	
Nov. 4 - Don Grasby, 8 hours @ 2.50 (Casual)	20.00	
Nov. 6,7,9,10 - Charles Bieberderf, 23½ hours @ 2.50 (Casual	58.75	
Nov. 5,6,7, - Rick Parker, 25 hours @ 2.50	62.50	
Nov. 9, 10, 11 - Harold Black - 13½ hours @ 2.50	33.75	
Nov. 11 - Larry Beck - 6 hours @ 2.50	15.00	
Nov. 12, 13, 14, 15 - Bill Paisley - 34½ hours @ 2.50	86.25	
Nov. 13, 14, 15 - Warren Visia, 25½ hours @ 2.50	63.75	
Oct. 26, 27, 28, C. Bierberderf	38.00	963.00

Truck Rental

Oct. 26 to 30	(5)	(10.00)	$ 50.00	
Nov. 1 - 15	(13)	(10.00)	130.00	
Nov. 16 - 24	(3)	(10.00)	40.00	220.00

Power Saw Rent	10.00	
Bundle Lath	4.15	
Salt	2. 05	
Gas for Power Plant	4.04	20.24

Magnetic Geophysical Survey

P. W. Smellie
90/mile x 3.5 = 315
G x P 78.05 393.05

Induced Potential Geophysical Survey - McPhar Geophysics 3,395.76

Engineering and Superivision 1,000.00

TOTAL $ 5,992.05

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA. } In the Matter of the geophysical survey over certain mineral claims held by Qualicum Mines Ltd. near Mt. Washington in the Nanaimo Mining Division

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Oct. 26, 27, 28, C. Bierbaerderf	38.00	963.00

And 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 3rd day of January 1968, A.D.

W G Stevenson

L. A Strickler

~~A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia.~~

Sub-mining Recorder

★o

C E R T I F I C A T E

I, William G. Stevenson, do hereby certify:

1. That I am a Consulting Geological Engineer with offices at Suite 509 Stock Exchange Building, 475 Howe Street, Vancouver, B. C.

2. That I am a graduate of University of Utah, 1946, with a Bachelor of Science degree.

3. That I am a registered Professional Engineer in the Association in British Columbia.

4. That I have practised my profession for twenty years.

5. That this report, dated December 29, 1967 is based on work that has been accomplished under by direction and that I have made periodic trips to this property during the 1967 field season.

Dated at Vancouver, British Columbia, this 29th day of December, 1967

W. G. Stevenson, P.Eng.

GEOPHYSICAL SURVEY

MOUNT WASHINGTON COPPER MINING COMPANY LTD.

CONTENTS

APPENDIX H

INTRODUCTION

A magnetometer survey has been carried out on the property of Mount Washington Copper Mining Company. This is located 16 miles northwest of Courtenay, Nanaimo Mining Division, B.C.. Field work was carried out by the author on November 12, 13 and 14, 1967.

INSTRUMENTATION

The magnetometer survey was carried out using the MZ-4 torsion magnetometer of A.B. Elektrisk Malmletning of Stockholm, Sweden. This measures the vertical magnetic intensity with an accuracy of 2 gammas.

FIELD PROCEDURE

The magnetometer was read at 100 ft. intervals along lines 1, 3, 5, 7 and 9. The base station was read about every two hours to measure the diurnal field variation. The reduced vertical magnetic intensity values are estimated to have an accuracy of 10 gammas.

RESULTS

The reduced magnetometer values are plotted on the accompanying Plan. Contours are drawn at 1000 gamma

intervals to show consistent changes in vertical magnetic intensity, but single-station changes are in general ignored. In general, magnetic field variations reflect lithologic contrasts and enable lithologic units to be traced through covered areas. Some zones of porphyry-type mineralization occur in zones of alteration marked by magnetic lows. From this point of view, the low at the north end of Line 3 would be of interest if there is other supporting evidence such as an Induced Polarization anomaly or a geochemical high.

Respectfully submitted,

D.W. SMELLIE, P.Eng.

November 30, 1967

DWS/sd

REPORT ON
INDUCED POLARIZATION
AND RESISTIVITY SURVEY
ON THE
COURTENAY PROPERTY
VANCOUVER ISLAND, BRITISH COLUMBIA
FOR
MOUNT WASHINGTON COPPER CO. LTD.

BY

D. B. SUTHERLAND, M. A.

R. A. BELL, Ph. D.

NAME AND LOCATION OF PROPERTY:

COURTENAY PROPERTY, VANCOUVER ISLAND, B. C.

NANAIMO MINING DIVISION, B. C. 49° N, 125° W - NE

DATE STARTED: NOVEMBER 1, 1967

DATE FINISHED: NOVEMBER 19, 1967

APPENDIX I

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McPHAR GEOPHYSICS LIMITED

REPORT ON

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

COURTENAY PROPERTY

VANCOUVER ISLAND, BRITISH COLUMBIA

FOR

MOUNT WASHINGTON COPPER CO. LTD.

1. INTRODUCTION

As authorized by Mount Washington Copper Co. Ltd. , an Induced Polarization and Resistivity Survey has been carried out on the Courtenay Property. This property is located in the Courtenay Area, Vancouver Island of the Nanaimo Mining Division, British Columbia and lies in the NE quadrant of the 1° quadrilateral whose SE corner is at 49° N, 125° W.

The survey grid near Murex Creek is underlain chiefly by gently dipping Karmutsen Volcanics of Triassic Age. An intrusive breccia of irregular shape, but elongated in the east-west direction, lies in the central portion of the grid. A narrow band of porphyry follows the sourthern edge of the breccia. Flat lying Comox sediments of late Cretaceous age are mapped on the southwest part of the grid.

Sulphide mineralization consisting of pyrite, pyrrhotite, arsenopyrite and chalcopyrite is reported in all rock types on the property. The three types of mineral deposits observed are:

i) veins in the sediments.
ii) disseminated mineralization in diorites and breccias.
iii) massive sulphides in shears cutting the volcanics.

The purpose of IP surveying was to outline areas of increased metallic content that might be indicative of one of these types.

A McPhar grequency type IP unit Model P654 was used for the field surveying during November 1967.

2. PRESENTATION OF RESULTS

The induced polarization and resistivity results are shown on the following data plots in the manner described in the notes preceding this report.

Line No.	Electrode Intervals	Dwg. No.
Murex Creek Grid		
1	200 feet	IP 2779-1
3	200 feet	IP 2779-2
5	200 feet	IP 2779-3
7	200 feet	IP 2779-4
9	200 feet	IP 2779-5
"The Bench" Area		
A	200 feet	IP 2779-6

Enclosed with this report is Dwg. Misc. 3284, a plan map of the Murex Creek Grid, at a scale of 1" = 400 '. Also attached is Figure 1, which shows the location of "The Bench" area with respect to the Murex Creek Grid. Its' scale is 1" = 1,000'.

The definite and possible induced polarisation anomalies are indicated by solid and broken bars respectively on this plan map as well as the data plots. These bars represent the surface projection of the anomalous zones as interpreted from the location of the transmitter and receiver electrodes when the anomalous values were measured.

Since the induced polarization measurement is essentially an averaging process, as are all potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly no anomaly can be located with more accuracy than the spread length; i. e. when using 200' spreads the position of a narrow sulphide body can only be determined to lie between two stations 200' apart. In order to locate sources at some depth, larger spreads must be used, with a corresponding increase in the uncertainties of location. Therefore, while the center of the indicated anomaly probably corresponds fairly well with source, the length of the indicated anomaly along the line should not be taken to represent the exact edges of the anomalous material.

3. DISCUSSION OF RESULTS

A. Murex Creek Grid.

Five N-S traverses spaced at 1, 200 foot intervals have been surveyed on the Murex Creek grid. Strong IP effects occur on each of these lines in an area of high copper geochemical values. Nearly all of these anomalies are considered important and definitely worthy of further investigation. Zoning and line to line correlation is difficult due to the wide line separation and additional surveying on intermediate lines might

be of value in reducing the number of individual follow-up targets.

Zone , has been interpreted as broad source trending E-W through the north part of the grid. A number of narrower sources occur near the main road that suggest a series of NW - SE trending zones.

In the following, Zone A will be discussed in detail, followed by a description of the remaining anomalies on each line.

Zone A

Zone A has been interpreted to extend across Lines 3, 5, 7 and 9 and trends roughly E-W. It is characterized by broad responses (i. e. up to 2,400 feet wide) suggesting continuous metallic mineralization that varies appreciably in concentration. Because of the width of these anomalies, the apparent metal factor values may be very close to the true metal factor of the source material. Similar results have been obtained over wide sources of 3 to 12 percent metallics.

In general, the sources appear to lie at shallow depth and the definite anomaly symbol indicates the shallower and more concentrated sections. The exception to this may be seen on Line 9, between 21N and 29N, where there appears to be some depth to the top of the strongest portion of the source.

Erratic but significantly high copper geochemical values occur along the entire length of Zone A. Some of the geochemical highs correspond with the shallower IP indications (e. g. 20N on Line 7 and 44N on Line 3) but the presence of a mill and steep topography may account for the lack of better coincidence.

Previous drill holes C-14, C-16 and C-18 are reported to have intersected sulphide mineralization with some copper but no assays are available. A re-evaluation of the core or logs of these holes may be of value in assessing the potential of Zone A. However, it should be remembered that Zone A is a broad shallow source that extends for at least 3,600 feet and relatively small percentages of copper could be of economic significance.

Zone A lies entirely within the volcanics and definitely warrants a thorough investigation. It appears to be quite shallow with respect to the 200 foot electrodes used for the survey but additional IP work with shorter spreads would be required for accurate depth determinations. Trenching or bulldozing should be considered over the stronger and shallower parts of the anomaly; information from previous drilling may be useful in assessing the feasibility of surface examinations. Alternately a series of short (i.e. 200 foot) holes should be planned to test the strongest and shallowest responses or a section of holes should be drilled across the zone. If a cross-section is favoured, Line 7 would be recommended since there is existing drilling near this line. However, it should be noted that DDH. C-14 may not have tested the strong shallow response shown between 14N and 16N; detailed IP surveying with shorter spreads would be required to pinpoint the location of this strong shallow indication.

Line 1

The three definite IP responses on this line occur on the south part of the grid and appear to lie within the volcanics. None of these correlate with Zone A but all are considered to be primary exploration targets.

The strongest IP response extends from 9N to 16N and indicates a shallow, complex source of metallic mineralization. Its shallowest, most concentrated portion lies between 10N and 12N; trenching or a short drill hole should be considered for this locality.

Definite anomalies are centered near 2S and 11S. Both of these suggest relatively narrow sources of moderate to high metallic content that are remote from the line (i. e. either at depth or to the side of the traverse). They are definitely worthy of further investigation but additional data on parallel lines should be obtained in order to establish locations for test drilling.

Line 3

A strong IP anomaly centered near 13S suggests a shallow source that may be narrower than the 200 foot electrode interval. The magnitude of the IP effects is exceptionally high and the source may be shallow enough for surface examination.

Between 7S and 8N the IP results have been interpreted as a broad zone of variable metallic content. A shallow, narrow source of more concentrated mineralization is indicated between 2S and 4S, while there appears to be some depth to the top of the stronger part of the source between 0 and 2N.

Line 5

Four definite anomalies on the south part of the line indicate

shallow sources that may be narrower than the 200 foot electrode interval. These are centered near 23S, 17S, 11S and 5S. Detailed IP work with shorter spreads would be of value in assessing the metallic content and depth of these sources but surface examination may establish their cause.

The definite anomaly near 18N displays smaller metal factor values than many of the other responses on the grid. Nevertheless, it could be due to a narrow source of high metallic content and should be detailed with a shorter electrode interval to further assess its importance.

Line 7

Strong IP effects and low resistivities indicate the existence of an important source near 12S. The resistivity values are reported to be too low to obtain accurate readings. However, there is adequate information to warrant surface investigations in this vicinity.

Line 9

The probable anomalies near 3S and 7S indicate shallow sources of low metallic content and are regarded as second priority targets.

B. "The Bench" Area

Only one traverse, Line A, was run in this area. It crosses an area of quartz diorite that intrudes the Cretaceous sediments.

There is a strong shallow source indicated by the results on the west end of Line A (i.e. to the west of 0). The IP surveying should be extended to complete the anomalous pattern. Part of this anomaly may have been tested by DDH. 169 located at 0.

A probable anomaly centered at 7E indicates a source that is remote from the line. Additional surveying on parallel lines will be required to determine its' location.

A definite anomaly occurs near 24E. Available data suggests that the cause is a narrow, steeply dipping source of concentrated metallic mineralization. However, the pattern may not be complete and Line A should be surveyed farther east with 200 foot dipoles or detailed with a shorter electrode separation.

4. SUMMARY AND RECOMMENDATIONS

A large number of strong IP responses has been encountered on the six lines surveyed on the property. Most of these are typical of the results obtained over moderate to highly concentrated sources of metallic mineralization and definitely warrant further investigation. The importance of the IP results is enhanced by the existence of previously mined copper deposits, geochemical highs, interesting showings and mineralized drill holes.

One anomalous zone, Zone A, has been interpreted from the widely spaced lines on the Murex Creek grid. It appears to represent a broad complex source, more than 2,000 feet wide, that has a variable metallic content. Zone A trends east-west and extends for at least 3,600 feet. Most of the responses indicate sources that are shallow with respect to the electrode interval of 200 feet and possibly amenable to investigation by trenching or bulldozing.

Alternately a series of short drill holes should be used to test the indicated shallow parts of Zone A or to cross-section the zone near Line 7.

The remaining anomalies on the Murex Creek grid suggest a series of NW-SE trending zones that are narrower than Zone A. However, the line separation of 1,200 feet precludes any definite zoning or line to line correlation. Many of these responses appear to be shallow and surface work may establish their cause. However, additional IP surveying on a 400 foot line spacing would be desirable before any further work is carried out on these anomalies.

Strong IP effects occur on the single traverse, Line A, that was surveyed in "The Bench" area. Three anomalies have been interpreted from the results but Line A should be extended both east and west to evaluate the effects on the ends of the line. Additional surveying on parallel traverses will also be required to assess the importance of the present indications.

McPHAR GEOPHYSICS LIMITED

D. B. Sutherland,
Geophysicist.

Robert A. Bell.
Robert A. Bell,
Geologist.

Dated: December 18, 1967.

ASSESSMENT DETAILS

PROPERTY: Courtenay Property

MINING DIVISION: Nanaimo

SPONSOR: Mt. Washington Copper Mines

PROVINCE: B.C.

LOCATION: Vancouver Island

TYPE OF SURVEY: Induced Polarization

OPERATING MAN DAYS:	48	DATE STARTED: November 1, 67
EQUIVALENT 8 HR. MAN DAYS:	72	DATE FINISHED: November 19, 67
CONSULTING MAN DAYS:	5	NUMBER OF STATIONS: 183
DRAUGHTING MAN DAYS:	5	NUMBER OF READINGS: 954
TOTAL MAN DAYS:	82	MILES OF LINE SURVEYED: 6.96

CONSULTANTS:
D. B. Sutherland, Apt.2518, 47 Thorncliffe Park Drive, Toronto 17, Ontario.
Robert A. Bell, 50 Hemford Crescent, Don Mills, Ontario.

FIELD TECHNICIANS:
R. Fernholm, 44 Kenwood Avenue, Toronto 10, Ontario.
3 helpers - supplied by client.

DRAUGHTSMEN:
P. Coulson, 38 Mafeking Crescent, Scarborough, Ontario.
B. Marr, 19 Kenewen Court, Toronto 16, Ontario.
N. Lade, Apt. 503, 35 Esterbrooke Avenue, Willowdale, Ontario.

McPHAR GEOPHYSICS LIMITED

D. B. Sutherland,
Geophysicist.

Dated: December 18, 1967

SUMMARY OF COST

Mt. Washington Copper

Crew

12	days	Operating	@ $220.00/day	$2,640.00
3/4	days	Travel) 4	@ 85.00/day	340.00
3 1/4	days	Bad Weather)		

Expenses

Air Fares	$ 21.50	
Taxis	20.35	
Mileage	21.00	
Freight	65.00	
Meals & Accommodation	267.30	
Telephone & Telegraph	11.20	
Supplies	9.41	415.76
		$3,395.76

CERTIFICATE

I, Don Benjamin Sutherland of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysicist residing at 47 Thorncliffe Park Drive, Apartment 2518, Toronto 17, Ontario.

2. I am a graduate of the University of Toronto in Physics and Geology with the degree of Bachelor of Arts (1954); and a graduate of the University of Toronto in Physics with the degree of Master of Arts (1955).

3. I am a member of the Society of Exploration Geophysicists and a member of the European Association of Exploration Geophysicists.

4. I have been practising my profession for over eleven years.

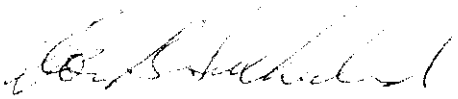
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Mount Washington Copper Co. Ltd. or any affiliate.

6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Toronto

This 18th day of December 1967.



Don B. Sutherland, M. A.

CERTIFICATE

I, Robert Alan Bell, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geologist residing at 50 Hemford Crescent, Don Mills, (Toronto) Ontario.

2. I am a graduate of the University of Toronto in Physics and Geology with the degree of Bachelor of Arts (1949); and a graduate of the University of Wisconsin in Economic Geology with the degree of Ph. D. (1953).

3. I am a member of the Society of Economic Geologists and a fellow of the Geological Association of Canada.

4. I have been practising my profession for over fifteen years.

5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Mount Washington Copper Co. Ltd. or any affiliate.

6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Toronto

This 18th day of December 1967.

Robert A. Bell

Robert A. Bell, Ph. D.

McPHAR GEOPHYSICS LIMITED

NOTES ON THE THEORY OF INDUCED POLARIZATION AND THE METHOD OF FIELD OPERATION

Induced Polarization as a geophysical measurement refers to the blocking action or polarization of metallic or electronic conductors in a medium of ionic solution conduction.

This electro-chemical phenomenon occurs wherever electrical current is passed through an area which contains metallic minerals such as base metal sulphides. Normally, when current is passed through the ground, as in resistivity measurements, all of the conduction takes place through ions present in the water content of the rock, or soil, i.e. by ionic conduction. This is because almost all minerals have a much higher specific resistivity than ground water. The group of minerals commonly described as "metallic", however, have specific resistivities much lower than ground waters. The induced polarization effect takes place at those interfaces where the mode of conduction changes from ionic in the solutions filling the interstices of the rock to electronic in the metallic minerals present in the rock.

The blocking action or induced polarization mentioned above, which depends upon the chemical energies necessary to allow the ions to give up or receive electrons from the metallic surface, increases with the time that a d.c. current is allowed to flow through

the rock; i. e. as ions pile up against the metallic interface the resistance to current flow increases. Eventually, there is enough polarization in the form of excess ions at the interfaces to effectively stop all current flow through the metallic particle. This polarization takes place at each of the infinite number of solution-metal interfaces in a mineralized rock.

When the d. c. voltage used to create this d. c. current flow is cut off, the Coulomb forces between the charged ions forming the polarization cause them to return to their normal position. This movement of charge creates a small current flow which can be measured on the surface of the ground as a decaying potential difference.

From an alternate viewpoint it can be seen that if the direction of the current through the system is reversed repeatedly before the polarization occurs, the effective resistivity of the system as a whole will change as the frequency of the switching is changed. This is a consequence of the fact that the amount of current flowing through each metallic interface depends upon the length of time that current has been passing through it in one direction.

The values of the "metal factor" or "M. F." are a measure of the amount of polarization present in the rock mass being surveyed. This parameter has been found to be very successful in mapping areas of sulphide mineralization, even those in which all other geophysical methods have been unsuccessful. The induced polarization measurement is more sensitive to sulphide content than other electrical measurements

because it is much more dependent upon the sulphide content. As the sulphide content of a rock is increased, the "metal factor" of the rock increases much more rapidly than the resistivity decreases.

Because of this increased sensitivity, it is possible to locate and outline zones of less than 10% sulphides that can't be located by E. M. Methods. The method has been successful in locating the disseminated "porphyry copper" type mineralization in the Southwestern United States.

Measurements and experiments also indicate that it should be possible to locate most massive sulphide bodies at a greater depth with induced polarization than with E. M.

Since there is no I. P. effect from any conductor unless it is metallic, the method is useful in checking E. M. anomalies that are suspected of being due to water filled shear zones or other ionic conductors. There is also no effect from conductive overburden, which frequently confuses E. M. results. It would appear from scale model experiments and calculations that the apparent metal factors measured over a mineralized zone are larger if the material overlying the zone is of low resistivity.

Apropos of this, it should be stated that the induced polarization measurements indicate the total amount of metallic constituents in the rock. Thus all of the metallic minerals in the rock, such as pyrite, as well as the ore minerals chalcopyrite, chalcocite, galena, etc. are responsible for the induced polarization effect. Some

oxides such as magnetite, pyrolusite, chromite, and some forms of hematite also conduct by electrons and are metallic. All of the metallic minerals in the rock will contribute to the induced polarization effect measured on the surface.

In the field procedure, measurements on the surface are made in a way that allows the effects of lateral changes in the properties of the ground to be separated from the effects of vertical changes in the properties. Current is applied to the ground at two points a distance (X) apart. The potentials are measured at two other points (X) feet apart, in line with the current electrodes. The distance between the nearest current and potential electrodes is an integer number (N) times the basic distance (X).

The measurements are made along a surveyed line, with a constant distance (NX) between the nearest current and potential electrodes. In most surveys, several traverses are made with various values of (N); i. e. (N) = 1, 2, 3, 4, etc. The kind of survey required (detailed or reconnaissance) decides the number of values of (N) used.

In plotting the results, the values of the apparent resistivity and the apparent metal factor measured for each set of electrode positions are plotted at the intersection of grid lines, one from the center point of the current electrodes and the other from the center point of the potential electrodes. The resistivity values are plotted above the line and the metal factor values below. The lateral displacement of a given value is determined by the location along the survey

line of the center point between the current and potential electrodes. The distance of the value from the line is determined by the distance (NX) between the current and potential electrodes when the measurement was made.

The separation between sender and receiver electrodes is only one factor which determines the depth to which the ground is being sampled in any particular measurement. These plots then, when contoured, are not section maps of the electrical properties of the ground under the survey line. The interpretation of the results from any given survey must be carried out using the combined experience gained from field, model and theoretical investigations. The position of the electrodes when anomalous values are measured must be used in the interpretation.

In the field procedure, the interval over which the potential differences are measured is the same as the interval over which the electrodes are moved after a series of potential readings has been made. One of the advantages of the induced polarization method is that the same equipment can be used for both detailed and reconnaissance surveys merely by changing the distance (X) over which the electrodes are moved each time. In the past, intervals have been used ranging from 100 feet to 1000 feet for (X). In each case, the decision as to the distance (X) and the values of (N) is largely determined by the expected size of the mineral deposit being sought, the size of the expected anomaly and the speed with which it is desired to progress.

The diagram in Figure 1 below demonstrates the method used in plotting the results. Each value of the apparent resistivity and the apparent "Metal factor" is plotted and identified by the position of the four electrodes when the measurement was made. It can be seen that the values measured for the larger values of (n) are plotted farther from the line indicating that the thickness of the layer of the earth that is being tested is greater than for the smaller values of (n); i. e. the depth of the measurement is increased.

METHOD USED IN PLOTTING DIPOLE-DIPOLE
INDUCED POLARIZATION AND RESISTIVITY RESULTS

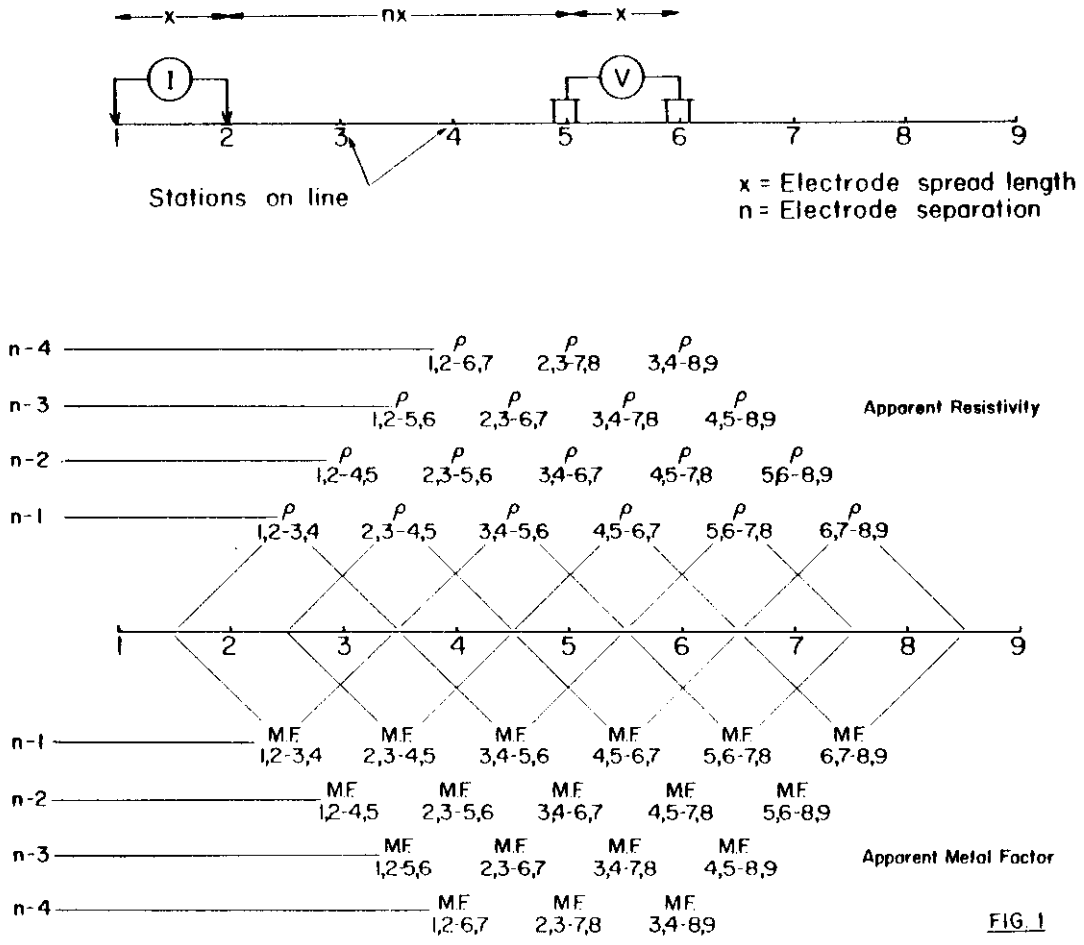
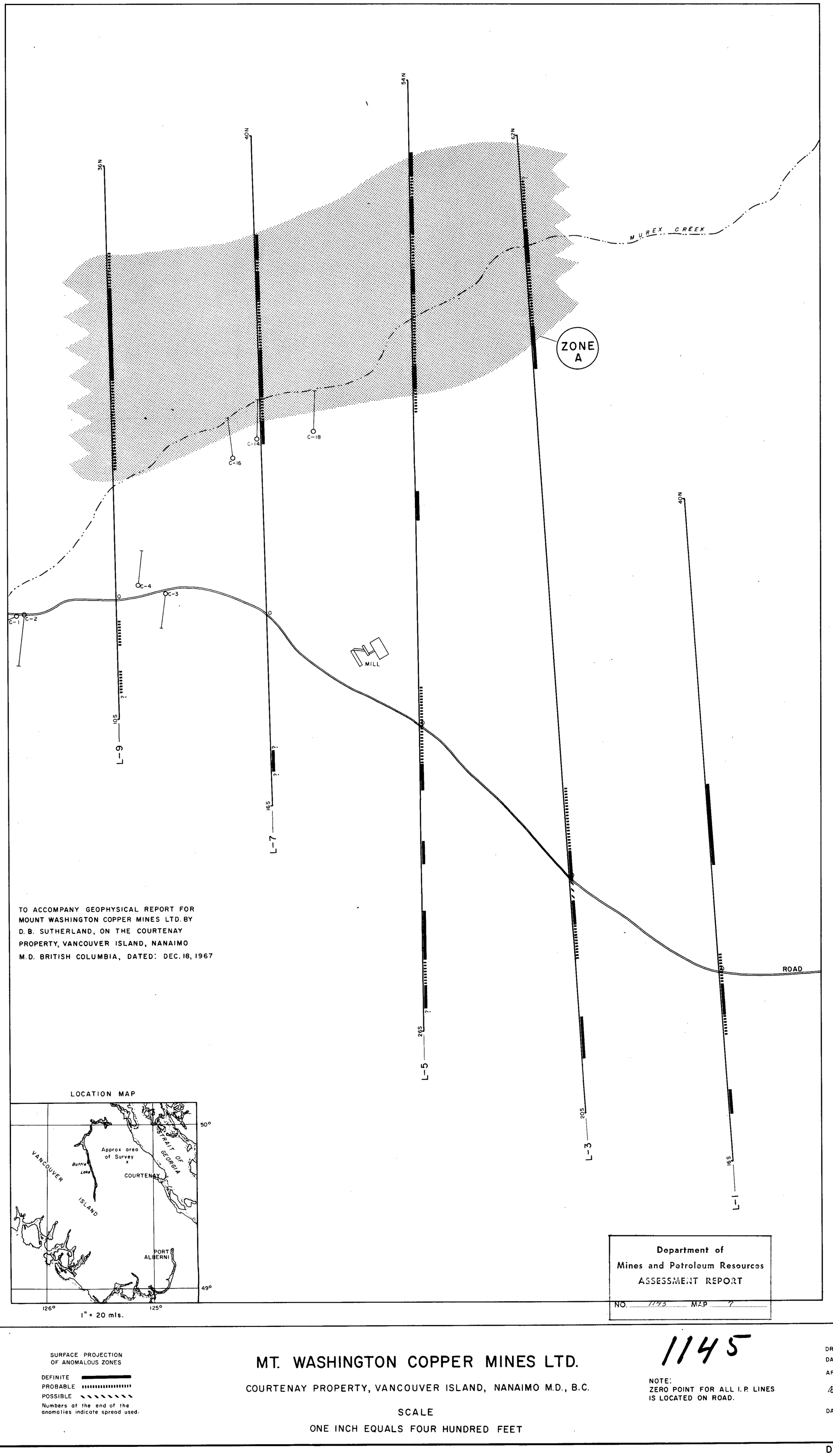


FIG. 1

McPHAR GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



TO ACCOMPANY GEOPHYSICAL REPORT FOR MOUNT WASHINGTON COPPER MINES LTD. BY D. B. SUTHERLAND, ON THE COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D. BRITISH COLUMBIA, DATED: DEC. 18, 1967

LOCATION MAP

1" = 20 mls.

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1143 MAP ?

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

Numbers at the end of the anomalies indicate spread used.

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

SCALE

ONE INCH EQUALS FOUR HUNDRED FEET

1145

NOTE:
ZERO POINT FOR ALL I.P. LINES IS LOCATED ON ROAD.

DRAWN: P.G.
DATE: DEC. 1967
APPROVED:
DATE: 12/12/67

McPHAR GEOPHYSICS LIMITED

DWG. MISC. 3284

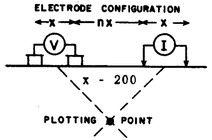
DWG. NO.-I.P.-2779-I

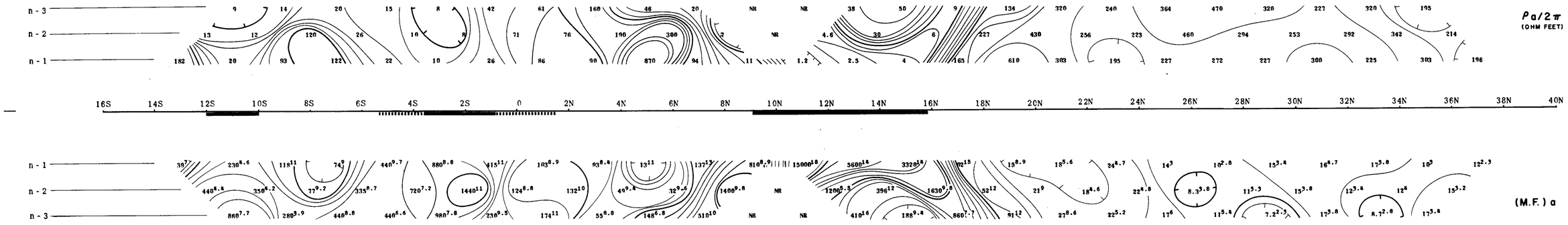
McPHAR GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: CONTOURS AT LOGARITHMIC MULTIPLES OF 10-15-20-30-50-75-100

ELECTRODE CONFIGURATION





SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

Scale—One inch = 200 Feet

NOTE: LOGARITHMIC CONTOUR INTERVAL

1145

FREQUENCY 1.3 & 2.5 CPS

DATE SURVEYED NOV. 1957

APPROVED

DATE 12/12/57

McPHAR GEOPHYSICS LTD.

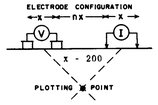
DWG. NO.-I.P.-2779-2

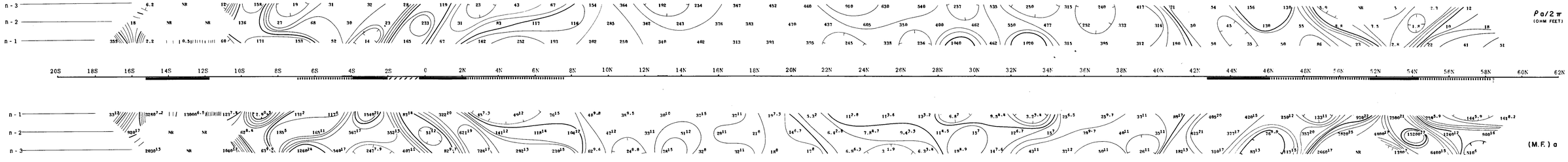
McPHAR GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: CONTOURS AT LOGARITHMIC MULTIPLES OF 10-15-20-30-50-75-100

ELECTRODE CONFIGURATION





LINE NO.-3

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

Scale—One inch = 200 Feet

NOTE LOGARITHMIC CONTOUR INTERVAL

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

1145

RECEIVED 1967

DATE APPROVED NOV 1967

APPROVED

DATE

DWG. NO.-I.P.-2779-3

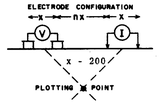
McPHAR GEOPHYSICS LIMITED

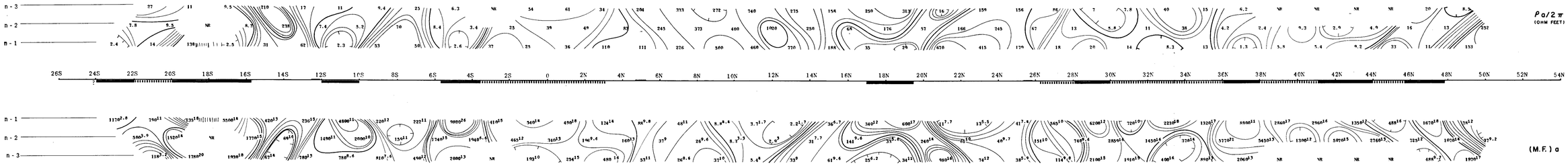
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: CONTOURS AT LOGARITHMIC MULTIPLES OF 10-15-20-30-50-75-100

LINE NO-5

ELECTRODE CONFIGURATION





MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

Scale—One inch= 200 Feet

NOTE: LOGARITHMIC CONTOUR INTERVAL

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

1145

DWG. NO.-I.P.-2779-4

McPHAR GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: CONTOURS AT LOGARITHMIC MULTIPLES OF 10-15-20-30-50-75-100

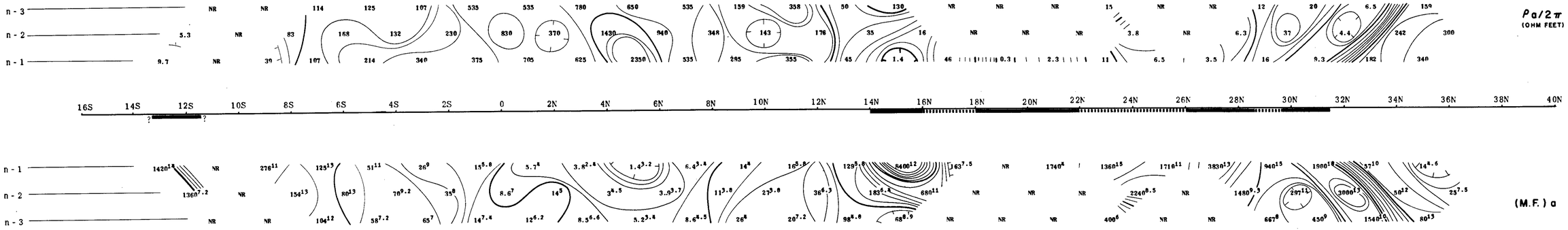
ELECTRODE CONFIGURATION

x ⟷ nx ⟷ x

V I

x - 200

PLOTTING POINT



LINE NO.-7

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

Scale—One inch = 200 Feet

NOTE: LOGARITHMIC CONTOUR INTERVAL

1145

FREQUENCIES 1.0 - 0.5 CPS

DATE SURVEYED NOV. 1957

APPROVED

DATE 12/12/57

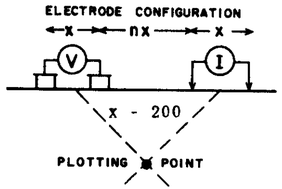
McPHAR GEOPHYSICS LIMITED

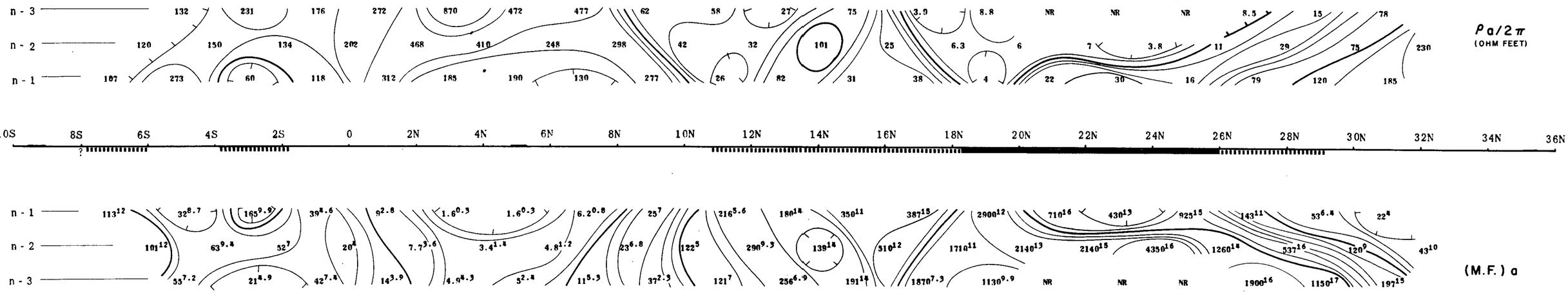
DWG. NO.-I.P.-2779-5

McPHAR GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: CONTOURS AT LOGARITHMIC MULTIPLES OF 10-15-20-30-50-75-100





LINE NO.-9

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ——————

PROBABLE ▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪▪

POSSIBLE / / / / / / / /

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

Scale-One inch= 200 Feet

NOTE LOGARITHMIC CONTOUR INTERVAL

1145

FREQUENCY 0.5 & 0.05 C.P.S.

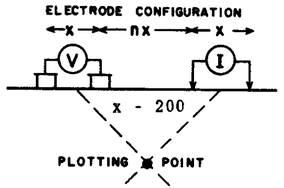
DATE SURVEYED NOV. 1957

APPROVED

DATE

McPHAR GEOPHYSICS LIMITED

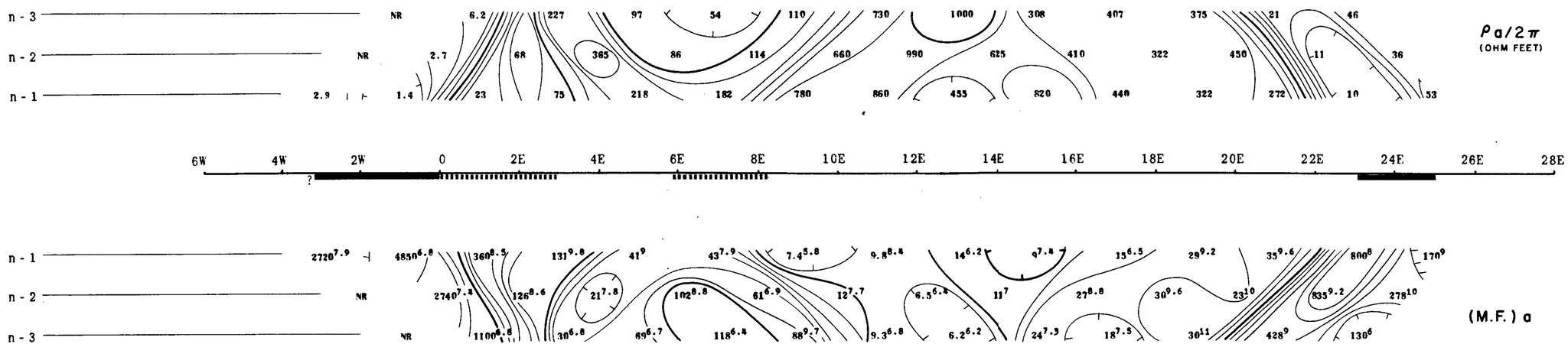
DWG. NO.-I.P.-2779-6



McPHAR GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: CONTOURS AT LOGARITHMIC MULTIPLES OF 10-15-20-30-50-75-100



LINE NO.- A (THE BENCH)

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

Scale-One inch= 200 Feet

NOTE LOGARITHMIC CONTOUR INTERVAL

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

1145

FREQUENCY [illegible] C.P.S.

DATE SURVEYED NOV. 1957

APPROVED

DATE

McPHAR GEOPHYSICS LIMITED

C.P.O.G. CONCESSION BOUNDARY

30,000 N

26,000 N

SECTION LINE

OPEN PIT

OPEN PIT

Line A

Mt. Washington

Murex Creek

TAILINGS POND

8,000 E

12,000 E

16,000 E

20,000 E

24,000 E

C.P.O.G. CONCESSION BOUNDARY

APPENDIX C.

1145

LEGEND

- CRETACEOUS (Comox Formation—sandstone, shale & coal)
- TRIASSIC (Karmutsen volcanics)
- Altered volcanics
- Intrusive Porphyry & quartz diorite
- Intrusive breccia
- Fault
- Diamond Drill Hole
- (13) Induced Potential Traverse Line

APPENDIX C

MT. WASHINGTON COPPER MINES LTD.

NANAIMO M.D. B.C.

GEOLOGICAL MAP

COMPILED FROM MAPS DRAWN BY ENGINEERS FROM COMINCO, NORANDA, G.S.C., B.C. DEPT. OF MINES, WITH ADDITIONS BY W.G.STEVENSON AND OTHERS.

1000' 0 1000' 2000 Feet

SCALE : FEET

DECEMBER, 1967	W.G. STEVENSON

CAM No.2 14538
CAM No.8 14536
CAM No.7 14535
CAM No.6 14534
CAM No.5 14533
SJO No.3 16053
SJO No.4 16054
SJO No.5 16055
SJO No.10 16060
SS No.5 16073
PEARL No.8 13969
PEARL No.6 13967
PEARL No.4 13965
PEARL No.2 13963
SJO No.1 16051
SJO No.12 16062
FR. SJO 16061
SJO No.6 16056
SJO No.8 16058
ENA No.2 15123
SS No.7 16075
SS No.8 16076
ENA No.4 15125
ENA No.6 15127
ENA No.1 15122
SS No.10 16078
SS No.9 16077
ENA No.8 15129
ENA No.3 15124
CAM No.4 14402
CAM No.2 14400
ENA No.5 15126
MUREX No.13 14003
SS No.12 16080
RONDO No.1 13970
PEARL No.7 13968
PEARL No.5 13966
PEARL No.3 13964
PEARL No.1 13962
ENA No.7 15128
MUREX No.11 14002
SS No.11 16079
CAM No.3 14401
CAM No.1 14399
JB FR. 16064
MUREX No.9 14001
MUREX No.14 13333
SS No.13 16081
RONDO No.3 13972
DOMINEER No.23 12328
KEN No.2 13707
MUREX No.12 13332
GEM No.7 13792
RONDO No.4 13973
DOMINEER No.22 12327
KEN No.8 13713
KEN No.6 13711
KEN No.4 15022
MUREX No.10 13331
GEM No.5 13790
SS No.15 16083
RONDO No.5 13974
DOMINEER No.2 12323
KEN No.1 13706
GEM No.8 13793
DOMINEER No.20 12325
DOMINEER No.1 L91G
LINE 'A'
KEN No.7 13712
KEN No.5 13710
KEN No.3 13708
ZSM FR. 16066
MG FR. 16065
GEM No.1 13786
GEM No.6 13791
E.M. No.7 14713
RONDO No.7 13976
DOMINEER No.4 L93G
GEM No.4 13789
E.M. No.10 14716
RONDO No.8 13977
DOMINEER No.3 L92G
DOMINEER No.6 L94G
KM FR. 16110
GEM No.17 13991
GEM No.15 15183
GEM No.13 15182
GEM No.11 15181
GEM No.9 14423
GEM No.2 13787
E.M. No.5 14711
E.M. No.3 14709
E.M. No.8 14714
E.M. No.1 14707
MAG No.1 14717
JACK No.6 15949
GEM No.19 13992
E.M. No.6 14712
MAG No.2 14718
E.M. No.4 14710
CHUCK F.R. 16067
M.J. No.13 16097
MJ FR. 16109
GAM No.1 19096
GEM No.16 14427
GEM No.14 14426
GEM No.12 14425
GEM No.10 14424
ME No.2 14991
MAG No.3 14992
M.J. No.11 16095
JACK No.8 15951
M.J. No.9 16093
M.J. No.14 16098
MJ No.7 16091
MJ No.5 16089
MJ No.3 16087
MJ No.1 16085
GMB No.5 16046
GMB No.3 16044
GMB No.1 16042
ME No.1 14990
MAG No.4 14993
GMB No.9 16050
M.J. No.12 16096
JGG FR. 16068
GMB No.8 16049
M.J. No.10 16094
MJ No.8 16092
MJ No.6 16090
M.J. No.4 16088
M.J No.2 16086
GMB No.6 16047
GMB No.4 16045
GMB No.2 16043
GMB No.7 16048

CLAIMS EXPIRATION DATE
1974
1973
1972
1969
1968

APPENDIX D

MT. WASHINGTON COPPER MINES LTD.

NANAIMO M.D. B.C.

TOPOGRAPHIC MAP WITH OUTLINE OF MINERAL CLAIMS BASED ON BEST AVAILABLE INFORMATION

1000' 0 1000 2000 Feet
SCALE 1" = 1000 FEET

DECEMBER, 1967 | W.G. STEVENSON

1145

18,000 E

20,000 E

22,000 E

24,000 E

30000 N.

28,000 N.

26,000 N.

24,000 N.

LEGEND

- 280 ppm AND OVER
- 220 to 280 ppm
- BELOW 220 ppm

APPENDIX E.

MT. WASHINGTON COPPER MINES LTD.

NANAIMO M.D. B.C.

GEOCHEMICAL MAP

ASSAYS COPPER PPM

SCALE

DECEMBER, 1967 | W. G. STEVENSON

1145

McPHAR GEOPHYSICS LIMITED

PLAN MAP

APPROVED: McPHAR GEOPHYSICS LIMITED

DATE: 2/12/65

PEARL No. 4 13965
PEARL No. 2 13963
CAM No. 5 14533
CAM No. 4 14402
CAM No. 2 14400
ENA No. 3 15124
ENA No. 5 15126
ENA No. 7 15128
MUREX No. 13 14003
MUREX No. 11 14002
PEARL No. 3 13964
RONDO No. 1 13970
CAM No. 3 14401
CAM No. 1 14399
JB FR 16064
MUREX No. 9 14001
MUREX No. 14 13333
MUREX CREEK
PEARL No. 1 13962
RONDO No. 2 13971
KEN No. 8 13713
KEN No. 6 13711
KEN No. 4 15022
KEN No. 2 13707
MUREX No. 12 13332
GEM No. 7 13792
DOMINEER No. 2 12323
DOMINEER No. 1 L 916
KEN No. 1 13706
MUREX No. 10 13331
GEM No. 5 13790
GEM No. 8 13793
DOMINEER No. 4 L 936
28E
KEN No. 7 13712
KEN No. 5 13710
KEN No. 3 13708
GEM No. 1 13786
GEM No. 3 13788
GEM No. 6 13791
'THE BENCH'
MILL
GEM No. 4 13789
DOMINEER No. 3 L 926
KM FR. 16110
GEM No. 17 13991
GEM No. 15 15183
GEM No. 13 15182
GEM No. 11 15181
GEM No. 9 14423
L-9
GEM No. 2 13787
EM No. 3 14709
EM No. 1 14707
EM No. 4 14710
GEM No. 19 13992
MJ FR. 16109
GAM No. 1 19096
GEM No. 16 14427
GEM No. 14 14426
GEM No. 12 14425
GEM No. 10 14424
CHUCK FR. 16067
L-7
ME No. 2 14991
EM No. 2 14708
N
M.J. No. 9 16093
MJ No. 7 16091
MJ No. 5 16089
ME No. 1 14990
L-5
GMB No. 9 16050
JGG FR. 16068
GMB No. 8 16049
L-3
L-1

MT. WASHINGTON COPPER MINES LTD.

COURTENAY PROPERTY, VANCOUVER ISLAND, NANAIMO M.D., B.C.

1" = 1000'

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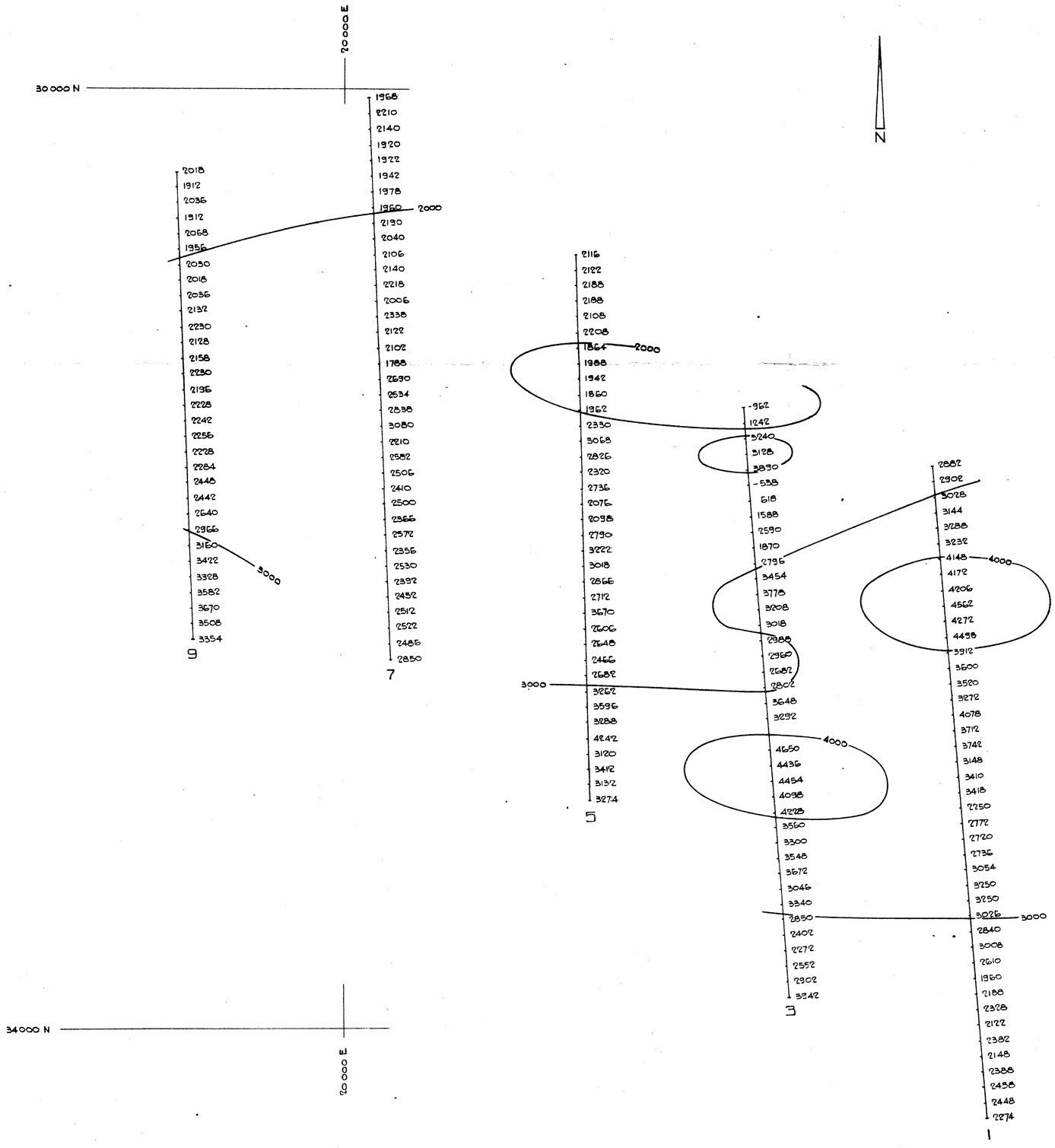
FIG. 1



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1145 MAP 6

MAGNETIC SURVEY

MT. WASHINGTON COPPER MINING CO. LTD.

Scale: 1" = 400'

Vertical magnetic intensity in gammas.

Donald W. Smellie, P.Eng. November 1967

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