GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT
ON THE
ROSE MINERAL CLAIM
VICTORIA M.D.
N.T.S. 92 B 13
48° 52' LAT 123° 52' LONG
LOCATED 14 KILOMETERS SOUTH OF LADYSMITH B.C.

REPORT BY
J.R. DEIGHTON
J. VYSELAAR

CLAIM OWNER J.R. DEIGHTON
WORK PAID FOR BY J.R. DEIGHTON
AND UTAH MINES LTD.

APRIL 1978

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

On The

HOPE MINERAL CLAIM

VICTORIA MINING DIVISION

NTS 92 B 13

REPORT BY J.R. DEIGHTON AND C. YSELAAR

LOCATION AND ACCESS:

The Hope Mineral Claim is located on the north side of the Chemainus River, approximately 14 kilometers south of Ladysmith B.C. The claim straddles Humbird Creek.

Access is by logging road that runs up the north side of the Chemainus River from Chemainus B.C. to a point approximately 10 kilometers of the road. From this point a branch road leads northwards following the west side of Humbird Creek. The road winds through the Hope Mineral Claim.

The property is owned by J.R. Deighton of Vancouver B.C., who is the operator of the claim. Part of the work was paid for by J.R. Deighton and part by Utah Mines Ltd.

Geological mapping was carried out on a scale of 1:12,000 over the entire are of the claim and the immediate area surrounding.

Three CEM orientation lines were run across the Hope Claim. A total of 2800 metres of line was run on this orientation sur-

Geochemical soil sampling survey was conducted over the entire Hope Claim. Samples were taken at 50 metre intervals on north-south lines approximately 200 metres apart.

CLAIMS OWNED OR CONTROLLED BY J.R. DEIGHTON
CLAIMS HELD BY IMPERIAL OIL
NANAIMO M.D.
VICTORIA M.D.
RES. MIN. & PLACER 500' EITHER SIDE O/C 1751, 21 MAY 70 SUBJ. TO CONDITIONS RELEASE REQUIRED
Banon Cr.
CORONATION MTN.
MT. HALL
Brenton Lakes
Holyoak L.
MT. BRENTON
HOLY 4
97 (6)
DRENWA
HOLY 3
96 (6)
HOLY 2
95 (6)
HOLY 1
94 (6)
QQ 1
116 (8)
QQ 2
117 (8)
Holyoak
FAITH
86 (5)
TWIN G
114 (8)
PATRICIA-JANE
83 (5)
MONS 1
60 (12)
MONS 2
61 (12)
HOPE
87 (5)
CHARITY
Humbird
Solly Cr.
Chipman Cr.

REGIONAL GEOLOGY:

The area covered in this report is underlain by a sequence of volcanics and sediments of Permain Age. These rocks form the Sicker Group and have been subdivided by the author into various mapable units. The group in the area north of the Chemainus River forms a steeply dipping limb of an anticline.

Granite intrusions of middle to late Jurassic Age occur throughout the area and are mainly Granordiorite to Diorite in composition. The contacts of the intrusions are generally sharp, well-defined and near vertical.

The Cretaceous Nanaimo Group unconformably overlies all the above rock units. It comprises a sequence of sediments containing conglomerates, sandstones and shales with associated coal seams.

A brief description of the lithology of the various formations follows and the reader is referred to the published material for detailed descriptions of the various units. (See particularly B.C. Dept. Mines Bull. #37 - Geology of the Cowichan Lake Area Vancouver Island - J. T. Fyles 1955; G.S.C. Paper 68 - 50: Geology and Mineral Deposits of Alberni Map Area, B.C. Muller and Carson 1969; G.S.C. Memoir 96: Sooke and Duncan Map Areas, Vancouver Island Clapp and Cooke 1917.)

LITHOLOGY

Nanaimo Group Sediments (Cretaceous)

This unit is comprised of sandstone, shale, and conglomerates, which are poorly bedded and sometimes poorly consolidated.

Island Intrusives (Middle to Late Jurassic)

The unit is a dark grey to black, poorly fractured intrusive. The "Star porphyry" phase has radiating phenocrysts of white feldspar in a dark aphanitic groundmass. The intrusive grades into a dark coarse-grained diorite, and may contain pyrite and chalcopyrite locally along the contacts. The contacts are usually steep and sharp.

Quartz Monzonite to Granodiorite

The unit is made up of grey, medium to coarse-grained poorly fractured granitic rocks that may contain rounded mafic inclusions. The granitics form elongated massed with steep sharp contacts.

Sicker Group (Pennslyvanian to Permian)

Sediments

Graphitic Schists to Meta-argillite

Dark grey, thin, platy schists to dark argillaceous sediments form this unit. It is a narrow unit within sericite schists, that is found only in eastern region (Mt. Richards), and may be equivalent to the "Iron Formation".

"Iron Formation"

"Iron Formation" is a field term used to describe a variable and poorly sorted sequence of black to purple shales, andesitic tuffs, and mixed clastic sediments. The unit contains beds of jasperoid and magnetite iron formation. Magnetite, hematite, pyrrhotite, pyrite and very minor chalcopyrite are found in local concentrations.

Cherts

This unit is composed of siliceous cream to black, fine-grained, bedded sediments that may exhibit cross bedding in places. Small sections of andesitic and rhyolitic tuffs may also occur within the unit.

Volcanic Rocks

Quartz-Feldspar Porphyry

The quartz-feldspar porphyry is a white to cream, massive unit with glassy quartz eyes and/or white feldspar phenocrysts up to ½" across. The rock exhibits a slight foliation and may be an intrusive unit.

Rhyolite to Sericite Schists

This unit is white to cream coloured and forms thin platy schists to less schistose masses that may have occasinal small glassy quartz eyes. Bands of chlorite schists and chlorite-sericite schist may also be present within the unit.

Dacitic Tuffs to Chlorite-Sericite Schists

The unit is composed of light to medium green, fine to medium-grained fragmentals, usually containing minor amounts of pyrite. A well developed schistocity is often present. The dacite may grade into rhyolite.

Andesitic Tuffs to Chloritic Schists

Dark green chloritic schists or tuffs with small 1/8" rounded fragments of feldspar and epidote make up this unit.

Agglomerates to Chloritic Schists

The composition of this unit is dark to medium green, volcanic rocks with rounded epidote/quartz bombs or fragments up to 10" across enclosed in a aphanitic to fine-grained green groundmass.

Hornblende Andesites to Chloritic Schists

Dark green andesites with phenocrysts of hornblende 1/8" long form this unit. In the schistose varieties, hornblende is altered to biotite or chlorite. The unit grades into andesitic tuffs.

STRATIGRAPHIC SECTIONS

Holyoak Creek Section

South to north section west of Holyoak Creek, East Concession area.

Top of Section

Cherty Sediments	Cherts, siltstone, sandstones, minor volcanic tuffs, rhyolitic and andesitic in character.

Andesitic to Dacitic Tuffs	Andesitic to dacitic tuffs and related chloritic and chlorite-sericite schists.
Rhyolitic Tuffs	Sericitic schists with minor sections of chlorite, chlorite-sericite schists.
Andesites and Rhyolites	Andesitic and rhyolitic tuffs and flows and related schists. No individual unit is of any great thickness.
Andesite and Rhyolite Tuffs	Tuffs and related chlorite, chlorite-sericite, and sericite schists. Massive pyrite associated with chlorite schist-andesitic tuff unit.

Base of Section

The bottom two units may form the core of an anticlinal fold. Intrusive units, diorite and quartz-feldspar porphyry, have been excluded from section. The sequence is not well established due to lack of exposure.

FAULTING AND FOLIATION

There appear to be two major fault or stress patterns exhibited in the area. A major fault pattern striking 020° with vertical dips, is found to be the trace of major valleys. This is exhibited by the Chemainus River, Hummingbird Creek, Chipman Creek and several branches of Solly Creek. The faults are vertical, left-handed, transverse faults.

The second fault or strain system is represented by the regional foliation of the area. This foliation is consistent throughout the region on a 110-120° trend with vertical dips. Local variations occur next to intrusive bodies. The foliation is found in all rocks except the Vancouver Intrusives, and therefore must be the first stress plane, as the Vancouver Intrusives have been offset on 020° planes.

Other faults have been mapped throughout the region but do not appear to have any set pattern.

CLAIM GEOLOGY:

The Hope Claim is underlain by Sicker Group volcanics, dioritic intrusives and Nanaimo Group sediments.

The Sicker Group volcanics and sediments (?) underlie the majority of the claim. They are mainly quartz sericite schists, and quartz-eye porphyries that do not have a well developed schistosity or foliation.

Andesite, dark green in colour is noted in one place adjacent to a dyke (?), sill (?) or dioritic body along the road that crosses the claim. This andesite is believed to be a flow or an agglomerate. Faulting seen in the outcrop makes identification difficult.

Diorite or feldspar "star" porphyry intrusives are found in many places on the property. The majority of these intrusive bodies are believed to be sill-like in nature. They appear in most cases to be elongated or have intruded along the general north-west schistocity planes evident throughout the Sicker volcanics in the area.

Faulting is seen in an outcrop of andesite in a roadcut near the center of the claim. This fault occurs almost at the contact between a dioritic intrusive and the Sicker andesite volcanics and may in part form the contact between the two units.

Faulting is also believed to occupy and be responsible for the incisement of the northerly striking creeks draining the area in and around the claim.

Cretaceous Nanaimo Group sediments topographically occupy the lower elevations on the property. These sediments are derived from volcanics and may be said to be volcanic sandstones, siltstones and argilites. The Nanaimo Group sediments may be in fault contact with the Sicker Group or may be an onlap or unconformably overlie the Sicker Group volcanics in the area.

MINERALIZATION:

Disseminated pyrite is seen in several of the outcrops of Bicker Group volcanics, mainly in the sericitic-quartz schists and the quartz-eye porphyry outcrops along the road. The pyrite content of these rocks does not exceed 2-5% where seen.

Pyrite sphalerite phyrhotite (?) and minor chalcopyrite was noted in a small narrow fault at an andesite-rhyolite contact adjacent to the contact with a dyke or sill of diorite. This outcrop is located in a roadcut in the central portion of the claim.

No other mineralization was seen on the claim.

GEOPHYSICS:

Electromagnetic Survey: Three reconnaissance EM lines were run over the Hope Claim. The purpose of the survey was to test geochemical anomalies obtained previously and an I.P. anomaly found by an earlier survey. A total of 2800 metres of line was run.

Due to the rugged topography and poor line control shoot-back EM was used. The shootback method eliminates errors due to topography and incorrect station intervals. The CEM instrument produced by Crone Geophysics Ltd. of Mississauga, Ontario, was used on the survey. This instrument operates at frequencies of 5010 HZ, 1830 HZ and 390 HZ.

Hope Claim: Lines 6W, 8W and 16W on the Hope Claim were surveyed

Lines 6W and 8W were surveyed using a 75 metre coil spacing and a 25 metre reading interval. Readings were taken at medium and low frequency (1830 and 390 HZ).

Line 16W was surveyed using a 100 metre coil spacing and a 50 metre reading interval. Readings were taken at high, medium and low frequency.

The readings are fairly noisy reflecting the inability of the shootback method to completely eliminate topographic effects. Part of the noisy results are also due to varying overburden conditions.

A total of 7 conductors were detected, 3 each on lines 6W and 8W and one on line 16W.

The conductors on lines 6W are located at 235N, 285N and 685N. The conductors at 235N and 685N are generally on strike with mineralization approximately 250 metres west of the line.

A second mineralized outcrop should cross line 6W around 600N. There is a definite conductor at 685N plus some indications of conductivity at 635N and 525N.

Characteristic curve analysis gives a depth to top of 26 metres and a conductivity-width product of 0.693 for the conductor at 685N. The conductor at 235N gives a depth of 26 metres and a conductivity-width product of 1.2. Both conductors have a low conductivity-width product indicating a poor conductor.

This is to be expected as the outcrops are mainly sphalerite-pyrite bodies.

The conductors on line 4W are located at 265N, 365N and 435N. The conductor at 265N is on strike with the conductor at 235N on line 6W. No analysis could be made on these conductors but the curve shape and amplitude is similar to the ones analyzed on 6W. Their depth-to-top and conductivity-width product are probably similar to those obtained on line 10W.

As the conductors on lines 6W and 8W had low conductivity-width products, it was decided to use the high frequency in addition to the other two frequencies to better define any conductors obtained on line 16W.

One conductor was detected at station 450N. It was adequately outlined by the low and meduim frequency data. Characteristic curve analysis gives a depth of approximately 30 metres and a conductivity-width product of about 2.0. Thus it is similar to the conductors obtained on lines 6W and 8W.

The high frequency results confirmed the presence of a conductor. They also show a marked difference in background response over the line. The first 300 metres are marked by readings of -15° to -20° while the rest of the line shows a background of -5° to 0°. This is interpreted as being due to a change in rock type with a contact at about 325N. The area from 0 to 325 is interpreted as being underlain by Nanaimo group sediments while the area north of 325N is interpreted as being underlain by volcanics.

GEOCHEMISTRY:

Two hundred and four (204) soil samples were collected from the B horizon, put into kraft paper bags and sent to Min-En Laboratories Ltd., 705 West 15th Street, North Vancouver, B.C. V7M 1T2 for preparation and analysis for Total Copper and Zinc. The samples were collected at 50 metre intervals on north-south lines, spaced 200 metres apart.

The results of this survey and the data sheets for the soil geochemistry are found attached to this report. Histograms prepared from the data show that the following values for threshold and anomalous are valid.

	threshold	anomalous
Cu	60	80
Zn	70	90

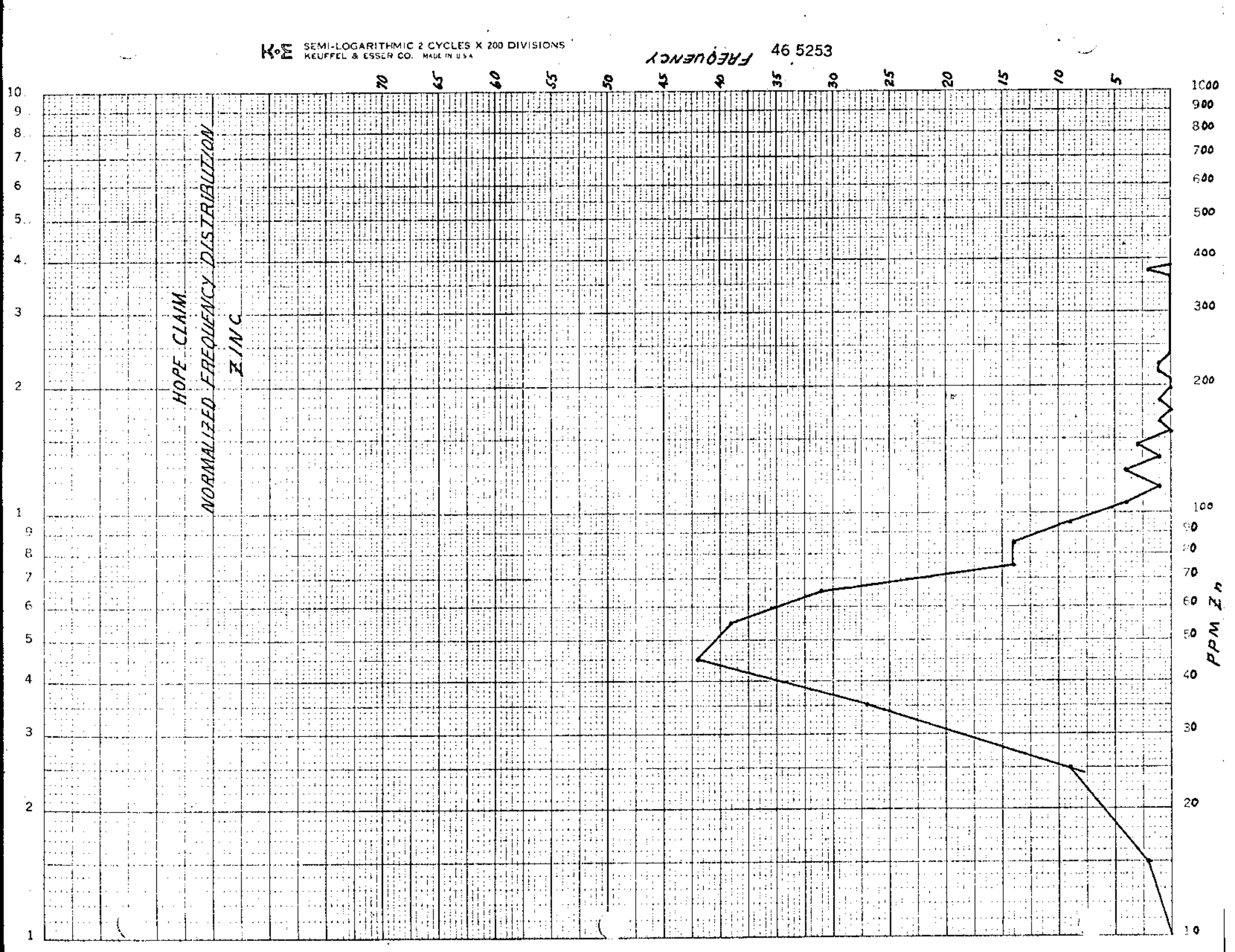
Thus there are twenty-eight (28) threshold and twenty-eight (28) anomalous samples in zinc and thirty-four (34) threshold and twenty (20) anomalous samples in copper.

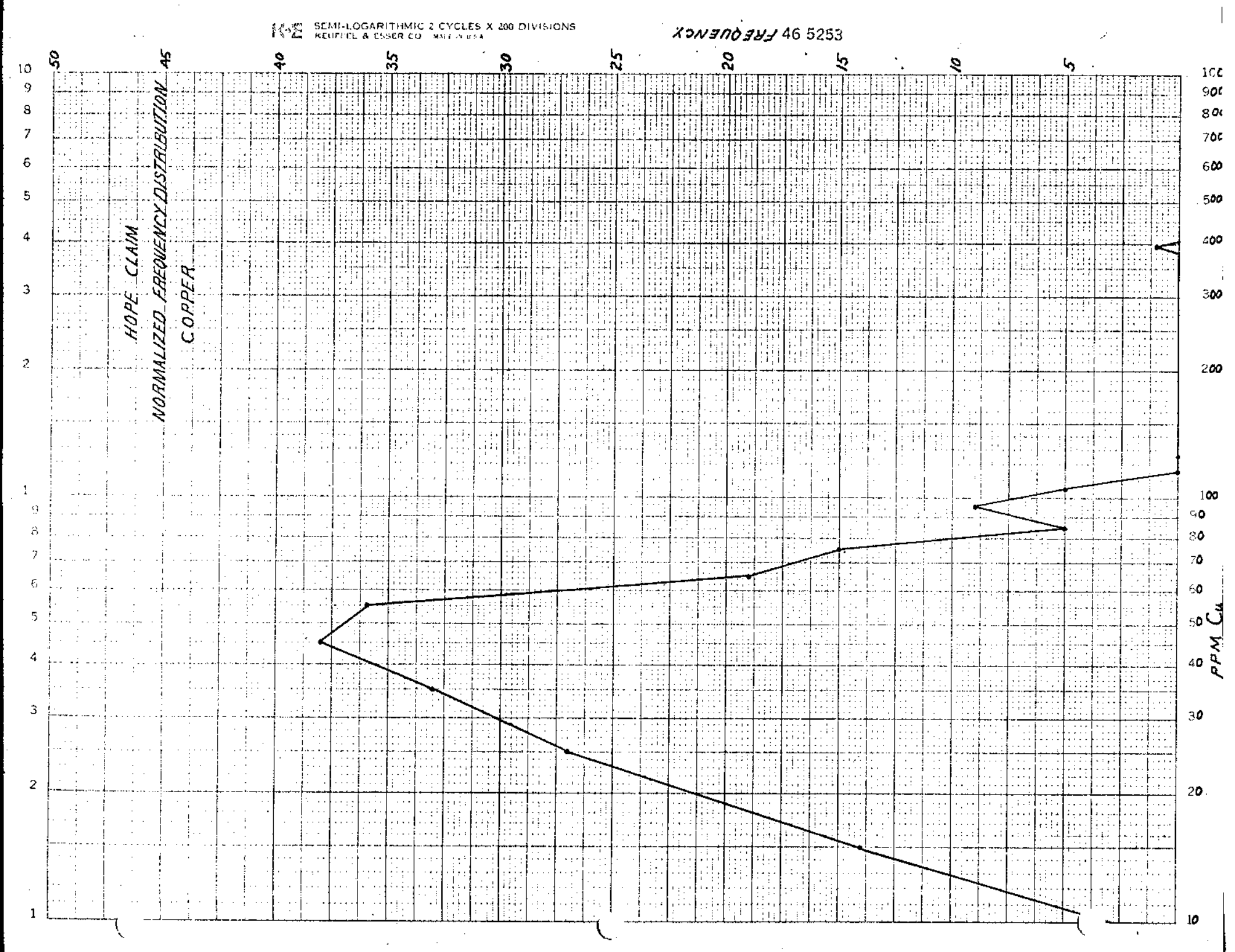
CONCLUSIONS:

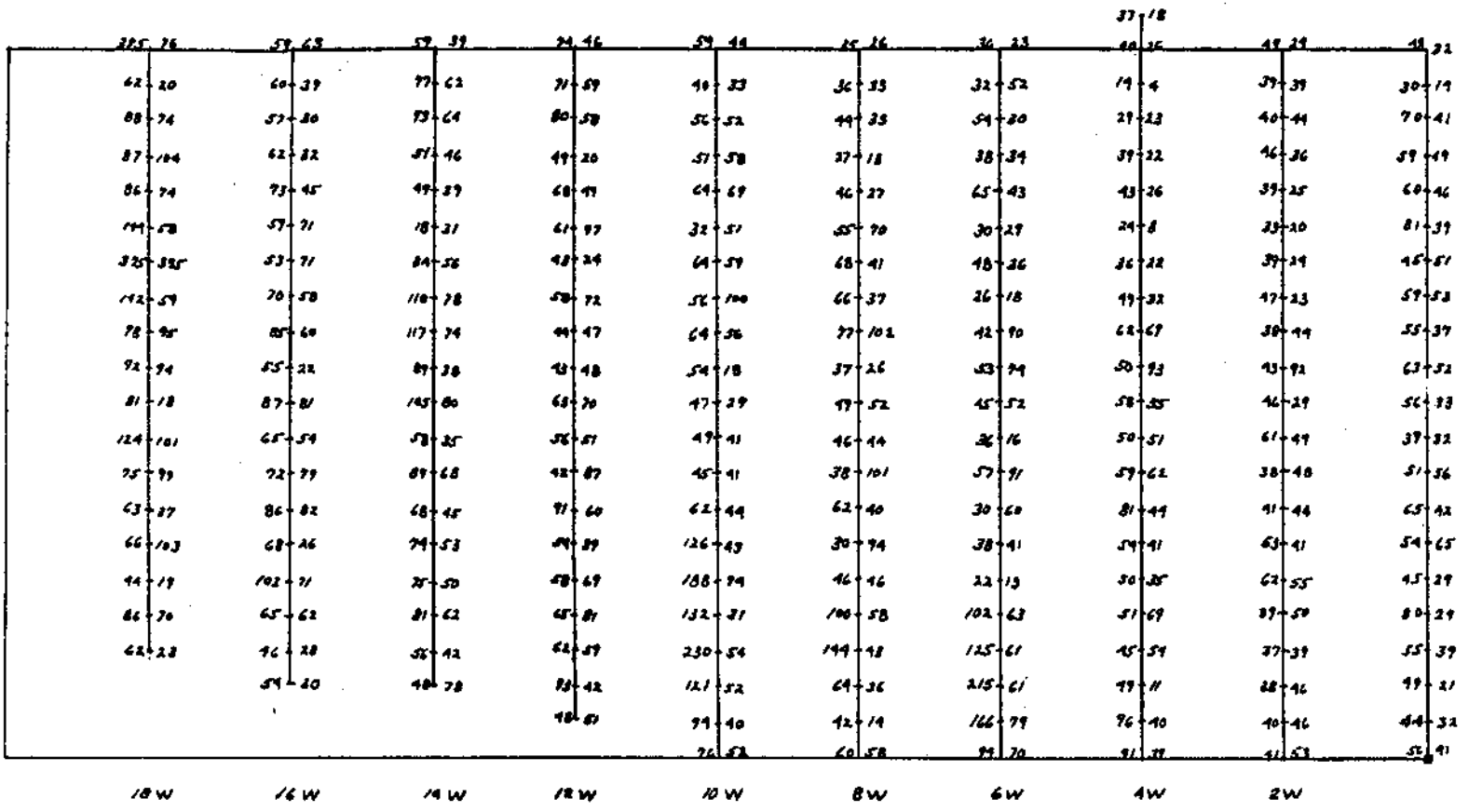
Seven narrow EM conductors were detected during the EM orientation survey conducted over the Hope Claim. Some of these conductors roughly correspond to geochemical anomalous samples or to noted mineralization seen on the property.

The property is underlain by rocks similar to those found at the Twin "J" Mine on Mount Sicker several kilometres further south.

The property has potential for containing ore zones similar to those found at the Twin "J" Mine.


K&E SEMI-LOGARITHMIC 2 CYCLES X 200 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 5253
FREQUENCY
70 65 60 55 50 45 40 35 30 25 20 15 10 5
HOPE CLAIM
NORMALIZED FREQUENCY DISTRIBUTION
ZINC
10 9 8 7 6 5 4 3 2 1
1000 900 800 700 600 500 400 300 200 100 90 80 70 60 50 40 30 20 10
PPM Zn


SEMI-LOGARITHMIC 2 CYCLES X 200 DIVISIONS
KEUFFEL & ESSER CO.
FREQUENCY 46 5253
HOPE CLAIM
NORMALIZED FREQUENCY DISTRIBUTION
COPPER
PPM Cu



FLAGGED LINE

STATION AND SAMPLE SITE

103 — 97

Zinc in ppm — Copper in ppm.

HOPE CLAIM

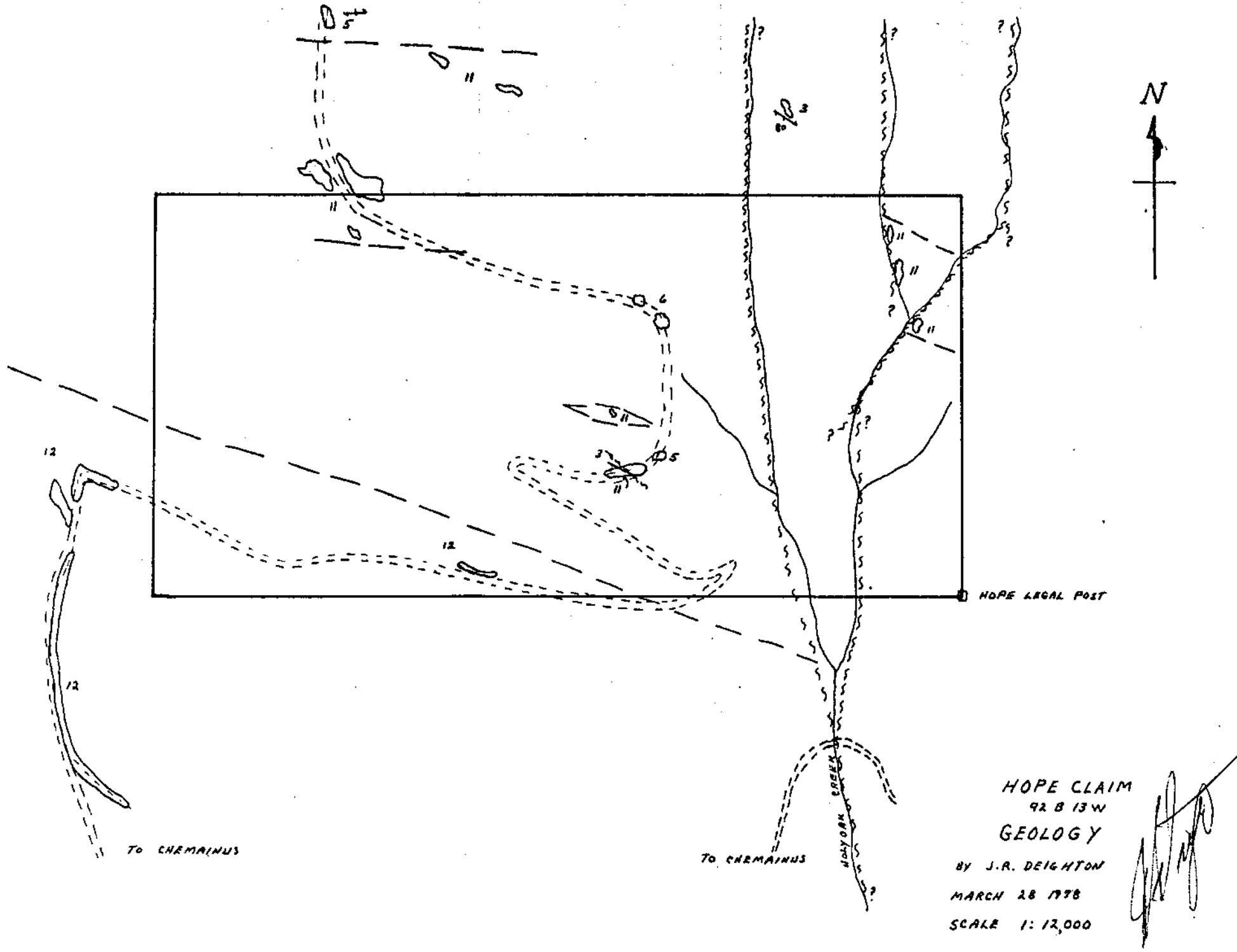
92 B 13 W

GEOCHEMICAL SOIL SURVEY

TOTAL Zinc, Copper

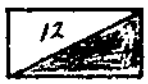
by J.R. DEIGHTON

SCALE 1:10,000


N
HOPE LEGAL POST
TO CHEMAINUS
TO CHEMAINUS
HOLYOAK CREEK
HOPE CLAIM
92 B 13 W
GEOLOGY
BY J.R. DEIGHTON
MARCH 28 1978
SCALE 1: 12,000

LEGEND

CRETACEOUS



Nanaimo Group Sediments

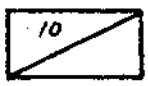
SANDSTONE, SHALE AND CONGLOMERATE
POORLY BEDDED AND SOMETIMES POORLY CONSOLIDATED.

MID TO LATE JURASSIC

Island Intrusives

STAR PORPHYRY TO DIORITE

HORNBLENDE FELDSPAR PORPHYRY, TO COARSE GRAINED DIORITE.



QUARTZ MONZONITE TO GRANODIORITE

MEDIUM GRAINED, POORLY FRACTURED.

PENNSYLVANIAN TO PERMIAN

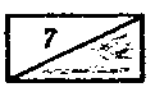
Sicker Group Sediments

GRAPHITIC SCHISTS

NARROW UNIT OF GREY TO BLACK GRAPHITIC SCHIST TO META ARGILLITE.

Iron Formation

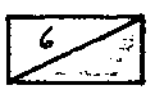
BLACK TO PURPLE SHALES, ANDESITIC TUFFS AND MIXED SEDIMENTS AND TUFFS.
CONTAINS BEDS ON BANDS OF RED JASPER. AND/OR RED JASPER FRAGMENTS.
MAGNETITE, PYRRHOTITE, PYRITE, HEMATITE AND CHALCOPYRITE LOCALLY.



CHERTY SEDIMENTS

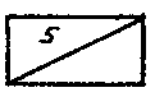
CHERTS, WITH MINOR TUFFS AND ARGILLITES, USUALLY THIN BEDDED.

VOLCANICS



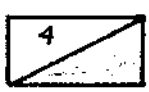
QUARTZ FELDSPAR PORPHYRY

QUARTZ EYE AND QUARTZ FELDSPAR PORPHYRY, MAY BE INTRUSIVE UNIT.



RHYOLITE TO SERICITE SCHIST

THIN PLATY CREAM COLORED SCHISTS WITH OCCASIONAL ROUNDED FRAGMENT OR QUARTZ, EYE.



DACITE TUFF TO CHLORITE SERICITE SCHIST

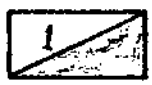
LIGHT GREEN, FINE GRAINED TUFFS, ALMOST INVARIABLY PYRITIC, MAY GRADE INTO RHYOLITE.

ANDESITE TUFF TO CHLORITE SCHISTS

DARK GREEN, TUFFS OR SCHISTS THAT CONTAIN SMALL 1/16"-1/8" ROUNDED FRAGMENTS OF QUARTZ AND EPIDOTE.

AGGLOMERATE TO CHLORITE SCHISTS

DARK GREEN, CONTAINING BOMBS OR FRAGMENTS OR ROUNDED QUARTZ-EPIDOTE UP TO 10" ACROSS



HORNBLENDE ANDESITES TO CHLORITIC SCHISTS

HORNBLENDE ANDESITES AND ASSOCIATED TUFFS AND SCHISTS, DARK GREEN IN COLOR

CONCESSION BLOCK NOW HELD

CONCESSION AREA TO BE RETAINED

STATEMENT OF QUALIFICATIONS

J. [illegible], Geophysicist for Utah Mines Ltd., Vancouver, British Columbia.

Completed BSc. (geology and geophysics) at the University of British Columbia in 1971; employed by Chisolm Prospecting Ltd. and Texas Gulf Sulphur Ltd. during the 1969 and 1970 field seasons, respectively, as a geological assistant; employed by Geoterrex from May, 1971 to October, 1971 and January 1972 to April, 1972 as a field geophysicist under Peer Norgaard, P.Eng.; employed by Barringer Research Ltd. as a geophysicist from May, 1972 to October, 1974 under the supervision of F.L. Jagodits, P.Eng., and R.J. Henderson; employed by Utah Mines Ltd. from January, 1975 to present as a geophysicist under the supervision of M.J. Young, P.Eng.

CERTIFICATION

I, JOHN RAYMOND DEIGHTON, of 3250 West 33rd Avenue, Vancouver, British Columbia, do hereby certify that:

I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1965.

Since graduation I have been engaged in Mineral Exploration in British Columbia, Yukon, North-west Territories, Washington, Arizona and California.

I am a Fellow of the Geological Association of Canada and of the Canadian Institute of Mining and Metallurgy.

I am a Geologist.

Vancouver, B.C.

John R. Deighton
Geologist

In the matter of assessment work on the Hope mineral claims in the Victoria Mining Division, located north of the Chemainus River near Bumbird Creek 14kilometers south of Ladysmith, British Columbia.

I, John R. Deighton of 3250 West 33rd Avenue, Vancouver, British Columbia, do solemnly declare that the following statement of costs is applicable to assessment work done on the above mineral claims.

Statement of costs:

John R. Deighton ..13 days @ $125 per day..	..$1625.00
J. Vyselaar..3.5 days @ $87.50 per day..	.. 306.25
Equipment costs..one 1970 Volvo @ $20/day for 9 days	
..one 1977 Chev Suburban @ $18.50/day for 3 days	
..gas and maintenance for Suburban @ $5/day for 3 days	.. 250.50
Ferry costs..	.. 26.00
Geophysical equipment rental..3 GEM units @37.50 per day for 3 days	.. 67.50
Room and Board ..15 man days at $35/man/day	.. 525.00
Geochemical assaying costs (as per invoice)..204 soils geochem Cu, Zn	.. 422.30
Report preparation..	.. 25.00
TOTAL	..$3247.55

COMPA _ J.R. Deighton

PROJECT No.: _____

ATTENTION: J. R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

I. _ No. 8-28

DATE: Feb.15, 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
0L-0N		41		56			•					
50N		32		44			•					
100N		21		49			•					
150N		39		55			•					
200N		29		80			•					
250N		29		45			•					
300N		65		54			•					
350N		42		65			•					
400N		56		51			•					
450N		32		39			•					
500N		33		56			•					
550N		52		63			•					
600N		37		55			•					
650N		53		59			•					
700N		51		45			•					
750N		39		81			•					
800N		46		60			•					
850N		49		59			•					
900N		41		70			•					
950N		14		30			•					
1000N		32		48			•					
2W0N		53		41			•					
50N		46		40			•					
100N		46		38			•					
150N		39		37			•					
200N		50		39			•					
250N		55		62			•					
300N		41		53			•					
350N		44		41			•					
2W 400N		48		38			•					

CERTIFIED BY _____

COMPA J.R. Deighton

PROJECT No.:

ATTENTION: J.R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 8-29

DATE: Feb.15, 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
2W450N		49		61			•					
500N		29		46			•					
550N		92		43			•					
600N		44		38			•					
650N		23		47			•					
700N		24		39			•					
750N		20		33			•					
800N		25		39			•					
850N		36		46			•					
900N		44		40			•					
950N		39		39			•					
1000N		24		49			•					
4W0N		39		91			•					
50N		40		96			•					
100N		11		49			•					
150N		54		45			•					
200N		69		51			•					
250N		35		50			•					
300N		41		54			•					
350N		44		81			•					
400N		62		59			•					
450N		51		50			•					
500N		55		58			•					
550N		93		50			•					
600N		69		62			•					
650N		32		49			•					
700N		22		36			•					
750N		8		24			•					
800N		26		43			•					
4W850N		22		39			•					

CERTIFIED BY Geoff Oliver

COMP: J.R. Deighton

PROJECT No.:

ATTENTION: J.R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 8-29

DATE: Feb. 1 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
4W 900N		23		29			•					
950N		4		14			•					
1000N		26		40			•					
1050N		18		37			•					
6W 0N		70		94			•					
50N		79		166			•					
100N		61		125			•					
150N		61		215			•					
200N		63		102			•					
250N		13		22			•					
300N		41		38			•					
350N		60		30			•					
400N		91		57			•					
450N		16		36			•					
500N		52		45			•					
600N		90		42			•					
650N		18		26			•					
700N		36		48			•					
750N		29		30			•					
800N		43		65			•					
850N		34		38			•					
900N		30		54			•					
950N		52		32			•					
1000N		23		36			•					
8W 0N		58		60			•					
50N		14		42			•					
100N		36		64			•					
150N		43		144			•					
200N		58		100			•					
250N		46		46			•					

CERTIFIED BY: D.G. Williams

COM. J.R. Deighton

PROJECT No.:

ATTENTION: J.R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 8-29

DATE: Feb. 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
8W 30.0N		94		30			•					
35.0N		40		62			•					
40.0N		101		38			•					
45.0N		44		46			•					
50.0N		52		49			•					
55.0N		26		37			•					
60.0N		102		77			•					
65.0N		37		66			•					
70.0N		41		68			•					
75.0N		70		55			•					
80.0N		27		46			•					
85.0N		13		27			•					
90.0N		33		44			•					
95.0N		33		36			•					
100.0N		26		35			•					
10W 0.0N		52		76			•					
5.0N		40		94			•					
10.0N		52		121			•					
15.0N		54		230			•					
20.0N		31		132			•					
25.0N		74		188			•					
30.0N		43		126			•					
35.0N		44		62			•					
40.0N		41		45			•					
45.0N		41		49			•					
50.0N		29		47			•					
55.0N		18		54			•					
60.0N		56		64			•					
65.0N		100		56			•					
70.0N		59		64			•					

CERTIFIED BY Geoffrey Plumer

COMPA J.R. Deighton

PROJECT No.:

ATTENTION: J.R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 8-29

DATE: Feb. 15, 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
1.0W/5.0N		5.1		3.2			•					
8.0.0N		6.9		6.4			•					
8.5.0N		5.8		5.1			•					
9.0.0N		5.2		5.6			•					
9.5.0N		3.3		4.0			•					
1.0.0.0N		4.4		5.4			•					
1.2W.0.N		5.1		4.8			•					
5.0N		4.2		7.3			•					
1.0.0N		5.9		6.2			•					
1.5.0N		8.1		6.5			•					
2.0.0N		6.9		5.8			•					
2.5.0N		3.9		5.4			•					
3.0.0N		6.0		9.1			•					
3.5.0N		8.7		4.2			•					
4.0.0N		5.1		5.3			•					
4.5.0N		7.0		6.3			•					
5.0.0N		4.8		4.3			•					
5.5.0N		4.7		4.4			•					
6.0.0N		7.2		5.8			•					
6.5.0N		2.4		4.3			•					
7.0.0N		9.7		6.1			•					
7.5.0N		4.9		6.8			•					
8.0.0N		2.0		4.9			•					
8.5.0N		5.8		8.0			•					
9.0.0N		5.9		7.1			•					
9.5.0N		4.6		7.4			•					
1.4W.10.0N		7.8		4.8			•					
1.5.0N		4.2		5.6			•					
							•					
							•					

CERTIFIED BY

COMPA J.R. Deighton

PROJECT No.:

ATTENTION: J.R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 8-29

DATE: Feb. 15, 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
1 4W 200N		62		81			•					
250N		50		75			•					
300N		53		74			•					
350N		45		68			•					
400N		68		89			•					
450N		35		58			•					
500N		80		105			•					
550N		38		89			•					
600N		74		117			•					
650N		78		110			•					
700N		56		84			•					
750N		31		18			•					
800N		39		49			•					
850N		46		51			•					
900N		64		93			•					
950N		62		77			•					
1000N		39		59			•					
1 6W 0N		30		54			•					
50N		28		46			•					
100N		62		65			•					
150N		71		103			•					
200N		26		68			•					
250N		82		86			•					
300N		79		72			•					
350N		54		65			•					
400N		81		87			•					
450N		22		55			•					
500N		60		85			•					
550N		58		70			•					
600N		71		53			•					

CERTIFIED BY

COMPA J.R. Deighton

PROJECT No.:

ATTENTION: J.R. Deighton

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

Fi No. 8-29

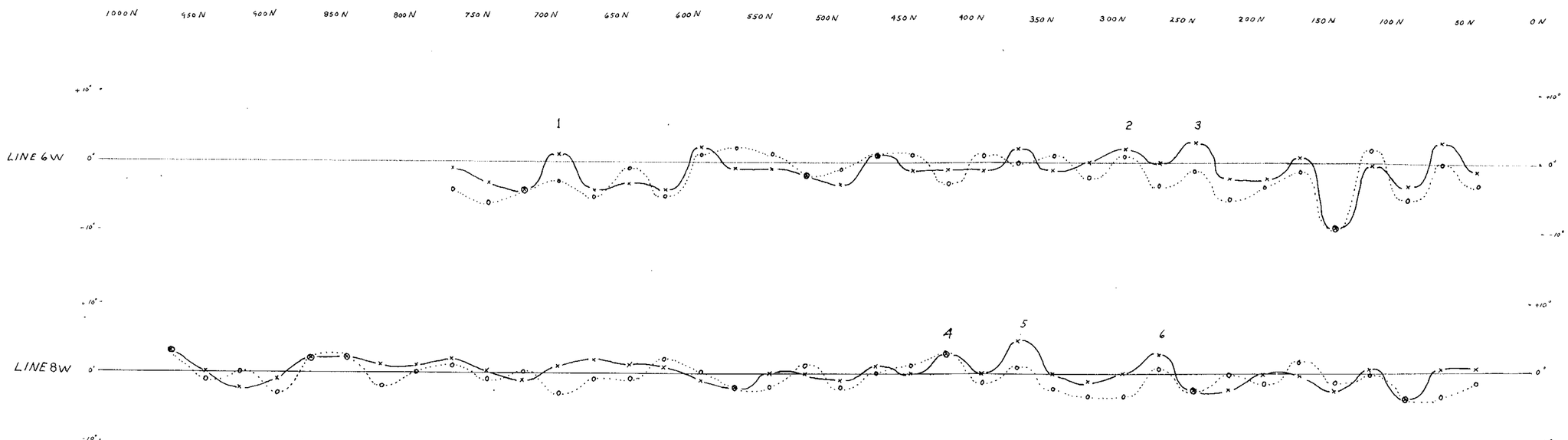
DATE: Feb.15, 1978.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb
1 6 W 6 5 0 N		7 1		5 9								
7 0 0 N		4 5		7 3								
7 5 0 N		3 2		6 2								
8 0 0 N		3 0		5 7								
8 5 0 N		3 9		6 0								
9 0 0 N		6 3		5 9								
1 8 W 1 5 0 N		2 3		6 2								
2 0 0 N		7 0		8 6								
2 5 0 N		1 9		4 4								
3 0 0 N		1 0 3		6 6								
3 5 0 N		3 7		6 3								
4 0 0 N		9 9		7 5								
4 5 0 N		1 0 1		1 2 4								
5 0 0 N		1 8		8 1								
5 5 0 N		9 4		9 2								
6 0 0 N		9 5		7 8								
6 5 0 N		5 9		1 4 2								
7 0 0 N		3 9 5		3 7 5								
7 5 0 N		5 8		1 4 4								
8 0 0 N		7 4		8 6								
8 5 0 N		1 0 4		8 7								
9 0 0 N		7 4		8 8								
9 5 0 N		2 0		6 2								
1 0 0 0 N		7 6		3 7 5								
J 3		4 2		4 8								
6 W 5 5 0 N		7 4		5 3								

CERTIFIED BY

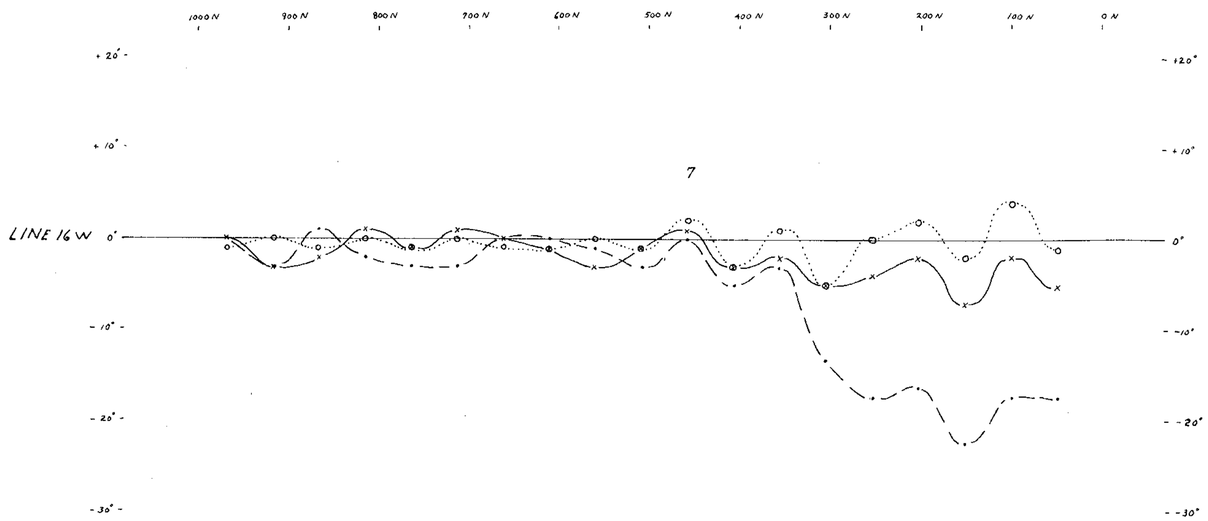
1" = 50 METRES
1" = 10°
75 METRE COIL SPACING
25 METRE READINGS

x——x MEDIUM FREQUENCY
o·····o LOW FREQUENCY



1" = 100 METRES
1" = 10°
100 METRE COIL SPACING
50 METRE READINGS

•——• HIGH FREQUENCY
x——x MEDIUM FREQUENCY
o·····o LOW FREQUENCY



HOPE CLAIM
CHEMAINUS RIVER
VICTORIA M.D. B.C.
92 B 13 W.

SHOOTBACK EM
ORIENTATION SURVEY