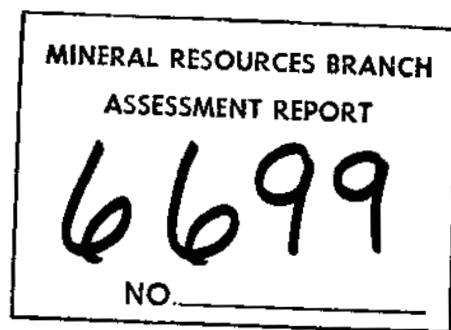


GEOLOGICAL AND GEOPHYSICAL REPORT
ON THE
FAITH MINERAL CLAIM
VICTORIA B.C.
R.T.S 92 B 13
48° 53' LAT 123° 49' LONG
LOCATED 10 KILOMETERS WEST OF CHELAINUS B.C.

REPORT BY
J.R. DEIGHTON
J. VYSELAAR
CLAIM OWNER J.R. DEIGHTON

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

MARCH 28, 1978



GEOLOGICAL AND GEOPHYSICAL REPORT ON THE
FAITH MINERAL CLAIM
VICTORIA LITING DIVISION
NTS 92 B13
REPORT BY J.R. DEIGHTON AND J. VYSELMAN

LOCATION AND ACCESS:

The Faith Mineral Claim is located on the north side of the Chemainus River approximately 9 kilometers west of Chemainus B.C.

Access is by logging road that runs up the north side of the Chemainus River from Chemainus B.C. The logging road cuts across the southwest corner of the Faith Mineral Claim at approximately 7.5 kilometers of the road.

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 1:12000 over the entire claim and immediately surrounding area.

One C.E.-M. orientation line was run along an abandoned logging road that crosses the southern portion of the Faith Claim and was 1500 meters long.

CLAIMS OWNED OR
CONTROLLED BY J. R. DEIGHAN

CLAIMS HELD BY IMPERIAL OIL

NANAIMO M.D.
VICTORIA M.D.

RES. MIN. & PLACER
500' EITHER WIDE
9/6/751, 21 MAY 70
SUBJ TO CONDITIONS
RELEASE REQUIRED

CORONATION
MTN.

MT.
HALL

Brenton
Lakes

Holyoak
L.

MT.
BRENTON

HOLY 4

97(6)

DRENWA-
65(10)

HOLY 3

96(6)

HOLY 2

95(6)

HOLY 1

94(6)

001

116(8)

HOLY 002

117(8)

FAITH

86(5)

TWIN G

PATRICIA-JANE
83(5)

114(8)

MONS 1

60(12)

HOPE

87(5)

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CHARLY

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REGIONAL GEOLOGY:

The area covered in this report is underlain by a sequence of volcanics and sediments of Permian Age. These rocks form the Sicker Group and have been subdivided by the author into various mappable 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 masses with steep sharp contacts.

Sicker Group (Pennsylvanian 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 $\frac{1}{2}$ " 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 occasional 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 schistosity is often present. The dacite may grade into rhyolite.

Andesitic Tuffs to Chloritic Schists

Dark green chloritic schists or tuffs with small $\frac{1}{8}$ " 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 $\frac{1}{8}$ " 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 $110-120^{\circ}$ 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 area of the claim is underlain by the eastern limb of an anticline made up of volcanic and sedimentary rocks of the Sicker Group. These volcanics and sediments have been intruded by diorite bodies, sills?, dykes and masses. Some of these diorite bodies may be massive flow rocks and not intrusives.

The rocks underlying the northern section of the claim are probably the youngest rocks of the volcanic-sedimentary Sicker Group pile in the area. They are essentially cherts or silicious fine grained tuffs. Interfingered with these sediments are tufaceous sediments of dacitic composition.

The southern portion of the claim is mainly underlain by volcanic rocks that were probably Andesitic to Rhyolitic tuffs and flows.

The whole of the area has been folded and stressed so that almost all of the volcanics and sediments of the Sicker Volcanic and Sedimentary pile have a regional foliation. This foliation generally has an east-west to a northwest-southeast strike. Dips in the foliation vary from shallow to steep in either a north or south direction.

The cherty sediments generally appear to have an east-west to northwest-southeast strike with shallow to moderate dips to the southwest or south.

The diorite bodies appear to lie along the strike of both the bedding and/or the foliation of Sicker Volcanics and sediments.

MINERALIZATION:

Disseminated pyrite was seen in several of the outcrops within the claim, as well as minor stringers or veins of pyrite. The veinlike stringers of pyrite seen lie along the foliation planes in the rhyolitic and in the Andesitic rock units. South of the Faith Claim in Holyoak Creek, pyrite occurs as disseminations, stringer veins and in veins or Breccia zones up to 10cm. wide. All these vein or Breccia zones lie along the bedding or foliation planes of the volcanics.

A fault probably lies in the creek that crosses the claim in a northwest-southwest direction. This fault probably continues northwestward and is postulated to cross Holyoak Lake and marks the south shoreline of the lake.

GEOPHYSICS:

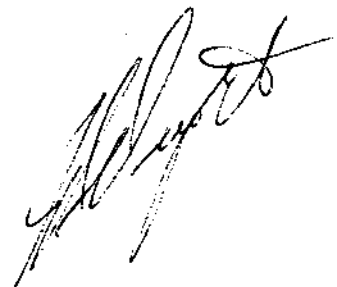
One reconnaissance EM line was run along an old logging road that crosses the Faith claim in an almost east-west direction.

The total length of the survey line was 1500 meters. Electromagnetic Survey: Reconnaissance EM lines were run over the Faith Claim. The purpose of the survey was to test geochemical anomalies obtained previously and an I.P. anomaly found by an earlier survey.

Due to the rugged topography and poor line control Shootback EM was used. The Shootback method eliminates errors due to topography and incorrect station intervals. The GEM instrument produced by Crone Geophysics Ltd. of Mississauga, Ontario, was used in the survey. This instrument operates at frequencies of 5010 HZ and 390 HZ.

A line was run along an old logging road that ran approximately across a strike. A 100 metre coil spacing was used with a 50 metre station interval. Readings were taken at low and medium frequencies.

One conductor was detected at station 1000. It is at a depth of approximately 25 metres and has a conductivity-width product of 1.29. A second conductor may be present at station 900 but the results are not too clear.

A handwritten signature in black ink, located in the bottom right corner of the page. The signature is stylized and appears to be the name of the author or reviewer.

BY..... DATE..... SUBJECT.....

SHEET NO..... OF.....

CHKD. BY..... DATE.....

JOB NO.....

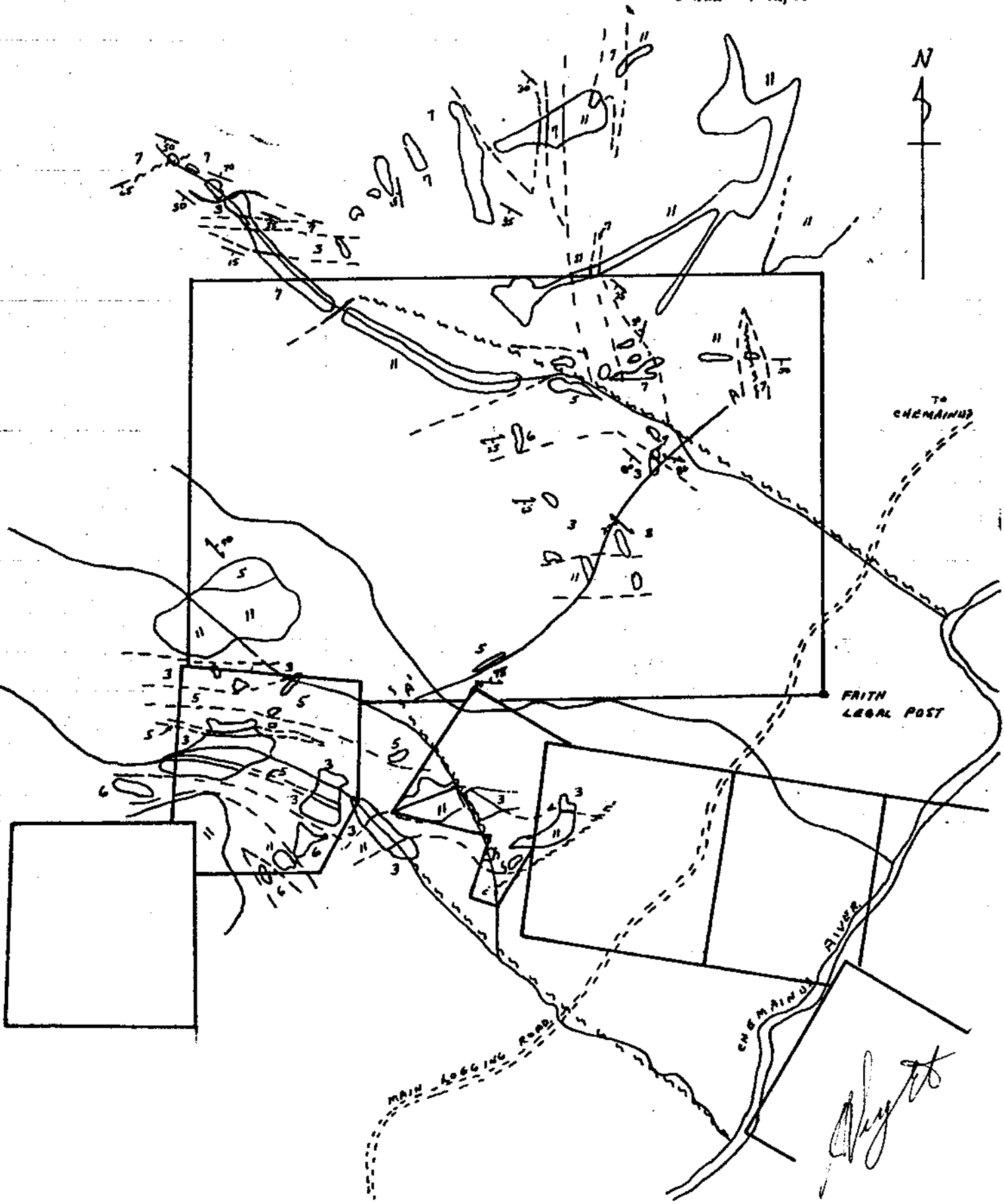
FAITH CLAIM.....

92 B13 W

GEOLOGY

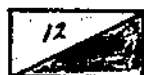
By J.R. DEIGHTON

SCALE 1:12,000



LEGEND

CRETACEOUS



Nanaimo Group Sediments

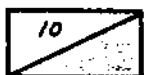
SANDSTONE, SHALE AND CONGLOMERATE
POORLY BEDDED AND SOMETIMES POORLY CONSOLIDATED.

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

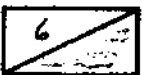
BLACK TO PURPLE SHALES, ANDESITIC TUFFS AND MIXED SEDIMENTS AND TUFFS.
CONTAINS BEDS OR BANDS OF RED JASPER. AND/OR RED JASPER FRAGMENTS.
MAGNETITE, PYRRHOTITE, PYRITE, HEMATITE AND CHALCOPYRITE LOCALLY.



CHERTY SEDIMENTS

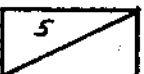
CHERTS, WITH MINOR TUFFS AND ARGILLITES, USUALLY THIN BEDDED.

VOLCANICS



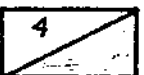
QUARTZ FELDSPAR PORPHYRY

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



HORNBLLENDE ANDESITES TO CHLORITIC SCHISTS

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

CONCESSION BLOCK NOW HELD

CONCESSION AREA TO BE RETAINED

STATEMENT OF QUALIFICATIONS

J. WYBLENAR, 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:

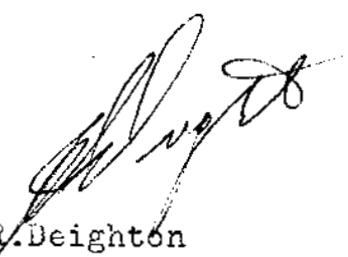
I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1965.

Since graduation I have been engaged in Mineral Exploration in British Columbia, Yukon, Northwest 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.



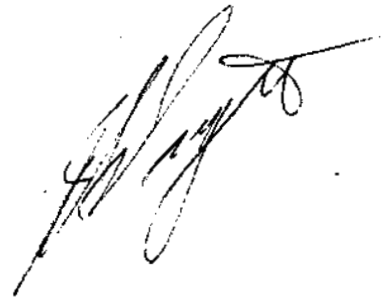
John R. Deighton
Geologist

In the matter of assessment work on the Faith Mineral Claim in the Victoria Mining Division located north of the Chemainus River approximately 10 kilometers west of Chemainus 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 claim.

Statement of costs:

| | |
|---|------------------|
| John R. Deighton..7 days @ \$125/day | ..\$ 875.00 |
| J. Vyselaar..1.5 days @ \$87.50 | .. 131.25 |
| Equipment rental..3 CEM units @ \$7.50/day for 1 day | .. 22.50 |
| Equipment costs..one 1970 Volvo @ \$20/day for 5 days | .. 100.00 |
| ..one 1977 Chev Suburban @ \$18.50/day | .. 18.50 |
| ..gas and maintenance for Suburban | .. 5.00 |
| Ferry costs.. | .. 30.00 |
| Room and Board..7 man days @ \$35/man/day | .. 245.00 |
| Report Preparation.. | <u>25.00</u> |
| TOTAL | <u>\$1452.25</u> |

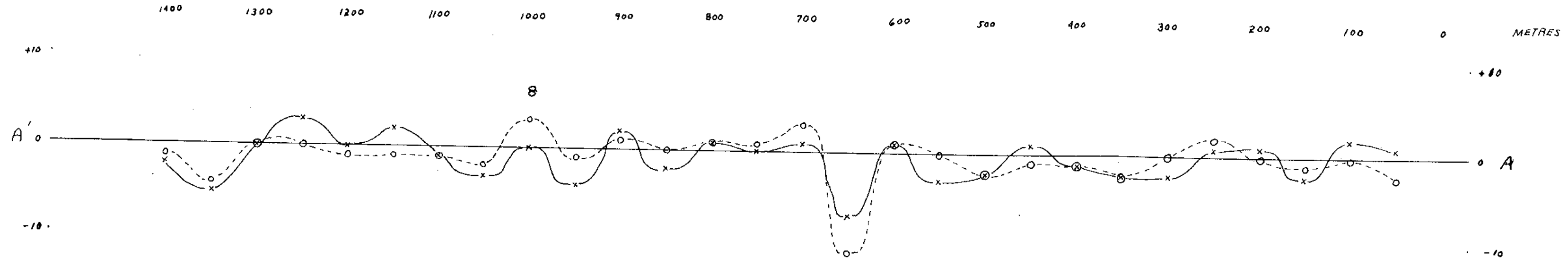


ORIENTATION SHOOTBACK EM SURVEY

FAITH CLAIM

NTS 92 B 13 WEST

VICTORIA MINING DIVISION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

6699
NO. _____

SCALE 1" = 100 METRES

1" = 10°

100 METRE COIL SPACING

50 METRE STATION READING

o---o HIGH FREQUENCY

x---x MEDIUM FREQUENCY