PROPERTY FILE
93L009 (7E) - 07
GOLD BRICK

015437

Bob Creek Property- Houston, BC

PROPERTY FILE

M.G.Berretta Oct/77

93L009 GOLD BRICK

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26935 - 100TH AVENUE
WHONNOCK, B.C.

CANADA

SUMMARY

An induced polarization survey on the Bob Creek Property, Houston, B.C., has outlined an anomalous zone about 2000' by 2400' within an acid volcanic rock unit. Response amplitudes indicate the presence of pyrite and possibly chalcopyrite and galena in unknown relative proportions, of up to 5% if disseminated, and substantially higher if massive. Due to the possibility of pyrite halos or envelopes in close association with copper, zinc, lead and silver minerals, it is recommended that this zone be tested with several drill holes in order to determine its economic importance.

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1. INTRODUCTION

During the period from September 28 to October 7,1977, an induced polarization survey was carried out, at the request of Nevin,Sadlier-Brown,Goodbrand Ltd., on the Bob Creek Property, Houston, B.C., of Mid Mountain Mining Ltd.

Claims

NEW BUCK	- 20 units	Record No. 316(6)
NABOB	- 12 "	" " 438(8)
FOG	- 1 "	Staked Sept. 26/77 and recorded Oct. 3/77 by D. Morasl as agent for H.S.Eisler

The property is located approximately 6 miles south of Houston, B.C., and is accessible via the Buck Creek road.

Crew

Mauro G. Berretta, M.Sc., Geophysicist/interpreter

Charles Locke, Junior Geophysicist/Party Chief

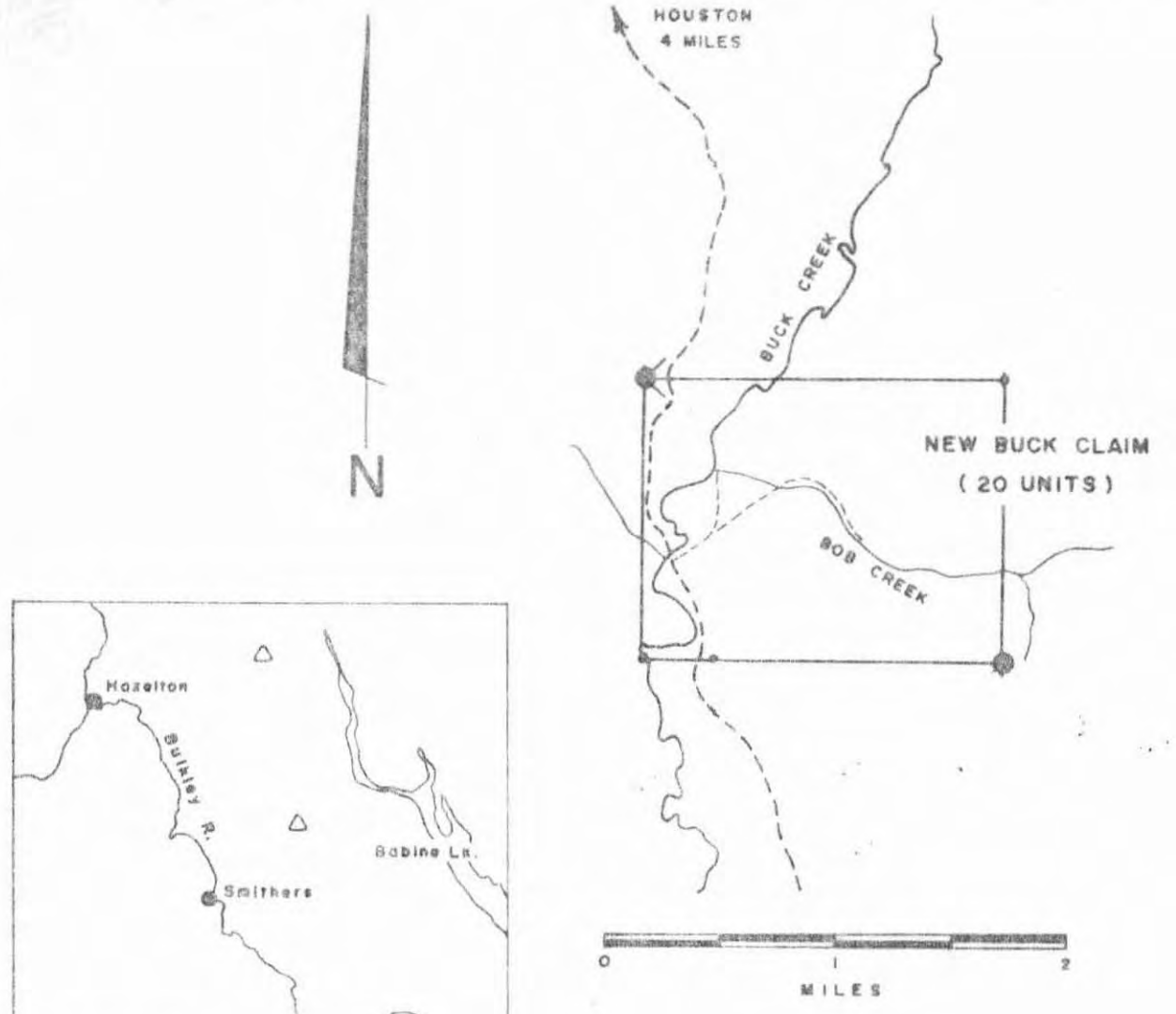
Alan Watson, Geophysical Operator

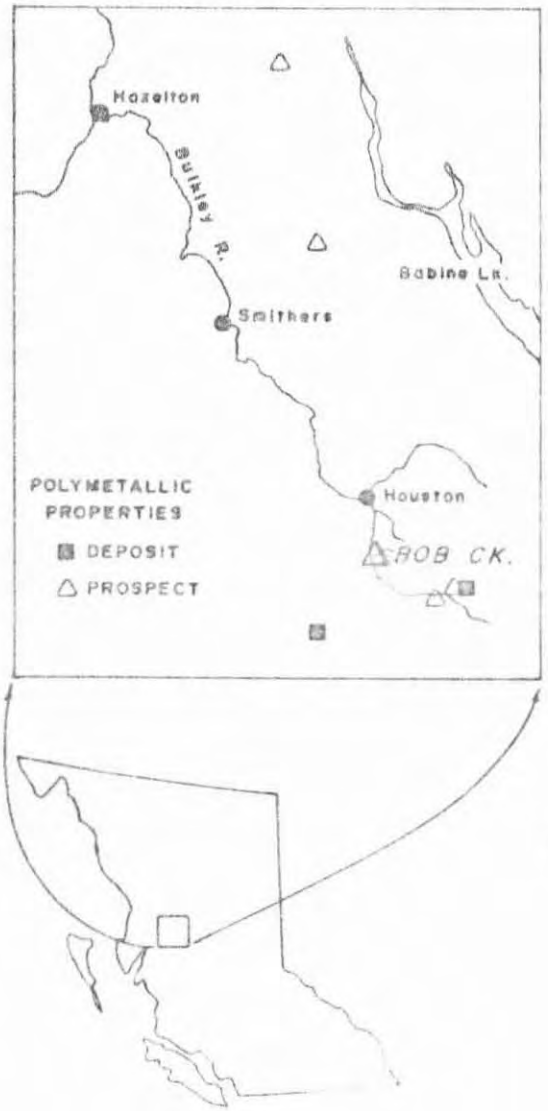
Patricia Macy, Field Assistant

Pierre LeBlanc, Field Assistant

Ed Brabander, Field Assistant

The instrumentation used consisted of a Sabre Mk 2 450 watt frequency domain system. A dipole-dipole array was employed with a=300', n=2, frequency span of 0.3-10 Hz, and a 300' station interval for basic coverage. Detail measurements were also made at 150' intervals using a=300', n=2; a=300' n=1; and a=150', n=1. A total of 223 stations were surveyed.





MID MOUNTAIN MINING Ltd.

BOB CREEK PROSPECT

LOCATION MAP

Dwg. 1

July 5, 1976

NEVIN SADLIER-BROWN GOODBRAND LTD.
CONSULTING GEOLOGISTS VANCOUVER, B.C.

2. GEOLOGY

The property is underlain by Mesozoic acid volcanics, mainly composed of rhyolite, which have been intruded by a small gabbro plug near the central part of the survey area. These are overlain in part, by younger andesites and basalts. Due to extensive overburden, the extent of this cover is not known. Scattered outcrops and trench exposures have detected the presence of metallic mineralization within the rhyolites, consisting primarily of pyrite, and also some sphalerite, chalcopyrite, galena, silver and gold. Also, the acid volcanic rocks display kaolin and sericite alteration.

3. INDUCED POLARIZATION RESULTS AND INTERPRETATION

The survey parameters used for basic coverage give an effective depth of penetration of about 300', Detail readings were made at depths of about 150' and 75'.

Resistivity

The resistivity data, shown in Figure 2, displays a range from about 50 ohm-m. to about 700 ohm-m. This is a very narrow range and hence it is difficult to extrapolate geological structure. The average level of these values suggests a somewhat widespread degree of rock fracturing, porosity and alteration, as well as the presence of possibly

conductive overburden. The main feature is a north-east trending belt of higher resistivities (400-600 ohm-m) in the central part of the survey area. A series of gabbro outcrops near the core of this zone indicate that, at least in part, these rocks may be the cause of the high. Andesite cover, probably thin, may also contribute to this resistivity high. Rhyolites appear to exibit resistivities in the 100 to 200 ohm-m range, except southwest of the Bob Creek gorge, where higher values are noted. At the north end of the survey area, on line 20E, a resistivity high is probably due to basalts. The resistivity low in the west-central part of the property may be an overburden effect. It should be emphasized that the above interpretation is at best tentative, since the observed resistivity variations could be caused by changes in overburden conductivity and depth.

Percent Frequency Effect

The pfe data is shown in Figure 3. Background responses of 3-5% are observed in several, small scattered zones and are probably due to barren gabbro and basalt rocks. Elsewhere, background is in the range of 5-10%. This is indicative of widespread disseminated pyrite and/or alteration within acid volcanics, and possibly also within overlying andesites. A large anomalous area is found on lines 20E to 40E from 4N to about 28N. Within this zone are two strong anomalies. One, anomaly A, is located from 20E to 30E, from 20N to 24N. The second, anomaly B, occurs on lines 25E to 40E from 8N to 28N. Line 30E was detailed in an attempt to obtain depth

information on both of these features. The results are shown in Figure 4. Both anomalies display good depth extent, with maximum response at about 300'. Depth to top is in the order of 100'. At 9N and 20N they appear to be within 50' of surface. Dip is tentatively estimated to be northerly. Corresponding resistivities are in the range of 100-400 ohm-m. A resistivity increase is noted near surface, and this is thought to be due to either a thin andesite cover (50-75') from 12N to 22N, or to decreasing fracturing and/or mineralization within acid volcanics near surface. Anomaly amplitudes of about 20%, are indicative of sulphide minerals such as pyrite, chalcopyrite and possibly galena, in unknown relative proportions, of up to 5% by volume if disseminated, and substantially higher if massive. Sections of these zones that tend to be associated with lower resistivities, are more likely to be due to more massive mineralization.

Two other responses, one at 24N,00E and the other at 12S from 10E to 20E, are viewed as interesting and worthy of more i.p. before any interpretation can be made.

4. RECOMMENDATIONS

It is recommended that anomalies A and B be tested with several drill holes in order to determine their economic importance. The possible association of pyrite halos or envelopes with zinc, copper, lead and silver sulphides places

great importance on zones of lower pfe response that are adjacent to anomalies A and B, such as at 7N, 11N and 19N, on line 30E.

Exact drill sites should be selected in light of all geophysical, geological and geochemical data. Additional i.p. detail, on lines 20E, 25E and 35E, would be extremely valuable in spotting holes.

5. AUTHORIZATION

Authorization is given to submit or distribute all or part of this report, provided the meaning and intent are not altered by partial reproduction.

Respectfully submitted,

Mauro G. Berretta, M.Sc.,
Geophysicist

October, 1977
Whonnock, B.C.

I, MAURO G. BERRETTA, do hereby certify that I have the following qualifications :

ACADEMIC

1964 - B.Sc. (Physics) - University of Windsor

1965 - M.Sc. (Physics) - University of Windsor

1967-69 - Ph.D. Studies (Geophysics) - U.B.C.

PROFESSIONAL and RELATED EXPERIENCE

1963-64 - oceanography and marine geophysics research with Great Lakes Institute, University of Toronto

1968-69 - lecturer in exploration geophysics (GP400,GP402) with Dept. of Geophysics, U.B.C.

1970-present - instructor in mining and petroleum geophysics with British Columbia Institute of Technology

1968-present - geophysical exploration as an employee, consultant, joint-venture partner with numerous mining companies in B.C., Yukon, and U.S.A.

- experience in all phases of geophysics (i.p., mag, e.m., seismic, gravity) with special concentration on i.p. and e.m. methods (in excess of 500 survey miles)

PROFESSIONAL ASSOCIATIONS

Active Member in British Columbia Geophysical Society

1974-75 - President , British Columbia Geophysical Society

Mauro G. Berretta

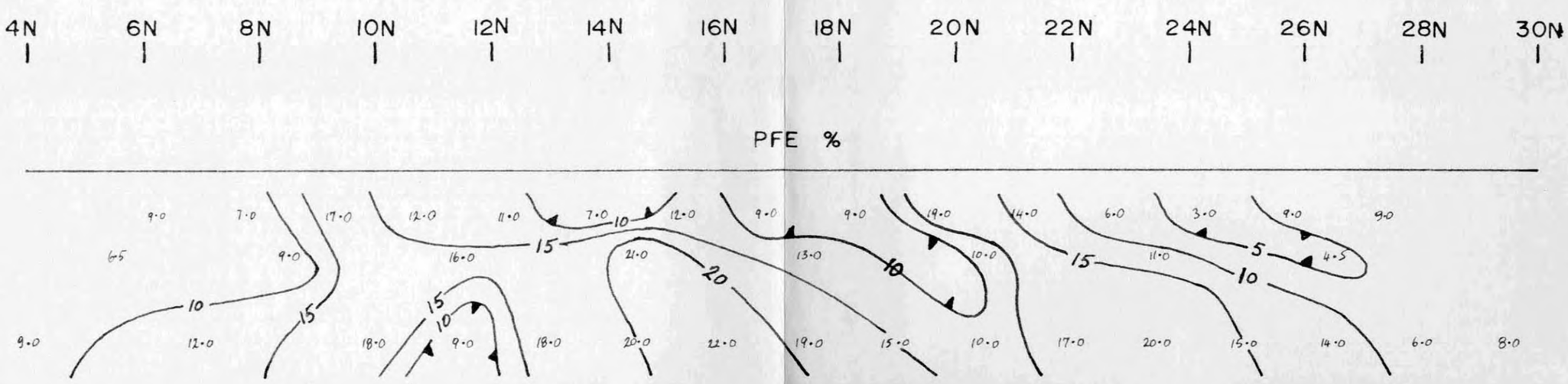


Fig 4

I.P DETAIL – L30E

BOB CREEK PROPERTY
HOUSTON, B.C.

DIPOLE-DIPOLE	0.3-10HZ
a = 300' n = 2	450 W
a = 300' n = 1	SABRE MK 2
a = 150' n = 1	1" = 200'

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Buck Cr.

road

to Houston

Bob Cr.

LINE D

-16 NW

-38 SE

N

— 56N
— 52N
— 48N
— 44N
— 40N
— 36N
— 32N
— 28N
— 24N
— 20N
— 16N
— 12N
— 8N
— 4N
— 00 BL
— 4S
— 8S
— 12S
— 16S
— 20S
— 24S

— 00
— 10E
— 15E
— 20E
— 25E
— 30E
— 35E
— 40E

PROPERTY FILE

Fig. 3

PFE MAP

BOB CREEK PROPERTY

HOUSTON B.C.

DIPOLE-DIPOLE

a = 300' n = 2 CONT. INT. - 5%

0.3 - 10 HZ

SABRE MK 2 1" = 400'

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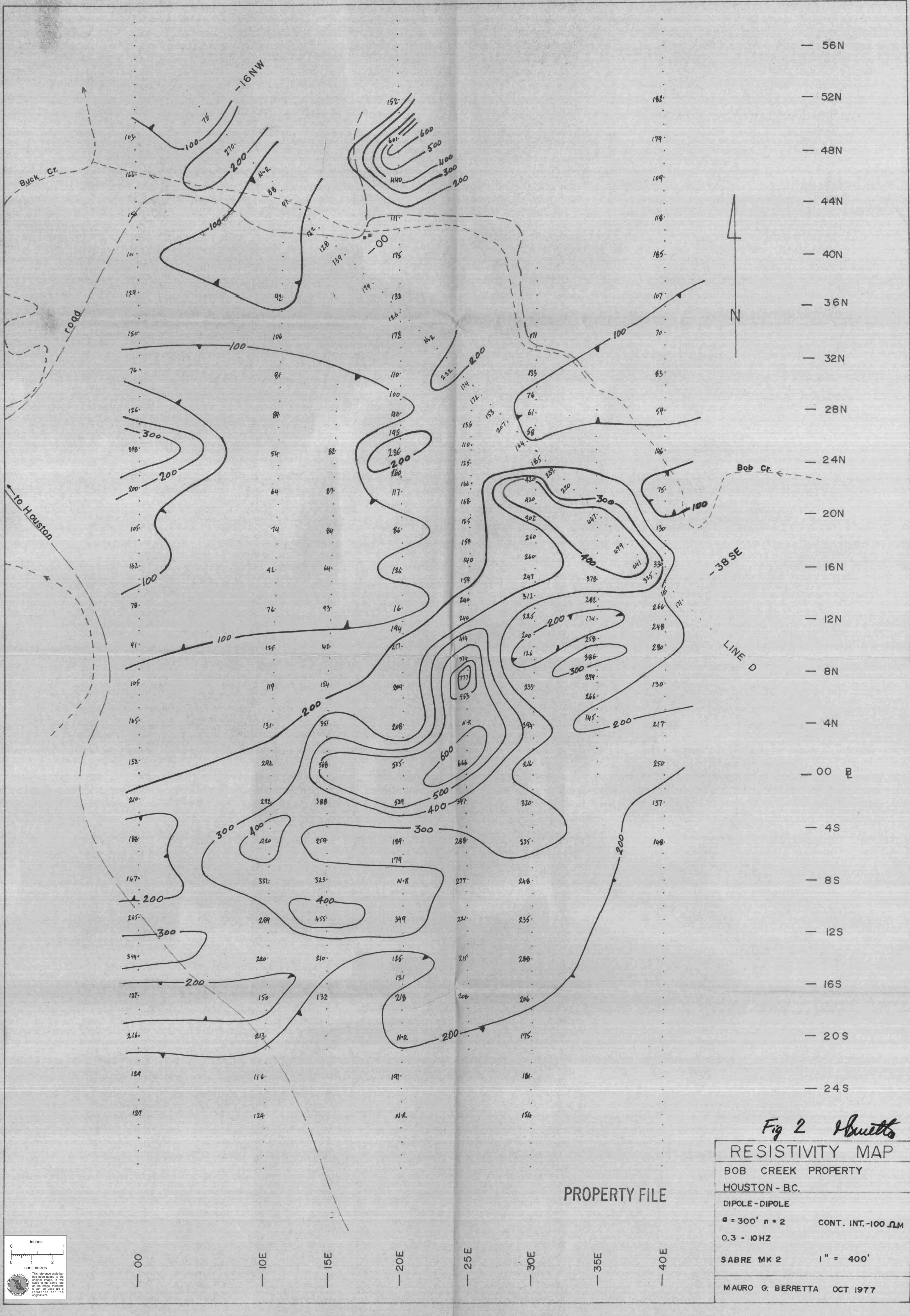

Fig 2

RESISTIVITY MAP

BOB CREEK PROPERTY

HOUSTON - B.C.

DIPOLE - DIPOLE

a = 300' n = 2 CONT. INT. - 100 ΩM

0.3 - 10 HZ

SABRE MK 2 1" = 400'

MAURO G. BERRETTA OCT 1977

BOB CREEK PROPERTY

I.P. DETAIL - LINE 30E

pfe % - RESISTIVITY Ωm

a = 300' n = 2 0.3 - 10 Hz

a = 300' n = 1 450W SABRE MK II

a = 150' n = 1 SCALE - 1" = 300'

MAURO G. BERRETTA

OCTOBER 1977

pfe % - CONTOUR INTERVAL 2.5%