3516

GEOPHYSICAL REPORT

ON THE

MINERAL CLAIM GROUPINGS - PYRRHOTITE CREEK GRID

Go-G Group
Cu Group One
Cu Group Two

Longitude: 131° 46'
Latitude : 58° 15'
N. T. S. : 104-J-4

ATLIN MINING DIVISION

BRITISH COLUMBIA

for

SKYLINE EXPLORATIONS LTD. (N.P.L.)

by

G. Gutrath, P.Eng. - Geologist
P. P. Nielsen - Geophysicist

ATLED EXPLORATION MANAGEMENT LTD.

VANCOUVER, B. C.

NOVEMBER 20, 1971

TABLE OF CONTENTS

TABLE OF CONTENTS (con't)

INTRODUCTION

During the period August 12 to August 22, 1971, a ground magnetometer survey was conducted on behalf of Skyline Explorations Ltd. (N.P.L.), on the "GO" mineral claims, Pyrrhotite Creek grids by Atled Exploration Management Ltd.

From September 1 to September 22, 1971 an Induced Polarization survey was executed over essentially the same grid area. The purpose of these surveys was to obtain further knowledge of the main showing area, to attempt to explain the geochemical anomalies and mineral occurrences over other parts of the grid, and to assist in the geological mapping over covered regions.

The magnetometer survey consisted of 22 line-miles or 1075 readings over pre-cut and picketed lines. A total of 14.3 line-miles of reconnaissance and detail I.P. was executed on the property.

A complete discussion of the property is contained in the "Geological and Geochemical Report on the Pyrrhotite Creek Project" by R.J. Darney dated November 1971. Work covered by this report includes geochemical soil sampling, geological mapping, and line-cutting over a total of 116,000 feet of cut grid-lines. Hand trenching was also executed in the main showing area and along Polar Creek.

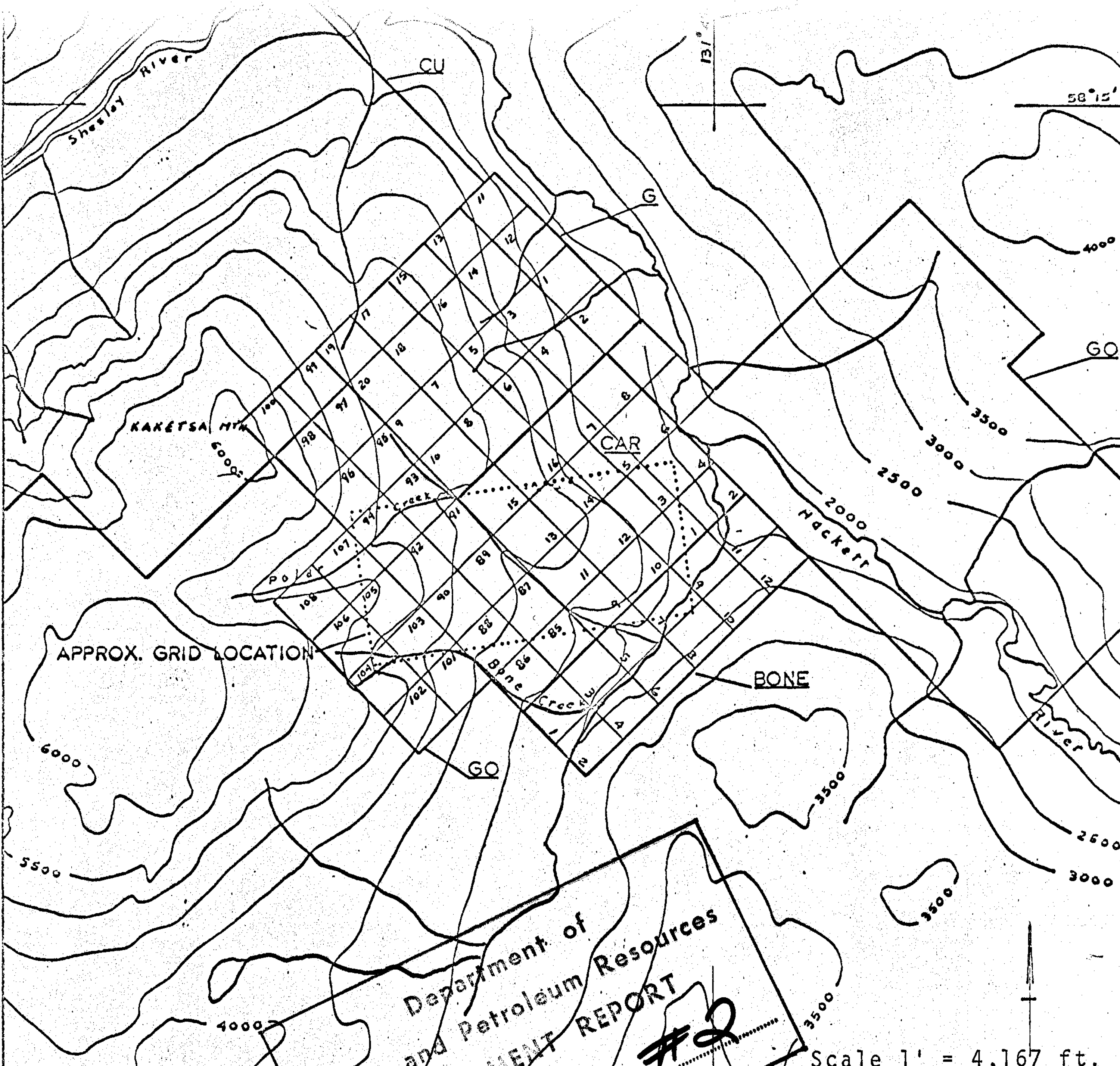
LOCATION AND ACCESS

The GO mineral claims are located approximately 30 air miles NW of Telegraph Creek at latitude 58° 13'N and longitude 131° 46'W on N.T.S. map sheet 104-J-4.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #1

FIG. 1

P.P. Nielsen



SKYLINE EXPLORATIONS LTD.
Vancouver, B.C.
PYRRHOTITE CREEK PROJECT

Atlin Mining Division   N.T.S 104-J-4

LOCATION MAP OF CLAIMS & GRID

FIG. 2

Atled Exploration Management Ltd.

R. Nielsen

LOCATION AND ACCESS (con't)

Property access is by helicopter from either Dease Lake or Telegraph Creek. For camp supply, float-equipped aircraft can be used between Dease Lake (approximately 62 miles ENE) and Hatchau Lake. However, helicopter support is still required to shuttle supplies five miles from Hatchau Lake to the Pyrrhotite Creek base camp. General access is possible along the old telegraph trail from Telegraph Creek.

Supplies are available at Dease Lake and Telegraph Creek. Telegraph Creek and Dease Lake are both serviced by Trans-Provincial Airlines on a regular schedule from Terrace. Harrison Airways also have a non-scheduled flight from Vancouver to Dease Lake during the field season.

GENERAL GEOLOGY AND PHYSIOGRAPHY

The Skyline GO claims area lies in the broad belt of Triassic intermediate volcanic andesites, tuffaceous andesites and tuffs with members of clastic sediments. These volcanics have been locally intruded by the Kaketsa stock which is monzonitic to granodiorite in composition. During Tertiary time the area was covered by a thick sequence of basalts.

Subsequent glaciation has removed these recent volcanics from the west side of the Hackett River valley exposing the older volcanics and Kaketsa intrusion to the valley floor.

Airphoto linears and topographic expressions indicate moderate block faulting of the Kaketsa Mountain area. The Hackett-Sheslay River System and tributaries of Pyrrhotite Creek offer some evidence of a NW-SE fracture system. Pyrrhotite Creek, Sheslay River and Copper Creek show a strong NE-SW trend.

GENERAL GEOLOGY AND PHYSIOGRAPHY (con't)

To date, mineralization has been observed over a large area but the main area of interest is in a zone of fracture controlled and disseminated chalcopyrite, chalcocite and minor pyrite with approximate lateral dimensions of 300 feet by 200 feet. Coincident anomalous geochemical molybdenum and copper areas on the flanks of the Chargeability "highs" adjoining the showing area and adjacent to the volcanic-intrusive contact have also been delineated.

Minerals likely to cause an I.P. response on the property are specular hematite, magnetite, pyrite, pyrrhotite and chalcopyrite. Highly conductive overburden and other conductive rock units such as bentonite, vermiculite, montmorillonite and graphite have not been observed on the property.

Electrical contact was generally good although some difficulty was encountered in the northwest quadrant of the survey grid. Talus slopes and highly fractured outcroppings of primarily granodiorites in this area made current induction difficult and hence a few of the readings were eratic.

The general terrain consists of moderate to steep easterly slopes. The grid is transected by a deep canyon which provides excellent rock exposure but hinders access to and mobility between various parts of the property.

GROUND MAGNETOMETER SURVEY

A. Survey Method

The magnetometer survey was executed using a vertical force fluxgate magnetometer which is hand held and levelled by the aid of a bubble-level on the face of the instrument.

The operator first read stations along the baselines to establish an absolute relative set of values so that the crossline readings could be adjusted to eliminate any inherent errors due to diurnal (daily) variations in the earth's natural magnetic field, magnetic storms, and possibly temperature or instrument drift.

The instrument was held with the aid of a harness to maintain constant height above ground and distance from the body. Readings were taken facing in one direction using the most sensitive scale possible. A nearby base-station was read at the beginning and end of each day for the day-to-day correlation.

B. Instrumentation

A McPhar M700 Model Fluxgate magnetometer was used. The instrument measures vertical force variations in the earth's natural magnetic field, displayed in gammas, on a meter with five ranges for a total range of ± 100,000 gammas. The M700 is very light (6-1/2 lbs.), and fully portable, has excellent temperature stability, has low orientation error and is of rugged construction.

C. Data Compilation and Presentation

The readings and time of readings were recorded in a paperbound field book and transferred to a planimetric map (Fig.15) after the necessary diurnal, day-to-day, and base-level corrections were made.

GROUND MAGNETOMETER SURVEY

C. Data Compilation and Presentation (con't)

The values were then contoured on a separte map (Fig.16) using a 500 gamma contour interval. Some lines are shown in profile form along with the I.P. results.

No station co-ordinates are given due to the variations in station spacings on different lines.

D. Discussion and Interpretation of Results

The values map (Fig. 15) illustrates the station locations, area of survey coverage and the range of relative vertical magnetic intensity gamma values which varied from 206 gammas to 11,184 gammas. The latter was a single value high over outcroppings of massive magnetite. The next highest reading is 4870 gammas.

The contour map represents in a general relative manner the lateral variations in susceptibility of underlying rock types, possible changes in overburden and volcanic thicknesses as well as lineaments and gradients due to structure.

Errors inherent in this data are "lows" due to inductive effects which include the vector angle of earth's field at survey area, remanent magnetization effects, attenuation of field due to increase in overburden thicknesses which are not presently known in some areas and bias due to rectangular grid sampling used.

Assumptions made are that causative sources of inductive anomalies are vertical and displaced slightly towards the associated "lows" when these lows exist in northern quadrants relative to "highs", that overburden thicknesses do not exceed 200 feet with glacial material being non-magnetic, and that the remanent field is vertical and normally polarized.

D. Discussion and Interpretation of Results (con't)

The author personally ran a check traverse along the baseline and two crosslines and found a one-to-one correspondence between relative values of his traverse and that of the operator. In the eastern part of the survey grid the 100 foot stations along the baseline have been omitted on the contour map in order to maintain the one-to-four rectangular grid ratio used. The western area of the grid between Lines 8E and 24E includes the 100 foot baseline intervals.

Lineaments and Elongated Trends

A number of elongated features are observed on the contour map.

The most prominent linears are observed as magnetic highs striking easterly throughout the eastern half of the grid. They vary in strike length from about 400 to 1600 feet with a peak amplitude of 1500 gammas above an estimated local background of 2000 gammas. The general magnetic trend in this region appears to be northwesterly, possibly determined by shallow overburden thicknesses, a northwest fault system and/or terrain effects due to Polar Creek gorge. These linears appear to be caused by vertical dike-like structures with an average width of 50 feet.

A series of elongated "lows" (less than 1500 gammas) conform to the path of Polar Creek and are due to terrain effects and/or a fault. Another fault is postulated striking from grid co-ordinates L 44E, Stn 10S through the northern edge of the main showing to about Line 12E, Stn. 11N where it is obscurred by a northeasterly trending magnetic high feature with peak amplitudes in excess of 4000 gammas which is thought to be due to massive magnetite along the intrussive-volcanic contact. Magnetite has been observed outcropping at various places within the high. Minor chalcopyrite was noticed with massive magnetite at Line 16EStn. 6+50N.

GROUND MAGNETOMETER SURVEY

Lineaments and Elongated Trends (con't)

Another sub-parrallel lineament strikes northwesterly between the lower section of Bone Creek and LO Stn. 3S. This linear is also observed on the resistivity contour map and to a lesser extent, on the chargeability contour map and is interpreted as a fault.

Two northeast trending linears more subtle in magnetic character strike through the showing area to Bone Creek. They could be shears, or faults parallel to the direction of fractures or joints observed nearby.

Due to a gradational contact, thin volcanic cover, areas of thick glacial overburden and complex structures it is difficult to interpret a contact line from the magnetics alone. A correlation of all available data has resulted in the contact shown on the interpretation (Fig. 19).

Other Features

The moderately high magnetic pattern at the northern ends of Lines 44 E to 52E could reflect an area of volcanic xenoliths or remnants noted by the geologist.

To the southwest of the interpreted Bone Creek fault is an area of low magnetic level and relief which correlates well with chargeabilities greater than 17 msecs. It occurs within a small cirque covered by large blocky talus of volcanic and intrusive rocks from the cirque wall to the west. No outcrop exists within these coincident anomalies.

GROUND MAGNETOMETER SURVEY

Other Features (con't)

The main showing area consists of a complex series of small highs and lows which are uninterpretable at this scale. A possible explanation for this magnetic pattern is that it is caused by near surface, local structures and by magnetite veins or lenses within and peripheral to the copper mineralization.

A closer sampling interval, a large scale blow-up of the area, and a finer contour interval are necessary for a meaningful magnetic interpretation of the showing area.

INDUCED POLARIZATION SURVEY

SURVEY SPECIFICATIONS

The Equipment: The Induced Polarization instrument used was a 2.5 kw. unit manufactured by Sharpe Instrument Ltd. of Toronto, Ontario, incorporating the Newmont remote-triggering type receiver and a solid state Pulse-Transient control unit.

The following specifications apply:

Type of Current: Direct current broken at periodic intervals with a pulse duration of two seconds with alternate pulses being of opposite polarity.

Pulse Repetition Rate: Two seconds "current on" and two seconds "current off."

Integrating Time: Area under decay curve (Ma) = 0.65 seconds, area over decay curve (L) = 1.30 seconds. (Delay time before integration = 0.45 seconds).

Maximum Power available = 2.5 kw.
Maximum Current available = 10 amps. D. C.

Electrode Configuration: A 3-electrode array was used whereby the current electrode C_1 and two potential electrodes, P_1 and P_2, were separated by a distance "a" from each other and moved in unision along the survey lines taking measurements at regular intervals. The second current electrode C_2 is fixed at "infinity" (∞) which is a minimum distance of 5a to the nearest station measured.

The station location is halfway between the current electrode C_1 and the nearest potential electrode P_1. All lines were surveyed with C_1 to the north of the potential electrodes.

SURVEY SPECIFICATIONS

Electrode Configuration (con't)

The entire survey was executed using an "a" spacing of 400 feet taking readings at 200 foot station intervals along cut lines spaced 400 and 800 feet apart. This procedure is called a "reconnaissance" survey and determines which areas require a more detailed and intensive study. Some interesting areas were examined using "a" spacings of 100, 200, and, in one case, 600 feet in an attempt to further explain and delineate the causative sources as to their possible physical properties and geometry. The amount of detail carried out was limited by, amount of available current delivered into the ground, nature of anomalies and time alloted to complete the survey.

Measurements taken in the field were:

1. The Primary voltage Vp between the measuring (potential) electrodes during "current on".

2. The current flowing through the current electrodes C_1 and C_2.

3. The apparent chargeability Ma which is the integrating time of the area under the transient curve measured by the receiver.

4. The time integral of the area over the transient curve called L. The ratio of L/M can be of assistance in defining the shape of the transient curve and hence the interpretation of the chargeability response is enhanced.

SURVEY SPECIFICATIONS

Electrode Configuration (con't)

4. Apparent resistivity ρa is calculated by dividing Vp by the applied current and multiplying by a factor appropriate to the geometry of the electrode array used and the Ohm-meter units desired.

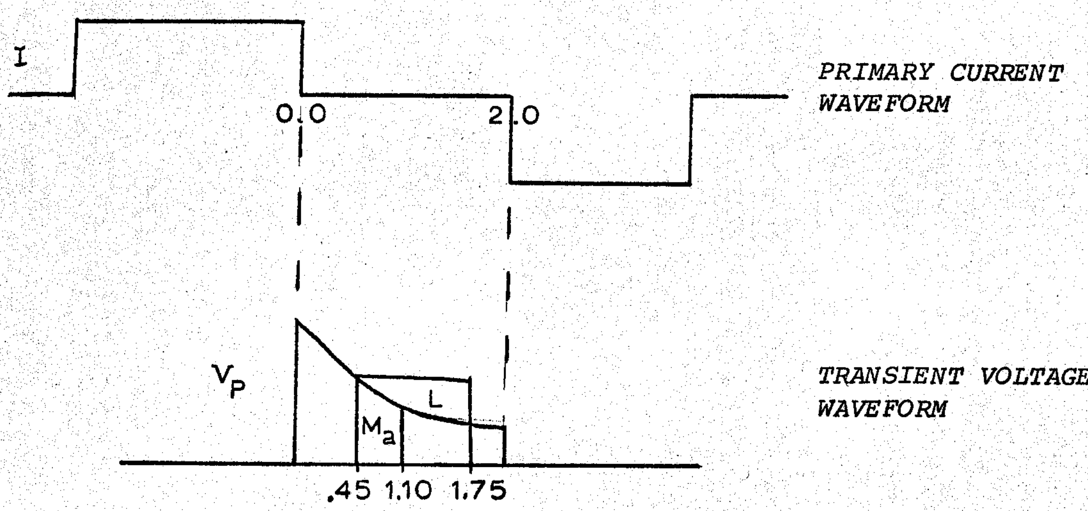


FIG. 3

DATA PRESENTATION

All resistivity and chargeability values for an electrode spacing of 400 feet were plotted and contoured in plan at a scale of 1" = 400'. These maps (in map pocket) illustrate approximately the lateral changes in resistivity and chargeability of the sub-surface up to a depth of 400 feet normal to slope. However, certain errors are inherent in this type of data presentation such as upslope displacement of the readings over steep terrain, "double-peaking" of anomalies, and with resistivity, topographic or terrain effects and variations in water content, and skewness in anomaly peaks due to the asymmetrical array. Therefore the plans serve to illustrate in a general sense the area of interest, the strike of the body and possible lateral changes in physical properties of the sub-surface.

DATA PRESENTATION (con't)

Some survey lines are shown in profile form at a horizontal scale of 1" = 400'. Apparent resistivity values are plotted on a vertical logarithmic scale, apparent chargeability values on a vertical linear scale of 1" = 20 milliseconds and the L/M ratios (where shown) are expressed in terms of greater than or less than unity. Magnetic profiles over some lines are included on the chargeability axes at a vertical scale of 1" = 1000 gammas.

No correction for fluctuations in station intervals have been made on the profiles. The contour maps were plotted from the same base maps as the geology and geochemistry plans which have accounted for variations in distance between stations.

Expander graphs (2 cycle log-log paper) for Line 56E and 64E where three or more "a" spacings were used are also included.

LINECUTTING

Some existing lines were extended in an attempt to close off high chargeability responses. These were Lines4E, 12E, 56E, & 64E. The Baseline was extended from 0 + 00 to 4 + 00W and Line 4W was cut and surveyed to the south.

DISCUSSION OF RESULTS AND INTERPRETATION

A. General Theory of the 3-array Electrode Configuration

The I.P. response due to a particular distribution of polarizable material is dependent upon the electrode array employed, the geometry of the polarized body and its location relative to the array, and on the resistivity and polarization contrast between the body and surrounding environment.

The Three Electrode array was used for the entire survey. Although anomalies are asymmetrical and the anomaly peaks do not always fall directly over the center of the causative source, its advantages more than outweigh this one disadvantage. This array requires only three men on the survey line, has good depth penetration, responds well to both flat-lying and steeply-dipping bodies and allows that only one electrode spacings be used during reconnaissance surveying permitting faster coverage.

As mentioned above, contour maps of the data should be treated with caution and are used to enhance the interpretation made primarily from the profiles. An example of a typical multiple electrode spacing response over a sulphide lens is included to illustrate the asymmetrical nature of this array as well as to point out the phenomenum of "double-peaking" which occurs when the electrode spacing is larger than the depth to the center of the body. The larger peak occurs when the first potential electrode (P_1) is in the vicinity of the body.

The maximum anomaly is obtained for the spacing equal to the depth to the center of an idealized sphere, although spacings of 3/4 to 1-1/2 times the depth give at least 90% of the maximum likely anomaly.

The use of two or more spacings gives a more reliable estimate of depths, attitude and continuity with depth. An accurate estimate of resistivity and polarization of the body cannot be made since the variables of size, conductivity, and polarizability cannot be separated, hence the term "apparent" chargeability.

CHARGEABILITY PROFILE EXAMPLE

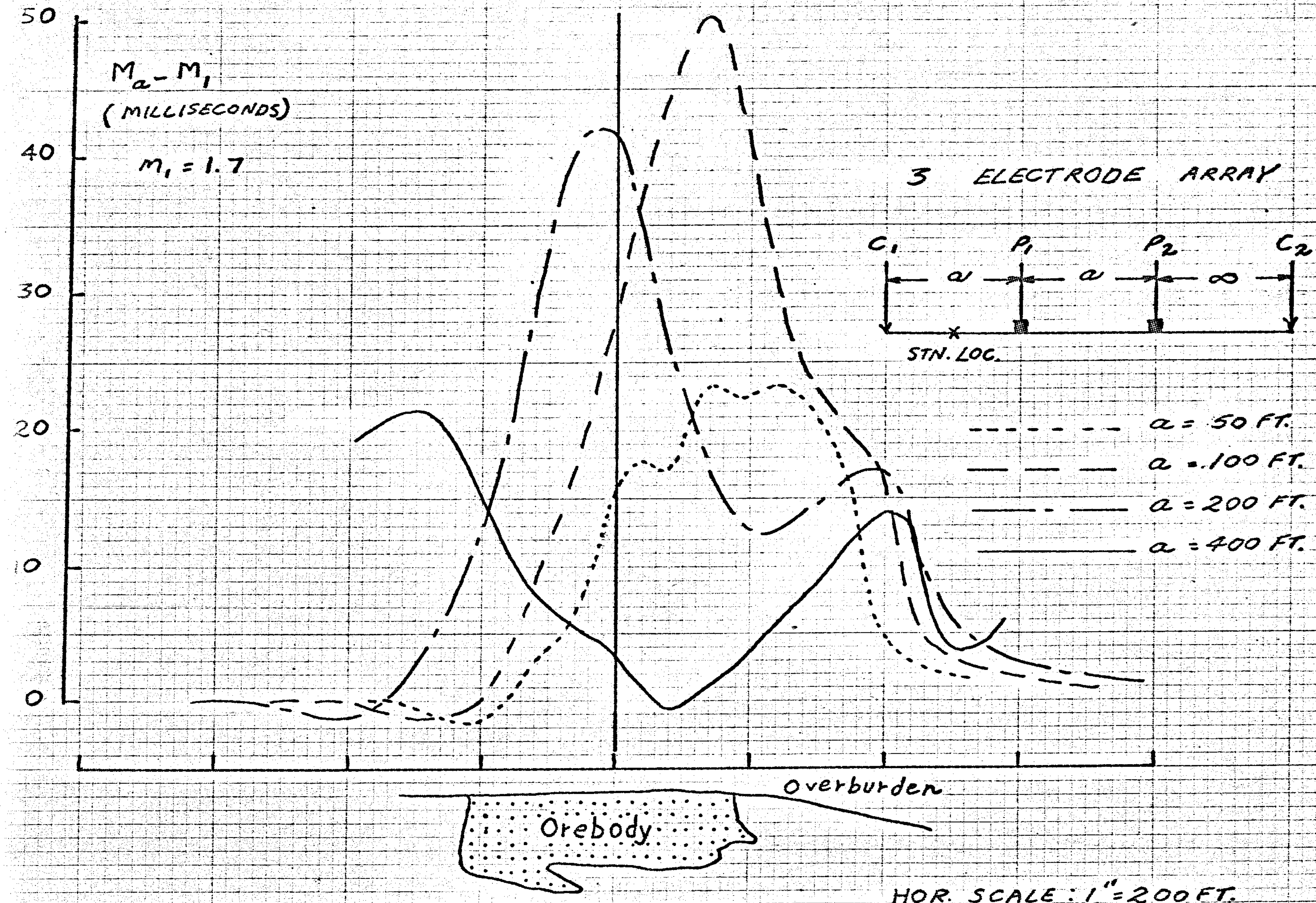


FIG. 4

DISCUSSION OF RESULTS AND INTERPRETATION

B. Discussion of Apparent Resistivity Contour Map

The resistivity portion of the I.P. survey covers a range of values from 105 ohm. meters to 3915 ohm. meters. Areas above 2000 ohm. meters are shown cross-hatched while areas less than 250 ohm. meters are stipled.

Generally, it appears that the apparent resistivity values at the electrode spacing (a = 400 feet) are not entirely representative of bedrock material. The survey has been severely influenced by changes in thickness and conductivity of water bearing glacial cover. Talus slopes offered very poor electrical contact especially around the showing and within the Bone Creek cirque. Highly fractured outcropping rocks also were a problem.

This is also evidenced by a comparison between the resistivity contours and the topographic contours included in Darney's report.

The high resistivity areas are usually coincident with outcropping intrusive rocks at high elevations.

Moderately high resistivities are found over areas thought to be primarily underlain by volcanic rocks covered by shallow overburden at slightly lower elevations.

The eastern most grid area indicates an increasing resistivity gradient with decreasing elevation. This area was almost entirely covered by large blocky talus originating from both intrusive and volcanic rocks to the west.

The low resistivity area (stipled) in the central grid region lies below the main showing between the 4000 foot elevation where there is a break in slope and the Polar Creek gorge. This area is

DISCUSSION OF RESULTS AND INTERPRETATION

B. Discussion of Apparent Resistivity Contour Map (con't)

completely covered by lateral morraine material and talus from the area to the west (see Geology Outcrop map). Much seepage and some swampy ground was observed by the writer through much of this region.

Overburden thicknesses could be up to or even greater than 200 feet between Line 28E to 36E south of the baseline. It is felt that bedrock was not being sampled by the I.P. survey within this area and that the readings observed are primarily a reflection of the physical properties of the overlying material. Low available current prevented the application of wider electrode spacings. In an attempt to get greater depth penetration a traverse incorporating an "a" spacing of 600 feet was made on L 64E. These results were not reliable, however, due to the low resistivity of the ground and the resulting low potentials being measured.

The small high resistivity area centered at L20E, Stn. 10S could be caused by a small intrusive plug.

The 500 ohm. meter contour at the north end of L52E coincides fairly well with a moderately high magnetic area mentioned above and thought to be caused by volcanic remnants in the acidic rocks.

Bone Creek cirque is roughly represented by a range of resistivities between 500 and 1000 ohm. meters.

Resistivities in the main showing area show a small low centered at L 16E, Stn. 0 + 00 and a high at L 20E, Stn. 1 + 00S. No interpretation of these features is here attempted.

Further discussion of the resistivity results are found under the profile and chargeability contour map discussion portions of this report.

C. Discussion of Apparent Chargeability Contour Map

The I.P. survey covered a range of chargeability values from 0.5 to 29.0 msecs. with readings greater than 15 msecs. apparent chargeability (Ma) being considered highly anomalous.

The main showing area contains zones in excess of 1.5% Cu over widths of about 10 feet in shallow trenches. The showing occupies an area of about 300 feet by 200 feet with an average grade of .5% Cu. The Ma response is between 7.5 and 10 msecs.

The general relationship used for calculating sulphide content from chargeability is that the larger the sulphide particles the lower is the chargeability response per volume percent. This yields responses from 10 msecs. per volume percent sulphides for large particles to 50 msecs. for fine-grained pyrite. Corrections for depth, resistivity contrast and background chargeability must be made when using this rule.

Although conditions did not allow for sufficient depth soundings, it is obvious from sulphides observed in the showing area and rock cuts along Polar Creek that this rule does not hold for this property.

The writer feels that a "rule-of-thumb" of 3% metallically conducting sulphides by volume per 10 msecs. apparent chargeability above a background of 5 msecs. is realistic for the property. This means, however, that all areas above 5 msec. Ma could be related to sulphides of possible economic importance. This covers half the survey grid. Thus, other information must be used in conjunction with the I.P. survey to pick areas requiring further investigation.

Various factors such as the presence of faults, dikes, magnetite veins and lenses, changes in the thickness of overburden and volcanics, and intimate and zonal relationships between different types of metallically conducting materials have all contributed to the chargeability texture and readings of the map.

C. Discussion of Apparent Chargeability Contour Map (con't)

A very large, relatively high chargeability area whose lateral dimensions are 2400 by 1600 feet with a peak Ma amplitude of 29 msecs is situated in the southwest quadrant of the grid from the Bone Creek cirque to near the main showing. Maximum vertical elevation relief within the 15 msec. contour is 1000 feet.

The only outcrop noticed within this anomaly was at L10E, Stn 6S. It consisted of pyritized, leached volcanics with minor chalcopyrite. Fresh surfaces were impossible to find.

A definite depression through the center of the anomaly conforms to an interpreted fault as mentioned above. The area to the southeast of this trough coincides with a magnetic low which may be due to increased pyritization or increased thicknesses of talus or change in rock type.

The flexure in the 15 msec. contour in the L4E, Stn. 8S area could be due to the small plug shown on Darney's geology map.

The area bounded by the 15 msec. contour could be underlain by a volume of metallically conducting particles (mainly pyrite) equivalent to 4.5% or greater sulphides by volume.

A slightly smaller yet impressive anomaly staddles Polar Creek and strikes northeasterly through co-ordinates L48E, Stn. 14S.

Gradients and peak amplitudes are similar to the Bone Creek Ma anomaly but the shape is somewhat more elongated.

Outcroppings along Polar Creek within this zone reveal leached pyrite and minor chalcopyrite.

Depths to bedrock on the eastern half of this anomaly vary from 0 feet along Polar Creek gorge to perhaps 20 feet on L64E. The western portion, however is expected to be under up to 100 feet of cover.

C. Discussion of Apparent Chargeability Contour Map (con't)

The small isolated Ma high (ie greater than 15 msec.) at L40E, Stn. 9S could be more deeply covered.

There is a strong suggestion that the two above mentioned anomalies are one and the same feature and that the break between them is due to an overburden and talus filled N-S trending depression in the bedrock. It is difficult to distinguish between the chargeability effects due to thickness of overburden and those due to sulphide content of underlying rocks.

D. Discussion of Profiles

General Comments

Profiles of interesting survey lines are illustrated on Figs. 5-13. Some are shown for only one "a" spacing (ie. 400 feet) while others show multiple electrode spacings.

Included are the magnetometer profiles and the L/M ratios for a = 400 feet which assist the interpreter in determining the type of conductive material, particle size and electromagnetic transients due to highly conductive geologic units. The L/M ratios are only valid or useful over anomalous chargeability segments of the profiles.

Line 4W (Fig. 5)

This line was surveyed in an attempt to close off the high Ma values observed on adjacent Line O. No magnetic readings were taken. A peak Ma of 23 msecs. occurs at Stn. 16 + 50 for a = 400 feet. The profile indicates a steep gradient to the north of this peak suggesting that the causative source is abruptly terminated on this side or is dipping to the south. The lower, broader peak on the a = 200 feet profile suggests that the causative source is at least 100 feet deep at this point. The subtle northerly shift of the nearer surface profile supports the theory of a southerly dip.

D. Discussion of Profiles

Line 4W (con't)

The L/M ratio plot indicates the presence of medium to large grained sulphides between Stn. 21S and 11S along this line.

The resistivity profiles are not very helpful. The fluctuations in the a = 200 feet profile are interpreted as being caused by the hummocks and talus slopes within the cirque. The ρ a highs conform to the hummocks composed of gravels and talus of very low water content. A background level of msecs. is assigned to this line.

Line O (Fig. 6)

The anomalous Ma readings were not closed off to the south. There is a constant build up in chargeability from Stn. O (5 msecs.) to Stn. 14S where a peak of 29 msecs. occurs in the center of the cirque. This peak is coincident with a magnetic dipolar anomaly indicating a fault at Stn. 13 + 50S.

The magnetic profile exhibits a high of 4540 gammas (see magnetometer survey values map) at Stn. 1N and a shoulder of about 2400 gammas to the north. Magnetite has been observed on the surface in this area. The positive L/M ratios and high resistivities all point to the cause as being due to two subparallel steeply dipping sheets of magnetite.

The L/M ratios over the more favourable sulphide section of the line between Stn. 4S and 18S indicate medium sized conducting particles.

D. <u>Discussion of Profiles</u>

<u>Line 4E</u> (Fig. 7)

These profiles are similar to those of Line O. The maximum chargeability of 21 msecs. is found further south at Stn. 20S, however. The peak of 29 msec. on Line O is thought to be related to the southern most peak (Stn. 12S) of a broad bi-model hump between Stns. 4S and 16S. Again one sees the magnetic dipolar signature indicating a fault at Stn. 15S.

The high magnetic amplitudes, positive L/M ratios and high resistivities illustrate the continuance of the magnetite zone from Line O.

Sulphides could be present with magnetite at Stn. 16N on this line.

<u>Line 8E</u> (Fig. 8)

This line is similar to Lines O and 4E and therefore discussion is brief.

The Ma peak of 19 msecs at Stn. 8S is related to the peaks on L4E, Stn 12S and on Line O, Stn. 14S.

The L/M ratio profile is only valid south of the baseline.

<u>Line 12E</u> (Fig. 9)

Two "a" spacings were carried out over the south portion of this line. The chargeability profile for a = 400 feet has changed somewhat from those discussed above. The peak has shifted considerably from the topographic low of the cirque to higher up the slope nearer the showing. The best likelihood for sulphides exists between Stn. 3S and 16S with zones of magnetite occuring at 4 + 50S and 9 + 00S. Sulphide content increases with depth. The southern most fault crosses this line at Stn. 20S.

D. Discussion of Profiles

Line 16E (Fig. 10)

On a broad chargeability gradient increasing to the south is a small chargeability peak of 17.5 msecs. at Stn. 6S. It is thought to be the eastern merging of the two peaks mentioned on Line 12E.

A contact zone between Stn. 1N and 12N is indicated primarily by the magnetic profile.

Line 20E (Fig. 11)

The chargeability profile for a = 400 feet shows a gentle rise in values from 0.5 msecs. at Stn. 12N to a high of 16.5 msecs. at Stn. 16S.

Some detail with an "a" spacing of 200 feet was carried out over the trenches of the main showing but delineation of the mineralized zones was still disappointing. Two subtle Ma bumbs and ρa troughs at Stn. 1S and Stn. 3S coincide with magnetic highs.

Another very small peak on the a= 400 feet profile at Stn. 4N could be related to magnetite.

The higher level of chargeability of the a = 400 feet profile suggests improvement of sulphide content with depth. The magnetic peaks suggest that the magnetite exists as thin, near-vertical sheets at this line.

Other veins or sheets of magnetite are likely present at Stns. 9S, 14S, and 18S. The magnetic profile also suggests a change in rock type or contact at Stn. 5S.

D. Discussion of Profiles

Line 56E (Fig. 12)

This line was run using three "a" spacings in an attempt to determine the cause of the excellent high chargeability - low resistivity relationship at Stn. 8S found on the reconnaissance spacing. of a = 400 feet.

The detail indicated that this inverse relationship only existed for this spacing. The a = 100 feet profile exhibits a direct correspondence between Ma and ρa. These observations are more clearly seen in the expander graphs. There also appears to be a very close relationship between the gamma values and chargeability between Stn. 10S and Stn. 3S suggesting a contact metamorphic environment.

There is a strong possibility that the Ma profile for a = 400 feet is "double-peaking" and that the causative source lies centered at Stn. 9S. The resistivity survey does not lend much support to this possibility however. The profiles indicate the existance of narrow, shallow magnetite veins or sheets. Sulphides are suspected to be present at depth between Stns. 6S and 13S as evidenced by the L/M ratios.

Another explanation for this complex picture is that there are two different rock types present such as thin-layered volcanics overlying intrusive rocks or an older volcanic sequence.

A narrow magnetic dike-like feature appears to Stn. 16N. The broader peak between Stn. 5N and 11N is thought to be the magnetic expression of volcanic remnants.

D. Discussion of Profiles

Line 64E (Fig. 13)

A clearer profile picture is seen on this line. Conducting material, mainly sulphides is interpreted as improving with depth and lying between the volcanic-intrusive contact at Stn. 3S and a fault at Stn. 12S. Less magnetite is suspected here than on Line 56E.

The magnetic peak at 1 + 50N is related to the peak on Line 56E at Stn.0.

The fall-off in chargeability on the a= 600 feet could be due to a bottoming-out of the causative source or because a large volume of rock is being sampled at this spacing and, hence, a mineralized portion is being integrated over the whole volume thus diminishing its apparent effect.

Sulphides could be present from Stn. 3N to Stn. 22S on this line although the best target is at Stn. 8S.

E. Discussion of Expanders

Segments of maximum chargeabiltiy on Lines 56E and 64E were plotted on 2-cycle log-log paper in an attempt to determine degree of continuity of conducting material with depth (ie. changes in electrode separation) and to observe the relationship between resistivity and chargeability.

Line 56E Expander

This graph shows an inverse relationship between Ma and ρa. The high Ma for a = 100 feet is probably due to near-surface ,narrow bands of magnetite whereas the wider electrode spacing (a = 400 feet) could reflect sulphides at 300 to 400 foot depths.

E. *Discussion of Expanders*

Line 56E Expander (con't)

Had there been a 600 foot electrode spacing traverse, the curves would more closely resemble those on line 64E.

Line 64E Expander

This graph indicates a general increase in conductive material with depth and a slight decrease over 400 feet deep. Resisitivity is lowest over the deeper sections.

There is an excellent possibility that 6% sulphides by volume could be encountered at a depth of 250 feet at Stn. 8S on this line.

CONCLUSIONS AND RECOMMENDATIONS

The Induced Polarization survey has indicated that a very substantial portion of the Pyrrhotite Creek grid is underlain by a large volume of metallically conducting material.

A study of the I.P. data in conjunction with the ground magnetics, geology, and geochemistry, suggest that the property has many of the characteristics indicative of a "porphyry"- type copper deposit.

Although minerals including magnetite and specular hematite can give rise to I.P. responses and have been observed on the property, it is felt that the region delineated by the 7.5 msec. chargeability contour is underlain primarily by sulphide-bearing rocks. These sulphides are likely to be zonally related pyrite and chalcopyrite with mainly pyrite occupying areas of highest chargeabilities.

Surface investigations indicate that although many of the high chargeability areas are covered by overburden, the conductive rocks are mainly volcanics and that the highest readings appear to be 500 to 1200 feet from the volcanic-intrusive contact.

A gradational contact in some regions, thinning of the volcanics and presence of xenoliths, and intrusive dikes and plugs have made interpretation difficult. Groundwater movements, variations in overburden and volcanic thicknesses, talus slopes, topographic, and other unknown factors have influenced the survey results.

The coincidence of relatively low apparent chargeabilities over the showing where assays of .5% Cu (in chalcopyrite) are observed is perplexing. A possible explanation for this phenomenum is that there is a preferred orientation of mineralization along certain fractures, that the average particle size of the sulphides is large, and that little mineralization is homogenously disseminated throughout the rock as a whole

CONCLUSIONS AND RECOMMENDATIONS (con't)

in the showing area. From these assumptions which are based on the profile and expander analysis as well as geological observations, a "rule-of-thumb" that an I.P. response of 10 msecs. above background is caused by 3% by volume equivalent metallically conducting sulphides is postulated for the property.

It is therefore recommended that the primary area of further investigation by drilling lies between the 7.5 msec. and the 17.5 msec. chargeability contours between L16E and L44E. Depths of overburden and extent of bedrock leaching could place the target 200 feet deep. The remaining areas above the 7.5 msec. contour must also be tested by drilling. The drilling program must be sufficiently large so as to test all anomalous conditions to a depth of at least 300 feet. A tentative initial drill program has been laid out on the compilation map of the Geological report.

After the first few holes are drilled, a re-examinations and re-interpretation should be made of all data. If more I.P. is contemplated it should include some depth soundings over presently anomalous areas concurrent with the drilling which should assist in spotting of drill holes. Test I.P. traverses at various bearings should be made to determine optimum line direction for the profiling and depth sounding. The present grid lines should be extended to the south and the chargeability anomalies closed off to background levels. These extensions should also be soil sampled and analyzed for copper.

Structure could be an important control of mineralization and therefore a second vertical derivative calculation of the magnetic data is advised. The resulting map and interpretation could also assist in locating drill sites.

CONCLUSIONS AND RECOMMENDATIONS (con't)

A terrain correction of the magnetics might also be of value although the depth of bedrock must be assumed to be constant or corrected for when using this technique.

Respectfully submitted,

P. P. Nielsen, B. Sc., Geophysicist

G. C. Gutrath, B. Sc., P. Eng, Geologist

ATLED EXPLORATION MANAGEMENT LTD.
VANCOUVER, B. C.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. C. GUTRATH

EQUISPACED 3-ELECTRODE EXPANDERS

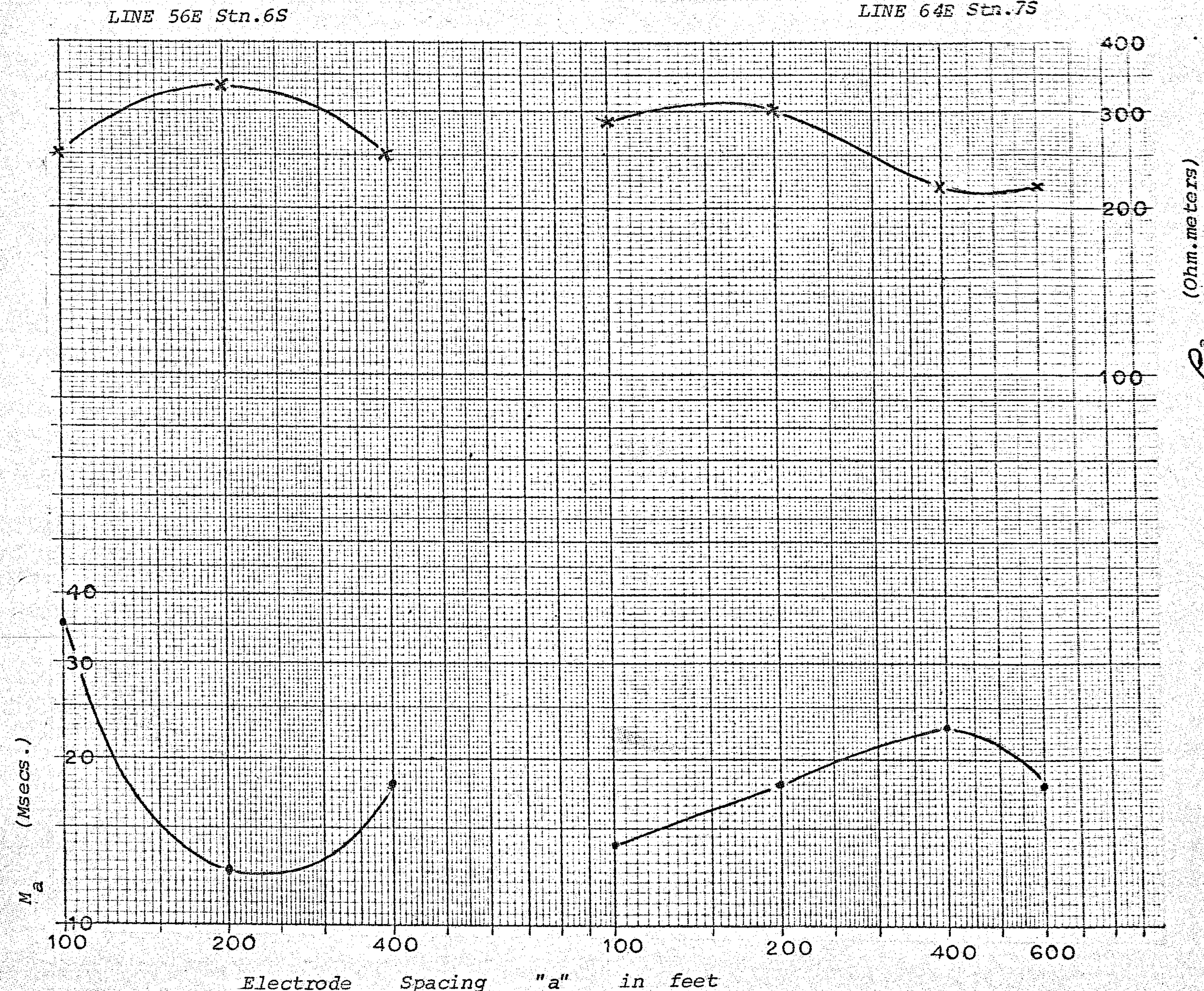


FIG. 14

APPENDIX I

LIST OF CLAIMS

GO - G GROUP # 740 (Suppliment)

The following listing is an attachment to the department of Mines and Mineral Resources Form B:

Affidavit on Application for Certificate of Work as submitted by R. E. Davis.

Name of Claim	Record Number	No. of Claims
Bone 1	17557	1
3	17559	1
5	17561	1
7	17563	1
G 1 - 20	13645K-13664K	20
Car 1 - 16	16332E-16347E	16
		40 claims

CU CLAIM GROUP ONE - #767

The following listing is an attachment to the department of Mines and Mineral Resources Form B:

Affidavit on Application for Certificate of Work as submitted by R. E. Davis.

Name of Claim	Record Number	No. of Claims
GO 101-108	15661H-15668H	8
86	15646H	1
88	15648H	1
90	15650H	1
92	15652H	1
94	15654H	1
96	15656H	1
98	15658H	1
100	15660H	1
CU 37	14357R	1
39	14359R	1
41	14361R	1
43	14363R	1
45	14365R	1
47	14367R	1
57-64	14377R-14384R	8
73-80	14383R-14400R	8
89	14409R	1
90	14410R	1
		40 claims

CU CLAIM GROUP TWO #768

The following listing is an attachment to the department of Mines and Mineral Resources Form B:

Affidavit on Application for Certificate of Work as submitted by R. E. Davis.

Name of Claim	Record Number	No. of Claims
GO 85	15645H	1
87	15647H	1
89	16549H	1
91	16551H	1
93	16553H	1
95	16555H	1
97	16557H	1
99	16559H	1
CU 38	14358R	1
40	14360R	1
42	14362R	1
44	14364R	1
46	14366R	1
48	14368R	1
21-32	14341R-14352R	12
3-16	14323R-14336R	14
		40 Claims

APPENDIX II

Personnel & Costs (Geophysical)

"Go -G" Group #740 (supp)
Cu Group One #767
Cu Group Two #768

SEASON 1971

PROJECT MANAGEMENT EXPENDITURE

L. Basher (camp manager)	85 days @ $60/day	$ 5100.00
W. Carlick (cook)	92 days @ $45	$ 4140.00
W. Waterman	61 days @ $35	2135.00
M. Cloutier	30 days @ $60	$ 1800.00
Meals	268 days @ $10/day	$ 2680.00
Camp Equipment & Camp Rentals		$ 3968.69
Communications		$ 1208.51
Mobilization		$ 3577.93
Helicopter		$11318.72
Fixed-wing Aircraft		$ 6010.70
Travel		$ 5812.78
Diesel Fuel		$ 3150.00
Office Supplies & Field Supplies		$14033.35
	Contingencies . .	$16,615.28
	TOTAL	$81,550.96

GEOLOGICAL

OVERALL SUPERVISION

G. Gutrath	$ 2,465.50
P. Sevensma	10,521.45

FIELD SUPERVISION GEOLOGICAL MAPPING

R. Darney	
July 1/71 - Sept 30/71 87 days @$90/day	$ 7,830.00
C.K. Ikona	
Aug. 15/71 - Sept. 30/71 37 days @$90/day	3,330.00
J. Burdette	
July 1/71 - Sept. 30/71 85 days @$50/day	4,250.00
Meals 209 days @ $10/day	$ 2,090.00

MAPS & REPORT PREPARATION

R. Darney	
7 days @ $65/day	$ 455.00
C.K. Ikona	
7 days @ $65/day	455.00
TOTAL	$31,396.95

GEOCHEMICAL

FIELD SAMPLING & SUPERVISION

D. Hopper	
84 days @ $50/day	$ 4,200.00

LINE CUTTING

E. Etzeoza	37 days		$ 1,665.00
R. Carlick	30 days		1,350.00
L Carlick	61 days	@ $45/day	2,745.00
H. Vance	30 days		1,350.00
I. Quock	23 days		1,035.00
Meals	265 days	@ $10/day	$ 2,650.00

SOIL SAMPLE ANALYSIS $ 3,793.37

TOTAL	$18,788.37

GEOPHYSICAL

GROUND MAGNETOMETER SURVEY

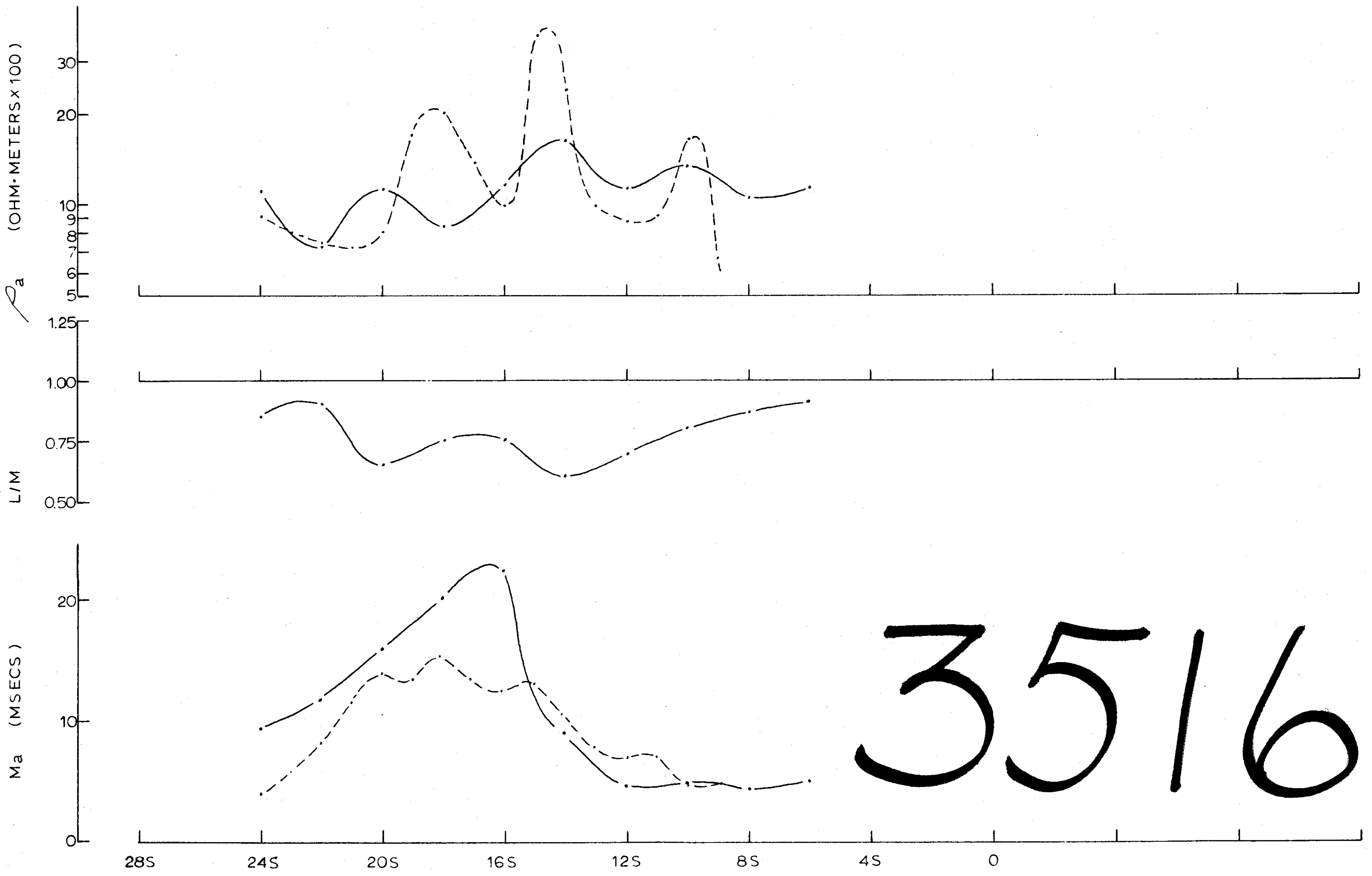
Alan Chard Atled Exploration Management Ltd.	$ 2,814.50

I.P. SURVEY

P. Nielsen (Geophysicist) Atled Exploration Management Ltd.	$ 8,195.00
TOTAL . . .	$11,009.50

PHYSICAL

C. VerWilghen	78 days	
J. O'Neil	30 days	
	108 days @ $65/day	$ 7,020.00
D. Davis	92 days	
	46 days	
	138 days @ $30/day	$ 4,140.00
Meals	246 days @ $10/day	$ 2,460.00
	TOTAL . . .	$13,620.00
	GRAND TOTAL . . .	$156,365.78



3516 M-3

PROFILES - LINE 4 W

LEGEND

APPARENT RESISTIVITY = Pa.

APPARENT CHARGEABILITY = Ma

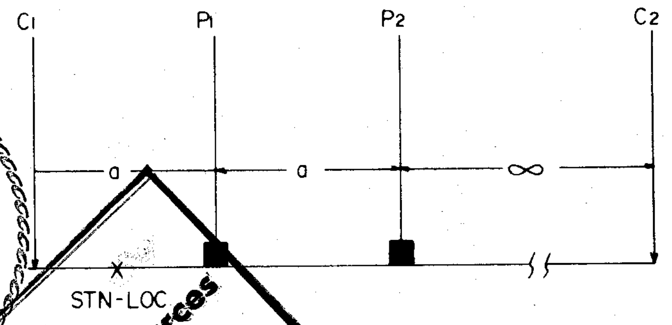
"a" = 100 FEET

"a" = 200 FEET

"a" = 400 FEET

"a" = 600 FEET

VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)



ELECTRODE ARRAY

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. C. GUTHRATH

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 3516 MAP #3

SKYLINE EXPLORATIONS LIMITED (N.P.L.)

GO MINERAL CLAIMS

PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

400 0 400

SCALE IN FEET

TO ACCOMPANY REPORT BY :-

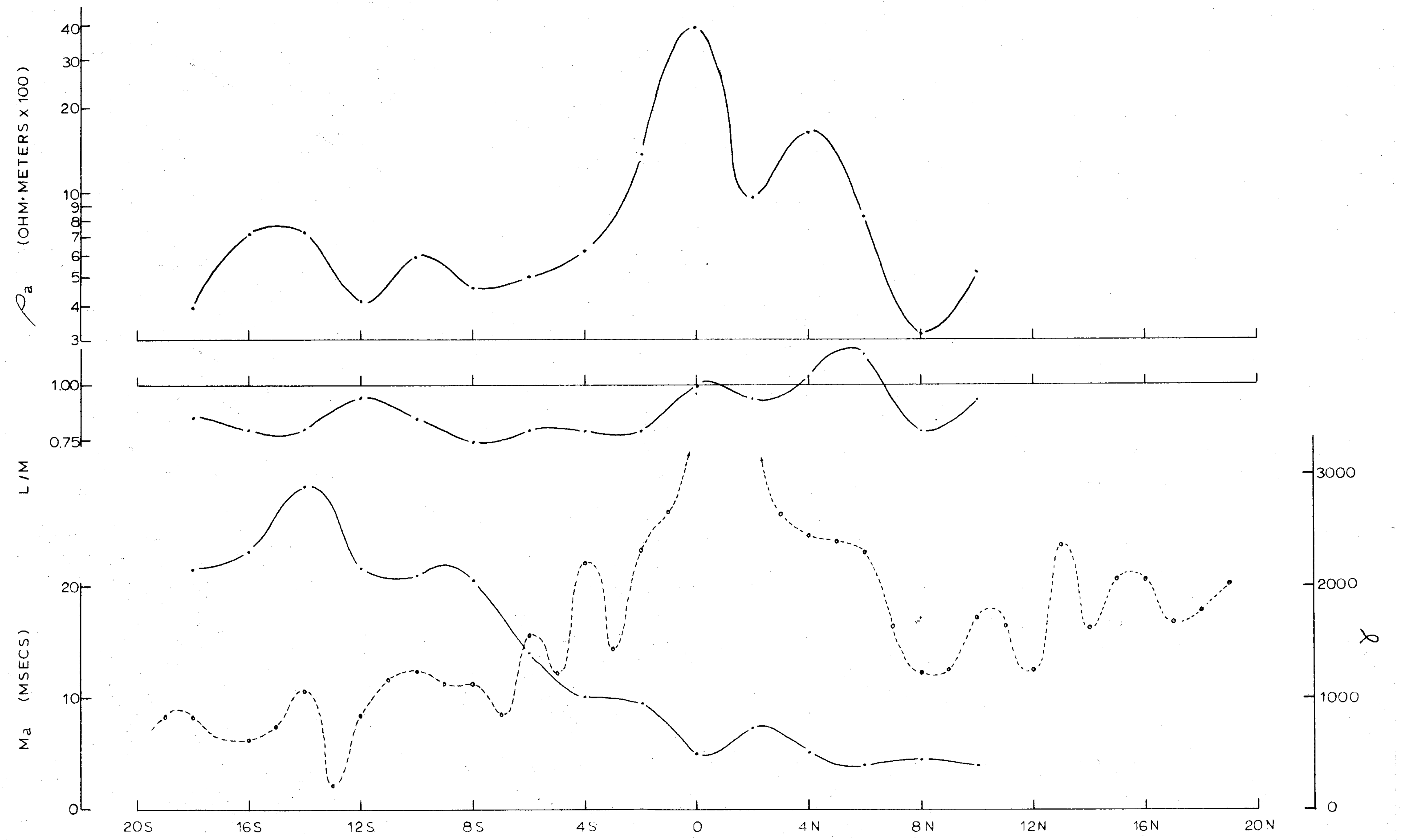
P.P. NIELSEN, B.Sc., GEOPHYSICIST

G.C. GUTHRATH B.Sc., PENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.

VANCOUVER B.C. NOV 1971

FIG. 5



PROFILES - LINE 0 E

LEGEND

APPARENT RESISTIVITY = Pa
APPARENT CHARGEABILITY = Ma
"a" = 100 FEET
"a" = 200 FEET
"a" = 400 FEET
"a" = 600 FEET
VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)

C1 P1 P2 C2
a a
x
STN-LOC

3 - ELECTRODE ARRAY

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. C. GUTRATH

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #4

SKYLINE EXPLORATIONS LIMITED (N.P.L.)
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

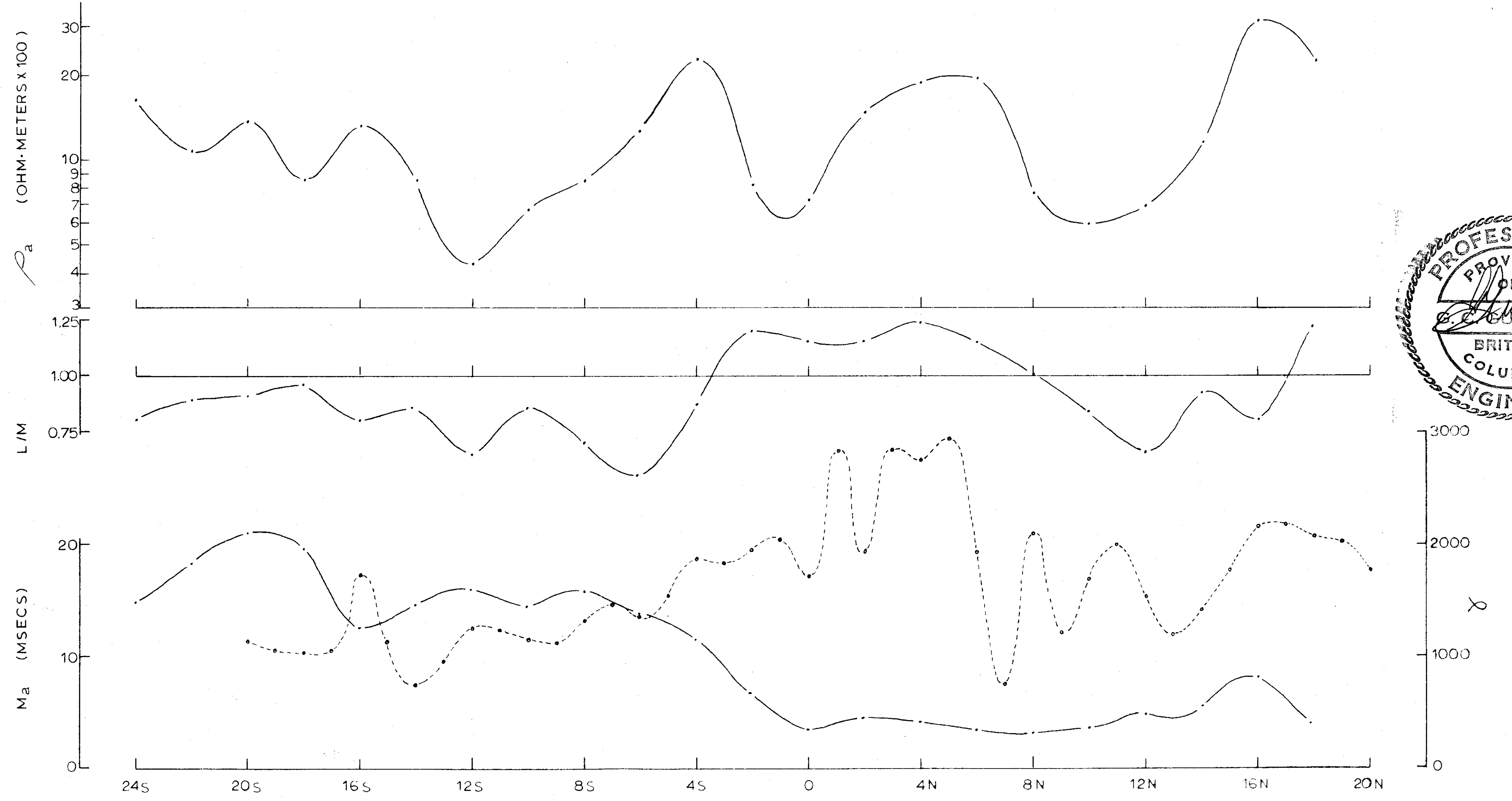
400 0 400
SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P P NIELSEN, B Sc, GEOPHYSICIST
G C GUTHRATH B Sc, PENG, GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.
VANCOUVER B C NOV 1971

FIG. 6



PROFILES - LINE 4 E

LEGEND

APPARENT RESISTIVITY = Pa
APPARENT CHARGEABILITY = Ma
"a" = 100 FEET
"a" = 200 FEET
"a" = 400 FEET
"a" = 600 FEET
VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)

C1 P1 P2 C2
a a ∞
X
STN-LOC
3 - ELECTRODE ARRAY

SKYLINE EXPLORATIONS LIMITED (N.P.L.)
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

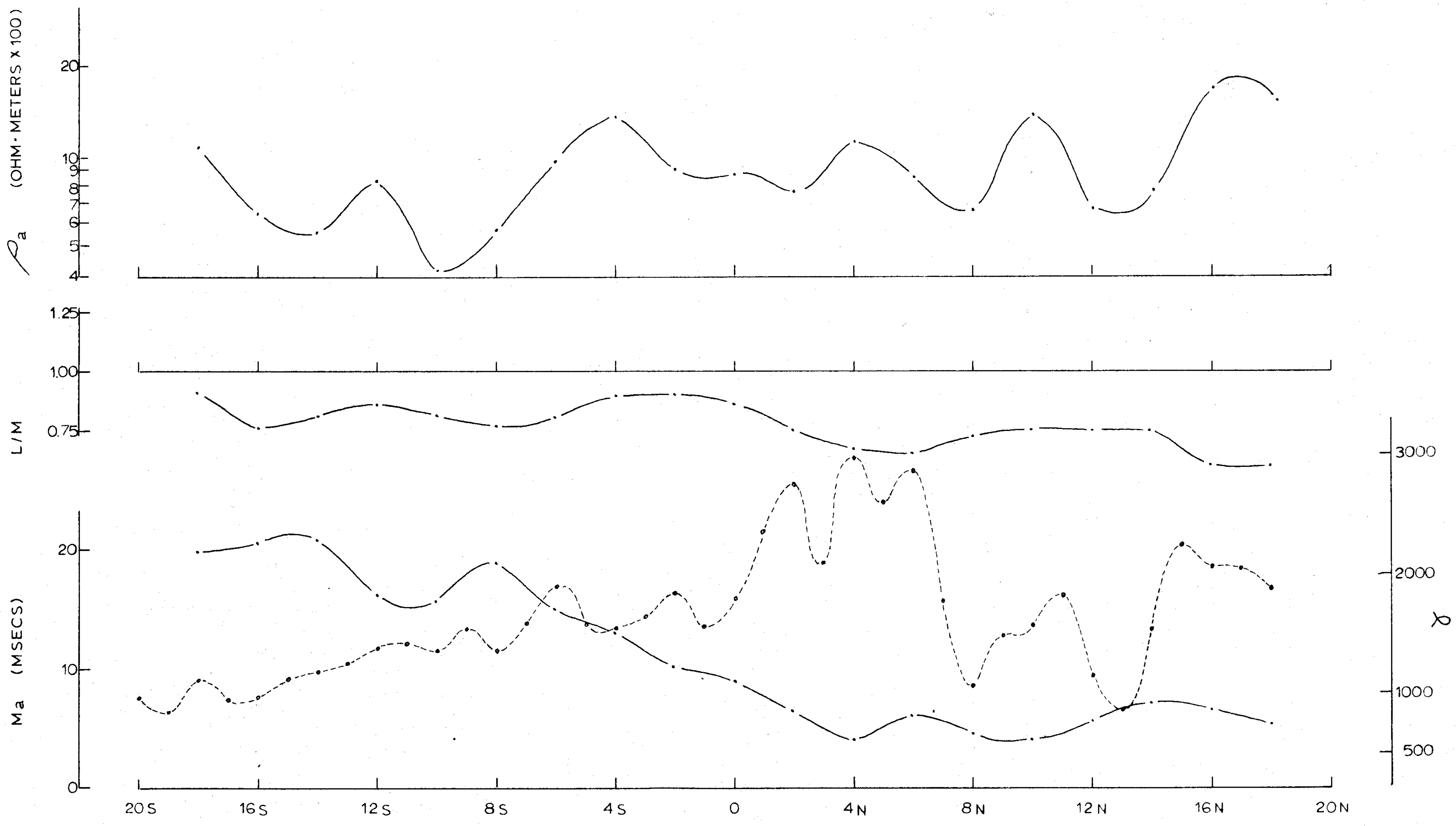
400 0 400
SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P.P. NIELSEN, B.Sc., GEOPHYSICIST
G.C. GUTHRATH B.Sc., P.ENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.
VANCOUVER B.C. NOV 1971

FIG. 7



PROFILES - LINE 8 E

LEGEND

APPARENT RESISTIVITY = Pa

APPARENT CHARGEABILITY = Ma

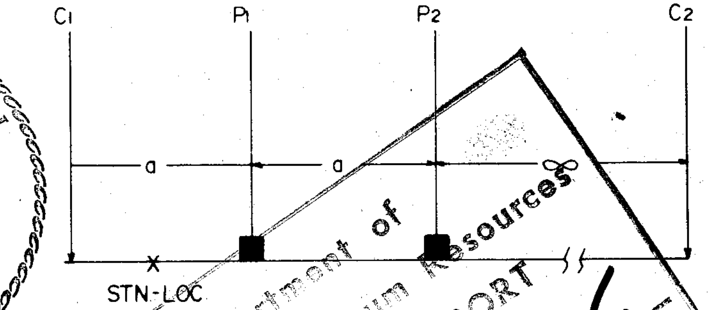
"a" = 100 FEET

"a" = 200 FEET

"a" = 400 FEET

"a" = 600 FEET

VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)



3 - ELECTRODE ARRAY

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. C. GUTHRATH

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 3516 MAP #6

SKYLINE EXPLORATIONS LIMITED (N.P.L.)

G MINERAL CLAIMS

PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

400 0 400

SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P.P. NIELSEN, B.Sc., GEOPHYSICIST

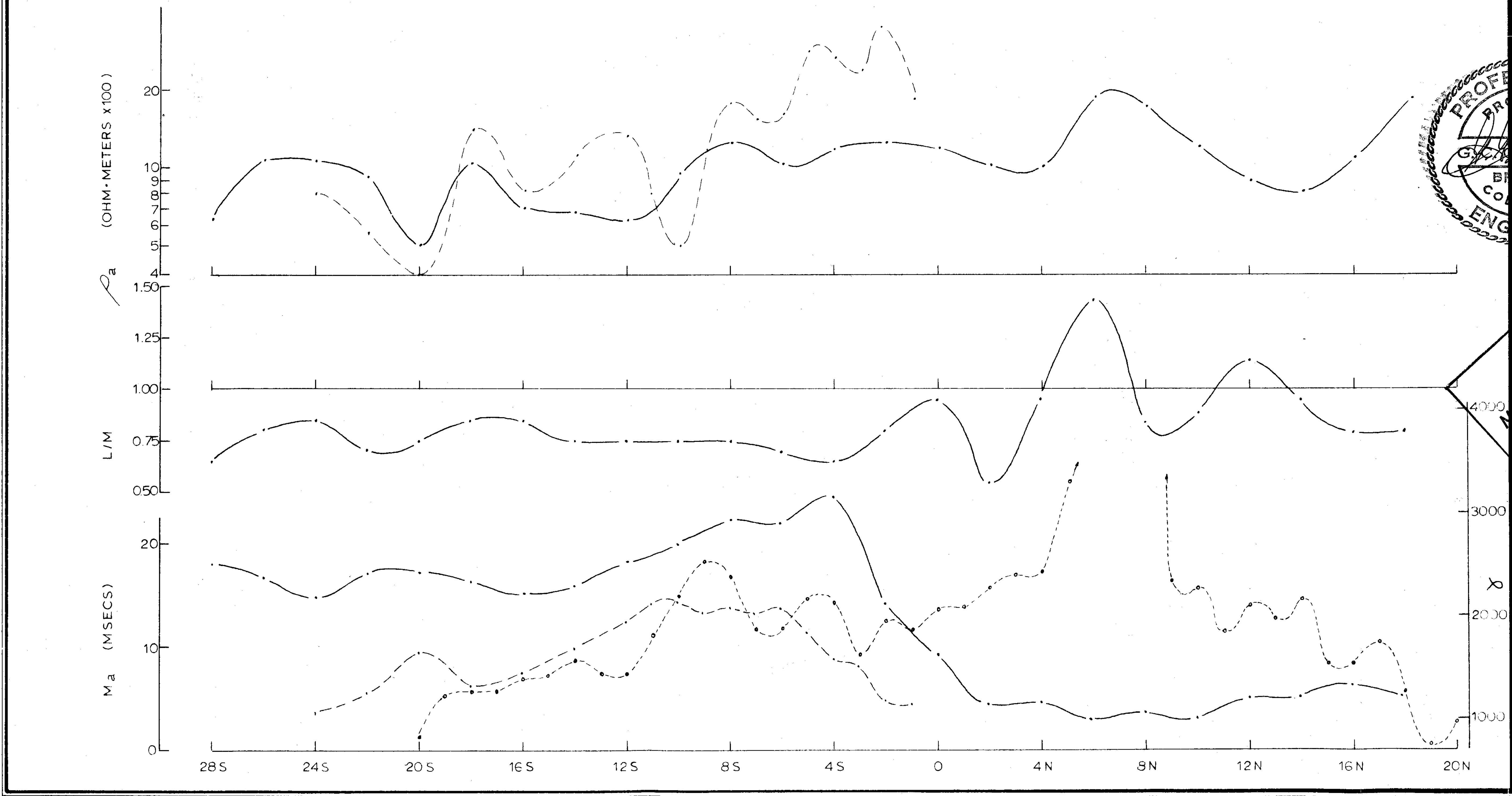
G.C. GUTHRATH B.Sc., PENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.

VANCOUVER B.C.

NOV. 1971

FIG. 8



PROFILES - LINE 12 E

LEGEND

APPARENT RESISTIVITY = Pa.
APPARENT CHARGEABILITY = Ma
"a" = 100 FEET
"a" = 200 FEET
"a" = 400 FEET
"a" = 600 FEET
VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)

C1 P1 P2 C2
a ∞
STN-LOC

3 - ELECTRODE ARRAY

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G.C. GUTHRATH

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 3516 MAP #7

SKYLINE EXPLORATIONS LIMITED (N.P.L.)
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

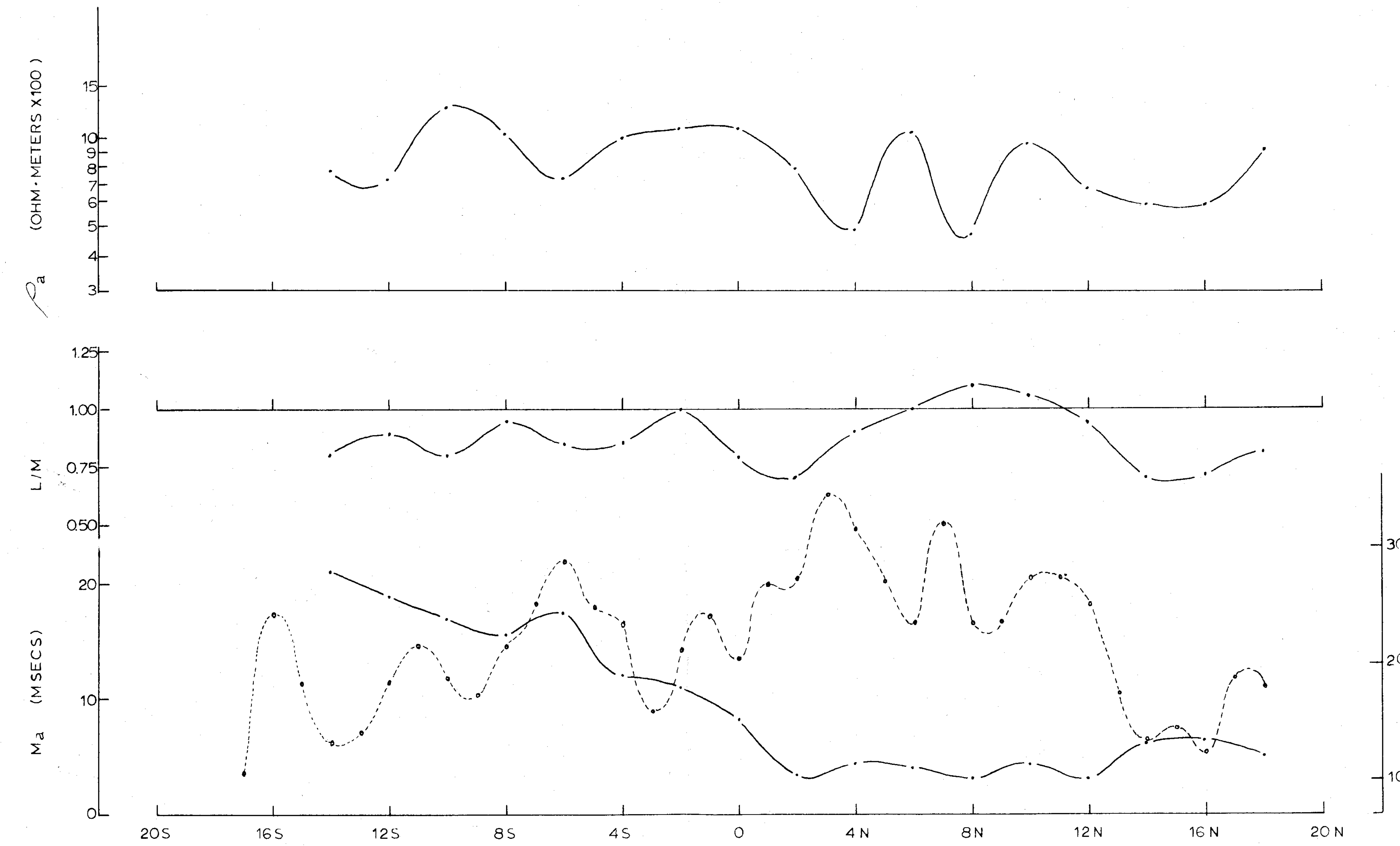
400 0 400
SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P.P. NIELSEN, B.Sc., GEOPHYSICIST
G.C. GUTHRATH B.Sc., P.ENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD
VANCOUVER B.C. NOV 1971

FIG. 9



PROFILES - LINE 16 E

LEGEND

APPARENT RESISTIVITY = Pa

APPARENT CHARGEABILITY = Ma

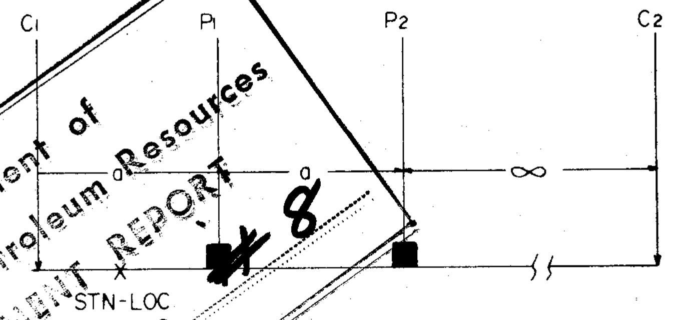
"a" = 100 FEET

"a" = 200 FEET

"a" = 400 FEET

"a" = 600 FEET

VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)



3 - ELECTRODE ARRAY

SKYLINE EXPLORATIONS LIMITED (N.P.L.)

GO MINERAL CLAIMS

PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

400 0 400

SCALE IN FEET

TO ACCOMPANY REPORT BY :-

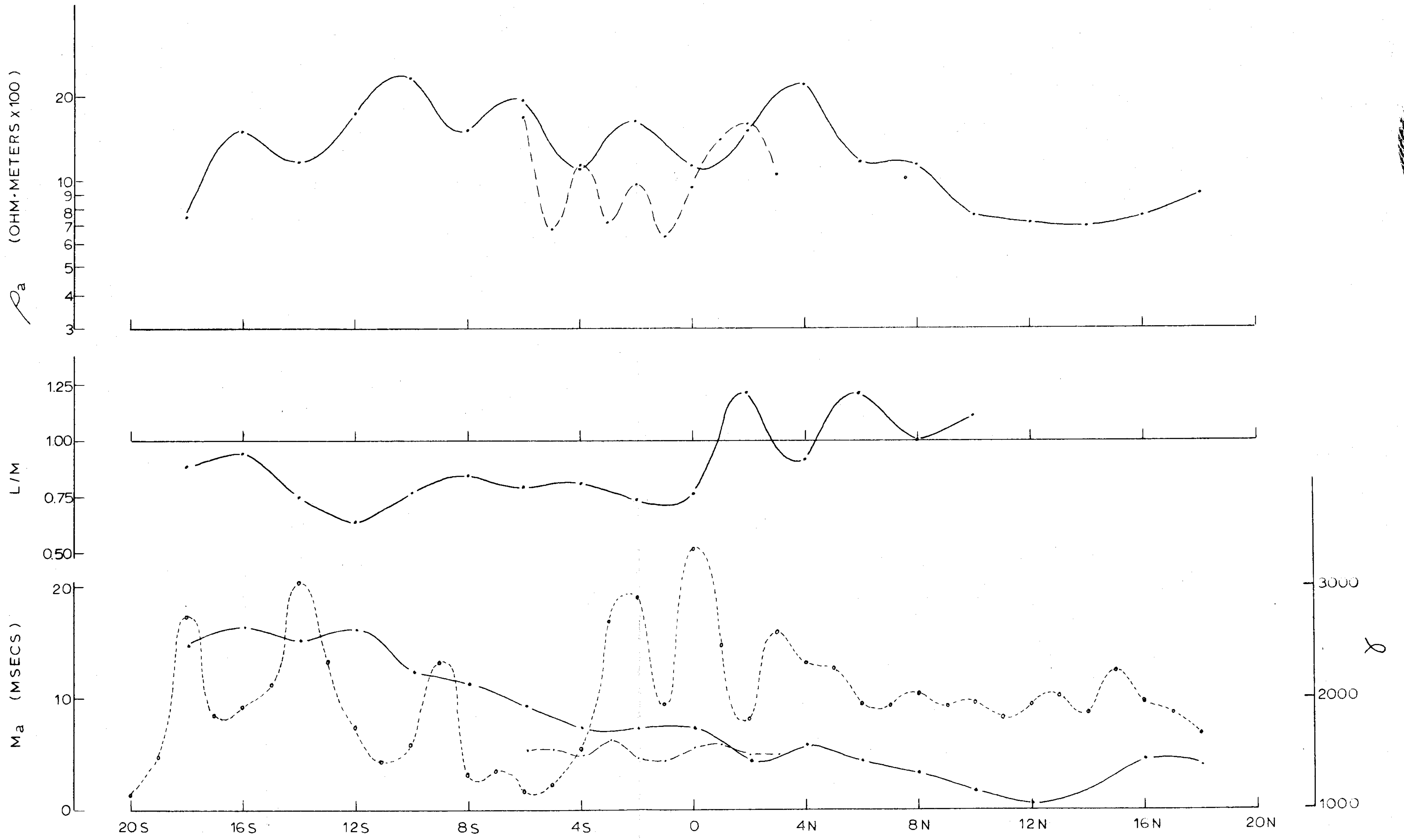
P.P. NIELSEN, B.Sc, GEOPHYSICIST

G.C. GUTHRATH B.Sc, P.ENG, GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.

VANCOUVER B.C. NOV 1971

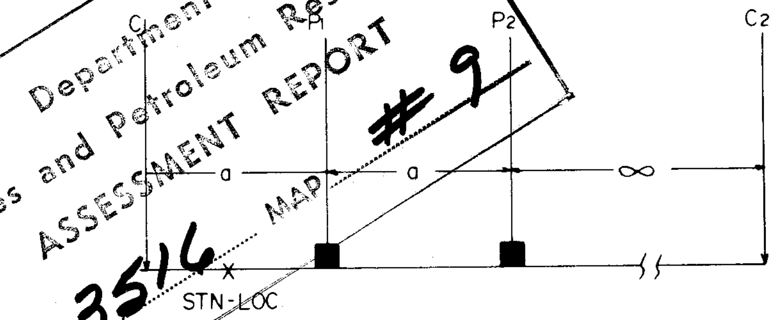
FIG. 10



PROFILES- LINE 20 E

LEGEND

APPARENT RESISTIVITY = Pa.
APPARENT CHARGEABILITY = Ma
"a" = 100 FEET
"a" = 200 FEET
"a" = 400 FEET
"a" = 600 FEET
VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)



3 – ELECTRODE ARRAY

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G. C. GUTHRATH

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #9

SKYLINE EXPLORATIONS LIMITED (N.P.L.)
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

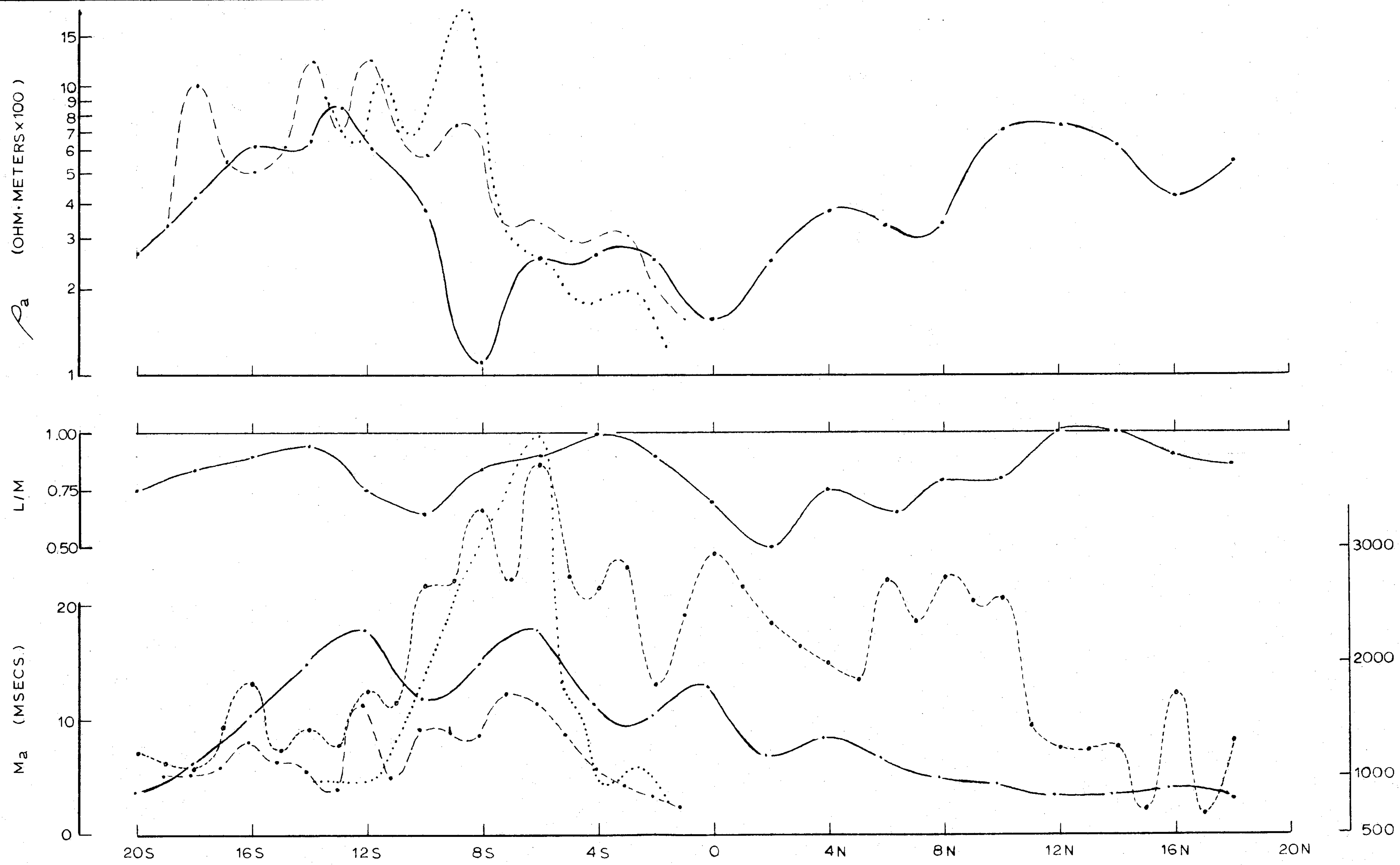
400 0 400
SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P.P. NIELSEN, B.Sc., GEOPHYSICIST
G.C. GUTHRATH B.Sc., P.ENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD
VANCOUVER B.C. NOV 1971

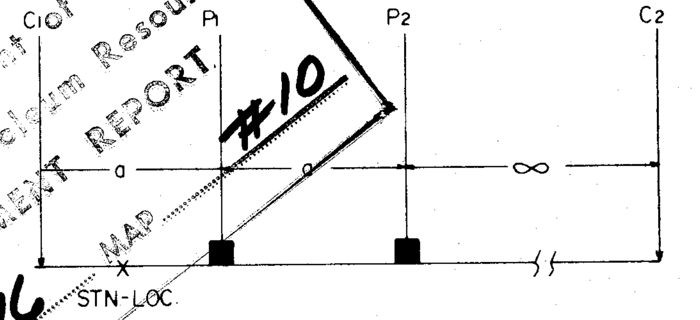
FIG. 11



PROFILES - LINE 56E

LEGEND

APPARENT RESISTIVITY = Pa
APPARENT CHARGEABILITY = Ma
"a" = 100 FEET
"a" = 200 FEET
"a" = 400 FEET
"a" = 600 FEET
VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)



3 - ELECTRODE ARRAY

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. C. GUTHRATH

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #10

SKYLINE EXPLORATIONS LIMITED (N.P.L.)

GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

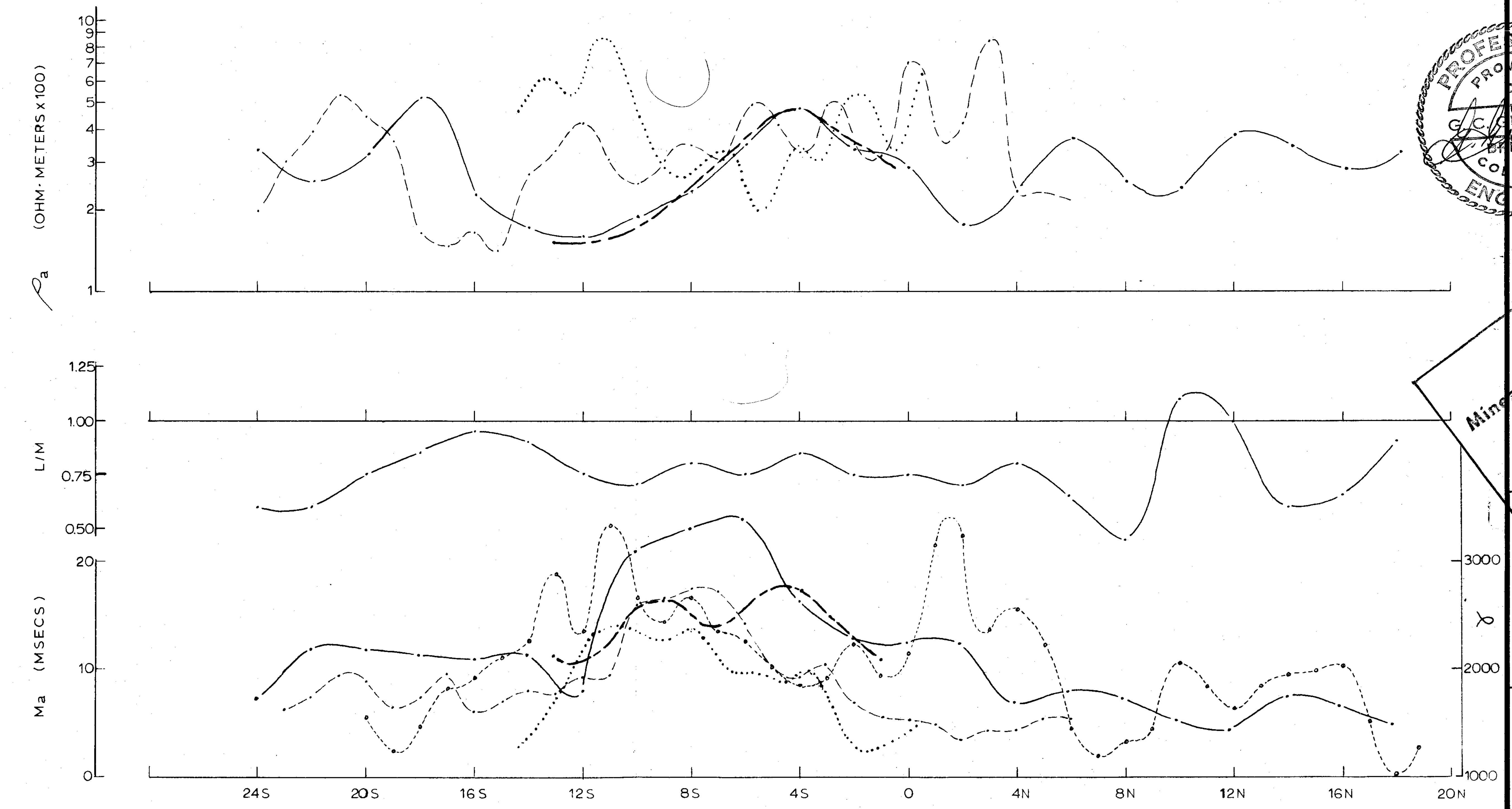
400 0 400
SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P.P. NIELSEN, B.Sc., GEOPHYSICIST
G.C. GUTHRATH B.Sc., P.ENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.
VANCOUVER B.C. NOV 1971

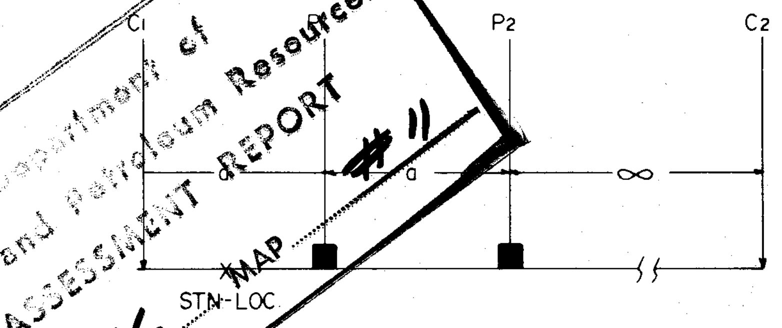
FIG-12



PROFILES - LINE 64E

LEGEND

APPARENT RESISTIVITY = Pa
APPARENT CHARGEABILITY = Ma
"a" = 100 FEET
"a" = 200 FEET
"a" = 400 FEET
"a" = 600 FEET
VERTICAL MAGNETIC INTENSITY IN GAMMAS (γ)



3 - ELECTRODE ARRAY

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G.C. GUTHRATH

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #11

SKYLINE EXPLORATIONS LIMITED (N.P.L.)

GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID

INDUCED POLARIZATION SURVEY

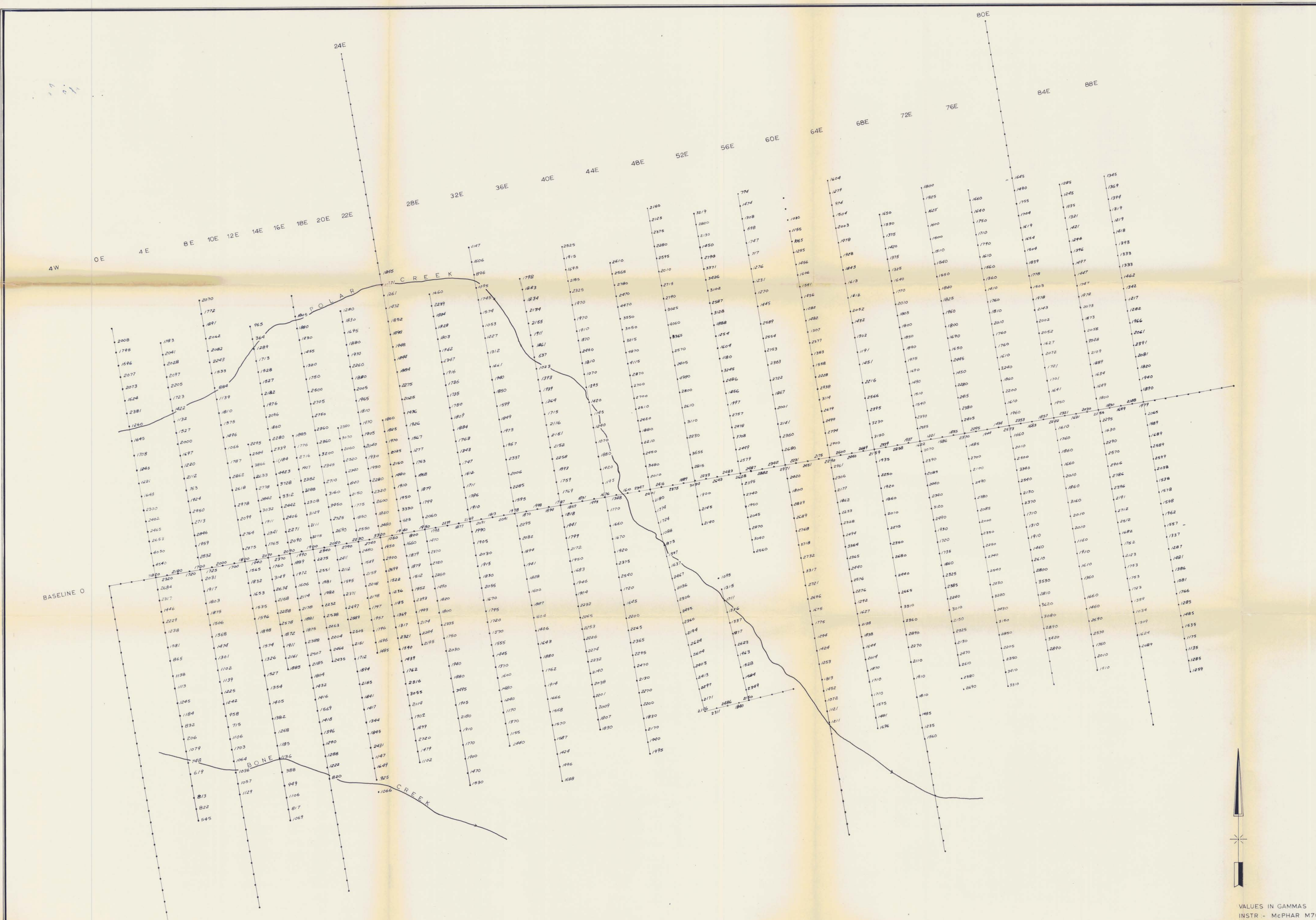
400 0 400
SCALE IN FEET

TO ACCOMPANY REPORT BY :-

P.P. NIELSEN, B.Sc., GEOPHYSICIST
G.C. GUTHRATH B.Sc., P.ENG., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.
VANCOUVER B.C. NOV. 1971

FIG. 13



PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #12

P. A. Nielsen

SKYLINE EXPLORATIONS LIMITED

VANCOUVER, B.C.

GO MINERAL CLAIMS

PYRRHOTITE CREEK GRID

MAGNETOMETER SURVEY

VALUES MAP

ATLIN MINING DIVISION — N.T.S. 104-J-4

ATLED EXPLORATION MANAGEMENT LIMITED

DATE - SEPTEMBER 1971 — DRAWN BY :- R.J.D.

400 0 400 800
Scale in feet

VALUES IN GAMMAS
INSTR. - McPHAR M700

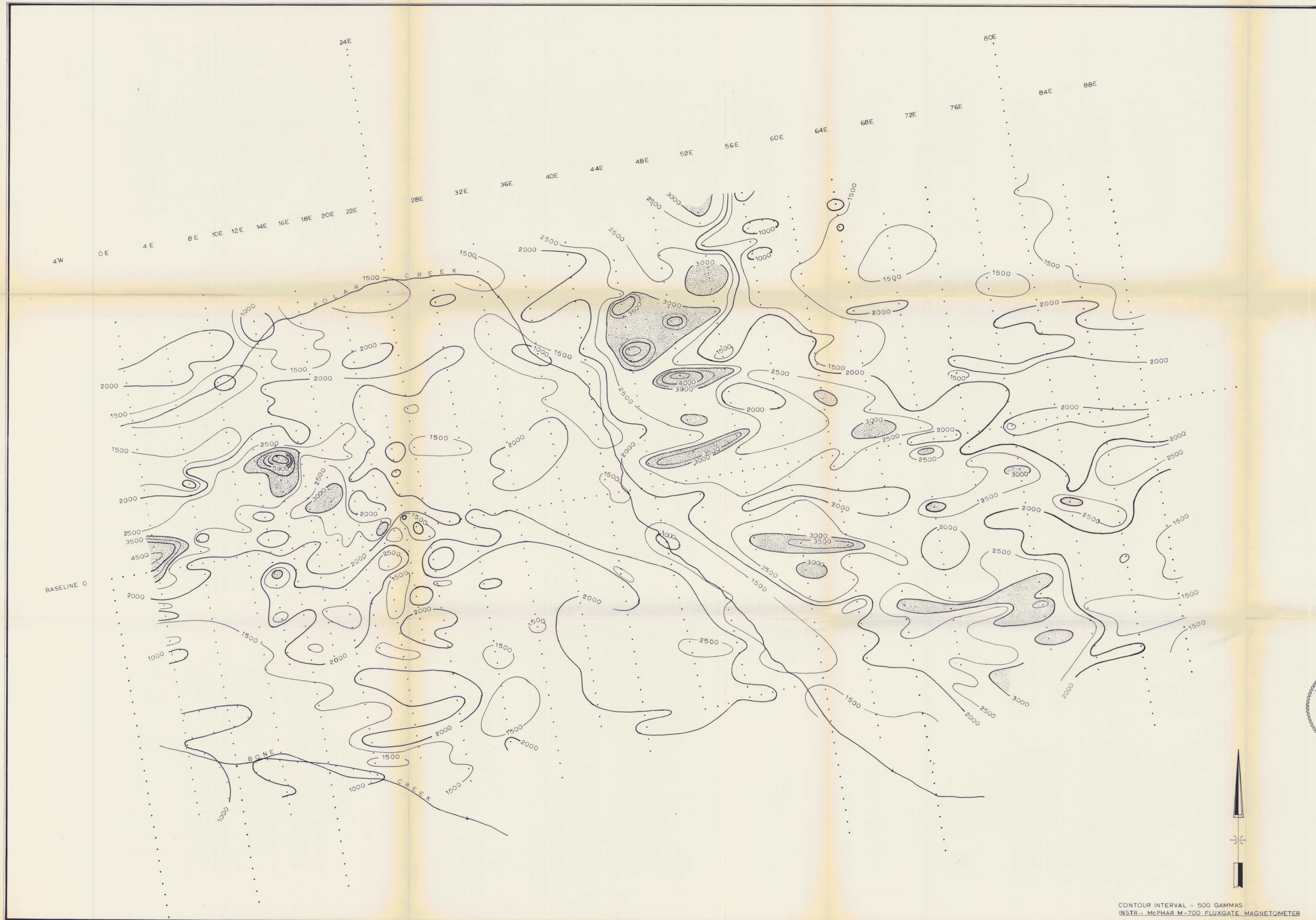
FIG - 15

SKYLINE EXPLORATIONS LIMITED
VANCOUVER, B.C.
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID
INDUCED POLARIZATION SURVEY
APPARENT RESISTIVITY PLAN
ATLIN MINING DIVISION
N.T.S. 104-J-4
ATLED EXPLORATION MANAGEMENT LIMITED
DATE :- AUGUST 1971
DRAWN BY :-
400 0 400 800
Scale in feet
FIG-18
THREE ELECTRODE ARRAY
a = 400'
C_1 P_1 P_2 C_2
a a ∞
N S
STN. LOCATION
LEGEND
LOW APPARENT RESISTIVITY AREA
HIGH APPARENT RESISTIVITY AREA
CONTOUR INTERVAL: 250 & 500 OHM-METRES
INSTRUMENT USED: SEIGEL MARK VII PULSE TYPE WITH 2·5 KW POWER SOURCE
To accompany report by P.P. Nielsen, F.B.Sc., Geophysicist
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #15
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
POLAR CREEK
BONE CREEK
BASELINE 0
4W 0E 4E 8E 10E 12E 14E 16E 18E 20E 22E 24E 28E 32E 36E 40E 44E 48E 52E 56E 60E 64E 68E 72E 76E 80E 84E 88E

24E
80E
84E
88E
4W
0E
4E
8E
10E
12E
14E
16E
18E
20E
22E
28E
32E
36E
40E
44E
48E
52E
56E
60E
64E
68E
72E
76E
BASELINE 0
CREEK
BONE CREEK
LEGEND
INFERRED FAULT
GEOLOGICAL CONTACT (APPROX., ASSUMED)
INTRUSIVE PLUG OR EMBAYMENT
7.5 MSEC M_a CONTOUR
15.0 MSEC M_a CONTOUR
MAGNETIC DIKE-LIKE FEATURES
MAGNETIC TREND
HIGH MAGNETIC AREA
MODERATE MAGNETIC AREA
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. C. GUTRATH
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #16
SKYLINE EXPLORATIONS LIMITED
VANCOUVER, B.C.
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID
INTERPRETATION MAP
ATLIN MINING DIVISION
N.T.S. 104-J-4
ATLED EXPLORATION MANAGEMENT LIMITED
DATE :- AUGUST 1971
DRAWN BY :- R.J.D.
400 0 400 800
Scale in feet

FIG - 19


THREE ELECTRODE ARRAY
a = 400'
LEGEND
ANOMALOUS APPARENT CHARGEABILITY AREA
CONTOUR INTERVAL: 2·5 MILLISECONDS
INSTRUMENT USED: SEIGEL MARK VII PULSE TYPE WITH 2·5 KW POWER SOURCE
To accompany report by P.P. Nielsen, B.Sc., Geophysicist
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
BASELINE 0
POLAR CREEK
BONE CREEK
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #14
SKYLINE EXPLORATIONS LIMITED
VANCOUVER, B.C.
GO MINERAL CLAIMS
PYRRHOTITE CREEK GRID
INDUCED POLARIZATION SURVEY
APPARENT CHARGEABILITY PLAN
ATLIN MINING DIVISION
N.T.S. 104-J-4
ATLED EXPLORATION MANAGEMENT LIMITED
DATE :- AUGUST 1971
DRAWN BY :-
Scale in feet
FIG - 17



LEGEND

3000 HIGH MAGNETIC SUSCEPTIBILITY AREA

1000 LOW MAGNETIC SUSCEPTIBILITY AREA

CONTOUR INTERVAL - 500 GAMMAS
INSTR.:- McPHAR M-700 FLUXGATE MAGNETOMETER

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3516 MAP #13

A. P. Nielsen

SKYLINE EXPLORATIONS LIMITED

VANCOUVER, B.C.

GO MINERAL CLAIMS

PYRRHOTITE CREEK GRID

MAGNETOMETER SURVEY

CONTOURS MAP

ATLIN MINING DIVISION	N.T.S. 104-J-4
ATLED EXPLORATION MANAGEMENT LIMITED	
DATE :- AUGUST 1971	DRAWN BY :- R.J.D.

400 0 400 800
Scale in feet

FIG-16