# GEOLOGICAL GEOCHEMICAL AND GEOPHYSICAL REPORT

on the

EAGLE 1 GROUP
(EAGLE 5, EAGLE 6, FOX 3, FOX 10, FOX 11
FOX 12 AND FOX 13 MINERAL CLAIMS)

LIARD MINING DIVISION
N.T.S. 104I/6E and 104I/11E
LAT. 58°30'N; LONG. 129°10'W

for

ESSO RESOURCES CANADA LIMITED
600 - 1281 WEST GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

by

C. C. EVERETT

DECEMBER 1, 1982

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## LIST OF TABLES/FIGURES/MAPS

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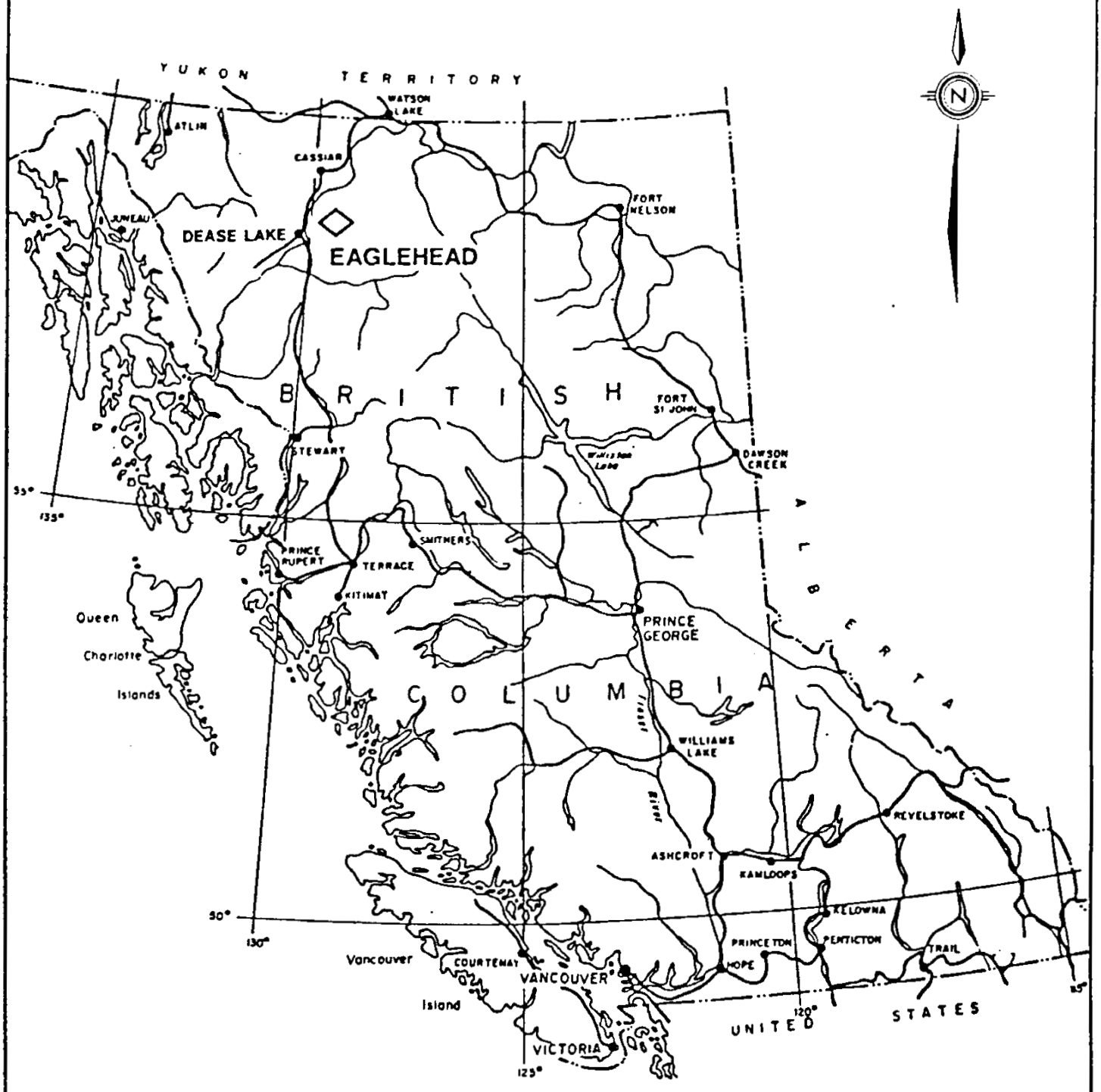
Summary

The "Eaglehead" porphyry copper-molybdenum prospect is located approximately 48 km east of Dease Lake in northern B.C. Copper mineralization has been identified along the southwestern contact of the Eaglehead batholith for 10 kilometres. Exploration completed by Esso Resources in 1982 focused on the southeastern extension of the showing. This report documents geological mapping, soil geochemistry and induced polarization surveying of the Far East Grid. All exploration was completed in the Eagle-1 Group mineral claims.




**ESSO MINERALS CANADA**

# EAGLEHEAD

## PROPERTY LOCATION MAP

0 100 200 MILES
0 100 200 400 KILOMETRES

FIGURE I

# 1.0 INTRODUCTION

## 1.1 Location And Access

The Eaglehead property is located in the Liard Mining Division, approximately 48 km east of Dease Lake in northern B.C., figure #1. The claims are located on NTS map sheet 104I/6E and 11E at north latitude 58°30'N and west longitude 129°10'W.

Access to the property is by fixed wing float plane to the southeast side of Eaglehead Lake, thence by helicopter or foot trail 9 km to the southeast.

The claims occupy a northwesterly trending drift filled valley flanked by northwest-southeast trending ridges. Ridges, with elevations greater than 1800 metres, are typically scalloped by cirques to the northeast and rounded and gently sloping to the south. The valley floor is extensively drift covered, characterized by kames, kettle holes and eskers.

Vegetation is predominantly "bunch grass" and "buck brush." A fringe of scrub alpine spruce and balsam occurs on lower ridge slopes. The upper slopes are covered with bunch grass and numerous talus fans.

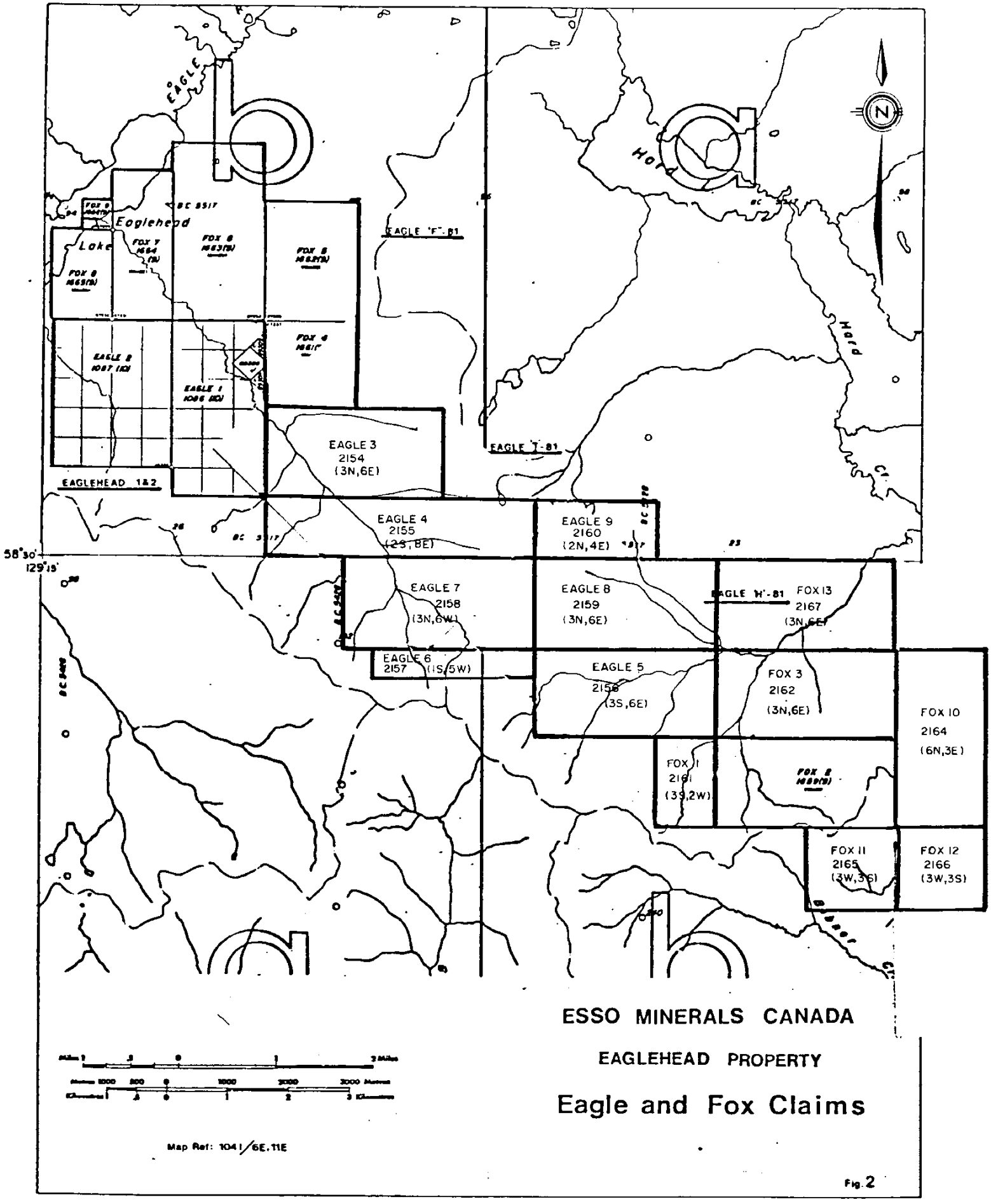
## 1.2 Property

The property consists of 22 mineral claims aggregating 291 contiguous units. Locations of the claims are shown on figure #2. Table #1 is a land record for the entire property. Table #2 lists the Eagle-1 group and itemizes claims worked on in 1982.

TABLE # 1

LAND RECORD - EAGLEHEAD PROPERTY

| Claim Name | No. Units | Record No. | Date of Record |
|---|---|---|---|
| Eagle 1 | 18 | 2153 | Oct 22/81 |
| Eagle 2 | 20 | 1087 | Oct 22/79 |
| Eagle 3 | 18 | 2154 | Oct 22/81 |
| Eagle 4 | 16 | 2155 | Oct 22/81 |
| Eagle 5 | 18 | 2156 | Oct 22/81 |
| Eagle 6 | 5 | 2157 | Oct 22/81 |
| Eagle 7 | 18 | 2158 | Oct 22/81 |
| Eagle 8 | 18 | 2159 | Oct 22/81 |
| Eagle 9 | 8 | 2160 | Oct 22/81 |
| Fox 1 | 6 | 2161 | Oct 22/81 |
| Fox 2 | 18 | 1659 | Sept 25/80 |
| Fox 3 | 18 | 2162 | Oct 22/81 |
| Fox 4 | 9 | 2163 | Oct 22/81 |
| Fox 5 | 12 | 1662 | Sept 25/80 |
| Fox 6 | 18 | 1663 | Sept 25/80 |
| Fox 7 | 10 | 1664 | Sept 25/80 |
| Fox 8 | 6 | 1665 | Sept 25/80 |
| Fox 9 | 1 | 1666 | Sept 25/80 |
| Fox 10 | 18 | 2164 | Oct 22/81 |
| Fox 11 | 9 | 2165 | Oct 22/81 |
| Fox 12 | 9 | 2166 | Oct 22/81 |
| Fox 13 | 18 | 2167 | Oct 22/81 |




**ESSO MINERALS CANADA**

**EAGLEHEAD PROPERTY**

## Eagle and Fox Claims

Fig. 2

TABLE # 2

EAGLE 1 GROUP CLAIMS

| Claim Name | No. Units | Record No. | Date of Record | Work |
|---|---|---|---|---|
| Eagle 5 | 18 | 2156 | Oct 22/81 | I.P., Soil geochemistry and geological mapping completed on Eagle 5, Fox 3, Fox 10, Fox 11 and Fox 13 mineral claims |
| Eagle 6 | 5 | 2157 | Oct 22/81 | |
| Fox 3 | 18 | 2162 | Oct 22/81 | |
| Fox 10 | 18 | 2164 | Oct 22/81 | |
| Fox 11 | 9 | 2165 | Oct 22/81 | |
| Fox 12 | 9 | 2166 | Oct 22/81 | |
| Fox 13 | 18 | 2167 | Oct 22/81 | |
| | 95 | | | |

## 1.3 History of Property

Copper mineralization was located in granitic float near Eaglehead Lake in 1963, by Kennco Explorations Ltd. From 1963-1965 Kennco conducted geochemical, geophysical and geological surveys, following up the initial work with four short diamond drill holes. The claims were allowed to lapse and were restaked by Spartan Explorations Limited in 1970. Imperial Oil optioned the property in 1971.

From 1971-1976 Imperial Oil continued geological, geochemical and geophysical work. Thirty additional drill holes were completed. The property sat idle from 1977-1978.

In 1979, Nuspar Resources Limited (reorganized from Spartan Explorations in 1978), assumed operatorship of the property. Work resumed on the showing from 1979-1981 under the supervision of Pamicon Developments Ltd. of Vancouver, B.C. Exploration entailed geological, geochemical and geophysical surveying. Twenty-five additional drill holes were completed.

Esso Resources Canada Limited assumed control of the property in 1982. Field work concentrated on the Far East Grid, in the southeastern portion of the property.

## 1.4 Regional Geology

The regional geology of the Cry Lake 104I map sheet was compiled in G.S.C. Open File Report #610 by H. Gabrielse in 1978. Subsequent work, mainly by Gabrielse, has furthered the understanding of the intrusive elements and structural style of the area. Map #1 is an updated compilation of the Open File #610 data.

The Eaglehead property lies along the southeast flank of a zoned, early to late Jurassic batholith, centering on Eaglehead Lake. The unit is elongate, from northwest to southeast and is sub-parallel to the main structural fabric of the area.

The batholith is bounded by the Kutcho fault to the northeast. The fault is characterized by strongly cataclastized, foliated and mylonitized rocks over widths of 1.5 - 3.0 km. Right lateral movement along the break appears to be in order of several tens of kilometers - the southwestern flank of the batholith is bounded by elements of the King Salmon Assemblage, comprising Cache Creek rocks overlain by Upper Triassic Kutcho and Stuhini formation volcaniclastics, the Sinwa limestone and sediments of the Inklin formation.

A high angle fault (Thibert Fault, Gabrielse 1982) marks the contact between the Cache Creek and Inklin rocks. The structure trends northwesterly of Dease Lake and is thought to originate from the Kutcho fault, somewhere near the Turnagain River. The sense of movement is right lateral with the southwest side being structurally higher.

Mineralized zones within the batholith are often sheared and mylonitized. The faults are steeply dipping and trend between 080 and 110°. They are typified by strong lineaments and a well developed foliation. Minor structures suggest strike-slip movement along these breaks. These structures may represent subsidiary splays of the Thibert fault.

Plutons of the Eaglehead batholith are confined to the region between the Kutcho and Thibert faults. West of Eaglehead Lake the batholitic rocks are medium to coarse grained hornblende diorites, hornblende quartz diorites, monzonites, and granodiorites. East of Eaglehead Lake the intrusive is a medium to coarse grained granodiorite characterized by coarse quartz eyes and a variable hornblende-biotite content. These rocks intrude Upper Triassic volcanic rocks (Kutcho and Stuhini formations). The contact appears sub-vertical, extreme brecciation and rafting of the volcanic occurs for 100-200 metres, decreasing inwards as grain size increases.

Mid-cretaceous and younger elements of the Cassiar batholith generally occur northeast of the Kutcho fault.

Gabrielse has reported a mid-Cretaceous medium to coarse grained, locally coarsely megacrystic quartz monzonite and granite between the Kutcho and Thibert faults. The spatial location of this stock and its similarity to the Jurassic intrusives suggests possible multi-phase intrusive activity ranging from early Jurassic to as late as mid-Cretaceous.

## 1.5 Details of Program

Field work completed on the Eagle-1 Group (June 22 - July 23) included linecutting, soil sampling, geological mapping and geophysical surveying. Table #3 is the exploration summary for this program.

TABLE # 3

EAGLE 1 GROUP - WORK SUMMARY

| (km) Linecutting | Soil (No.) Geochemistry | Geological Mapping (km2) | Induced Polarization Survey (km) |
|---|---|---|---|
| 44.4 km picket line | 245 soils 34 silts | 18 $km^2$ | 34 km |

Geological mapping was done at a 1:5000 scale. Soil samples were taken at the B horizon with hand tools. Samples were taken at 100 metre intervals. Soils and silts were sent to Min-En Labs in North Vancouver, B.C. for analysis. The

Induced Polarization survey was completed by Phoenix Geophysics Limited of Vancouver, B.C. for Esso Resources Canada Limited. Pseudosections and descriptions of geophysical and geochemical methods are listed in the Appendix.

## 2.0 FAR EAST GRID

### 2.1 Geology and Mineralization

#### Introduction

Geology of the Far East Grid is shown on Maps #2 and 3. Figure #3 is a location map for the grid, illustrating lines completed in the I.P. survey and the extent of geochemical surveying.

#### Geology

The Far East Zone is located along the southeastern edge of the Eaglehead batholith, approximately 14 kilometres southeast of Eaglehead Lake. The grid is situated in a flat glacial valley. Outcrop exposure is poor. Differentiation of geological units was done by mapping frost heaves and scattered outcrop in stream beds. Most of the grid is strewn with glacial debris and flat marshy areas.

The Eaglehead batholith, elongated in a northwest-southwest direction, lies northeast of the Upper Triassic Kutcho, Sinwa and Stuhini Formations. The contact between these units is not fault bounded. Fragments and blocks of basic flows and augite porphyry flows occur throughout the hornblende granodiorite phase of the batholith; map #3. Brecciation increases towards the southwest. The attitude of the intrusive-volcanic contact is not known. The contact shown on map #3 is approximate as fine fingers and pockets of micro-granodiorite occur within the basic flow outcrops.

Volcanics identified within the Far East Zone are dark green aphanitic andesite-basaltic flows and augite porphyry flows. Mapping by the G.S.C. in 1978 and 1982 place these units as equivalent to Kutcho formation strata, figure #3. The volcanic characteristics noted in the field suggests these units are Stuhini Formation rocks, stratigraphically younger than the Kutcho sequence.

The Eaglehead batholith consists of 3 main differentiated phases: 1. (HGD) hornblende granodioite border phase; 2. (BGD) biotite granodiorite intermediate phase; and 3. (GP) a granodiorite core phase. A separate alteration zone (GPGZ) granodiorite porphyry gradational zone has been identified within the core phase. Crowded feldspar porphyry, hornblende porphyry, Fe-rich sub-volcanic, diabase and aplite dykes occur within the intrusive. These units are rarely found in the field and are best seen in drill core.

Hornblende granodiorite occurs along the margin of the Eaglehead porphyry. It has been traced from the Far East Zone 6 km northwest to the Camp Zone, fig. #3. An extension of this unit to Eaglehead Lake is conjectural as it has been identified only in float. The hornblende granodiorite typically appears dark to apple green and fine to medium grained. Component minerals are hornblende (5-20%), quartz (20%), plagioclase (40-60%), orthoclaise (tr-5%), biotite (tr-5%), and magnetite (tr-5%). Hornblende is easily identified by its larger size and dark green colour. Intensely chloritic sections may mask the hornblende content making it appear absent. Hornblende content decreases and biotite content increases towards the biotite granodiorite phase. Angular volcanic fragments and blocks comprise 1-10% of this unit. It is often difficult to differentiate volcanic from intrusive where the granodiorite has a fine grained texture.

The hornblende granodiorite is pervasively altered to chlorite and minor epidote-sericite. The alteration appears inherent to the Eaglehead batholith margin and not directly attributed to copper bearing fracture zones within the biotite granodiorite. Much of this chlorite could be assimilated along the intrusive-volcanic contact zone.

Biotite granodiorite occurs as a narrow 200-600 metre band, separating the hornblende granodiorite and granodiorite porphyry phases. It is identified by its natural composition and by specific alteration characteristics partial to this

zone. The granodiorite consists of biotite books (plus minor hornblende - 10%), quartz (20%:5% occurring as 2-4 mm quartz eyes), plagioclase (50-60%) and orthoclaise (10%). Hornblende occurs only as trace phenocrysts. The unit is invariably medium grained. Volcanic fragments were not identified.

Prominent copper zones on the Eaglehead property are spatially located within the biotite granodiorite phase. Groundmass alteration assemblages vary from chlorite sericite-epidote-carbonate-quartz to sericite chlorite-epidote-K-feldspar-carbonate-quartz to K-spar-sericite-quartz biotite and carbonate. K-feldspar, epidote, chlorite and hematite also occurs as narrow (1-20 mm) selvage-type alteration. Fracture controlled alteration, particularly K-feldspar, shows preference to the lower intensity chlorite epidote-sericite zones. Boundaries of specific alteration types could not be identified on the Far East Zone.

The granodiorite porphyry phase underlies most of the Far East Grid. The unit is coarse grained, containing trace 1-4 cm coarse orthoclaise phenocrysts floating in a quartz-plagioclaise- orthoclaise matrix. Component minerals of the granodiorite porphyry are biotite (10%), hornblende (tr), quartz (20%-4 to 8% as coarse quartz eyes), orthoclaise (10-20%) and plagioclaise (30-50%). This phase is essentially fresh with minor traces of chlorite dusting the biotite books.

The granodiorite porphyry gradational zone shown on geology maps #2 and #3 represents the altered equivalent of the

granodiorite porphyry. It is not a separate intrusive phase. This zone parallels the biotite granodiorite from the East Zone to the Far East Zone. Hydrothermal alteration was noted for approximately 200 metres into the coarser grained porphyry, dissipating to the northeast. Groundmass alteration assemblages include variable low intensity sericite-chlorite-epidote quartz-carbonate to sericite-Kspar-carbonate alteration. Traces of epidote, chlorite and K-feldspar were noted along narrow fractures. Fracture controlled alteration is considered weak, occurring only as trace 1-10 mm selvages. Distinct fracture trends were not identified.

Contacts between phases of the Eaglehead batholith are gradational. There are progressive increases or decreases in grain size, biotite or hornblende content and intensity of alteration which characterize these units. Phase differentiation is made by "eye" only. There is no apparent inter-intrusive brecciation between granodiorite types.

## Mineralization

All noteable copper mineralization in the Far East Zone is restricted to outcrops in the north-south trending stream bed along lines 88+00mE to 96+00mE. A narrow 5-10 metre mylonitized, sericitized shear, trending $095^{o}$, was found at grid locations 94+00mE : 14+40mN. Estimated copper grade within this section is .5-1.0%. Chalcopyrite, malachite and

traces of neodesite and pyrite occur throughout the showing. This mineralization shows no association to quartz veining or with any regular fracture pattern. The zone appears to be a narrow shear, within the hornblende granodiorite phase, rich in Cu and low in Fe sulphides.

Traces of chalcopyrite and pyrite occur throughout the biotite granodiorite phase. No zones of noteworthy copper mineralization were discovered. Where pyrite content increased from tr - 3%, the granodiorite appeared weakly foliated with the biotites crudely aligned. A weak spotty resistivity anomaly, as described in section 2.3, is coincident with the biotite granodiorite phase, from East Zone to Far East Zone.

## 2.2 Geochemistry

Silt geochemical results are included on geology maps #2 and #3. Soil geochemistry is located on maps #4 and #5. All samples were analyzed at Chemex Laboratories in North Vancouver for copper and molybdenum. Only soils with sample numbers are being applied as assessment for the Eagle 1 Group. The remaining soil geochemical results were obtained from a 1981 reconnaissance flag-line soil survey. They are plotted to illustrate the crude alignment of anomalous 1981 and 1982 soils with the biotite granodiorite intrusive phase.

Streams draining the biotite granodiorite were anomalous in

copper and molybdenum; 210-2450 ppm Cu and 8-32 ppm Mo. The streams drain an extensively glacial filled valley. Outcrop and frost heave occurrences are limited. Sources of the anomalous silt geochem were not discovered.

A few spotty soils gave anomalous Cu and Mo responses; 100 ppm Cu and 10 ppm Mo. Anomalous soil results are underlined on maps #4 and #5. The erratic nature of the soil geochem is attributed to the poor soil cover and extensive marshes which are coincident with a major portion of the biotite granodiorite intrusive phase. Possibly anomalous induced polarization anomalies follow this rough geochemical trend, suggesting potential for copper-molybdenum mineralization at depth.

## 2.3 Summary and Interpretation of Geophysical Surveys

### Introduction

Phoenix Geophysics has carried out a frequency domain IP survey on behalf of Esso Minerals Canada over the south-eastern portion of the Eagle grid (Figure #3). The purpose of the survey was to locate the sources of soil geochemical anomalies high in copper and molybdenum.

The system used was manufactured by Phoenix Geophysics. The measurements were made at two frequencies - .25 and 4 Hz. A dipole-dipole array was used with a minimum separation 'x' of 50 metres (Figure 2, Appendix B). Measurements were made for 4 multiples of this separation (i.e. n=1,2,3,4).

Results

The pseudo-sections and line by line analysis are presented in Appendix B. The interpreted anomalous trends are plotted on Map #6 (in map pocket). Four anomalous zones were delineated.

Zone A is located on lines 136+00E and 140+00E at about 15N. This zone is approximately on strike with a mineralized area intersected by diamond drill hole 55 on line 128+00E, where a six metre intersection of semi-massive copper sulphide mineralization was encountered.

Zone B extends from line 92+00mE to 98+00mE and is centred at about 14+00N. Frequency effects are in a range of 2.5 to 3 times background. Resistivities are generally lower than adjacent values. The source of this response is shallow and appears to represent a zone of low sulphide mineralization.

Zone C extends from 92+00mE to 104+00mE at about 17+40N. It is open both to the east and the west. West of 92+00mE the feature has been outlined in an earlier survey by Peter Walcott. Strongest responses are found between lines 94+00mE and 96+00mE and indicate a shallow to intermediate depth

source. Here, frequency effect data is far more diagnostic than the resistivity data.

Zone D is centred at about 27+00N between lines 104+00mE and 98+00mE. Frequency effects are up to 2 times background and resistivities are slightly lower than in adjacent areas. Consequently, this is a marginal anomaly and could have been caused by either highly disseminated sulphides in the range of about 1-3% or rock alteration. However, the anomaly borders on an anomalous geochemical copper and molybdenum zone and is open to the east. In other IP zones on this property, localized strong IP anomalies within have been caused by high sulphide concentrations. This may happen here and thus further prospecting should be carried out east of the grid.

## Conclusions

Four anomalous IP zones have been delineated. Responses are generally weak. Zones A, B, and C appear to be extensions of sulphide-bearing horizons outlined in previous surveys. Zone D is a new, but very weak anomalous zone. It borders on an area anomalous in copper and molybdenum and extends further to the east.

In the area of an extensive anomalous Cu and Mo geochemical feature, located between lines 84+00mE and 92+00mE and north of 22+00N, no IP anomalies were detected. The source of this geochemical anomaly is not known.

Previous work has indicated that copper sulphides have generally been located in areas of localized strong IP anomalies. The following areas are recommended for follow-up as they are anomalies within anomalous backgrounds:

1. Zone A along line 140+00E between 1300N and 1400N.
2. Zone C on line 94+00E between 1650N and 1750N.
3. Zone B on line 94E between 1400N and 1500N.
4. Zone D on line 100+00E between 2750N and 2850N.

Cal Everett

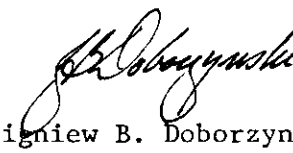
## STATEMENT OF QUALIFICATION

I am a Bachelor of Science graduate from the University of New Brunswick (May 1977) and have been employed as an exploration geologist within the mining industry for six years.

CAL C. EVERETT

## STATEMENT OF QUALIFICATION

I am a graduate of McGill University, with a Bachelor of Engineering Degree in Mining Engineering and Applied Geophysics and a Master of Science Degree in Applied Geophysics. I have been employed as an exploration geophysicist with Esso Minerals Canada for the last eight years.



Zbigniew B. Doborzynski.

SUMMARY OF COSTS

COST ESTIMATE - EAGLE 1 GROUP

| TYPE OF WORK | MAN DAYS | COST/MAN DAY | COST | TOTAL |
|---|---|---|---|---|
| Geology | 11 | 150.00 | 1650.00 | |
| | 11 | 75.00 | 825.00 | |
| | | | | $ 2475.00 |
| Geochemistry | 1 | 75.00 | 75.00 | |
| | 12 | 55.00 | 660.00 | |
| | 13 | 65.00 | 845.00 | |
| | | | | 1580.00 |
| Linecutting | 1 | 150.00 | 150.00 | |
| | 3 | 75.00 | 225.00 | |
| | 9 | 65.00 | 585.00 | |
| | 9 | 55.00 | 495.00 | |
| | | | | 1455.00 |
| Contracted Linecutting 39.2 line kilometres @ 200.00 per km. | | | | 7840.00 |
| Geophysics (I.P. Survey) 34 line kilometres @ 760.00 per km. | | | | 25840.00 |
| Contracted Linecutting 39.2 line kilometres @ 200.00 per km. | | | | 7840.00 |
| Mobilization-Demobilization Costs | | | | |
| Induced Polarization Crew | | | 628.00 | |
| Linecutters | | | 419.00 | |
| Esso Resources Field Personnel | | | 838.00 | |
| | | | | 1885.00 |
| Report Preparation | | | | |
| Writing 5 days @ 150.00/day | | | 750.00 | |
| Drafting 2 days @ 150.00/day | | | 300.00 | |
| Map Reproduction | | | 200.00 | |
| | | | | 1250.00 |

Geochemical Analytical Costs

| Sample Type | Number | |
|---|---|---|
| 245 soils (Avg. $3.33 unit) | | 816.00 |
| 34 silt (Avg. $3.33 unit) | | 113.00 |
| | | 929.00 |

| | | |
|---|---|---|
| Geochemical Freight Charge | | 419.00 |
| Room and Accommodation: June 20-July 27/1982 | | |
| 273 man days @ 30.00/day | | 8190.00 |
| Cook: 28 man days @ $95.00/day | | 2660.00 |
| Transportation and Air Support | | |
| Helicopter (206B Jetranger) | | |
| - 36.2 hours @ 375.00 hour | 13575.00 | |
| Fixed Wing Support | | |
| - 6 Otter trips @ $735.00/trip | 4410.00 | |
| | | 17985.00 |
| Fuel Costs - Helicopter | | |
| - 36.2 hours x 22 gals/hr x $3.30 gal | | 2628.00 |
| Materials and Supplies | | 400.00 |
| | TOTAL | $75,536.00 |

## EAGLE 1 GROUP - COST DISTRIBUTION

| | |
|---|---|
| Geology | $ 2470.00 |
| Geochemistry | 1580.00 |
| Geophysics | 25840.00 |
| Linecutting | 9295.00 |
| Analyses | 929.00 |
| Helicopter Support | 13575.00 |
| Fixed Wing Support | 4410.00 |
| Mob-Demob | 1885.00 |
| Freight Charge | 419.00 |
| Room and Board | 8190.00 |
| Cook | 2660.00 |
| Supplies | 400.00 |
| Fuel | 2628.00 |
| TOTAL | $75,536.00 |
| WORK APPLIED | $74,900.00 |

## LIST OF PERSONNEL

Calvin Everett (Project Geologist)
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# APPENDIX A

## GEOCHEMICAL SAMPLING TECHNIQUES

Soil samples were taken at the B-horizon with hand tools. Soils and silts were stored in brown gusset bags, dried and shipped to Chemex Laboratories in North Vancouver for geochemical analysis. Each sample was oven dried, sieved to obtain the -80 mesh fraction and then subjected to nitric perchloric acid digestion. Measurement of trace element concentrations was done by atomic absorption analysis. Samples were analyzed for copper and molybdenum.

Pulps for soils and silts are stored at the Esso Minerals Canada office in Vancouver, B.C.

# APPENDIX B

## Geophysical Methods and Interpretation of Results

### Purpose

A frequency domain IP survey has been carried out on the Eagle East grid (Figure 1) to delineate the source(s) of geochemical copper and molybdenum anomalies.

### Equipment and Survey Procedure

The survey was carried out by a contract crew provided by Phoenix Geophysics Limited. The equipment consisting of a frequency domain IP receiver, transmitter and motor generator, was also manufactured by Phoenix Geophysics.

The transmitter (IPT 1) was powered by a 1 KVA; 400 hz motor generator (MG-1A). Current was introduced into the ground by means of two steel electrodes identified as $C_1$ and $C_2$. The operating frequencies used were 0.25 and 4 hz.

The receiver (IPV-1) is an extremely stable and sensitive potentiometer, tuned to the preselected transmitter frequencies and measures the voltages across potential electrodes $P_1$ and $P_2$.

The electrode layout used was the "dipole-dipole" array. The separation 'x' was 50 m; measurements were taken for 4 multiples of 'x', n=1, 2, 3 & 4.

The quantities measured consisted of the current (I) flowing through electrodes $C_1$ and $C_2$ and the resulting voltages (V) set up in the ground and appearing across electrodes $P_1$ and $P_2$. These were then used to calculate the following parameters.

1. Apparent Resistivity (pa) - calculated only for the low frequency measurement and defined as:

$$a = K\frac{V}{I} \text{ ohm-m}$$

where K is a constant whose value is determined by the type of array and its separation.

2. Percent Frequency effect (FE) - a measure of the amount of polarizable material present and obtained by calculating the percentage difference in resistivities at the two frequencies, 0.25 and 4.0 Hz:

$$\%FE = \frac{(pa.25 = pa4)}{pa\ 4} \times 100$$

3. Metal Factor (MF) - designed to minimize variation of IP effect with resistivity of the host rock and defined as

$$MF = \frac{F.E. \times 1000}{pa4}$$

These parameters are plotted on separate pseudo sections in Appendix C.

## Results

The contoured "pseudo-sections" are given at the end of this section. The anomaly map is found in the Map Pocket. A line by line discussion of the data follows:

### Line 120+00E - 50 m dipoles

The weak anomalous zone between 800N and 850m appears to reflect a deep polarizable source as it is detected only by n = 4. the zone located between 950N and 1000N is caused by a near surface weakly polarizable source.

### Line 128+00E - 50 m dipoles

The region south of 1550N is characterized by high frequency effects within which there are two anomalous zones.

The first is located between 950N and 1150N and the other is between 1300N and 1350N. The latter feature appears to be the deeper of the two because it has been detected only at the n = 4 separation.

Line 136+00E - 50 m dipoles

Measured frequency effects are significantly weaker than on the previous line, though still above background. Furthermore a larger number of the values are in the questionable category indicating electrode contact problems.

No significant anomalies are present.

Line 140+00E - 50 m dipoles

A zone of pronounced frequency effects is located between 1250N and 1450N. Resistivities are comparatively low in the 300-600 -m range. An anomalous feature is interpreted between 1300N and 1450N, at n = 2, 3 and 4 indicating that the source is at shallow depth.

Line 159+00E = 50 m dipoles

This line and the next 4 cover the area bounded by 2000N and 3800N where an extensive geochemical copper and molybdenum anomaly was outlined.

On this line resistivities are generally high (+1500 -m) and the frequency effects are background. No anomalies are present.

Line 167+00E - 50 m dipoles

No anomalies.

Line 175+00E - 50 m dipoles

No anomalies.

Line 183+00E - 50 m dipoles

No anomalies.

Line 192+00E (Also Line - 88+00mE) - 50 m dipoles

No anomalies.

Line 90+00mE - 50 m dipoles

At about 1800N there is a significant change in resistivity indicating a possible electrical contact between two different rock types. To the south resistivities are significantly lower and frequency effects are 2 to 4 times higher.

A weak anomalous zone is interpreted between 1500N and 1600N. The source of the anomaly is deep seated because it has been detected only at the n = 4 spread.

A shallow, stronger anomaly is indicated between 1650N and 1750N.

Line 92+00mE - 50 m dipoles

The electrical contact occurs at about 1950N.

The anomalous zone between 1450N and 1550N appears shallower than on the previous line.

The area between 1600N and 1950N has anomalously high frequency effects within which two distinctive zones occur. The first is located between 1600N and 1700N. This feature probably outcrops and is characterized by reduced resistivity and strong frequency effects.

Further north between 1800N and 1900N, frequency effects are up to 4 times background. The strongest responses are obtained at n = 2, 3 and 4 indicated the source is located well below surface.

Line 94+00mE - 50 m dipoles

The distinctive change in resistivity occurs at about 1950N. To the south, frequency effects are 3 to 4 times background except in the area bounded by 1500N and 1650N for n = 1 and 2. Here frequency effects are near background outlining a pendant-like zone of neutral material.

South of 1500N, a shallow to outcropping anomalous zone is indicated.

Line 94+00mE - 50 m dipoles

A definite anomaly is interpreted between 1650N and 1750N. This feature is characterized by high frequency effects along with low resistivities (200 -m). The strongest responses occur at n = 2 and 3 indicating the source is at a depth of about 50 m.

In the high resistivity unit, between 2600N and 2700N the higher than background frequency effects in part correlate with a drop in resistivity. This response is not in itself anomalous but may indicate a polarizable horizon further east along strike.

Line 96+00mE - 50 m dipoles

The electrical contact is interpreted at about 2000N. Frequency effects are strongest south of this contact. As well, above background values now extend well into the high resistivity rock unit.

The source of the anomaly south of 1450N is shallow to outcropping. The quality of response suggests a comparatively weak polarizable source.

The response between 1700N and 1800N shows a coincident zone of low resistivity and high frequency effects. Although frequency effect values indicate a shallow source, the focus of this anomaly is due to a deeper source defined at n = 2 and 3.

The weakly anomalous feature between 2600N and 2700N, mentioned on the previous line, is not evident in the frequency effect data but there does appear to be a significant change in resistivity north of 2600N.

Line 98+00mE - 50 m dipoles

The electrical contact occurs at about 1950N. Frequency effects, though variable, are generally twice background along the whole length of the line. The response south of the contact is weaker compared to previous lines. As well, the pendant-like neutral zone is more extensive.

The possible anomaly south 1450N is characterized only by anomalous frequency effects.

The zone bounded by 1650N and 1900N is characterized by low resistivities and anomalous frequency effects at n = 3 & 4. Based solely on resistivity data, the most pronounced response is between 1650N and 1750N.

The anomalous zone between 2600N and 2850N is due to a near surface source. Resistivities though high (+ 1500 -m) are considerably less than adjacent values, while frequency effects are up to 3 times background.

Line 100+00mE - 50 m dipoles

The electrical contact occurs at 1900N. Frequency effects south of this contact are again weaker as well as more dispersed.

A deep (n = 4) polarizable zone occurs between 1450N and 1550N. The response is weak.

A rather weak, near surface zone occurs between 1750N and 1900N.

The strongest response along this line occurs between 2650N and 2850N. Frequency effects are up to 4 times background. Resistivities are comparatively lower between 2750N and 2850N at n = 3 and 4 indicating a buried source.

Line 102+00mE - 50 m dipoles

The electrical contact is located at about 1950N.

A very weak, near surface anomalous zone is located between 1750N and 1900N.

North of 2650N, frequency effects are up to 2 times background. Resistivities are comparatively high except between 2850N and 2900N at n = 3 and 4. The source of this overall anomalous response is shallow.

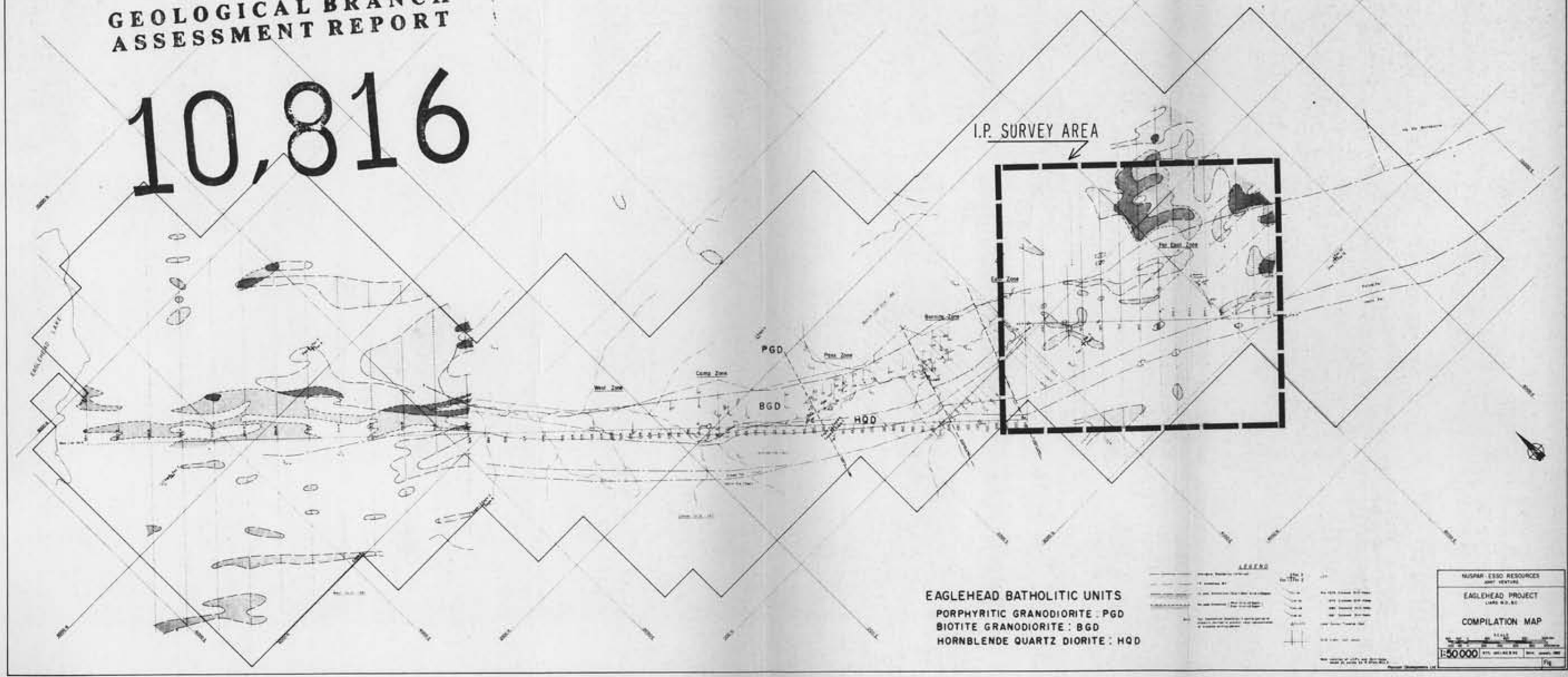
Line 104+00mE - 50 m dipoles

The zone between 1700N and 2000N is in an area of slightly lower resistivity. Frequency effects are marginally above background. The source is shallow.

Further north, the weak anomalous zone between 2700N and 2800N is in an area of comparatively high resistivites (+ 1500 -m). Frequency effects are up to twice background. The source of this anomaly is also shallow.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816



DWG. NO.-I P-1

ESSO EAGLE PROSPECT L120E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE 750N | 850N | | 950N | | 1050N | | 1150N | | 1250N | | 1350N | | 1450N | |
| INTERPRETATION | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N=1 | 878 | 600 | 872 | 785 | 966 | 861 | 692 | 1396 | 874 | 996 | 1437 | 916 | | | N=1 |
| N=2 | 1190 | 763 | 972 | 894 | 982 | 1263 | 856 | 1138 | 1526 | 737 | 1259 | 1015 | 781 | | N=2 |
| N=3 | 1408 | 999 | 1183 | 984 | 1012 | 1213 | 1169 | 1296 | 1147 | 1199 | 699 | 855 | 887 | 759 | N=3 |
| N=4 | 1461 | 1162 | 1351 | 1173 | 1010 | 1172 | 938 | 1594 | 1263 | 936 | 1317 | 590 | 806 | 772 | 903 N=4 |
| N=5 | | | | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | | | | N=6 |

ESSO EAGLE PROSPECT L120E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE 750N | 850N | | 950N | | 1050N | | 1150N | | 1250N | | 1350N | | 1450N | |
| INTERPRETATION | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N=1 | 2.5 | 2.3 | 2 | 3.5 | 4.8 | 5.1 | 3.7 | 2.6 | 1.4 | 3.3 | 2.3 | 1 | | | N=1 |
| N=2 | 2.6 | 3.1 | 2.6 | 3.8 | 4.2 | 6 | 5.6 | 3.8 | 2.9 | 3.8 | 3.7 | 3.2 | 2.3 | | N=2 |
| N=3 | 2.8 | 2.7 | 3.7 | 4.1 | 4.1 | 4.3 | 6.1 | 5.7 | 4.7 | 4.6 | 3.7 | 3.5 | 3.8 | 2.6 | N=3 |
| N=4 | 2.2 | 2.4 | 3.8 | 5.5 | 5.4 | 4.2 | 4.8 | 5.8 | 6.4 | 5.5 | 4.4 | 3.2 | 3.8 | 4 | 2.8 N=4 |
| N=5 | | | | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | | | | N=6 |

ESSO EAGLE PROSPECT L120E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE 750N | 850N | | 950N | | 1050N | | 1150N | | 1250N | | 1350N | | 1450N | |
| INTERPRETATION | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N=1 | 2.8 | 3.8 | 2.3 | 4.5 | 5 | 5.9 | 5.3 | 1.9 | 1.6 | 3.3 | 1.6 | 1.1 | | | N=1 |
| N=2 | 2.2 | 4.1 | 2.7 | 4.3 | 4.3 | 4.8 | 6.5 | 3.3 | 1.9 | 5.2 | 2.9 | 3.2 | 2.9 | | N=2 |
| N=3 | 2 | 2.7 | 3.1 | 4.2 | 4.1 | 3.5 | 5.2 | 4.4 | 4.1 | 3.8 | 5.3 | 4.1 | 4.3 | 3.4 | N=3 |
| N=4 | 1.5 | 2.1 | 2.8 | 4.7 | 5.3 | 3.6 | 5.1 | 3.6 | 5.1 | 5.9 | 3.3 | 5.4 | 4.7 | 5.2 | 3.1 N=4 |
| N=5 | | | | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | | | | N=6 |

# ESSO MINERALS CANADA

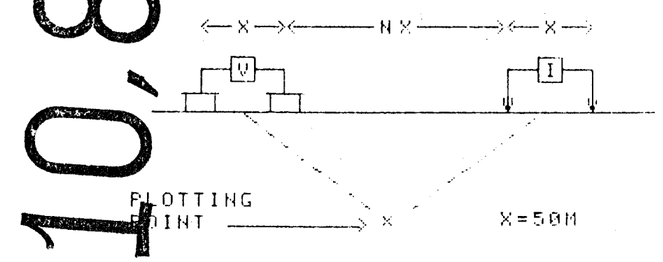
EAGLE PROSPECT

LAIRD M.D., B.C.

LINE NO.-120+00E

ASSESSMENT REPORT

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
4.0HZ & 0.25HZ

NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1, -1.5 -2, -3, -5, -7.5, -10

DATE SURVEYED: JULY 1982

APPROVED

PAC

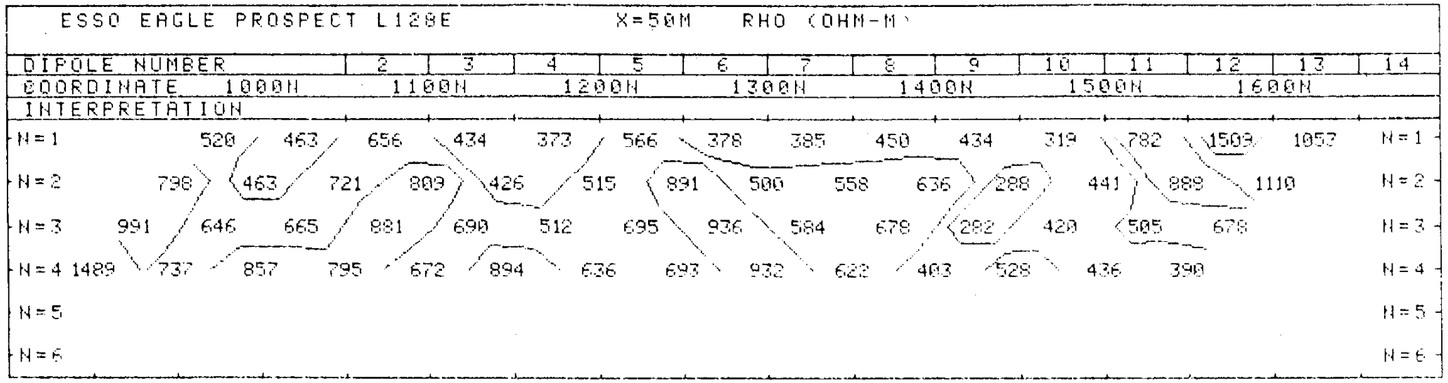
DATE Nov 10/82

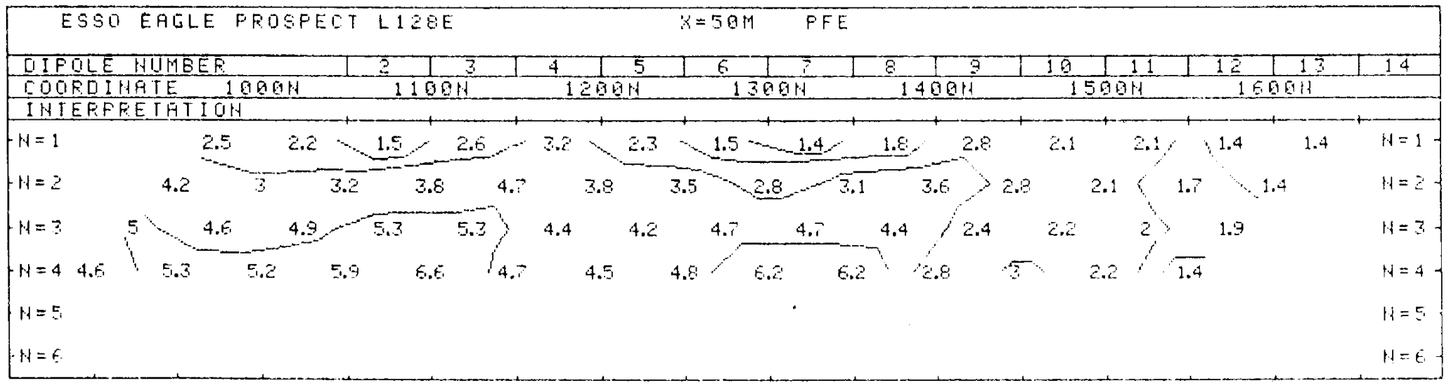
# PHOENIX GEOPHYSICS LTD.

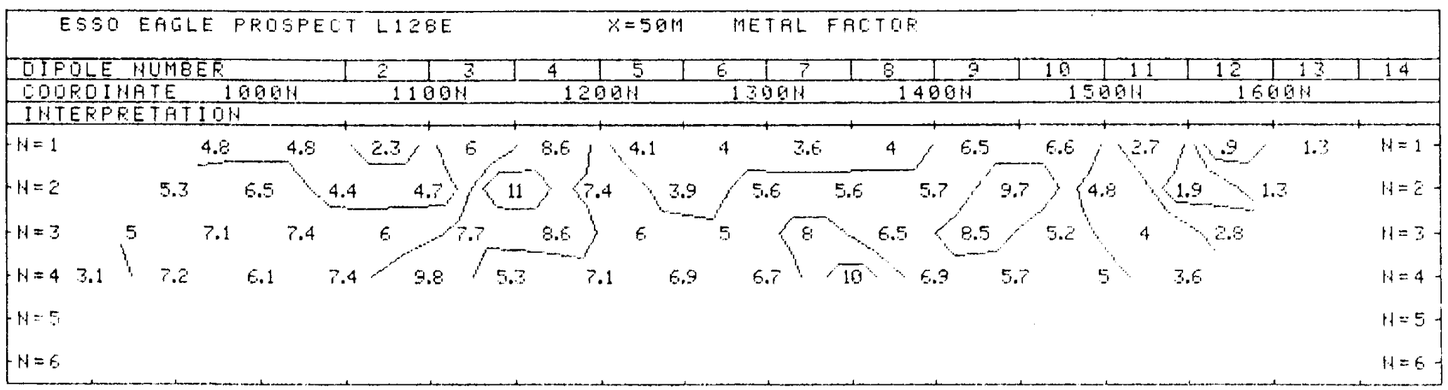
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

DWG NO -I.P-2




# ESSO MINERALS CANADA

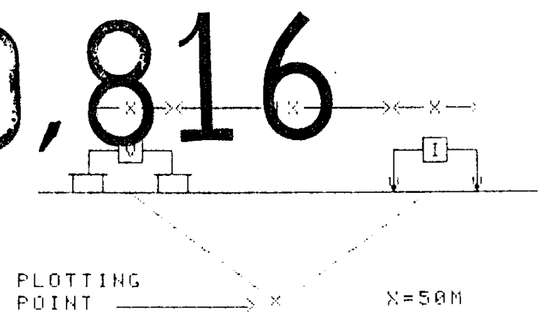
EAGLE PROSPECT

LAIRD M D .B. C

**GEOLOGICAL BRANCH**
**ASSESSMENT REPORT**

LINE NO -128+00E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
4.0HZ,0.25HZ

NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED JULY 1982

APPROVED

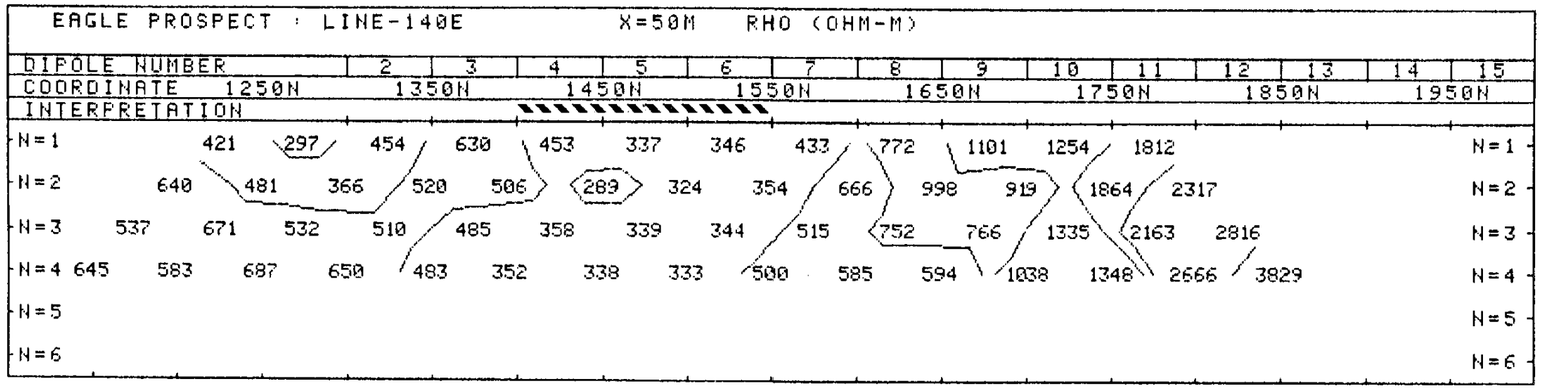
PAC

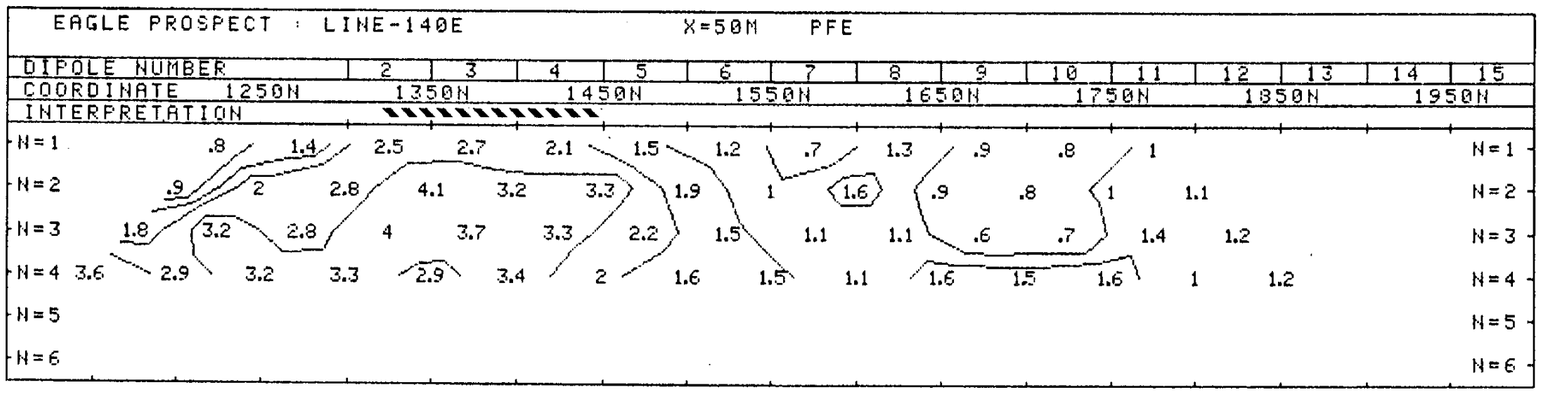
DATE Nov 10/82

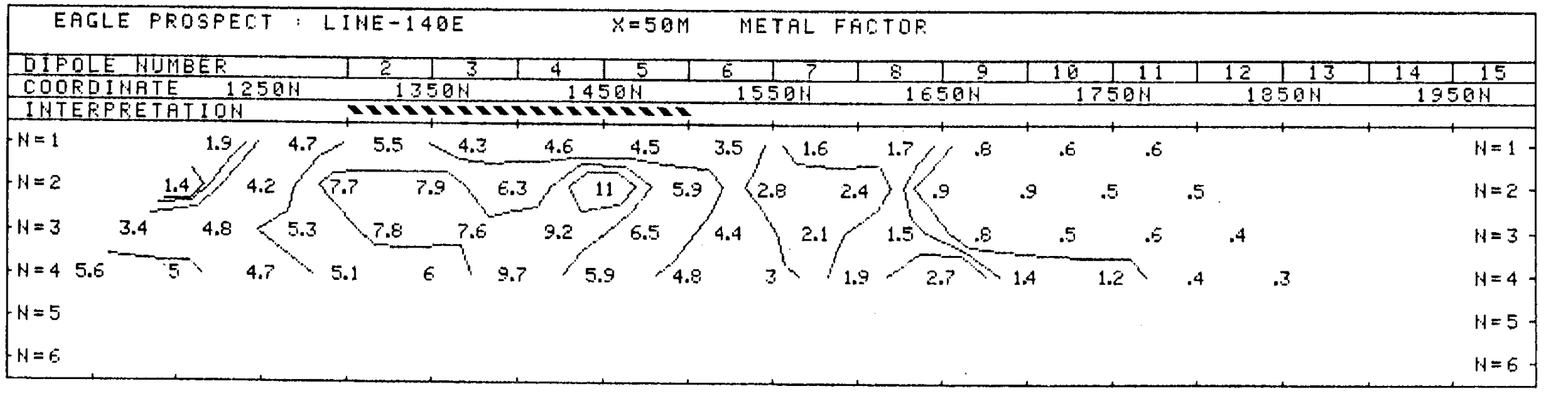
# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-33

# ESSO MINERALS CANADA

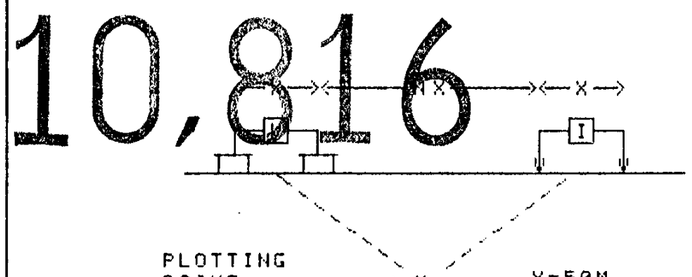
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE 140E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 ,-2,-3,-5,-7.5,-10

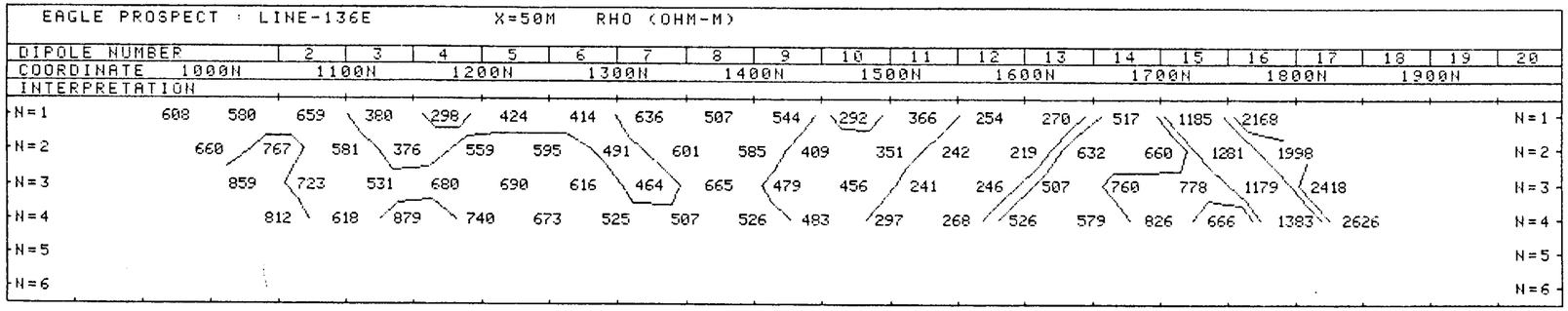
DATE SURVEYED: JULY 1982
APPROVED

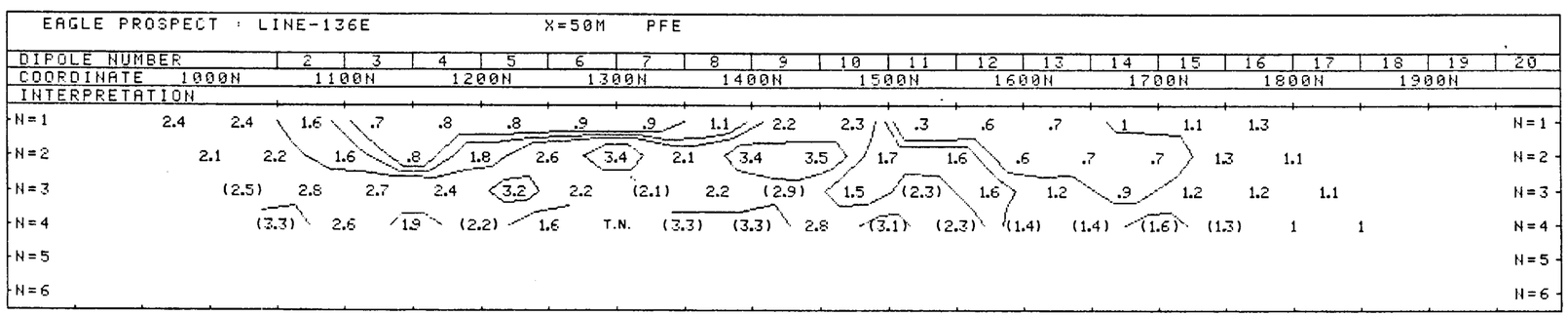
DATE

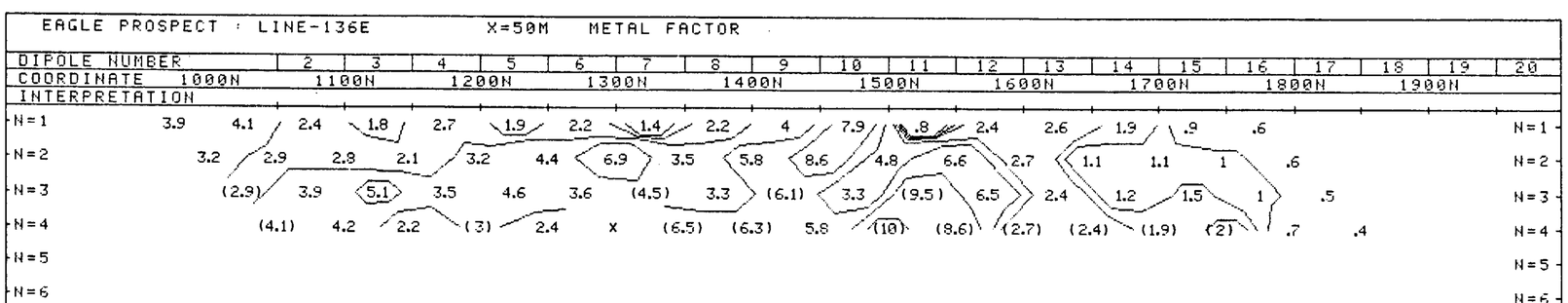
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-32

# ESSO MINERALS CANADA

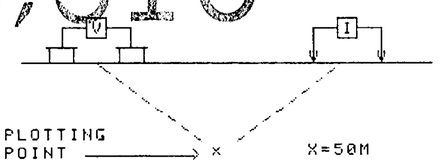
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA



LINE NO.-136E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982

APPROVED

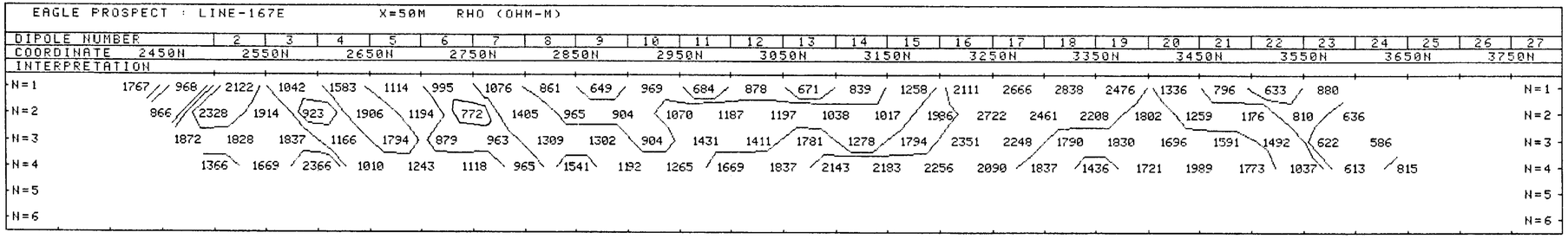
DATE

## PHOENIX GEOPHYSICS LTD.

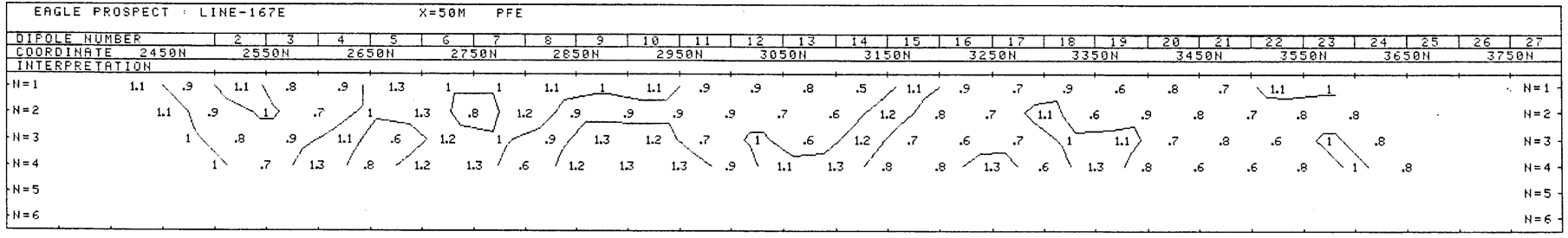
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

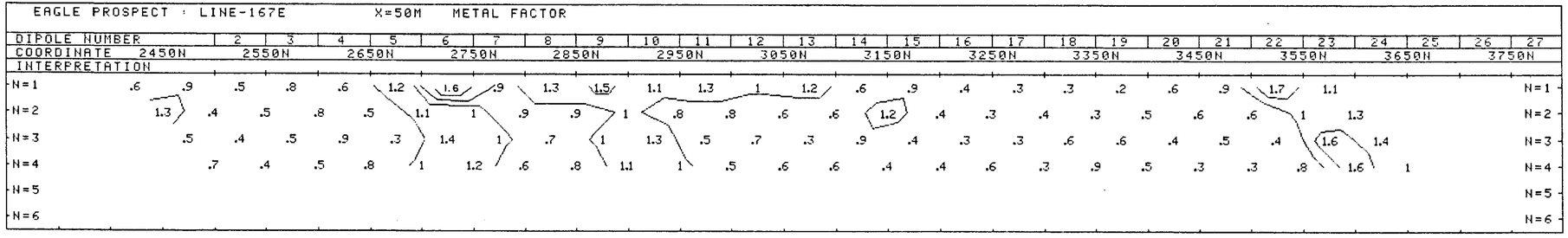
EAGLE PROSPECT : LINE-167E X=50M RHO (OHM-M)




EAGLE PROSPECT : LINE-167E X=50M PFE




EAGLE PROSPECT : LINE-167E X=50M METAL FACTOR




DWG. NO.-I.P.-5311-35

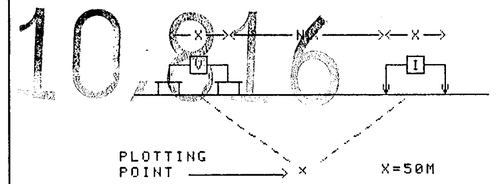
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

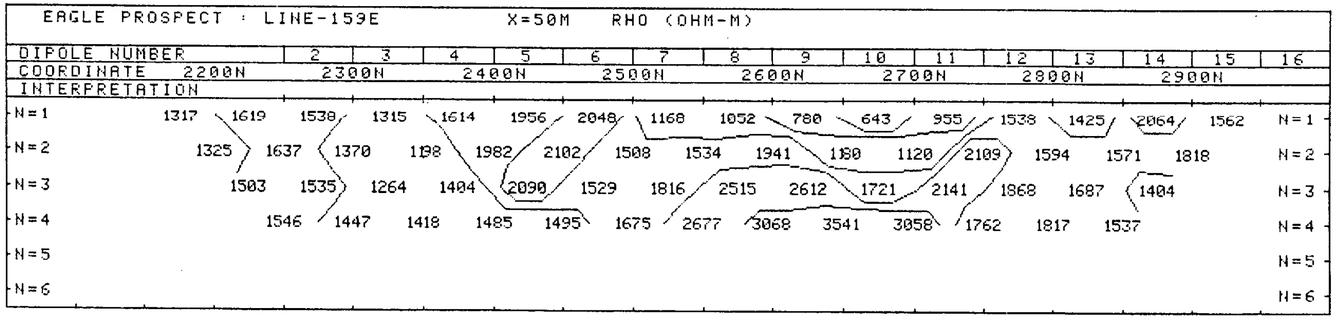
DATE SURVEYED: JULY 1982
APPROVED

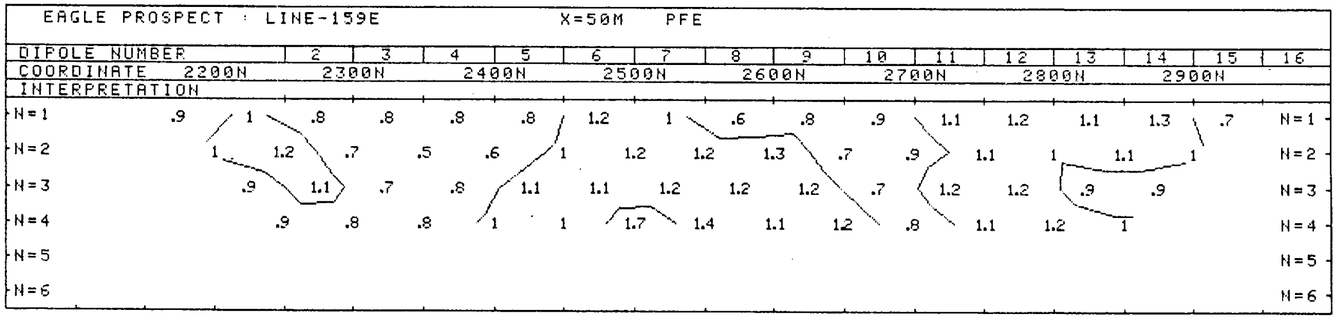
DATE

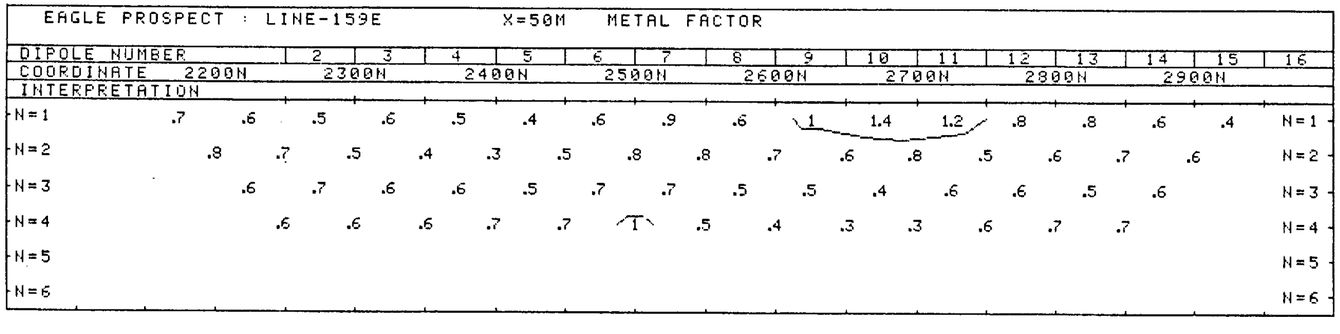
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P-5311-34

# ESSO MINERALS CANADA

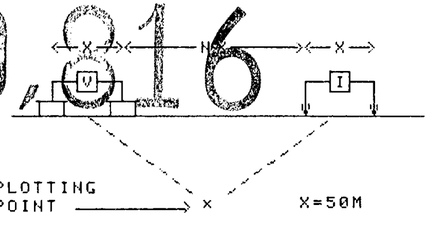
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO. 159E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

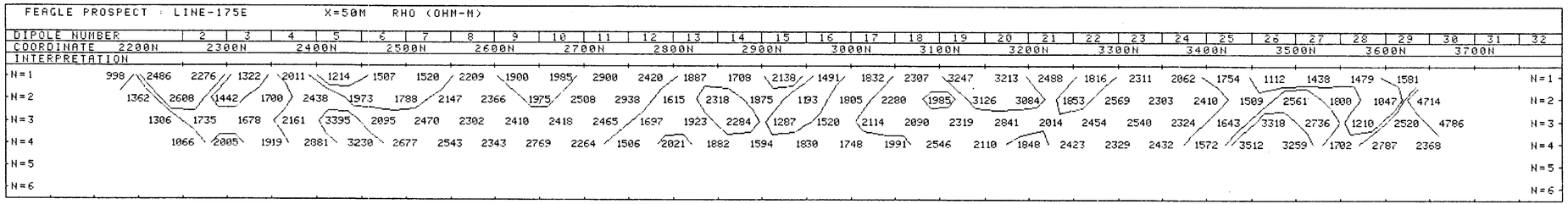
DATE SURVEYED: JULY 1982
APPROVED

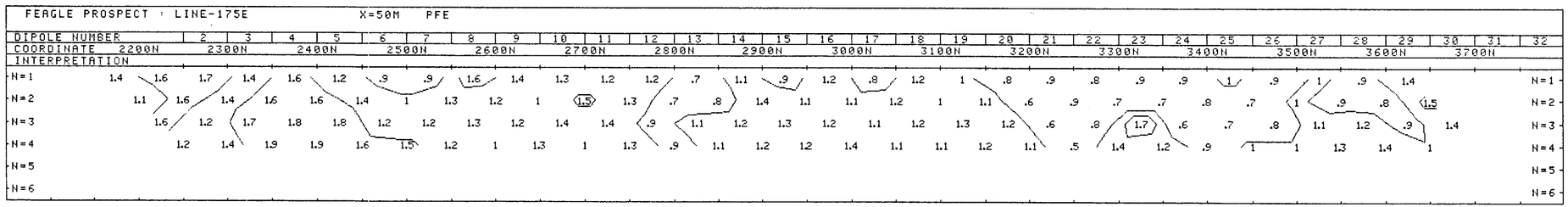
DATE

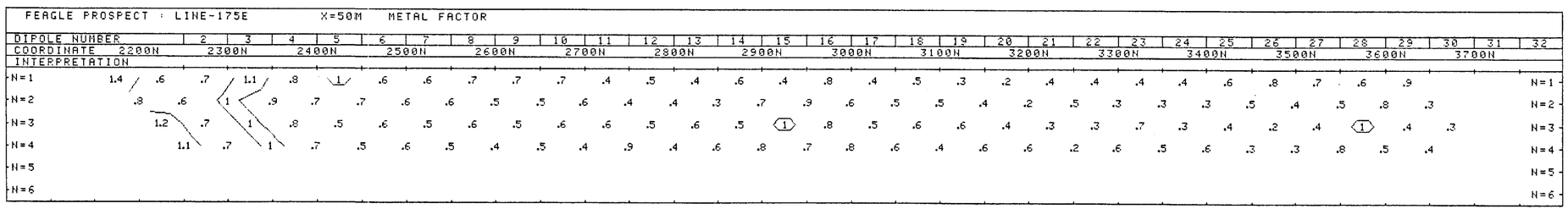
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG NO.-I.P.-5311-36

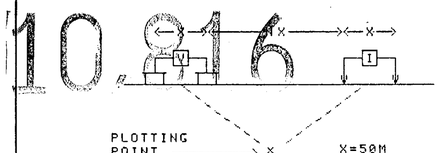
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,216




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982
APPROVED

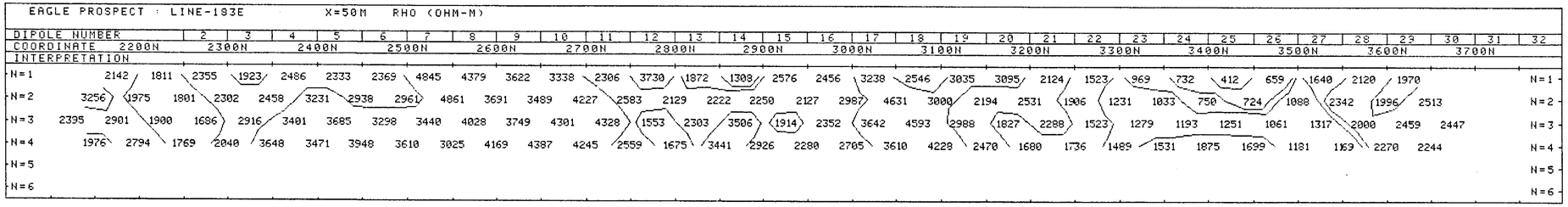
DATE

## PHOENIX GEOPHYSICS LTD.

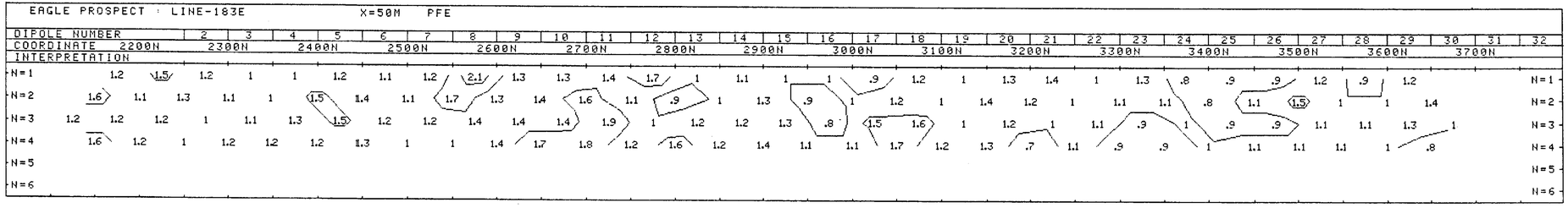
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

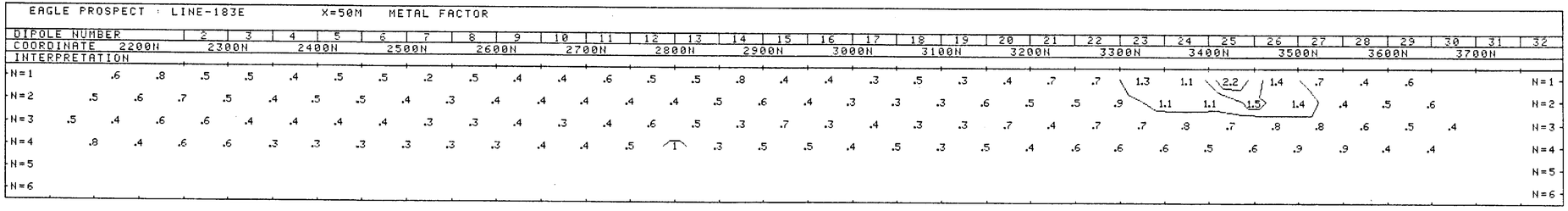
EAGLE PROSPECT : LINE-183E X=50M RHO (OHM-M)




EAGLE PROSPECT : LINE-183E X=50M PFE




EAGLE PROSPECT : LINE-183E X=50M METAL FACTOR




DWG. NO.-I.P.-5311-37

# ESSO MINERALS CANADA

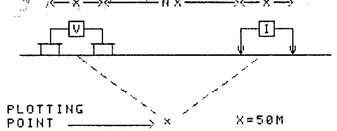
EAGLE PROSPECT

LIARD M.D., BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO.-183E

10816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

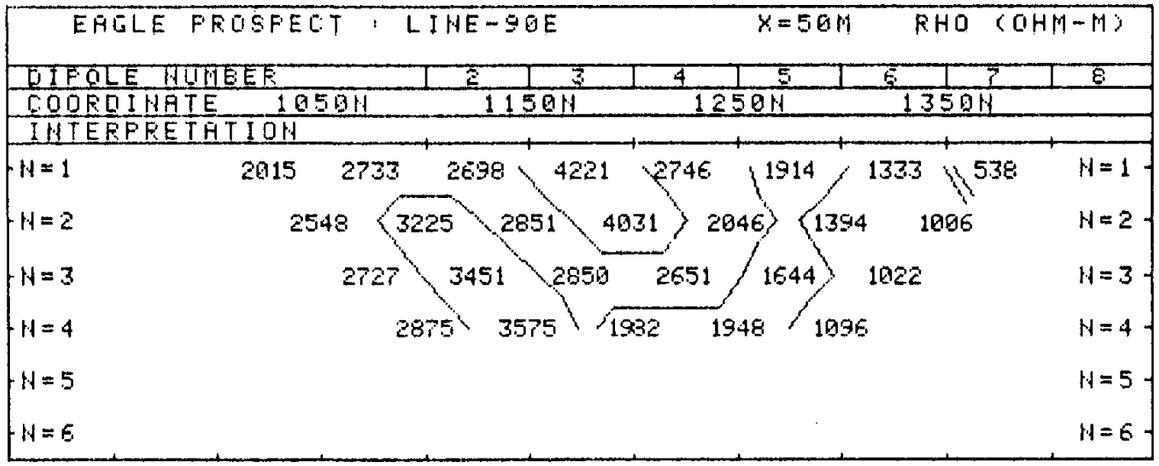
DATE SURVEYED: JULY 1982
APPROVED

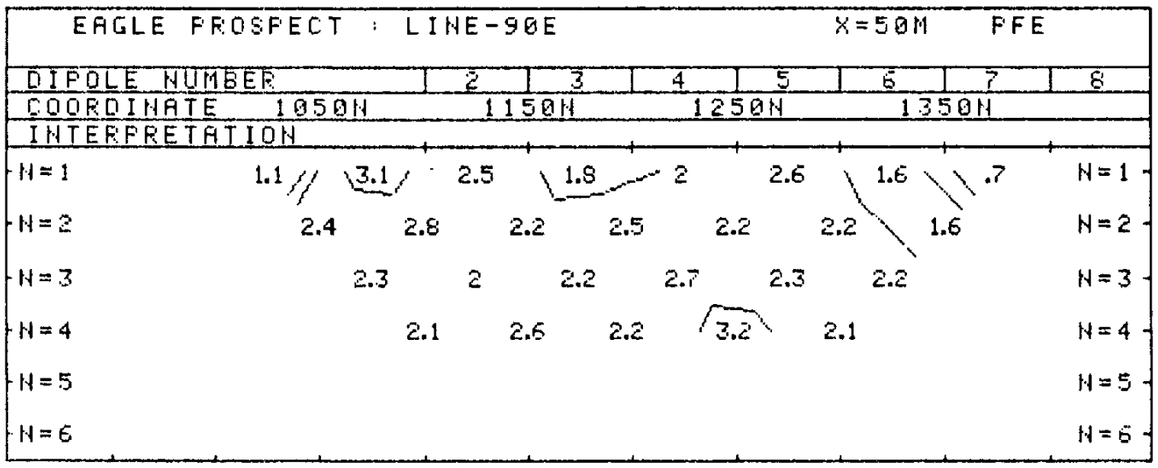
DATE

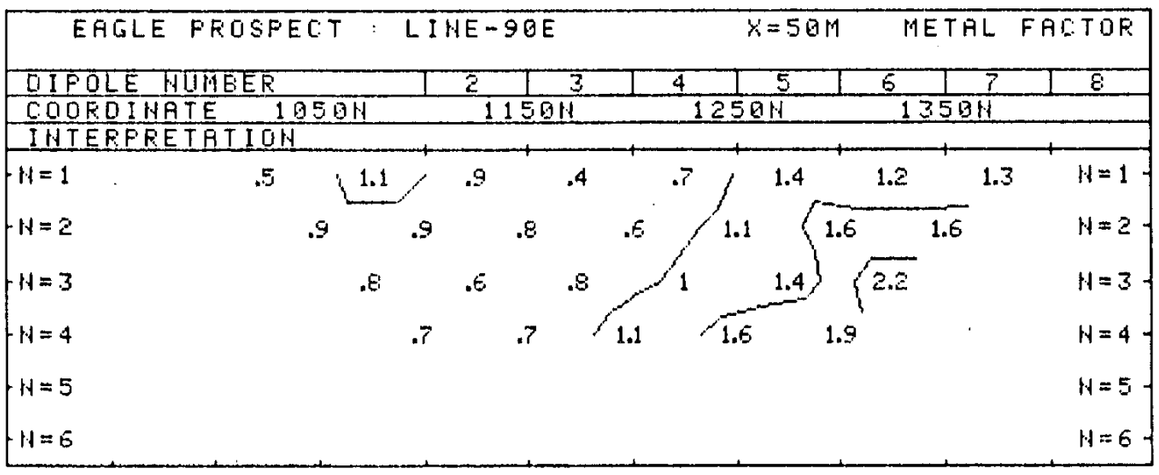
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P-5311-4

# ESSO MINERALS CANADA

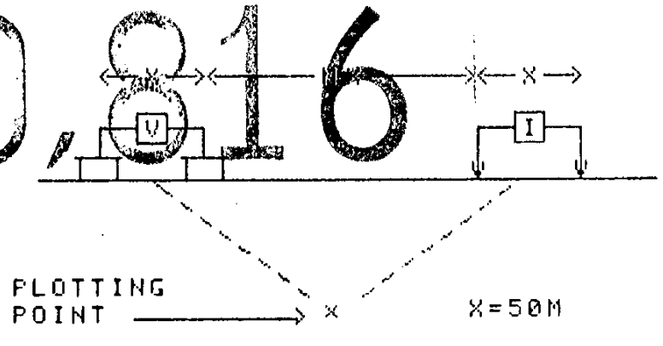
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO. 90E

10,816




PLOTTING POINT → X=50M

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT : LINE-192E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 2200N | | 2300N | | 2400N | | 2500N | | 2600N | | 2700N | | 2800N | | 2900N | | 3000N | | 3100N | | 3200N | | 3300N | | 3400N | | 3500N | | 3600N | | 3700N |
| INTERPRETATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=1 | | 2606 | 2522 | 1739 | 2577 | 1750 | 4344 | 6442 | 2313 | 3734 | 3021 | 3313 | 1888 | 1111 | 1166 | 1941 | 1636 | 2109 | 1805 | 1382 | 1393 | 1842 | 1431 | 1976 | 2048 | 3667 | 2494 | 1818 | 1623 | 1833 | 2390 | N=1 |
| N=2 | 3067 | 2722 | 1800 | 2531 | 3060 | 2308 | 5813 | 4957 | 3389 | 3427 | 3201 | 3357 | 1313 | 1474 | 1945 | 1624 | 1672 | 2500 | 1857 | 1593 | 1940 | 1741 | 1736 | 2027 | 3007 | 2340 | 1711 | 2970 | 1420 | 1693 | 3047 | N=2 |
| N=3 | 2434 | 3240 | 2131 | 2577 | 2879 | 3401 | 3410 | 4940 | 5938 | 3032 | 3904 | 3151 | 2071 | 1744 | 2451 | 1673 | 1425 | 2038 | 2464 | 2062 | 2183 | 1674 | 1938 | 1680 | 3154 | 1923 | 1976 | 2641 | 2533 | 1541 | 2019 | 1633 | N=3 |
| N=4 | | 2493 | 2692 | 3064 | 2921 | 2823 | 4484 | 2927 | 5362 | 4590 | 3124 | 3244 | 1771 | 2692 | 2601 | 1993 | 1518 | 1685 | 1948 | 2685 | 2685 | 1664 | 1796 | 1900 | 2593 | 2230 | 1720 | 2969 | 2039 | 2573 | 1985 | 1172 | N=4 |
| N=5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | N=6 |

EAGLE PROSPECT : LINE-192E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 2200N | | 2300N | | 2400N | | 2500N | | 2600N | | 2700N | | 2800N | | 2900N | | 3000N | | 3100N | | 3200N | | 3300N | | 3400N | | 3500N | | 3600N | | 3700N |
| INTERPRETATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=1 | | 1.2 | 1.2 | 1.4 | 1 | 1 | 1.5 | 1.5 | 1.4 | 1.2 | 1.3 | 1.8 | 1.2 | .9 | 1.6 | 1.3 | 1.4 | .9 | 1.5 | 1.2 | 1.1 | 1 | 1.5 | 1.2 | 1.4 | .8 | 1.9 | .9 | 1.3 | .7 | 1.2 | N=1 |
| N=2 | 1.5 | 1.5 | 1.3 | 1.1 | 1.1 | 1.8 | 1.9 | 1.7 | 1.6 | 1.3 | 1.9 | 2 | 1.6 | 1.4 | 1.2 | 1.3 | .9 | 1.2 | 1.4 | 1 | 1.3 | 1.5 | 1 | .9 | 1.3 | 1.3 | 1 | 1.1 | 1.6 | 1.2 | .8 | N=2 |
| N=3 | 1 | 1.4 | 1.4 | 1.2 | 1 | 1.5 | 1.7 | 1.6 | 1.5 | 1.3 | 1.6 | 1.7 | 1.5 | 1.6 | 1.6 | 1.4 | .7 | 1.1 | 1.1 | 1.2 | 1.5 | (1.5) | 1.2 | .9 | 1.3 | 1.9 | .8 | 1.4 | 1.2 | 1.4 | .7 | .8 | N=3 |
| N=4 | (1.6) | 1.2 | 1.4 | 1.1 | T.N. | (2.2) | (1.6) | 1.6 | 1.3 | (1.5) | (1.6) | 1.7 | (1.5) | (1.7) | (1.6) | (1.6) | (1.6) | 1.6 | 1.1 | (1.2) | 1.5 | 1.4 | 1.3 | 1 | 1.8 | 1.3 | 1.3 | 1.4 | 1.2 | 1 | .6 | | N=4 |
| N=5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | N=6 |

EAGLE PROSPECT : LINE-192E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 2200N | | 2300N | | 2400N | | 2500N | | 2600N | | 2700N | | 2800N | | 2900N | | 3000N | | 3100N | | 3200N | | 3300N | | 3400N | | 3500N | | 3600N | | 3700N |
| INTERPRETATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=1 | .5 | .5 | .8 | .4 | .6 | .3 | .2 | .6 | .3 | .4 | .5 | .6 | .8 | 1.4 | .7 | .9 | .4 | .8 | .9 | .8 | .5 | 1 | .6 | .7 | .2 | .8 | .5 | .8 | .4 | .5 | | N=1 |
| N=2 | .5 | .6 | .7 | .4 | .4 | .8 | .3 | .3 | .5 | .4 | .6 | .6 | 1.2 | .9 | .6 | .8 | .5 | .5 | .8 | .6 | .7 | .9 | .6 | .4 | .4 | .6 | .6 | .4 | 1.1 | .7 | .3 | N=2 |
| N=3 | .4 | .4 | .7 | .5 | .3 | .4 | .5 | .3 | .3 | .3 | .5 | .4 | .4 | .5 | .7 | .9 | .7 | .8 | .5 | .5 | .4 | .6 | .7 | (.9) | .6 | .5 | .4 | 1 | .4 | .5 | .5 | .9 | .3 | .5 | N=3 |
| N=4 | (.6) | .4 | (.5) | .4 | - | (.5) | (.5) | .3 | .3 | (.5) | (.5) | 1 | (.6) | (.7) | (.8) | (1.1) | .9 | .8 | .4 | (.4) | (.9) | .8 | .7 | .4 | .8 | .8 | .4 | .7 | .5 | .5 | .5 | | N=4 |
| N=5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | N=6 |

DWG. NO.-I.P.-5311-38

# ESSO MINERALS CANADA

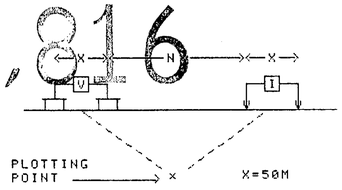
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO.-192E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE

# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT : LINE-90E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| COORDINATE | 2850N | 2950N | 3050N | 3150N | | | |
| INTERPRETATION | | | | | | | |
| N=1 | 1361 | 4750 | 2029 | 2143 | 2208 | 1794 | 2362 | 1295 | N=1 |
| N=2 | 1573 | 2895 | 2640 | 3431 | 2325 | 1800 | 1701 | N=2 |
| N=3 | 1144 | 3287 | 3705 | 3320 | 2482 | 1469 | N=3 |
| N=4 | 1338 | 4387 | 3442 | 3640 | 1817 | N=4 |
| N=5 | N=5 |
| N=6 | N=6 |

EAGLE PROSPECT : LINE-90E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| COORDINATE | 2850N | 2950N | 3050N | 3150N | | | |
| INTERPRETATION | | | | | | | |
| N=1 | .8 | 1.1 | 1 | 1 | 1 | 1 | 1.3 | .7 | N=1 |
| N=2 | .8 | 1.3 | 1 | 1.3 | 1.1 | .7 | .9 | N=2 |
| N=3 | .7 | 1 | 1.4 | 1 | .9 | .8 | N=3 |
| N=4 | .7 | 1.2 | 1.1 | 1.1 | .8 | N=4 |
| N=5 | N=5 |
| N=6 | N=6 |

EAGLE PROSPECT : LINE-90E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| COORDINATE | 2850N | 2950N | 3050N | 3150N | | | |
| INTERPRETATION | | | | | | | |
| N=1 | .6 | .2 | .5 | .5 | .5 | .6 | .6 | .5 | N=1 |
| N=2 | .5 | .4 | .4 | .4 | .5 | .4 | .5 | N=2 |
| N=3 | .6 | .3 | .4 | .3 | .4 | .5 | N=3 |
| N=4 | .5 | .3 | .3 | .3 | .4 | N=4 |
| N=5 | N=5 |
| N=6 | N=6 |

DWG. NO.-I.P.-5311-2

# ESSO MINERALS CANADA

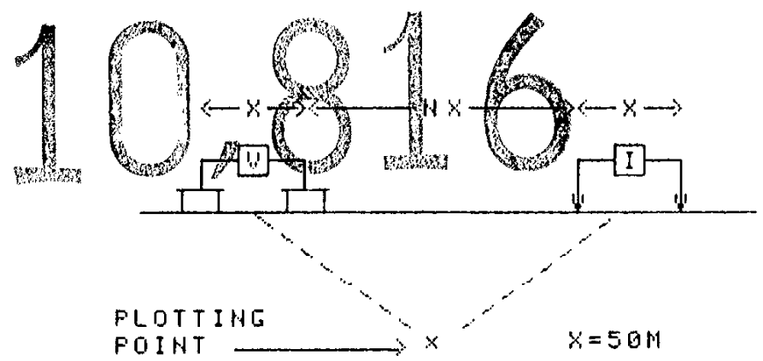
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO. 90E

10816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

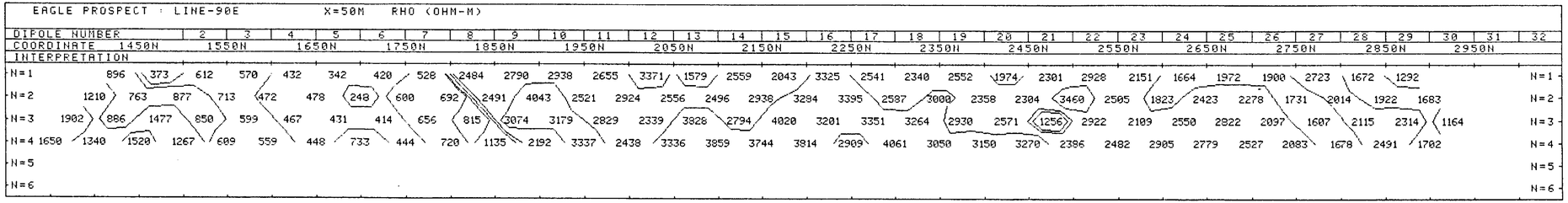
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

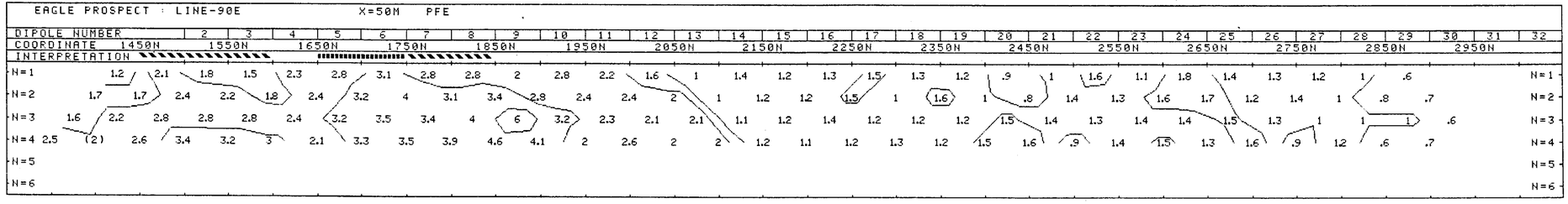
DATE

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

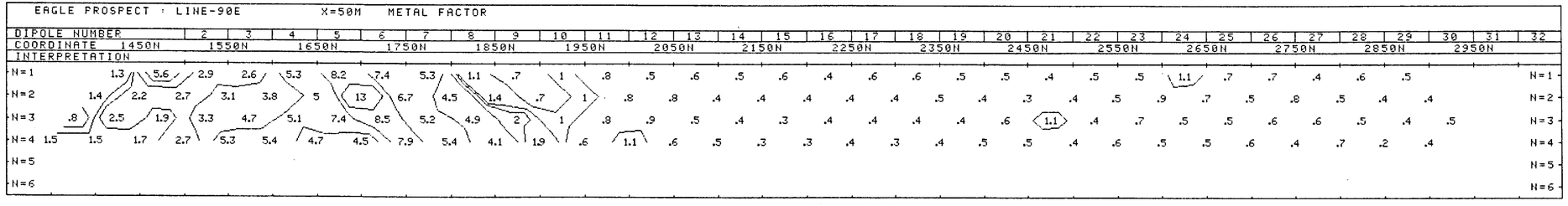
AND RESISTIVITY SURVEY




TOPOGRAPHY

VALLEY STREAM




DWG. NO.-I.P.-5311-3

# ESSO MINERALS CANADA

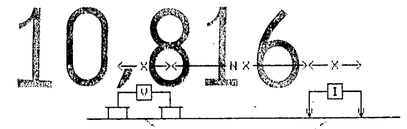
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO.-90E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982
APPROVED

DATE

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT : LINE-90E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 3200N | | 3300N | | 3400N | | 3500N | | 3600N | | 3700N | |
| INTERPRETATION | | | | | | | | | | | | |
| N=1 | 1352 | 1956 | 1558 | 1493 | 2038 | 1838 | 1917 | 2285 | 2945 | 2842 | | N=1 |
| N=2 | 1702 | 1754 | 2614 | 1522 | 2016 | 1911 | 2188 | 2239 | 2241 | 3050 | 2772 | N=2 |
| N=3 | 1608 | 2122 | 2218 | 2375 | 1778 | 1840 | 2274 | 2391 | 2648 | 2307 | 2993 | 2470 N=3 |
| N=4 | 1976 | 2448 | 1822 | 2470 | 1543 | 2134 | 2496 | 2491 | 2493 | 2262 | 2552 | N=4 |
| N=5 | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | N=6 |

EAGLE PROSPECT : LINE-90E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 3200N | | 3300N | | 3400N | | 3500N | | 3600N | | 3700N | |
| INTERPRETATION | | | | | | | | | | | | |
| N=1 | 1 | 1 | 1 | 1.2 | 1.1 | 1 | 1 | 1.1 | 1.2 | 1.3 | | N=1 |
| N=2 | 1.1 | 1.5 | 1.1 | 1.2 | 1.1 | 1.4 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | N=2 |
| N=3 | 1.2 | 1.3 | .9 | 1 | 1.2 | 1.3 | 1 | 1.2 | 1.2 | 1.4 | .8 | .9 N=3 |
| N=4 | 1.3 | 1.5 | 1.3 | 1.2 | 1.3 | 1.2 | 1.2 | 1.5 | 1.3 | 1.5 | 1 | N=4 |
| N=5 | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | N=6 |

EAGLE PROSPECT : LINE-90E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 3200N | | 3300N | | 3400N | | 3500N | | 3600N | | 3700N | |
| INTERPRETATION | | | | | | | | | | | | |
| N=1 | .7 | .5 | .6 | .8 | .5 | .5 | .5 | .5 | .4 | .5 | | N=1 |
| N=2 | .6 | .9 | .4 | .8 | .5 | .7 | .6 | .5 | .5 | .4 | .4 | N=2 |
| N=3 | .7 | .6 | .4 | .4 | .7 | .7 | .4 | .5 | .5 | .6 | .3 | .4 N=3 |
| N=4 | .7 | .6 | .7 | .5 | .8 | .6 | .5 | .6 | .5 | .7 | .4 | N=4 |
| N=5 | | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | | N=6 |

DWG. NO.-I.P.-5311-1

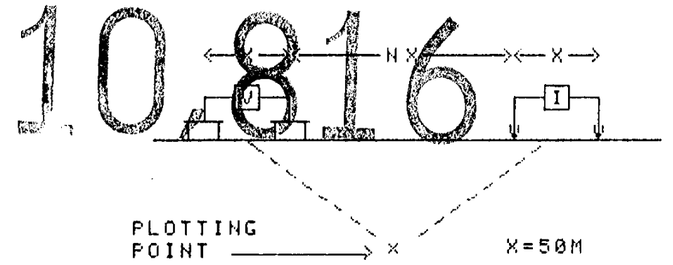
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

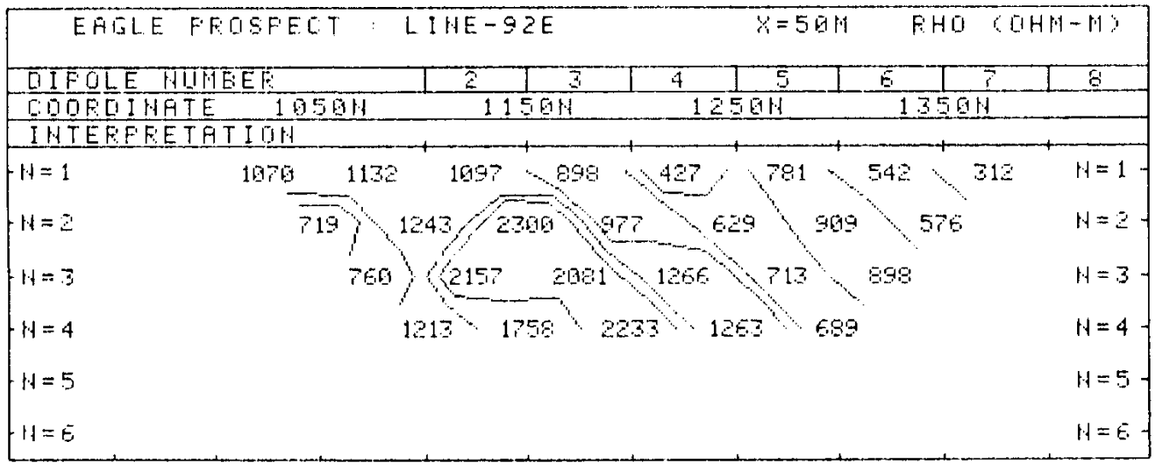
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

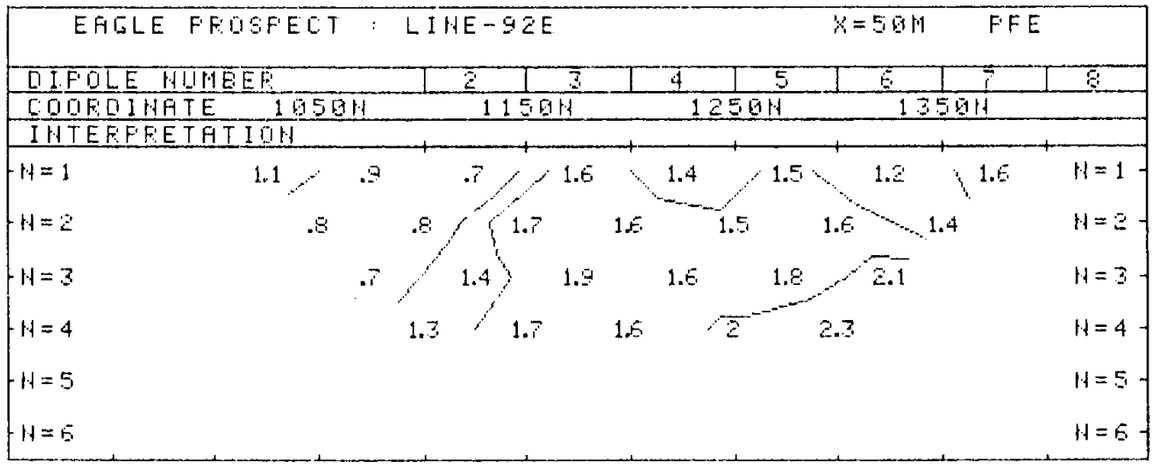
DATE

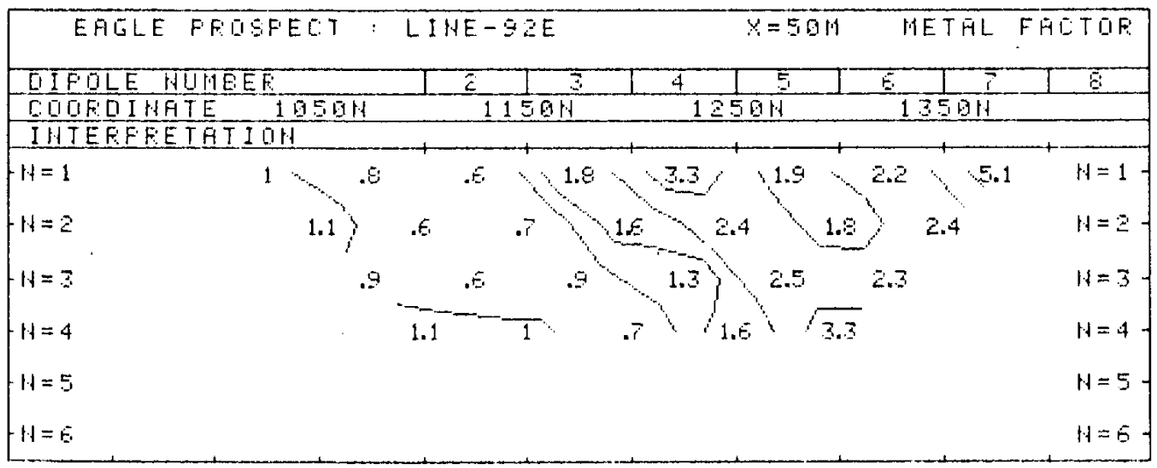
# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-1.P.-5311-8

# ESSO MINERALS CANADA

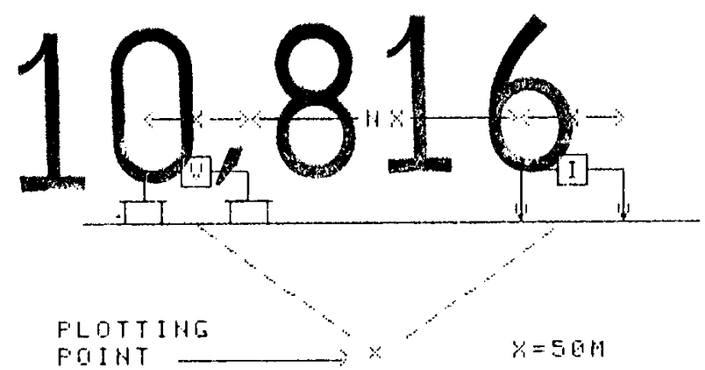
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

**GEOLOGICAL BRANCH**
**ASSESSMENT REPORT**

LINE NO.-92E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982

APPROVED

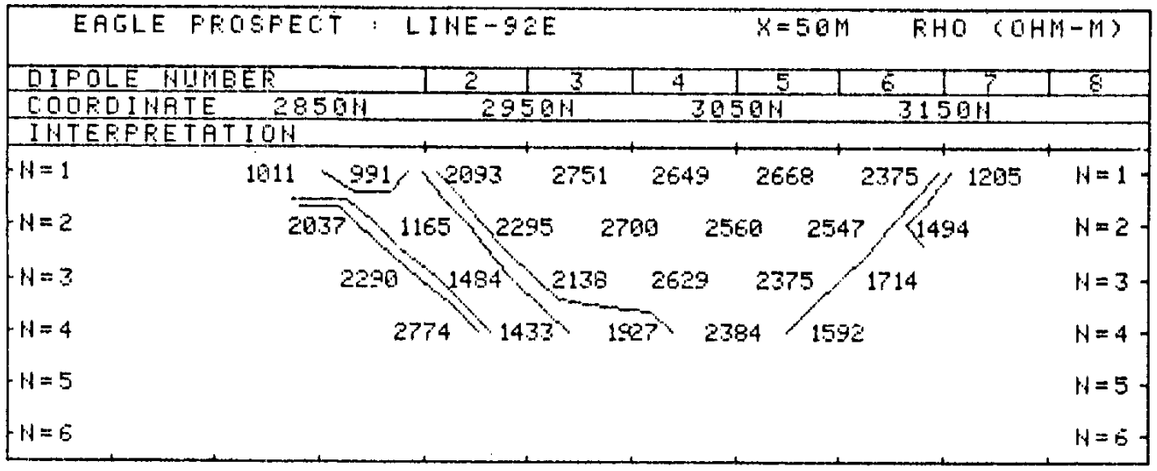
_____

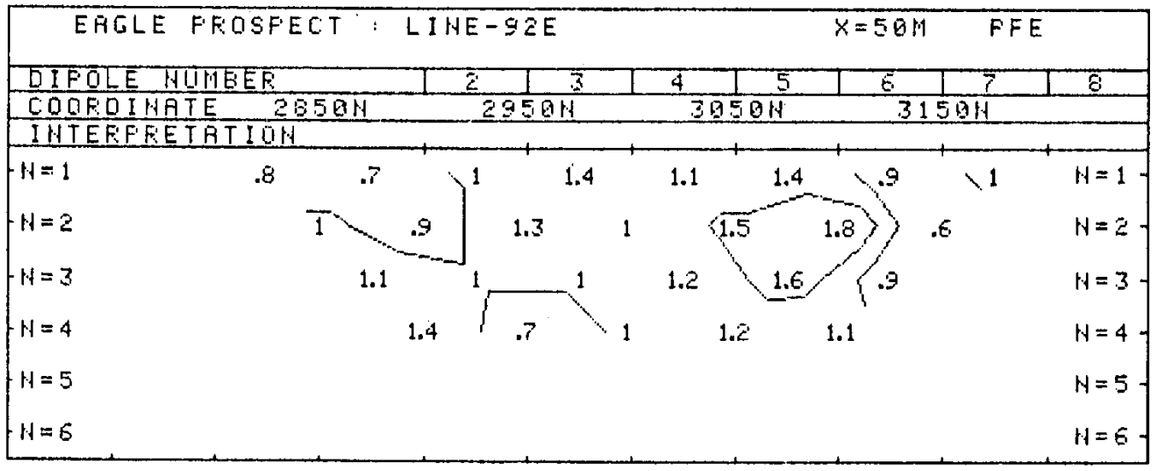
DATE_____

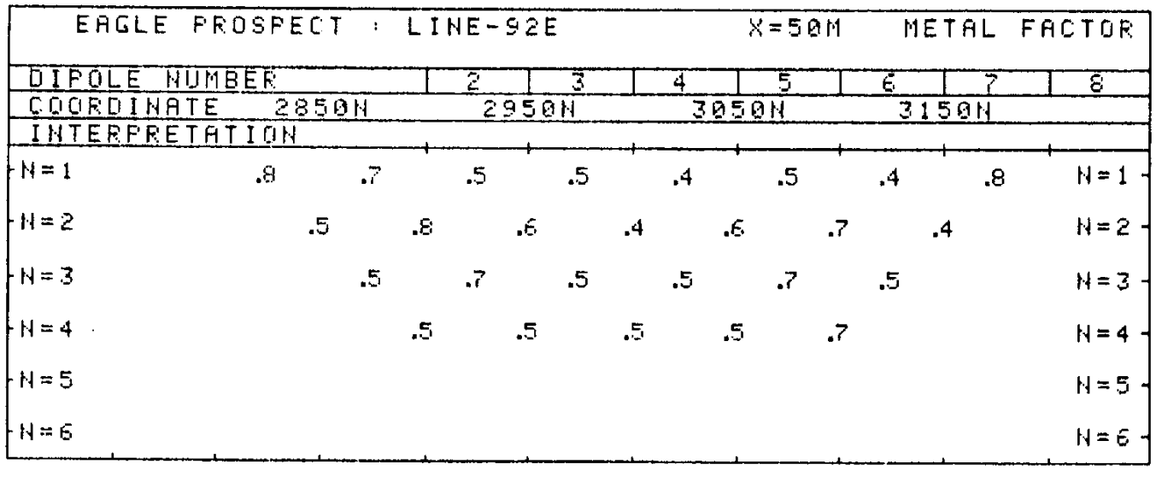
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-6

# ESSO MINERALS CANADA

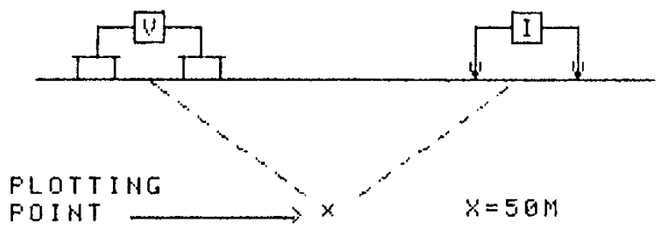
EAGLE PROSPECT

**GEOLOGICAL BRANCH**
**ASSESSMENT REPORT**

LIARD M.D. BRITISH COLUMBIA

LINE NO.-92E

# 10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

_____

DATE_____

## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT - LINE-92E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 1450N | | 1550N | | 1650N | | 1750N | | 1850N | | 1950N | | 2050N | | 2150N | | 2250N | | 2350N | | 2450N | | 2550N | | 2650N | | 2750N | | 2850N | | 2950N | |
| INTERPRETATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=1 | 404 | 732 | 781 | 752 | 505 | 491 | 880 | 1520 | 1314 | 1837 | 2062 | 1768 | 2326 | 2394 | 2157 | 2442 | 2312 | 2879 | 1867 | 2178 | 1917 | 2343 | 1568 | 1328 | 1708 | 1696 | 1474 | 1306 | 1189 | 1295 |
| N=2 | 508 | 645 | 920 | 775 | 790 | 447 | 406 | 1315 | 1414 | 886 | 1933 | 2454 | 2350 | 2431 | 2102 | 2735 | 2738 | 2272 | 2371 | 2203 | 2194 | 2167 | 1737 | 1757 | 2494 | 2817 | 1366 | 1631 | 1837 | 2257 | 1115 |
| N=3 | 813 | 832 | 699 | 892 | 787 | 658 | 341 | 599 | 1316 | 1001 | 1007 | 2334 | 3207 | 2530 | 2119 | 2864 | 2714 | 2841 | 1978 | 2791 | 2458 | 2751 | 1862 | 1798 | 2803 | 3499 | 2050 | 1306 | 2007 | 3125 | 2193 |
| N=4 | 1071 | 1209 | 840 | 668 | 867 | 627 | 494 | 564 | 637 | 826 | 1121 | 193 | 2484 | 3325 | 2171 | 2712 | 2677 | 2799 | 2559 | 2251 | 3007 | 2924 | 2143 | 1779 | 2772 | 3805 | 2743 | 1758 | 1545 | 2470 | 3240 |
| N=5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

EAGLE PROSPECT - LINE-92E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 1450N | | 1550N | | 1650N | | 1750N | | 1850N | | 1950N | | 2050N | | 2150N | | 2250N | | 2350N | | 2450N | | 2550N | | 2650N | | 2750N | | 2850N | | 2950N | |
| INTERPRETATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=1 | 2.2 | 2.3 | 2.2 | 2.4 | 3.4 | 3.2 | 3.7 | 4.3 | 4.9 | 4.9 | 4.6 | 2.4 | 1.5 | 1.6 | 1.5 | 1.1 | 1.5 | 1.6 | 1 | 1.5 | 1.2 | 1.1 | 1.2 | 1.2 | 1.6 | 1.4 | 1.1 | 1 | 1.1 | .6 |
| N=2 | 2 | 2.7 | 2.5 | 3.2 | 2.6 | 3.2 | 3.4 | 4.6 | 6.2 | 6 | 5.2 | 4.6 | 1.4 | 1.6 | 1.5 | 1.4 | 1.2 | 1.7 | 1.5 | 1.4 | 1.4 | .9 | 1.2 | 1.3 | 1.7 | 1.6 | 1.5 | 1 | 1.3 | 1.4 | .8 |
| N=3 | 2 | 2.7 | 3.1 | 3.1 | 3.4 | 2.5 | 3 | 4.1 | 6.3 | 6.4 | 5.2 | 4.5 | 3.9 | 1.6 | 1.4 | 1.3 | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.2 | 1 | 1.3 | 1.8 | 1.7 | 1.6 | 1.2 | 1.3 | 1.2 | 1.3 |
| N=4 | 2.6 | 2.6 | 2.9 | 3.8 | 3.7 | 3.3 | 2.7 | 3.7 | 5.5 | 6 | 5.9 | 4.1 | 3.2 | 3.1 | 1.6 | 1.5 | 1.4 | 1.5 | 1 | 1.3 | 1.3 | 1.4 | 1 | 1.1 | 1.7 | 1.7 | 1.8 | 1.4 | 1 | 1 | 1 |
| N=5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

EAGLE PROSPECT - LINE-92E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 1450N | | 1550N | | 1650N | | 1750N | | 1850N | | 1950N | | 2050N | | 2150N | | 2250N | | 2350N | | 2450N | | 2550N | | 2650N | | 2750N | | 2850N | | 2950N | |
| INTERPRETATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=1 | 5.4 | 3.1 | 2.8 | 3.2 | 6.7 | 6.5 | 4.2 | 2.8 | 3.7 | 2.7 | 2.2 | 1.4 | .6 | .7 | .7 | .5 | .6 | .6 | .5 | .7 | .6 | .5 | .8 | .9 | .9 | .8 | .7 | .8 | .9 | .5 |
| N=2 | 3.9 | 4.2 | 2.7 | 4.1 | 3.3 | 7.2 | 8.4 | 3.5 | 4.4 | 6.8 | 2.7 | 1.9 | .6 | .7 | .7 | .5 | .4 | .7 | .6 | .6 | .6 | .4 | .7 | .7 | .7 | .6 | 1.1 | .6 | .7 | .6 | .7 |
| N=3 | 2.5 | 3.2 | 4.4 | 3.5 | 4.3 | 3.8 | 8.8 | 6.8 | 4.8 | 6.4 | 5.2 | 1.9 | 1.2 | .6 | .7 | .5 | .5 | .5 | .7 | .5 | .5 | .4 | .5 | .7 | .6 | .5 | .8 | .9 | .6 | .4 | .6 |
| N=4 | 2.4 | 2.2 | 3.5 | 5.7 | 4.3 | 5.3 | 5.5 | 6.6 | 8.6 | 7.3 | 5.3 | 3.4 | 1.3 | .9 | .7 | .6 | .5 | .5 | .4 | .6 | .4 | .5 | .5 | .6 | .6 | .4 | .7 | .8 | .6 | .4 | .3 |
| N=5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N=6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

DWG. NO. -I.P.-5311-7

# ESSO MINERALS CANADA

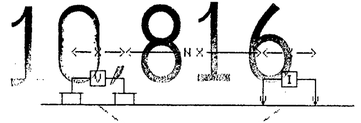
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

LINE NO.-92E

10,816




PLOTTING POINT → X X=50M

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ

NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5 -2,-3,-5,-7.5,-10

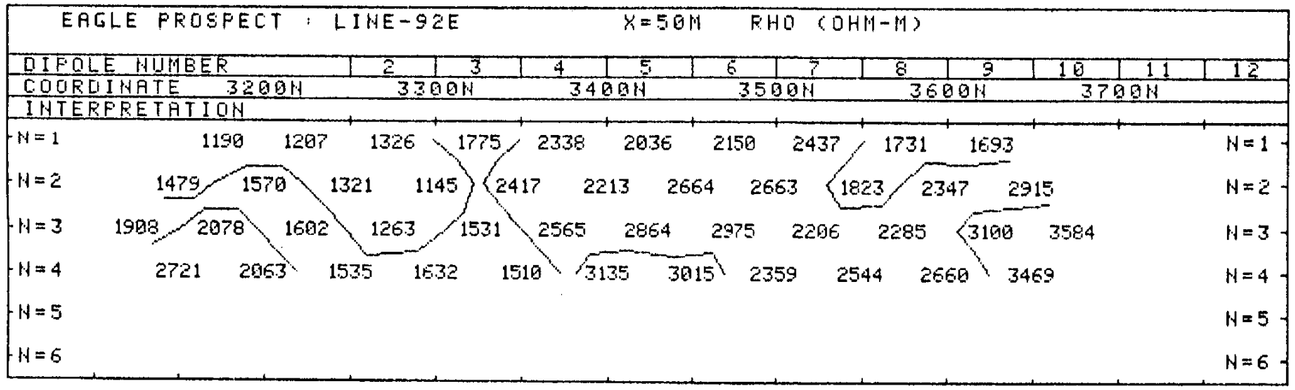
DATE SURVEYED: JULY 1982
APPROVED

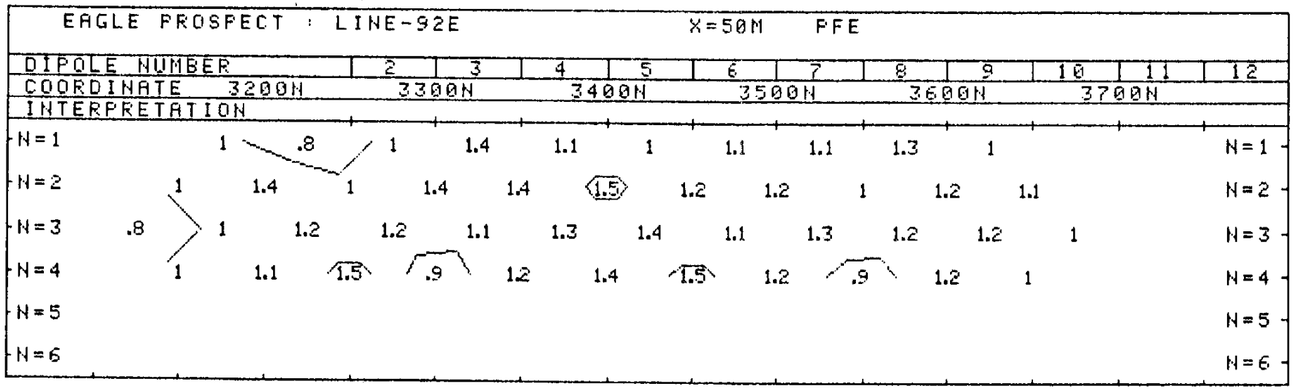
DATE

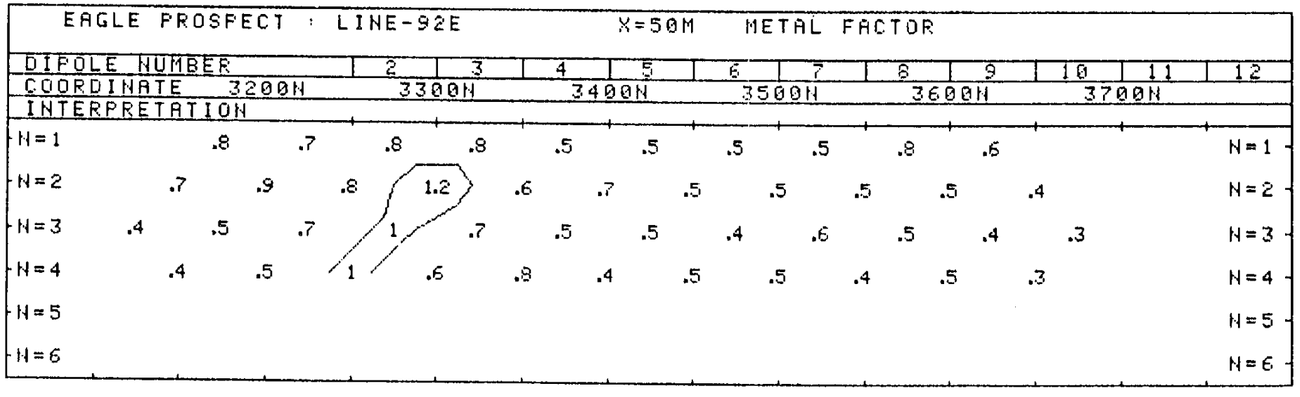
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-5

# ESSO MINERALS CANADA

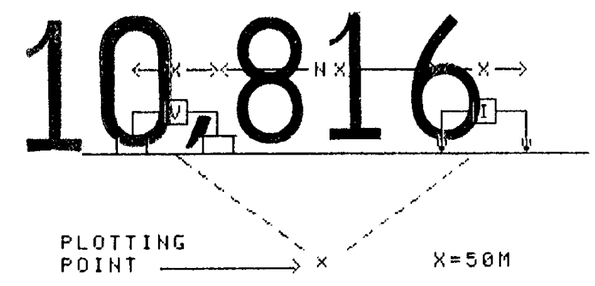
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

**GEOLOGICAL BRANCH**
**ASSESSMENT REPORT**



# 10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982
APPROVED

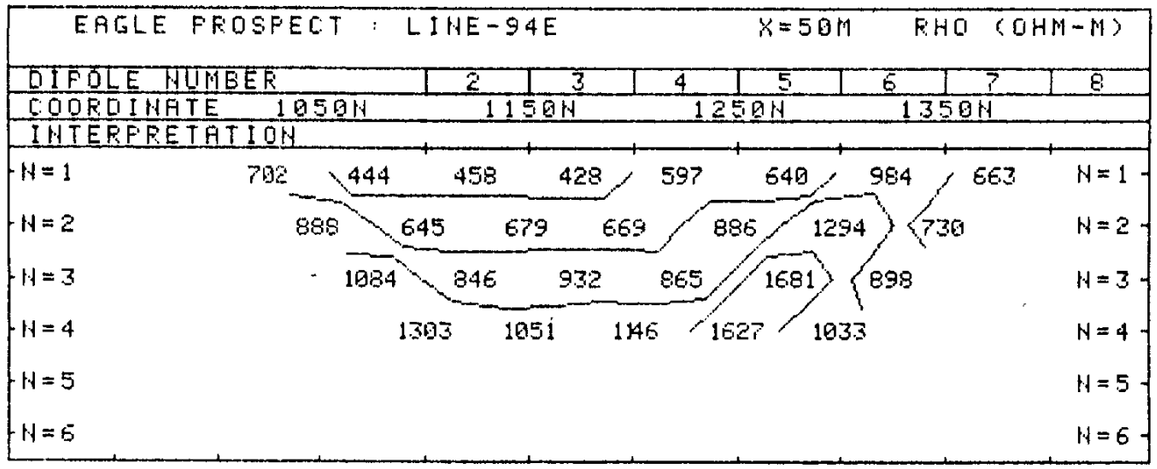
_____

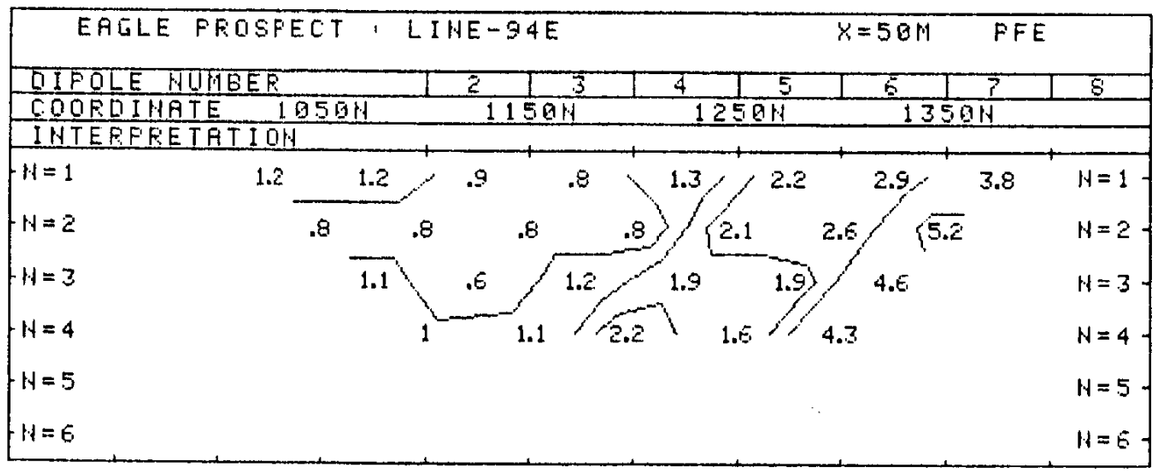
DATE_____

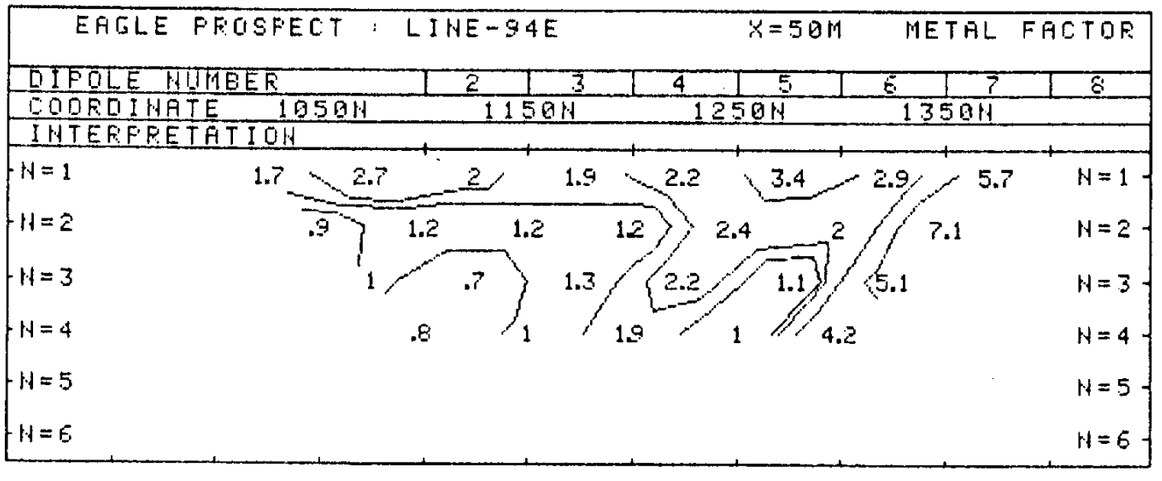
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-12

# ESSO MINERALS CANADA

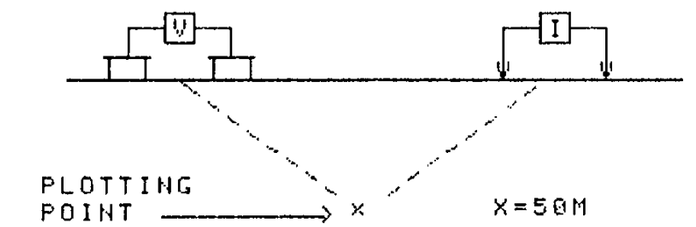
EAGLE PROSPECT

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LIARD M.D. BRITISH COLUMBIA

LINE NO.-94E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE

## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT : LINE-94E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| COORDINATE | 2850N | 2950N | 3050N | 3150N | | | |
| INTERPRETATION | | | | | | | |
| N=1 | 1024 | 753 | 1150 | 3924 | 1663 | 1963 | 2549 | 1736 | N=1 |
| N=2 | 1817 | 1525 | 2258 | 2885 | 1881 | 1742 | 2588 | N=2 |
| N=3 | 3108 | 2660 | 1928 | 2558 | 1610 | 1609 | N=3 |
| N=4 | 4791 | 2451 | 1580 | 1939 | 1409 | N=4 |
| N=5 | N=5 |
| N=6 | N=6 |

EAGLE PROSPECT : LINE-94E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| COORDINATE | 2850N | 2950N | 3050N | 3150N | | | |
| INTERPRETATION | | | | | | | |
| N=1 | 1.2 | .8 | .8 | 1.3 | 1.1 | 1.1 | 1.4 | .8 | N=1 |
| N=2 | 1.4 | .7 | 1.1 | 1.4 | 1 | 1.3 | 1.3 | N=2 |
| N=3 | 1.6 | 1 | 1.1 | 1.2 | 1.4 | 1.1 | N=3 |
| N=4 | 1.6 | 1 | .9 | 1.1 | 1.1 | N=4 |
| N=5 | N=5 |
| N=6 | N=6 |

EAGLE PROSPECT : LINE-94E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| COORDINATE | 2850N | 2950N | 3050N | 3150N | | | |
| INTERPRETATION | | | | | | | |
| N=1 | 1.2 | 1.1 | .7 | .3 | .7 | .6 | .5 | .5 | N=1 |
| N=2 | .8 | .5 | .5 | .5 | .5 | .7 | .5 | N=2 |
| N=3 | .5 | .4 | .6 | .5 | .9 | .7 | N=3 |
| N=4 | .3 | .4 | .6 | .6 | .8 | N=4 |
| N=5 | N=5 |
| N=6 | N=6 |

DWG. NO.-I.P-5311-10

# ESSO MINERALS CANADA

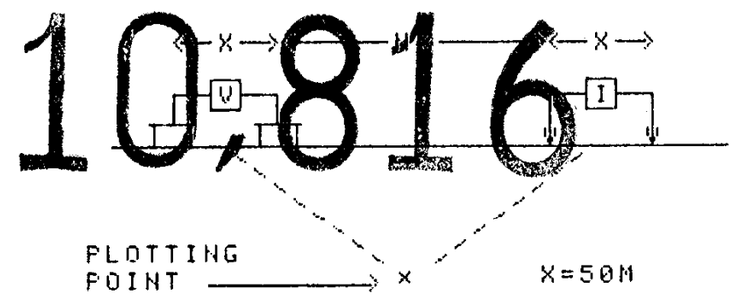
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO. 94E

**GEOLOGICAL BRANCH**
**ASSESSMENT REPORT**

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

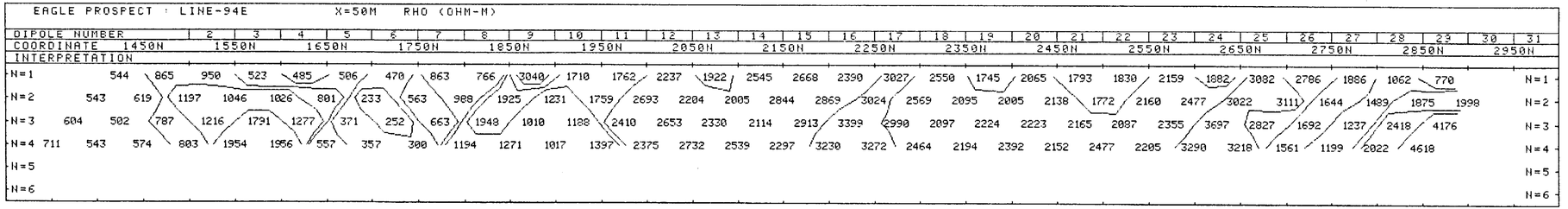
DATE SURVEYED: JULY 1982
APPROVED

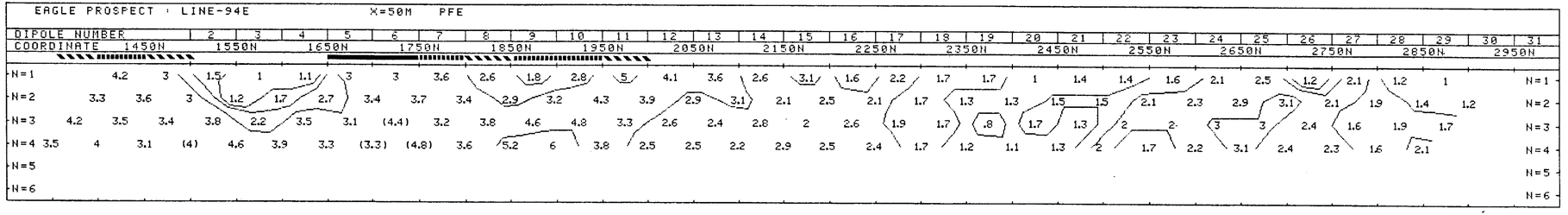
DATE

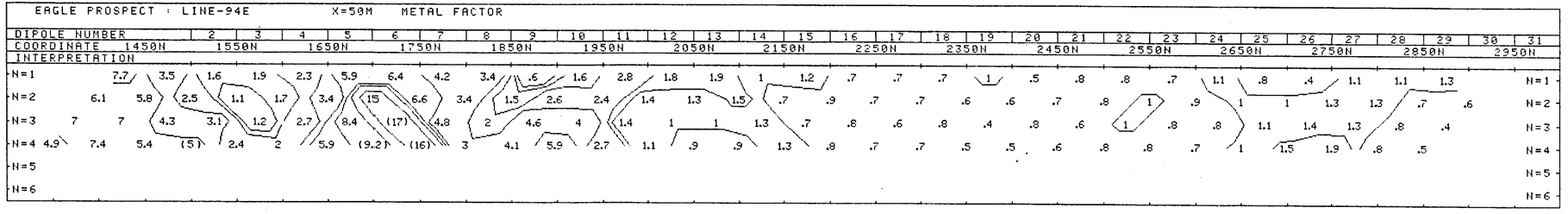
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-11

# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

LINE NO. 94E

10,816

PLOTTING POINT X=50M

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

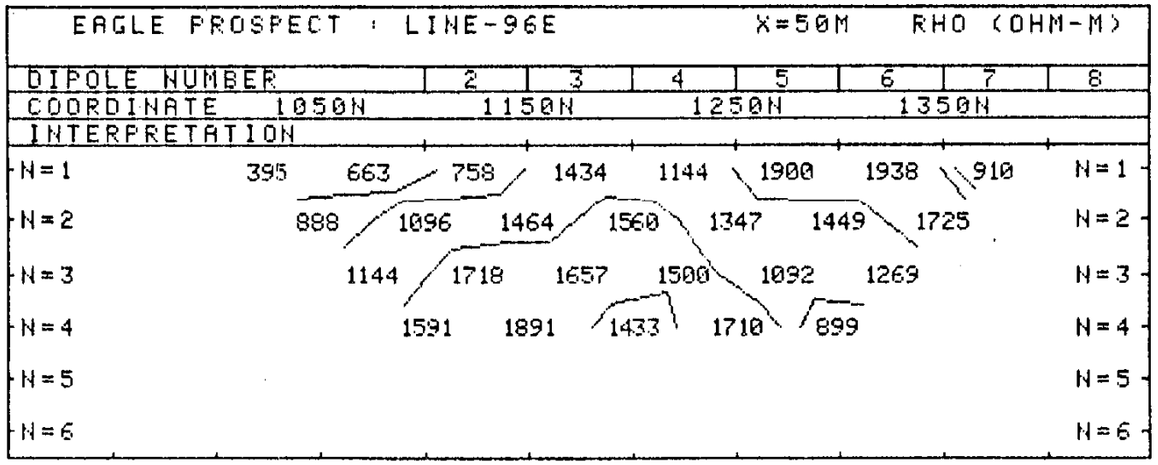
DATE SURVEYED: JULY 1982
APPROVED

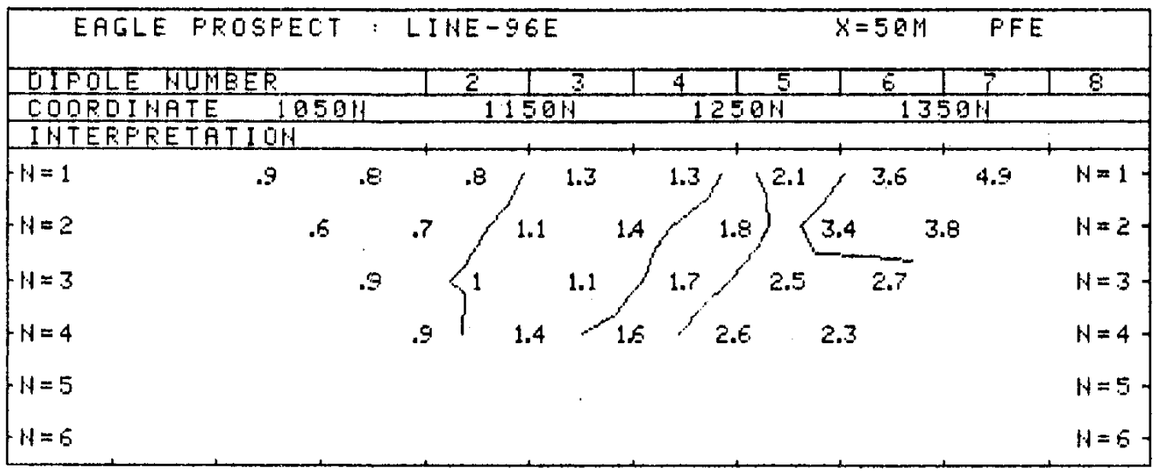
DATE

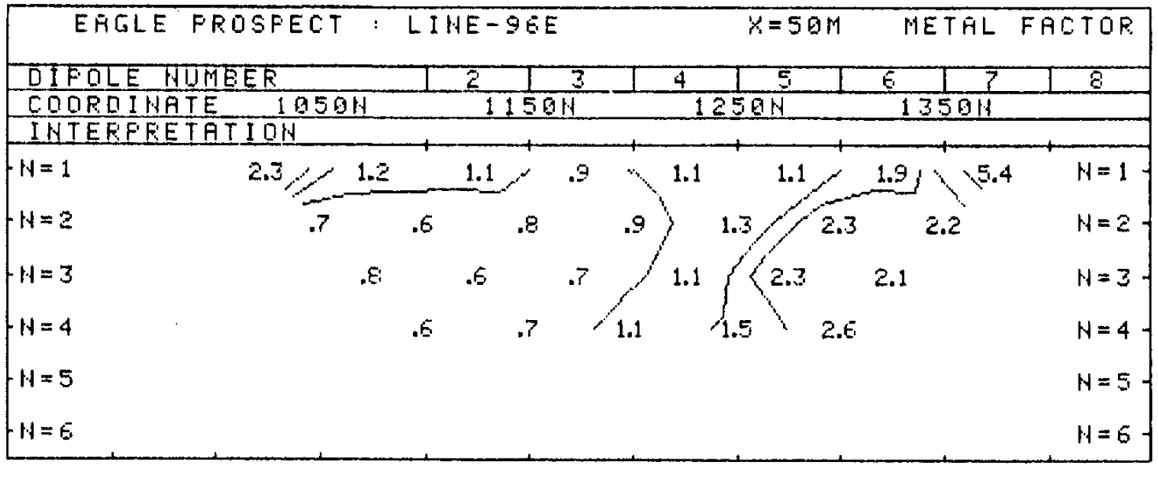
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-16

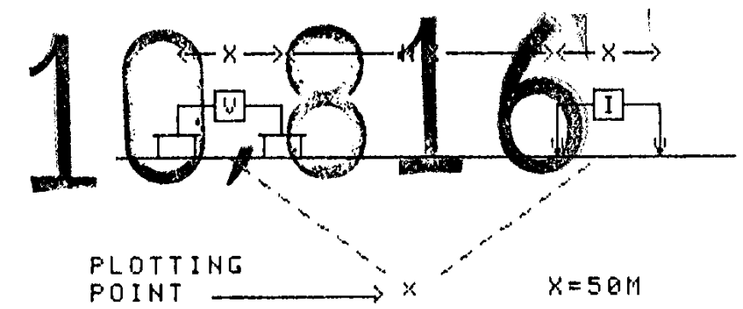
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA



10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE

## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT : LINE-94E X=50M RHO (OHM-M)

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 3200N | | 3300N | | 3400N | | 3500N | | 3600N |
| INTERPRETATION | | | | | | | | | |
| N=1 | | 1720 | 1263 | 1457 | 1473 | 1874 | 2180 | 3464 | 1786 | 2960 | N=1 |
| N=2 | 2134 | 1431 | 1397 | 2058 | 3072 | 1573 | 2304 | 2992 | 2368 | | N=2 |
| N=3 | 1900 | 1793 | 1514 | 1944 | 3659 | 2323 | 2090 | 2162 | 3618 | | N=3 |
| N=4 | | 1544 | 1799 | 1936 | 3323 | 2730 | 3230 | 1972 | 2570 | | N=4 |
| N=5 | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | N=6 |

EAGLE PROSPECT : LINE-94E X=50M PFE

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 3200N | | 3300N | | 3400N | | 3500N | | 3600N |
| INTERPRETATION | | | | | | | | | |
| N=1 | | 1.2 | 1.1 | 1.2 | 1.2 | 1.2 | 1.4 | 1.3 | .6 | .8 | N=1 |
| N=2 | 1.3 | 1.1 | 1.4 | 1.4 | 1.5 | 1.1 | 1.4 | 1.4 | 1.2 | | N=2 |
| N=3 | 1.4 | 1.4 | 1.2 | 1.4 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 | | N=3 |
| N=4 | 1.2 | 1.6 | 1.5 | 1.5 | 1.3 | 1.5 | 1.2 | 1.4 | | | N=4 |
| N=5 | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | N=6 |

EAGLE PROSPECT : LINE-94E X=50M METAL FACTOR

| DIPOLE NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|
| COORDINATE | 3200N | | 3300N | | 3400N | | 3500N | | 3600N |
| INTERPRETATION | | | | | | | | | |
| N=1 | | .7 | .9 | .8 | .8 | .6 | .6 | .4 | .3 | .3 | N=1 |
| N=2 | .6 | .8 | 1 | .7 | .5 | .7 | .6 | .5 | .5 | | N=2 |
| N=3 | .7 | .8 | .8 | .7 | .4 | .6 | .6 | .6 | .4 | | N=3 |
| N=4 | .8 | .9 | .8 | .5 | .5 | .5 | .6 | .5 | | | N=4 |
| N=5 | | | | | | | | | | | N=5 |
| N=6 | | | | | | | | | | | N=6 |

DWG. NO.-I.P.-5311-9

# ESSO MINERALS CANADA

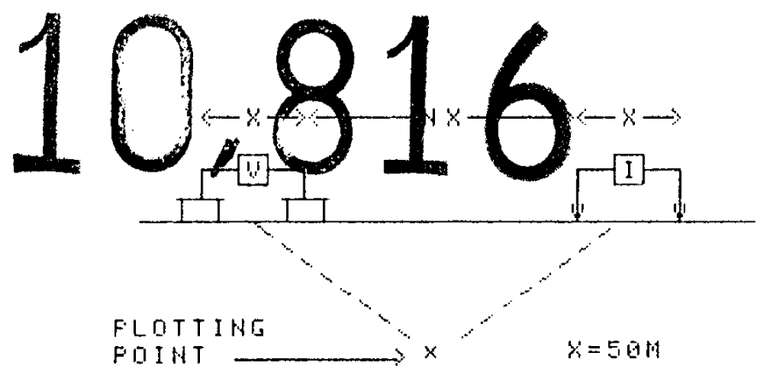
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA



LINE NO.-94E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

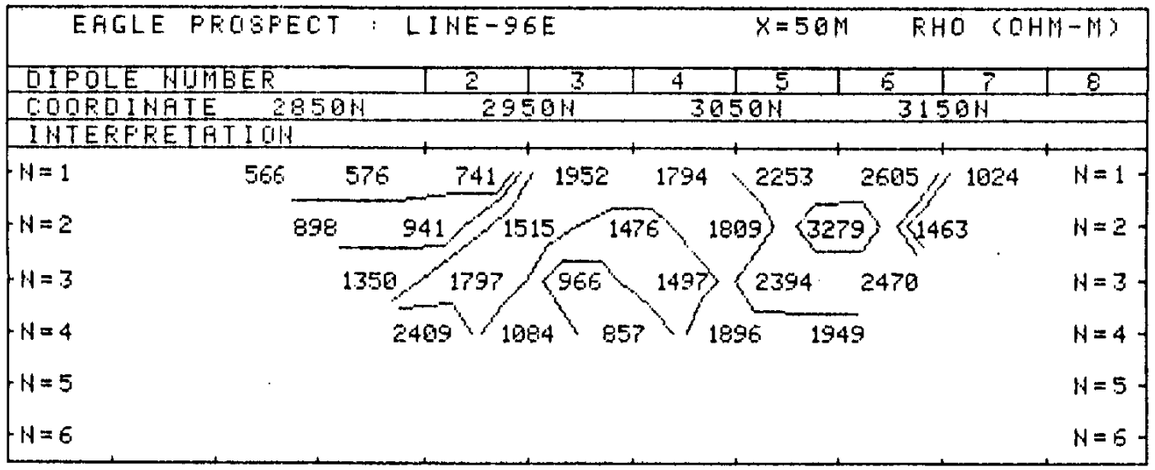
DATE SURVEYED: JULY 1982
APPROVED

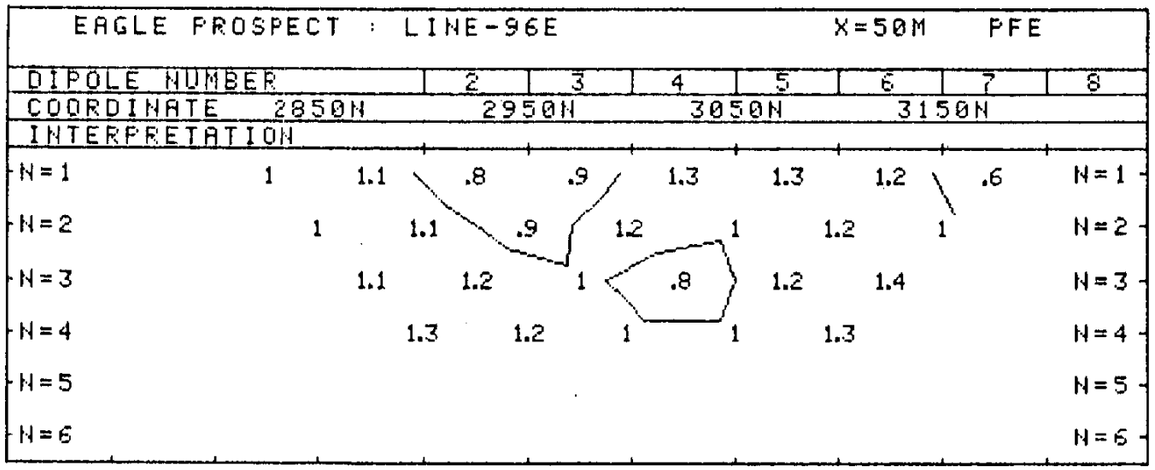
DATE

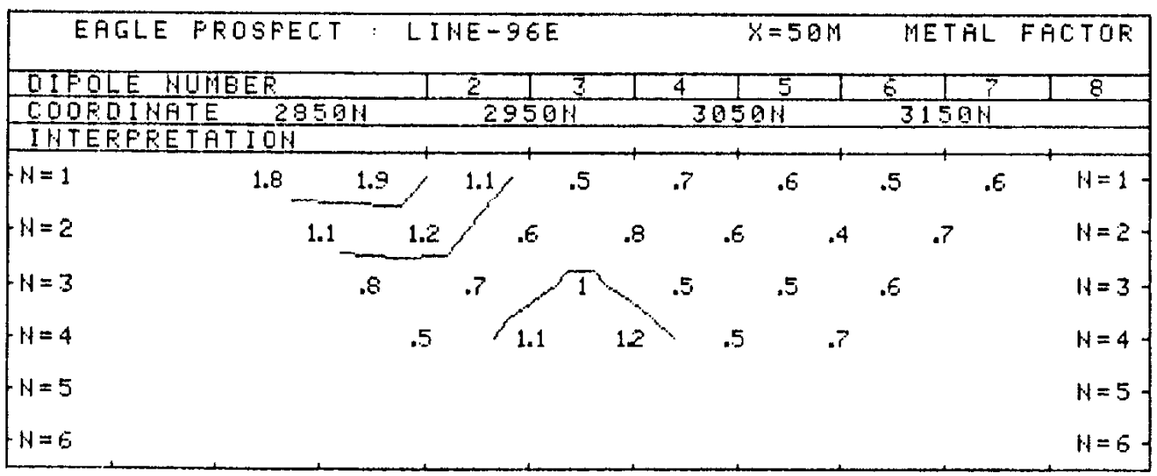
# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-14

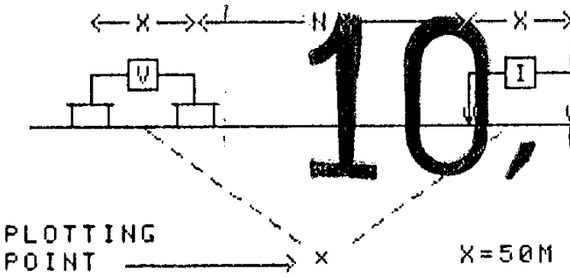
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-96E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

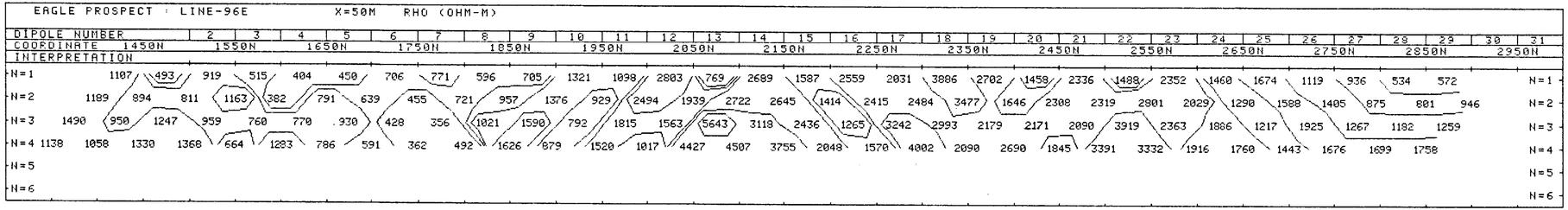
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1, -1.5 -2, -3, -5, -7.5, -10

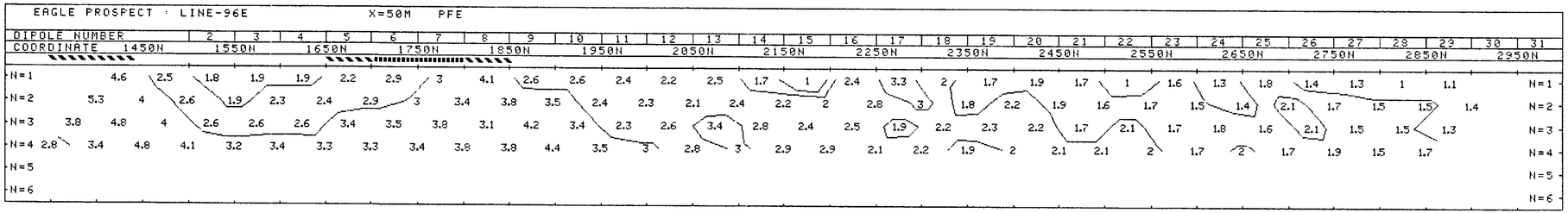
DATE

# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

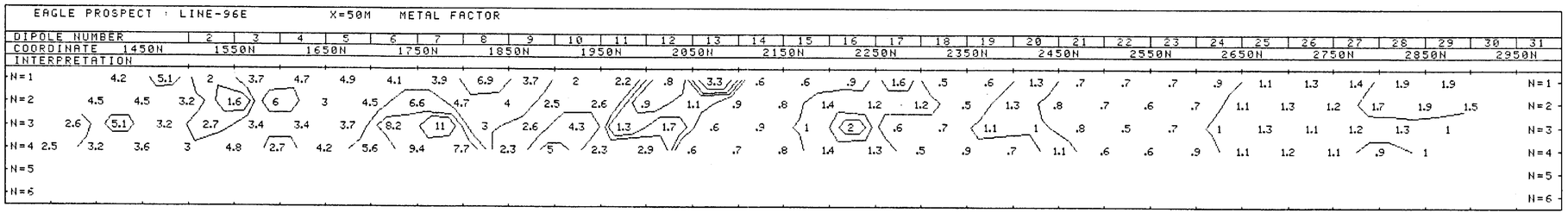



TOPOGRAPHY

SWAMP

STREAM




DWG. NO.-I.P.-5311-15

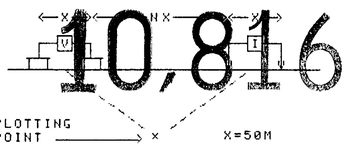
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-96E

**GEOLOGICAL BRANCH ASSESSMENT REPORT**




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE

PROBABLE

POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982

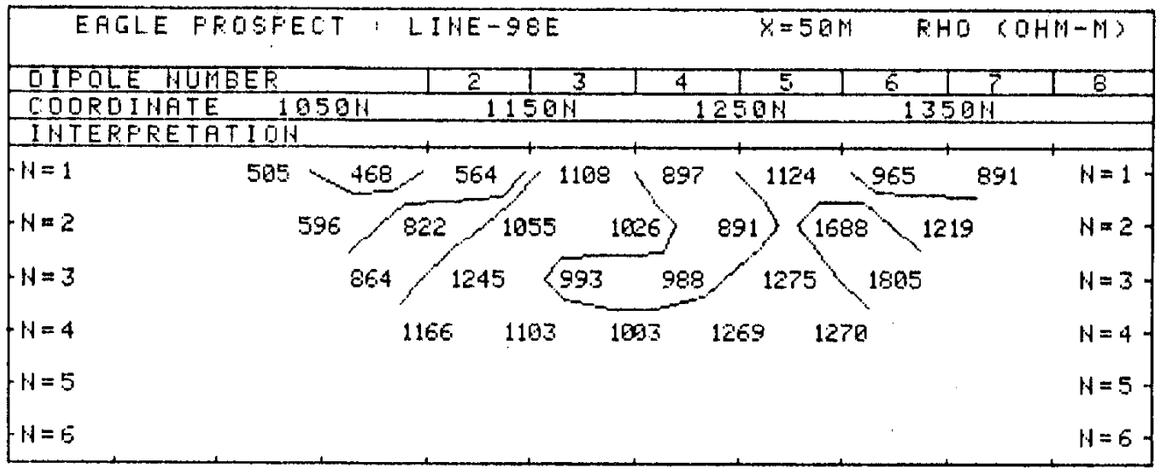
APPROVED

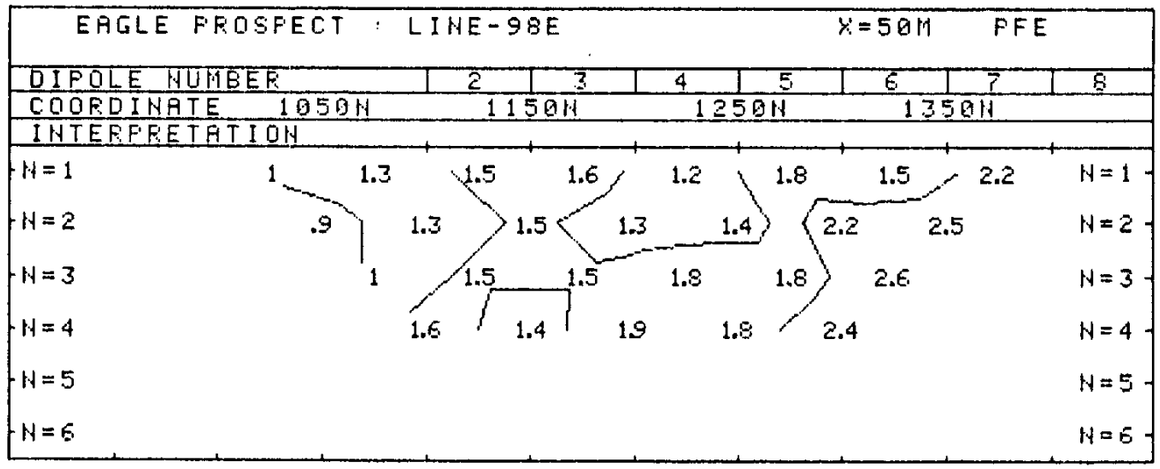
DATE

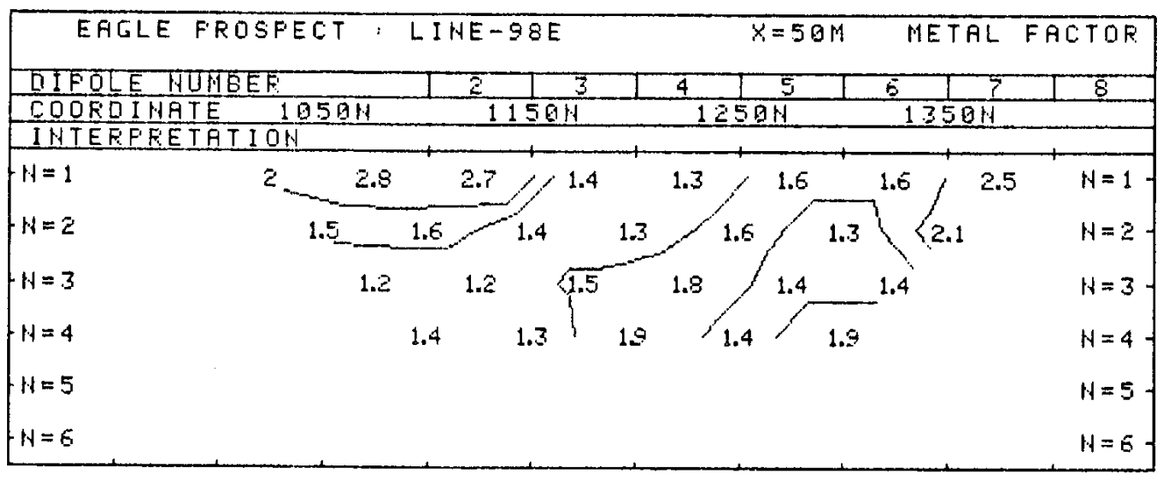
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-20

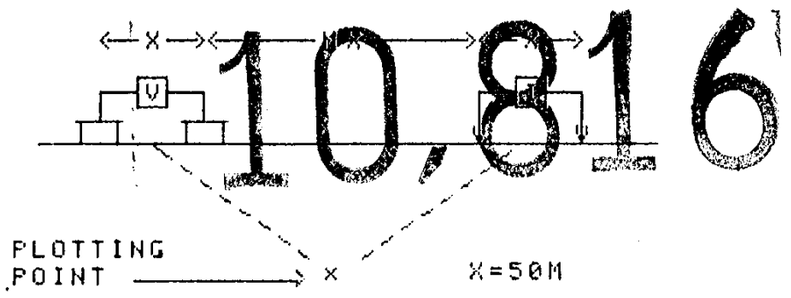
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-98E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

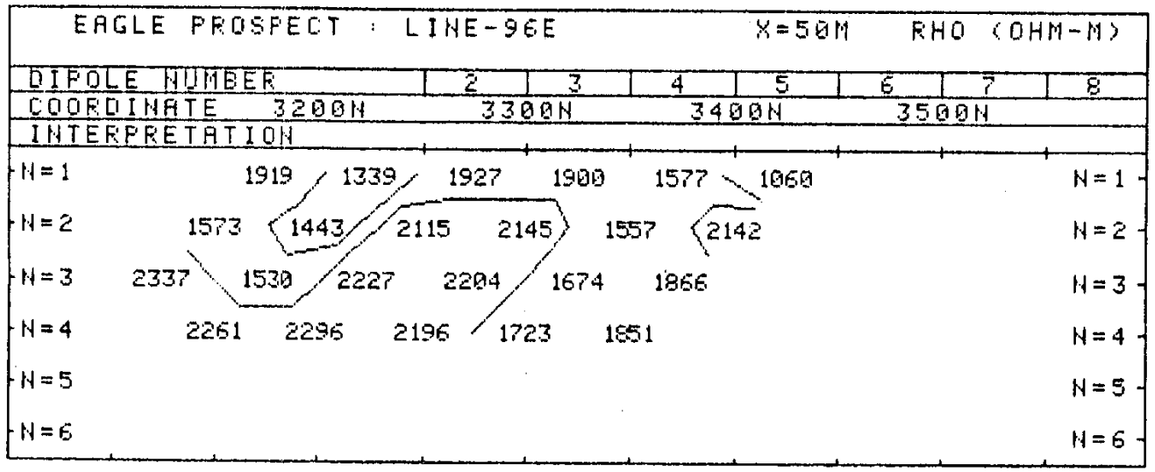
_____

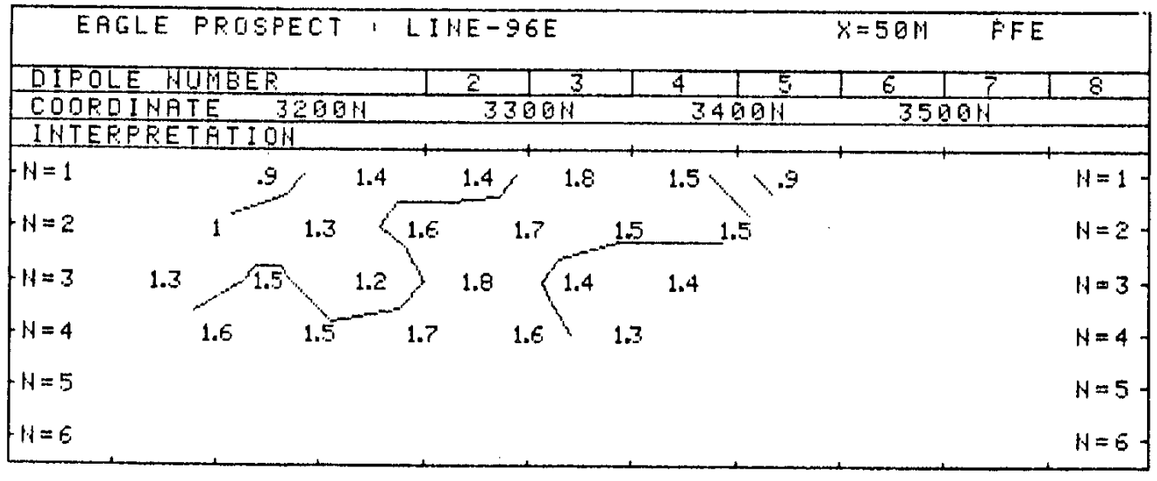
DATE_____

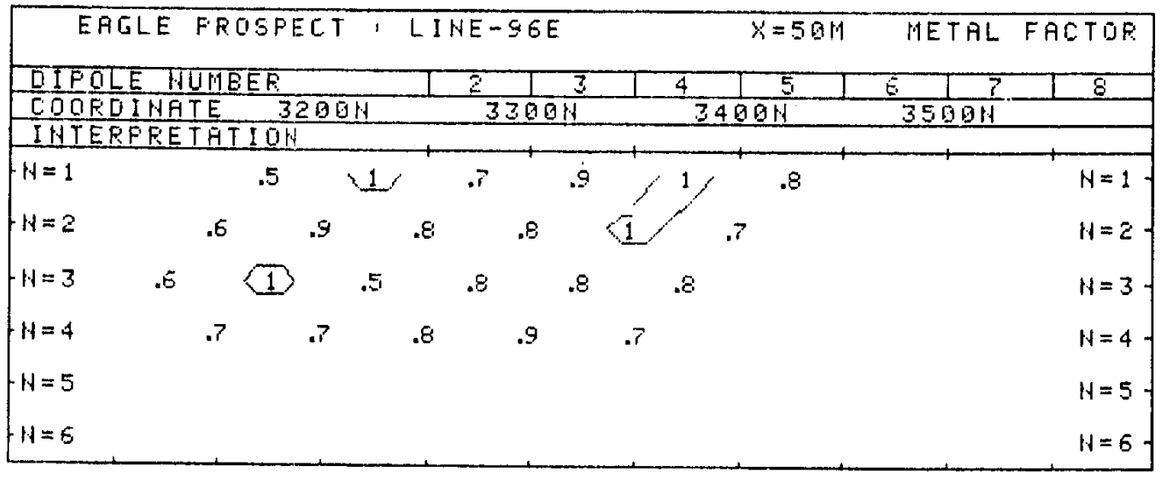
# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-13

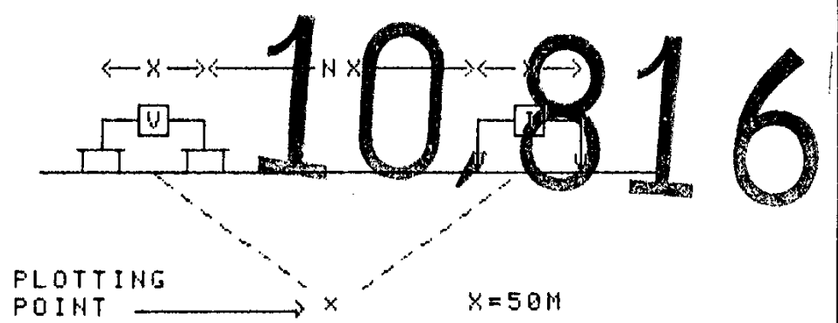
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO. 96E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

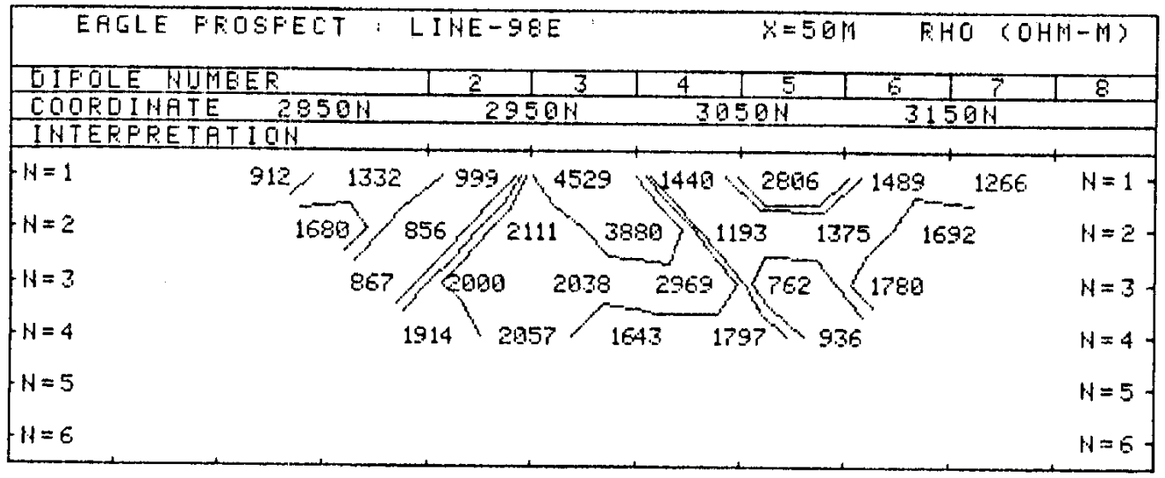
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

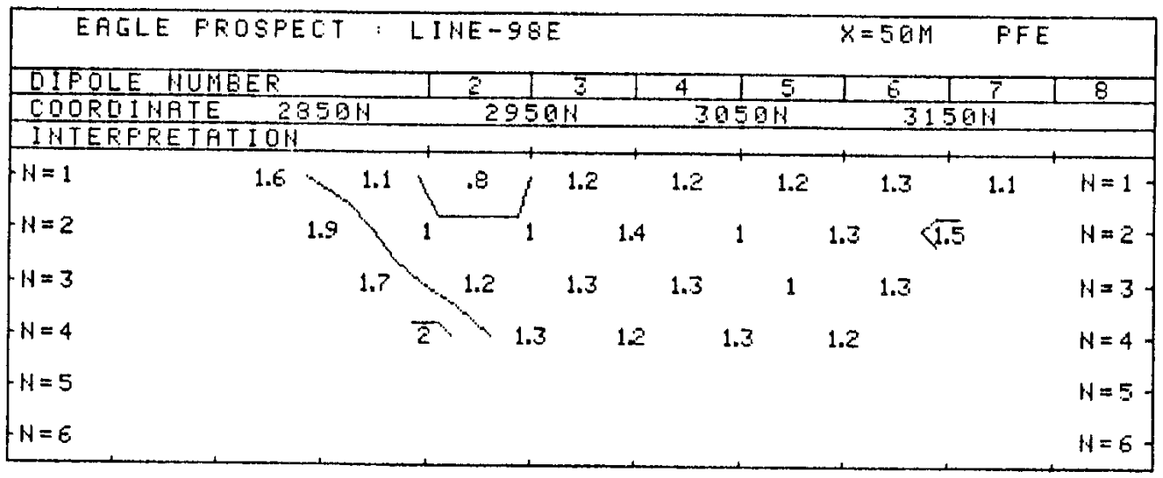
DATE

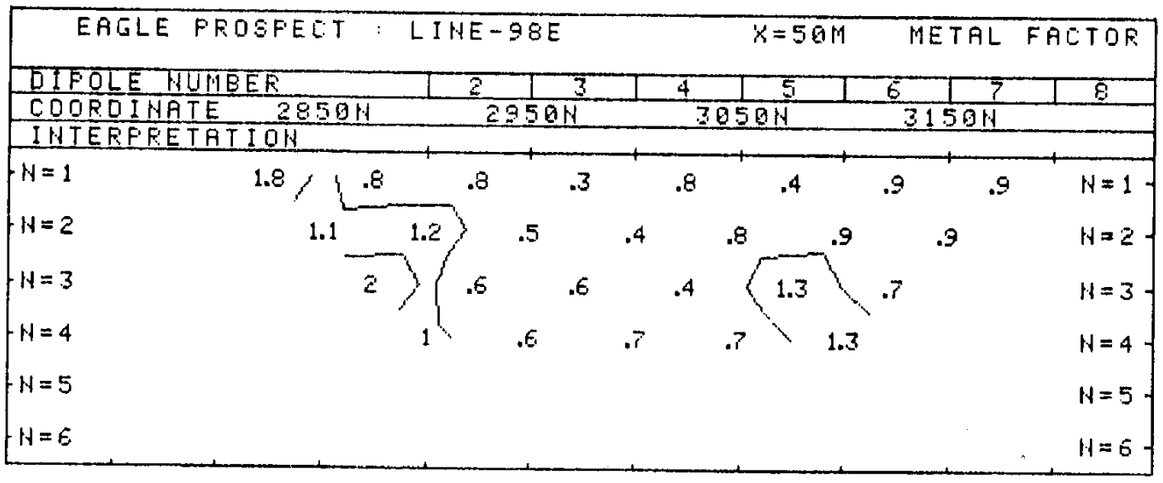
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-18

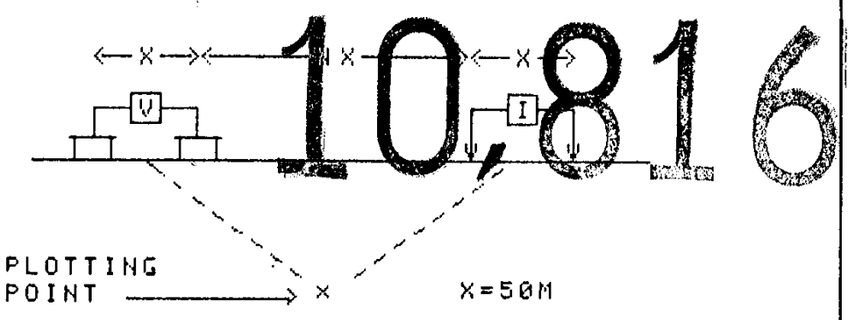
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO. 98E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

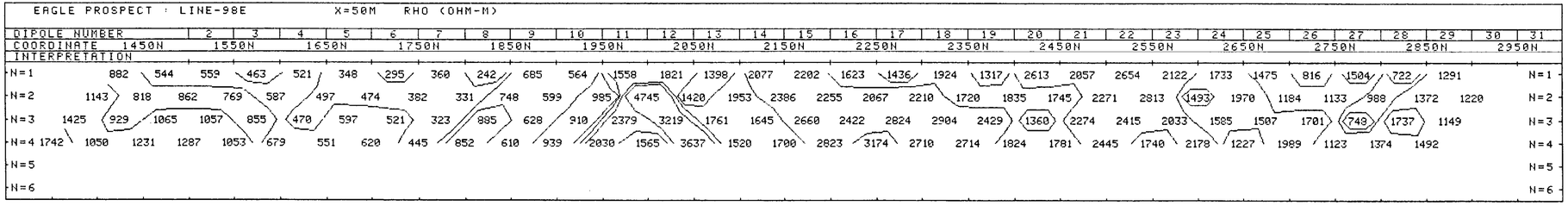
DATE

## PHOENIX GEOPHYSICS LTD.

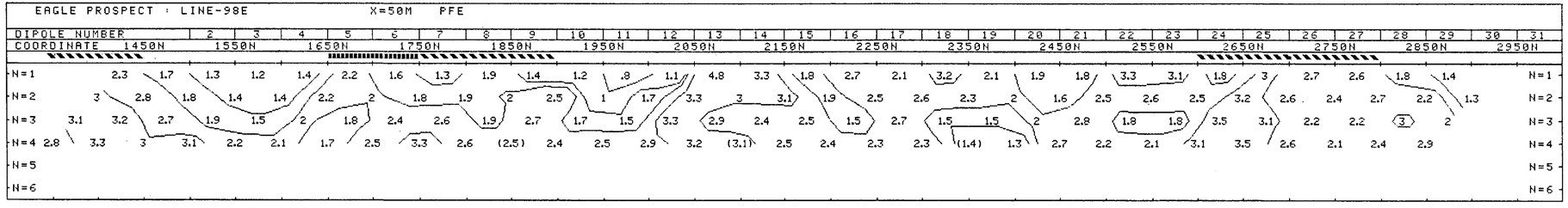
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

EAGLE PROSPECT : LINE-98E X=50M RHO (OHM-M)

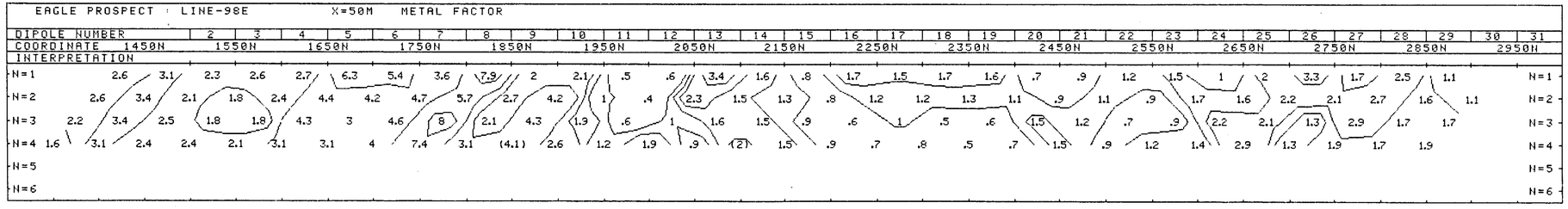



EAGLE PROSPECT : LINE-98E X=50M PFE




TOPOGRAPHY // STREAM

EAGLE PROSPECT : LINE-98E X=50M METAL FACTOR




DWG. NO.-I.P.-5311-19

# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-98E

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816

PLOTTING POINT X=50M

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

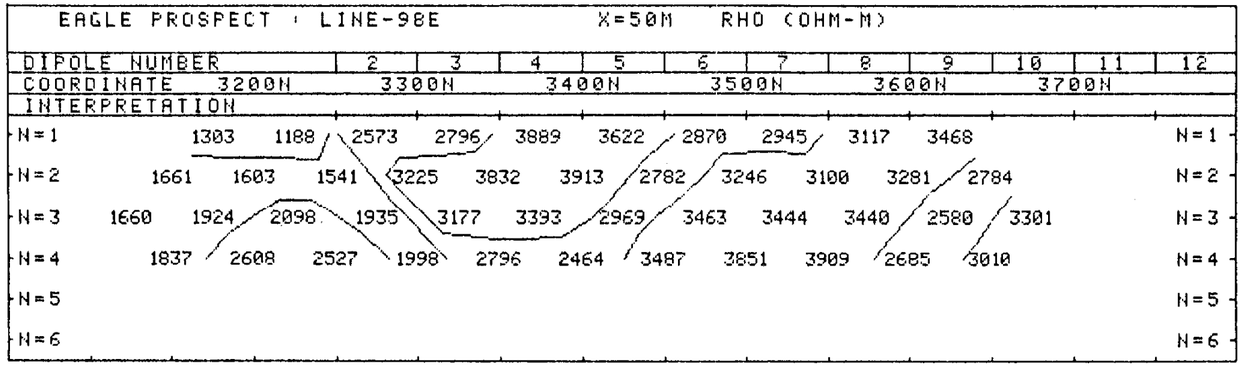
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

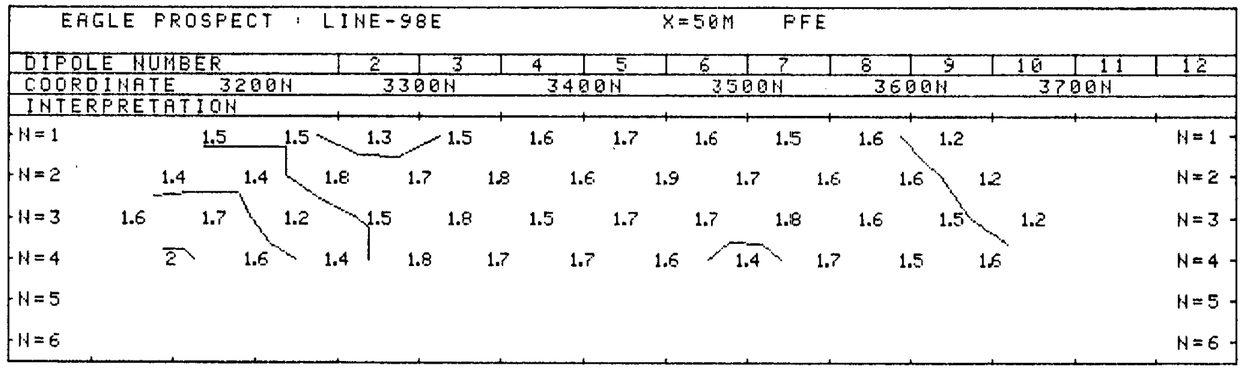
DATE

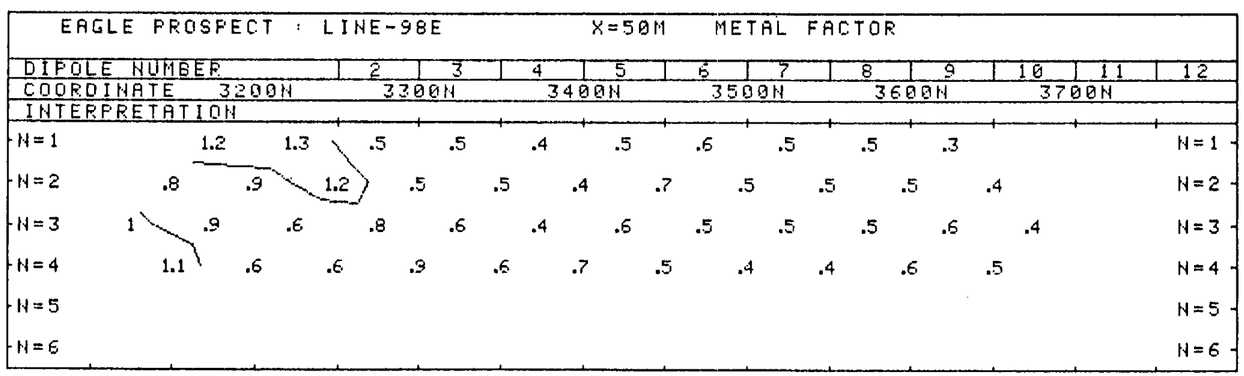
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P-5311-17

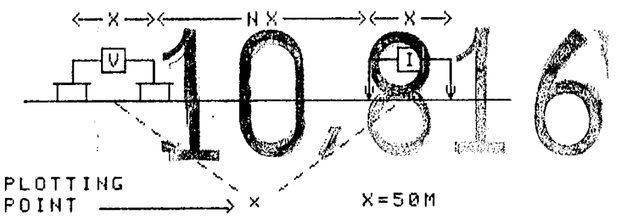
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-98E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

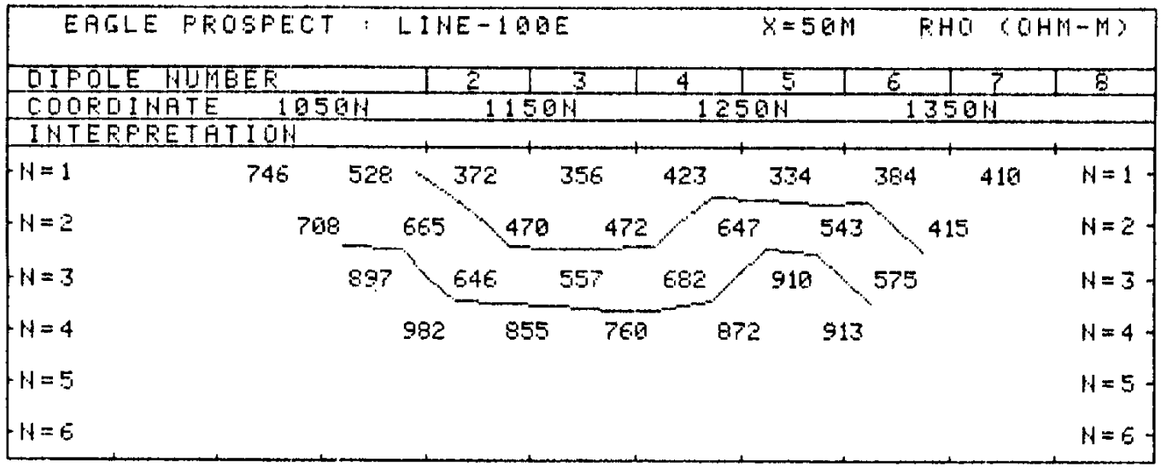
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

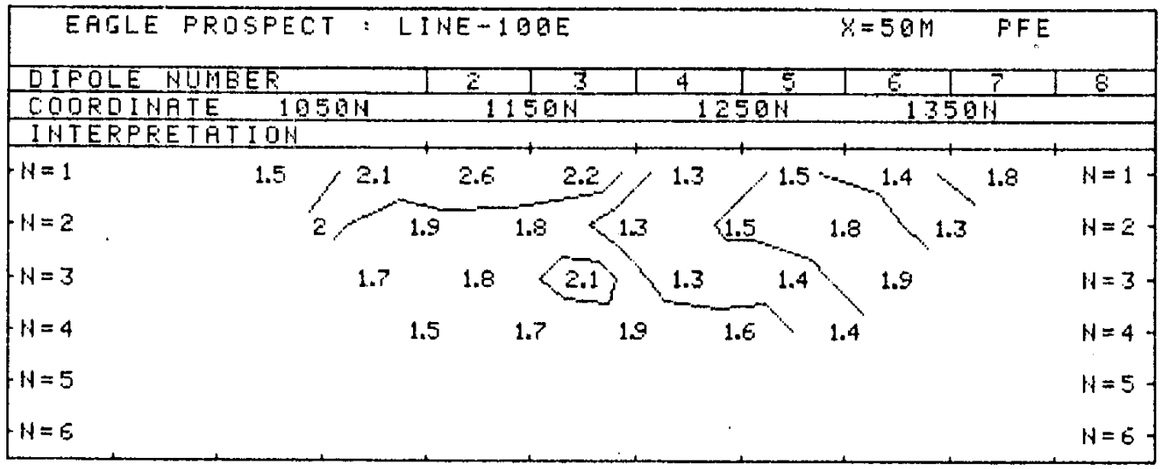
DATE

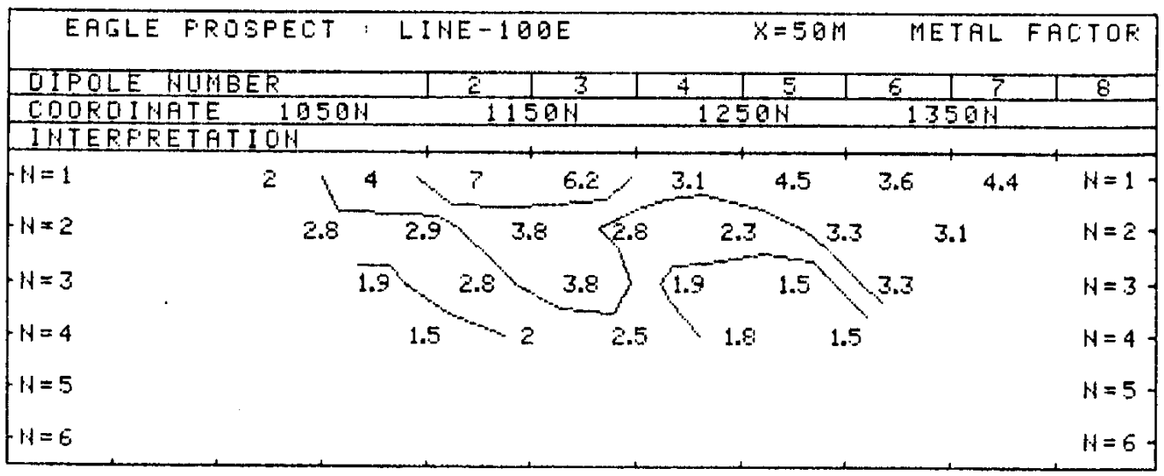
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY



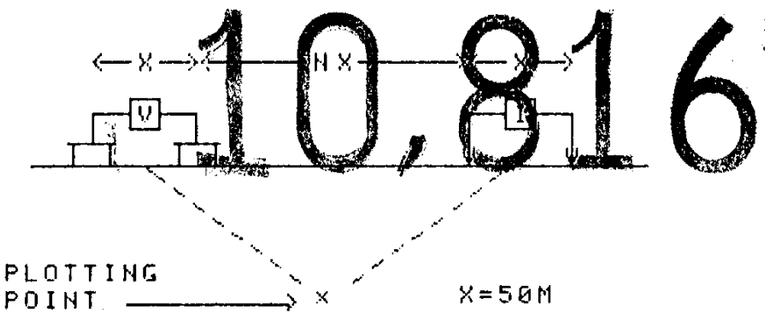

DWG. NO.-I.P.-5311-24

# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

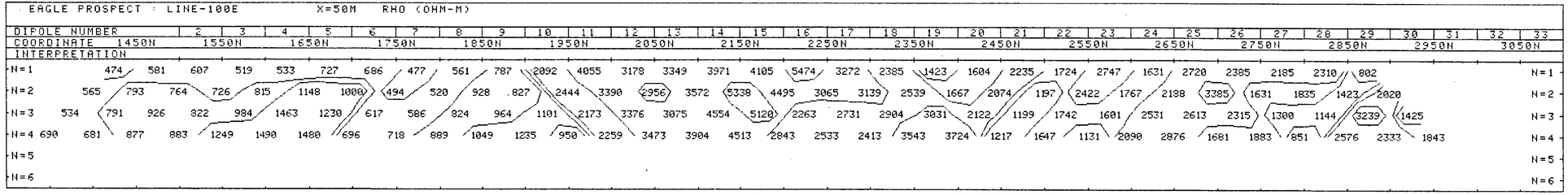
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

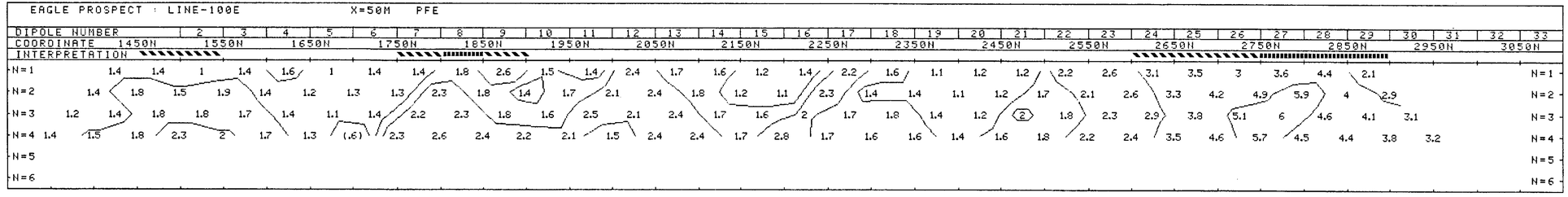
DATE

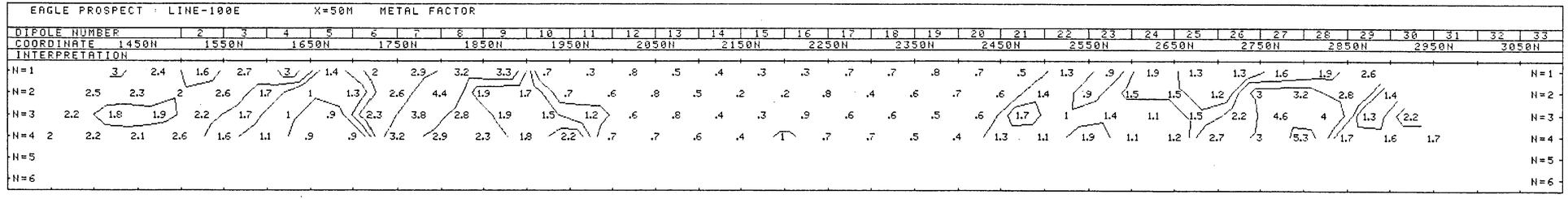
# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-23

# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816

LINE 100E

PLOTTING POINT X=50M

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

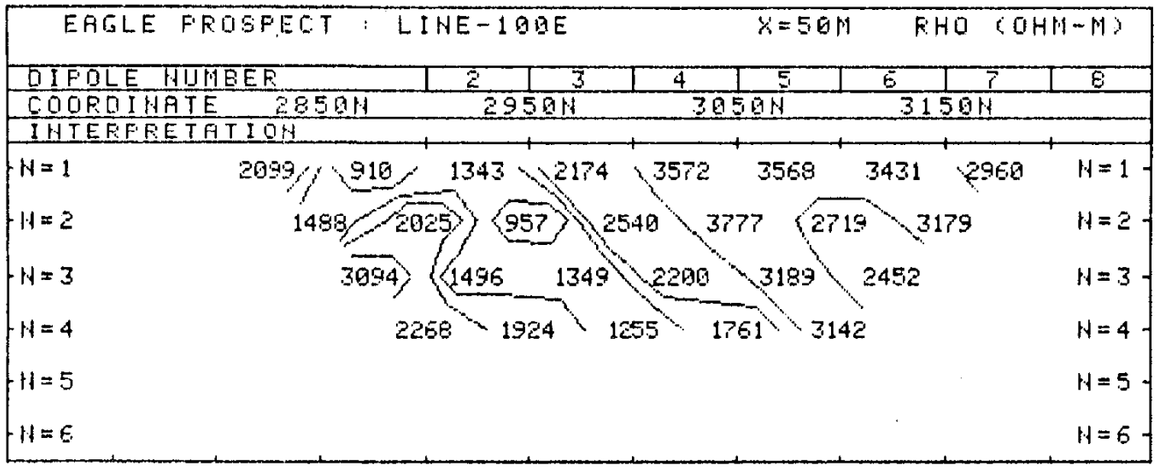
DATE SURVEYED: JULY 1982
APPROVED

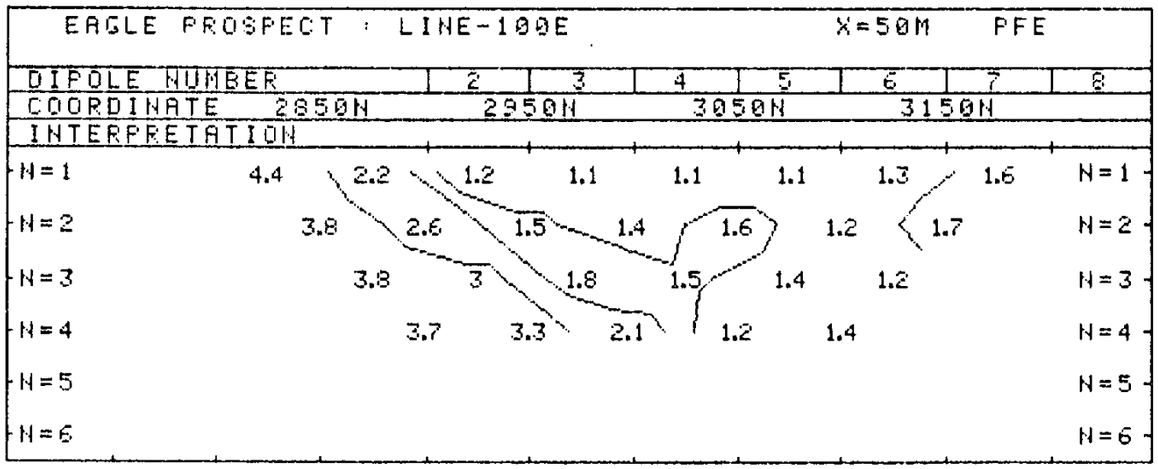
DATE

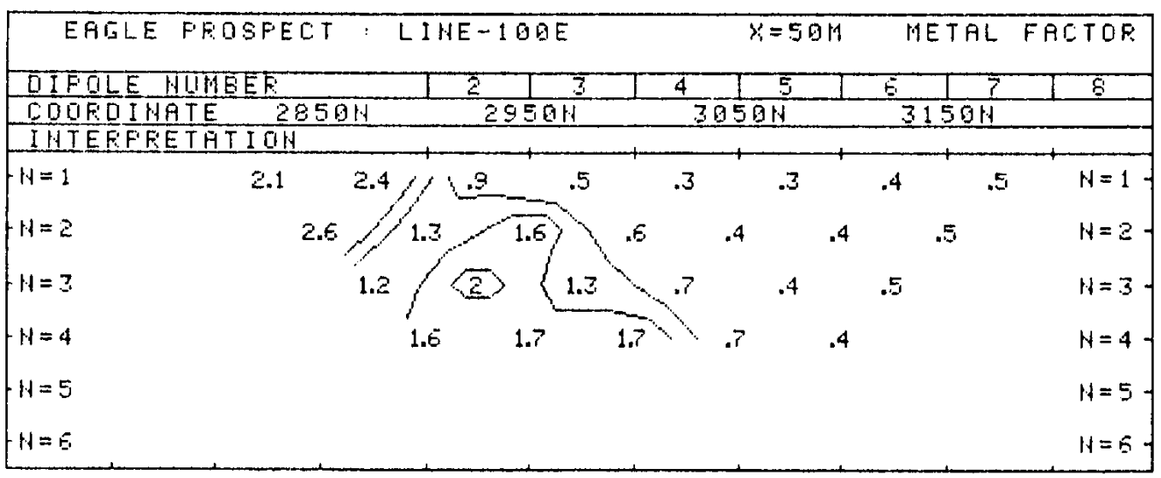
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY






10,816

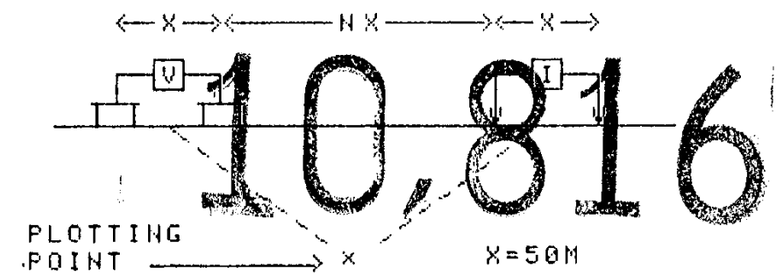
DWG NO.-I.P-5311-22

# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-100E




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

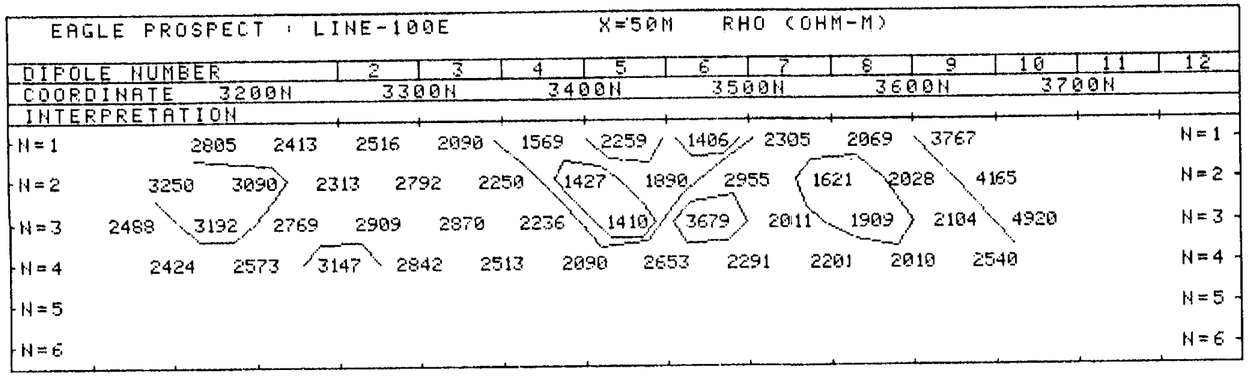
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

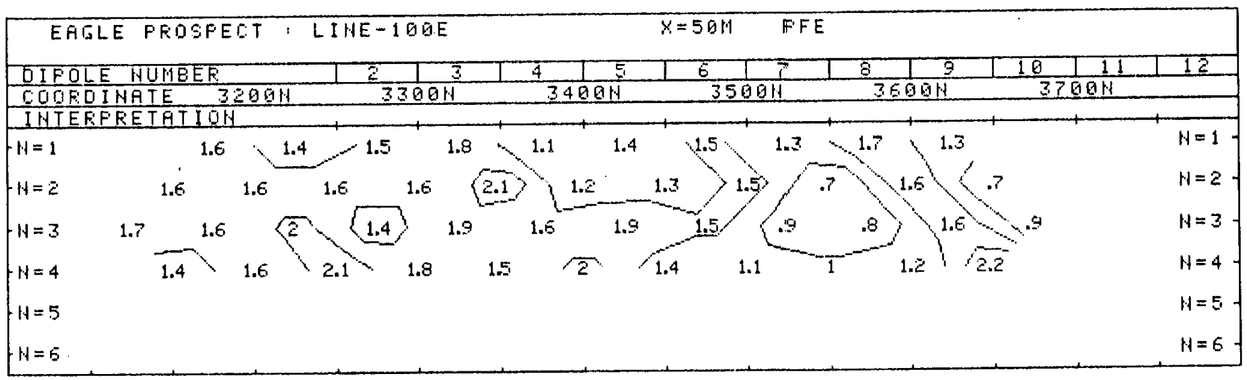
DATE

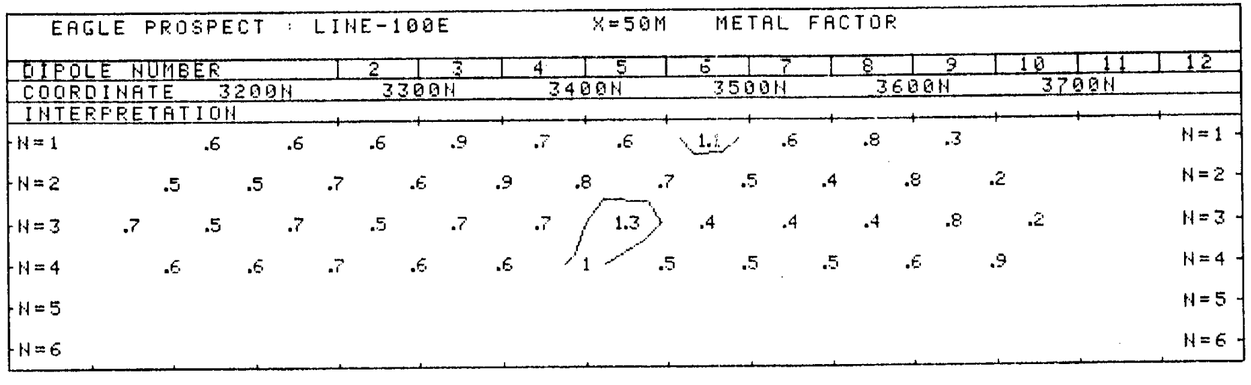
# PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY



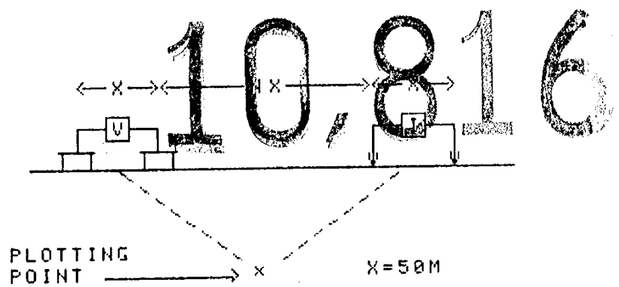



# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

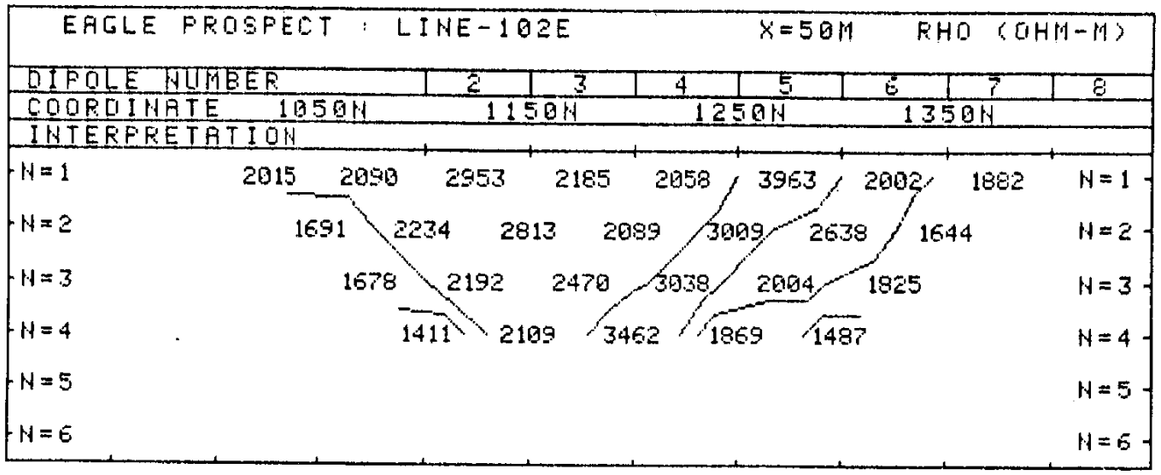
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

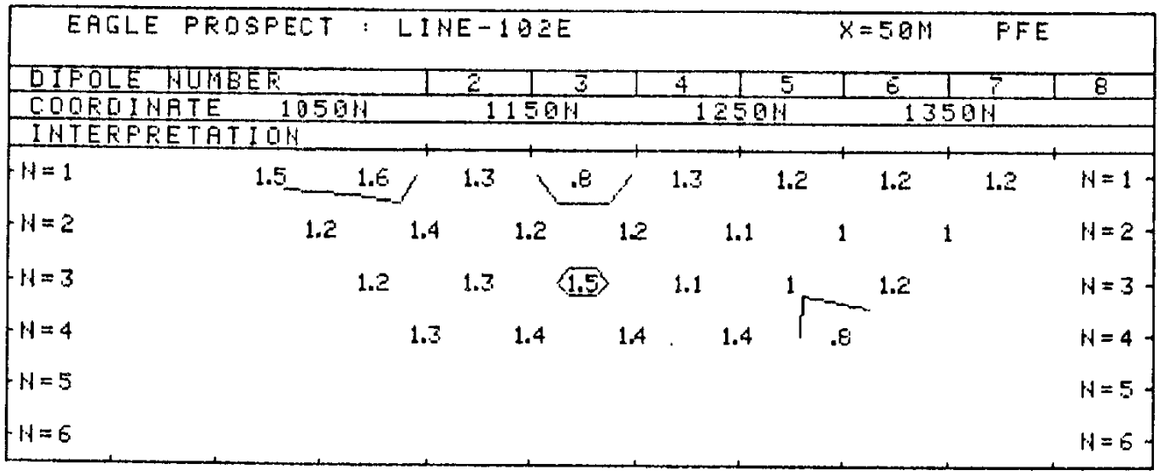
DATE

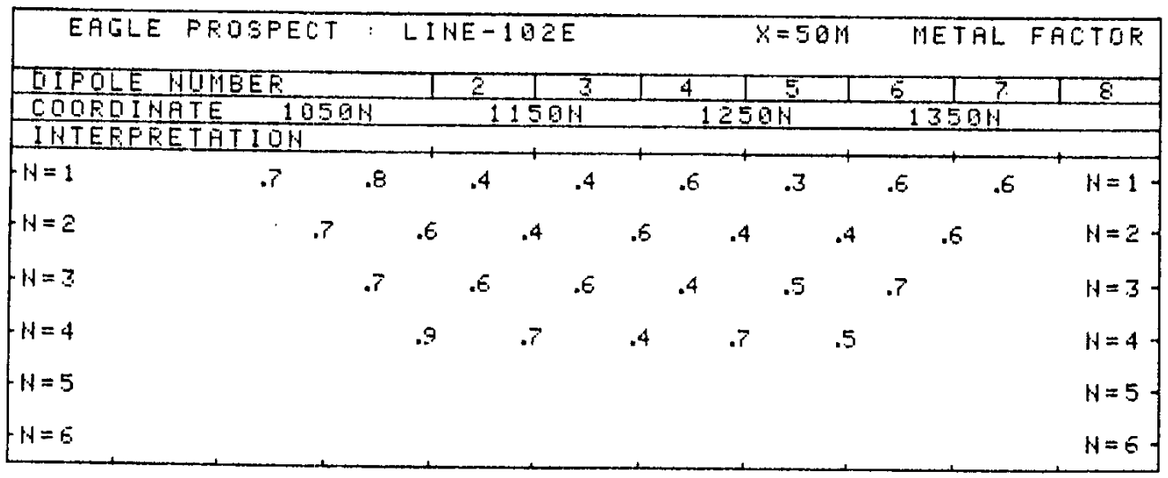
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-28

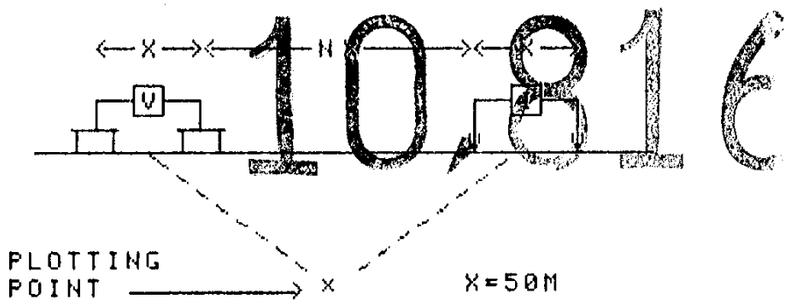
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA








SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982
APPROVED

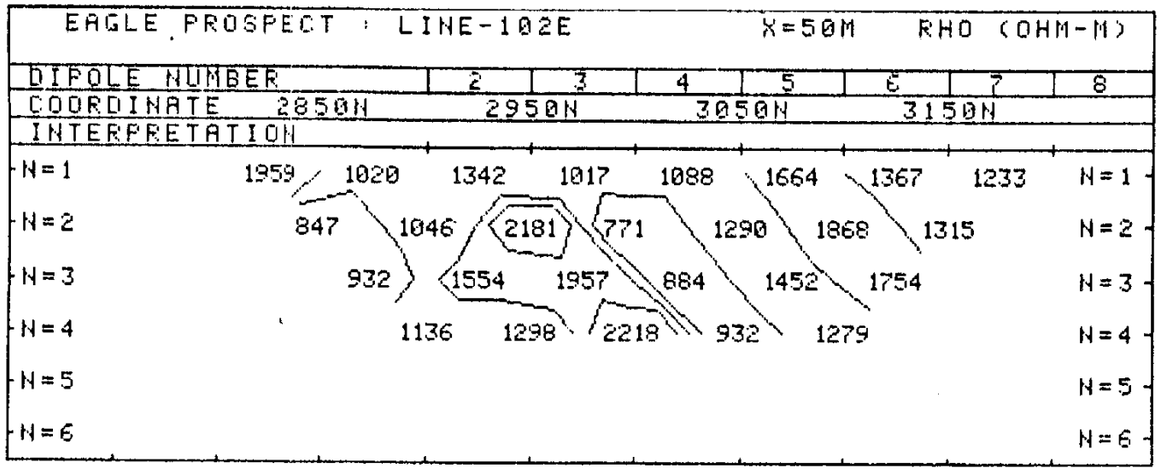
_____

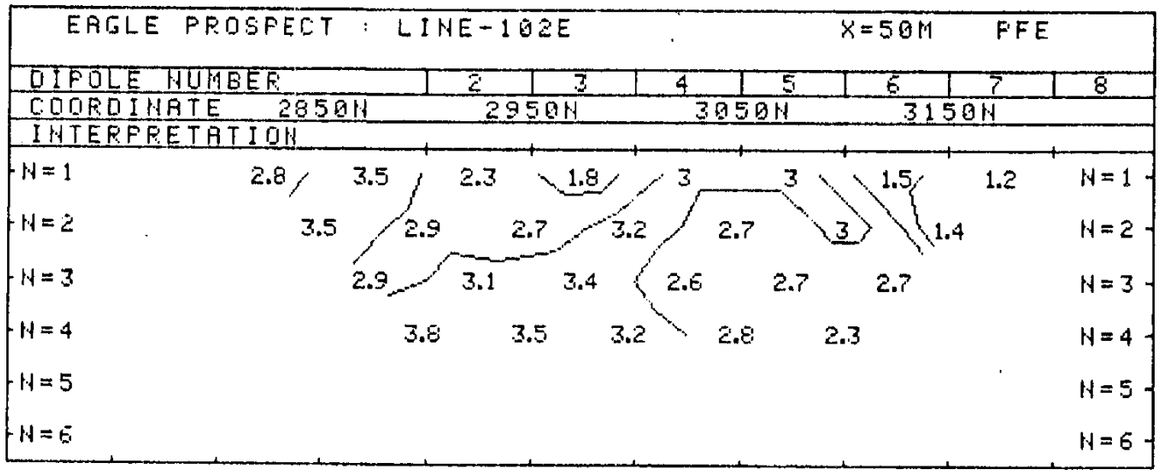
DATE_____

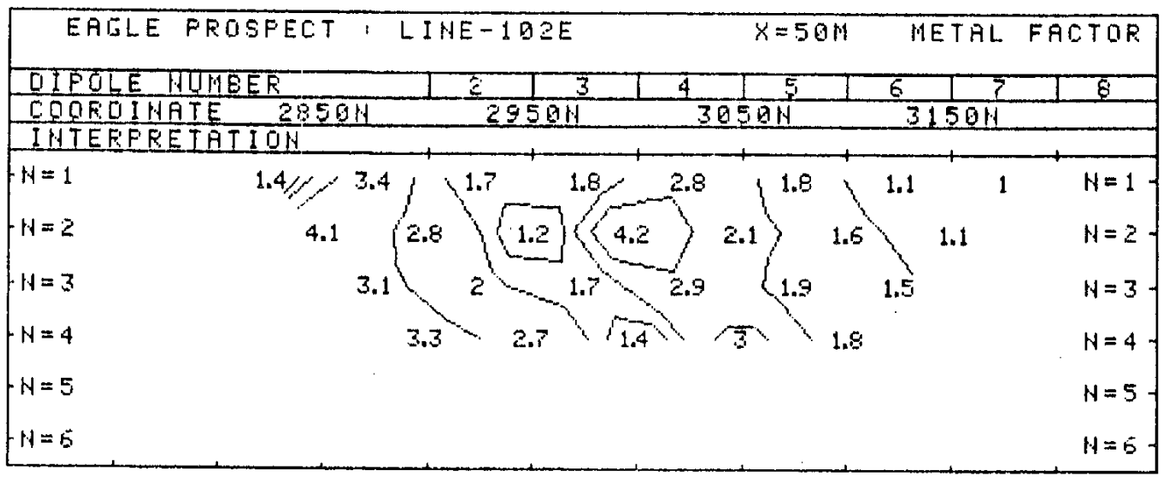
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P-5311-26

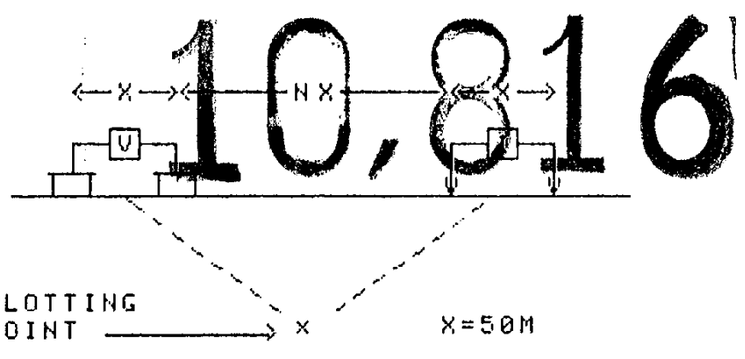
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
LINE NO. SURVEY REPORT

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

DATE SURVEYED: JULY 1982
APPROVED

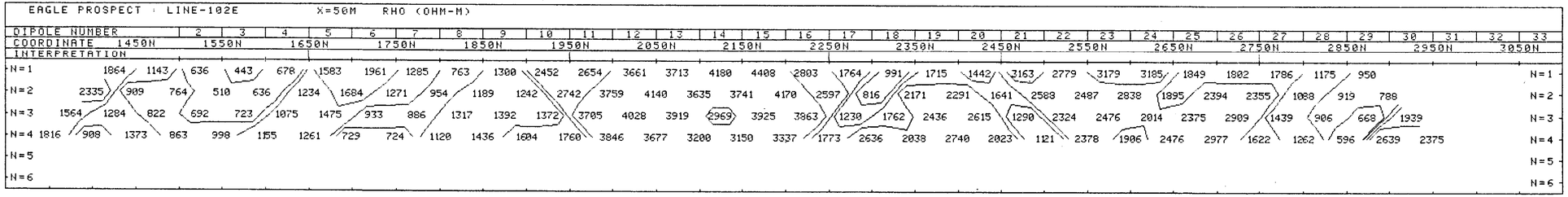
DATE

PHOENIX GEOPHYSICS LTD.

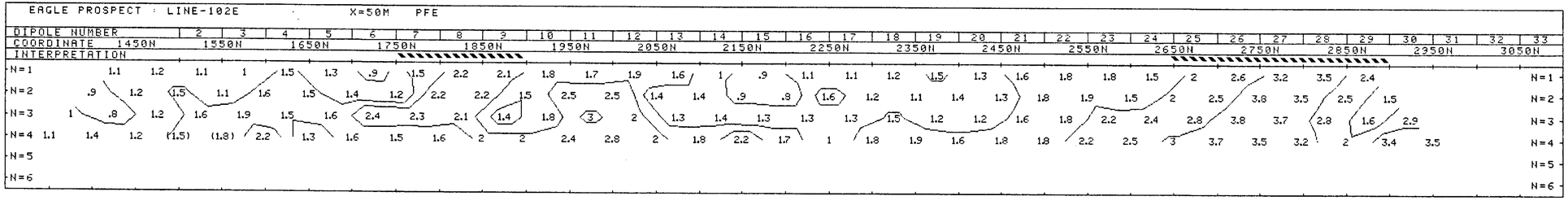
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

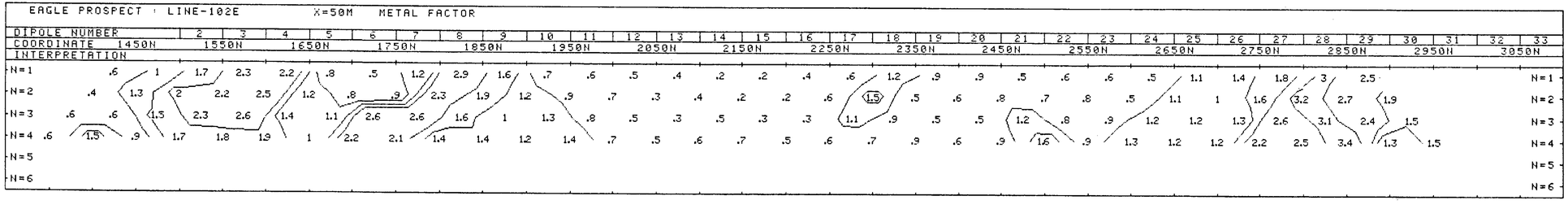
EAGLE PROSPECT : LINE-102E X=50M RHO (OHM-M)




EAGLE PROSPECT : LINE-102E X=50M PFE




EAGLE PROSPECT : LINE-102E X=50M METAL FACTOR




DWG. NO.-I.P.-5311-27

# ESSO MINERALS CANADA

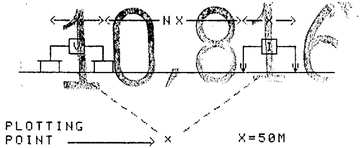
EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO. 102E

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

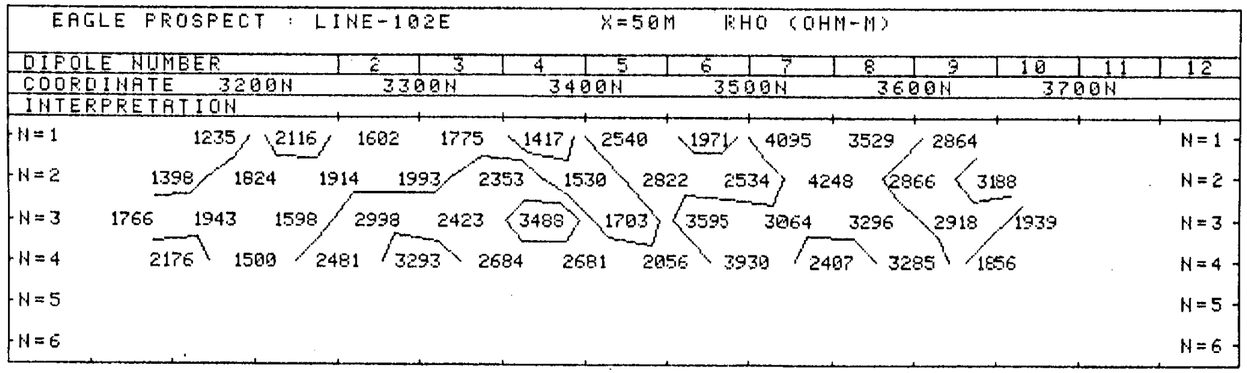
DATE SURVEYED: JULY 1982
APPROVED

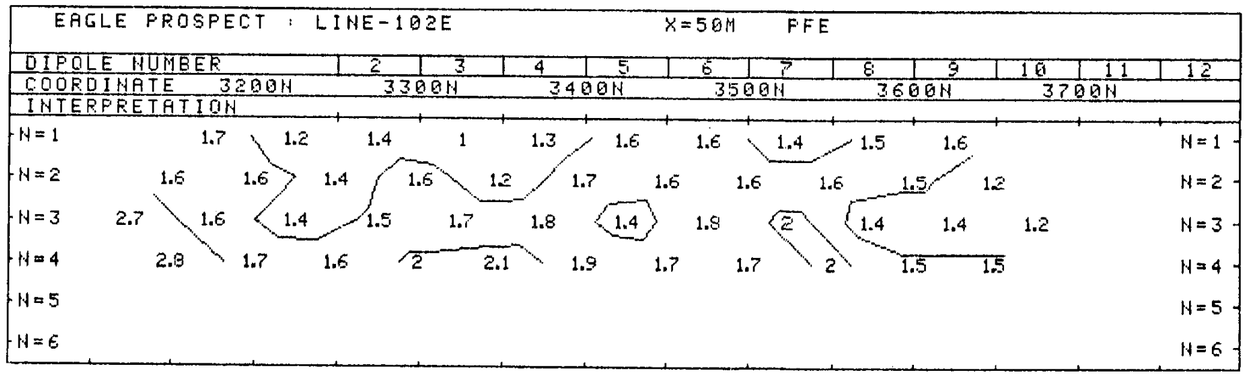
DATE

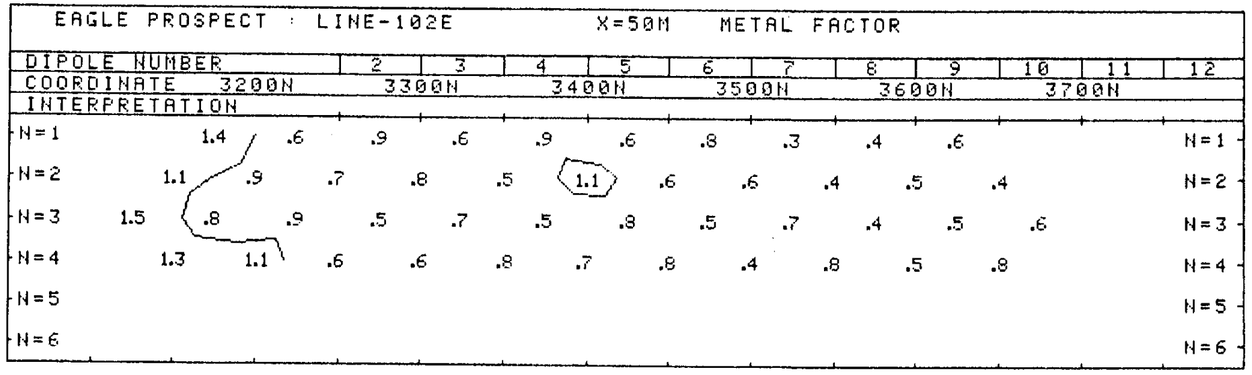
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P-5311-25

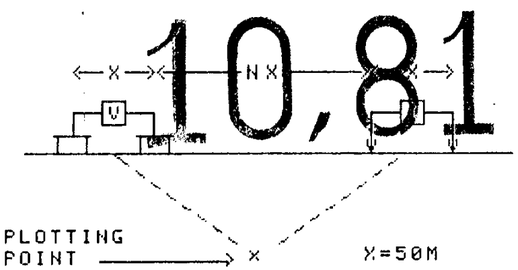
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

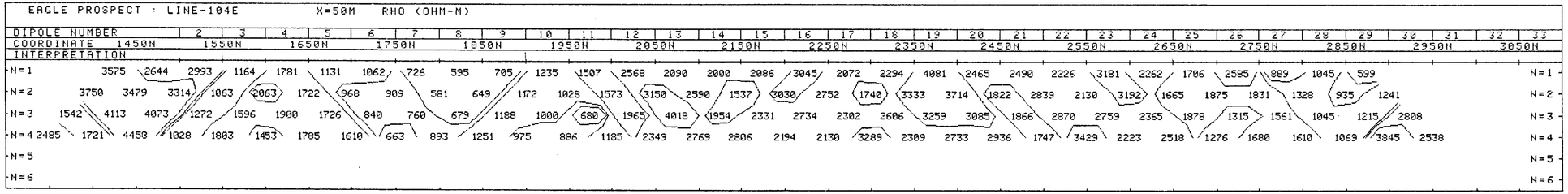
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

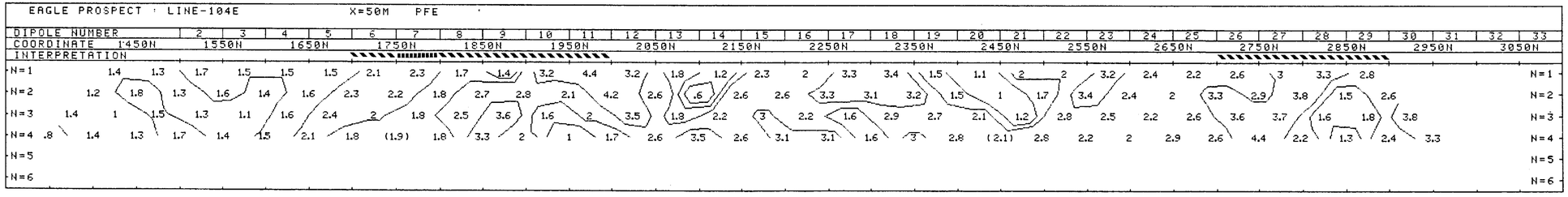
DATE

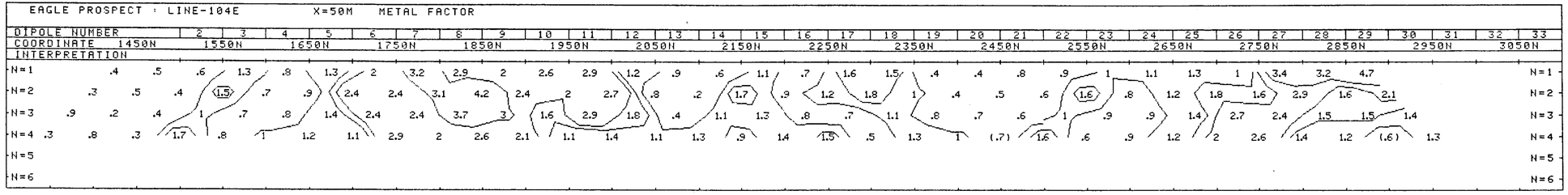
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I.P.-5311-31

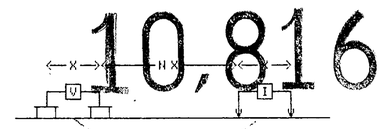
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT
LINE NO.-104E

10,816




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5 -2,-3,-5,-7.5,-10

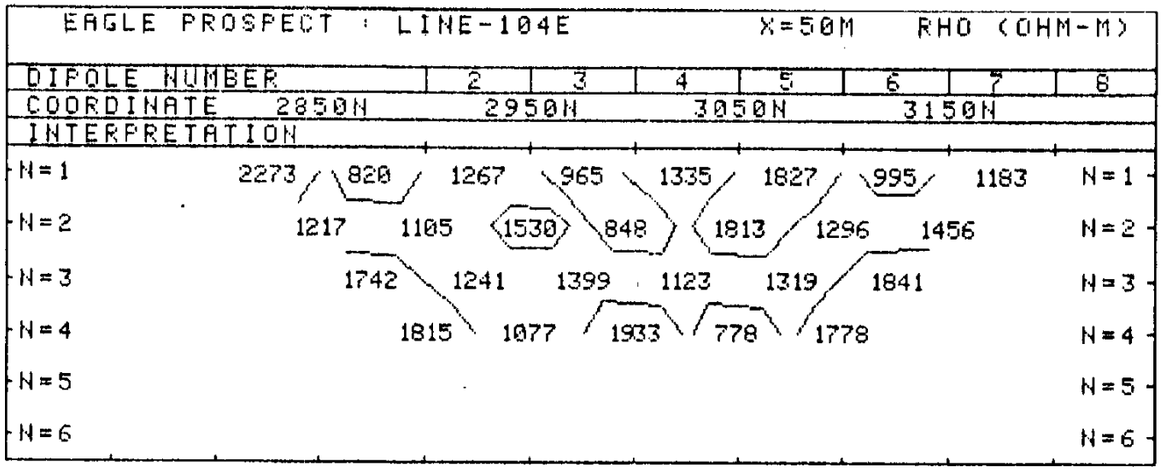
DATE SURVEYED: JULY 1982
APPROVED

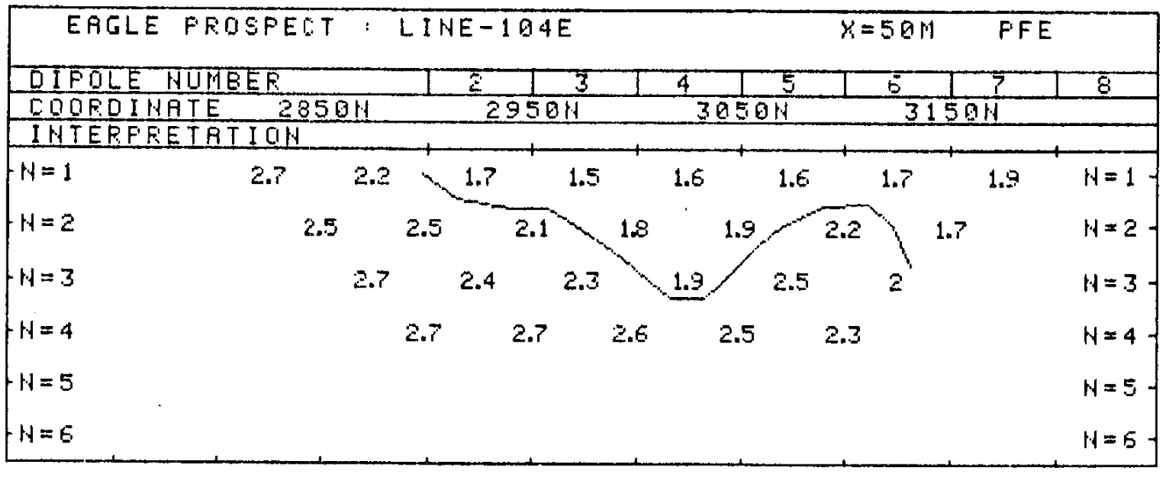
DATE

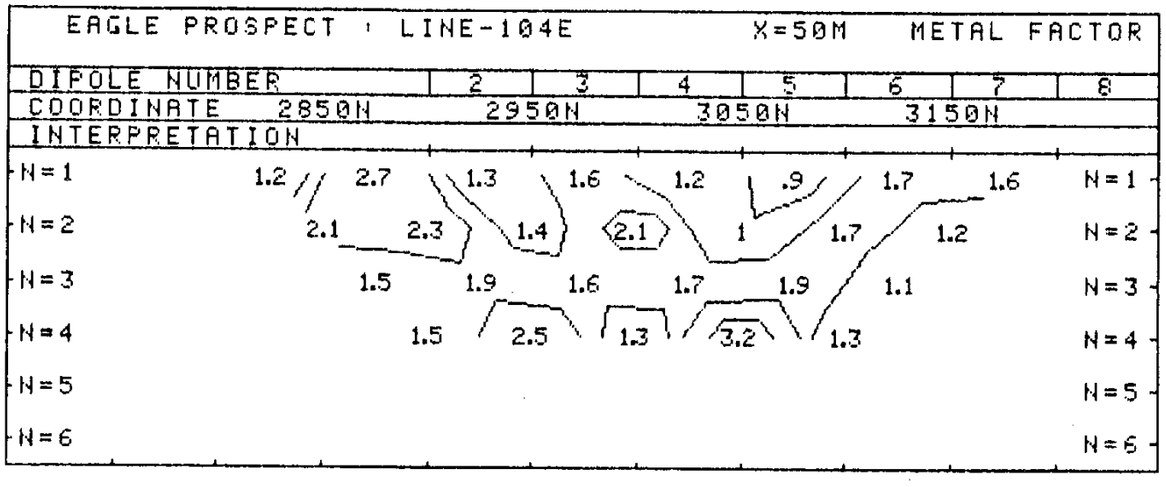
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY



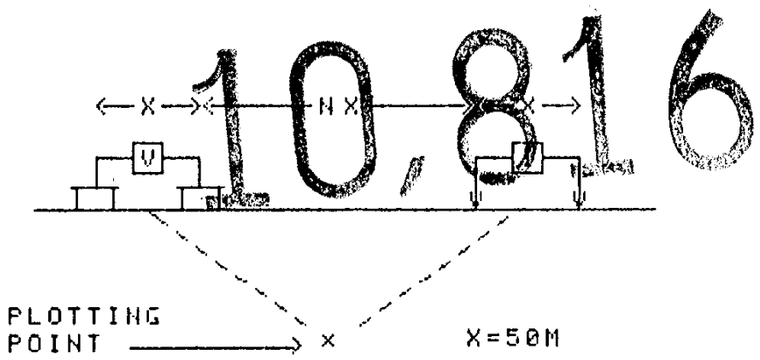

DWG. NO.-I.P.-5311-30

# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

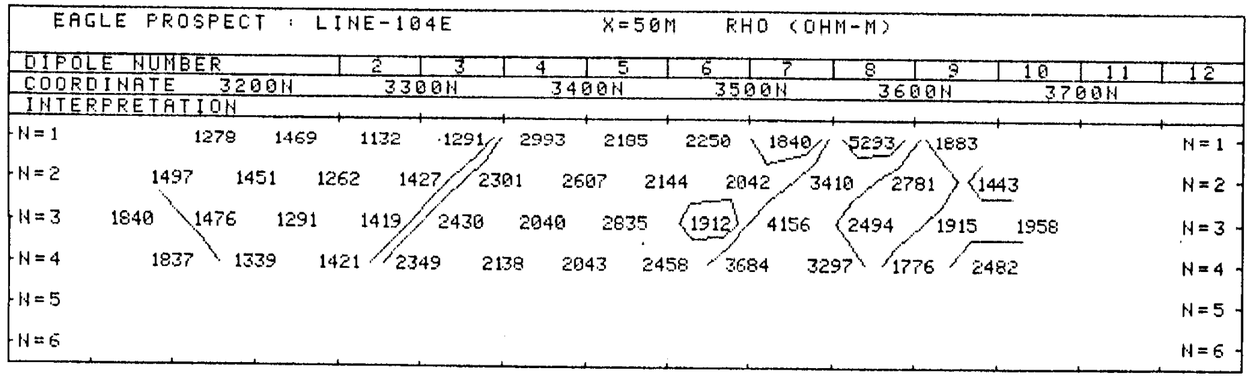
_____

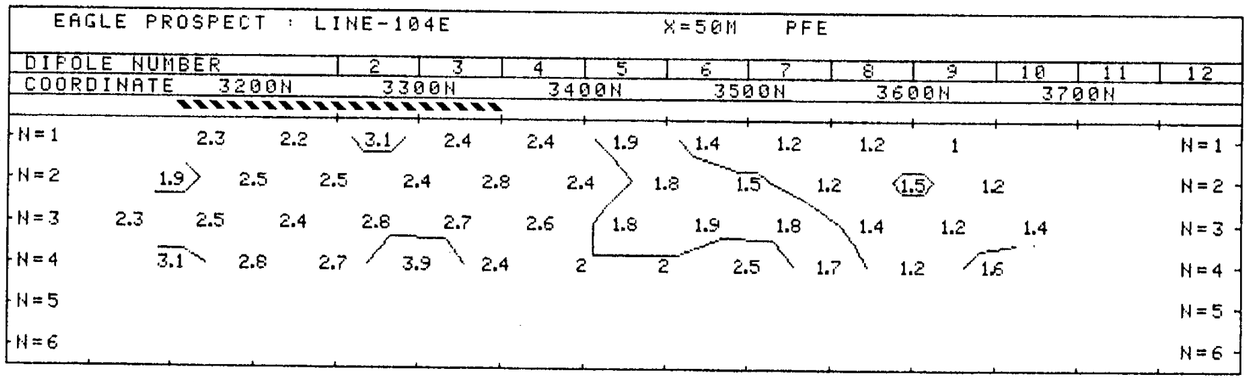
DATE_____

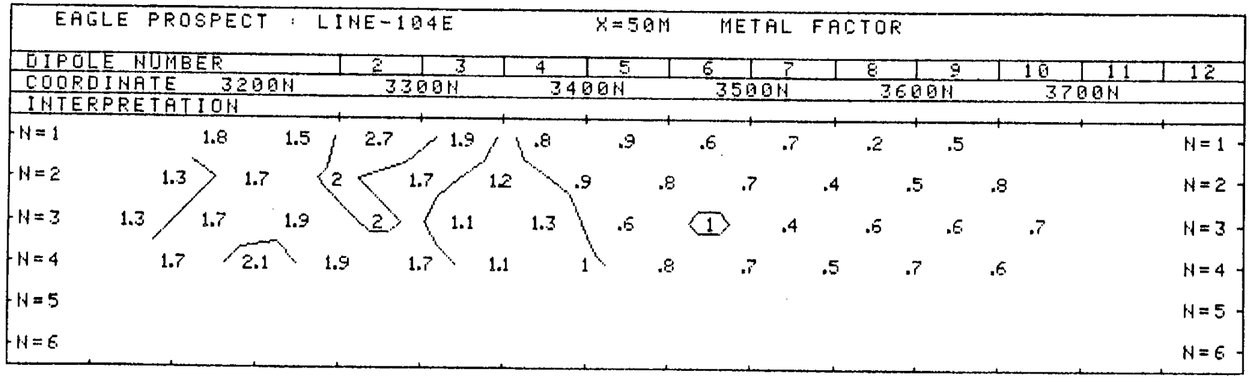
## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




DWG. NO.-I P-5311-29

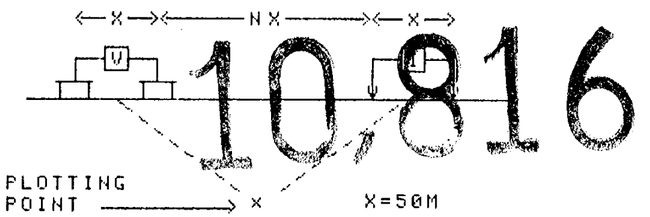
# ESSO MINERALS CANADA

EAGLE PROSPECT

LIARD M.D. / BRITISH COLUMBIA

LINE NO.-104E






SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982
APPROVED

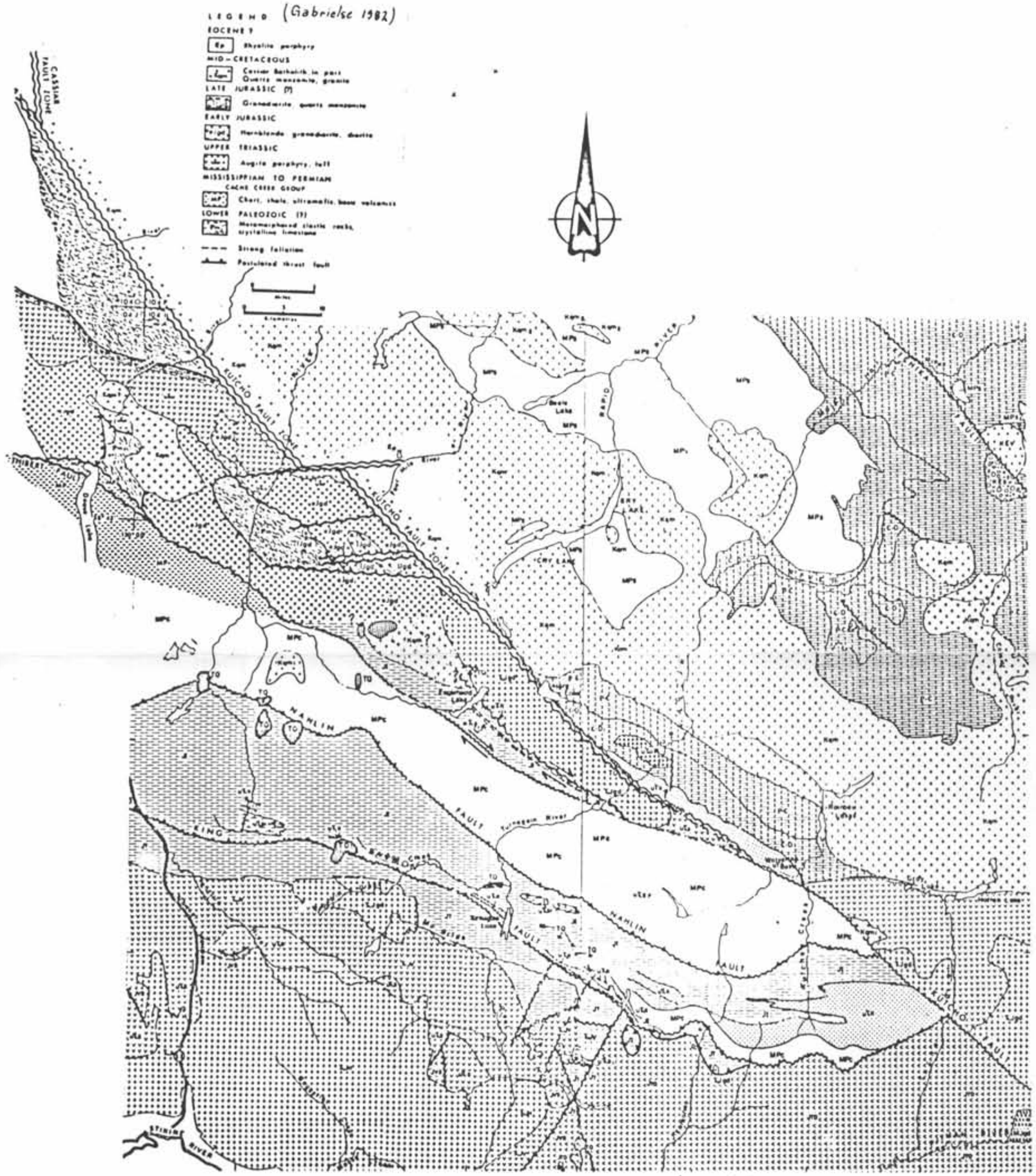
NOTE- CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5 -2,-3,-5,-7.5,-10

DATE

## PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION

AND RESISTIVITY SURVEY




## Legend

Stratified Rocks (Gabrielse 1978)

TERTIARY AND QUATERNARY

TQ: Basalt, lava, tuff, agglomerate

CRETACEOUS(?) AND TERTIARY
UPPER CRETACEOUS(?) TO EOCENE(?)

KEs: Conglomerate, sandstone, shale

KEv: Rhyolite, ptsolitic siliceous tuff, chalcedonic rhyolite breccia

JURASSIC
MIDDLE JURASSIC (mainly)

JTo: "TODDOGGONE VOLCANICS": Mauve and green andesitic and dicitic volcanics; conglomerate, siltstone, shale

LOWER JURASSIC (mainly Toarcian)

JTo: "TODDOGGONE VOLCANICS": Andesite, dacite, rhyolite, green and maroon feldspar porphyry, tuff, breccia; calcareous siltstone, silty limestone

LOWER JURASSIC (mainly Pliensbachian)

JLM: INKLIN FORMATION: Greywacke, slate conglomerate (age range uncertain), locally includes
TAKWAHOHI FORMATION: Greywacke, siltstone, argillite, conglomerate

TRIASSIC AND JURASSIC
UPPER TRIASSIC AND LOWER JURASSIC

uTJv: Andesitic green and maroon weathering volcanics

UPPER TRIASSIC

uTSt: STUHINI FORMATION: Augite porphyry, coarse-blasted feldspar porphyry; minor sedimentary rocks

uTSy: SINWA FORMATION: Fetid limestone; minor calcareous shale

uTKt: "KUTCHO FORMATION": Quartz-eye sericite schist, chlorite schist, breccia, conglomerate

MISSISSIPPIAN TO PERMIAN

MPm: CACHE CREEK GROUP: Chert, shale, limestone, ultramafics, gabbro, diorite, basic volcanics

MPs: SYLVESTER GROUP: Chert, slate, limestone, ultramafics, gabbro, diorite, basic volcanics; lower part includes chert arenite and chert-pebble conglomerate

CAMBRIAN TO DEVONIAN

C-D: Limestone, dolomite, sandstone, siltstone, shale; C-D, , mainly black, carbonaceous phyllite, prossibly includes lower

PROTEROZOIC AND LOWER CAMBRIAN

P-C: Limestone, sandstone, shale, grit and metamorphosed equivalents: P-C, mainly metamorphosed clastic rocks

Intrusive Granitic Rocks

MID-CRETACEOUS (mainly)

Kqm: CASSIAR BATHOLITH: Quartz monzonite, minor granodiorite and diorite; locally foliated or megacrystic near contact; abundant metasedimentary inclusions near Eagle River; age uncertain; Kqm, Kqmy in part dioritic

MID-JURASSIC(?)

MJgd: Granodiorite, leucocratic, pink; fine to medium grained

UPPER TRIASSIC AND LOWER JURASSIC (may include younger rocks in part)

TJm: HOTAILUH Batholith: Granodiorite, syenodiorite, gabbro

TJgd: Hornblende diorite, quartz monzonite, in part foliated

Ultrabasic Rocks - Alaskan Type

UPPER TRIASSIC(?)

uTu: Dunite, peridotite, pyroxenite

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816

ESSO MINERALS CANADA

# EAGLEHEAD

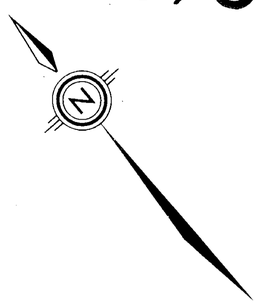
## REGIONAL GEOLOGY (after Gabrielse 1978,82)

0 100 200 MILES
0 100 200 400 KILOMETRES

| C. EVERETT | PROJECT 2154 | DATE JULY 1982 | Map 1 |
|---|---|---|---|

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,816



## GEOLOGICAL UNITS

**A** — ANDESITE: PALE TO OLIVE GREEN, LOCALLY CRACKLED, HEMATITE STAINING NEAR CONTACT TO HORNBLENDE GRANODIORITE. CONTAINS TRACE HORNBLENDE AND PYROXENE PHENOCRYSTS (STUHINI FORMATION?). COMMONLY OCCURS AS ANGULAR TO ROUNDED FRAGMENTS WITHIN THE BIOTITE GRANODIORITE. FRAGMENT SIZE AND ABUNDANCE DECREASES TOWARDS THE BIOTITE GRANODIORITE.

**D** — DYKE: UNIT LOCATED IN FLOAT ONLY. FERICH, HIGHLY OXIDIZED, RED, FINE GRAINED GROUNDMASS CONTAINING ANGULAR TO ROUNDED COARSE GRAINED MONZONITE AND SEDIMENT FRAGMENTS.

EAGLEHEAD BATHOLITH

**HGD** — HORNBLENDE GRANODIORITE: TYPICALLY APPLE GREEN IN COLOUR. WEAK TO INTENSE CHLORITE CONTENT WITH MINOR SERICITE ASSOCIATED. COARSE HORNBLENDE PHENOCRYSTS NOTED IN FRESH TO WEAKLY CHLORITIZED SECTIONS. VARIABLE QUARTZ EYE CONTENT - TR → 5%. CONTAINS 20-40-50% PLAGIOCLASE PHENOCRYSTS FLOATING IN AN APHANITIC CHLORITIC GROUNDMASS. COPPER BEARING SECTIONS MAY BE MYLONITIZED. 1-5% OF UNIT COMPOSED OF BASIC VOLCANIC FRAGMENTS AND BLOCKS ASSIMILATED ALONG THE INTRUSIVE - VOLCANIC CONTACT.

**BGD** — BIOTITE GRANODIORITE: MEDIUM GRAINED; VARIABLE CHLORITE - EPIDOTE - SERICITE - CARBONATE ↔ SERICITE ↔ K-SPAR ↔ K-SPAR - QUARTZ - SERICITE - BIOTITE - CARBONATE ALTERATION OF GROUNDMASS. HEMATITE, K-SPAR, CHLORITE, EPIDOTE, QUARTZ AND CARBONATE MAY ALSO OCCUR ON FRACTURES AND ALSO AS PERVASIVE GROUNDMASS FLOODING. UNIT IS COMPOSITIONALLY SIMILAR TO THE GRANODIORITE PORPHYRY. ONLY TRACE HORNBLENDES NOTED. SEPARATION FROM UNITS Bp AND HGD IS MADE BY GRAIN SIZE AND HORNBLENDE CONTENT RESPECTIVELY. COMMONLY HOST EAGLEHEAD COPPER ZONES.

**GP** — GRANODIORITE PORPHYRY: MEDIUM TO COARSE GRAINED. CONTAINS 5-10% FINE K-SPAR IN MATRIX, 50% PLAGIOCLASE, 5-15% 5-15mm QUARTZ EYES, 10% BIOTITE, TR. HORNBLENDE AND TR. MAGNETITE. UNIT IS GENERALLY BARREN AND FRESH. CONTAINS ONLY TRACE QTZ STRINGERS AND COPPER BEARING SHEARS.

**GPGZ** — GRANODIORITE PORPHYRY - GRADATIONAL ZONE: SIMILAR TO UNIT (GP). REPRESENTS AN ALTERATION ZONE WHICH BORDERS THE BIOTITE GRANODIORITE. VARIES FROM PERVASIVE SERICITE - K-SPAR ↔ CHLORITE - EPIDOTE FLOODING OF GROUNDMASS. Tr py, tr cpy

## LEGEND

- OUTCROP
- FLOAT
- GEOLOGICAL BOUNDARY — DEFINED
- — APPROXIMATE
- — INTERPRETED
- QUARTZ VEIN ATTITUDE (INCLINED, VERTICAL)
- BEDDING (INCLINED, VERTICAL)
- JOINTING (INCLINED, VERTICAL)
- SYNCLINE
- ANTICLINE
- GLACIAL
- FAULT
- TRAIL
- STREAM (PERENNIAL, INTERMITTENT)
- DRILL HOLE PROJECTION
- MARSH - LOW BUCK BRUSH COVER
- (H) HELICOPTER PAD
- CLAIM POST

| | |
|---|---|
| SER. | SERICITE |
| K-SPAR. | POTASSIUM FELDSPAR |
| CHLOR. | CHLORITE |
| EPI | EPIDOTE |
| CARB. | CARBONATE |
| INT. | INTENSE |
| wk. | WEAK |
| mod. | MODERATE |
| py | PYRITE |
| cpy | CHALCOPYRITE |
| mal. | MALACHITE |
| ox. | OXIDIZED |

## FAR EAST GRID

| | |
|---|---|
| SECTION 1 | SECTION 2 |

Map # 2

## SECTION 1

SCALE 1:5000

0 50 100 150 200 300 400m.

| | |
|---|---|
| ESSO MINERALS CANADA | |
| EAGLE PROJECT | |
| FAR EAST GRID | |
| GEOLOGY | |
| PROJECT # 2154 | MINING DIVISION: LIARD |
| DATE: JULY 1982 | SCALE: 1cm. = 50 METRES |
| NTS: 104 I 6E/11E | DRAWN BY: C.E. |

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 10,816

## GEOLOGICAL UNITS

**A** — ANDESITE: PALE TO OLIVE GREEN, LOCALLY CRACKLED, HEMATITE STAINING NEAR CONTACT TO HORNBLENDE GRANODIORITE. CONTAINS TRACE HORNBLENDE AND PYROXENE PHENOCRYSTS (STUHINI FORMATION?). COMMONLY OCCURS AS ANGULAR TO ROUNDED FRAGMENTS WITHIN THE HORNBLENDE GRANODIORITE. FRAGMENT SIZE AND ABUNDANCE DECREASES TOWARDS THE BIOTITE GRANODIORITE

**D** — DYKE: UNIT LOCATED IN FLOAT ONLY. FE RICH, HIGHLY OXIDIZED, RED, FINE GRAINED GROUNDMASS CONTAINING ANGULAR TO ROUNDED COARSE GRAINED MONZONITE AND SEDIMENT FRAGMENTS.

EAGLEHEAD BATHOLITH

**HGD** — HORNBLENDE GRANODIORITE: TYPICALLY APPLE GREEN IN COLOUR. WEAK TO INTENSE CHLORITE CONTENT WITH MINOR SERICITE ASSOCIATED. COARSE HORNBLENDE PHENOCRYSTS NOTED IN FRESH TO WEAKLY CHLORITIZED SECTIONS. VARIABLE QUARTZ EYE CONTENT - TR → 5% CONTAINS 10-40-50% PLAGIOCLASE PHENOCRYSTS FLOATING IN AN APHANITIC CHLORITIC GROUNDMASS. COPPER BEARING SECTIONS MAY BE MYLONITIZED. 1-5% OF UNIT COMPOSED OF BASIC VOLCANIC FRAGMENTS AND BLOCKS - ASSIMILATED ALONG THE INTRUSIVE - VOLCANIC CONTACT.

**BGD** — BIOTITE GRANODIORITE: MEDIUM GRAINED; VARIABLE CHLORITE - EPIDOTE - SERICITE - CARBONATE ↔ SERICITE ↔ KSPAR ↔ KSPAR - QUARTZ - SERICITE - BIOTITE - CARBONATE ALTERATION OF GROUNDMASS. HEMATITE, KSPAR, CHLORITE, EPIDOTE, QUARTZ AND CARBONATE MAY ALSO OCCUR ON FRACTURES AND AS PERVASIVE GROUNDMASS FLOODING. UNIT IS COMPOSITIONALLY SIMILAR TO THE GRANODIORITE PORPHYRY. ONLY TRACE HORNBLENDES NOTED. SEPARATION FROM UNITS GP AND HGD IS MADE BY GRAIN SIZE AND HORNBLENDE CONTENT RESPECTIVELY. COMMONLY HOSTS EAGLEHEAD COPPER ZONES.

**GP** — GRANODIORITE PORPHYRY: MEDIUM TO COARSE GRAINED. CONTAINS 5-10% FINE K-SPAR IN MATRIX, 50% PLAGIOCLASE, 5-15% 5-15 mm. QUARTZ EYES, 10% BIOTITE, TR. HORNBLENDE AND TR. MAGNETITE. UNIT IS GENERALLY BARREN AND FRESH. CONTAINS ONLY TRACE QTZ STRINGERS AND COPPER BEARING SHEARS.

**GPGZ** — GRANODIORITE PORPHYRY - EREADATIONAL ZONE SIMILAR TO UNIT (GP) REPRESENTS AN ALTERATION ZONE WHICH BORDERS THE BIOTITE GRANODIORITE. VARIES FROM PERVASIVE SERICITE - K-SPAR ↔ CHLORITE - EPIDOTE FLOODING OF GROUNDMASS. TRPG, TRCPY.

## LEGEND

- OUTCROP
- FLOAT
- GEOLOGICAL BOUNDARY - DEFINED / - APPROXIMATE / - INTERPRETED
- QUARTZ VEIN ATTITUDE (INCLINED, VERTICAL)
- BEDDING (INCLINED, VERTICAL)
- JOINTING (INCLINED, VERTICAL)
- SYNCLINE
- ANTICLINE
- GLACIAL
- FAULT
- TRAIL
- STREAM (PERENNIAL, INTERMITTENT)
- DRILL HOLE PROJECTION
- MARSH - LOW BUCK BRUSH COVER
- HELICOPTER PAD
- CLAIM POST

SER SERICITE
K-SPAR POTASSIUM FELDSPAR
CHLOR CHLORITE
Epi EPIDOTE
CARB CARBONATE
INT. INTENSE
WK. WEAK
MOD. MODERATE
PY PYRITE
CPY CHALCOPYRITE
MAL. MALACHITE
OX. OXIDIZED
⊥ JADE BOULDERS

## FAR EAST GRID

| SECTION 1 | SECTION 2 |
|---|---|

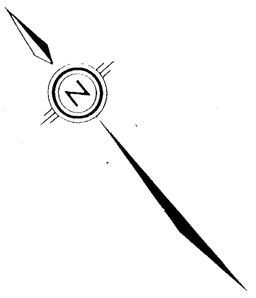
Map # 3
**SECTION 2**

SCALE 1:5000
0 30 100 150 200 300 400

| | |
|---|---|
| ESSO MINERALS CANADA | |
| EAGLE PROJECT | |
| FAR EAST GRID | |
| GEOLOGY | |
| PROJECT # 2154 | MINING DIVISION: LIARD |
| DATE: JULY 1982 | SCALE: 1cm = 50 METRES. |
| N.T.S. 104I 6E/11E | DRAWN BY: C.E. |

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 10,816



## 1981 SOIL GEOCHEM

Cu (ppm)
Mo (ppm)

## 1982 SOIL GEOCHEM

SAMPLE NUMBER
Cu (ppm)
Mo (ppm)

## FAR EAST GRID

SECTION 1 | SECTION 2

Map #4

## SECTION 1

SCALE 1:5000

0 50 100 150 200 300 400m.

ESSO MINERALS CANADA

# EAGLE PROJECT

FAR EAST GRID

Cu Mo

## SOIL GEOCHEMISTRY

| | |
|---|---|
| PROJECT # 2154 | MINING DIVISION : LIARD |
| DATE : JULY 1982 | SCALE : 1cm. = 50 METRES |
| NTS : 104 I 6E/11E | DRAWN BY : C.E. |

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 10,816

## 1981 SOIL GEOCHEM

Cu (ppm.)
Mo (ppm.)

## 1982 SOIL GEOCHEM

SAMPLE NUMBER — Cu (ppm.) / Mo (ppm.)

## FAR EAST GRID

SECTION 1 | SECTION 2

Map #5

**SECTION 2**

SCALE 1:5000

0 50 100 150 200 300 400

ESSO MINERALS CANADA

# EAGLE PROJECT

FAR EAST GRID

Cu Mo

## SOIL GEOCHEMISTRY

| | |
|---|---|
| PROJECT # 2154 | MINING DIVISION : LIARD |
| DATE: July 1982 | SCALE: 1cm = 50 METRES |
| N.T.S. 104I 6E/11E | DRAWN BY: C.E. |

ZONE A

ZONE B

ZONE C

ZONE D

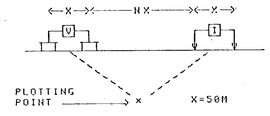
- 35+00m N.
- 30+00m N.
- 25+00m N.
- 20+00m N.
- 15+00m N.
- 10+00m N.
- 5+00m N.

Baseline 12+00m N.

Baseline

128+00E
136+00E
141+00E
154+00E
156+00E
160+00E
168+00E
176+00E
184+00E
192+00E
90+00m E
92+00m E
94+00m E
96+00m E
98+00m E
100+00m E
102+00m E
104+00m E

N




SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE



FREQUENCY (HERTZ)
0.25 & 4.0 HZ.

DATE SURVEYED: JULY 1982

ESSO MINERALS CANADA
DIV'N. OF ESSO RESOURCES CANADA LIMITED

PROSPECT: EAGLE
FAR EAST ZONE
I. P. SURVEY

ACCOUNT № MA57 | FILE № BC57 | TORONTO

SCALE 1:5000 | 0 200M | DATE NOV. '82

AUTHOR Z. DOBORZYNSKI | NTS 104 I/6 | DWG. № 6