

FAST 103P/6 10


## Department of

Mines and Petroleum Resources

## ASSESSMENT REPORT

```
TITLE
AUTHOR
    J.L. LeBel
DATE
COMMODITY
LOCATION-Area
Alice Arm
    -Mining Division
    -Coordinates
    -NTS
```

Mohawk Mountain $\mathrm{MoS}_{2}$ Property
J.L. LeBel

December, 1975
Mo
Alice Arm
Skeena
Latitude $55^{\circ} 25^{\prime} 30^{\prime \prime} \mathrm{N}$ Longitude $129^{\circ} 27^{\prime} 30^{\prime \prime} \mathrm{W}$ 103 P 6

AMAX EXPLORATION, INC.
Vancouver Office

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An induced polarization survey which comprises 2.4 miles in two orthogonal lines on the Mohawk Mountain Property and the part of a larger airborne magnetometer which covers the property are described.

The airborne magnetometer survey outlined several unexplained near surface anomalies which indicate a degree of magnetic complexity unusual for the argillites and greywackes which underlie the property.

No unjquely anomalous condition was detected by the induced polarization survey although abnormally high per cent frequency effects were recorded. The high values are attributed to ubiquitous pyrite and/or graphite in the metasediments.

## INTRODUCTION

This report describes the results of an airborne magnetometer survey and an induced polarization survey conducted over the Mohawk Mountain.

The property is located approximately two miles south of the Kitsault townsite and four miles south of the town of Alice Arm. Access is by means of helicopter.

The property consists of 22 contiguous mineral claims, Fast (1-22) recorded on July 5, 1974. The approximate centre of the claim group is defined by longitude $55^{\circ} 25^{\prime} \mathrm{N}$ and latitute $129^{\circ} 27^{\prime} W$ and it is situated in the Skeena Mining Division. The Fast 6-12 claims comprise the A Group, Fast 1-5 and Fast 13-22 comprise the B Group.

| Claim | Group | Record Number | Expiry Date |
| :--- | :--- | :--- | :--- | :--- |
| Fast 6-12 incl. | A | $38846-38852$ incl. | July 5, 1977 |
| Fast 1 | B | 38863 | July 5, 1976 |
| $2-5$ incl. | B | $38842-38845$ incl. | July 5, 1976 |
| 13-22 incl. | B | $38853-38862$ incl. | July 5, 1976 |




MOHAWK MOUNTAIN MOLYBDENITE PROPERTY

# $5814 \mathrm{M}-2$ 

CLAIM MAP

\author{

- showing location of AIRBORNE MAGNETOMETE\& SURVEY Higぇ
}



## AIRBORNE MAGNETOMETER SURVEY

## INTRODUCTION

The airborne magnetometer survey was conducted by Sandner Resource Surveys, lll - 744 West Hastings Street, Vancouver, B.C. during the period August 14 to $16,1975$. Seventeen line miles of a larger survey are described herein.

## EQUIPMENT AND PROCEDURE

The equipment package which was installed in a Bell-206 Jet Ranger helicopter chartered from Vancouver Island Helicopters included:

- Varian V-4937A - Proton precession magnetometer
- Varian SDV-4991 - Digital recorder
- Neyard Automas G-2 35 mm - Tracking camera
- Hewlett Packard 7130A - Chart recorder
- Bonzer 70 - Radar Altimeter
- Sandner Modified Intervalometer

A ground magnetic monitoring station which consisted of a Barringer SMIO4 magnetometer and a Baush and Lomb VOM 6 chart recorder was set up at Kitsault and operated during all survey flights.

The survey was flown along approximately north-south lines spaced at 1,000 foot intervals. Two east-west tie lines were flown. The magnetic sensor mean terrain clearance was $200 \pm 100$ feet. Three consecutive lines flown in the same direction to subdue the effects of "herringbone".

Survey lines were predrawn on an airphoto mosaic and adhered to during the survey by visual navigation. The nagigator recorded the approximate position of the line during the flight by annotating overflown topographic points with the fiducial number from the intervalometer display.

## DATA REDUCTION AND PRESENTATION

After flight path recovery an $X-Y$ coordinate system was superimposed on the flight line mosaic. Thus the start and finish of the flight path and any point where the flight path changed direction was defined in terms of $X$ (the distance east of the origin and $Y$ (the distance north of the origin).

The digital paper punch-tape information was transcribed onto magnetic tape and input into a computer along with the flight line information.

The magnetic data were corrected by first correcting each tie line by removing any variations from a mean value recorded at the ground base station. Diurnal variations were removed from the rest of the survey by applying a smooth array of adjustments along the line which would remove the differences noted at the two tie line/flight line intersections.

The corrected results were computer plotted on a flight line map with the value of the magnetic field annotated at about 300 foot intervals. A final map was produced by hand contouring at 25 ganma intervals.

Figure 3 shows the portion of the airborne magnetometer survey that covers the Mohawk Mountain Property. Results for an area slightly larger than the property are presented to give some credence to the location of the contours.

## RESULTS OF THE SURVEY

The isomagnetic contour map shows a number of magnetic anomalies greater than 57,900 gammas. Most of the anomalies are supported by more than one flight line. Total magnetic excursion is from 57,400 to 58,100 gammas. The

anomalies are arranged peripherally to 400 gamma magnetic low which centres at the peak of Mohawk Mountain.

DISCUSSION OF RESULTS

Analysis of the shape of the magnetic anomalies suggests that all the anomalies can be attributed to near surface effects. The peripheral pattern of the anomalies is probably superficial and is not attributed to a single particular geometry or distribution of magnetic material. The degree of complexity of the magnetic field however is unusual for argillites and greywackes which elsenwere in the survey have uniform magnetic response.

## CONCLUSIONS

The results of the airborne magnetometer survey over Mohawk Mountain show a complexity which is atypical of the argillites and greywackes which underlie the property suggesting that the geology of the area may be somewhat more complex than is indicated by geologic mapping to date.

## INTRODUCTION

During the period October 28 to 31,1975 an induced polarization survey was completed on the Mohawk Mountain Property by Morrison-DePaoli, feophysical Surveying \& Consulting. The lines (see Figure 2) were prepared by two line cutters supplied by Darma Explorations Ltd. just prior to the survey between October 24 to 27, 1975.

## EQUIPMENT AND PROCEDURE

A McPhar P660 frequency domain induced polarization system was used for the survey. The equipment measures the induced polarization effect - per cent frequency effect (PFE) between two operating frequencies ( 0.3 and 5.0 hertz in this case). The apparent resistivity at the lowest frequency is provided by calculation from the following parameters; measured voltage, transmitted current, and the electrode array geometric factor.

The dipole-dipole electrode array with an a-spacing of 300 feet was used. Four separations ( $n=1,2,3,4$ ) were used to expand the array. It was possible to cover 5,400 feet of line from a single transmitter site. Where more than one set-up was required some of the stations from the previous set-up were reread to ensure continuity in the results.

Two orthogonal lines (located in Figure 2) which intersected over the area of interest were surveyed. A total of 2.4 miles of survey was completed.

## PRESENTATION OF DATA

The apparent per cent frequency effect ( $\mathrm{PFE}_{\mathrm{a}}$ ) and apparent resistivity ( $\rho_{a}$ ) in units ohm-feet/ $2 \pi$ are displayed in pseudosection (Figures 4 a and 4 b ). The apparent metal factor ( $\mathrm{MF}_{\mathrm{a}}$ ), also shown, is an artificial number created by the calculation: $\left(\mathrm{PFE}_{\mathrm{a}} \div \rho_{\mathrm{a}}\right) \mathrm{x} 1000$
A rough sketch of the topography is also displayed. Locations with two values indicate stations where readings were repeated wi.th transmitting and receiving dipoles reversed.

The contour interval is semi-logarithmic and employs multiples of $1,1.5,2,3,5,7.5,10$.

## RESULTS OF THE SURVEY

Line $0+00 \mathrm{E}$ which is perpendicular to the local geologic strike has marked changes in apparent resistivity from 1.6 to 2412 ohm-ft/ $2 \pi$. The apparent resistivity forms bands of alternating high and low values which are also reflected in the properties' step-like topography. Per cent frequency effects on Line $0+00 \mathrm{E}$ range from a low of 3.4 to a high of 13.2 with a mean value about 10 . The two negative values recorded were carefully checked and confirmed in the field. The lowest, negative, and noisy values invariably coincide with the very low apparent resistivities or occur at contacts between high and low apparent resistivity.

There doesn't appear to be a consistent relationship between apparent resistivity and apparent per cent frequency effect.

The changes in apparent resistivity on Line $0+00 \mathrm{~N}$ which is parallel to geologic strike are not dramatic as on Line $0+00 E$. Values range from 50 to $1086 \mathrm{ohm}-\mathrm{ft} / 2 \pi$.

Again banding in the results is evident but is not as clear as on Line $0+00 E$. Per cent frequency effects vary from 7.8 to 16.3 with a mean of 10 . There were no noisy, abnormally low, or negative readings taken on Line $0+00 \mathrm{~N}$.

## DISCUSSION OF RESULTS

Although the PFE's are abnormally high, there are no changes that would indicate a uniquely anomalous situation. The high tenor in PFE is attributed to ubiquitous pyrite and/ or graphite but, since the interpreted sulphide content of 3 - $5 \%$ exceeds that visually present, the sulphides must occur in ideal grain size and grain/pore geometry. The low and negative PFE values appear to be associated with low resistivity or resistivity changes so are either spurious or a result of contact phenomenon.

The resistivity bands correlate well with the geology. The high resistivities correspond to bands of massive greywacke whereas lower values reflect occurrences of banded argillite. Some of the anomalies may be modified by distortions in the colinearjty of the electrodes because of the coincidence of topographic precipies and stratigraphy.

The lowest apparent resistivities measured probably indicate local concentrations of pyrite and/or graphite.

## CONCLUSIONS

No uniquely anomalous condition was detected by the induced polarization survey. Ubiquitous high per cent frequency effects are attributed to pyrite and/or graphite in argillites and greywackes. The apparent resistivity results correspond well with geology with areas of high and
low resistivity represent alternating greywacke and argillite, respectively.


## APPENDIX I

STATEMENT OF COSTS

Period of Work August 14－16 and October 25－31， 1975


Personnel Employed

| J．L．LeBel，Geophysicist，601－535 Thurlow Street，Vancouver |  |
| ---: | :--- |
| 4 days © $\$ 73.70 /$ day | 294.80 |

S．L．Sandner，A．Mlcuch，T．Tinsley， Sandner Resource Surveys Ltd．，
111－744 West Hastings Street， Vancouver，B．C．

D．F．Morrison，G．M．DePaoli，B．B．Taylor，N．Jorgensen， Morrison－DePaoli Geophysical Surveying \＆Consulting， 5305 East Georgia Street，
Burnaby，B．C．
Freeman Frost，Timothy Biggins，
Darma Explorations Limited， 4647－197 Street， Langley，B．C．

Airborne Magnetometer Survey－Sander Resource Surveys 17 miles＠$\$ 25.00 / \mathrm{mile}$
425.00

Line Cutting－Darma Exploration Ltd．
2 days © $\$ 100.00 /$ day 200.00
2.8 miles＠$\$ 300.00 /$ day 840.00

| Induced Polarization Survey－Morrison，DePaoli |  |
| :---: | :---: |
| 2 days＠$\$ 395.00 /$ day | 790.00 |
| 2 days＠$\$ 245.00 /$ day | 490.00 |

Transportation
Air fares 603.00
Freight 312.00
Helicopter 7.1 hrs ．（1）\＄293．75／hour 2，085．63
Room and Board
28 man days＠$\$ 20.00 /$ day 560.00
Report Preparation and Drafting 500.00

TOTAL
\＄7，100．43

This work is to be applied for
One year on Fast 6－12 inclusive， 21 and 22 Two years on Fast 1－5 inclusive，13－20 inclusive．

## APPENDIX II

STATEMENT OF QUALIFICATIONS

```
NAME: J. LAURENCE LEBEL
ADDRESS: 1607-1155 HARWOOD STREET
    VANCOUVER, BC V6E 1Sl
EDUCATION: B.Sc. (1971) Queen's University - Geological Engineering -
                                    Geophysics Option
    M.Sc (1973) University of Manitoba - Geophysics
```

EXPERIENCE:


APPENDIX III

## EXPLORATION,INC.

-601.535 THURLOW STREET
VANCOUVER 5, BRITISH COLUMBIA
VEE 3L6

Agreement made this
 Between


AMAX Exploration, Inc. 601-535 Thuriow Street, Vancouver, B.C. VEE SLE (hereinaiter called AMAX)

> of the First Part

## And

Sandner Resource Surveys Ltd., 111~744 fiest lastings Street, Vancouver, B.C. VGC $1 A 5$ (hereinafter called CONTRACTOR)

## of the Second Part

Whereas AMAX has need of services provided by COMTMACTOR and Whereas CumThercr hereby agrees to provide such services to Allax in accordance with the following terms and conditions:

1. CONTHACTOR agrees to conduct an afrborne magnetometer survey in accordance with the specifications in form attached hereto as Schedule A. Such specifications when completed and signed by a representative of $A M A X$ and accepted by CONTRACTOR shall form an integral part of this Agreement.
2. CONTRACTOR anrees to provide such number of experienced men, together with all such equipment, material and supplies as are reasonably necessary to complete the job in an efficient and workmanlike manner. Subject to the specifications and other directions siven by $A M A T$, the services performed hereunder will be carried out under COMTRACIOR'S onn direction and control and at its own risk and for this purpose the
the CONTRACTOR shall be an independent contractor and its employees shall not be employees of AMAX for any purpose whatsoever. CONThACTOR is not an ament or other representative of ARAX and is not authorized to obligate AMAX in any way.
3. CONTRACTOR agrees to pay all salaries and wares for its crew and to make all required deductions and remit them to the appropriate qovernment acency for incone tax, unemployment insurance, and rovernmont health and pension plans, and otherwise conply in every way with applicable labour legislation. If requested by AMAX, CONRRACTOR will provide AMAX a list of all men used on the job shoving their names, home addresses, and the dates and number of days worked by each of them.
4. CONTRACTOR shall at all times enforce strict discipline and maintain good order among its employees and shall not retain on the work any unfit person or anyone not skilled in the work assigned to him. Any employees of the CONTRACTOR who is objectionable or unsatisfactory to AMAX shall be removed from the work and replaced by an employee satisfactory to AMAX.
5. CONTRACTOR agrees that all information and documentary results he or his employees may receive as a result of the work carried out by him under this arrement shall be the exclusive property of $A P A X$ and shall not be disclosed to any other person without the written consent of AMAX.
6. During the course of the work, the CONrRACTOR shall at all times keep the area in which the work is performed free from accumalation of waste material or rubbish and upon completion of the woik shall renove all tools, equipment, scaffolding, surplus materials and rubbisin and leave such area in a clean and safe condition in accordance with Forest Service Regulations governing the area.
7. COHTRACTOR shall comply with all applicable manicipal, provincial, territorial and federal lerislation and regulations dealing with forest fires, pollution or similar matters and will be resporsible for any violations of such legislation and rerrlations by him, his subcontractors and his employees while providing services to ANAX hereunder.
8. CONTPACTOR shall maintain in full force and effect at its expense during the performance of this contract the following insurance in amounts not less than those spectifed below:
(a) Korkman's Compensation Insurance in compliance with applicable provincial, territorial and federal laws;
(b) Comprehensive Public Liability Insurance, including non-owned automobile, contractual liability, and completed operations, with bodily infury limits not less then $\$ 100,000$ per person and $\$ 300,000$ per occurrence and property damage limits not less than $\$ 50,000$ per occurrence; and
(c) Comprehensive Automobile Liability and Property Damage Insurance with bodily injury limits not less then $\$ 100,000$ per person and $\$ 300,000$ per occurrence and Property Damage limits not less than $\$ 50,000$ per accident.

CONTRACTOR shall furnish AMAX, on demand, insurer's certificates evidencing the existence of the insurances reforred to in pararraphs (b) and (c) above, which certificates shall specifically state that the policy covers the above mentioned requirements and stipulates that such policies shall not be modified or cancolled unless ten (10) days prior written notice thereof is furnished to AliAX.
9. CONTRACTOR agrees to indemnify AMAX and its directors, employees and arents from all loss and expense including any court costs and other legal expenses arising out of all claims, demands, actions, processes and suits of every nature and kind whatsoever incident to or resulting from the operations of CONTRACTOR or of any subcontractor or agent or employee of the CONTRACTOR or any of them.
10. The original and one copy of the CONTRACTOR'S invoice will be forwarded to the project geologist in charge of the job. One copy of the invoice will be forwarded to the AMAK office responsible for payment. Payment will be made by AsAX promptly on receipt from the project ceologist of tro approved copies of the invoice. The final invoice will be approved by the project geologist only folloving an on site inspection of the property and his acknowledgement that it has been left in an acceptable condition pursuant to clauses 6 and 7 hereof.
11. CONTRACTOR agrees that AMAT shall have the right at any time to dmmediately terminate this Agreement and Aind agrees that the CONTRACTO $\operatorname{shall}$ have the right at any time to terminate this Apreement on 30 day's notice to AMAX. In the event of termination by ALAX, AMAX will pay for work completed and the reasonable costs of returning

CONTRACTOR'S men and equipment to the sites from which such men and equipment commenced operations hereunder.

AMA EXPLORATION, INC.


SANDER RESOURCE SURVEYS LTD.


Dated $\frac{\text { Play } 29}{0} \cdot 1975$.

SCHEDULE A - SPECIFICATIONS
Re: AEROHAGNETIC SURVEY, KITSAULT, B.C.

The following specifications set out the work to be performed by CONTRACROR in accordance with terms and conditions set forth in clauses 1 to 11 inclusive, of that certain Agreement dated the 2946 day of 7 Tay 1975, between AMAX EXPLOMATION, INC. (AMAX) and SAMDMSR RESOURCE SURVEYS LMD. (CORTRACIOR). Such specifications when signed become an integral part of said Agreement.

## SURVEY DESCRIPTION

1. The area to be flown covers a 8 mile by 12 mile block situated south and east of Kitsault, B.C. as shown on the accompanying map. The total line mileare anounts to approximately 500 miles including two tie lines.
2. Line spacing will be 1,000 feet. When the actual Iine spacing exceeds by $\pm 300$ feet the intendea line spacing over a distance of 1 mile, extra lines will be flown to fill In the gap at no extra charge to AMAX. Line direction will te approximately north-south as shovn on the accompanying map.
3. The tie lines will be flown at locations approximately $1 / 3$ and $2 / 3$ the north-south longth of the survey area.
4. Lines will be flown with a sensor elevation of 200 feet $\pm 100$ feet above the $\%$ round. Fortions of lines flown at greater than 300 foot terrain clearnace over distances of l mile or more will not be acceptable and will be reflown if practicable. The pilot's decision as to minimum safe altitude will prevail.
5. Each 3 consecutive lines will be flown in the same direction.
6. The survey will be flown with a helicopter with performance equal to or better than a Bell 206-B. The preferred carrier is an Allouette II helicopter.
7. The following equinuent or equivalents will be carried in the heliconter: a Vaxian 4937A or Earringer AM-104 marnetometer capadle of measuring the total intensity of the exth's macnetic field in units of 1 gamas at intervals of 1 becond, a ip-7130n 2 chanal - 2 side pen chart recorder, an Automax cs- 3.5 m tracking camera, a Banciner intervaicceter, a Bonzar nodel 70 radar al氏imeter, a Varian de9l digital recording syotcm.
8. mime variations of tio eartis marnetic field जill be monitoroc by a Goometrics sse magnetometer operated at a ground Liase station and recoried in anaiog form on a Pustrack recorder on 2 inch chart paper with a full scale deflection of 100 Gammas. Aeromañetic datamill ve considered acceptable only during periods when the ragnetometer trace ghows no departuro from any chord 30 minutes long which exceed 10 gammas.
9. The nojse envelope on the airborne marnetometer record will not excecd $\bar{b}$ gammas. ivoise shall be considered persistent recorded variations not due to geolocic or cultural sources and not repeatable on sutsequent reflights. If a marnetic noise level excecring 5 gamas is suspected, the COINRACTOR will carrs out apmopriate test refisfhts to ascortain the type and amplitude of the noise envelope.
10. At the beginaing of the first plight and at the end of the last flight of each day the altimeter will be calibrated at Intervals of 100 feet from lou feet above the ground to the waximum acceptable filght elevation of that day.

DATA PROCESSTNG
11. Flight path will be recovered by identifying points on the traciong tilm and airphotograpins and transferring these to basc maps at a scale of 1 inch to 2,320 feet.
12. The magnetic fisld values will be levelled by comparing the differences in value rocorded at eacil tie line/ flight line intersection and applying a smooth array of adjustments.

## MATEEIAL TO BE DELIVERED

13. A map of all fligut lines and all control points pleked appropriately annotated and labelled on a linch to l,320 feet airphotograph mosaic base.
14. A map siowing the computer printed marnetic fleld values at appropriate intervals along each flight line antoured st an appropriate contour interval on a $l$ inch to 1,320 feet airphotograph mosaic base.
15. All enited analorue tapos showing marnetometer trace, number ïducial maras, altimeter trace and altimeter calibrations, any scales necessary, and flight line number and direction of flimht.
16. Tracking film with frames numbered to correspond to the fiducial marks and any and all working maps used during the survey.
17. Three copies of a hrief logistics report describing the equipment, procedure followed, dates of the survey, poroonnel involved, and sicned cortificates of qualification, suitable for B.C. Govermment assessment filing.

## COST OF SURVEY

18. Acceptable survey miles flom will be charged at the all-inclusive rate of 425.00 per mile.

If the line milease exceeds 700 miles a rate of $\ddagger 21.50$ per mile will apply to acceptable survey miles flown. In this case helicopter fuel will be sumplied by AdsX, all other costs will be borne by the ComTRACTOR.

## TINIHG

19. It is anticipated that the survey will comence durtng the last part of June, 1975 subject to the amount of snow cover and persistence of good weather.
20. Material detailed in clauses 12 to 17 will be delivered 4 feeks after completion of the survey.

## RESPONSIBILITIES OF AVAX

21. AMAX :ill supply prior to the commeacement date of the survey: 3 copies of a 1 inch to 1.320 feat blacin line paper print airphotograph mosaic showing the lines to be flown and one stable base film of the above mosaic from which clear copies can be made for plotting of flight lines and contoured magnetic fisid values.
22. AMAX will supply at no charge to the CONTMACron lodging and board for the survey crew at the town of Kitsault.

## PAYMENT

23. A deposit of $\$ 6,600.00$ will accompany the stoner Agreement. The balance of the contract price will be payable upon receipt by AMAX of the completed maps and report.

MAX EXPLORATION, INC.


SANDIER RESOURCE SURVEYS LTD.


Dated

$$
\text { May } 29
$$ , 1975.



AMAX EXPLDRATION INC.

## MOHAWK PROPERT <br> $P_{\text {(a) }} / 2 \pi$

P. 660 FRERUENCY DOMAIN 0.3 AND 5.0 HERTZ DIPOLE - DIPOLE ARRAI DIPOLE LENGTH $300^{\circ}$ OPERATORS: MOREISON + LEPAOLI
$58 T 44$ 29.




AMAX EXPLORATION INC MOHAWK PROPERT ALICE ARM AREA, B.C.

P-660 FREQUENCY DOMAIN IP
0.3 AND 5.0 HERTZ

DIPOLE - DIPOLE ARRAY
DIPOLE LENGTH 300'
OPERATORS: MORRISON + DEPAOLI

SCALE: ${ }^{\circ}=300^{\circ}$
SATE: OCT. 29,30, 1975

LINE O+CON

PFE.

| Department of |
| :---: |
| Mines and Petroleum Resources |
| ASSESSMENT REPORT |
| NO. $58 / 4$ |



MORRISON \& DEPAOLT
GEOPHYSICAL SURVEYTNG \& CONSULPING

VANCOUVER (6CH) 200-1464 TORONINO (705) 6e7-2009

AYAX EXTLORATTON TNC.,
H601-535 GHURTOM STREET,
VANCOUVER 5, R.C.
ATREMTION: T. LAPETI
RE: Induced Polarization Survey, Alice Arm Area, B.G.

We are nleased to nresent herein a nronosal to execute tinis survey for 5.6 Jine miles of irduced rolarization / resistivity surveying on your oenalf. It is understood that the survey is to commence on or around 0ctooer 20, 1975.

1. MORRISON \& DEPAOLI will provide the following equipment, versonnel and services:
(a) A McPhar 2.5 Ki freouency domain induced nolarization system ard all accessories required for the execution of the survey.
(b) D.F. Morrison and G.P. DePaoli to operate and execute the survey.
(c) The survey confimuration utilized will be a diooledinole array emoloying a 300 dipole lencth and readings taken to 4 separations. $(N=1,2,3,4)$
(d) Data will be disolayed in oseudosection format presenting fa/2 $\pi$, metal factor and PFE.
(e) Initial interoretation of the data will be mane in the field with the suvervising Geologist on an informal basis. An Assessment kedort will follow within one week of completion of field work.
2. It is agreed that Amax Exploration Inc. will provicie the following:
(a) Mobilization and demobilization expenses at cost from Vancouver to the jod site and return.
(b) Two helpers to execute the survey.

Item 2 Cont.
(c) Room and board in a tent camo.
3. Costs for items 1 (a)-(e) are as follows:

## ESTTMAPLD


4. Indemnification: MORRISON \& DEPAOII agree to indemify and save harmless personnel of Amax against eny and all loss and expense includine attorney's fees and other lesal expenses, by reason of liability imposed or claimed to be imposed by Amax Exploration Inc. for damages because of bodily in,iuries, including death, at any time resulting from or on account $0 \boldsymbol{f}$ damage to property sustajned by any person or persons arising out of or in consequence of the performance of work called for by this agreement.
5. MORRISON \& DEPACLI shall maintain in full force and efect at their expense during the nerformance of the survey the following insurance in amounts not less than those specified below:
(a) Workmen's Commensation in accordance with the laws of the Province of British Columbia.
(b) Comprehensive General Liability insurence with not less than oodily injury limits of $\$ 100,000$ per verson and $\$ 300,000$ ver occurrence and property damaqe limits of $\$ 25,000$ per accicent.
(c) Comprehensive Automobile Liability Insurance with not less than bodily infury limits of $\$ 100,000$ per person and $\$ 300,000$ ner occurrence and property damage limits of 25,000 per accident.

The above certificates shall stipulate that the policy shail not be reduced or cancelled during the beriod work is being done for Amax Exploration Inc.

We look forward, with pleasure, to being of service in this regard.

SIGNED
 Concern

PER


PER
535 THURLOW STREET VANCOUVER 5.B.C.
MAX EXPLORATiON INC.

DATE ACCEPMED, OCMOBER 1. 1975.


## APPENDIX IV

## Sandier


(604)687-1115 (604)687-4335

111-744 WEST HASTINGS STREET VANCOUVER, BC. VOC 1 AF

September 30,1975

## INVOICE

In Account with:
Amax Exploration Inc. \#601-535 Thurlow Street.,
Vancouver, B.C.
V6E 3L6.

Attention: Mr. Larry LeBel.

1) Reference: Detailed Aeromagnetic Survey, Kitsault area, north western British Columbia. Agreement - May 29, 1975 as per section 18. Total line mileage 558 @ $\$ 25.00 / \mathrm{mile}=\$ 13,950$.

Paid on account June 2, $1975=\$ \cdot 6,600$.
Balance due
= $\$ 7,350 . V$


The "State of the Oft" Company

[^0]Re: Line Cutting Alice Arm, B.C.

| Air fare to and from Prince Rupert | $\$ 236.00$ |  |
| :--- | ---: | :--- |
| Bus fare to and from Kamloops | 20.00 |  |
| Air freight | 24.00 | $\$ 280.00$ |

Travel time:
4 days @ $\$ 50.00$ per day ( 2 men)
\$ 200.00
1 day in camp because of fog, 2 men @ $\$ 50.00$
100.00 300.00
5. 6 middles of line cutting 4.6300 .00 per mile


$$
\frac{\$ 1680.00}{\$ 1,380.00} \quad \frac{1680.00}{1,380.00}
$$


,$m=P_{H} 530 \% 032$ Thank you for the opportunity of serving you.

```
P.O. BOX 418
GRAVENIURST, ONMARIO,
POC 1GO
5305 E. GEORGIA ST. BURNABY 2, B.C. \(V 5 B\) IV 3.
NOVEMBER 1, 1975 ,
AMA EXPLORATION INC.
\#601 - 535 THURLOW STREET
VANCOUVER 5, B.C.
```

RE: Induced Polarization Surveying on Bell Moly and Mohawk Properties.

5 Operating Days @ $\$ 300.00$ per day $\ldots . . . . \$ 1,500.00$
3 Travel and Standby Days © $\$ 150.00$ per day $\$ 450.00$
Mobilization, demobilization charge for
D.F. Morrison and I.P. equipment from Toronto SUBTOTAL . . . . . $\$ 2.550 .00$
SUBTOTAL
$-3$


Extra Labour Charges (2 MEN)
Salaries 8 days @ $\$ 95.00$ per day Handing expenses (20\%
$\qquad$


TOTAL NOW DUE AND PAYABLE

Please make payment to:
Dennis F. Morrison,
P.0. Box 418 ,

Gravenhurst, Ontario,
PRC 1 GO
ת

DFT/ amd

$\qquad$



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DENNIS F. MORRISON
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WEEKLY TI. . SHEET

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$0_{2}+3 \%$












REFERENCE $\qquad$


FLYING SERVICE FOR MONTH OF $\qquad$ 19. $\cdots "$ AS PER ATTACHED FLIGHT INVOICES


HELICOPTER TYPE $\qquad$ REG. No. C.F. $\qquad$

BASE OF OPERATION $\qquad$


This company complies with the CODE OF ETHACS of the Helicopter Association of America.


TEFMS: NET 30 DAYS. INTEREST AT $1 \frac{1}{2}$ : PER MONTH ( $18 \%$ ) PER ANNUM) GHARGED ON OVEROUE

This company complies with the CODE OF ETYINS of the Heicopter Association of America.



| Contract |
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| ADDRESS |
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| AIRCRAFT | DATE |  |  |
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| TIME OFF | TMME | REMARKS |  |
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TERMS: NET 3O DAYS. INTEREST AT $1 \frac{1}{2}$. PER MONTH $110^{\circ}: I$ PER ANNUMI CMARGED ON OVERDUE ACCOUNTS.

This company complies with the CODE OF ETHICS $\mathrm{c}^{\text {t }}$ ine Helicopter Association of Americal




[^0]:    Amax Exploration Inc., 535 Thurlough Street, Vancouver, B.C.

