| LOGNO: 0907 | RD. |
| :--- | :--- |
| ACTION: |  |

on the

## MAXI CLAIM

Lake Cowichan Area
Victoria Mining Division
(48. $45^{\circ}$ N. Lat -9E $124^{\circ} 04^{\prime}$ W. Long.)
for

USS. PLATINUM INC.
1250-800 West Pander Stet
Vancouver, B.C.
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(Owner and Operator
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by
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GRANT F. CROOKER, B.Sc., FSA.C.,
Geologist
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August, 1989
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## APPENDICES

Appendix I - Geophysical Equipment Specifications Appendix II - Geophysical Data Appendix III - Cost Statement
FIGUREPAGE

1. Location Map follows page 12. VLF EM Survey, Quadrature \& In-phase3. VLF EM Survey, Fraser Filter4. Magnetometer Survey5. Compilation Mappocketpocket
pocketpocket

## SUMMARY AND RECOMMENDATIONS

The Maxi Claim consists of 12 units and is located in the Victoria Mining Division. The property is located 8 kilometers south of Lake Cowichan on southern Vancouver Island.

The property is underlain by Lower Jurassic Bonanza Group volcanic rocks which have been intruded by dykes and irregularily shaped bodies of granodiorite. Mineralization at the Hillcrest and Anomaly Showings is related to skarns occuring along the contact of the volcanic and intrusive rocks. Magnetite, pyrrhotite and chalcopyrite occur within the meta-volcanic actinolite-garnet skarns. Significant copper mineralization is associated with the massive sulphide mineralization.

The magnetite and pyrrhotite mineralization is detectable by both VLF EM and magnetic geophysical methods. It was therefore decided to carry out the geophysical survey in an attempt to locate additional copper mineralization.

Four target area were outlined by the survey.

## Target A

Target A consists of a weak to moderate north trending conductor passing through the Hillcrest Showing. Zones of high magnetism occur coincidentally with the conductor in several locations. The coincidental high magnetism and conductor may be indicating extensions of the skarn mineralization. The conductor extends from line 1 s to line 8 N .

## Target B

Target $B$ occurs at the Anomaly Showing. It consists of a zone of high magnetism flanked by low magnetism with a weak to moderate conductor occuring coincidentally with the high magnetism. This geophysical feature may be indicating additional skarn mineralization. Approximately 150 meters west of the Anomaly Showing another weak conductor occurs coincidentally with high magnetism.

Target C
Target $C$ occurs along line $4 N$ where no mineralization is exposed. Two zones of very high magnetism, with flanking zones of low magnetism occur coincidentally with moderate to strong conductors.


The geophysical anomalies occuring on the Maxi Claim may be caused by massive sulphide skarn mineralization. Further work is warranted on the property to evaluate these anomalies.

Recommendations are as follows:

1) The magnetometer and VLF EM surveys be completed over the claim.
2) A soil geochemical survey be carried out over the anomalies to check for copper/zinc mineralization.


### 1.0 INTRODUCTION

### 1.1 GENERAL

The writer and one field assistant carried out a moderate exploration program on the Maxi Claim from July 31 to August 7, 1989. The program consisted of completing the magnetometer survey on the 1986 grid, and establishing a new grid over the Hillcrest and Anomaly Showings and carrying out magnetometer and VLF EM surveys over the new grid.

### 1.2 LOCATION AND ACCESS

The property (Figure 1) is located at the headwaters of the Robertson River, eight kilometers south of the town of Lake Cowichan, Vancouver Island. The NTS Coordinates are approximately $48^{\circ} 45^{\prime}$ north latitude and $124^{\circ} 04^{\prime}$ west longitude (NTS 92C-9E).

Access is from the Lake Cowichan-Port Renfrew logging road, turning off on the Hillcrest Main road to the Long Creek area. Numerous logging roads traverse the property giving good access, although at times the roads are washed out and not usable.

### 1.3 PHYSIOGRAPHY

The claim is located in the southern part of the Vancouver Island Mountains. Elevation varies from 300 to 850 meters above sea level and topography is generally steep.

Most of the area has been logged and slash and second growth timber predominate. Many areas have been thinned making progress on lines extremely slow and tedious.

Vegetation consists mainly of hemlock and balsam trees with some fir. Heavy underbrush covers the open areas.

### 1.4 PROPERTY AND CLAIM STATUS

The Maxi Claim is owned and operated by U.S. Platinum Inc., 1250-800 West Pender Street, Vancouver B.C., V6C 2V6. The property consists of 12 units and is located in the Victoria Mining Division.

| Claim | Units | Mining Division | Record No. | Expiry Date ${ }^{*}$ |
| :--- | :---: | :---: | :---: | :---: |
| Maxi | 12 | Victoria | $275(8)$ | Aug. 22, 1992 |

[^0]
### 1.5 AREA AND PROPERTY HISTORY

Magnetite, pyrrhotite and chalcopyrite mineralization occurs in volcanic and meta-volcanic actinolite-garnet skarns near the contact of granitic and dioritic intrusives. These mineralized zones have been explored a number of times in the past.

The American Smelting and Refining Co. carried out trenching on the Crown Showing in 1930. The exact location of the work is not known but it is believed to be in the vicinity of the Hillcrest Showing.

The two main showings on the property are the Hillcrest and Anomaly zones (figure 5). These showings had sporadic exploration carried out on them between 1956 and 1968 by W.E. Fraser, Noranda Mines Ltd., Gunnex Ltd. and Albeta Mines Ltd.

The Hillcrest Showing was trenched and sampled by W.E. Fraser in 1956. These samples returned assays as high as $3.8 \%$ copper. Seven X-ray diamond drill holes gave results between 0.2\% and 2.6\% copper, with the latter assay over 23 feet (White 1966).

Diamond drilling by Albeta Mines during 1968 gave the following intersections:

| Drill Hole | Width (ft) | Copper (\%) |
| :---: | ---: | :---: |
|  |  |  |
| $68-1$ | 6 | 1.4 |
| $68-1$ | 8 | 2.7 |
| $68-2$ | 9 | 0.8 |

The Anomaly Showing has been trenched and ten X-ray diamond drill holes totalling 500 feet were drilled. These returned assays of between $0.6 \%$ and $3.0 \%$ copper, with one drill hole returning 4.46\% zinc over 3 feet (McKechie 1962, 1963; White 1966).

In 1956 Noranda Mines Ltd. conducted magnetometer and self-potential surveys around the Hillcrest and Anomaly Showings. These surveys defined geophysical anomalies but they apparently were never tested.

During 1980 and 1981 Strata Energy Corporation (now U.S. Platinum Inc.) carried out geological mapping and sampling over the Maxi Claim, and in 1986 magnetometer and VLF EM surveys were carried out over a portion of the claim. Significant copper values were obtained from sampling on the Hillcrest Showing and a number of magnetic highs and VLF EM conductors were indicated by the geophysical surveys. A recommendation was made to complete the geophysical survey to ascertain the size and strike of the anomalies.

### 2.0 EXPLORATION PROCEDURE

A grid was established over the northwestern portion of the Maxi Claim and magnetometer and VLF EM surveys were carried out over the grid. The magnetometer survey was also completed over the 1986 grid.

## GRID PARAMETERS

-baseline direction north-south
-survey lines perpendicular to baseline
-survey line separation 100 meters
-survey station spacing 25 meters
-survey total - 8.05 line kilometers
-lines 4 N through 8 N
-declination $21.5^{\circ}$

## VLF EM SURVEY PARAMETERS

```
-survey line separation }100\mathrm{ meters
-survey station spacing 25 meters
-survey totals - 6.75 line kilometers
-transmitting station - Hawaii - 23.4 KHz.
-direction faced - easterly
-instrument - Geonics EM-16
-in-phase (dip angle) and out-of-phase (quadrature)
-components measured in degrees at each station
```

The VLF EM profiles were plotted on figure 2 and the Fraser Filter values on figure 3 at a scale of 1:2500. The VLF EM readings are listed in Appendix II.

MAGNETOMETER SURVEY PARAMETERS

```
-survey line separation }100\mathrm{ meters
-survey station spacing 25 meters }198
-survey station spacing 15 meters 1986
-survey totals - 11.5 line kilometers
-instrument - Scintrex MP-2 magnetometer
-measured total magnetic field in gammas
-instrument accuracy \pm 1 gamma
```

A base station reading was taken at the beginning and ending of each day. These values were used to obtain standard values for all baseline readings. All loops ran off the baseline were then corrected to these values by the straight line method. The magnetic values were plotted on figure 4 at a scale of 1:2500.

A compilation map (figure 5) was then prepared showing significant conductors and magnetic trends.

### 3.0 GEOLOGY AND MINERALIZATION

### 3.1 REGIONAL GEOLOGY

The Maxi Claim is mainly underlain by the Lower Jurassic Bonanza Group Volcanics. This group is composed of lava, tuff and breccia of mainly basaltic and rhyolitic composition. Occasionally it contains intercalated beds and sequences of marine argillite and greywacke.

A stock of Jurassic Island Group Intrusive lies to the southwest of the Maxi Claim.

### 3.2 CLAIM GEOLOGY

The property is underlain by volcanic rocks of the Bonanza Group. These volcanics are mainly basalts with minor tuffs. In several locations outcrops of limestone and chert were noted.

Several small, irregularly shaped bodies and dykes of a fine grained granodiorite intrude the volcanics.

In several locations the volcanics have been locally metamorphosed to garnet-actinolite skarns by the intrusive.

### 3.3 MINERALIZATION

Mineralization at the Hillcrest Showing consists of magnetite, pyrrhotite and chalcopyrite occuring along the contact of a basalt flow and a fine grained granodiorite. The area has been trenched and skarn mineralization outcrops at numerous locations within the area. The zone appears to have a northerly strike.

Copper assays from the showing in previous years gave results ranging from 0.005\% over 3.0 meters to $2.18 \%$ over one meter. Gold and silver values were negligible.

Mineralization at the Anomaly Showing consists of pyrrhotite and chalcopyrite in a sheared zone with some skarnification. Trenching has exposed mineralization at a number of locations within the area but the exact dimensions are not known.

Copper assays from previous years ranged from 0.23\% over 2.0 meters to $2.46 \%$ over 1.3 meters. One sample returned 0.5 ounces per ton silver with negligible gold values. Zinc values have also been reported from this area.

### 4.0 GEORHYSICS

### 4.1 VLF EM SURVEY

VLF EM data profiles have in many cases been influenced by topography in the form of a negative bias when the operator faced downhill and a positive bias when the operator faced uphill. In-phase anomaly amplitude ranged from weak to moderate.

A number of weak to moderate VLF EM conductors were indicated by the survey (figure 5). These conductors have a northerly strike and several of them occur coincidentally with zones of high magnetism. The significant conductor systems have been labelled "89-A" through "89-B".

System "89-A" is a weak to moderate conductor occuring over a magnetite, pyrrhotite, chalcopyrite skarn zone at the Hillcrest Showing on line 7 N at $1+25 \mathrm{E}$. This north trending system extends from line 1 S to line 8 N and occurs intermittently with zones of high magnetism.

System "89-B" is a weak to moderate conductor extending from line 1 S to line 5 N and occuring coicidentally with zones of high magnetism. The conductor is strongest on line 4 N at $5+50 \mathrm{E}$, where the magnetism is also quite strong.

System "89-C" is a weak conductor extending from line 2 S to 8 N . Several small zones of high magnetism occur along the length of the conductor.

System "89-D" is a weak to moderate conductor extending from line 6 N to 8 N and occuring within the area of the anomaly showing. A zone of high magnetism also occurs coincidentally with the conductor.

### 4.2 MAGNETOMETER SURVEY

Magnetic response over the property gave total field magnetic values ranging from 54,214 to 65,830 gammas. Values averaged between 55,000 and 56,000 gammas. Magnetism over some areas of the property (figure 5) is complex with zones of high magnetism flanked by zones of low magnetism. A number of VLF EM conductors occur coincidentally with the zones of high magnetism.

A zone of higher magnetism was found in the vicinity of the Hillcrest Showing. This higher magnetism may be indicating magnetite, pyrrhotite, chalcopyrite skarn mineralization. A weak to moderate conductor also occurs over the showing.

Several zones of high magnetism occur near the Anomaly Showing and the easterly zone is flanked by a zone of low magnetism. Several conductors occur coincidentally with the high magnetism.

Along line 4 N , two narrow zones of high magnetism are flanked by zones of low magnetism. The reading at $6+50 \mathrm{E}$ was the highest of any taken on the property. Conductors also occur coincidentally with the zones of high magnetism.

High magnetic response may be indicating magnetic minerals such as magnetite and pyrrhotite.

### 5.0 CONCLUSIONS AND RECOMMENDATIONS

The geophysical survey indicated a number of geophysical anomalies. These anomalies were indicated by a combination of VLF EM conductors and zones of high magnetism.

The mineralization on the property consists of magnetite, pyrrhotite and chalcopyrite skarn mineralization. This massive sulphide type mineralization is detectable by both VLF EM and magnetic geophysical methods. Four target area were outlined by the survey.

Target A
Target A consists of a weak to moderate north trending conductor passing through the Hillcrest Showing. Zones of high magnetism occur coincidentally with the conductor in several locations. The coincidental high magnetism and conductor may be indicating extensions of the skarn mineralization. The conductor extends from line 1 s to line 8 N .

Target B
Target B occurs at the Anomaly Showing. It consists of a zone of high magnetism flanked by low magnetism with a weak to moderate conductor occuring coincidentally with the high magnetism. This geophysical feature may be indicating additional skarn mineralization. Approximately 150 meters west of the Anomaly Showing another weak conductor occurs coincidentally with high magnetism.

## Target C

Target $C$ occurs along line $4 N$ where no mineralization is exposed. Two zones of very high magnetism, with flanking zones of low magnetism occur coincidentally with moderate to strong conductors.

The geophysical anomalies occuring on the Maxi Claim may be caused by massive sulphide skarn mineralization. Further work is warranted on the property to evaluate these anomalies.

Recommendations are as follows:

1) The magnetometer and VLF EM surveys be completed over the claim.
2) A soil geochemical survey be carried out over the anomalies to check for copper/zinc mineralization.


### 6.0 REFERENCES

Crooker, G.F., Geological Report on the Maxi Claim Group, Cowichan Lake Area, Victoria Mining Division, July 1980.

Geological Report on the Maxi Claim Group, Cowichan Lake Area, Victoria Mining Division, October 1981.
, Geophysical Report on the Maxi Claim, Cowichan Lake Area, Victoria Mining Division, August 1986.

McKechnie, B.C. Minister of Mines and Petroleum Resources Report, 1962., 1963.

Muller, J.E., Geology of Vancouver Island, 1977.

Reamsbottom, Stanley, B., Report on the Maxi Claim, January 1980.

White, L., Report on the Fraser Property, Lake Cowichan, B.C., for Copper Ridge Mines Ltd., Vancouver, B.C., 1966.

## 7.O CERTIFICATE OF QUALIFICATIONS

I, Grant F. Crooker, of Upper Bench Road, Keremeos, in the Province of British Columbia, hereby certify as follows:

1 That I graduated from the University of British Columbia in 1972 with a Bachelor of Science Degree in Geology.
2. That I have prospected and actively pursued geology prior to my graduation and have practised my profession since 1972.
3. That I am a member of the Canadian Institute of Mining and Metallurgy.
4. That I am a Fellow of the Geological Association of Canada.
5. That $I$ have no interest in the Maxi Claim.

Dated this /6th day of $A_{\text {u }}$, 1989, at Keremeos, in the Province of British Columbia.


## Appendix I

## GEOPHYSICAL EQUIPMENT SPECIFICATIONS

| Source of Primary Field | VLF transmitting station |
| :---: | :---: |
| Transmitting Stations Used: | Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station. |
| Operating Frequency Range: | About 15-25 Hz. |
| Parameters Measured: | 1- The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). <br> 2- The vertical out-of-phase (quad -rature) component (the short axis of the polarization ellipsoid compared to the long axis). |
| Method of Reading: | In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone |
| Scale Range: | In-phase $\pm 150 \%$; quadrature $\pm 40 \%$ |
| Readability: | $\pm 1 \%$ |
| Operating Temperature Range: | -40 to $50^{\circ} \mathrm{C}$. |
| Operating Controls: | ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature dial $\pm 40 \%$, inclinometer $\pm$ 150\% |
| Power Supply: | 6 size AA alkaline cells $200 \mathrm{hrs}$. |
| Dimensions: | $42 \times 14 \times 9 \mathrm{~cm}(16 \times 5.5 \times 3.5 \mathrm{in})$ |
| Weight: | $1.6 \mathrm{~kg} .(3.5 \mathrm{lbs})$ |
| Instrument Supplied With: | Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional) set of batteries. |
| Manufacturer: | ```Geonics Limited 1745 Meyerside Drive/Unit 8 Mississauga, Ontatio L5T 1C5``` |

## MP-2 PROTON PRECESSION MAGNETOMETER

| Resolution: | 1 gamma |
| :---: | :---: |
| Total Field Accuracy: | $\pm$ gamma over full operating range |
| Range : | 20,000 to 100,000 gammas in 25 overlapping steps. |
| Internal Measuring Program: | A reading appears 1.5 seconds after depression of Operate Switch \& remains displayed for 2.2 secs. Recycling feature permits automatic repetitive readings at 3.7 sec. intervals. |
| External Trigger: | External trigger input permits use of sampling intervals longer than 3.7 seconds. |
| Display: | 5 digit LED readout displaying total magnetic field in gammas or normalized battery voltage. |
| Data Output: | Multiplied precession frequency and gate time outputs for base station recording using interfacing optionally available from scintrex. |
| Gradient Tolerance: | Up to 5,000 gammas/meter. |
| Power Source: | 8 size D cells $\approx 25,000$ readings at $25^{\circ} \mathrm{C}$ under reasonable conditions. |
| Sensor: | Omnidirectional, shielded, noisecancelling dual coil, optimized for high gradient tolerance. |
| Harness: | Complete for operation with staff or back pack sensor. |
| Operating Temperature Range: | -35 to $+60^{\circ} \mathrm{C}$. |
| Size: | Console, $8 \times 16 \times 25 \mathrm{~cm} ;$ Sensor, $8 \times 15 \mathrm{~cm} ;$ Staff $30 \times 66 \mathrm{~cm}$; |
| Weights: | Console, 1.8 kg ; Sensor, 1.3 kg ; Staff, 0.6 kg ; |
| Manufacturer: | Scintrex <br> 222 Snidercroft Road Concord, Ontario |

Appendix II

GEOPHYSICAL DATA

| Grant Crooker Data Listin <br> Area: Maxi Claim <br> Grid: Main |  |  | Line \& Station + = northing/easting |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Name: n |
| Date: August 9, 1989 |  |  |  |  |
| Instrument Type: Details |  |  |  |  |
| Geonics EM-16 Facing easterly Hawaii |  |  |  |  |
| Scintrex MP-2 proton magnetometer |  |  |  |  |
| Data Types |  |  |  |  |
| \#1 | VLF-EM In- | e Va | , H | aii |
| \#2 | VLF-EM Qua | ure, | awaii |  |
| \#3 | Magnetic v | s, | mas |  |
| Line | \# Station | \# 1. | \# 2. | \# 3. |
| line | 400 |  |  |  |
| 400 | 000 | -38 | -24 | 55841 |
| 400 | 025 | -29 | -12 | 55982 |
| 400 | 050 | -23 | -7 | 55628 |
| 400 | 075 | -33 | -13 | 55687 |
| 400 | 100 | -26 | -6 | 55716 |
| 400 | 125 | -26 | -10 | 55733 |
| 400 | 150 | -27 | -11 | 55762 |
| 400 | 175 | -24 | -10 | 55757 |
| 400 | 200 | -23 | -11 | 55740 |
| 400 | 225 | -22 | -10 | 55737 |
| 400 | 250 | -30 | -17 | 55739 |
| 400 | 275 | -28 | -18 | 55777 |
| 400 | 300 | -23 | -14 | 55735 |
| 400 | 325 | -17 | -13 | 55728 |
| 400 | 350 | -16 | -13 | 55828 |
| 400 | 375 | -15 | -18 | 55802 |
| 400 | 400 | -22 | -22 | 55734 |
| 400 | 425 | -15 | -12 | 55722 |
| 400 | 450 | -6 | -8 | 55639 |
| 400 | 475 | 3 | -4 | 55567 |
| 400 | 500 | 15 | 6 | 55425 |
| 400 | 525 | 7 | -5 | 55513 |
| 400 | 550 | 1 | - 6 | 57514 |
| 400 | 575 | -1 | -14 | 58602 |
| 400 | 600 | 2 | -14 | 54092 |
| 400 | 625 | 18 | -13 | 61173 |
| 400 | 650 | 44 | -12 | 65830 |
| 400 | 675 | 17 | -10 | 54930 |
| 400 | 700 | 18 | 4 | 55471 |
| 400 | 725 | 28 | 5 | 55695 |
| 400 | 750 | 32 | 6 | 55767 |
| 400 | 775 | 15 | -2 | 55589 |
| 400 | 800 | 14 | -1 | 55788 |
| 400 | 825 | 15 | -1 | 55754 |
| 400 | 850 | 16 | 1 | 55683 |
| 400 | 875 | 13 | 3 | 55603 |
| 400 | 900 | 18 | 4 | 55645 |
| 400 | 925 | 16 | 2 | 55645 |
| 400 | 950 | 19 | 2 | 55576 |
| 400 | 975 | 19 | 3 | 55627 |


| 400 | 1000 | 25 | 8 | 55657 |
| ---: | ---: | ---: | ---: | ---: |
| 400 | 1025 | 24 | 14 | 55655 |
| 400 | 1050 | 23 | 13 | 55772 |
| 400 | 1075 | 21 | 11 | 55696 |
| 400 | 1100 | 22 | 14 | 55813 |
| 400 | 1125 | 23 | 17 | 55778 |
| 400 | 1150 | 19 | 18 | 55766 |
| 400 | 1175 | 16 | 19 | 55705 |
| 400 | 1200 | 18 | 22 | 55726 |
| 400 | 1225 | 19 | 21 | 55663 |
| 400 | 1250 | 17 | 24 | 55530 |
| 400 | 1275 | 17 | 24 | 55570 |
| 400 | 1300 | 16 | 22 | 55420 |
| 400 | 1325 | 19 | 26 | 55575 |
| 400 | 1350 | 20 | 27 | 55734 |
| $1 i n e$ | 500 |  |  |  |
| 500 | 000 | -20 | -4 | 55889 |
| 500 | 025 | -20 | -16 | 55826 |
| 500 | 050 | -23 | -8 | 55837 |
| 500 | 075 | -38 | -14 | 55781 |
| 500 | 100 | -33 | -10 | 55780 |
| 500 | 125 | -30 | -11 | 55693 |
| 500 | 150 | -28 | -8 | 55646 |
| 500 | 175 | -30 | -13 | 55705 |
| 500 | 200 | -28 | -18 | 55668 |
| 500 | 225 | -29 | -19 | 55751 |
| 500 | 250 | -30 | -14 | 55663 |
| 500 | 275 | -25 | -15 | 55738 |
| 500 | 300 | -18 | -13 | 55710 |
| 500 | 325 | -22 | -14 | 55689 |
| 500 | 350 | -19 | -20 | 55698 |
| 500 | 375 | -18 | -18 | 55800 |
| 500 | 400 | -20 | -12 | 55778 |
| 500 | 425 | -19 | -17 | 55702 |
| 500 | 450 | -16 | -19 | 55641 |
| 500 | 475 | -10 | -15 | 55660 |
| 500 | 500 | -8 | -11 | 55652 |
| 500 | 525 | -4 | -9 | 55547 |
| 500 | 550 | 2 | -10 | 55482 |
| 500 | 575 | 2 | -8 | 56590 |
| 500 | 600 | -2 | -6 | 55490 |
| 500 | 625 | -10 | -7 | 55417 |
| 500 | 650 | -1 | -7 | 55478 |
| 500 | 675 | 0 | -8 | 55588 |
| 500 | 700 | -3 | -13 | 55648 |
| 500 | 725 | -4 | -20 | 55551 |
| 500 | 750 | -2 | -18 | 555166 |
| 500 | 775 | 7 | -15 | 55509 |
| 500 | 800 | 10 | -15 | 55472 |
| 500 | 825 | 8 | -13 | 55608 |
| 500 | 850 | 21 | -12 | 55500 |
| 500 | 875 | 10 | -14 | 55537 |
| 500 | 900 | 20 | -13 | 55512 |
| 500 | 925 | 26 | -8 | 55545 |
|  |  |  |  |  |


| 500 | 950 | 33 | -2 | 55621 |
| ---: | ---: | ---: | ---: | ---: |
| 500 | 975 | 32 | 0 | 55545 |
| 500 | 1000 | 25 | -1 | 55647 |
| 500 | 1025 | 33 | 1 | 55871 |
| 500 | 1050 | 31 | 1 | 55572 |
| 500 | 1075 | 24 | 0 | 55632 |
| 500 | 1100 | 23 | 0 | 55672 |
| 500 | 1125 | 20 | -1 | 55652 |
| 500 | 1150 | 19 | 1 | 55619 |
| 500 | 1175 | 16 | 1 | 55622 |
| 500 | 1200 | 16 | 4 | 55889 |
| 500 | 1225 | 20 | 10 | 55548 |
| 500 | 1250 | 18 | 10 | 55579 |
| 500 | 1275 | 12 | 10 | 55579 |
| 500 | 1300 | 10 | 15 | 55557 |
| 500 | 1325 | 14 | 14 | 55578 |
| 500 | 1350 | 10 | 11 | 55583 |
| $1 i n e$ | 600 |  |  |  |
| 600 | 000 | -28 | -11 | 55759 |
| 600 | 025 | -30 | -13 | 55838 |
| 600 | 050 | -36 | -13 | 56012 |
| 600 | 075 | -30 | -6 | 56350 |
| 600 | 100 | -40 | -15 | 56312 |
| 600 | 125 | -38 | -7 | 56760 |
| 600 | 150 | -40 | -8 | 55423 |
| 600 | 175 | -38 | -11 | 55471 |
| 600 | 200 | -38 | -14 | 55453 |
| 600 | 225 | -38 | -14 | 55736 |
| 600 | 250 | -32 | -13 | 55718 |
| 600 | 275 | -29 | -12 | 55719 |
| 600 | 300 | -27 | -11 | 55807 |
| 600 | 325 | -30 | -14 | 55977 |
| 600 | 350 | -27 | -21 | 55941 |
| 600 | 375 | -27 | -17 | 55732 |
| 600 | 400 | -25 | -20 | 55708 |
| 600 | 425 | -32 | -22 | 55755 |
| 600 | 450 | -29 | -21 | 55702 |
| 600 | 475 | -28 | -18 | 55652 |
| 600 | 500 | -27 | -13 | 55638 |
| 600 | 525 | -22 | -14 | 55638 |
| 600 | 550 | -23 | -15 | 55562 |
| 600 | 575 | -20 | -16 | 55571 |
| 600 | 600 | -10 | -16 | 55554 |
| 600 | 625 | 2 | -16 | 55564 |
| 600 | 650 | 2 | -12 | 555333 |
| 600 | 675 | -3 | -8 | 55620 |
| 600 | 700 | 2 | -11 | 55616 |
| 600 | 725 | -3 | -17 | 55605 |
| 600 | 750 | -3 | -16 | 55582 |
| 600 | 775 | -2 | -12 | 55537 |
| 600 | 800 | 5 | -11 | 55539 |
| 600 | 825 | 7 | -5 | 55586 |
| 600 | 850 | 2 | -10 | 55641 |
| 600 | 875 | 5 | -10 | 56121 |
|  |  |  |  |  |


| 600 | 900 | 1 | -15 | 55950 |
| ---: | ---: | ---: | ---: | ---: |
| 600 | 925 | -2 | -15 | 56344 |
| 600 | 950 | 2 | -17 | 55729 |
| 600 | 975 | 7 | -16 | 56034 |
| 600 | 1000 | 10 | -12 | 55609 |
| 600 | 1025 | 10 | -13 | 56440 |
| 600 | 1050 | 17 | -11 | 56088 |
| 600 | 1075 | 18 | -10 | 55626 |
| 600 | 1100 | 19 | -9 | 55696 |
| 600 | 1125 | 21 | -6 | 55922 |
| 600 | 1150 | 22 | -4 | 55452 |
| 600 | 1175 | 17 | -5 | 55469 |
| 600 | 1200 | 17 | -4 | 55468 |
| 600 | 1225 | 20 | -3 | 55632 |
| 600 | 1250 | 20 | -1 | 55722 |
| 600 | 1275 | 20 | 5 | 55544 |
| 600 | 1300 | 20 | 7 | 55620 |
| 600 | 1325 | 18 | 4 | 55527 |
| 600 | 1350 | 12 | 9 | 55601 |
| $1 i n e$ | 700 |  |  |  |
| 700 | 000 | -21 | -4 | 55929 |
| 700 | 025 | -22 | -8 | 55924 |
| 700 | 050 | -23 | -6 | 56005 |
| 700 | 075 | -24 | -5 | 55921 |
| 700 | 100 | -28 | -4 | 55780 |
| 700 | 125 | -25 | -7 | 55698 |
| 700 | 150 | -37 | -16 | 55653 |
| 700 | 175 | -31 | -11 | 55720 |
| 700 | 200 | -27 | -8 | 55790 |
| 700 | 225 | -28 | -8 | 55829 |
| 700 | 250 | -28 | -8 | 55739 |
| 700 | 275 | -23 | -7 | 55772 |
| 700 | 300 | -25 | -8 | 55780 |
| 700 | 325 | -24 | -11 | 55765 |
| 700 | 350 | -24 | -11 | 55788 |
| 700 | 375 | -28 | -13 | 55765 |
| 700 | 400 | -27 | -12 | 55782 |
| 700 | 425 | -24 | -13 | 55801 |
| 700 | 450 | -20 | -9 | 55815 |
| 700 | 475 | -20 | -11 | 55879 |
| 700 | 500 | -21 | -8 | 55648 |
| 700 | 525 | -15 | -9 | 55512 |
| 700 | 550 | -18 | -14 | 55484 |
| 700 | 575 | -20 | -14 | 57068 |
| 700 | 600 | -20 | -16 | 55100 |
| 700 | 625 | 18 | -13 | 55805 |
| 700 | 650 | 17 | -12 | 55543 |
| 700 | 675 | -15 | -13 | 55530 |
| 700 | 700 | -4 | -12 | 55833 |
| 700 | 725 | -10 | -11 | 56004 |
| 700 | 750 | -12 | -12 | 55903 |
| 700 | 775 | -14 | -10 | 55645 |
| 700 | 800 | -10 | -14 | 55642 |
| 700 | 825 | -11 | -12 | 55687 |
| 700 |  |  |  |  |
| 00 |  |  |  |  |


| 700 | 850 | -13 | -16 | 55733 |
| ---: | ---: | ---: | ---: | ---: |
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| 700 | 900 | -16 | -18 | 56566 |
| 700 | 925 | -11 | -16 | 56138 |
| 700 | 950 | -10 | -18 | 55934 |
| 700 | 975 | -12 | -14 | 55826 |
| 700 | 1000 | -12 | -18 | 55489 |
| 700 | 1025 | -11 | -16 | 55173 |
| 700 | 1050 | -7 | -15 | 55326 |
| 700 | 1075 | -8 | -14 | 55463 |
| 700 | 1100 | -8 | -13 | 55458 |
| 700 | 1125 | -3 | -12 | 55377 |
| 700 | 1150 | -5 | -13 | 55387 |
| 700 | 1175 | -3 | -15 | 55431 |
| 700 | 1200 | -1 | -11 | 55457 |
| 700 | 1225 | 1 | -10 | 55420 |
| 700 | 1250 | 2 | -10 | 55483 |
| 700 | 1275 | 2 | -8 | 55544 |
| 700 | 1300 | 1 | -6 | 55704 |
| 700 | 1325 | 0 | -8 | 55494 |
| 700 | 1350 | 1 | -6 | 55527 |
| $1 i n e$ | 800 |  |  |  |
| 800 | 000 | -19 | -4 | 55829 |
| 800 | 025 | -19 | -3 | 56038 |
| 800 | 050 | -18 | -2 | 56073 |
| 800 | 075 | -19 | -2 | 56003 |
| 800 | 100 | -22 | -2 | 55912 |
| 800 | 125 | -23 | -1 | 55968 |
| 800 | 150 | -26 | -3 | 55975 |
| 800 | 175 | -26 | -3 | 56244 |
| 800 | 200 | -22 | -4 | 56693 |
| 800 | 225 | -23 | -6 | 57642 |
| 800 | 250 | -19 | -11 | 57214 |
| 800 | 275 | -18 | -2 | 55519 |
| 800 | 300 | -20 | -2 | 55870 |
| 800 | 325 | -20 | 6 | 56039 |
| 800 | 350 | -8 | 5 | 56441 |
| 800 | 375 | -9 | 10 | 55614 |
| 800 | 400 | -10 | 0 | 55650 |
| 800 | 425 | -15 | -2 | 55854 |
| 800 | 450 | -19 | -9 | 55653 |
| 800 | 475 | -20 | -6 | 55670 |
| 800 | 500 | -24 | -9 | 55725 |
| 800 | 525 | -21 | -10 | 55700 |
| 800 | 550 | -21 | -10 | 55626 |
| 800 | 575 | -21 | -11 | 55676 |
| 800 | 600 | -20 | -10 | 55770 |
| 800 | 625 | -27 | -10 | 55773 |
| 800 | 650 | -20 | -9 | 55844 |
| 800 | 675 | -17 | -8 | 56840 |
| 800 | 700 | -18 | -7 | 55906 |
| 800 | 725 | -23 | -4 | 56113 |
| 800 | 750 | -14 | -7 | 56238 |
| 800 | 775 | -13 | -6 | 56748 |
|  |  |  |  |  |


| 800 | 800 | -17 | -6 | 57024 |
| :---: | :---: | :---: | :---: | :---: |
| 800 | 825 | -14 | -5 | 56061 |
| 800 | 850 | -13 | -10 | 55862 |
| 800 | 875 | -23 | -9 | 55922 |
| 800 | 900 | -23 | -10 | 55839 |
| 800 | 925 | -22 | -11 | 55516 |
| 800 | 950 | -22 | -12 | 55219 |
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| 800 | 1050 | -14 | -10 | 55642 |
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| 800 | 1150 | -17 | -14 | 55923 |
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| 800 | 1225 | -18 | -11 | 56123 |
| 800 | 1250 | -18 | -11 | 55484 |
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| 300 | 135 |  |  | 55586 |
| 300 | 150 |  |  | 55702 |
| 300 | 165 |  |  | 55571 |
| 300 | 180 |  |  | 55659 |
| 300 | 195 |  |  | 55506 |
| 300 | 210 |  |  | 55498 |
| 300 | 225 |  |  | 55635 |
| 300 | 240 |  |  | 55627 |
| 300 | 255 |  |  | 55627 |
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| 300 | 300 |  |  | 55659 |
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| 300 | 330 |  |  | 55595 |
| 300 | 345 |  |  | 55657 |
| 300 | 360 |  |  | 55577 |
| 300 | 375 |  |  | 55739 |
| 300 | 390 |  |  | 55749 |
| 300 | 405 |  |  | 55518 |
| 300 | 420 |  |  | 55624 |
| 300 | 435 |  |  | 55650 |


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|  | 300 | 495 | 55740 |
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|  | 300 | 525 | 55543 |
|  | 300 | 540 | 55427 |
| - | 300 | 555 | 55610 |
|  | 300 | 570 | 55601 |
|  | 300 | 585 | 55573 |
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|  | 300 | 645 | 55790 |
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|  | 300 | 690 | 55900 |
| t | 300 | 705 | 55891 |
|  | 300 | 720 | 55743 |
|  | 300 | 735 | 55587 |
| $\square$ | 300 | 750 | 55570 |
|  | 300 | 765 | 55680 |
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|  | 300 | 975 | 55627 |
|  | 300 | 990 | 55572 |
| $\pm$ | 300 | 1005 | 55630 |
|  | line 100 |  |  |
|  | 100 | 000 | 56014 |
| - | 100 | 015 c | 56075 |
|  | 100 | 015 b | 55847 |
|  | 100 | 015 a | 55606 |
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|  | 100 | 060 | 55675 |
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|  | 100 | 090 | 55804 |
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|  | 100 | 120 | 55855 |
| - | 100 | 135 | 55850 |
|  | 100 | 150 | 55635 |
|  | 100 | 165 | 55763 |


| 100 | 180 | 55780 |
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| 100 | 210 | 55731 |
| 100 | 225 | 55755 |
| 100 | 240 | 55739 |
| 100 | 255 | 55378 |
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| 100 | 285 | 55235 |
| 100 | 300 | 55317 |
| 100 | 315 | 55475 |
| 100 | 330 | 55443 |
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| 100 | 375 | 55521 |
| 100 | 390 | 55458 |
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| 100 | 420 | 55867 |
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| -100 | 120 | 55749 |
| -100 | 135 | 55892 |
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| $\pm$ | -100 | 690 | 55563 |
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|  | -100 | 720 | 55432 |
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|  | -100 | 855 | 54963 |
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|  | -100 | 975 | 56431 |
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|  | -100 | 1005 | 55309 |
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| - | -200 | 165 | 55829 |
|  | -200 | 180 | 55895 |
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|  | -200 | 345 | 56009 |
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| -200 | 405 | 56127 |
| -200 | 420 | 56519 |
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| -200 | 450 | 56008 |
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| -200 | 780 | 55227 |
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| -200 | 990 | 55586 |
| -200 | 1005 | 55720 |
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| bl | 800 | 55829 |
| bl | 775 | 55940 |
| bl | 750 | 56001 |
| bl | 725 | 55965 |
| bl | 700 | 55929 |
| bl | 675 | 56142 |
| bl | 650 | 55833 |
| bl | 625 | 55826 |
| bl | 600 | 55759 |
| bl | 575 | 55763 |


| bl | 550 | 55811 |
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| bl | 525 | 55813 |
| bl | 500 | 55874 |
| bl | 475 | 55855 |
| bl | 450 | 55940 |
| bl | 425 | 55929 |
| bl | 400 | 55848 |
| bl | 375 | 55976 |
| bl | 350 | 56556 |
| bl | 325 | 56719 |
| bl | 300 | 56355 |
| bl | 275 |  |
| bl | 250 | 55842 |
| bl | 225 | 55910 |
| bl | 200 | 55841 |
| bl | 175 | 56150 |
| bl | 150 | 56014 |
| bl | 125 | 56002 |
| bl | 100 | 56189 |
| bl | 075 | 55735 |
| bl | 050 | 55857 |
| bl | 025 | 55753 |
| bl | 000 | 55841 |
| bl | -025 | 55862 |
| bl | -050 | 55782 |
| bl | -075 | 55686 |
| bl | -100 | 55645 |
| bl | -125 | 55729 |
| bl | -150 | 55720 |
| bl | -175 | 55886 |
| b1 | -200 | 55810 |

## Appendix III

## COST STATEMENT

- Grant Crooker, Geologist July 31, Aug 1-10, 1989 11 days $\$ 350.00$ per day $\$ 3.850 .00$
- Lee Mollison, Field Assistant July 31, Aug 1-7, 1989 8 days $\$ 175.00$ per day $\quad 1,400.00$

MEALS AND ACCOMMODATION

- Grant Crooker - 8 days $\$ 60.00 /$ day 480.00
- Lee Mollison - 8 days \$ 60.00/day 480.00

TRANSPORTATION

- Vehicle Rental (Ford 3/4 ton 4x4)

July 31, Aug 1-7, 1989
8 days $\$ 60.00$ per day 480.00

- Gasoline 185.25
- Ferry

EQUIPMENT RENTAL

- VLF EM Geonics EM 16 July 31, Aug 1-7, 1989
8 days $\$ 25.00$ per day 200.00
- Magnetometer MP-2

July 31, Aug 1-7, 1989
8 days $\$ 25.00$ per day 200.00
SUPPLIES

- Hip chain thread, flagging etc.

DRAUGHTING
250.00

PREPARATION OF REPORT

- Secretarial, reproduction, telephone, etc.
400.00

Total
\$ 8,018.25






[^0]:    * Upon acceptance of this report.

