

091950

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

on the

FOG 1-24 CLAIMS

NTS: 115J/8

Latitude: 62°18'

Longitude: 138°02'

WHITEHORSE MINING DISTRICT

September 3 to 9, 1986



Kerr Addison Mines Ltd.,  
703-1112 W. Pender Street,  
Vancouver, B.C. V6E 2S1

J. Pautler  
December, 1986.

this report has been examined by,  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ H^bO.OD.



*P. O. Edmund*  
Regional Manager, Exploration and  
geological Services for Commissioner  
of Yukon Territory.

091950

TABLE OF CONTENTS

|                                 | <u>PAGE NO.</u> |
|---------------------------------|-----------------|
| SUMMARY                         | 1               |
| LOCATION AND ACCESS             | 2               |
| LEGAL DESCRIPTION               | 5               |
| TOPOGRAPHY AND VEGETATION       | 5               |
| HISTORY                         | 6               |
| 1986 PROGRAM                    | 6               |
| GEOLOGY                         | 7               |
| Regional                        | 7               |
| Property-                       | 7               |
| Structure                       | 7               |
| Mineralization and Alteration   | 8               |
| GEOCHEMISTRY                    | 9               |
| Procedure                       | 9               |
| Results                         | 9               |
| GEOPHYSICS                      | 12              |
| Procedure                       | 12              |
| Results.                        | 12              |
| CONCLUSIONS AND RECOMMENDATIONS | 14              |

APPENDICES

|     |                             |
|-----|-----------------------------|
| I   | Selected References         |
| II  | Rock Descriptions           |
| III | Geophysical Data            |
| IV  | Statement of Expenses       |
| V   | Statement of Qualifications |

FIGURES:

|    |                   |             |           |
|----|-------------------|-------------|-----------|
| 1  | Compilation Map   | 1:20,000    | 2a        |
| 2  | Location Map      | 1:1,000,000 | 3         |
| 3  | Claim Map         | 1:50,000    | 4         |
| 4  | Geology-          | 1:5,000     | In Pocket |
| 5  | Rock Geochemistry | 1:5,000     | " "       |
| 6  | Soil Geochemistry |             |           |
|    | Au, Ag            | 1:5,000     | " "       |
| 7  | Soil Geochemistry |             |           |
|    | As                | 1:5,000     | " "       |
| 8  | Soil Geochemistry |             |           |
|    | Sb                | 1:5,000     | " "       |
| 9  | V.L.F. Profiles   | 1:5,000     | " "       |
| 10 | Contoured Fraser  |             |           |
|    | Filter Data       | 1:5,000     | " "       |

PHOTO 1: View of northeastern FOG Claims from southwest.

SUMMARY; (Figure 1)

The FOG 1-24 claims are located 90 km west, 25 km north of Carmacks, Y.T. which is 175 km north of Whitehorse by road. There is road access to the Mt. Nansen Mine, 45 km southeast of the property. The FOG is 7 km southeast of the SHADOW claims.

Follow up of a 2000 ppb Au value from the FOG VEIN ZONE, discovered in 1985, revealed additional quartz veins in the area which prompted the staking of the FOG property in 1986.

The property is underlain by Cretaceous intrusive and related volcanic rocks. A granodiorite batholith covers most of the claim area and is intruded by rhyolite to alaskite to granite and rhyolite quartz feldspar porphyry dykes and small plutons. Andesitic pyroclastic rocks occupy the northern and extreme southern regions of the property. South of the claim block, an olivine basalt unit overlies the andesites.

The quartz veins are primarily hosted by the rhyolitic unit and the granodiorite, but were also found in the andesite tuffs at the north end of the property. The general trend of the veins is northwest to west. (The VLF survey outlined north-northwest to northwest trends.) The quartz is commonly accompanied by a carbonate which appears to be siderite.

The rhyolitic rocks are commonly clay altered and locally silicified and sericitized and the granodiorite is clay altered and pyritized in the vicinity of quartz occurrences.

Values up to 2,000 ppb Au were obtained from the FOG VEIN ZONE, which consists of sheeted quartz vein talus spread over a 30m wide area. The vein appears to be at least 300m long. The vein is surrounded by a 1.0 Sb soil contour and a VLF anomaly

SUMMARY - cont'd

cuts across the vein. It is quite possible that the FOG Zone consists of several subparallel veins with the VLF reflecting the true trend.

A quartz-carbonate to quartz breccia vein southwest of the FOG VEIN, (VEIN 2), appears to have a 500m extent and displays high Sb values. A pyritic section of the vein contained 65 ppb Au. The unexposed possible down dip extent of this vein is marked by a VLF conductor and an Sb soil anomaly.

Other veins and stringers on the property + pyrite and/or tetrahedrite contain gold values in the 50 to 250 ppb range. Many occurrences of quartz float across the property occur within and along VLF conductors.

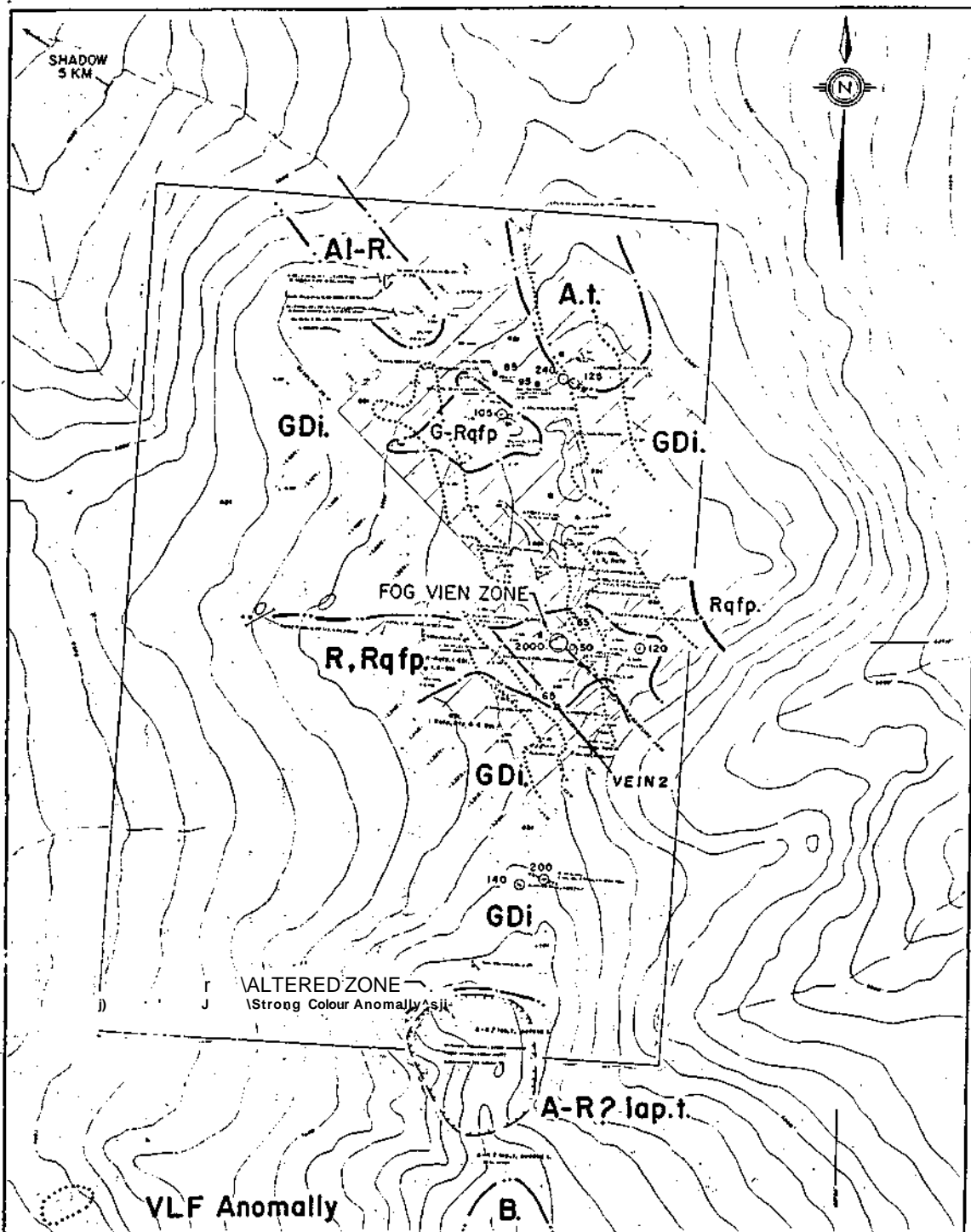
Four coincident VLF and multi element soil anomalies occur.

Ag values are essentially negligible.

Very little mapping was undertaken in 1986 due to snow cover. Consequently the 1987 program should involve detailed mapping of the grid area especially in the vicinity of three of the four anomalies mentioned above and along trend of the FOG and Vein 2 Zones. The entire property should also be mapped at a scale of 1:5,000. Work should be conducted in late August when snow cover is minimal. Many quartz vein occurrences on the property remain unsampled.

LOCATION AND ACCESS: (Figure 2)

The FOG claims, NTS Map Sheet 115J/8, are located 90 km west, 25 km north of Carmacks, Y.T. which is 175 km north of Whitehorse by road. Latitude and longitude of property centre are 62°18'; 138°02'.



- B. Basalt
- R, Rqfp. Rhyolite, Rhyolite quartz, feldspar porphyry
- G, Al. Granite, Alaskite
- A.lap.t. Andesite lapilli tuff, tuff
- GDi Granodiorite

Au (ppb)

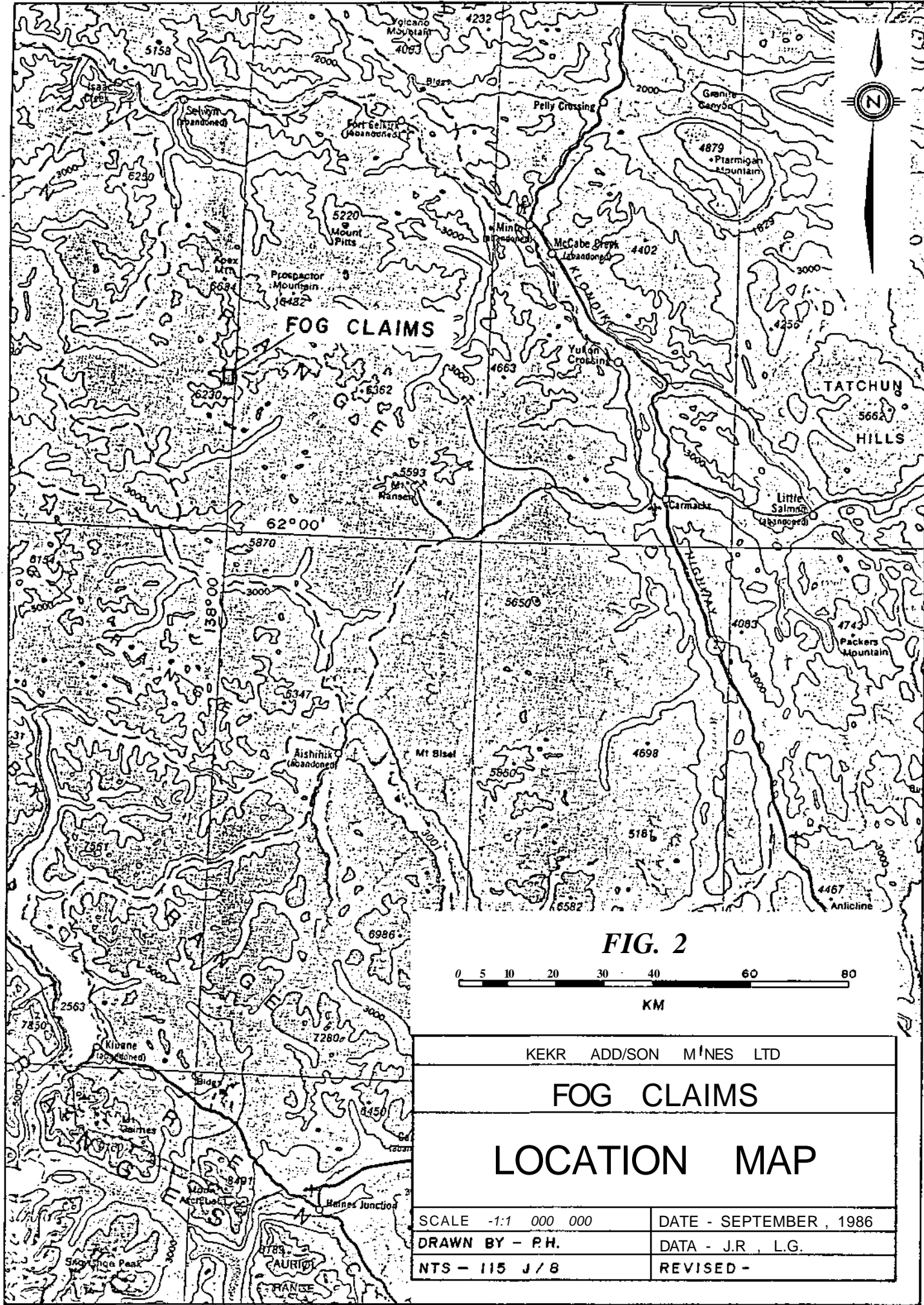
- +1000 Au (rock)
- 100-1000 Au (rock)
- 50-99 Au (rock)

1 : 20 000

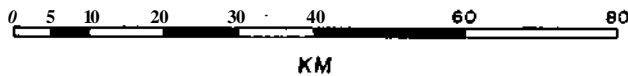


**FIG. I**

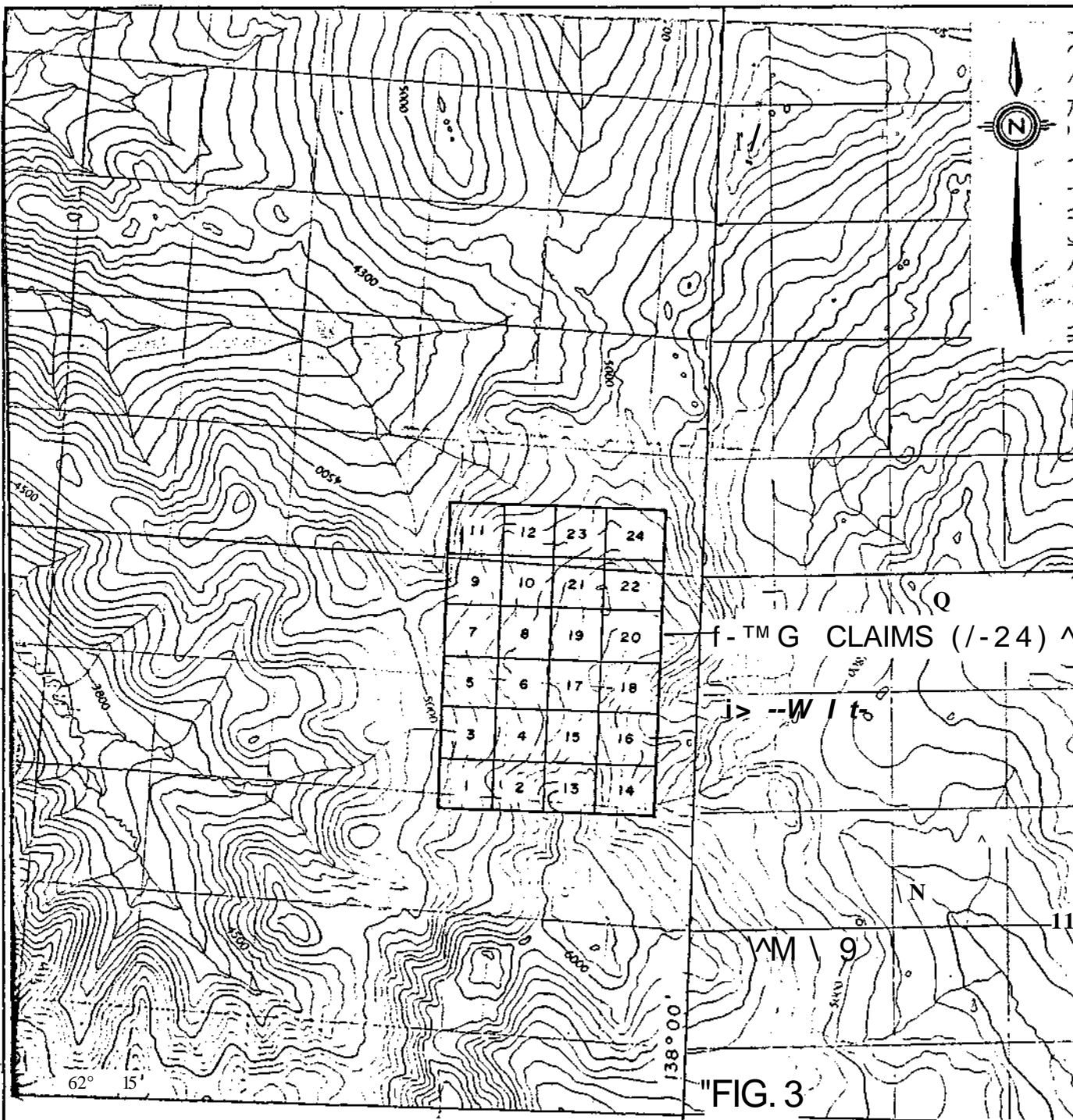
FOG



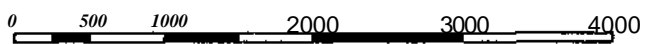
**FIG. 2**



|                        |                        |
|------------------------|------------------------|
| KEKR ADD/SON MINES LTD |                        |
| FOG CLAIMS             |                        |
| LOCATION MAP           |                        |
| SCALE - 1:1 000 000    | DATE - SEPTEMBER, 1986 |
| DRAWN BY - P.H.        | DATA - J.R., L.G.      |
| NTS - 115 J/8          | REVISED -              |



"FIG. 3"



|                        |                        |
|------------------------|------------------------|
| KERR AODISON MINES LTD |                        |
| FOG CLAIMS             |                        |
| CLAIM MAP              |                        |
| SCALE - 1 : 50 000.    | DATA- SEPTEMBER , 1986 |
| DRAWN BY - P.H.        | DATA- J.P. , L.6.      |
| NTS - 115 J/8          | REVISED-               |

LOCATION AND ACCESS: cont'd

Helicopter access is available from Carmacks. There is road access to the Mt. Nansen area, 45 km southeast of the property. The FOG lies 7 km southeast of the SHADOW Claims.

LEGAL DESCRIPTION; (Figure 3)

The FOG property consists of 24 contiguous claims with record numbers YA 95070 - YA95093. The claims were recorded on July 7, 1986 and are located in the Whitehorse Mining District.

TOPOGRAPHY AND VEGETATION: (Photo 1)

The FOG Claims lie within the Dawson Range, southwestern Yukon. They primarily consist of a flat north trending ridge with gently sloping and rare steeply sloping sides. The ridge is relatively barren with isolated exposures and mounds of felsenmeer. The elevation ranges from 4800<sup>1</sup> to 6100'. Vegetation consists of buckbrush. A large portion of the flat ridge and adjacent slopes are covered by swamp.



PHOTO 1: View of Northeastern FOG Claims from Southwest.

## HISTORY

A 2,000 ppb Au value was obtained from the FOG Vein Zone in 1985.- Follow up of this anomaly in 1986 revealed the existence of additional quartz veins in the area which prompted the subsequent staking of the FOG property.

## 19 86 PROGRAM

Twelve man days were spent on the FOG property between September 3 and 9, 1986. The program involved the implementation of a soil and V.L.F. survey over an irregular 1.3 km x 0.8 km grid on the northeast half of the property. Snow cover prevented mapping and rock sampling of the grid. Previous to staking the property was mapped and sampled at a 1:50,000 scale.

GEOLOGY:

Regional:

The FOG is located in an area of Cretaceous granodiorite (Casino granodiorite) which is overlain by Cretaceous volcanic rocks of the Mt. Nansen and Carmacks Groups. Government mapping shows a westerly fault contact between the granodiorite and Carmacks volcanics north of the FOG. A felsic feldspar porphyry dyke swarm also of Cretaceous age cuts across the western part of the property. (Tempelman-Kluit, 1974 and 1984).

Property: (Figure 4)

The FOG claims are primarily underlain by a granodiorite batholith which appears to be the source of andesitic pyroclastic rocks that occupy the extreme northern and southern regions of the property. Rhyolite to alaskite to granite and rhyolite quartz feldspar porphyry dykes and small plutons, probably all related to the Cretaceous feldspar porphyry dyke swarm, intrude the granodiorite. The andesite pyroclastics in the southern claim area are strongly bleached hence the actual composition cannot be determined. It is possible that they are felsic pyroclastics. These form a light orange-yellow-buff colour anomaly that corresponds to a government Hg anomaly. South of the claim block, Olivine basalts of the Carmacks Group overlie the pyroclastics.

Structure:

The structural trend of the area appears to be north-north-west to northwest to less commonly westerly as evidenced by dyke, vein, fault and V.L.F. trends. The dyke swarms on the government map, (Tempelman-Kluit, 1974), show north trends.

GEOLOGY: Cont'd

Mineralization and Alteration

Quartz veins across the property are primarily hosted by the rhyolitic unit (rhyolite to alaskite to granite and rhyolite quartz feldspar porphyry), and the granodiorite intrusion, but were also found in andesite tuffs at the north end of the property. The general trend of the veins is northwest to less commonly west. The quartz is commonly accompanied by a heavy carbonate which appears to be siderite. The veins commonly contain minor pyrite and less commonly tetrahedrite.

The FOG Vein Zone consists of sheeted quartz vein felsenmeer + hematite spread over a 30m wide area. The vein may trend about 300° and appears to extend for at least 300m. Vein 2 is a quartz-carbonate + pyrite to quartz breccia vein about 100m southwest of the FOG Vein. It has been traced along a 500m extent. Vein width is unknown but appears to be in the 0.2 to 2m range.

Other veins occur across the property but are difficult to trace due to swamp cover. Most are exposed in local frost boils. Only those veins in a 100 x 200m area on the northern part of the property contain tetrahedrite. These veins occur as 3-5cm wide pieces of float in altered zones 1-2m wide.

In the vicinity of quartz veins and stringers the rhyolite is commonly clay altered and locally silicified and sericite altered. The granodiorite exhibits clay alteration and pyritization in the vicinity of veins and stringers. Hematite accompanies some of the veins.

GEOCHEMISTRY:

Procedure:

A total of 364 soil and 1 rock sample were collected from the property between September 3 and 9, 1986. Thirty-six rock and two soil samples were collected in 1986 previous to staking. All samples were sent to Chemex Labs, North Vancouver, B.C. and analyzed for Au, Ag, As and Sb using standard atomic absorption procedures, Au being first preconcentrated by fire assay.

Rock samples were of the grab type. Soil samples were collected at 25m intervals on lines 100m apart over an irregular 1.3 km x 0.8 km grid. Many of the soils consisted of bottom B - top C horizon material exposed in frost boils.

Results:

Rock: (Figure 5)

Values of 2,000 ppb Au, 4.3 ppm Ag (5G3R), 440 ppb, 430 ppb, 105 ppb and 50 ppb Au (6G10-13R) have been obtained from the FOG Vein Zone. The possible northwest extension of the vein (6J21R) was not anomalous. The southeast extent of the vein has not been sampled. A stringer zone just north of the FOG Vein ran 260 ppb Au (5G2R) and slightly further north a similar stringer zone ran 65 ppb Au, (5G1R). About 200m east of and along trend of this last zone another sample of quartz stringers (6J22R) ran 120 ppb Au, 300.0 ppm Sb and 5.7 ppm Ag.

Vein 2 contains high Sb values of 67.0 and 80.0 ppm. The latter value is associated with a pyritic section of the vein which ran 65 ppb Au.

GEOCHEMISTRY; cont'd

Results: - Rock

The tetrahedrite bearing veins hosted by altered granodiorite ran high As as expected, (1100 and 1300 ppm) but only 85 and 95 ppb Au. Another small quartz vein in this vicinity ran 105 ppb Au. To the east of these veins quartz float up to 7 cm wide across a 2-10m wide zone in hematite altered granodiorite and andesitic tuff ran 240 ppb and 125 ppb Au, (6J11R, Y22A-6G1R).

Quartz vein breccia with pyrite collected approximately 750m south of the FOG Vein over a 1m wide zone in altered rhyolite ran 200 ppb Au (6J1R). About 100m to the west pyritic granodiorite with drusy, vuggy quartz ran 140 ppb Au.

Ag values are all less than 2.0 ppm except for the two values already mentioned. Anomalous As and Sb values are associated with some of the veins.

Results: - Soil (Figures 6-8)

Soil anomalies were generally low with maximum values of 45 ppb Au, 1.6 ppm Ag, 260 ppm As and 4.4 ppm Sb.

Ag values were negligible with only three values of 1.1, 1.3 and 1.6 ppm that were greater than 1.0. These values correspond with weak Sb anomalies in the 1.0-2.5 ppm range.

Au anomalies occur as spot highs with one weak northwest trend in the southeast corner of the grid, (i.e. L30-32N/16W). Northwest trends are more strongly indicated by the contoured As data and even more so by the contoured Sb data.

GEOCHEMISTRY: cont'd

Results: - Soil

Anomalous Au, As and Sb values coincide in the following localities:

- 1) L30-32N/16-18W - Au, As, Sb  
(135, 170, 3.0)
- 2) L36-38N/12-16W - As Sb Spot highs in Au  
(250, 2.0, 40)
- 3) L30N/23W -Spot High Au As, Sb  
(30, 110, 4.4)
- 4) L35N/17W - As, Sb, Au  
(260, 3.4, 10)
- 5) L43N/23W - Sb, Au  
(2.0, 25)
- 6) <sup>5</sup> 11^1' 11 5, \l P P H i - Peripheral to 1.0 high Sb contour  
~~L37N/23W~~ - 35 ppb Au) r r a

Anomaly 4 can be accounted for by a composite sample of quartz stringers, (6G5R), collected at this locality, that contained 40 ppb Au, 580 As and 2.8 Sb.

Anomaly 6, (1.0 Sb) surrounds the FOG Vein and quartz stringer zones north of the vein.

GEOPHYSICS; (Figures 9-10)

Procedure;

A V.L.F. survey was conducted using an EM-16 #52 machine. Readings were taken at 25m intervals on grid lines 100m apart. Interim readings were taken in the vicinity of in phase cross-overs. The Seattle Station was used since Seattle lies at about  $090^{\circ}$  to the grid lines. The initial null was taken facing the station and in phase and quadrature readings were taken with the instrument facing northeast.

Results:

Strong north-northwest to northwest trends are outlined by the VLF survey. Although they do not directly relate to known quartz veins, quartz float occurs within and along the highs. One conductor occurs southwest of Vein 2, follows the same trend and corresponds to an Sb anomaly in soil, (maximum 4.0 ppm). The conductor may be from the down dip extent of the vein and would therefore indicate a southwest dip. Another conductor cuts across the FOG Vein and includes stringer occurrences north of the vein and quartz vein occurrences southeast of the vein. It may reflect the true shape of the vein since only scattered vein occurrences were observed on surface. There may also be several subparallel veins in this area.

Several VLF anomalies correspond to anomalies outlined by the soil survey. These include the following:

1. L30-32N/16-18W - direct correlation
2. L36-38N/12-16W - direct correlation between L36-38N/14-16W.
3. L30N/23W - direct correlation as part of larger VLF anomaly.
4. L35N/17W - spot VLF anomaly to south. - explained by rock geochemistry.

GEOPHYSICS: cont'd

Results:

The northern extent of the north-northeast trending VLF anomaly that partly corresponds to Soil Anomaly 2, may reflect, in part, the granodiorite/andesite tuff contact.

CONCLUSIONS AND RECOMMENDATIONS:

The Fog Vein Zone which includes values up to 2,000 ppb Au is surrounded by a 1.0 ppm Sb soil contour and a VLF anomaly cuts across the vein. It is quite possible that the Fog Zone consists of several subparallel veins and the VLF reflects the true trend.

The unexposed possible down dip extent of Vein 2 is marked by a VLF conductor and an Sb soil anomaly. Other quartz float occurrences across the property occur within and along VLF anomalies.

VLF anomalies correspond to four multi element soil anomalies. Three of these should be investigated further.

1. L30-32N/16-18W
2. L36-38N/12-16W
3. L30N/23W

The mineralization and alteration on the FOG suggests that it fits on the lower part of a high level epithermal system.

Ag values are essentially negligible.

Detailed mapping of the grid area on the FOG, which wasn't completed due to snow cover, may reveal new veins and result in a better correlation of results especially in the vicinity of the three anomalies and the FOG and Vein 2 Zones. Many veins on the property also remain unsampled because of snow conditions.

The 1987 program should involve detailed mapping of the grid area and 1:5,000 scale mapping of the entire property. Detailed sampling of quartz exposures should also be completed. Work should be conducted in late Aug. when snow cover is minimal.

APPENDIX I

Selected References

- Grextan, L. and Pautler, J., 1985; Yukon gold-silver regional project (Y-06), 1985 program; Kerr Addison Mines Limited In-House Report.
- Tempelman-Kluit, D.J. 1974; Reconnaissance Geology of the Aishihik Lake, Snag and part of Stewart River map-areas, west-central Yukon; G.S.C. Paper 73-41.
- Tempelman-Kluit, D.J., 1984; Geology, Laberge (105E) and Carmacks (115 I), Yukon Territory; G.S.C. O.F. 1101.

APPENDIX II

ROCK DESCRIPTIONS

J<sup>r</sup> STEPHEN  
 ^.^ EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET - ROCK GEOCHEM SAMPLING

a.c. BOLD SYNDICATE

NTS < 1" / H

SAMPLER J. Poulter

PROJECT P/O

LINE

DATE 11/11/2007 jr

LOT PHOTO No.

| SAMPLE NUMBER | LOCATION       | ROCK type               | ALTERATION   | MINERALIZATION        | STRIKE/DIP | ADDITIONAL REMARKS                            | WIDTH    |      | ASSAYS |      |      |     |
|---------------|----------------|-------------------------|--------------|-----------------------|------------|---|----------|------|--------|------|------|-----|
|               |                |                         |              |                       |            |   | APPARENT | TRUE | An.    | A.   | Sb   | As  |
| (1) Vr- kj> * | N FOG          | R? host                 | cl, sil      | y-H1 by               | no"        |   | 1m       |      | E.00   | 9j0  | 13   | 1.2 |
| (2) Jn2 J3R   | just S. of FOG | py, sil                 | " "          | 7 tvt, b on           | 110°/vd    | C'ttib J> of A-A sideite                      |          |      | 3-0    | 3"   | S    | <M  |
| (3) Jn2 J3R   | S of FOG       | " "                     | (1 '1        | a - pat b VN          |            | same on as J3R                                |          |      | 65-    | '00  | 60°  | ^5  |
| (4) Jn2 J4R   | S of FOG       | " "                     | " "          | y. b x un             |            | - SOI-VJ; bKKf txcWi, Aj.                     |          |      | 5-     | 2<>  | 67.0 | 0.1 |
| (5) J5R       | N FOG          | G.D.C                   | w m s.l.c.   | py, hmi.              | 240°       | - near R dy                                   |          |      | 5-     | 33   | *i   | W   |
| (6) J6R       | N FOG          | a.GD:                   | CKI, c(c,    | ? - float             | 090°       | - float up to 2cm wide gms                    |          |      | 105    | si   | (0.B | 1.3 |
| (7) J7R       | N FOG          | GD;                     |              | 2 un float            | 080°       | - float up to 3cm wide gms - possible started | 50-60cm  |      | 25     | 14   | 7.fr | 0.4 |
| (8) J8R       | " "            | G.D. py                 |              | 2 un, calcite ± py    | 125°       | up to 3cm wide i.t. r u & v.                  |          |      | 3S     | 400  | 3.4  | 0.6 |
| (9) J9R       | " "            | G.D.                    |              | 2 un, py tetrahedrite |            |   |          |      | 85     | 1100 | 5.0  | 1-2 |
| (10) J10R     | " "            | G.D.                    | v. c S.)     | 2 un, tetrah          |            |   |          |      | 95     | 1300 | 15vc | 1-1 |
| (11) J11R     | " "            | in Kim G.D. anil Vm: AJ | KLH CC       | 2 float               | 125°       | up to 3cm wide in 2m wide zone                |          |      | 240    | H    | 6.4  | 0.7 |
| (12) J12R     | N FOG          | py, sil                 | sil, calcite | 2 un x pv             | 110°       | same bl. cherty? same as S. 5. st. sil        |          |      | /r     | 7    | 4.2  | 0.1 |
| (13) J13R     | M FOG          | py, sil                 | cl a.        | 7h+                   |            | Acic Cti., 4-                                 |          |      | <5     | 2    | 2.y  | *1  |
| (14) J14R     | N FOG          | G-IJ>:                  |              | whk py                |            | J blas calcite                                |          |      | ^5-    | 7    | /r   | oA  |
| (15) J15R     | W FOG          | C-ly?                   |              | 2 un                  |            | 1 did up to 25x30cm + smaller ones            |          |      | ^ ^    | 9    | 3.2  | oS  |
| (16) J16R     | IP rtc-7       | G.D.?                   |              | few g sil.            |            |   |          |      | 10     | /r   | 6.6  | 0.6 |
| (17) J17R     | " "            | ... vif/h)              |              | 2 un                  |            | up to 2cm wide                                |          |      | 25     | 60   | 3.6  | 0.7 |
| (18) J18R     | " "            | f<-}rc                  |              | 2 un                  | 306°       | up to 4-5cm wide                              |          |      | 30     | 33   | 5.2  | 0.6 |
| (19) J19R     | " "            | t*-(o'(-                | sil, calcite | 2 un in float         |            | - along Jg R dy, on bend with 14R?            |          |      | <5     | 1a   | 3.6  |     |
| (20) J20R     | A / c r.       | ."                      | sil, calcite | 2 un                  |            | many ways                                     |          |      | 10     | 36   | 4.0  | 0.2 |

-TABLE-3-continued-

ANOMALOUS-ROCK-SAMPLES-TARGETS -21,-21A,-22

| SAMPLE     | ZONE | DESCRIPTION   | Ag<br>ppm | As<br>ppm | Sb<br>ppm | Au<br>ppb |
|------------|------|---|-----------|-----------|-----------|-----------|
| Y21A-5J 1R |      | hornblende biotite & quartz veins up to 2cm   | 2.1       | 3         | 0.2       | 5         |
| Y21-5J 9R  |      | Andesite feldspar porphyry - siderite veins   | 0.1       | 60        | 6.4       | 5         |
| Y22A-5G 1R | Fog  | Rhyolite quartz feldspar porphyry - drusy quartz veins & veinlets max. 2.5cm wide sheeted structure   | 0.1       | 420       | 0.5       | 65        |
| Y22A-5G 2R | Fog  | Rhyolite quartz feldspar porphyry - cryptocrystalline & minor drusy quartz stringer zone, max. width of vein = 2.5 cm, stringer zone 50cm wide, sheeted structure                     | 0.1       | 17        | 3.4       | 260       |
| Y22A-5G 3R | Fog  | Rhyolite quartz feldspar porphyry - weak hematite, weak-moderate sericite quartz stringers vein zone composite over 30m <sup>2</sup> , max zone widths 10 to 40 cm, sheeted structure | 4.3       | 46        | 5.0       | 2000      |
| Y22A-5G 4R | Fog  | biotite hornblende Granodiorite - cryptocrystalline - finely drusy quartz, vuggy, 10-20% pyrite. possible minor carbonate-siderite ?  | 1.5       | 200       | 9.8       | 140       |
| Y22A-5G 5R | Fog  | Granodiorite - moderate-strongly silicified   | 1.0       | 22        | 3.4       | 15        |
| Y22A-5G 6R | Fog  | Granodiorite ? - fine quartz - stringers up to 1cm  | 1.1       | 200       | 3.6       | 30        |

APPENDIX 3

GEOPHYSICAL DATA

# EM SURVEY DATA 0986)

FOG M.C.

| Station    | In Phase | Quad. <sup>^E</sup> |        | Station    | In Phase | Quad. | FRASEA<br>FILTER |
|------------|----------|---------------------|--------|------------|----------|-------|------------------|
| L 20N//6 w | -22.     | 0                   |        | L31A///, w | -32      | -*r   |                  |
| /G2TW      | "2.1     | -Z.                 | f      | /(.2s-w>   | -4       | /     | 18               |
| /6S-0W     | -20      | -2.                 | 15     | /(>S-0w    | -2°      | -2    | 29               |
| It, ?E-w   | -/y      | +y                  | 6      | H7rw       | -76      | +8    | 15               |
| 17w        | -/y      | /y                  | -7     | /7-w       | -/?      | +8    | 6                |
| 1725       |          | +2                  | -7     | 1725w      | -14      | +8    | 7                |
| JTSOW      | f^       | V-2.                | 7      | 1750w      |          | +9    | -4               |
| 1775w      | -18      | +2                  | 2      | 1775w      | -13      | +8    | 7                |
| 18W        | -/v      | +8                  | -5     | /^ W       | -16      | +4    | -13              |
| 102S-VJ    | -19      | /y                  | -3     | J825" W    | -20      | ti    | 4                |
| 1850w      | -/^      | +4                  | 2      | /grow      | -19      | 0     | 2                |
| 1875w      | -18      | +3                  | -3     | 1875w      | -13      | if    | 6                |
| /9iv       | -/>      | +8                  | -15    | 19w        | -13      | i3    | 5                |
| 1925w      | -2V      | ^y                  | ?/     | 1925w      | -/J      | +2    | 5                |
| lyro iv    | -28      | 0                   | -7     | 1950w      | -9       | +3    | H                |
| 1975w      | -3i      | -y                  | 22     | 1975w      | -/J      | -2.   | 11               |
| low        | -25      | +1                  | 28     | low        | -y       | 12    | 5                |
| 20 ZS" V   | -13      | +5                  | 9      | z.02rvV    | -6       | -2    | 7                |
| 2050w      | -16      | ti                  | i      | 2050w      | -8       | -y    | 3                |
| 20 ?i" W   | -13      | -1                  | -8     | 2075w      | -3       | f/    | 10               |
| 21 W       | -/>      | '2.                 | U      | 211^       | -9       | -y    | -16              |
| 212ST W    | -20      | -                   | 2      | 212S"Ky    | -73      | -7    | -15              |
| 21TO V^    | 15?      | -12                 | 0      | 2pw        | -/y      | -8    | -19              |
| Z/?5" W    | -17      |                     | 11     | 21?y W     | -2.2,    | -ff   | 14               |
| 22. w/     | -2/      | -8                  | -15    | 22V        | -2y      | -Q    | 14               |
| 2225-w     | -2S"     | -/y                 | -2     | 22J5.S" V^ | 0        | +8j   | 46               |
| 22.S"0W    | -28      | -18                 | 22     | 2-21S" w   | +2       | +6    | 20               |
| 22?S-vu    | -20      | -/y                 | -55    | 2.2 TOW    | -2       | +2    | 4                |
| 23w        | "11      | -10                 | 30     | 2"2?i" W   | 0        | it    | 12               |
| Z3ZSw      | -2       | -S"                 | 12     | 23 W       | tH       | is.   | 11               |
| 2.2 S-o W  | f/       | -y                  | -2     | 2? 2J"Vu   | +0       | 0     | 8                |
| 23?s~W     | -2.      | -6                  | -4     | 23 row     | of?      | +1.   | -11              |
| 2V»v       | -1       | -6                  | 7      | 22 ?y w    | f7       | +4    | -10              |
| 2y /Zks    | -"       | -?                  | -6, -6 | 2y u»      | f5"      | 0     | 1                |
| 2425 w     | -y       | -8                  |        | 2V2S-W     | +3       | -3v   |                  |
| 2450 w     | -r       | -9                  |        | 2425.S W   | +6       | 0>    | 15               |
|            |          |                     |        | 2450w      | +12      | +5    | 2                |
|            |          |                     |        | 2475       | +11      | +4.   |                  |
|            |          |                     |        | 2y«?.^w    | +8       | -2.   | -P,              |
|            |          |                     |        | 25w        | +6       | -^>   |                  |
|            |          |                     |        | 25"/2.^Vu' | f 7      | ^y    |                  |
|            |          |                     |        | 2S"2? W    | +8       | ft    |                  |



# EM SURVEY DATA (1986)

FOG M.C.

| Station    | In Phase | Quad. | FRASER<br>FILTER | Station  | In Phase | Quad. | FRASER<br>FILTER |
|------------|----------|-------|------------------|----------|----------|-------|------------------|
| L3&A///1.W | -8       | +5    |                  | L35N/12W | -22      | -9    |                  |
| 1625W      | -13      | 0     | 5                | 1225W    | -10      | -V    |                  |
| 1650W      | -8       | +6    |                  | 1237.5W  | -5       | +5    | 23               |
| 1662.5W    | -8       | 1L    | 1                | 1250W    | -5       | +5    | -5               |
| 1675W      | -8       | +4    | -12              | 1275W    | -12      | 0     | -19              |
| 17W        | -72      | +2    | -10              | 13W      | -16      | 0     | -19              |
| 1725W      | -16      | -2    |                  | 1325W    | -2.0     | -2    | -23              |
| 1737.5W    | -17      | -2    | 6                | 1350W    | -27      | -2    | -23              |
| 1750W      | -14      | +1    | 21               | 1375W    | -32      | -4    | -22              |
| 1775W      | -8       | +3    | 20               | 14W      | -31      | -7    | -2               |
| 18W        | -1       | +8    |                  | 1425W    | -43      | -10   | 2a               |
| 1812.5W    | 0        | +9    | 10               | 1450W    | -29      | 0     |                  |
| 1825W      | -1       | +7    | 3                | 1475W    | -24      | +1    |                  |
| 1850W      | +2       | +9    | 4                | 15W      | -1Y      | -2    |                  |
| 1875W      | -1       | +5    | 6                | 1525W    | -16      | +2    | 10               |
| 19W        | +6       | +10   | -11              | 1550W    | -1a      | +2    | 9                |
| 1925W      | +1       | +4    |                  | 1575W    | -12      | +2    |                  |
| 1937.5W    | -2       | +2    | -18              | 16W      | -7       | +4    |                  |
| 19S-Q W    | -7       | -2    | 5                | 1625W    | -4       | +5    | 0                |
| v975W      | -4       | -2    |                  | 1650W    | -7       | +3    | 1                |
| 1987.5W    | 0        | +4    | 16               | 1675W    | -4       | +1    | 5                |
| 10 W       | +3       | +7    | 5                | 17W      | -6       | -1    |                  |
| 2025W      | +2       | +5    |                  | 1725W    | 0        | +7    | e                |
| 10 SQ W    | +2       | +5    | -7               | 1750W    | -1       | +7    | 11               |
| 2075W      | -1       | +2    | -7               | 1775W    | +3       | +7    | 8                |
| 2.W        | -2       | +5    | -3               | 18W      | +7       | +9    | -1               |
| 2/gfu/     | -4       | +1    | 1                | 1825W    | +3       | +7    | -1               |
| 2/S-QW     | -2       | +2    | 20               | 1875W    | +6       | +9    | -7               |
| 2/62. TW   | 0        | +4    | 20               | 1875W    | +3       | +2    | -15              |
| 2175W      | +5       | +8    | 19               | 19W      | -1       | +5    | -10              |
| 22W        | +9       | +6    | 13               | 1925W    | -5       | +2    | 1                |
| 2225W      | +11      | +12   | 3                | 1950W    | -3       | +3    | 6                |
| 22.ro W    | +14      | +12   | -U               | 1975W    | -2       | +3    | 0                |
| 2275W      | JILL     | +10   | -22              | 20W      | 0        | +4    | 4                |
| 23W        | +5       | +8    | -26              | 2025W    | +1       | +2    |                  |
| 2325W      | -2       | +1    | -18              | 20S-0 W  | +3       | +4    | 4                |
| 2350W      | -8       | -2    | 6                | 2075W    | +4       | +3    | 2                |
| 2362.5W    | -11      | -1    |                  | 21W      | +4       | +4    | 0                |
| 2375W      | -7       | 0     |                  | 2125W    | +5       | +6    | -1               |
| 2387.5W    | -2       | +3    |                  | 2150W    | +3       | +2    | 9                |
| 24W        | +3       | +7    |                  | 2175     | +5       | +4    | 17               |
|            |          |       |                  | 22W      | +12      | +8    | d.               |

# EM SURVEY DATA (1986)

FOG M.C.

| Station            | In Phase | Quad. | FRA%<br>FILE A | Station            | In Phase | Quad. | FRA%<br>FILE J |
|--------------------|----------|-------|----------------|--------------------|----------|-------|----------------|
| L 35 N / 22 + 85 W | +12      | +5    | -1             | L 36 N / 19 + 25 W | +2       | +7    |                |
| 2 2 TOW            | +13      | +3    |                | 19 32.5 W          | +3       | +5    | 7-             |
| 22 75 W            | +12      | +4    | -3             | 19 50 W            | 0        | +2    |                |
| 23 W               | +11      | +3    | -2             | 19 62.5 W          | +2       | +3    | 14             |
| 23 25 W            | f 10     | +2    | 2.             | 19 75 W            | +5       | +5    | 19             |
| 23 50 W            | h 11     | +5    | f              | 20 W               | +11      | +6    | 10             |
| 23 75 W            | +12      | +4    |                | 20 25 W            | +13      | +6    | 0              |
| 24 W               | +13      | +4    |                | 20 00 W            | +13      | +8    | -10            |
|                    |          |       |                | 20 75 W            | +11      | +6    | -23            |
|                    |          |       |                | 21 W               | +5       | +2    |                |
| L 36 N / 12 W      | -19      | -5    |                | 21 12.5 W          | 0        | -2    | -21            |
| 12 25 W            | -11      | +1    | <5             | 21 25 W            | -4       | -4    | 12             |
| 12 50 W            | -9       | +4    | -18            | 21 50 W            | -1       | -2    |                |
| 12 75 W            | -16      | 0     | -11            | 21 62.5 W          | +3       | +1    | 27             |
| 13 W               | -2.2     | -2    | -21            | 21 75 W            | +9       | +5    |                |
| 13 25 W            | -27      | -4    | -20            | 11 W               | +13      | +4    |                |
| 13 50 W            | JIA      | -6    | -1B            |                    |          |       |                |
| 13 75 W            | -37      | -8    | 3              | L 37 N / 11 W      | -23      | -2    |                |
| 14 W               | -40      | -8    | 30             | 12 25 W            | -19      | f 2   | -13            |
| 14 25 W            | -26      | -1    | St.            | 12 50 W            | -24      | -1    | -2.1           |
| 14 50 W            | -15      | -12   | 10             | 12 75 W            | -30      | -4    | -19            |
| 14 75 W            | -15      | -10   | 0              | 73 W               | "3V      | -6    | -4             |
| 15 W               | -16      | -1    | ?              | 13 25 W            | -39      | -8    | 21             |
| 15 25 W            | -14      | -1    | 13             | 13 50 W            | -29      | -4    | 22             |
| 15 50 W            | -10      | -1    | 19             | 13 75 W            | -13      | 0     |                |
| 15 75 W            | -7       | 0     |                | 14 W               | ^ i      | -2    |                |
| 15 87.5 W          | -3       | +2    | 24             | 14 25 W            | -22      | -1    | 22             |
| 16 W               | +2       | +5    | 13             | 14 50 W            | -6       | -4    |                |
| 16 25 W            | +5       | f V   | 0              | 14 75 W            | -6       | 0     |                |
| 16 50 W            | +3       | +4    | 2              | 14 87.5 W          | ft       | +2    | 31             |
| 16 75 W            | +4       | +3    | 4              | 15 W               | f /      | +1    | 17             |
| 17 W               | +6       | JLL   | -4             | 15 25 W            | f g      | +3    | i              |
| 17 25 W            | +5       | f 0   | 10             | 15 50 W            | f C      | i?    | -7             |
| 17 50 W            | +1       | +5    | -13            | 15 75 W            | f V      | 0     | -4             |
| 17 62.5 W          | -1       | -V    | -12            | 16 W               | +3       | 0     | -1             |
| 17 75 W            | -3       | +J    | -4             | 16 25 W            | f 3      | f 3   | -1             |
| 18 W               | -3       | +3    | -3             | 16 50 W            | f 3      | +4    | -4             |
| 18 25 W            | -3       | +3    | -5             | 16 75 W            | +3       | f S   | 0              |
| 18 50 W            | -6       | 0     | 0              | 17 W               | 0        | +3    |                |
| 18 75 W            | -5       | +2    | 9              | 17 12.5 W          | -2       | f     | 0              |
| 19 W               | -V       | +2    |                | 17 25 W            | -5       | -1    | 0              |
| 19 12.5 W          | "1       | is    | 11             |                    |          |       |                |

# EM SURVEY DATA (1986)

FOG M.C.

| Station        | In Phase         | Quad | 5   | Station      | In Phase | Quad.          | FRASER<br>FILTER |
|----------------|------------------|------|-----|--------------|----------|----------------|------------------|
| L37N/17+50W    | -3               | f/   | 8   | 13%N/1?6Z:rw | fi       | f"? 2          |                  |
| /?5"W>         | -2               | +4   |     | 1775W        | +1       | fv 9           |                  |
| /?0?.3W        | -2               | +2   | 11  | lew          | f2       | f^ t           |                  |
| 18w            | +2               | +5   | 3   | 1825w        | ft       | +8 -9          |                  |
| 1825w          | +4               | #0   |     | 1850w        | ft       | -fv~           |                  |
| /03?.^vv       | - +2             | ft   | -11 | 1862.5w      | f/       | +4 -1*         |                  |
| 18^0v          | -                | f3   |     | 1875w        | -i       | +4 0           |                  |
| 1862: < vj     | - -/             | +4   | -6  | 11UJ         | -3       | 0 11           |                  |
| J8?SW/         | -v               | 0    |     | iq/XS IA/    | -        | 0 0            |                  |
| /#8 7.S-iv     | - /              | c    | 8   | ?2r U/       | 0        | -1             |                  |
| /2t*v          | y-y              | y-/  | n   | 1937.5w      | f v      | +1 26          |                  |
| 1925w          | +2               | +4   | 10  | 17S"o w      | t7       | *3 26          |                  |
| Mso w          | iS               | ft   | 2   | 1975w        | i/i      | +7             |                  |
| lizSw          | fS"              | +2   |     | 2.0 w        | fly.     | f4             |                  |
| 201A/          | fpt              | ^3   |     |              |          |                |                  |
| L38N/12w       | -36              | -3   |     | L39N/12w     | -2J      | 0              |                  |
| /2.2.SW        | -72              | -8   | »   | 1225w        | -21      | -1             | m                |
| /2S"OW         | -V/              | -10  | 19  | y25*0v^      | -22      | -6             | 11               |
| 1275w          | -38              | -10  | 28  | 1275w        | -20      | -9             | 40               |
| /3w            | -2 <sup>1*</sup> | -9   | 21  | /Su/         | -6       | -9             | 43               |
| /32S"w         | -ly              | -8   | 27  | 1312.5w      | f/       | -10            | 40               |
| :3S"0w         | -2.0             | -?   | 25  | 1325w        | fV       | -X             | 42               |
| /37S-W         | ~V               | g    | 57  | 1350w        | +13      | -10            | 26               |
| /Vw            | -S"              | -4   | 58  | 1375w        | fir      | -5             | -6               |
| W/i.Tw         | f#               | -y   | 58  | 14w          | +34      | +2             | -25              |
| 1425w          | +18              | +i   | "?  | 1425w        | +30      | f7.            | -27              |
| ivs~OW         | f i/             | +2   | -13 | 1450w        | f 2i     | 0              | -24              |
| /V?ru/         | *-/?             | 0    |     | 1475w        | f/t      | -3             | -15              |
| 1S" w          | 10.S"0           | 0    |     | 15w          | f?       | -7             | -12              |
| 1525w          | +10              | -2   | -A3 | 15^ayw       | +7       | -^             | 0                |
| 1550w          | +7               | -2   | -6  | 1550w        | f ^      | -Q             | 12               |
| 1575w          | +5               | -2   |     | 1562.5w      | f/       | -9             | 7                |
| /6 Uk          | ft               | +2   | -5  | 1575w        | f/       | -?"            | -3               |
| /6 2S"Uv       | f S"             | i2   | -4  | 1587.5w      | f3       |                | 1                |
| / fo SO Vv f / | -2               |      |     | /tU»         | f8       | f <sup>3</sup> | 0                |
| 1<°(2SW        | fV               | +2   | 0   | 1625w        | fT-      | fx.            | 1                |
| 1675w          | +6               | fS"  | 2   | /GROW        | f sr     | f/             | 2                |
| ^IAJ           | ft               | fC   | -JO | 1675w        | f *      | fY             | -2               |
| 1725w          | +3               | ^v   |     | 17w          | f?       | #8             | -16              |
| ni?.\$~ VJ     | 0                | +2   | -0  | i7 25TW      | f8       | f8             | -25              |
| m-o w          | -/               | 0    |     | i^S"0 W      | +10      | +11            |                  |
|                |                  |      |     | /7?S~W       | f-r      | +8             |                  |

# EM SURVEY DATA (1986)

## FOG M.C.

| Station       | In Phase | Quad. | FRASER<br>FILTER | Station     | In Phase | Quad. | FRASER<br>FILTER |
|---------------|----------|-------|------------------|-------------|----------|-------|------------------|
| L39N/17+87.5W | - fa-    | JL5L  |                  | L40N/18+25W | -2.      | 0     | 12               |
| /flu;         | -3       | +2    | -15              | 1627.5W     | +8       | +6    | 29               |
| 1825W         | -7       | -2    | 5                | 1850W       | +11      | +8    | III              |
| 1850W         | -6       | 0     |                  | 1875W       | +13      | +7    |                  |
| 1862.5W       | -2       | fa    | 25               | 19W         | f/Y      | +6    | 5                |
| 1875W         | +1       | f3    |                  | 1925W       | +17      | +8    | -4               |
| 1887.5W       | +6       | JISL  | 32.              | 1950W       | +15      | +6    | -13              |
| 19W           | +11      | Jtg.  | 21               | 1975W       | +12      | +5    | -19              |
| 1925W         | +16      | +8    | 6                | 201V        | +7       | 0     | -18              |
| 1950W         | +17      | +6    | -3               | 2025W       | f/       | -3    | -12              |
| 1975W         | +16      | +6    |                  | 2050W       | 0        | -2    | 1                |
| 20W           | J+L      | +4    |                  | 2075W       | 0        | 0     |                  |
|               |          |       |                  | 21W         | +2       | +2    |                  |
| L40N/12W      | -fc      | +2    |                  | L41N/11+50W | -7       | f/    |                  |
| 1225W         | -11      | -1    | 27-              | 1175W       | -2       | -2.   |                  |
| y2.ro w       | -y       | -4    |                  | 1187.5W     | +4       | 0     | 23               |
| 1262.5W       | 0        | -S"   | 29               | 12W         | +5       | -3    | 12               |
| 1275W         | +4       | -6    | 26               | 1225W       | ii       | -fc   | 23               |
| 13W           | +10      | -10   | 25               | 1250W       | +15      | -6    | 25               |
| 1325W         | +16      | -9    | 22               | 1275W       | +23      | -4    | 19               |
| 13s-0W        | +23      | -8    | 17               | 13W         | +27      | -2.   | 0                |
| 1375W         | +25      | -5    | 11               | 1325W       | +30      | +2    | -24              |
| 14W           | +31      | -1    | -8               | 1350W       | +20      | 0     | -30              |
| 1425W         | +28      | -1    | -25              | 1375W       | +13      | -4    | -24              |
| 1450W         | +20      | -3    | -2.7             | 14W         | +7       | -7    | -17              |
| 1475W         | +14      | -4    | -25-             | /vis- w     | +2       | -9    | -6               |
| 15W           | +7       | -8    |                  | 1450W       | f/       | -9    |                  |
| 1512.5W       | +1       | -10   | -17              | 1462.5W     | 0        | -9    | 8                |
| 1525W         | +2       | -10   | -1               | 1475W       | +2       | -7    | 19               |
| 1550W         | +2       | -7    | 11               | 15W         | +2.      | -2    | 12               |
| 1575W         | +6       | -3    | 5                | 1525W       | f/3      | fy    | -7               |
| 16W           | ii.      | +2    | -4               | 1550W       | fjo      | 0     | -20              |
| 1625W         | fV       | -1    | -1/              | 1575W       | JfcE     | -3    |                  |
| 1650W         | +2       | -2.   |                  | 1582.5W     | +2       | -3    | -23              |
| 1675W         | 0        | -v    |                  | 16W         | -2       | -C    | -19              |
| 1687.5W       | +2       | 0     | (3               | 1625W       | -6       | -8    | -13              |
| 17W           | +7       | +5    | 6                | 1650W       | -10      | -y    | -2               |
| 1725W         | +8       | +10   | -10              | 1675W       |          |       | 7                |
| 1750W         | +5       | +6    | -ffc.            | 17W         | -7       | 1-2   | 8                |
| 177y w        | 0        | +2    |                  | 1725W       | -?       | -2    | 15               |
| 1787.5W       | -1       | f/    | -k?              | 1750W       | -3       | -)    |                  |
| 18W           | -3       | 0     |                  |             |          |       |                  |

# EM SURVEY DATA (/986)

FOG M.C.

| Station          | In Phase     | Quad.          | FRASER<br>FIL ^ | FRASER<br>FILTER | Station           | In Phase | Quad.     | FRASER<br>FIL ^ | FRASER<br>FILTER |
|------------------|--------------|----------------|-----------------|------------------|-------------------|----------|-----------|-----------------|------------------|
| tiff ft /11&Z.SW | -2           | 0              | H               |                  | i- V2A// /zts-o w | ^r       | D         |                 |                  |
| 7775'w           | +4           | f#             | 1,9             |                  | 1775w             | +7       | +1        |                 |                  |
| yew              | +5           | t <sup>2</sup> | 2.3             |                  | 18w               | 1.8      | 0         |                 |                  |
| 1825w            | +15          | +7             | 14              |                  | 1825w             | +8       | 7         |                 |                  |
| /OSTO W          | 1-17         | +8             | -1              |                  | 1850w             | +8       | -1        |                 |                  |
| /07s" w          | f/7-         | +8             | -8              |                  | 1875w             | +4       | -;        |                 | 18               |
| 19w              | f/v          | +5             | -13             |                  | 19w               | 1/v      | .11       |                 | 17               |
| 1925w            | f i2         | +2             | -17             |                  | 1925w             | f 23     | f 8       |                 | -1               |
| IHTOVJ           | f 6          | -5             | -7              |                  | 11SOXAJ           | f 1f     | fv        |                 | -14              |
| /<?7rw           | f 3          | - v            |                 |                  | 1975w             | +17      | +6        |                 |                  |
| 7.0 w            | f-8          | +1             |                 |                  | 2^) W             | til      | f 2       |                 |                  |
| L V2 A/ //lto    | -6>          | f-3            |                 |                  | LHIAJ //ZVJ       | +30      | 0         |                 | -3               |
| JIZsw            | -2           | +1             | 17              |                  | 1225w             | f 13     | -y        |                 | -9               |
| 11S'OVJ          | 0            | -3             | 30              |                  | 1^S"O W           | +23      | -2        |                 | -1               |
| 117S-V^          | +9           | -4             | 33              |                  | 1275w             | f-2/     | 0         |                 | -27              |
| 121w             | +19          | -2             | 27              |                  | 13u               | f 11-    | -S-       |                 | -20              |
| 122              | +23          | -V             | 11              |                  | <b>mfti</b>       | ^ ~      | -4        |                 | -2               |
| <b>nr^</b>       | <b>~72T~</b> | -2             | -12             |                  | <b>W11^VJ</b>     | ^ i      | <b>-4</b> |                 | 7                |
| 1275w            | +22          | -1             | -35             |                  | 14w               | +4       | 0         |                 | -3               |
| 13w              | +3           | +2             | -35             |                  | 1<12S"W           | +2       | 0         |                 | -3               |
| 1325w            | +18          | -2             | -35             |                  | 1437.5w           | C        | 1         |                 | -3               |
| 12TO W           | f 10         | -6             | -21             |                  | HS"o VAV          | -2       | -^        |                 | -10              |
| 1375w            | +4           | -V             |                 |                  | N62.rw            | 1        | 0         |                 | -7               |
| 73??S-W          | - f 1        | -8             | ~^              |                  | 1475w             | -2       | 0         |                 | -6               |
| 14w              | -2           | B              | -1F             |                  | 15w               | -5       | -i.       |                 | 0                |
| 1425w            | -7           | -to            | "               |                  | 15"2S"Uv^         | -6       | -3        |                 | 0                |
| 1450w            | -3           | -S"            | "               |                  | 1550w             | -?       | -^        |                 | 1                |
| 1462.5w          | +2           | -2             | 16              |                  | 1575w             | -4       | -2.       |                 | 1                |
| 1475w            | f V          | +1             | -1              |                  | 161w              | -3       | -V        |                 | 0                |
| 15w              | +2           | -3.            |                 |                  | 1d,Z\$Kf          | -2       | -S"       |                 | 1                |
| 1512.5w          | -- 0         | -3             | -12             |                  | 1G2?.S"Wv         | -7       | -3        |                 | 1                |
| 1525w            | -2.          | -S-            | -16             |                  | 1650w             | *7       | -^        |                 | 5                |
| 1550w            | -V           | -6             | -15             |                  | 16>7^w            | V2.      | -V        |                 | 1                |
| 1575w            | -V           | -6             | X               |                  | 17 kv             | +2       | -4        |                 | 1                |
| 16w              | -7           | -8             | ^               |                  | 1725w             | +2       | -3        |                 | 1                |
| 1625w            | -8           | -e             | 2               |                  | 17-37.S-W         | 1        | 6         |                 | -5               |
| 1650w            | -8           | -6             | 15              |                  | ?S-O W            | -1       | -C        |                 | 1                |
| 16>75-Vv         | -5           | -4             | 11              |                  | 1775w             | 0        | -(.       |                 | 1                |
| 17-V^            | 3            | -V             | "               |                  | 1787.5w           | 0        | -S~       |                 | 0.6              |
| 1712.S-W         | -0-1         | -2.            | 1-1             |                  |                   |          |           |                 |                  |
| 172S" W          | +1           | -2.            | ^               |                  |                   |          |           |                 |                  |

# EM SURVEY DATA (1986)

FOG M.C.

| Station                | In Phase  | Quad.      | Vj                   | Station                                   | In Phase | Quad.    |
|------------------------|-----------|------------|----------------------|---|----------|----------|
| <b>L Hi/Ni /1% w O</b> |           | <b>-5"</b> | <b>1*</b>            |   |          |          |
| IBis-U/                | *S        | -2         |                      |   |          |          |
| 1850W                  | +10       | f3         | Y                    |   |          |          |
| 197SW                  | +10       | 0          | 1                    |   |          |          |
| ltiv                   | f//       | f/         | -5                   |   |          |          |
| 191TV^                 | -hio      | 0          |                      |   |          |          |
| 1937.5W                | +9        | -2         | -5"                  |   |          |          |
| 1950W                  | +6        | -3         |                      |   |          |          |
| 1975"Vv/               | -f/o      | 0          |                      |   |          |          |
| ZOVJ                   | +<        | 0          |                      |   |          |          |
| <b>LHZh/lijZ'w</b>     | t/9       | <b>-3</b>  | <b>C<sup>3</sup></b> | <b>SURVEY DETAILS:</b>                    |          |          |
| <b>n row fit</b>       |           | <b>4</b>   | <b>3&gt;</b>         | Instrument - EM-16 No 52                  |          |          |
| <b>II *.\$" VJ f3</b>  |           | <b>-2</b>  | <b>40</b>            | Operator - J. PCLATE*                     |          |          |
| <b>II W</b>            | - /       | <b>-2</b>  | <b>18</b>            | Station - Seattle                         |          |          |
| <b>1075W</b>           | <b>-3</b> | <b>-2</b>  |                      | in/7:*/ A/m/ A cin, ilio^ (SE)            |          |          |
|                        |           |            |                      | Readings taken facing northeasterly (45°) |          |          |
|                        |           |            |                      | 50ft in "A" - K. Qcid'lyo J. yv/i » 25m   |          |          |
|                        |           |            |                      | along lines with some                     |          |          |
|                        |           |            |                      | 12.5" m dj-cti l re-nd/ntf                |          |          |
|                        |           |            |                      | in between                                |          |          |
|                        |           |            |                      | - LIMPS 100 yy. apart                     |          |          |
|                        |           |            |                      | No-ft: Fov- otriQjinctl rfc* T« See       |          |          |
|                        |           |            |                      | Fieldbook ' ONLY Edt V.T.                 |          |          |
|                        |           |            |                      | IO«C 1). fl ,l/f "                        |          |          |
|                        |           |            |                      | * FRASER FILTER APPLIED                   |          |          |
|                        |           |            |                      | "VjiOMI vQ.f5DM; > '4"                    |          |          |
|                        |           |            |                      | 25 m intervals is not                     |          |          |
|                        |           |            |                      | including eg 243W/1932.5W                 |          |          |
|                        |           |            |                      |   |          | <b>1</b> |

APPENDIX IV

STATEMENT OF EXPENSES


|   |                               |                                    |        |                |
|---|-------------------------------|------------------------------------|--------|----------------|
| <u>Wages;</u>   | J. Pautler                    | 4912 62nd St.,<br>Ladner, B.C.     |        |                |
|   |                               | Sept. 3-9, 1986                    |        |                |
|   | L. Grexton                    | 1761-16th Ave.,<br>Vancouver, B.C. |        |                |
|   |                               | Sept. 3-9, 1986                    |        |                |
|   | 12 Man days @ \$115/day + 10% | =                                  |        | \$ 1,394       |
| <u>Groceries:</u>   |                               |                                    |        |                |
|   | 12 Man days @ \$16/man day    | =                                  |        | 192            |
| <u>Camp Supplies;</u>   |                               |                                    |        |                |
|   | 12 Man days @ \$15/man day    | =                                  |        | 180            |
| <u>Field Supplies;</u> (topofil, flagging, sample bags, etc.) |                               |                                    |        |                |
|   | 12 Man days @ \$15/man day    | =                                  |        | 180            |
| <u>Expeditor;</u>   |                               |                                    |        |                |
|   | 7 days @ \$400/Mo.            | =                                  |        | 100            |
| <u>Truck;</u>   |                               |                                    |        |                |
|   | 7 days @ \$33/day             | =                                  |        | 231            |
| <u>Geochemical Analyses;</u>                                  |                               |                                    |        |                |
|   | 1 rock @ \$21/ea.             | \$ 21                              |        |                |
|   | 364 Soils @ \$16/ea.          | <u>5,824</u>                       |        |                |
|   |                               | \$5,844                            | =      | 5,844          |
| <u>Air Charter;</u>   |                               |                                    |        |                |
|   | Trans North Helicopters Ltd.  |                                    |        |                |
|   | Sept. 3                       | 1.0 hr.                            |        |                |
|   | Sept. 10                      | <u>1.0 hr.</u>                     |        |                |
|   |                               | 2.0 hrs. @ \$585/hr.=              |        | 1,170          |
| <u>Maps;</u>  |                               |                                    |        |                |
|   | 1:5,000 scale enlargement     |                                    |        | <u>50</u>      |
|   |                               |                                    | TOTAL: | <u>\$9^341</u> |

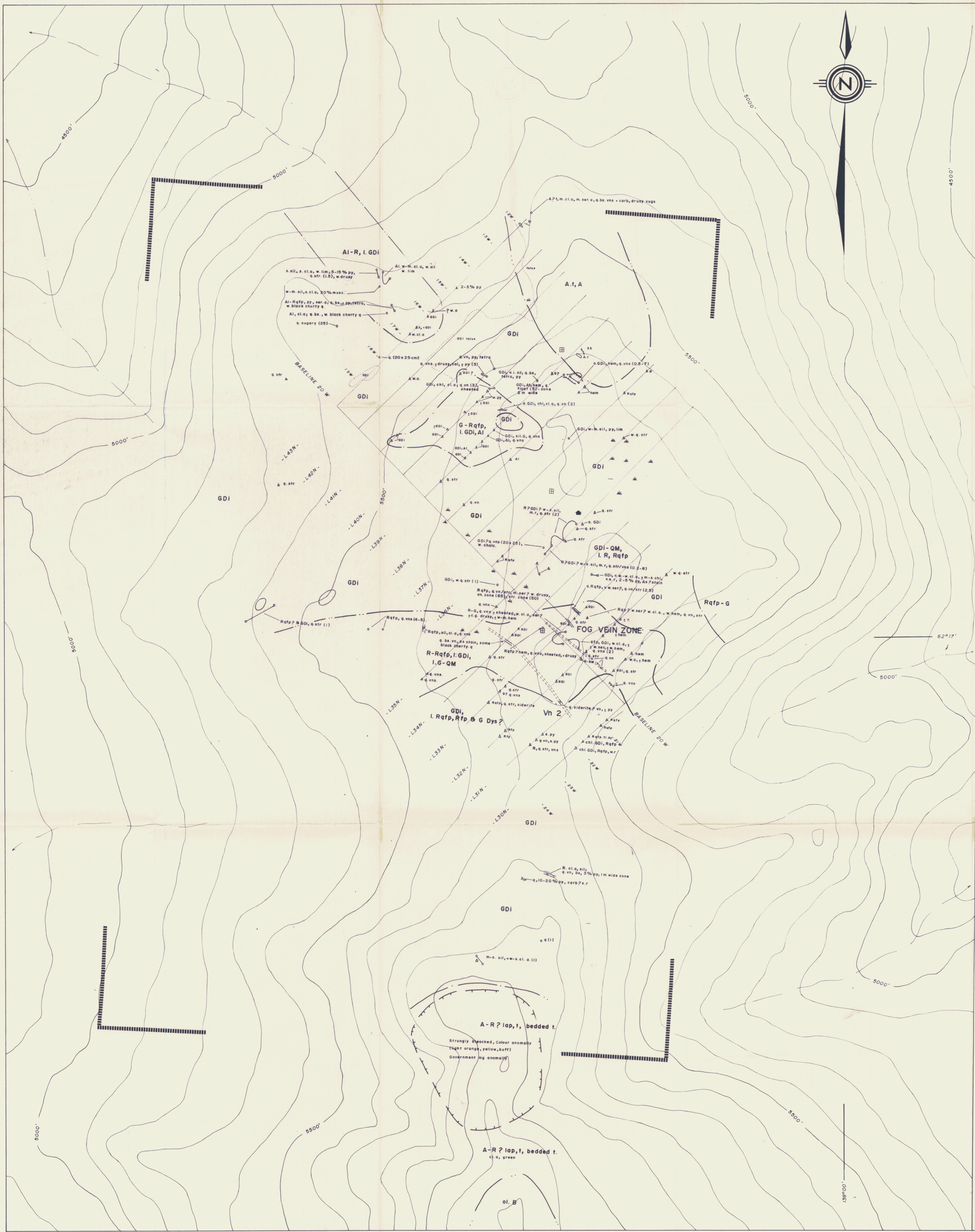
APPENDIX V

STATEMENT OF QUALIFICATIONS

I, Jean Marie Pautler, graduated from Laurentian University, Sudbury, Ontario in May, 1980 with an Honours Bachelor of Science degree in geology. I have worked as a geologist in the Canadian Cordillera over the past seven years.

I was actively involved in the 1986 field program on the FOG property.

  
\_\_\_\_\_  
Jean Pautler  
Geologist



**LEGEND**

|          |                               |
|----------|-------------------------------|
| B        | Basalt                        |
| A        | Andesite                      |
| R, AI, G | Rhyolite, Alaskite, Granite   |
| QM, GDI  | Quartz Monzonite, Grandiorite |

|         |                    |       |                 |
|---------|--------------------|-------|-----------------|
| bio     | biotite            | py    | pyrite          |
| chl     | chlorite           | tetra | tetrahedrite    |
| f       | feldspar           | hem   | hematite        |
| hb      | hornblende         | carb  | carbonate       |
| q       | quartz             | chalc | chalcedonic     |
| ol      | olivine            | As    | Arsenic         |
| ser     | sericite           | Sb    | Antimony        |
| cal     | calcite            | lim   | limonite        |
|         |                    |       |                 |
| f, lap  | tuff, lapilli tuff | cl    | clay            |
| p       | porphyry           | sil   | silicified      |
| dy      | dyke               | a     | altered         |
| str, vn | stringer, vein     | w, m  | weak, moderate  |
| bx      | structural breccia | s, i  | strong, intense |
| r       | rusty              | tr    | trace           |
| l       | local              | c.g.  | coarse grained  |
| v       | very               |       |                 |

|  |  |
|--|--|
|  | Outcrop, subcrop                           |
|  | Local rock, float                          |
|  | Composite samples                          |
|  | Altered zone boundary                      |
|  | Width of vein (cm)                         |
|  | Geological contact - approximate, inferred |
|  | With or without                            |
|  | Claim post                                 |
|  | Property boundary                          |
|  | Campsite                                   |
|  | Swamp, bog                                 |

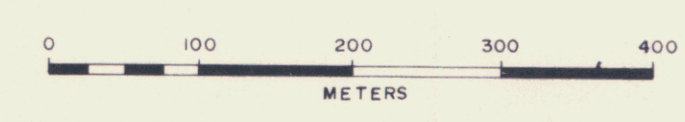


FIG. 4

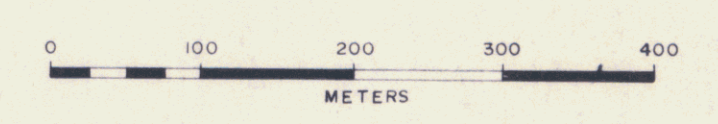
KERR ADDISON MINES LTD.  
**FOG CLAIMS**  
**GEOLOGY**  
 SCALE - 1 : 5,000      DATE - OCT , 1986  
 DRAWN BY - L.G.      DATA - J.P., L.G.  
 NTS - 115 4/1 88      REVISED -

001050



**LEGEND**

|                  |  |
|------------------|--|
| ○, △             | Rock sample - local, float   |
| ○—○, △—△         | Composite samples  |
| 2.8, 30, 4.5, 50 | Ag (ppm), As (ppm), Sb (ppm), Au (ppb) - Values < 0.1 ppm Ag, 1 ppm As, < 0.1 ppm Sb and < 5 ppb Au are not shown. |
| □                | Claim post   |
| -----            | Property boundary  |
| 🏠                | Campsite   |
| GIR              | 1986 Sample (YF-6GIR)  |
| 5GIR             | 1985 Sample (Y22A-5GIR)  |



**FIG. 5**

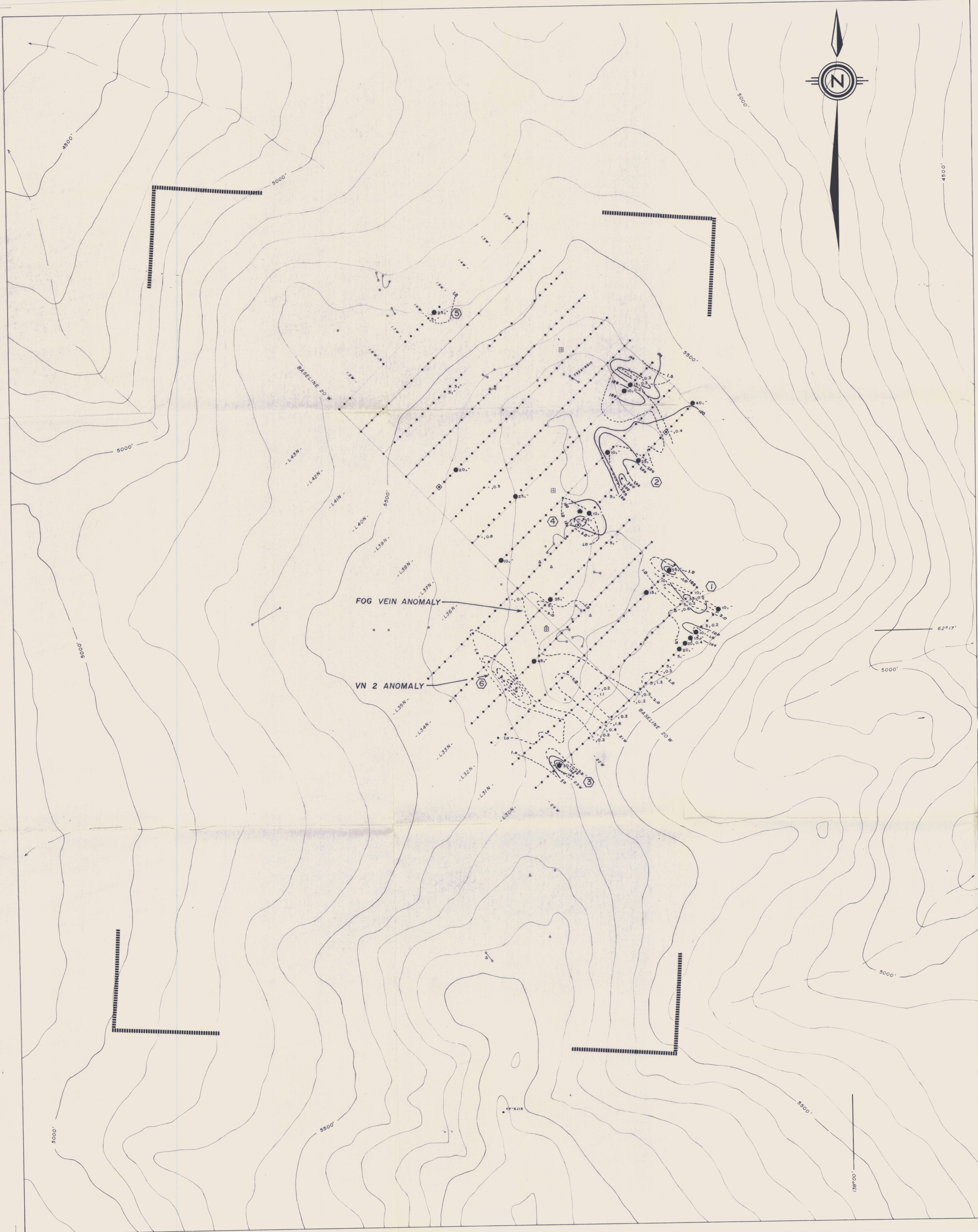
KERR ADDISON MINES LTD.

**FOG CLAIMS**

**ROCK GEOCHEMISTRY**  
and **SAMPLE LOCATIONS**

|                  |                   |
|------------------|-------------------|
| SCALE - 1:5,000  | DATE - OCT, 1986  |
| DRAWN BY - L.G.  | DATA - J.P., L.G. |
| MTS - 115 J/1 88 | REVISED -         |

001950



**LEGEND**



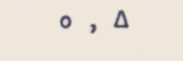
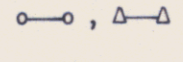
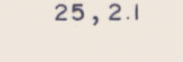







-  Soil profile sample (Sample number + Grid coordinate i.e. YF-L30N/16W-D)
-  Soil sample (Sample number + Grid coordinate i.e. YF-L30N/16 W)
-  Rock samples - local, float
-  Composite samples
-  Au (ppb), Ag (ppm) - Values of <5ppb Au @ 0.1ppm Ag are not shown.
-  Property boundary
-  Claim post
-  Campsite
-  Anomalous Au (soil)
-  As Soil Anomaly Contour
-  Sb Soil Anomaly Contour
-  Anomaly Number



FIG. 6

|  |                     |
|--|---------------------|
| KERR ADDISON MINES LTD.                                    |                     |
| <b>FOG CLAIMS</b>  |                     |
| <b>Au, Ag Soil GEOCHEMISTRY<br/>&amp; Soil COMPILATION</b> |                     |
| SCALE - 1 : 5,000  | DATE - OCT. 1988    |
| DRAWN BY - L.G.  | DATA - J.P., L.G.   |
| NTS - 115 J/1 88   | REVISED - DEC. 1988 |

001050



**LEGEND**

- Soil profile sample
- Soil sample
- , △ Rock samples - local, float
- , △, △ Composite samples
- 50 As (ppm) - Values of 1 ppm are not shown
- ▬▬▬▬▬▬ Property boundary
- ⊕ Claim post
- ⬆ Campsite

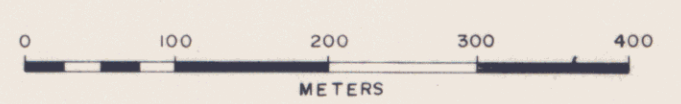


FIG. 7

|                         |                   |
|-------------------------|-------------------|
| KERR ADDISON MINES LTD. |                   |
| FOG CLAIMS              |                   |
| As Soil GEOCHEMISTRY    |                   |
| 1300                    |                   |
| SCALE - 1 : 5,000       | DATE - OCT, 1986  |
| DRAWN BY - L.G.         | DATA - J.P., L.G. |
| NTS - 115 J/1 B B       | REVISED -         |

091950



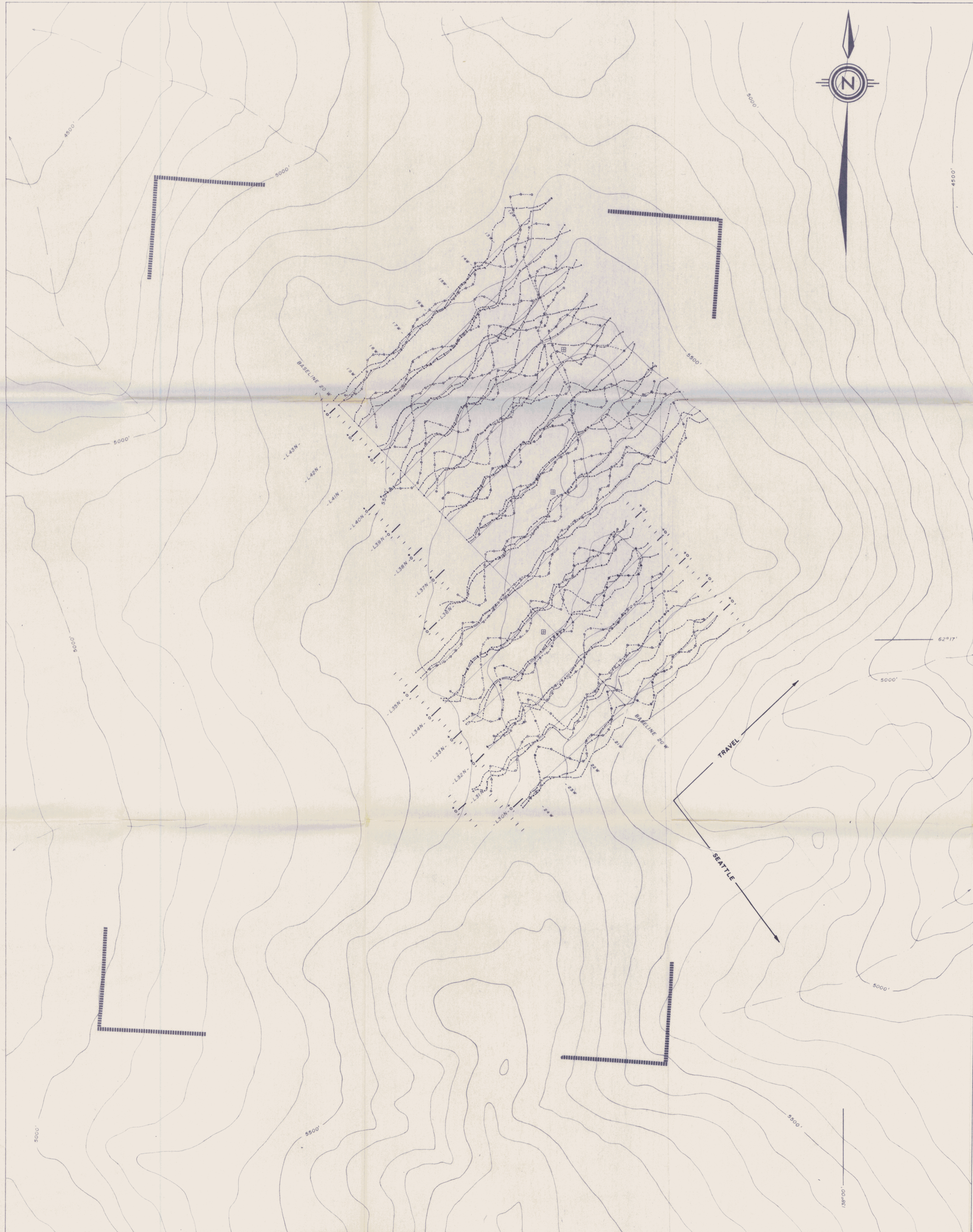
**LEGEND**

- Soil profile sample
- Soil sample
- , △ Rock samples-local, float
- Composite samples
- 2.6 Sb (ppm)-Values of 0.1 ppm are not shown
- Property boundary
- ⊞ Claim post
- ⬛ Campsite

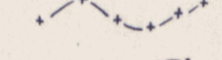
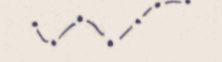
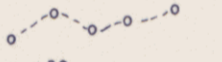
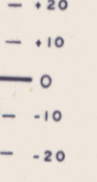


**FIG. 8**

|                             |                   |
|-----------------------------|-------------------|
| KERR ADDISON MINES LTD.     |                   |
| <b>FOG CLAIMS</b>           |                   |
| <b>Sb Soil GEOCHEMISTRY</b> |                   |
| 1303                        |                   |
| SCALE - 1:5,000             | DATE - OCT, 1986  |
| DRAWN BY - L.G.             | DATA - J.P., L.G. |
| NTS - 115 J/1 8 8           | REVISED -         |



**LEGEND**

-  Quadrature
-  In Phase
-  Fraser Filter
-  Vertical Scale 1cm = 20

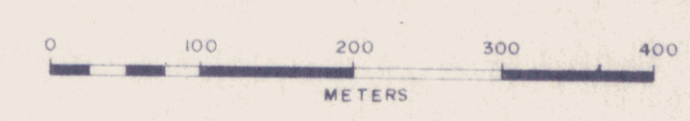


FIG. 9

|                         |                   |
|-------------------------|-------------------|
| KERR ADDISON MINES LTD. |                   |
| FOG CLAIMS              |                   |
| VLF PROFILES<br>(EM-16) |                   |
| SCALE - 1:5,000         | DATE - OCT., 1986 |
| DRAWN BY - L.G.         | DATA - J.P., L.G. |
| NTS - 115 J/1 B B       | REVISED -         |

091950

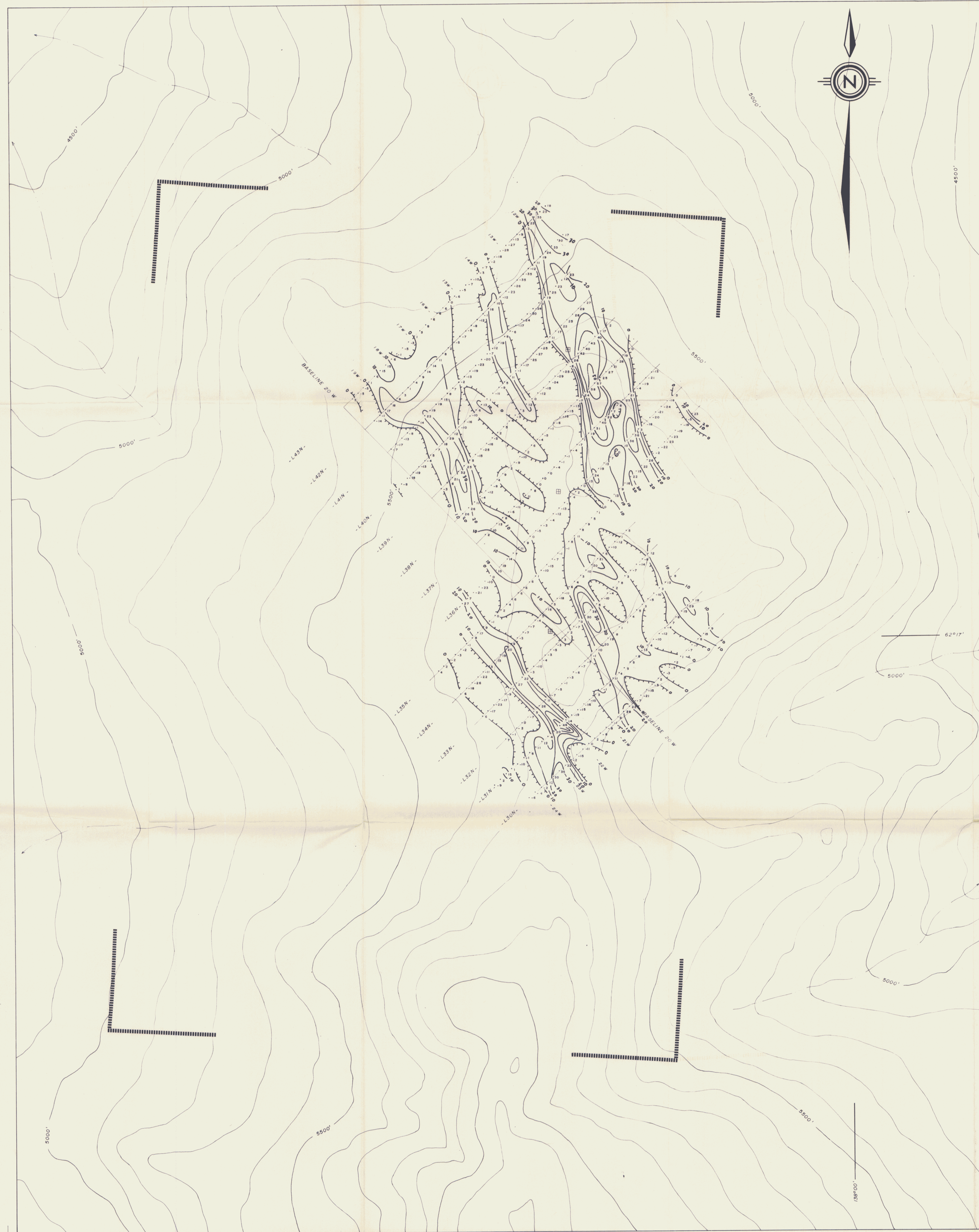


FIG. 10

KERR ADDISON MINES LTD.

FOG CLAIMS

VLF (EM16) SURVEY  
FRASER FILTER DATA

SCALE - 1 : 5,000

DATE - OCT, 1986

DRAWN BY - L.G.

DATA - J.P., A.G.

NTS - 115 4/1 88

REVISED -

09-1950