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FOURSTAR PETROLEUM RESOURCES LTD.
512 - 625 HOWE STREET
VANCOUVER B.C. V6C 2T6

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,285

ASSESSMENT REPORT
on a
VLF-EM and MAGNETOMETER SURVEY
on the
JAME MINERAL CLAIM
KAMLOOPS MINING DIVISION
NTS 92-I/16 W

Lat. 50°56'N. Long. 120°18'W.

by

R.J. ENGLUND, B.Sc.
STRATO GEOLOGICAL ENGINEERING LTD.
103 - 709 DUNSMUIR STREET
VANCOUVER B.C. V6C 1M9

May 20, 1983.

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VLF - EM and MAGNETIC SURVEY

JAME CLAIM, KAMLOOPS M.D, B.C.

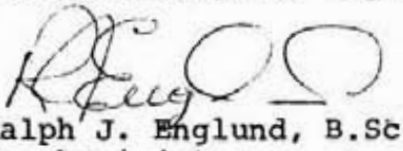
SUMMARY

A recently completed VLF electromagnetic and magnetic survey over the central JAME claim area has indicated a number of conductive zones which are attributed to shear zones, dykes and/or intrusive-sedimentary contacts. Mineralized quartz veins associated with sericitic and graphitic schist are known in the southern claim area and so make the outlined conductive zones primary target areas for follow-up exploration.

A geochemical soil sampling and geological mapping program is recommended to establish the economic nature of the conductive zones to further define mineral targets for further exploration.

Respectfully submitted,

Strato Geological Engineering Ltd.



Ralph J. Englund, B.Sc.
Geophysicist.

May 20, 1983.

INTRODUCTION

Persuant to a request from the Directors of Fourstar Petroleum Resources Ltd., VLF electromagnetic and magnetic surveys were conducted over a portion of the JAME mineral claim during April, 1983. The intent of the geophysical work was to outline any geological structure and/or conductive zones which might be related to possible gold vein structures known to occur near the southern claim boundary.

The results of 10 kilometers of geophysical survey work are presented in this report.

LOCATION, ACCESS, TOPOGRAPHY

The JANE mineral claim comprises 16 units situate about 15 kilometers due north of Kamloops, B.C. Access is easily available along the west side of the North Thompson River to Jamieson Creek. Good gravel roads provide easy access to the central claim areas from the

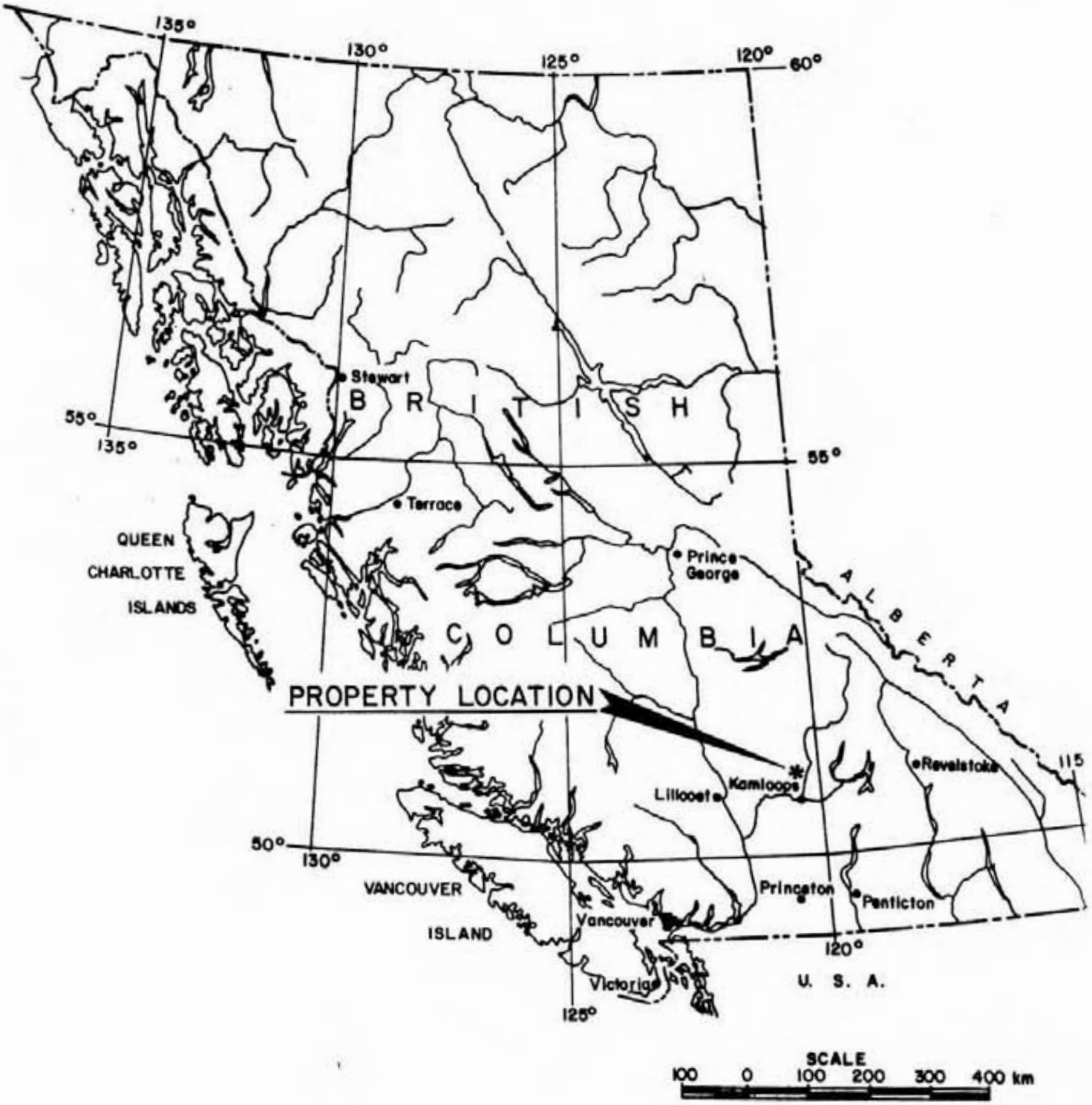


FIGURE I

LOCATION MAP

FOURSTAR PETROLEUM RESOURCES LTD.

JAME CLAIM (No. 4042 (5))

KAMLOOPS M.D.

To accompany a report by; R. J. ENGLUND
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MAY 20, 1983

main road. Permission should be requested from a local landowner for access through his property to the claim.

Topography is relatively steep in the southwest quarter of the claim where the ground slopes southwesterly into the Jamieson Creek valley. Elevations vary between near 500 to over 850 meters above sea level in the north-central claim area. There is little topographic relief at higher elevations in the central areas.

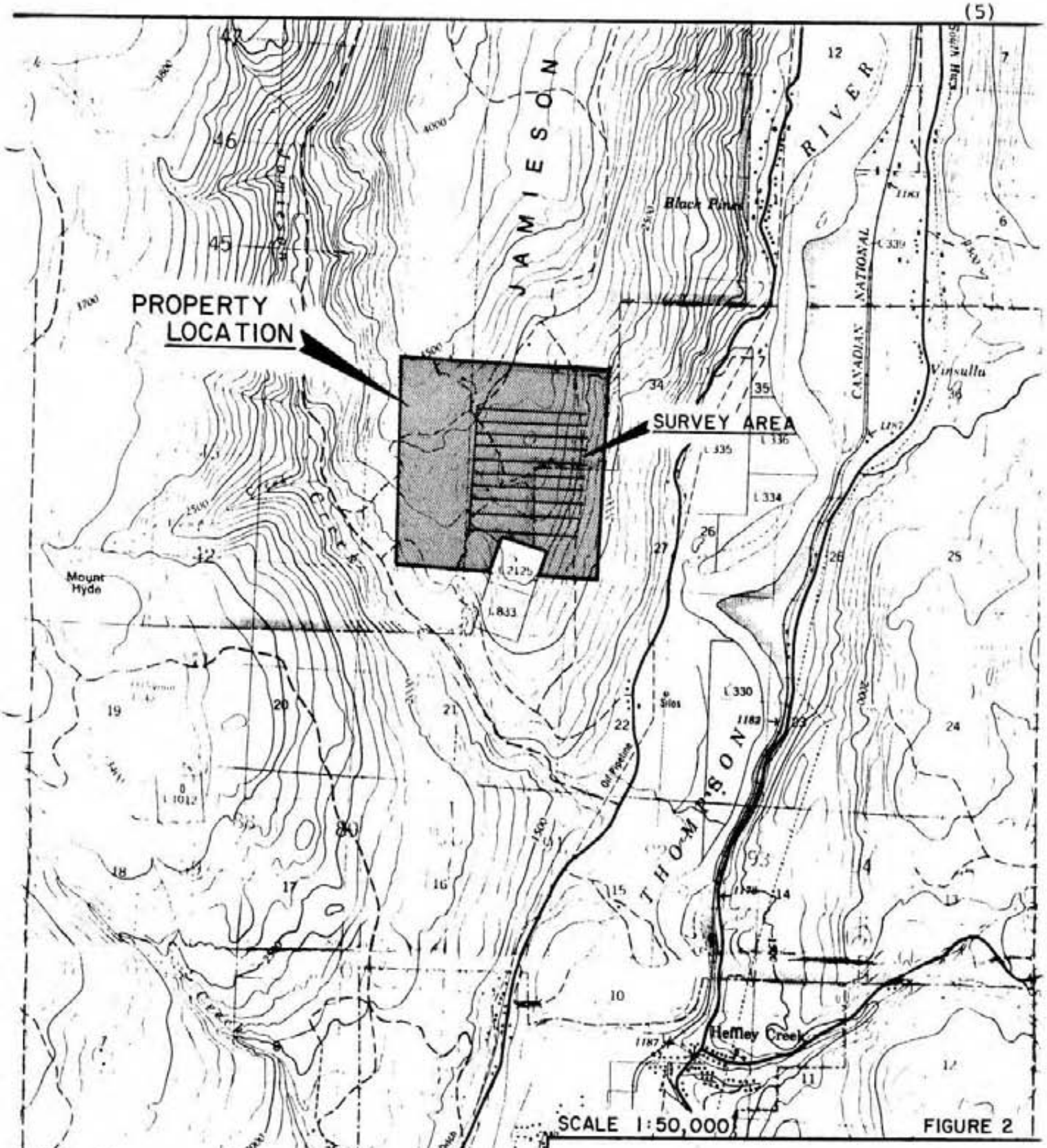
CLAIM

The JAME mineral claim is located in the Kamloops Mining Division, just east of Jamieson Creek, some 15 kilometers due north of Kamloops, B.C. The claim is recorded as follows:

Name	Units	Record No.	Expiry Date
JAME	16	4042 (5)	May 26,1983

The claim is shown on the B.C. Department of Mines and Petroleum Resources Mineral Claim Map M92-I/16W. The JAME claim may not contain a full 16 units as it appears to border the Homestake and Molly Gibson crown grants in the south as shown in Figure 2.

Assessment work has been filed, this report being a part of the work to maintain the claims in good standing until May 26, 1985.



TOPOGRAPHIC MAP

FOURSTAR PETROLEUM RESOURCES LTD.

JAME CLAIM (No. 4042 (5))

KAMLOOPS M. D.

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MAY 20, 1983

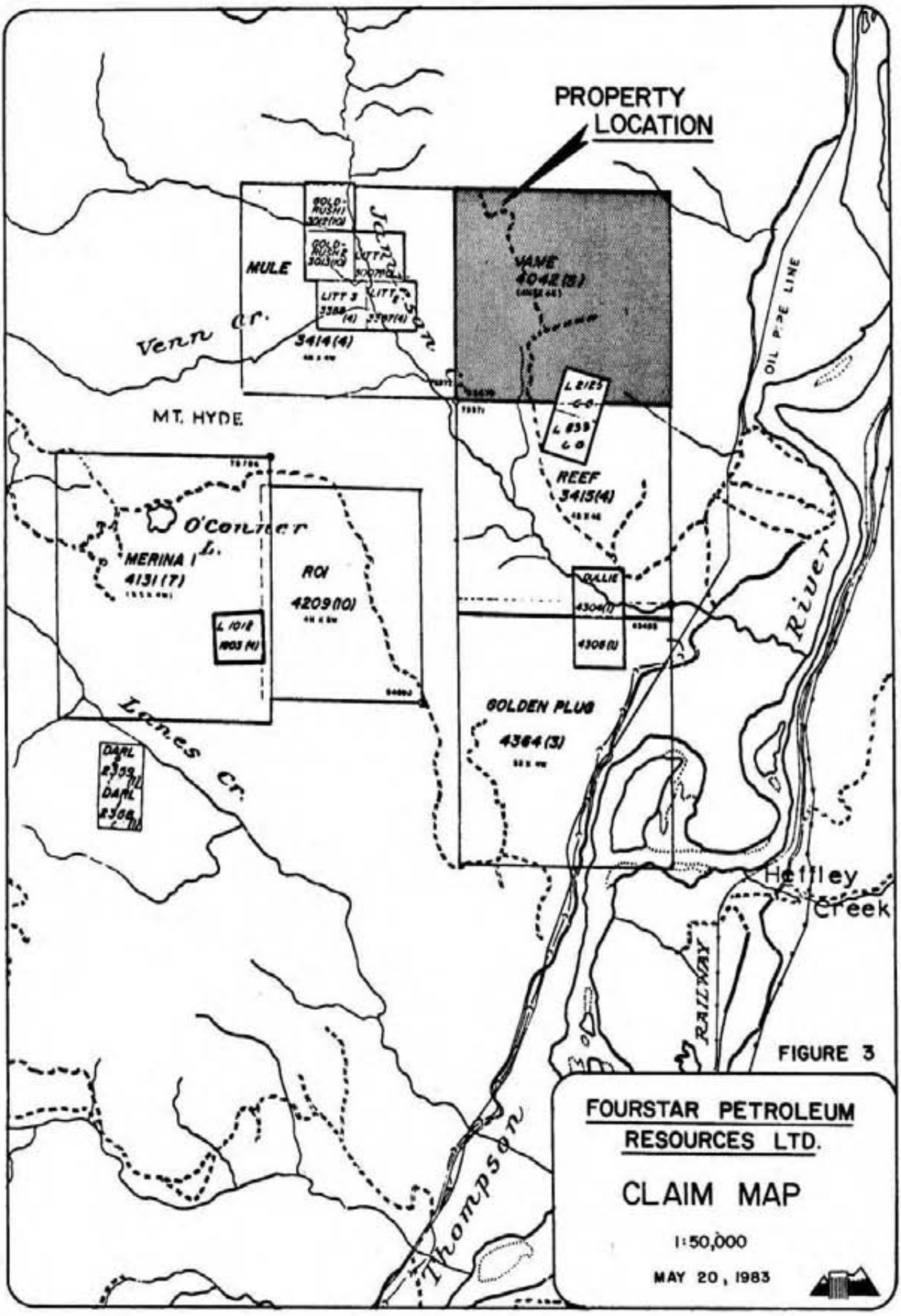

FIGURE 3

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CLAIM MAP

1:50,000

MAY 20, 1983

GENERAL GEOLOGY

The claim area is shown to be underlain by the Cache Creek Group sediments and the Coast Intrusions of Jurassic age [G.S.C. Map 886A(Nicola)]. The argillaceous sediments in the area are generally sheared and dragfolded and converted to graphitic and sericitic schist.

Structurally the lineation trends slightly east of north over the claim area and old workings in the southern claim area have numerous quartz vein structures striking north to N30°W with steep west to southwesterly dips.

INSTRUMENTATION & SURVEY PROCEDURE

A detail VLF electromagnetic and magnetometer survey was carried out over a 10 kilometer grid in the central claim area, just north of the Homestake and Molly Gibson crown grants.

East-west survey lines were compassed and flagged at 100 meter line separation and 25 meter station intervals from a north-south baseline as shown on Figure 2. The grid was tied to the south claim boundary.

The VLF survey was conducted with a Sabre Electronics, Model 27, receiver. The transmitter station used was NPG, Jim Creek, Wash. at a frequency of 18.6 KHz. and a radiated power of 250 kilowatts. Both dip angle and horizontal field strength measurements were recorded; dip angle measurements were filtered using the Fraser Filter Method to perimit presentation of data in contour map form, Figure 4. Field data is presented as a profile plot plan map, Figure 5. The method is well known and is fully described in the literature.

The magnetic survey was conducted with a Scintrex MP - 2 Proton Precession Magnetometer measuring the total magnetic field. All survey data was tied to an established base station and lines were "looped" at frequent intervals to allow for correction of durinal variations in accordance with standard practice. The methods are well known and fully described in the literature. Magnetic data is presented in contour map form with a 57,000 gamma datum base as Figure 6.

DISCUSSION OF RESULTS

The VLF-EM results indicate a number of northerly trending conductors within the survey area. The relative variation of background dip angle and field strength measurements, Figure 5, suggest a variation of rock conductivity within this area. Although the continuity of the conductive zones is broken, possibly due to some cross faulting in the central grid area, the results show three main conductive trends through the area. The magnetic results, Figure 6, do not provide a clear distinction btween rock units but do tend to correlate well with the VLF-EM results. The VLF-EM highs are generally found on the flanks of high magnetic zones and in the central grid area the breaks in conductor continuity are also associated with magnetic anomalies.

A conductive zone, showing a strong dip angle cross-over and an increased field strength, trends somewhat east of north from L100N, 3 + 50E to L 400N, 4 + 50E for a strike length of over 300 meters. This zone is flanked by magnetic anomalies on both its southern and northern extensions and possibly continues northerly as an intermittant conductive zone from L 600N, 650E

through L 1000N, 750E. This conductor is attributed to a possible fault as shear zone.

Relative background values in the northeastern grid areas suggest a more conductive rock unit underlying the area. A series of relatively weak conductive zones in this area may be attributable, in part, to contacts between the more conductive Cache Creek sediments and a possible narrow Costal Intrusive granitic unit. The break in the continuity of the conductors on Line 500N in the central grid area may also be attributed to a geological contact or a possible fault through this area.

A conductor of significant strike length (L00, 825E to L 400, 700E) is located in the southeastern grid area and is attributed to a dyke or shear zone.

The conductive zone maxima are associated with the flanks of magnetic anomalies and warrent further investigation since they lie within a possible sedimentary unit and may be due to fractures and/or shear zones along the structural trends.

CONCLUSIONS

The geophysical survey results have outlined several significant conductive zones which may be attributed to geological contacts, dykes and/or shear zones. The conductors are, in part, associated with magnetic anomalies and follow-up exploration is recommended.

All outline conductive zones are considered important within this environment. Mineralized quartz veins are known to be associated with sericitic and graphitic schist just south of the survey area. Follow-up geological mapping and geochemical sampling will be required before comments regarding the economic nature of the defined targets can be ascertained.

RECOMMENDATIONS

Geological mapping and a geochemical soil sampling program is recommended over the survey grid area. The relationship between geophysical and geochemical results should then provide a satisfactory basis for outlining targets of good mineral potential.

The VLF-EM and magnetic surveys should be expanded to determine the extent of the indicated zones and to locate other zones of interest. A south boundary is also recommended to establish the claim area with respect to the Molly Gibson Crown Grants.

Respectfully submitted,
Strato Geological Engineering Ltd.

Ralph J. Englund, B.Sc.
Geophysicist

May 20, 1983.

REFERENCES

(1) Report on the REEF Mineral Claim (16 units), Record No. 3415 (4), Jamieson Creek - Heffley Area, Kamloops Mining Division, for Casa Grande Engery and Mines Ltd., by Donald W. Tully, P. Eng., dated June 30, 1981.

(2) Geological Survey of Canada, Memoir 249, by W.E. Cockfield.

(3) Geological Survey of Canada, Map 886A, Nicola, Kamloops and Yale Districts, 1947.

Certificate of Qualifications

I, Ralph J. Englund, do hereby certify that:

(1) I am a practising geophysicist with offices at 103 - 709 Dunsmuir Street, Vancouver B.C. Canada, V6C 1M9.

(2) I am a graduate of U.B.C. where I obtained my B.Sc., (Physics) in 1971.

(3) I am a member in good standing of the following professional organization:
(a) B.C. Geophysical Society.

(4) I have been engaged in the study, teaching, and practice of exploration geophysics continuously for 10 years. I have worked as a geophysical consultant on numerous projects in Western North America since 1972.

(5) The Geophysical field work and the interpretation of the results in this report were done under my direct supervision.

(6) I have no direct, indirect or contingent interest in the securities of Fourstar Petroleum Resources Ltd., or the JAME mineral claim, nor do I expect to receive any such interest.

Dated in Vancouver, B.C. this 20th day of May, 1983.

Ralph J. Englund, B.Sc.,
Geophysicist

TIME-COST DISTRIBUTION

The geophysical surveys were conducted over the JAME Claim by Strato Geological Engineering Ltd. during the periods April 7th to 12th 1983. A listing of personnel and distribution of costs are as follows:

Personnel

J. Gibson	Project Supervisor and Geological Operator
N. McGary	Geophysical Operator and Field Assistant

Cost Distribution

Labour	$ 1,650.00
Room & Board, Field supplies, etc	475.00
Transportation (2 vehicles)	390.00
Filing Fees	160.00
Drafting & Miscellaneous	385.00
Report	900.00
Total:	$ 3,960.00

Strato Geological Engineering Ltd.

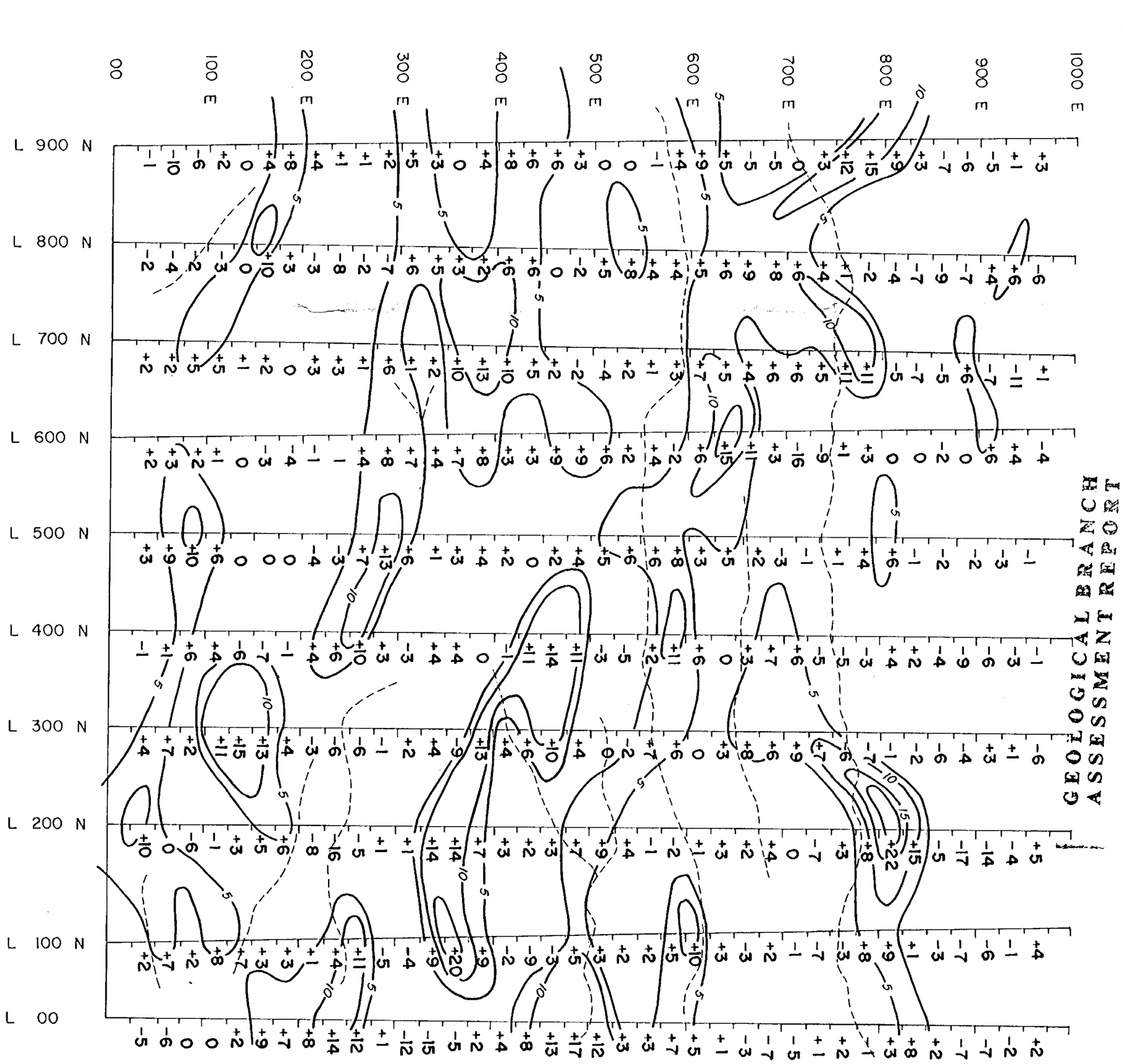

FIGURE 4

LEGEND

NOTES:

- Instrument : Sabre Electronics Model 27 VLF - EM Reciever
- Transmitter station NPG Seattle
- Contour Interval + 5

---- Roads

Field Work Period April 7 - 12

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JAME CLAIM (No. 4042 (5))

VLF - ELECTROMAGNETIC SURVEY
(FRASER FILTER DATA)

100 0 100 m

KAMLOOPS M.D. ; KAMLOOPS, B.C.

To accompany a report by R.J. ENGLUND
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN BY: DNH | DATED : MAY 20,83

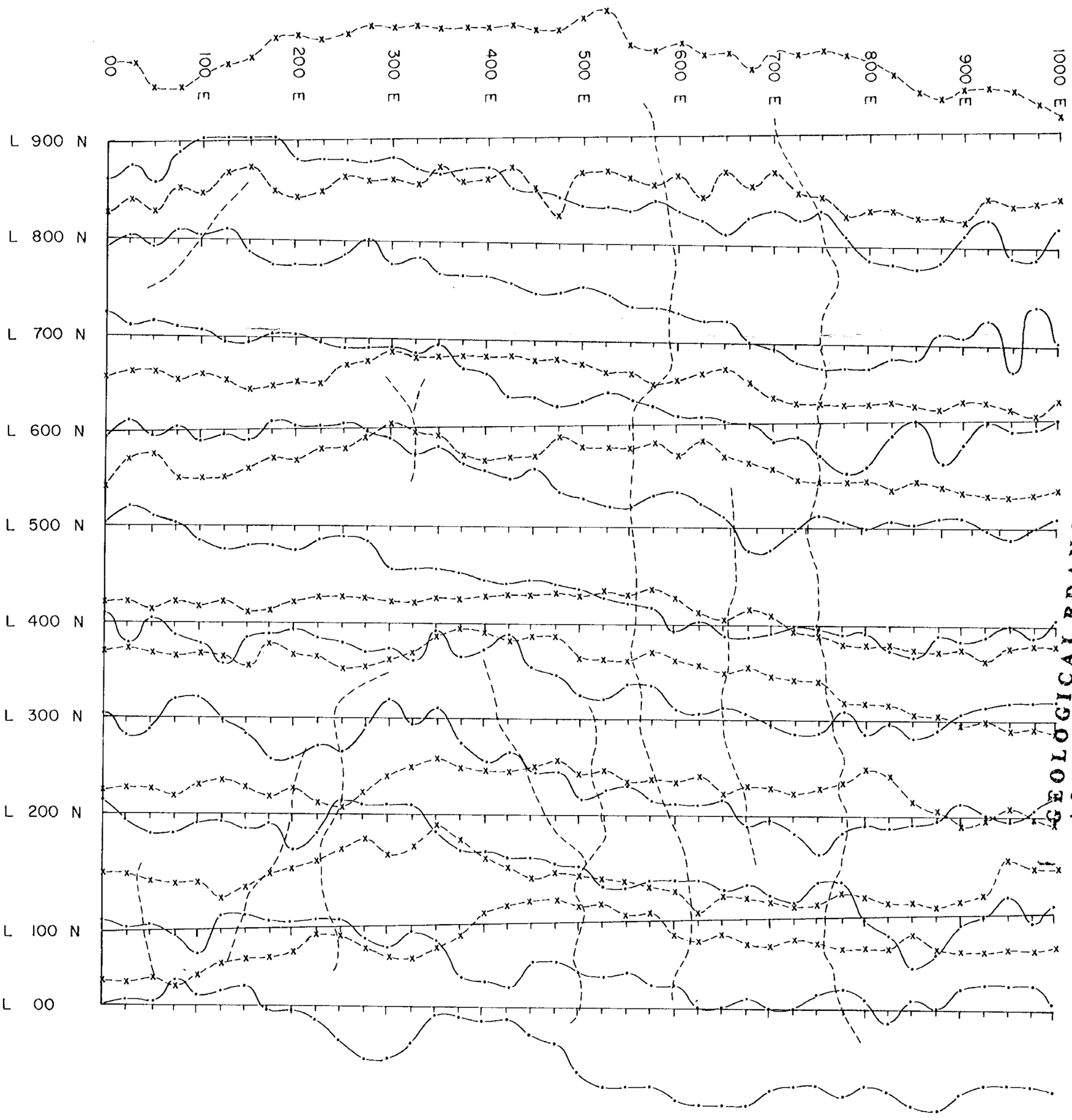


FIGURE 5

LEGEND

+20% — FIELD-STRENGTH SCALE — -20%

+20° — DIP-ANGLE SCALE — -20°

x— — —x Field-strength

·———· Dip-angle

– – – – Roads

NOTES:

- Instrument : Sabre Electronics Model 27 VLF-EM Reciever
- Transmitter station NPG Seattle

Field Work Period April 7 – 12

FOURSTAR PETROLEUM RESOURCES LTD.

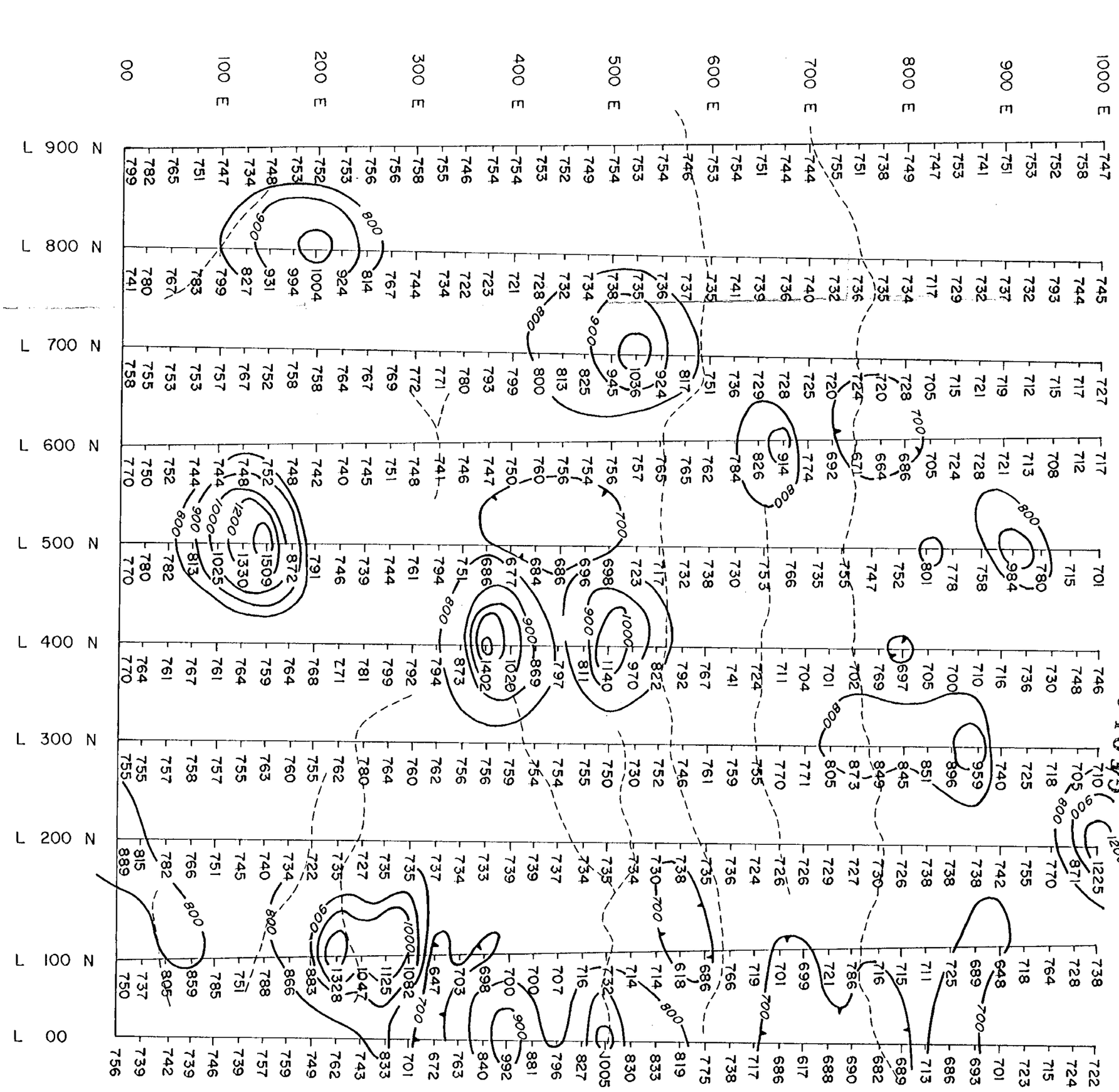
JAME CLAIM (No. 4042 (5))

VLF - ELECTROMAGNETIC SURVEY
(FRASER FILTER PROFILES)
100 0 100 m

KAMLOOPS M.D. ; KAMLOOPS, B.C.

To accompany a report by R.J. ENGLUND
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN BY: DNH | DATED: MAY 20,83



GEOLOGICAL BRANCH
ASSESSMENT REPORT

FIGURE 6

LEGEND

737 ··· Station & magnetometer reading (gammas)

--- ··· Roads

NOTES:

- Total field magnetic survey – Datum 57,000 gammas
- Instrument – Sintrex 2 Proton magnetometer
- Contour interval 100 gammas

Field Work Period : April 7-12

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JAME CLAIM (No. 4042(5))

MAGNETOMETER SURVEY

100 0 100 m

KAMLOOPS M.D. ; KAMLOOPS, B.C.

To accompany a report by R.J. ENGLUND
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DRAWN BY: | DATED: