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GEOPHYSICAL REPORT
on a
MAGNETIC AND VLF-ELECTROMAGNETIC
SURVEY
on the
ROCHER DEBOULE PROPERTY
NTS 93M/4E Omineca Mining Division
Lat. 55° 9.8'N Long. 127° 35.6'W
for
SOUTHERN GOLD RESOURCES LTD.

by
E. Trent Pezzot, B.Sc.

FILMED

GeoSci Data Analysis Ltd.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,575

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October 7, 1987

Vancouver, B.C.

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SUMMARY

A magnetic and VLF-Electromagnetic survey was conducted across two portions of the Rocher Deboule properties by Southern Gold Resources Ltd. in the summer of 1987. Past production of Cu, Au and Ag from mineralized veins located along the edge of a granodiorite intrusive generated renewed interest in this area. It was the intention of this survey to assist the mapping of the intrusive/sedimentary contact and identify specific targets for ground investigations.

The intrusive stock is clearly delineated by an increase in the total magnetic field intensity. In addition, a number of small isolated magnetic lows are observed within the stock which likely reflect localized areas of increased fault activity. Three outliers of high magnetic susceptibility materials are mapped along the perimeter of the larger stock. These are likely reflections of intrusive materials but may be accumulations of magnetite or pyrrhotite mineralization.

Inphase, quadrature and field strength measurements of three VLF-EM stations were gathered during the course of this survey. Weak evidence of the outline of the Rocher Deboule stock was observed in the field strength data.

Alternating narrow bands of moderately conductive and resistive materials are aligned at 075° across the main survey grid. These trends appear to be comprised primarily of 100 to 200 metre long lenses which are most pronounced near the intrusive/sedimentary contact and normally extend into the intrusive mass. These electromagnetic anomalies are generated from surface or very near surface sources and are probably related to the mineralized fault sets mapped along the contact. Isolated magnetic lows correlate with a number of low conductivity lenses observed within the body of the Rocher Deboule stock.

1. INTRODUCTION

GeoSci Data Analysis Ltd. was commissioned by Southern Gold Resources Ltd. to process, plot and interpret magnetic and VLF-Electromagnetic data gathered across the Rocher Deboule Property in central B.C. The data was gathered by Southern Gold Resources Ltd. personnel in the summer of 1987 with a Scintrex IGS-2 System. Total field magnetic intensity and inphase, quadrature and field strength measurements of three VLF-EM signals were recorded during the course of this survey.

The geology of the Rocher Deboule Property is dominated by a granodiorite stock intruding country sediments and volcanics. A variety of mineralized veins are associated with this stock.

It was the intention of this survey to assist the geological mapping of the claims area and attempt to directly map the target vein systems.

2. LOCATION AND ACCESS

The Rocher Deboule Mine is located five miles south of South Hazelton, B.C. The property lies within the Omineca Mining Division and NTS 93M/4E. The approximate geographical coordinates are latitude 55° 9.8'N and longitude 127° 35.6'W.

Access to the property is available via 4-wheel drive vehicles and is reached by a road eight miles long from Skeena Crossing, five miles southwest of South Hazelton, B.C.

3. PROPERTY

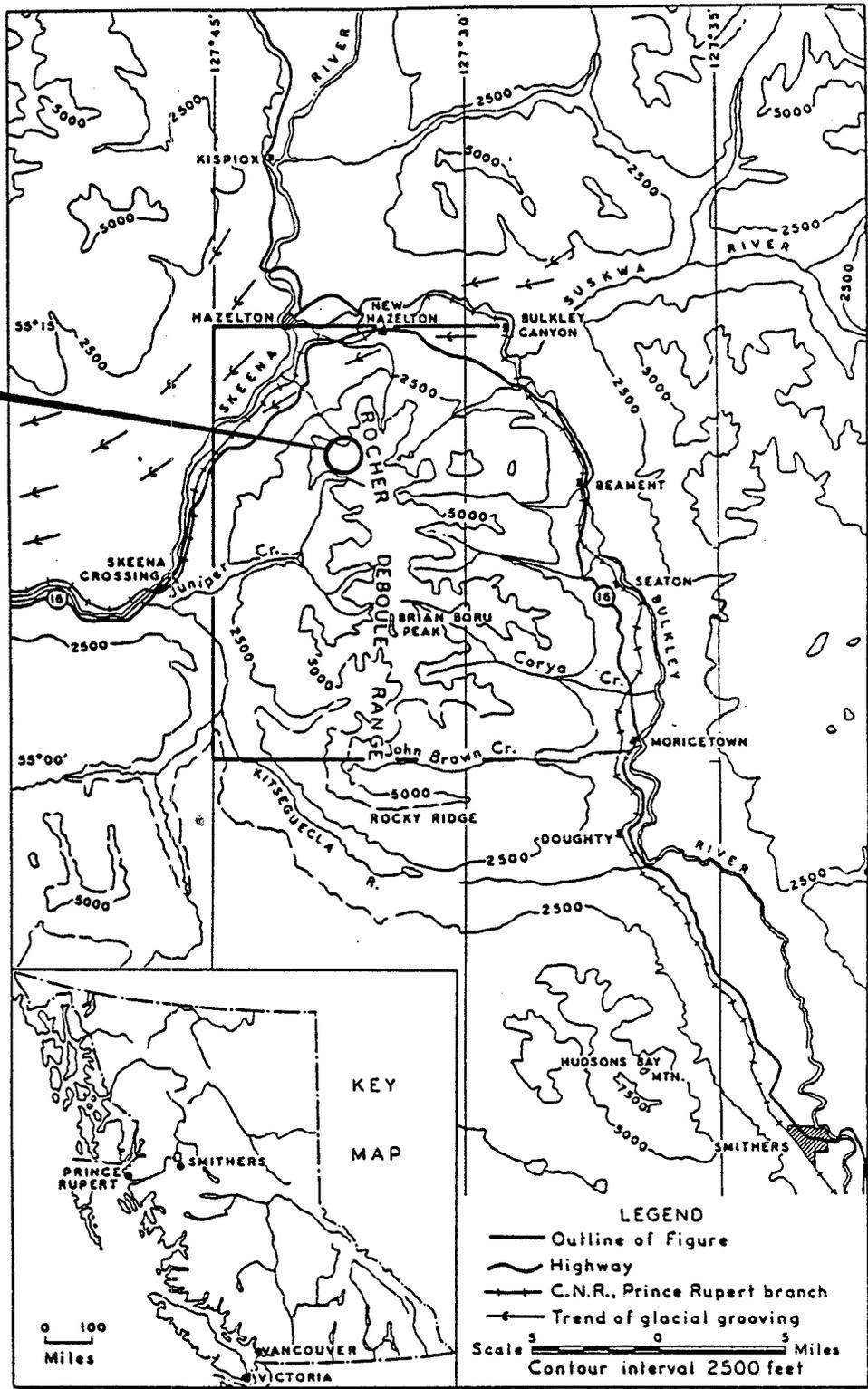
The following information has been copied from a report prepared for Southern Gold Resources Ltd. by J. R. Woodcock, dated February, 1987.

"The group consists of 36 reverted Crown Grants, two located two-post claims and one located 20-unit grid claim. The claims are listed on Tables I and II and shown on the claim map of Figure 2. The outlines of the claim block with respect to the Rocher Deboule stock are shown on Figure 3 which is adapted from Bulletin 43."

According to Mr. Stephen P. Quin, geologist of Southern Gold Resources Ltd., Mr. Wm. Craig of Smithers consolidated all the claims of the group and optioned them to Southern Gold Resources Ltd. However, that portion of the Victoria (Lot 3303) and Bell (Lot 3304) mineral claims, known as the No. 1 and Cross veins lying above the bottom level (elevation approximately 5168 feet) is subject to prior lease between Sandra Freznel of Smithers and J.M. Hutter of Telkwa, British Columbia."

The author has not confirmed the status of the claims.

ROCHER DEBOULE PROPERTY



From Bulletin No 43

SOUTHERN GOLD RESOURCES LTD.

ROCHER DEBOULE PROPERTY
INDEX MAP

N.T.S. 93M-4E

OMINECA M.D., B.C.

FIGURE 1

TABLE I
MINERAL CLAIMS

1. Located Claims

<u>Name of Claim</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Record Date</u>
Leo	3110 (8)	20	1980
Summit Fraction	582		1977
Waterfall Fraction	583		1977

2. Reverted Crown-granted Claims

<u>Name of Claim</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Record Date</u>
Hazleton View	3299	401	1976
Lead Pick	3300	402	1976
Moose	3301	403	1976
Elk	3302	404	1976
Delta Fraction	604	455	1976
Joe Fraction	533	456	1976
Juniper	2400	457	1976
Balsam	2401	458	1976
Jack Pine	2402	459	1976
Timber Line	2403	460	1976
Iowa	2404	461	1976
Log Cabin	2405	462	1976
Balsam Fraction	2406	463	1976
Pie Fraction	2407	464	1976
Third Fraction	2408	465	1976
Victoria	3303	466	1976
Belle	3304	467	1976
View Fraction	3305	468	1976
Belle Fraction	3306	469	1976
Mammoth	3307	470	1976
Tiger	3308	471	1976
Bowl Fraction	3315	472	1976
Summit	605	555	1977
Great Ohio	702	556	1977
Pilot	704	557	1977
Coral Queen	532	616	1977
Lucky Jack	603	617	1977
Islander	710	618	1977
Golden Fleece	1001	619	1977
Happy Jack	1003	620	1977
Zig Zag Fraction	1005	621	1977
Balmoral	1002	622	1977
Highland Boy	1000	623	1977
Independence	4276	687	1977
Fraction			
Red Cross	3310	1372	1978
Last Chance	3523	7609	1986

TABLE II
CLAIM GROUPS

<u>Group Name</u>	<u>Included Claims</u>	<u>Kindle Reference No.</u>	<u>Sutherland-Brown Reference No.</u>
Great Ohio	Great Ohio Pilot	36	7
Highland Boy	Delta Fraction Summit Coral Queen Lucky Jack Islander Golden Fleece Happy Jack Zig Zag Fraction Balmoral Highland Boy Summit Fraction Waterfall Fraction	29	6
Rocher Deboule Mine	Joe Fraction Juniper Balsam Jack Pine Timberline Iowa Log Cabin Balsam Fraction Pine Fraction Third Fraction Last Chance	35	5
Rocher Deboule Mountain	Hazelton View Lead Pick Moose Elk Independence Fraction	34	
Victoria	Victoria Belle View Fraction Belle Fraction Mammoth Tiger Bull Fraction	28	4

Notes: The Summit Fraction and the Waterfall Fraction were subsequently staked and were not Crown Granted. The Leo grid claim bounds the Crown Granted claims on the southeast.

4. GEOLOGY

4.1 General

The general geological environment of the Rocher Deboule property is illustrated on Figure 3 of this report. The property is predominantly underlain by an elongated pluton oriented N25°W. This is the Rocher Deboule stock and is part of the lower Cretaceous Bulkley Intrusions. It is composed primarily of granodiorite and is directly related to the observed mineralization on the subject property.

The southern and western portion of this property is underlain by the upper Jurassic, Bowser Lake Group sedimentary rocks.

4.2 Mineralization

A variety of mineralized veins are associated with the Rocher Deboule stock. The veins generally strike northeasterly and dip steeply to the northwest. They follow distinct fracture sets near the contact of the stock and in many places cut across from one joint to a parallel joint.

Three stages of mineralization have been suggested, including a pegmatitic stage formed predominantly of black hornblende and glassy quartz with feldspar, magnetite, scheelite, tourmaline, etc. The second stage generally replaces minerals of the first stage and includes chalcopyrite, arsenopyrite, pyrrhotite, pyrite and cobalt-nickel sulpharsenides. The third stage cuts across the earlier veins and includes milky quartz, sphalerite, tetrahedrite, galena and pyrite. Precious metal mineralization occurred during the second stage and the third stage. That of the second stage occurred predominantly with the cobalt-nickel sulpharsenides whereas that of the third stage is predominantly silver with tetrahedrite.

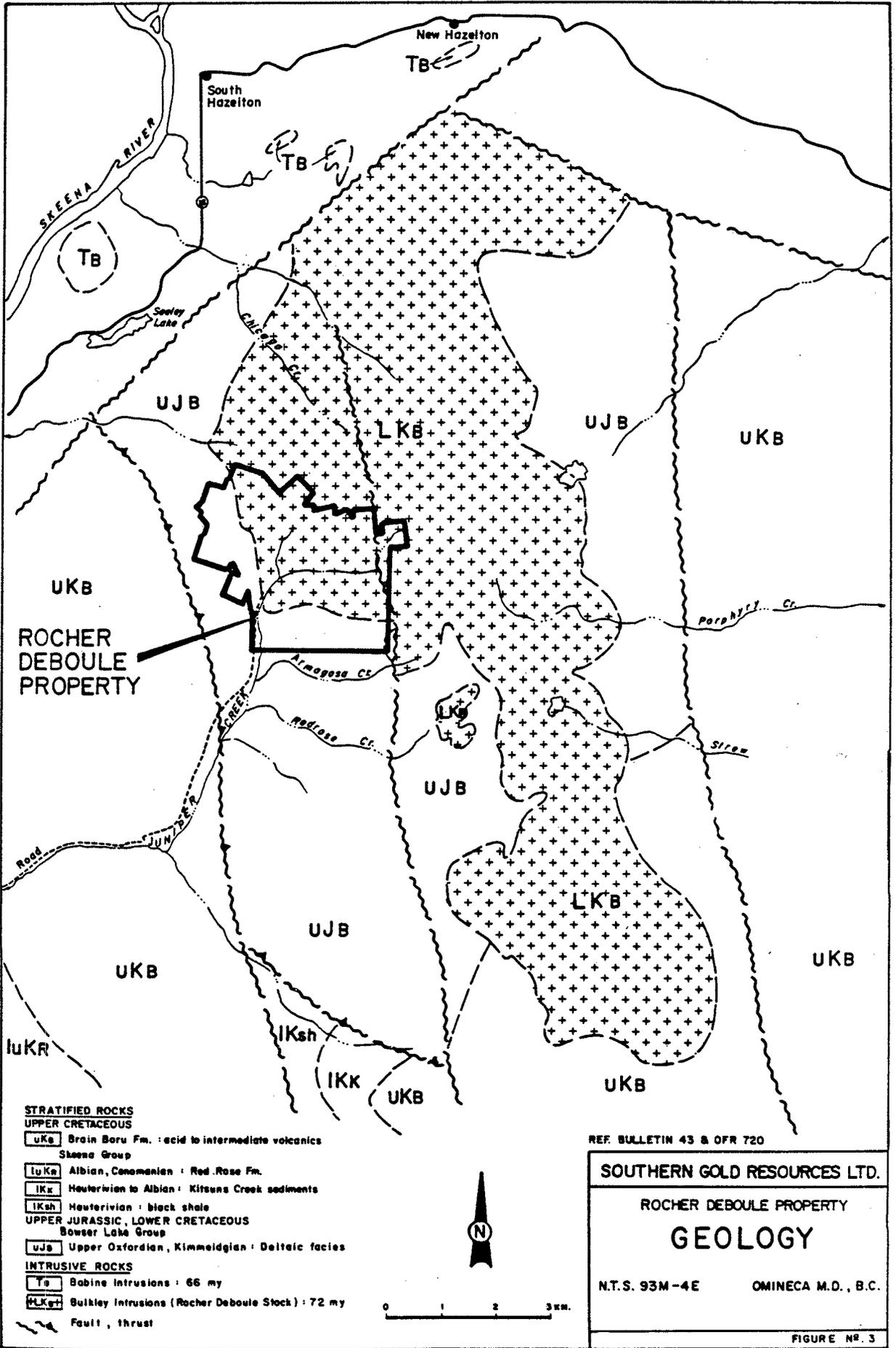
5. HISTORY AND PREVIOUS WORK

The property was originally staked in 1910 by Monroe Sargent and was transferred to Rocher Deboule Copper Co. Ltd in 1911. Work consisted primarily of cross cuts, drifts and adits on the No. 2 and No. 4 veins.

In 1914 the property was leased to Montana Continental Development Co. This company shipped 17,000 tons of ore to the Granby smelter averaging 8% Cu, \$1.65 Au and \$0.50 Ag.

In 1916 the Rocher Deboule Mining Co. Ltd. resumed operations and shipped 16,800 tons containing 1200 oz. Au, 16,700 oz. Ag and 1,619,000 pounds Cu. Operations ceased in 1918.

In 1929 Aurimount Mines Ltd. optioned the property and shipped 72 tons of hand sorted ore which assayed 0.14 oz/ton Au, 40 oz/ton Ag and 4% Cu.



The property remained inactive until 1950 when it was acquired by Western Uranium Cobalt Mines Ltd. which subsequently became Far West Mining Ltd. A 100-ton mill which operated in 1952 milled 12,814 tons of ore to produce 267 oz Au, 18,640 oz Ag and 305,498 pounds Cu.

No other production or exploration of this property is known of by the author.

6. GEOPHYSICAL SURVEY

Two survey grids were established and examined at this time. The main Deboule Property grid is comprised of 12 north-south lines, spaced at 100 metre intervals and 3 fill-in lines, 50 metres apart. Stations were occupied at 25 metre increments along each line. This grid was positioned to examine the main showings in the area. The Armagosa Grid is composed of two north south lines, 400 metres long and spaced 100 metres apart. This grid was set up to test an east-west vein.

Each grid was surveyed with the Scintrex IGS-2 system which measured the earths' total magnetic field intensity and the inphase, quadrature and field strength values of three VLF-EM signals: Seattle, Washington (NLK, 24.8 kHz), Annapolis, Maryland (NSS, 21.4 kHz) and Lualualei, Hawaii (NPM, 23.4 kHz). Apparently the operator faced 180° to the preferred direction when recording the data, generating a reverse sign to the inphase data. This situation has been compensated for by picking the opposite inphase inflection point from what would normally be used to delineate a conductor axis with this system..

7. DATA PROCESSING

The data was presented to GeoSci Data Analysis Ltd. on computer disk with preliminary reductions applied. Both the magnetic and VLF-EM data had already been edited for noise spikes and diurnal variations. Inphase and quadrature data was provided in both field and Fraser filtered format. The Fraser filter appears to have been correctly applied to compensate for the operator facing the reverse direction.

VLF-EM inphase, quadrature and field strength measurements are presented in profile format at a scale of 1:2500. In addition, the Fraser filtered inphase data is presented as contours at the same scale. A well defined strike orientation of 075° was observed in the inphase VLF-EM data. This preferred strike was incorporated in the contouring gridding procedure. Smaller scale (1:7500) color contour maps of the field strength and Fraser filtered inphase data are presented in the text of this report.

The magnetic data is presented in contour format at a scale of 1:2500 and in colored contoured format in the text of this report.

8. DISCUSSION OF RESULTS

8.1 Rocher Deboule Property

Figures 4 through 10 inclusive are small scale color contour maps of the survey data bound in the body of this report. These presentations clearly exhibit both the general and localized anomalous trends observed in the data. Figures 11 through 17 are 1:2500 scale maps and are stored in the pockets.

8.1.a Magnetic Survey

The magnetic intensity color contour map (Fig. 4) clearly illustrates the magnetic susceptibility change between materials within the Rocher Deboule stock and the country rocks. This characteristic outlines the southwestern edge of this intrusive body as an arcuate lineation extending from line OW station 100N to line 500W station 600N. Various undulations and indentations along this lineation are likely a result of local terrain.

In addition to the general geological structure described above, the magnetic data delineates a number of smaller and more interesting anomalous trends. These features are generated from surface or very near surface, narrow sources which generally strike east-west to 075° . Both magnetic highs and magnetic lows are present respectively indicating the accumulation and absence of ferromagnetic materials (magnetite, pyrrhotite, ilmenite etc.). These anomalies are most prominent within and along the edge of the intrusive mass. Considering the geological environment, the most likely source of these features are the mineralized fracture sets observed at the contact between the stock and the country rock. The magnetic data suggests that these structures extend into the stock.

Two small areas of high magnetic intensity are observed adjacent to the major intrusive mass: one on the north end of line 600W and the other extending from line OW to 300W centred on station 50N. These may be mineralized fractures or small outliers of the intrusive material.

Three distinctly isolated, east-west oriented magnetic lows align to form a northwesterly striking feature which parallels the southwestern edge of the intrusive body. This response follows a series of surface drainage channels and may be reflecting a major fault system. The terrain has likely exposed the source of the isolated magnetic anomalies in the creek beds.

The localized magnetic anomalies have been highlighted on the 1:2500 scale contour map, Figure 11.

8.1.b VLF-EM Survey

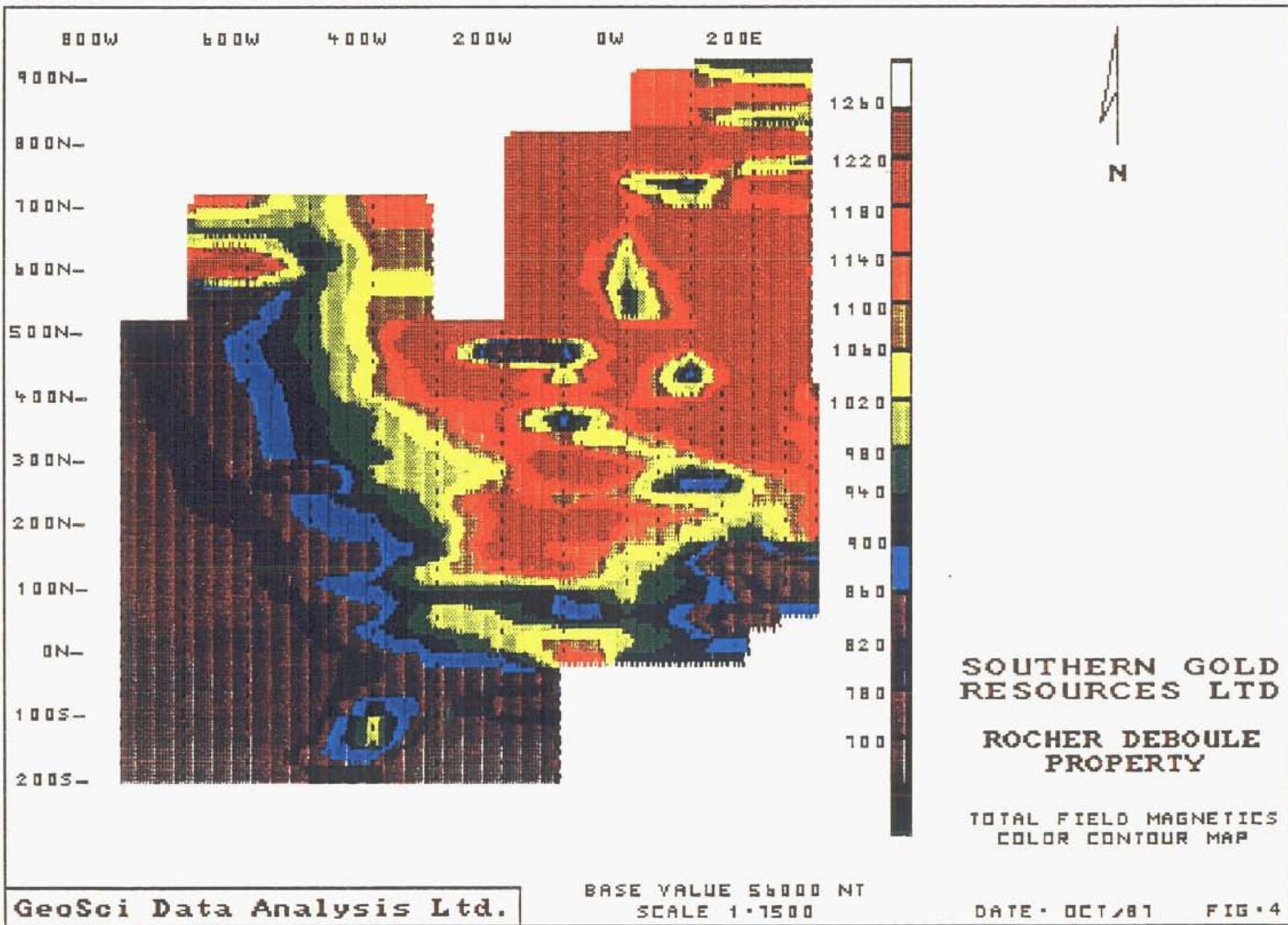
The VLF-EM data is presented in profile format on Figures 12, 13 and 14, representing the Lualualei, Seattle and Annapolis frequency information respectively. Interpreted high conductivity lineations are flagged on the profile and Fraser filtered inphase contour maps, Figures 15, 16 and 17.

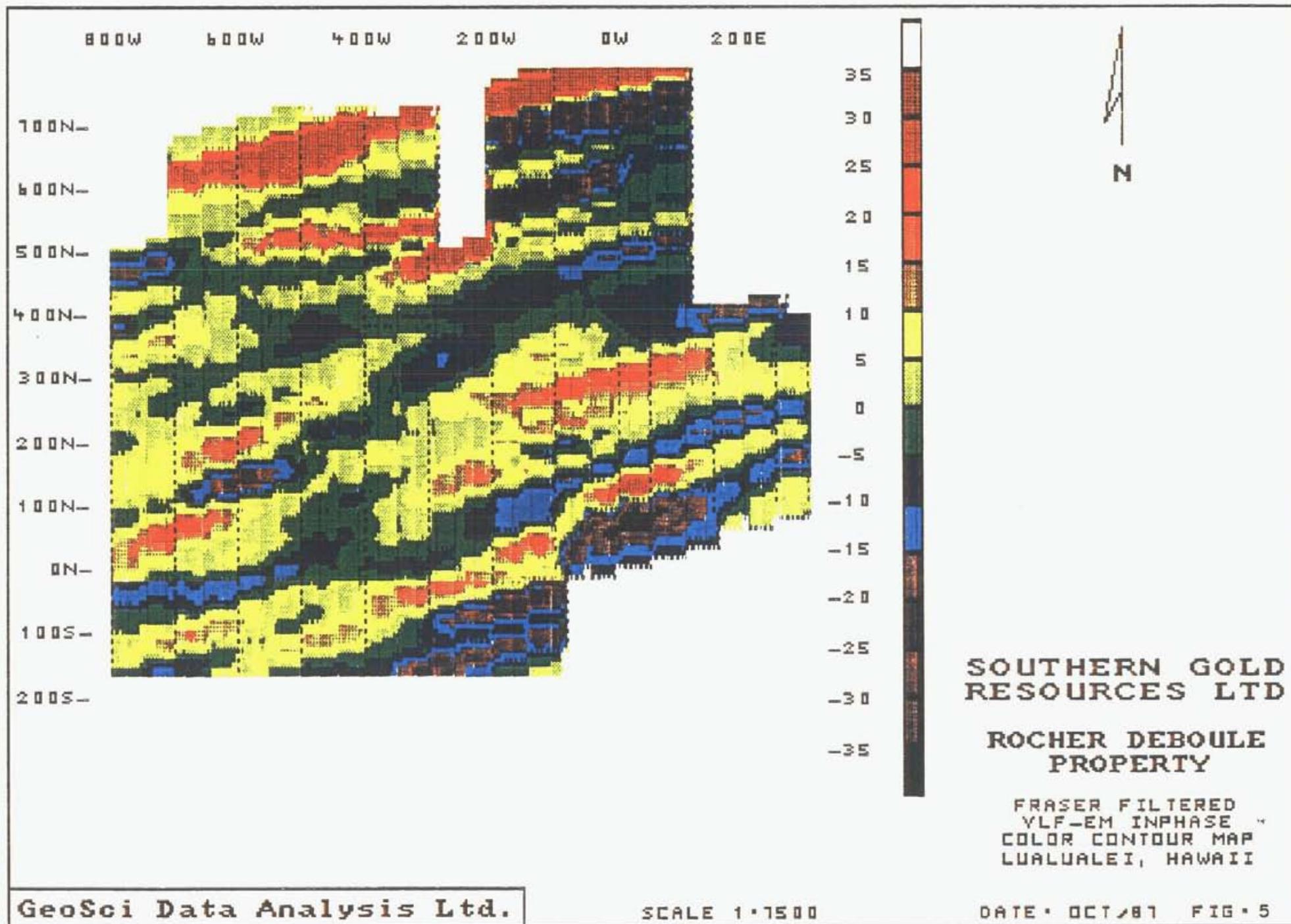
The field strength measurements for all three frequencies monitored were relatively low. Seattle was the strongest with average values of 40%. Lualualei averaged 10% and Annapolis 4%. In spite of these low intensities the inphase and quadrature values observed were relatively consistent. The colored contour maps of the field strength measurements, Figures 6, 8 and 10, indicate an increase in the background surface conductivity across the sedimentary country rocks in the western portion of the survey grid. The outline of the intrusive stock is not as clearly delineated as in the magnetic data but is weakly evidenced. The most interesting feature observed is a 100 metre wide band of increased field strength measurements of the Seattle and Annapolis signals which correlate with the trend of magnetic lows described above. This response supports a fault or contact interpretation.

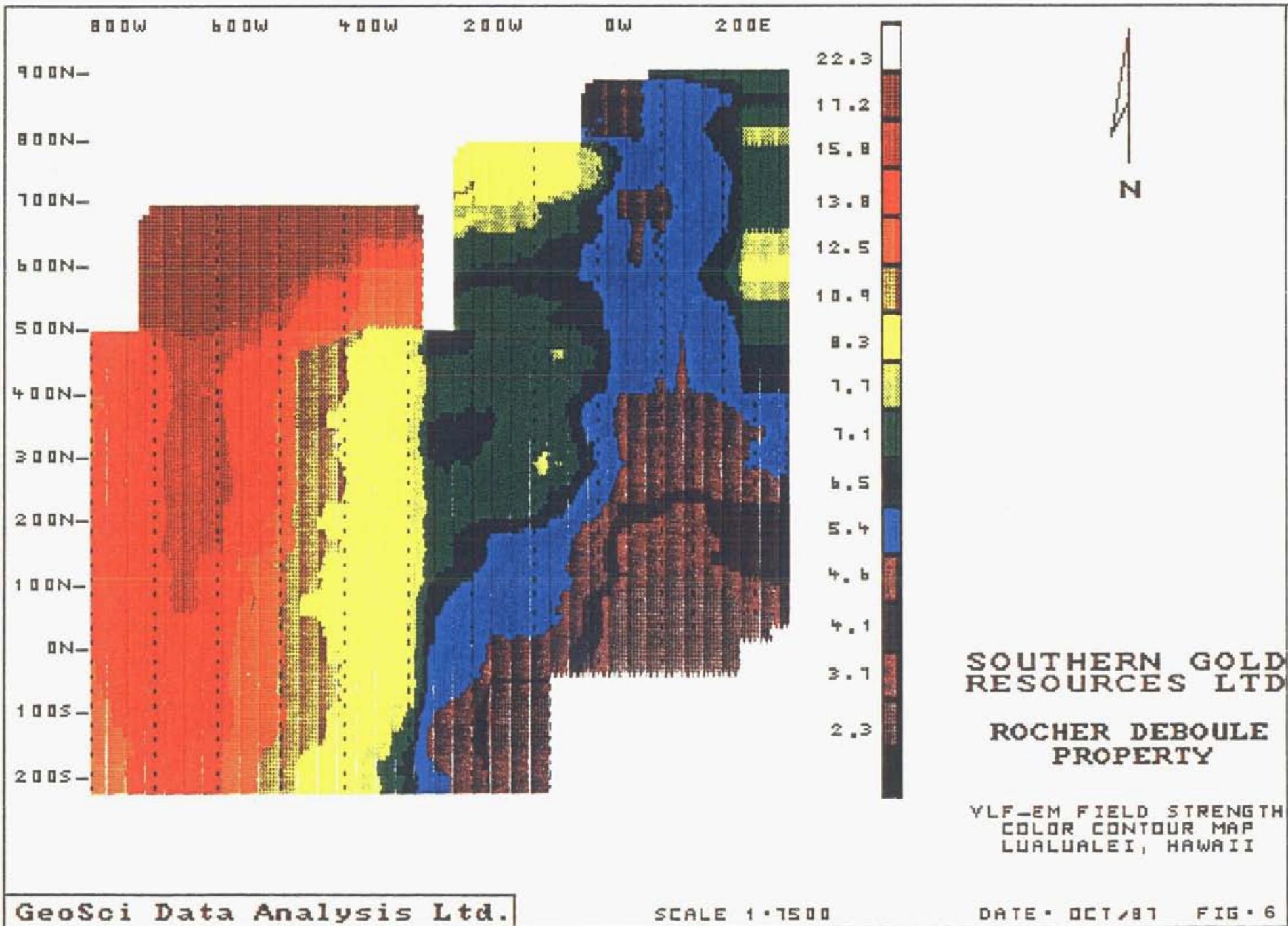
The inphase and quadrature profiles generally parallel each other over most of the area indicating moderate conductivities to the source bodies. Reverse quadrature responses associated with the inphase inflections are mapped on line 500W station 625N, line 300W station 475N and on the conductor mapped on the north ends of lines 100W to 100E inclusive. This combination of responses indicates that the conductivity of these causative bodies is significantly higher than that associated with the majority of the anomalies observed across this grid.

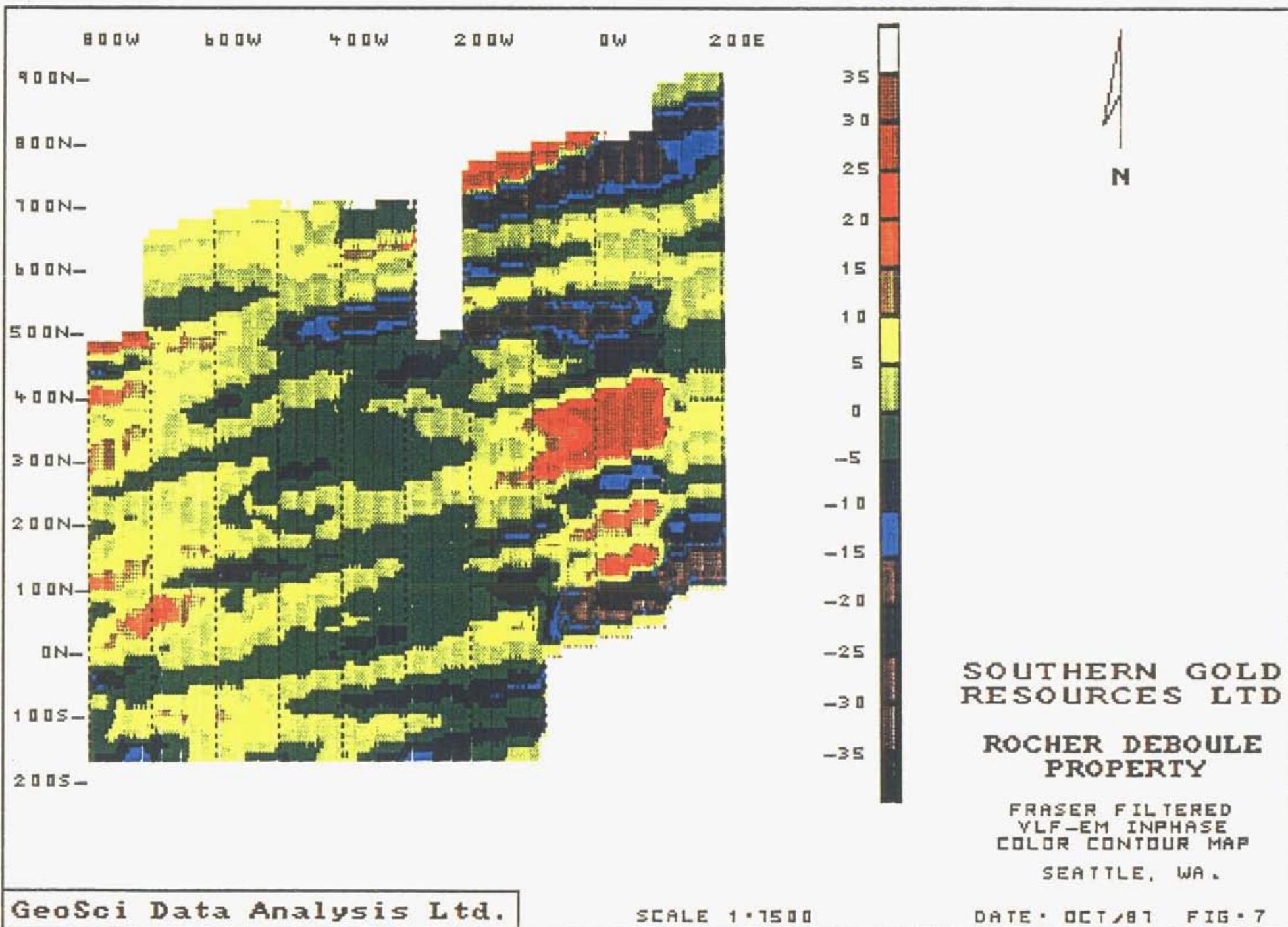
The VLF-EM data for all three transmission frequencies monitored exhibit a multitude of conductivity responses across the property. Very good correlation between the data sets is observed with the only significant difference being in the area bounded by lines 200W and 400W and stations 400N to 500N. The Seattle frequency data suggests this is an area of low conductivity lineations while the Lualualei frequency infers high conductivity.

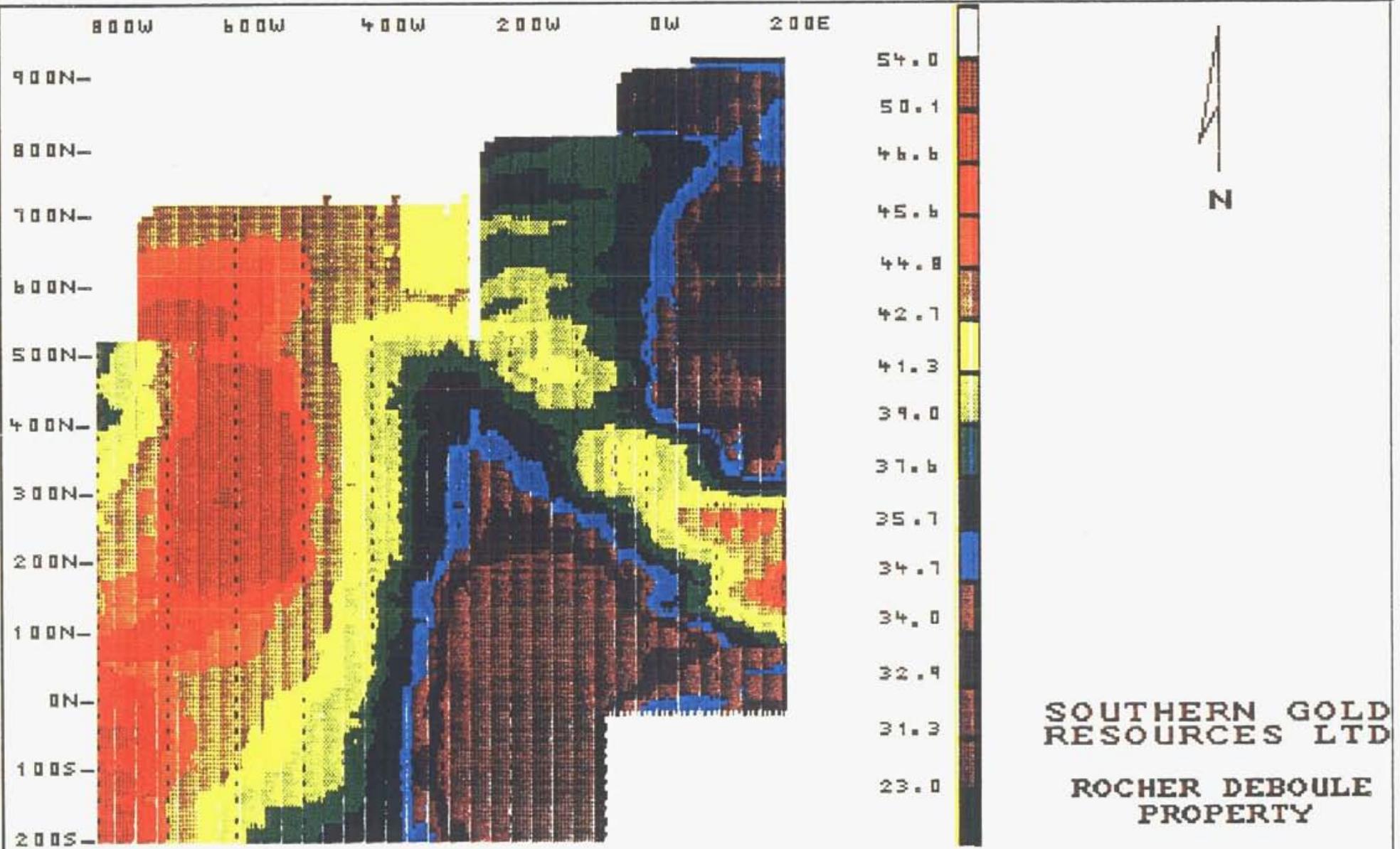
The majority of the electromagnetic anomalies are very narrow and extend for 100 to 200 metres along a preferred strike of 075° . Some align to form regional trends but most appear to start near the mapped intrusive/sedimentary contact and extend into the intrusive mass. The sources of these anomalies are generally at or very near the surface and can likely be identified by careful geological mapping. The distinctive banding between the conductive and resistive rocks evident across the intrusive mass is so pronounced that it is difficult to determine which characteristic is representative of the anomalous geology and which reflects the host rock. The small, isolated magnetic low lineations observed in this same area correlate better with the resistive zones than with the areas of increased conductivity.

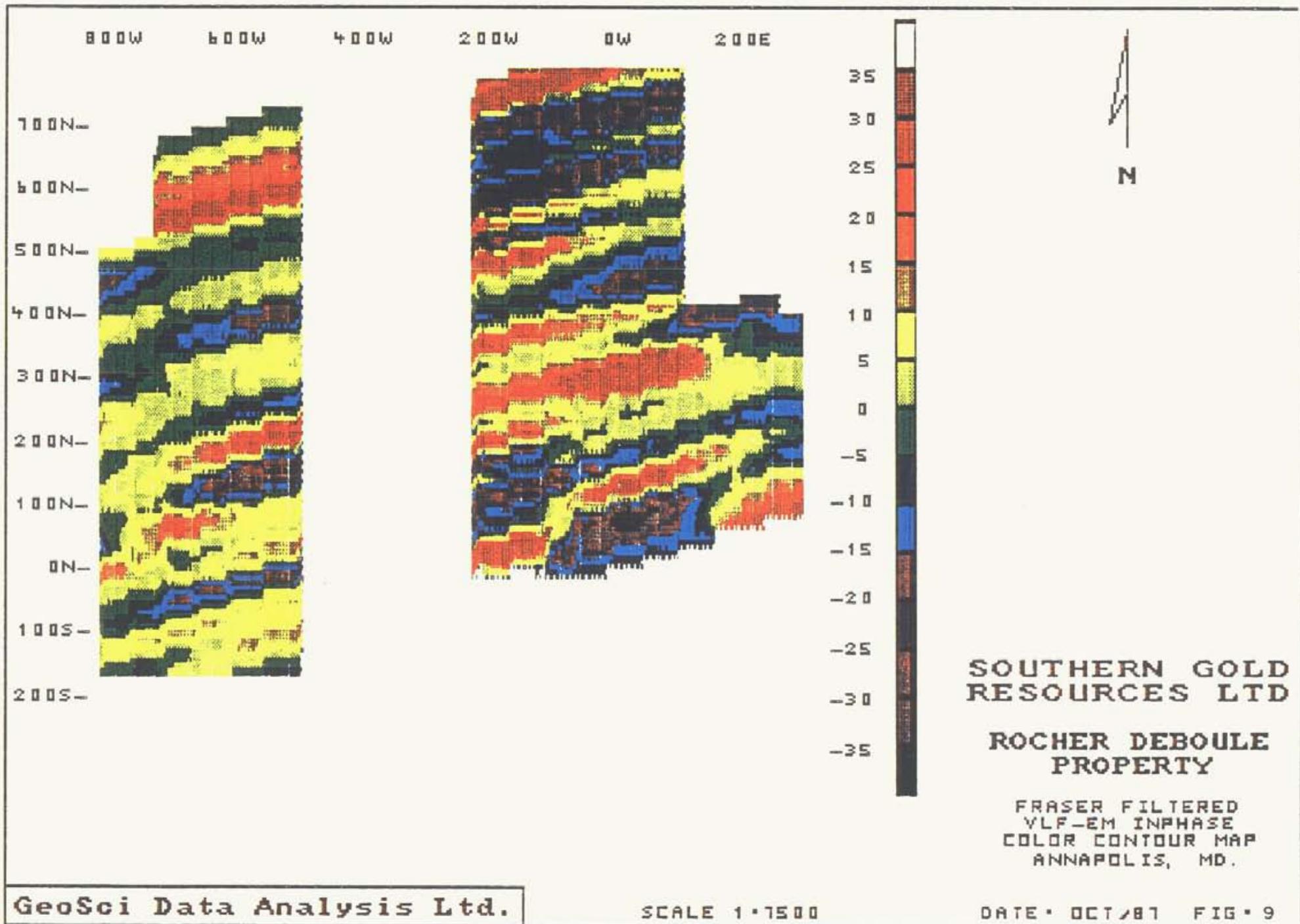


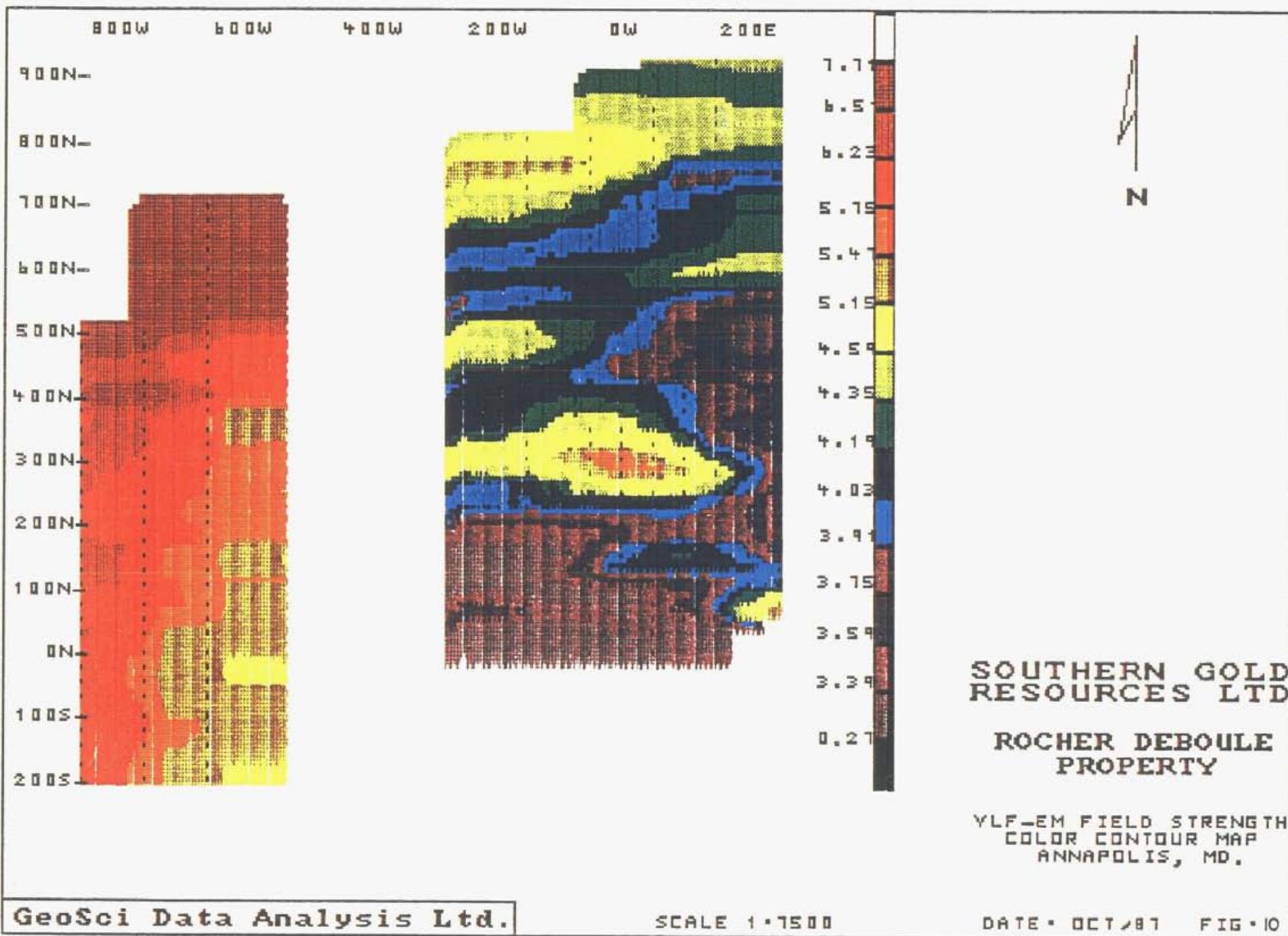












8.2 Armagosa Grid

Two survey lines 100 metres apart, each 400 metres long, were surveyed in the same manner as the main grid. The magnetic and VLF-Electromagnetic information is presented in profile format as Figures 18, 19 and 20.

8.2a Magnetic Survey

A shift in the background magnetic field intensity noted near station 175N on both lines indicates a geological or lithological contact at this position with higher magnetic susceptibility materials located to the north. A 50 nT localized magnetic high is associated with this contact on line 200W. This may be indicating very minor amounts of magnetite or pyrrhotite but is more likely a result of varying alteration effects.

8.2.b VLF-EM Survey

Both Annapolis and Lualualei frequency information was gathered across the two grid lines. The same contact effect observed in the magnetic data is present in the VLF-EM data. Assuming the operator facing direction was reversed in the same manner noted on the main grid, this contact does not appear to have an increased conductivity associated with it. Weak conductors are observed to the north near station 350N on both lines.

400N-

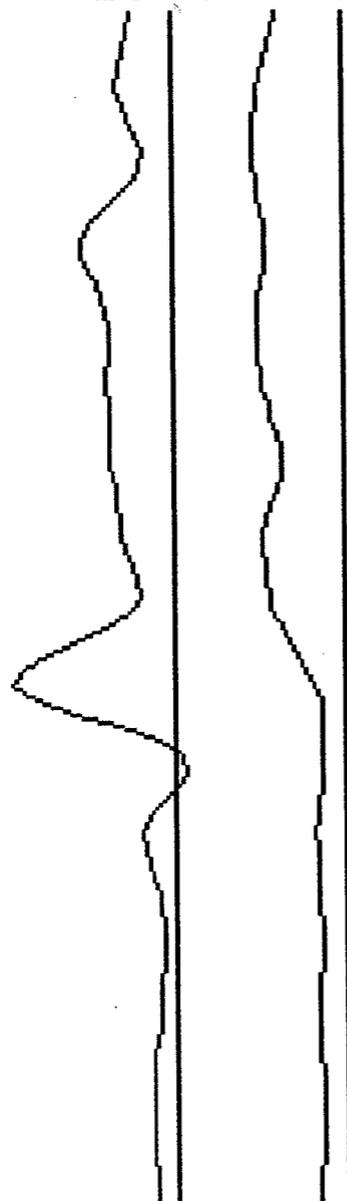
200W 100W

300N-

200N-

100N-

0N-



KEY

INSTRUMENT • SCINTREX IGS-2
 PLOTTED DATA •
 TOTAL MAGNETIC FIELD INTENSITY (NT)
 BASE VALUE (SURVEY LINE) • 56500 NT
 VERTICAL SCALE • 25 NT per mm
 (POSITIVE TO WEST)

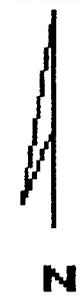
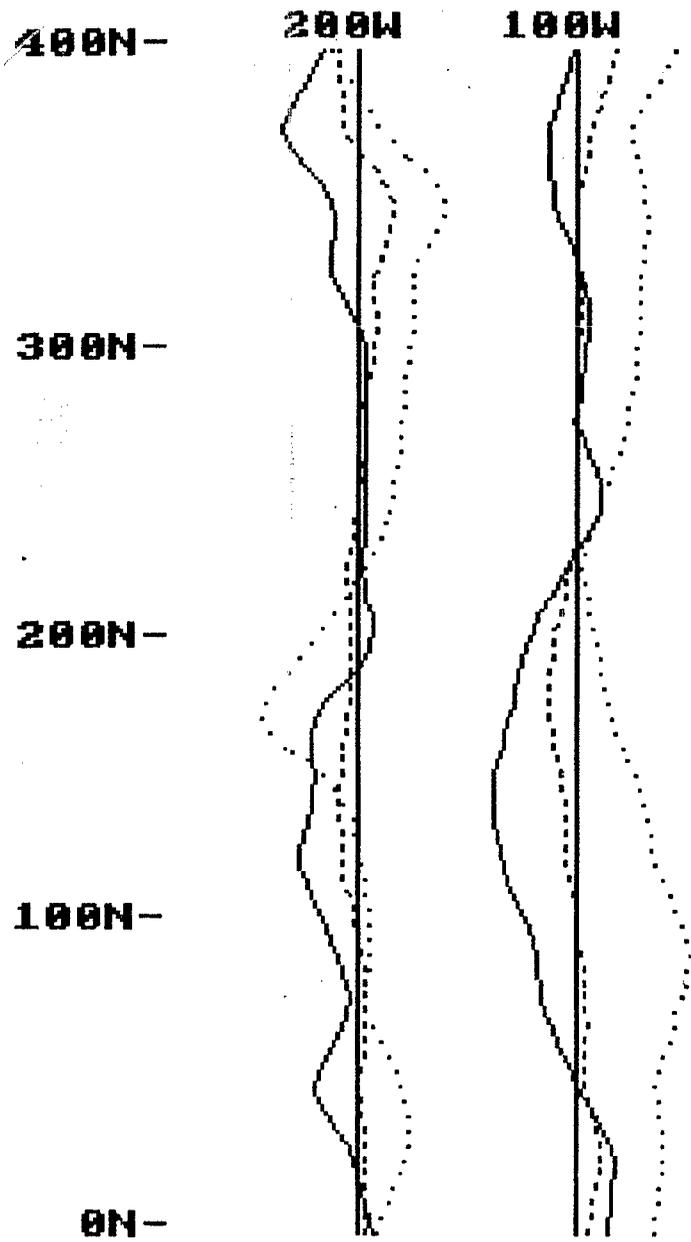
MAP SCALE • 1 • 2500
 NTS 93M/4E
 OMINECA MINING DIVISION

SOUTHERN GOLD RESOURCES LTD.

ROCHER DEBOULE PROPERTY

ARMAGOSA GRID

TOTAL MAGNETIC FIELD INTENSITY
PROFILE MAP



KEY

INSTRUMENT: SCINTREX IGS-2
 PLOTTED DATA:
 INPHASE - SOLID LINE
 QUADRATURE - DASHED LINE
 FIELD STRENGTH - DOTTED LINE
 VERTICAL SCALE ↑ POSITIVE TO WEST ↑
 INPHASE - 2.5 % PER mm
 QUADRATURE - 2.5 % PER mm
 FIELD STRENGTH - 0.25 % PER mm
 BASE VALUE (SURVEY LINE)
 INPHASE - 0%
 QUADRATURE - 0%
 FIELD STRENGTH - 10%

MAP SCALE - 1:2500
 NTS - 93M/4E
 OMINECA MINING DIVISION

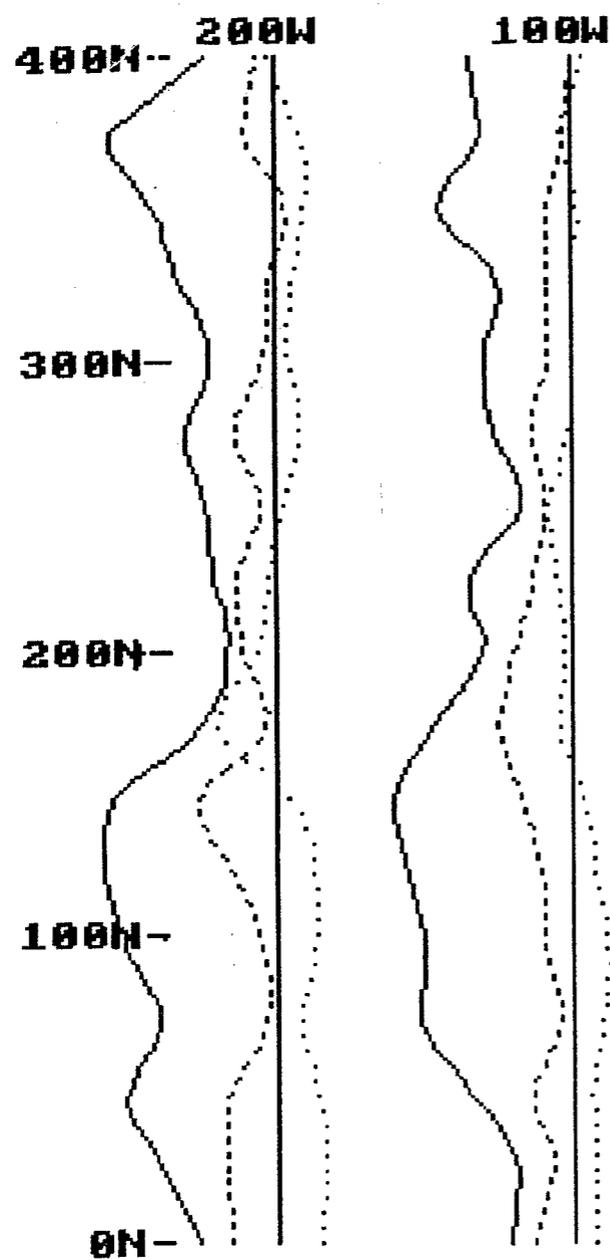
SOUTHERN GOLD RESOURCES LTD.
ROCHER DEBOULE PROPERTY
ARMAGOSA GRID

VLF-EM STACKED PROFILE MAP
LUALUALEI, HAWAII (23.4 kHz)

GeoSci Data analysis Ltd.

DATE: OCT 7 1987

FIG: 21



KEY

INSTRUMENT: SCINTREX IGS-2
 PLOTTED DATA:
 INPHASE - SOLID LINE
 QUADRATURE - DASHED LINE
 FIELD STRENGTH - DOTTED LINE
 VERTICAL SCALE (POSITIVE TO WEST)
 INPHASE - 2.5 % PER mm
 QUADRATURE - 2.5 % PER mm
 FIELD STRENGTH - 0.25 % PER mm
 BASE VALUE (SURVEY LINE)
 INPHASE - 0%
 QUADRATURE - 0%
 FIELD STRENGTH - 5%

MAP SCALE - 1:2500
 NTS - 43M/4E
 OMINECA MINING DIVISION

SOUTHERN GOLD RESOURCES LTD.

**ROCHER DEBOULE PROPERTY.
 ARMAGOSA GRID**

**VLF-EM STACKED PROFILE MAP
 ANNAPOLIS, MARYLAND (21.4 kHz)**

GeoSci Data analysis Ltd.

DATE: OCT 1 1981

FIG: 22

9. CONCLUSIONS

The magnetic data contains two distinct responses across the main survey grid. The general outline of intrusive stock is clearly indicated as a gradient from high magnetic intensities observed across the stock to lower values reflecting the country rock. Specific delineation of the surface expression of this contact can best be accomplished by using the isomagnetic lines as a guide between known contact positions.

A number of small isolated magnetic lows are observed within the stock which likely reflect localized areas of increased fault activity. Some of these magnetic anomalies align to form a northwesterly trending zone which parallels the outline of the stock. These may be reflecting major fault activity along a series of southeasterly flowing drainage channels.

Three outliers of high magnetic susceptibility materials are mapped along the perimeter of the larger stock. These are likely composed primarily of intrusive material but may be accumulations of magnetite or pyrrhotite mineralization.

Inphase, quadrature and field strength measurements of three VLF-EM stations were gathered during the course of this survey. The field strength intensities were relatively weak but consistent and reliable readings were obtained. Weak evidence of the outline of the Rocher Deboule stock was observed in the field strength data. A northwesterly trending zone of increased field strength values correlates with a magnetic trend across the intrusion and support a fault interpretation.

Alternating narrow bands of moderately conductive and resistive materials are aligned at 075° across the main survey grid. These trends appear to be comprised primarily of 100 to 200 metre long lenses which are most pronounced near the intrusive/sedimentary contact and normally extend into the intrusive mass. These electromagnetic anomalies are generated from surface or very near surface sources. These geophysical anomalies are probably related to the mineralized fault sets mapped along the contact.

Two 400 metre long lines were surveyed across the Armagosa grid to test a known vein structure. Both the magnetic and electromagnetic data indicate a geological contact near station 175N to 200N but no significant conductivity increase appears to be associated with it.

10. RECOMMENDATIONS

Based on these results and previous production, the Rocher Deboule Property warrants continued exploration. The small, lense type magnetic and electromagnetic anomalies mapped are likely related to the mineralized fault sets previously mined.

The next immediate exploration phase should involve a correlation between the known vein systems and the geophysical anomalies to prioritize the followup targets. Cultural features such as railroad lines, tram cables, old buildings, tailing piles and other refuse from the previous mining operations could generate the types of geophysical responses observed and may be used to explain some of the mapped anomalies. Most of the geophysical targets will likely be identified by surface or trenching geological examinations.

Particular attention should be afforded to three electromagnetic conductors which exhibit significantly higher apparent conductivity than the majority of the anomalies. These are located on line 500W at station 650N, line 300W station 475N and line 100W station 750N.

Respectively submitted,



E. Trent Pezzot, BSc.
Geology, Geophysics

CERTIFICATION

I, E. TRENT PEZZOT, of the City of Richmond, Province of British Columbia, hereby certify as follows:

- I am a principal of GeoSci Data Analysis Ltd., a company incorporated under the laws of the Province of British Columbia.
- The Richmond office of GeoSci Data Analysis Ltd. is located at 3740 Lockhart Road, Richmond, B.C.
- I graduated from the University of British Columbia in 1974 with a BSc. degree in the combined honors Geology and Geophysics program.
- I have practiced my profession continuously from that date.
- I hold no interest, direct or indirect, in Southern Gold Resources Ltd. or any of its' affiliates, nor do I expect to receive any.
- I consent to the use of this report or the information contained within it, provide the context is not changed to alter the intended meaning, in or in connection with a Prospectus or in a Statement of Material Facts.



E. TRENT PEZZOT
BSC. Geophysics/Geology

Oct. 7, 1987

COST BREAKDOWN

OFFICE

Processing & Plotting

Rocher Deboule Grid

Stacked profiles (Hawaii, Annapolis, Seattle)\$ 236.00

Fraser filter contour (Hawaii, Annapolis, Seattle)\$ 276.00

Contour (magnetic)\$ 104.00

False Color mapping\$ 315.00

Armagosa Grid

Stacked profiles (Hawaii, Annapolis)\$ 64.00

Profile (magnetic)\$ 32.00

Data Transcription\$ 30.00

Data handling (File structuring, duplicate station
and line removal)\$ 60.00

Drafting\$ 275.00

Reproduction\$ 340.00

Secretarial/Materials\$ 165.00

Interpretation & Report Compilation\$ 550.00

Report collation/delivery/sundry\$ 55.00

 SUB TOTAL \$2502.00

FIELD

These costs supplied by S.P. Quin, Southern Gold Resources Ltd.,
for field and logistical costs of acquiring the data:

Survey

Equipment rental (7 days @ \$163.00)\$1140.00

Payroll (6 man days @ \$150.00)\$ 900.00

Support

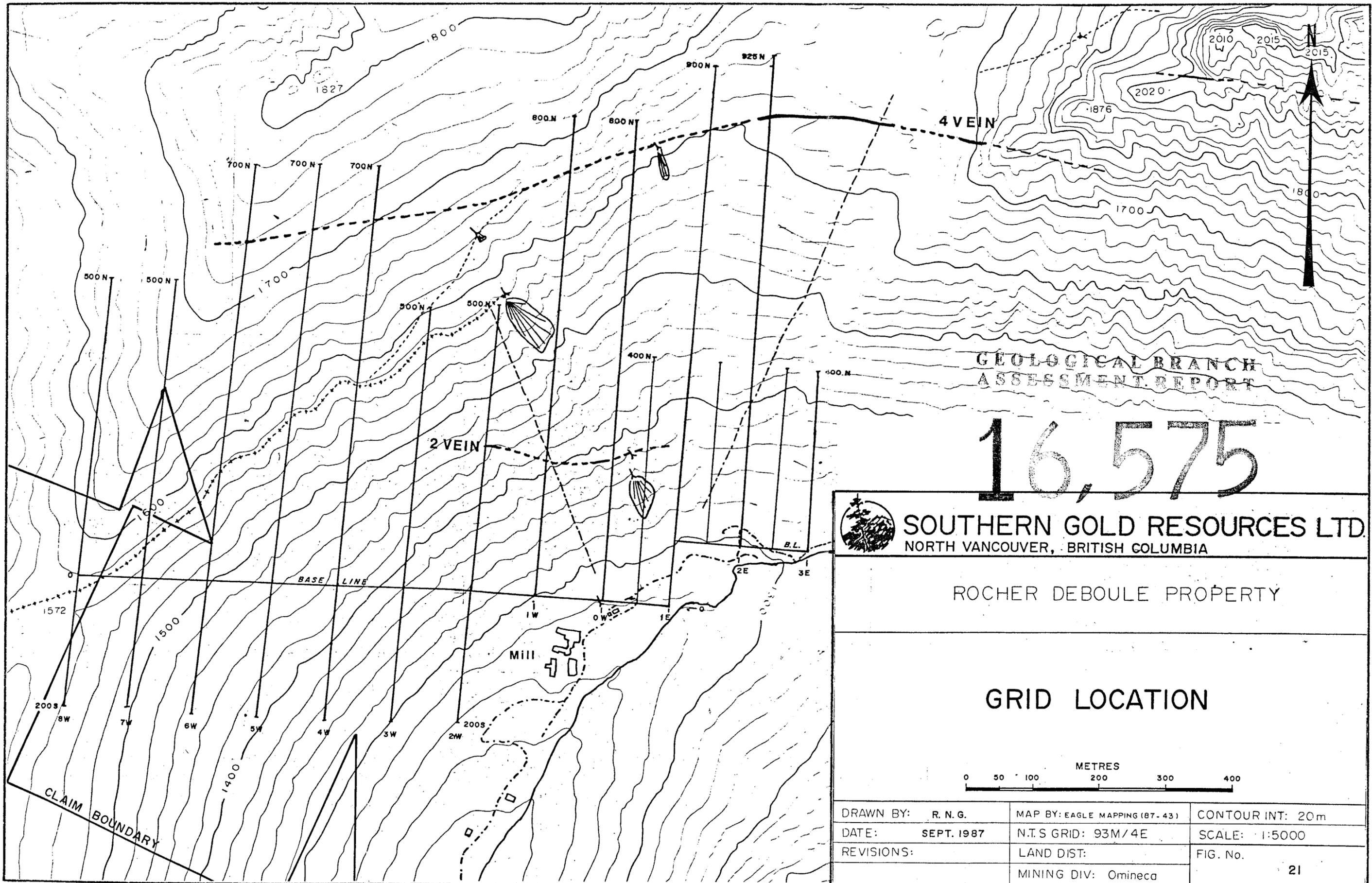
Hotel and Meals (6 days @ \$55.00)\$ 330.00

Physical Work

13.5 km. roadwork\$8492.16

 SUB TOTAL \$10862.16

TOTAL ASSESSMENT VALUE \$13364.16



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,575



SOUTHERN GOLD RESOURCES LTD.
NORTH VANCOUVER, BRITISH COLUMBIA

ROCHER DEBOULE PROPERTY

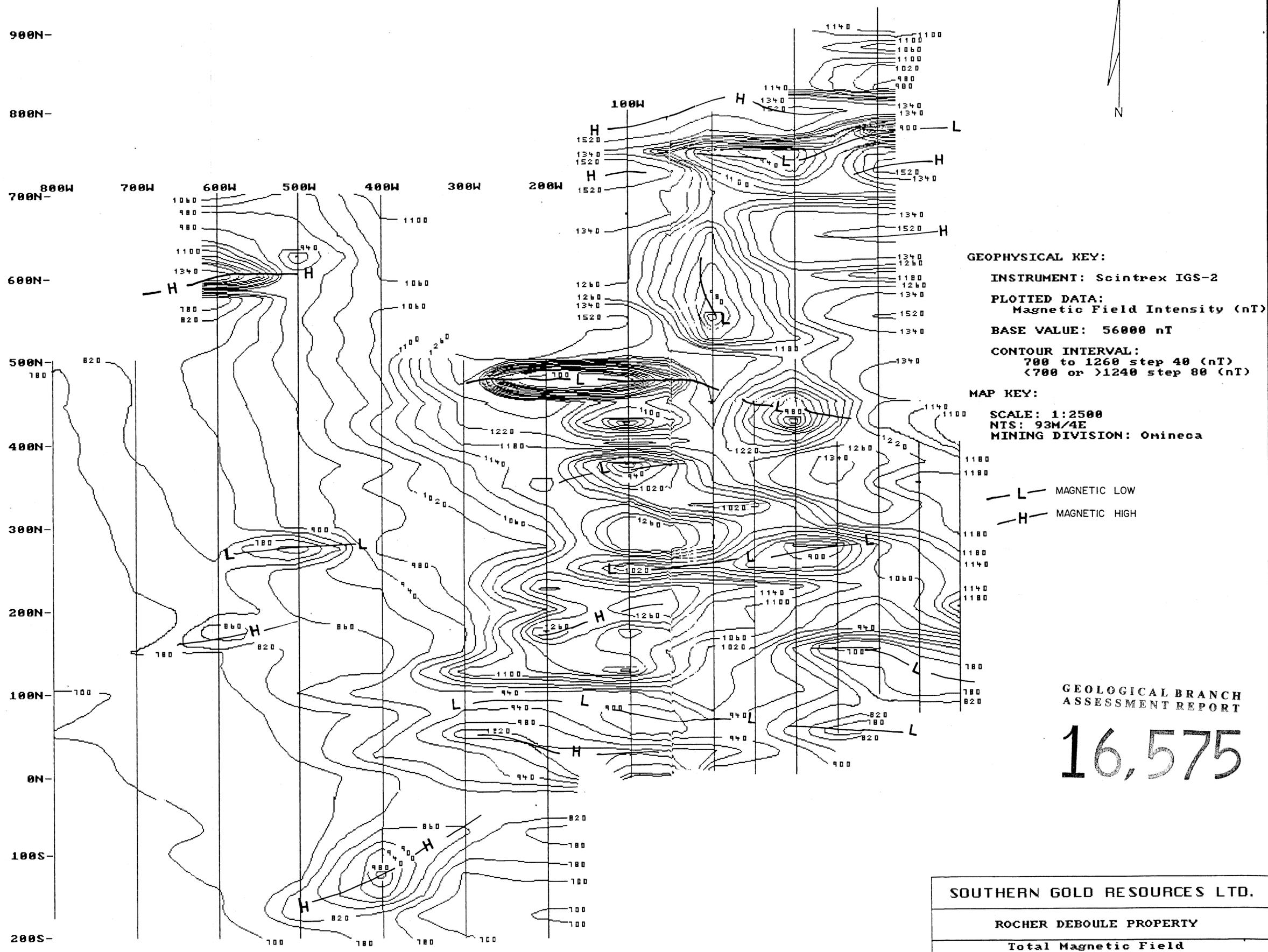
GRID LOCATION



DRAWN BY: R. N. G.	MAP BY: EAGLE MAPPING (87-43)	CONTOUR INT: 20m
DATE: SEPT. 1987	N.T.S GRID: 93M/4E	SCALE: 1:5000
REVISIONS:	LAND DIST:	FIG. No.
	MINING DIV: Omineca	21

900N-
800N-
700N-
600N-
500N-
400N-
300N-
200N-
100N-
0N-
100S-
200S-

800W 700W 600W 500W 400W 300W 200W 100W



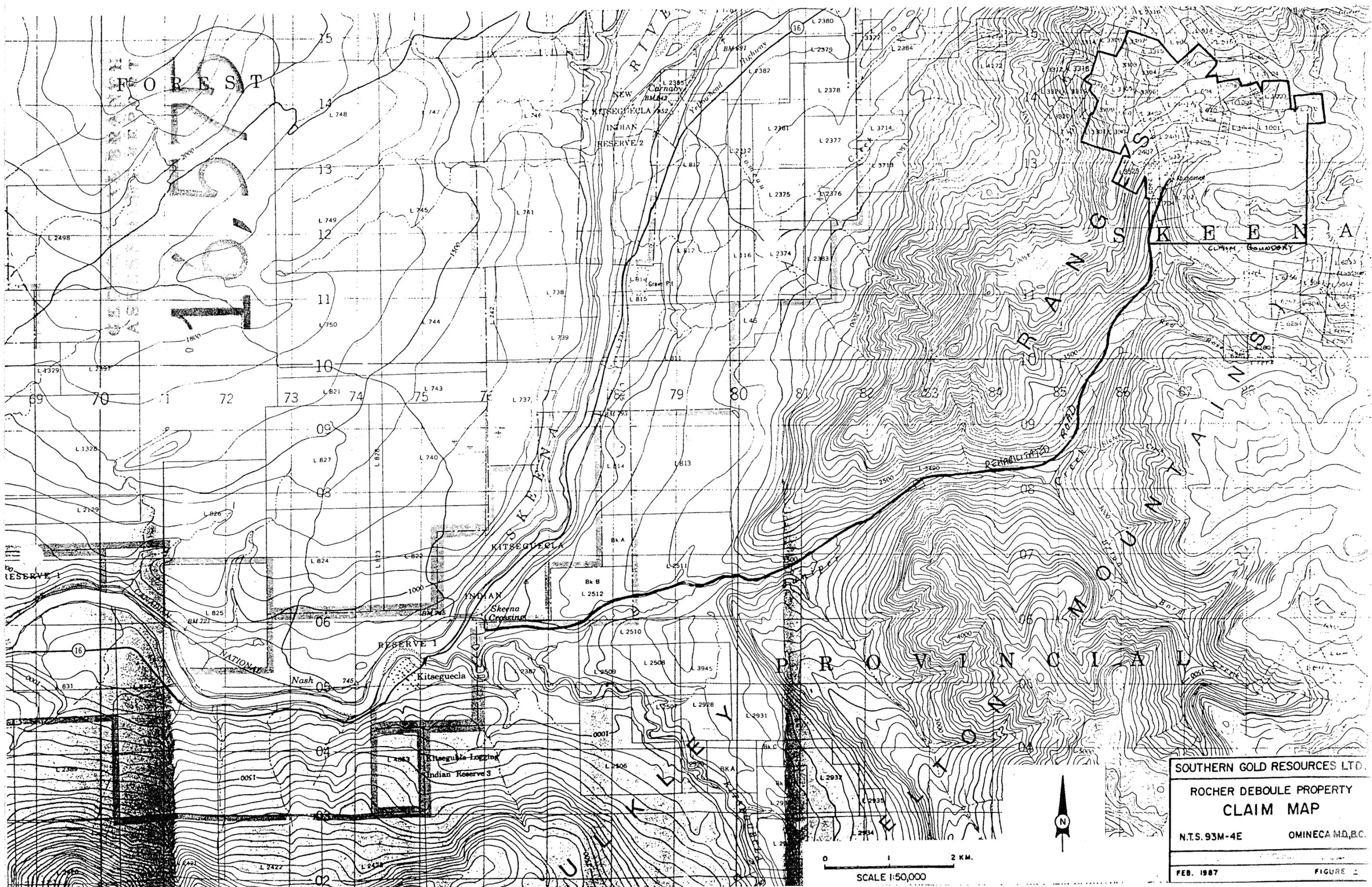
GEOPHYSICAL KEY:
INSTRUMENT: Scintrex IGS-2
PLOTTED DATA: Magnetic Field Intensity (nT)
BASE VALUE: 56000 nT
CONTOUR INTERVAL:
 700 to 1260 step 40 (nT)
 <700 or >1240 step 80 (nT)

MAP KEY:
SCALE: 1:2500
NIS: 93M/4E
MINING DIVISION: Omineca
 — L — MAGNETIC LOW
 — H — MAGNETIC HIGH

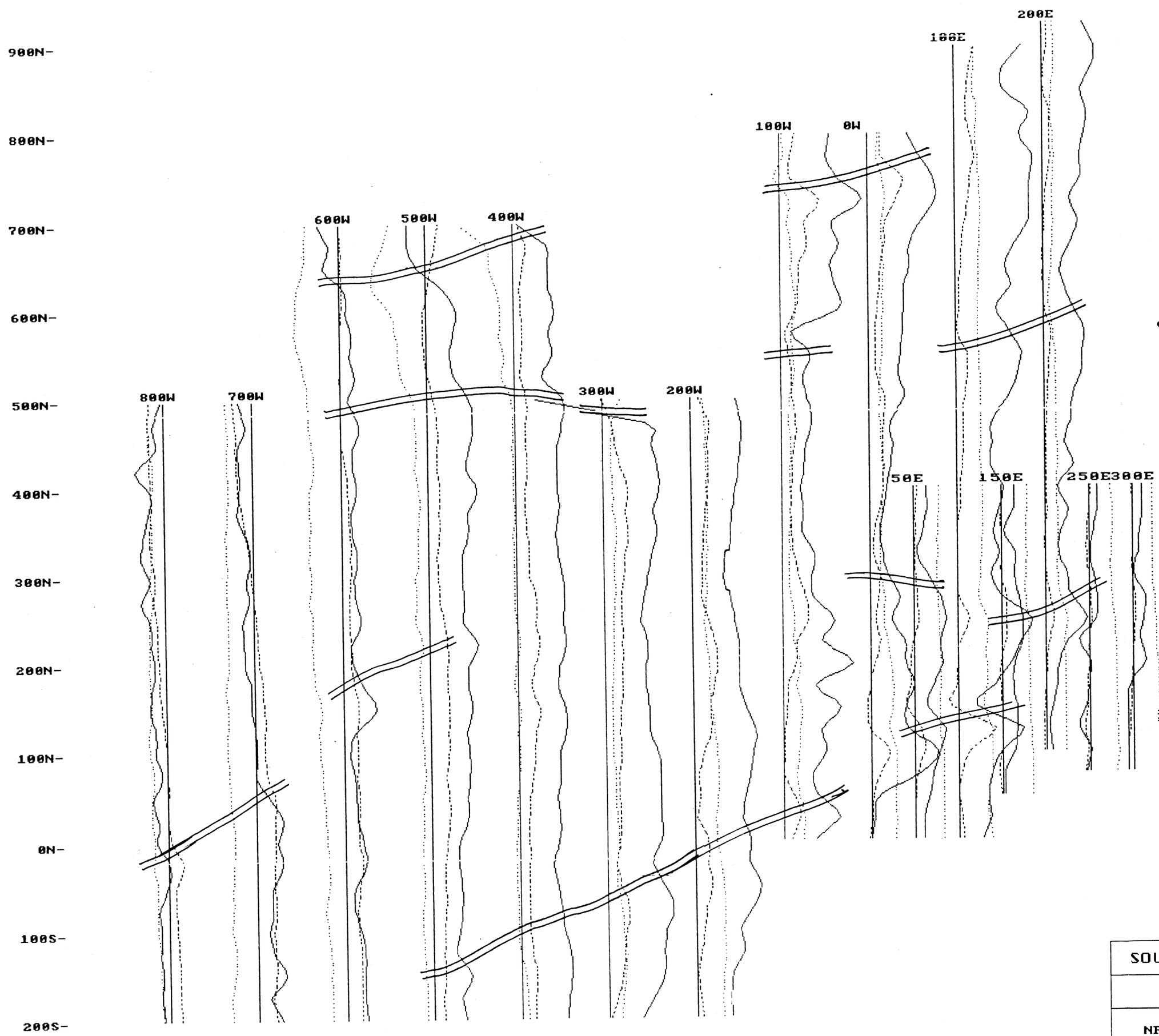
GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,575

SOUTHERN GOLD RESOURCES LTD.	
ROCHER DEBOULE PROPERTY	
Total Magnetic Field Intensity Contour Map (nT)	
SURVEY* Southern Gold Resources Ltd.	
PROCESSING* GeoSci Data Analysis Ltd.	
DATE: Oct 7, 1987	Fig: II



SOUTHERN GOLD RESOURCES LTD.
 ROCHER DEBOULE PROPERTY
CLAIM MAP
 N.T.S. 93M-4E OMINICA MD, B.C.
 FEB. 1987 FIGURE 1



GEOPHYSICAL KEY:
INSTRUMENT: Scintrex IGS-2
PLOTTED DATA:
 InPhase -> Solid line
 Quadrature -> Dashed line
 Field Strength -> Dotted line
VERTICAL SCALE:
 InPhase -> 2.5% per mm.
 Quadrature -> 2.5% per mm.
 Field Strength -> 0.5% per mm.
BASE VALUE (survey line):
 InPhase -> 8%
 Quadrature -> 8%
 Field Strength -> 40%

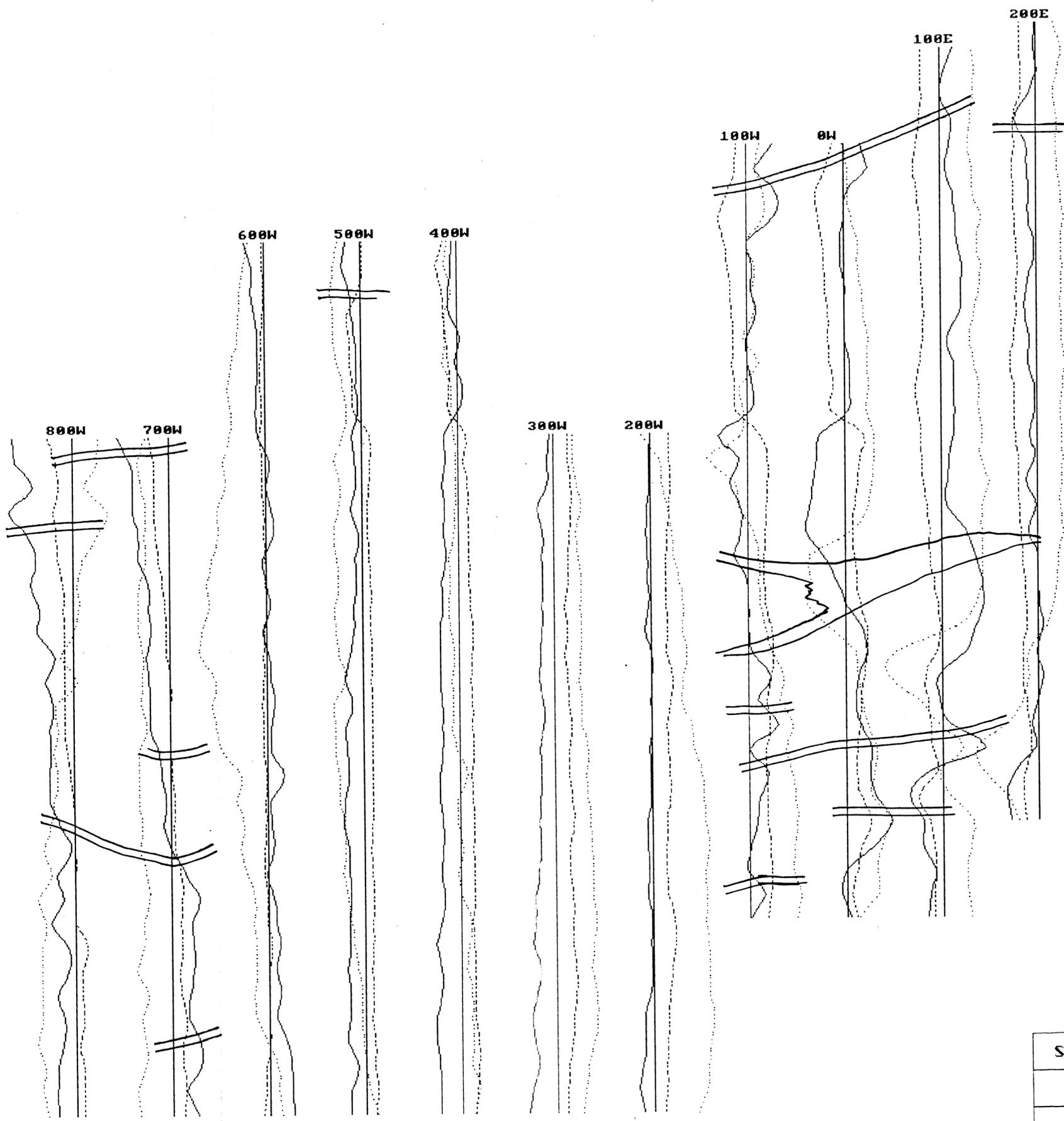
MAP KEY:
SCALE: 1:2500
NTS: 93M/4E
MINING DIVISION: Omineca
 = CONDUCTOR

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

16,575

SOUTHERN GOLD RESOURCES LTD.	
ROCHER DEBOULE PROPERTY	
VLF-EM Stacked Profile Map NPM Lualualei, Hawaii (23.4 kHz) InPhase, Quadrature, Field Strength	
SURVEY - Southern Gold Resources Ltd.	
PROCESSING - GeoSci Data Analysis Ltd.	
DATE: Oct 7, 1987	Fig: 12

900N-
800N-
700N-
600N-
500N-
400N-
300N-
200N-
100N-
0N-
100S-
200S-



GEOPHYSICAL KEY:
 INSTRUMENT: Scintrex IGS-2
 PLOTTED DATA:
 InPhase -> Solid line
 Quadrature -> Dashed line
 Field Strength -> Dotted line
 VERTICAL SCALE:
 InPhase -> 2.5% per mm.
 Quadrature -> 2.5% per mm.
 Field Strength -> 0.5% per mm.
 BASE VALUE (survey line):
 InPhase -> 0%
 Quadrature -> 0%
 Field Strength -> 40%

MAP KEY:
 SCALE: 1:2500
 NTS: 93M/4E
 MINING DIVISION: Omineca

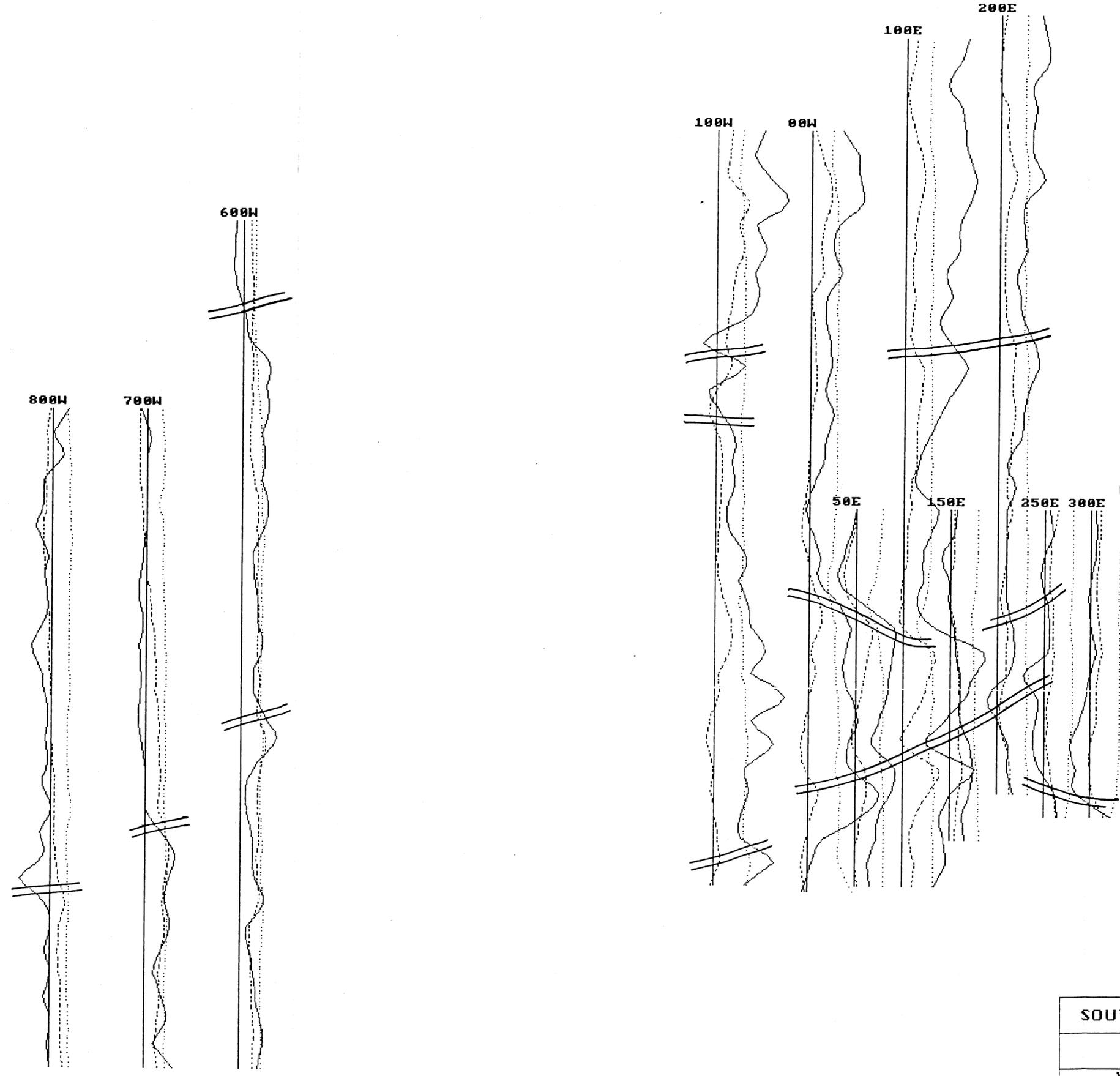
CONDUCTOR

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

16,575

SOUTHERN GOLD RESOURCES LTD.	
ROCHER DEBOULE PROPERTY	
VLF-EM Stacked Profile Map NLK Seattle, Washington (24.8 kHz) InPhase, Quadrature, Field Strength	
SURVEY* Southern Gold Resources Ltd.	
PROCESSING* GeoSci Data Analysis Ltd.	
DATE: Oct 7, 1987	Fig: 13

900N-
800N-
700N-
600N-
500N-
400N-
300N-
200N-
100N-
0N-
100S-
200S-



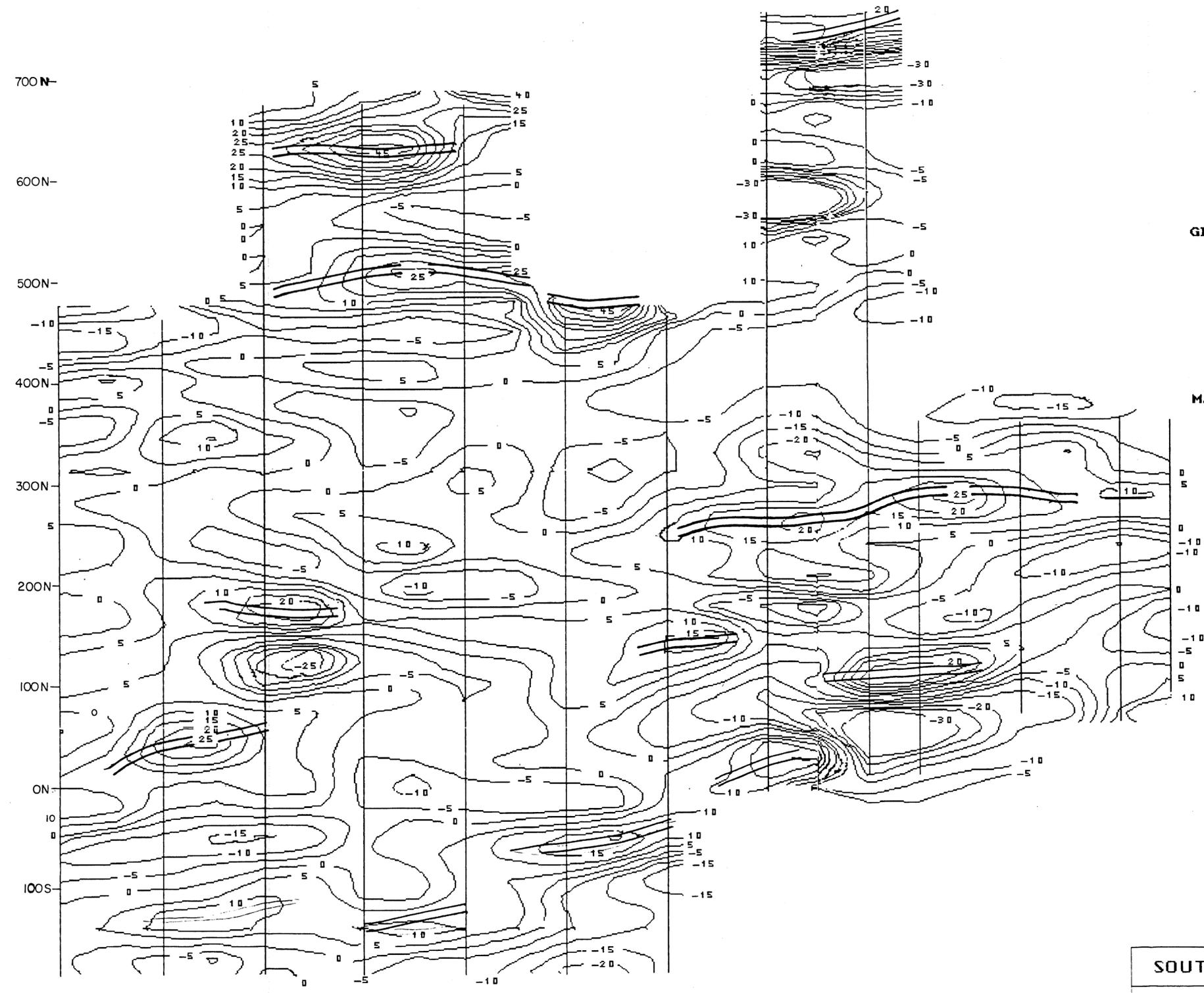
GEOPHYSICAL KEY:
INSTRUMENT: Scintrex IGS-2
PLOTTED DATA:
 InPhase -> Solid line
 Quadrature -> Dashed line
 Field Strength -> Dotted line
VERTICAL SCALE:
 InPhase -> 2.5% per mm.
 Quadrature -> 2.5% per mm.
 Field Strength -> 0.5% per mm.
BASE VALUE (survey line):
 InPhase -> 0%
 Quadrature -> 0%
 Field Strength -> 10%

MAP KEY:
 SCALE: 1:2500
 NTS: 93M/4E
 MINING DIVISION: Onineca
 == CONDUCTOR

GEOLOGICAL BRANCH
 ASSESSMENT REPORT
 16,575

SOUTHERN GOLD RESOURCES LTD.	
ROCHER DEBOULE PROPERTY	
VLF-EM Stacked Profile Map NSS Annapolis, Maryland (21.4 kHz) InPhase, Quadrature, Field Strength	
SURVEY: Southern Gold Resources Ltd.	
PROCESSING: GeoSci Data Analysis Ltd.	
DATE: Oct 7, 1987	Fig: 14

800W 700W 600W 500W 400W 300W 200W 100W 0W 100E 200E 300E



GEOPHYSICAL KEY:
INSTRUMENT: Scintrex IGS-2
PLOTTED DATA: Fraser Filtered InPhase (%)
CONTOUR INTERVAL: -30% to +45% step 5%

MAP KEY:
SCALE: 1:2500
NTS: 93M/4E
MINING DIVISION: Onineca

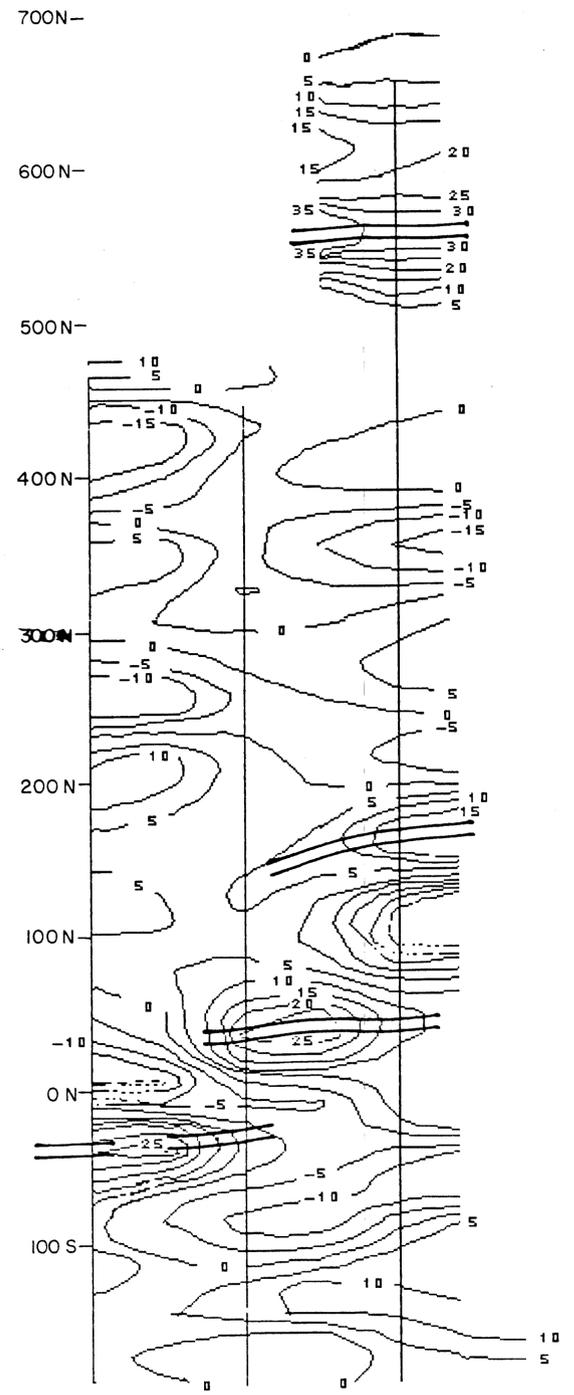
CONDUCTOR

GEOLOGICAL BRANCH
ASSESSMENT REPORT

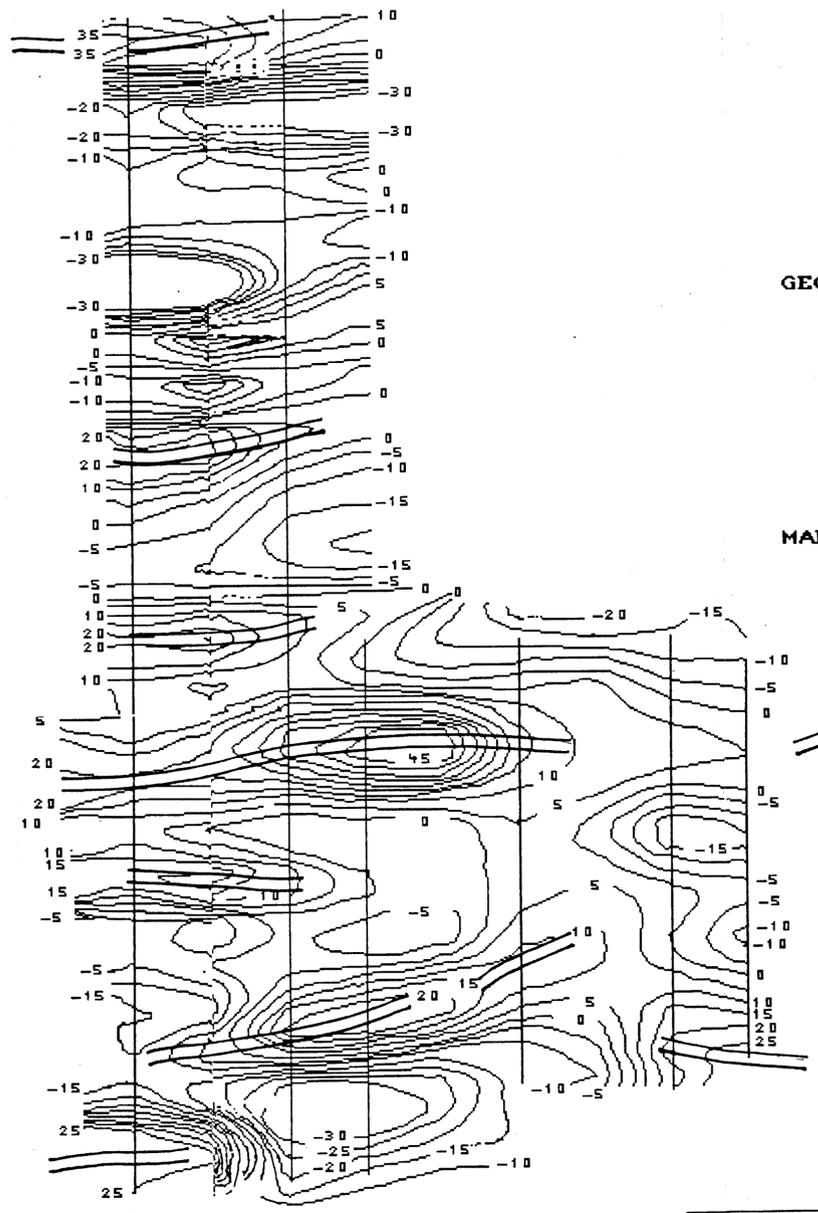
16,575

SOUTHERN GOLD RESOURCES LTD.	
ROCHER DEBOULE PROPERTY	
VLF-EM Contour Map NPM Lualualei, Hawaii (23.4 kHz) Fraser Filtered InPhase Data	
SURVEY*	Southern Gold Resources Ltd.
PROCESSING*	GeoSci Data Analysis Ltd.
DATE: Oct 7, 1987	Fig: 15

800W 700W 600W



100W 0W 100E 200E 300E



GEOPHYSICAL KEY:
 INSTRUMENT: Scintrex IGS-2
 PLOTTED DATA: Fraser Filtered InPhase (%)
 CONTOUR INTERVAL: -30% to +45% step 5%

MAP KEY:
 SCALE: 1:2500
 NTS: 93M/4E
 MINING DIVISION: Omineca

CONDUCTOR

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

16,575

SOUTHERN GOLD RESOURCES LTD.	
ROCHER DEBOULE PROPERTY	
VLF-EM Contour Map N55 Annapolis, Maryland (21.4 kHz) Fraser Filtered InPhase Data	
SURVEY: Southern Gold Resources Ltd.	
PROCESSING: GeoSci Data Analysis Ltd.	
DATE: Oct 7, 1987	Fig: 17