

85-216-14280

ROY W. ROBINSON 04/86
GEOPHYSICAL REPORT
ON AN
AIRBORNE VLF-ELECTROMAGNETOMETER
AND
MAGNETOMETER SURVEY
O.G.G. CLAIM GROUP - NELSON M.D.
LAT.49°23'N LONG.117°23'W
NTS 82F/6W
AUTHORS: E.Trent Pezzot, B.Sc.,
Geophysicist
Glen E. White, B.Sc.P.Eng.
Consulting Geophysicist
Date of Work: Dec.19,1984
Date of Report:Jan.4,1985

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,280

PART
2 OF 2



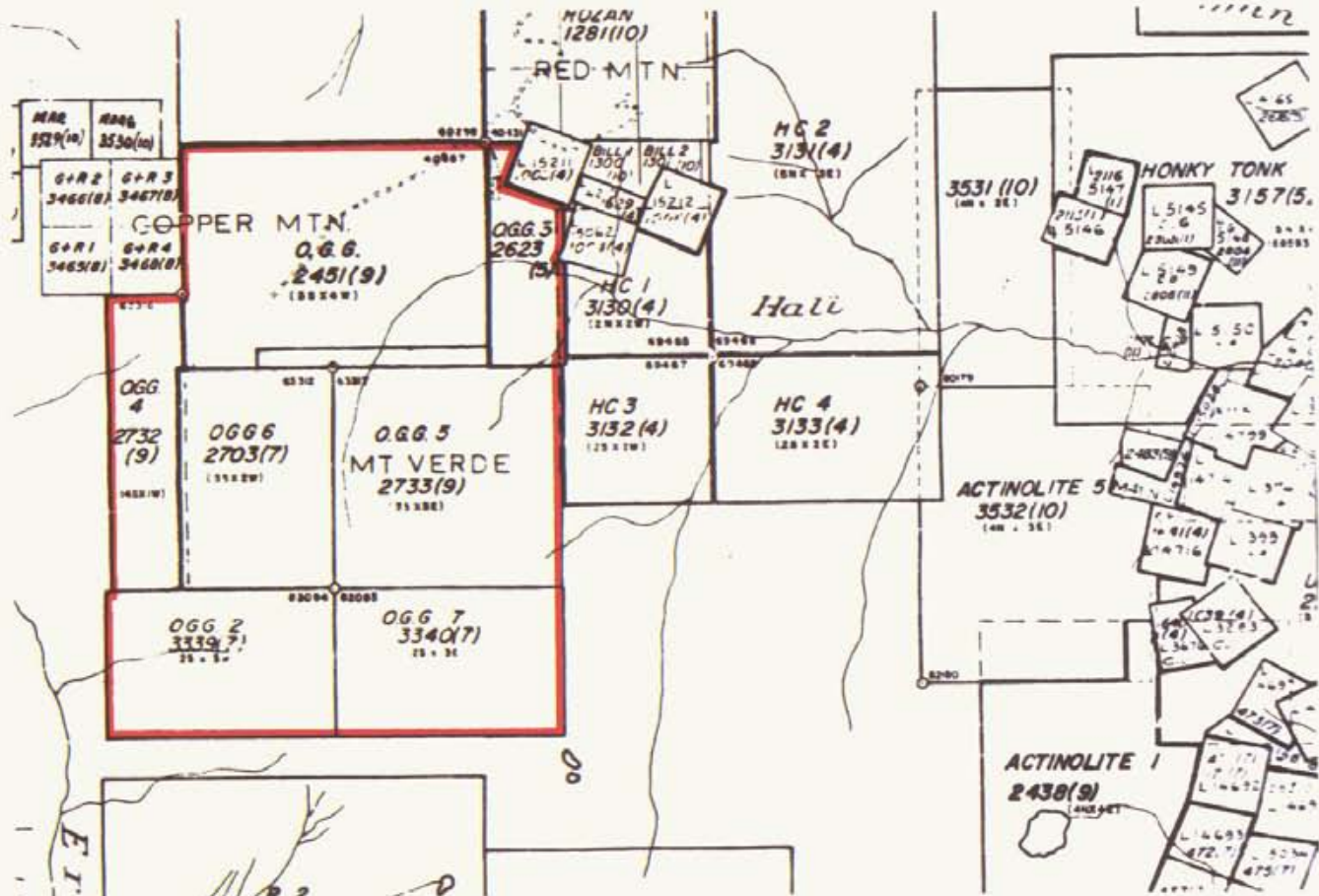
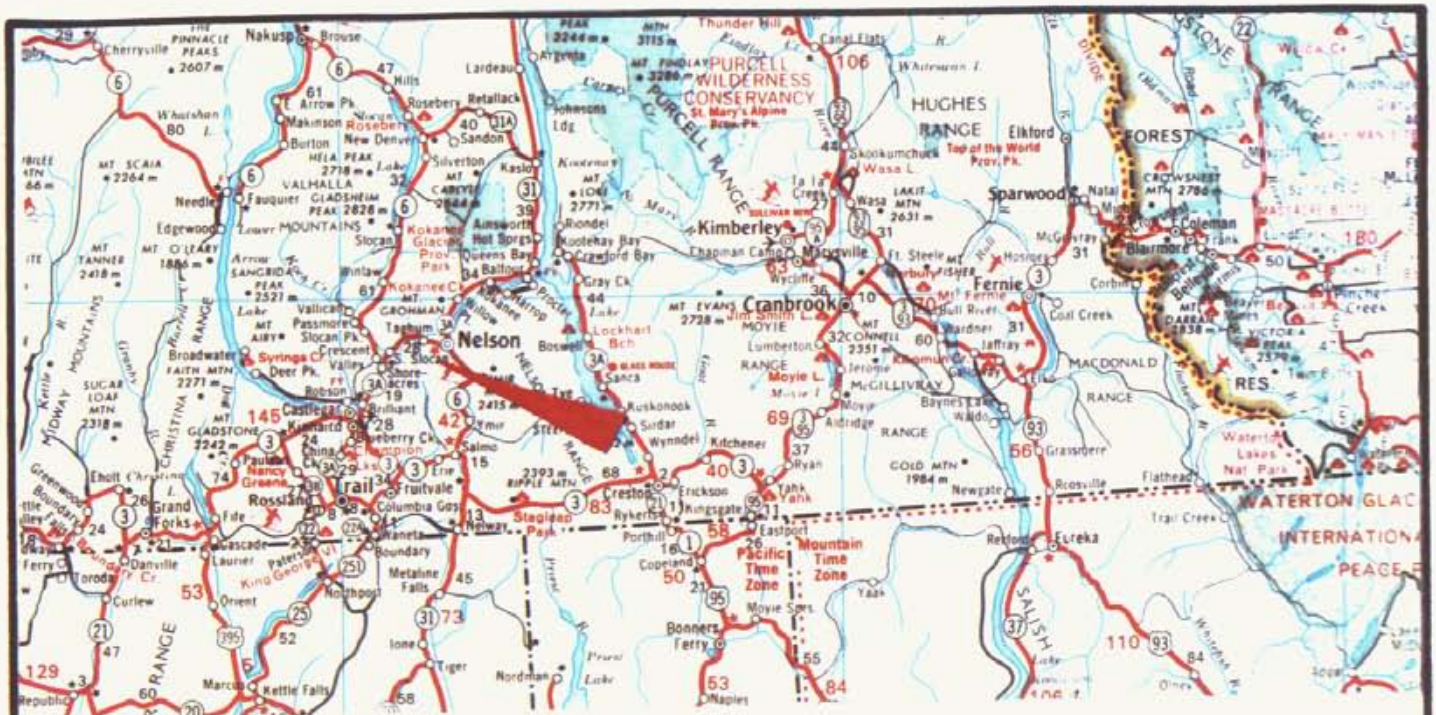
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INTRODUCTION

An airborne magnetometer and VLF-electromagnetometer survey was conducted across the O.G.G. group of claims, 14 kilometres south of Nelson, B.C. on December 19, 1984. The survey was conducted on behalf of Roy W. Robinson at the request of G. Salazar S. & Associates Ltd. and totalled approximately 97 kilometres in length.

The claims are located in an area which has been actively explored since the 1800's and has mapped occurrences of gold, silver, copper, lead and zinc mineralization. It was the intention of this survey to provide information to assist in the reconnaissance geological mapping and provide target areas for detailed ground exploration.

PROPERTY

The O.G.G. group of claims is comprised of 46 contiguous units as listed below and illustrated on Figure 1.

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>DATE</u>
O.G.G.	2451	12	May 8, 1986
O.G.G.2	3339	6	July 19, 1985
O.G.G.3	2623	3	May 6, 1986
O.G.G.4	2732	4	Sept.2, 1985
O.G.G.5	2733	9	Sept.2, 1985
O.G.G.6	2703	6	July 23, 1985
O.G.G.7	3340	6	July 19, 1985



LOCATION AND ACCESS

The claims are located approximately 14 kilometres south-southwest of Nelson, B.C. in the Nelson Mining Division and NTS 82F/6W. The approximate geographical co-ordinates are latitude $49^{\circ}23'N$ and longitude $117^{\circ}23'W$.

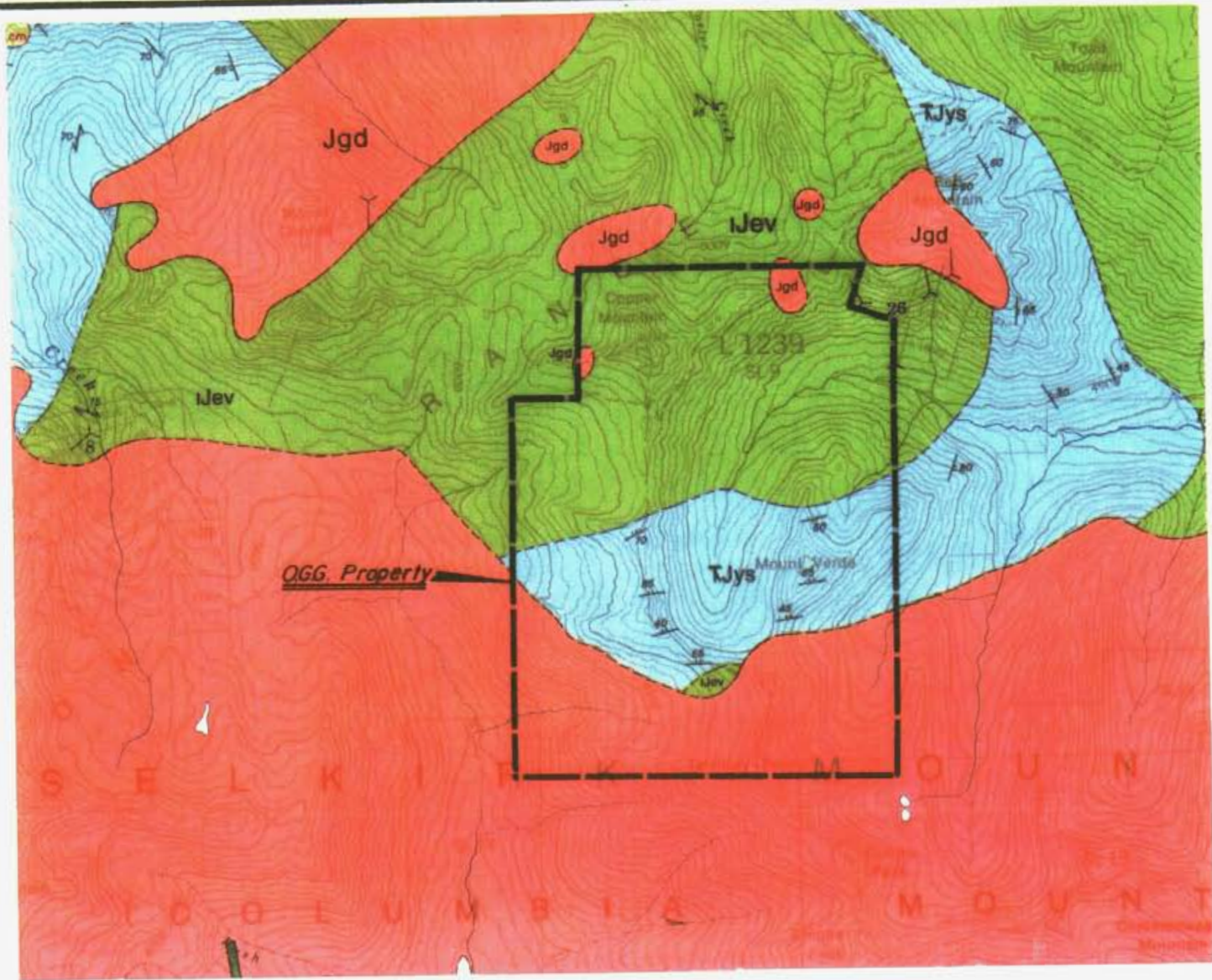
A unimproved forestry and logging road which leaves B.C. Highway 6 at the town of Hall (14 kilometres south of Nelson) follows Hall Creek and provides direct vehicle access to the claim area. A network of switchback roads provides access from Hall Creek part way up the side of Red Mountain. A second route, which branches off B.C. Highway #3 near the Taghum bridge, follows Fortynine Creek and approaches the claim area from the north. These roads pass near the summits of Red and Copper Mountains. Heavy snow conditions restrict access at the higher elevations during the winter months.

GENERAL GEOLOGY

Map 1571A published by the Geological Survey of Canada illustrates the general geological environment of the O.G.G. claims area. The applicable portion of this map has been reproduced as Plate 1 in this report. The G.S.C. delineates 3 distinct rock groups in the area; the Ymir group of sediments of Triassic and Jurassic (?) age which are overlain conformably by Elise formation volcanic rocks of Jurassic age. Both units have been intruded by granodiorites, diorites and granites (Nelson Intrusions) of Jurassic and Cretaceous (?) age.

Mineralization noted in the area includes gold, silver, lead, zinc and copper.






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GENERAL GEOLOGY
 G.S.C. Map 1571A — 1:50,000

PLATE I

LEGEND

CENOZOIC

QUATERNARY

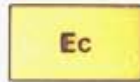


Unconsolidated sediments: till, sand, gravel, silt

TERTIARY

EOCENE

MIDDLE EOCENE



CORYELL INTRUSIONS: Ecs, syenite; Ecm, biotite monzonite, biotite - augite monzonite

CRETACEOUS AND/OR TERTIARY



KTip, quartz-feldspar-augite porphyry dykes; KTia, aplite dykes; KTil, lamprophyre and diabase dykes



Pegmatitic granite

JURASSIC AND (?) CRETACEOUS



SILVER KING PORPHYRY: porphyritic hornblende quartz diorite

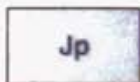


NELSON INTRUSIONS: granodiorite, granite, diorite; Jdi, diorite porphyry

JURASSIC (?)



Pyroxene - hornblende - biotite rock



Pseudodiorite

MESOZOIC

JURASSIC

LOWER AND MIDDLE JURASSIC



HALL FORMATION: argillite, sandstone, shale, siltstone, conglomerate; some argillaceous quartzite

LOWER JURASSIC



ELISE FORMATION: andesite and basalt flows and flow breccia, agglomerate, augite porphyry; minor tuff



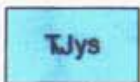
ARCHIBALD FORMATION: argillaceous and micaceous quartzite, siltstone, argillite; minor tuff

ROSSLAND GROUP

TRIASSIC (?) AND JURASSIC (?)

LOWER JURASSIC (?) AND OLDER

YMIR GROUP



Argillaceous quartzite, micaceous quartzite, argillite, slate; minor limestone; locally layered gneiss

PREVIOUS WORK

The general area has been actively explored and mined since the late 1800's and mineralization found to date includes gold, silver, lead, zinc and copper. A portion of the Minerals Inventory Map for this area has been reproduced as Plate 2 of this report and shows the location of known mineral occurrences near the O.G.G. claim group.

Conversations with G. Salazar of G. Salazar S & Associates Ltd. have indicated that some exploration efforts have been applied specifically to the O.G.G. claims. These include, in part, grid preparation and a limited amount of ground magnetometer surveying but the results were unavailable to the authors.



LEGEND:

100	NEBRAY	Ag
101	SPICE	As, Co, Ag
102	SEB PAK	Pb, Co, As, Mo
103	HOMERACE	As, Ag, Co
104	MONDAY	Zn, Pb, Ag
105	BOYNE	Co, As, Ag
106	TUESDAY	Co, As, Ag
107	SUNET	Zn, Pb, Ag
108	MAD OF BIN	As, Co, Zn, As
109	RAA BOY	Ag, As, Co
110	MAYFLOWER	Zn, Ag, Pb, As, Cd
111	ROBERT E. LEE	As
112	FRONDEX	As, Co, Ag
113	ABE LINCOLN	Co, As
114	ST. BLMO	Mo, Co, W, Ag, As
115	CONCELAIRD ST. BLMO	As, Co, Ag, Mo
116	CLIFF, VIEW	As, Co, Ag
117	SOUTHERN BELLE	As, Ag
118	GOLDEN CHERRY	As, Co
119	GREAT WESTERN	As, Co
120	MOUNTAIN VIEW	Mo
121	GOOD FRIDAY, NORTHERN BELLE	As, Co
122	MATHE	As, Ag
123	MONMON	As, Ag, Pb
124	MATHE BROWN	Ag, Pb
125	BLUESD	As, Ag, Pb, Zn
126	MAYFLOWER (DIA FORBIA)	Ag, Zn, Pb, As, Cd
127	JOSE	As, Co, Ag
128	ANNE	As, Ag, Co
129	GEORGIA	As, Ag
130	COLUMBA	As, Ag
131	KOOTENAY	As, Ag
132	CROWN ROCK	As, Co, Ag
133	LEY MAY	Ag, Co, Zn, Pb, As
134	CLEW	Ag, As
135	RED BAGLE	Ag, Pb
136	NATURE BOY	Ag, Pb, Zn
137	UBAL	As, Ag
138	CASINO RED CAP	Pb, Zn, Ag, As
139	COLUMBA	As, Ag
140	SUNET	Ag, Pb, Zn
141	SILVER TP	As, Ag
142	VENUS, JUNG	As, Ag, Pb, Co
143	BIRBYE	Ag, As
144	ARIZASCA	As, Ag, Pb, Zn, Co
145	CALIFORNIA	As, Ag, Zn, Pb
146	SHANOCK	Zn, Pb, Ag, As
147	BINE	As, Ag
148	GREAT EASTERN	As, Ag
149	VICTORIA, JESSE	Co, As, Ag
150	SUNLIGHT	As, Ag
151	DAYLIGHT, BERLIN	As, Ag, Pb, Zn
152	SILVER KING	Co, Ag, As, Pb
153	REDFORD	As
154	NORTHERN LIGHT	As, Ag, Co
155	GOLDEN BAGLE	Pb, Zn, As, Ag
156	BALTC	As, Ag
157	GOLD KING	As, Ag, Co
158	BBAR	As, Ag
159	FISH	As, Ag
160	CANADIAN BELLE	As, Co, Ag
161	GOLDEN AGE	As, Ag, Pb, Zn, W, Co
162	SURVIVOR	As, Ag, Pb, Zn
163	SECOND RELIEF	As, Ag, Co, Pb, Zn
164	HARVEY	As, Ag
165	FORO ECO	As, Ag
166	SPOTTED HORSE	As, Ag
167	COMMONORE	As, Ag
168	BLUE	Ag
169	ARIZONA	As, Ag
170	NEW VICTOR	As, Ag
171	DICKSON	As, Ag
172	FLOY-GOOD HOPE	As, Ag
173	MYSTLE	As, Ag, Zn, Pb
174	SENTRY	Zn, Pb, Ag, As
175	HEWING (BURANCO)	As, Pb, Zn, Ag, Cd
176	CLARKE, CONSFORD (BOASER CITY)	As, Ag, Zn
177	SECOND CHANCE	As, Ag
178	KEYSTONE	As, Ag, Zn, Pb
179	CANADIAN KING	As, Ag, Pb
180	GOLD HILL	As, Ag
181	ARLINGTON	As, Ag, Pb, Zn
182	BLANCE	As, Ag
183	SILVER DOLLAR	As, Ag, Zn, Pb
184	FERRIS	As, Zn, Pb, Ag
185	CATHERINE	As, Pb, Zn, Ag
186	HUMBOLDT	As, Zn, Pb, Ag
187	MAMMOTH	As, Co, Mo
188	MOYA	As, Ag
189	BRIM LUNNON	Co
190	BOBA	Co
191	HOMERACE	Co
192	BOBO	As, Ag
193	INCE	As, Ag
194	INVINCIBLE	Pb, Zn, W
195	ANDER	Zn, Ag, Pb, Co, Cd
196	CLEW	Mo
197	TRINE V	As, Mo
198	WINDWARD	As, Ag
199	ZIGZAG	Co, Pb, Zn
200	BADY BOY	Mo, Co
201	ST. MARY	Co, Pb, Mo
202	HAYE	Mo
203	SEN	Co
204	PO	W
205	STANLEY	W
206	SILVER 1	Ag, Pb, Zn
207	SILVER 2	Ag, Pb, Zn, Co
208	HEALING, WIND	Pb
209	HEAL	Co, Mo
210	SNOW BIRBYE	W
211	HEBERRY MEN	Co, Ag, As
212	BLANCK	As, Ag, Pb, Zn, Co
213	COVERED (BINA)	As
214	MYRIS LONE (BURNING)	As
215	ATLON - MORE	Ag, As



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AIRBORNE VLF-ELECTROMAGNETIC AND MAGNETIC SURVEY

This survey system simultaneously monitors and records the output signal from a proton precession magnetometer and two VLF-EM receivers installed in a bird designed to be towed 100 feet below a helicopter. A gimbal and shock mounted TV camera, fixed to the helicopter skid, provides input signal to a video cassette recorder allowing for accurate flight path recovery by correlation between the flight path cassette and air photographs of the survey area. A KING KRA-10A radar altimeter allows the pilot to continually monitor and control terrain clearance along any flight path.

Continuous measurements of the earth's total magnetic field intensity and of the total horizontal VLF-EM field strength of two transmission frequencies are stored in three independent modes: an analogue strip chart recorder, digital magnetic tapes and a digital video recovery system. A three-pen analogue power recorder provides direct, unfiltered recordings of the three geophysical instrument output signals. A Hewlett-Packard 9875 tape drive system digitally records all information as it is processed through an on-board micro-computer. The magnetic and electromagnetic data is also processed through the onboard micro-computer, incorporating an analogue to digital converter and a character generator, then superimposed along with the date, real time and terrain clearance upon the actual flight path video recording to allow exact correlation between geophysical data and ground location. The input signals are averaged and updated on the video display every second. Correlation between the strip chart, digital tape and the video flight path recovery tape is controlled via fiducial marks common to all systems. Line identification, flight direction and pertinent survey information are recorded on the audio track of the video recording tape.

DATA PROCESSING

Field data is digitally recorded, with the time of day fiducial, on magnetic cassettes in a format compatible with the Hewlett-Packard 9845 computer. The recovered flight path locations are digitized and the field data is processed to produce plan maps of each of the parameters. A variety of formats are available in which to display this data.

Total field intensity magnetic information is routinely edited for noise spikes and corrected for any diurnal variations recorded on a base magnetometer located in the survey area.

Total field intensity VLF-EM signals are sensitive to topographic changes and sensor oscillation. Oscillation effects can be reduced by filters tuned to the dominant period. Long period effects attributable to topography can be removed by high pass filtering the planimetric data.



DISCUSSION OF RESULTS

The airborne survey totalled approximately 97 kilometres on lines oriented $330^{\circ}/150^{\circ}$ and spaced at 200 metre intervals. The magnetic data gathered is presented in contour form as Figure 2 of this report and the Seattle and Annapolis VLF-EM data as profiles on Figures 3 and 4 respectively.

A general correlation is observed between the magnetic trends (Figure 2) and the geological mapping presented by the Geological Survey of Canada (Plate 1 and Figure 2). The Ymir group of sediments, which cuts across the central portion of the claim group, is reflected by a magnetic low when compared to the Elise formation volcanics (andesites, basalts) mapped across the northernmost claims. The Nelson Intrusions (granodiorite) also appear as magnetic lows, of similar intensity to those reflecting the Ymir group.

There are a number of magnetic responses observed which apparently contradict the geological mapping. Most noticeably is an area of high magnetic intensity which covers portions of the southern claims as shown on Figure 2. This magnetic anomaly is of similar intensity to that correlated with the Elise formation to the north. Although a small window of these volcanics is mapped in the area, the magnetic information suggests the area of underlying volcanics is much larger. Other possibilities are that the Nelson Intrusion geologically mapped in the area is either very thin and underlain by the Elise formation or contains a facies with higher magnetic susceptibility materials.

The data recorded on line 8 was extremely noisy, showing large and rapid variations in the magnetic intensity. When compared with the data on the adjacent lines, it is apparent that these responses resulted from a northwesterly trending fault or contact zone which is interpreted as crossing the property as illustrated on Figures 2. The extreme magnetic variations observed likely result from localized alteration



zones occurring along this lineation. These features appear to be accurately mapped with the airborne technique. The most definitive of these anomalies is a strong dipole effect located along the border between the O.G.G.4 and O.G.G.6 claims.

Based on the comparisons between the magnetic contour trends and the mapped geology, a geophysical interpretation of the major lithologies is presented as Figure 5. The contact between Ymir group sediments and Nelson Intrusions should be considered questionable because of the similarity of the magnetic intensities reflecting these units.

In addition to the general geological environment reflected in the magnetic data, a number of smaller, localized anomalies warrant specific mention. As discussed above, the interpreted northwesterly trending fault is characterized along its' length by extreme magnetic variations which will require ground investigation to be accurately delineated. Localized magnetic dipoles, such as the ones mapped at the centre of the O.G.G.5 claim and southeast corner of the O.G.G. claim likely originate from either intrusive plugs or alteration zones associated with them.

The VLF-EM data is presented as profiles on Figures 3 and 4. A number of conductivity type responses are observed as delineated on these maps but for the most part, they coincide with topographic ridges. The nature of the primary VLF-EM signal is such that sharp topographic ridges and valleys often produce false conductivity anomalies therefore the validity of these responses should not be assumed without supportive evidence. Above background energy levels in the VLF-EM signal are observed on portions lines 8,9 and 10 which supports the fault interpretation illustrated.



SUMMARY AND CONCLUSIONS

A 97 kilometre program of airborne magnetometer and VLF-electromagnetometer survey was conducted across the O.G.G. claim group on December 19, 1984. The program was undertaken on behalf of Roy W. Robinson at the request of G. Salazer S. & Associates Ltd. to provide direction for ground investigations of the claims area.

The magnetic data shows good correlation to the geology known from regional mapping by the Geological Survey of Canada. It does however infer the presence of a much larger volcanic unit across the southern portion of the claim block than has been mapped geologically and also detected two or three small Nelson Intrusions near the centre of the claim block. There is also strong evidence to support the interpretation of a north-westerly-southeasterly trending fault zone which crosses the O.G.G.4, O.G.G.6, O.G.G.2, and O.G.G.7 claims. A geological interpretation based on this geophysical information is presented as Figure 5 of this report.

In addition to the large scale geological trends mentioned above, a number of magnetic and electromagnetic responses are observed which indicate localized geological variations. These are the type more typically associated with mineral deposits. Of particular note is the strong dipole anomaly which straddles the border common to the O.G.G.4 and O.G.G.6 claims and is used, in part, to delineate a northwesterly trending fault zone. This area also reflects an increased intensity to the VLF-EM signals indicating increased near surface conductivity and should be considered a high priority target for detailing ground investigations. Three other dipolar anomalies have been highlighted as "Areas of Interest" on Figures 2 and 6. One is located along the northern border of the O.G.G. claim and ties directly with a geologically defined Nelson Intrusion. The second anomaly is located in the southeast corner of the O.G.G. claim and the third near the centre of the O.G.G.5 claim. These later two could be generated by similar granodiorite intrusions.



Most of the VLF-EM anomalies flagged on the geophysical maps can be explained by the local topography. This does not however exclude the possibility of a coincident geological source; these areas should be examined as second priority targets.

RECOMMENDATIONS

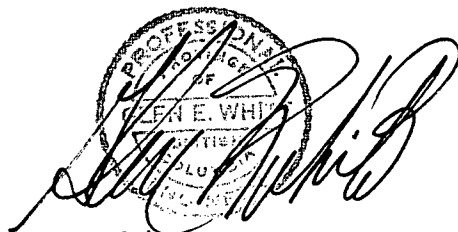
The geophysical-geological interpretation (Figure 5), which is based primarily upon the magnetic data, should be confirmed by normal geological mapping procedures. Particular attention should be afforded to the northwesterly trending fault zone and the four areas labelled as "Areas of Interest" on Figure 5. These areas also warrant detailing geochemical, ground magnetometer and VLF-electromagnetometer surveys to confirm and precisely locate the anomalous responses.

Based on the initial geological, magnetic and electromagnetic results, a program of geochemical sampling, trenching and/or more sophisticated geophysics (Induced Polarization, Time Domain Electromagnetic) may be warranted.

Respectfully submitted,



E. Trent Pezzot, B.Sc., Geophysicist



Glen E. White, B.Sc., P. Eng.
Consulting Geophysicist



INSTRUMENT SPECIFICATIONSBARRINGER AIRBORNE MAGNETOMETER

MODEL: Nimbin M-123
TYPE: Proton Precession
RANGE: 20,000 to 100,000 gammas
ACCURACY: \pm 1 gamma at 24 V d.c.
SENSITIVITY: 1 gamma throughout range
CYCLE RATES:
 Continuous 0.6, 0.8, 1.2 and 1.9 seconds
 Automatic 2 seconds to 99 minutes in 1 second steps
 Manual Pushbutton single cycling at 1.9 seconds
 External Actuated by a 2.5 to 12 volt pulse longer than 1 millisecond.

OUTPUTS:
 Analogue 0 to 99 gammas or 0 to 990 gammas
 - automatic stepping
 Visual 5 digit numeric display directly in gammas

EXTERNAL OUTPUTS:
 Analogue 2 channels, 0 to 99 gammas or 0 to 990 gammas at 1 m.a. or 1 volt full scale deflection.
 Digital BCD 1, 2, 4, 8 code, TTL compatible.

SIZE: Instrument set in console
 30 cm X 10 cm X 25 cm

WEIGHT: 3.5 Kg

POWER REQUIREMENTS: 12 to 30 volts dc, 60 to 200 milliamps maximum.

DETECTOR: Noise cancelling torroidal coil installed in airfoil.

INSTRUMENT SPECIFICATIONSSABRE AIRBORNE VLF SYSTEM

Source of Primary

Field: - VLF radio stations in the frequency range of 14 KHz to 30 KHz.

Type of Measurement: -Horizontal field strength

Number of Channels: -Two; Seattle, Washington at 24.8 KHz
-Annapolis, Maryland at 21.4 KHz

Type of Sensor: -Two ferrite antennae arrays, one for each channel, mounted in magnetometer bird.

Output: -0 - 100 mV displayed on two analogue meters (one for each channel)
-recorder output posts mounted on rear of instrument panel

Power Supply: -Eight alkaline 'AA' cells in main instrument case (life 100 hours)
-Two 9-volt alkaline transistor batteries in bird (life 300 hours)

Instrument Console: -Dimensions - 30 cm x 10 cm x 25 cm
-Weight - 3.5 Kg.

Instrument Specifications

FLIGHT PATH RECOVERY SYSTEM

i) T.V. Camera:

Model: RCA TC2055 Vidicon
 Power Supply: 12 volt DC
 Lens: variable, selected on basis of expected terrain clearance
 Mounting: Gimbal and shock mounted in housing, mounted on helicopter skid

ii) Video Recorder:

Model: Sony SLO - 340
 Power Supply: 12 volt DC / 120 volt AC (60Hz)
 Tape: Betamax $\frac{1}{2}$ " video cassette - optional length
 Dimensions: 30 cm x 13 cm x 35 cm
 Weight: 8.8 Kg
 Audio Input: Microphone in - 60 db low impedance microphone
 Video Input: 1.0 volt P-P, 75 Ω unbalanced, sync negative from camera

iii) Altimeter:

Model: KING KRA-10A Radar Altimeter
 Power Supply: 27.5 volts DC
 Output: 0-25 volt (1 volt / 1000 feet) DC signal to analogue meter, 0-10 v (4mv/ft) analogue signal to microprocessor
 Mounting: fixed to T.V. camera housing, attached to helicopter skid



Instrument Specifications

DATA RECORDING SYSTEM

i) Chart Recorder

Type: Esterline Angus Miniservo III Bench AC
 Ammeter - Voltmeter Power Recorder
Model: MS 413B
Specification: S-22719, 3-pen servo recorder
Amplifiers: Three independent isolated DC amplifiers
 (1 per channel) providing range of
 acceptable input signals
Chart: 10 cm calibrated width Z-fold chart
Chart Drive: Multispeed stepper motor chart drive,
 Type D850, with speeds of 2,5,10,15,30
 and 60 cm/hr. and cm/min.
Controls: Separate front mounted slide switches for
 power on-off, chart drive on-off, chart
 speed cm/hr.- cm/min. Six position chart
 speed selector, Individual front zero
 controls for each channel.
Power Requirements: 115/230 volts AC at 50/60Hz (Approxi-
 mately 30 W.
Writing System: Disposable fibre tipped ink cartridge
 (variable colors)
Dimensions: 38.6 cm x 16.5 cm x 43.2 cm
Weight: 9.3 kg.

ii) Digital Video Recording System

Type: L.M. Microcontrols Ltd. Microprocessor
 Control Data Acquisition System
Model: DADG - 68
Power Requirements: 10 - 14 volts DC, Maximum 2 amps.
Input Signal: 3,0 - 100 mvolt DC signals
 1,0 - 25 volt DC signals
Microprocessor: Motorola MC-6800
CRT Controller: Motorola MC-6845
Character Generator: Motorola MCM-6670
**Analogue/Digital
 Convertor:** Intersil 7109
Multiplexer: Intersil IH 6208
Digital Clock: National MM 5318 chip
 9 volt internal rechargeable nickle-
 cadmium battery
Fiducial Generator: internally variable time set controls
 relay contact and audio output
Dimensions: 30 cm x 30 cm x 13 cm
Weight: 3 kg.



DATA RECORDING SYSTEM (CON'T)iii) Digital Magnetic Tape

Type: Hewlett Packard cartridge tape unit

Model: 9875A

Power Requirements: 24 volt d.c.

Data Format: HP's Standard Interchange Format (SIF)

Tape Cartridge: HP 98200A 225K byte cartridge compatible with HP Series 9800 desktop computers.

Tape Drive: Dual tape drives providing up to 8 hours continual recording time.

Controller: Internal micro-computer provides 23 built in commands.

: External computer generated commands.

COST BREAKDOWN

<u>PERSONNEL</u>	<u>SERVICE</u>	<u>DATES</u>	<u>CHARGEABLE DAYS</u>	<u>RATE</u>	<u>SUBTOTAL</u>
E.T.Pezzot	Pre-Survey Preparation	Nov.19- Dec.14/84	2	300	\$600.00
E.T.Pezzot	Mobilization	Dec.17- Dec.18/84	2	450	900.00
E.T.Pezzot	Survey/De-Mob	Dec.19/84	1	450	<u>450.00</u>
Subtotal					\$1,950.00

Geophysicist Supervision

Flight Path Recovery					150.00
Flight Path Digitizing					150.00
Data Analysis					200.00
Computer Processing - Magnetic Map & Contouring					400.00
	- VLF-EM #1				175.00
	- VLF-EM #2				<u>175.00</u>
Subtotal					\$1,250.00

Support Charges

Instrument Lease					500.00
Helicopter & Fuel					1,100.00
Vehicle					360.00
Meals & Accommodations					120.00
Photomosaic/Photographics					200.00
Materials					30.00
Drafting					150.00
Interpretation & Report Compilation					600.00
Reproduction					<u>240.00</u>
Subtotal					\$3,300.00

Total\$6,500.00



STATEMENT OF QUALIFICATIONS

NAME: PEZZOT, E. Trent

PROFESSION: Geophysicist - Geologist

EDUCATION: University of British Columbia-
B.Sc.- Honors Geophysics and Geology

PROFESSIONAL ASSOCIATIONS: Society of Exploration Geophysicist

EXPERIENCE: Three years undergraduate work in
geology - Geological Survey of Canada,
consultants.

Three years Petroleum Geophysicist,
Senior Grade, Amoco Canada Petroleum
Co. Ltd.

Two Years consulting geophysicist,
Consulting geologist - B.C., Alberta,
Saskatchewan, N.W.T., Yukon, western
U.S.A.

Four years geophysicist with Glen E.
White Geophysical Consulting & Services
Ltd.

STATEMENT OF QUALIFICATIONS

NAME: WHITE, Glen E., P. Eng.

PROFESSION: Geophysicist

EDUCATION: B.Sc. Geophysicist - Geology
University of British Columbia.

PROFESSIONAL ASSOCIATIONS: Registered Professional Engineer,
Province of British Columbia.

Associate member of Society of Exploration Geophysicists.

Past President of B.C. Society of Mining Geophysicists.

EXPERIENCE: Pre-Graduate experience in Geology -
Geochemistry - Geophysics with Anaconda
American Brass.

Two years Mining Geophysicist with Sulmac
Exploration Ltd. and Airborne Geophysics
with Spartan Air Services Ltd.

One year Mining Geophysicist and Technical
Sales Manager in the Pacific north-west for
W.P. McGill and Associates.

Two years Mining Geophysicist and supervisor
Airborne and Ground Geophysical Divisions
with Geo-X Surveys Ltd.

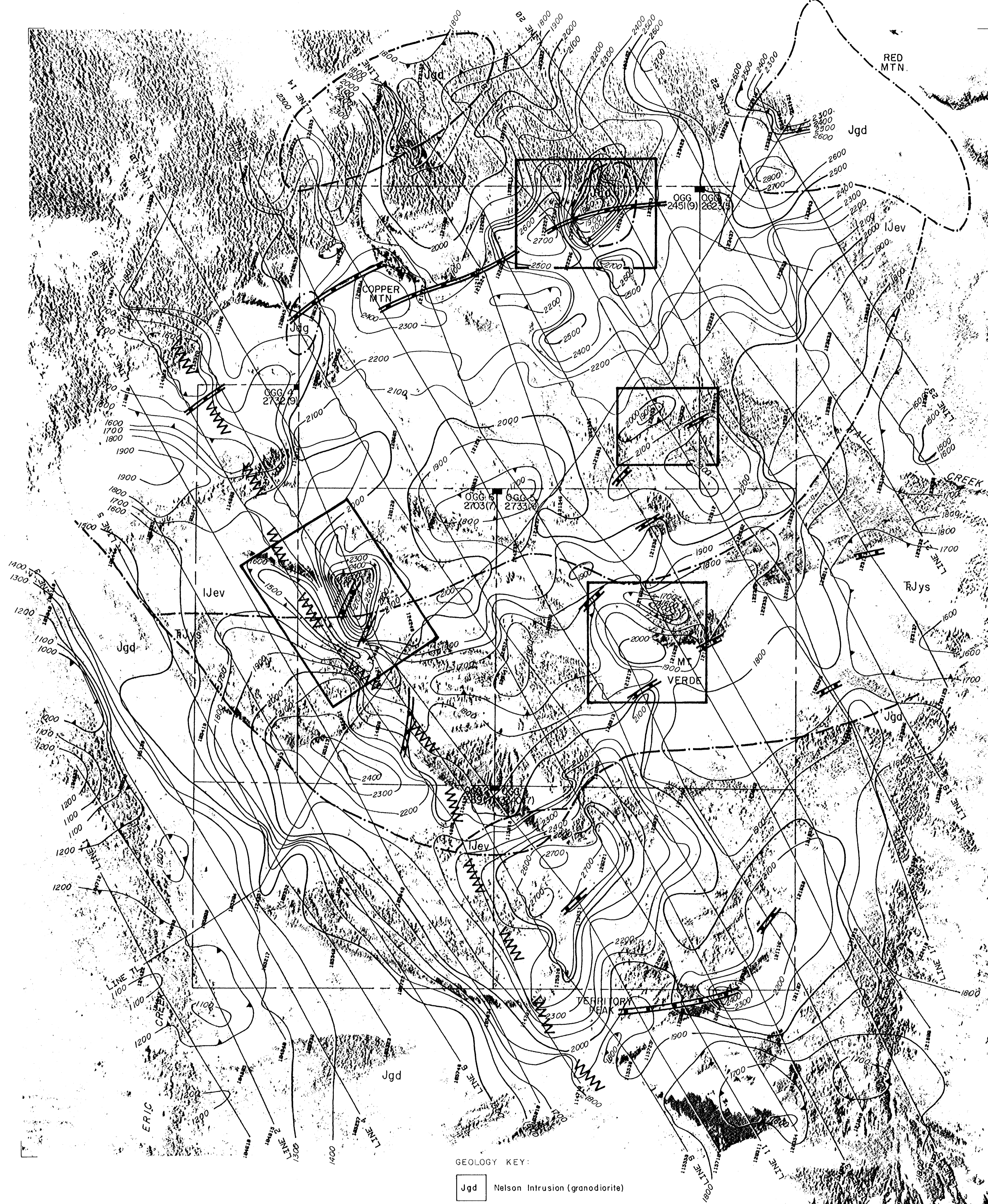
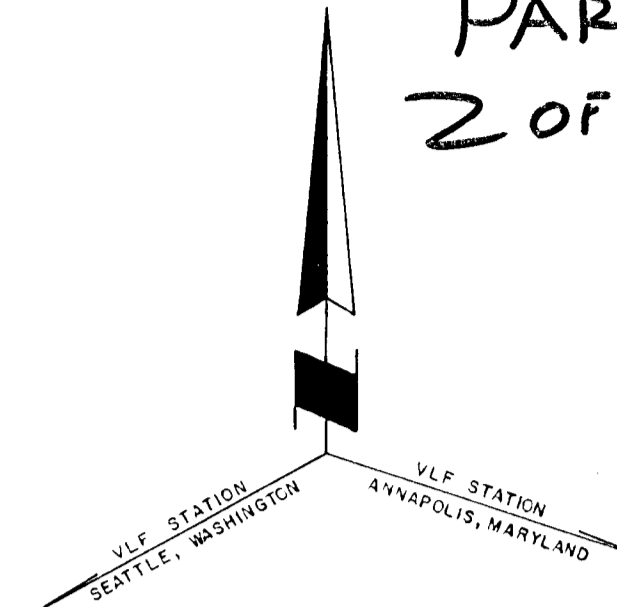
Two years Chief Geophysicist Tri-Con Explor-
ation Surveys Ltd.

Eleven years Consulting Geophysicist.

Active experience in all Geologic provinces
of Canada.

14,280

PART
2 of 2.

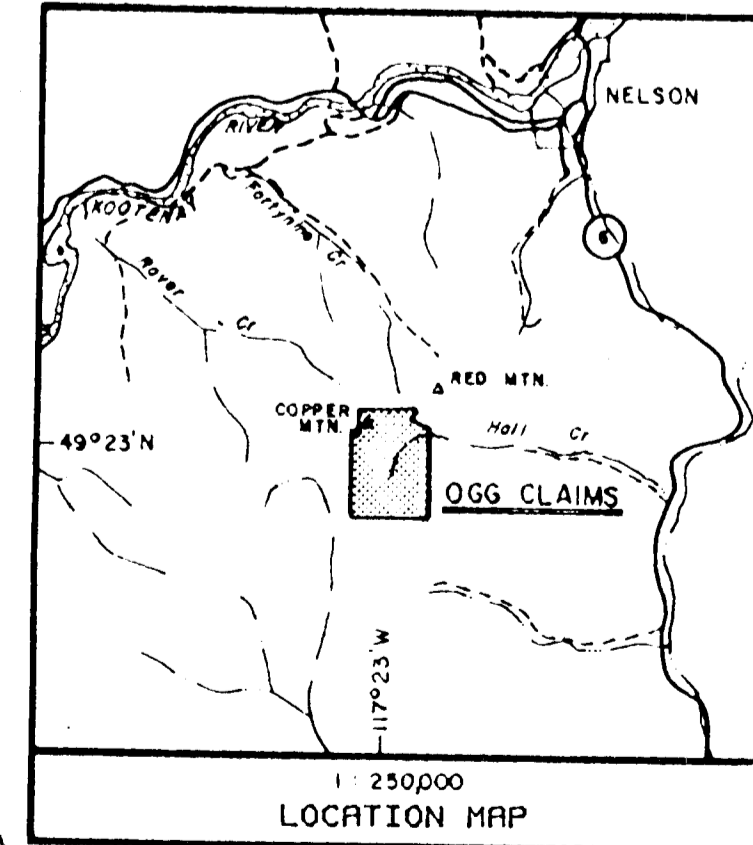


- KEY:
- INSTRUMENT: Barringer M-123 Magnetometer
 - Data corrected for diurnal variations
 - Base Value= 56000 gammas
 - Contour Interval= 100 gammas
 - == Roads
 - - - Claim boundary
 - Claim post
 - WWW Inferred Fault
 - ▬ VLF-EM Conductor
 - Magnetic Low
 - Areas of Interest
 - - - Geological Contact - GSC Map 1571A

GEOLOGY KEY:

- Jgd Nelson Intrusion (granodiorite)
- Ijev Elise Formation (volcanics: andesite, basalt)
- Rjys Ymir Group sediments: (quartzite, slate, argillite)

N.T.S. 82 F/6W

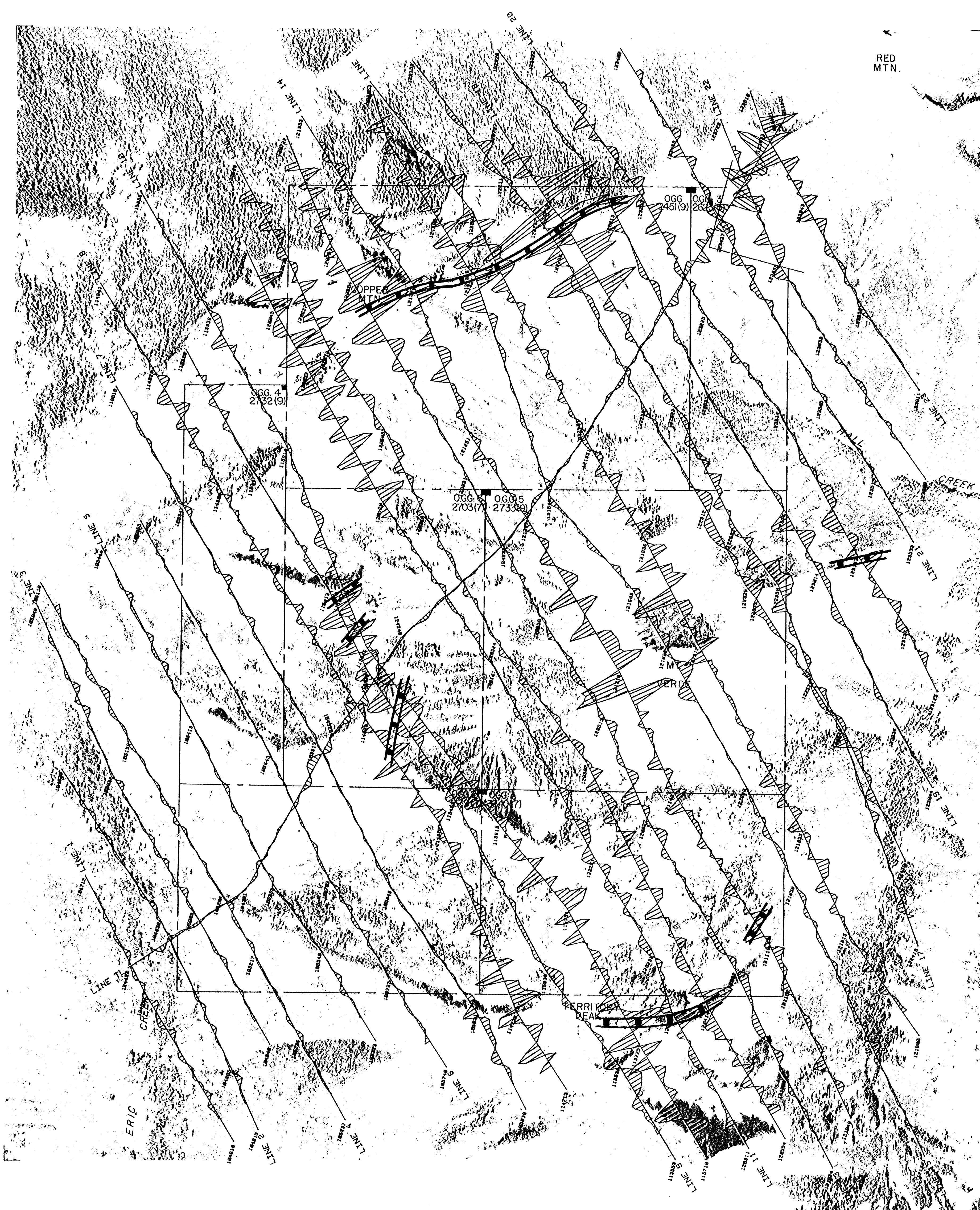


ROY W. ROBINSON
OGG CLAIMS
MAGNETIC INTENSITY CONTOUR MAP
TOTAL MAGNETIC FIELD INTENSITY (GAMMAS)

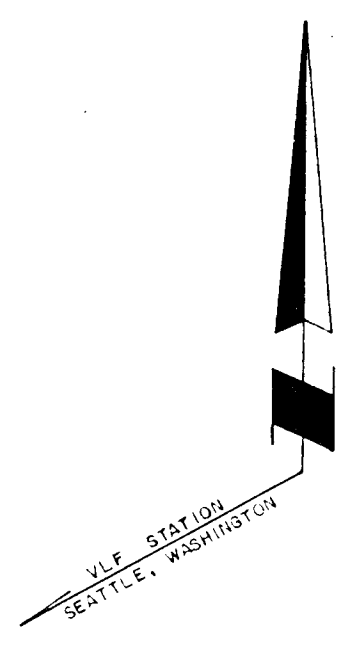
DATE: DEC. 19/84

FIG.: 2

Western
Geophysical
Service Ltd



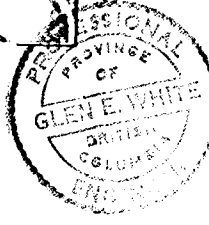
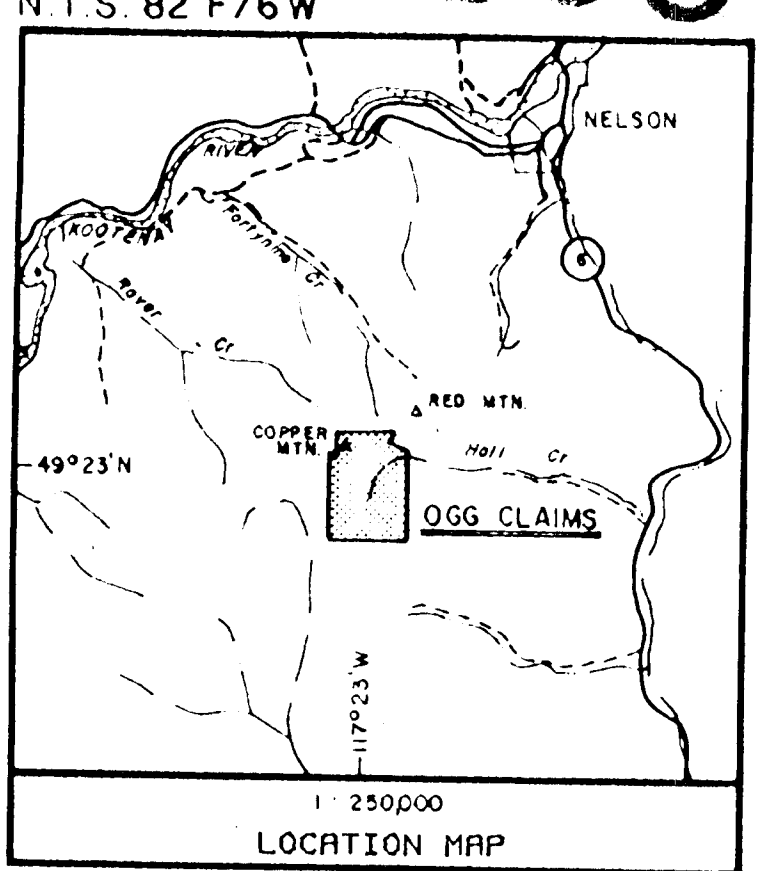
RED MTN.



- KEY
- INSTRUMENT: Sabre Total Field Intensity VLF-EM
 - Transmitter Station, Seattle (24.8 Khz.)
 - Data corrected for long period terrain effects
 - Vertical Scale = 10%/cm.
 - == Roads
 - Claim boundary
 - Claim post
 - WWW Inferred Fault
 - ▬ VLF-EM Conductor

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

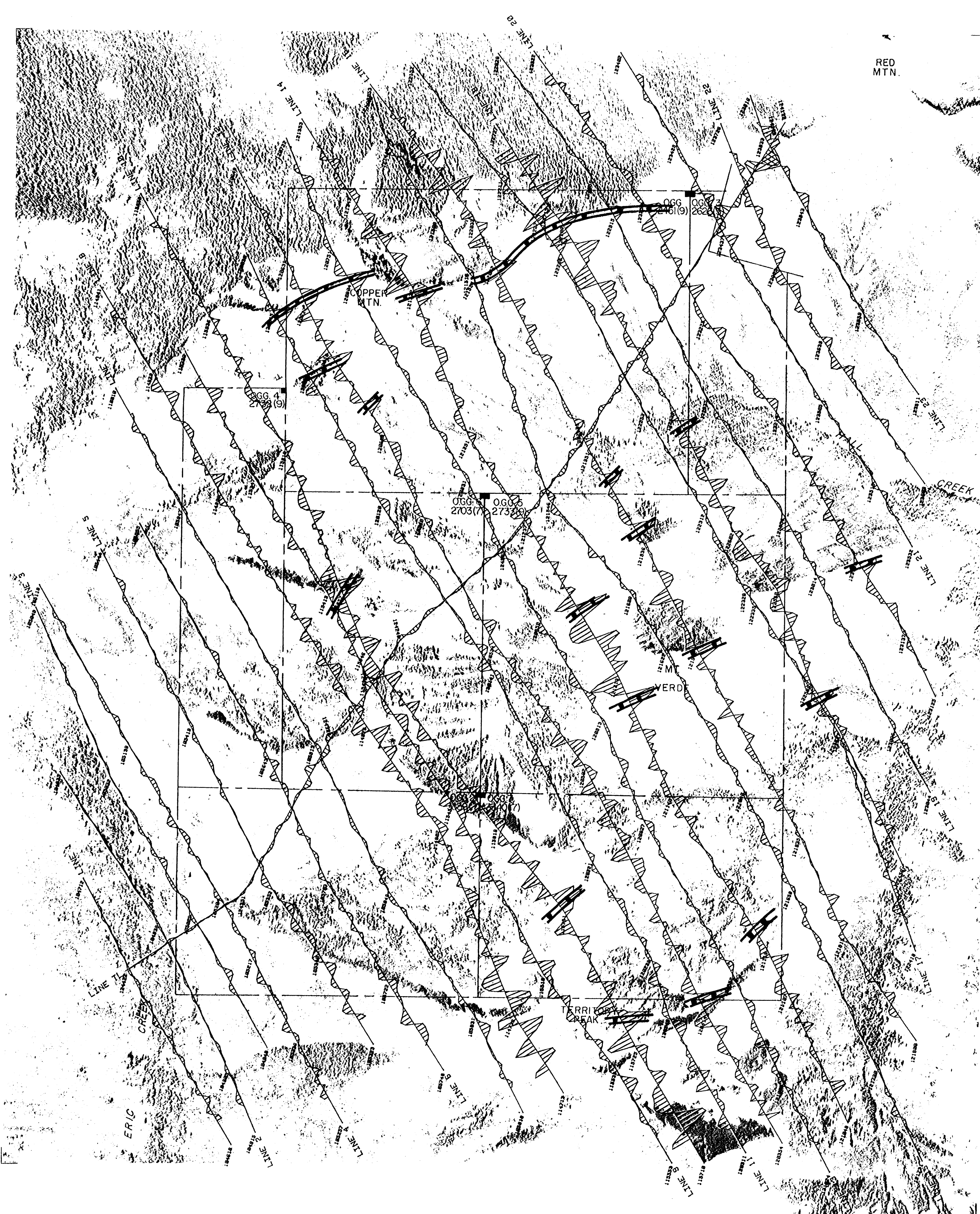
14,280 PART 2 OF 2



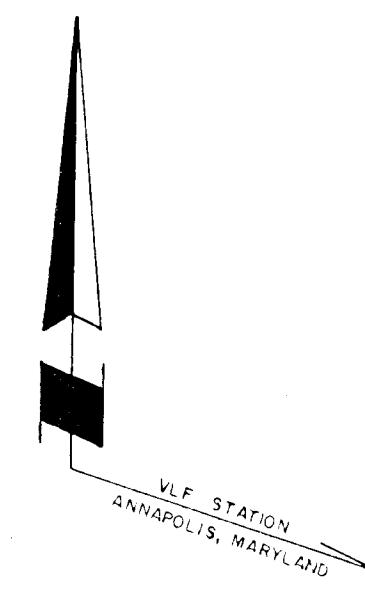
*Western
Geophysical
Service Ltd.*

To accompany the Geophysical Report on the OGG CLAIMS

ROY W. ROBINSON
OGG CLAIMS
VLF-EM PROFILES (SEATTLE)
TOTAL HORIZONTAL FIELD INTENSITY (%)
DATE: DEC. 19/84 FIG.: 3



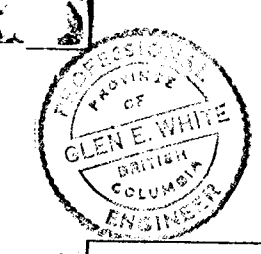
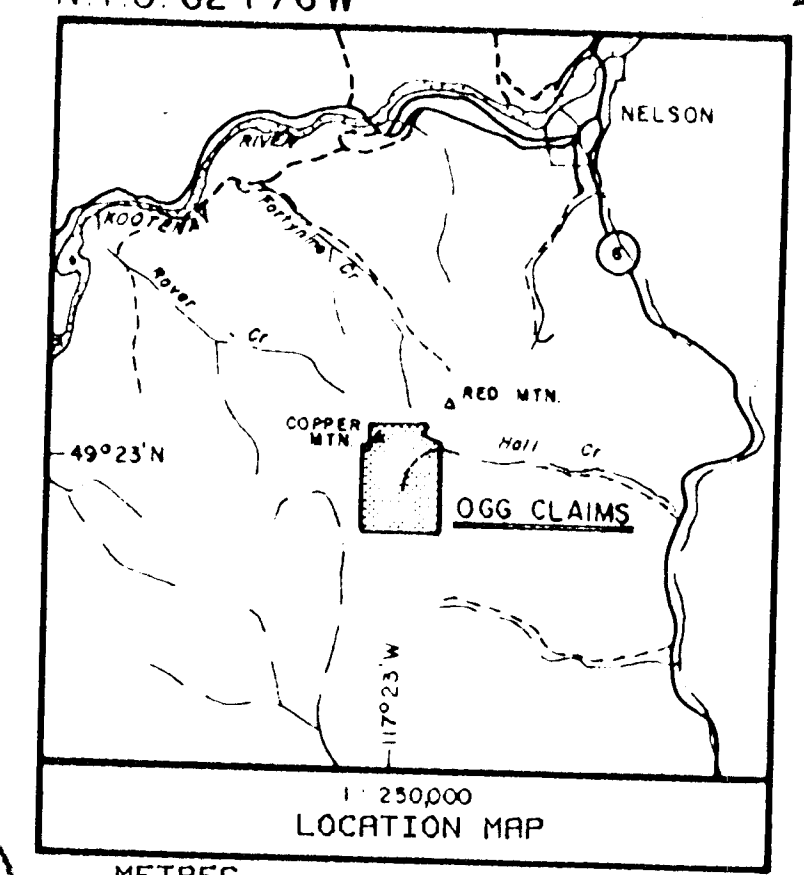
RED MTN.



KEY
 INSTRUMENT: Sabre Total Field Intensity VLF-EM
 Transmitter Station, Annapolis (21.4 Khz.)
 Data corrected for long period terrain effects
 Vertical Scale = 10%/cm.
 ——— Roads
 - - - Claim boundary
 ■ Claim post
 WW Inferred Fault
 ▬ VLF-EM Conductor

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

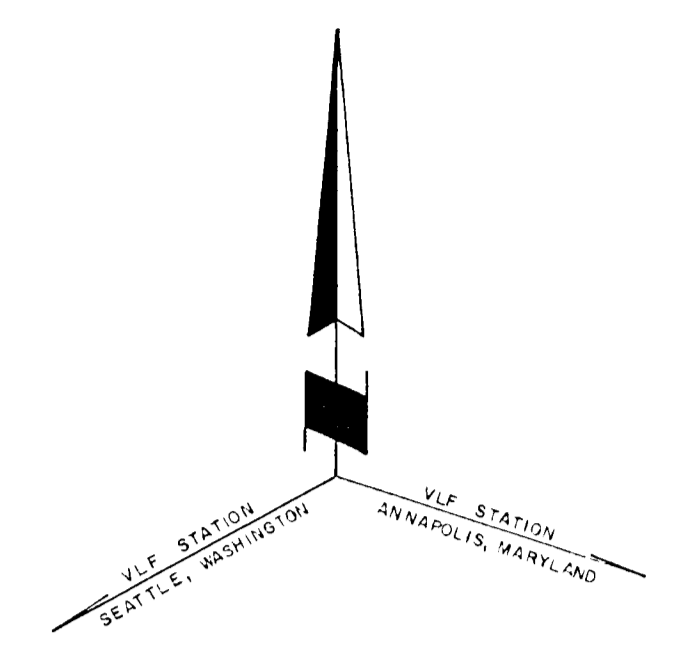
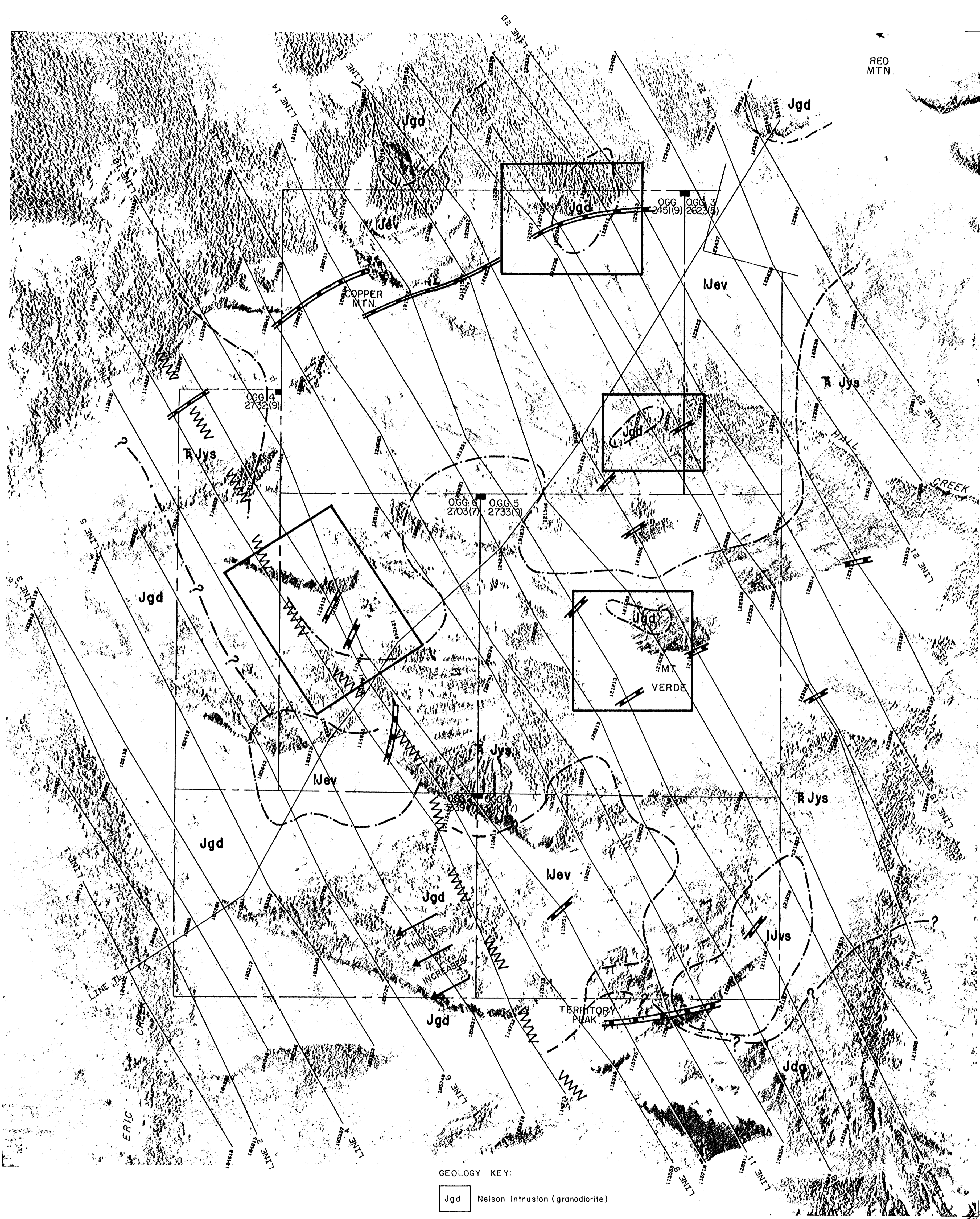
14,280 PART
 N.T.S. 82 F/6W 2 OF 2



ROY W. ROBINSON
 OGG CLAIMS
 VLF-EM PROFILES (ANNAPOLIS)
 TOTAL HORIZONTAL FIELD INTENSITY (%)
 DATE: DEC. 19/84 FIG.: 4

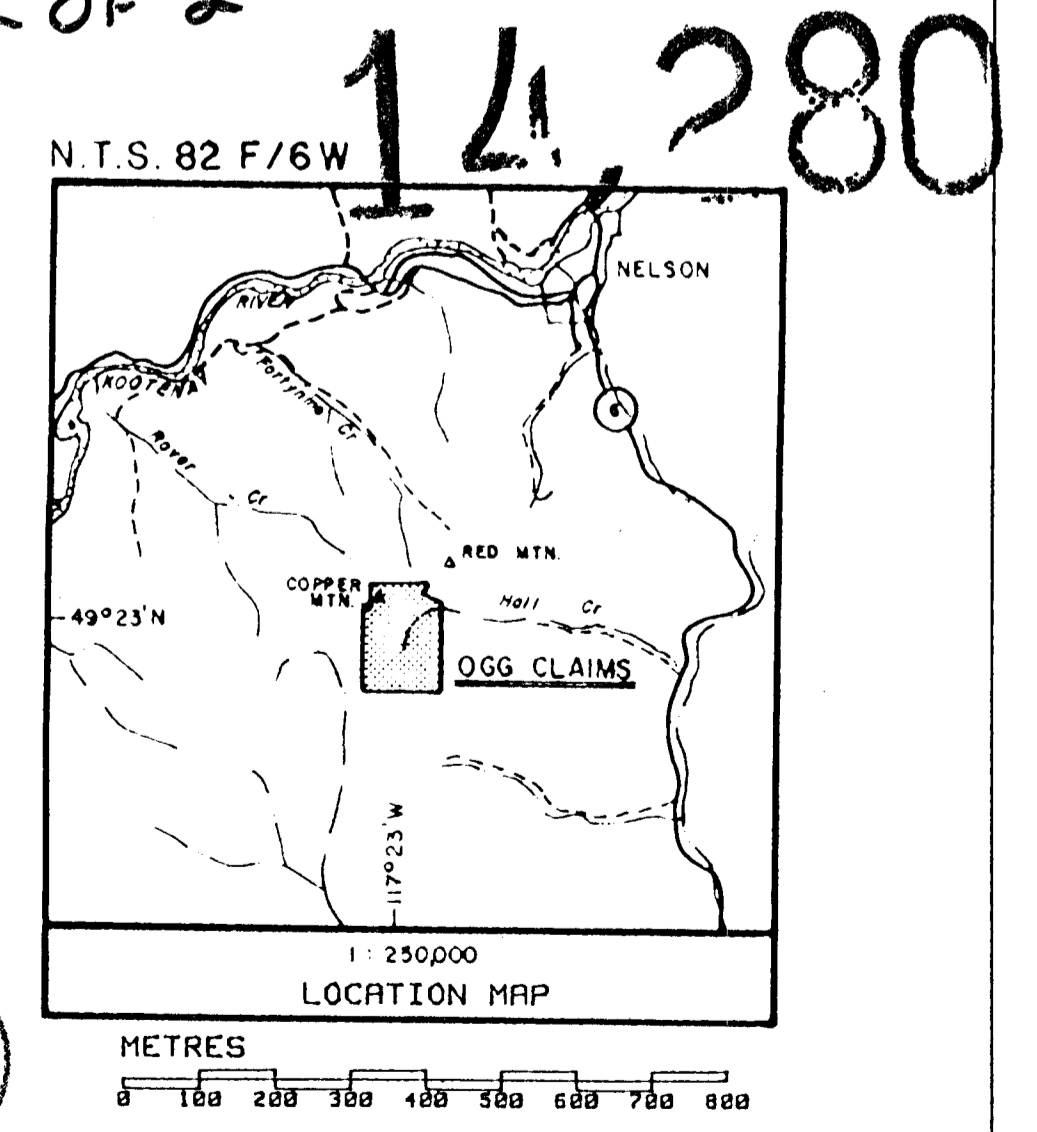
Western
 Geophysical
 Serv. Data Ltd.

To accompany the Geophysical Report on the OGG CLAIMS



- KEY**
- INSTRUMENT: Barringer M-123 Magnetometer
 - INSTRUMENT: Sabre Total Field Intensity VLF-EM
 - == Roads
 - - - Claim boundary
 - Claim post
 - W W W Inferred Fault
 - ▬ VLF-EM Conductor
 - · - Geological Contact, Interpreted
 - Areas of Interest

PART 2 OF 2 **GEOLOGICAL BRANCH ASSESSMENT REPORT**



- GEOLOGY KEY:**
- Jgd Nelson Intrusion (granodiorite)
 - IJev Elise Formation (volcanics: andesite, basalt)
 - Jys Ymir Group (sediments: quartzite, slate, argillite)

Western Geophysical Aero Data Ltd.

To accompany the Geophysical Report on the OGG CLAIMS

ROY W. ROBINSON OGG CLAIMS
GEOPHYSICAL INTERPRETATION MAP

DATE: DEC. 19/84 FIG.: 5