

8/86

GEOLOGICAL AND GEOPHYSICAL REPORT

ON THE

PUL, SUN AND STAR CLAIMS
(ACAPULCO GROUP)

TOODOGGONE RIVER AREA

Omineca Mining Division, B.C.

94E-2W

(57° 12' N. Lat., 126° 57' W. Long.)

by

Mohan R. Vulimiri, B.Sc.(Hons.), M.Sc.

and

Grant F. Crooker, B.Sc., F.G.A.C.

for

SEREM INC
(Owners and Operators)

October 1985

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,025

TABLE OF CONTENTS

Introduction	
General.....	1
Location and Access.....	1
Physiography.....	2
Property and Claim Status.....	2
Property History.....	2
Exploration Procedure.....	3
Geology.....	5
Mineralization.....	7
Geophysics.....	8
Potential.....	8
Recommendations.....	9
References.....	11
Certificates of Qualifications.....	12 & 13
Appendices	
Certificates of Analysis	
Detailed Cost Statement	
Operating Manual EM-16	

ILLUSTRATIONS

Figure 1. Location Map. Scale 1:250,000.....	follows p1
Figure 2. Claim Map. Scale 1:50,000.....	follows p1
Figure 3. Claim Geology. Scale 1:5000.....	pocket
Figure 4. Geology. Section A -A'. Scale 1:5000....	pocket
Figure 5. Map of Hand Trenches. Scale 1:100...follows	p5
Figure 6. VLF-EM Survey, In-phase and Quadrature Data. Scale 1:2500.....	pocket
Figure 7. VLF-EM Survey, Fraser Filter Data, Scale 1:2500.....	pocket

INTRODUCTION

General

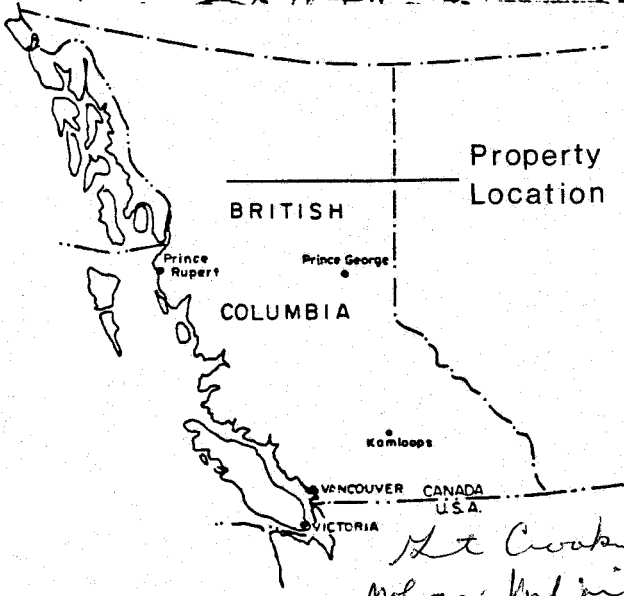
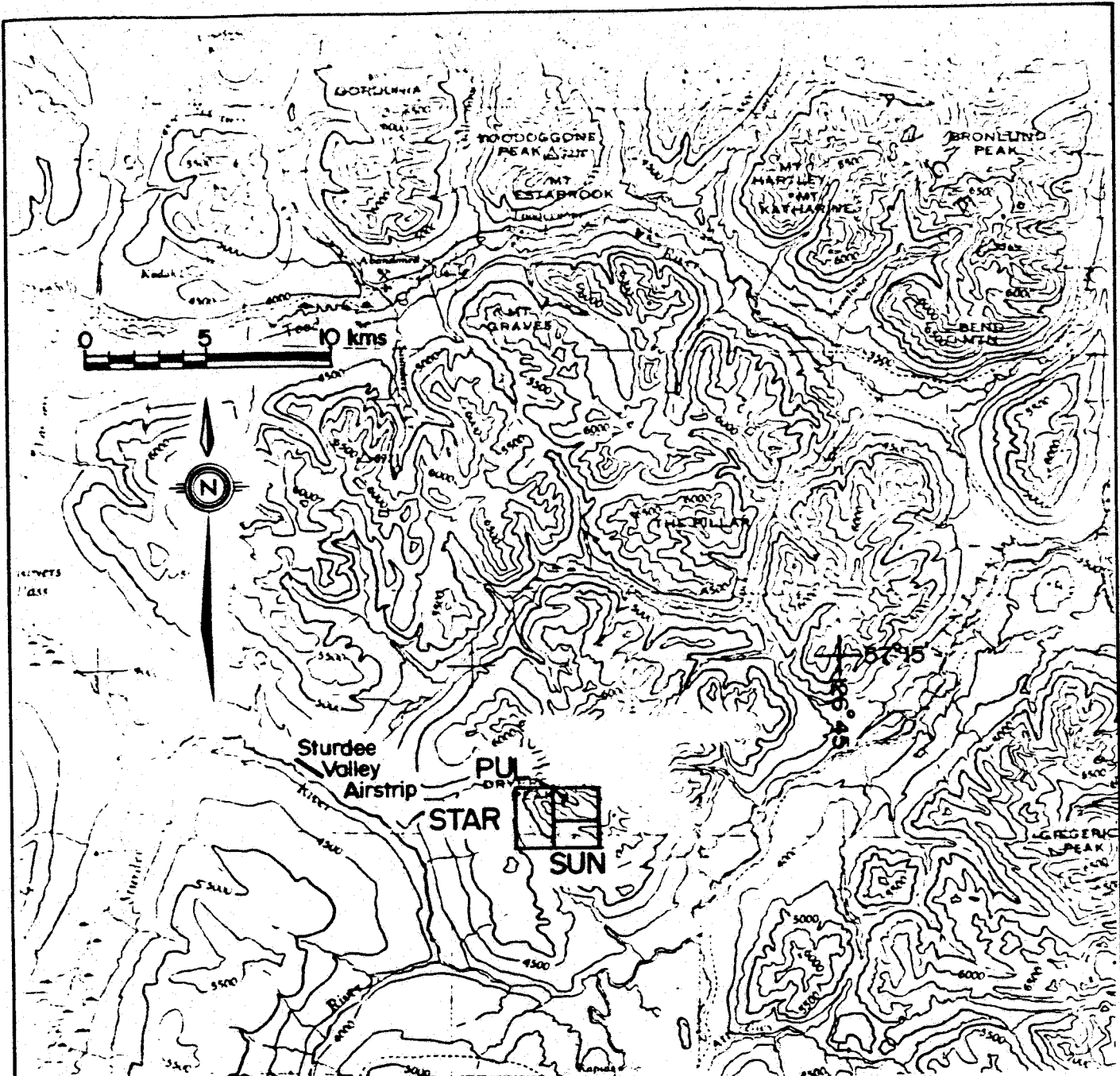
Field work was carried out on the property by Mohan R. Vulimiri, Grant F. Crooker and Sheila A. Keilbach, geologists from July 27th through August 1st, 1985.

Geological mapping, prospecting and VLF-EM survey were carried out on the claims.

Location and Access

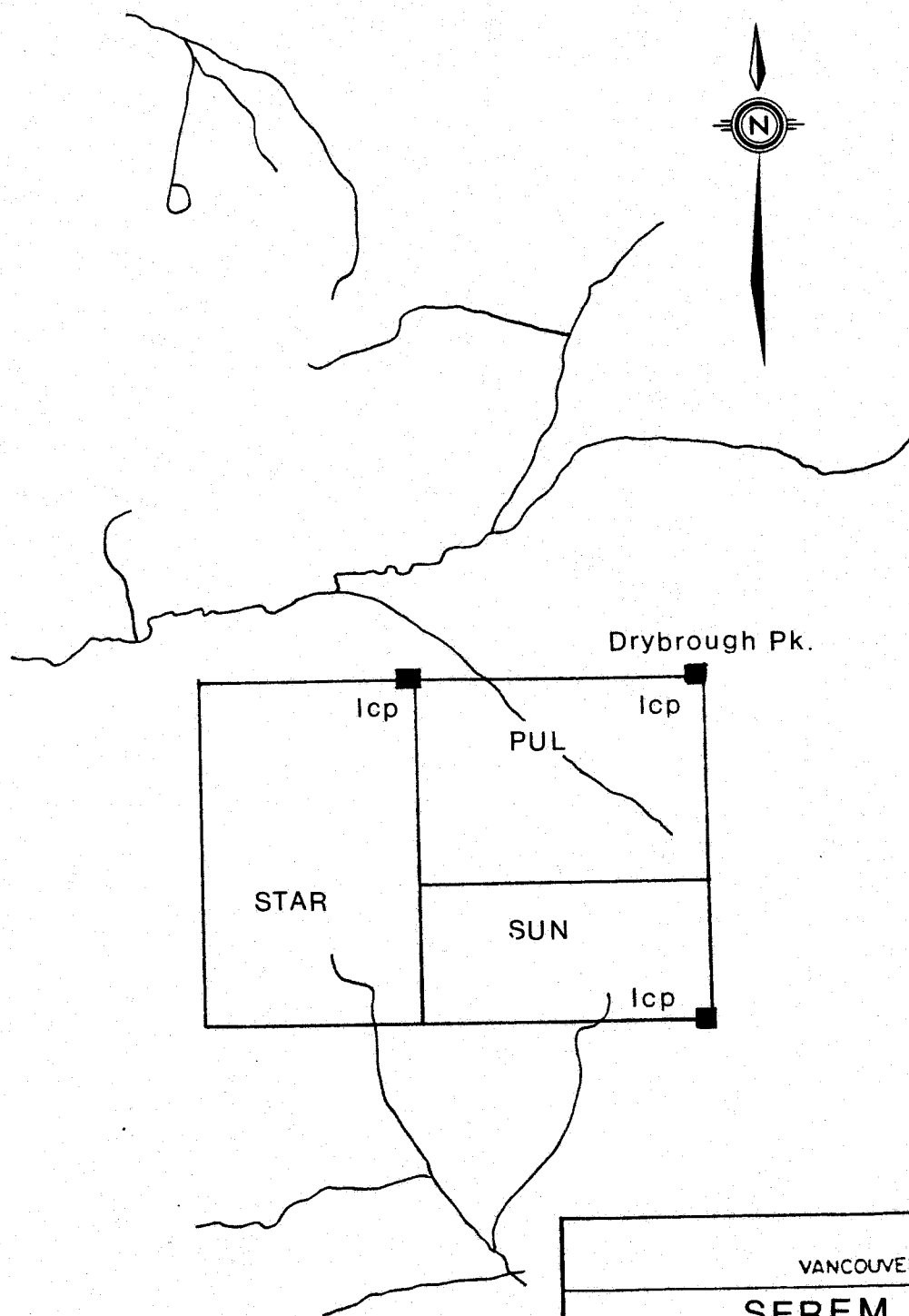
The Acapulco Claim Group is located at 57° 12' N. latitude and 126° 57' W. longitude in the Sturdee River - Finlay River area, Toadoggone River Map Sheet, 94E-2W, Omineca Mining Division (Figures 1 and 2)

Access to the property is by airplane from Smithers to Sturdee Airstrip, a distance of 280 kilometres, and from Sturdee Airstrip to the property by helicopter, a distance of 6 kilometres.

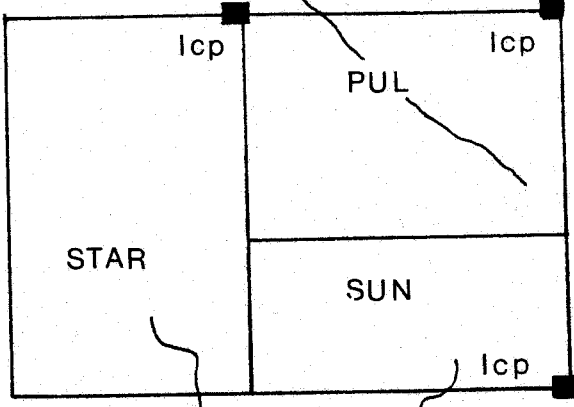


VANCOUVER, B.C.	
SEREM INC.	
Acapulco Group	
Location Map	
DRAWN BY: G. CROOKER	N.T.S. : 94E / 2W
DATE : SEPT. 1985	FIGURE NO. 1

Pat Crook
Moham M. M. M.



Drybrough Pk.



0 1 2 3 Km.

VANCOUVER, B.C.	
SEREM INC.	
Acapulco Group	
Claim Map	
DRAWN BY: G. CROOKER	N.T.S. : 94E / 2W
DATE: SEPT. 1985	FIGURE Nº. 2

*St Crocker
Main Volume*

Physiography

Topography is moderately rugged; elevation ranges from 1400 metres to 2065 metres above sea level. Outcrop patterns are variable with best exposures along steep mountain ridges, along creeks and gullies. Rest of the claim group is mostly drift covered.

Property and Claim Status

The claims (Figure 2) are owned and operated by Serem Inc., Box 11175, Royal Centre, 1055 W. Georgia Street, Vancouver, B.C. They consist of the following:

<u>Claim</u>	<u>Units</u>	<u>Record_No.</u>	<u>Record_Date</u>
Sun	8	3684	26 March 1981
Star	15	3683	26 March 1981
Pul	12	3114	15 August 1980

Property History

Previous work in the area consists of exploration for copper and molybdenum by Cordilleran Engineering in 1968 and by Minas de Cerro Dorado in 1973

Work performed in 1980 by Serem Ltd. now Serem Inc. included silt sampling of the streams draining the property, grid soil

sampling, preliminary geological mapping and prospecting.

1982 program by Serem Ltd evaluated the mineral occurrences by geological mapping and detailed prospecting. For detailed results of the above two programs 1980 and 1982 assessment reports can be referred to.

The purpose of the 1985 program was to delineate the skarn zones with VLF-EM Surveys and detailed geological mapping, and evaluate the economic potential with respect to their geological setting.

EXPLORATION PROCEDURE

Work in 1985 consisted of VLF electro-magnetic surveying and detailed geological mapping. The old was re-established as closely as possible to the original and additional lines were ran. A total of 1.3 kilometres of baseline and 12.4 kilometres of crosslines were established.

Geological mapping with prospecting was performed at a scale of 1:5000 and resulting data is shown on Figures 3,4 and 5.

Twelve and one-half kilometres of VLF-EM survey were carried out, with reading taken every 20 metres along lines. A Geonics EM-16 was used as a receiver, with NLK, Seattle, Washington,

24.8 Khz the transmitter. This transmitter was used due to its good signal strength and orientation to the geological structures.

The EM-16 measures In-phase and quadrature components of vertical magnetic field as a percentage of horizontal primary field (that is, tangent of the tiltangle and ellipticity). Both values are given in percentages. Field procedure requires to always face the same direction when taking readings. When approaching a conductor the readings will be positive, and when leaving a conductor the readings will be negative. The EM-16 is rotated in the vertical plane until a minimum signal is obtained. This reading in the "In-phase" and gives the tiltangle in degrees and the tangent of the tiltangle expressed as percent. Once this minimum signal is obtained, the "Quadrature" knob is rotated until the signal minimum is obtained. This reading is approximately the ratio of the vertical secondary field to the horizontal primary field.

The VLF-EM can pick up conductors caused by electrolyte-filled fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological boundaries as well as sulphide bodies.

The In-phase and Quadrature data were plotted as percentages on Figure 6 at a scale of 1:2500. The Fraser filter method was

then applied to the In-phase data, and the results plotted at a scale of 1:2500 on Figure 7.

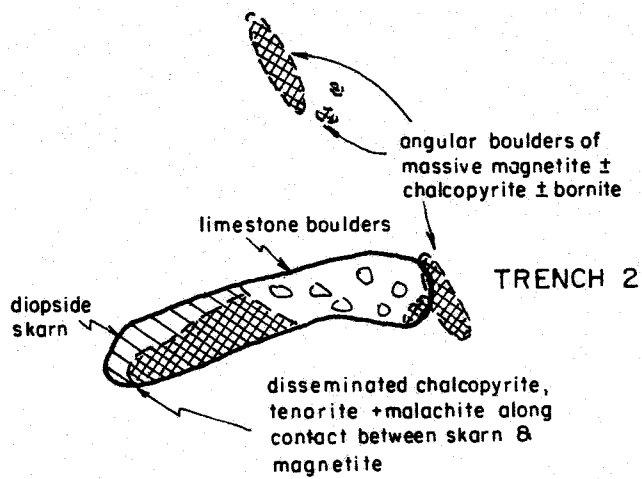
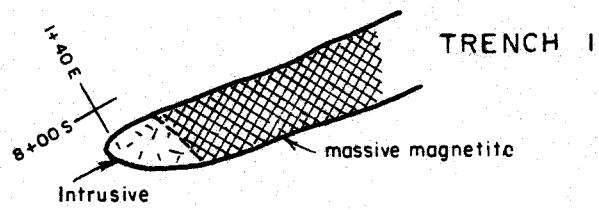
GEOLOGY

The claims are underlain by Permian Asitka Group and Lower Jurassic Omineca intrusions.

The Permian Asitka Group consists of mainly recrystallized limestone and marble with minor interbeds of volcanic rocks (feldspar porphyritic andesite). It outcrops along a ridge in the middle of the claim group (Figure 3). The units strike approximately NW-SE and dips moderately (around 30°) to the east.

Detailed mapping on the claim group shows that the Asitka carbonates are underlain and intruded by the Omineca intrusive rocks consisting of quartz diorite to quartz monzonite with minor feldspar porphyritic phases.

Skarn zones appear to be present at the contact of the intrusive rocks and limestones. The skarn zones are formed by contact metasomatism of intrusive rocks and carbonates. The marbles and recrystallized limestones are caused by contact metamorphism.



Mohan Vulimiri
Grant Crooker

SEREM INC.	
ACAPULCO GROUP SUN - STAR CLAIMS MAP OF HAND TRENCHES OMINECO M.D., B.C. SCALE 1:100	
0 1 2 3 4 5 Metres	
WORK BY : GRANT CROOKER & MOHAN VULIMIRI	
DRAWN BY : M.VULIMIRI	N.T.S. 94E-2W
DATE : SEPT. 1985	FIGURE Nº. 5

Skarns are exposed at the contact of the limestone with the intrusions all around the ridge at lower elevations on the claim group (Figure 3). Minor skarns along with some quartz dioritic and quartz monzonitic intrusions and lamprophyre dykes are also observed on top of the ridge suggesting the intrusion has an undulating contact with apophyses and embayments (Figure 4).

The skarns appear to be related to predominantly $160^{\circ}/70^{\circ}E$ fractures. The chalcedony fracture fillings (possibly excess silica left over during the skarn-forming reactions) also are related to the same fractures. Tracing of these fractures will possibly lead to skarns hidden within the embayments of the intrusion. Minor skarns also occur along the bedding planes of the limestone unit.

The skarns primarily consist of magnetite, diopside, grossular garnet and epidote near the intrusion and away from the intrusion they consist of diopside, epidote, wollastonite with minor garnet.

The intrusion exhibits extensive hydrothermal alteration in the vicinity of the skarns. It is completely bleached of mafic minerals with intense k-feldspar alteration and quartz veining. Where exposed, tracing of the alteration zones within the intrusion towards the carbonates lead to skarns.

MINERALIZATION

Three types of mineralization are present on the claim group. They are the following:

1. Mineralization consisting of chalcopyrite, bornite, malachite, pyrite, pyrrhotite, magnetite, minor galena and sphalerite with gold values is associated with skarn zones. Grab samples from this type of mineralization are assayed for gold and silver. Assays are shown in the table below.

<u>Sample</u>	<u>Ag_oz/ton</u>	<u>Au_oz/ton</u>	<u>Location</u>	<u>Mineralogy</u>
25446	32.0	0.50	7+00E;1+30S	Skarn (Cpy. & Mal.)
25447	0.1	<0.01	Hand Trench-2	Skarn (Magnetite)
25448	1.8	0.78	Hand Trench-2	Skarn (Mag.,Cpy.& Mal.)
25449	0.5	0.75	Hand Trench-2	Skarn (Mag.,Cpy.& Mal.)
25450	0.8	0.21	Hand Trench-2	Skarn (Malachite.)

2. The second type of mineralization consists primarily of galena with minor sphalerite in narrow veinlets in limestone. This does not appear to have much potential. Several samples were assayed for silver and gold in 1982.

3. Chalcopyrite and molybdenum mineralization with associated K-feldspar alteration occurs in the quartz monzonitic phase of the intrusion.

GEOPHYSICS

The Fraser filter method was applied to all In-phase readings to allow contouring of the data. The results were contoured at 10 percent intervals.

Two conductors were delineated by the VLF electro-magnetic survey.

Conductor A consists of two sub-conductors extending from L-3N;1+20E to L-10S;0+80E, a distance of 1200 metres. This is a very strong conductor, delineating a contact zone (skarn?) between the intrusion and the overlying limestone unit. Skarn outcrops are observed at some locations, where exposed, along the conductor.

Conductor B consists of a weak to moderate conductor extending from L-3N;5+80E to L-2S;6+00E. This corresponds to a feldspar porphyry intrusive dyke and related skarn zones (Figure 3, 6 & 7).

POTENTIAL

Assays of samples with skarn mineralogy with even small amounts of chalcopyrite and other copper-bearing minerals show significant amounts of gold (upto 0.78 oz/ton).

Trenching (Figure 5) in an area of magnetite skarn shows that samples with only magnetite do not carry any gold values, but samples with magnetite and copper-bearing minerals carry significant gold values. Samples containing chalcopyrite, bornite, galena and sphalerite collected from skarns in the northern portion of the claim group also carry significant gold values.

The above results show that skarn zones are the most important in terms of gold values. The west contact zone of limestone and intrusion was traced along approximately north-south was traced geophysics (VLF-EM) and to a minor extent by geology and geochemistry (1980 report) for a distance of 1200 metres, and along east-west direction under the ridge by geological methods and interpretation for a distance of about 900 metres (Figures 3,4,6 & 7).

RECOMMENDATIONS

The western contact of the limestone and intrusion can be systematically trenched from known showings with a bulldozer and a back-hoe, because of gentle topography and accessibility from Sturdee Airstrip.

Drilling can also be initiated at the same time uphill under

the overlying recrystallized limesone and marble, again systematically delineating the known showings.

Respectfully submitted

Mohan Vulimiri

Mohan R. Vulimiri B.Sc.(Hons.), M.Sc.

Grant F. Crooker

Grant F. Crooker B.Sc., F.G.A.C.

REFERENCES

Crawford, S.A., & Vulimiri, M.R. (1980) - Geochemical & Prospecting Report on the Acapulco, Aca & Pul claims.

Reeve, A.P. (1968) - Geological Report on the Riga Claim Group.

Stammers, M.A. (1968) - Geological, Geochemical and Trenching Report on the Acapulci Group.

CERTIFICATE OF QUALIFICATIONS

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

1. That I graduated from the University of British Columbia in 1972 with a Bachelor of Science degree in Geology.

2. That I have prospected and actively pursued geology prior to my graduation and have practised my profession since 1972.

3. That I am a member of the Canadian Institute of Mining and Metallurgy.

4. That I am a Fellow of the Geological Association of Canada.

5. That I have no direct or indirect interest in the property

Dated at Vancouver, B.C. this 6th day of November, 1985.

Grant F. Crooker
Grant Crooker, B.Sc., F.G.A.C.

CERTIFICATE OF QUALIFICATIONS

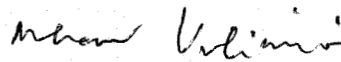
I, Mohan R. Vulimiri, of 1120 Heywood Street, North Vancouver, B.C., hereby certify that:

1. I am a graduate with a B.Sc. (Hons.) degree from the Indian Institute of Technology, Kharagpur and a M.Sc. (Economic Geology) degree from the University of Washington.

2. I am involved in mineral exploration in British Columbia since 1970 and I have acted in responsible positions since 1974.

3. I have no direct or indirect interest in the property

Dated at Vancouver, B.C., this 6th day of November, 1985.



Mohan R. Vulimiri

DETAILED_COST_STATEMENT

Wages

1 Geologist, G. Crooker
8 days at \$300.00 per day.....\$2400.00
July 27 - 31, August 1, 13, 14, 1985

1 Geologist, M.R. Vulimiri
10 days at \$300.00 per day\$3000.00
July 27 - 31, August 1, 11, 13, 14, 1985

1 Geologist, S.Keilbach
6 days at \$200.00 per day\$1200.00
July 27 - 31, August 1, 1985

Camp Costs (include groceries, camp supplies, camp equipment,
radio, expediting, etc.

G. Crooker, 6 days at \$50.00 per day.....\$300.00
July 27 - 31, August 1, 1985

M.R. Vulimiri, 6 days at \$50.00 per day...\$300.00
July 27 - 31, August 1, 1985

S. Keilbach, 6 days at \$50.00 per day.....\$300.00
July 27 - 31, August 1, 1985

Transportation

Helicopter (Hughes 500D)
2.1 Hrs charter at \$450.00 per Hr.....\$945.00
2.1 Hrs fuel at \$115.00 per Hr.....\$241.00

Fixed Wing* (Smithers to Sturdee Strip)
6 days at \$72.50 per day.....\$435.00
July 27 - 31, August 1, 1985

Mobilization & Demobilization
6 days at \$78.25 per day
July 27 - 31, August 1, 1985

Supplies (flagging, toposil thread, etc.).....\$50.00

Instrument Rental

Geonics EM-16R.....\$150.00
6 days at \$25.00 per day
July 27 - 31, August 1, 1985

Assays

5 rock samples (Au, Ag) at \$22.00.....\$110.00

Preparation of Report

Secreterial, draughting, reproduction, etc.\$700.00

\$10,600.00

* Mobilization and demobilization costs, and fixed wing costs are pro-rated over 7 projects in the Toodoggone Area covering 44 days



GEONICS LIMITED

1745 Meyerside Drive, Unit 8, Mississauga, Ontario, Canada L5T 1C5 Tel. (416) 676-9580 Cables: Geonics

OPERATING MANUAL

for

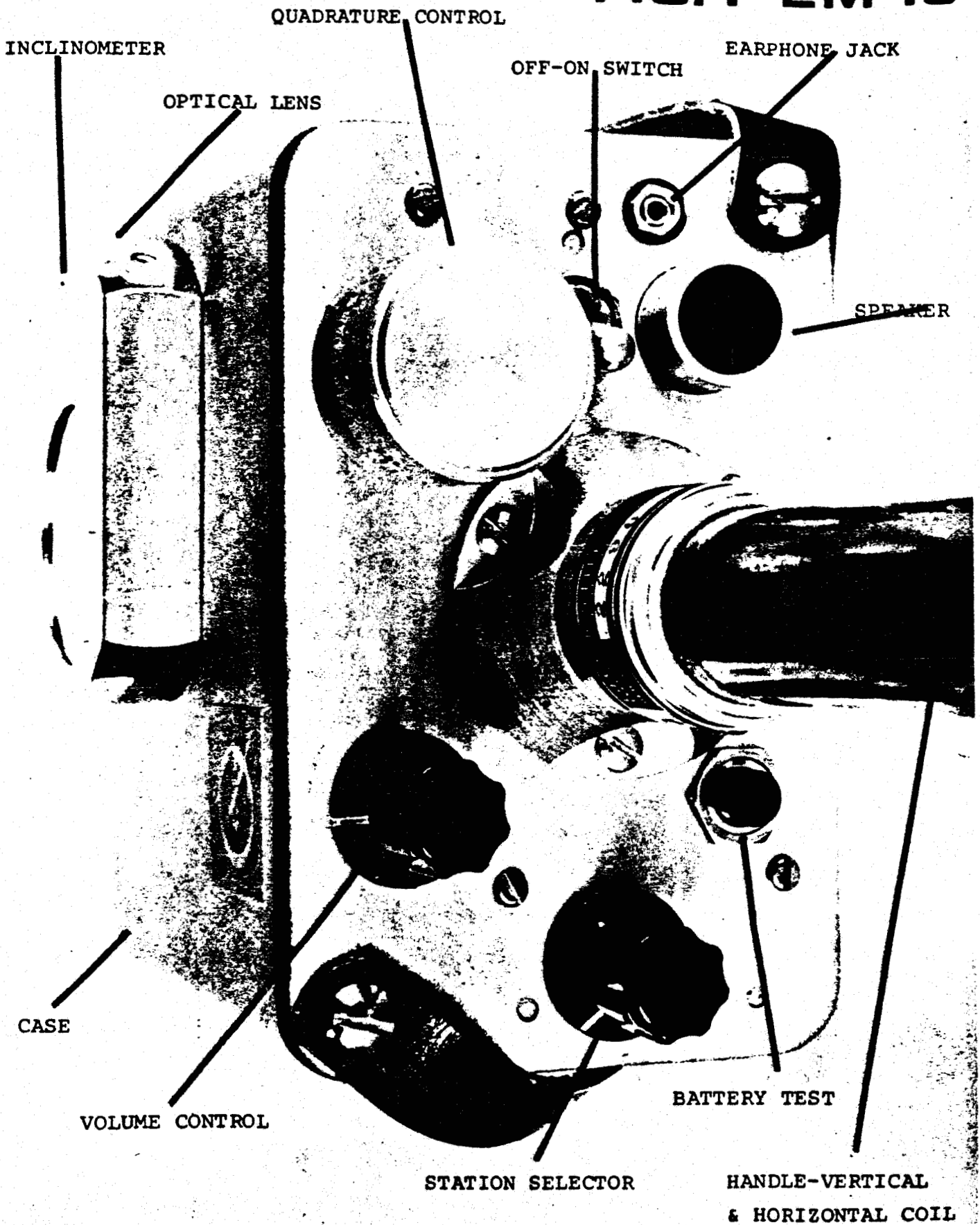
EM16 VLF-EM

Revised Jan. 1979

EM16 SPECIFICATIONS

MEASURED QUANTITY	In-phase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity).
SENSITIVITY	In-phase : ±150% Quad-phase : ± 40%
RESOLUTION	±1%
OUTPUT	Nulling by audio tone. In-phase indication from mechanical inclinometer and quad-phase from a graduated dial.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	On/Off switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.
POWER SUPPLY	6 disposable 'AA' cells.
DIMENSIONS	42 x 14 x 9cm
WEIGHT	Instrument: 1.6 kg Shipping : 4.5 kg

FIG. 1 EM 16



PRINCIPLES OF OPERATION

The VLF-transmitting stations operating for communications with submarines have a vertical antenna. The Antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. (See Figures 3 & 4). This equipment measures the vertical components of these secondary fields.

The EM16 is simply a sensitive receiver covering the frequency band of the VLF-transmitting stations with means of measuring the vertical field components.

The receiver has two inputs, with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt-angle is calibrated in percentage. The remaining signal in this coil is finally balanced out by a measured percentage of a signal from the other coil, after being shifted by 90° . This coil is normally parallel to the primary field, (See instrument Block Diagram - Figure 2).

Thus, if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation $1/2$ -signal from the horizontal coil is a measure of the quadrature vertical signal.

Some of the properties of the VLF radio wave in the ground are outlined by Figures 4 thru 9.

ACCOMPANYING NOTES FOR FIGURES 2 - 9

FIGURE 2 is the block diagram of the EM16. The diagram is self-explanatory. Both the coils (reference and signal coil) are housed in the lower part of the handle. The directions of the axis of the coils are as follows: The reference coil axis is basically horizontal and is kept more or less parallel to the primary field during measurement. The signal coil is at right angles to the reference coil and its axis is, of course, vertical.

The signal amplifier has the two inputs, one connected to the signal coil and one to the reference channel. By tilting the coils, the operator minimizes the signal from the signal (vertical axis) coil. Any remaining signal is reduced to zero by the quadrature control in the reference channel. The signal amplifier has zero output

SELECTION OF THE STATION

The magnetic field lines from the station are at right angles to the direction of the station. Always select a station which gives the field approximately at right angles to the main strike of the ore bodies or geological structure of the area you are presently working on. In other words, the strike of geology should point to the transmitter. (See Figure 3). Of course, $\pm 45^{\circ}$ variations are tolerable in practice.

Tuning of the EM16 to the proper transmitting station is done by means of plug-in units inside the receiver. The instrument takes two selector-units simultaneously. A switch is provided for quick switching between these two stations.

To change a plug-in unit, open the cover on top of the instrument, and insert the proper plug. (Figure 10) Close the cover and set the selector switch to the desired plug-in.

On the following pages is a variety of information on the most commonly used (i.e. reliable) VLF Transmitters including transmission frequency, geographical location and their scheduled maintenance periods.

REVISED
April 2, 1982

VLF Transmitter Information

NAVY STATIONS OFF-AIR TIMES:

NAA Schedule off 1300 to 2300 UT daily 15 Nov. through Nov. 17
NDT Scheduled off twenty-four hours each day 28 Oct. and 29 Oct. (Local);
ten hours each day Mon. through Sat. (Local) Beginning 14 Jan. 1979 at
2300 UT and ending 6 Feb. at 0900 UT; Twenty-four hours each day Mon.
0900 UT; Ten hours each day Mon. through Sat. (Local) Beginning 7 Mar.
at 2300 UT and ending 13 Apr. at 0900 UT.
NPM 19 Oct. 1800 to 2158 UT
Scheduled off 1800 to 0200 UT Mon. through Fri. (Local) 15 Jan. 1979 to
17 Mar.
NSS Scheduled off 15 Oct. to 10 Nov. and 1200 to 2400 UT daily 21 Nov.
through 24 Nov.
NWC May be off intermittently until 24 Nov.

NORMAL MAINTENANCE PERIODS:

Cutler NAA Every Mon. 1200 to 2000 UT. If Holiday falls on Mon., maintenance will
be performed on preceding Fri.
NDT First Thur./Fri. of month 2300 to 0900 UT, other Thur./Fri. 2300 to
0700 UT
Seattle NLK Every Thur. 1600 to 2400 UT. During daylight saving time every Thur. 1500
to 2300 UT.
NPM Every Wed./Thur. 1700 to 0500 UT.
NSS Every Tues. 1200 to 2000 UT.
NWC Every Wed. 0000 to 0800 UT.

For further information the U.S. Naval Observatory, Time Service Division, Washington D.C.
may be contacted at (202) 254-4548.

REVISED

Sept. 22, 1982

The frequency of NLK is now 24.8 kHz.

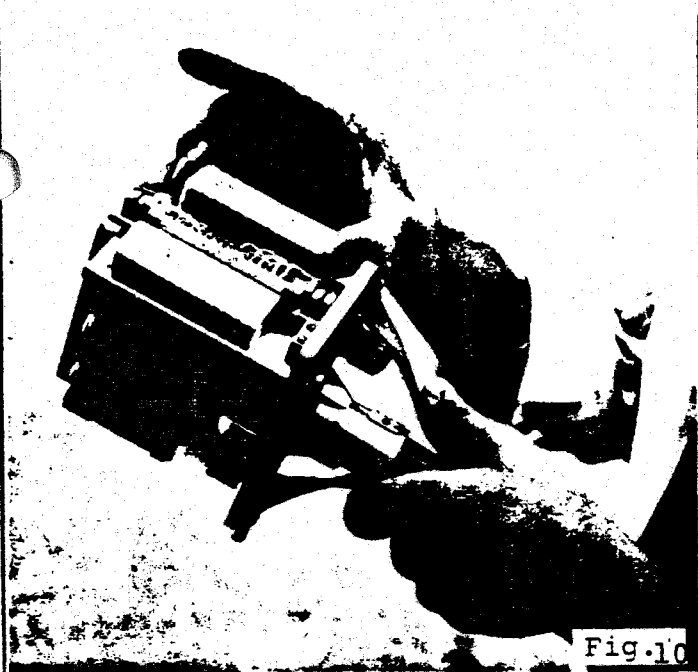


Fig. 10

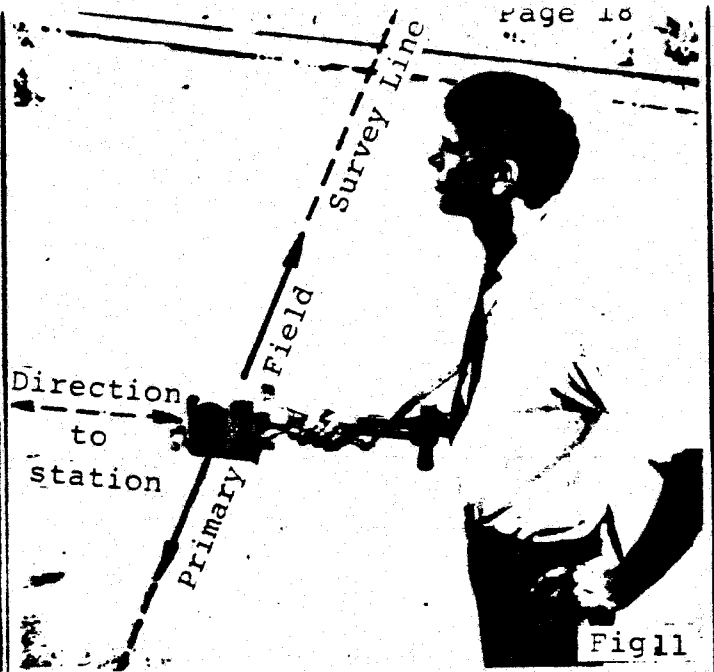


Fig. 11

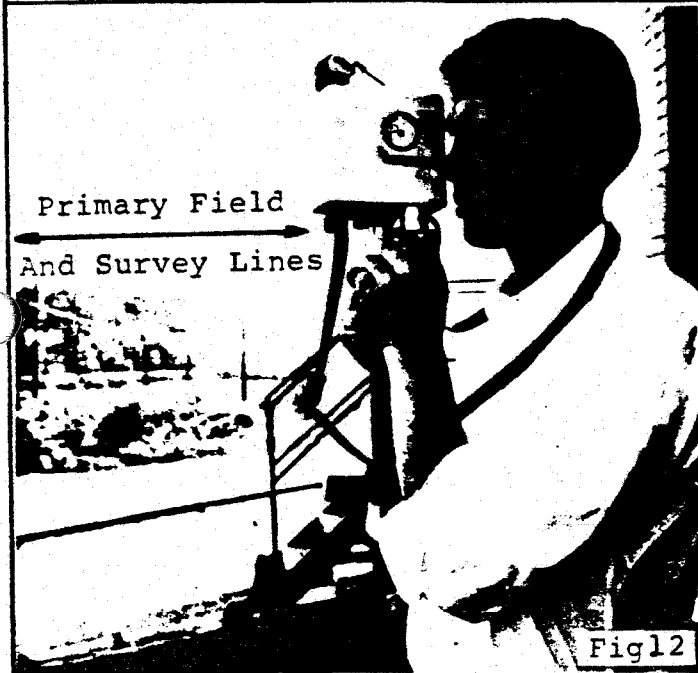
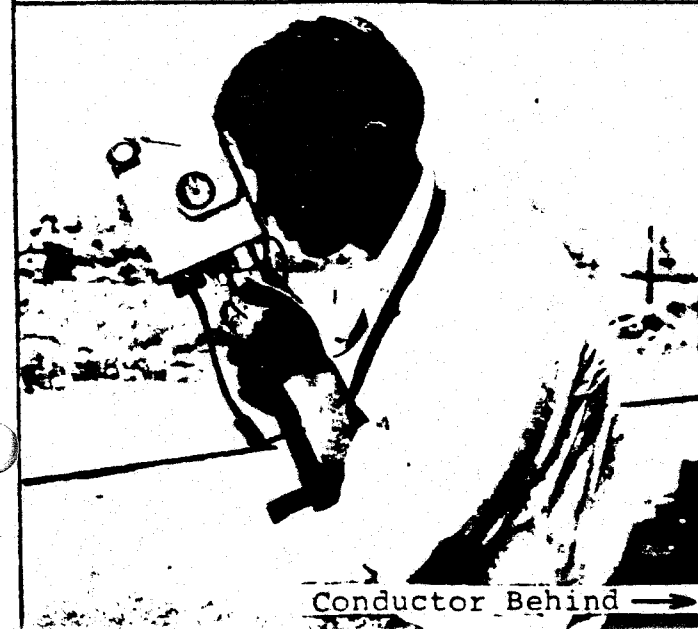


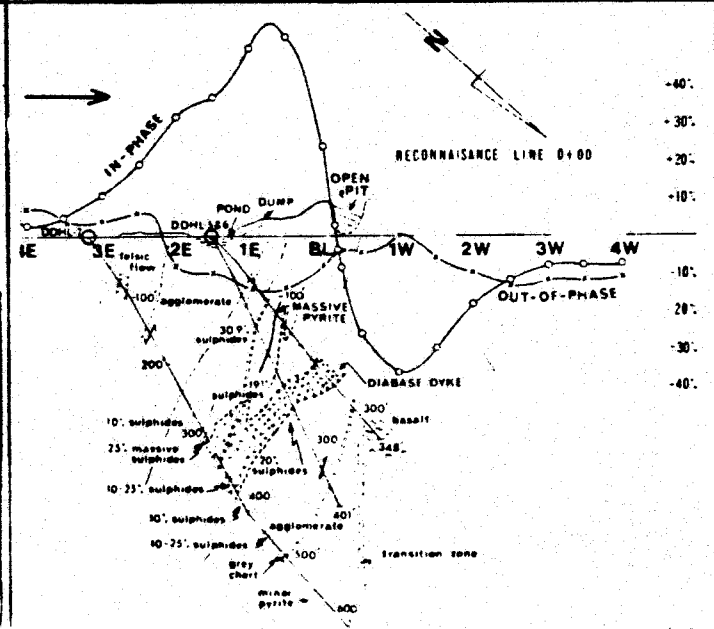
Fig. 12



Fig. 13



Conductor Behind



FIELD PROCEDURE

Orientation & Taking a Reading

The direction of the survey lines should be selected approximately along the lines of the primary magnetic field, at right angles to the direction to the station being used. Before starting the survey, the instrument can be used to orient oneself in that respect. By turning the instrument sideways, the signal is minimum when the instrument is pointing towards the station, thus indicating that the magnetic field is at right angles to the receiving coil inside the handle. (Fig.11).

To take a reading, first orient the reference coil (in the lower end of the handle) along the magnetic lines. (Fig.12) Swing the instrument back and forth for minimum sound intensity in the speaker. Use the volume control to set the sound level for comfortable listening. Then use your left hand to adjust the quadrature component dial on the front left corner of the instrument to further minimize the sound. After finding the minimum signal strength on both adjustments, read the inclinometer by looking into the small lens. Also, mark down the quadrature reading.

While travelling to the next location you can, if you wish, keep the instrument in operating position. If fast changes in the readings occur, you might take extra stations to pinpoint accurately the details of anomaly.

The dials inside the inclinometer are calibrated in positive and negative percentages. If the instrument is facing 180° from the original direction of travel, the polarities of the readings will be reversed. Therefore, in the same area take the readings always facing in the same direction even when travelling in opposite way along the lines.

The lower end of the handle, will as a rule, point towards the conductor. (Figs.13 & 14) The instrument is so calibrated that when approaching the conductor, the angles are positive in the in-phase component. Turn always in the same direction for readings and mark all this on your notes, maps, etc.

THE INCLINOMETER DIALS

The right-hand scale is the in-phase percentage (ie. H_s/H_p as a percentage). This percentage is in fact the tangent of the dip angle. To compute the dip angle simply take the arc-tangent of the percentage reading divided by 100. See the conversion graph on the following page.

The left-hand scale is the secant of the slope of the ground surface. You can use it to "calculate" your distance to the next station along the slope of the terrain.

- (1) Open both eyes.
- (2) Aim the hairline along the slope to the next station to about your eye level height above ground.
- (3) Read on the left scale directly the distance necessary to measure along the slope to advance 100 (ft) horizontally.

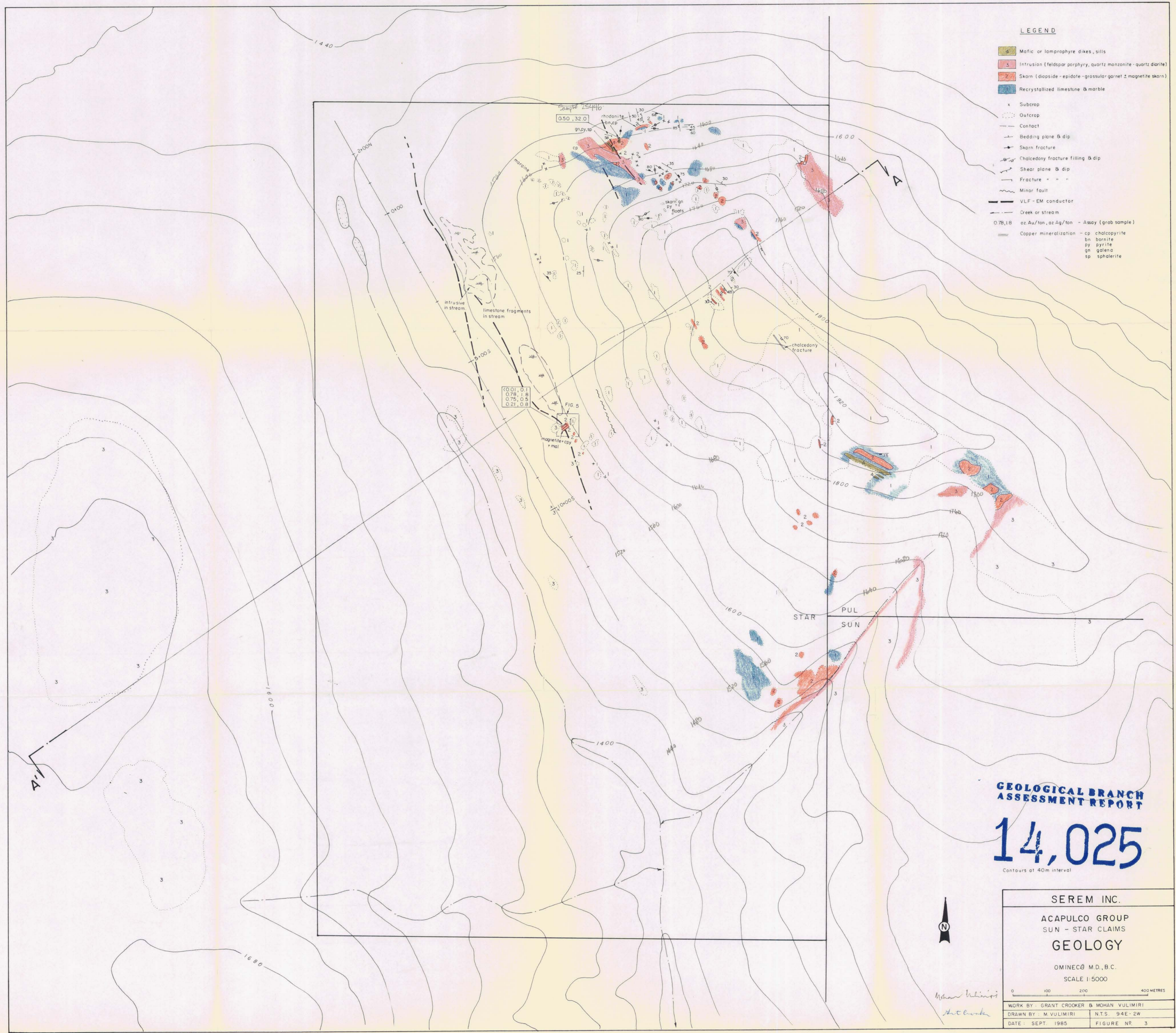
We feel that this will make your reconnaissance work easier. The outside scale on the inclinometer is calibrated in degrees just in case you have use for it.

PLOTTING THE RESULTS

For easy interpretation of the results, it is good practice to plot the actual curves directly on the survey line map using suitable scales for the percentage readings. (Fig.15) The horizontal scale should be the same as your other maps on the area for convenience.

A more convenient form of this data is easily achieved by transforming the zero-crossings into peaks by means of a simple numerical filtering technique. This technique is described by D.C. Fraser in his paper "Contouring of VLF-EM Data", Geophysics, Vol. 34, No. 6. (December 1969)pp958-967. A reprint of this paper is included in this manual for the convenience of the user.

This simple data manipulation procedure which can be implemented in the field produces VLF-EM data which can be contoured and as such provides a significant advantage in the evaluation of this data.



- LEGEND**
- Mafic or lamprophyre dikes, sills
 - Intrusion (feldspar porphyry, quartz monzonite-quartz diorite)
 - Skarn (diopside-epidote-grossular garnet ± magnetite skarn)
 - Recrystallized limestone & marble
 - x Subcrop
 - Outcrop
 - Contact
 - Bedding plane & dip
 - Skarn fracture
 - Chalcodony fracture filling & dip
 - Shear plane & dip
 - Fracture " " "
 - ~ Minor fault
 - VLF-EM conductor
 - Creek or stream
 - 0.78, 1.8 oz Au/ton, oz Ag/ton - Assay (grab sample)
 - Copper mineralization
 - cp chalcocopyrite
 - bn barite
 - py pyrite
 - gn galena
 - sp sphalerite

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,025

Contours at 40m interval

SEREM INC.	
ACAPULCO GROUP SUN - STAR CLAIMS	
GEOLOGY	
OMINECÓ M.D., B.C. SCALE 1:5000	
WORK BY: GRANT CROOKER & MOHAN VULIMIRI	DRAWN BY: M. VULIMIRI
DATE: SEPT. 1985	N.T.S. 94E-2W FIGURE Nº 3

N

Mohan Vulimiri
Art Crook

A

A'

EI. 2000 m.

LOOKING SOUTH

EI. 1600 m

EI. 1200 m

Diopside + epidote + minor garnet skarn

Recrystallized limestone & marble

Bleached & highly k-feldspar altered quartz diorite intrusion.

Location of hand trenches (magnetite + chalcopyrite with gold in garnet-diopside skarn)

Relatively unaltered quartz diorite intrusion.

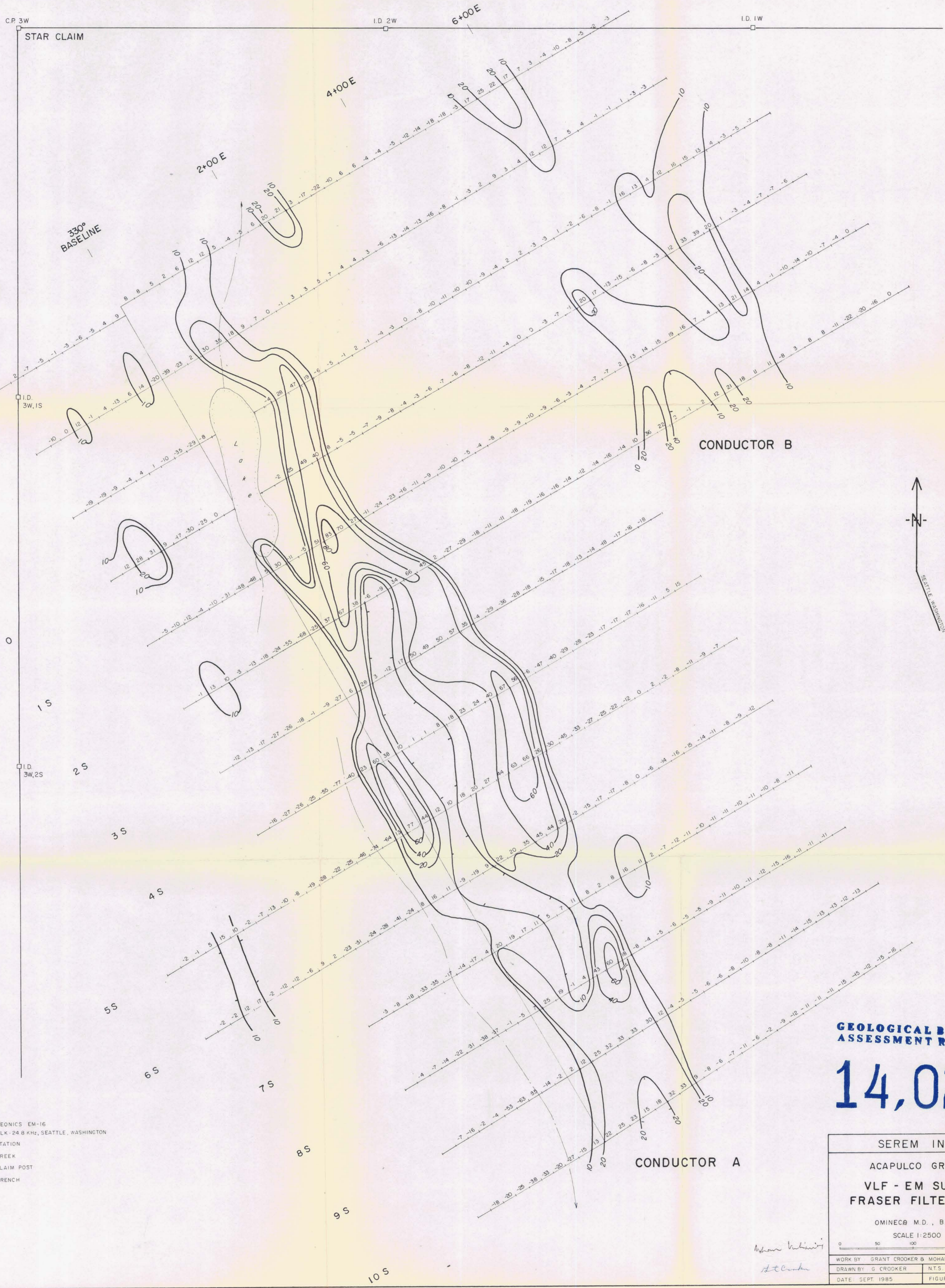
Bleached highly siliceous k-feldspar altered intrusion

GEOLOGICAL BRANCH ASSESSMENT REPORT

14,025

*Grant Crooker
Mohan Vulumiri*

SEREM INC.	
ACAPULCO GROUP SUN - STAR CLAIMS	
CROSS SECTION A-A'	
OMINECO M.D., B.C.	
SCALE 1:5000	
0 100 200 300 Metres	
WORK BY: GRANT CROOKER & MOHAN VULIMIRI	
DRAWN BY: M. VULIMIRI	N.T.S. 94E-2W
DATE: SEPT. 1985	FIGURE N ^o . 4



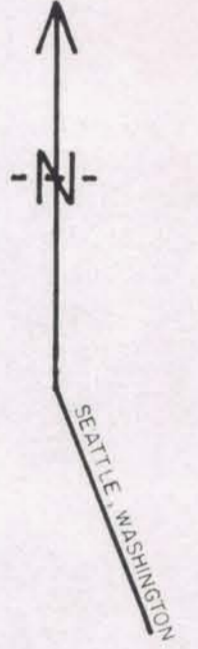
INSTRUMENT : GEONICS EM-16
 TRANSMITTER : NLK-24.8 KHZ, SEATTLE, WASHINGTON
 ——— STATION
 — CREEK
 □ CLAIM POST
 TRENCH

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,025

SEREM INC.	
ACAPULCO GROUP	
VLF - EM SURVEY FRASER FILTER DATA	
OMINECO M.D., B.C.	
SCALE 1:2500	
0 50 100 200 METRES	
WORK BY GRANT CROOKER & MOHAN VULMIRI	
DRAWN BY G. CROOKER	NTS. 94E-2W
DATE: SEPT. 1985	FIGURE NO. 6

Mohan Vulmiri
G. Crooker





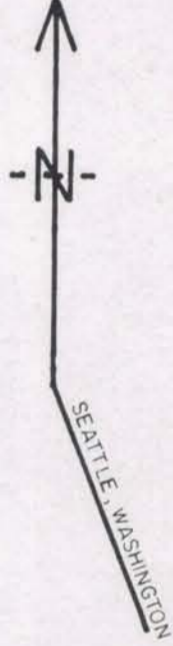
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,025

SEREM INC.	
ACAPULCO GROUP	
VLF - EM SURVEY	
IN-PHASE & QUADRATURE DATA	
OMINECA M.D., B.C.	
SCALE 1:2500	
WORK BY GRANT CROOKER & MOHAN VULIMIRI	
DRAWN BY G. CROOKER	N.T.S. 94E-2W
DATE: SEPT. 1985	FIGURE NO. 7

INSTRUMENT : GEONICS EM-16
 TRANSMITTER : NLK-24 B KHz, SEATTLE, WASHINGTON
 STATION
 CREEK
 CLAIM POST
 TRENCH
 IN-PHASE (%), TANGENT OF TILT ANGLE
 QUADRATURE (%)

50%
 0
 -50%
 VERTICAL SCALE
 1cm = 25%



Mohan Vulimiri
G. Crooker