

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES	
Rec'd	AUG 22 1986
SUBJECT	_____
FILE	_____
VANCOUVER, B.C.	

15,045

**GEOPHYSICAL REPORT
ON THE
CHUCK 1, 2 and MOYEZ 1, 2 and 4 CLAIMS**

Located in the Toadoggone River Area
Liard Mining Division
NTS 94-E-6W, 11W
British Columbia

298' at
57°~~52'~~ Latitude
127°~~25'~~ Longitude
27.5'

FILMED

for
Operator: MIRAMAR ENERGY CORPORATION
Owner: Newmont Exploration of Canada Ltd.
by

S. Todoruk, Geologist
C.K. Ikona, P.Eng.

August 10, 1986

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 LIST OF CLAIMS	1
3.0 LOCATION, ACCESS AND GEOGRAPHY	2
4.0 REGIONAL GEOLOGY	3
5.0 PROPERTY GEOLOGY	3
6.0 GEOPHYSICAL SURVEYS	4
Grid #1	5
Grid #2	6
7.0 CONCLUSIONS AND RECOMMENDATIONS	6

LIST OF FIGURES

	<u>Following Page</u>
Figure 1 Property Location Map	1
Figure 2 Claim Index Map	1
Figure 3 Grid #1 Map	4
Figure 4 Grid #2 Map	4
Figure 5 Grid #1 Resistivity Plot	5
Figure 6 Grid #1 Fraser Filter Plot	5
Figure 7 Grid #1 Dip Angle Plot	5
Figure 8 Grid #2 Resistivity Plot	5
Figure 9 Grid #2 Fraser Filter Plot	5
Figure 10 Grid #2 Dip Angle Plot	5

LIST OF APPENDICES

Appendix I	List of References
Appendix II	Cost Statement
Appendix III	Statement of Qualifications
Appendix IV	Engineer's Certificate
Appendix V	Geonics EM + EMR-16 Data Sheets

1.0 INTRODUCTION

The Chuck-Moyez property was purchased by Miramar Energy Corporation from Newmont Exploration of Canada Ltd. in early 1985. The property was staked by Newmont in 1982 to cover geologic targets located adjacent to Energex Minerals Ltd.'s A1 property high grade gold deposit.

Newmont carried out reconnaissance geochemical studies and preliminary geologic mapping in 1983 and 1984.

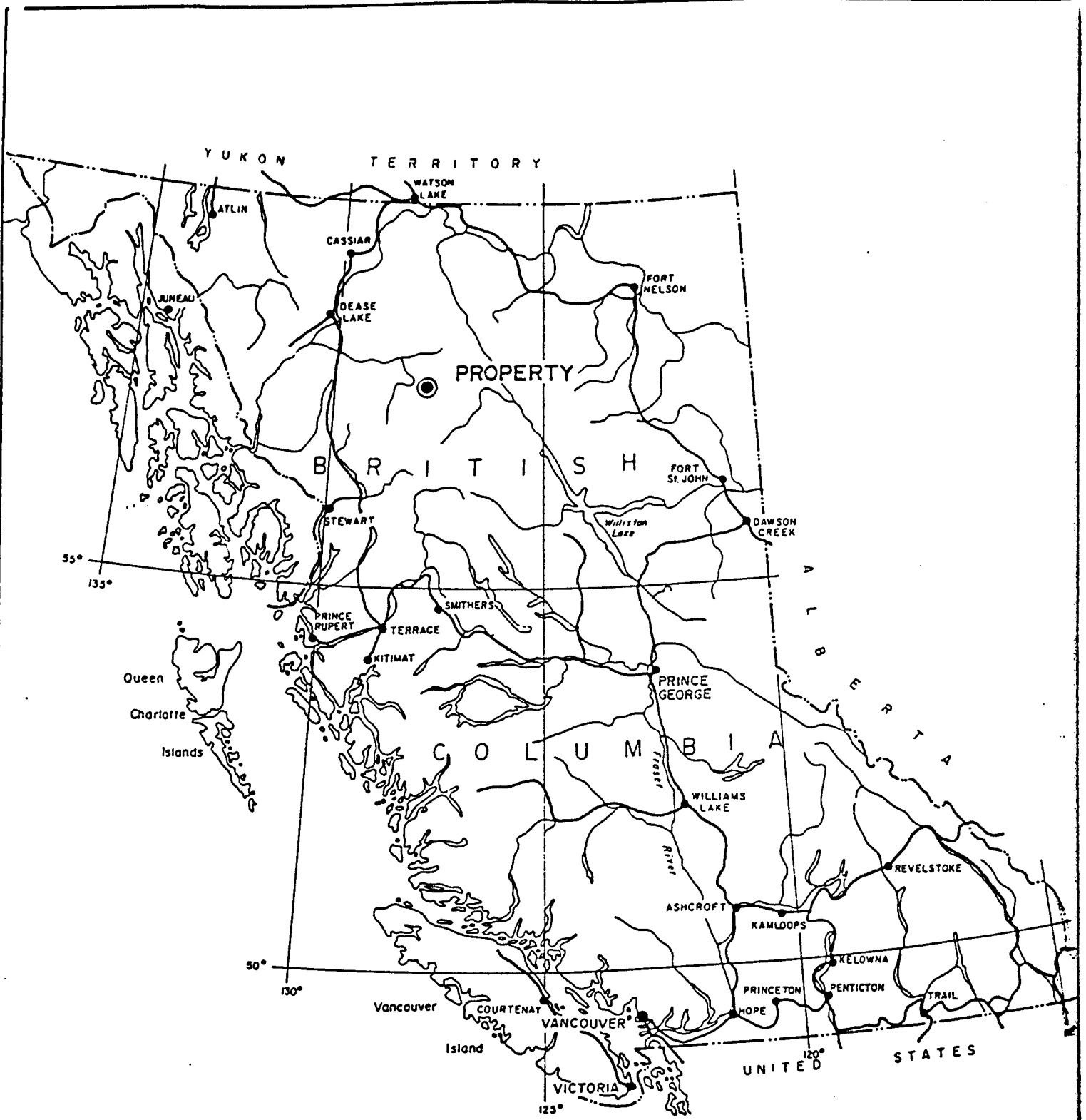
The 1985 program consisted of detailed geologic mapping, rock chip geochemical sampling, seepage sediment geochemical sampling and heavy sediment geochemical sampling from various locations on the property.

The 1986 project involved VLF (very low frequency) electromagnetic and resistivity surveys on two separate grid areas trying to follow up previous geological anomalies. A total of 8.3 km of geophysical surveying was completed.

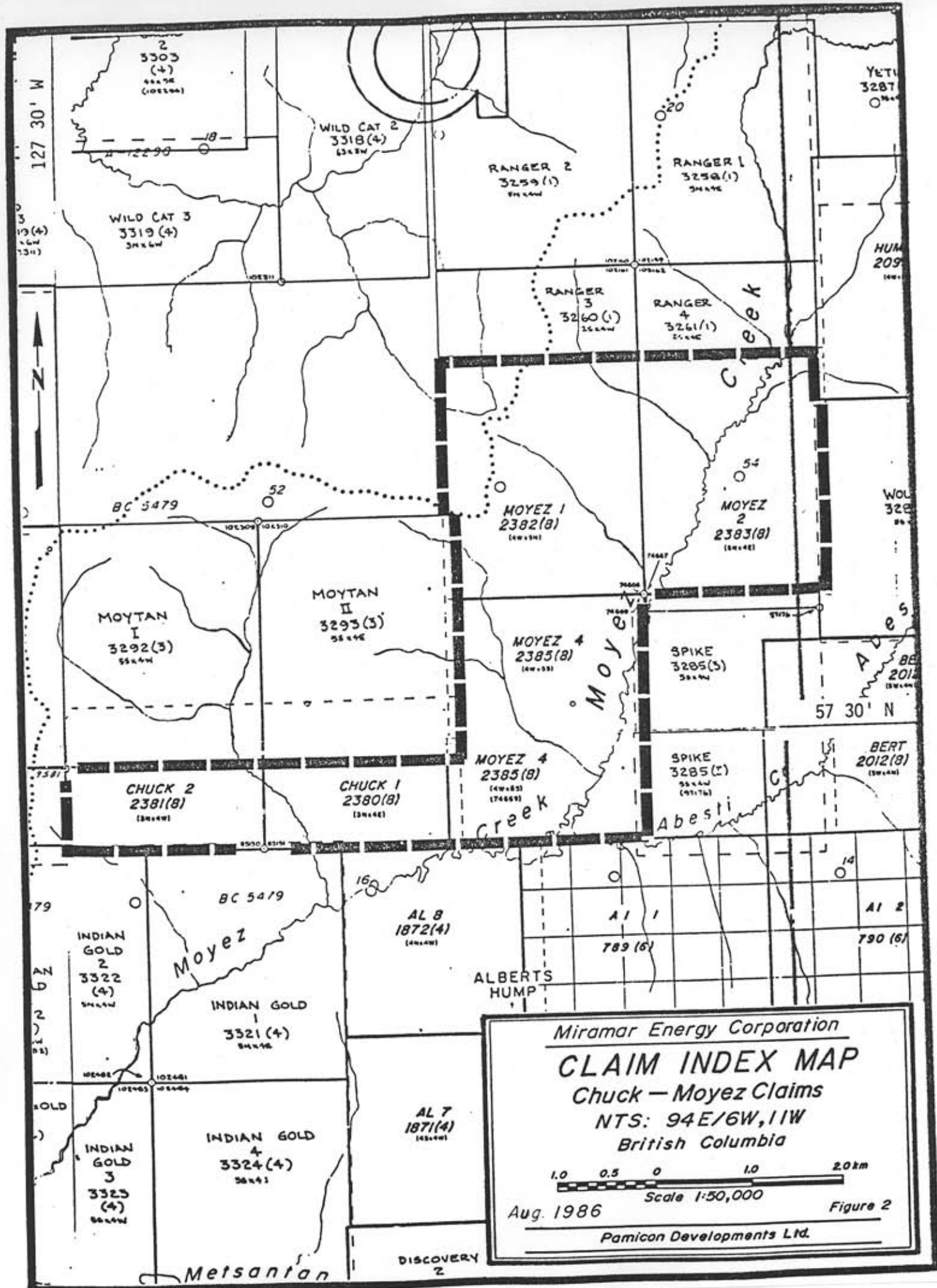
2.0 LIST OF CLAIMS

Examination of mineral titles registered with the British Columbia Ministry of Mines and Petroleum Resources shows the claims are held by Newmont Exploration of Canada Ltd. Separate documents examined indicate that Miramar Energy Corporation has agreed to purchase the claims and are presently fulfilling the requirements of purchase.

The following table summarizes the pertinent claim data.



Miramar Energy Corporation			
CHUCK-MOYEZ CLAIMS NTS: 94 E/6W, 11W British Columbia PROPERTY LOCATION MAP			
PAMICON DEVELOPMENTS LTD.			
DRAWN	PROJECT	DATE	FIG.
Toedoggone	Toedoggone	Aug 1986	1



Miramar Energy Corporation
CLAIM INDEX MAP
 Chuck - Moyez Claims
 NTS: 94E/6W, 11W
 British Columbia

1.0 0.5 0 1.0 2.0 km
 Scale 1:50,000

Aug. 1986

Figure 2

Pamicon Developments Ltd.

<u>Claim Name</u>	<u>Record No.</u>	<u>Record Date</u>	<u>No. of Units</u>	<u>Tag Number</u>
Chuck 1	2380	August 13/82	12	85151
Chuck 2	2381	August 13/82	12	85150
Moyez 1	2382	August 13/82	20	74666
Moyez 2	2383	August 13/82	20	74667
Moyez 4	2384	August 13/82	20	74669

Claim posts examined in the field indicate that the claims were staked in accordance with the requirements of the B.C. Mineral Act.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The claims lie on NTS sheets 94-E-6W and 94-E-11W at approximately 57°31' N latitude, 127°25' W longitude.

The property is located in the Toodoggone River area of northern B.C. approximately 310 km north of Smithers, B.C. It lies along Moyez Creek, which flows into the Stikine River (Pacific drainage) 8 km to the west. Access is by charter aircraft for 273 km from Smithers to the Sturdee airstrip then a further 35 km north by helicopter to the property.

The property lies at the northern extremity of the Omineca Mountains and the southern limits of the Cassiar Mountains. The area is characterized by wide U-shaped, drift-filled valleys and deeply incised V-shaped upland valleys. In the vicinity of the Chuck-Moyez property the terrain generally consists of rolling hills and broad drift-filled valleys. The valleys are typically full of scrub brush and swamp foliage while the uplands are characterized by scrub timber grading into grassy alpine plateaus. Elevations on the property range from 1380 m to

1700 m. Water is plentiful on the claims, the highest dependable year round supply occurring at the 1600 metre level.

4.0 REGIONAL GEOLOGY (Forster 1981)

The property lies in the Intermontane Geologic Belt and is underlain by Lower Jurassic pyroclastic volcanic rocks of the Toodoggone volcanics. The Toodoggone volcanics occur in a northwesterly trending belt bounded on the east by the Omineca Mountains and on the west by the Stikine Plateau. Pre-Toodoggone rocks within the region include Permian carbonates of the Asitka Group and Late Triassic Takla volcanics. Hazelton Group volcanics occur in fault contact with Toodoggone rocks and were deposited in a volcanic arc environment during the Early Jurassic. Omineca intrusions of Triassic to Jurassic age invade all pre-Cretaceous rocks within the region. Toodoggone rocks are unconformably overlain to the southwest by sediments of the Cretaceous-Tertiary Sustut Group and Middle to Late Jurassic Bowser Group.

5.0 PROPERTY GEOLOGY (Yeager 1986)

British Columbia Ministry of Mines mapping indicates that the property is underlain by the Adoogatcho Creek Formation described in the 1985 preliminary geologic map on the Toodoggone area as "Pale reddish grey to dark red-brown quartzose biotite hornblende phyrific ash flows. The rocks contain minor sanidine and rare augite. Welding is widespread and ranges from incipient to eutaxitic; locally orange to brown vitrophyric clasts are common. Includes lapilli tuff and breccia units as well as minor layered ground surge deposits."

At least 200 metres of stratigraphic thickness of the Adoogatcho Creek Formation is present on the property and some attempt was made to establish a local stratigraphic sequence based primarily on colour differences between tuff units. The limited mapping carried out does not yet indicate if this approach is valid; that is, the colour differences may be due more to varying degrees of alteration rather than primary compositional layering. A postulated stratigraphic sequence appears in the legend of Figure 4 of this report.

The rock units observed dipped fairly consistently five to ten degrees to the northeast.

6.0 GEOPHYSICAL SURVEY

Several reconnaissance VLF electromagnetic and resistivity survey lines were conducted over the Chuck-Moyez claims. The west central area of the Chuck 1 claim was tested to follow up an earlier mapped (Yeager, 1985) silicified zone trending northwest-southeast. Survey lines were also conducted on the western border of the Moyez 1 and 4 claims to follow up silt geochemical anomalies.

The VLF-R survey was conducted on the property because of previous success encountered by Newmont Exploration of Canada Ltd. on their Toodoggone gold-silver epithermal Shasta and Golden Lion prospects. Newmont's resistivity surveys defined potentially mineralized silicified zones that are the typical hosts to mineralization throughout the Toodoggone by their high resistivity signature. (B. Downing, pers. comm.). Resistivity lows tend to indicate altered or structurally conductive zones.

Glacial till overburden in areas surveyed appeared to be less

GEOLOGICAL BRANCH
ASSESSMENT REPORT

CHUCK I

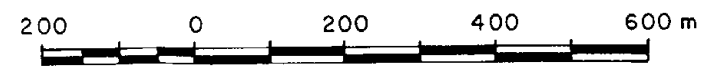
15,045

10+00W
9+00W
8+00W
7+00W
6+00W
5+00W
4+00W
3+00W
2+00W
1+00W
B/L 0+00

GRID
NO 1

L2N L3N L4N L7N L10N

MOYEZ 1
MOYEZ 4



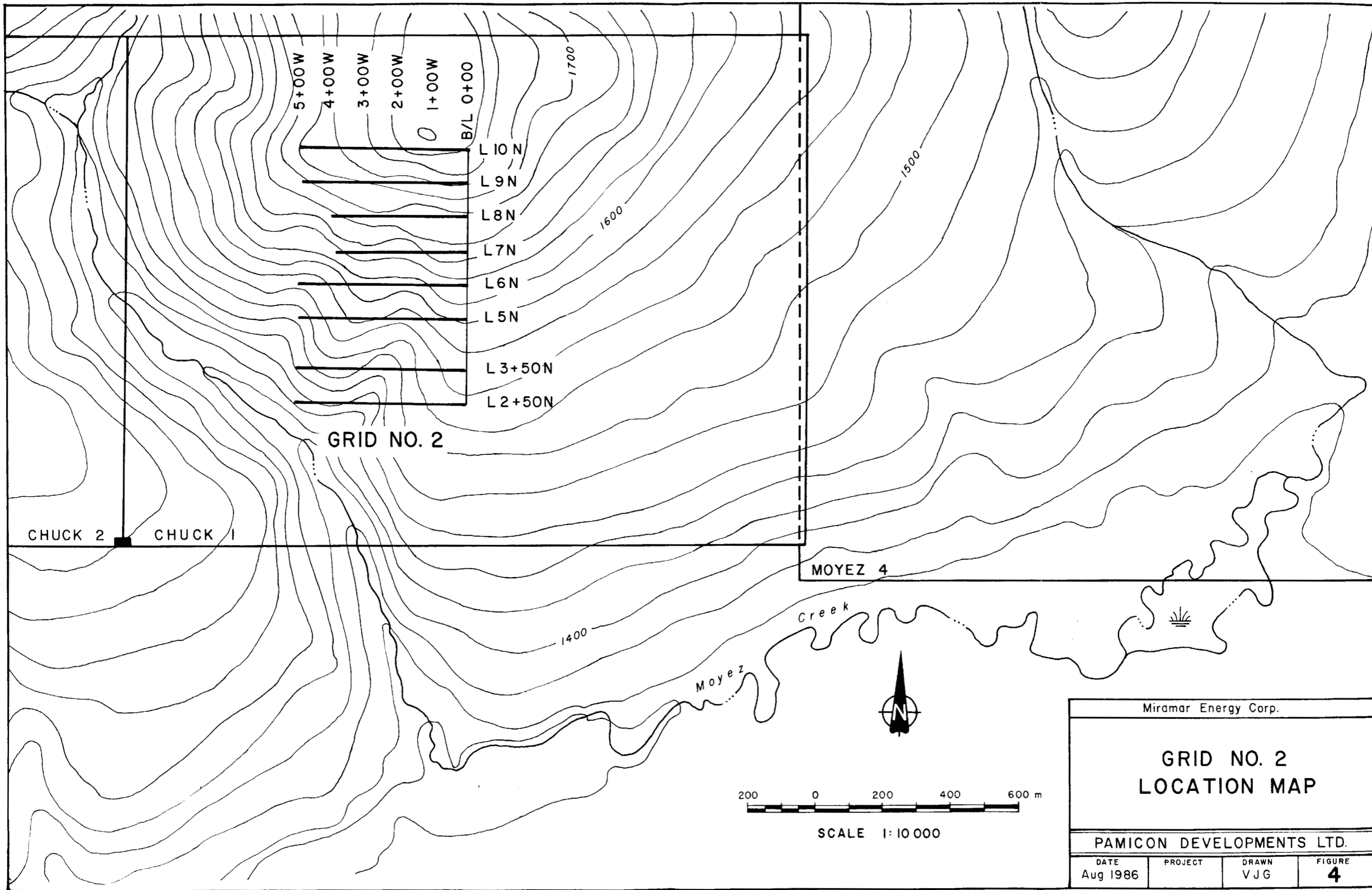
SCALE 1:10000

Miramar Energy Corp.

GRID NO. 1
LOCATION MAP

PAMICON DEVELOPMENTS LTD.

DATE	PROJECT	DRAWN	FIGURE
Aug 1986		VJG	3



Miramar Energy Corp.			
GRID NO. 2 LOCATION MAP			
PAMICON DEVELOPMENTS LTD.			
DATE Aug 1986	PROJECT	DRAWN VJG	FIGURE 4

than 10 metres and thus should produce reliable data. Readings were taken every 25 metres on chained, slope-corrected lines.

These instruments act as receivers only. They utilize the primary electromagnetic fields generated by VLF (very low frequency) marine communications stations. These stations operate at a frequency between 21 to 24 KHz, and have a vertical antenna current resulting in a horizontal primary field; thus, the VLF electromagnetometer measures the dip-angle of the secondary field induced in a conductor.

For maximum coupling, a transmitter station located in the same direction as geological strike should be selected since the direction of the horizontal electromagnetic field is perpendicular to the direction of the transmitting station.

Lualualei, Hawaii (23.4 KHz) and Annapolis, Maryland (21.4 KHz) were chosen as the transmitting stations for both the EM and EMR-16 surveys. All lines were represented by a Fraser, Dip Angle and Resistivity plot. The Hawaii station presented the best EM data. Annapolis survey data are appended.

For the Fraser plot the data was filtered in the field by the operators as described by D. C. Fraser, Geophysics, Volume 34, Number 6 (December, 1969). The advantage of this method is that it removes the dc (background noise) and attenuates long spatial wave lengths to increase resolution of local anomalies, and phase shifts the dip angle data by 90° so that cross-overs and inflections will be transformed into peaks to yield contourable quantities.

Grid #1

Resistivity surveys on the grid failed to yield any high resistivity values indicative of silicified zones. Rather, a weak anomaly trending north-south through the middle of the area surveyed had low resistivity values ranging from 45-160 ohm-m

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,045

LEGEND

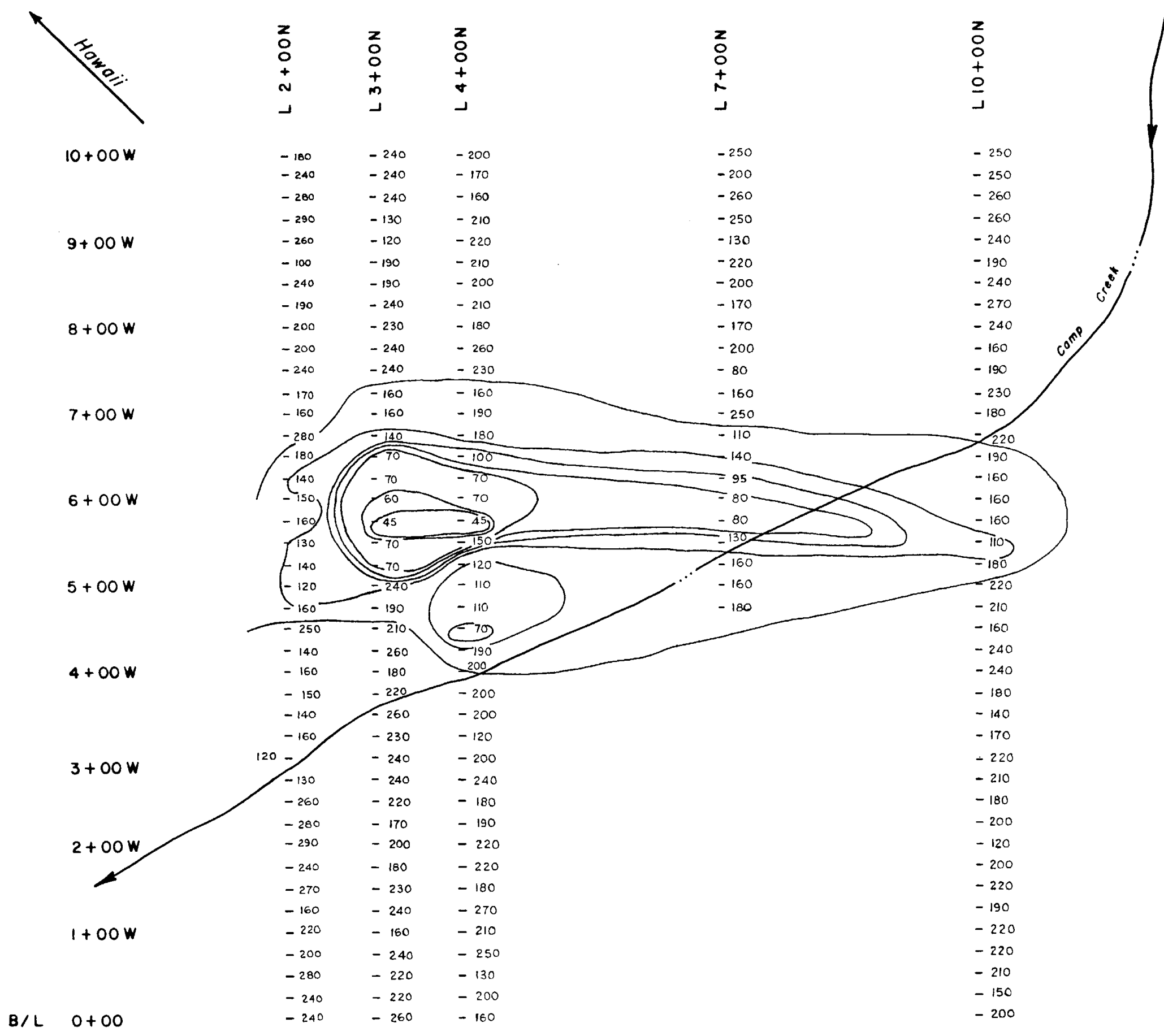
Instrumentation: Geonics VLF EM/EMR-16
 Transmitter Station: Hawaii
 Frequency: 23.4 kHz
 Station Interval: 25 metres
 Operator: S. Todoruk

DEGREES 0 20 40°

METRES 100 0 100 m

SCALE 1:5000

Miramar Energy Corp.			
VLF EMR-16 SURVEY			
RESISTIVITY PLOT			
GRID NO. 1			
CHUCK 1 CLAIM			
NTS 94-E-6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE	PROJECT	DRAWN	FIGURE
Aug. 1986		VJG	5



GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,045



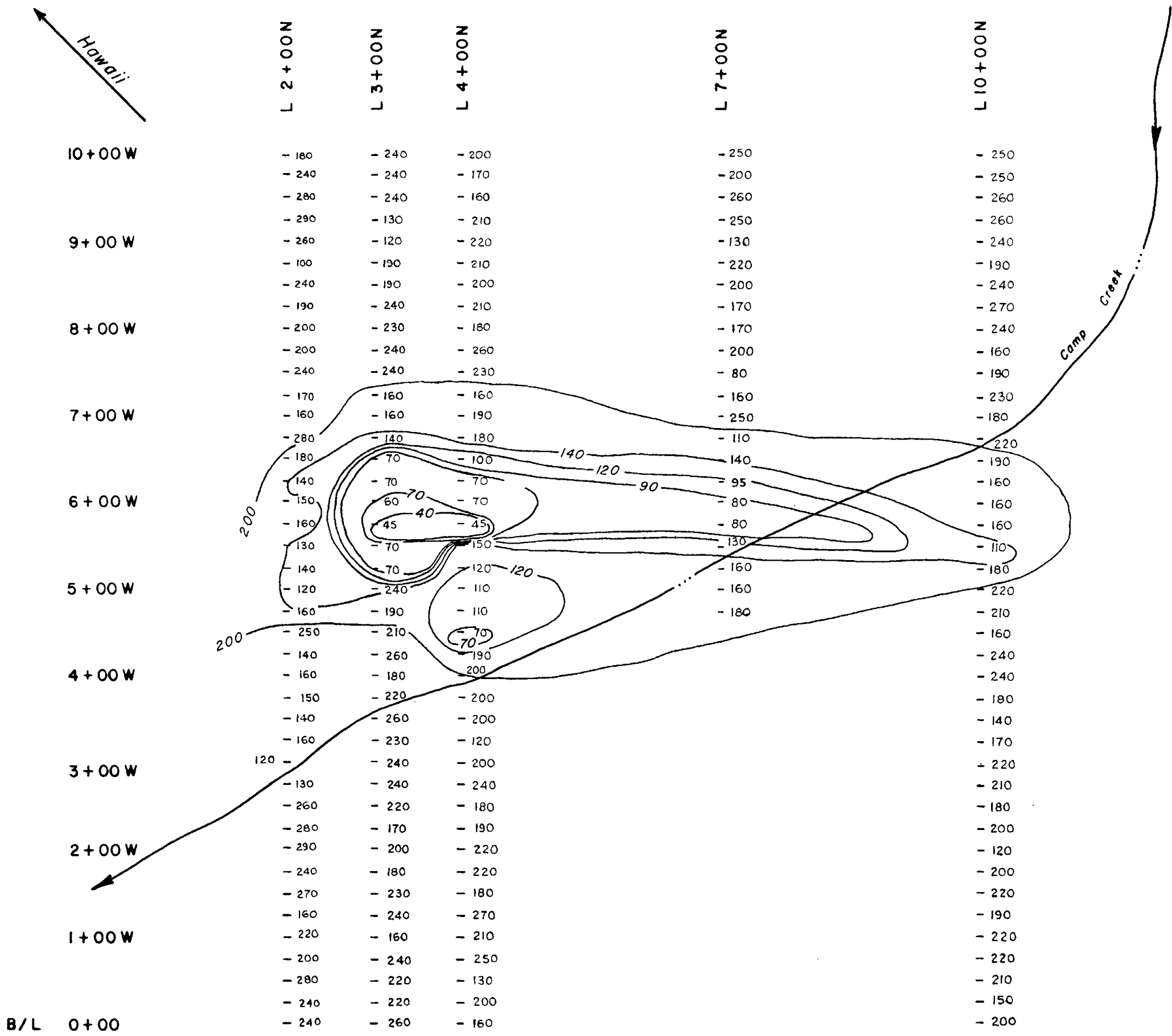
LEGEND

Instrumentation: Geonics VLF EM/EMR-16
 Transmitter Station: Hawaii
 Frequency: 23.4 kHz
 Station Interval: 25 metres
 Operator: S. Todoruk

Values in ohm-m



SCALE 1:5000



B/L 0+00

Miramar Energy Corp.			
VLF EMR-16 SURVEY			
RESISTIVITY PLOT			
GRID NO. 1			
CHUCK 1 CLAIM			
NTS 94-E-6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE Aug. 1986	PROJECT	DRAWN VJG	FIGURE 5

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,045
LEGEND

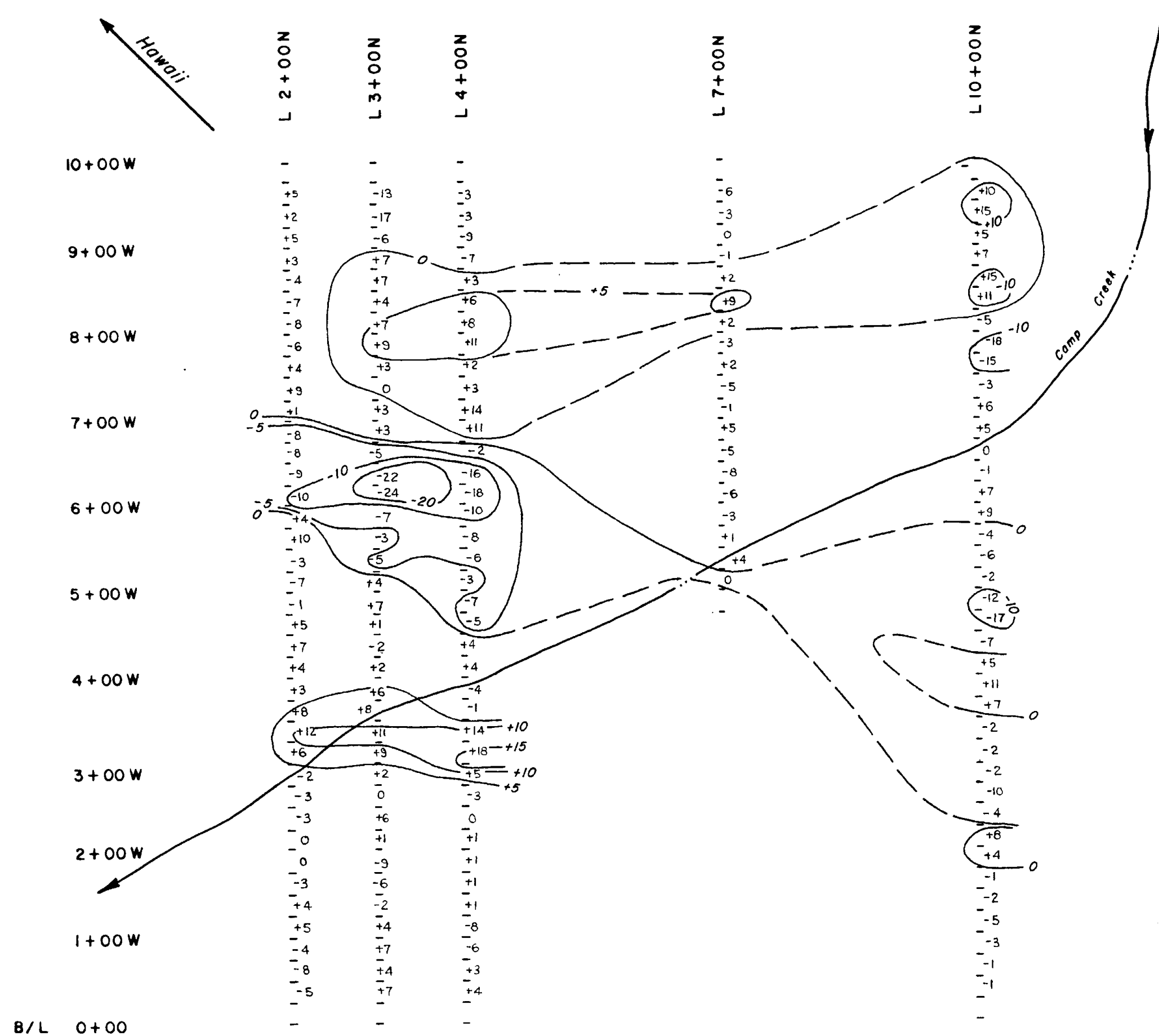
Instrumentation: Geonics VLF EM/EMR-16
 Transmitter Station: Hawaii
 Frequency: 23.4 kHz
 Station Interval: 25 metres
 Operator: S. Todoruk

Values in %

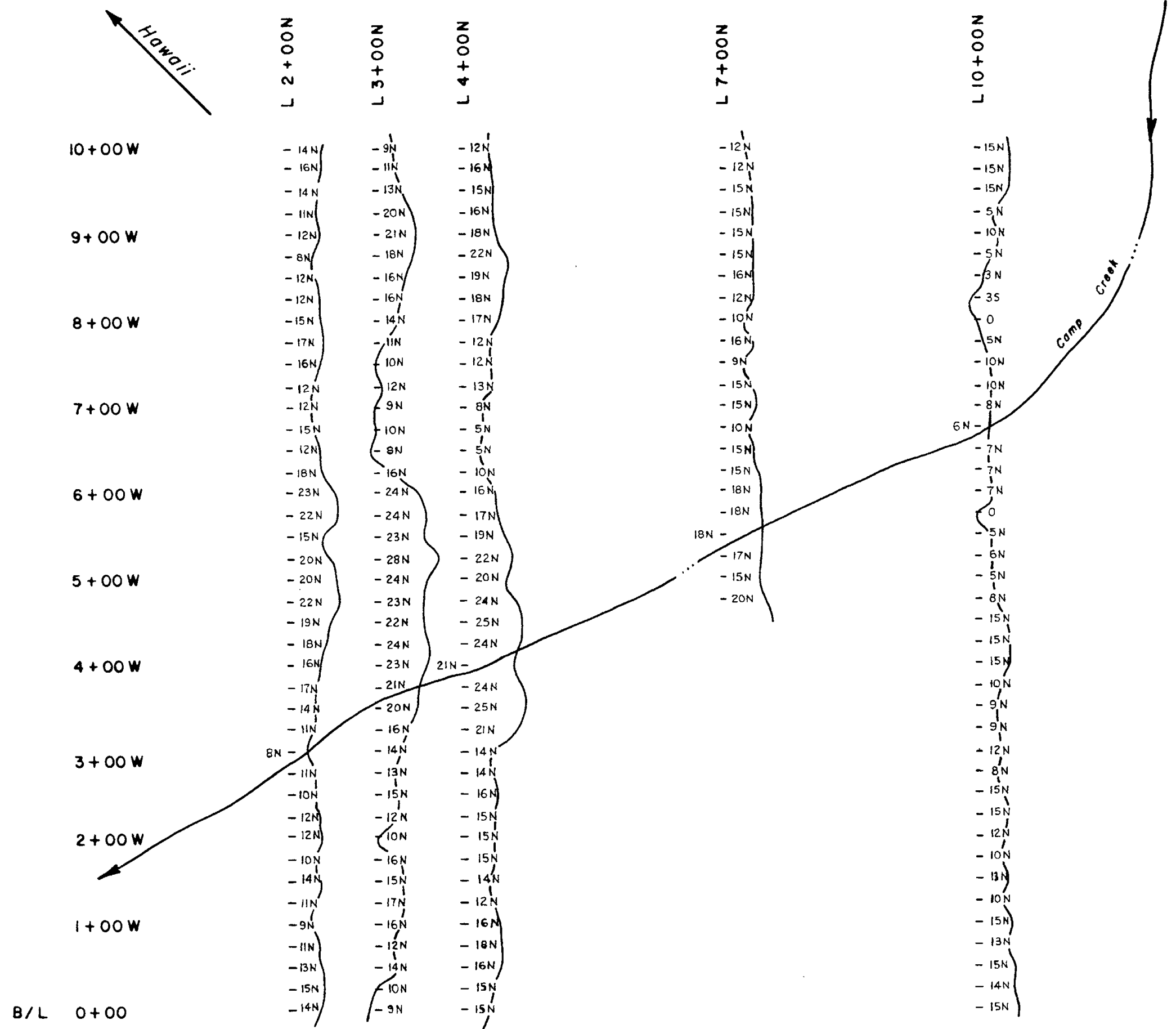
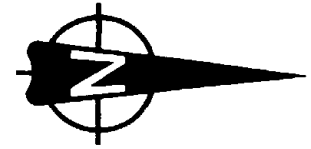


SCALE 1:5000

Miramar Energy Corp.			
VLF EM-16 SURVEY			
FRASER FILTER PLOT			
GRID NO. 1			
CHUCK 1 CLAIM			
NTS 94-E-6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE	PROJECT	DRAWN	FIGURE
Aug. 1986		VJG	6

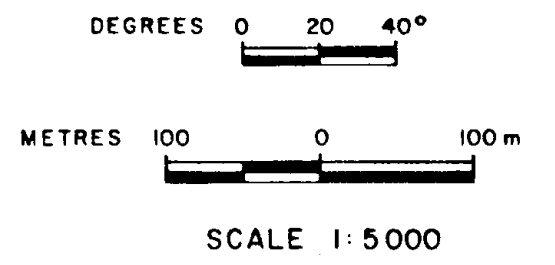


Hawaii



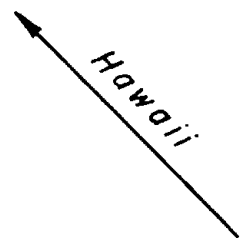
LEGEND

Instrumentation: Geonics VLF EM/EMR-16
 Transmitter Station: Hawaii
 Frequency: 23.4 kHz
 Station Interval: 25 metres
 Operator: S. Todoruk



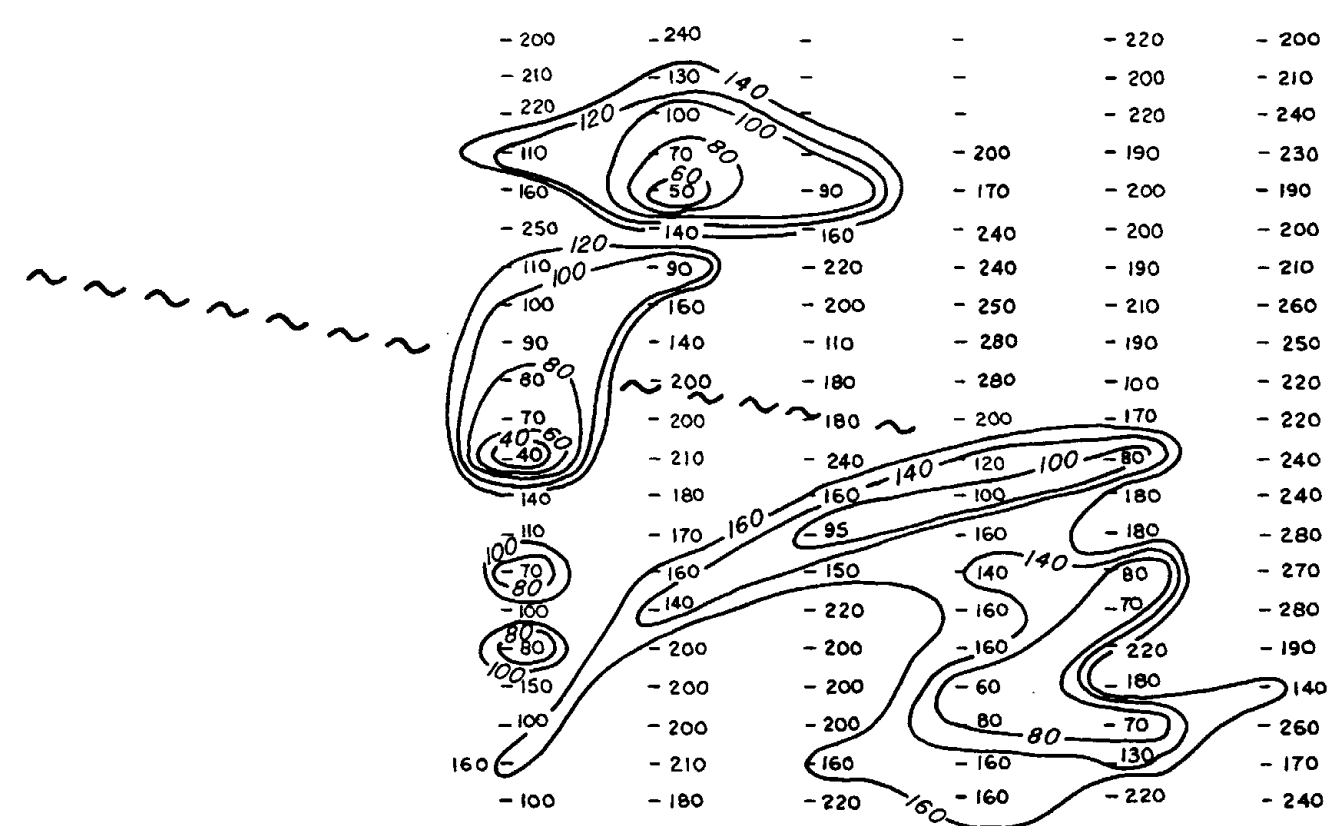
Miramar Energy Corp.			
VLF EM-16 SURVEY			
DIP ANGLE PLOT			
GRID NO. 1			
CHUCK 1 CLAIM			
NTS 94-E-6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE Aug. 1986	PROJECT	DRAWN VJG	FIGURE 7

15,045
LEGEND



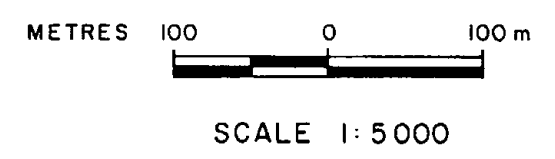
L 5+00N
L 6+00N
L 7+00N
L 8+00N
L 9+00N
L 10+00N

5+00 W
4+00 W
3+00 W
2+00 W
1+00 W
B/L 0+00 W

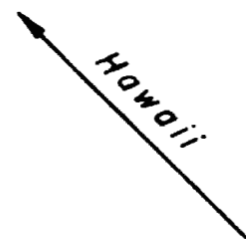


Instrumentation: Geonics VLF EM/EMR-16
Transmitter Station: Hawaii
Frequency: 23.4 kHz
Station Interval: 25 metres
Operator: S. Todoruk

Values in ohm-m



Miramar Energy Corp.			
VLF EMR-16 SURVEY			
RESISTIVITY PLOT			
GRID NO. 2			
MOYEZ 1+4 CLAIMS			
NTS 94-E-6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE Aug. 1986	PROJECT	DRAWN VJG	FIGURE 8



L 5+00N
L 6+00N
L 7+00N
L 8+00N
L 9+00N
L 10+00N

5+00W

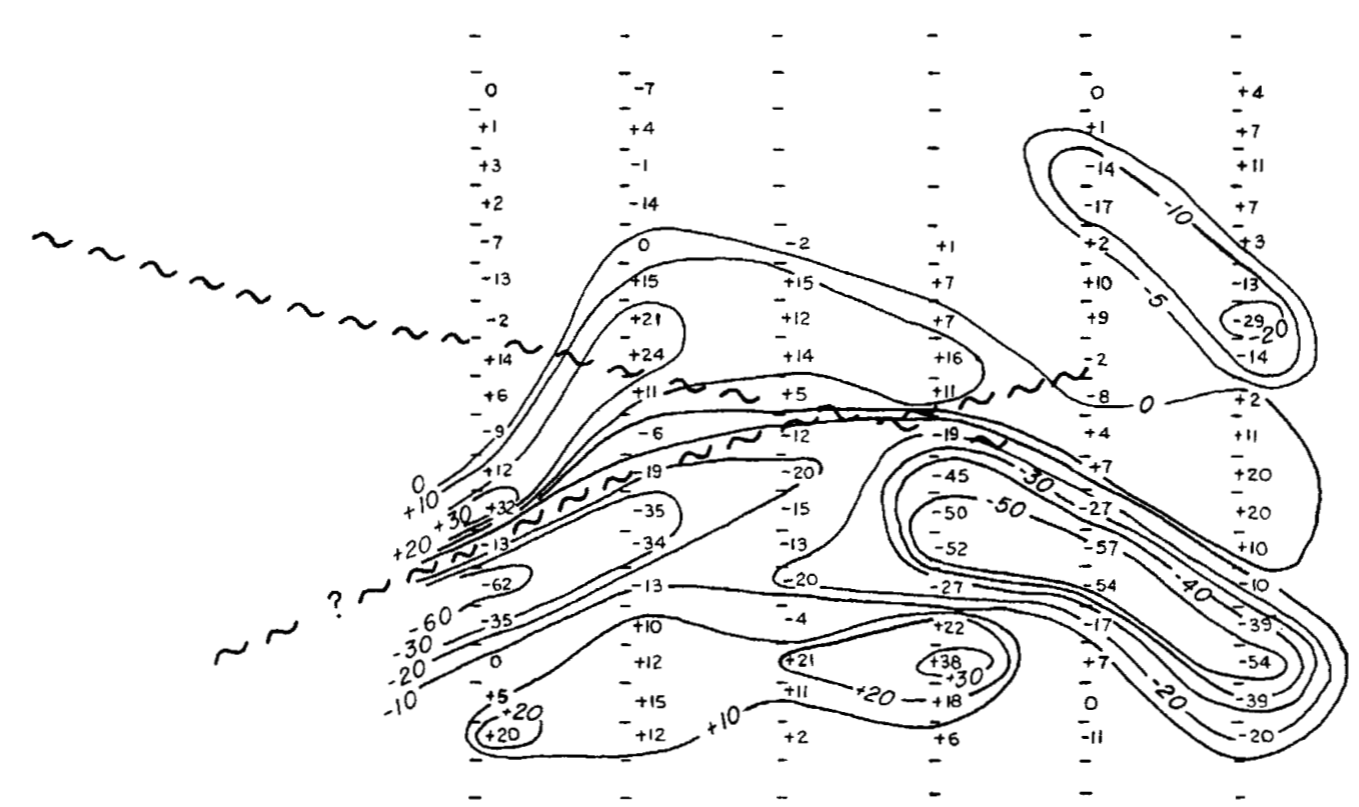
4+00W

3+00W

2+00W

1+00W

B/L 0+00W



LEGEND

Instrumentation: Geonics VLF EM/EMR-16
 Transmitter Station: Hawaii
 Frequency: 23.4 kHz
 Station Interval: 25 metres
 Operator: S. Todoruk

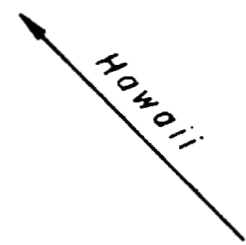
Values in %



SCALE 1:5000

Miramar Energy Corp.			
VLF EM-16 SURVEY			
FRASER FILTER PLOT			
GRID NO. 2			
MOYEZ 1+4 CLAIMS			
NTS 94 - E - 6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE	PROJECT	DRAWN	FIGURE
Aug. 1986		VJG	9

15,045



L 5+00 N
L 6+00 N
L 7+00 N
L 8+00 N
L 9+00 N
L 10+00 N

5+00 W

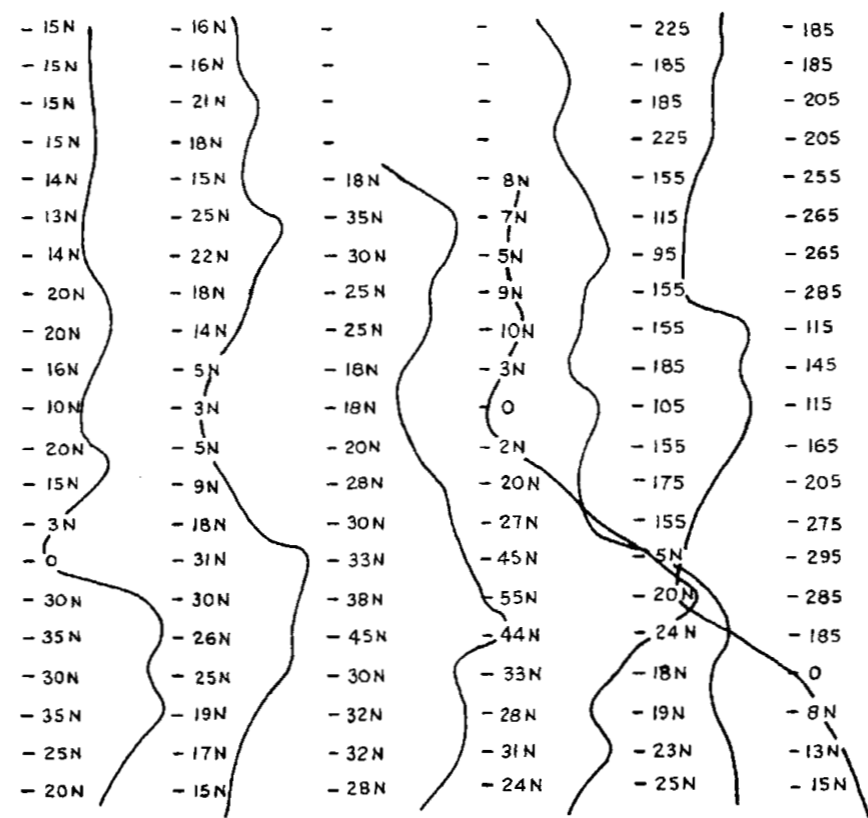
4+00 W

3+00 W

2+00 W

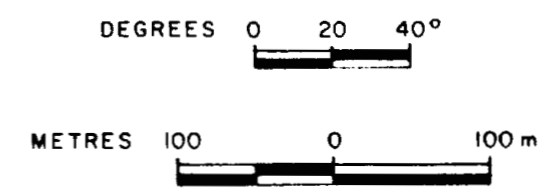
1+00 W

B/L 0+00 W



LEGEND

Instrumentation: Geonics VLF EM/EMR-16
 Transmitter Station: Hawaii
 Frequency: 23.4 kHz
 Station Interval: 25 metres
 Operator: S. Todoruk



SCALE 1:5000

Miramar Energy Corp.			
VLF EM-16 SURVEY			
DIP ANGLE PLOT			
GRID NO. 2			
MOYEZ 1+4 CLAIMS			
NTS 94-E-6W, 11W			
LIARD MINING DIVISION			
PAMICON DEVELOPMENTS			
DATE Aug. 1986	PROJECT	DRAWN VJG	FIGURE 10

which could indicate an altered rock unit beneath. The only geological structure seen nearby is a southwest flowing creek approximately 100 metres to the east. The EM-16 survey failed to yield any geophysical trends.

Grid #2


VLF Resistivity, EM-16 Fraser and Dip Angle plots of data from the grid suggest a possible north-northeasterly trending geological structure extending from the southwest corner of the Chuck 1 claim block. The most notable anomaly along this structure occurs near 9+25N/1+25W. Resistivity values range from 70 to 160 ohm-m and EM Dip Angles from 0 to -50%. These could be interpreted to indicate an alteration and/or fault zone. A smaller northwesterly trending structure is seen in the southeast corner of the grid and appears to transect the major N-NE structure. Neither the EM or Resistivity Survey delineated a previously mapped silicified zone in the northwest quadrant of the grid. Most rock seen appeared little more than slightly altered and the surveys tend to support this evidence. Rather, silicified rock boulders seen on the hill slope appear to be originated up slope from within a transported glacial till where the boulders are seen scattered about the hill peak.

7.0 CONCLUSIONS AND RECOMMENDATIONS

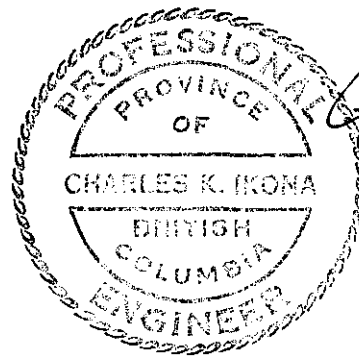
The 1986 geophysical surveys carried out have possibly defined a N-NE trending geological structure on the Chuck 1 claim which could be host to gold-silver mineralization similar to that seen elsewhere in the Toodoggone as at Energex's Al property and Serem's Lawyers property. Resistivity surveys failed to indicate any favourable silicified zones although anomalously low resistivity zones may indicate alteration or conductive zones which could possibly be masking any obvious silicified zones.

It is recommended that VLF EM + EMR-16 fill-in lines be conducted on the grids as well as reconnaissance lines on the remainder of the claims to further identify any favourable structures which may host mineralization. Also, ICP soil geochemistry lines should be conducted over the indicated N-NE trending geological structure to utilize precious metal and trace element concentrations to locate vein structures.

Respectfully submitted,



S. Todoruk, Geologist



C. K. Ikona, P.Eng.

GEONICS
EM 16 SPECIFICATIONS

MEASURED QUANTITY	Inphase and quad-phase componets of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity).
SENSITIVITY	Inphase: $\pm 150\%$. Quad-phase: $\bullet 40\%$.
RESOLUTION	$\pm 1\%$.
OUTPUT	Nulling by audio tone. Inphase 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.
OPERATING 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 9 cm.
WEIGHT	Instrucment: 1.6 kg. Shipping: 5.5 kg.

GEONICS
EMR-16 SPECIFICATIONS

MEASURED QUANTITY	Apparent Resistivity of the ground in ohm-metres. Phase angle between E_x and H_y in degrees.
RESISTIVITY RANGES	10 - 300 ohm-metres. 100 - 3000 ohm-metres. 1000 - 30000 ohm-metres.
PHASE RANGE	0-90 degrees.
RESOLUTION	Resistivity: $\pm 2\%$ full scale. Phase: $\bullet 0.5^\circ$.
OUTPUT	Nulling by audio tone. Resistivity and phase angle read from graduated dials.
OPERATING FREQUENCY	15-25 KHz VLF Radio Band. Station selection done by means of rotary switch.
INTERPROBE SPACING	10 metres.
PROBE INPUT IMPEDANCE	100 M Ω in parallel with 0.5 picofarads.
DIMENSIONS	19 x 11.5 x 10 cm. (attached to side of EM16).
WEIGHT	1.5 kg (including probes and cable).

LIST OF REFERENCES

- Diakow, J., Panteleyev, A. and Schroeter, T.G. 1975. Preliminary Map 61, Geology of the Toodoggone River Area, NTS 94E.
- Forster, D.B. 1984. Geology, Petrology and Precious Metal Mineralization, Toodoggone River Area, North-Central British Columbia.
- Visagie, D. 1983. Geology and Geochemistry Report on the Adoo Claims.
- Visagie, D. 1984. Geological and Geochemical Report on the Chuck-Moyez Claims.
- Yeager, D. 1985. Geological and Geochemical Report on the Chuck-Moyez Claims.

APPENDIX II

COST STATEMENT

COST STATEMENT

MOYEZ GROUP

Liard Mining Division
July 17 - August 11, 1986

S. TODORUK (GEOLOGIST)
215 - 543 Granville Street
Vancouver, B.C.

12 Days at \$275.00/Day \$3,300.00

B. CHARLTON (PROSPECTOR)
215 - 543 Granville Street
Vancouver, B.C.

9 Days at \$150.00/Day 1,350.00

BURDEN at 20% 930.00

\$5,580.00

AIRFARE

Vancouver - Smithers return
Cranbrook - Vancouver return 836.00

FREIGHT - PWA 349.24

MISC. EXPENSES

Hotel, Meals, Taxis, Parking 229.24

FOOD 335.03

CAMP RENTAL

2 Men x 8 Days x \$10.00/Day 160.00

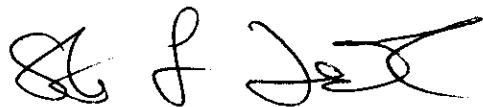
EQUIPMENT - SUPPLIES	297.43	
DRAFTING - TYPING	320.85	
TRUCK RENTAL - FUEL	119.75	
FIXED WING	687.91	
HELICOPTER	2,466.00	
EQUIPMENT EXPENSE - RENTALS	763.85	
GENERAL OFFICE EXPENSES - ACCOUNTING	750.00	
COMMUNICATION, TELEPHONE - RADIO RENTAL	180.00	
INSURANCE	80.00	
REPORT	3,025.00	
SURPERVISION - MANAGEMENT	<u>1,590.05</u>	
		<u>\$12,190.30</u>
		<u>\$17,770.30</u>

STATEMENT OF QUALIFICATIONS

I, STEVE L. TODORUK, of 102 - 767 West 70th Avenue, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Geologist in the employment of Pamicon Developments Ltd. with offices at 215, 543 Granville Street, Vancouver, British Columbia,
2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology,
3. THAT my primary employment since 1979 has been in the field of mineral exploration,
4. THAT my experience has encompassed a wide range of geologic environments and has allowed considerable familiarization with geophysical and geochemical techniques,
5. THAT this report is based on data generated by myself, under the direction of C.K. Ikona,
6. THAT I have no interest in the property described herein, nor in securities of any company associated with the property; nor do I expect to acquire any such interest.

DATED at Vancouver, British Columbia, this 22 day of August, 1986.



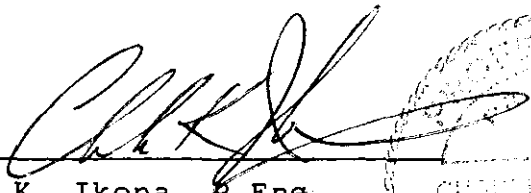
Steve L. Todoruk, Geologist

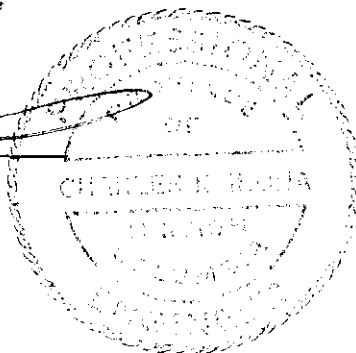
ENGINEER'S CERTIFICATE

I, CHARLES K. IKONA, of 5 Crowley Court, Port Moody, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am Consulting Mining Engineer, with offices at 215, 543 Granville Street, Vancouver, British Columbia,
2. THAT I am a graduate of the University of British Columbia with a Degree in Mining Engineering,
3. THAT I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia,
4. THAT this report is based upon data from an exploration program conducted under my supervision by S. Todoruk for Pamicon Developments Ltd. and a review of all available data by myself,
5. THAT I have no interest in the property described herein, nor nor do I expect to acquire any such interest.

DATED at Vancouver, British Columbia, this 22 day of Aug, 1986.


Charles K. Ikona, E.Eng.



APPENDIX V

GEONICS EM + EMR-16 DATA SHEETS

VLF - EM SURVEY Grid #1

Project No. Chalk - 1000 Date July 28/86Station HawaiiLine 2+00NOperator S. TaborFacing W^NE

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
0+00	+14				
0+25W	+15	+29		+7	+210
0+50W	+13	+26	-5	+7	+210
0+75W	+11	+24	-8	+2	+200
1+00W	+9	+20	-4	-2	+200
1+25W	+11	+20	+5	-1	+220
1+50W	+14	+25	+4	-1	+160
1+75W	+10	+24	-3	0	+280
2+00W	+12	+22	0	-1	+210
2+25W	+12	+24	0	+1	+210
2+50W	+10	+22	-3	+1	+210
2+75W	+11	+23	-3	+1	+210
3+00W	+8	+19	-2	+1	+210
3+25W	+11	+19	+6	+1	+210
3+50W	+14	+23	+12	+4	+210
3+75W	+17	+31	+8	+4	+210
4+00W	+16	+33	+3	+4	+160
4+25W	+18	+34	+4	+7	+110
4+50W	+19	+37	+7	+3	+250
4+75W	+22	+41	+5	+4	+160
5+00W	+20	+42	-1	0	+120
5+25W	+20	+40	-7	-1	+110
5+50W	+15	+35	-3	-4	+150
5+75W	+22	+39	+10	+1	+100
6+00W	+23	+45	+8	-1	+200
6+25W	+18	+41	-10	+1	+210
6+50W	+19	+35	-9	0	+160
6+75W	+15	+32	-8	-1	+110
7+00W	+12	+29	-8	-1	+160
7+25W	+12	+24	+1	-2	+160
7+50W	+16	+28	+9	+2	+210

VLF - EM SURVEY Grid #1

Project No. Chalk - 1000 Date July 28/86Station HawaiiLine 2+00NOperator S. TaborFacing W^NE

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
7+75W	+17	+33	+4	+3	+110
8+00W	+15	+32	-6	+2	+160
8+25W	+12	+27	-8	+2	+160
8+50W	+12	+24	-7	0	+210
8+75W	+8	+20	-4	-2	+160
9+00W	+10	+20	+8	0	+260
9+25W	+11	+23	+5	+2	+290
9+50W	+14	+26	+2	+2	+280
9+75W	+16	+30	+5	+2	+240
10+00W	+14	+28		+1	+130

VLF - EM SURVEY

Grid #1

Project No., Chuck - Moyez

Date

July 29/86Station, Hawaii

Line

3+00NOperator S. Todoruk

Facing

W^N
S E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
0+00	+9				
0+25W	+10	+19	+7	+1	+260
0+50W	+14	+24	+4	0	+220
0+75W	+12	+26	+7	-1	+220
1+00W	+16	+28	+4	-7	+240
1+25W	+17	+33	-2	+2	+160
1+50W	+15	+32	-6	+2	+240
1+75W	+16	+31	-9	+2	+230
2+00W	+10	+26	+1	+4	+180
2+25W	+12	+22	+6	0	+200
2+50W	+15	+27	0	-1	+170
2+75W	+13	+28	+2	0	+220
3+00W	+14	+27	+9	0	+240
3+25W	+16	+30	+11	-3	+240
3+50W	+20	+36	+8	0	+230
3+75W	+21	+41	+6	0	+260
4+00W	+21	+44	+2	+3	+220
4+25W	+23	+44	-2	0	+180
4+50W	+24	+47	-2	+2	+260
4+75W	+22	+46	+1	+4	+210
5+00W	+23	+45	+7	-1	+190
5+25W	+24	+47	+4	+1	+210
5+50W	+28	+52	-5	+2	+70
5+75W	+23	+51	-3	-1	+70
6+00W	+24	+47	-7	0	+45
6+25W	+24	+48	-24	0	+45
6+50W	+24	+40	-22	-1	+60
6+75W	+16	+24	+5	0	+70
7+00W	+8	+18	+3	0	+70
7+25W	+10	+19	+3	-1	+140
7+50W	+9	+21	0	0	+160
7+75W	+12	+22	+3	0	+160
8+00W	+10			0	+240

VLF - EM SURVEY

Grid #1

Project No., Chuck - Moyez

Date

July 29/86Station, Hawaii

Line

3+00NOperator S. Todoruk

Facing

W^N
S E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
7+75W	+11	+21	+9	-1	+290
8+00W	+14	+25	+7	-1	+230
8+25W	+16	+30	+4	+2	+240
8+50W	+16	+32	+7	0	+190
8+75W	+18	+34	+7	+4	+190
9+00W	+21	+39	-6	-2	+120
9+25W	+20	+41	-17	+3	+130
9+50W	+13	+33	-13	0	+240
9+75W	+11	+24		0	+240
10+00W	+9	+20		0	+240

VLF - EM SURVEY

GRID #2

Project No. Chuck - Meyer Date July 31/86
 Station Hawaii Line 6+00N
 Operator S. Todoruk Facing W^N_SE

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////					
B/L 0+00	+15			-6	+180
0+25W	+17	+32		-4	+210
0+50W	+19	+36	+12	-2	+200
0+75W	+25	+44	+15	-2	+200
1+00W	+26	+51	+12	+4	+200
1+25W	+30	+56	+10	+4	+140
1+50W	+31	+61	-13	+4	+160
1+75W	+18	+49	-24	-4	+170
2+00W	+9	+29	-35	-2	+180
2+25W	+5	+14	-19	-5	+210
2+50W	+3	+8	-6	0	+200
2+75W	+5	+8	+11	+4	+200
3+00W	+14	+19	+24	+3	+140
3+25W	+18	+32	+21	+5	+160
3+50W	+22	+40	+15	+10	+90
3+75W	+25	+47	0	+10	+140
4+00W	+15	+40	-14	+5	+50
4+25W	+18	+33	-1	+4	+70
4+50W	+21	+39	+4	0	+100
4+75W	+16	+37	-7	0	+130
5+00W	+16	+32		0	+240

VLF - EM SURVEY

GRID #2

Project No. Chuck - Meyer Date July 30/86
 Station Hawaii Line 5+00N
 Operator S. Todoruk Facing W^N_SE

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////					
B/L 0+00	+20			-10	+100
0+25W	+25	+45		0	+160
0+50W	+35	+60	+20	+5	100
0+75W	+30	+65	+5	+6	150
1+00W	+35	+65	0	0	80
1+25W	+30	+65	-35	+4	100
1+50W	0	+30	-62	0	70
1+75W	+3	+3	-12	-4	110
2+00W	+15	+15	+32	-6	140
2+25W	+20	+35	+12	+5	40 ?
2+50W	+10	+30	-9	0	70
2+75W	+16	+26	+6	0	80
3+00W	+20	+36	+14	+4	90
3+25W	+20	+40	-2	+4	100
3+50W	+14	+34	-13	+4	110
3+75W	+13	+27	-7	+3	250
4+00W	+14	+27	+2	+1	160
4+25W	+15	+29	+3	+4	110
4+50W	+15	+30	+1	0	220
4+75W	+15	+30	0	0	240
5+00W	+15	+30		+2	200

VLF - EM SURVEY

GRID #2

Project No. Chuck - Meyer Date July 30/86
 Station Hawaii Line L 8+00N
 Operator S. Todoruk Facing W ^N S _E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
1/2 0+00	+24			-3	+160
0+25W	+31	+55		-2	+160
0+50W	+28	+59	+6	-4	+80
0+75W	+33	+61	+18	-2	+60
1+00W	+44	+77	+38	+8	+160
1+25W	+55	+99	+22	+7	+160
1+50W	+45	+99	-27	+5	+140
1+75W	+27	+72	-52	-4	+160
2+00W	+20	+47	-50	+6	+160
2+25W	+2	+22	-45	+2	+120
2+50W	0	+2	-19	+6	+200
2+75W	+3	+3	+11	+9	+280
3+00W	+10	+13	+16	+6	+280
3+25W	+9	+19	+1	+6	+250
3+50W	+5	+14	-7	+5	+240
3+75W	+7	+12	+1	+2	+240
4+00W	+8	+15		-3	+170
4+25W					
4+50W					
4+75W					
5+00W					

VLF - EM SURVEY

GRID #2

Project No. Chuck - Meyer Date July 30/86
 Station Hawaii Line L 7+00N
 Operator S. Todoruk Facing W ^N S _E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
1/2 0+00	+28			-1	+220
0+25W	+32	+60		-1	+160
0+50W	+32	+64	+2	-4	+200
0+75W	+30	+62	+11	-1	+200
1+00W	+45	+75	+21	+4	+200
1+25W	+38	+83	-4	+8	+220
1+50W	+33	+71	-20	+4	+150
1+75W	+30	+63	-13	+4	+95
2+00W	+28	+58	-15	+6	+160
2+25W	+20	+48	-20	+2	+240
2+50W	+18	+38	-12	+5	+180
2+75W	+18	+36	+5	+8	+130
3+00W	+25	+43	+14	+10	+110
3+25W	+25	+50	+12	+10	+200
3+50W	+30	+55	+15	+10	+220
3+75W	+35	+65	-2	+10	+160
4+00W	+18	+53		+6	+90

VLF - EM SURVEY GRID #2

Project No. Chuck - Meyer Date July 30/86
 Station Hawaii Line 10+00W
 Operator S. Todoruk Facing W^N_S E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
///	///				
B/L 0+00	+15			-4	+240
0+25W	+13	+28		-4	+170
0+50W	+8	+21	-20	-2	+260
0+75W	0	+8	-39	-1	+140
1+00W	-18	-18	-54	-8	+190
1+25W	-23	-46	-39	-5	+280
1+50W	-29	-57	-10	+2	+270
1+75W	-27	-56	+10	+6	+280
2+00W	-20	-47	+20	+2	+240
2+25W	-16	-36	+20	+6	+240
2+50W	+11	-27	+11	+4	+220
2+75W	-14	-25	+2	+2	+220
3+00W	-11	-25	-14	0	+250
3+25W	-28	-39	-29	-2	+260
3+50W	-26	-54	-13	-4	+210
3+75W	-26	-52	+3	-4	+200
4+00W	-25	-51	+7	-6	+190
4+25W	-20	-45	+11	-8	+230
4+50W	-20	-40	+7	-10	+240
4+75W	-18	-38	+4	-7	+210
5+00W	-18	-36		-10	+200

VLF - EM SURVEY GRID #2

Project No. Chuck - Meyer Date July 30/86
 Station Hawaii Line 9+00W
 Operator S. Todoruk Facing W^N_S E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
///	///				
B/L 0+00	+25			0	+220
0+25W	+23	-43		0	+130
0+50W	+19	+42	-11	-1	+70
0+75W	+18	+37	0	-2	+180
1+00W	+24	+42	+7	0	+220
1+25W	+20	+41	-17	+4	+70
1+50W	+5	+25	-54	-1	+80
1+75W	-15	-10	-57	-2	+180
2+00W	-17	-32	-22	0	+180
2+25W	-15	-32	+7	+2	+180
2+50W	-10	-25	+4	+1	+170
2+75W	-18	-28	-8	-3	+100
3+00W	-15	-33	-2	-4	+190
3+25W	-15	-30	+9	-4	+210
3+50W	-9	-24	+10	0	+190
3+75W	-11	-20	-2	0	+200
4+00W	-15	-26	-17	-7	+200
4+25W	-22	-37	-14	-10	+190
4+50W	-18	-40	+1	-10	+220
4+75W	-18	-36	0	-6	+200
5+00W	-22	-40		-12	+220

VLF - EM SURVEY

Grid #1

Project No., Chuck - Moyer 2

Date

July 28/86Station, Annapolis

Line

2+00WOperator S. TodorukFacing W $\begin{matrix} N \\ S \end{matrix}$ E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////	//////				
B/L-000	+3			+1	+230
0+25W	+3	+6		-1	300
0+50W	+7	+10	+7	+2	260
0+75W	+6	+13	+7	0	250
1+00W	+11	+17	+10	+5	250
1+25W	+12	+23	+9	+7	260
1+50W	+14	+26	-1	+10	240
1+75W	+8	+22	-10	+8	230
2+00W	+8	+16	-6	+9	230
2+25W	+8	+16	-7	+7	290
2+50W	+1	+9	-21	+4	230
2+75W	-6	-5	-21	+1	170
3+00W	-6	-12	-6	+1	180
3+25W	-5	-11	+6	+1	180
3+50W	-1	-6	+12	-1	220
3+75W	+2	+1	+13	-2	230
4+00W	+5	+7	+10	+1	200
4+25W	+6	+11	+6	0	250
4+50W	+7	+13	+6	-1	160
4+75W	+10	+17	+7	-3	200
5+00W	+10	+20	+5	-2	160
5+25W	+12	+22	+9	-4	130
5+50W	+17	+29	+13	-3	160
5+75W	+18	+35	+6	-2	180
6+00W	+17	+35	+1	-2	180
6+25W	+19	+36	-1	0	180
6+50W	+15	+34	-9	-1	150
6+75W	+12	+27	-13	-1	240
7+00W	+9	+21	-16	-2	190
7+25W	+8	+17	-2	0	240
7+50W	+11	+19	+3	+1	+250
//////	//////				

VLF - EM SURVEY

Grid #1

Project No., Chuck - Moyer 2

Date

July 28/86

Station

Annapolis

Line

2+00W

Operator

S. TodorukFacing W $\begin{matrix} N \\ S \end{matrix}$ E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////	//////				
7+75W	+9	+20	-3	+2	+210
8+00W	+7	+16	-9	0	160
8+25W	+4	+11	-4	-1	220
8+50W	+8	+12	+6	-1	210
8+75W	+9	+17	+9	+2	160
9+00W	+12	+21	+9	+3	270
9+25W	+14	+26	+5	+5	280
9+50W	+12	+26	-2	+4	260
9+75W	+12	+24	-2	+4	210
10+00W	+12	+24		+2	+260
//////	//////				

VLF - EM SURVEY

Grid #1

Project No. Clack - May 2

Date Aug 1/86

Station Annapolis

Line 7+00N

Operator S. Todoruk

Facing W $\begin{matrix} N \\ S \end{matrix}$ E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////	//////				
L7N/4+25W	+7			+2	+180
5+00W	+10	+11.7		+4	+200
5+25W	+7	+17	-7	0	180
	+3	+10	-10	-2	130
	+4	+7	+1	0	60
	+7	+11	+6	+2	85
	+6	+13	+5	0	90
	+10	+16	+5	0	180
	+8	+18	-8	0	100
	0	+8	-17	-4	+180
	+1	+1	-2	-4	110
	+5	+6	+4	-3	220
	0	+5	-6	-4	230
	0	0	-3	-4	170
	+2	+2	+4	-4	180
	+2	+4	+7	-4	180
	+7	+9	+11	-3	190
	+8	+15	+5	+1	95
	+6	+14	-2	-3	200
	+7	+13	0	-4	240
	+7	+14	0	+2	210
10+00W	+6	+13		-4	190
//////	//////				

Project No. Chuck - Meyer Date July 31/86
 Station Annapolis Line 3+50 N
 Operator S. Todorok Facing W (N E)

W-E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////					
B/L 0+00	+26			+10	+160
0+25W	+32	+52		+14	+140
0+50W	+30	+62	-2	+4	+160
0+75W	+20	+50	-22	-4	+200
1+00W	+20	+40	+3	-6	+70
1+25W	+33	+53	+28	0	+50
1+50W	+35	+68	+22	+4	+70
1+75W	+40	+75	+12	+4	+120
2+00W	+40	+80	+3	+2	+110
2+25W	+38	+78	-2	+2	+80
2+50W	+40	+78	+2	+8	+60
2+75W	+40	+80	-8	+8	+220
3+00W	+30	+70	-18	+1	+100
3+25W	+32	+62	-8	0	+220
3+50W	+30	+62	-2	-2	+110
3+75W	+30	+60	-4	+2	+200
4+00W	+28	+58	-4	+2	+240
4+25W	+28	+56	-5	0	+240
4+50W	+25	+53	-8	0	+200
4+75W	+23	+48	-10	0	+250
5+00W	+20	+43		0	+260
//////					

Project No. Chuck - Meyer Date July 31/86
 Station Annapolis Line 2+50 N
 Operator S. Todorok Facing W (N E)

W-E

Station	% Dip A	Sum	Fraser	% Quad	Resistivity
//////					
B/L 0+00	+30			+10	+200
0+25W	+30	+60		+10	+200
0+50W	+30	+60	0	+8	+100
0+75W	+30	+60	-10	+10	+120
1+00W	+20	+50	-10	+5	+200
1+25W	+30	+50	+10	+6	+200
1+50W	+30	+60	+15	+6	+180
1+75W	+35	+65	+3	+6	+160
2+00W	+28	+63	-12	+4	+180
2+25W	+25	+53	-23	0	+200
2+50W	+15	+40	-20	-4	+110
2+75W	+18	+33	+8	-2	+140
3+00W	+30	+48	+37	0	+110
3+25W	+40	+70	+37	+4	+120
3+50W	+45	+85	+15	+2	+240
3+75W	+40	+85	-5	+4	+180
4+00W	+40	+80	-10	+4	+95
4+25W	+35	+75	-15	+6	+110
4+50W	+30	+65	-13	+6	+85
4+75W	+32	+62	-3	+3	+180
5+00W	+30	+62		+4	+180
//////					

