

PHOENIX GEOPHYSICS LIMITED

REPORT ON THE COMBINED
GEOPHYSICAL SURVEYS ON THE
FREEGOLD PROJECT, MOUNT FREEGOLD AREA
CARMACKS AREA, YUKON TERRITORY

FOR

TECK EXPLORATIONS LIMITED

N.T.S. 115I/6

Longitude: $137^{\circ}5'$ West Latitude: $62^{\circ}15'$ North

BY

PAUL A. CARTWRIGHT, B.Sc., Geophysicist

FRANK DISPIRITO, B.A.Sc., Geophysicist

September 20, 1981

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 <u>Part B:</u> Illustrations	 17 pieces
Plan Maps (in pockets)	Dwg. I.P.P.-B-4002b Dwg. I.P.P.-B-4002c Dwg. I.P.P.-B-4002d Dwg. EM-B-4002H Dwg. EM-B-4002S Dwg. EM-B-4002
IP Data Plots	Dwgs. IP-5802-1 to 8
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1) Introduction

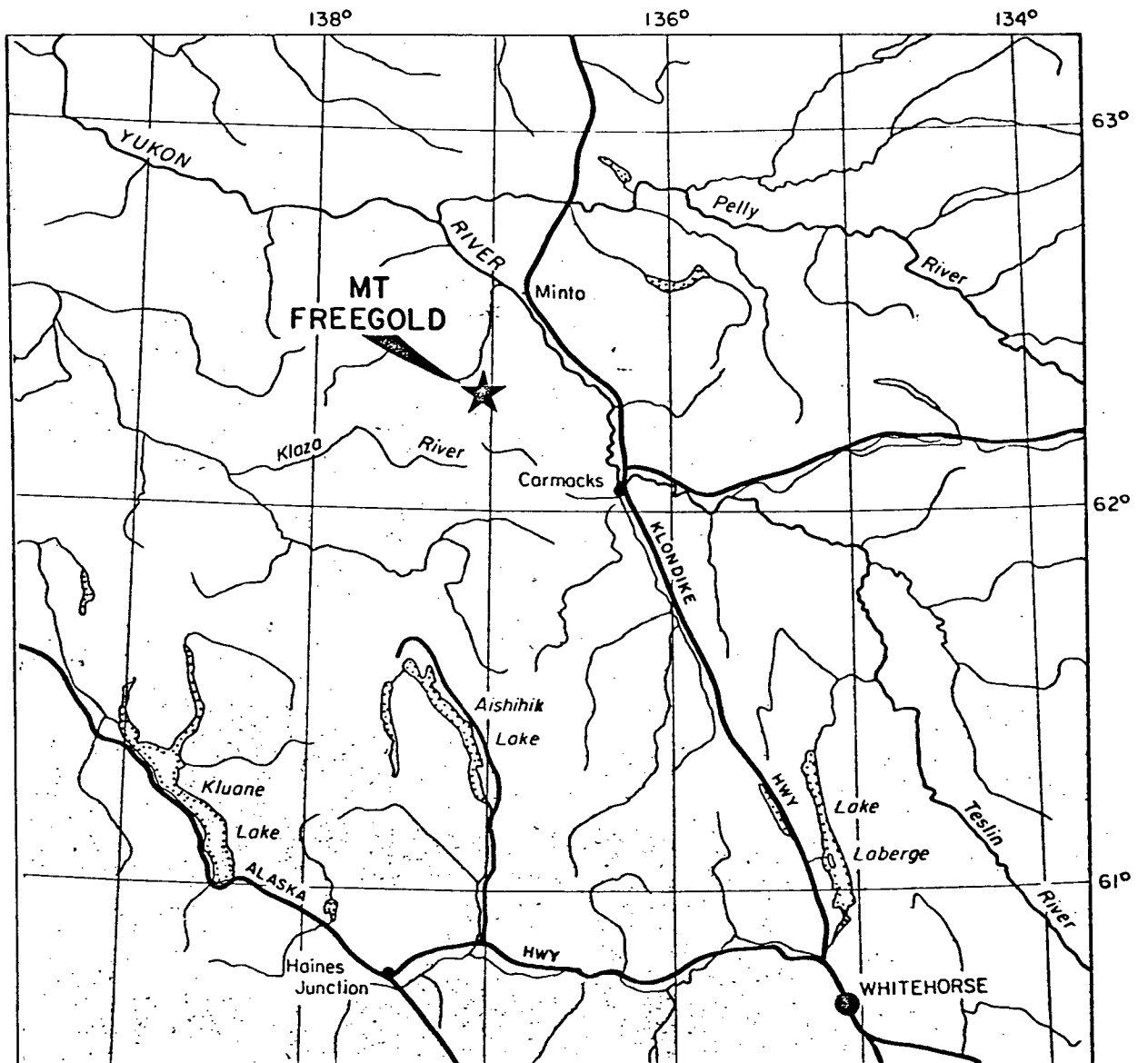
Combined geophysical surveys have been carried out on the Freegold Project, Mount Freegold area, Yukon Territory, under the direction of Archer, Cathro and Associates Ltd., property managers for Teck Explorations Ltd.

Survey techniques employed included Induced Polarization (I.P.) and Resistivity, VLF Electromagnetics (VLF-EM) and Vertical Field Magnetics.

The survey grid is situated approximately 50 kilometers northwest of the community of Carmacks, Y.T. Access is via road from the Klondike Highway.

Gold-silver veins, discovered in the property in 1931, were mined during 1939-40 and 1965-66. The present geophysical surveys further investigated a gold-bearing tertiary breccia intrusive complex. In addition, the VLF-EM and Magnetometer surveys were extended to cover other previously known vein structures.

Field work was carried out during May-June, 1981, under the supervision of Mr. Peter Gardner, geophysical crew leader. Dipole-dipole array was employed exclusively for the IP coverage with a basic inter-electrode length of 100 feet, and measuring up to six dipole separations. A Phoenix Model IPV-1 IP and Resistivity receiver unit was used in conjunction with a Phoenix Model IPT-1 IP and Resistivity Transmitter unit, operating at frequencies of 4.0 Hertz and 0.25 Hertz. The IP effect is measured as Per Cent Frequency Effect (P.F.E.), while the



LOCATION MAP

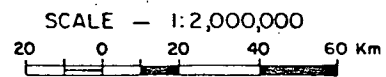


FIGURE 1

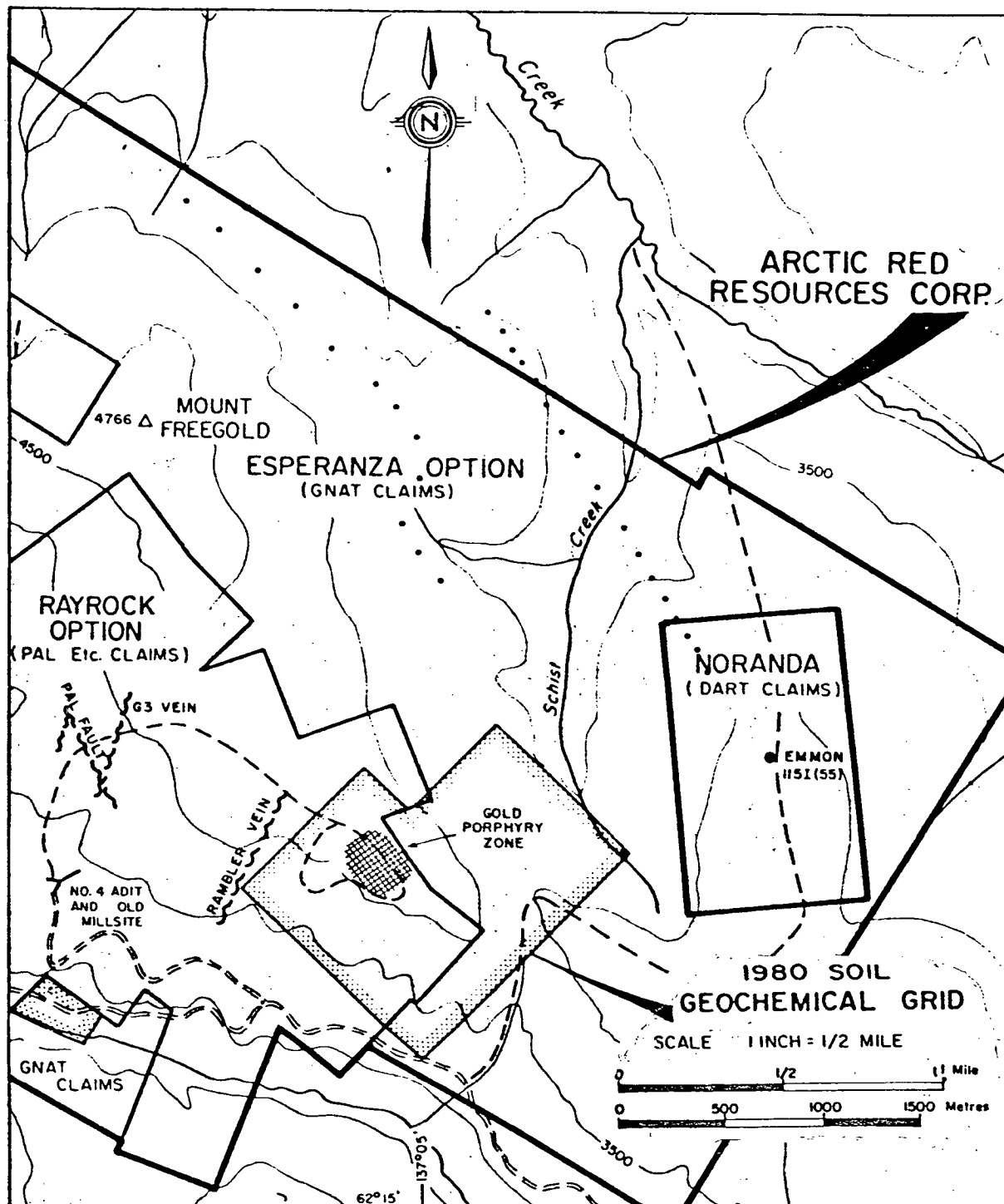


FIGURE 2

Apparent Resistivity values are normalized in units of ohm-ft/2PI. Metal Factor values are calculated according to the formula: $(P.F.E. \times 1000)/App. Res.$

All three parameters, P.F.E., Apparent Resistivity, and Metal Factor have been filtered using Fraser's technique, in which an average value is calculated for each dipole separation using one n=1 value, two n=2 values, etc. These intermediate results are then further averaged to yield one number which can be contoured in plan.

Phoenix Model VLF-2 Electro-Magnetic receivers were used to make the VLF-EM measurements. Dip angle measurements were recorded in degrees using the transmitter located in Hawaii (23.4 KHz), and Seattle, Washington (18.6 KHz). This data was also filtered using Fraser's method according to the following formula: $(A + B)/2 - (C + D)/2$, with A, B, C, D being sequential dip angle values. The resultant data was then plotted in plan form.

Vertical field magnetometer readings were made using McPhar Model M-700 fluxgate magnetometers. Data was corrected for diurnal drift and plotted in plan as gamma units.

2) Presentation of Data

i) Induced Polarization and Resistivity

The IP and Resistivity results are plotted in the psuedo section format on the following data plots:

<u>LINE</u>	<u>ELECTRODE INTERVAL</u>	<u>DWG. NO.</u>
20N	100 feet	I.P.-5802-1
16N	100 feet	I.P.-5802-2
12N	100 feet	I.P.-5802-3
8N	100 feet	I.P.-5802-4
4N	100 feet	I.P.-5802-5
0	100 feet	I.P.-5802-6
4S	100 feet	I.P.-5802-7
8S	100 feet	I.P.-5802-8

Also enclosed with this report are Dwgs. I.P.P.-B-4002d, I.P.P.-B-4002b, and I.P.P.-B-4002c, plan maps of the Freegold Project Grid at a scale of 1"=200'. These plans show the Fraser filtered and contoured P.F.E., Apparent Resistivity and Metal Factor values, respectively. The definite, probable and possible Induced Polarization anomalies are also indicated by bars, in the manner shown on the legend, on these plan maps as well as on the data plots. These bars represent the surface projection of the anomalous zones as interpreted from the location of the transmitter and receiver electrodes when the anomalous values were measured.

Since the Induced Polarization measurement is essentially an averaging process, as are all potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly, no anomaly can be located with more

accuracy than the electrode interval length; i.e., when using 100 foot electrode intervals the position of a narrow sulphide body can only be determined to lie between two stations 100 feet apart. In order to definitely locate, and fully evaluate a narrow, shallow source, it is necessary to use shorter electrode intervals. In order to locate sources at some depth, larger electrode intervals must be used, with a corresponding increase in the uncertainties of location. Therefore, while the center of the indicated anomaly probably corresponds fairly well with source, the length indicated anomaly along the line should not be taken to represent the exact edges of the anomalous material.

The geological and grid information shown on Dwgs. I.P.P.-B-4002d, I.P.P.-B-4002b, and I.P.P.-B-4002c have been taken from maps made available by the staff of Archer Cathro and Associates Ltd.

ii) VLF Electro-Magnetics

The Fraser filtered and contoured dip angle results are shown on the following plan maps of the Freegold Project Grid at a scale of 1" = 200':

Dwg. EM-B-4002H	-	Hawaii Transmitter (23.4 KHz)
Dwg. EM-B-4002S	-	Seattle Transmitter(18.6 KHz)

Actual dip angle values are shown on these plans as well.

iii) Vertical Field Magnetism

Corrected and contoured magnetic values are marked on Plan Map Dwg. EM-B-4002 at a scale of 1" = 200'.

3) Discussion of Results

i) IP and Resistivity Data

Background apparent resistivity values outlined by the present survey are relatively low, with the majority of the measurements being substantially less than 1000 ohm-feet/2PI. The northeastern margin of the grid area appears to be underlain by even less resistive rock as apparent resistivity values in this area are generally lower than 500 ohm-feet/2PI. A depth of weathering in excess of 200 feet could account for these results.

The highest magnitude apparent resistivity values are noted to be coincident with the center of the breccia intrusive complex outlined by geological mapping and drilling. Resistivity patterns within the intrusive suggest that the resistive rock type extends only a short distance below the surface, possibly less than 100 feet in some instances.

A large zone of moderately anomalous IP effects is evident in the data. Included within the anomalous region is the bulk of the intrusive complex, except for the extreme northeastern margins. The IP zone extends beyond the intrusive boundary towards the southwest, and the northwest, at which points the zone is open. Depth to the top of the source is almost certainly less than 50 feet throughout the anomalous area.

More concentrated mineralization appears to be present along the northwestern contact of the intrusive

as indicated by a narrow zone of somewhat higher magnitude polarizability values and lower than background apparent resistivity measurements, set within the larger region of moderately anomalous IP readings. This more definitely anomalous IP trend extends to the vicinity of Line 8S, Station 1 + 50W where it is undefined towards the southwest. It is quite possible that this same relatively narrow zone follows the mapped intrusive contact along its northeastern side before striking back towards the southwest edge of the grid as a much weaker zone. Such an interpretation, combined with the pattern shown by the apparent resistivity contour map, suggests that the intrusive may extend to the southwest as a more elongated structure than is shown by the present mapping.

ii) VLF-EM Data

Data was recorded using two different VLF transmitting stations. In general, the Hawaii facility is located at a better angle to the prevailing strike in the grid area, and therefore gave rise to more definitive anomalies. However, none of the VLF-EM responses recorded by the present survey could be described as strongly anomalous.

The resistivity of the underlying rocks, at least in that part of the grid area surveyed with the IP and Resistivity method, is relatively low, thus restricting the effective detection depth of the VLF method. All of the anomalous VLF-EM trends detected appear to have current axis less than 100 feet sub-surface, as evidenced by individual anomaly half-widths of 100 feet or less.

Previously discovered structures such as the Rambler Vein, G3 Vein, and the Pal Fault, appear to be outlined by the present VLF-EM data.

A number of other possibly interesting VLF trends are indicated in the data, with the most encouraging feature being evident in the interval between Line 0 and Line 8S, several hundred feet south of Baseline 'E'. This zone is associated with a weakly anomalous IP zone discussed previously.

Two additional VLF-EM zones are present near the southeastern end of Line 8S through to Line 12N. Unfortunately, these responses are just outside the limit of effective near-surface IP coverage, and it is not known if they are coincident with any known mineralization or geological structures.

iii) Magnetic Data

No clear patterns are apparent in the vertical field magnetic data, with the possible exception of a roughly semi-circular area of lower magnitude values situated southwest of approximately Line 14N, and contained between Baseline 'D' and Baseline 'F'. The northeastern end of this magnetic "low" is generally coincident with the mapped position of the intrusive complex. This lends support to the IP and Resistivity interpretation which indicates the intrusive may extend considerably further towards the southwest than the original mapping shows.

4) Summary and Conclusions

Combined geophysical surveys have been completed over a portion of the Freegold Project Grid, using IP and Resistivity, VLF-EM and Vertical Field Magnetics. The entire grid was surveyed using the latter two methods.

Most significant result was the detection of an anomalous IP zone which may form a horseshoe-shaped trend open towards the southwest and enclosing the mapped intrusive complex within its northeastern end. Apparent resistivity results suggest the center of the intrusive to be more resistive than the surrounding rocks and to extend beyond the southwestern boundary of the intrusive as it was originally mapped. This interpretation is somewhat supported by the magnetic results, which show a region of uniformly lower magnetic readings in the same area.

It is the author's understanding that the IP zone mentioned above has already been drill-tested in several locations and interesting mineralization intersected. Therefore, it is recommended that additional IP and Resistivity and Magnetic surveying be completed to completely define the source of the IP zones southwest of Line 8S.

VLF-EM results detected the known veins in the grid area, as well as the Pal Fault structure. Three other possibly interesting zones are outlined on the western end of the grid. IP and Resistivity survey coverage could be extended further west on Line 4S and Line 8N to investigate

the source of two of these responses. The other trend, which is evident just west of Baseline 'E' is open towards the southwest at present, and further work should be deferred until additional IP coverage is available to the southwest.

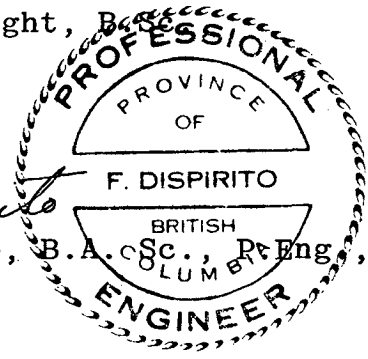
PHOENIX GEOPHYSICS LTD.

Paul A. Cartwright

Paul A. Cartwright, B.Sc.
Geophysicist.

Frank DiSpirito

Frank DiSpirito, B.A., C.Sc., P.Eng.
Geophysicist.



Dated 20 September 1981

ASSESSMENT DETAILS

PROPERTY: Mount Freegold

Yukon Territory

SPONSOR: Teck Explorations Ltd.

LOCATION: Northwest of Carmacks, Y.T.

TYPE OF SURVEY: Induced Polarization and Resistivity,
VLF Electro-Magnetic, Vertical Field
Magnetic

OPERATING MAN DAYS: 34

DATE STARTED: 20 May 1981

EQUIVALENT 8 HR. MAN DAYS: 51

DATE FINISHED: 8 June 1981

CONSULTING MAN DAYS: 6

NUMBER OF STATIONS: IP-283
VLF-800
Mag-822

DRAFTING MAN DAYS: 10

TOTAL MAN DAYS: 67

NUMBER OF READINGS: IP-2388
VLF-800
Mag-822

MILES OF LINE SURVEYED:

IP-5.21
VLF-14.53
Mag-14.87

CONSULTANTS:

Paul A. Cartwright, 4238 W. 11th Avenue, Vancouver, B.C.

Frank DiSpirito, 2743 Oxford Street, Vancouver, B.C.

FIELD TECHNICIANS:

Peter Gardner, 393 Connaught Avenue, Willowdale, Ontario
Ben Polzer, 200 Yorkland Blvd., Willowdale, Ontario

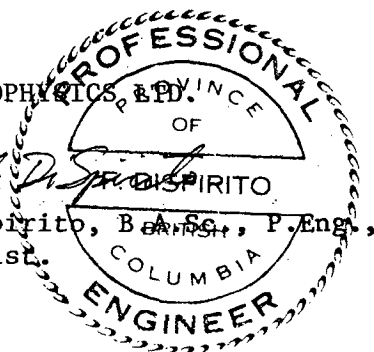
DRAUGHTSMEN:

Ron Walaluk, 7886 Vivian Drive, Vancouver, B.C.

DATED: 20 September 1981

PHOENIX GEOPHYSICS & P.D.

Frank DiSpirito
Frank DiSpirito, B.A.Sc., P.Eng.,
Geophysicist



STATEMENT OF COST

Teck Explorations Ltd., IP and Resistivity Survey, VLF-EM Survey,
Magnetic Survey

Mount Freegold, Yukon Territory

Crew: P. Gardner, B. Polzer

Period: 20 May 1981 to 8 June 1981

17 operating days @ 680.00/day \$11,560.00

2 Travel/Organization
Days @ 380.00/day 760.00

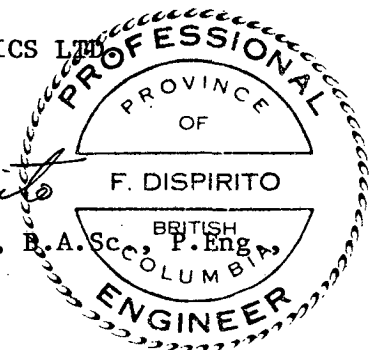
Mobilization-Demobilization 1,895.00

\$ 14,215.00

PHOENIX GEOPHYSICS LTD.

Frank Di Spirito

Frank DiSpirito, B.A.Sc., P.Eng.,
Geophysicist.



DATED: 20 September 1981

CERTIFICATE

I, Paul A. Cartwright, of the City of Vancouver,
Province of British Columbia, do hereby certify that:

1. I am a geophysicist residing at 4238 West 11th Avenue, Vancouver, B.C.
2. I am a graduate of the University of British Columbia, B.C., with a B.Sc. Degree.
3. I am a member of the Society of Exploration Geophysicists and the European Association of Exploration Geophysicists.
4. I have been practising my profession for 11 years.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Teck Explorations Ltd. or any affiliate.
6. The statements made in this report are based on a study of published geological literature and unpublished private reports.
7. Permission is granted to use in whole or in part for assessment and qualifications requirements but not for advertising purposes.



Paul A. Cartwright, B.Sc.

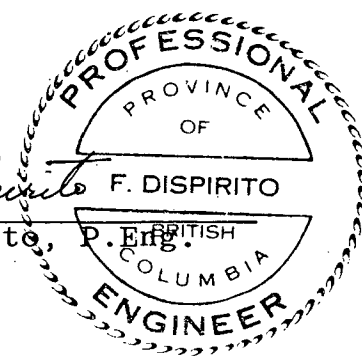
Dated at Vancouver, B.C.
this 20th day of September 1981.

CERTIFICATE

I, Frank DiSpirito, of the City of Vancouver,
Province of British Columbia, do hereby certify that:

1. I am a geophysicist residing at 2748 Oxford Street,
Vancouver, B.C.
2. I am a graduate of the University of British
Columbia, with a B.A.Sc. Degree in Geological
Engineering.
3. I have been practising my profession for 7
years.
4. I have no direct or indirect interest, nor do
I expect to receive any interest directly or
indirectly, in the property or securities of
Teck Explorations Limited or any
affiliate.
5. The statements made in this report are based on a
study of published geological literature and un-
published private reports.
6. Permission is granted to use in whole or in part
for assessment and qualification requirements
but not for advertising purposes.

Frank DiSpirito
Frank DiSpirito, P. Eng.



The seal is circular with a decorative border. The text inside the seal reads: "PROFESSIONAL" at the top, "PROVINCE OF" in the upper middle, "F. DISPIRITO" in the center, "P. Eng." in the lower middle, "BRITISH COLUMBIA" in the lower middle, and "ENGINEER" at the bottom.

DATED AT VANCOUVER
this 20th day of September 1981.

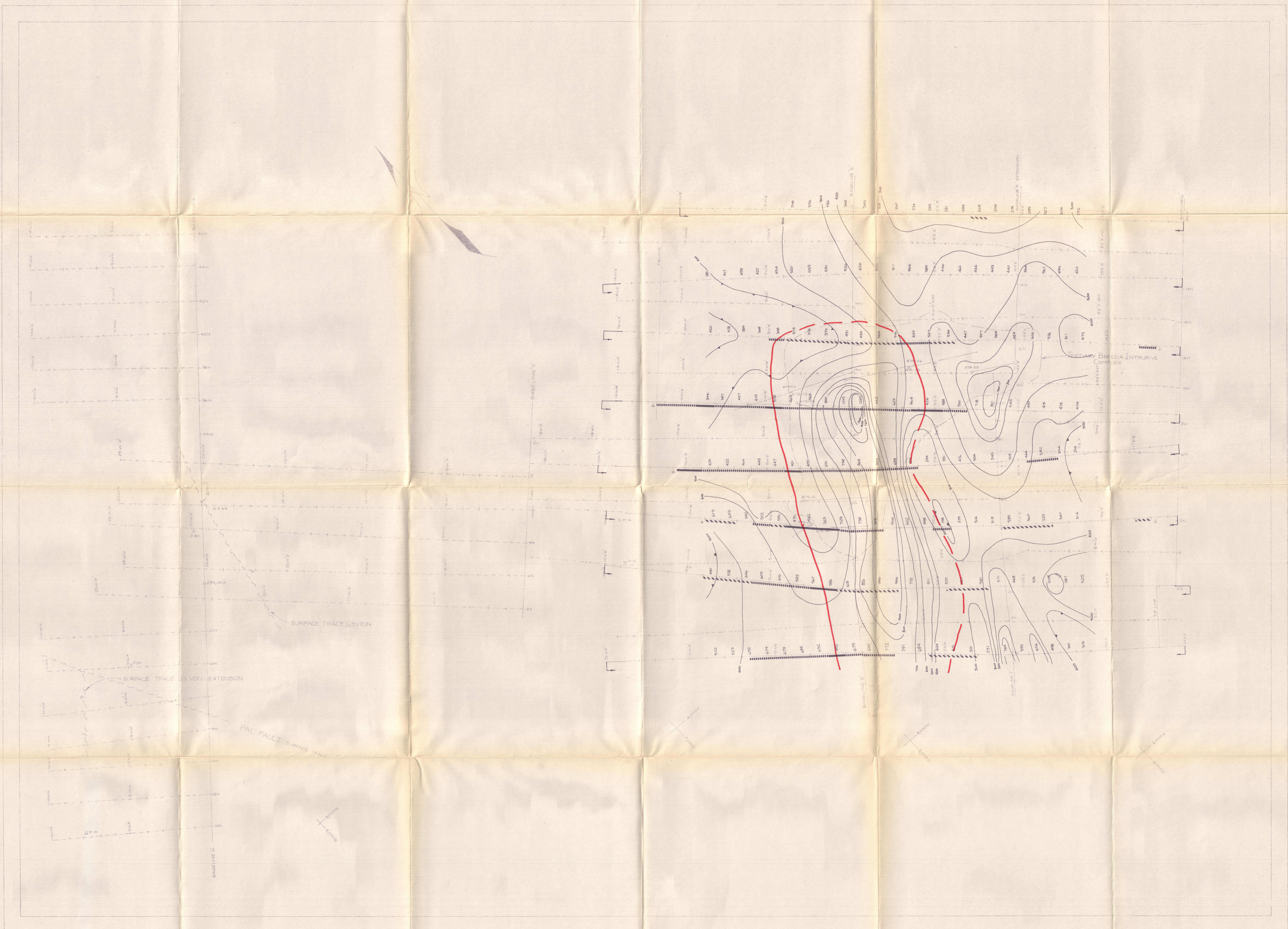
CERTIFICATE

I, Peter Gardner, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysical crew leader residing at 393 Connaught Avenue, Willowdale, Ontario.
2. I am a graduate of Radio College of Canada, in Electronics Technology.
3. I have been practising my vocation about four years.
4. I am presently employed as a geophysical crew leader by Phoenix Geophysics Ltd. of 200 Yorkland Blvd., Willowdale, Ontario.

DATED AT VANCOUVER, B.C.
this 20th day of September 1981.

Peter Gardner



SURFACE PROJECTION
 OF ANOMALOUS ZONE
 DEFINITE
 PROBABLE
 POSSIBLE
 NUMBER AT END OF ANOMALIES
 INDICATE SPREAD USED.

TO ACCOMPANY GEOPHYSICAL REPORT
 BY PA. CARTWRIGHT B.Sc.,
 DATED SEPT. 20, 1981.

TECK EXPLORATIONS LIMITED
 FREEGOLD PROJECT, MT. FREEGOLD AREA,
 CARMACKS, Y.T.

SCALE
 ONE INCH = 200 FEET

LIMIT OF IP COVERAGE
 (OUTER ELECTRODES)

APPARENT RESISTIVITY (OHM-METERS)
 FRASER FILTERED TO N=6
 CONTOUR INTERVAL: 100 OHM METERS

DRAWN: RGW
 DATE: JUNE 21, 1981
 APPROVED: FAC
 DATE: SEPT 15/81

PHOENIX GEOPHYSICS LIMITED
 INDUCED POLARIZATION AND RESISTIVITY SURVEY
 PLAN MAP



SURFACE PROJECTION
 OF ANOMALOUS ZONE
 DEFINITE
 PROBABLE
 POSSIBLE
 NUMBER AT END OF ANOMALIES
 INDICATE SPREAD USED

TO ACCOMPANY GEOPHYSICAL REPORT
 BY P.A. CARTWRIGHT B.S.C.,
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 FREEGOLD PROJECT, MT. FREEGOLD AREA,
 CARMACKS, Y.T.

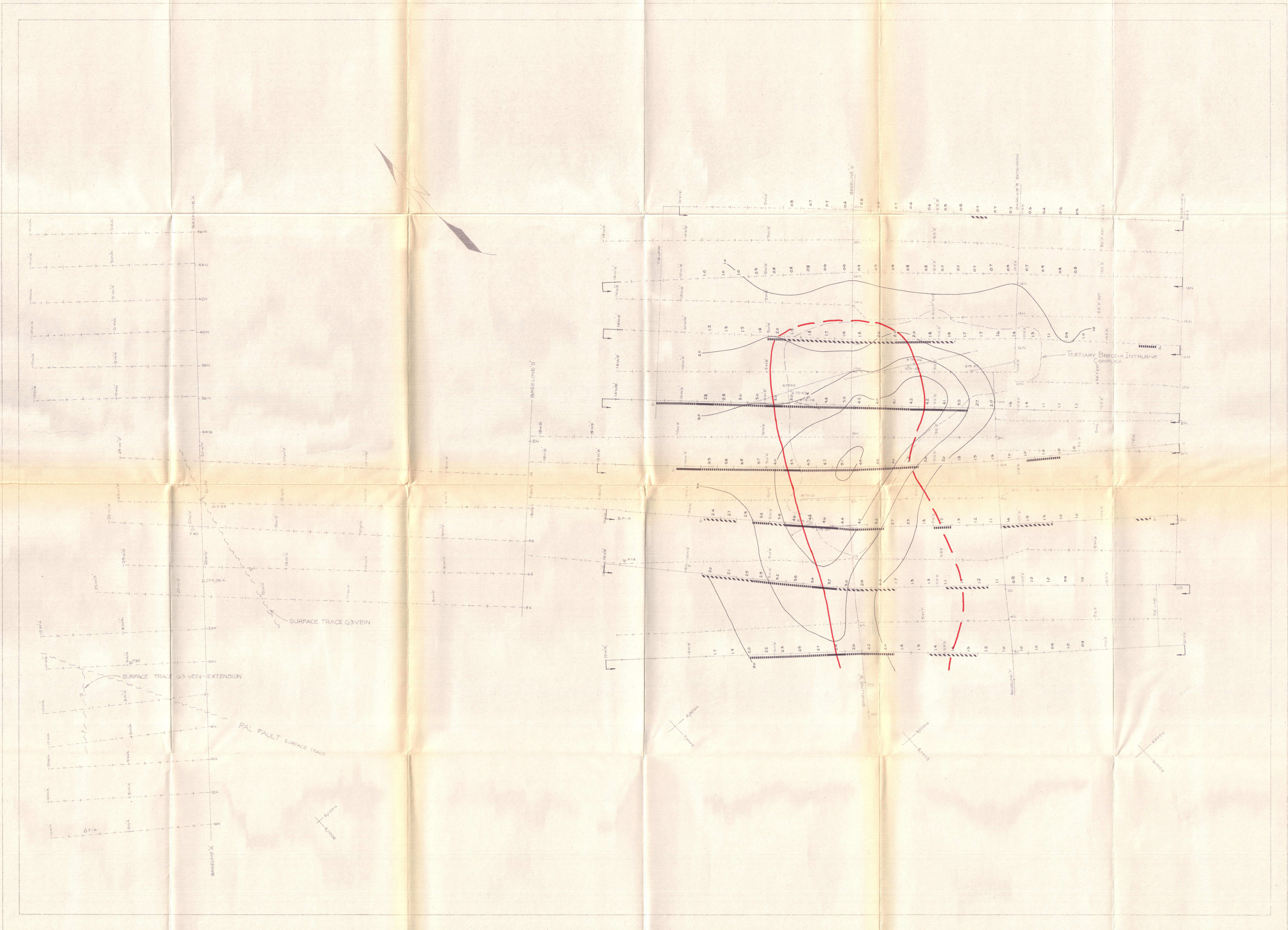
SCALE
 ONE INCH = 200 FEET

LIMIT OF IP COVERAGE
 (OUTER ELECTRODES)

METAL FACTOR
 FRASER FILTERED TO N=6
 CONTOUR INTERVAL: 1.0

DRAWN: RGW
 DATE: JUNE 21, 1981
 APPROVED: PAC
 DATE: SEPT 15/81

PHOENIX GEOPHYSICS LIMITED
 INDUCED POLARIZATION AND RESISTIVITY SURVEY
 PLAN MAP



SURFACE PROJECTION OF ANOMALOUS ZONE
 DEFINITE
 PROBABLE
 POSSIBLE
 NUMBER AT END OF ANOMALIES INDICATE SPREAD USED

TO ACCOMPANY GEOPHYSICAL REPORT
 BY P.A. CARTWRIGHT B.Sc.,
 DATED SEPT. 20, 1981

TECK EXPLORATIONS LIMITED
 FREEGOLD PROJECT, MT. FREEGOLD AREA,
 CARMACKS, Y.T.

SCALE
 ONE INCH = 200 FEET

PERCENT FREQUENCY EFFECT
 FRASER FILTERED TO N=6
 CONTOUR INTERVAL: 1.0% FE.

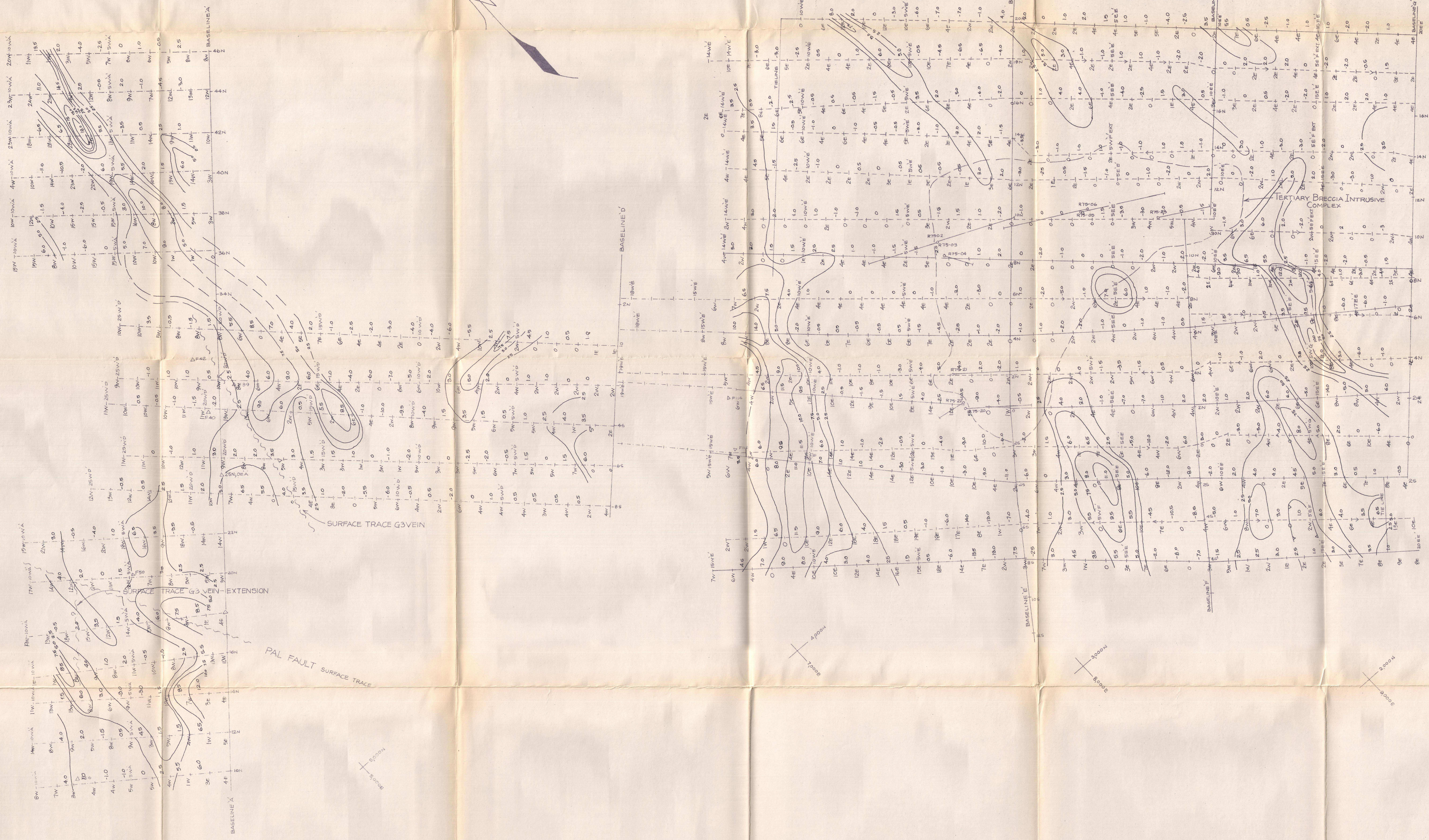
LIMIT OF IP COVERAGE (OUTER ELECTRODES)

DRAWN: RGW
 DATE: JUNE 21, 1981
 APPROVED: PAC
 DATE: SEPT 15/81

PHOENIX GEOPHYSICS LIMITED

V.F. ELECTROMAGNETIC SURVEY

PLAN MAP

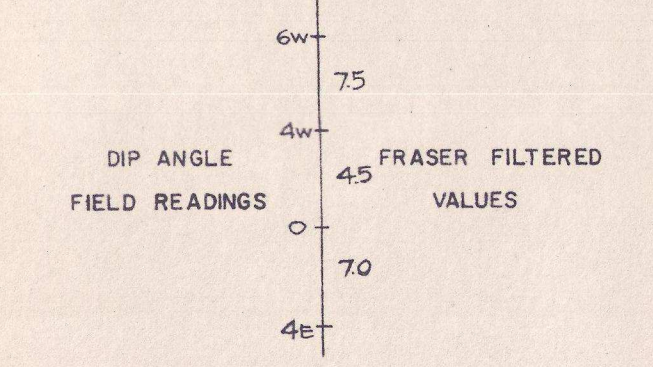


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 B.Sc., GEOPHYSICIST.
 DATED: SEPT. 20, 1981.

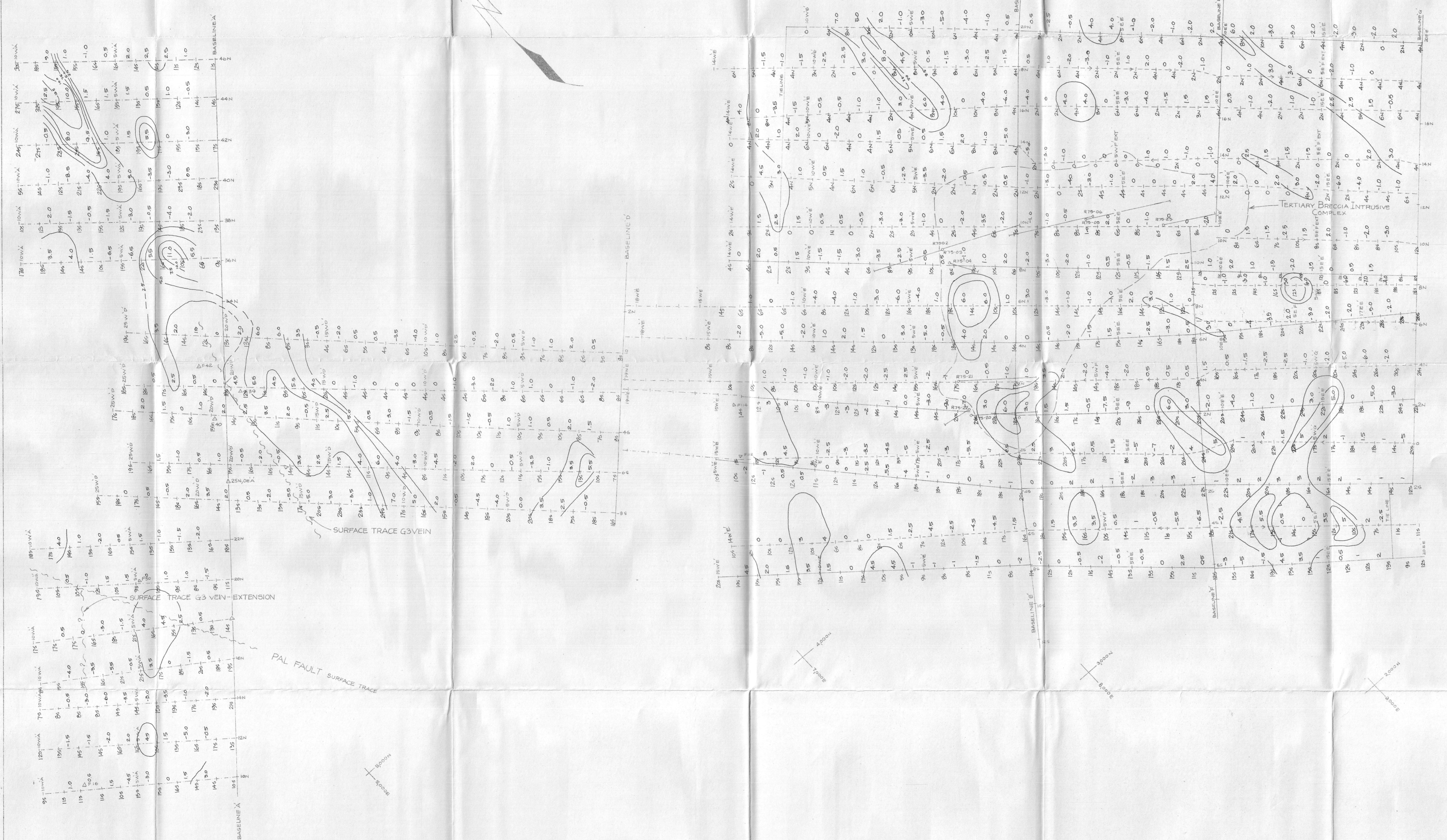
TECK EXPLORATIONS LIMITED
 FREEGOLD PROJECT, MT. FREEGOLD AREA,
 CARMACKS, Y.T.

SCALE
 ONE INCH = 200 FEET
 0 50 100 200 400

VLF-EM DATA-HAWAII TRANSMITTER (23.4 KHZ)
 FRASER FILTER VALUES-CONTOUR INTERVAL-2.5



DRAWN: RGW
 DATE: JUNE 21, 1981
 APPROVED: Pac
 DATE: SEPT 15, 1981

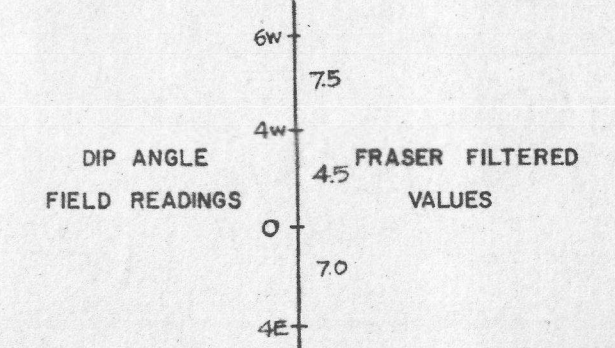


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TECK EXPLORATIONS LIMITED
FREEGOLD PROJECT, MT. FREEGOLD AREA,
CARMACKS, Y.T.

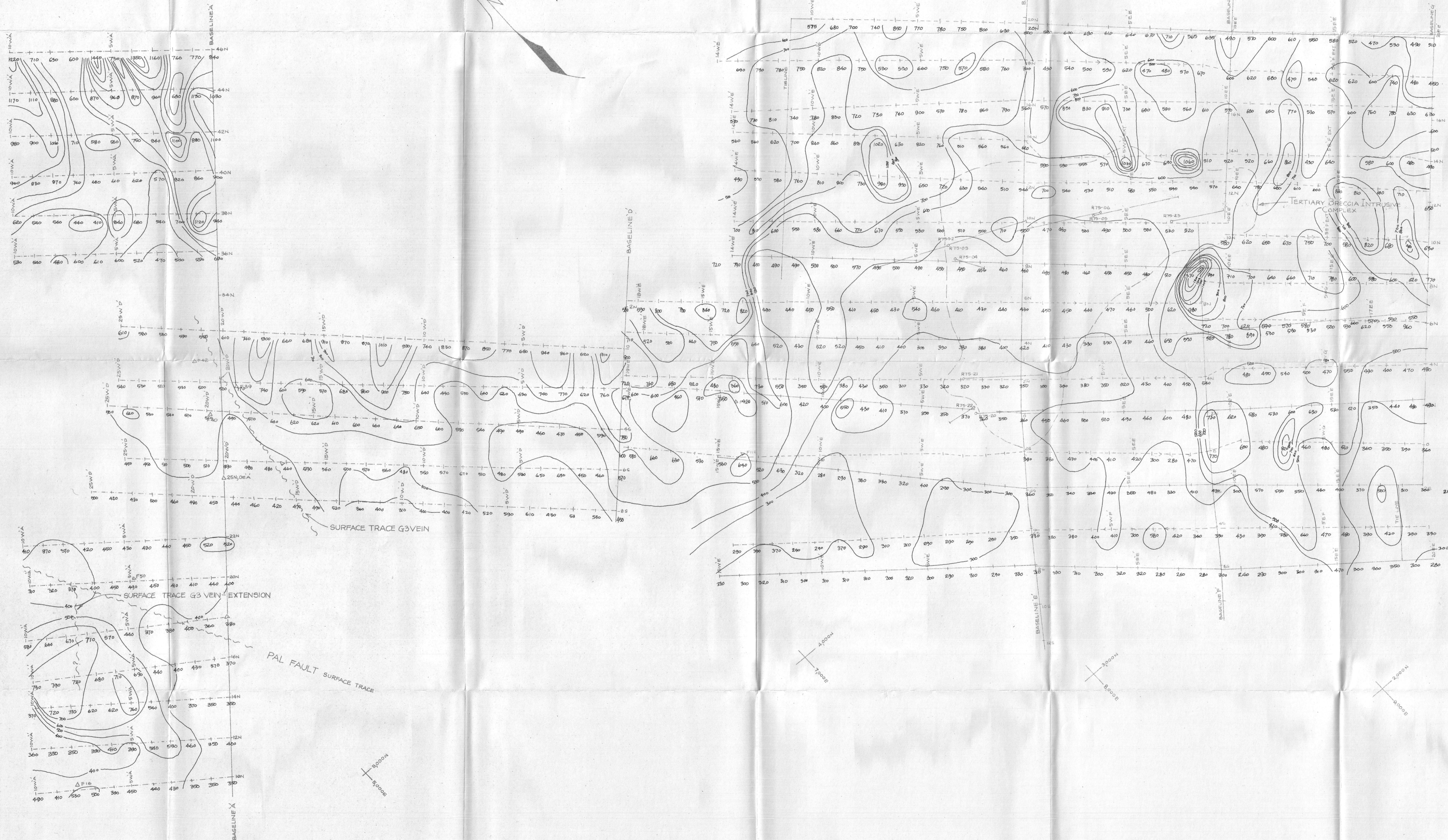
SCALE
ONE INCH = 200 FEET

VLF - EM DATA - SEATTLE TRANSMITTER (18.6 KHZ)
FRASER FILTER VALUES - CONTOUR INTERVAL - 2.5



DRAWN: RGW
DATE: JUNE 21, 1981
APPROVED: PJC
DATE: SEPT 15/81

PHOENIX GEOPHYSICS LIMITED
 VERTICAL FIELD MAGNETOMETER SURVEY
 PLAN MAP



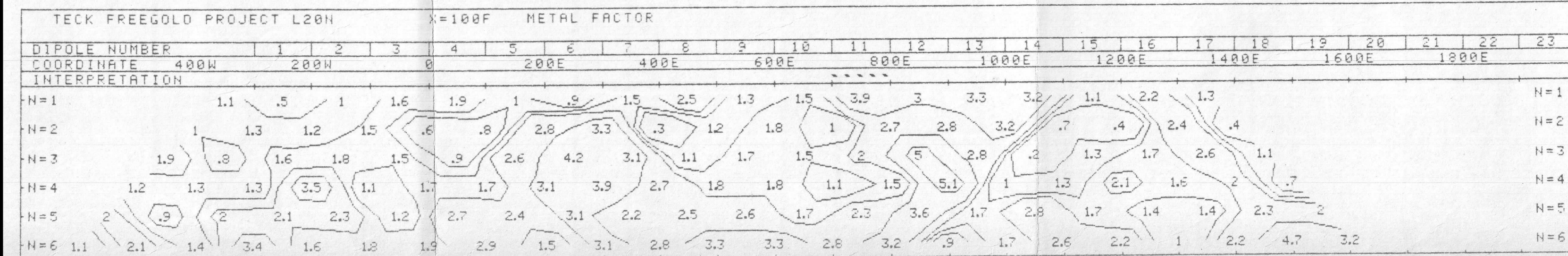
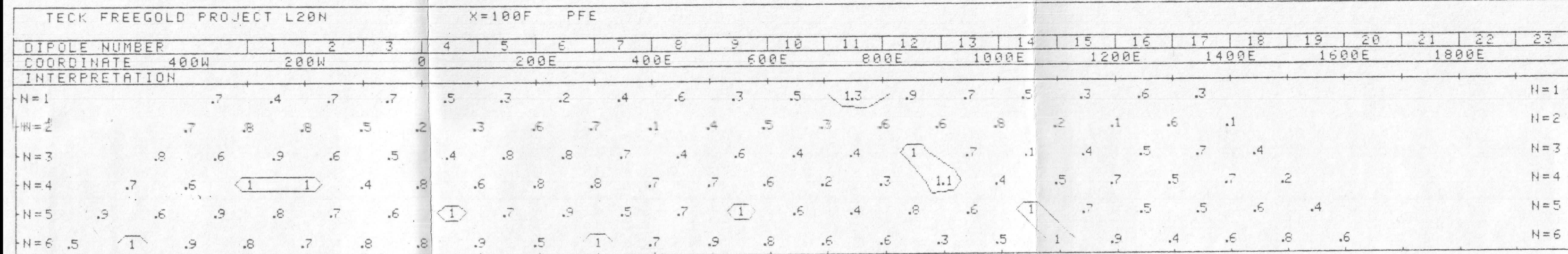
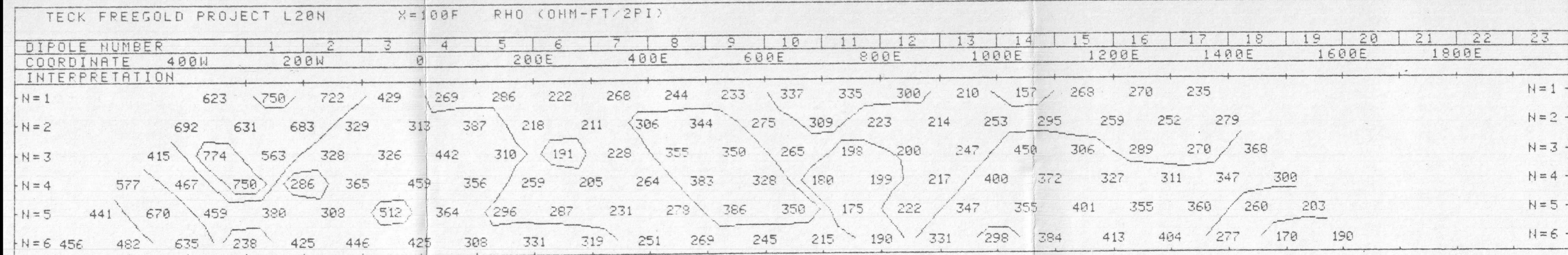
NOTE TO ACCOMPANY GEOPHYSICAL REPORT
 FOR TECK CORPORATION LTD. ON THE
 FREEGOLD PROJECT, MT. FREEGOLD
 AREA Y.T. BY PAUL CARTWRIGHT,
 B.Sc., GEOPHYSICIST.
 DATED SEPT. 20, 1981.

TECK EXPLORATIONS LIMITED
 FREEGOLD PROJECT, MT. FREEGOLD AREA,
 CARMACKS, Y.T.

SCALE
 ONE INCH = 200 FEET
 0 50 100 200 400

CONTOUR INTERVAL - 100 GAMMAS

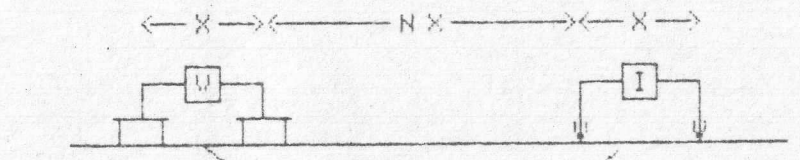
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 APPROVED: PJC
 DATE: SEPT 15/81



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT, MT FREEGOLD
CARMACKS AREA, YUKON TERR

LINE NO. - 20N



PLOTTING POINT X=100FT
SURFACE PROJECTION OF ANOMALOUS ZONE

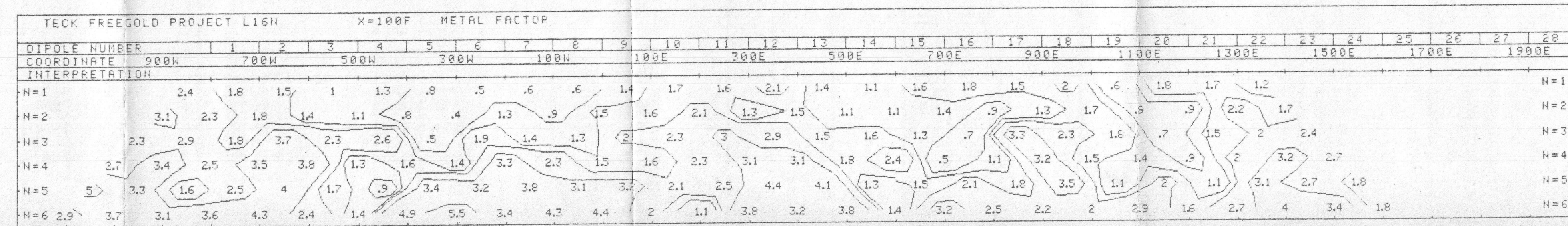
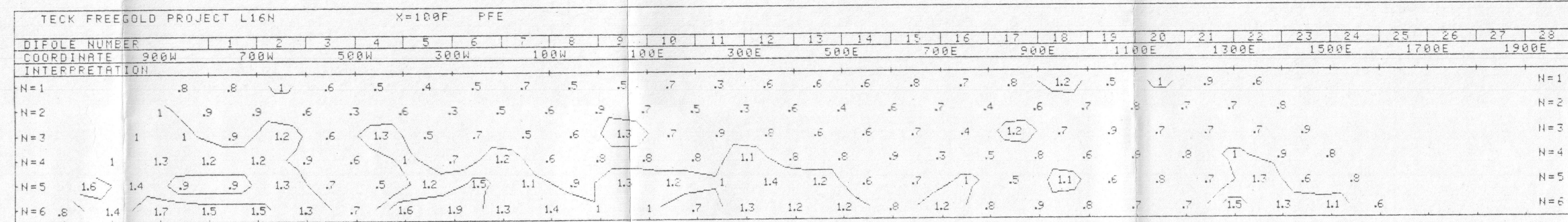
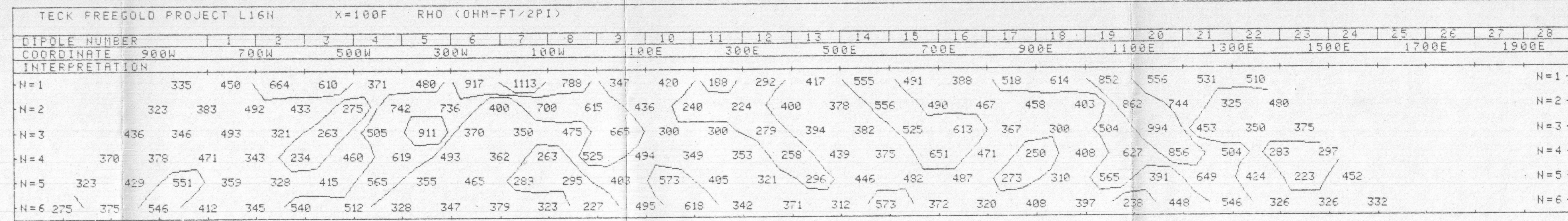
DEFINITE ———
PROBABLE - - - - -
POSSIBLE - - - - -

FREQUENCY (HERTZ) 4.000 25 DATE SURVEYED MAY/JUNE 1981
APPROVED

NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1, -1.5, -2, -3, -5, -7.5, -10 DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

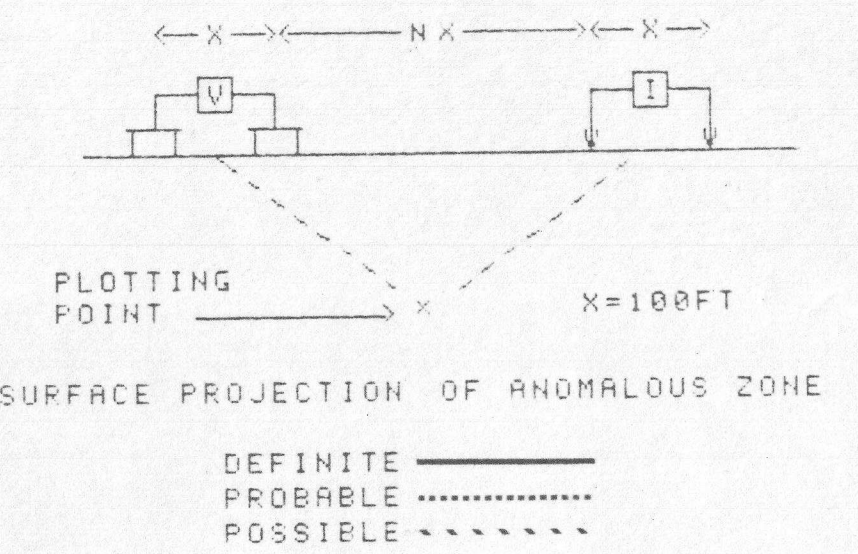
INDUCED POLARIZATION AND RESISTIVITY SURVEY



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT; MT FREEGOLD
CARMACKS AREA; YUKON TERR

LINE NO - 16N

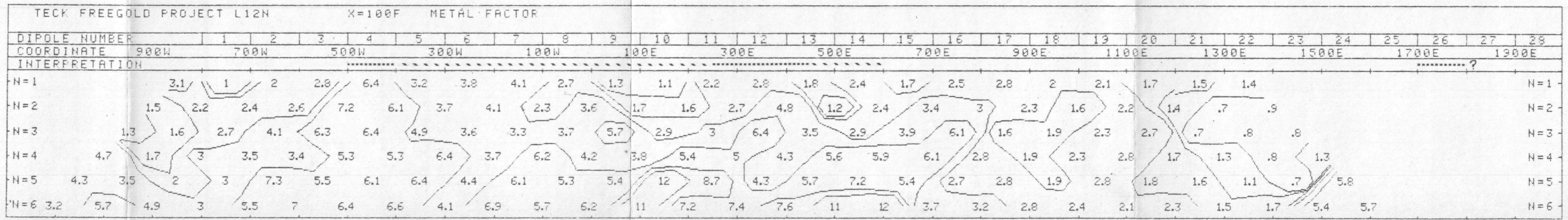
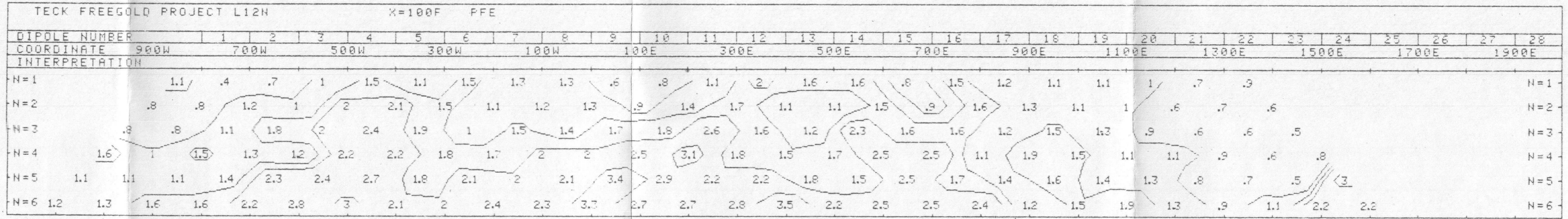
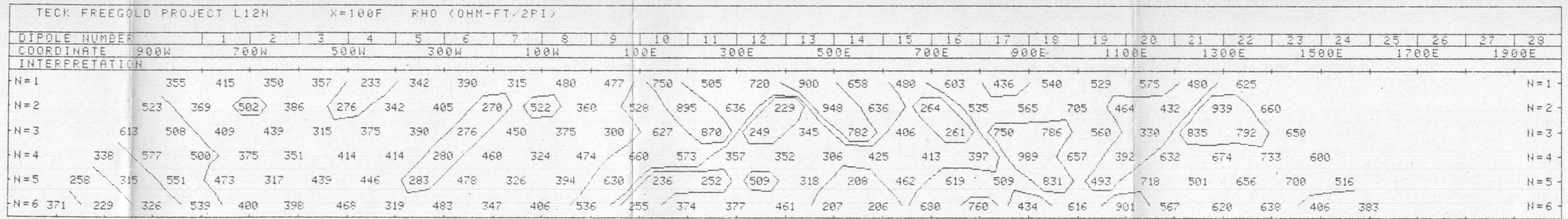


FREQUENCY (HERTZ) 4.0/0.25 DATE SURVEYED MAY/JUNE 1981
APPROVED

NOTE - CONTOURS AT LOGARITHMIC INTERVALS: 1, -1.5, -2, -3, -5, -7.5, -10
DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

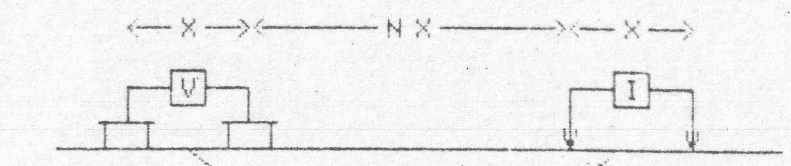
INDUCED POLARIZATION AND RESISTIVITY SURVEY



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT: MT FREEGOLD
 CARMAKCS AREA: YUKON TERR

LINE NO. - 12N



PLOTTING POINT X X=100FT
 SURFACE PROJECTION OF ANOMALOUS ZONE

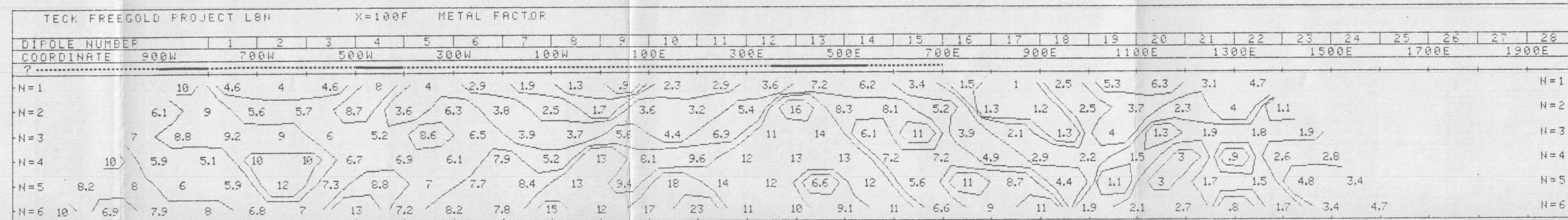
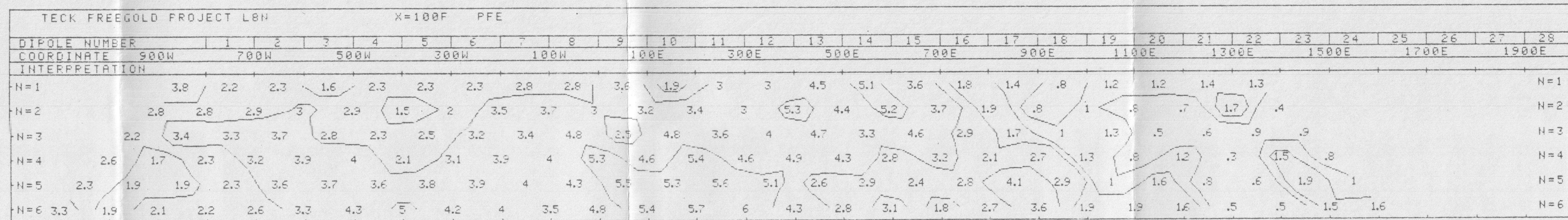
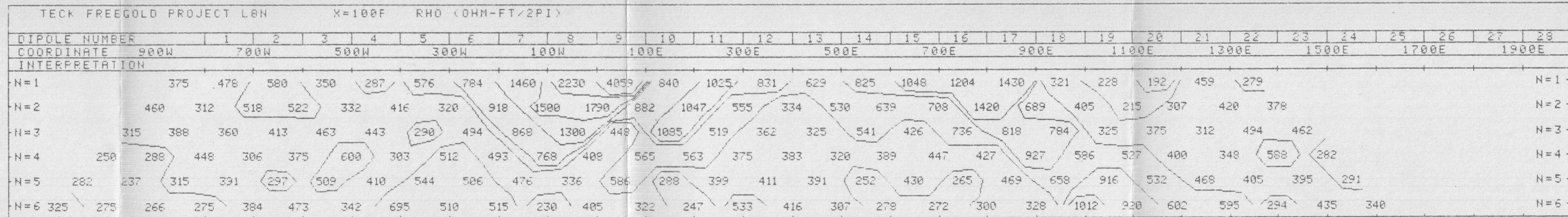
DEFINITE ———
 PROBABLE - - - - -
 POSSIBLE ·····

FREQUENCY (HERTZ) 4.0, 0.25 DATE SURVEYED MAY/JUNE 1981
 APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS: 1, -1.5, -2, -3, -5, -7.5, -10
 DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

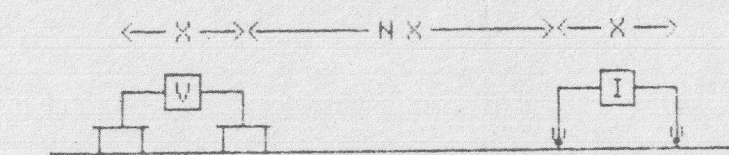
INDUCED POLARIZATION AND RESISTIVITY SURVEY



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT; MT FREEGOLD
CARMACKS AREA; YUKON TERR.

LINE NO. - 8N



PLOTTING POINT X X=100FT

SURFACE PROJECTION OF ANOMALOUS ZONE

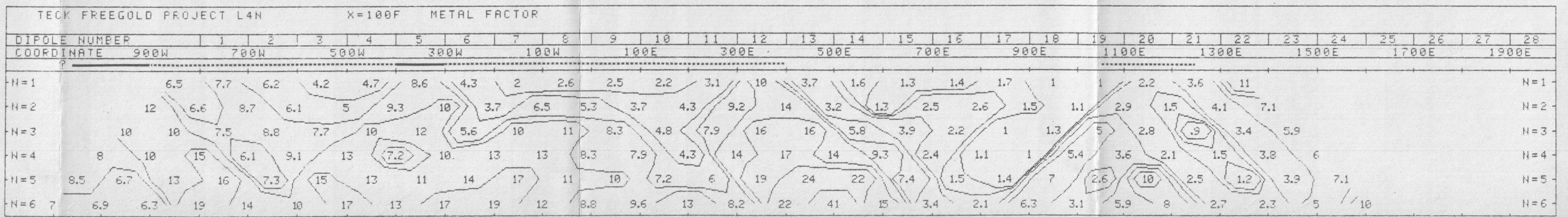
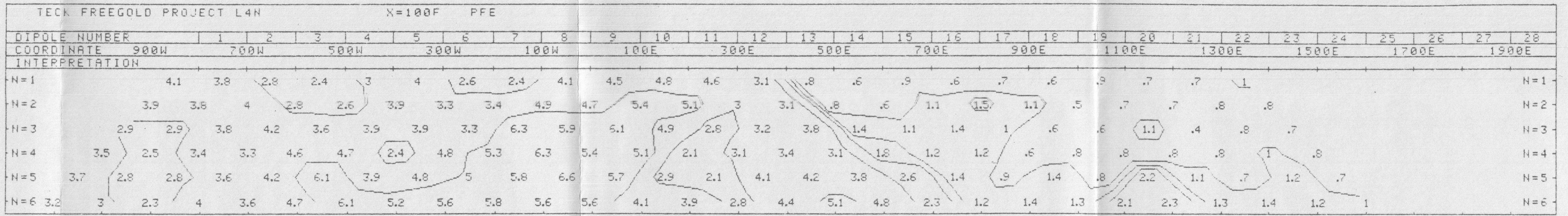
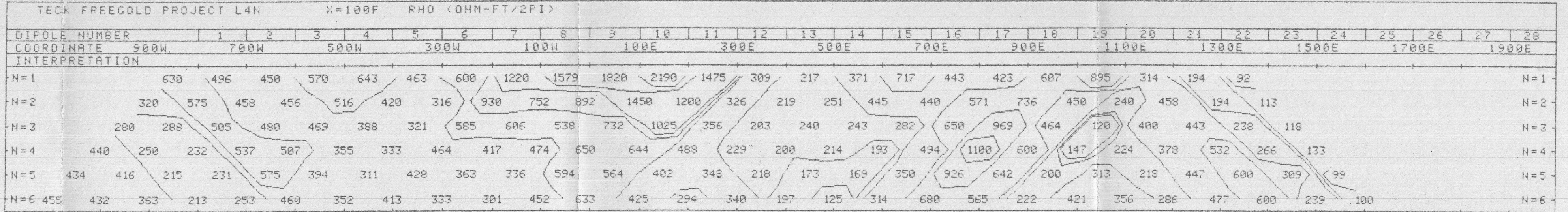
DEFINITE ———
PROBABLE
POSSIBLE - - - - -

FREQUENCY (HERTZ) 4 0; 0.25 DATE SURVEYED MAY/JUNE 1981
APPROVED

NOTE - CONTOURS AT LOGARITHMIC INTERVALS: 1, -1.5, -2, -3, -5, -7.5, -10
DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

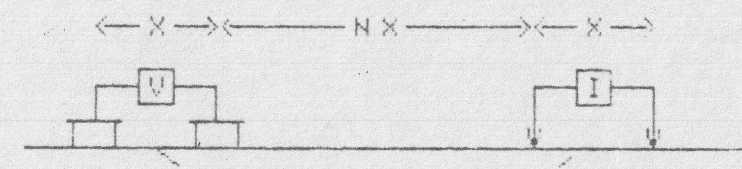
INDUCED POLARIZATION
AND RESISTIVITY SURVEY



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT, MT FREEGOLD
CARMACKS AREA, YUKON TERR.

LINE NO. - 4N



PLOTTING POINT X X=100FT

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE ————
PROBABLE - - - - -
POSSIBLE ······

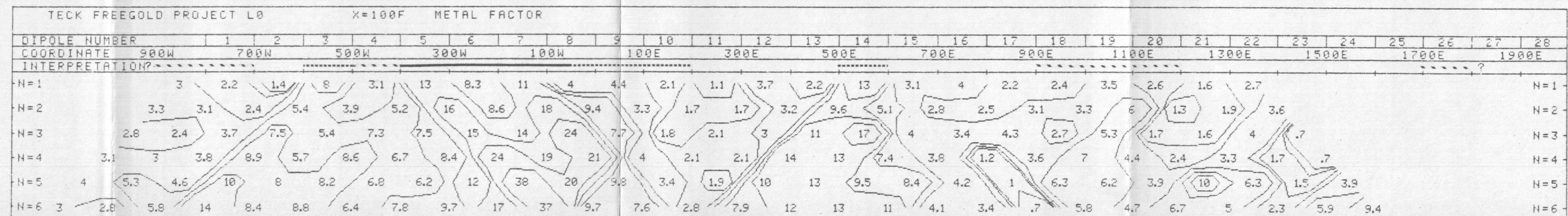
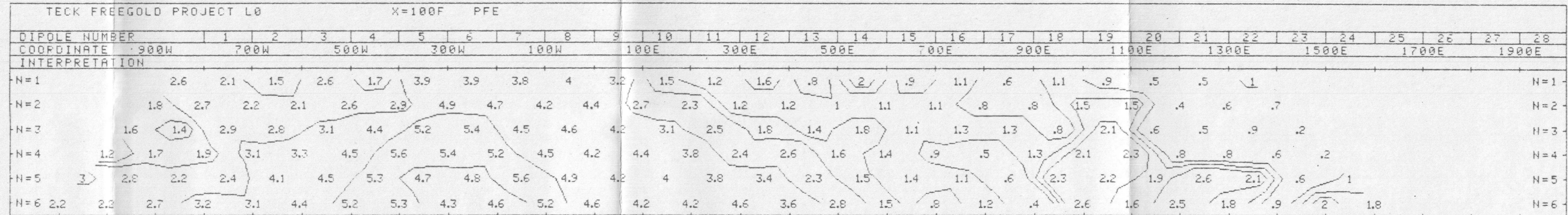
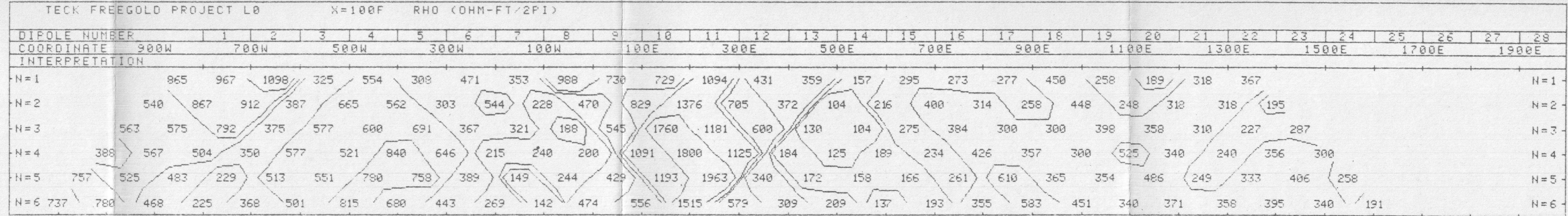
FREQUENCY (HERTZ) 4.0, 8.25
DATE SURVEYED: MAY/JUNE 1981
APPROVED

NOTE - CONTOURS AT LOGARITHMIC INTERVALS: 1, -1.5, -2, -3, -5, -7.5, -10

DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

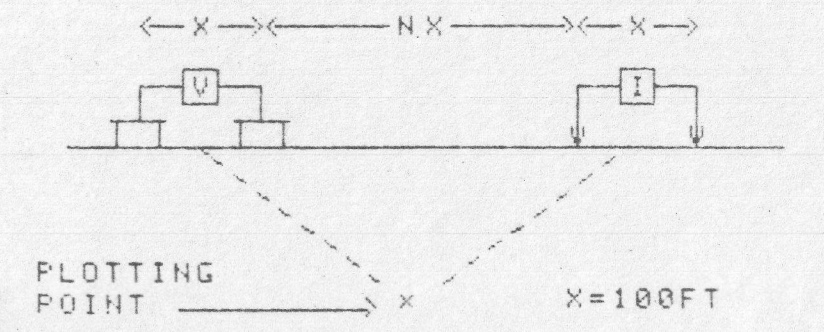
INDUCED POLARIZATION AND RESISTIVITY SURVEY



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT, MT FREEGOLD
CARMACKS AREA, YUKON TERR.

LINE NO. - 0



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE ———
PROBABLE - - - - -
POSSIBLE - - - - -

FREQUENCY (HERTZ) 4.0/0.25 DATE SURVEYED: MAY/JUNE 1981
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS: 1, -1.5, -2, -3, -5, -7.5, -10
DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

TECK FREEGOLD PROJECT L4S		X=100F RHO (OHM-FT/2PI)																																						
DIPOLE NUMBER		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28											
COORDINATE		900W	700W	500W	300W	100W	100E	300E	500E	700E	900E	1100E	1300E	1500E	1700E	1900E																								
INTERPRETATION																																								
N=1		517	496	738	475	448	500	670	810	723	863	964	893	643	356	248	336	584	1024	457	366	967	639	511											N=1					
N=2		364	531	692	605	512	562	510	747	576	780	900	960	921	450	309	277	327	695	750	423	379	859	678	308											N=2				
N=3		459	323	646	525	670	735	586	538	413	600	695	1216	1222	609	379	345	228	384	529	698	414	346	886	417	505											N=3			
N=4		476	445	388	575	581	960	709	785	310	393	507	982	1609	863	550	420	230	248	320	505	630	371	415	505	652	559											N=4		
N=5		426	459	481	334	615	803	926	709	436	280	317	714	1289	1321	817	608	266	239	210	302	461	578	453	267	781	662	348											N=5	
N=6		866	411	538	417	311	850	765	845	383	379	241	438	949	1128	1450	939	361	261	204	200	276	420	774	286	503	791	425	286											N=6

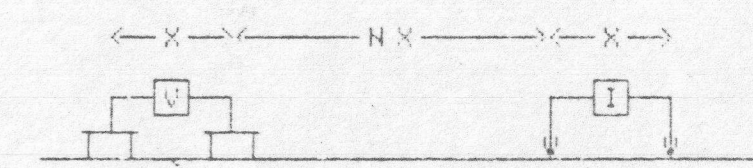
TECK FREEGOLD PROJECT L4S		X=100F PFE																																						
DIPOLE NUMBER		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28											
COORDINATE		900W	700W	500W	300W	100W	100E	300E	500E	700E	900E	1100E	1300E	1500E	1700E	1900E																								
INTERPRETATION																																								
N=1		2.3	1.9	2	2	1.4	2.8	3.1	3.6	2.9	2	2.3	1.8	.4	.6	.7	1.2	.8	1	.5	1.1	1	.5	1.2											N=1					
N=2		1.1	1.7	1.5	1.8	3.1	3.9	3.3	4.4	3.4	1.9	2.3	1.4	1.7	1.2	1.1	.9	.9	1.8	1	.6	.7	.7	1.3	1											N=2				
N=3		1.3	2.3	1.6	1.7	3.4	3.9	3.5	3.8	3.8	3.2	1.4	1.8	1	.9	1.4	.6	.7	1	1.1	.4	1.1	.8	.8	.7	.7											N=3			
N=4		1.4	2	2.3	2.4	2.4	3.8	3.6	4.4	3.6	4.1	3.1	2.4	1.8	1.2	1.2	1.3	1.7	.4	.7	1	1	.8	1	.5	1	1											N=4		
N=5		1.8	1.3	2.5	2.4	3.4	3.2	3.2	4.6	3.2	3.3	3.1	3.2	1.7	1.6	1.4	1.4	2.4	1.1	1	1	1.2	.6	1	1.7	.4	1.1	1.5											N=5	
N=6		3.2	2	2.3	2.4	2.7	3.6	2.6	5.6	3.8	3.3	3.8	3.8	2.6	2.2	2.2	.9	2.4	2.1	1.5	2.2	1.9	1.2	1	1.7	1.7	.6	1.5	1.7											N=6

TECK FREEGOLD PROJECT L4S		X=100F METAL FACTOR																																						
DIPOLE NUMBER		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28											
COORDINATE		900W	700W	500W	300W	100W	100E	300E	500E	700E	900E	1100E	1300E	1500E	1700E	1900E																								
INTERPRETATION																																								
N=1		4.4	3.8	2.7	4.2	3.1	5.6	4.6	4.4	4	2.3	2.4	2	.6	1.7	2.8	3.6	1.4	1	1.1	3	1	.8	2.3											N=1					
N=2		3	3.2	2.2	3	6.1	6.9	6.5	5.9	5.9	2.4	2.6	1.5	1.8	2.7	3.6	3.2	2.8	2.6	1.3	1.4	1.8	.8	1.9	3.2											N=2				
N=3		2.8	7.1	2.5	3.2	5.1	5.3	6	7.1	9.2	5.3	2	1.5	.8	1.5	3.7	1.7	3.1	2.6	2.1	.6	2.7	2.3	.9	1.7	1.4											N=3			
N=4		2.9	4.5	5.9	4.2	4.1	4	5.1	5.6	12	10	6.1	2.4	1.1	1.4	2.2	3.1	7.4	1.6	2.2	2	1.6	2.2	2.4	1	1.5	1.8											N=4		
N=5		4.2	2.8	5.2	7.2	5.5	4	3.5	6.5	7.3	12	9.8	4.5	1.3	1.2	1.7	2.3	9	4.6	4.8	3.3	2.6	1	2.2	6.4	.5	1.7	4.3											N=5	
N=6		3.7	4.9	4.3	5.8	8.7	4.2	3.4	6.6	9.9	8.7	16	8.7	2.7	2	1.5	1	6.6	8	7.4	11	6.9	2.9	1.3	5.9	3.4	.8	3.5	5.9											N=6

TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT, MT FREEGOLD
CARMACKS AREA, YUKON TERR.

LINE NO. - 4S



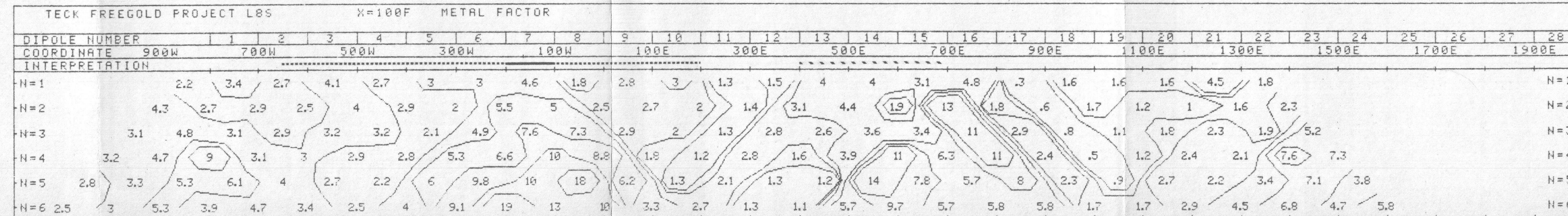
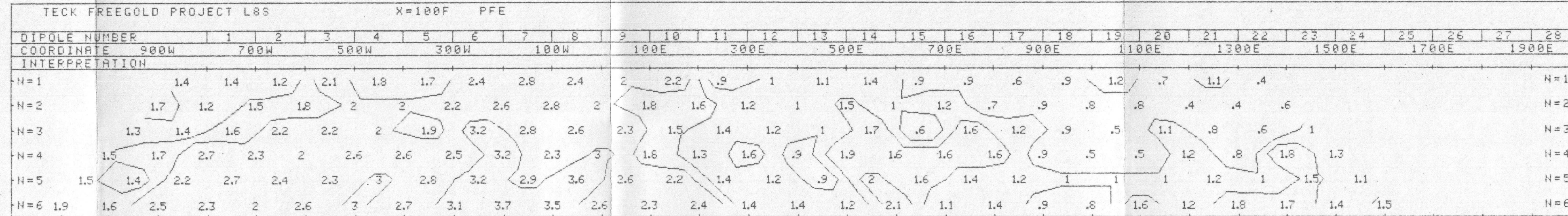
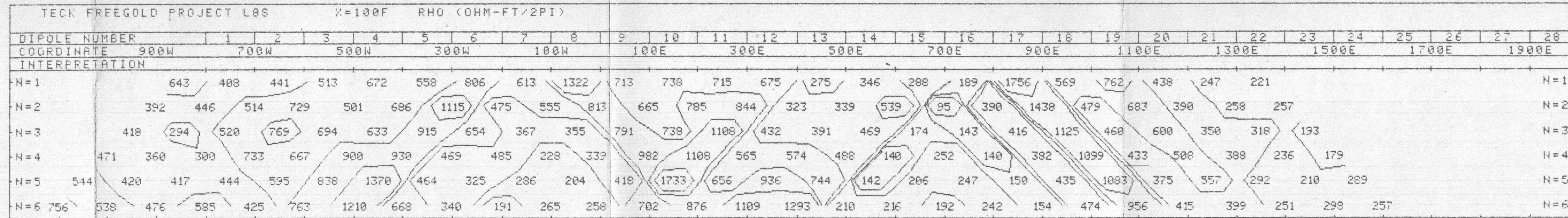
PLOTTING POINT X X=100FT
SURFACE PROJECTION OF ANOMALOUS ZONE
DEFINITE ———
PROBABLE
POSSIBLE - - - - -

FREQUENCY (HERTZ) 4 0.0 25
DATE SURVEYED MAY/JUNE 1981
APPROVED

NOTE- CONTOURS AT LOGARITHMIC INTERVALS: 1, -1.5, -2, -3, -5, -7.5, -10
DATE Aug 6/81

PHOENIX GEOPHYSICS LTD.

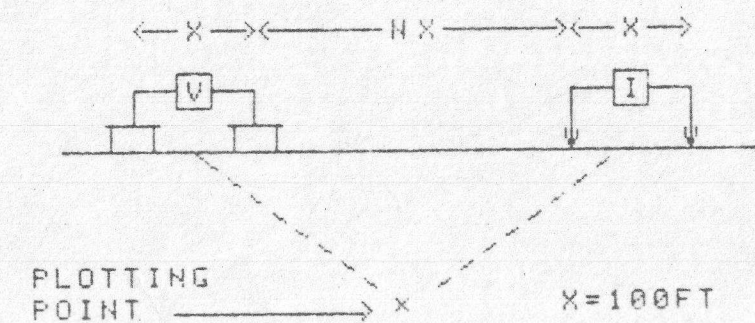
INDUCED POLARIZATION AND RESISTIVITY SURVEY



TECK EXPLORATIONS LIMITED

FREEGOLD PROJECT, MT FREEGOLD
CARMACKS AREA, YUKON TERR.

LINE NO. - 8S



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE ———
PROBABLE
POSSIBLE - - - - -

FREQUENCY (HERTZ)
4.0; 0.25

DATE SURVEYED - MAY/JUNE 1981
APPROVED

NOTE - CONTOURS
AT LOGARITHMIC
INTERVALS: 1, -1.5
-2, -3, -5, -7.5, -10

PAC
DATE *AUG 6/81*

PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION
AND RESISTIVITY SURVEY