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AIRBORNE ELECTROMAGNETIC SURVEY

BURNS LAKE AREA, BRITISH COLUMBIA

CHEVRON RESOURCES LIMITED

PROJECT #22085 840350 MARCH 1981

Questor Surveys Limited, 6380 Viscount Rd., Mississauga, Ontario, Canada.

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CONTENTS

INTRODUCTION

This report contains the results of an airborne electromagnetic survey flown in the Burns Lake Area, British Columbia on December 12, 1980.

A brief description of the survey procedure together with recommendations for ground follow-up is included.

The survey mileage was 357 line kilometres and the survey was performed by Questor Surveys Limited. The survey aircraft was a Shorts Skyvan C-FQSL and the operating base was Prince George, British Columbia.

The area outline is shown on a 1:250,000 map at the end of this report. This is part of the National Topographic Series sheet number 93K.

The following were the personnel involved with the airborne survey:

Pilot	M. Portalier
Co-pilot	G. Robertson
Operator	W. Schieman
Engineer	P. Melen
Geophysicist	D. Isherwood

MAP COMPILATION

The base maps are uncontrolled mosaics constructed from National Air Photo Library 1:60,000 photographs. These mosaics were used to produce maps at a scale of 1:20,000 on a stable transparent film from which white prints can be made.

Flight path recovery was accomplished by comparison of 35mm film with the mosaics in order to locate the fiducial points. These points are approximately 1310 metres apart.

SURVEY PROCEDURE

Terrain clearance was maintained as close to 122 metres as possible with the E.M. bird at approximately 45 metres above the ground. A normal S-pattern flight path using approximately one mile turns was used. The equipment operator logged the flight details and monitored the instruments.

A line spacing of 305 metres was used for the lines.

During the course of the survey, an attempt was made to fly the flight lines in alternate directions. This procedure aids in the interpretation of a dip of a conductor. Double peaks occur on the up-dip flight line while only one intercept usually occurs on the down-dip flight line. If more than one anomaly occurs on the down-dip flight line, then more than one conductor is suspected. Where the conductor is considered to be vertical, a small response usually precedes the larger second response. This will occur no matter what direction the flight line is flown. The ratio in channel 2 amplitudes between the first and second anomalies is approximately 1:10. For a conductor dipping at 45^{o}, the ratio is roughly 1:1.5.

Conductor axes have been plotted as accurately as possible on the map. They should not be construed as being in the exact location. Ground geophysical surveys are definitely needed to pinpoint them accurately on the ground. The axes on the INPUT maps should be used as a guide only.

INTERPRETATION AND RECOMMENDATIONS

This area has a heavey layer of conductive overburden which made it difficult to interpret bedrock conductors with a reasonable degree of confidence. Anomalies that show the strongest responses may turn out to be just the edge effect of a change in depth of the overburden. The anomalies that have axes drawn through, I feel mostly represent contacts between rock types. In this area, there are acid, intermediate, and basic volcanics, and sediments comprised of conglomerates, sandstones and shales. Also, the entire region is overlaid with glacial drift, which appears to be the source of the conductive background.

ZONE 1

In this area, the conductors are associated with the magnetic lows, reflecting, possibly, contacts between a sedimentary region and an acid volcanic region. The conductors display moderate conductivity-thicknesses, from 4 to 17 siemens and they dip vertically to near vertically. The anomalies appear to be multiple or thick conductors, but there is a great deal of cultural noise in the area which could provide the same responses. The magnetic lows indicate a possible graphitic or pyritic source. The strongest E.M. responses are displayed from conductor E. A follow-up survey could be initiated from that vicinity.

ZONE 2

In this area, the anomalies have relatively poor shapes and conductivity-thickness products. This zone is in a region of contact between granitic rocks and acid to intermediate volcanics. There is an old lead-zinc showing here, as well. These anomalies flank a broad, medium gradient, magnetic high. The channels, in this zone, go negative following an anomaly, which usually indicates a flat-lying structure. The strongest responses, here, are 10290A and 10290AZ. Further work could be initiated from those areas.

ZONE 3

Group A

These are moderate strength responses in an area of granitic rocks. They flank a more basic igneous intrusion. This intrusion is relatively resistive, indicating that it has penetrated further up into the drift cover. Therefore these anomalies probably just reflect basement topography. I would not recommend further work in this area.

Group B

Flanking the above mentioned intrusion on the other side, are these four conductors. They are on the outer edge of the heavier overburden area. The anomalies are broad, and of increasing amplitude, indicating that they are more likely due to overburden responses than bedrock. Also they end at the intrusion. I would not recommend further work here.

ZONE 4

This zone edges a less conductive background area. These anomalies are not very strong, 4 to 8 siemens, and the dip is into the increasing overburden cover, a possible reflection of the slope of the basement floor. However, they also correlate to a definite magnetic trend in an area of intermediate to basic volcanics, possibly reflecting a contact. Any further work could be initiated in the region of 10041B, the strongest E.M. response, but this area would be a low priority target.

ZONE 5

This zone contains a series of weak to moderate strength conductors, in the range of 4 to 16 siemens. Anomalies 10041D, 10041E, 10050B, and 10050C have the strongest E.M. responses while also having strong magnetic responses. These anomalies have good shapes and appear to be in a more resistive area in a region of basic volcanics. I would recommend a follow-up survey.

ZONE 6

In this area, there is a series of short strike length conductors. They are of moderate strength and they correlate with magnetic features. The anomalies are in an area of contacts between acid and basic volcanics. The anomaly with the best conductivity-width product is 10061C. Within this area, there is an anomaly on the tie line, 19020D, which has the appearance of being flown oblique to strike. I would recommend a follow-up.

ZONE 7

This is a moderate strength conductor, 7 to 10 siemens in a region of contacts. There are no associated magnetic features for these anomalies which would indicate either a pyritic or graphitic source. If there is any further work on this conductor, it could be initiated from the area of 10170F, the strongest E.M. anomaly. This is a low priority target.

Anomalies in the survey area which have not been specifically discussed or had axes drawn through, I feel, have a relationship to overburden or culture. They have not been eliminated from the map since they may, ultimately, be of some interest. To be able to glean more information out of the survey results, I would recommend one or more of the following alternatives: normalizing the channels to channel 2; contouring the ratio of channel 2 to channel 4; contouring channel 2.

Normalizing to channel 2 removes the altitude effect and most of the overburden effect. Bedrock anomalies have lower ratios than the background.

Contouring the ratio of channel 2 to channel 4 would provide what could be used as a conductivity map.

Contouring channel 2 would provide an indication of extent of the conductive overburden.

QUESTOR SURVEYS LIMITED

Douglas Isherwood

Douglas Isherwood,
Geophysicist.

APPENDIX

EQUIPMENT

The aircraft is equipped with a Mark VI INPUT (R) airborne E.M. system and Sonotek P.M.H. 5010 Proton Magnetometer. Radar altimeters are used for vertical control. The outputs of these instruments together with fiducial timing marks are recorded by means of galvanometer type recorders using light sensitive paper. Thirty-five millimeter continuous strip cameras are used to record the actual flight path.

(I) BARRINGER/QUESTOR MARK VI INPUT (R) SYSTEM

The Induced Pulse Transient (INPUT) system is particularly well suited to the problems of overburden penetration. Currents are induced into the ground by means of a pulsed primary electromagnetic field which is generated in a transmitting loop around the aircraft. By using half sine wave current pulses and a loop of large turns-area, the high output power needed for deep penetration is achieved.

The induced current in a conductor produces a secondary electromagnetic field which is detected and measured after the termination of each primary pulse. Detection is accomplished by means of a receiving coil towed behind the aircraft on four hundred feet of cable, and the received signal is processed and recorded by equipment in the aircraft. Since the measurements are in the time domain rather than the frequency domain common to continuous wave systems, interference effects of the primary transmitted field are eliminated. The secondary field is in the form of a decaying voltage transient originating in time at the termination of the transmitted pulse. The amplitude of the transient is, of course, proportional to the amount of current induced into the conductor and, in turn, this current is proportional to the dimensions, the conductivity and the depth beneath the aircraft.

The rate of decay of the transient is inversely proportional to conductivity. By sampling the decay curve at six different time intervals, and recording the amplitude of each sample, an estimate of the relative conductivity can be obtained. By this means, it is possible to discriminate between the effects due to conductive near-surface materials such as swamps and lake bottom silts, and those due to genuine bedrock sources. The transients due to strong conductors such as sulphides exhibit long decay curves and are therefore commonly recorded on all six channels. Sheet-like surface materials, on the other hand, have short decay curves and will normally only show a response in the first two or three channels.

The samples, or gates, are positioned at 310, 490, 760, 1120, 1570 and 2110 micro-seconds after the cessation of the pulse. The widths of the gates are 180, 180, 360, 360, 540, and 540 micro-seconds respectively.

For homogeneous conditions, the transient decay will be exponential and the time constant of decay is equal to the time difference at two successive sampling points divided by the log ratio of the amplitudes at these points.

(II) SONOTEK P.M.H. 5010 PROTON MAGNETOMETER

The magnetometers which measure the total magnetic field have a sensitivity of 1 gamma and a range from 20,000 gammas to 100,000 gammas.

Because of the high intensity field produced by the INPUT transmitter, the magnetometer results are recorded on a time-sharing basis. The magnetometer head is energized while the transmitter is on, but the read-out is obtained during a short period when the transmitter is off. Using this technique, the head is energized for 0.83 seconds while the precession frequency is being recorded and converted to gammas. Thus a magnetic reading is taken every 1.13 second.

For this survey, a lag factor has been applied to the data. Magnetic data recorded on the analogue records at fiducial 10.00 for example would be plotted at fiducial 9.95 on the mosaics.

DATA PRESENTATION

The symbols used to designate the anomalies are shown in the legend on each map sheet, and the anomalies on each line are lettered in alphabetical order in the direction of flight. Their locations are plotted with reference to the fiducial numbers on the analog record.

A sample record is included to indicate the method used for correcting the position of the E.M. Bird and to identify the parameters that are recorded.

All the anomaly locations, magnetic correlations, conductivity-thickness values and the amplitudes of channel number 2 are listed on the data sheets accompanying the final maps.

GENERAL INTERPRETATION

The INPUT system will respond to conductive overburden and near-surface horizontal conducting layers in addition to bedrock conductors. Differentiation is based on the rate of transient decay, magnetic correlation and the anomaly shape together with the conductor pattern and topography.

Power lines sometimes produce spurious anomalies but these can be identified by reference to the monitor channel.

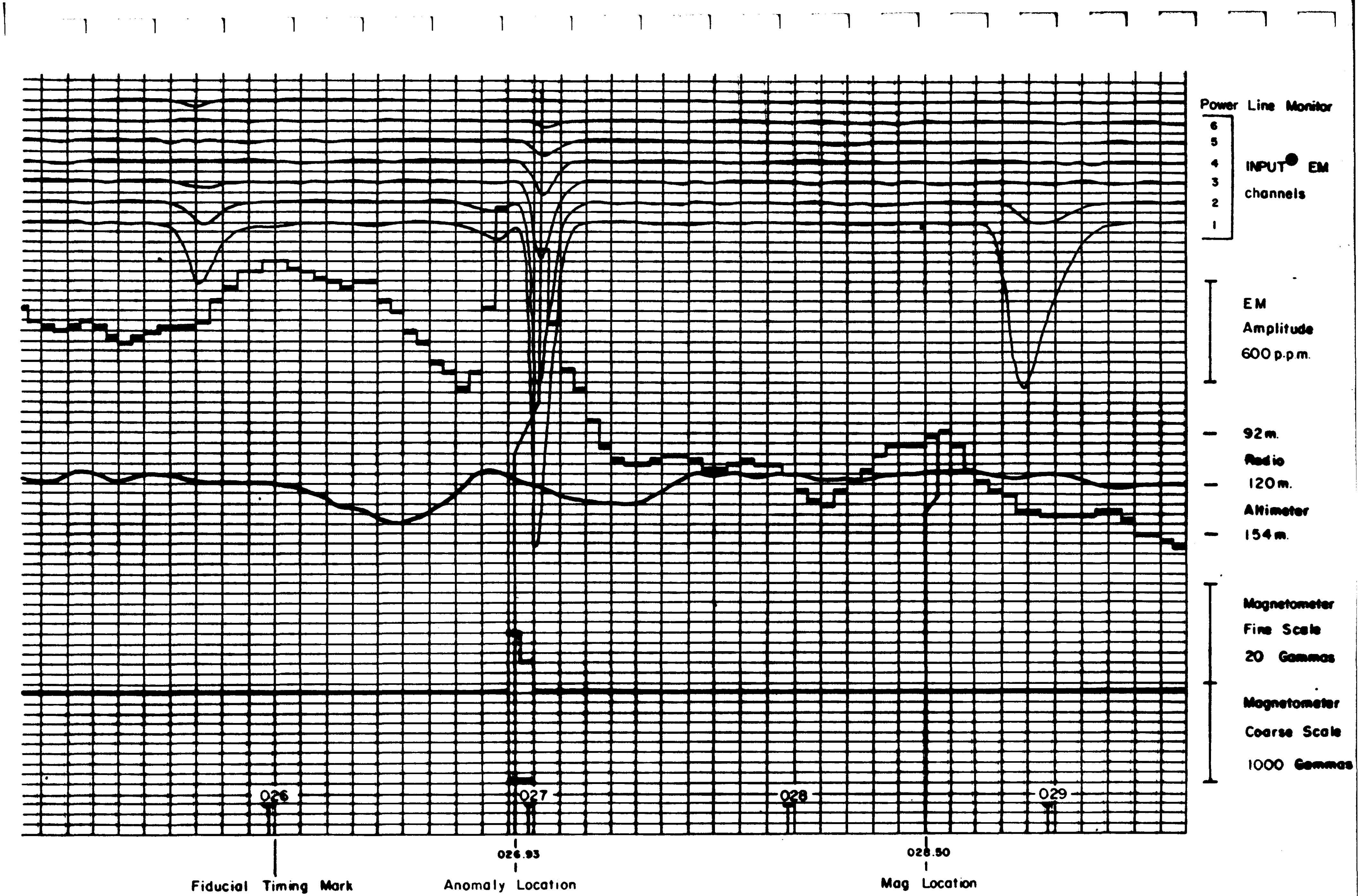
Railroad and pipeline responses are recognized by studying the film strips.

Graphite or carbonaceous material exhibits a wide range of conductivity. When long conductors without magnetic correlation are located on or parallel to known faults or photographic linears, graphite is most likely the cause.

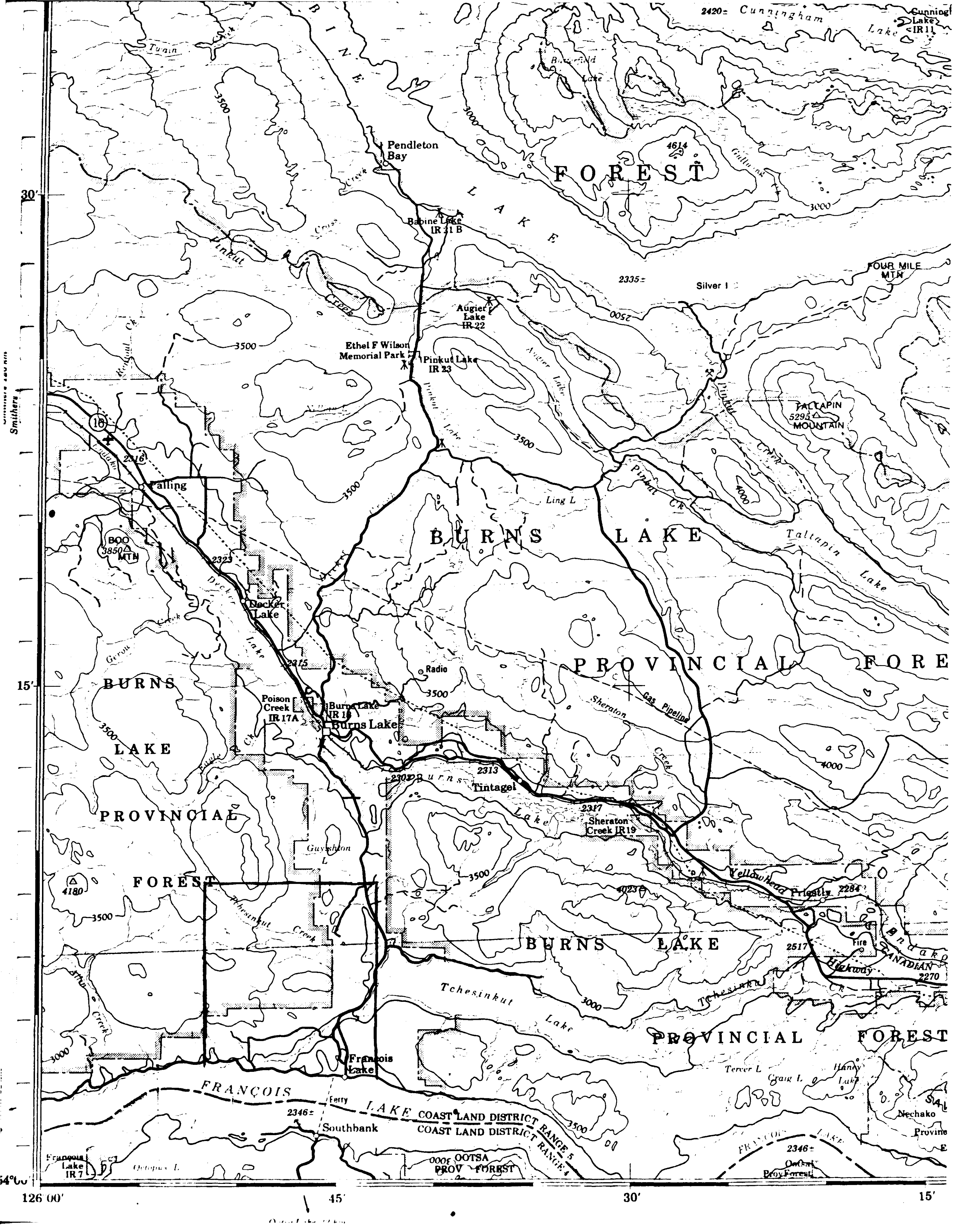
Contact zones can often be predicted when anomaly trends coincide with the lines of maximum gradient along a flanking magnetic anomaly. It is unfortunate that graphite can also occur as relatively short conductors and produce attractive looking anomalies. With no other information than the airborne results, these must be examined on the ground.

Serpentinized peridotites often produce anomalies with a character that is fairly easy to recognize. The conductivity which is probably caused in part by magnetite, is fairly low so that the anomalies often have fairly large response on channel #1; they decay rapidly, and they have strong magnetic correlation. INPUT E.M. anomalies over massive magnetites show a relationship to the total Fe content. Below 25 - 30%, very little or no response at all is obtained, but as the percentage increases the anomalies become quite strong with a characteristic rate of decay which is usually greater than that produced by massive sulphides.

Commercial sulphide ore bodies are rare, and those that respond to airborne survey methods usually have medium to high conductivity. Limited lateral dimensions are to be expected and many have magnetic correlation caused by magnetite or pyrrhotite. Provided that the ore bodies do not occur within formational conductive zones as mentioned above, the anomalies caused by them will usually be recognized on an E.M. map as priority targets.



Representative INPUT®, Magnetometer and Altimeter Recording



BABINE LAKE
2420± Cunningham Lake
Cunningham Lake IR 11
Tuain Ck
Butterfield Lake
4614
FOREST
Gullwing Ck
3000
3500
Pendleton Bay
Creek
30'
Babine Lake IR 21 B
Cross Ck
Pinkut Creek
2335±
Silver I
FOUR MILE MTN
2500
Augier Lake IR 22
Ethel F Wilson Memorial Park
Pinkut Lake IR 23
Augier Lake
Pinkut Lake
Pinkut Creek
Smithers
16
TALTAPIN MOUNTAIN
5295
2316
Falling
Pinkut Ck
Ling L
4000
BOO MTN
3850
BURNS LAKE
Taltapin Lake
2323
Decker Lake
Decker Lake
Geron Creek
Radio
PROVINCIAL FORE
2315
15'
BURNS
Poison Creek IR 17A
Burns Lake IR 18
Burns Lake
Sheraton Creek
Gas Pipeline
LAKE
Eoule Ck
2303
2313
Burns Lake
Tintagel
2317
Sheraton Creek IR19
PROVINCIAL
Guyishton L
FOREST
4180
4023
Yellowhead Highway
Priestly
2284
Tchesinkut Creek
BURNS LAKE
2517
Fire
Endako
CANADIAN
2270
Tchesinkut Lake
Tchesinkut Ck
PROVINCIAL FOREST
François Lake
Tercer L
Craig L
Haney Lake
FRANÇOIS LAKE
Ferry
COAST LAND DISTRICT RANGE 5
COAST LAND DISTRICT RANGE 4
2346±
Southbank
Nechako
Province
François Lake IR 7
Octopus L
OOTSA PROV FOREST
Ootsa Prov Forest
54°00'
126°00'
45'
30'
15'

FINAL ANOMALY	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
10011A	275.475	6	1100	6	275.55	17
10011B	275.800	4	575	1	275.80	3
10011C	277.20	6	1253	8	-	
10011D	277.45	5	969	11	277.45	113
10011E	277.775	6	856	5	-	
10011F	278.250	6	1128	5	-	
10011G	280.025	5	1131	4	280.20	143
10011H	281.425	6	1262	7	-	
10011J	281.65	6	1331	5	-	
10011K	282.00	5	568	3	282.20	12
10020A	293.575	6	1277	5	293.50	12
10020B	293.950	5	530	1	293.80	8
10020C	295.300	6	1102	7	-	
10020D	295.43	6	1046	10	295.65	31
10020E	298.050	5	1749	4	-	
10020F	299.450	5	827	9	299.55	17
10020G	300.675	5	670	4	-	
10030A	284.575	4	271	1	284.50	4
10030C	289.625	5	737	5	-	
10030D	291.275	6	1583	8	291.15	8
10030E	291.550	5	830	2	291.75	186
10041A	255.850	5	664	6	-	
10041B	256.150	6	1382	6	-	
10041C	256.500	6	30	3	256.45	24
10041D	257.77	6	770	16	-	
10041E	258.050	6	835	7	258.20	27
10050A	239.500	6	777	4	239.50	146
10050B	241.375	6	899	6	-	
10050C	241.67	6	899	8	241.70	102
10050D	243.575	6	2155	5	-	
10050E	244.000	6	364	1	243.85	68
10050F	245.050	4	780	1	244.30	11
10061A	268.05	5	129	6	-	
10061B	269.300	6	822	3	268.95	98
10061C	269.500	6	1266	9	-	
10061D	269.650	6	1060	6	270.05	162
10061E	271.550	6	572	3	271.10	115
10061F	272.47	6	1081	6	272.15	8
10070A	224.000	5	581	6	224.05	85
10070B	224.300	6	1334	5	-	

FINAL ANOMALY	FID	CHS	CH2.AMP	MHOS	MAC	VALUE
10070C	226.125	6	778	11	225.85	97
10070D	227.550	6	1593	9	227.50	91
10070E	228.200	6	1147	1	-	
10070F	228.825	6	884	3	228.75	82
10070G	229.200	5	390	2	229.40	25
10080A	251.000	5	689	2	250.90	88
10080B	251.300	6	858	1	251.30	42
10080C	251.350	4	758	1	-	
10080D	251.67	6	1583	8	251.85	246
10080E	252.00	6	1189	9	252.30	2
10080F	252.700	6	1017	8	253.15	81
10080G	256.38	6	1201	7	-	
10090A	207.550	5	888	3	207.75	242
10090B	207.975	6	1307	11	-	
10090C	208.150	6	1563	4	-	
10090D	208.50	6	970	2	-	
10090E	212.250	4	594	1	212.20	8
10100A	234.175	4	327	4	234.35	97
10110A	191.275	4	1777	4	-	
10110B	191.500	6	2214	8	191.85	35
10110C	192.525	6	2546	7	192.15	28
10110D	193.825	5	1005	7	193.85	49
10130A	172.325	6	744	8	172.10	116
10130B	172.525	6	1141	5	-	
10130C	173.475	6	1959	11	173.55	8
10130D	173.825	6	2303	10	-	
10130E	175.800	6	2875	7	175.80	4
10130F	175.925	6	3237	7	-	
10130G	178.725	4	646	1	178.75	7
10140A	200.100	4	854	2	200.10	8
10140B	204.525	6	1404	11	-	
10140C	204.875	6	2267	9	-	
10140D	205.250	6	1435	7	-	
10140E	206.300	6	1267	5	-	
10150A	153.975	6	1629	8	-	
10150B	154.175	6	1695	8	154.30	10
10150C	155.175	6	1870	11	-	
10150D	156.00	6	2195	6	155.70	11

10150E	160.800	4	1147	1	160.55	110
10150G	162.400	6	4263	5	162.75	24
10160A	181.075	6	2074	1	-	
10160B	182.800	4	1918	1	-	
10160C	184.250	6	2249	6	-	
10160D	187.975	6	1905	9	-	
10160E	188.97	6	852	15	-	
10160F	189.400	6	1780	5	-	
10170A	134.300	4	1015	2	134.40	38
10170B	134.600	3	1018	1	-	
10170C	135.075	6	2233	6	-	
10170D	135.875	6	2349	7	135.55	35

FINAL ANOMALY	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
10170E	138.225	6	2399	6	138.20	6
10170F	139.900	6	2146	10	-	
10170G	141.575	5	1442	1	141.20	239
10170H	143.150	6	3780	2	-	
10180A	163.800	6	2879	4	-	
10180B	166.975	6	1478	2	166.70	7
10180C	168.275	6	1022	4	168.45	19
10180D	170.075	6	2334	6	170.30	13
10180E	171.650	4	772	3	-	
10190A	116.900	5	1356	3	117.25	35
10190B	118.900	6	753	2	118.90	58
10190C	120.425	5	925	1	-	
10200C	150.175	5	489	2	-	
10200D	151.450	6	1951	3	-	
10200E	151.775	6	2126	3	-	
10210A	97.600	5	411	1	-	
10210B	98.250	4	386	2	-	
10211A	104.125	6	2463	4	103.95	26
10211B	104.750	6	3323	9	-	
10211C	105.125	6	1910	5	-	
10220A	125.150	6	2493	5	125.35	46

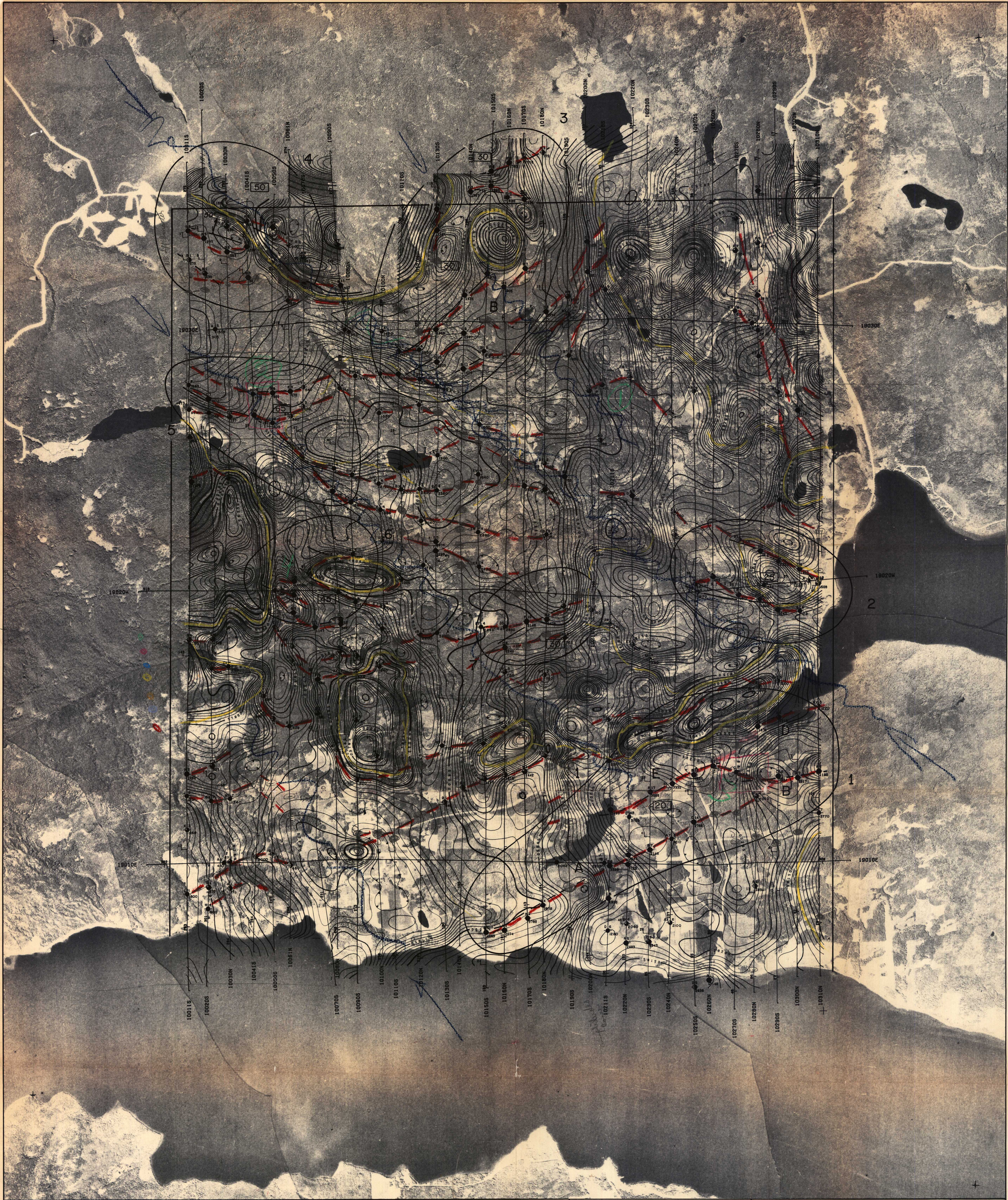
FINAL ANOMALY	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
10220B	126.000	6	3125	12	–	
10220C	126.100	6	3343	8	126.25	31
10220D	126.25	6	3153	13	–	
10220E	130.100	6	752	2	130.00	55
10220F	131.325	3	965	1	131.40	6
10230A	82.825	6	3568	17	82.70	29
10230B	83.500	6	2146	7	83.35	41
10230C	84.600	5	3343	5	84.50	26
10240A	108.450	6	3332	10	108.40	30
10250A	60.725	4	697	1	60.65	36
10250B	62.875	6	4885	12	63.10	28
10250C	63.425	6	2766	14	–	
10250D	65.375	4	2638	5	–	
10260A	85.450	6	3149	11	–	
10260B	87.900	6	2752	2	–	
10260C	90.000	5	483	1	89.85	27
10270A	37.400	5	1064	3	37.40	11
10270B	41.575	5	1302	2	41.50	25
10270C	43.55	6	3426	11	–	
10280A	67.025	4	1934	2	66.95	11
10280B	68.05	6	2200	12	–	
10280C	68.850	6	1675	4	69.20	367
10280D	70.725	6	1815	2	70.50	147
10280E	73.475	6	1387	9	73.25	70
10280F	74.050	5	1425	5	73.75	9
10280G	74.625	6	2262	6	–	
10290A	22.750	6	3243	4	–	
10290B	23.975	5	1218	5	–	
10290C	24.650	6	3834	12	–	
10300A	48.500	6	2517	7	48.70	7
10300B	50.25	6	2129	8	50.50	118
10300C	50.700	6	1410	6	–	
10300D	52.425	6	3110	10	–	
10310A	29.700	6	1190	2	29.40	126

10310B	31.675	5	1508	10	31.65	66
19010A	306.15	6	2042	13	-	
19010B	306.675	6	2373	11	-	
19020A	310.150	4	1295	4	-	
19020B	310.700	6	1632	4	310.50	35
19020C	311.52	4	270	4	310.75	10
19020D	316.450	6	1535	5	-	
19030A	318.275	6	1554	5	318.25	305
19030B	324.65	6	1491	15	324.55	10

ANOMALY	FID	CHS	CH2 AMP	MHOS	MAG	VALUE
10011L	282.67	6	1800	1		
10020FX	298.40	5	1660	2		
10020H	300.87	6	1900	4		
10020GX	299.75	6	1750	7		
10030B	286.12	6	1340	8		
10030BX	284.87	5	810	1		
10030CX	286.95	6	1260	7		
10030CZ	288.95	3	320	1		
10030BY	285.55	6	1340	7		
10041G	261.35	4	1560	3		
10041H	261.55	4	1980	7		
10041J	263.25	4	2000	1		
10050BX	239.92	5	760	5		
10050G	246.52	3	480	1		
10061AX	266.50	4	460	1		
10061BX	268.78	4	520	1		
10061BY	268.92	4	520	1		
10061EX	271.05	4	420	1		
10061EY	271.32	4	580	1		
10061G	273.05	5	600	7		
10070CY	225.40	4	540	1		
10070CZ	225.60	4	600	3		
10080AX	249.90	4	630	1		
10080AY	250.75	3	450	2		
10080GX	252.92	6	940	4		
10080GY	253.70	6	1440	4		
10090EX	208.97	6	1480	4		
10090EY	210.10	6	1600	4		
10090EZ	210.40	6	1540	4		
10090EW	211.05	6	1360	4		
10090EV	211.60	6	1420	4		
10090G	213.05	4	390	3		
10090H	213.65	4	300	2		
10090F	212.45	5	420	4		
10100B	235.18	5	840	4		
10100C	235.85	4	1770	4		
10100D	236.57	5	1080	4		
10100E	236.95	6	1780	4		
10100F	237.20	6	2190	4		
10100G	237.90	6	1350	4		
10100H	238.30	5	1800	4		
10100J	238.70	5	1470	4		
10100CX	235.60	6	1110	4		

ANOMALY	FID	CHS	CH2 AMP	MHOS	MAG	VALUE
10110CX	191.85	4	1380	3		
10110DX	192.75	6	3000	3		
10110E	194.55	6	1240	4		
10120A	218.28	5	820	8		
10120B	219.82	6	2200	4		
10120C	220.58	6	1780	4		
10120D	221.05	6	3040	4		
10120F	222.20	6	2080	4		
10120H	222.75	6	2980	4		
10120E	221.35	6	2620	3		
10120G	222.43	6	2050	4		
10130EX	174.08	6	1790	4		
10130EY	174.82	6	1600	4		
10130EZ	175.22	6	2380	4		
10130GX	176.89	6	3280	4		
10130GY	178.12	6	1720	4		
10150ET	156.75	6	1600	4		
10150EV	157.33	6	1840	4		
10150EW	158.07	6	2880	4		
10150EX	158.45	6	2820	4		
10150EY	159.15	6	2940	4		
10150EZ	160.40	6	2640	4		
10160CX	183.35	5	270	17		
10150CY	183.98	5	750	5		
10160DS	184.47	6	2430	4		
10160EX	188.30	4	200	15		
10170EY	136.62	6	1410	4		
10170FY	138.60	6	1830	4		
10170GX	140.70	6	810	4		
10180BX	165.40	5	300	7		
10180BY	166.28	4	780	3		
10180CX	167.85	6	960	6		
10180DX	168.55	5	1280	2		
10190BX	117.10	4	1120	1		
10190BY	117.55	6	1450	8		
10190BZ	120.80	6	720	5		
10200CY	147.85	4	180	1		
10200CZ	148.50	3	150	1		
10210AZ	96.47	6	1010	6		
10211AW	102.10	3	1780	1		
10211AY	103.18	4	2010	1		
10211AZ	103.60	6	2310	6		
10211D	105.50	6	4280	6		
10220BX	125.35	5	2060	6		

ANOMALY	FID	CHS	CH2 AMP	MHOS	MAG	VALUE
10220EY	128.43	4	300	1		
10220G	132.62	3	80	3		
10230AV	78.27	4	720	1		
10230AX	81.40	3	280	5		
10230AZ	82.15	6	870	7		
10240AX	106.92	5	2100	6		
10240AY	107.85	6	3210	5		
10240C	111.24	4	600	1		
10240D	111.48	3	480	1		
10240G	112.55	3	300	1		
10250AX	58.48	4	170	4		
10260CY	89.65	3	400	1		
10270AX	37.00	5	1180	1		
10270BX	38.15	6	610	4		
10270BY	40.90	4	300	1		
10280DX	69.28	4	690	6		
10280DY	70.20	6	1940	6		
10280EY	72.83	6	2110	6		
10280EZ	73.10	6	2240	5		
10290AX	20.10	5	2100	1		
10290AY	21.40	6	1620	11		
10290AZ	22.12	6	2250	4		
10290BX	23.55	4	1250	3		
10200BX	49.25	6	1950	4		
10310AX	29.22	6	3770	7		
10310BX	30.40	5	1220	5		
19010AX	302.62	6	450	7		



Legend

- 6 Channel Anomaly
- 5 Channel Anomaly
- 4 Channel Anomaly
- 3 Channel Anomaly
- 2 Channel Anomaly
- 1 Channel Anomaly
- Magnetic Correlation

Anomaly Letter — B, 5 — Apparent Conductivity-Width
1800 — Ch. 2 Amplitude P.P.M.
25 — Aprox depth to conductor in metres

BURNS LAKE AREA

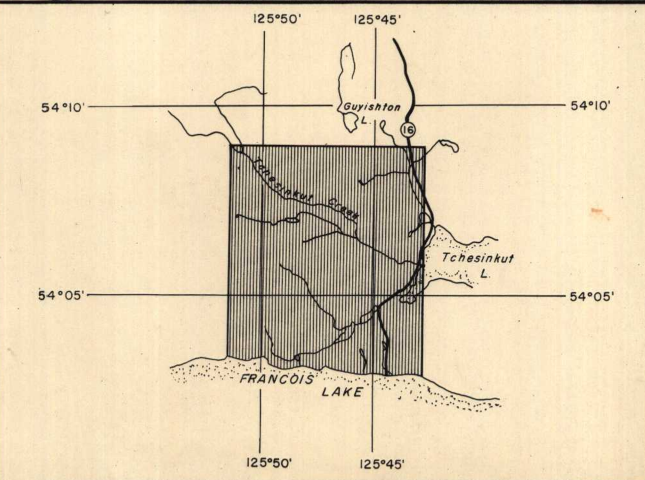
Map 1 of 1 Scale – 1 : 20,000 22085

ISOMAGNETIC INTERVAL

(TOTAL FIELD)

10 GAMMA CONTOUR LINE
50 GAMMA CONTOUR LINE
500 GAMMA CONTOUR LINE
MAGNETIC DEPRESSION
FLIGHT ALTITUDE 400' ABOVE TERRAIN

inches 0 1 2
0 1 2 3 4 5 centimetres
BRITISH COLUMBIA GEOLOGICAL SURVEY
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



QUESTOR SURVEYS LIMITED
Airborne Mk VI Input Survey

BURNS LAKE AREA

Scale – 1:20,000

Drawn By	Dataplotting
Dates Flown	December, 1980
Flight Path Recovery	D. I.
Data Reduction	B.D.C.
Completed	March, 1981
Checked	D.I.
File No. 22085	Map 1 of 1