

REPORT ON A  
HELICOPTER E.M. AND MAGNETOMETER SURVEY  
LIKELY PROJECT

LIKELY, BRITISH COLUMBIA  
CARIBOO MINING DIVISION

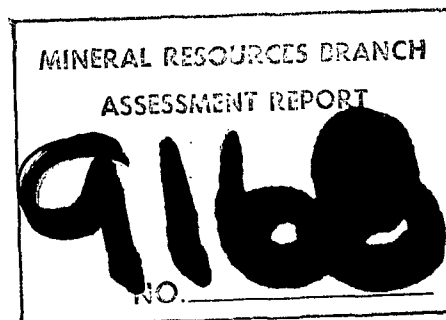
NTS 93 A 11, 12

LATITUDE 52° 37'N LONGITUDE 121° 32'W

OWNERS: CAROLIN MINES LTD.  
AQUARIUS RESOURCES LTD.

OPERATOR: CAROLIN MINES LTD.

SURVEY DATES: February 24-28, 1981



May 15, 1981  
Vancouver, B.C.

Apex Airborne Surveys Ltd.  
Ronald F. Sheldrake, B.Sc.

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CERTIFICATION

STATEMENT OF COSTS

1. SUMMARY

The geophysical survey has been successful in identifying three areas that are prospects for mineralization.

Recommendations have been made for follow-up evaluation.

## 2. INTRODUCTION

This report describes the details of a combined helicopter-borne electromagnetic and magnetic survey undertaken on behalf of Carolin Mines Ltd.

The survey totalled 715 linear kilometres of traverse over terrain ranging in elevation from 750 metres to 1500 metres. The survey data was collected February 24 to February 26, 1981.

The purpose of the survey was to locate conductive targets that may be concentrations of massive sulphide mineralization and to provide a psuedo-geological map using the geophysical parameters.

Aircraft positioning was controlled from a 1:20,000 scale photomosaic map. A mean terrain clearance of 30 to 35 metres (for the E.M.-33 sensor) was maintained where possible.

The Geonics 33-1 Electromagnetometer is a solid state system especially designed for helicopter transport.

It consists of two coaxial coils, one serving as a transmitter and the other as a receiver, which are mounted 6 metres apart, in a rigid "bird" with their axes horizontal and in the direction of flight. The bird is towed 30 metres below the helicopter by means of a suitable cable which also carries the electrical signals and power to and from the bird.

The system operates at 918 hertz. Changes in the alternating magnetic field at the receiver coil, caused by eddy currents in the subsurface rock, are recorded. These changes are expressed in ratios of the normal undistorted primary field. They are so small as to be expressed in parts per million or p.p.m.

The magnetometer used on this survey was a Geometrics 803. It is a total field nuclear precession instrument which measures the magnetic field strength with a sensitivity of one gamma. The sensor is toroidal and is positioned half way between the helicopter and the E.M. 33-1 bird.

Appendix I gives details of the geophysical equipment used for this survey. Appendix II describes the flight record and flight path recovery process.

CLAIMS

The claims listed under this section were covered by the geophysical survey.

<u>NAME</u>	<u>RECORD NUMBER</u>	<u>UNITS</u>	<u>EXPIRY DATE</u>
MARCH 1	1531	20	Mar. 17, 1983
MARCH 2	1532	4	Mar. 17, 1983
DUG	999	12	May 22, 1983
EASY NO. 7	1007	20	May 23, 1983
JUNE	1050	20	June 28, 1983
TY	1051	20	June 29, 1983
JUN 6	1794	20	July 7, 1983
JUN 7	1795	20	July 7, 1983
JUN 8	1796	20	July 7, 1983
JUN 9	1797	20	July 7, 1983
JUN 10	1798	18	July 7, 1983
JUN 11	1799	18	July 7, 1983
GOLD 1	1800(7)	1	July 7, 1983
GOLD 2	1801(7)	1	July 7, 1983

<u>NAME</u>	<u>RECORD NUMBER</u>	<u>UNITS</u>	<u>EXPIRY DATE</u>
JUL 1	1852(8)	9	Aug. 8, 1983
AUG 1	1149	6	Aug. 31, 1983
EASY NO. 1	877	20	Nov. 2, 1982
EASY NO. 2	878	6	Nov. 2, 1982
EASY NO. 3	879	15	Nov. 2, 1982
EASY NO. 4	880	20	Nov. 2, 1981
EASY NO. 5	881	6	Nov. 2, 1983
NOV. 4	1366	20	Dec. 6, 1983
EASY NO. 6	923	20	Dec. 7, 1982



LOCATION AND ACCESS

The claim groups discussed in this report are situated near the Town of Likely, British Columbia, and are easily accessible by numerous logging roads in the area.

GENERAL GEOLOGY\*

' Figure 2 shows the basic elements of the regional geology for the Likely District, B.C. The gold showings at Likely are found largely in a northwesterly trending Permian-Tertiary basin that includes a major volcanic belt (Takla rocks). Auriferous showings are also found to the northeast side of the belt in a fault-contact block of Lower Cambrian rocks of low metamorphic grade.

An eroding Cambrian landmass was undoubtedly a source of sediment (conglomerate and silty carbonates) in the tectonic Permian-Tertiary basin, but the main basin fill came from probably widespread sources of submarine volcanic flows and pyroclastics. Mount Warren (4,000 feet) with an impressive agglomeratic pile in its summit region, is identified as one local volcanic vent source (Fig. 2). A second volcanic source is indicated just east of Quesnel Forks. The thick pile of agglomerates at Mount Warren points to an explosive, central vent type eruption, and interbedded or blanketing pillow lavas establish a submarine environment. These two volcanic centres may be directly related to the intersection of two regional fault systems (volcanic rifts) which trend northeasterly and northwesterly.

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\* Godfrey, J.D., "A Survey of the Mineral Prospects in the Likely District".  
Private Report for Aquarius Resources Ltd. and Carolin Mines Ltd. March 1980.

There appear to have been deeper, quieter parts of the Permian-Tertiary basin where argillaceous limy sediments accumulated. More proximal sections of the basin received polymictic conglomerates, probably reflecting the mixed igneous-metamorphic lithologies of the Cambrian block undergoing erosion to the northeast.

Although not noticeably metamorphically altered, the Permian-Tertiary rocks have been subjected to deformation and are tightly folded and faulted.

The composition of the flows appears to range from basic-intermediate to distinctly acidic; pillow lavas, agglomerates, explosion breccias, and flow banding are all found in the Likely District.

Hydrothermal alteration, closely related to important auriferous mineralization in the Likely District, may be controlled by volcanic vent sources in combination with volcanic rift zones.'

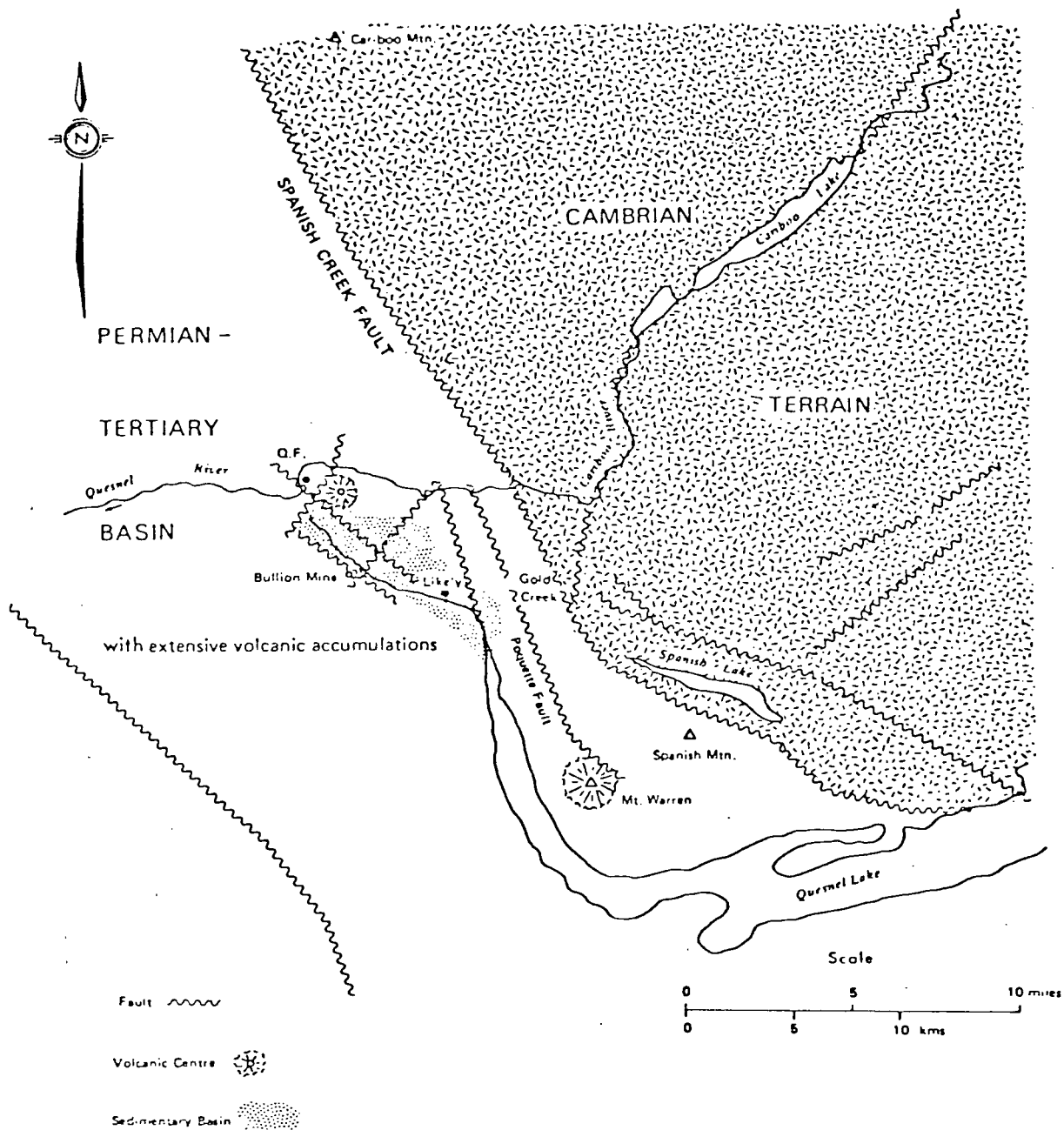


FIGURE 2 Regional geological setting of Likely district, B.C.

### 3. DATA PRESENTATION

#### 3.1 Electromagnetics (Plate I)

The Electromagnetic Survey Profiles Map shows the profiles of inphase and quadrature E.M. responses along the flight lines. The E.M. profiles are transcribed and plotted from the digital chart recorded in flight, after assigning a suitable base level value.

#### 3.2 Magnetics (Plate II)

The Total Field Magnetic Map shows contours of the total magnetic field uncorrected for regional variation. The maps are plotted from the digital chart recorded in flight, and contoured at an interval of ten gammas. The 50 gamma and 100 gama contours are "weighted" for clarity.

3.3 Interpretation Map (Plate III)

The Interpretation Map provides a summary of the interpreted information. Formational responses, rock types, contact zones and photo-lineaments are displayed as well as target conductors that may be suitable for massive sulphide exploration.

#### 4. INTERPRETATION

Both Magnetic and Electromagnetic Maps can be interpreted to reveal areas underlain by different rock types and lineaments which could indicate contact or fault zones. Magnetic Maps can reveal the location of orebodies which contain higher percentages of magnetite or pyrrhotite than the surrounding rocks.

Conductivity thickness is the "parameter-pair" measured with the electromagnetometer. Materials which conduct electronically, metallic sulphides and graphite, have higher conductivity-thickness values than electrolytic conductors such as clays (in overburden) and ion-rich sloughs or creeks, however, there is considerable overlap.

In general, the electromagnetic responses encountered by an electromagnetic survey are of four main types.

1. Bedrock conductors: including formational graphitic responses and massive sulphide targets.
2. Surficial conductors: overburden and lake responses.

3. A combination of 1 and 2: when a conductive material overlays a bedrock conductor the response due to the bedrock is superimposed on the response of the overburden or lake response. Depending upon the conductivity contrasts, and the thickness of the overburden, some bedrock conductors can be recognized through the surficial layer.



5. DISCUSSION OF RESULTS

The geophysical data in general, conforms to the regional geology of the area. The large areas of low magnetic relief and conductive formations are indicative of a deep sedimentary basin.

The magnetic activity that is evident on the map sheet probably arises from volcanic rocks. Some of the volcanic rocks may be acidic, however, and will not be geophysically distinguishable from the sedimentary units.

A regional tectonic feature bounds the southwestern edge of the survey area and is characterized by a magnetic depression.

For a generalized interpretation of the data see PLATE III - INTERPRETATION MAP.

Three anomalous responses are described below and have been selected as the best exploration targets for mineralization. However, it ought to be noted that as verification on the ground proceeds the criteria for anomaly selection may change, thereby making further evaluation of the data necessary.

With that in mind, the criteria for the selection of the targets listed below are as follows:

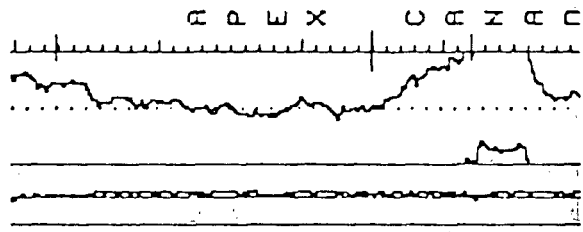
1. Elimination: There are many conductors on the map sheets. Most of them are "formational" and are not typical of mineralization.
2. Correlation: Conductive responses associated with magnetic anomalies, fault and contact zones are given priority.
3. Conductance: High conductance anomalies are, of course, given priority, however, this is very often not the leading consideration, particularly in the case of fractured, disseminated or otherwise not continuously conductive mineralization.

With the description of each "Target Zone", a schematic diagram has been provided. The purpose of the simple diagrams is to show the relative location and attitudes of the targets and will not reflect the complexity of the true geological situation.

Target T-1

Target T-1 has been selected to point out a lineament of conductive rock which are at once adjacent to an interpreted contact, a photo lineament (fault?) and magnetic rocks.

The conductance values of these targets are low but nonetheless this target (and related anomalies that are on strike) ought to be examined. See Figure 3 for a schematic interpretation.

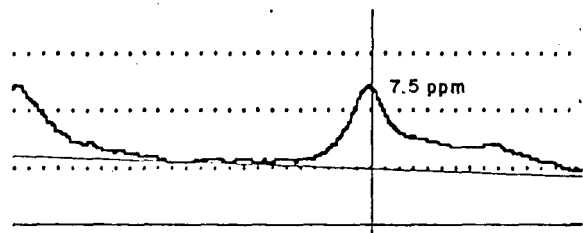


TARGET T-1

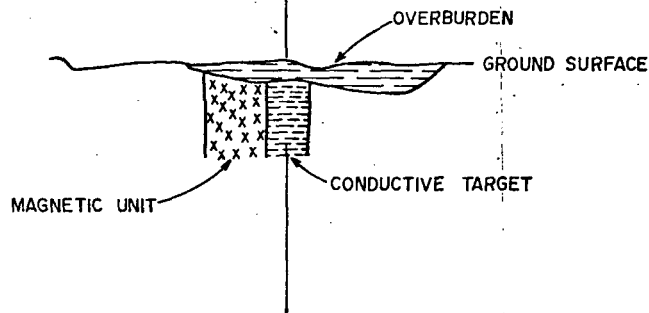
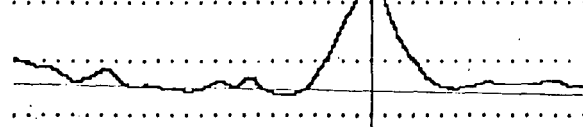
ANOMALY 315

CONDUCTANCE 4-8 mhos  
 DEPTH 15-25 meters  
 PRIORITY 1

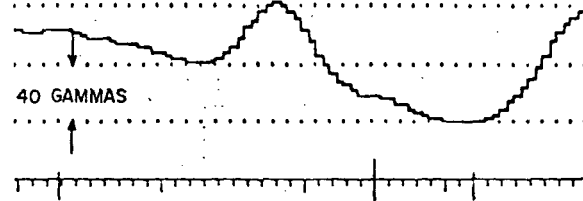
IN - PHASE



QUADRATURE



MAGNETOMETER



fid 290

00

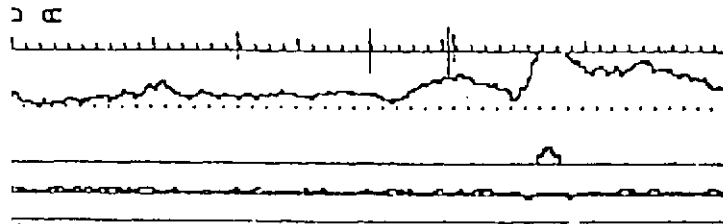
315

FIGURE 3

DETAIL ANOMALY  
 LINE 104

Target T-2

Target T-2 is centered on a pair of E.M. anomalies that are contiguous with a small and distinct magnetic anomaly. Even though the response is part of a formational one and is of low conductance, its correlation to the magnetic anomaly gives it priority. See Figure 4 for a schematic interpretation.

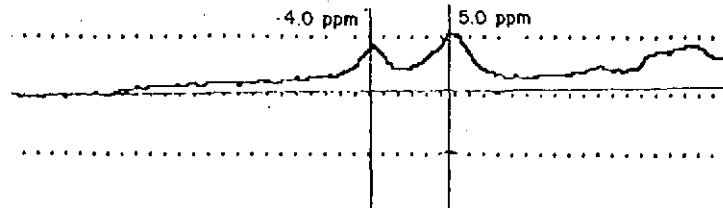


TARGET T-2

ANOMALY 2555

CONDUCTANCE 3-6 mhos  
 DEPTH 0-3 meters  
 PRIORITY 1

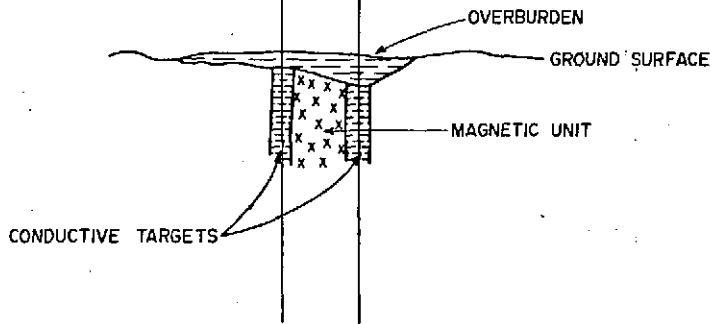
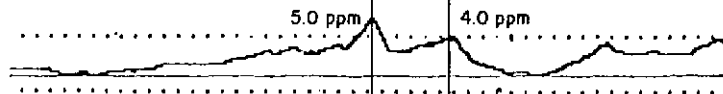
IN - PHASE



ANOMALY 2560.5

CONDUCTANCE 6-10 mhos  
 DEPTH 0-3 meters  
 PRIORITY 1

QUADRATURE



MAGNETOMETER

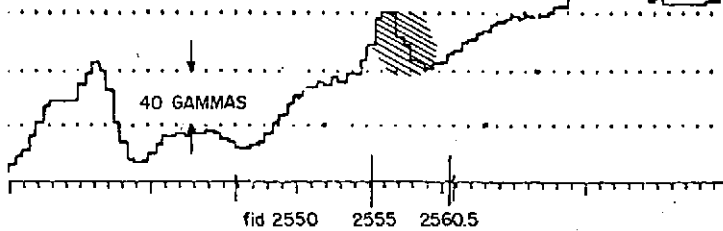
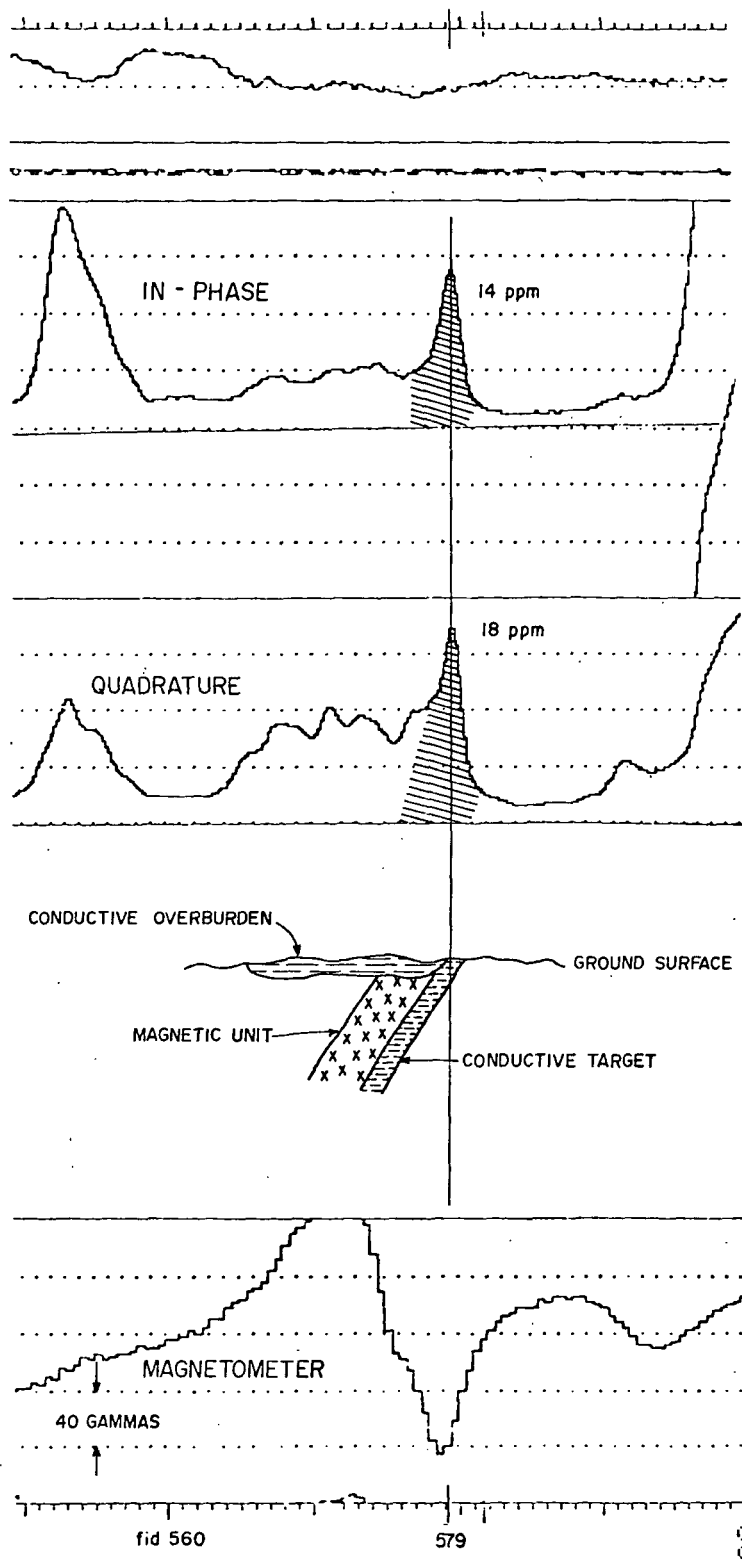


FIGURE 4

DETAIL ANOMALY  
 LINE 63

Target T-3

Target T-3 is centered around a dike-like response at fiducial 579 or L40 and may be due to a concentration of sulphides at a geologic contact. See Figure 5 for a schematic interpretation.



TARGET T-3

ANOMALY 579

CONDUCTANCE 6-10 mhos  
 DEPTH 0-3 meters  
 PRIORITY I

FIGURE 5

DETAIL ANOMALY  
 LINE 40



6. CONCLUSIONS AND RECOMMENDATIONS

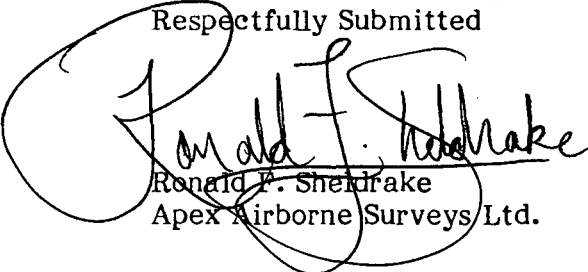
The survey has been successful in identifying three target zones that are prospects for mineralization.

The anomalous responses are not strongly conductive, however, their relationship to structured and magnetic features gives these anomalies priority.

Information collected during the follow-up stages of this project could alter the premis of interpretation and may lead to accrediting other anomalies with a higher priority.

It is recommended that all anomalous areas be detailed with traverses of ground magnetometer, Max-Min E.M. and geochemistry surveys. Drill targets should be identifiable from that data.

Respectfully Submitted



Ronald F. She Drake  
Apex Airborne Surveys Ltd.

BIBLIOGRAPHY

Godfrey, J.D.,

"Survey of the Mineral Prospects in the Likely District,  
British Columbia"

Private Report for Aquarius Resources Ltd. and Carolin Mines  
Ltd., March 1980.

APPENDIX I

## APPENDIX I

### INSTRUMENTATION

#### Electromagnetic Instrument

Type: Helicopter mounted in-phase - quadrature instrument manufactured by Geonics Limited, Toronto, Ontario.

Coils: The transmitting and receiving coils are co-axial 6 metres apart in a towed bird 30 metres below the helicopter. The coil axis is in the direction of travel.

Frequency: 918 Hz

Noise Level: Approximately 1/4 ppm (0.6 second time constant).

#### Magnetometer

Type: Proton precession model G803 manufactured by Geometrics Corporation, Toronto.

Cycling Time: 1.0 second.

Sending Head Design: 5 inch diameter Toroid.

APPENDIX I (cont'd)

Ancillary Equipment:

UDAS Digital Acquisition System with recorder.

Geocam 35 mm Flight Path Camera

Bonzer Radio Altimeter

Geometrics G806 Magnetic Base Station and recorder.

Helicopter:

Gazelle Helicopter supplied by Highwood Airservices Ltd.  
Calgary, Alberta.

APPENDIX II

## APPENDIX II

### THE "ANALOGUE" CHART AND FLIGHT PATH RECOVERY

The flight tape is a roll of chart paper which moves through the digital printer at a speed of 5.48 cm per minute.

The digital printer chart facilitates the use of a full alpha-numeric system. All "header" sensitivity and fiducial information is printed automatically.

The chart is 520 dots wide as follows:

#### DOTS:

- 0 - 100 magnetometer fine - 2 gammas per dot.
- 100 - 180 magnetometer coarse - 25 gammas per dot.
- 180 - 320 quadrature 0.6 sec T.C. 1/4 ppm per dot.
- 320 - 460 in phase 0.6 sec T.C. 1/4 ppm per dot.
- 460 - 470 powerline monitor
- 460 - 470 spherics monitor
- 480 - 520 altimeter 10 feet per dot (0 - 400 feet).

The helicopter flight path is recovered from 35 mm film, which is exposed at 2.0 second intervals during the flight traverses. After processing and anotating, recognizable fiducials are pin-pointed on the photomosaic map.

APPENDIX III



PROJECT  
AREA LIKELY, B.C.

FLT. N 1  
DATE FEBRUARY 24, 8

LN	START FID	END FID	TIME START	PRODUCTION		COMMENTS
				END FID	START FID	
CAL	0	128		-	-	calibrate
33	0	160	11:55	1	160	
32	161	286	12:02	161	286	
31	287	455	12:06	287	455	
30	456	618	12:17	462	618	
29	619	815	12:22	624	815	
28	816	983	12:29	817	983	
27	984	1207	12:35	998	1200	
26	1208	1374	12:43	1206	1374	
25	1375	1590	12:48	1286	1590	
24	1591	1758	12:56	1591	1758	
23	1759	1945	13:02	1764	1945	
22	1946	2102	13:08	1957	2102	
21	2103	2304	13:14	2109	2207	labelled L 22 incorrectly.
20	2305	2472	13:21	2305	2472	
19	2473	2644	13:27	2475	2644	
18	2645	2802	13:33	2656	2802	
CAL	2803	2816	13:38	-	-	calibrate pulse

PROJECT  
AREA LIKELY B.C.

FLT N 2  
DATE FEB 24, 1981

LN	START FID	END FID	TIME	PRODUCTION		COMMENTS
				END FID	START FID	
CAL	0	47	14:23	-	-	
17	48	226	14:26	58	226	
16	227	392	14:34	228	392	
15	393	561	14:40	393	561	
14	562	711	14:46	568	711	
13	712	863	14:51	712	863	
12	864	1008	14:56	868	1008	
11	1009	1173	15:01	1011	1173	
10	1174	1309	15:07	1180	1309	
9	1310	1436	15:12	1310	1436	
8	1437	1538	15:16	1437	1537	
7	1538	1650	15:20	1560	1650	
6	1651	1729	15:23	1652	1729	
5	1730	1831	15:26	1732	1831	
4	1832	1914	15:30	1833	1914	
3	1915	2010	15:33	1948	2010	
2	2011	2085	15:36	2012	2085	
1	2086	2152	15:39	2086	2152	labelled LN 9 in map
CANYON	2153	2277	15:41	2153	2277	
CAL	2278	2279	15:47	-	-	
34	2280	2450	15:48	2287	2450	
35	2451	2578	15:54	2451	2578	
36	2579	2755	15:59	2587	2752	
37	2756	2994	16:05	2755	2894	
AL	2895	2911	16:10	-	-	

PROJECT  
AREA LIKELY

FLTN 3  
DATE FEB 25 1981

LN	START FID	END FID	TME	PRODUCTION		COMMENTS
				END FID	START FID	
CAL	0	114	08:42	-	-	
0338	115	116		-	+	scrub
38	117	305	08:47	128	305	
39	306	474	08:54	307	474	
40	475	680	09:00	481	680	
41	681	853	09:07	686	853	
42	854	1038	09:13	857	1038	
43	1039	1205	09:20	1044	1205	
44	1206	1377	09:25	1210	1377	
45	1378	1545	09:32	1380	1545	
46	1546	1742	09:37	1551	1742	
47	1743	1913	09:44	1743	1913	
48	1914	2101	09:50	1919	2101	
48	2102	2102	09:51	+	-	
49	2103	2160	09:57	-	-	scrub - printer head w/s.

PROJECT  
AREA LIKELY

FLT N 4  
DATE FEB 25, 1981

LN	START FID	END FID	TME	PRODUCTION END FID	START FID	COMMENTS
CAL	0	39	11:21	-	-	calibrate
49	40	237	11:23	45	237	
50	238	406	11:31	245	406	
51	407	591	11:36	420	591	
52	592	766	11:43	593	766	
52	767	768	11:49	-	-	
53	769	953	11:49	775	953	
CAL	954	992	11:56	-	-	calibrate
54	993	1162	11:57	993	1162	
55	1163	1326	12:05	1164	1326	
56	1327	1499	12:10	1330	1499	
57	1500	1654	12:16	1504	1654	
58	1665	1830	12:22	1667	1830	
59	1831	2002	12:28	1843	1928	
59	2003	2003	12:34	-	-	
60	2004	2162	12:34	2004	2162	
61	2163	2330	12:40	2169	2330	
62	2331	2492	12:46	2335	2492	
63	2493	2637	12:51	2497	2637	
64	2638	2795	12:56	2743	2795	
65	2796	2949	13:02	2800	2949	
66	2950	3096	13:07	2954	3096	
67	3097	3217	13:12	3098	3217	
68	3218	3352	13:16	3222	3352	
69	3353	3450	13:21	3354	3450	
70	3451	3547	13:25	3455	3546	
CAL	3547		13:28	-	-	calibrate

PROJECT AREA LIKELY

FLTN 5  
DATE 25 Feb 81

LN	START FID	END FID	TIME	PRODUCTION		COMMENTS
				END FID	START FID	
CAL	0	51	14:33	-	-	calibrate.
71	52	148	14:37	57	148	
72	149	262	14:42	151	262	
73	263	352	14:46	264	352	
74	353	450	14:49	356	450	
75	451	532	14:53	460	532	
76	533	618	14:56	538	616	
77	617	699	14:59	627	699	
78	700	780	15:02	705	780	
79	781	847	15:05	785	847	
80	848	915	15:08	850	915	
81	916	980	15:10	918	920	
82	981	1054	15:12	986	1054	
83	1055	1134	15:15	1059	1134	
84	1135	1205	15:18	1137	1205	
85	1206	1291	15:21	1204	1291	
86	1292	1378	15:24	1293	1378	
87	1379	1488	15:27	1384	1488	
88	1489	1540	15:31	-	-	labelled LN 89
89	1541	1637	15:33	1542	1637	SCRUB OFF NAV.
90	1638	1732	15:37	1643	1732	
91	1733	1825	15:41	1736	1825	
92	1826	1924	15:44	1829	1924	
93	1925	2019	15:47	1925	2019	
94	2020	2137	15:51	2021	2137	labelled LN 93
95	2138	2248	15:55	2138	2248	
96	2249	2389	15:59	2242	2389	
97	2390	2509	16:07	2390	2509	
98	2510	2637	16:09	2515	2637	
99	2638	2756	16:13	2638	2756	
100	2757	2918	16:19	2766	2918	
100	2919	3049	16:24	2921	3049	
CAL	3050	3069	16:31	-	-	calibrate.

L  
J 3/27  
/2

FLIGHT LOG - APEX AIRBORNE SURVEYS LTD

PROJECT: \_\_\_\_\_  
 DATE: FEB. 26/1981  
 AREA: LIKELY

FLIGHT NO.: 6

LINE NO	FID START	FID END	PRODUCTION		COMMENTS	TIME
			START FID	END FID		
CAL	0	66	-	-		7.41
CAL	67	98	-	-		
101	99	252	100	252		
102	253	374	260	374		
103	375	523	382	523		
104	524	654	525	654		
105	655	813	657	813		
106	814	955	815	955		
107	956	1110	961	1110		
108	1111	1239	1113	1239		
<del>109</del>	<del>1240</del>	<del>1390</del>	<del>1248</del>	<del>1390</del>		
110	1391	1518	1392	1518		
111	1519	1642	1521	1642		
112	1643	1745	1644	1745		
113	1746	1873	1746	1873		
114	1874	1965	1875	1964		
115	1966	2053	1967	2053		
116	2054	2148	2057	2148		
117	2149	2235	2152	2234		
118	2236	2318	2238	2318		
119	2319	2392	2320	2392		
120	2393	2453	2395	2453		
121	2454	2516	2455	2516		
122	2517	2577	2521	2577		
TL	2578	3006	2577	3006		
TL-2	3007	3200	3008	3200		
CAL	3201	3215	-	-		
TEST	3216		-	-		

PROJECT AREA LIKELY, B.C.

FLT N 13  
DATE Feb 28, 1981

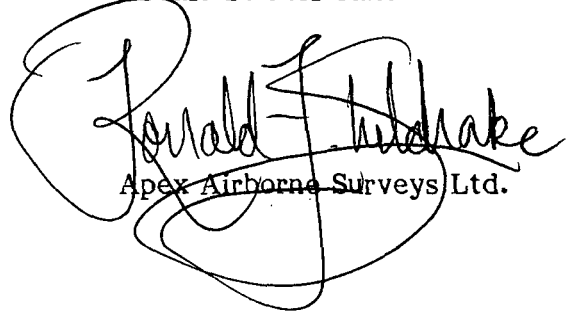
LN	START FID	END FID	TIME	PRODUCTION		COMMENTS
				END FID	START FID	
0	0	29	12:36	-	-	
1	30	574				
2	575	744				
3	745	834		834	854	plot data fids 834 to 854 only
CALL	855	864	13:07	-	-	

CERTIFICATION

I, RONALD F. SHELDRAKE, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am President of **Apex Airborne Surveys Ltd.** a company incorporated under the laws of the Province of British Columbia.
2. The Vancouver Office of **Apex Airborne Surveys Ltd.** is located at Suite 512 -625 Howe Street, Vancouver, British Columbia.
3. I received my B.Sc., in Geophysics from the University of British Columbia in May 1974.
4. I have practised my profession since that date.
5. I did not examine the claims area referred to in this report, but I am not aware of any claim conflict and believe that the data presented herein is reliable.
6. I have no interest, direct or indirect, in the claims of **CAROLIN MINES LTD.** or **AQUARIUS RESOURCES LTD.** or its affiliates, nor do I expect to receive any.
7. I consent to the use of this report in or in connection with a Prospectus or in a Statement of Material Facts.

Ronald F. Sheldrake



Apex Airborne Surveys Ltd.

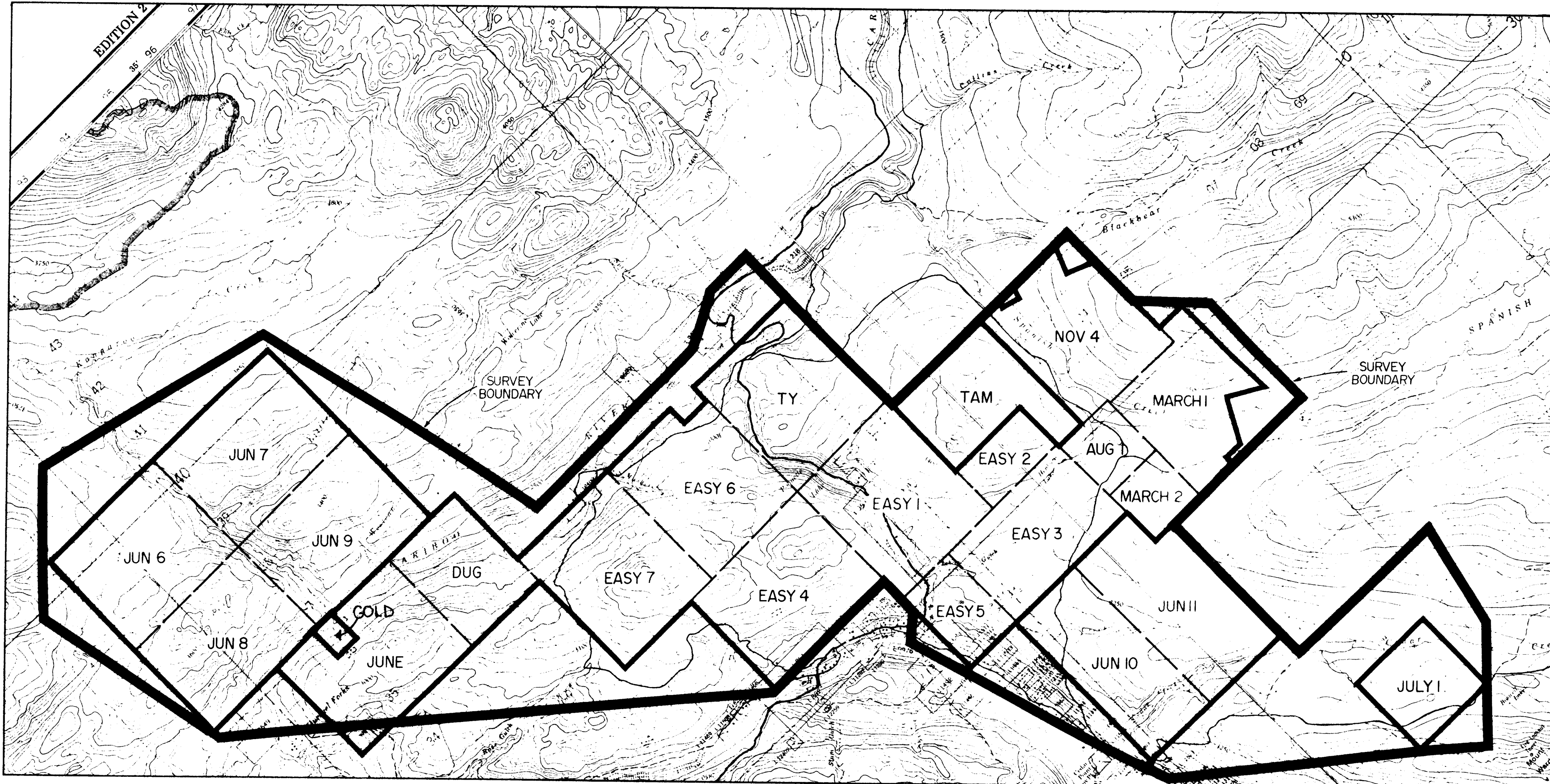
May 15, 1981



May 15, 1981

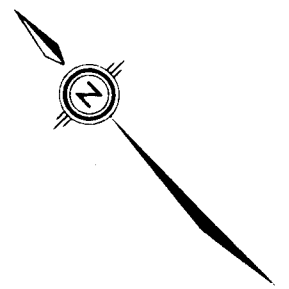
STATEMENT OF COSTS

Type of Survey:	Helicopter Electromagnetic and Magnetic
Date(s) of Fieldwork:	February 24-28, 1981 - 5 days
Survey Kilometres:	715 kilometres
Cost per linear Kilometre:	\$55
Additional Charges:	
Total cost of Survey:	(715 km x \$55.00) = \$39,325.00

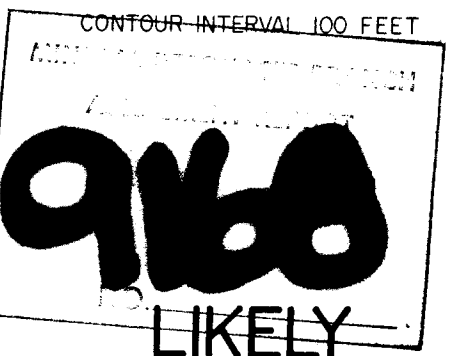


SURVEY & CLAIM  
LOCATION  
MAP

CAROLIN MINES  
LTD.



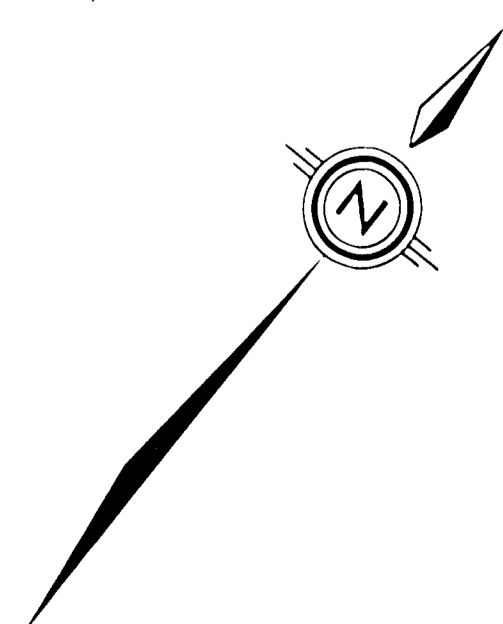
1 : 50,000  
METRES 000 500 0 1000 METRES



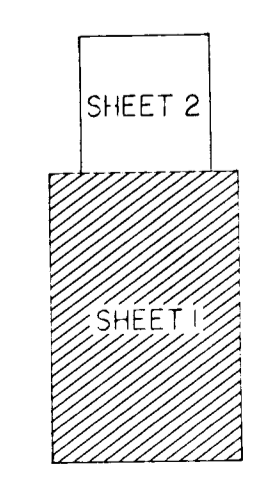
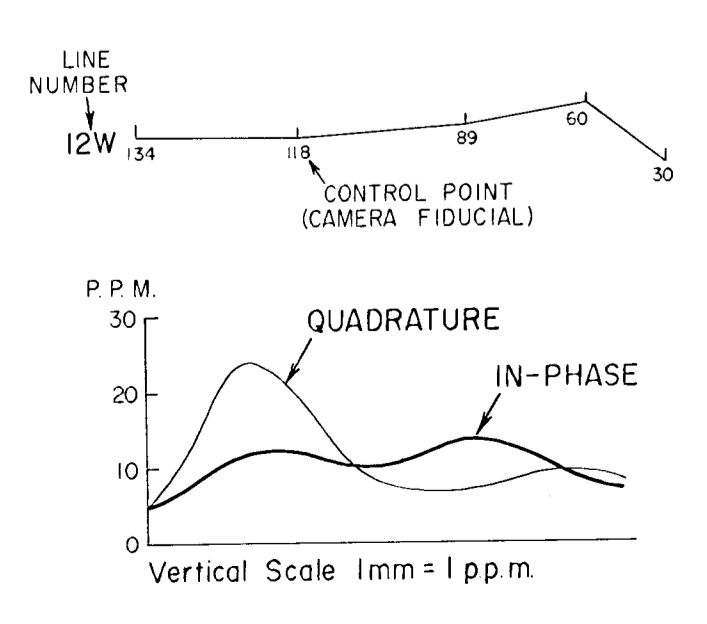
**9160**  
LIKELY  
PROJECT

FIGURE 1  
CARIBOO MINING DIVISION  
N.T.S. 93A/11,12

PRODUCED FROM NATIONAL N.T.S. SERIES



- NOTES:
- INSTRUMENTATION: GEONICS 33-1
  - COIL SEPARATION: 6 METRES-COAXIAL
  - FREQUENCY: 98 HRTZ
  - NOISE LEVEL: LESS THAN 1/2 PPM
  - SENSOR TERRAINE CLEARANCE: 35 METRES
  - HORIZONTAL CONTROL: 35 M.M. FILM, FLIGHT PATH RECOVERY FROM PHOTO MOSAICS
  - VERTICAL CONTROL: RADAR ALTIMETER



9168

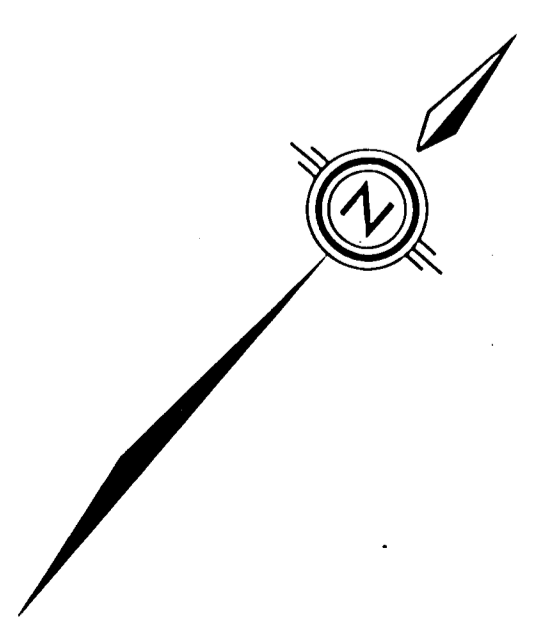
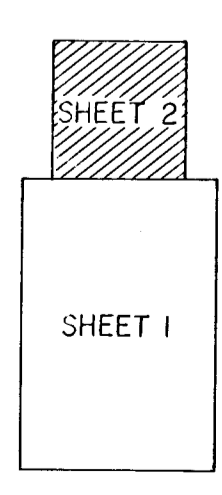
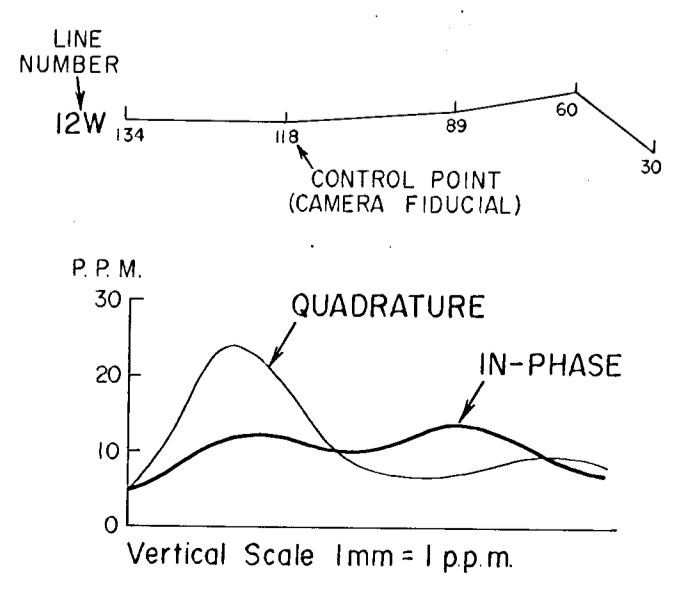
PLATE I (SHEET 1)  
 ELECTROMAGNETIC PROFILES MAP  
 LIKELY AREA PROJECT  
 CARIBOO MINING DIVISION  
 BRITISH COLUMBIA  
**CAROLIN MINES LTD.**

Scale 1:20,000  
 Metres 400 200 0 400 800 1200 1600 2000 Metres  
 N T S 93 A / 12, 11  
 121° 35' W  
 52° 39' N  
 To accompany a report by Ronald F. Sheldrake dated May 15, 1981



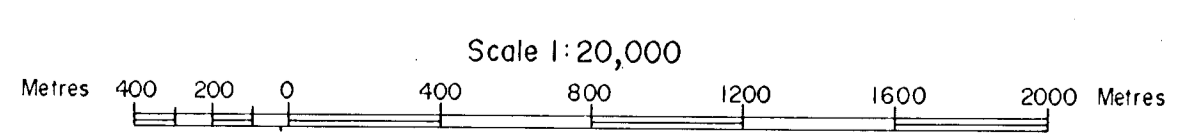
NOTES:

- INSTRUMENTATION: GEONICS 33-1
- COIL SEPARATION: 6 METRES—COAXIAL
- FREQUENCY: 98 HRTZ
- NOISE LEVEL: LESS THAN 1/2 P.P.M.
- SENSOR TERRAINE CLEARANCE: 35 METRES
- HORIZONTAL CONTROL: 35 M.M. FILM, FLIGHT PATH RECOVERY FROM PHOTO MOSAICS
- VERTICAL CONTROL: RADAR ALTIMETER



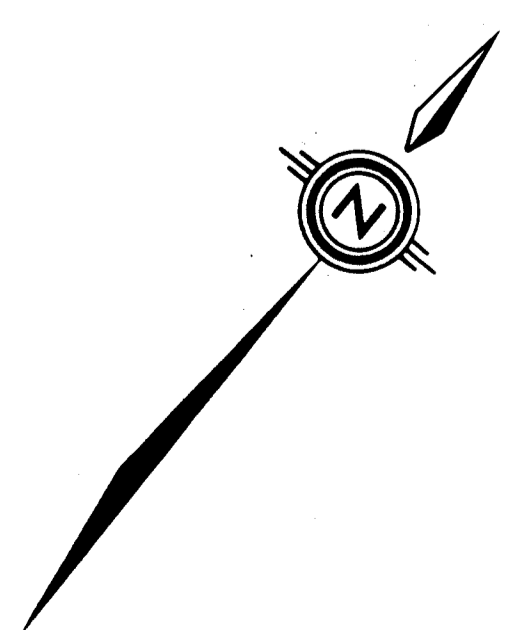
9168

PLATE I (SHEET 2)  
 ELECTROMAGNETIC PROFILES MAP  
 LIKELY AREA PROJECT  
 CARIBOO MINING DIVISION  
 BRITISH COLUMBIA  
 CAROLIN MINES LTD.



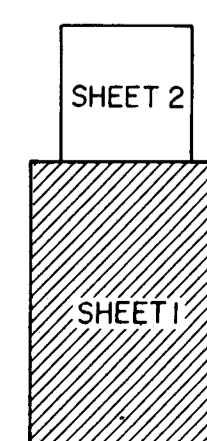
N.T.S. 93A/12, II  
 121° 35' W  
 52° 39' N

To accompany a report by Ronald F. Sheldrake dated May 15, 1981



- NOTES:
- VERTICAL CONTROL - RADAR ALTIMETER (MEAN SENSOR HEIGHT 50 METRES)
  - HORIZONTAL CONTROL - 35 M.M. FILM, RECOVERY ON PHOTO MOSAICS
  - REGIONAL TOTAL FIELD VALUE: 58,000 GAMMAS
  - MAGNETIC DECLINATION: 23° E.
  - MAGNETIC INCLINATION: 72°
  - CONTOURS UNCORRECTED FOR REGIONAL GRADIENT.
  - MAGNETOMETER: GEOMETRICS G-803

- LEGEND
- 57650 GAMMAS
  - 10 GAMMA CONTOUR
  - 57600 GAMMAS
  - ● MAGNETIC DEPRESSION



9168

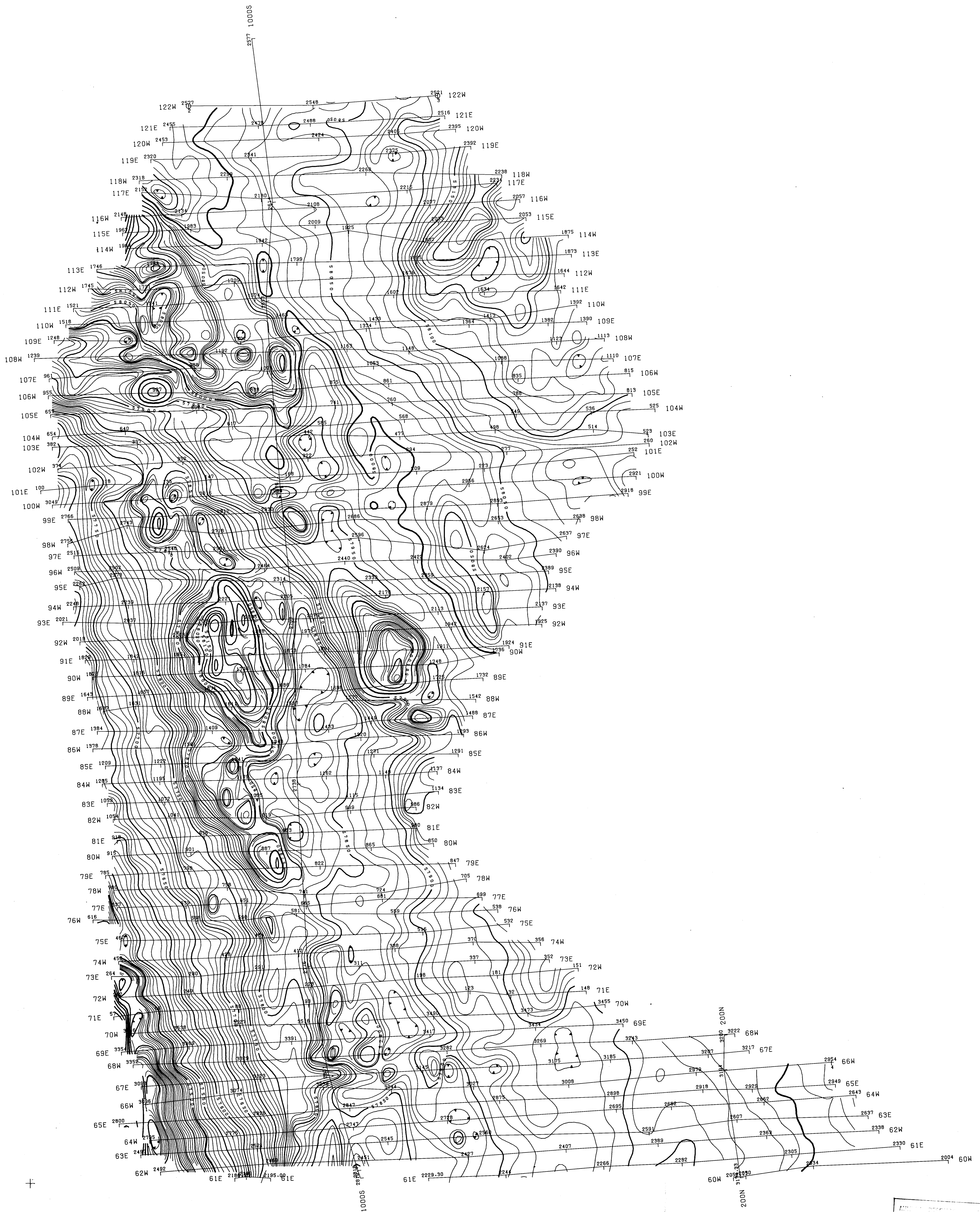
PLATE II (SHEET I)

TOTAL FIELD MAGNETIC MAP  
 LIKELY AREA PROJECT  
 CARIBOO MINING DIVISION  
 BRITISH COLUMBIA  
**CAROLIN MINES LTD.**

Scale 1:20,000  
 Metres 400 200 0 400 800 1200 1600 2000 Metres

N.T.S. 93A/12, II  
 121° 35' W.  
 52° 39' N

To accompany a report by Ronald F. Sheldrake dated May 15, 1981



9168

PLATE II (SHEET 2)

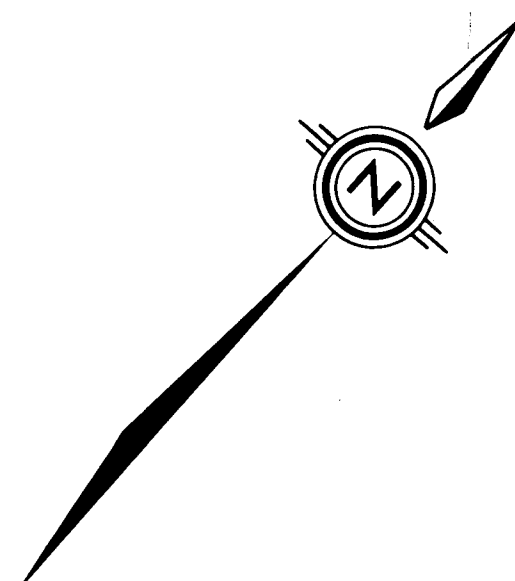
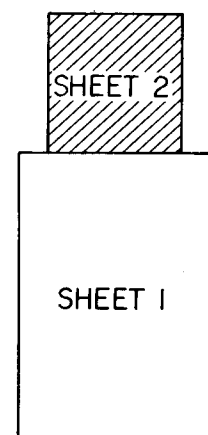
TOTAL FIELD MAGNETIC MAP  
 LIKELY AREA PROJECT  
 CARIBOO MINING DIVISION  
 BRITISH COLUMBIA  
**CAROLIN MINES LTD.**

NOTES:

- VERTICAL CONTROL — RADAR ALTIMETER  
(MEAN SENSOR HEIGHT 50 METRES)
- HORIZONTAL CONTROL — 35 M.M. FILM,  
RECOVERY ON PHOTO MOSAICS.
- REGIONAL TOTAL FIELD VALUE:  
58,000 GAMMAS.
- MAGNETIC DECLINATION: 23° E.
- MAGNETIC INCLINATION: 72°
- CONTOURS UNCORRECTED FOR  
REGIONAL GRADIENT.
- MAGNETOMETER: GEOMETRICS G-803

LEGEND

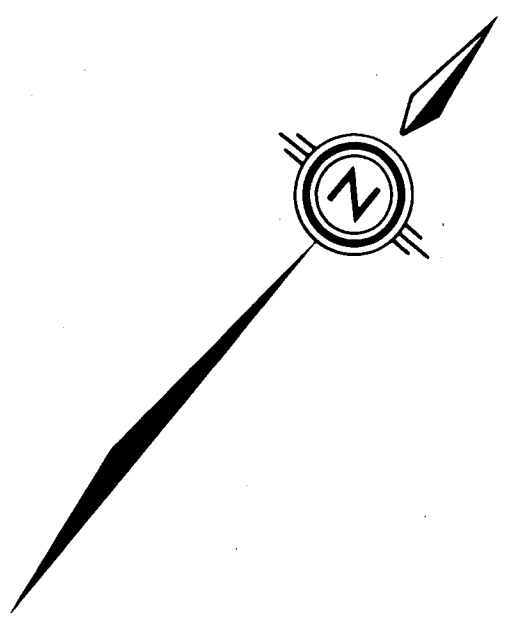
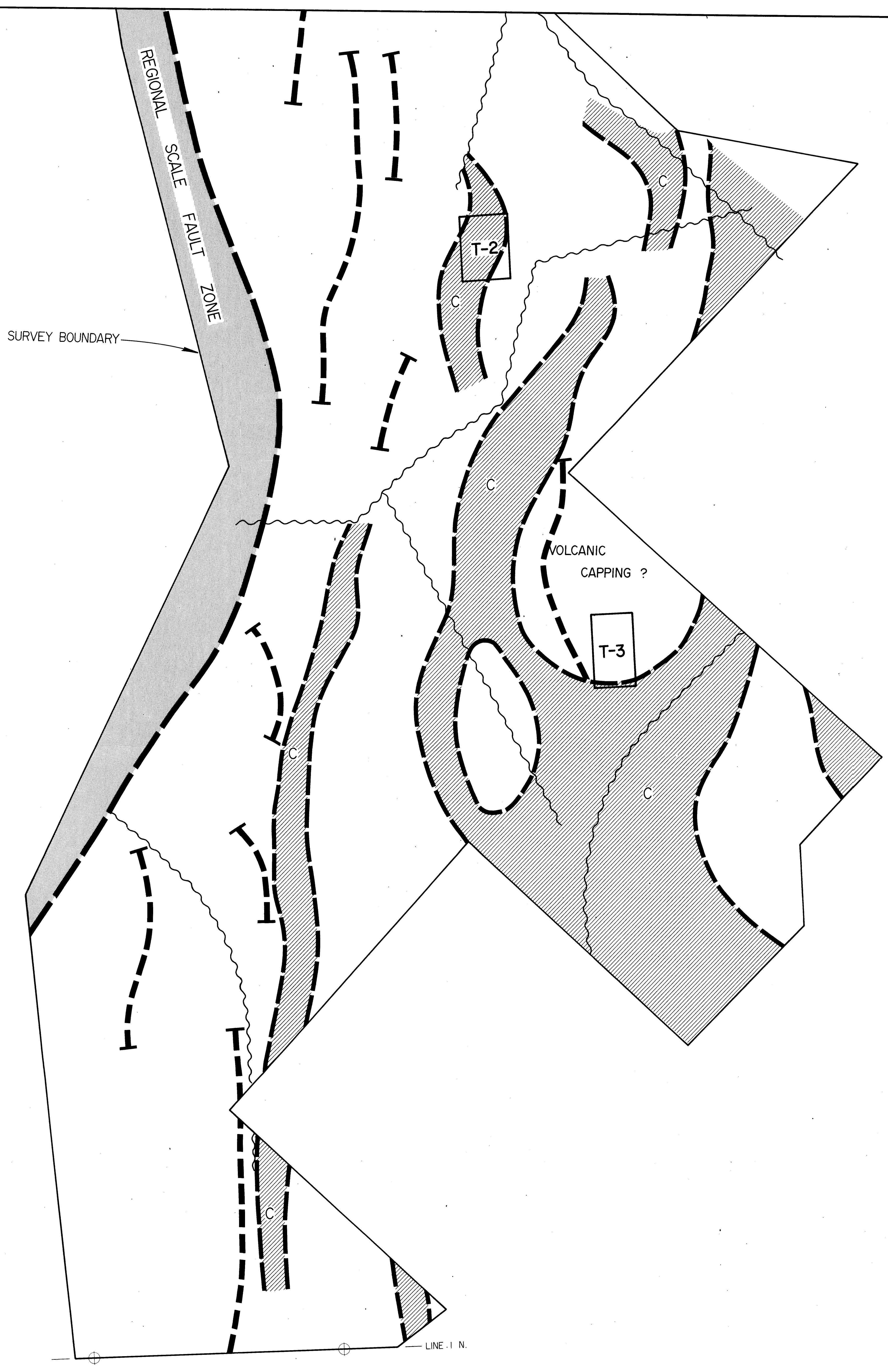
- 57650 GAMMAS
- 10 GAMMA CONTOUR
- 57600 GAMMAS
- MAGNETIC DEPRESSION



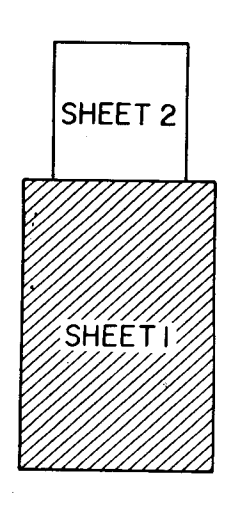
Scale 1:20,000  
 Metres 400 200 0 400 800 1200 1600 2000 Metres

N.T.S. 93A/12, II  
 121° 35' W  
 52° 39' N

To accompany a report by Ronald F. Sheldrake dated May 15, 1981



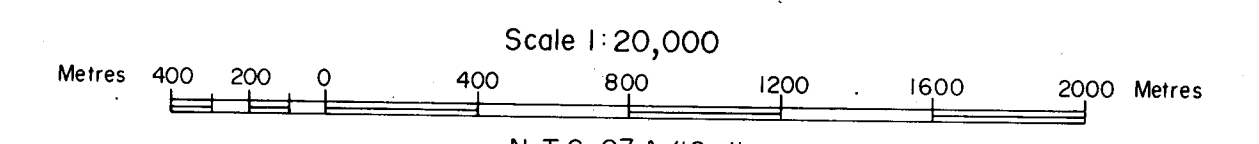
- LEGEND**
- CONDUCTIVE FORMATION
  - GEOPHYSICAL LINEAMENT
  - PHOTO LINEAMENT
  - CONTACT
  - MAGNETIC LINEAMENT
  - TARGET ZONE



MINERAL DEVELOPMENT BRANCH  
 9168  
 1981

PLATE III (SHEET I)  
 INTERPRETATION MAP  
 LIKELY AREA PROJECT  
 CARIBOO MINING DIVISION  
 BRITISH COLUMBIA

**CAROLIN MINES LTD.**



Scale 1:20,000  
 N.T.S. 93 A/12, II  
 121° 35' W  
 52° 39' W

To accompany a report by Ronald F. Sheldrake dated May 15, 1981

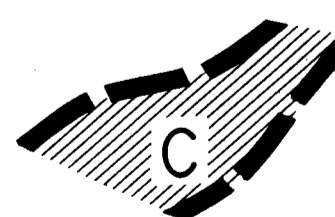




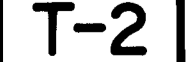
LINE 122 S.

VOLCANIC  
ROCKS ?

VOLCANIC  
ROCKS

SURVEY BOUNDARY

LEGEND

-  — CONDUCTIVE FORMATION
-  — GEOPHYSICAL LINEAMENT
-  — PHOTO LINEAMENT
-  — CONTACT
-  — MAGNETIC LINEAMENT
-  — TARGET ZONE

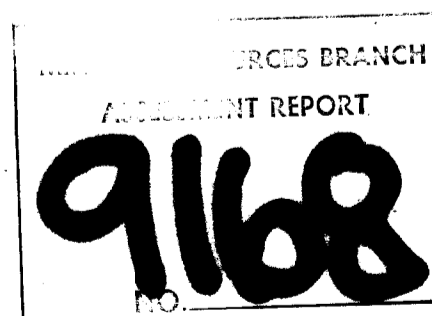
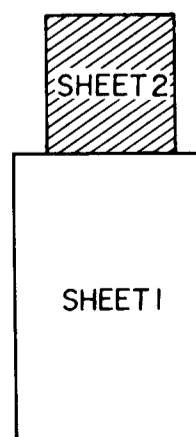
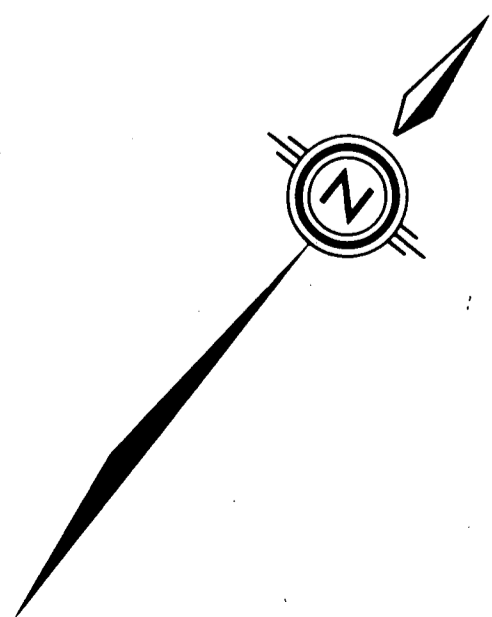


PLATE III (SHEET 2)

INTERPRETATION MAP  
LIKELY AREA PROJECT  
CARIBOO MINING DIVISION  
BRITISH COLUMBIA

**CAROLIN MINES LTD.**

Scale 1:20,000  
Metres 400 200 0 400 800 1200 1600 2000 Metres

N.T.S. 93A/12, II  
121° 35' W  
52° 39' N

To accompany a report by Ronald F. Sheldrake dated May 15, 1981