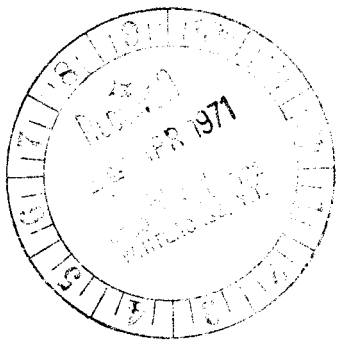

REPORT ON
AIRBORNE GEOPHYSICAL SURVEYS
SWIFT RIVER PROPERTY, YUKON TERRITORY
ON BEHALF OF
BOSWELL RIVER MINES LTD.

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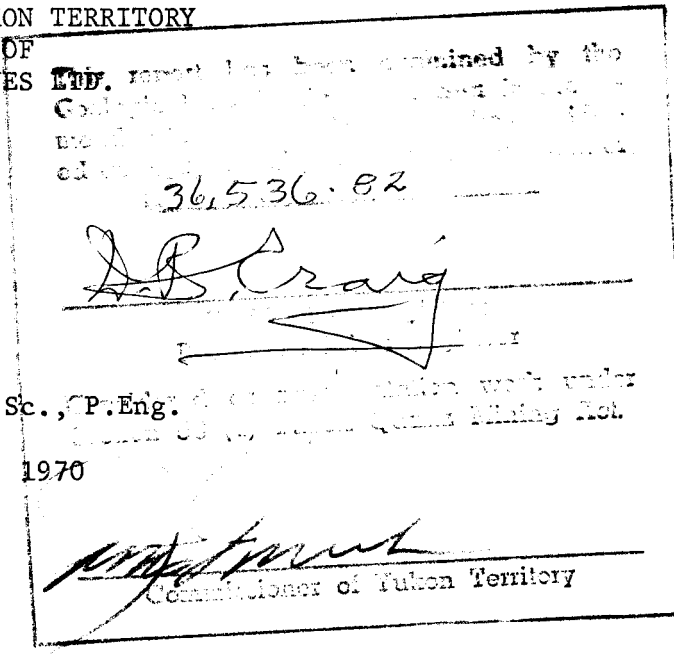


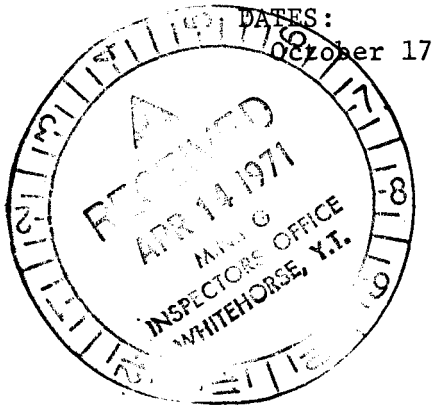
by

Richard O. Crosby, B.Sc., P.Eng.

November 29, 1970

LOCATION:
About 80 miles west of Watson Lake, Yukon Territory
Watson Lake Mining Division
60°10' North, 131°6' West

DATES:
October 17 to October 21, 1970



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SUMMARY

Helicopter-borne electromagnetic and magnetometer surveys were executed over approximately 50 square miles in the Swift River area, Yukon Territory. A number of electromagnetic conductors have been revealed, some of which show correlation with magnetic features.

Ground follow-up magnetic and electromagnetic surveys are recommended for five areas.

REPORT ON AIRBORNE GEOPHYSICAL SURVEYS SWIFT RIVER PROPERTY, YUKON TERRITORY ON BEHALF OF BOSWELL RIVER MINES LTD.

INTRODUCTION

From October 17 to October 21, 1970, geophysical surveys were executed on behalf of Boswell River Mines Ltd. in the Swift River area, Yukon Territory covering approximately 50 square miles (see Plate 1). Centre of the area is located 60°10' N, 131°6' W. Basic compilation of the data was carried out during November 1970.

The airborne surveys included electromagnetic and magnetometer measurements. The former employed a Lockwood helicopter electromagnetic unit and the latter a Gulf Research and Development Corporation, total intensity, fluxgate magnetometer.

Appendix 'A', attached, gives full details of the airborne geophysical equipment and the ancillary equipment employed, as well as the treatment of data resulting from these surveys. In the case of the present surveys a Fairchild Hiller - FH1100 helicopter, on charter from Autair Helicopters, was employed as the basic transport vehicle.

The electromagnetic survey lines were flown at a nominal 1000' line interval along lines oriented N 30° E at a mean terrain clearance of 250'. Flight navigation and flight path recovery have been based upon photomosaics on the scale of approximately 1" = 1320'.

The magnetometer sensor and the EM "bird" were flown 100' below the helicopter.

The purpose of the present programme was to map the distribution of subsurface conductors in the area covered. In the survey area the

targets of economic interest are metallic sulphide bodies. The electromagnetic data provide the basic information relating to the possible presence of such bodies. The purpose of the magnetometer survey results is twofold. The primary purpose is one of correlation with the electromagnetic conductors and the second purpose is to infer geological structure.

A description of the geology of the survey area is reported in a "Preliminary Report on the Swift River Property of Boswell River Mines Ltd. in the Yukon Territory", by H. Wober, P.Eng., dated December 9, 1970 and will not be included in this report.

The value of the earth's total magnetic field in the survey area is approximately 58,800 gammas. The inclination is 77°.

PRESENTATION OF DATA

The results of the geophysical surveys are presented on Plates 2 and 3 on the scale of 1" = 1320'. Some topographic features and flight lines are shown on the plates. Plate 2 shows the magnetic contours. The contours are at an interval of 100 gammas or less, according to magnetic relief. Plate 3 shows the electromagnetic results. Conductor half-widths and peak locations are shown, coded as described in Appendix 'A'. The in-phase amplitude, in-phase to out-of-phase ratio and magnetic correlation (if any) are indicated for each conductor intersection.

The original geophysical traces are on the following scales:

EM	1" - 100 parts per million
Magnetometer	1" = 120 gammas per inch

DISCUSSION OF RESULTS

The electromagnetic responses of interest obtained during the present survey are listed in Table One.

The survey area is characterized by above normal electromagnetic responses in the southern portion of the eastern half of the grid, an extensive zone along the northern ends of the flight lines extending westward from Daughney Lake for a distance of about 6 miles and a random distribution of anomalies in the western portion of the property.

The responses in the southeastern part of the area exhibit in-phase amplitudes ranging from 10 ppm to a maximum of 95 ppm at fiducial 176 on Line 54. The responses in this zone are generally coincident with a relatively undisturbed magnetic zone suggesting that the electromagnetic sources could be argillaceous or carbonaceous sediments. An exception occurs between Lines 57 and 62, where a linear magnetic anomaly was recorded about 1000' south of the series of conductors. Since the magnetic anomaly is displaced with respect to the conductors, the conductors may reflect zones which are in part structurally controlled by the source of the magnetic anomaly, which is interpreted to be a basic "dike-like" intrusive. Quantitative analysis indicates the upper surface of the dike is probably outcropping and dips about 45° to the southwest. Similar magnetic features have been located throughout the area and trenching across one of these has revealed the presence of magnetite, pyrrhotite, spalerite, pyrite, and chalcopyrite mineralization.

A double-peaked magnetic anomaly recorded on Lines 50, 51 and 52 occurs about 3/4 of a mile west of the above feature. Inspection of the analog records suggests that this anomaly occurs along a contact, with the more magnetic rocks located to the south. Depth determinations

indicate that the feature should outcrop. Electromagnetic conductors were recorded coincidently with the magnetic anomaly. In-phase amplitudes and ratios for the conductor range from 40 to 60 ppm and 1.2 to 1.3.

The northern ends of Lines 37 through 56 traversed an extensive conductive zone both flanking and coincident with an arcuate magnetically active area partially covered by the survey lines. This zone is located immediately south of an intrusive and the underlying rocks are geologically mapped as a block of limestone bounded by two faults. Conductor in-phase amplitudes ranged from 20 ppm to 164 ppm recorded on Line 49. In-phase, out-of-phase ratios varied from 1.3 to 4.3.

The length of this zone strongly suggests that it may be formational and/or structural, however the varying conductivity could reflect increases and decreases in metallic sulphides and consequently the zone must be field checked.

An intense magnetically active area was recorded in the vicinity of Tie Line 2 along Lines 25 to 37. The zone trends generally northwesterly and is limited by the area lying between Line 18 and Line 25 which was not flown. A northwesterly extension of the anomaly located between fiducials 1245 and 1257 on Line 25 is coincident with a strong magnetic anomalous area which has been surveyed by a ground magnetometer. Parts of the area have been trenched and metallic sulphides and magnetite were observed. It would seem therefore that the similar mineralization would be expected to occur along the zone lying between Line 25 and Line 37.

The western part of the survey area includes a number of electromagnetic responses which warrant further investigation. The

most important is conductor A located at fiducial 1973 on Line 5. The in-phase anomaly of 102 ppm is coincident with a 500 gamma magnetic anomaly. The conductor axis is located about 1/2 mile south of a gossan zone and lies about midway between Gossan and Skarn Lakes. The electromagnetic conductor is interpreted as steeply dipping to the south and its upper surface should be no deeper than 100' below the surface of the ground.

CONCLUSIONS AND RECOMMENDATIONS

The airborne geophysical survey has revealed both electromagnetic and magnetic responses which warrant further investigation.

The magnetic zones of interest occur in the vicinity of Tie Line 2 between Lines 25 and 39 and also between Lines 54 and 62 about 2 miles southwest of the Pine Lake airstrip. A third zone of interest is the dual peaked anaomly centred at fiducial 845 on Line 51. It is recommended that each of these areas be field checked for evidence of sulphide mineralization.

Electromagnetic conductors warranting ground follow-up surveys are those recorded at the north ends of Lines 37 through 56 and the conductor centred at fiducial 1973 on Line 5. In both cases, it is recommended that a combined Magnetometer-Turam survey be conducted over the areas of interest. Drill locations if warranted will be determined upon the completion of the ground surveys.

Respectfully submitted,

SEIGEL ASSOCIATES LIMITED

Richard O. Crosby

Richard O. Crosby, B.Sc., P.Eng.
Geophysicist

Vancouver, B. C.
November 29, 1970

APPENDIX 'A'

DESCRIPTION OF AIRBORNE SYSTEMS

ELECTROMAGNETIC SYSTEM - LOCKWOOD HELICOPTER ELECTROMAGNETIC SYSTEM

Equipment

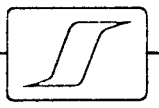
The Lockwood EM system is a solid state, fixed-configuration, electromagnetic system especially designed for helicopter transport. It consists of two coaxial coils, one serving as transmitter and the other as receiver, which are mounted, 30 ft. apart, in a rigid "bird" with their axes horizontal and in the direction of flight. The bird is towed approximately 100 ft. below the helicopter, by means of a suitable cable which also carries electrical signals and power to and from the bird.

The system operates at 4000 Hertz. Changes in the alternating magnetic field at the receiver coil are observed and these changes are converted into two components, one whose phase is the same as that of the transmitted signal (the "In-Phase" component) and the other whose phase is 90^{o} apart (the "Out-of-Phase" component). These changes are expressed in terms of the normal undistorted primary field. They are so small as to be expressed usually in parts-per million or p.p.m.

The In-Phase and Out-of-Phase variations are presented in analog form on two channels of a graphic recorder. The full scale chart width employed is commonly 400 p.p.m. At one or more points during each flight the scale sensitivity is checked by means of calibration signals, usually 100 p.p.m. on each trace.

The reference or "zero" level for each EM trace is an arbitrary one and is obtained empirically from the regional level of each trace. These levels may drift slowly during a flight because of temperature changes affecting the bird dimensions. These drifts are very gradual and are readily distinguishable from much quicker, local changes due to conductors of a geologic origin. Similarly, severe turbulence effects sometimes introduce low-order, primarily in-phase disturbances which are of such short period that they may also readily be distinguished from the effects of geologic conductors.

Man-made disturbances are often to be seen, including power lines, pipe lines, metal fences, railways, etc. The former are generally recognizable as such because they usually



show through as cyclic noise of irregular shape and phase relationship. Non-energized, grounded power lines (e.g. 3 phase systems) may also give rise to proper conductor indications, however. Such indications, as well as those from pipe lines and metal fences, etc. are usually of short duration and can be distinguished from proper geologic sources except for very narrow, near-surface lenses. In some instances ground investigation may be necessary in order to resolve the ambiguity of possible source. Whereas the airborne geophysical crew attempts to note visible man-made conductors of the above types, the ground moves by so rapidly at the low flight elevation employed that 100% recognition of such sources cannot be expected from the air.

The normal terrain clearance of the bird is 100 ft. - 200 ft. depending on the surface topography and tree cover, etc., with the helicopter 100 ft. above. The established useful depth of detection of the system for moderate-to-large conducting bodies is about 350 ft. sub-bird under conditions of low extraneous geologic noise, i.e. where the general level of conductivity of the overburden and rock types of the area is low. The useful depth of detection of the system is therefore between 150 ft. and 250 ft. beneath the ground surface under these conditions.

Interpretation of Results

The EM records are interpreted to determine the presence of conducting bodies and to obtain some information relating to their character. The intervalometer time marks (see below) are synchronized with the positioning camera film strip (also see below) and thereby permit the relating of the conductors with appropriate ground locations. The altimeter data (see below) indicate, for each conductor, what the terrain clearance was at the time of detection.

A plan is prepared, either using a subdued photo-mosaic ("grayflex") or an overlay from a mosaic or topographic plan as base. The flight path of each survey line is obtained by means of "tie points", which are features on the mosaic or topographic plan which are also recognizable on the positioning camera film. The flight path is interpolated between these tie points.

For each conductor the following quantities are measured and recorded.

a) Half width. This is the distance between the points of half the maximum conductor disturbance. For a very thin, steeply dipping body or pipe line, etc., the half width will be about 1.6 times its depth below the bird. If the bird is at a mean conductor clearance of 150 ft. the half width would be about 250 ft. Larger half widths reflect either more deeply buried or, more likely,

thicker conductors.

Flat-lying conductors (e.g.overburden) characteristically give large half widths.

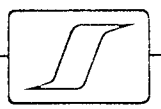
The conductor half width is indicated on the plan by an open bar symbol along the flight line. In the event of very narrow conductors only the peak location may be shown (see below).

b) Peak Location. The in-phase conductor peak location is shown on the plan by a circle in the appropriate location. In the case of broad conductors or closely spaced multiple conductor zones there may be more than one peak, in which event all major peaks are shown. If a conductor is of short half width there may be no room for a half width bar and only the peak circle will be shown. A conductor which is likely man-made will be indicated by an X rather than by a circle.

c) In-Phase and Out-of-Phase Amplitudes. These amplitudes are scaled from the EM traces and noted in parts per million. On the flight plan, opposite each peak location (circle) will be given the peak in-phase amplitude and the ratio of peak in-phase to peak out-of-phase response (see below).

d) Conductor Coding. Conductor intersections are graded in electrical categories 1, 2 and 3, based on the in-phase amplitude but taking into account the terrain clearance. For tabular bodies such as sheet-like ore deposits, strata bound conductors and overburden, their response drops off almost in accordance with the inverse cube power of the elevation. Assuming an average 50 ft. of overburden, a category 1 conductor has a peak in-phase response equivalent to 350 p.p.m. or over at 100 ft. bird terrain clearance. A category 2 conductor has a peak in-phase response under similar conditions of between 100 p.p.m. and 350 p.p.m. A category 3 conductor has an equivalent peak in-phase response of less than 100 p.p.m.

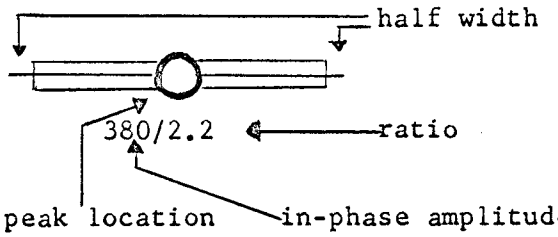
The respective peak circles are shaded to reflect their electrical category, with category 1 fully shaded, category 2 half shaded and category 3 unshaded.



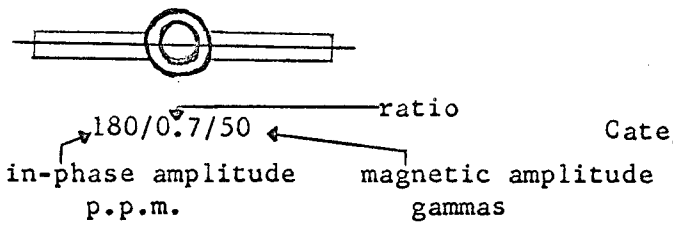
For each conductor peak the ratio of peak in-phase to peak out-phase amplitude is calculated and plotted on the plan. This ratio is indicative of a conductivity-size factor for the conductor. Large, high conducting bodies such as massive sulphides or graphite and seawater, etc., generally have ratios of 3 or over. Moderate conductivity-size bodies will have ratios between 1 and 3. Poor conductivity bodies (e.g. most overburden and some sulphide and graphitic zones) will have ratios of less than 1. In areas where there is a clear differentiation in conductivity between the targets of potential economic interest and other possible conductors, the ratio is a diagnostic feature. In some areas, however, there is an overlap of conductivity ranges and then the ratio cannot be too rigidly relied upon.

Where magnetic data is available, preferably from a coincident recording magnetometer, any correlating magnetic activity will be noted for the pertinent conductor peak. A conductor peak with apparently direct magnetic correlation will be indicated by a double concentric circle. Although a conducting body which is appreciably magnetic is more likely to be a sulphide body than one which is non-magnetic, there are many very important base metal ore bodies which are quite non-magnetic.

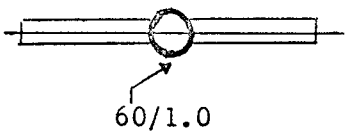
Examples of conductor coding are given below.



Category one, no magnetic correlation.



Category two, magnetic correlation.



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X

Category three, no magnetic correlation.

Probably man-made conductor.

MAGNETOMETER - GULF RESEARCH AND DEVELOPMENT - MARK III

The Fluxgate Magnetometer makes use of a ferromagnetic element of such high permeability that the earth's field can induce a magnetization that is a substantial proportion of its saturation value. If the earth's field is superimposed upon a cycle field induced by a sufficiently large alternating current in a coil around the magnetic, the resultant field will saturate the core. The place in the energizing cycle at which saturation is reached is proportional to the intensity of the earth's ambient field.

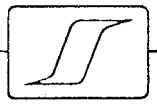
In practice, two parallel cores are aligned with their axes in the direction of the earth's field. Identical primary coils, in series, magnetize the two cores with the same flux density, but in opposite directions since their coil windings are opposite around the respective cores. Thus, the earth's field reinforces the field set up by one coil and opposes the field of the other. In the Gulf Mark III airborne magnetometer, the output pulses are continuously balanced by means of a compensating coil. The current flowing through this coil is recorded on a self balancing moving tape potentiometer recorder.

In as much as variations in the earth's field are of much more importance than absolute values in exploration work, provision is made for balancing out most of the field with one of several compensating coils so that the differences can be recorded with maximum sensitivity. The higher the full scale sensitivity selected for the potentiometer, the larger will be the proportion of the field so nullified. The total field is the compensated portion plus the residual as recorded.

The orienting system that automatically keeps the measuring element described above parallel to the earth's total magnetic field consists of two fluxgate elements mounted so that they are mutually perpendicular to each other and to the measuring element. The outputs of the orienting elements activate servo-mechanisms which keep them in a position of zero magnetic field, thus keeping the measuring element parallel to the earth's field.

Where it is intended to contour the magnetic information it is customary to fly tie lines across the survey grid. A fixed magnetic field monitor is often used as well, on the ground, primarily to indicate periods of magnetic storms during which the aeromagnetic data should be considered as unreliable.

The aeromagnetic data may be contoured if desired, using a contour interval of 25 gammas or up, depending on the amount of magnetic relief. Alternatively they may be used simply for purposes of correlation with simultaneously obtained electromagnetic data to determine which conductor zones are appreciably magnetic.



ANCILLARY EQUIPMENT

1. Altimeter

An APN-1, high frequency solid state radio altimeter is employed to continuously indicate the mean terrain clearance of the helicopter or other transporting aircraft. The altimeter is installed in the aircraft (unless otherwise indicated) so that the elevation of the sensing birds (electromagnetic or magnetic) will be less by the usual vertical displacement of these birds below the aircraft.

2. Positioning Camera

A DeHavilland 35 mm. positioning camera is employed with a wide angle lens. Photographs of the ground are taken with sufficient frequency to give a complete record of the flight path of the aircraft or helicopter. The frequency of exposure is controlled by the intervalometer referred to below.

3. Intervalometer

An electronic intervalometer provides regularly spaced timing pulses which drive the positioning camera exposure mechanism and produces synchronous "fiducial marks" on the side pen of the geophysical graphic recorded or recorders. Because of the Synchronization of the geophysical traces and the positioning camera it is then possible to relate the geophysical events of interest to their proper ground location. The timing pulse frequency may be adjusted in accordance with the ground speed of the aircraft so that an adequate flight path record is obtained.

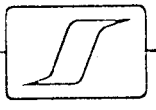
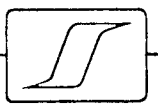


TABLE ONE

LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
2	A	1744	2	Moderate conductivity	20 γ coincident
	B	1750	2	Poor conductivity	40 γ coincident
	C	1755	2	Moderate conductivity	
3	A	1825	3	Poor conductivity	50 γ flanking
	B	1818	3	Poor conductivity	50 γ flanking
4	A	1887	2	Poor conductivity	60 γ flanking
5	A	1973	2	Poor conductivity	520 γ flanking
	B	1960	3	Poor conductivity	150 γ flanking
6	A	2147	2	Poor conductivity	30 γ coincident
	B	2136	3	Poor conductivity	100 γ flanking
	C	2119	3	Poor conductivity	30 γ coincident
7	A	2075	3	Poor conductivity	80 γ flanking
9	A	2335	3	Poor conductivity	45 γ flanking
11	A	2292	3	Poor conductivity	40 γ flanking
	B	2284	3	Poor conductivity	25 γ flanking
	C	2275	3	Poor conductivity	30 γ coincident
	D	2260	3	Poor conductivity	18 γ flanking
12	A	254	3	Moderate conductivity	20 γ flanking
	B	111	3	Moderate conductivity	70 γ flanking
13	A	338	3	Poor conductivity	20 γ flanking
	B	486	3	Poor conductivity	30 γ flanking
14	A	554	2	Good conductivity	50 γ flanking
16	A	1416	3	Moderate conductivity	
18	A	1555	3	Poor conductivity	
	B	1507	3	Poor conductivity	30 γ coincident
	C	1464	3	Poor conductivity	20 γ flanking
	D	1456	3	Poor conductivity	120 γ flanking
25	A	1218	3	Poor conductivity	40 γ flanking
	B	1265	2	Moderate conductivity	18 γ flanking
26	A	1134	3	Moderate conductivity	
	B	1023	3	Moderate conductivity	60 γ flanking
	C	998	2	Moderate conductivity	40 γ coincident

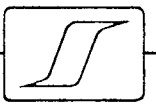


LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
27	A	830	2	Moderate conductivity	60 coincident
	B	837	2	Moderate conductivity	60 flanking
	C	881	3	Poor conductivity	25 flanking
	D	940	2	Moderate conductivity	28 flanking
	E	950	3	Poor conductivity	25 flanking
	F	969	3	Poor conductivity	25 flanking
28	A	769	3	Poor conductivity	18 flanking
	B	761	2	Poor conductivity	18 flanking
	C	730	3	Poor conductivity	
	D	667	3	Moderate conductivity	50 coincident
	E	657	3	Poor conductivity	90 coincident
29	A	500	3	Moderate conductivity	70 coincident
	B	510	2	Moderate conductivity	200 coincident
	C	518	3	Moderate conductivity	60 coincident
	D	526	2	Moderate conductivity	50 coincident
	E	552	3	Moderate conductivity	
	F	603	2	Moderate conductivity	125 flanking
	G	622	2	Moderate conductivity	38 flanking
30	A	457	2	Moderate conductivity	
	B	452	2	Moderate conductivity	50 flanking
	C	447	2	Moderate conductivity	50 flanking
	D	428	2	Moderate conductivity	30 coincident
	E	422	3	Moderate conductivity	40 coincident
	F	364	3	Poor conductivity	240 flanking
	G	334	3	Moderate conductivity	80 coincident
	H	330	3	Moderate conductivity	70 flanking
31	A	160	2	Moderate conductivity	30 coincident
	B	146	3	Moderate conductivity	60 flanking
	C	125	3	Moderate conductivity	28 flanking
	D	33	3	Good conductivity	25 flanking
32	A	5162	3	Moderate conductivity	20 flanking
	B	5150	3	Moderate conductivity	10 flanking
	C	5101	3	Moderate conductivity	10 flanking
	D	5010	2	Moderate conductivity	240 coincident
	E	4998	2	Moderate conductivity	240 flanking
33	A	4930	2	Moderate conductivity	370 flanking
34	A	4673	3	Poor conductivity	770 flanking
	B	4646	3	Moderate conductivity	770 flanking
	C	4621	2	Good conductivity	210 flanking
35	A	4337	3	Moderate conductivity	450 flanking
	B	4361	3	Moderate conductivity	460 flanking
	C	4375	2	Moderate conductivity	30 flanking

LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
36	A	4166	3	Poor conductivity	260 ↘ flanking
	B	4125	2	Moderate conductivity	205 ↘ flanking
	C	4121	1	Moderate conductivity	205 ↘ flanking
37	A	4015	3	Poor conductivity	60 ↘ flanking
	B	4061	3	Moderate conductivity	120 ↘ coincident
	C	4077	3	Moderate conductivity	60 ↘ flanking
	D	4086	2	Moderate conductivity	
38	A	3864	3	Poor conductivity	100 ↘ coincident
	B	3833	2	Good conductivity	220 ↘ flanking
39	A	3740	3	Moderate conductivity	
	B	3753	3	Poor conductivity	
	C	3811	2	Good conductivity	40 ↘ coincident
40	A	3501	3	Moderate conductivity	
	B	3472	3	Moderate conductivity	
	C	3432	3	Poor conductivity	
	D	3378	2	Moderate conductivity	20 ↘ flanking
	E	3370	2	Moderate conductivity	60 ↘ flanking
41	A	3196	3	Poor conductivity	
	B	3231	2	Moderate conductivity	
	C	3267	2	Moderate conductivity	26 ↘ flanking
	D	3293	3	Moderate conductivity	
	E	3327	2	Moderate conductivity	115 ↘ flanking
	F	3340	2	Moderate conductivity	100 ↘ flanking
42	A	3065	2	Moderate conductivity	50 ↘ coincident
	B	3049	2	Moderate conductivity	25 ↘ coincident
	C	3031	3	Good conductivity	
	D	3016	2	Moderate conductivity	
	E	3007	2	Moderate conductivity	
	F	2965	3	Moderate conductivity	22 ↘ flanking
	G	2923	2	Moderate conductivity	110 ↘ flanking
	H	2905	2	Moderate conductivity	120 ↘ flanking
43	A	2756	1	Moderate conductivity	40 ↘ flanking
	B	2763	2	Moderate conductivity	40 ↘ coincident
	C	2770	2	Moderate conductivity	40 ↘ flanking
	D	2797	2	Moderate conductivity	30 ↘ flanking
	E	2830	2	Moderate conductivity	260 ↘ flanking
	F	2855	2	Moderate conductivity	80 ↘ coincident
	G	2875	2	Good conductivity	260 ↘ flanking
44	A	2687	2	Moderate conductivity	30 ↘ flanking
	B	2670	3	Moderate conductivity	16 ↘ flanking
	C	2640	3	Poor conductivity	10 ↘ coincident
	D	2630	2	Moderate conductivity	10 ↘ coincident
	E	2616	2	Moderate conductivity	45 ↘ coincident
	F	2596	2	Moderate conductivity	95 ↘ coincident

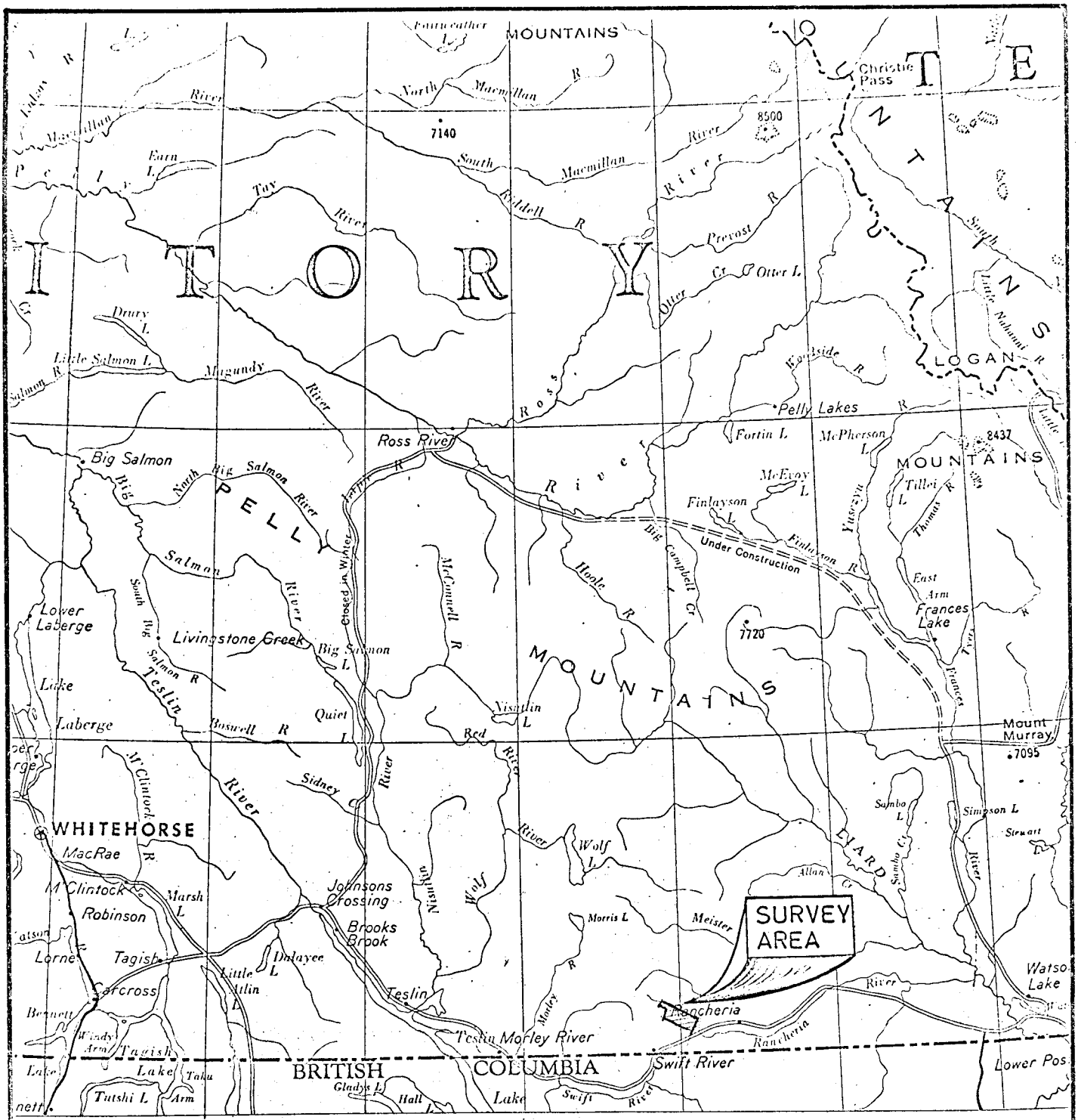
LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
	G	2579	2	Moderate conductivity	95 Y flanking
	H	2564	2	Moderate conductivity	
	J	2549	2	Good conductivity	
	K	2541	2	Good conductivity	
	L	2492	3	Moderate conductivity	
	M	2445	2	Good conductivity	340 Y coincident
45	A	2260	2	Good conductivity	45 Y flanking
	B	2281	2	Moderate conductivity	90 Y flanking
	C	2288	2	Moderate conductivity	90 Y coincident
	D	2294	2	Moderate conductivity	90 Y flanking
	E	2320	3	Moderate conductivity	45 Y flanking
	F	2351	2	Moderate conductivity	50 Y flanking
	G	2393	2	Moderate conductivity	390 Y flanking
46	A	2125	2	Moderate conductivity	
	B	2107	2	Moderate conductivity	
	C	2051	2	Moderate conductivity	120 Y flanking
	D	2038	3	Moderate conductivity	120 Y coincident
	E	2006	2	Moderate conductivity	55 Y flanking
	F	1945	2	Moderate conductivity	390 Y coincident
	G	1931	2	Moderate conductivity	390 Y flanking
47	A	1733	2	Moderate conductivity	162 Y coincident
	B	1746	3	Moderate conductivity	12 Y flanking
	C	1875	2	Good conductivity	
	D	1802	3	Moderate conductivity	
	E	1820	2	Good conductivity	20 Y coincident
	F	1833	2	Moderate conductivity	70 Y coincident
	G	1854	2	Moderate conductivity	40 Y flanking
	H	1897	2	Good conductivity	330 Y coincident
	J	1908	2	Good conductivity	330 Y flanking
	K	1916	2	Good conductivity	330 Y flanking
48	A	1700	3	Moderate conductivity	
	B	1683	3	Moderate conductivity	
	C	1661	2	Moderate conductivity	
	D	1649	2	Moderate conductivity	
	E	1643	3	Moderate conductivity	10 Y coincident
	F	1621	2	Moderate conductivity	
	G	1611	3	Moderate conductivity	
	H	1594	2	Moderate conductivity	
	J	1584	2	Moderate conductivity	
	K	1573	2	Moderate conductivity	40 Y flanking
	L	1542	2	Moderate conductivity	140 Y flanking
	M	1476	2	Moderate conductivity	280 Y flanking
49	A	1284	2	Moderate conductivity	
	B	1293	2	Moderate conductivity	
	C	1298	3	Moderate conductivity	
	D	1307	2	Moderate conductivity	140 Y flanking

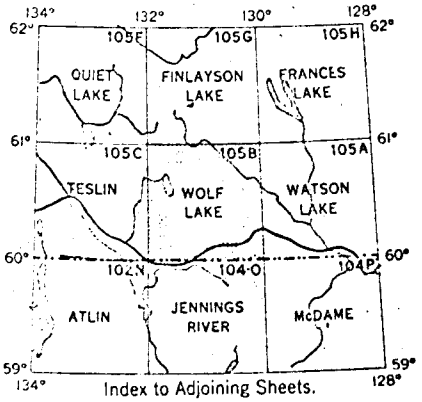
LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
	E	1326	3	Moderate conductivity	20 ɣ flanking
	F	1339	2	Moderate conductivity	50 ɣ flanking
	G	1375	3	Moderate conductivity	80 ɣ flanking
	H	1437	2	Moderate conductivity	50 ɣ coincident
50	A	1225	3	Moderate conductivity	20 ɣ flanking
	B	1208	3	Moderate conductivity	
	C	1183	2	Moderate conductivity	
	D	1174	2	Moderate conductivity	
	E	1142	2	Moderate conductivity	
	F	1111	2	Moderate conductivity	
	G	1091	2	Moderate conductivity	70 ɣ flanking
	H	1048	2	Moderate conductivity	70 ɣ flanking
	J	1045	2	Moderate conductivity	
	K	974	2	Moderate conductivity	190 ɣ flanking
51	A	759	3	Moderate conductivity	
	B	775	2	Moderate conductivity	
	C	794	2	Moderate conductivity	
	D	851	2	Moderate conductivity	270 ɣ coincident
	E	880	2	Moderate conductivity	15 ɣ flanking
	F	923	3	Poor conductivity	20 ɣ flanking
	G	941	2	Moderate conductivity	190 ɣ coincident
	H	948	2	Good conductivity	190 ɣ coincident
52	A	698	3	Moderate conductivity	40 ɣ flanking
	B	687	2	Moderate conductivity	
	C	666	2	Moderate conductivity	
	D	657	3	Moderate conductivity	
	E	642	2	Moderate conductivity	20 ɣ flanking
	F	624	2	Moderate conductivity	
	G	616	2	Moderate conductivity	20 ɣ flanking
	H	587	3	Moderate conductivity	140 ɣ flanking
	J	554	2	Moderate conductivity	20 ɣ flanking
	K	471	2	Moderate conductivity	230 ɣ flanking
	L	466	2	Moderate conductivity	230 ɣ coincident
53	A	249	2	Moderate conductivity	15 ɣ coincident
	B	278	2	Moderate conductivity	55 ɣ coincident
	C	307	2	Moderate conductivity	
	D	322	3	Moderate conductivity	15 ɣ flanking
	E	352	2	Moderate conductivity	90 ɣ flanking
	F	380	2	Good conductivity	
	G	447	2	Moderate conductivity	320 ɣ flanking
54	A	204	2	Moderate conductivity	
	B	200	2	Moderate conductivity	
	C	189	2	Moderate conductivity	
	D	179	2	Moderate conductivity	
	E	176	2	Moderate conductivity	10 ɣ flanking
	F	168	2	Moderate conductivity	30 ɣ coincident
	G	158	2	Moderate conductivity	30 ɣ flanking



LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
	H	117	2	Moderate conductivity	120 flanking
	J	96	2	Moderate conductivity	25 flanking
	K	91	2	Moderate conductivity	25 flanking
	L	14	2	Moderate conductivity	320 flanking
55	A	2028	2	Moderate conductivity	
	B	2037	2	Moderate conductivity	
	C	2044	2	Moderate conductivity	20 coincident
	D	2059	2	Moderate conductivity	
	E	2071	2	Moderate conductivity	28 flanking
	F	2080	3	Moderate conductivity	28 flanking
	G	2148	2	Moderate conductivity	10 flanking
	H	2153	2	Moderate conductivity	
	J	2220	3	Moderate conductivity	165 flanking
56	A	1960	2	Moderate conductivity	10 coincident
	B	1950	2	Moderate conductivity	
	C	1938	3	Moderate conductivity	
	D	1889	3	Moderate conductivity	30 flanking
	E	1864	3	Moderate conductivity	
57	A	1603	3	Moderate conductivity	
	B	1610	2	Moderate conductivity	
	C	1624	2	Moderate conductivity	
	D	1641	2	Moderate conductivity	10 flanking
	E	1649	3	Moderate conductivity	540 flanking
	F	1678	2	Moderate conductivity	50 flanking
	G	1710	3	Moderate conductivity	10 flanking
58	A	1516	2	Moderate conductivity	30 flanking
	B	1510	2	Moderate conductivity	30 coincident
	C	1505	2	Moderate conductivity	30 flanking
	D	1483	2	Moderate conductivity	10 flanking
	E	1467	2	Good conductivity	
	F	1439	2	Moderate conductivity	70 flanking
	G	1404	3	Moderate conductivity	18 flanking
59	A	1053	2	Moderate conductivity	
	B	1060	2	Moderate conductivity	
	C	1066	2	Moderate conductivity	15 coincident
	D	1070	3	Moderate conductivity	
	E	1076	2	Moderate conductivity	20 flanking
	F	1097	3	Moderate conductivity	
	G	1102	3	Moderate conductivity	
	H	1120	3	Moderate conductivity	640 flanking
	J	1131	3	Moderate conductivity	640 flanking
	K	1147	3	Good conductivity	640 flanking
	L	1155	3	Good conductivity	50 flanking
	M	1166	2	Good conductivity	60 coincident
	N	1200	3	Good conductivity	25 flanking

LINE	ANOMALY	PEAK FIDUCIAL	CATEGORY	ELECTRICAL CHARACTER	MAGNETIC CORRELATION
60	A	1017	2	Good conductivity	20 ✓ coincident
	B	1010	2	Moderate conductivity	20 ✓ coincident
	C	991	2	Moderate conductivity	
	D	975	3	Moderate conductivity	
	E	967	2	Moderate conductivity	650 ✓ flanking
	F	953	2	Moderate conductivity	30 ✓ flanking
	G	943	2	Moderate conductivity	15 ✓ coincident
	H	906	3	Moderate conductivity	
	J	837	2	Moderate conductivity	130 ✓ flanking
61	A	598	3	Moderate conductivity	
	B	609	2	Good conductivity	10 ✓ flanking
	C	615	2	Moderate conductivity	
	D	628	3	Moderate conductivity	10 ✓ coincident
	E	641	3	Good conductivity	
	F	651	2	Moderate conductivity	
	G	661	2	Good conductivity	440 ✓ flanking
	H	677	3	Moderate conductivity	440 ✓ flanking
	J	688	3	Moderate conductivity	20 ✓ flanking
	K	694	3	Moderate conductivity	110 ✓ flanking
62	A	545	3	Moderate conductivity	10 ✓ flanking
	B	553	2	Moderate conductivity	10 ✓ coincident
63	A	134	3	Moderate conductivity	30 ✓ flanking
	B	142	2	Moderate conductivity	10 ✓ coincident
	C	150	2	Moderate conductivity	10 ✓ coincident
	D	294	3	Poor conductivity	
	E	305	3	Poor conductivity	





Index to Adjoining Sheets.

BOSWELL RIVER MINES

LOCATION MAP

AIRBORNE GEOPHYSICAL SURVEY

0 32 64 96 MILES

SURVEY BY
SEIGEL ASSOCIATES LIMITED
OCT. – NOV. 1970

PLATE 1

L-1 L-2 L-3 L-4 L-5 L-5A L-6 L-7 L-8 L-9 L-10 L-11 L-12 L-13 L-14 L-15 L-16 L-17 L-18 L-25 L-26 L-27 L-28 L-29 L-30 L-32 L-31 L-33 L-34 L-35 L-36 L-37 L-38 L-39 L-40 L-41 L-42 L-43 L-44 L-45 L-46 L-47 L-48 L-49 L-50 L-51 L-52 L-53 L-54 L-55 L-56 L-57 L-58 L-59 L-60 L-61 L-62 L-63

TIE LINE 2

CRESCENT LAKE

DAUGHNEY LAKE

PINE LAKE

TIE LINE 2

TIE LINE 1

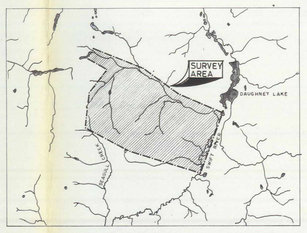
SEAGULL CREEK

SWIFT RIVER

AIRPORT

TIE LINE 1

LOCATION MAP



TO ACCOMPANY A GEOPHYSICAL REPORT
BY RICHARD O. CROSBY DATED NOV. 29, 1970

LEGEND

L-2 — FLIGHT LINE FLIGHT LINE NUMBER AND NUMBERED FIDUCIAL POINTS

500 GAMMA ISOMAGNETIC CONTOUR INTERVAL

100 GAMMA ISOMAGNETIC CONTOUR INTERVAL

20 GAMMA ISOMAGNETIC CONTOUR INTERVAL

MAGNETIC LOW

AIRCRAFT TERRAIN CLEARANCE - 250'

FLIGHT LINE SPACING - 1000 FEET

BASE INTENSITY ARBITRARY

DRAINAGE

PLATE 2

BOSWELL RIVER MINES

SWIFT RIVER PROPERTIES, YUKON

AIRBORNE GEOPHYSICAL SURVEY

MAGNETOMETER CONTOUR PLAN

APPROX. SCALE 1" = 1320 FEET

0 — 1 MILE

SURVEY BY SEIGEL ASSOCIATES LIMITED

FLOWN AND COMPILED OCTOBER - NOVEMBER 1970

TIE LINE 2

CRESCENT LAKE

DAUGHNEY LAKE

PINE LAKE

TIE LINE 2

AIRPORT

RIVER

SWIFT

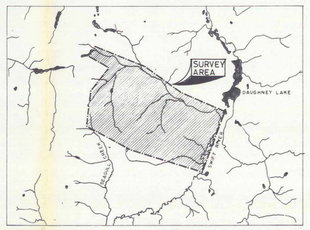
TIE LINE 1

SEAGULL CREEK

TIE LINE 1

L-1 L-2 L-3 L-4 L-5 L-5A L-6 L-7 L-8 L-9 L-10 L-11 L-12 L-13 L-14 L-15 L-16 L-17 L-18 L-25 L-26 L-27 L-28 L-29 L-30 L-32 L-31 L-33 L-34 L-35 L-36 L-37 L-38 L-39 L-40 L-41 L-42 L-43 L-44 L-45 L-46 L-47 L-48 L-49 L-50 L-51 L-52 L-53 L-54 L-55 L-56 L-57 L-58 L-59 L-60 L-63 L-28

LOCATION MAP



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TO ACCOMPANY A GEOPHYSICAL REPORT
BY RICHARD O. CROSBY DATED NOV. 29. 1970

LEGEND

L-2 ——— FLIGHT LINE, FLIGHT LINE NUMBER AND NUMBERED FIDUCIAL POINTS

A.E.M. CONDUCTOR REPRESENTATION

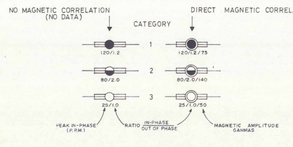

PLATE 3

BOSWELL RIVER MINES

SWIFT RIVER PROPERTIES, YUKON

AIRBORNE GEOPHYSICAL SURVEY

ELECTROMAGNETIC CONDUCTORS

APPROX. SCALE 1"= 1320 FEET

0 ——— 1 MILE

SURVEY BY SEIGEL ASSOCIATES LIMITED

FLOWN AND COMPILED OCTOBER - NOVEMBER 1970

SHEET 1 OF 1

TAM
Y 42822 - Y42845 INCL.
NO. 1 - 24 INCL.

L - 1
L - 2
L - 3
L - 4
L - 5
L - 5A
L - 6
L - 7
L - 8
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L - 58
L - 59
L - 60
L - 63

TIE LINE 2

DRUM
Y 28086 - Y 28087

CRESCENT LAKE

WET
Y 42517 - Y 42533 INCL.
NO. 17 - 33 INCL.

BUD
Y 22938 - Y 22956 INCL.
NO. 1 - 18 INCL.

Y 28295 - Y 28308 INCL.
NO. 274 - 286 INCL.

Y 28227 - Y 28234 INCL.
NO. 181 - 188 INCL.

Y 28290 + Y 28291
NO. 271 + 272

DAN
Y 22862 - Y 22877 INCL.
NO. 67 - 82 INCL.

DAN
Y 13401 - Y 13410 INCL.
NO. 1 - 10 INCL.

Y 22800 - Y 22805 INCL.
NO. 11 - 16 INCL.

MAX
Y 42471 - Y 42480 INCL.
NO. 51 - 60 INCL.

MAX

SAM

SAM
Y 42487 - Y 42509 INCL.
NO. 1 - 16 INCL.

Y 42495 - Y 42498 INCL.
NO. 18 - 21 INCL.

LUX
Y 42778 - Y 42821 INCL.
NO. 1 - 24 INCL.

MAX
Y 42421 - Y 42468 INCL.
NO. 1 - 48 INCL.

DAUGHNEY LAKE

PINE LAKE

SUSAN
Y 17840 - Y 17847 INCL.
NO. 1 - 8 INCL.

DAN
Y 28312 + Y 28313
NO. 269 + 270

Y 28309 - Y 28311 INCL.
NO. 271 - 273 INCL.

TOM
Y 27628 - Y 27645 INCL.
NO. 1 - 18 INCL.

Y 22901 - Y 22938 INCL.
NO. 83 - 120 INCL.

Y 27617 - Y 27624 INCL.
NO. 121 - 128 INCL.

DAN

DAN

DRUM
NO. 1 & 2 Y 28311

DELL
89445 - 89452 INCL.
NO. 1 - 8 INCL.

DAN
Y 27670 - Y 27677 INCL.
NO. 127 - 135 INCL.

Y 28179 - Y 28198 INCL.
NO. 137 - 156 INCL.

DAN
Y 28205 - Y 28214 INCL.
NO. 163 - 172 INCL.

Y 28219 - Y 28226 INCL.
NO. 173 - 180 INCL.

DAN
Y 28215 - Y 28218 INCL.
NO. 189 - 192 INCL.

TIDE
Y 42846 - Y 42893 INCL.
NO. 1 - 48 INCL.

DAN

GLEN
Y 17832 - Y 17839 INCL.
NO. 1 - 8 INCL.

REX
Y 17908 - Y 17915 INCL.
NO. 1 - 8 INCL.

DAN

TIE LINE 1

MOD
86917 - 86920 INCL.
NO. 1 - 4 INCL.

DAN

DAN
Y 28199 - Y 28204 INCL.
NO. 157 - 162 INCL.

OMO
Y 42598 - Y 42797 INCL.
NO. 1 - 200 INCL.

DAN
Y 28243 - Y 28245 INCL.
NO. 225 - 227 INCL.

Y 28247 - Y 28285 INCL.
NO. 228 - 270 INCL.

Y 28235 - Y 28242 INCL.
NO. 193 - 200 INCL.

DAREN
Y 28092 - Y 28095 INCL.
NO. 1 - 4 INCL.

RAY-ED
Y 22628 - Y 22635 INCL.
NO. 1 - 8 INCL.

TOM
Y 27646 - Y 27659 INCL.
NO. 19 - 32 INCL.

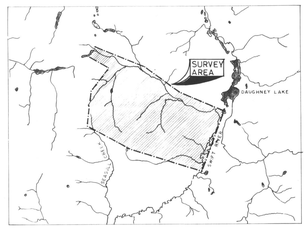
SEAGULL CREEK

WHITEHORSE RIVER

AIRPORT

TIE LINE 1

LOCATION MAP



TO ACCOMPANY A GEOPHYSICAL REPORT
BY RICHARD O. CROSBY DATED NOV. 29, 1970

PLATE 4

BOSWELL RIVER MINES

SWIFT RIVER PROPERTIES, YUKON

AIRBORNE GEOPHYSICAL SURVEY

CLAIM LOCATION AND FLIGHT LINES

APPROX. SCALE 1" = 1320 FEET

0 — 1 MILE

SURVEY BY SEIGEL ASSOCIATES LIMITED

FLOWN AND COMPILED OCTOBER - NOVEMBER 1970

Richard O. Crosby

SHEET 1 OF 1

060878