GEOPHYSICAL REPORT

ON THE

MULLIGAN CLAIM

Cu-Pb-Zn

Squamish Area, Vancouver Mining Division

NTS 92G/11E

Lat. 49°41'N, Long. 123°03'W

by

Shelley C. James, B.Sc. Hons.

R.L. Scott-Hogg, P.Eng.

Owner: KIDD CREEK MINES LTD.

Operator: KIDD CREEK MINES LTD.

Vancouver, B.C. October, 1982

Part 2 of 2

APPENDICES

LIST OF FIGURES

INTRODUCTION

Location, Access and Terrain

The Mulligan Claim (Lat. 49°41'N, Long. 123°03'W) is located about 7 km east of the town of Squamish, in southwestern British Columbia (Figure 1). The claim is situated on Ray Creek, a tributary of the Stawamus River (Figure 2). Access is by 4-wheel drive vehicle along a main haulage logging road heading east from Squamish, then along an abandoned logging road leading to the lower slopes of Mt. Mulligan

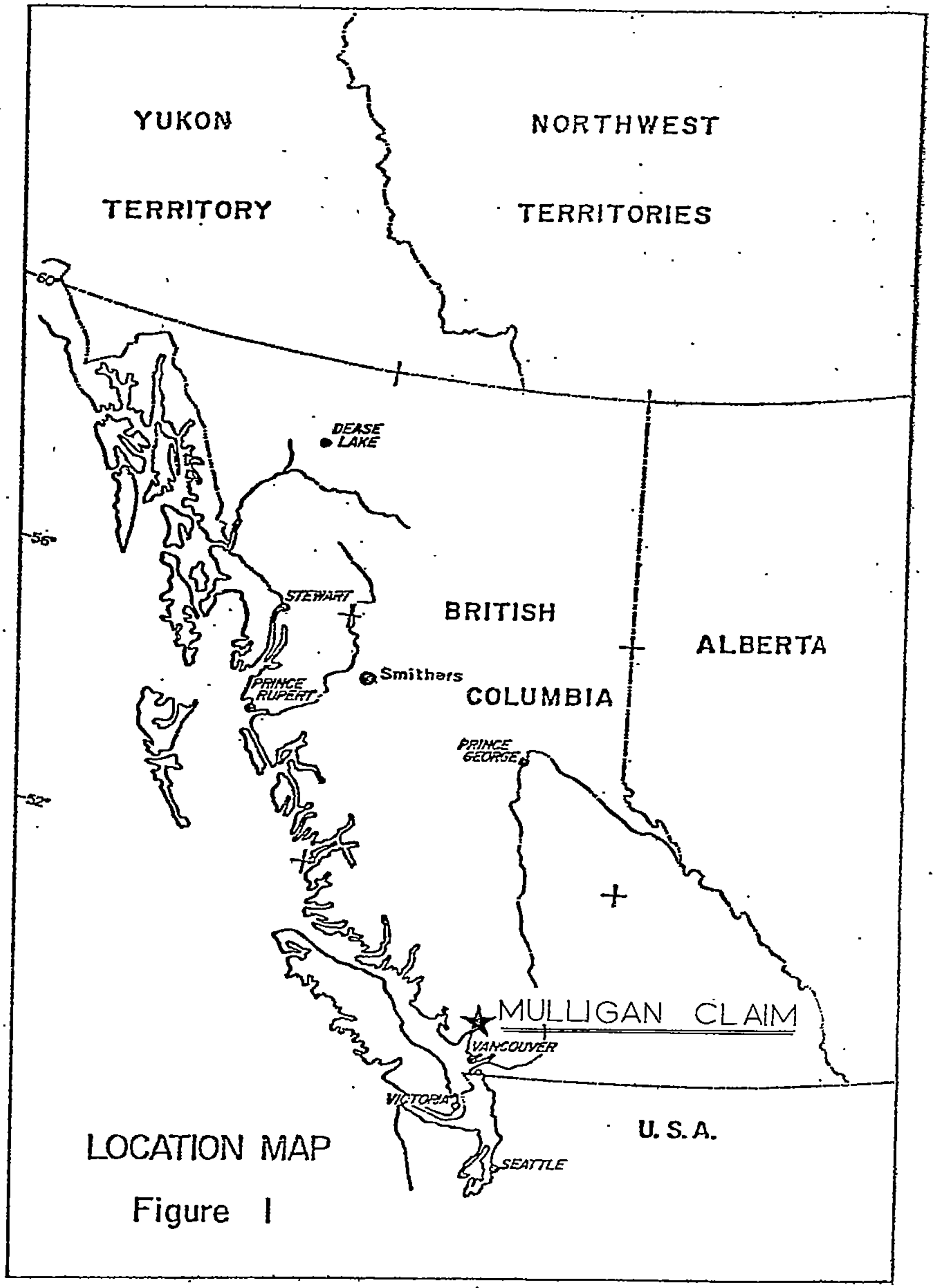
The terrain is rugged with elevations ranging from 300 metres, at the Ray Creek, Stawamus River junction, to 1300 metres on the slopes of Mt. Mulligan. Most of the area is timbered, or "clear cut" and covered by second growth bush and shrub as a result of logging operations. The headwaters of the Ray Creek drain a relatively, flat, swampy, narrow valley called the Ray Creek Basin, which is situated between Mt. Mulligan and a higher ridge to the southwest.

Higher elevations receive abundant snowfall in the winter, much of which reamins until mid-summer.

Property History and Definition

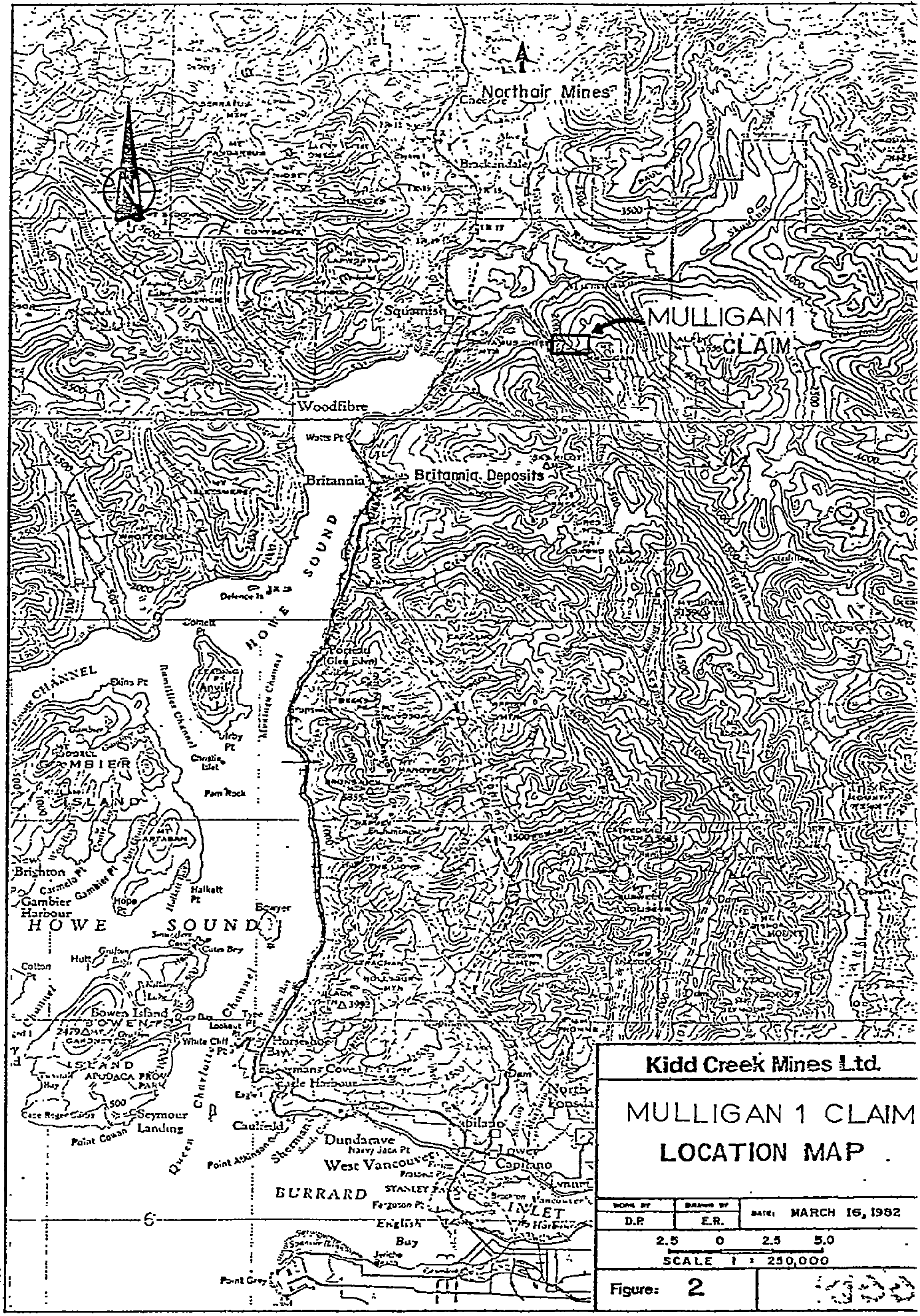
In the early 1900's, several open-cuts and adits were driven on lenses of massive to semi-massive pyrite outcropping in Ray and Little Ray Creeks. Local concentrations of chalcopyrite and sphalerite are associated with a few of these showings. Claims included the Bruce, Radiant and Contact groups.

In 1929, a "Radiore Electrical Survey" was conducted in the area of Ray Creek Basin by Radiant Copper Ltd. The survey indicated a number of weak conductors, which appeared to be caused by "pyritic shear zones".



LOCATION MAP

Figure 1



Kidd Creek Mines Ltd.

MULLIGAN 1 CLAIM

LOCATION MAP

WORK BY	DRAWN BY	DATE:
D.P.	E.R.	MARCH 16, 1982

2.5 0 2.5 5.0

SCALE 1 : 250,000

Figure: 2

NCI - 556

Later work focused on a copper showing at the head of the basin; three diamond drill holes tested this showing. Results were not encouraging.

In March 1977, M. Levasseur staked the Crane Claims over the basin area; assessment work included some Cat trenching on the copper showing. On October 1977, Texasgulf Inc., now Kidd Creek Mines Ltd., staked the Mulligan 1 Claim centred in the area of Ray Creek. On March 31, 1978 the Crane Claim was optioned by Texasgulf Inc. from Eagle River Mines, who had acquired the ground from M. Levasseur.

During 1978, work on the property included geological mapping (1:5000), limited geochemical (silt and soil sampling along Ray Creek and in Ray Creek Basin) and geophysical (VLF and horizontal loop follow-up) surveys.

The property now consists of the Mulligan 1 claim, consisting of 8 units aggregating 200 hectares (Figure 3). The Crane claim option was dropped in 1979.

Summary of Work Completed

Airborne geophysical survey

During the period June 9 - 11, 1982, a helicopter-borne combined magnetic, VLF-EM, electromagnetic survey, totalling 300 line kilometres, was flown over the Mulligan claim and adjacent area in the Indian River Belt. The survey was flown in order to identify massive sulphide mineralization targets.

Work distribution

Complete coverage of the Mulligan 1 claim (record number 209, expiry date October 7, 1983) was attained during the survey.

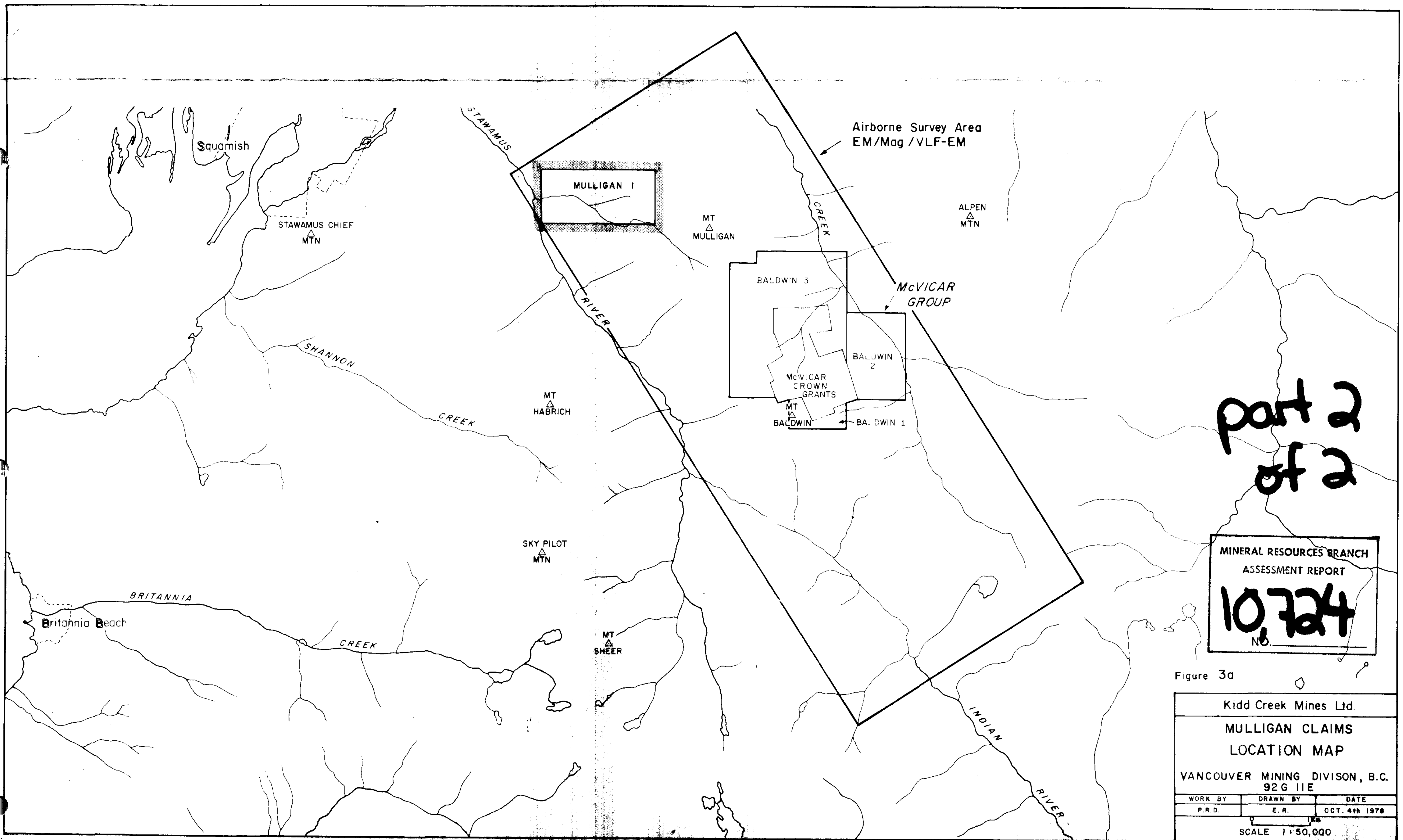


Figure 3a

Kidd Creek Mines Ltd.

MULLIGAN CLAIMS
LOCATION MAP

VANCOUVER MINING DIVISON, B.C.
92G 11E

WORK BY	DRAWN BY	DATE
P.R.D.	E.R.	OCT. 4th 1978

SCALE 1:50,000

GEOLOGY

The Mulligan 1 claim lies at the north end of a belt of volcano-sedimentary rocks known as the Indian River Pendant, which is believed to be correlative with the Cretaceous Gambier Group. This pendant lies within the Coast Crystalline Complex and is connected to the Britannia Pendant to the southwest by a "bridge" of volcanic rock.

The property is largely underlain by a structurally complex pile of intermediate to felsic pyroclastic rocks. These rocks are in sharp contact with massive granitic rocks to the southwest and an embayment of granitic rocks to the northeast. An outlier of Garibaldi Volcanics covers an area near the north boundary of the property.

Local sulphide showings are associated with silicification and alteration. A geology map of the property by DeLancey, 1978, is shown in Figure 4.

GEOPHYSICS

A combined electromagnetic, magnetic, VLF-EM helicopter-borne survey was conducted over the Mulligan 1 claim and adjacent areas from June 9 to June 11, 1982 (Figure 3). A total of 300 line-kilometres at approximately 200 metre line-kilometre spacing was flown by Aerodat Ltd., for Kidd Creek Mines Ltd., using a helicopter operated by Quasar Aviation. Details and results of the survey are contained in their report, included as Appendix A, and Figures 5 to 7.

A number of low conductance conductors, typical of "structural" type conductors or very minor mineralization were identified.

No ground follow-up work has been done to date on this property.

S.C. James, B.Sc. Hons
R.L. Scott Hogg, P.Eng.

BIBLIOGRAPHY

DeLANCEY, P.R. 1978. Report on the McVicar-Baldwin-Mulligan Claim Groups, Squamish Area, B.C. 92E/11E, unpublished Texasgulf Company Report, 21 pages.

JAMES, H.T. 1929. Britannia Beach Map-area, B.C. Geological Survey of Canada. Memoir 158, 139 pages.

PAYNE, J.G., BRATT, J.A., and STONE, B.C. 1980. Deformed Mesozoic Volcanogenic Cu-Zn Sulfide Deposits in the Britannia District, British Columbia. Economic Geology, Vol. 75, pp. 700-721.

RODDICK, J.A. 1965. Vancouver North, Coquitlam, and Pitt Lake Map-Areas, B.C. G.S.C. Memoir 335.

APPENDIX A

REPORT ON COMBINED HELICOPTER-BORNE MAGNETIC, VLF-EM AND ELECTROMAGNETIC SURVEY

REPORT ON

COMBINED HELICOPTER-BORNE

MAGNETIC, VLF-EM AND ELECTROMAGNETIC

SURVEY

SQUAMISH, BRITISH COLUMBIA

for

KIDD CREEK MINES LIMITED

by

AERODAT LIMITED

JUNE 1982

TABLE OF CONTENTS

LIST OF MAPS

(Scale 1:10,000)

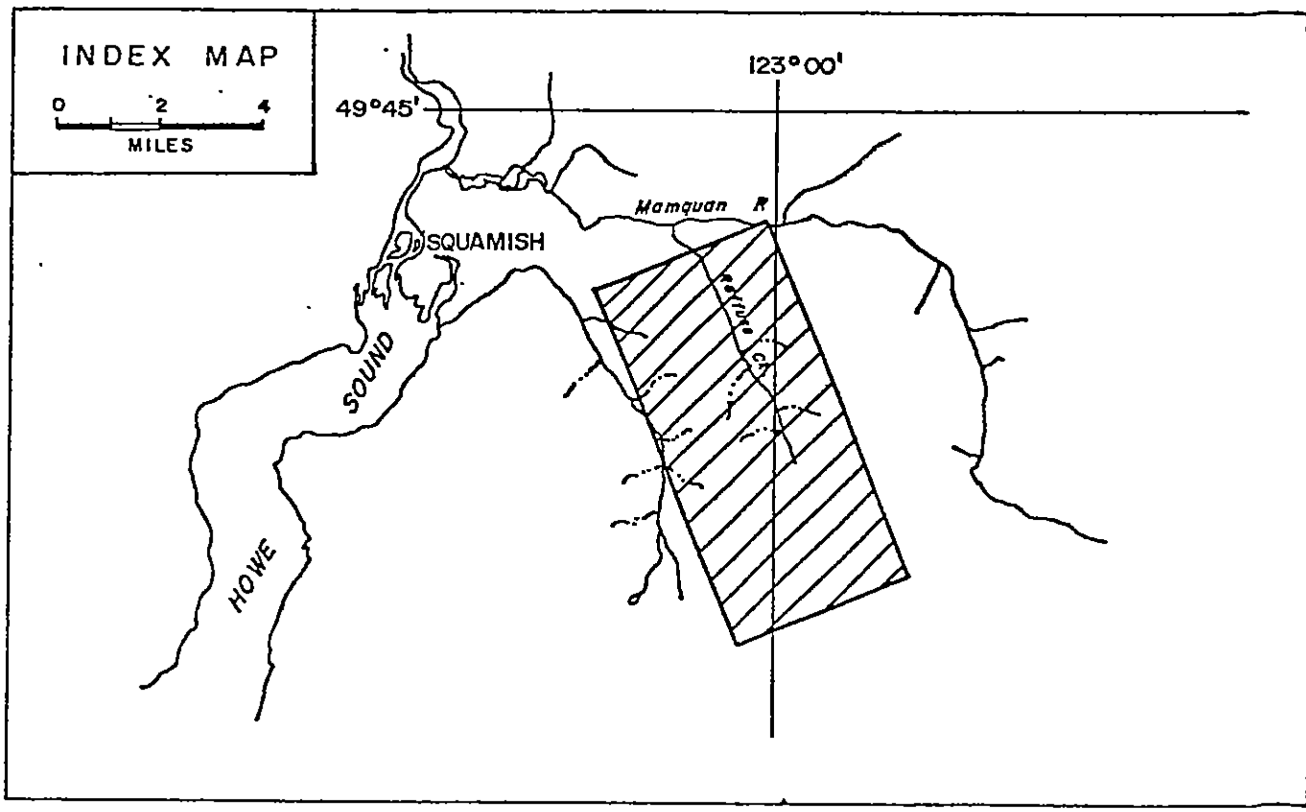
1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Kidd Creek Mines Limited by Aerodat Limited. Equipment operated included a 3 frequency electromagnetic system, a magnetometer and a VLF-EM system, as well as a Motorola MRS III radar positioning system.

The survey, located in the vicinity of Squamish B. C., was flown during the period June 9 to June 11, 1982 from an operations base at Squamish. A total of 300 line kilometers was flown.

2. SURVEY AREA

The survey area is indicated on the map below. The flight lines were flown in a roughly NE/SW direction parallel to the survey boundary at a mean spacing of 200 meters.



3. AIRCRAFT EQUIPMENT AND PERSONNEL

3.1 Aircraft

The helicopter used for the survey was Bell 206L owned and operated by Quasar Aviation. Installation of the geophysical and ancillary equipment was carried out by Aerodat at Squamish. The helicopter was operated at a mean terrain clearance of 60 meters, where safety permitted.

3.2 Equipment

3.2.1 Electromagnetic System

The electromagnetic system was an Aerodat/ Geonics/Geotech 3 frequency system. Two vertical coaxial coil pairs were operated at 935 and 4570 Hz and a horizontal coplanar coil pair at 4270 Hz. The transmitter-receiver separation was 6 meters. In-phase and quadrature signals were measured simultaneously for the 3 frequencies with a time-constant of 0.1 seconds. The EM bird was towed 30 meters below the helicopter.

3.2.2 VLF-EM System

The VLF-EM system was Herz Totem 2A. This instrument measures the total field and quadrature components of the two selected frequencies; Jim Creek, Washington (NLK/24.8 KHz) and Cutler, Maine (NAA/17.8 KHz). The sensor was towed in a bird 15 meters below the helicopter.

3.2.3 Magnetometer

The magnetometer was a Geometrics G-803 proton precession type. The sensitivity of the instrument was 1 gamma at a 1 second sample rate. The sensor was towed in a bird 15 meters below the helicopter.

3.2.4 Magnetic Base Station

An IFG proton precession type magnetometer was operated at the base of operations to record diurnal variations of the earths magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation.

3.2.5 Radar Altimeter

A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

3.2.6 Tracking Camera

A Geocam tracking camera was used to record flight path on 35 mm film. The camera was operated in frame mode and the fiducial numbers for cross reference to the analog and digital data were imprinted on the margin of the film.

3.2.7 Analog Recorders

A RMS 16-channel dot-matrix recorder was used to display the data during the survey. The chart speed was 2 mm/sec. and in addition to manual and time fiducials the following data was recorded:

Input		Channel #	Scale
Altimeter		00	10 ft./mm (500 ft. at top edge of chart)
VLF-EM	Total Field "Maine"	02	2.5%/mm
	Quadrature "Maine"	04	2.5%/mm
	Total Field "Washington"	03	2.5%/mm
	Quadrature "Washington"	05	2.5%/mm
EM	Quadrature 4270 Hz	06	2 ppm/mm
	In-phase 4270 Hz	07	2 ppm/mm
	Quadrature 4570 Hz	08	1 ppm/mm
	In-phase 4570 Hz	09	1 ppm/mm
	Quadrature 935 Hz	10	1 ppm/mm
	In-phase 935 Hz	11	1 ppm/mm
Magnetometer		01	2 gammas/mm

3.2.8 Digital Recorder

A Perle DAC/NAV data system recorded the survey data on cassette magnetic tape. Information recorded was as follows:

Equipment	Interval
EM	0.1 seconds
VLF-EM	1.0 seconds
Magnetometer	1.0 seconds
Altimeter	1.0 seconds
Fiducial (time)	1.0 seconds
Fiducial (manual)	0.2 seconds
Mini-Ranger	0.2 seconds

3.2.9 Navigation System

A Motorola Mini-Ranger III radar positioning system was used to provide precise positioning control. Transponders located in the vicinity of the survey area were monitored by the airborne system to determine range-range data several times per second. The instrument operates at radar frequencies and is limited to line of sight range. The relief in the survey area sufficiently limited its overall effectiveness and its use for general navigation and flight path recovery was abandoned.

3.3 Personnel

Personnel directly involved with the survey operation were as follows:

Pilot: S. Rogers

Equipment Operator/Technician: P. Moisan

4. DATA PRESENTATION

4.1 Flight Path Recovery

Navigation and flight path determination was carried out visually using a photomosaic base provided by Kidd Creek. For compilation purposes the plotted fiducials were transferred from the photomosaic to an enlarged topographic map base.

4.2 Electromagnetic

The Aerodat 3 frequency system utilizes 2 different transmitter/receiver coil geometries. The traditional coaxial coil configuration is operated at 2 frequencies, 935 and 4570 Hz and a second horizontal coplanar coil configuration is operated at 4270 Hz.

A given conductive source within the detection range of the system will couple differently with the coaxial as opposed to coplanar coil pairs. As a result the characteristic shape of the anomaly may differ significantly between geometries.

In the case of a thin steeply dipping dyke-like feature, the coaxial coil pair yield a symmetric peak directly over the conductor whereas the coplanar coil pair yield a minimum flanked by positive side lobes. As the dip of the conductor decreases the coaxial anomaly shape changes slightly but in the case of the coplanar coil pair the side lobe on the down dip side strengthens relative to that on the up dip side. This asymmetry characteristic may be used for estimating dip.

As the thickness of the conductor increases the coaxial response shape changes slightly. However, in the case of the coplanar coils the minimum response directly over the conductor diminishes in amplitude relative to the positive side lobes and in the limiting case of a sphere or horizontal sheet-like conductor the minimum will disappear completely.

In general the coaxial coil pairs operated at two frequencies provide a conductive response range sufficiently broad to ensure a good response from geologic conductors. The coplanar coil pair provides additional information well suited to the interpretation of the structure of the conductive anomaly.

The Airborne Electromagnetic Survey Map shows inphase anomaly amplitude in parts per million (ppm) of the primary field strength, and apparent conductances. The apparent conductance is determined by applying the inphase and quadrature anomaly amplitudes of the (4570 Hz) coaxial coil configuration to the phasor diagram for the vertical half-plane model. The relationship of apparent conductance to true conductance, which in the case of narrow, slab-like bodies is the product of the electrical conductivity and average thickness, depends upon how closely the body approximates the sheet-like form, and upon how nearly at right angles its strike direction is to the flight line of the aircraft.

Conductance in mhos is the reciprocal of resistance in ohms and is a geologic parameter because it is characteristic of the conductor alone. It is generally independent of frequency and flying height (or depth of burial) and relatively independent of conductor strike length and dip. The inphase amplitude is a function of both flying height and dip, and is more strongly affected by conductor size than is conductance. Although the conductances presented are apparent only, they are most useful for comparative evaluation of conductors.

Apparent conductance values are divided into 10 ranges shown on the map legend. These are represented on the map as a number within a circle at the anomaly location. This procedure generally tends to make the work of diagnosis easier and is also useful in planning follow-up procedures.

Also determined from the phasor curves but not shown in the Airborne Electromagnetic Survey Map are the apparent depths to the conductors. Although the phasor curves are often able to distinguish between conditions of comparatively thick and thin overburden, the depth estimates are not generally reliable.

Some of the more common reasons for this area:

(i) the conductivity of the body may change with depth

(ii) the conductor plunges

(iii) the dip is substantially less than vertical

(iv) interference from conductive overburden or host rock has distorted the anomalies

(v) the body has too short a strike length to give a good half-plane response

Any of the conditions enumerated above may affect the anomaly amplitudes. Some will cause roughly proportionate changes in both phases, so that the depth estimates tend to be more seriously affected than the conductance estimates.

The conductance values are divided into groups, and the symbols given in the Interpretation Map indicate the range into which each analysis falls. This procedure generally tends to make the work of diagnosis easier. Most overburdens have apparent conductances which fall into the lowest range on the scale (< 2 mhos), whereas conductive clay deposits may have apparent conductances in the next higher range (2-4 mhos). Also included as a general rule in the two lowest ranges are the very weak bedrock conductors, such as unmineralized faults and shears, referred to as "structural" conductors.

The higher ranges in the scale of apparent conductances (> 4 mhos) indicate that a significant fraction of the electrical conduction is electronic rather than electrolytic in nature. Materials which conduct electronically are limited to the metallic sulphides and to graphite. Thus, the higher apparent conductance categories are generally limited to graphite - and to sulphide-bearing rocks, and are referred to as "mineralized" conductors.

The apparent conductance of a rock unit, in mhos, is very largely an indicator of its electrical properties. The value is affected to some extent by the strike length of the body (if it is short), and by the dip; but these effects are comparatively minor, and are unlikely to cause more than a 30% change. A strong conductance (> 20 mhos) indicates well-connected mineralization extending throughout a fairly large region, and this often suggests either graphitic zones or massive sulphides. Disseminated sulphides, which typically occur in porphyry type deposits, generally have low to moderate conductances.

A listing of responses together with amplitude (in ppm), apparent conductances, apparent depths to the conductor and sensor height is provided in the appendix. Profiles of inphase and quadrature EM response are shown along the flight lines. These profiles are transcribed and plotted from magnetic tape recorded in flight, after assignment of a suitable base level.

The "Electromagnetic Survey Interpretation Map" presents the flight path together with anomaly symbols indicating the inphase response in ppm and estimated conductance based on the coaxial coil pair operated at 4570 Hz.

Also indicated on this map are interpreted conductor axes. These axes have been identified by analysis of profile shape from line to line and drawn only where a reasonable correlation of response shape could be identified.

Where the conductor axis is coincident with a magnetic anomaly or likely due to cultural interference such as power lines it is identified by a code shown in the map legend.

4.3 Magnetics

The Total Field Magnetic Map shows contours of the total magnetic field, uncorrected for regional variation.

A correction for diurnal variation was made by direct subtraction of the recorded magnetic base station variation. Whether an EM anomaly with a magnetic correlation is more likely to be caused by a sulphide deposit than one without depends on the type of mineralization. An apparent coincidence between an EM and a magnetic anomaly may be caused by a conductor which is also magnetic, or by a conductor which lies in close proximity to a magnetic body. The majority of conductors which are also magnetic are sulphides containing pyrrhotite and/or magnetite. Conductive and magnetic bodies in close association can be, and often are, graphite and magnetite. It is often very difficult to distinguish between these cases. If the conductor is also magnetic, it will usually produce an EM anomaly whose general pattern resembles that of the magnetics. Depending on the magnetic permeability of the conducting body, the amplitude of the inphase EM anomaly will be weakened, and if the conductivity is also weak, the inphase EM anomaly may even be reversed in sign.

5. RECOMMENDATIONS

The Electromagnetic Interpretation Map presents a number of conductors identified by the survey. The calculated apparent conductance is consistently low and typical of "structural" type conductors or very minor mineralization. On this basis alone high priority follow up investigation cannot be recommended for any of the anomalies.

A complicating factor, apparent in many of the electromagnetic responses, has been the influence of nearby magnetic features on the in-phase response, leading to negative or reduced response levels. This phenomenon will lead to an under-estimate of conductance.

As a result it is recommended that all of the anomalies be considered by geologists familiar with the area, who can assign follow up priority for the conductors on the basis of favourable geologic association.

Respectfully submitted,

AERODAT LIMITED.

REGISTERED PROFESSIONAL ENGINEER R. L. S. HOGG PROVINCE OF ONTARIO

September 22, 1982.

R. L. Scott Hogg, B.A.Sc., P. Eng.

APPENDIX I

Anomaly List

FLIGHT	LINE	ANOMALY	CATAGORY	FREQUENCY 4570 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	1	A	0	0.0	0.7	0	0	32
1	1	B	0	-0.4	1.9	0	0	12
1	1	C	0	-1.4	2.8	0	0	8
1	1	D	0	0.5	1.1	0	50	33
1	2	A	0	-0.3	0.5	0	0	40
1	2	B	0	0.0	1.5	0	0	16
1	2	C	0	-0.1	0.9	0	0	22
1	2	D	0	-0.8	0.9	0	0	14
1	2	E	0	0.0	0.8	0	0	42
1	3	A	0	0.2	0.7	0	24	61
1	3	B	0	-3.0	1.1	0	0	11
1	3	C	0	-1.9	0.7	0	0	13
1	3	D	0	-4.5	1.7	0	0	15
1	3	E	0	-3.4	1.2	0	0	14
1	3	F	0	-0.2	0.6	0	0	16
1	3	G	0	0.6	0.8	0	70	34
1	3	H	0	0.2	0.9	0	38	33
1	4	A	0	-7.9	5.4	0	0	5
1	4	B	0	-6.8	2.8	0	0	12
1	4	C	0	-3.8	1.6	0	0	9
1	4	D	0	0.4	0.4	0	99	38
1	4	E	0	0.0	0.7	0	0	29
1	5	A	0	0.1	0.6	0	0	27
1	5	B	0	-2.8	1.9	0	0	19
1	5	C	0	-2.8	1.4	0	0	20
1	5	D	0	-1.0	1.2	0	0	13
3	6	A	0	0.0	1.1	0	0	49
3	6	B	0	-3.8	0.9	0	0	21
3	6	C	0	-1.8	0.5	0	0	36
3	6	D	0	0.1	0.3	0	0	56
3	7	A	0	0.0	0.6	0	0	58
3	7	B	0	-0.3	0.8	0	0	43
3	7	C	0	-0.7	0.7	0	0	30
3	7	D	0	-0.8	0.8	0	0	19
3	8	A	0	0.0	1.9	0	0	15
3	8	B	0	-0.6	2.1	0	0	11
3	8	C	0	-0.1	1.9	0	0	22
3	8	D	0	-0.8	1.0	0	0	32

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

FLIGHT	LINE	ANOMALY	CATAGORY	FREQUENCY 4570 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
3	8	E	0	-0.7	1.0	0	0	40
3	8	F	0	-3.3	2.8	0	0	21
3	9	A	0	0.6	1.1	0	53	33
3	9	B	0	-0.1	0.7	0	0	33
3	9	C	0	-0.5	1.7	0	0	19
3	9	D	0	-0.5	1.7	0	0	15
3	10	A	0	0.2	0.2	0	103	72
3	11	A	0	0.2	0.4	0	80	41
3	12	A	0	0.0	0.4	0	0	41
3	13	A	0	0.1	0.4	0	0	36
3	14	A	0	0.0	0.3	0	0	44
3	14	B	0	-0.5	0.1	0	0	37
4	15	A	0	-0.3	2.6	0	0	21
4	15	B	0	0.0	2.3	0	0	29
5	171	A	0	0.0	0.0	0	0	0
5	171	B	0	0.2	0.4	0	74	47
5	171	C	0	-0.3	1.1	0	0	39
5	18	A	0	-1.3	0.1	0	0	23
5	18	B	0	0.1	0.7	0	0	39
5	18	C	0	0.2	0.5	0	63	43
5	19	A	0	0.5	1.5	0	24	44
5	19	B	0	0.0	0.7	0	0	56
5	19	C	0	0.1	1.2	0	0	58
5	19	D	0	-7.2	0.0	0	0	0
5	20	A	0	0.5	1.3	0	32	43
5	21	A	0	0.0	0.8	0	0	50
5	21	B	0	0.2	1.0	0	24	43
5	21	C	0	0.0	1.3	0	0	39
5	22	A	0	-0.4	1.1	0	0	34
5	22	B	0	0.5	1.5	0	36	32
5	23	A	0	-0.8	1.0	0	0	31

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

FLIGHT	LINE	ANOMALY	CATAGORY	FREQUENCY 4570 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
5	23	B	0	0.7	0.8	0	45	61
5	24	A	0	0.1	1.3	0	0	51
5	24	B	0	-0.1	1.0	0	0	29
5	25	A	0	0.1	1.0	0	0	36
5	25	B	0	0.0	0.9	0	0	27
6	26	A	0	0.2	2.9	0	7	25
6	26	B	0	0.5	1.7	0	25	38
6	26	C	0	0.6	4.0	0	27	11
6	27	A	0	0.0	1.7	0	0	24
6	27	B	0	1.7	5.1	0	2	43
6	27	C	0	1.0	4.6	0	17	23
6	27	D	0	-4.2	0.0	0	0	2
6	28	A	0	0.4	1.3	0	31	39
6	28	B	0	0.9	1.2	0	21	69
6	29	A	0	1.3	1.4	0	13	75
6	29	B	0	0.4	2.3	0	33	14
6	30	A	0	0.0	1.1	0	0	17
6	30	B	0	2.5	4.8	0	15	36
6	30	C	0	1.9	4.2	0	33	18
6	30	D	0	0.1	0.9	0	0	39
6	31	A	0	2.3	2.8	0	3	65
6	31	B	0	-0.7	0.9	0	0	14
6	31	C	0	-0.3	0.8	0	0	15
6	31	D	0	-0.6	2.2	0	0	11
6	31	E	0	-0.4	2.7	0	0	17
6	32	A	0	0.1	1.6	0	0	14
6	32	B	0	0.0	1.5	0	0	12
6	32	C	0	0.1	1.6	0	0	28
6	32	D	0	0.6	1.2	0	41	41
6	33	A	0	0.7	1.3	0	43	38
6	33	B	0	-0.2	1.3	0	0	24
6	33	C	0	-0.4	2.7	0	0	16
6	34	A	0	0.3	0.7	0	41	54
6	34	B	0	0.5	0.6	0	64	53

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

FLIGHT	LINE	ANOMALY	CATAGORY	FREQUENCY 4570 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
6	34	C	0	0.2	1.2	0	24	35
6	35	A	0	0.5	1.2	0	19	59
6	35	B	0	0.3	0.6	0	93	12
6	35	C	0	0.4	1.7	0	31	28
6	36	A	0	0.2	1.5	0	0	56
6	36	B	0	0.2	0.6	0	59	35
6	36	C	0	-0.8	1.0	0	0	6
6	37	A	0	0.7	1.0	0	37	58
6	37	B	0	0.3	0.6	0	71	34
6	37	C	0	0.2	0.4	0	71	50
6	38	A	0	0.5	0.6	0	87	30
6	38	B	0	1.2	0.7	0	55	57
6	38	C	0	0.7	1.5	0	47	28
6	39	A	0	0.6	0.8	0	48	56
6	39	B	0	0.2	1.4	0	41	13
6	39	C	0	-0.7	0.8	0	0	2
6	39	D	0	0.0	0.8	0	0	26
6	40	A	0	0.1	1.0	0	0	41
6	40	B	0	-0.3	1.1	0	0	14
6	41	A	0	0.6	1.1	0	48	39
6	42	A	0	0.2	1.7	0	20	27
6	44	A	0	0.0	0.5	0	0	30
6	45	A	0	0.2	0.8	0	41	36
6	46	A	0	0.0	0.6	0	0	29
6	48	A	0	1.0	2.3	0	51	13
6	50	A	0	0.0	0.7	0	0	0
6	51	A	0	-1.4	1.0	0	0	11
6	521	A	0	0.2	0.5	0	54	52
6	53	A	0	-0.1	1.2	0	0	35

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

FLIGHT	LINE	ANOMALY	CATAGORY	FREQUENCY 4570 INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
6	54	A	0	-0.1	0.5	0	0	28
6	55	A	0	0.0	0.6	0	0	22
6	55	B	0	-0.7	1.8	0	0	13
6	56	A	0	-3.3	0.5	0	0	26
6	56	B	0	-0.9	1.2	0	0	14
6	58	A	0	0.3	0.7	0	39	57
6	59	A	0	0.4	0.9	0	47	41
6	60	A	0	0.3	2.7	0	23	15
6	60	B	0	0.0	1.7	0	0	18
6	61	A	0	-0.4	0.8	0	0	21
6	61	B	0	-3.6	0.2	0	0	11
6	61	C	0	0.0	1.8	0	0	31

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

APPENDIX B

STATEMENT OF QUALIFICATIONS

APPENDIX B

Shelley C. James - geologist

I obtained a B.Sc. Hons. degree in geology from the University of the Witwatersrand, South Africa in 1971. I have been engaged in exploration in South Africa (O'Okiep Copper Company, a Newmont subsdiary, and Union Carbide Exploration Corporation) and in Canada (Canadian Superior Exploration Ltd. and Kidd Creek Mines Ltd.) from 1972 to the present. I am a member of the Geological Society of South Africa and a fellow of the Geological Association of Canada.

R.L. Scott-Hogg - geophysicist

R.L. Scott-Hogg is a registered professional engineer in the Province of Ontario.

APPENDIX C

STATEMENT OF EXPENDITURES

Airborne Geophysical Survey

Aerodat Ltd. (invoice) 300 line-kilometre @ $40 per kilometre; mobilization and demobilization	$15,500.00
Quasar Helicopters Ltd. (invoice) 4-12 June, Bell 206L-1; 26.3 hours at $495 per hour, fuel and crew costs	$15,348.25
Mulligan 1 pro-rated share: 25% of total survey costs of $30,848.25	$ 7,712.06

Kidd Creek Mines Ltd

MULLIGAN GROUP

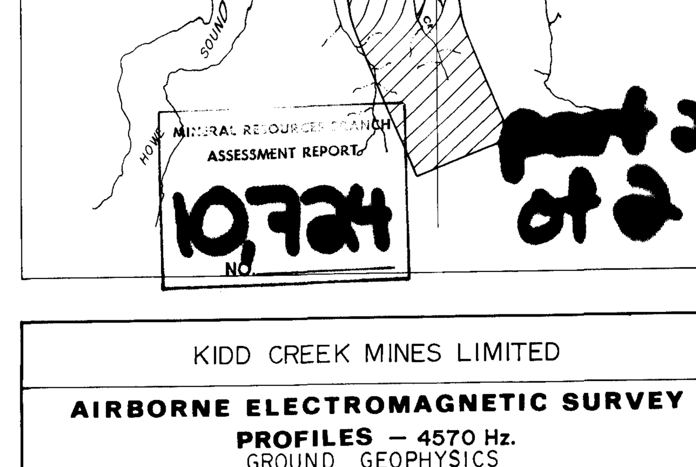
GEOLOGY

Contour interval 20m

WORK BY	DRAWN BY	DATE	DRW,G NO.
[illegible]	[illegible]	20 NOV., 1978	

Scale in Metres

Refuse
Mount Mulligan
Mount Baldwin
Creek
River
Average bird height ....30 metres
Line spacing ....200 metres
AERODAT HEM SYSTEM RESPONSE
VERTICAL HALF - PLANE
QUADRATURE (ppm)
IN-PHASE (ppm)
f - Frequency (Hz)
σ t - Conductance (siemens)
EM RESPONSE
Conductivity thickness in mhos
⑨ > 500
⑧ 250 – 500
⑦ 125 – 250
⑥ 60 – 125
⑤ 30 – 60
④ 15 – 30
③ 8 – 15
② 4 – 8
① 2 – 4
○ < 2
25 Inphase response
EM ANOMALY SYMBOLS
Interpreted conductor axis
Conductor with coincident magnetic anomaly
Conductor axis doubtful
INDEX MAP
MILES
123°00'
49°45'
Mamquan R
SQUAMISH
SOUND
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,724
NO
part 2 of 2
KIDD CREEK MINES LIMITED
AIRBORNE ELECTROMAGNETIC SURVEY
INTERPRETATION MAP
SQUAMISH
BRITISH COLUMBIA
SCALE 1/10,000
1/2 mile
Kilometre
Fig. 5
DATE: June, 1982
N.T.S. No: 92G
MAP No: 1
AERODAT



KIDD CREEK MINES LIMITED

AIRBORNE ELECTROMAGNETIC SURVEY

PROFILES — 4570 Hz.

GROUND GEOPHYSICS

LINE LOCATION

SQUAMISH

BRITISH COLUMBIA

Fig. 6

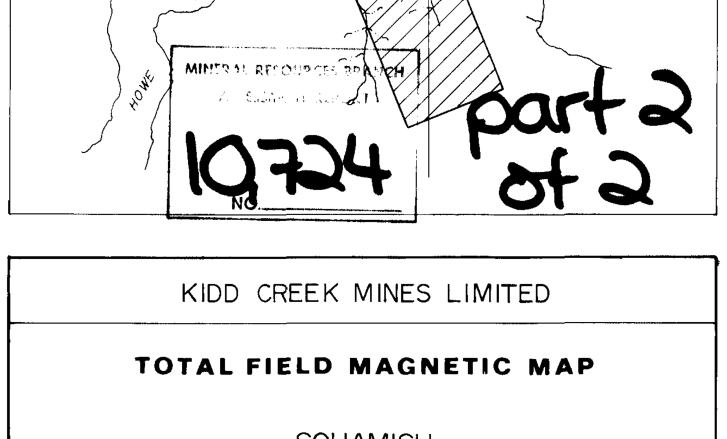
SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT

DATE:	June, 1982
N.T.S. No:	92G
MAP No: 2	Additions: G.Hendrikson Sept. 1982



KIDD CREEK MINES LIMITED

TOTAL FIELD MAGNETIC MAP

SQUAMISH

BRITISH COLUMBIA

SCALE 1/10,000

Fig. 7

AERODAT

DATE:	June, 1982
N.T.S. No:	92G
MAP No:	3