

ARCHER, CATHRO & ASSOCIATES LTD.

CONSULTING GEOLOGICAL ENGINEERS

P.O. BOX 1051
WHITEHORSE, YUKON

REPORT ON

AIRBORNE GEOPHYSICAL SURVEY

GEOCHEMICAL SURVEY

AND

GEOLOGICAL SURVEY

SPLIT AND WINDY CLAIMS

PONTOON LAKE

ANVIL- VANGORDA DISTRICT

CLAIM SHEET 105-K-3

FOR

DYNACORE EXPLORATIONS LTD.

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

D. C. Bradley
RESIDENT GEOLOGIST

Approved as to cost in the amount
of: \$ 7877.01

R. J. Cathro
REGISTERED MINING ENGINEER

R.J. Cathro, P. Eng.

June 1- July 31,

1966.

Accepted as representation work
under Section 53(4) Yukon Quartz
Mining Act.

[Signature]
COMMISSIONER OF YUKON

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MAPS

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Figure 7-	Lead Geochemistry
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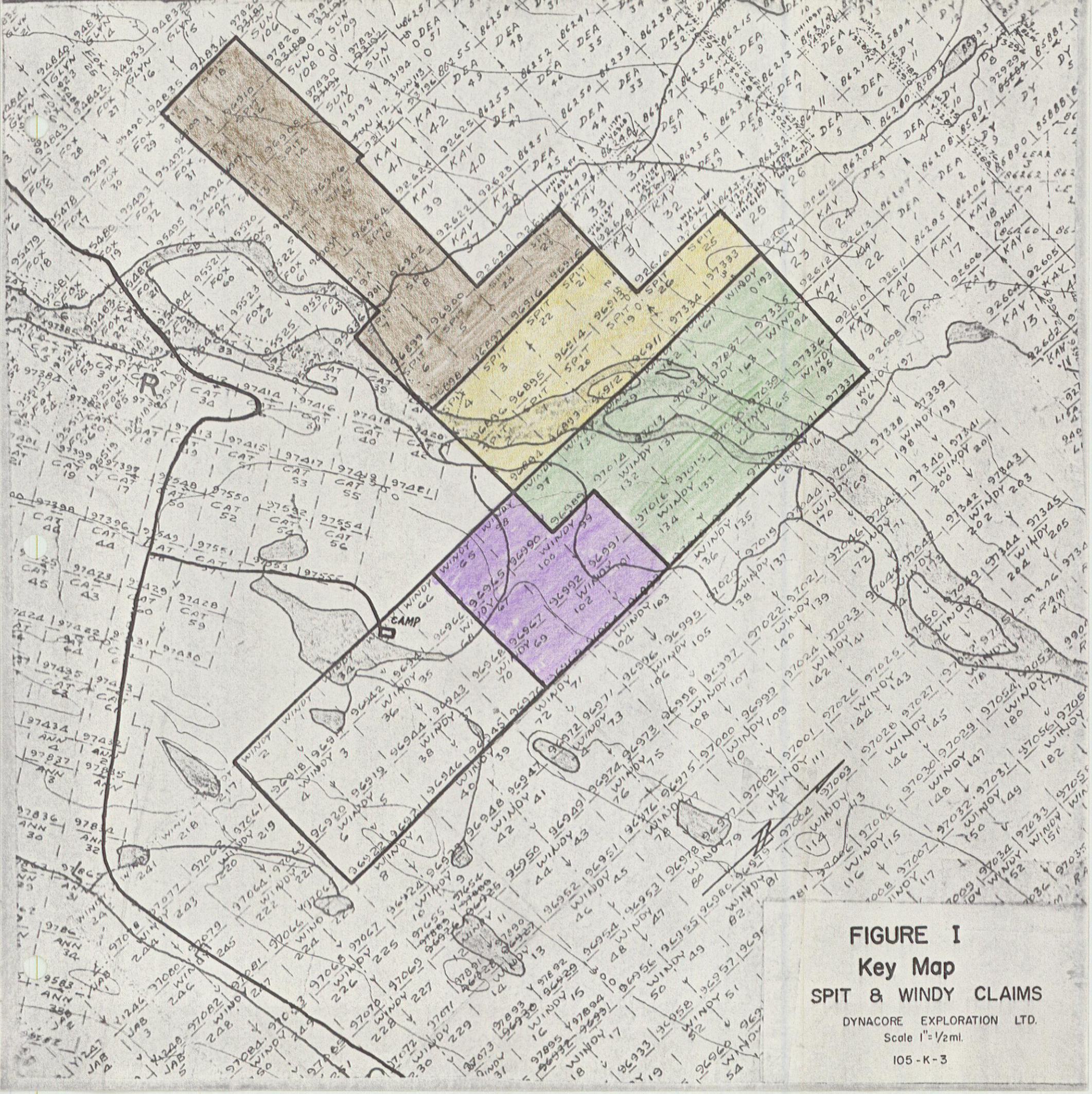


FIGURE I
Key Map
SPIT & WINDY CLAIMS

DYNACORE EXPLORATION LTD.
Scale 1"=1/2mi.

INTRODUCTION

During the 1966 field season, an airborne geophysical survey and combined geochemical and geological survey was conducted over the Spit and Windy property of Dynacore Explorations Ltd., under the supervision of the writer. An airborne Mag survey was previously flown over the property by Canadian Aero Services Ltd. An independent report on the property was prepared by S. J. Hunter, P. Eng., Consulting Engineer. The program was directed by L. Pancer, P. Eng., President of Dynacore.

This 65-claim property is situated near Pontoon Lake, and crosses Pelly River in claim sheet 105-K-3, as shown on Figure 2. It is accessible by all-weather road to the old Abel Linecutting camp on Pontoon Lake, ~~and~~ ^{since} the Ross River- Carmacks Highway and Blind Creek tote road cross the claims.

AIRBORNE GEOPHYSICAL SURVEYS

Canadian Aero Service Ltd. flew a magnetic survey over the property on May 16 and 17 in a Bell 47G-3 helicopter owned by Klondike Helicopters. The results of this survey are shown in Figure 3.

A combined magnetometer (Mag) and electromagnetometer (EM) survey was conducted under contract by Lockwood Survey

Corp. Ltd. on July 13, 1966. The equipment was mounted in a Bell 204 B turbine helicopter on charter from Okanagan Helicopters Ltd. The survey equipment consisted of a continuous-reading Gulf magnetometer and EM coils with a primary current of 400 cycles per second, which were mounted in a bird which was towed beneath the aircraft by a 100 foot long cable. An air-photo mosaic of the claim group was used for navigation and a continuous strip photo record of the flight path was made. The aircraft was kept as close as possible to a mean terrain clearance of 200 feet by means of a radio altimeter and this was recorded on an APN tape. The mean terrain clearance of the bird was thus about 100 feet. The survey recording equipment and camera were mounted in the cabin of the helicopter and produced graphical tape records of the Mag, EM and elevation profiles. Flight lines were spaced at 1000 foot intervals. A total of 31 line-miles were flown.

A preliminary plot of the Mag and EM data was made in the field, on contract by Explorations Geophysics (Yukon) Ltd., and interpreted by Dr. D.W. Smellie, consulting geophysicist, of that firm. The preliminary plotting and interpretation, which was based on uncorrected data, was made to detect top priority anomalies

which required immediate follow-up before the end of the summer. It was anticipated that final data reduction by Lockwood would take some time and this was not received until late December.

The results of this survey are shown in Figures 4 and 5. A copy of Dr. Smellie's preliminary interpretation is included in the appendix.

GEOCHEMICAL AND GEOLOGICAL SURVEY

Pelly River crosses the centre of the claims. On the northeast side, quartz-sericite schist float in the overburden and similar outcrop on the Anvil Mining claims nearby indicate that these claims are probably underlain by Mississippian schist, the favourable rock sequence in this district. On the southwest side of the river, a belt of limestone and impure quartzite lies near Pontoon Lake and outcrops in several places. These rocks have been mapped by the Geological Survey of Canada (Map 13-1961) as part of the Mississippian schist sequence but they do not appear to be of economic interest. The geology is shown on Figure 5.

Geochemical sampling was conducted along claim base lines at intervals of 400 feet. A total of 80 samples were collected and analyzed.

Control for the sampling was provided by aerial photographs, tape, and compass. Sample locations were marked with plastic flagging. Sampling was done with a mattock grub-hoe and wherever possible the B 1 horizon was sampled. In a few cases permafrost prevented the taking of an ideal sample, free from organic matter or volcanic ash. However, since geochemical targets in this district are large and the spacing of the samples was fairly close, it is felt that nothing significant had been missed.

The samples were collected in individual small kraft bags and sent to Atlas Testing Labs, Edmonton, for analysis. Analysis consisted of hot aqua regia extraction of heavy metal ions from the screened and dried sample, and metal content determination by atomic absorption. All samples were analyzed for copper, lead, and zinc.

Figures 6, 7, and 8 show the plotted values for copper, lead, and zinc respectively. No samples were collected from the Pelly River flood plain. A weakly anomalous zone in copper and lead occurs near the Dynacore- Anvil boundary, on the northeast side of the river. These values have probably been carried downslope from the Anvil property. A few fairly low

5.

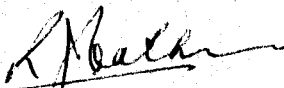
values near Pontoon Lake appear to be in glacial till and are probably not significant.

CONCLUSIONS AND RECOMMENDATIONS

The best indications of mineralization, the geochemical and magnetic response on the northeast side of the Pelly River, are probably on the Anvil property. However, because the formations here dip flatly from the Anvil property onto the Dynacore property, these claims should be kept in good standing to await developments. No further work is recommended on the southwest side of the river.

A limited program of detailed geochemical sampling should be conducted on the northeast side of the river to better define the source of the known anomalies.

Respectfully submitted,
ARCHER, CATIRO & ASSOCIATES LTD.



R. P. Cathro, P. Eng.
agent for

RJC:ps

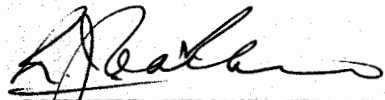
Dynacore Explorations Ltd.

Appendix I

AFFIDAVIT


I, Robert J. Cathro, Consulting Geological Engineer, of Whitehorse, agent for Dynacore Explorations Ltd., have compiled the statement of costs presented in Appendix II of this report, and do hereby make oath and say:

That to the best of my knowledge and belief, the statement of costs as presented is a true and accurate representation of expenditures, to be applied as assessment work on the Spit and Windy Claims.


R.J. Cathro, P. Eng.

Sworn and subscribed to at
Whitehorse this 10 day of

January 1967.


A Commissioner for taking Affidavits
in and for the Yukon Territory.



BOX 999 - WHITEHORSE
 •• YUKON TERRITORY ••

SOLD TO . Mr. Lou Pancer,
 121 Richmond St. W.,
 . Toronto 1, Ontario.

DATE . May 25, 1966.

ACCOUNTS DUE WHEN RENDERED			PAYABLE AT PAR CALGARY	
CUSTOMER'S ORDER NUMBER	SHIP VIA	DATE SHIPPED	AIRCRAFT	TRIP NO.
			CF-UAJ	
QUANTITY	PART NUMBER	DESCRIPTION	PRICE	AMOUNT

PILOT: D. Hadler,

RE: Charter of one Bell 47G-3 Helicopter per authorized
 Daily Flight Reports No. 4913, 4914, attached.

FLYING: May 16, 17, 1966.

5:10 hours @ \$131.50 /hr. (\$130.00 + \$.10 gal./hr. @ 15 gal./hr.)	•	\$679.42
3:20 hours @ \$122.50 /hr.	•	408.33
		<u>\$1,087.75</u>

Rounding off in accordance with Rule 53(d) of our
 A.T.B. Charter Tariff.

TOTAL THIS INVOICE. • \$1,088.00

*Canadian Helic
 mag. survey*

[Signature]

Charter • Overhaul • Training • • • Bell and Hiller Helicopters

Nº 832

*Dynacore Explorations Ltd
 Approved for payment*

[Signature]

L. G. WHITE & ASSOCIATES LTD.
CONSULTING MINING ENGINEERS

TELEPHONE 684-5432

411 DAVIE BUILDING
1033 DAVIE STREET
VANCOUVER 5, B.C.

January 17, 1966

Mr. S. David Anfield
Barristers and Solicitors
3rd Floor - 535 Howe Street
Vancouver 1, B.C.

Re: Report on Spit and Windy Claim Groups.

TO: Professional Services to examination of all reports
and data, preparation of report.

Total Fees	\$ 225.00
Expenses, Typing	<u>18.36</u>
Total Charges	\$ 243.36

Certified Correct.....
L. G. White & Associates Ltd.

LOUIS PANCER, P. Eng.

MINING ENGINEER


121 RICHMOND ST. W. • TORONTO 1, CANADA • Telephone Empire 4-9471

I, LOUIS PANCER, Mining Engineer, of the City of Toronto, County of York, do hereby declare that I have rendered professional services to Dynacore Explorations Limited with respect to its "Spit" and "Windy" claims, in the Yukon Territory, in supervising and directing the field program on the said claims and reviewing progress reports with respect to same and advising and recommending further work thereon and that my fees for such services to-date hereof are in the sum of \$1,300.00.

DECLARED before me at the)
City of Toronto, in the)
County of York, this 4th)
day of January, 1967.)



Louis Pancer



A Notary Public in the)
for the Province of)
Ontario.)

Appendix II

STATEMENT OF COSTS

A. Geophysical Surveys

1. Canadian Aero Service Ltd.

a. equipment rental, operation & data reduction	\$2402.00	
b. helicopter rental- Klondike	<u>1088.00</u>	\$3490.00

2. Lockwood Survey Corp. Ltd. & Archer Cathro & Assoc. Ltd.

a. Helicopter rental- Okanagan Helicopters flying lines- 1:10 hours test flights, mobilization- :08 "		
	<u>1:18 hours</u>	
@ \$450.00/hour	\$585.00	
b. Crew accomodation @ avg. cost/line-mile	77.50	
c. Prelim. plotting & interp. @ \$2.25/l.m. plus drafting supplies & printing80.00	
d. Air photos, mosaic preparation, maps80.00	
e. Management fees @ \$3.00/claim180.00	
f. " expenses @ avg. cost/line-mile.	43.40	
g. Equipment rental- <u>estimate</u> - \$10.00/l.m.	310.00	
h. Data reduction- <u>Estimate</u> - \$20.00/l.m.620.00	
i. Final interpretation- <u>estimate</u> \$1.00/l.m.	<u>31.00</u>	\$2006.90

B. Geological and Geochemical Survey- Archer, Cathro & Assoc. Ltd.

a. Transportation- truck rental, G.N.A.	\$54.00	
b. Camp rental, groceries, radio, mobilization	638.25	
c. Field wages- 39 man-days	993.00	
d. Analysis- Atlas Testing Labs, 80 @ \$1.95 plus freight	165.00	
e. Supervision150.00	
f. Office expense- drafting, blueprinting etc.	<u>229.50</u>	\$2229.75

C. Consulting and Management Services

a. S.J. Hunter, P. Eng. L.G. White & Assoc. Ltd. preparation of qualifying report	\$243.36	
b. Louis Pancer, P. Eng.- direction of technical program	<u>1300.00</u>	\$1543.36

Grand Total \$9270.01

Appendix III

PERSONNEL ENGAGED IN 1966 FIELD WORK

A. AIRBORNE GEOPHYSICAL SURVEYS

Canadian Aero Services Ltd.		Toronto
D. Hadler	pilot	Klondike Helicopters Ltd.
T.R. Gurr	pilot	Okanagan " "
H. Sandau	operator	Lockwood Survey Corp. Toronto.
D. Gamble	technician	Expl. Geophysics (Yukon) Ltd.
D. Smellie	geophysicist	" " " "
R.J. Cathro	geol. engineer	Archer, Cathro & Assoc. Ltd.

B. GEOLOGICAL AND GEOCHEMICAL SURVEY

F.M. Smith	student geologist	Archer, Cathro & Assoc. Ltd.
J. Litsenburger	" "	" " " "
R. McGeachen	soil sampler	" " " "
J. McPherson	" "	" " " "
P. Turner	" "	" " " "
J. Dickson	" "	" " " "
B. Smail	" "	" " " "
N. Pelletier	cook	" " " "
M. Hommes	draftsman	" " " "
A. Archer	consulting engineer	" " " "
R. Cathro	" "	" " " "

Appendix iv
EXPLORATION GEOPHYSICS (Yukon) LTD.Archer and Cathro & Associates
P.O. Box 1051
Whitehorse Y.T.
Ltd.

WHITEHORSE, Y.T.

2 Aug; 1966

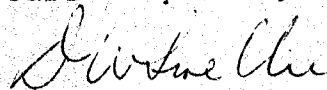
DYNACORE

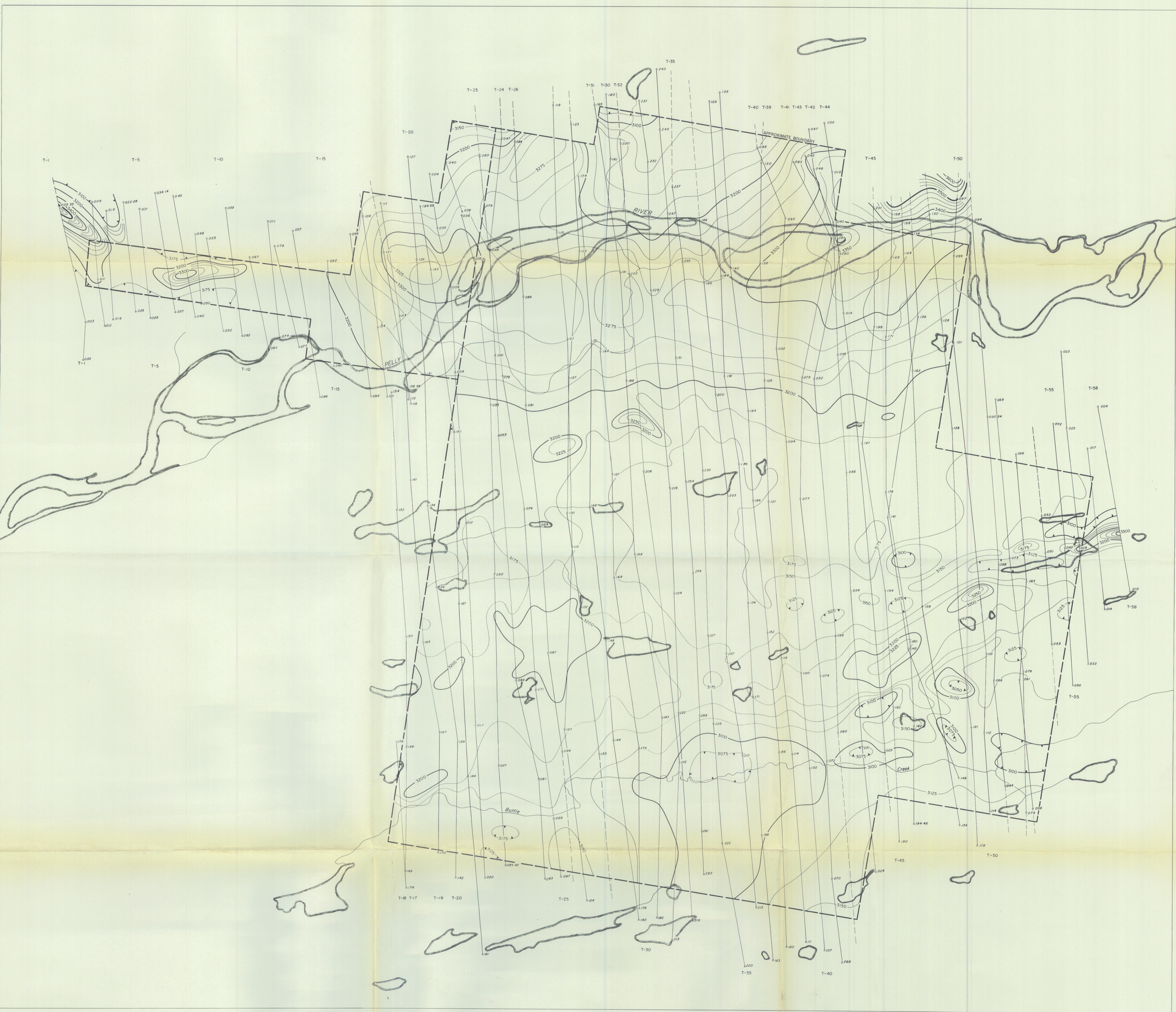
PRELIMINARY MAGNETIC AND ELECTROMAGNETIC RESULTS

We have examined the magnetic and electromagnetic data from a helicopter-borne survey of this area performed by the Lockwood Survey Corporation. The survey was flown during July 1966 and the final maps are expected at a later date. Final interpretation will involve a more detailed examination.

The survey showed a number of electromagnetic anomalies and a magnetic pattern of low relief. The preliminary examination of the data disclosed nothing on the SPIT and WINDY properties for first priority ground examination. A good quality conductor occurs on the BREEZE group at L-9(9714) denoting Flight line -9 at fiducial 9714 and at L-10(9878). This merits ground electromagnetic and magnetic investigation. A good quality conductor appeared on the neighboring JAYE property at L-1(8590) and L-2(9195).

Yours very truly,

D.W. Smellie P.Eng.
Director
Exploration Geophysics (Yukon) Ltd.



APPROXIMATE

HORIZONTAL CONTROL BASED ON PHOTO LAYDOWN

File
Airborne Geoph. Survey
SPIT & WINDY CLAIMS
Ref: Spit 5
Drawn & blue

BUTTLE CREEK AREA
 YUKON TERRITORY

SPIT & WINDY GROUP

SCALE 1 INCH TO 1320 FEET (APPROXIMATELY)

Fig. 2.

MEAN TERRAIN CLEARANCE 100 FEET
 TRAVERSE INTERVAL 1/8 MILE
 CONTOUR INTERVAL 25 GAMMAS
 BASE INTENSITY ARBITRARY

CANADIAN AERO SERVICE LIMITED
 OTTAWA, ONTARIO

DYNACORE EXPLORATIONS LIMITED
AIRBORNE GEOPHYSICAL SURVEY



MEAN FLIGHT LINE SPACING.....1000 FEET
 MEAN TERRAIN CLEARANCE.....200 FEET
 ELECTROMAGNETIC CONTOURS 5,10,15 etc. 1, 2, 3, 4 etc.
 NEGATIVE CONTOURS -5, -10 etc. -1, -2, -3, -4 etc.
 FIDUCIAL POINTS..... 3690
 FLIGHT LINES.....

The contours represent amplitude of in phase response of the resultant field expressed in parts per million of the primary.
 The figures $\frac{2.3}{0.2}$ represent amplitude in phase component / quadrature component
 The frequency of the primary current is 4000 cycles per second.

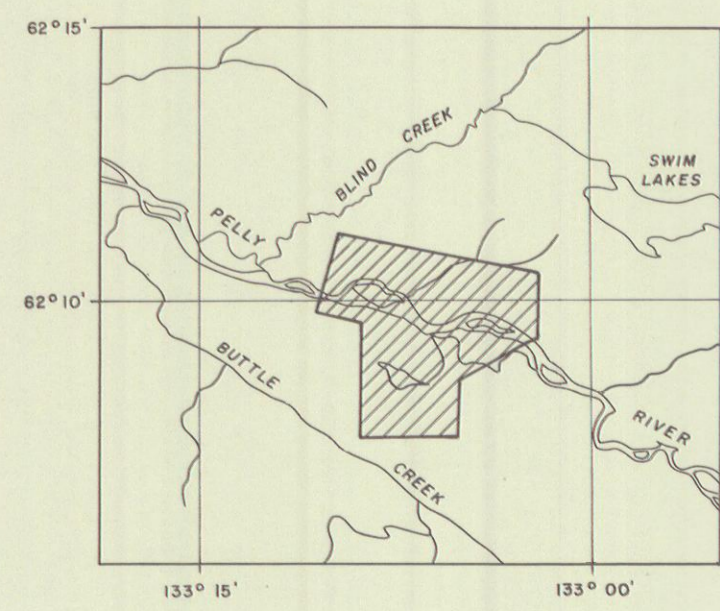
SPIT AND WINDY GROUP
YUKON TERRITORY

Flown and Compiled by
LOCKWOOD SURVEY CORPORATION LIMITED
TORONTO, CANADA
1966

SCALE
1000 0 1000 2000 3000 4000 5000
FEET
1 Inch to 1320 Feet (Approx.)

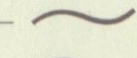


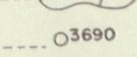
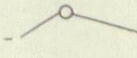
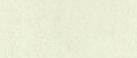
ELECTROMAGNETIC MAP

Fig. 3.



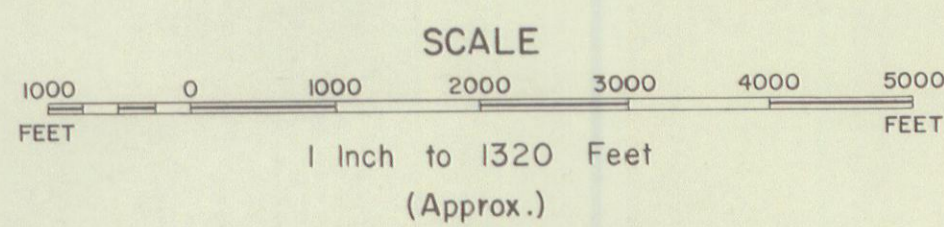
DYNACORE EXPLORATIONS LIMITED
 AIRBORNE GEOPHYSICAL SURVEY



- CONTOUR INTERVAL 20 GAMMA
- MEAN FLIGHT LINE SPACING 1000 FEET
- MEAN TERRAIN CLEARANCE 200 FEET
- 500 GAMMA CONTOUR 
- 100 GAMMA CONTOUR 
- 20 GAMMA CONTOUR 
- MAGNETIC LOW 
- FIDUCIAL POINTS  3690
- FLIGHT LINES 

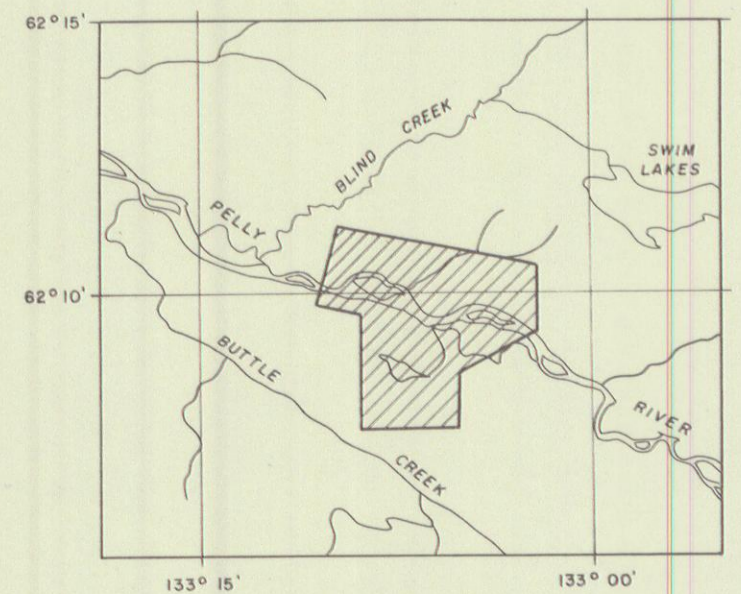
SPIT AND WINDY GROUP
 YUKON TERRITORY

Flown and Compiled by
 LOCKWOOD SURVEY CORPORATION LIMITED
 TORONTO, CANADA
 1966



AEROMAGNETIC MAP

Fig. 4.





LEGEND

- 7 Quartz-sericite schist
- 7a Quartzite chert outcrop
- 9b Conglomerate
- Assumed contact

**GEOLOGY & GEOCHEMICAL
SAMPLE LOCATION**

SPIT & WINDY CLAIMS DYNACORE EXPLORATIONS LTD. ANVIL DISTRICT YUKON	
ARCHER & CATHRO Consulting Geological Engineers	
SCALE	approx. 1" = 1/4 mile
DRAWN	M. Hammes
DATE	23 July 1966
DWG. No	5.



LEGEND

- 300+ ppm
- 145-299 "
- 49-144

GEOCHEMICAL SAMPLING
Copper PPM hot extraction

SPIT & WINDY CLAIMS DYNACORE EXPLORATIONS LTD. ANVIL DISTRICT YUKON	
ARCHER & CATHRO Consulting Geological Engineers	
SCALE	approx. 1" = 1/4 mile
DRAWN	M. Hammett
DATE	23 July 1966
DWG. No	6

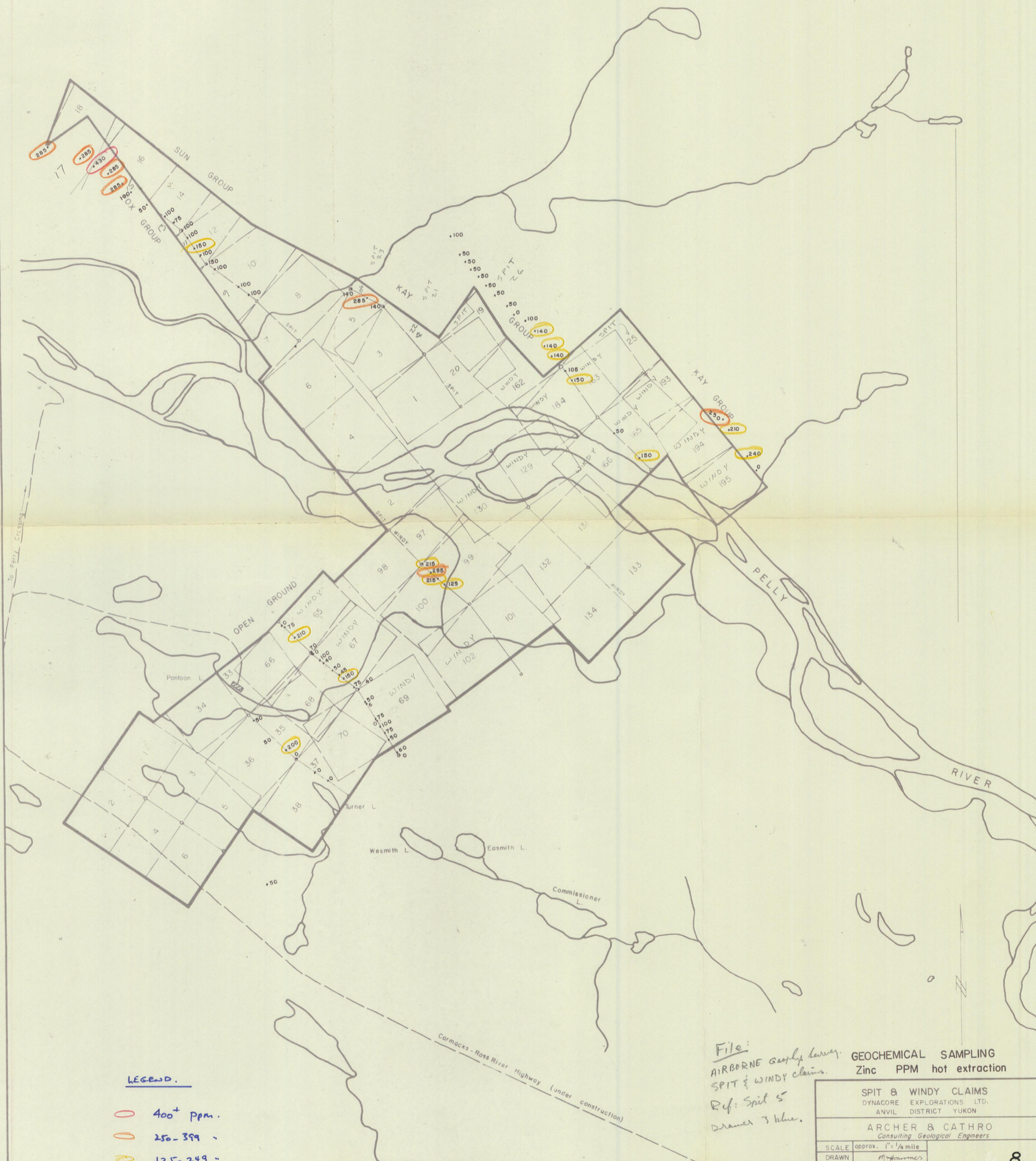


LEGEND

- 150+ ppm
- 75-149 "
- 50-74 "

GEOCHEMICAL SAMPLING
Lead PPM hot extraction

SPIT & WINDY CLAIMS	
DYNACORE EXPLORATIONS LTD.	
ANVIL DISTRICT YUKON	
ARCHER & CATHRO	
Consulting Geological Engineers	
SCALE	approx. 1" = 1/4 mile
DRAWN	M. Hamner
DATE	23 July 1966
DWG. No	7



LEGEND.

- 400+ ppm.
- 250-399 "
- 125-249 "

File:
 AIRBORNE Geophy survey
 SPIT & WINDY claims.
Ref: Spit 5
Drawn 3 blue.

GEOCHEMICAL SAMPLING
 Zinc PPM hot extraction

SPIT & WINDY CLAIMS
 DYNACORE EXPLORATIONS LTD.
 ANVIL DISTRICT YUKON

ARCHER & CATHRO
 Consulting Geological Engineers

SCALE	approx. 1" = 1/4 mile
DRAWN	M. Hammes
DATE	23 July 1966

DWG. N^o