

ARCHER, CATHRO

& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

VANCOUVER, B.C. (604) 688-2568

Box 4127, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415

1016 - 510 WEST HASTINGS STREET
VANCOUVER, B.C. V6B 1L8



GEOLOGICAL AND GEOCHEMICAL REPORT

BLENDE 1 - 15 CLAIMS
(YA43524-YA43538)

MARCH, 1982

CLAIM SHEET 106D/7



Latitude 64°24'N

Longitude 134°42'W

A.R. Archer, B.A.Sc., P.Eng.

W.D. Eaton, B.A., B.Sc.

WORK DONE JUNE 19, 1981

090998

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representative work in the amount
of \$ 1500.

A. Walden

for Regional Director, Exploration and
Geological Services for Commissioner
of Yukon Territory.

MAYO

FROM: Mining Recorder at

TO: Supervising Mining Recorder at Whitehorse, Y.T.

FOR ACTION ARE:



NEW APPL'N for PLACER LEASE to PROSPECT: Name: _____ Lease No.

RENEWAL APPL'N PLACER LEASE to PROSPECT: Name: _____ Lease No.

AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name: _____ Lease No.

ASSIGNMENT of PLACER LEASE No.
From: _____ To: _____

GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner: _____

DIAMOND DRILL LOGS:
Claims: _____ Claim sheet no: _____

QUARTZ ASSESSMENT REPORT:
Claims: BLENDE 1-15 Claim sheet no. 106-D-7

Type of report: G. G.C. Submitted by: HARPER, CATHRO & ASSOC.

Cls. work performed on: _____ \$ Req. for ren. application \$1500⁰⁰
(ACTUAL COST 1513⁰⁰)

[Signature]
Signature _____
Date Ret. _____

REPLY ACTION:

090998

Signature

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Figure in Pocket

Figure I - Geology, Geochemistry and Mineralization,
Blende Claims.

Introduction

The Blende 1-15 claims were staked by Archer, Cathro & Associates Limited in March, 1981 to cover a lead-zinc vein occurrence previously staked as the Will claims by Cyprus Anvil Mining Corporation in July, 1975. After the Will claims were allowed to lapse without systematic sampling of the mineralized outcrop or an evaluation of the silver content, the property was staked by Archer, Cathro because of its similarity to nearby occurrences being developed by Prism Resources Ltd. The property was examined by geologist W.D. Eaton on June 19, 1981 and a suite of samples taken to determine the silver content of the occurrence.

The property is well described in an assessment report written by Wayne Roberts and Peter Dean for Cyprus Anvil Mining Corporation in December, 1975 and held on file by DINA in Whitehorse. Figure 1 (in pocket) is a compilation of the 1975 data contained in the above mentioned report and also illustrates the location and assays for specimens taken from the No. 5 vein by Mr. Eaton on behalf of Archer, Cathro & Associates Limited.

Location, Access and Activity by Others

The Blende claims are located on Mt. Williams in the Mayo Mining District at Latitude 64°24'N, Longitude 134°42'W within NTS map sheet 106D/7. They are situated 65 km northwest of the United Keno Hill Mines Ltd.

townsite of Elsa, which is accessible from Whitehorse by 440 km of good grade all-weather gravel highway. A winter road (Wind River Trail) extends north of Elsa to within 11 km of the property.

The main explorer in this district during the past several years has been Prism Resources Ltd. which is actively developing vein-like silver-lead occurrences some 50 km to the east. Prism is currently drifting its Vera occurrence (on Rusty Mountain) where drilling to the end of 1980 had indicated 864,000 tonnes grading 9 oz/ton Ag and 3% combined lead and zinc.

Geology and Mineralization

The Blende veins and the Prism occurrences to the southeast are hosted by orange-weathering dolomite of the Gillespie Lake Group, which forms the upper portion of the Helikian or older Wernecke Supergroup. The Wernecke Supergroup hosts the well known Bonnet Plume district uranium and copper occurrences to the northeast.

The Gillespie Lake Group dolomite on the Blende claims has been folded into a broad west-trending anticline and is unconformably overlain to the south and northwest by Ordovician and younger limestone and dolomite. Altered dykes of diorite and gabbro that cut the Gillespie Lake Group in this area have been mapped by the GSC as Cretaceous. However, the writer believes they are much older, possibly even Helikian. Cyprus Anvil geologists subdivided the older dolomite into three sub-units as illustrated in Figure 1.

The most continuous mineralized zone on the property is the No. 5 vein which outcrops intermittently along the north ridge of Mt. Williams which rises to 1905 m (6250 ft) above sea level and exhibits steep, partially talus covered slopes. Additional vein zones were found by Cyprus Anvil near the summit of Mt. Williams and down its southeast flank to its base, some 685 m (2250 ft) lower in elevation.

The No. 5 vein lies entirely within Gillespie Lake Group dolomite. It consists of a well-defined vein fault up to 2 m wide along the footwall with irregularly developed mineralized breccia zones up to 15 m wide on its hanging wall. The vein strikes westerly, dips about 75° south, can be traced for a length of 820 m and is terminated by cross-faulting at both ends. Cyprus Anvil geologists visually estimated that the vein has the potential for up to 1 million tons grading 10% combined lead and zinc through the 120 vertical metres that are mineralized on surface. In June 1981 Archer, Cathro examined about 450 m of the No. 5 vein and found it to be accurately mapped. A total of seven specimens were collected during the visit and their locations are illustrated in Figure 1. Assay results and descriptions are listed in the following table:

<u>Sample No.</u>	<u>%Zn</u>	<u>%Pb</u>	<u>oz/ton Ag *</u>	<u>Description</u>
3853	6.10	3.34	1.76	Chip sample of talus and outcrop over a 3 m wide area of brecciated dolomite.
8959	4.52	1.81	1.34	1.5 m wide zone of vein gouge with no visible sulphide.
8958	7.16	3.34	2.20	2 m wide vein zone containing gouge but no visible sulphides.

* analyzed by fire assay methods at Chemex Labs Ltd., North Vancouver, B.C.; all samples assayed only trace gold.

<u>Sample No. (cont)</u>	<u>%Zn</u>	<u>%Pb</u>	<u>oz/ton Ag</u>	<u>Description (cont)</u>
3855	1.92	6.70	4.46	Oxidized rock fragments in vein gouge at same location as 8958.
3854	13.7	5.73	3.56	Chip from talus below vein over a length of 50 m.
3856	22.20	0.71	0.84	Grab sample of sphalerite-rich talus.
3857	9.30	38.60	34.34	Specimen of galena-rich talus.

Cyprus Anvil geologists located seven other veins, as illustrated on Figure 1. In addition, several unexplored kill zones were noted during the 1981 visit.

Geochemical Survey

A program of soil and stream sediment sampling was conducted in the vicinity of Mt. Williams by Cyprus Anvil in 1975. Results of copper, lead and zinc analyses are plotted on Figure 1. Lead is the best indicator for this type of mineralization due to its insolubility. Values over 200 ppm lead are considered anomalous and values over 500 ppm lead strongly anomalous under these weathering conditions. The following conclusions can be drawn from the lead data:

- a) stream sediment sample values (range 350 ppm to 3200 ppm lead) indicate that Mt. Williams is the main area of interest;
- b) soil sampling has located several areas peripheral to Mt. Williams with a lead response in the 200 to 500 ppm range that require further examination;

- c) the geochemical survey does not extend far enough beyond Mt. Williams to define the limits of the area of interest.

Conclusions and Recommendations

The No. 5 showing has strong continuity of mineralization both horizontally and vertically and has a favourable silver to lead ratio averaging 0.8 to 1. It is not difficult to visualize a deposit containing several million tons of mineralization grading 10% lead plus zinc and 3 to 4 oz/ton silver. If the vein averages 6 m wide and extends to depth for one half its strike length, it would contain over 6 million tons. There also appears to be good potential for developing smaller tonnages of mineralization grading in the range of 20% combined lead and zinc and 8 to 10 oz/ton silver. In addition, seven other less well explored zones have been found on the property and the geochemical sampling suggests that more exist.

The property is well located with respect to existing roads and to the Prism property, which may require townsite and all-weather road construction if the present underground development program is successful. The Wind River Trail which passes within 11 km of the claims is the proposed access route for the billion ton Bonnet Plume basin coal deposits being developed by Pan Ocean Oil Ltd.

Further exploration should commence with the staking of the area of interest as defined by the Cyprus Anvil geochemical survey. This should be followed by detail mapping, trenching and chip sampling of the No. 5 vein. In addition, a small concurrent program should be conducted to map

and sample other veins on the claims and to explore for additional veins peripheral to the claims using geochemical sampling. The cost of this preliminary work is estimated at \$50,000.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED,



W.D. Eaton, B.A., B.Sc.

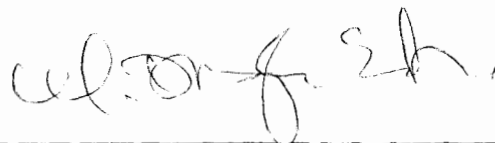


A.R. Archer, B.A.Sc., P.Eng.

STATEMENT OF QUALIFICATIONS

I, W. Douglas Eaton, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in Burnaby, British Columbia, do hereby declare:

1. I graduated from the University of British Columbia in 1980 with a B.Sc. and am currently enrolled in a M.Sc. majoring in Geological Sciences.
2. From 1971 to the present, I have been actively engaged in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981, became a partner in Archer, Cathro & Associates (1981) Limited.
3. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



W. Douglas Eaton, B.A., B.Sc.

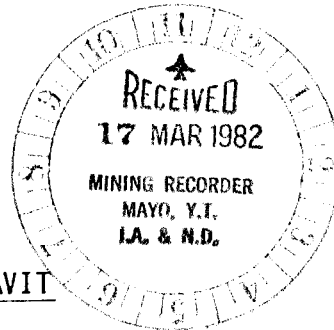
ARCHER, CATHRO

AND ASSOCIATES LTD.

CONSULTING GEOLOGICAL ENGINEERS

Box 4127, WHITEHORSE, Y.T. Y1A 3S9 667-4415

STANDARD BUILDING, VANCOUVER, B.C. 688-2568




1016 STANDARD BUILDING
510 WEST HASTINGS STREET
VANCOUVER, B.C.
V6B 1L8

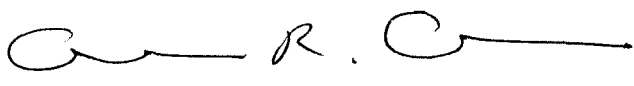
AFFIDAVIT

I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on the Blende 1-15 mineral claims on Claim Sheet 106D/7 is accurate.


Joan Mariacher

Sworn before me at Vancouver, B.C.
this 3 day of
March, 1982


Notary, Yukon Territory

090998

Statement of Expenditures
Blende 1 - 15 Claims
March 3, 1982

Labour

D. Eaton - June 19 - 1 day at \$200	\$200.00	
A. Archer - report preparation	<u>350.00</u>	\$ 550.00

Expenses

Drafting - 19.5 hours at \$18/hour	351.00	
Contract Hughes 500D helicopter, 0.9 hours at \$360/hour	324.00	
Helicopter fuel, 0.9 hours at 25 gal/hour at \$3/gal	67.00	
Chemex Labs Ltd. - assays	176.00	
Room and board - 1 day	<u>45.00</u>	<u>963.00</u>

Total		<u>\$1,513.00</u>
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CHEMEX LABS LTD.

212 BROOKSBANK AVE
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

*** INVOICE ***

To : ARCHER CATRO & ASSOC. LTD.
BOX 4127
WHITEHORSE, Y.T.
Y1A 3S9

Invoice # : I8111735

Date : 06-JUL-81

P.O. # : NONE

Project BLENDE = AC 81

Invoice for analytical work reported on certificate(s) A8111735-001

Quantity	Analysed for code description	unit price	amount
10	312 - Pb percent		
	316 - Zn percent		
	333 - Ag (FA) oz/t		
	396 - Au (FA) oz/t	18.50	185.00

Sample preparation and other charges :

10	207 - Assay - PULVERIZE	3.50	35.00
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TOTAL	\$	220.00
Discount (20 %)	\$	44.00

Please pay this amount ----> \$ 176.00

TERMS -- NET 30 DAYS
1.5 % per month (18 % per annum) charged on overdue accounts



INVOICE
TOTAL



MEMBER
CANADIAN TESTING
ASSOCIATION

VIKING HELICOPTERS LIMITED FLIGHT REPORT

11718

BOX 5104, STN. F, OTTAWA, ONTARIO, CANADA, K2C 3H4

613-257-4660

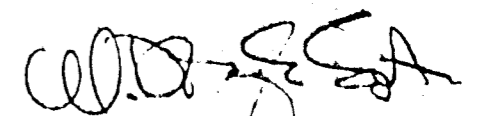
DATE
June-11-81

PILOT Harold Gounley ↗	HELICOPTER REGISTRATION C-GYUA	CTC ZONE 9.0	CONTRACT No.	IF NO FLYING CHECK: <input type="checkbox"/> NIL ASSIGNMENT <input type="checkbox"/> WEATHER <input type="checkbox"/> UNSERVICEABLE
ENGINEER	HELICOPTER TYPE S-60-D	CLASS <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 7 TYPE	TOTAL A/F HOURS	

FLT. NO.	JOURNEY FROM PREVIOUS LINE TO	PASSENGERS	TIME UP	TIME DOWN	AIR TIME	FUEL GALS. REFUNDABLE	REMARKS
1	Pike	Risa, Bill, Bill, Ken	8:20	9:00	:40		} total 0.9 hrs Blonde.
2	Diel	Doug	9:10	10:05	:55		
3	Thazo	Doug	10:35	11:20	:55		
4	Nazo - Refuel	Doug	15:45	16:15	:35		
5	Catino to Bear River	Doug	16:45	17:30	:45		
6	Pike	Risa, Bill, Bill, Ken	17:40	18:30	:50		
7							
8							
9							
10							
11							
12							
13							
14							

CONDITIONS OF CARRIAGE

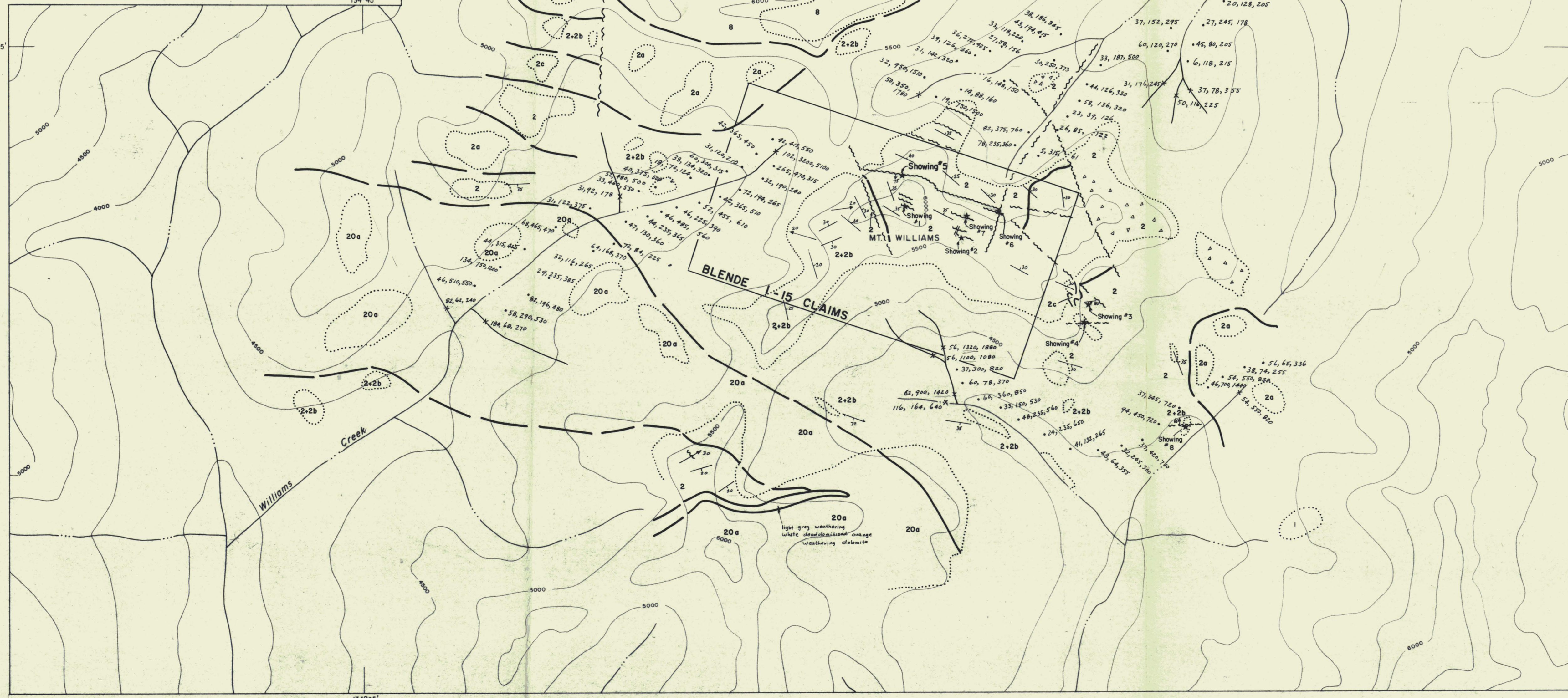
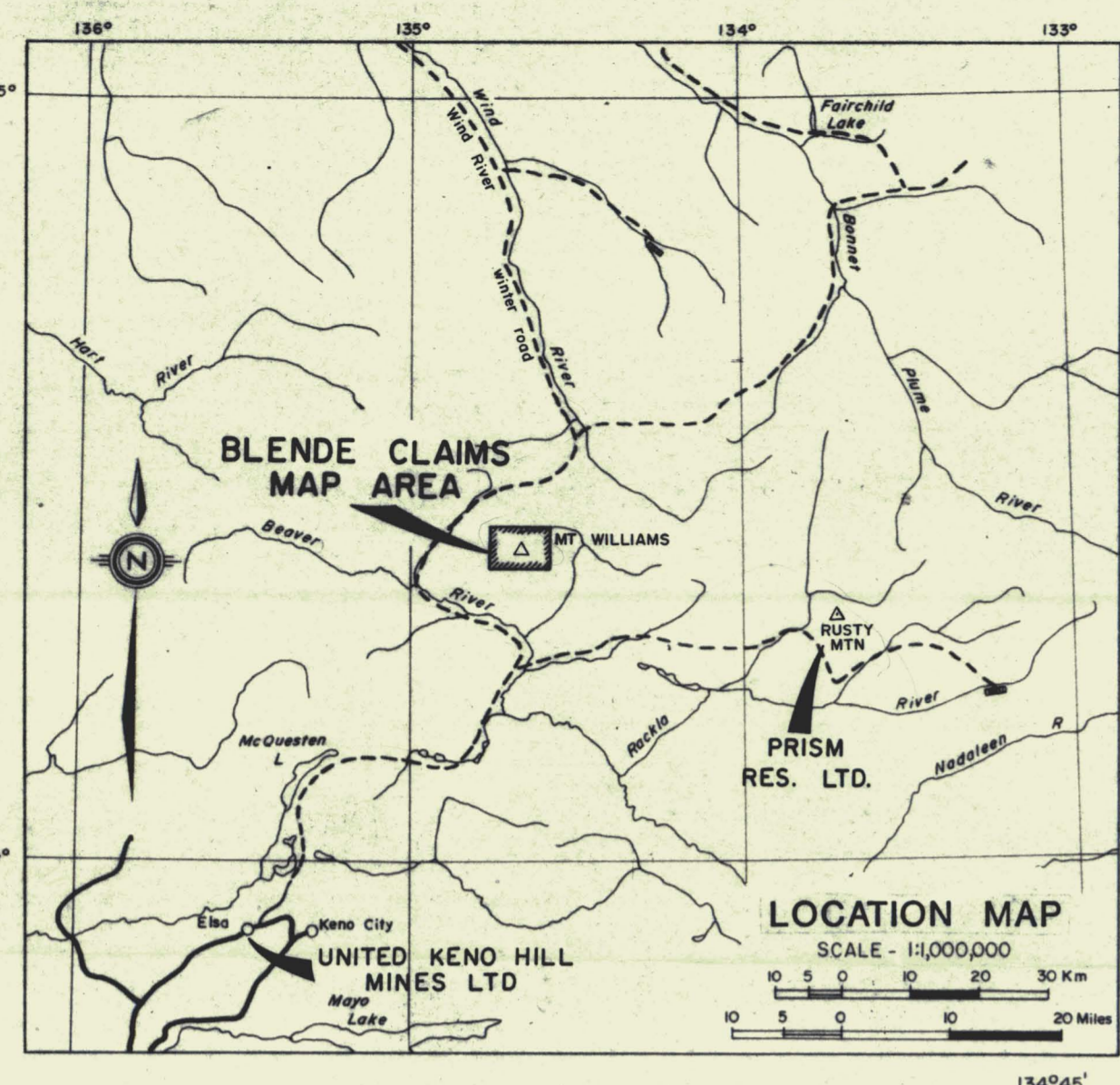
The Charter Tariff of Viking Helicopters Limited (the Carrier), which is available for examination (at any office of the Carrier upon request), is deemed to form a part of this and all contracts for the carriage of the Charter and/or his servants, agents and/or goods. In particular, the Charterer is advised that the liability of the Carrier for loss or damage to the goods of the Charterer is limited to the sum of 10¢ per lb., pursuant to Rule 13 of its said Charter Tariff.



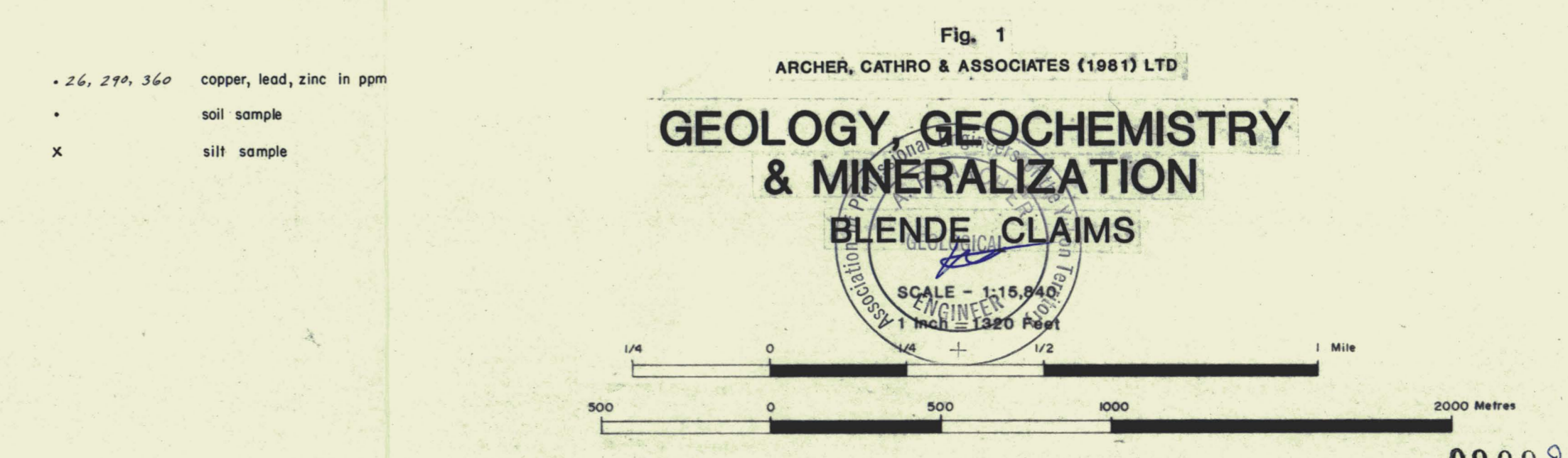
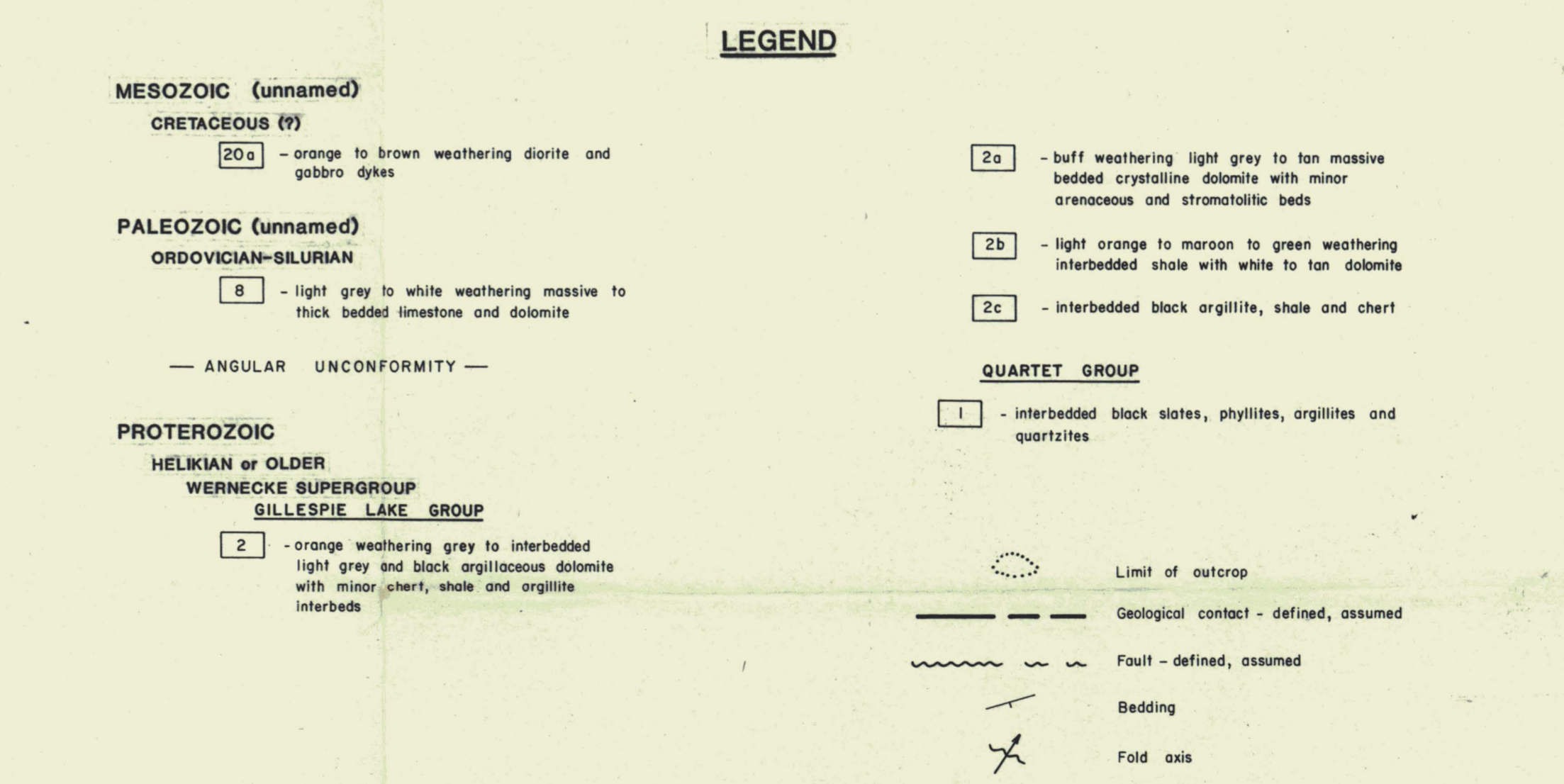
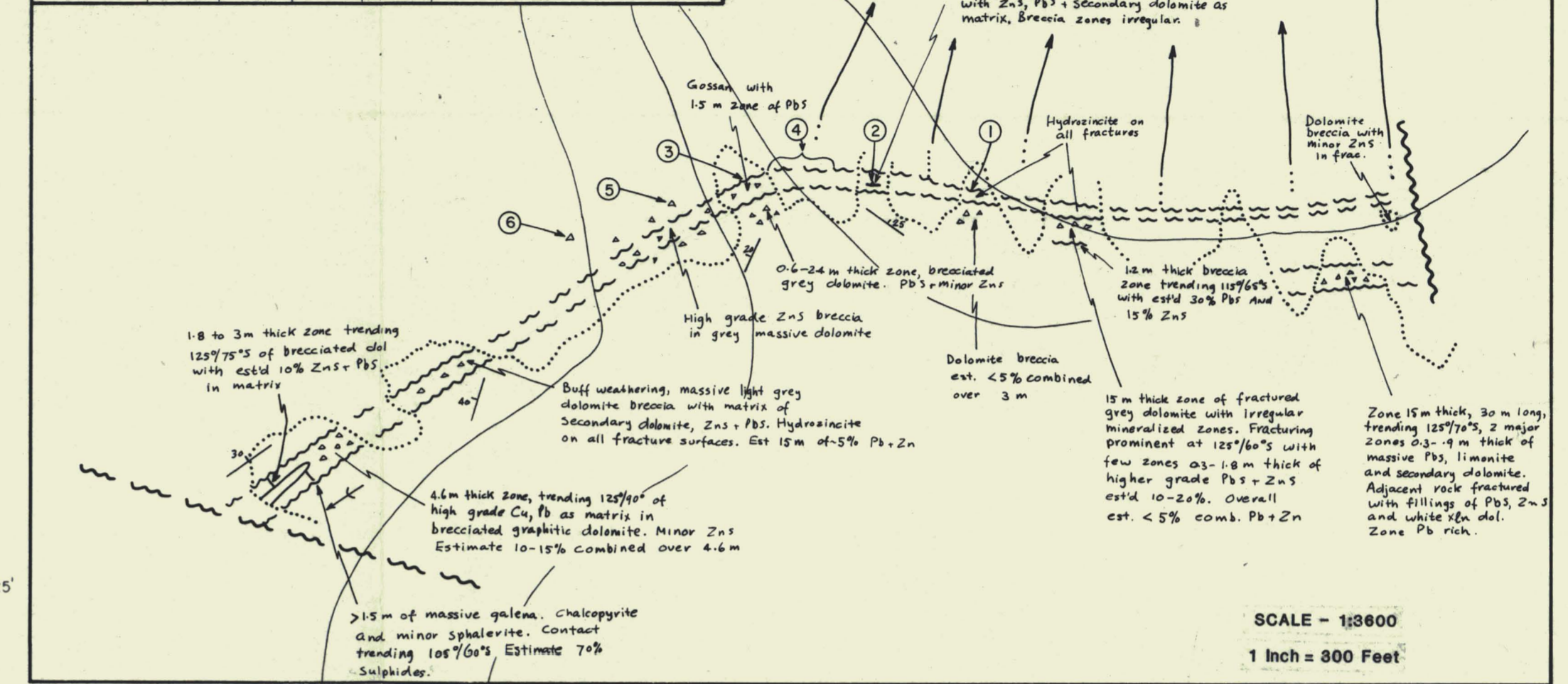
APPROVAL AUTHORIZED COMPANY REPRESENTATIVE

CLIENT NAME & ADDRESS
Archer-Catino + Assoc.

DAILY TOTAL HOURS	4:40
BROUGHT FORWARD	15:30
TOTAL CONTRACT HOURS	20:10



1981 SAMPLE DATA					
LOCATION	SAMPLE No.	% Zn	% Pb	Ag/Ton Ag	DESCRIPTION
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5	3856	22.20	0.71	0.84	Grab sample of sphalerite-rich talus.
6	3857	9.30	38.60	34.34	Specimen of galena-rich talus.



Most data for this map is from W. Roberts Nov. 24, 1975 Assessment Report for CYPRIUS ANVIL MINING CORP. Geology has been modified to conform with GSC mapping (Green - 1971)