

REPORT ON
GEOPHYSICAL WORK ON AKIE CLAIM GROUP

AKIE RIVER AREA

OMINECA MINING DIVISION

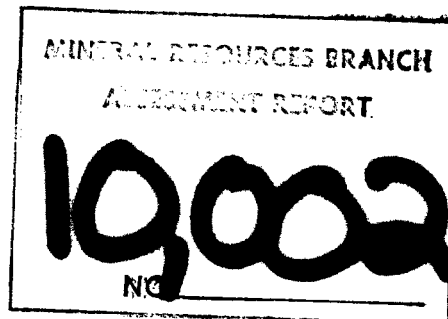
N.T.S. 94F

57°13 N 124°31 W

August, 1981

G. R. Coutellier

Aquitaine Company of Canada Ltd.



INTRODUCTION

During the latter part of June 1981, an Aquitaine Company of Canada geophysical crew completed 1.9 km of horizontal coplanar loop electromagnetic surveying on the AKI claim group.

The AKI claim group is in the AKIE river area of the Omineca Mining Division, northern British Columbia. (NTS 94F)

The purpose of the geophysics was to see if any conductivity was associated with gossan zones within the Gunsteel shale belt. These gossans had been located by geological work the previous year.

PERSONNEL

Dave Boerner - graduate student - crew chief
Gary Deering - student
Michael Scrimmes - student

EQUIPMENT

Apec Parametrics Maxin II electromagnetic system.

SURVEY PROCEDURE

Two lines were cut on the "A" zone gossan and one line on the "D" zone gossan. A topographical profile of each line was prepared. Stations were established at 25 m intervals horizontally. The lines were surveyed using the 888 HZ and 222 HZ frequencies at a coil separation of 150 m. The topographic information was used to correct the in-phase data for coil coplanar at all times. The lower frequencies of the E.M. system were used in an attempt to reduce the response of the conductive host.

DISCUSSION OF THE DATA

The two lines on the "A" zone reveal that the whole area is underlain by very conductive carbonaceous shale. This conductivity appears to be interrupted by a thin non conductive unit near the centre of each line. This unit may be a thin

Carbonate or Barite bed within the shales. It is very difficult if not impossible to see the response of any lead-zinc-pyrite zone within this type of conductive package.

The one line on the "D" zone reveals two broad conductive zones within a shale package which is more resistive than the "A" area. There is an indication that the core of the broadest conductor has much better conductivity. If the anomalous zinc geochemistry can be associated to this core zone than it may be significant.

CONCLUSION

There is good conductivity associated with the gossans however, it is likely the "A" zone conductivity relates to carbonaceous shale. The differentiation of conductivity within the "D" zone is interesting geologically. Perhaps more geological work would shed some light on the importance of the "D" zone.

G. Hendricks

GEOCHEMISTRY
AKI Claim Group

During 1980, a zone of ferricrete and gossan (called "C" zone) was mapped but not sampled during the geological and geochemical survey Aquitaine Company of Canada carried out on the Aki Claim Group.

During the 1981 geophysical survey, thirteen rock and soil samples were collected and assayed for lead, zinc, copper and silver.

The sampled area covers about 100 X 50 meters. Rock samples mainly consist of gossan or ferricrete material. Soils are generally of red or black colour and derived from the ferricrete or gossan occurrences.

Results show a "high background" in zinc (up to 2.45%) Copper is anomalous in the south-eastern part of the sampled area (168 to 520 ppm). Silver values vary from 1.0 to 2.8 ppm, most of them being higher than 2.0 ppm. There is no anomaly in lead.

Zinc results are homogeneous with those obtained in 1980 on the "A", "C" and "D" zones. It is interesting to note traces of copper in the "C" zone. Samples were not assayed for copper in 1980.

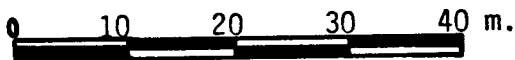
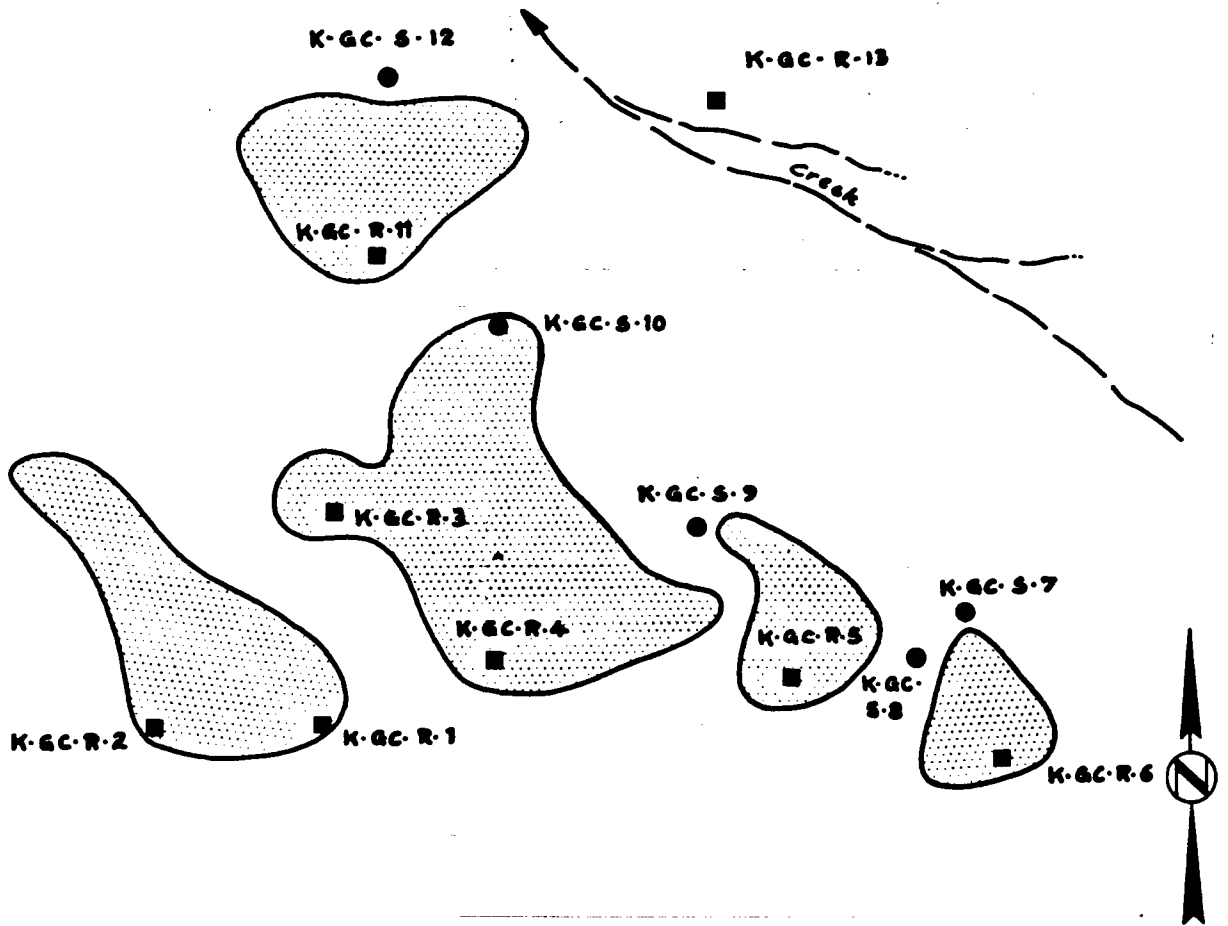
Guy Coutellier
Project Geologist



● Soil sample

■ Rock sample

○ Ferricrete or gossan occurrence.



AQUITAINE
COMPANY OF CANADA Ltd.

AKI CLAIMS

GEOCHEMISTRY ("C" Zone)

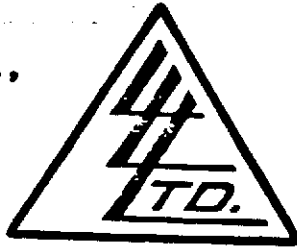
DATE AUGUST 1981

SCALE

Prep. by

FILE

To: AQUITAINE COMPANY OF CANADA LTD.,
1700, 555 - 4th Avenue S.W.,
Calgary, Alberta T2P 3J6



File No. 21985
 Date August 6, 1981
 Samples Rock & Soil

ATTN: Joyce Davis

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 1

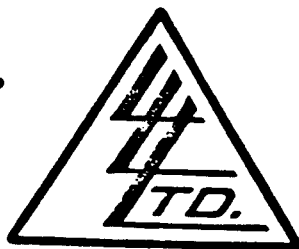
SAMPLE No.	% Pb	% Zn
<u>"Soil & Rock"</u>		
81R-K-GC- 1	-	1.85
2	-	1.50
3	-	.39
4	-	1.40
5	-	.41
6	-	.54
81S-K-GC- 7	-	.33
8	-	.46
9	-	.41
10	-	.74
81R-K-GC-11	-	1.45
81S-K-GC-12	-	.85
81R-K-GC-13	-	2.45

**I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES**

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

J. J. [Signature]
 Assayer

To: AQUITAINE COMPANY OF CANADA LTD.,
1700, 555 - 4th Avenue S.W.,
Calgary, Alberta T2P 3J6



File No. 21985
 Date August 6, 1981
 Samples Rock & Soil

ATTN: Joyce Davis

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LORING LABORATORIES LTD.

Page # 2

SAMPLE No.	PPM Cu	PPM Pb	PPM Zn	PPM Ag
81R-K-GC- 1	8	40	1000+*	2.0
2	4	38	1000+*	2.0
3	16	32	1000+*	1.0
4	96	40	1000+*	2.0
81R-K-GC- 5	520	50	1000+*	2.5
6	168	38	1000+*	2.5
81S-K-GC- 7	50	40	1000+*	2.0
8	180	42	1000+*	2.5
9	180	42	1000+*	2.5
10	300	40	1000+*	2.8
81R-K-GC- 11	8	38	1000+*	2.0
81S-K-GC- 12	38	48	1000+*	1.8
81R-K-GC- 13	6	44	1000+*	1.5

(*) = Assayed

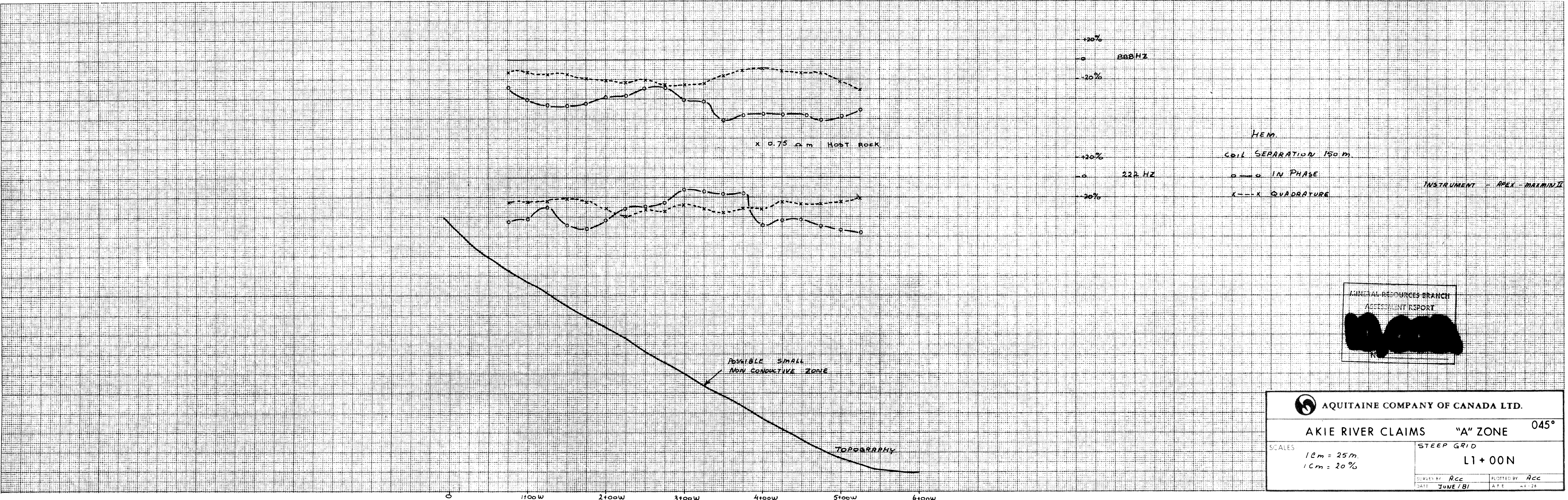
**I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES**

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

[Signature]
 Assayer

EXPENDITURES (for geophysical and geochemical survey)

Wages	\$ 830
Helicopter	3,280
Geophysical equipment	120
Geochemical assay	<u>100</u>
	<u>\$4,330</u>

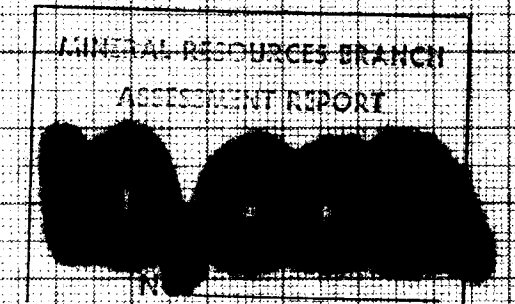



888 HZ
 222 HZ

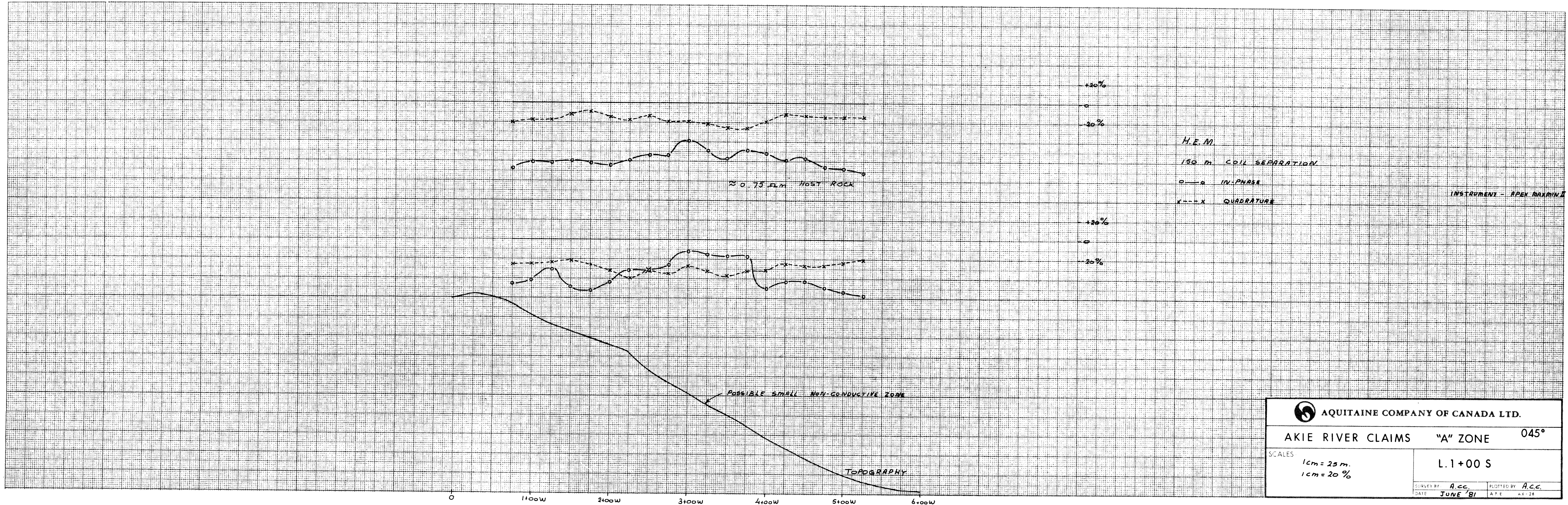
HEM.
 COIL SEPARATION 150 m.
 O—O IN PHASE
 X—X QUADRATURE
 INSTRUMENT - APEX - MALMIN II


POSSIBLE SMALL
 NON CONDUCTIVE ZONE

TOPOGRAPHY



 AQUITAINE COMPANY OF CANADA LTD.	
AKIE RIVER CLAIMS "A" ZONE	
045°	
SCALES 1 cm = 25 m. 1 cm = 20 %	STEEP GRID L1+00N
SURVEY BY Acc DATE JUNE / 81	PLOTTED BY Acc AFE 44-28



 AQUITAINE COMPANY OF CANADA LTD.	
AKIE RIVER CLAIMS "A" ZONE 045°	
SCALES: 1cm = 25 m. 1cm = 20 %	
L.1+00 S	
SURVEY BY A.C.C. DATE JUNE '81	PLOTTED BY A.C.C. A.F.E. AX-28

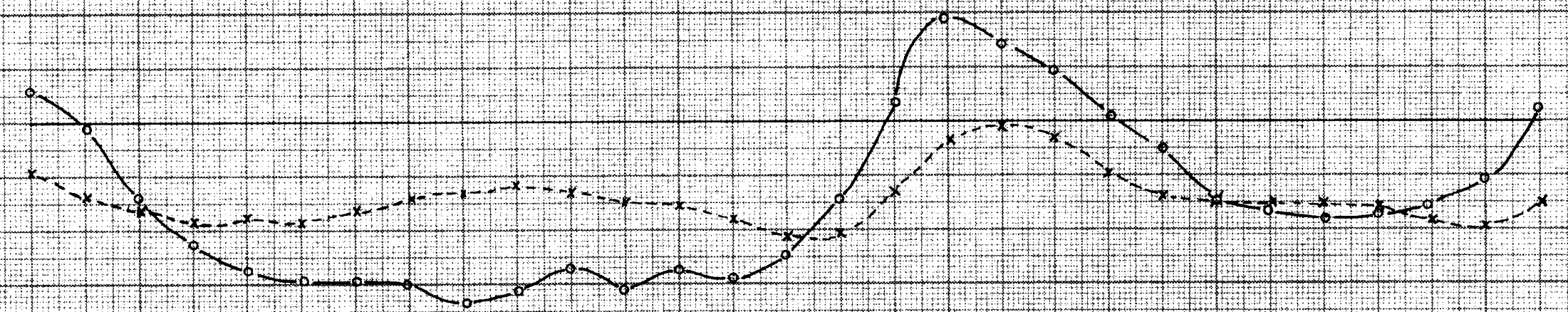


+20%
0
-20%

888 HZ

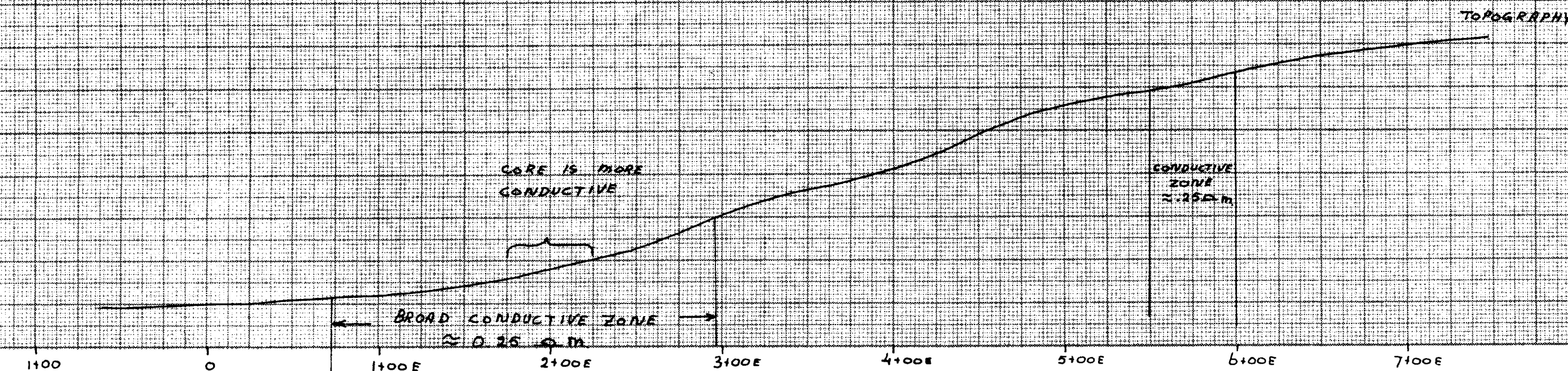
H. E. M.
COIL SEPARATION 150 M
○ IN-PHASE
x---x QUADRATURE

INSTRUMENT APPEX - MAXIM II



+20%
0
-20%

222 HZ

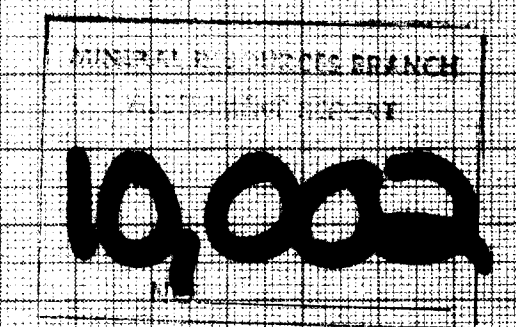


TOPOGRAPHY

CORE IS MORE CONDUCTIVE

CONDUCTIVE ZONE ~ 250 M

BROAD CONDUCTIVE ZONE ~ 0.25 km



AQUITAINE COMPANY OF CANADA LTD.	
AKIE RIVER CLAIMS "D" ZONE	
055°	
SCALES 1cm = 25m. 1cm = 20%	
LINE 0+00	
SURVEY BY <i>R.C.C.</i> DATE <i>June '61</i>	PLOTTED BY <i>R.C.C.</i> AFE AX-28

124°30'

57°14'

57°14'

57°13'

57°13'

57°12'

57°12'

124°30'



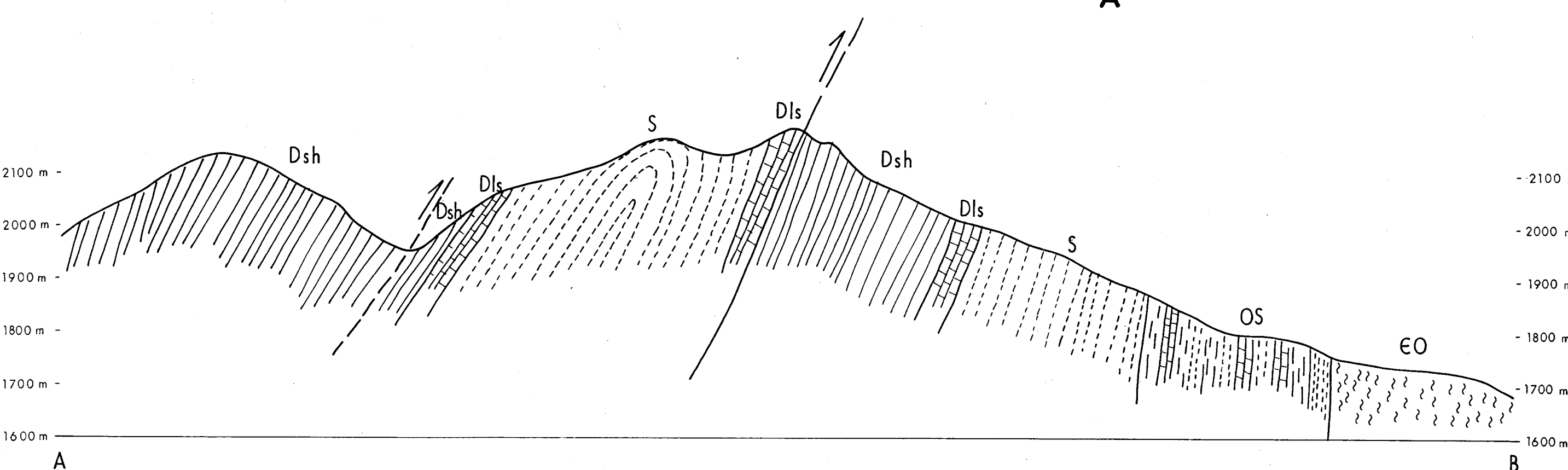
GEOLOGICAL CROSS-SECTION

- Dsh - DEVONIAN - SHALE (Gunsteel Formation)
- Dls - DEVONIAN - LIMESTONE
- S - SILURIAN SANDSTONE
- OS - ORDOVICIAN / SILURIAN - LIMESTONE, SHALE SANDSTONE (Rood River Formation)
- EO - CAMBRO- ORDOVICIAN - PHYLLITE



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,002
NO.

MAP N°1



- F FOSSILS LOCATION
- GOSSANS
- BEDDING
- CLEAVAGE
- ANTICLINE AXIS
- THRUST FAULT
- CLAIM OUTLINE

AQUITAINE COMPANY OF CANADA LTD.

AKI PROPERTY
BRITISH COLUMBIA
NTS PORTIONS OF
94F/1W & 94F/2E

GEOLOGY

Prepared by: G. Coutellier
Date: Sept. 1980

Scale 1:10,000
File N-4