

Geophysical Report
 PLATA 1-4 (116 B 5)
 Fifteenmile Creek, Dawson M.D.
 64° 18'N 139°52' W

S. Presunka and A.C. Ogilvy, P.Eng.
 Field Work done July, September, 1971

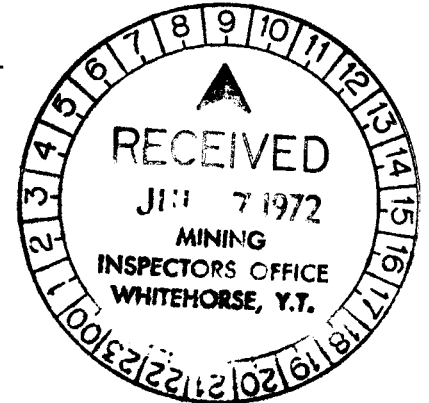


TABLE OF CONTENTS

	Page
Introduction	1
Claims, Location and Access	2
Geology and Previous Work	2
Geophysical Surveys	4
Report by Steve Presunka	
Appendix: Speciman Field Notes	

ILLUSTRATIONS (in pocket)

- Fig. 1 Location Map
- Fig. 2 Magnetometer Survey
- Fig. 3 EM 16 Survey St. 18.6 khz
- Fig. 4 EM 16 Survey St. 17.8 khz

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 1200.00

M. W. Wilson
 Resident Geologist or
 Resident Mining Engineer

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

[Signature]
 Commissioner of Yukon Territory

Geophysical Report
PLATA 1-4 (116 B 5)
Fifteenmile Creek, Dawson M.D.
64° 18'N 139°52' W
S. Presunka and A. C. Ogilvy, P.Eng.
Field work done July, September, 1971

Introduction

The writer (A. C. Ogilvy, P.Eng.) has been handed material relating to a geophysical survey made by Mr. Steve Presunka on the PLATA Claims, with a request that it be reviewed and put in a form acceptable as assessment work.

I have known Mr. Presunka for two years, and worked with him occasionally during that time. I believe he has been a geophysical operator for approximately 20 years: about 15 years with Falconbridge Ltd., the last 5 of which he was one of that large company's senior operators, and for the past 4 or 5 years he has carried on a private practice of field geophysics. His work is highly regarded in the field.

I have carefully examined all the data presented to me and studied all published reports pertaining to the prospect. On this basis, together with my confidence in Mr. Presunka, I herewith accept professional responsibility for this entire report on the same basis as I would had I supervised the field work.

Claims, Location and Access

The property consists of 4 mineral claims PLATA 1-4 (Grant Nos. Y65002 - Y65005) staked by L. A. Patnode, recorded in Dawson June 10, 1971, and shown on Staking Sheet 116 B 5. They are located at approximately 64°18'N, 139°52'W, on the north side of the Yukon River, at the first bend below the mouth of Fifteenmile Creek. Access is by river boat or helicopter.

Geology and Previous Work

The prospect is mentioned in the following reports of the Geological Survey of Canada:

Cockfield, W.E.: "Silver-Lead Deposits of Fifteenmile Creek"
Sum. Rept., 1927, pt A, ppl-13 (1927)

Green, L. H. and J. A. Roddick: Paper 62-7 (1962)

----- and C. I. Godwin: Paper 63-38 (1963)

-----: Paper 64-36 (1964)

Cockfield describes one- to eight-inch "seams of galena and zinc blend, with subordinate chalcopyrite, malachite and azurite" in highly faulted lenses of dolomite within the quartz mica schists of the Nasina series. He notes that a shipment had been made (prior to 1928) of 5 tons of material that occurred as float on the beach. He further notes that picked samples of this float have yielded 200 to 500 oz of silver per ton, although he expresses doubt that reasonable mining withes would average more than a few ounces. Quartz stringers up to eight inches

thick and sparsely mineralized with galena and chalcopyrite were noted east of the beach zone and 700 feet above the river.

Green and Roddick (Map 13-1962) represent the prospect by the symbol "Ag Pb" and show it within their map unit D (Greenstone, gneiss; minor schists, quartzite and limestone) adjacent to a very small body of (Tertiary?) quartz porphyry.

Green and Godwin (1963) note that "By October, 1962 an adit.....about 200 feet long had been driven almost due north into the talus about 300 feet above the river in an attempt to locate a sulphide vein that J. Risco reported he had intersected in 1929. Bedrock was encountered 90 feet from the portal. At 122 feet from the portal a fault with $2\frac{1}{2}$ feet of gouge strikes east-west and dips 80 degrees to the north. No important mineralization was seen in the bedrock portion of the adit, which was mainly crumpled schists. In the talus, both in the adit and on the surface, blocks of quartz-carbonate rock contained nickel-bearing serpentine, disseminated galena, and a few species of tetrahedrite."

Green and Godwin (1964) note that during 1963 the adit was extended to a total length of 276 feet and 3 cuts totalling approximately 40,000 cu ft, were hydraulicked in the overburden. A cut about 350 feet vertically below the adit encountered galena-rich float.

Geophysical Surveys

Magnetometer and electromagnetic (EM-16) surveys, carried out in July and September, 1971 by Steve Presunka are described in his brief report which is attached hereto. Based on an examination of his data I would make the following observations:

A 1400 foot east-west base-line was established along the claim location line. Station 1000 was established at the mutual posts of PLATA 1-4 claims, approximately 70 ft WSW of the portal of the adit. At right angles to the base-line the following lines were established:

Line 0 E	7 + 00 S to 21 + 00 N	(2800 ft)
Line 2 E	7 + 00 S to 4 + 50 N	(1150 ft)
Line 4 E	7 + 00 S to 37 + 00 N	(4400 ft)
Line 6 E (old 4 W)	8 + 50 S to 7 + 00 N	(1550 ft)
Line 8 E (old 2 W)	0 + 00 to 7 + 00 N	(700 ft)
Line 8 + 50 E	7 + 00 N to 37 + 00 N	(3000 ft)
Line 10 E (old 0)	0 + 00 to 8 + 00 N	(800 ft)
Line 10 E	7 + 00 S to 6 + 00 S	(100 ft)
Line 12 E (old 2 E)	0 + 00 to 6 + 00 N	(600 ft)
Line 14 E (old 14 E)	0 + 00 to 6 + 00 N	(600 ft)

Total cross lines: 15,700ft

Approximately 324 stations at 50 foot centers were occupied. Magnetic and EM readings were taken at each. Magnetic traverses were closed and drift corrections applied (see sample field notes enclosed).

Several conductors were located, as described in Mr. Presunka's report, which follows. Recommendations for further geophysical work must be dependant on a geological examination of the ground.

Respectfully submitted,
A.C. Ogilvy A.C. OGILVY PEng

The geophysical survey done on the Plata Claim group, consisted of an Electro Magnetic and Magnetometer Survey. Thirty eight soil samples were taken along some of the lines.

The electro magnetic instrument used was the V.L.F. Ronka E.M.-16, using stations 18.6 (Seattle) and 17.8 (Maine). The Magnetometer used was the Scointrex M-F-1 Fluxgate. The magnetometer was adjusted for a background reading of 500 gammas.

E.M.-16 Station 18.6 (Tilt direction '070')

The reception of St. 18.6 was strong, so that the readings taken are reliable. Readings were taken at 50 foot intervals along the lines. The slopes were taken in degrees along the direction of tilt.

"A" conductor station, which is some 1800 feet north of the adit, is the start of a good conductor. This should be followed up geophysically, particularly to the east. This area is in overburden. This conductor is coincidental with a broad magnetic anomaly, as well as with St. 17.8. The 17.8 showed up much stronger because of the tilt being at right angle to it.

"B" conductor located on lines 4E and 8E on north end of the grid is a broad, deep seated conductor. This conductor requires follow up geophysically. The overburden is suspected to be heavy there.

The E.W. "C" conductor, located some 550 feet north of the adit extends east of the grid. The east end of this conductor is closer to surface and should be followed up to the east. Both the "B" and the "C" zones are the better conductor and extend to the east.

The northwest striking "D" conductor, has a fair magnetic correlation. There was some previous trenching done just below this conductor.

The weak "E" conductor does not have continuity. This conductor has no magnetic correlation.

E.M.-16 St. 17.8 (Tilt direction 360)

The reception of this station was very weak. In spite of the weak reception, the stronger conductors stood out well.

The "A" conductor, which coincides well with the "A" conductor of St. 18.6 stood out strong. This conductor is fairly close to surface. This conductor warrants follow up to the east.

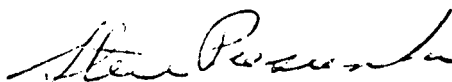
The "B" and the "B"1 conductors are in deep overburden. There is a weak magnetic anomaly on L-8E close to the end of this line.

The B and the B1 conductors are well marked by cross flaggings high on the trees.

The "C" conductor, some 550 feet north of the adit is best on the east end, as in the "A" conductor. This too, should be followed up to the east.

The northwest striking "D" and "D"1 conductors on the west end of Line 2E has a fair magnetic correlation. St. 18.6 also responded to this conductor.

This project requires at least 2 weeks of geophysical work to properly evaluate the merits of this property. Its very likely that the high grade float might have come from the "A" conductor, some 550 feet north of the adit. This "A" conductor could be checked with the horizontal loop E.M. once the lines are cut. The slope is very steep to about 1600 feet north of the river, where the horizontal loop would not be practical, if not impossible to be used.



Steve Presunka

FALCONBRIDGE NICKEL MINES LIMITED

RONKA EM 10 SURVEY

PROPERTY
LINE NO

TRAVERSE DIRECTION
OPERATOR

PAGE

DATE

Station	Frequency Tilt Direction				Frequency Tilt Direction				Remarks
	In Phase	Quad	Slope	Cross Over	In Phase	Quad	Slope	Cross Over	
1									
2									Road
3									
4									Road
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

430
 440
 450
 460
 470
 480
 490
 500
 510
 520
 530
 540
 550
 560
 570
 580
 590
 600
 610
 620
 630
 640
 650
 660
 670
 680
 690
 700
 710
 720
 730
 740
 750
 760
 770
 780
 790
 800
 810
 820
 830
 840
 850
 860
 870
 880
 890
 900
 910
 920
 930
 940
 950
 960
 970
 980
 990

Handwritten signature or initials

2	4
PLATA	
Y65002	Y65005
1	3
Y65002	Y65004

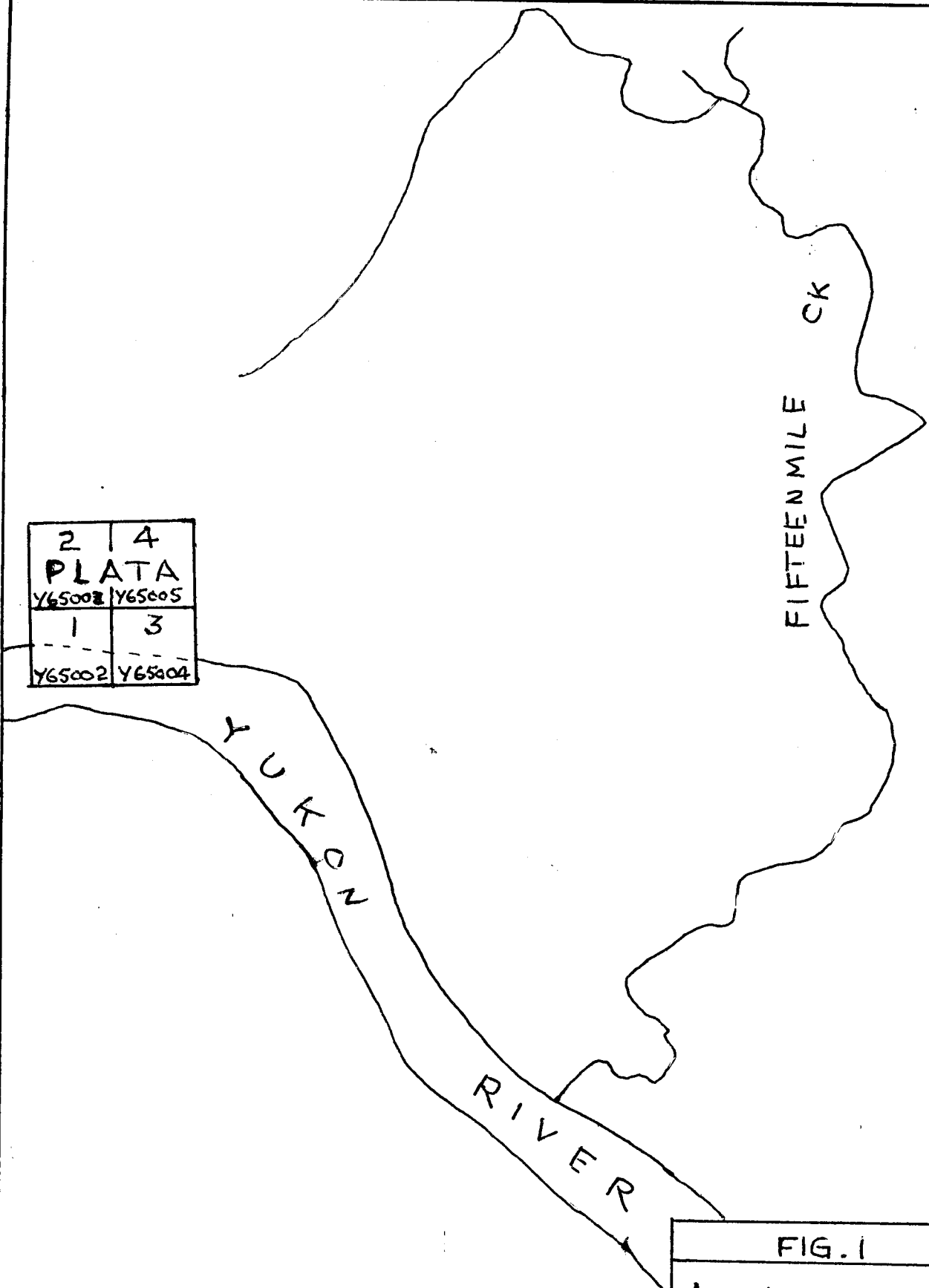


FIG. 1
Location Map PLATA 1-4 116 B5, DAWSON MD
SCALE 1" to 0.5 mi.
Acopluz June 1972

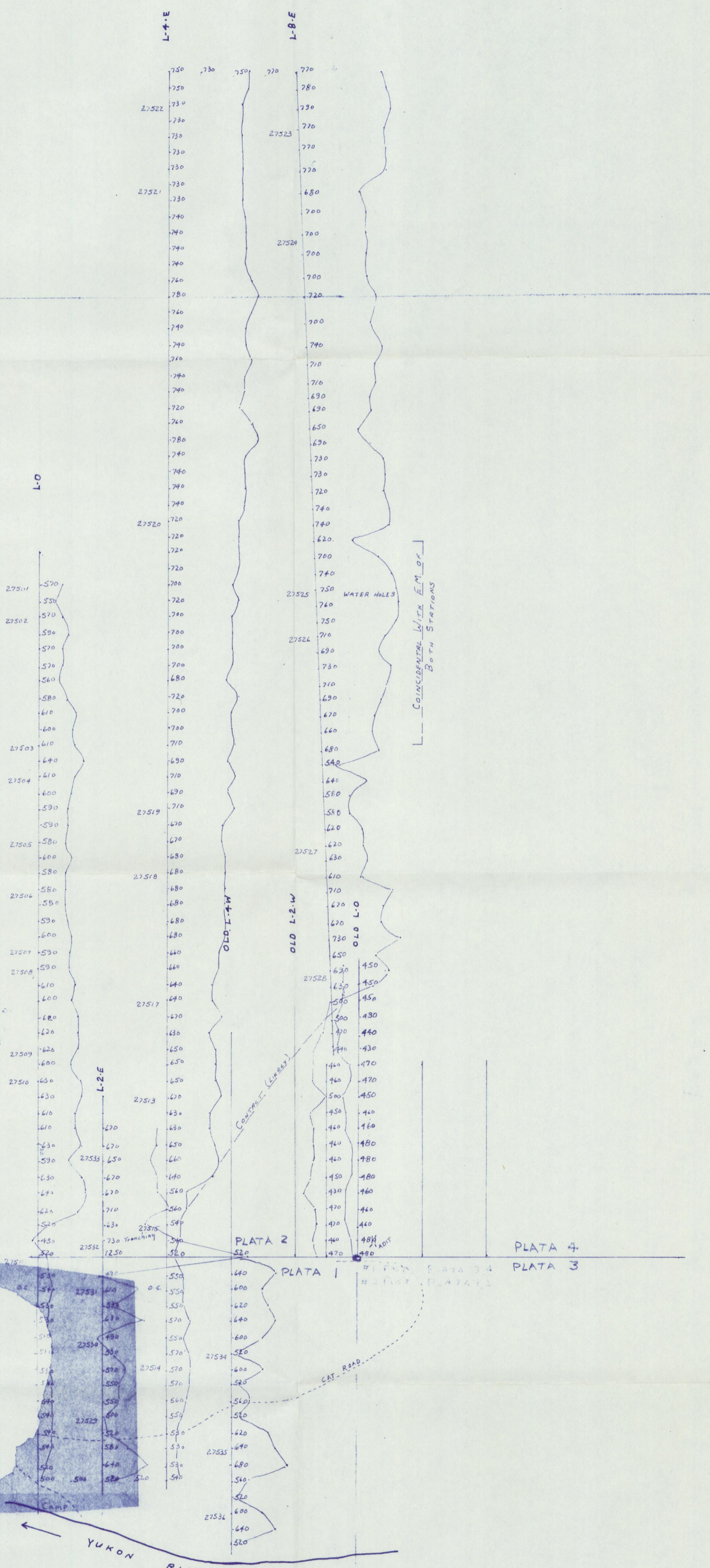


Fig 2
 PLATA CLAIMS
 DAWSON AREA YUKON
 MAGNETOMETER SURVEY
 Scale: 1" = 200' Sept. 1971
 S. Presunka

A.C. Ogilvy P. Eng.

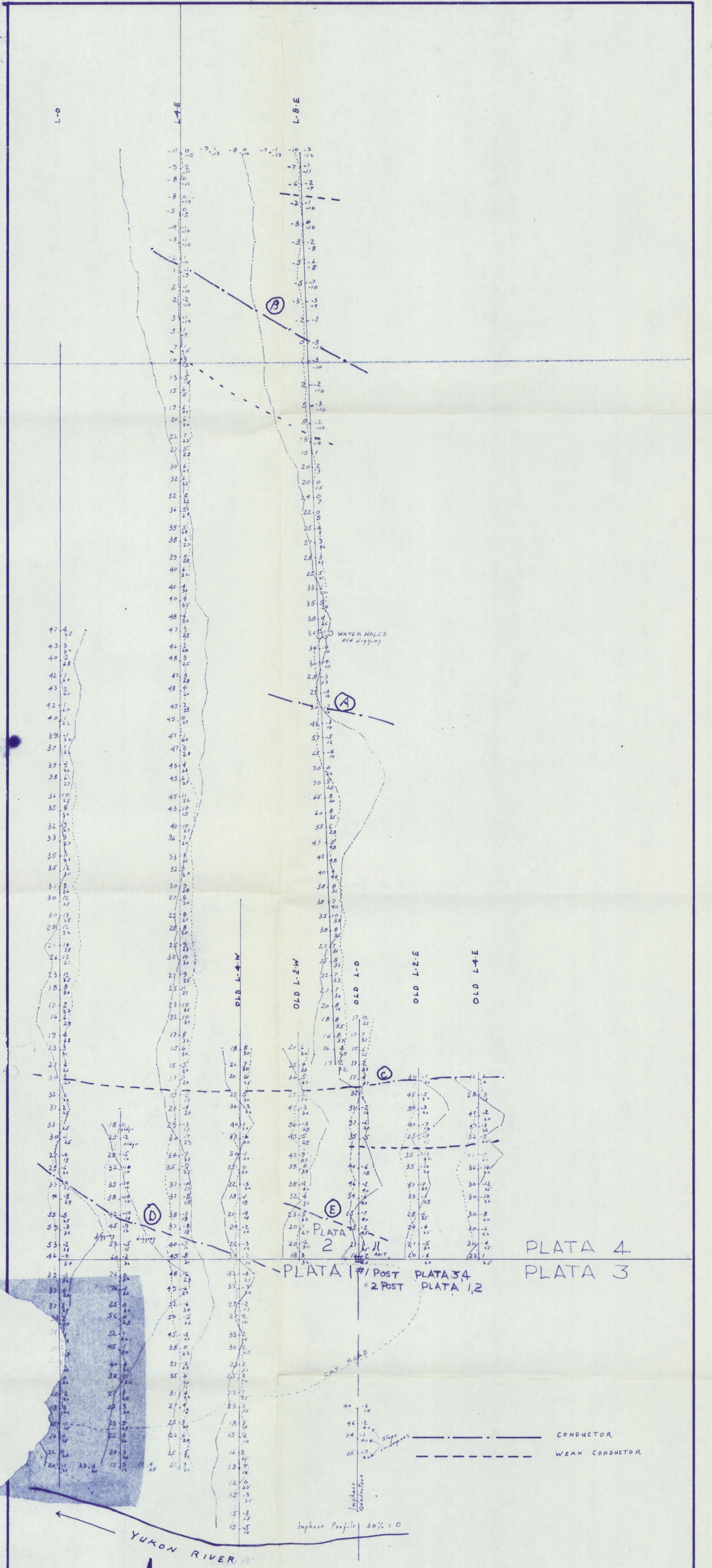


FIG 3
PLATA CLAIMS
 DAWSON AREA YUKON
 E.M.16 SURVEY ST.18.6
 Inphase ——— } 1"=40%
 Quadrature - - - - }
 Scale: 1"=200' Sept.1971
 S. Presunka

A.C. OGILVY P.Eng.

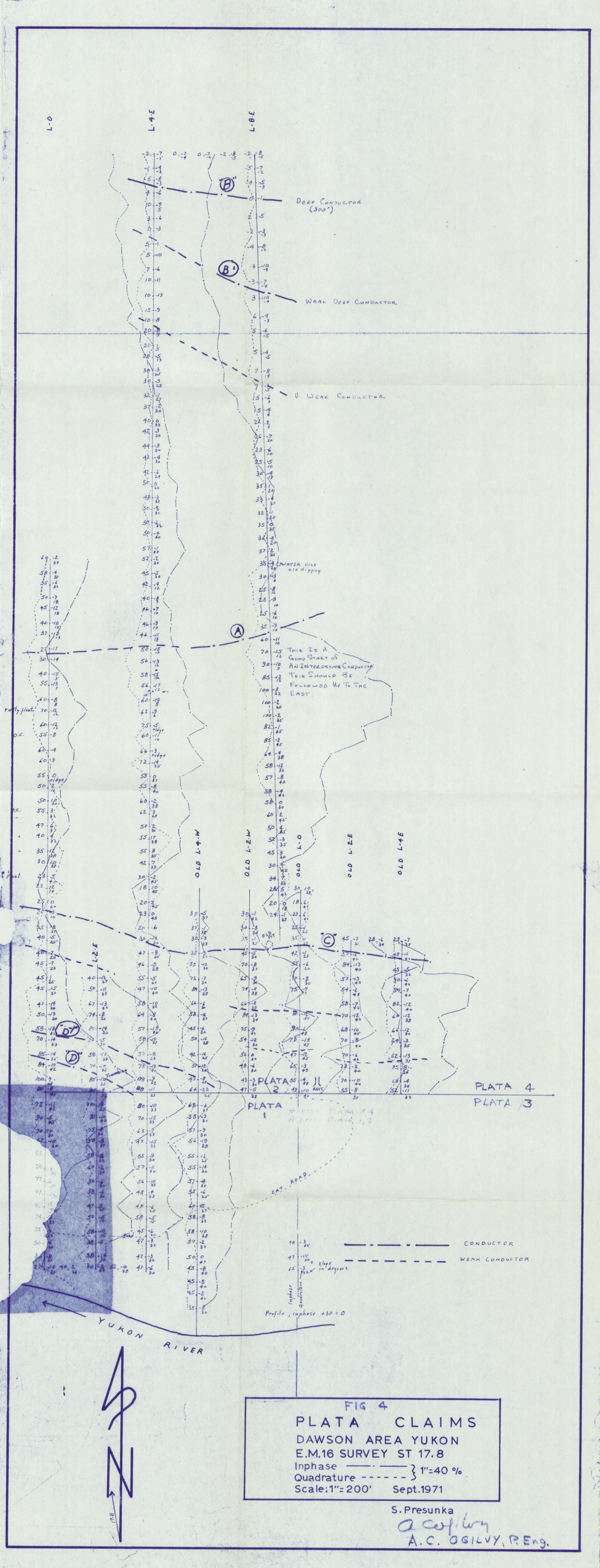


FIG 4
 PLATA CLAIMS
 DAWSON AREA YUKON
 E.M.16 SURVEY ST 17.8
 Inphase ——— } 1"=40 %
 Quadrature - - - - }
 Scale: 1"=200' Sept. 1971

S. Presunka
 A.C. OGILVY, P. Eng.