

3554
Department of
Mineral Resources
ASSESSMENT REPORT
NO. 3554 MAP

INITIAL DEVELOPERS CORPORATION,
2502-1177 West Hastings Street,
Vancouver 1, B.C.

REPORT

INDUCED POLARIZATION SURVEY

ON THE

KAMLOOPS PROPERTY

Latitude $50^{\circ}40'N$.

Longitude $120^{\circ}27'W$.

Survey Conducted: February 9th-28th, 1972.

by

Robert E. Chaplin, P. Eng.

ROBERT E. CHAPLIN, P.ENG.,
Consultant,
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Vancouver 8, B.C.

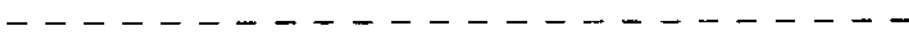
February 29th, 1972.

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ZONE "A"



INTRODUCTION

The object of this survey was to check the validity of I.P. surveys conducted by Sulmac Exploration Services Limited in 1966, and to detail an area of known copper mineralization to select drill targets.

Seven line miles of pole-dipole reconnaissance survey was performed and 4 dipole-dipole, detailed setups to 4 separations was completed on zone "A".

Zones A, C, E, F and G were traversed during this survey.

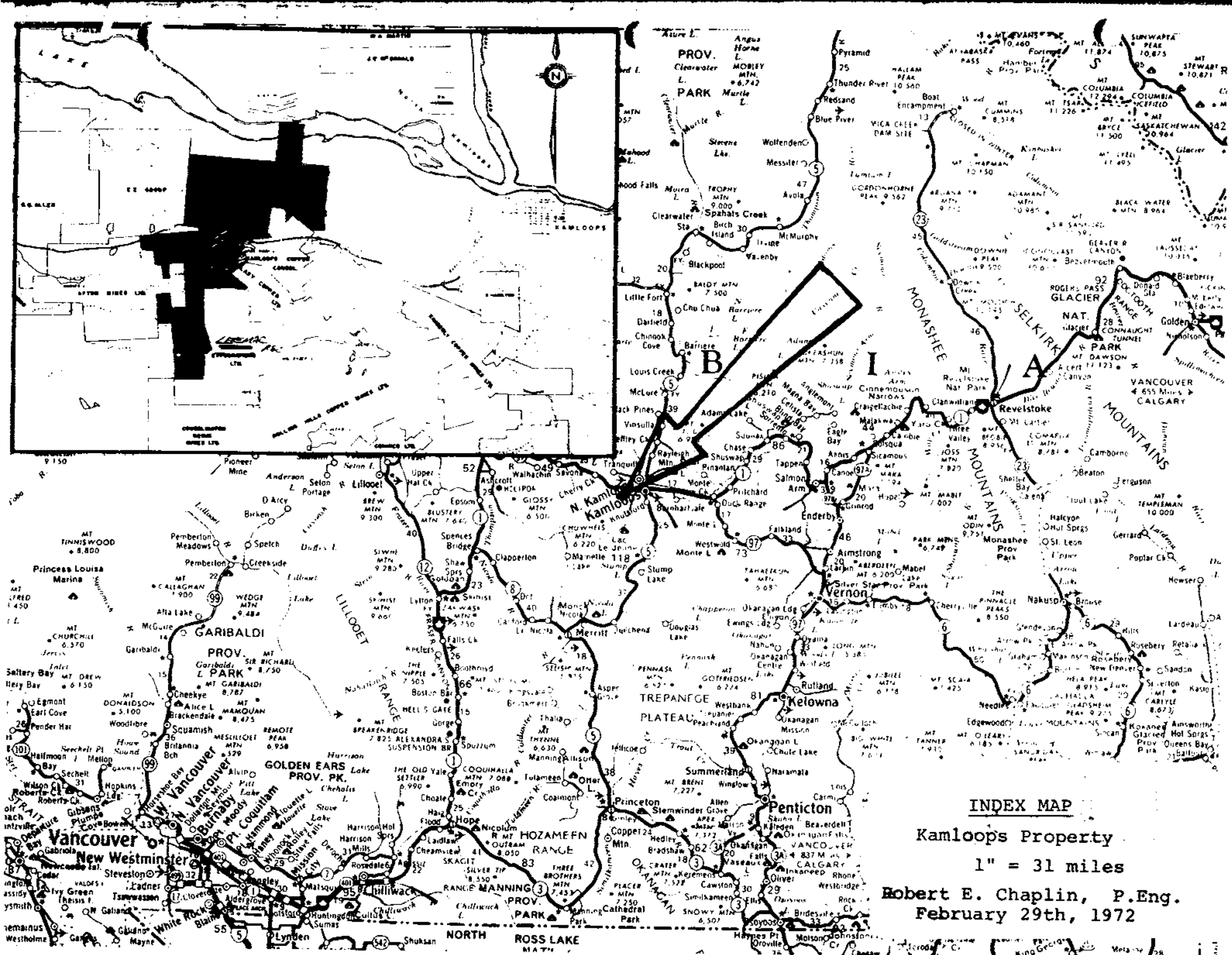
SUMMARY

I.P. surveys conducted by "Sulmac" in 1966 were selectively tested by duplicating identical arrays and electrode spacing over 3½ miles of the "Sulmac" surveys. The present work indicates that the Sulmac data is reliable, and that Zone "A" copper mineralization should be further tested to the E-NE of the known zone by bulldozer trenching and drilling. Previous drilling may have been centred too far south of the target areas.

Five I.P. anomalies, located by the 1966 surveys, and one anomaly, located by the present survey, should be further tested by percussion drilling.

The estimated cost of the percussion drilling program is \$40,000.00 for 20 - 300ft. vertical holes, including assaying and supervision.

- Diamond drilling and trenching is recommended,
- (a) currently on Zone "A" - with sludge recovery to test the known mineralized zone and its extension to the ENE; and
 - (b) to test mineralized zones outlined by the percussion program.



INDEX MAP

Kamloops Property

1" = 31 miles

Robert E. Chaplin, P.Eng.
February 29th, 1972

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NO. 3554 MAP #1

LOCATION AND ACCESS (BONDING AND WATER SUPPLIES)

The claims are approximately 7 miles west of Kamloops and lie south of the Trans Canada Highway, at latitude $50^{\circ}40'N$. and longitude $120^{\circ}27'W$.

Access is by 2 and 4-wheel drive vehicles over the many roads and trails in the area.

The posting of bonds is commonly required to assure ranches against property damage.

Water for drilling operations is scarce, but may be purchased locally.

HISTORY (Since 1966).

In 1966 Vanco Explorations Limited exercised options on several properties in the same general area, including the Kamloops property. The option period was relatively short due to problems incurred from the different property owners and, as a result, the option was terminated shortly after one year. During their option, fifteen diamond drill holes, for a total of 5,300 feet, were drilled and geochemical and geophysical surveys were conducted. The geophysical surveys included a ground magnetometer and induced polarization survey conducted by Sulmac Exploration Services Limited. Three of the drill holes encountered appreciable quantities of chalcopyrite and pyrite.

Results of the I.P. survey indicated five anomalies, two major and three minor. Major and minor anomalies have been classified as those having chargeabilities of ten and five milliseconds respectively, while background chargeability was two milliseconds. All anomalies, with the exception of one, have well mineralized old diggings on or near them, and all appear to be located in areas of northeasterly or east-west lineaments. Data was obtained using a three-electrode array - one current, and two potential electrodes. Electrodes were spaced 200 feet apart along lines on a 200-foot grid network.

PROPERTY

The property consists of 86 mineral claims, five crown grants and one mineral lease:

<u>Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>
DM 5 Fr.	38580	Jan. 3/1975
DM 55-57 incl.	18189-18191 incl.	Jan. 30/1975
DM 61-62 incl.	18195-18196 "	" " "
DM 63-64 "	18089-18090 "	Jan. 27/1975
DM 71	31070	Feb. 10/1975
DM 73	18754	Feb. 2/1975
DM 75	18756	" " "
DM 77	18758	" " "
DM 94-95 Fr.	34945	Feb. 27/1975
DM 96-97 incl.	34946-34947 incl.	" " "
DM 98-99 "	18779-18780 "	Feb. 2/1975
DM 120-121""	27070-27071 "	Aug. 26/1972
DM 124	27272	Sept. 20/1972
Ro 1-4 incl.	47802-47805 incl.	Nov. 18/1976
Ro 5-26 "	47806-47827 "	Nov. 18/1972
Ro 47-52 "	48241-48246 "	Dec. 14/1972
Ro 61	48255	" " "
Ro 63-65 incl.	48257-48259 incl.	" " "
Audra 1 Fr.	54086	March 1/1972
Audra 2 Fr.	54087	" " "
Audra 3 Fr.	54088	" " "
Lorna 1	46387	June 8/1983
Lorna 2-4 incl.	46388-46390 incl.	June 8/1982
Monzo 1-3 incl.	54137-54139 incl.	March 8/1977
<u>Crown Grants:</u>		
Con Verdant	Lot No. 1341	July 2/1972
May Fraction	Lot No. 1311	" " "
Sodium Fraction	Lot No. 4666	" " "
Winty	Lot No. 4667	" " "
<u>Mineral Leases:</u>		
Iron Cap (L. 875)	Lease No. 21-0	March 2/1972
<u>Others:</u>		
EB 1-19 incl.	94026-94044 incl.	Dec. 14/1972

I.P. SURVEY

Purpose of Survey

Copper mineralization occurs both as fracture fillings and dissemination of pyrite, magnetite, chalcopyrite, bornite, native copper - within fractured intrusive rocks of the Iron Mask batholith.

Induced polarization surveys should detect the presence of concentrations of disseminated sulphides and disseminated magnetite.

The current work essentially confirmed that the Sulmac I.P. surveys of 1966 are reliable.

Procedure

Reconnaissance traverses, using a 200-foot and 400-foot pole-dipole array, were run at $\frac{1}{2}$ spread intervals. The equipment, a Geoscience unit (Model No. 5280), is powered by a 1500 watt, 400 cycle generator. Current supplied to the electrode commonly ranged between 1.0 and 0.3 amps, using stainless steel electrodes and a strong detergent - and NaCl solution - at a frequency range of 3.0-0.1 c.p.s.

Dipole-dipole arrays were run to 4-separations, using a 100-foot electrode interval. Frost conditions required that all electrode stations be blasted to obtain low contact resistances.

Porous pots with saturated copper sulphate solution were used for potential-measuring electrodes. Ground had to be cleared of snow.

Results

(a) Reconnaissance - see Location Map, Figure 1.

Three of the Sulmac chargeability anomalies were traversed, namely A, C and E - all of which were confirmed with respect to location. A fourth anomaly (Zone F) was detected south of the old Sulmac grid.

Zones A, C and F are due to bedrock effects, as indicated by the presence of shallow overburden and high apparent resistivities.

Zone E could be due to an overburden effect; however, malachite and pyrite were found at Station 70S of the "O" line when blasting electrode holes - 70S is on the south side of Zone E. The overburden cover deepens northward towards a marshy, low-lying valley - with attendant low apparent resistivities.

Zone G, at the east end of Iron Mask Lake, may be due to bedrock effects under \pm 100 feet overburden.

Zones B and D were not investigated during this survey.

(b) Detailed Arrays

Zone A was investigated by four N-S dipole-dipole traverses to 4 separations on a 100-foot electrode interval.

The results of the detailed surveys indicate an ENE-trending zone of 800 ft. by 200 ft. size, with percent frequency effects (P.F.E.) up to 9 (background is 2, or less) - flanked on both sides by P.F.E.'s up to 30 over a total width of 600 feet.

CONCLUSIONS - ZONE "A" *see*

The central, saddle-like P.F.E. between the peaking highs is considered most likely to contain economic quantities of copper-bearing sulphides, because it corresponds with the area of known prospect pits and drill holes with copper grading \geq 0.4 percent.

The dipole-dipole sections on lines 46E and 50E both contain a 200 ft. zone of intermediate apparent resistivities associated with the central P.F.E.'s.

The P.F.E.'s tend to form a pyramidal pattern in profile, indicating a relatively steep-dipping causative body.

Previous drilling apparently tested the southernmost part of the P.F.E. highs (the highest P.F.E. effects!) where very low amounts of copper were detected.

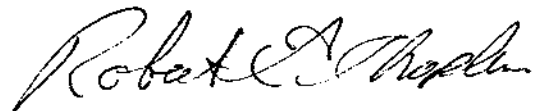
In the writer's opinion, the previous drilling was located too far south of the zone of interest, and the holes were commonly drilled at -45° southwesterly - away from the central P.F.E. zone.

William Pierre, P.Eng., used an MF-1 magnetometer along lines 46, 50 and 54E., in the vicinity of the I.P. anomaly. The magnetic profiles shown on the I.P. sections indicate that magnetite is not present to significantly contribute to the P.F.E.'s.

RECOMMENDATIONS

Percussion drill all the indicated zones. Approximately 6,000 feet of drilling is required to test all the induced polarization targets.

Respectfully submitted,



Robert E. Chaplin, P.Eng.

COST OF SURVEY

<u>Dates Worked.</u>	<u>Personnel Employed.</u>	<u>Wages.</u>	
February, 1972 9th-25th incl.	T. Duhaime @ \$25.00/day	\$ 300.00	
	M. Ferguson @ \$25.00/day	300.00	
	F. Wisman @ \$25.00/day	275.00	
	G. Lafortane @ \$25.00/day	250.00	
9th-28th incl.	R.E. Chaplin, P.Eng., @ \$100.00/day	<u>2,000.00</u>	\$3,125.00
Room and Board			400.00
I.P. Rental @ \$75.00/day			1,500.00
Transportation			<u>500.00</u>
		TOTAL	<u><u>\$5,525.00</u></u>

Respectfully submitted,



Robert E. Chaplin, P.Eng.
February, 1972.

QUALIFICATIONS OF AUTHOR

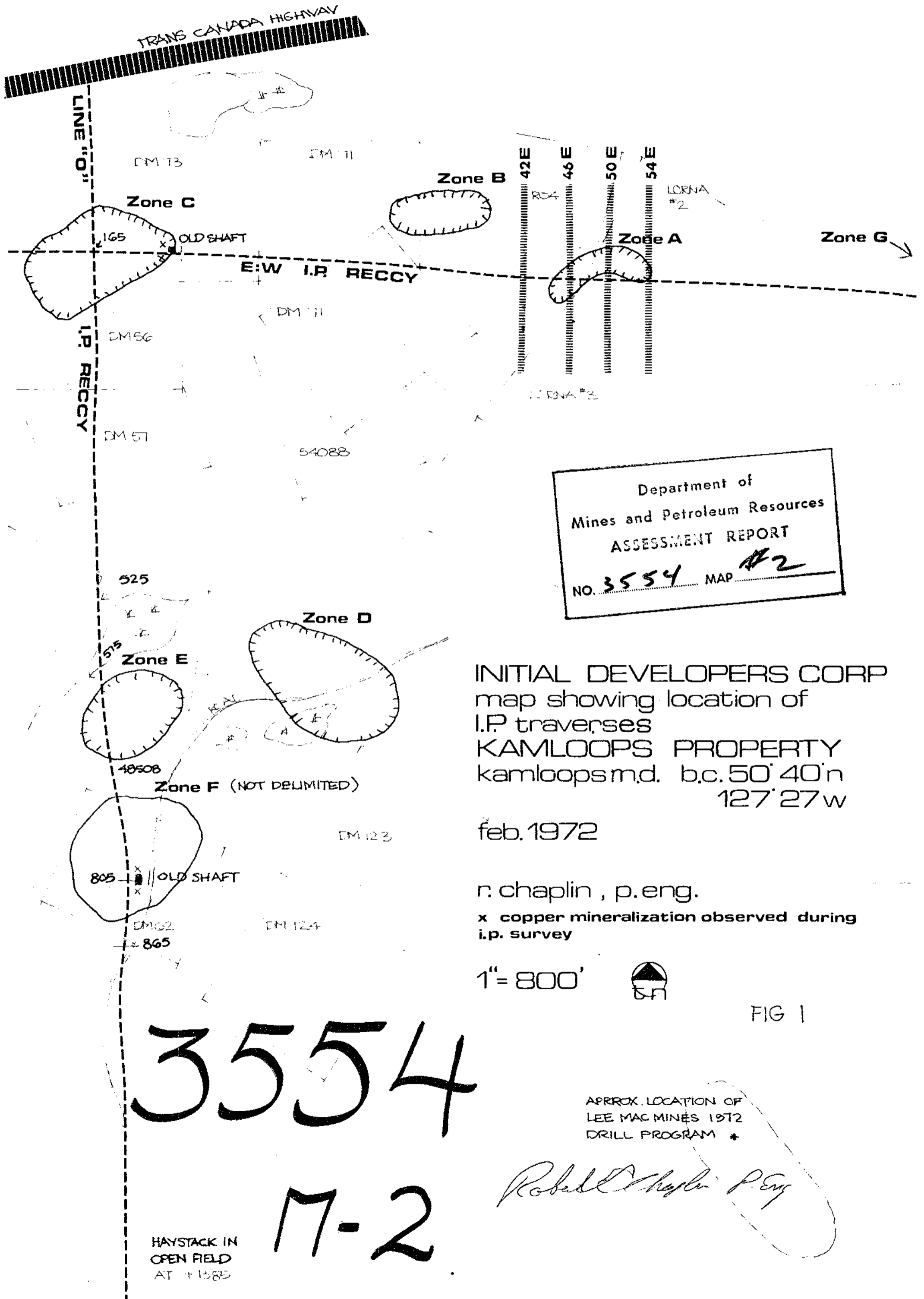
I, Robert E. Chaplin, P.Eng., with business and residence at 1761 Drummond Drive, Vancouver 8, British Columbia, hereby certify that:.

1. I am a member of the Association of Professional Engineers of the Province of British Columbia.
2. I am a graduate of the University of British Columbia, 1959, B.Sc.
3. I have 20 years' experience in mineral exploration in Canada and the United States.
4. For the past 7 years I have owned and operated an Induced Polarization Unit, Geoscience Model 5280, and conducted my own Geological Consulting practice during that time.

Respectfully submitted,



Robert E. Chaplin, P.Eng.,
February 29th, 1972.



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INITIAL DEVELOPERS CORP
 map showing location of
 I.P. traverses
 KAMLOOPS PROPERTY
 kamloops m.d. b.c. 50° 40' n
 127° 27' w

feb. 1972

r. chaplin, p. eng.

x copper mineralization observed during
 i.p. survey

1" = 800'



FIG 1

3554

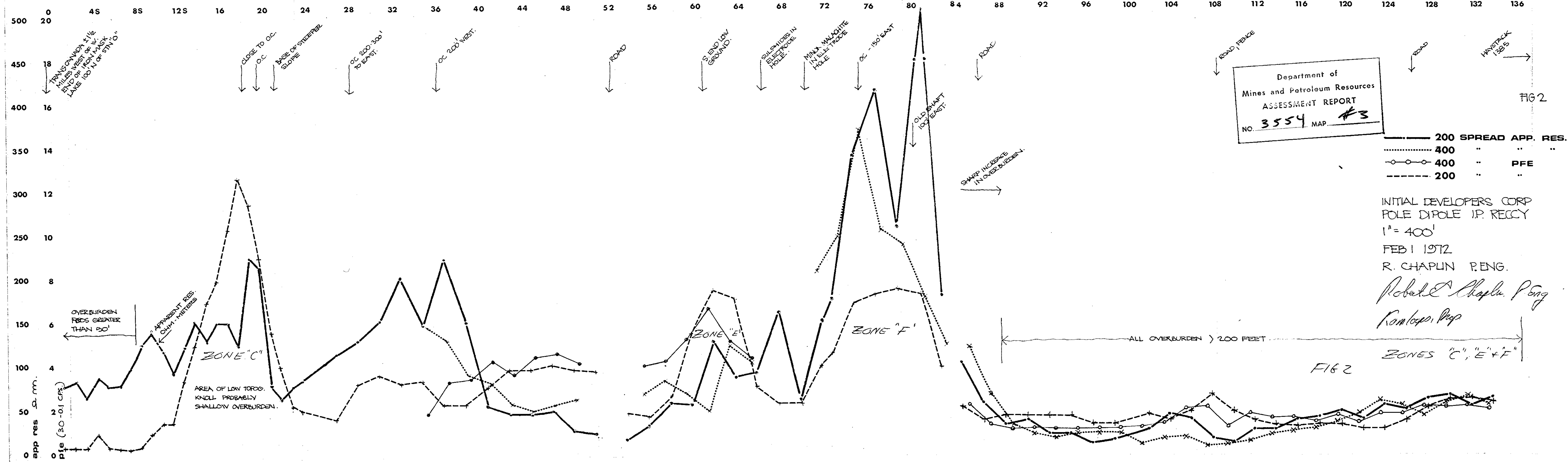
17-2

APPROX. LOCATION OF
 LEE MAC MINES 1972
 DRILL PROGRAM *

Robert Chaplin P. Eng.

HAYSTACK IN
 OPEN FIELD
 AT +1385

LINE "O" 200' pole dipole IP RECCY



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— 200 SPREAD APP. RES.
 400 " " "
 —○— 400 " PFE
 - - - - 200 " "

INITIAL DEVELOPERS CORP
POLE DIPOLE IP RECCY
1" = 400'
FEB 1 1972
R. CHAPLIN P. ENG.

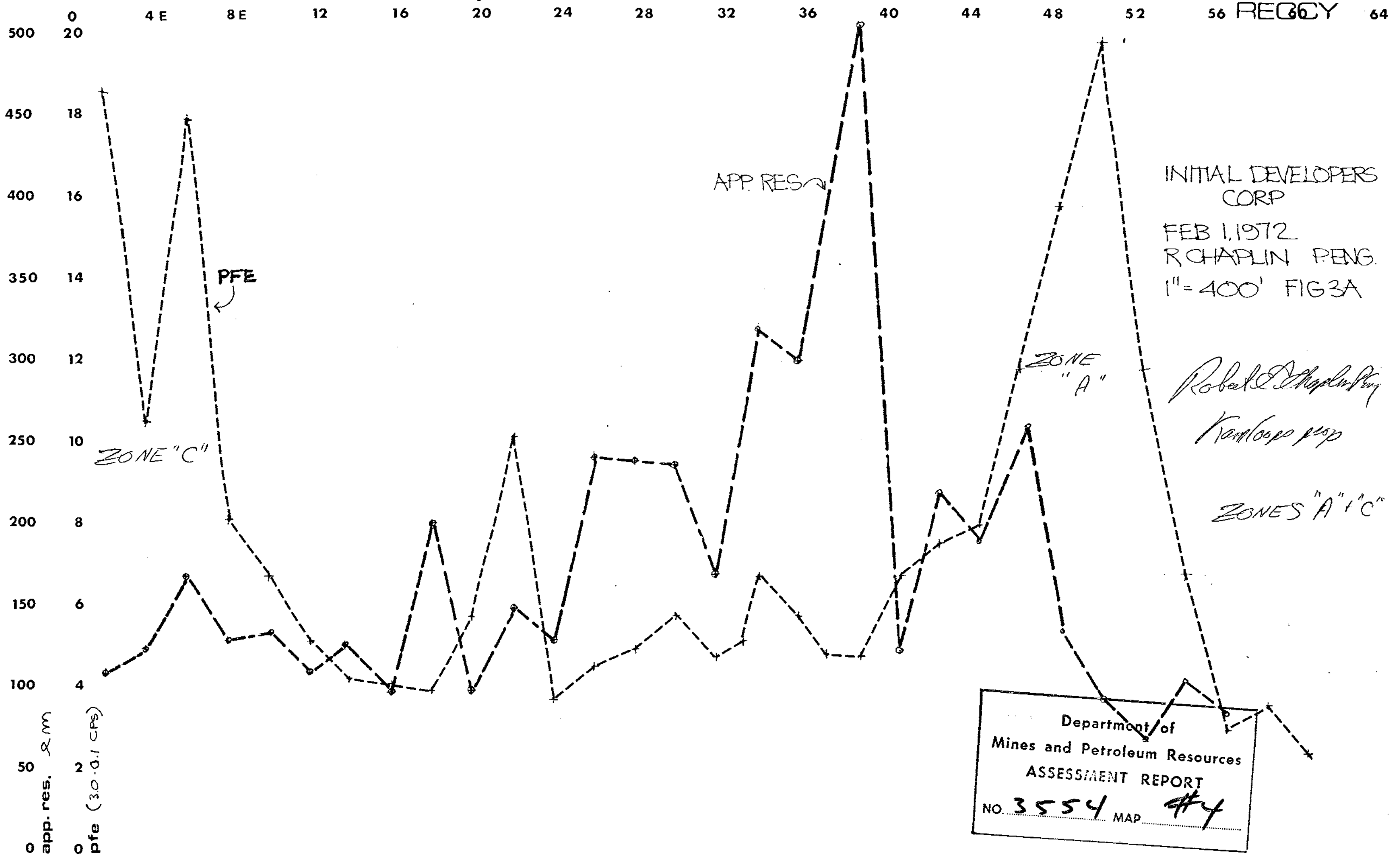
Robert E. Chaplin, P. Eng.
Rom Lopez, Prop.

ZONES "C", "E" + "F"

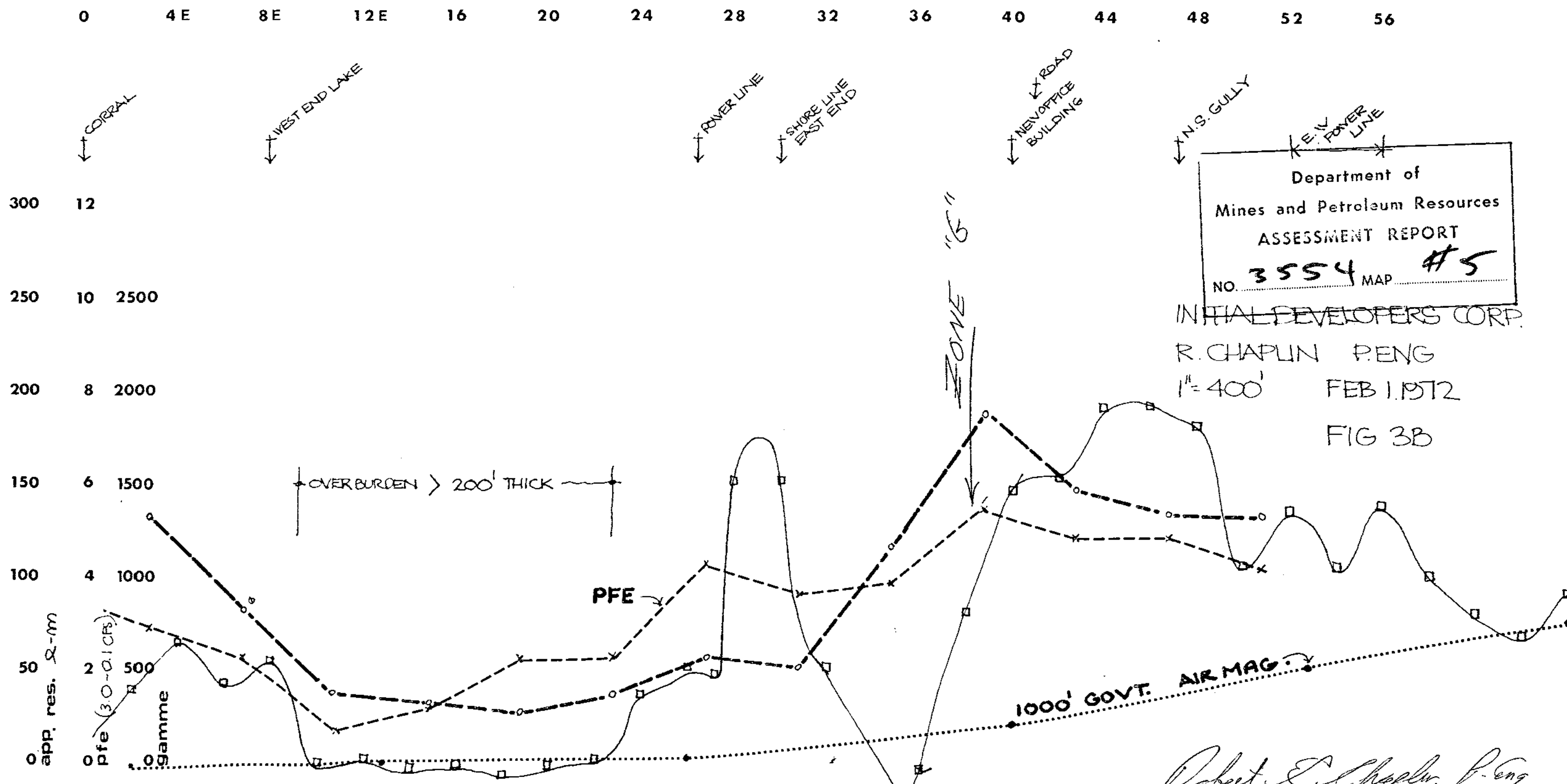
FIG 2

FIG 2

E-W TRAVERSE thru VC-1 200' pole dipole I.P.



E-W IRON MASK LAKE TRAVERSE 400' pole dipole I.P.



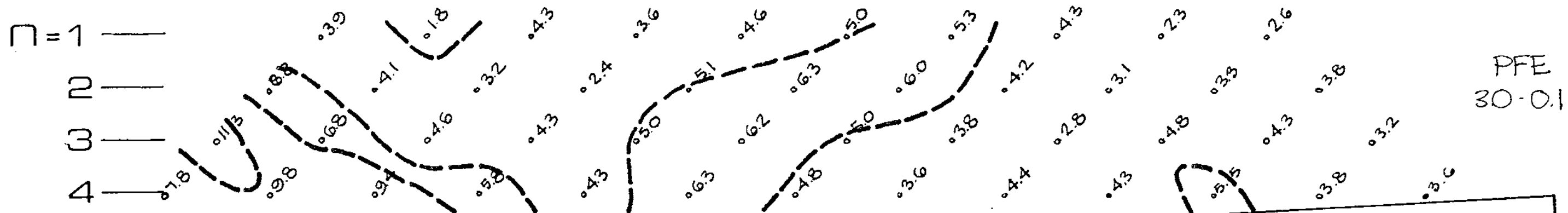
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NO. 3554 MAP #5

INITIAL DEVELOPERS CORP.
R. CHAPLIN P. ENG
1" = 400'
FEB 1, 1972
FIG 3B

Robert E. Chaplin, P. Eng
Kamloop prep
ZONE "6"

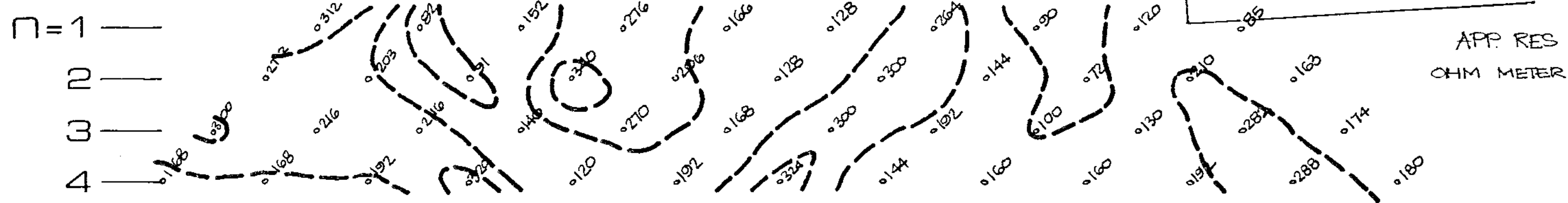
LINE 42 E

85 75 65 55 45 35 25 15 0 1N 2N 3N 4N 5N 6N 7N



PFE
30-0.1

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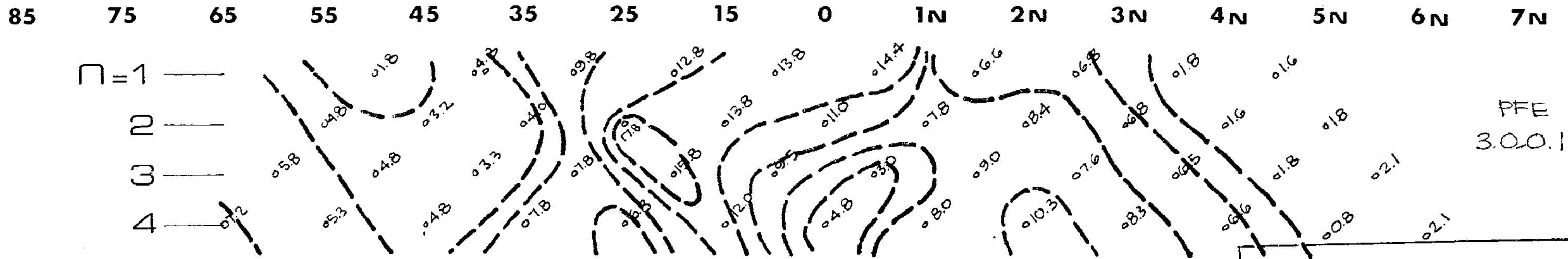


APP RES
OHM METER

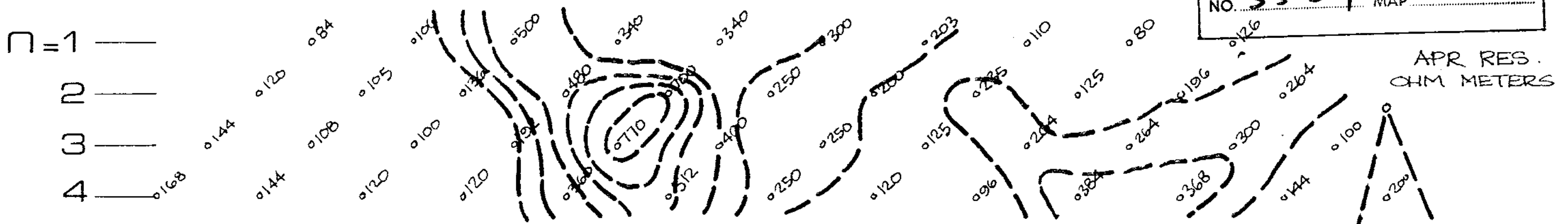
INITIAL DEVELOPERS CORP
DIPOLE - DIPOLE I.P. ZONE "A"
A=100' 30-0.1 cps
R. CHAPLIN P. ENG.
FEB 1 1972 FIG. 4

Robert A. Chaplin, P. Eng.
Kamloops
1"=100' **A2E**

LINE 46E



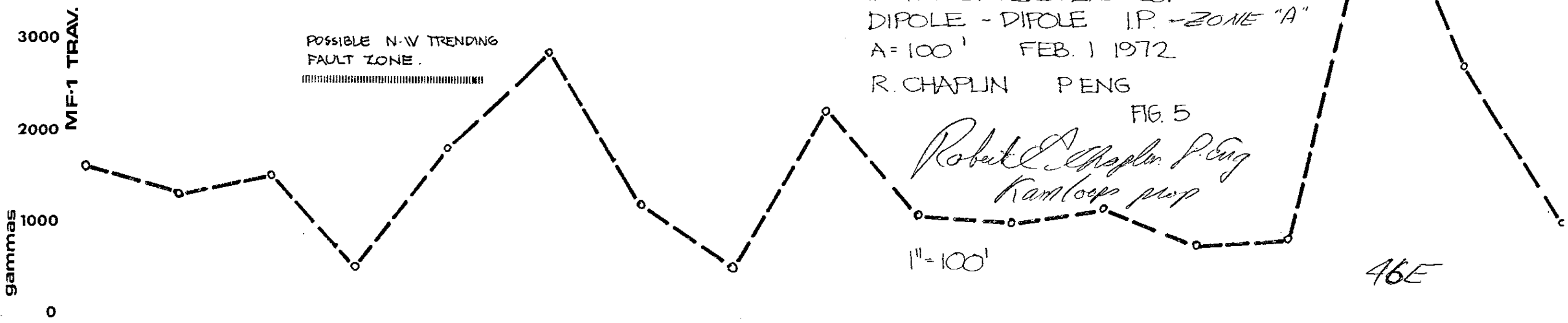
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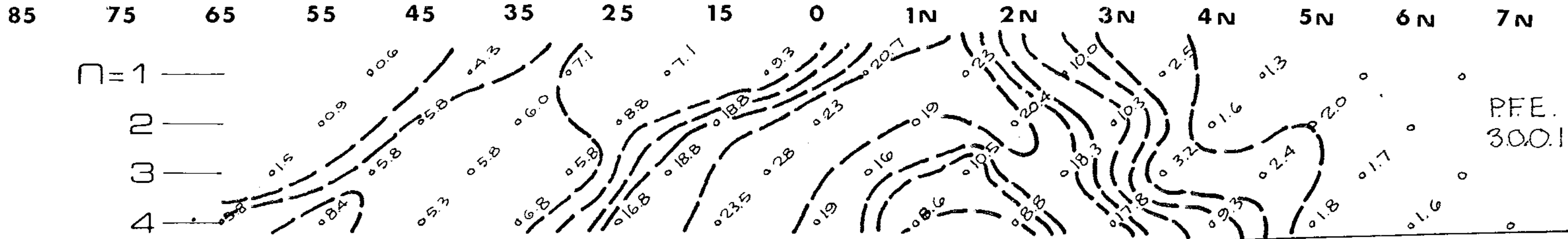
INITIAL DEVELOPERS CORP.
DIPOLE - DIPOLE I.P. - ZONE "A"
A = 100' FEB. 1 1972
R. CHAPLIN PENG

FIG. 5

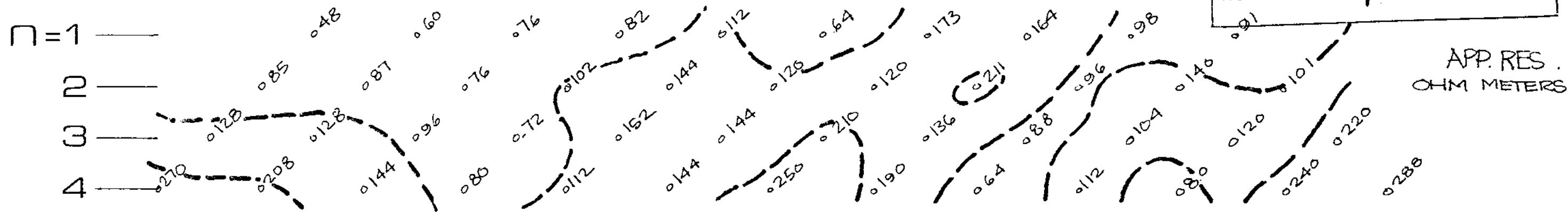
Robert A. Chaplin, P. Eng
Kamloops map



LINE 50E



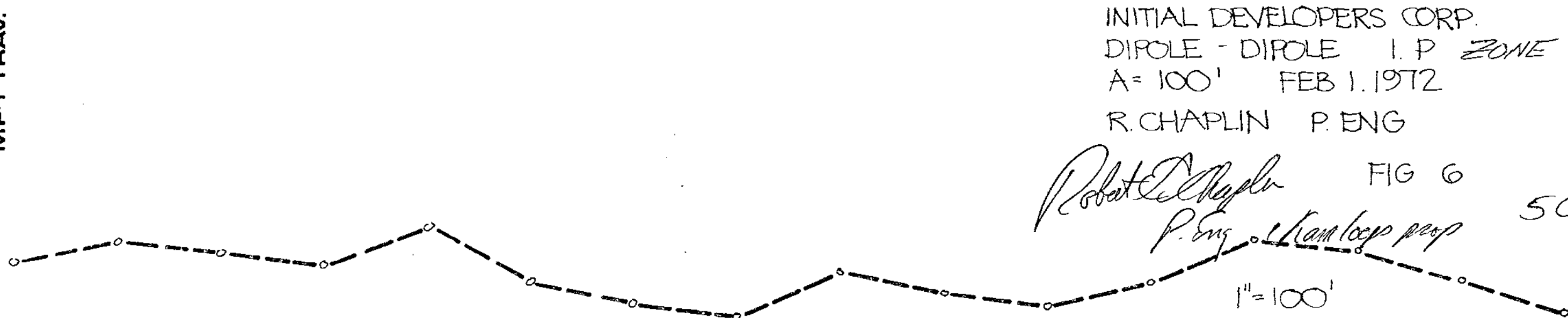
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3000
2000
1000
0

MF-1 TRAV.

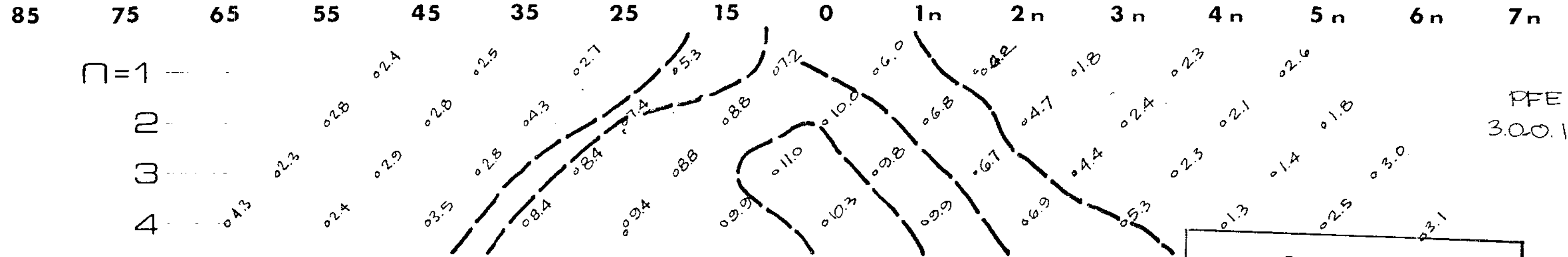
gammas



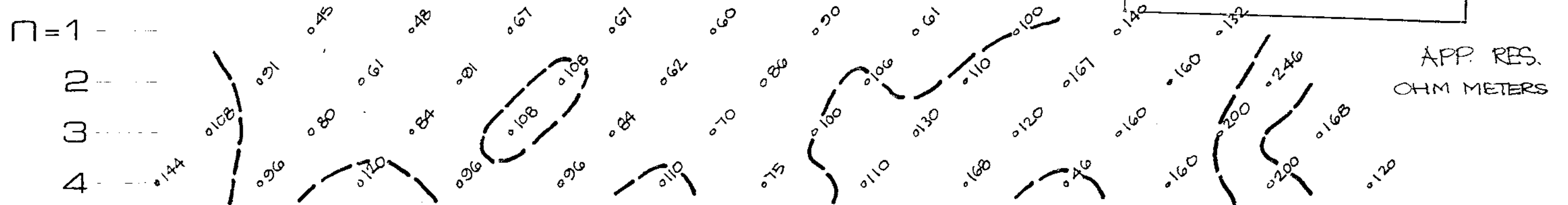
INITIAL DEVELOPERS CORP.
DIPOLE - DIPOLE I.P. ZONE "A"
A = 100' FEB 1, 1972
R. CHAPLIN P. ENG

Robert E. Chaplin
P. Eng. *R. Chaplin prep*
FIG 6
50E

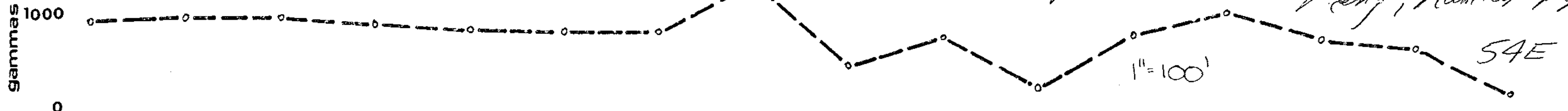
LINE 54E



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MF.1 TRAV.
 3000
 2000



INITIAL DEVELOPERS CORP.
 DIPOLE - DIPOLE = I.P. ZONE "A"
 A = 100' FEB 1, 1972
 R. CHAPUN PENG

Robert Chapun Peng FIG. 7
Kamloops prop.

42E

46E

50E

54E

4N

3N

2N

1N

0

1S

2S

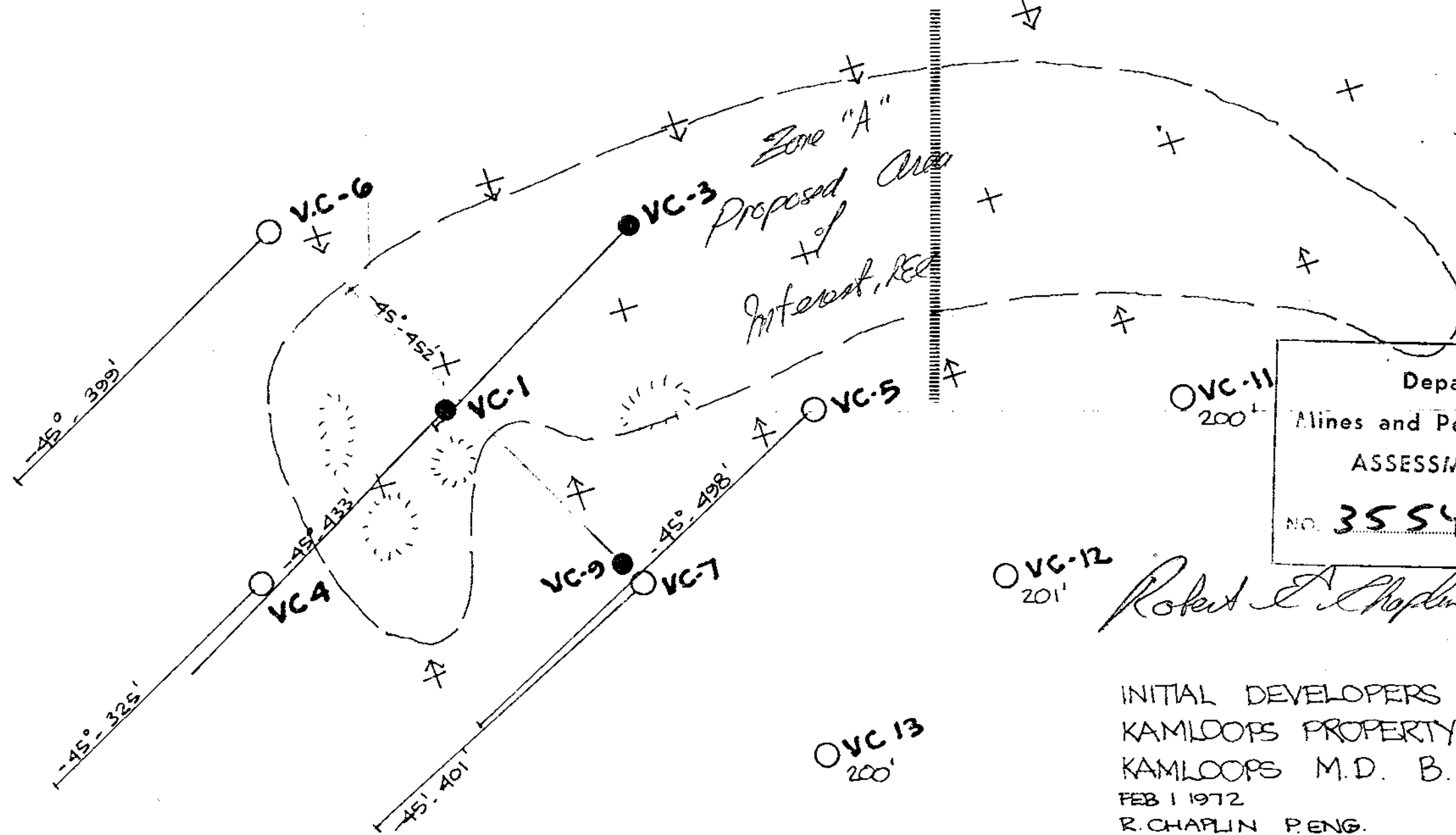
3S

4S



TN

1"=100'



Department of
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 NO. 3554 MAP #10

Robert A. Chaplin, P. Eng

INITIAL DEVELOPERS CORP
 KAMLOOPS PROPERTY
 KAMLOOPS M.D. B.C.
 FEB 1 1972
 R. CHAPLIN P. ENG.

- OLD DRILL COLLAR BARREN CORE
- OLD DRILL COLLAR 9 0.4% CU.

☆ OLD TEST PIT OR TRENCH

----- PROPOSED CAT TRENCH

+ PROPOSED VERTICAL DRILL HOLES

⊕ PROPOSED 45° DRILL HOLES

1"=100' FIG 8