COMINCO LTD.

EXPLORATION

NTS: 82M/13

WESTERN DISTRICT

GEOPHYSICAL REPORT

INDUCED POLARIZATION AND MAGNETOMETER SURVEY

CK PROPERTY

Raft Synform Grid

Raft River Area, B.C.; Kamloops Mining Division

LATITUDE: 51⁰55'N; LONGITUDE: 119⁰35'W

Work performed: July 6-9, 11-13

On Claims: Park 1, North 1

ALAN, R. SCOTT

30 OCTOBER 1980

Part 4 MINERAL REFOURCES BRANCH ACCILIANTING REPORT OSSUMMENT REPORT

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INTRODUCTION

The CK property is located some 50 kilometers by road north east of Clearwater, B.C. Plate 180-80-1 shows the general location of the property and 180-80-2 the location of the survey lines in relation to the claims.

The 1980 work discussed in this report consisted of 4.6 line kilometers of multiseparation IP and magnetometer survey on the RAFT SYNFORM GRID. The survey closed off an anomaly detected in the fall of 1979.

This report presents the data, describes the procedures, and discusses the results of the 1980 survey.

LOCATION AND ACCESS

Road access to the CK property can be gained by turning north off highway number 5, 3 kilometers north of Clearwater, onto a well maintained logging road which follows the Raft River Valley. The CK claims are about 40 kilometers by road from highway number 5, as indicated on plate 180-80-1.

GEOPHYSICAL SURVEYS

Induced Polarization

A Huntec 7.5 kw motor generator/IP transmitter in combination with two Scintrex IPR-8 receivers were used on the CK survey. Chargeability (IP) response was measured in the time domain using a 2 second current on /2 current off alternating square wave signal. The plotted chargeability values are the M_{232} measurement of from 650 to 1170 milliseconds following cessation of the²³² current pulse. Units are in millivolts per volt.

The pole dipole electrode array was used with an "a" spacing of 50 meters and "n" separations of 1,2,3, and 4. The current electrode was to the west of the potential dipole on all survey lines.

The apparent resistivity was calculated from the relation:

resistivity = (V/I).K,

where V is the voltage during the current on period (I), and K is a geometrical factor dependant on the "a" spacing and "n" separation.

Magnetometer Survey

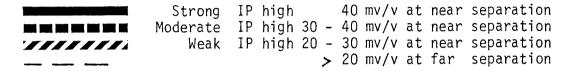
A Scintrex MP-2 proton precession total field magnetometer was used for the magnetic survey. Readings were corrected for diurnal drift by the base station looping method.

1.

DISCUSSION OF RESULTS

The chargeability (IP) and apparent resistivity survey results are presented in pseudosection format on plates 180-80-3 to 8 inclusive. The total field magnetics are plotted with the IP pseudosections as line profiles.

IP anomalies are categorized on the sections as follows:



Apparent resistivity lows are indicated by:

---- 600 ohm meters at near separation.

Plates 180-80-9 and 10 are contour plans of the near separation (n=1) IP and resistivity respectively, for both the 1980 survey and the previous (1979) survey. IP anomalies of greater than 30 mv/v and resistivity lows of less than 500 ohm meters are indicated by the stipled pattern on the respective plans.

The 1980 survey work consisted of one line to the south of the 1979 grid (line 44N), two lines to the north (lines 52N and 53N), the extension of lines 45N and 49N to the east, and a short section on the west side of line 51N (from 3000E to 3200E).

A broad IP high zone (>20mv/v) was detected on line 44N; 2900E to 3300E. A strong anomaly (39.5 mv/v at u=1) plots at 3025E within this zone.

A broad IP high zone was detected from 3550E to 3600E on line 45N. The moderately high 36.1 mv/v (n=1) value at 3675E is conincident with an apparent resistivity low and is on strike to the anomaly detected on line 47N in 1979.

A broad IP high zone plots from 3400E to 3750E on line 49N. The eastcentral portion of the anomaly (3500E to 3700E) is coincident with low apparent resistivity.

The 1980 survey on the west section of line 51N gave substantially different results than the 1979 survey. The very strong response at 3300E in 1979 was not confirmed in 1980. The 1979 results at that set up are believed to have been in error, probably due either to bad contact or telluric noise.

A moderate amplitude anomaly of 37 mv/v (n=1) plots at 3425E on line 52N. The anomaly is coincident with high resistivity, and is on strike to the anomaly detected on line 51N. The anomaly is coincident with high resistivity, and is on strike to the anomaly detected on line 53N.

CONCLUSIONS

Portions of the Raft Synform grid on the CK property were surveyed with time domain IP and total field magnetics in the summer of 1980. The work was on extension of IP survey work conducted in 1979.

A low resistivity associated IP anomaly was detected on line 45N centered at 3675E, and a high resistivity associated IP anomaly was dectected on line 52N at 3425 E. Both these anomalies are on strike to anomalies detected in 1979. The northern anomaly (line 52N) does not extend further northwards whereas the southern anomaly is open to the south.

The broad IP high zone from 3400 to 3750 E on line 49N correlates to anomalies detected on lines 48N and 50N in 1979. The east central portion of the anomaly is associated with low resistivity.

Respectfully submitted by:

Alan R. Scott

Geophysicist

Endorsed for Release by:

Harden

Manager, Western District

Distribution: Mining Recorder (2) Western District (1) Geophysics file (1)

APPENDIX I

CERTIFICATION

I, Alan R. Scott, of 4013 West 14th Avenue, in the City of Vancouver, in the Province of British Columbia, do hereby certify:-

- THAT I graduated from the University of British Columbia in 1970 with a B.Sc. in Geophysics;
- 2. THAN I am a member of the Association of Professional Engineers of the Province of Saskatchewan, the Society of Exploration Geophysicists of America, and the British Columbia Geophysical Society.
- 3. THAT I have been practising my profession for the past ten years.

Alan R. Scott, Geophysicist

C A N A D A PROVINCE OF BRITISH COLUMBIA TO WIT:

STATUTORY DECLARATION

I, ROBIN LAWSON WOODS, of the District of North Vancouver, in the Province of British Columbia, DO SOLEMNLY DECLARE THAT:
I am the Supervisor, Exploration and Foreign Accounting for Cominco Ltd., 2300 - 200 Granville Street, Vancouver, British Columbia, and, as such have knowledge of the facts deposed to herein.
Attached to this Statutory Declaration, as Schedule A, is a statement of expenditures indicating the expenditures charged by Cominco Ltd. to the CK Property account for the period January 1, 1980 to October 31, 1980.

3. The statement of expenditures referred to in paragraph 2 is true and accurate to the best of my knowledge, information and belief.

4. This Statutory Declaration is made in support of an application for credit as assessment work pursuant to the Mineral Act of British Columbia.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

DECLARED before me at the City of Vancouver in the Province of British Columbia, this 12fk day of November 1980

Commission for Affidavits ish Columbia Brit

Anthony Allen Zoobkoff A Commissioner for taking Affidavits for British Columbia.

Robin Lawson Woods

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

C K PROPERTY

KAMLOOPS, M.D., B.C.

STATEMENT OF EXPENDITURES

WORK PERFORMED JULY 5 - SEPT. 18,1980

TYPE OF WORK	DIRECT COST	CAMP COST	SUPERVISION & CORE LOGGING COSTS	TOTAL COSTS
Drilling .	\$ 104,565	\$ 5,950	\$ 37,600	\$ 148,115
Geochemistry	16,045	1,410	7,300	24,755
Road Const. & Acc. to Drill sites	10,898	1,034	4,950	16,882
Geophysics	15,832	-	-	15,832
	\$ 147,340	\$ 8,394	\$ 49,850	\$ 205,584

This is Schedule A referred to in the Statutory Declaration of ROBIN LAWSON WOODS declared before me this/2thday of November , 1980.

A Commissioner for

Affidavits for British Columbia

Anthony Allen Zoobkoff A Commissioner for tilking /Affidavits for British Columbia.

STATEMENTS OF EXPENDITURES

CK PROPERTY

KAMLOOPS M.D., B.C.

JANUARY 1, 1980 TO OCTOBER 31, 1980

Geology	\$ 59 , 850
Linecutting	2,559
Geophysics	13,273
Geochemistry	16,045
Diamond drilling	104,565
Transportation	11,681
Access	10,898
Camp costs	8,394
Tenure	11,988
Option payment	20,000
Communications	2,164
Administrative services	24,142
	\$285,559

Cominco Ltd. Vancouver Office <u>November 12, 1980</u> Copies: Mining Recorder (2) Senior Technician File (2)

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Robin Lawson Woods Supervisor, Exploration & Foreign Accounting

<u>C K PROPERTY</u>

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WORK PERFORMED JULY 5 - SEPT. 18,1980

GROUPING	DRILLING	GEOCHEM.	ROAD	GEOPHYSICS	TOTAL
СК80-1	\$ -	\$ 1,637	\$ 4,000	\$ -	\$ 5,637
2	-	4,852	-	744	5,596
3	-	7,906	-	930	8,836
4	-	7,021		10,044	17,065
5	40,896	-		••	40,896
6	29,586	1,733	2,176	3,525	37,020
7	72,700	1,052	-	-	73,752
	\$ 143,182	\$ 24,201	\$ 6,176	\$ 15,243	\$ 188,802

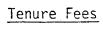
TOTAL VALUE OF WORK DECLARED

GR.Ck	80 1 - 7	\$ 188,802				
СК	79-3 Suppl.	3,000				
СК	79-7	8,700				
Cost Statement in Assessment Report to be Minimum. <u>\$ 200,502</u>						

PAC	APPLIED:		WORK APPLIED	WORK & PAC APPLIED
Credit +	Applied			
\$ 37.000	\$ 304.00 1.264.00 3,735.00 9,504.00 7,156.00 14,448.00	CK 80-1 80-2 80-3 80-4 80-5 80-6 80-7	\$ 3,400.00 5,596.00 8,836.00 17,065.00 40,896.00 36,844.00 73,752.00	\$ 3,400.00 5,900.00 10,100.00 20,800.00 50,400.00 44,000.00 88,200.00
	\$ 36,411.00		\$ 186,389.00	\$ 222,800.00

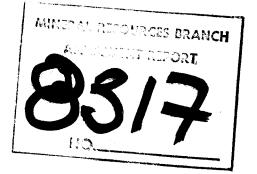
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\$	36,411.00
-	37.00
\$	36,374.00

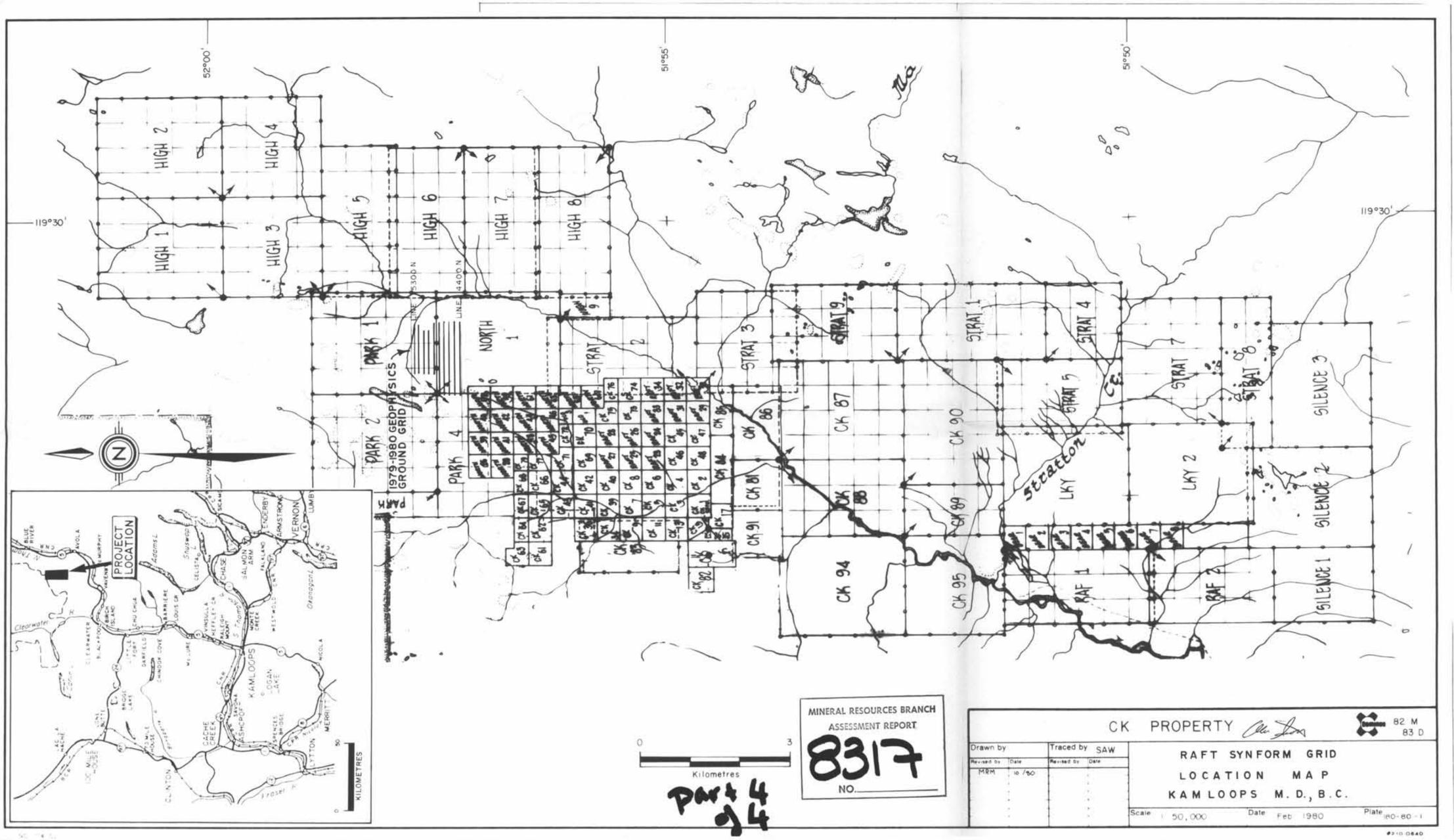


N/G	7 @ \$5.00	\$	35.00
Fees	5% of Assessment		
work	value	1	1,140.00

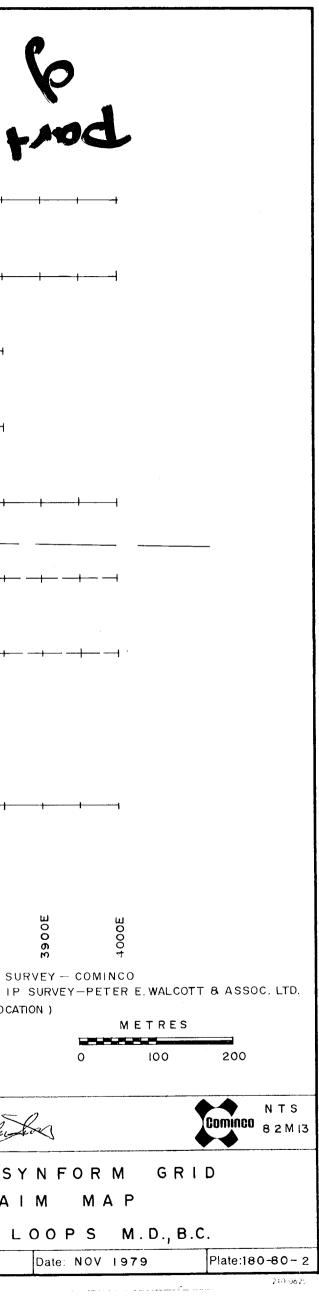
<u>11,140.00</u> \$ 11,175.00

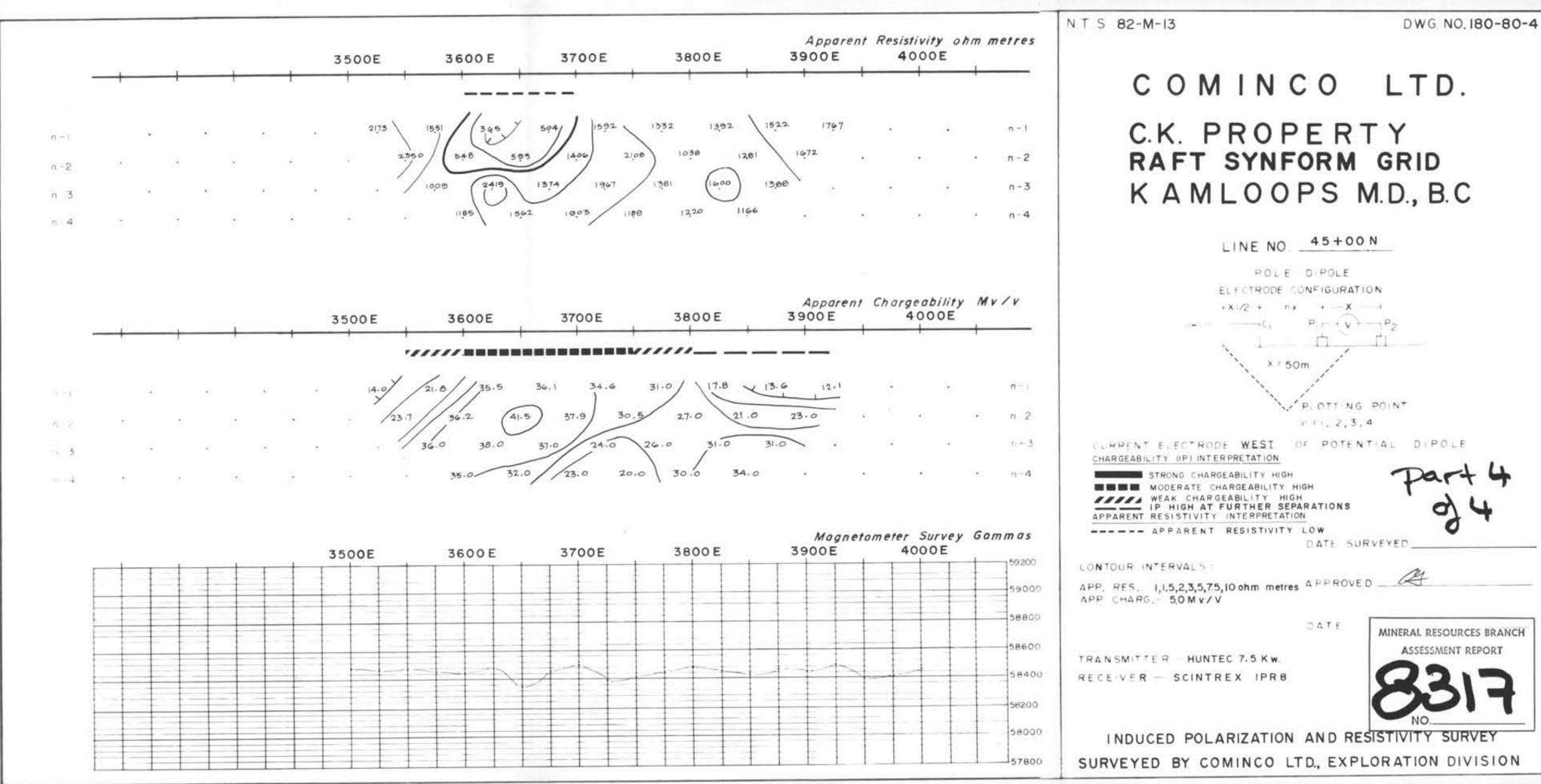


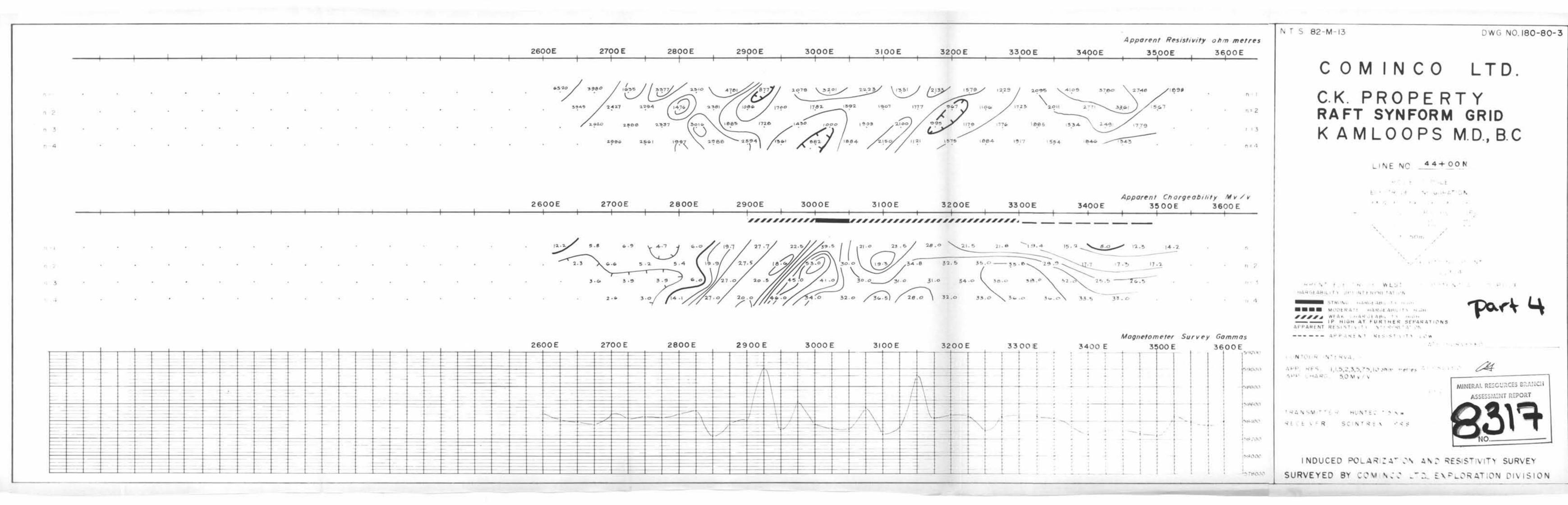
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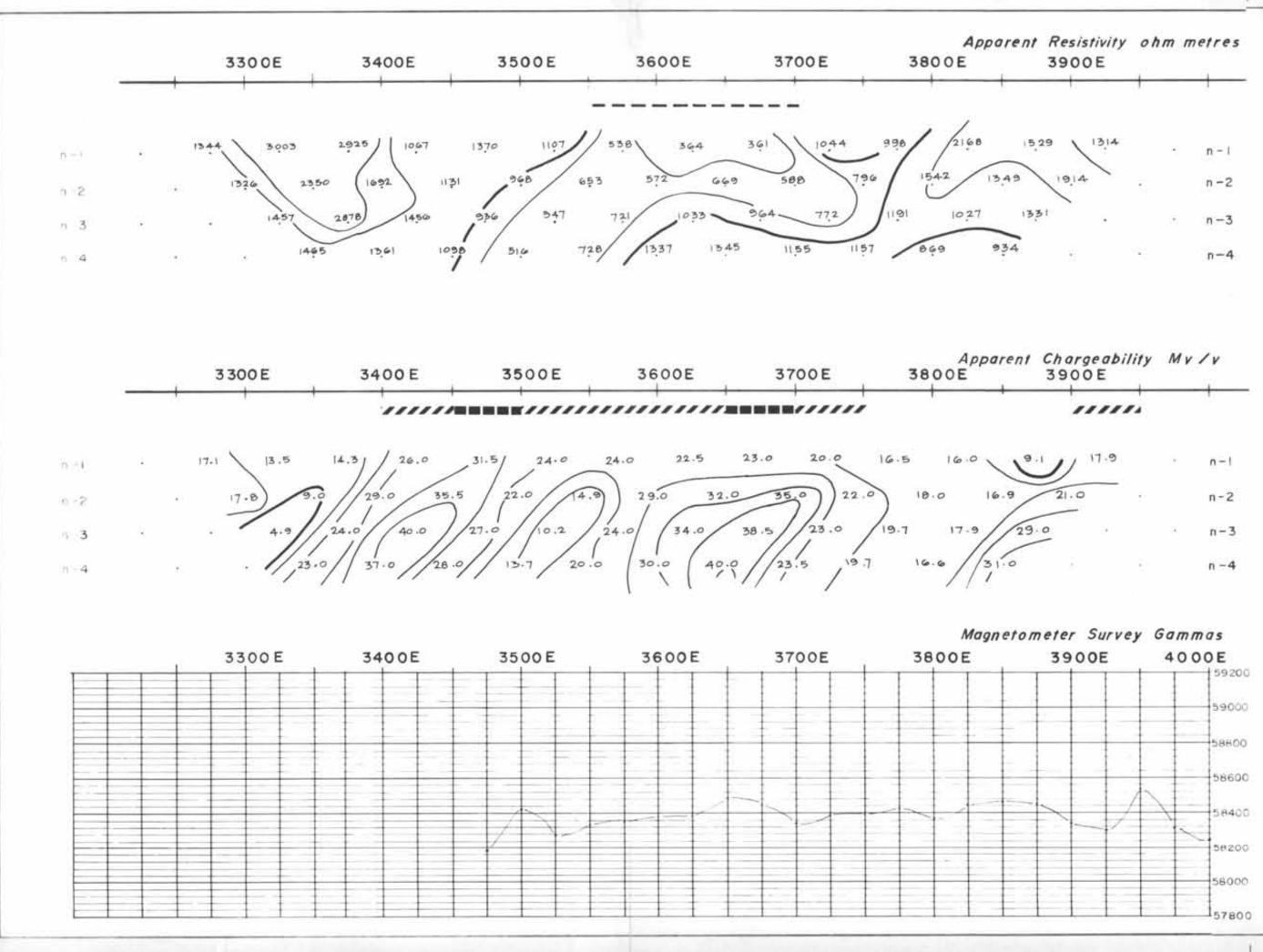


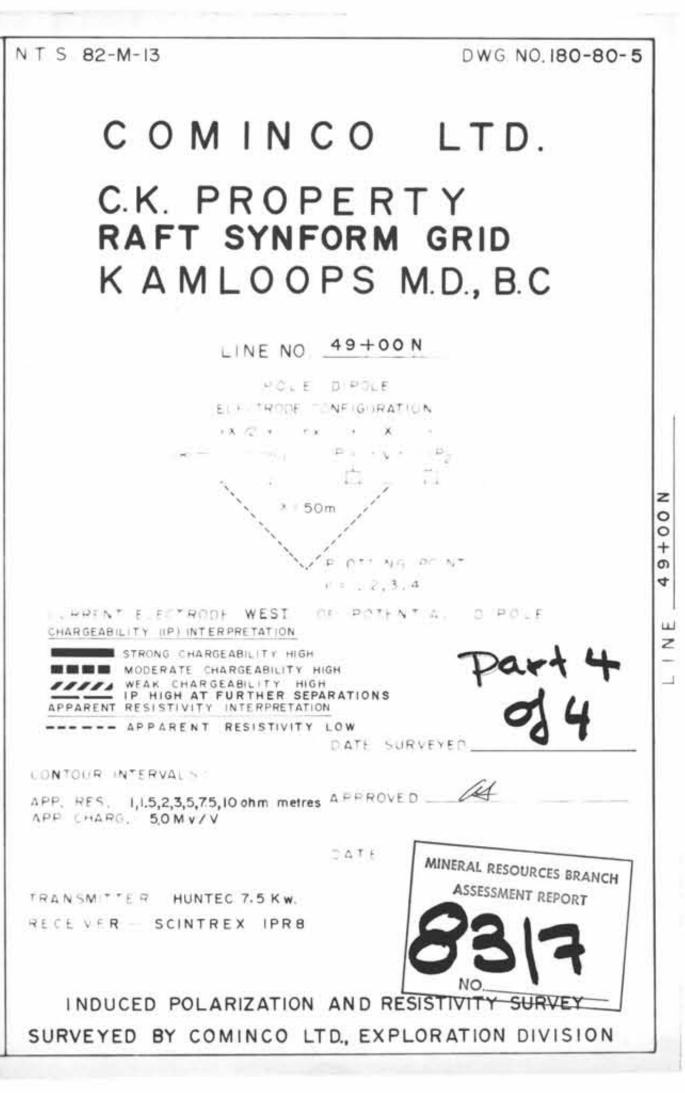
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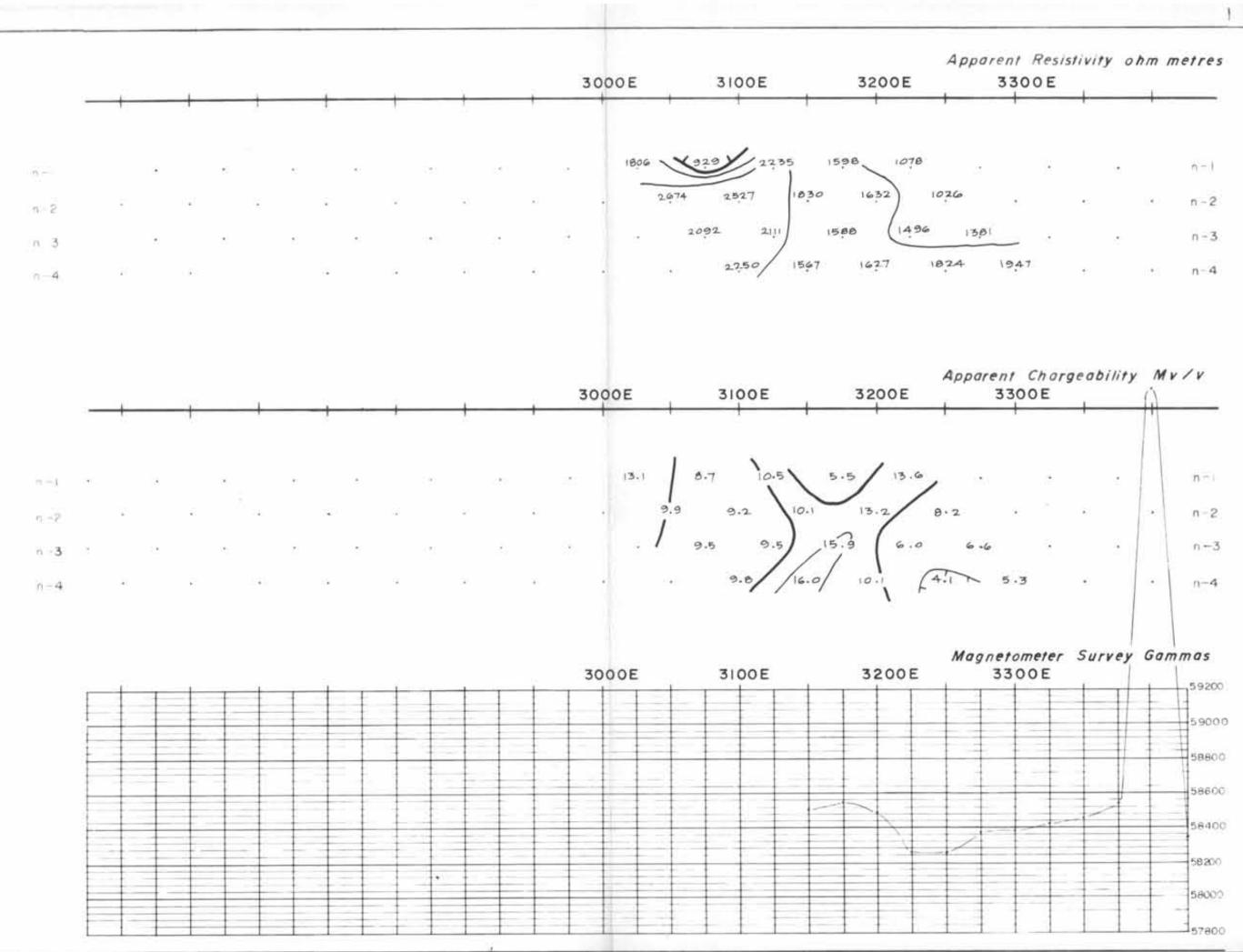












NTS 82-M-13

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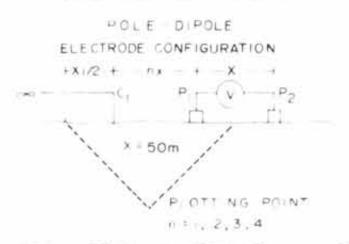
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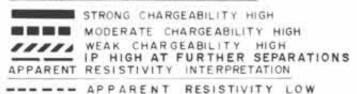
COMINCO LTD. C.K. PROPERTY RAFT SYNFORM GRID

KAMLOOPS M.D., B.C

LINE NO 51+00N



CHARGEABILITY (IP) INTERPRETATION



LONTOUR INTERVALS

TRANSMITTER HUNTEC 7.5 KW.

RECEVER - SCINTREX IPR8

DATE SURVEYED

APP. RES. 1,1.5,2,3,5,7.5,10 ohm metres APPROVED

Δ.T.E

MINERAL RESOURCES BRANCH

8317

INDUCED POLARIZATION AND RESISTIVITY SURVEY SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

