

COMINCO LTD.

WESTERN DISTRIÇT

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EXPLORATION 92 H 9

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YEAR END REPORT TO OWNERS

PERCUSSION DRILLING AND INDUCED POLARIZATION SURVEYS

LUCKY-JURA PROPERTY

LUCKY, LUCKY 2 , BOCH 1-4, MAC MINERAL CLAIMS

Record No: 2435, 2896, 3237-9, 3282, 3238

PRINCETON

Similkameen Mining Division

Latitude: 49 deg. 34' N Longitude: 120 deg. 27' W

December 10, 1990

A. M. Pauwels

YEAR END REPORT TO OWNERS

LUCKY-JURA PROPERTY

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COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

YEAR END REPORT TO OWNERS

PERCUSSION DRILLING AND INDUCED POLARIZATION SURVEYS

LUCKY-JURA PROPERTY

I SUMMARY

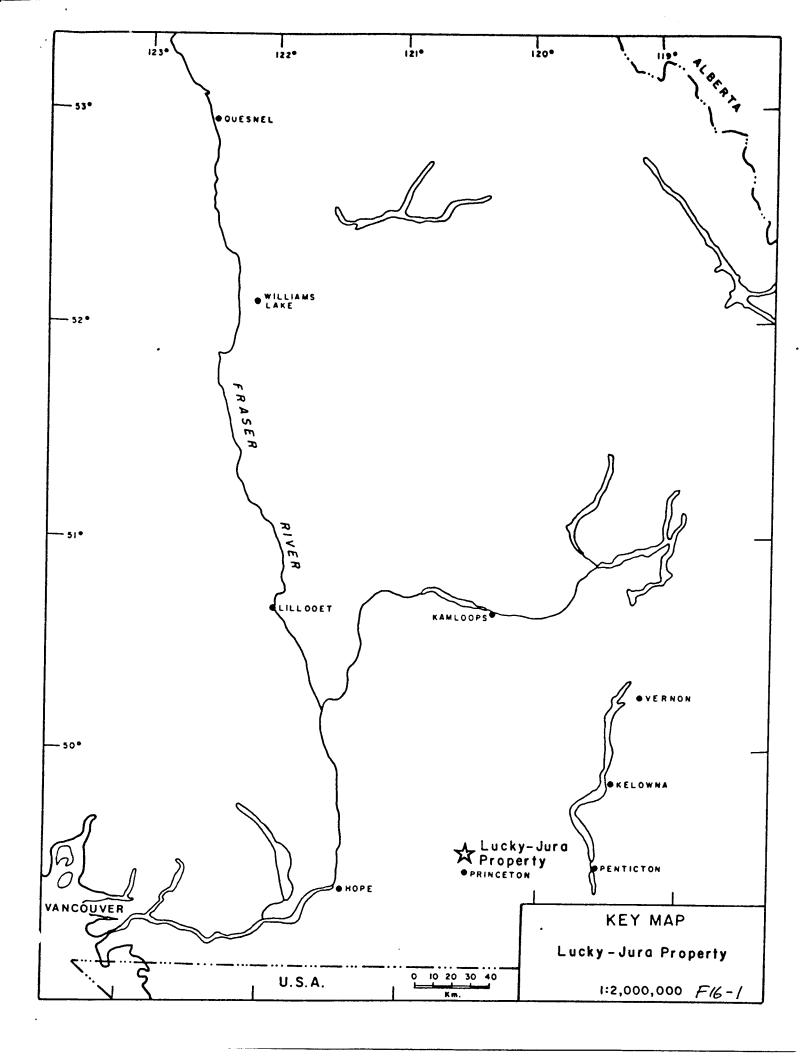
Past exploration found high copper and gold values in soils, outcrops and drill holes associated with a large hydrothermal system developed in Nicola volcanic rocks. Induced Polarization surveys in 1960 showed an IP high caused by the hydrothermal alteration. The western and southern boundaries of this IP high were delineated in April 1990. Later reconnaissance style IP over the northern part of the claims did not find any additional IP anomalies. The undrilled, overburden covered part of the IP high was tested with percussion drilling (17 holes). Altered bedrock was intersected with elevated copper and gold values but the values found are not considered to be of economic interest to Cominco.

II INTRODUCTION

The claims are 12 km northeast of Princeton (see Figures 1 and 2) and straddle the paved Princeton-Osprey Lake road. The Kettle Valley Railway (CP-Rail) also passes through the property. The area consists of gently sloping grasslands and dry hayfields with widely spaced trees at higher elevation in the northern part of the claims. Most surface rights are privately owned. Induced polarization surveys were done in April and October by A. Scott Geophysics from Vancouver with a crew of five. Drilling lasted from May 14 to 22, 1990. The drill contractor was A. Miller Percussion Drilling Ltd. of Barriere, B.C. The drill crew included A. Miller and helper. Water was delivered to the site by F. Ceccone of Princeton, B.C. Cominco employees involved were A.P. Roberts, technician (logistics and sampling), M. Davies (sampling) and A.M. Pauwels, senior geologist (planning, supervision, logging). Analytical work was done at Comince's E.R. Laboratory, 1486 E. Pender, Vancouver.

III AREA GEOLOGY

The area of the claims is underlain by Nicola Group (Upper Triassic) volcanic and intrusive rock, the Summers Creek batholith (Jurassic) and Princeton Group (Tertiary) sediments. The Nicola rocks occupy the central part of the claims and consist of andesite and dacite intruded by syenite and monzonite.



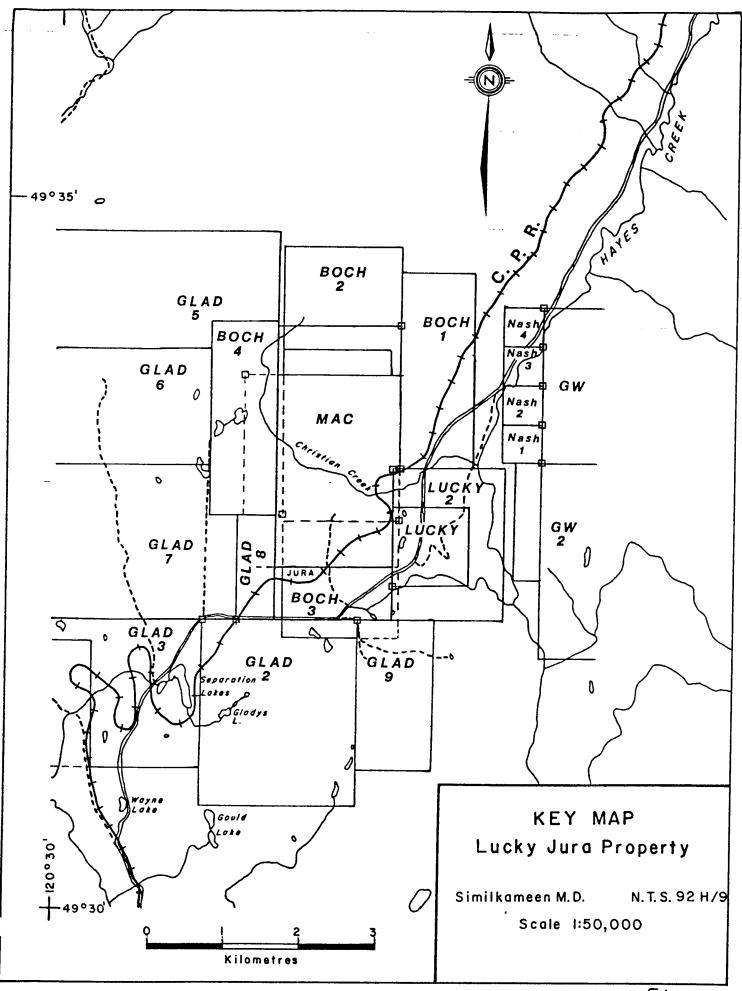


FIGURE 2

In the eastern part of the claims these Triassic rocks are intruded by granodiorite of Jurassic age (Summers Creek batholith). To the southeast and west the Nicola rocks are down faulted along northwest and north-south trending normal faults. Sandstones belonging to the Princeton Group cover the Nicola Group in this area. Of economic interest is a large area of hydrothermally altered Triassic rocks outcropping as gossans along the Princeton-Osprey Lake road. Alteration minerals include K-feldspar, epidote, sericite, quartz, pyrite, hematite and chalcopyrite. This alteration affects a large area, much of it overburden covered. Induced polarization surveys indicate sulphides over 1.5 square kilometers.

IV PREVIOUS EXPLORATION

The earliest recorded work on the property dates back to 1927, when prospectors drove three short adits and excavated several trenches on copper showings in the area of the present Lucky claim. Modern exploration was started in 1959 by Kennco. Kennco was searching for porphyry copper mineralization. The Lucky area was targeted because geological setting and aeromagnetic expression were very similar to the Copper Mountain area. Kennco completed airborne and ground magnetics, soil geochemistry, induced polarization, geological mapping, trenching and 4 diamond drill holes (744 feet). Most of this work was on the present Lucky and Mac claims. Kennco delineated a 1 sq. km IP high with some coincident high copper in solls. This IP high straddles the boundary of the present Lucky and Mac claims. The four short holes tested copper geochemical highs associated with the IP anomaly. Detailed assay results are not available but copper mineralization of subeconomic grade has been reported in some of the holes. Kennco abandoned the property in 1970.

Induced polarization, geochemical soil surveys and extensive drilling were done 2 km west of the Kennco drilling by Amax Explorations on behalf of Copex Mining in 1972 and 1973. Drilling probed a 700 by 500 m copper anomaly with a coincident but small IP high. Drilling consisted of percussion drilling, 2,400 m in 28 holes and diamond drilling, 1,100 m in 8 holes. Low grade copper mineralization was found over short lengths in some of the holes. The drilling effectively tested the porhyry copper potential of this area.

Later in 1978 and 1979 Superior Oil tested the Eastern fringes of the Kennco IP anomaly with percussion (9 holes, 233 m) and diamond drilling (2 holes, 600 m). Detailed assay results are not available, but apparently only very low grade copper and gold mineralization was encountered in altered andesite.

Mingold optioned the Lucky claim in 1987 and completed soil sampling and drilling (717 m, 8 holes) in the area drilled by Kennco. High gold values were found in the soils (max 315 ppb) associated with high copper values found earlier by Kennco. Low grade copper-gold mineralization in parts of holes 87-1, 87-2, 87-7 and 87-8. Best values were in 0.42% Cu and 0.205 g/t Au over 23 m in hole 87-8.

V TENURE

The property consists of seven contiguous mineral claims: Lucky, Lucky 2, Boch 1 to 4 and Mac, a total of 71 units. The claims were optioned by Cominco Ltd. from Sundial Resources Ltd. (Boch, Mac) and Peter Peto (Lucky). Sundial Resources in turn has an underlying agreement with Chalco Resources Ltd., the owner of the Mac claim. Work expenditures are estimated at \$85,000, of which \$52,000 was done on the Mac and Boch claims (IP surveys, drilling) and \$33,000 on the Lucky claims (drilling). A detailed account of expenditures will be available in January, 1991. Work was applied to all claims, according to the terms of the various agreements and the present status of the claims is summarized in the table below:

TABLE I CLAIM STATUS

Claim	Record Number	Units	Expiry Date
Boch 1	3237	10	November 9, 1993
Boch 2	3238	6	November 10, 1993
Boch 3	3239	9	November 10, 1993
Boch 4	3282	10	March 31, 1993
Mac	3209	20	October 11, 1993
Lucky	2435	4	August 20, 1994
Lucky 2	2896	12	April 29, 1994

V INDUCED POLARIZATION SURVEYS

During the periods of April 10-14 and October 18-20, 1990 induced polarization and magnetometer surveys were conducted over the Mac and Boch claims (see Figure 3). A total of 8.0 kilometers of IP and magnetic surveys were completed in April and 9 kilometers of IP and mag in October. The survey in April consisted of seven lines, with a line spacing of 200 metres (see Figure 4). The survey in October was more reconnaissance style and was conducted along roads in the northern part of the property.

Equipment and Procedures

A Scintrex IPR-11 time domain receiver and a Scintrex 2.5kw IPC-7 transmitter were used for the IP surveys. A 2-second alternating square wave was output at the transmitter, and the decay of that signal during the off time was measured at the receiver. The receiver recorded chargeabilities for 10 time slices (MO-M9), as well as the primary voltage (Vp) and self potential (SP) for each of 4 potential electrode pairs at each station.

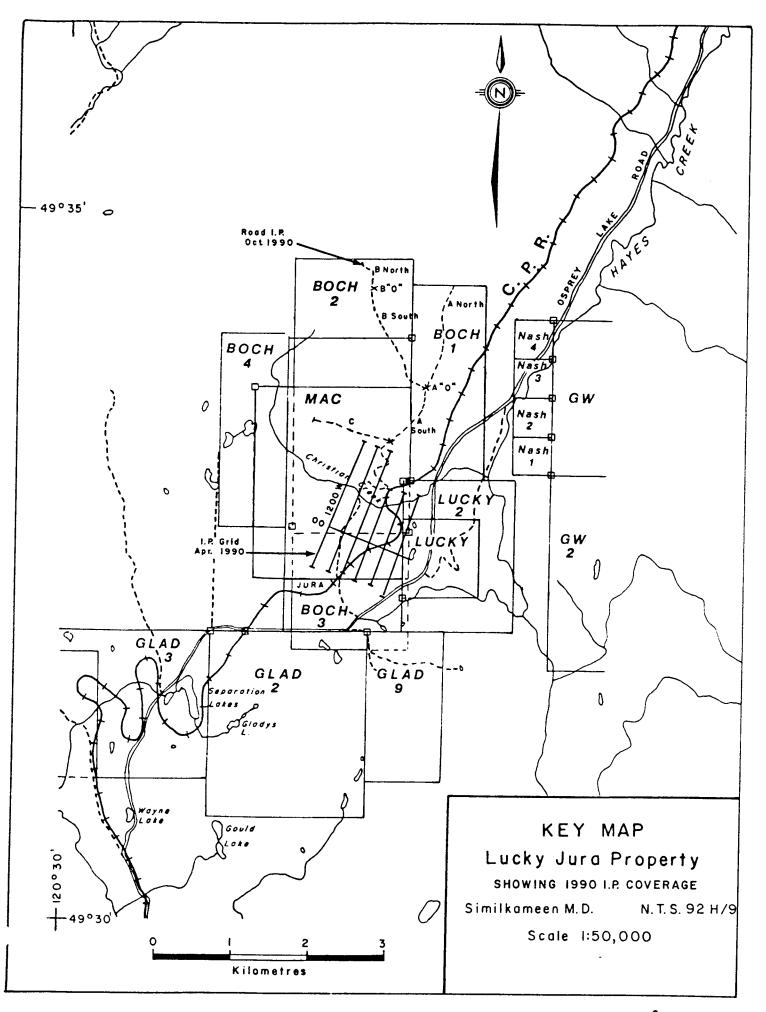


figure 3

A Geometrics G816 total field proton precession magnetometer was used for the magnetometer survey, with a Geometrics G836 total field proton precession magnetometer as the base station, which was set up at the IP transmitter site. Both magnetometers were read during moves of the IP array, ie. when the transmitter was off. Total field magnetometer measurements were taken at 25 metre intervals and were corrected for diurnal drift with reference to a fixed base station.

All survey data was archived, processed, and plotted using a Toshiba 1200 microcomputer, using Scintrex Soft II, IGS, and proprietary software.

The survey in April was done with a pole-dipole array configuration. Readings were taken at an "a" spacing of 50 metres for N=1, 2, 3, 4 and 5. The station interval was 50 metres. In October the same array was used but readings were taken at an "a" spacing of 25 and 75 maters, both for N=1 and 2.

Presentation of Data

The IP for the April survey data is presented as pseudo-sections, and contour plans of chargeability and apparent resistivity (see Figures 5 to 8). The October survey is presented as pseudo-sections only. The pseudo-sections are presented at a scale of 1:5,000 for each of the survey lines, incorporating all the chargeability and calculated resistivity data. The chargeability values plotted on the pseudo-sections and contour plans are those from the eighth slice (M7 - 690 to 1050 milliseconds after shutoff, with a midpoint of 870 As indicated on the pseudo-sections, the current electrode milliseconds). positions are north of the receiving electrodes. The contour plan maps of chargeability and apparent resistivity for N=1 a=50m, are plotted at a scale of 1:5,000 with contour intervals of 2.5 mV/V and 100 ohm-metres respectively. Anomaly bars are plotted on the pseudo-sections, and are categorized as anomalous or weakly anomalous based on shape and chargeability. For this property, chargeabilities greater than 6 mV/V are considered weakly anomalous, greater than 10 mV/V are anomalous.

The corrected total field magnetic data is presented at a scale of 1:5,000 as a contour plan map, with a contour interval of 500 mT.

Discussion of Results

The April survey complements the IP survey done in 1959 by Kennco (Assessment Report 318). The 1959 survey found an IP high coinciding with outcrops of altered pyrite and chalcopyrite bearing volcanic rocks. The present survey detailed the western and southern boundaries of the IP high found in 1959. Weakly anomalous chargeability values are found on part of all the lines, anomalous values are restricted to the northern part of lines 200 and 400 West. Resistivity values associated with the higher chargeabilities vary from 100 to 750 ohm-m. The area of high IP effects is overburden covered and in analogy with the 1959 survey it is believed that the higher chargeabilities are caused by disseminated pyrite and/or chalcopyrite in hydcothermally altered volcanic rocks. The southern boundary of the IP high on lines 200, 400 and 600 West coincides with a sharp drop of resistivities to the south. This probably reflects a fault contact between unaltered Princeton sediments to the south and altered, sulphidic volcanic rocks to the north.

The survey done in October failed to show any higher chargeability values.

VII PERCUSSION DRILLING

A total of 17 open hole percussion holes were completed from May 14 to 22, 1990. The purpose of the drilling was to test the overburden covered area where disseminated sulphides were indicated by Induced Polarization surveys in 1967 and 1990. The area drilled is west of all previous drilling in the Lucky area. Holes were spaced 150 m apart and all holes were drilled at -90 degrees.

Drill hole data are detailed in TABLE II below. Location of the holes is illustrated on Figure 9. Assay results and description of the chips can be found in Appendix I.

Hole	Claim	Date	Coordinates	Overburden/
No				Total Length
				(m)
00 1	Mac	Nov 14	0 150 N	2 6 01 5
90-1		May 14	0 150 N	3.6 91.5
90-2	Lucky States in	May 14	150 E 150 N	10.4 91.5
90-3	Lucky	May 15	150 E 300 N	2.7 91.5
90-4	Lucky	May 15	300 E 300 N	5.5 91.5
90-5	Lucky	May 15	300 E 150 N	2.4 91.5
90-6	Lucky	May 16	300 E 0	1.8 91.5
90–7	Lucky	May 16	415 E 65 S	2.1 91.5
90 -8	Lucky	May 17	150 E O	9.5 91.5
90 -9	Mac the h	Мау 17	0 0	18 91.5
90-10	Mac 1	May 18	0 150 S	17.1 91.5
90-11	Mac	May 18	0 300 S	7.6 54.9
90-12	Mac	May 19	150 W 0	18.3 91.5
90-13	Mac	May 19	150 W 150 N	22.9 91.5
90-14	Lucky	May 20	150 E 150 S	2.1 91.5
90-15	Mac	May 21	300 W 120 N	2.1 91.5
90–16	-Mac by L	May 21	260 W 280 N	46.00 46.0
90–17	Lucky	Мау 22	450 E 150 N	2.4 91.5

TABLE II DRILL HOLES

TOTAL

1,473.4

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All holes, except hole 16 reached bedrock. Overburden varies from 2.1 m in hole 14 to over 46 metres in hole 16. Bedrock chips were logged with a binocular microscope, samples were taken every 3.05 m. The chips consist mostly of K-spar with fine grained sericite clusters and 1% to 3% very finely disseminated pyrite and occasional chalcopyrite. Magnetite, hematite, chlorite and epidote are only found in a few of the intervals. These minerals clearly indicate a very altered alkaline volcanic rock or fine grained intrusive rock. Samples for analysis were taken every 3.05 m (1/12 split of total cuttings). Every second sample was send to Cominco's laboratory, 1482 East Pender in Vancouver. Analysis was done for gold and copper (Aqua regia decomposition and atomic absorption spectrometry). Results indicate elevated copper values in most of the samples, most values range from 200 to 600 ppm Cu. Only a few of the samples contain more than 0.1% Cu. Best values were 0.17% Cu in hole 7 from 15.25-18.3 and from 27.45-30.5. Low copper values are largely associated with chlorite rich, propylitically altered rocks and with K-spar rich rocks without sericite. Higher copper values are mostly associated with K-spar/sericite rich rocks with 1-3% pyrite. Gold values athough low were anomalous and the best values are correlated to the higher copper values. The best gold value was 140 ppb Au in hole 3, associated with 0.125% Cu.

VIII CONCLUSIONS AND RECOMMENDATIONS

A total of seventeen percussion holes were sompleted over an overburden covered IP high to the west of an area where previous drilling and some outcrops indicated a copper rich hydrothermal alteration system. The holes intersected altered, alkaline rocks with elevated copper and gold contents. The copper and gold values are nevertheless too low to be of immediate economic interest. This years drilling and drill holes by previous operators are spaced close enough to preclude the existence of a contiguous porphyry copper-gold deposit of sufficient size to be of interest to Cominco. Geometrically the possibility for a small (perhaps 10-30 million Tons) deposit is still possible within the hydrothermal alteration zone on the property. Best potential for this would be east of the Osprey Road on the Lucky claim. Reconnaissance IP surveys did not indicate any additional anomalies on the property. No further work is recommended.

Reported by

Andre M. Pauwels Senior Geologist

Approved for Release

W. J. Wolfe Manager, Exploration Western Canada.

REFERENCES

Assessment Reports 318, 6292, 7476, 7795, 8600, 16135, 16265

1927,28 MMAR, Lucky Strike

Rice GSC Memoir 243, 1947

Dist: Cominco Files (1) Mining Recorder (2)

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APPENDIX

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DRILL HOLE RECORDS

L.ILL HOLE RECORD

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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 15, 1990 May 15, 1990 O, 150N to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. MAC Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-1 A.M. Pauwels May, 1990	
METERAGE <u>FROM TO</u> 0 - 3.6	DESCRIPTION Overburden.	·				
3.6 - 21.3	Grey, green and 0.5%, trace cha	i white chips, llcopyrite, ch	, a few pink (Kspar) nalcopyrite increase	chips with se s to 0.2% at b	ericite, chlorite. Pyrite pottom of interval.	
21.3 - 30.5	Translucent to trace chalcopy	Translucent to pink feldspar chip, pale green sericite, 3% disseminated pyrite, trace chalcopyrite, epidote, trace hematite.				
30.5 - 57.95	Pink to pale wh sericite, pyrit	Pink to pale white, translucent Kspar grains, trace epidote, grey and green sericite, pyrite 2-3%, chalcopyrite trace.				
57.95 - 67.1	Mostly white fe disseminated py	Mostly white feldspar chips with small clusters of greenish sericite and with disseminated pyrite, 2% pyrite, trace of hematite, trace of chalcopyrite.				
67.1 - 88.45	Green to grey o chips, epidote	chips, a few p chips, 3% dis	oink Kspar chips, da sseminated pyrite, t	rk green, very race of hemati	fine grained andesite te.	
88.45 - 91.5	Predominantly p pale sericite.	oink Kspar chi	ips, trace of pyrite	, 3% hematite	grains, cluster of	
91.5	End of hole.					

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Property: LUCKY-JURA

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MAC 90-1

METERAGE Au (ppb) 3.66 - 9.15 172 <10 15.25 - 18.30 114 <10 21.35 - 24.40 334 <10 27.45 - 30.50 136 30 33.55 - 36.60 134 <10 39.65 - 42.70 116 <10 45.75 - 48.80 149 <10 51.85 - 54.90 186 <10 57.95 - 61.00 433 <10 64.05 - 67.10 427 <10 70.15 - 73.20 174 <10 76.25 - 79.30 194 <10 82.35 - 85.40 89 <10 88.45 - 91.50 57 <10		SAMPLE AN	ALYSIS	
3.66 - 9.15 172 (10) $15.25 - 18.30$ 114 (10) $21.35 - 24.40$ 334 (10) $27.45 - 30.50$ 136 30 $33.55 - 36.60$ 134 (10) $39.65 - 42.70$ 116 (10) $45.75 - 48.80$ 149 (10) $51.85 - 54.90$ 186 (10) $57.95 - 61.00$ 433 (10) $64.05 - 67.10$ 427 (10) $70.15 - 73.20$ 174 (10) $76.25 - 79.30$ 194 (10)	METERAGE			
3.66 - 9.15 172 <10 $15.25 - 18.30$ 114 <10 $21.35 - 24.40$ 334 <10 $27.45 - 30.50$ 136 30 $33.55 - 36.60$ 134 <10 $39.65 - 42.70$ 116 <10 $45.75 - 48.80$ 149 <10 $51.85 - 54.90$ 186 <10 $57.95 - 61.00$ 433 <10 $64.05 - 67.10$ 427 <10 $70.15 - 73.20$ 174 <10 $76.25 - 79.30$ 194 <10	FROM TO	Cu (ppm)	Au (ppb)	
21.35 - 24.40 334 <10 $27.45 - 30.50$ 136 30 $33.55 - 36.60$ 134 <10 $39.65 - 42.70$ 116 <10 $45.75 - 48.80$ 149 <10 $51.85 - 54.90$ 186 <10 $57.95 - 61.00$ 433 <10 $64.05 - 67.10$ 427 <10 $70.15 - 73.20$ 174 <10 $76.25 - 79.30$ 194 <10 $82.35 - 85.40$ 89 <10	3.66 - 9.15	172	<10	
27.45 - 30.5013630 $33.55 - 36.60$ 134<10	15.25 - 18.30	114	<10	
33.55 - 36.60 134 <10 $39.65 - 42.70$ 116 <10 $45.75 - 48.80$ 149 <10 $51.85 - 54.90$ 186 <10 $57.95 - 61.00$ 433 <10 $64.05 - 67.10$ 427 <10 $70.15 - 73.20$ 174 <10 $76.25 - 79.30$ 194 <10 $82.35 - 85.40$ 89 <10	21.35 - 24.40	334	<10	
39.65 - 42.70116<10 $45.75 - 48.80$ 149<10	27.45 - 30.50	136	30	
45.75 - 48.80 149 <10 $51.85 - 54.90$ 186 <10 $57.95 - 61.00$ 433 <10 $64.05 - 67.10$ 427 <10 $70.15 - 73.20$ 174 <10 $76.25 - 79.30$ 194 <10 $82.35 - 85.40$ 89 <10	33.55 - 36.60	134	<10	
51.85 - 54.90 186 <10 $57.95 - 61.00$ 433 <10 $64.05 - 67.10$ 427 <10 $70.15 - 73.20$ 174 <10 $76.25 - 79.30$ 194 <10 $82.35 - 85.40$ 89 <10	39.65 - 42.70	116	<10	
57.95 - 61.00 433 <10	45.75 - 48.80	149	<10	
64.05 - 67.10 427 <10	51.85 - 54.90	186	<10	
70.15 - 73.20 174 <10	57.95 - 61.00	433	<10	
76.25 - 79.30 194 <10	64.05 - 67.10	427	<10	
82.35 - 85.40 89 <10	70.15 - 73.20	174	<10	
	76.25 - 79.30	194	<10	
88.45 - 91.50 57 <10	82.35 - 85.40	89	<10	
	88.45 - 91.50	57	<10	

LKILL HOLE RECORD

Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 15, 1990 May 15, 1990 150E, 150N to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-2 A.M. Pauwels May, 1990
METERAGE					
FROM TO	DESCRIPTION				
0 - 10.37	Overburden.				
10.37 - 51.85			ips with small clust lesite?) chips, trac		een sericite, 15% dark d magnetite.
51.85 - 76.25	(5%) dark green	n "andesite" (0.5% dissemin	uartz chips and less ated pyrite. Pyrite
76.25 - 91.5			ostly sericite with sericite chalcopyrite.	finely dissemi	nated hematite or
91.5	End of hole.				

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Property: LUCKY-JURA

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LUCKY 90-2

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	SAMPLE	ANALYSIS
METERAGE		
FROM TO	Cu (ppm)	Au (ppb)
10.37 - 15.25	12	<10
15.25 - 18.30	9	<10
21.35 - 24.40	13	<10
27.45 - 30.50	11	<10
33.55 - 36.60	38	<10
39.65 - 42.70	16	<10
45.75 - 48.80	46	<10
51.85 - 54.90	57	<10
57.95 - 61.00	82	<10
64.05 - 67.10	108	<10
70.15 - 73.20	103	<10
76.25 - 79.30	153	<10
82.35 - 85.40	91	<10
88.45 - 91.50	92	<10
		1
		1

[ILL HOLE RECORD

Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 16, 1990 May 16, 1990 150E, 300N to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-3 A.M. Pauwels May, 1990	
METERAGE <u>FROM TO</u> 0 - 2.75 2.75 - 9.15	DESCRIPTION Overburden. Weathered brown of chalcopyrite.	chips. Pale	white to grey, feld	spar/sericite	chips 0.5% pyrite, trace	
9.15 - 91.5	Pink Kspar chips chalcopyrite, tr	s with grey se race of epidot	ericite clusters and ce.	disseminated	pyrite (2%), trace of	
91.5	End of hole.					

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Property: LUCKY-J	URA
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LUCKY 90-3

SAMPLE ANALYSIS

METERA	GE		1
FROM	то	Cu (ppm)	Au (ppb)
2.75 -	6.10	71	<10
9.15 -	12.20	240	24
15.25 -	18.30	213	20
21.35 -	24.40	284	30
27.45 -	30.50	496	36
33.55 -	36.60	509	60
39.65 -	42.70	259	60
45.75 -	48.80	556	62
51.85 -	54.90	792	56
57.95 -	61.00	740	58
64.05 -	67.10	617	42
70.15 -	73.20	1250	140
76.25 -	79.30	815	60
82.35 -	85.40	656	44
88.45 -	91.50	511	36
			1
		1	

· LILL HOLE RECORD

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LOM	TUCO	L10.

Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 16, 1990 May 16, 1990 300E, 300N to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-4 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 5.5	DESCRIPTION Overburden, lit	tle weathering	•		
5.5 - 15.25	Pink feldspar c pyrite.	nips with aggr	regates (10%) of grey	/ green serici	te, trace of hematite and
15.25 - 30.5	Pink chips and sulphides.	grey chips, mo	ttled with sericite,	trace of epic	dote, chlorite, little
30.5 - 60.5	Grey to green s magnetite and O		d Kspar and plagiocl	ase chips, 1%	finely disseminated
60.5 - 88.45			a little sericite, ite, grey green very		
88.45 - 91.5	Pink Kspar chip chalcopyrite an		e grey-green sericit	e, 2% pyrite,	trace of
91.5	End of hole.				

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LUCKY 90-4

	SAMPLE ANALYSIS				
METERAGE					
FROM TO	Cu (ppm)	Au (ppb)			
5.49 - 9.15	23	<10			
9.15 - 12.20	26	<10			
15.25 - 18.30	22	<10			
21.35 - 24.40	627	60			
27.45 - 30.50	352	22			
33.55 - 36.60	346	20			
39.65 - 42.70	244	<10 (1)			
45.75 - 48.80	268	20			
51.85 - 54.90	314	<10			
57.95 - 61.00	327	24			
64.05 - 67.10	107	<10			
70.15 - 73.20	45	<10			
76.25 - 79.30	39	<10			
82.35 - 85.40	93	<10			
88.45 - 91.50	511	26			

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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 16, 1990 May 16, 1990 300E, 150N to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-5 A.M. Pauwels May, 1990
METERAGE FROM TO	DESCRIPTION				
0 - 2.4 2.4 - 27.45	Overburden. Mottled, grey-gr disseminated pyr	reen chips, pl rite (1%), tra	lagioclase – chlori ace of chalcopyrite	te, a few pink •	Kspar chips. Very finely
27.45 - 48.8	Kspar chips, mot of pyrite, hemat and sericite (ve	tite and magne	ricite, become pred etite (1% oxides),	ominant, also a quartz chips ha	a few quartz chips, traces ave associated chlorite
48.8 - 91.5	Same as above bu chips. These gr hematite or magr	reen chips are	e devoid of sulphid	rk green, very es, also trace	fine grained (andesite?) of epidote overall 1%
91.5	End of hole.				

COMINCO LTD.

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Property: LUCKY-JURA

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LUCKY 90-5

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		SAMPLE ANALYSIS				
METERAGE		1				
FROM TO	Cu (pp	m) Au	(ppb)			
2.44 - 6.1	0 116		36			
9.15 - 12.	20 316		32			
15.25 - 18.	30 120		20			
21.35 - 24.	40 142		20			
27.45 - 30.	50 37	<	10			
33.55 - 36.	60 22	()	10			
39.65 - 42.	70 40	()	10			
45.75 - 48.	80 32	<	10			
51.85 - 54.	90 30		20			
57.95 - 61.	00 23	(1)	10			
64.05 - 67.	10 16	<	10			
70.15 - 73.		<	10			
76.25 - 79.		<	10			
82.35 - 85.			10			
88.45 - 91.	50 13	<	10			
		1				

Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 16, 1990 May 16, 1990 300E, O to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-6 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 1.9 1.9 - 70.15	DESCRIPTION Overburden. Grey to green to chalcopyrite. N	o pink mottled Most chips are	l chips with very fir Kspar with chlorite	ne grained pyri e and epidote.	ite (2%) and trace of
70.15 - 91.5	Increased number	r of pure Kspa	ur chips, otherwise t	the same as abo	ve, 1% pyrite.
90.15	End of hole.				

COMINCO LTD.

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Property: LUCKY-JURA

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LUCKY 90-6

	SAMPLE ANALYSIS				
METERAGE					
FROM TO	Cu (ppm)	Au (ppb)			
1.83 - 6.10	108	<10			
9.15 - 12.20	691	38			
15.25 - 18.30	621	62			
21.35 - 24.40	167	22			
27.45 - 30.50	315	<10			
33.55 - 36.60	243	<10			
39.65 - 42.70	310	<10			
45.75 - 48.80	142	<10			
51.85 - 54.90	183	<10			
57.95 - 61.00	185	<10			
64.05 - 67.10	222	<10			
70.15 - 73.20	301	20			
76.25 - 79.30	321	<10			
82.35 - 85.40	257	<10			
88.45 - 91.50	249	<10			

L ILL HOLE RECORD

COMINCO LTL.

Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 17, 1990 May 17, 1990 415E, 65S to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-7 A.M. Pauwels May, 1990
METERAGE FROM TO	DESCRIPTION				
0 - 2.1	Overburden.				
2.1 - 9.1	Very weathered t	o 9 m, with a	few malachite coat	ings on limoni	tic grains.
9.1 - 46.0	Grey to light gr fine grained pyr to maximum 3% in	ite and chalo	copyrite (0.1% Cu) ov	gioclase with s verall, 2% pyr	sericite clots. Very ite. Pyrite increases
46.0 - 57.9	Grey to pale pin Chlorite rich sa			cite, 2% pyrito	e, trace of chalcopyrite.
57.9 - 67.1	Grey to pale gre disseminated.	en chips, fel	dspar-chlorite and s	sericite, pyri	te 0.5% very finely
67.1 - 91.5	Grey chips fleck All sulphides ar			rained pyrite,	trace chalcopyrite.
91.5	End of hole.				

COMINCO LTD.

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Property: LUCKY-JURA

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LUCKY 90-7

	SAMPLE ANALYSIS			
METERAGE				
FROM TO	Cu (ppm)	Au (ppb)		
2.14 - 6.10	603	30		
9.15 - 12.20	561	32		
15.25 - 18.30	1720	118		
21.35 - 24.40	968	44		
27.45 - 30.50	1700	60		
33.55 - 36.60	577	50		
39.65 - 42.70	649	58		
45.75 - 48.80	121	26		
51.85 - 54.90	105	<10		
57.95 - 61.00	77	<10		
64.05 - 67.10	765	26		
70.15 - 73.20	617	20		
76.25 - 79.30	685	<10		
82.35 - 85.40	293	<10		
88.45 - 91.50	266	<10		

. ILL HOLE RECORD

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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 17, 1990 May 17, 1990 150E, 0 to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-8 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 9.45	DESCRIPTION Overburden.				
9.45 - 12.2		of limonite ch	nips and tarnished p	yrite grains,	overall little weathering.
12.2 - 42.7			<pre>(spar-sericite, rare</pre>		% pyrite, trace molybdenite, 1.0 m.
42.7 - 91.5			of sericite), pyrit nlorite becomes more		minated from 1-3%, trace of last 20 m.
91.5	End of hole.				

COMINCO LTD.

Property: LUCKY-JURA

LUCKY 90-8

	SAMPLE ANALYSIS				
METERAGE		1			
FROM TO	Cu (ppm)	Au (ppb)			
9.46 - 15.25	202	<10			
15.25 - 18.30	148	<10			
21.35 - 24.40	126	<10			
27.45 - 30.50	151	<10			
33.55 - 36.60	150	<10			
39.65 - 42.70	190	<10			
45.75 - 48.80	192	<10			
51.85 - 54.90	204	<10			
57.95 - 61.00	187	<10			
64.05 - 67.10	136	<10			
70.15 - 73.20	141	<10			
76.25 - 79.30	145	<10			
82.35 - 85.40	164	<10			
88.45 - 91.50	179	<10			
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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 18, 1990 May 18, 1990 O, O to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. MAC Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-9 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 18.0 18.0 - 61.0	DESCRIPTION Overburden, no wea Grey to pink chips 2% to 3% in variou	s, Kspar with		rite dissemina	ted, pyrite varies from
61.0 - 91.5	Grey to pink chips	s, Kspar with		rite. Chlorit ick-red Kspar	e increases with depth to fragments with a
91.5	End of hole.				

COMINCO LTD.

Property: LUCKY-JURA

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MAC 90-9

SAMPLE ANALYSIS

METERAGE					
FROM TO	Cu (ppm)	Au (ppb)			
18.00 - 21.35	69	<10			
21.35 - 24.40	70	<10			
27.45 - 30.50	130	<10			
33.55 - 36.60	97	<10			
39.65 - 42.70	166	<10			
45.75 - 48.80	193	<10			
51.85 - 54.90	187	<10			
57.95 - 61.00	246	ʻ <10			
64.05 - 67.10	532	<10			
70.15 - 73.20	.509	<10			
76.25 - 79.30	651	40			
82.35 - 85.40	592	20			
88.45 - 91.50	477	<10			
		1			
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Property: Commenced:	LUCKY-JURA May 18, 1990	District: Claim:	Similkameen M.D. MAC	Hole No.	90-10
Completed: Co-ordinates: Objective: Drilled by:	May 18, 1990 May 18, 1990 O, 150S to test IP anomaly Al Miller Percussion Drilling Ltd.	Core Size: Collar dip: Length:	Percussion 2"	Logged by: Date:	A.M. Pauwels May, 1990
METERAGE					
<u>FROM TO</u> 0 - 17.0	DESCRIPTION Overburden, no wea	thering			
0 1/ 0		tener mg.			
17.0 - 61.0		is finely dis	tle sericite and raisseminated in sericite in the sericite in the sericite intervals.		
61.0 - 91.3	Grey and pink Kspa trace of epidote.	r grains with	a sericite clusters	(5-10%), chlor	ite 5%, pyrite 1%,
91.3	End of hole.				

COMINCO LTD.

Property: LUCKY-JURA

MAC 90-10

	SAMPLE ANALYSIS				
METERAGE					
FROM TO	Cu (ppm)	Au (ppb)			
17.08 - 21.35	145	<10			
21.35 - 24.40	167	<10			
27.45 - 30.50	119	<10			
33.55 - 36.60	266	<10			
39.65 - 42.70	270	<10			
45.75 - 48.80	462	<10			
51.85 - 54.90	407	<10			
57.95 - 61.00	577	<10			
64.05 - 67.10	501 6	<10			
70.15 - 73.20	420	<10			
76.25 - 79.30	336	36			
82.35 - 85.40	550 .	28			
88.45 - 91.50	963	100			

Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 18, 1990 May 18, 1990 O, 300S to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. MAC Percussion 2" -90° 54.9 m	Hole No. Logged by: Date:	90-11 A.M. Pauwels May, 1990
METERAGE FROM TO	DESCRIPTION				
0 - 7.6	Overburden.				
7.6 - 15.25	Slightly weathered chalcopyrite, trace	pale pink chi e of chlorite,	ips with sericite cli , azurite coating on	usters, 1.5% p one grain.	yrite, trace of
15.25 - 54.9	purely pink grains	(5%), trace of	of Kspar, sericite a of epidote. of bornite at 54.0 m	-	1% pyrite. A few
54.9	End of hole.				

COMINCO LTD.

Property: LUCKY-JURA

MAC 90-11

SAMPLE ANALYSIS METERAGE FROM TO Cu (ppm) Au (ppb) 7.63 - 12.20 141 <10 15.25 - 18.30 195 <10 21.35 - 24.40 172 <10 27.45 - 30.50 242 <10 33.55 - 36.60 171 <10 39.65 - 42.70 149 <10 45.75 - 48.80 187 <10 51.85 - 54.90 248 <10

. . . ILL HOLE RECORD

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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 18, 1990 May 18, 1990 150W, 0 to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. MAC Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-12 A.M. Pauwels May, 1990
METERAGE <u>FR</u> OM TO	DESCRIPTION	•			
0 - 18.3	Overburden.			·	
18.3 - 91.5	No weathering. Very small spec	ks and clots	nd pink chips, 5% dis of sericite and chic ninish to 3% below 54	orite, trace o	ite, very fine grained. f hematite and below 60.0 m.
91.5	End of hole.				

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COMINCO LTD.

Property: LUCKY-JURA

MAC 90-12

SAMPLE ANALYSIS

METERAGE		
FROM TO	Cu (ppm)	Au (ppb)
18.30 - 21.35	157	<10
21.35 - 24.40	178	<10
27.45 - 30.50	217	<10
33.55 - 36.60	315	<10
39.65 - 42.70	252 -	<10
45.75 - 48.80	170	<10
51.85 - 54.90	274	<10
57.95 - 61.00	605	24
64.05 - 67.10	1210	44
70.15 - 73.20	1130	42
76.25 - 79.30	570	<10
82.35 - 85.40	493	<10
88.45 - 91.50	393	<10

. ILL HOLE RECORD

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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 19, 1990 May 19, 1990 150W, 150N to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. MAC Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-13 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 22.8 22.8 - 54.9	chlorite. Diss	seminated pyri	t feldspar grains wit te and rare chalcopy o the feldspar grains	/rite, 2-3% sul	clusters of sericite and Iphides, trace of
54.9 - 91.5	Greenish chips. chips. Sulphic syenite and alt	les (pyrite, t	race chalcopyrite) t:	tined chlorite cotal 1%. Perf	(10-30%) in feldspar naps a contact between
91.5	End of hole.				

COMINCO LTD.

Property: LUCKY-JURA

MAC 90-13

SAMPLE ANALYSIS

METERAGE		
FROM TO	Cu (ppm)	Au (ppb)
22.88 - 27.45	78	<10
27.45 - 30.50	78	<10
33.55 - 36.60	93	<10
39.65 - 42.70	165	<10
45.75 - 48.80	276	<10
51.85 - 54.90	638	<10
57.95 - 61.00	1920	58
64.05 - 67.10	364	<10
70.15 - 73.20	453	<10
76.25 - 79.30	229	<10
82.35 - 85.40	147	<10
88.45 - 91.50	299	<10
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COMINCO LTL.

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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 19, 1990 May 19, 1990 150E, 150S to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. LUCKY Percussion 2" -90° 91.5 m	Hole No. Logged by: Date:	90-14 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 1.5	DESCRIPTION Overburden.				
1.5 - 21.5	Some weathering chlorite/feldsp propylitically	bar with disse	minated, very fine g	ous stages of g grained pyrite	oxidation. Finely grained and some epidote. Probably
21.5 - 51.85	Chlorite dimin grained pyrite	ishes, mostly (2%). Small	sericite from 31.5 m admixture of mostly	n on, grey to p pink grains (l	pink chips, very fine Kspar).
51.85 - 91.5	Grey, sericite finely dissemin	and chlorite nated pyrite (flecked grains and p 1%) and trace of cha	oink sericite alcopyrite.	flecked grains. All with
91.5	End of hole.				

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COMINCO LTD.

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Property: LUCKY-JURA

LUCKY 90-14

	SAMPLE ANALYSIS				
METERAGE					
FROM TO	Cu (ppm)	Au (ppb)			
1.53 - 6.10	547	<10			
9.15 - 12.20	133	<10			
15.25 - 18.30	130	<10			
21.35 - 24.40	93	<10			
27.45 - 30.50	- 102	<10			
33.55 - 36.60	85	<10			
39.65 - 42.70	51	<10			
45.75 - 48.80	25	<10			
51.85 - 54.90	244	<10			
57.95 - 61.00	207	<10			
64.05 - 67.10	251	<10			
70.15 - 73.20	321	<10			
76.25 - 79.30	229	<10			
82.35 - 85.40	190	<10			
88.45 - 91.50	108	<10			
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. L.ILL HOLE RECORD

Property: Commenced:	LUCKY-JURA May 20, 1990	District: Claim:	Similkameen M.D. MAC	Hole No.	90-15
Completed: Co-ordinates: Objective: Drilled by:	May 20, 1990 300W, 120N to test IP anomaly Al Miller Percussion Drilling Ltd.	Core Size: Collar dip: Length:	Percussion 2" -90° 91.5 m	Logged by: Date:	A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 2.14 2.14 - 27.45	· · · · · · · · · · · · · · · · · · ·	.15 m. Pink	feldspar grains with	h flecks of se	ricite and chlorite (5%).
	Finely dissemin				
27.45 - 91.5		rey chips, fi	ecked with sericite	and chlorite,	pyrite increases to 2%.
91.5	End of hole.				

COMINCO LTD.

Property: LUCKY-JURA

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MAC 90-15

	SAMPLE ANALYSIS				
METERAGE					
FROM TO	Cu (ppm)	Au (ppb)			
2.14 - 6.10	75	<10			
9.15 - 12.20	66	<10			
15.25 - 18.30	76	<10			
21.35 - 24.40	132	<10			
27.45 - 30.50	153	<10			
33.55 - 36.60	359	<10			
39.65 - 42.70	224	<10			
45.75 - 48.80	301	<10			
51.85 - 54.90	411	<10			
57.95 - 61.00	739	56			
64.05 - 67.10	534	40			
70.15 - 73.20	408	38			
76.25 - 79.30	276	30			
82.35 - 85.40	212	<10			
88.45 - 91.50	226	<10			
	1				
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Property: Commenced: Completed: Co-ordinates: Objective: Drilled by:	LUCKY-JURA May 21, 1990 May 21, 1990 to test IP anomaly Al Miller Percussion Drilling Ltd.	District: Claim: Core Size: Collar dip: Length:	Similkameen M.D. MAC Percussion 2" -90° 46.0 m	Hole No. Logged by: Date:	90-16 A.M. Pauwels May, 1990
METERAGE <u>FROM TO</u> 0 - 46.0	DESCRIPTION Overburden.				

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Property: Commenced:	LUCKY-JURA May 22, 1990	District: Claim:	Similkameen M.D. LUCKY	Hole No.	90-17
Completed: Co-ordinates: Objective: Drilled by:	May 22, 1990 450E, 150N to test IP anomaly Al Miller Percussion Drilling Ltd.	Core Size: Collar dip: Length:	Percussion 2" -90° 91.5 m	Logged by: Date:	A.M. Pauwels May, 1990
METERAGE FROM TO	DESCRIPTION	· · · · · · · · · · · · · · · · · · ·			
0 - 2.44	Overburden.				
2.44 - 91.5		eminated, ver			l chlorite and epidote. A few pink feldspar grains
91.5	End of hole.				
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COMINCO LTD.

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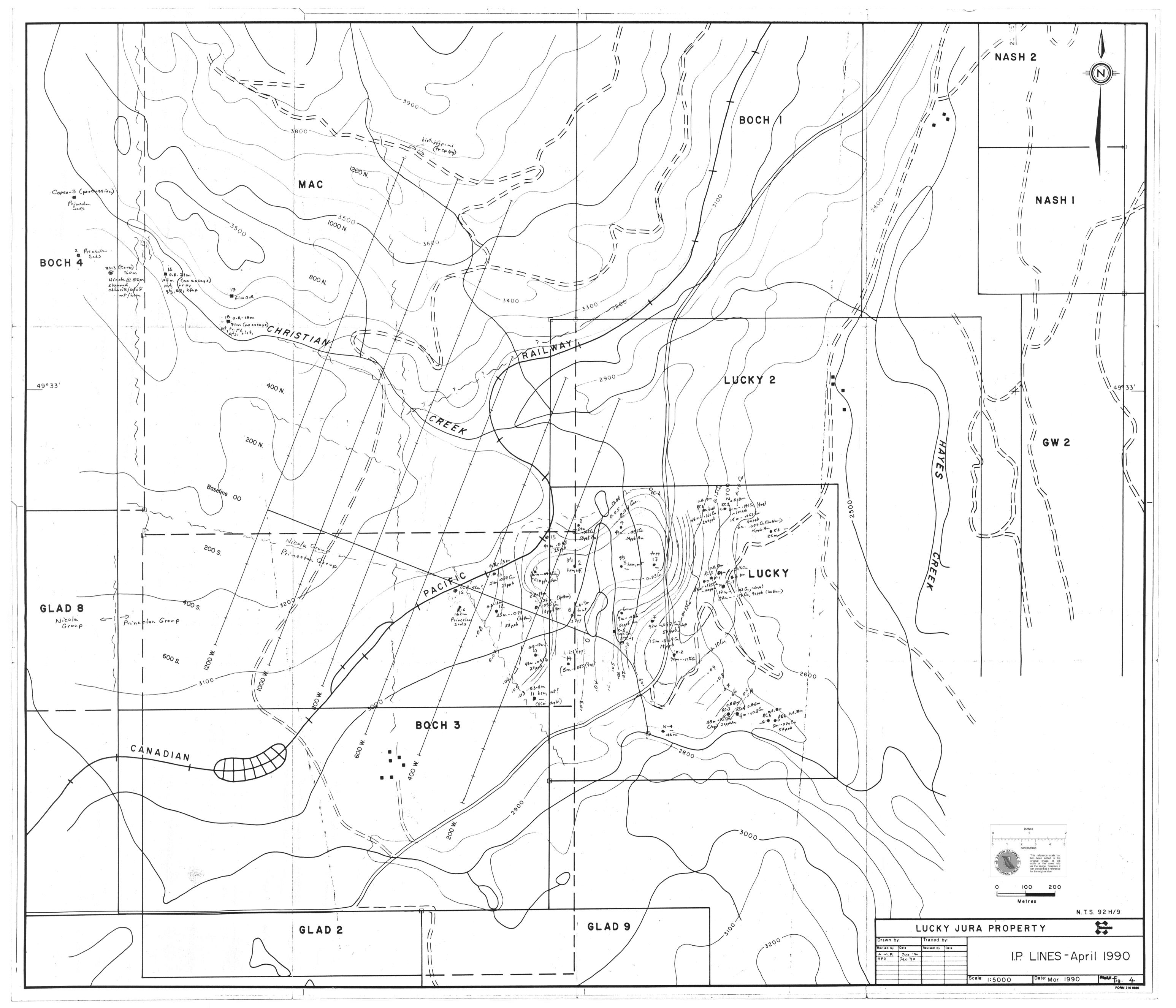
Property: LUCKY-JURA

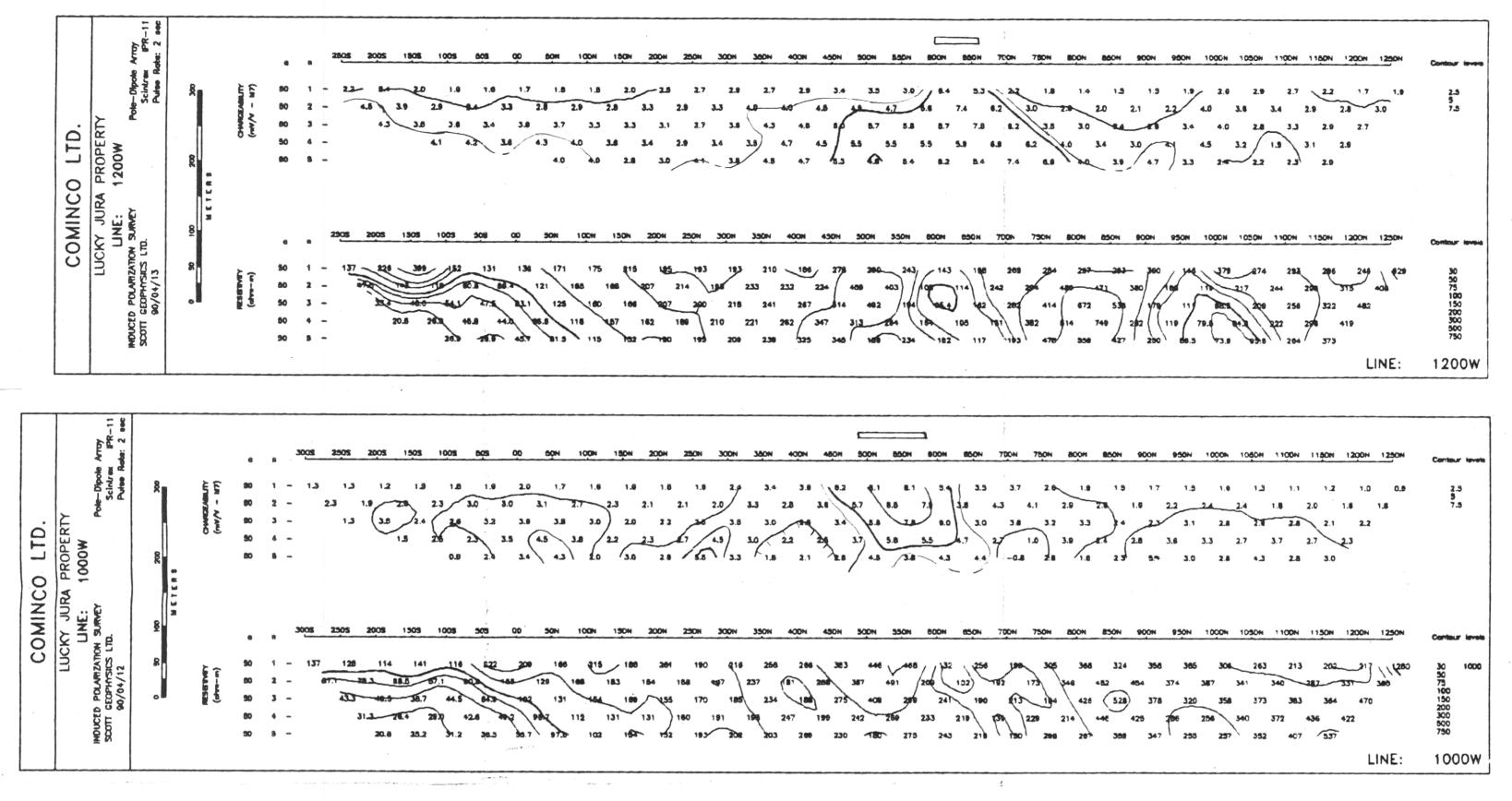
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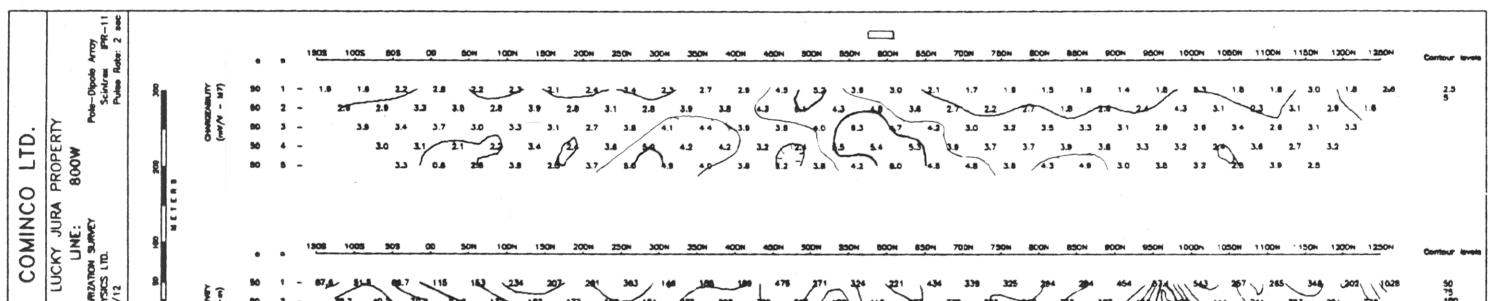
LUCKY 90-17

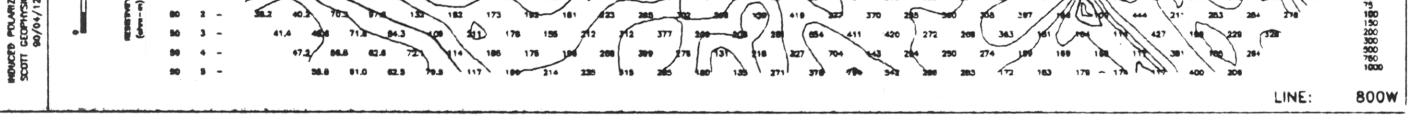
SAMPLE ANALYSIS

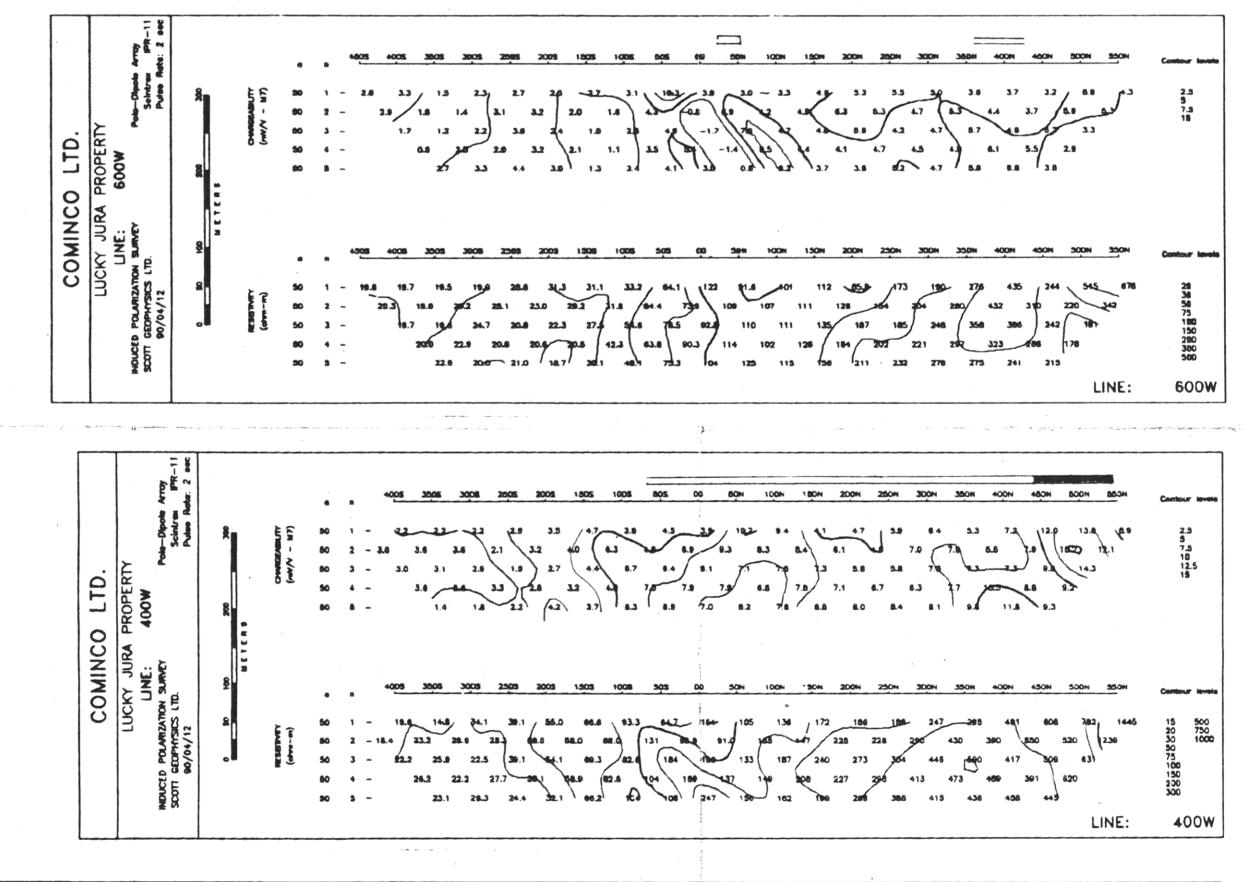
METERAGE		1
FROM TO	Cu (ppm)	Au (ppb)
2.44 - 6.10	31	<10
9.15 - 12.20	18	<10
15.25 - 18.30	135	<10
21.35 - 24.40	55	<10
27.45 - 30.50	57	<10
33.55 - 36.60	59	<10
39.65 - 42.70	89	<10
45.75 - 48.80	38	<10
51.85 - 54.90	82	<10
57.95 - 61.00	84	<10
64.05 - 67.10	83	<10
70.15 - 73.20	111	<10
76.25 - 79.30	141	<10
82.35 - 85.40	103	<10
88.45 - 91.50	38	<10
	1	1

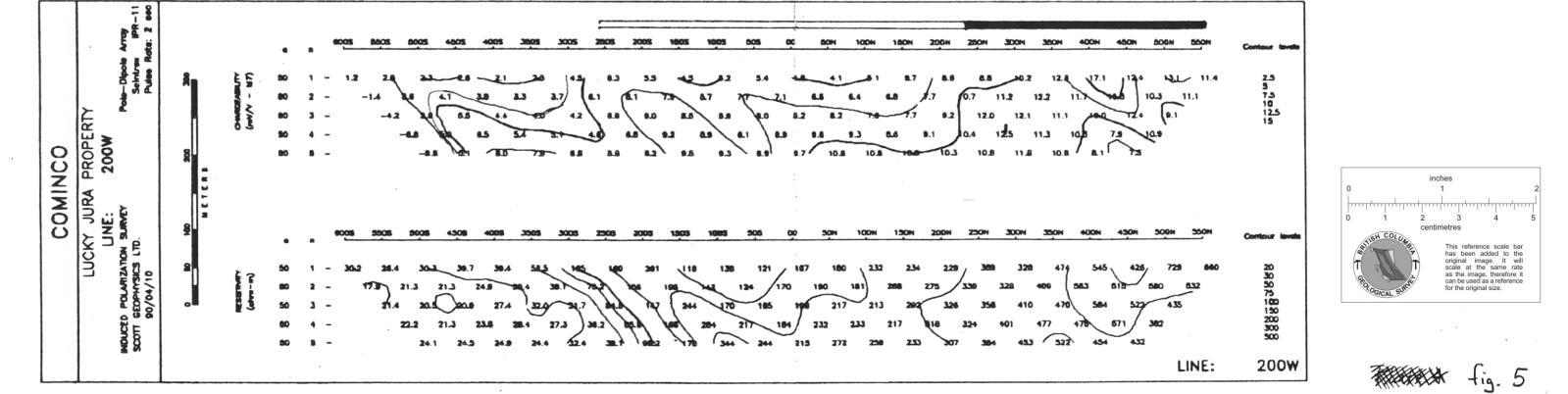


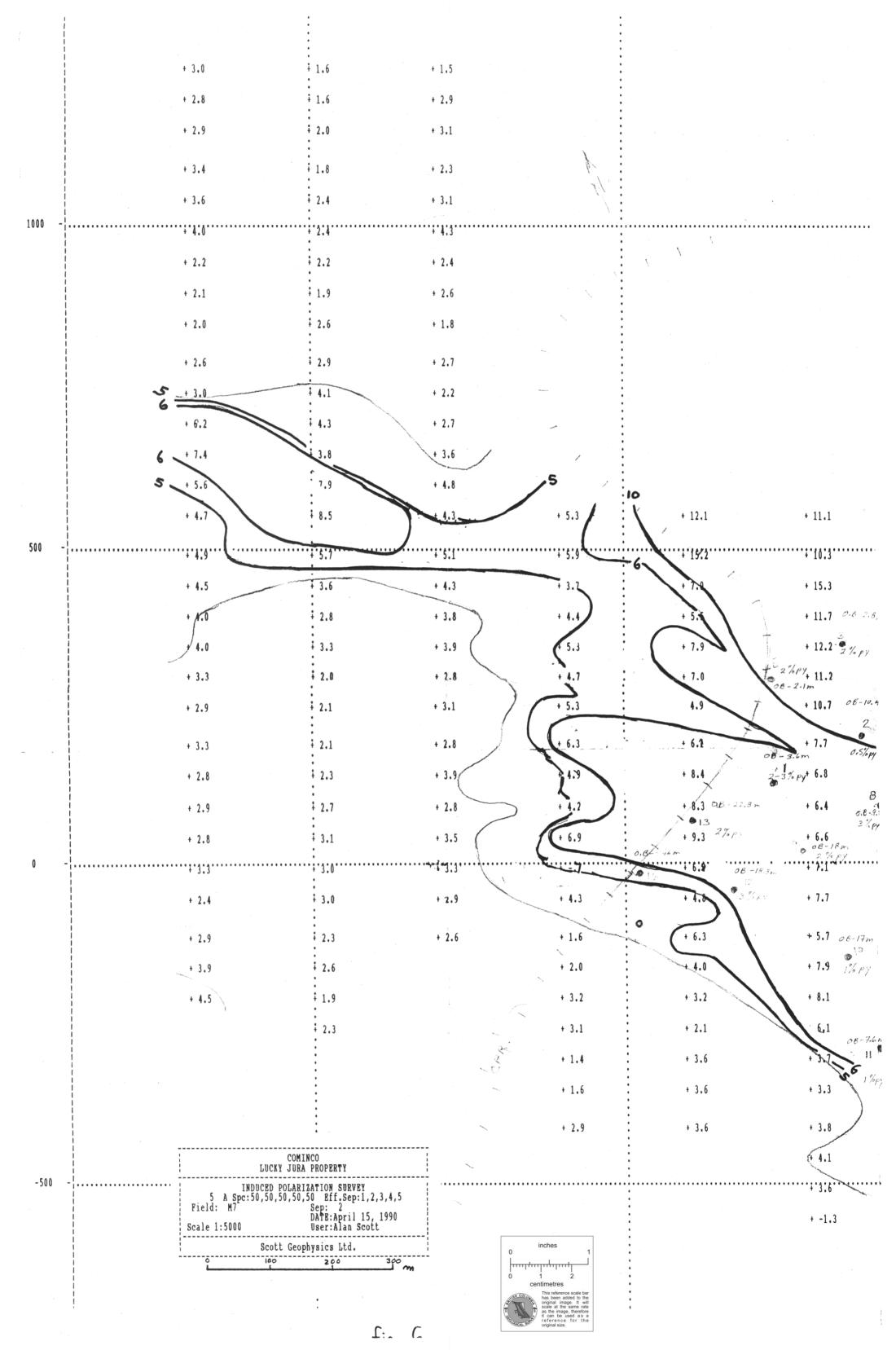


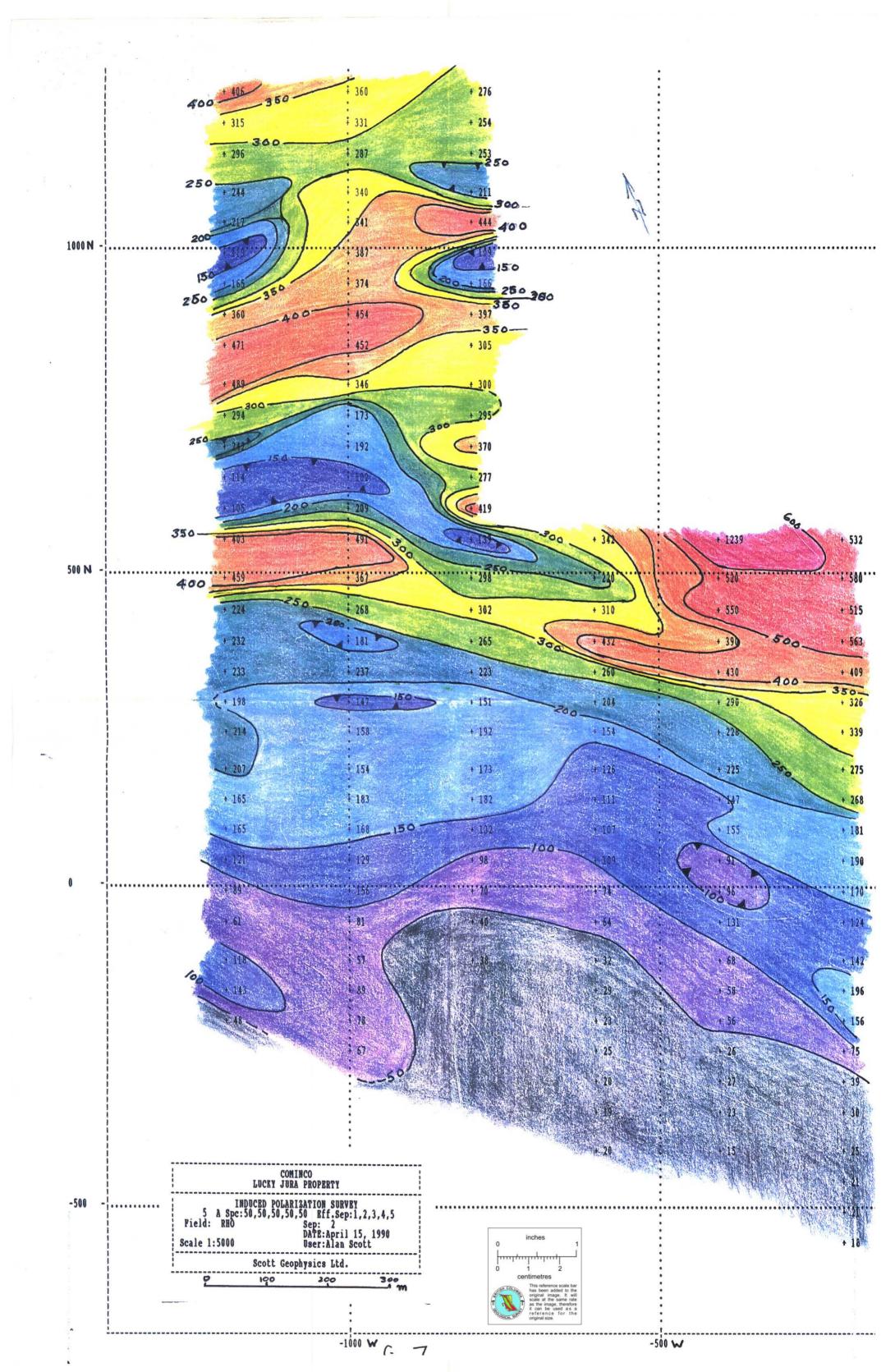


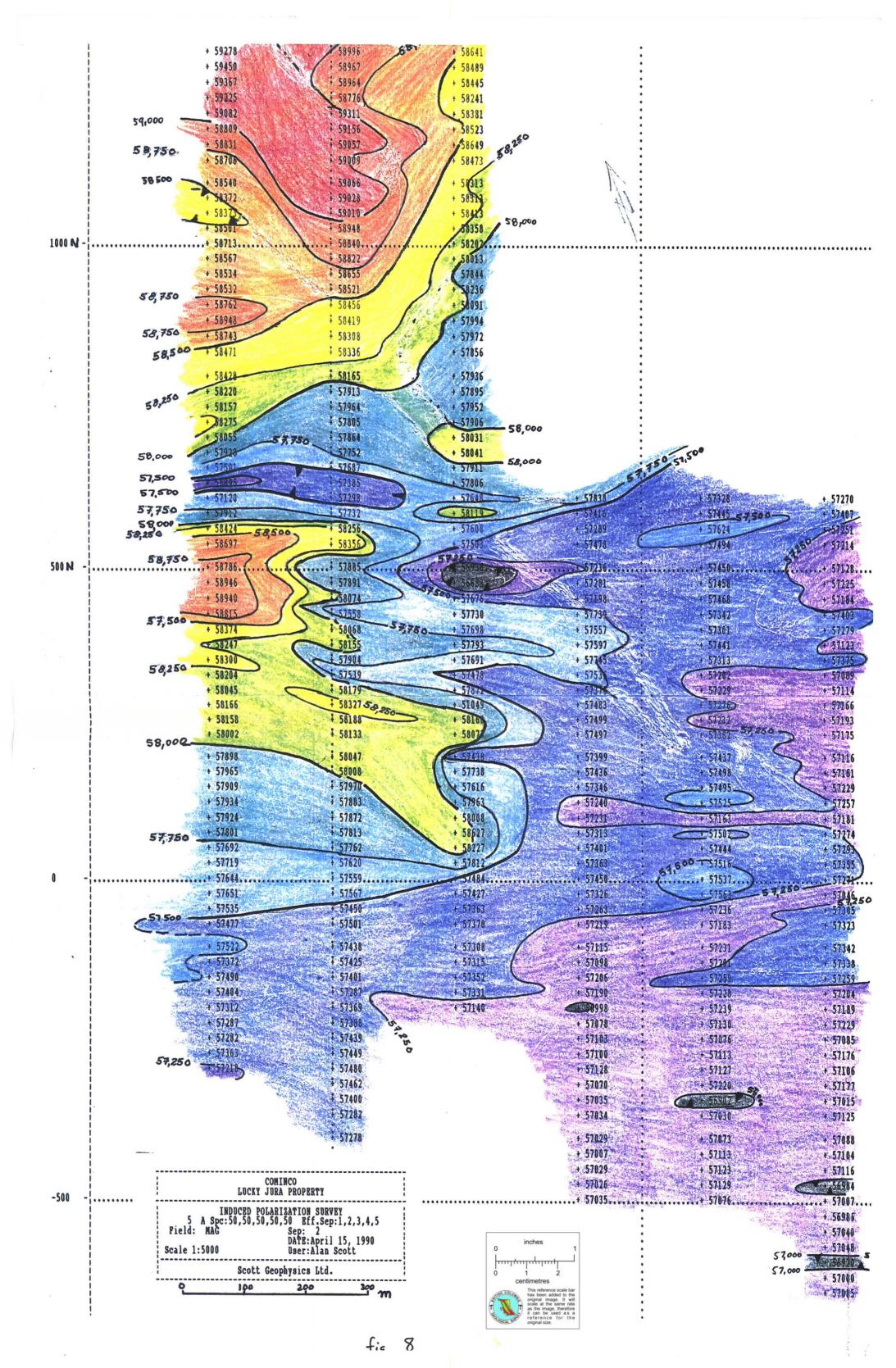


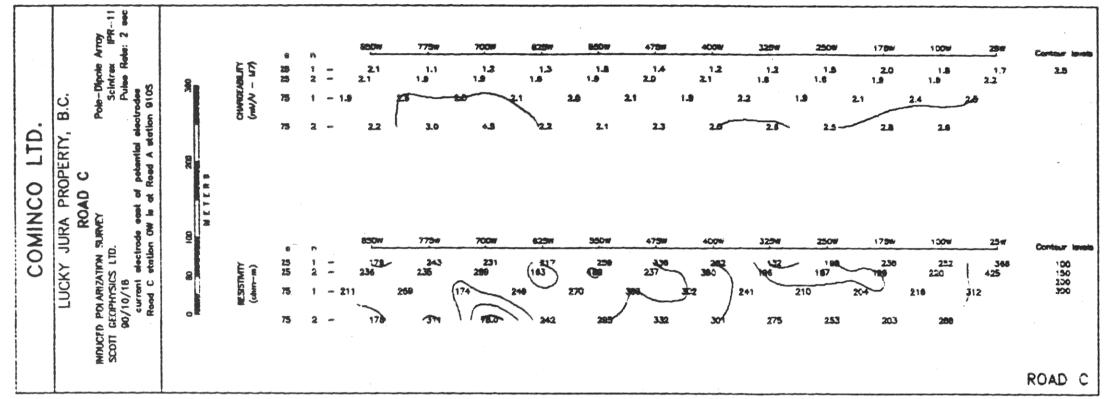


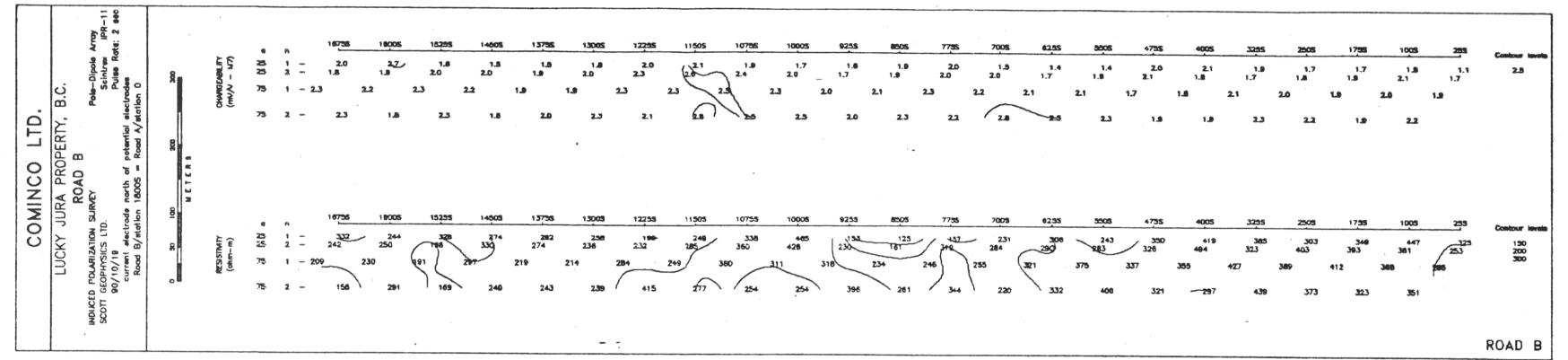


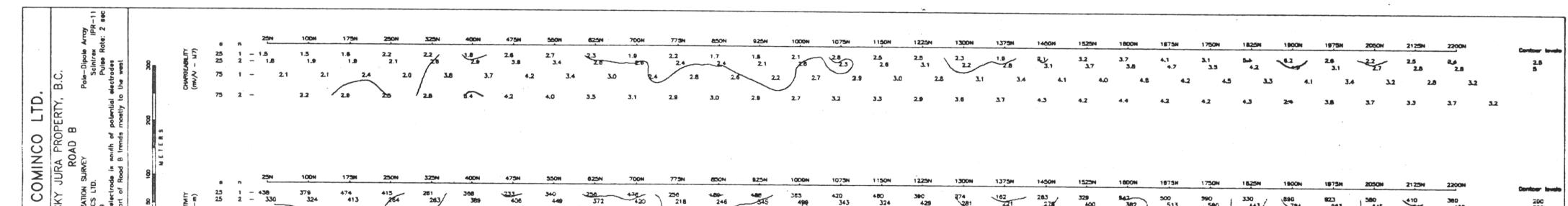




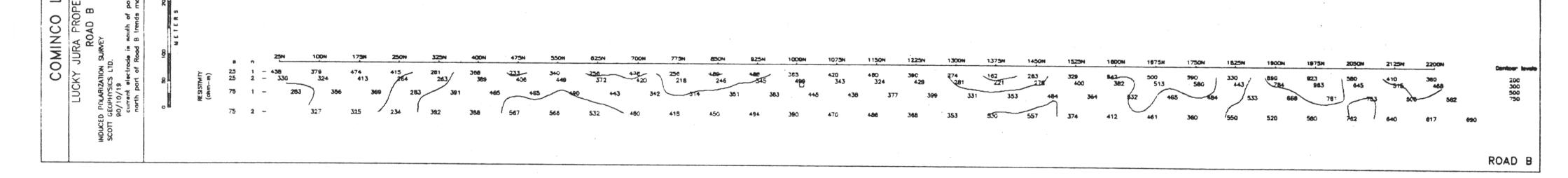


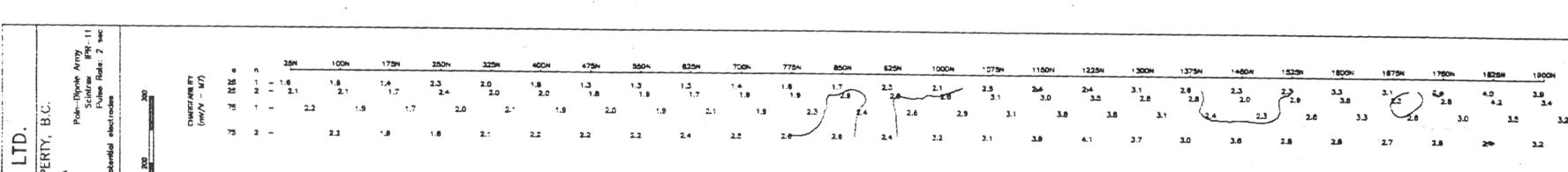


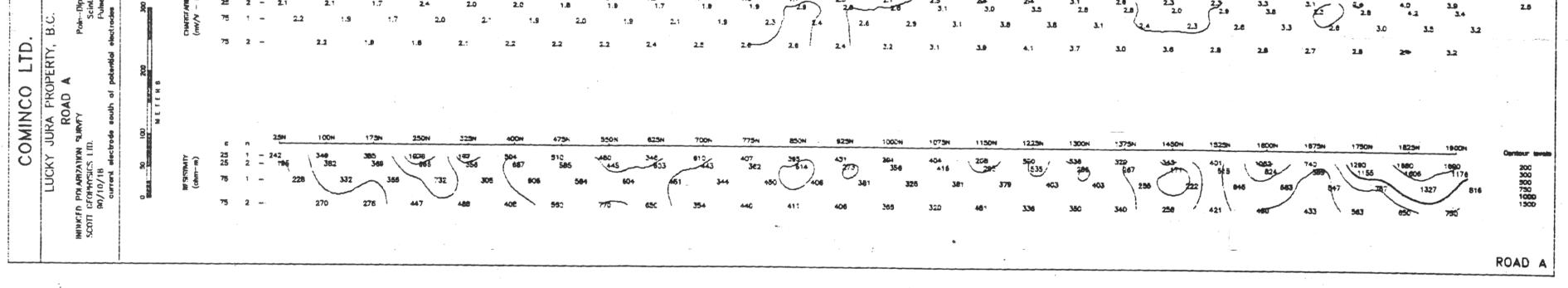


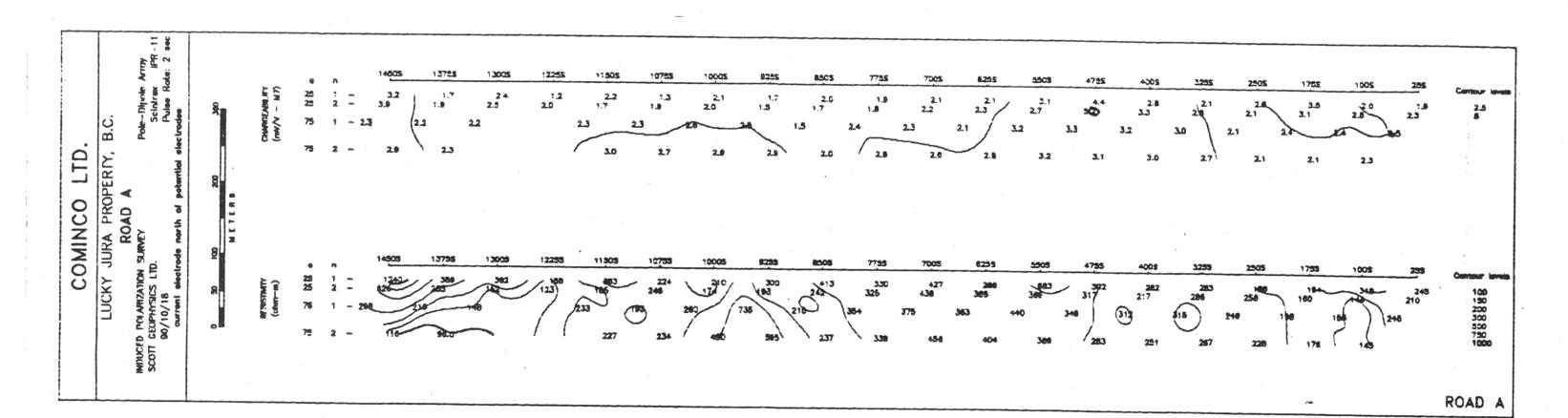


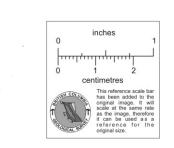
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fig. 9

