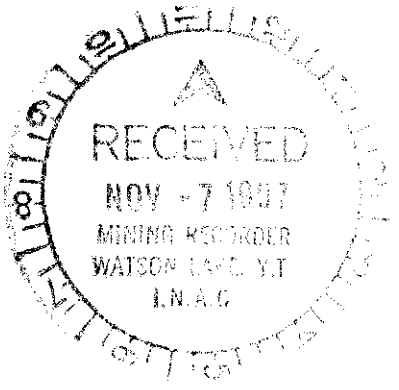
COMINCO LTD.

EXPLORATION
NTS 105 H/4

WESTERN DISTRICT



1997 ASSESSMENT REPORT

RIVER PROPERTY

GEOPHYSICS, LINECUTTING & DIAMOND DRILLING

WATSON LAKE M.D., YUKON

PELLY MOUNTAINS AREA

WORK PERIOD:
Mar 21, 22: May 9: Aug 9-12, 1997

LATITUDE: 61°05'

LONGITUDE: 129°50'

OCTOBER, 1997

VICTORIA L. BANNISTER
DAVID C. HALL

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of $ 8,000.00.

[signature]

for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

TABLE OF CONTENTS

FIGURES

APPENDICES

ATTACHMENTS

Cominco Ltd.

Exploration
NTS: 105 H/4

Western Canada
October, 1997

1997 ASSESSMENT REPORT
RIVER PROPERTY, YUKON TERRITORY

1.0 SUMMARY

The RIVER property, comprising 80 units, is located approximately 65 km southeast of Cominco's ABM VHMS Deposit, approximately 10 km north of Hasselberg Lake, and 120 km northwest of Watson Lake.

The property was staked in 1995 after a Cominco Airborne Geophysical survey and based on regional Government geophysical information.

The rocks underlying this area of the Yukon have been assigned to the Yukon Tanana Terrane (YTT). The YTT consists of a layered sequence of metamorphosed rocks comprising a "*lower unit*" of pre-Devonian quartzite, pelitic schist and minor marble, a late Devonian to mid-Mississippian "*middle unit*" comprised of carbonaceous phyllite and schist with interbanded mafic and, locally significant felsic metavolcanics, and an "*upper unit*" of Pennsylvanian marbles and quartzites. Volcanism within the "*middle unit*" was accompanied by the intrusion of late Devonian to Mississippian, mafic to felsic metaplutonic suites. Felsic volcanics of the "*middle unit*" are host to Cominco's ABM VHMS Deposit.

A late Devonian to mid-Mississippian sequence of intermixed felsic metavolcanics and variably carbonaceous metasediments of the YTT underlies the RIVER property.

Work completed on the RIVER property in 1997 included the cutting of a grid for geophysical work, followed by a ground geophysical survey and the drill testing of a magnetic anomaly with corresponding EM. No further work is currently planned for the RIVER property

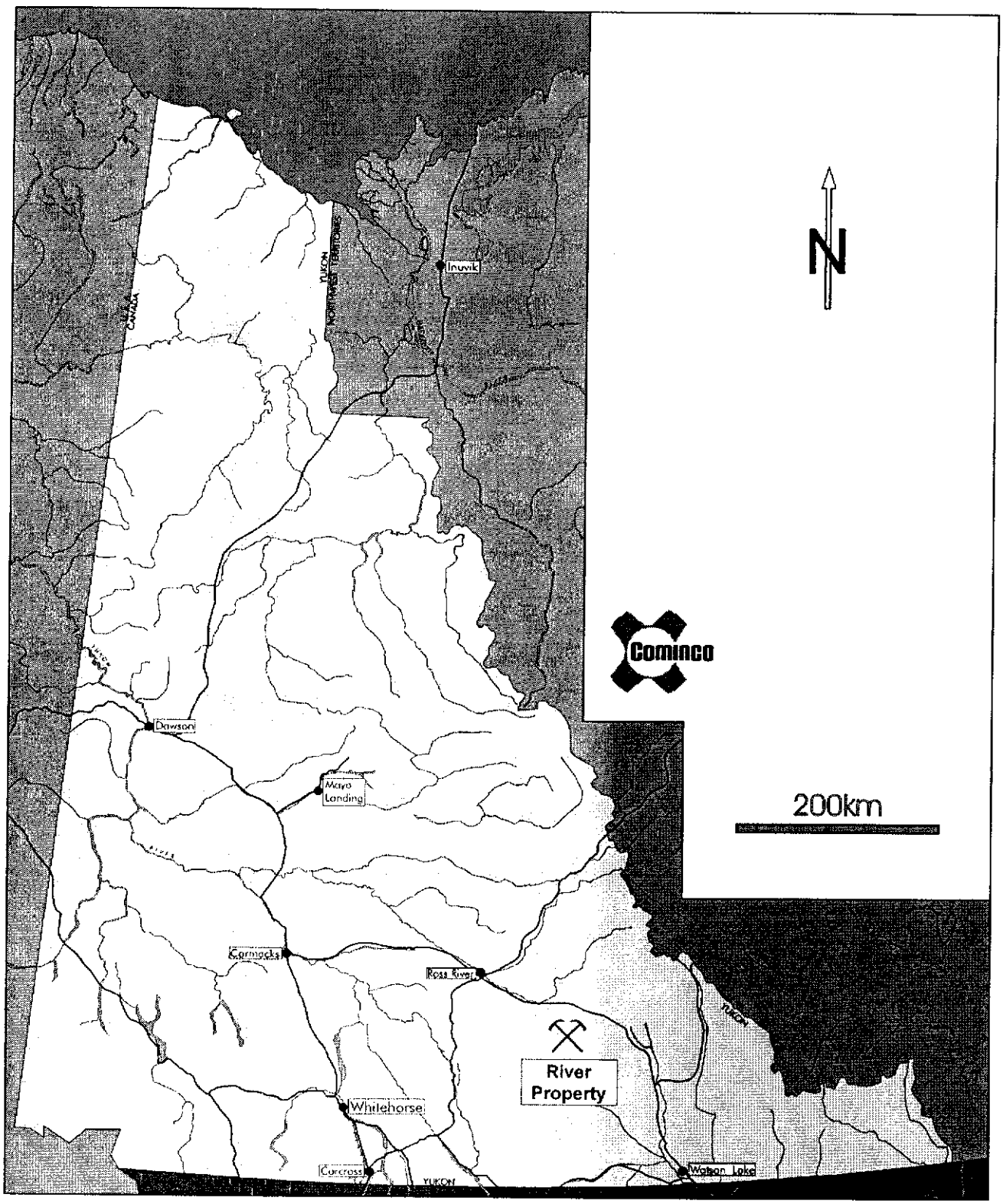
2.0 LOCATION AND ACCESS

The RIVER property is located 65 km southeast of Cominco's ABM VHMS Deposit. Overall, the property lies 120 km northwest of Watson Lake, Yukon (Figure 1). The Robert Campbell Highway is approximately 35 km west of the property. Direct access is by helicopter.

3.0 PROPERTY AND OWNERSHIP

The RIVER property, comprising 80 units, is 100% owned by Cominco Ltd. (Figure 2).

Name	Units	Claim No.	Due Dates
RIVER 1-80	80	YB71103-182	May 15, 2001



Drawn by:		Traced by: a. m. a.	
Revised by:	Date:	Revised by:	Date:

RIVER
PROPERTY LOCATION

105 H/4

Scale: **As Shown** | Date: **August 1997** | Plate: **1**

4.0 PREVIOUS WORK

Known-recorded work on the RIVER property is limited to the government RGS survey conducted in 1987. Subsequently Cominco began work on this property in 1995. In 1995, an airborne EM/MAG geophysical survey was flown over the property while minor geological mapping and prospecting was done. Mapping and prospecting in 1995 and 1996 found limited outcrop but geophysical interest remained based on high magnetic response with correlating moderate EM conductors present.

5.0 REGIONAL GEOLOGY

The rocks underlying this part of southeastern Yukon have been assigned to 2 terranes: the Yukon-Tanana Terrane (YTT) and the Slide Mountain Terrane (SMT) (Mortensen, 1983a; Mortensen and Jilson, 1985).

The YTT consists primarily of a layered sequence of metamorphosed rocks comprising a *"lower unit"* (3l) of pre-Devonian quartzite, pelitic schist and minor marble, a late Devonian to mid-Mississippian *"middle unit"* (3F) comprising carbonaceous phyllite and schist with interbanded mafic and, locally significant, felsic metavolcanics (3G), and an *"upper unit"* of Pennsylvanian marbles and quartzite. Volcanism within the "*middle unit*" was accompanied by the intrusion of 2-3, late Devonian to Mississippian, mafic to felsic metaplutonic suites (Simpson Range suite and augen and monzonitic orthogneisses). This sequence appears to reflect stable platformal or shelf sedimentation with an intervening period of mafic to felsic arc volcanism developed within a more reduced basinal setting. Felsic volcaniclastics of the *"middle unit"* are host to Cominco's ABM VHMS Deposit.

The late Devonian to Triassic SMT comprises a heterogeneous package of mafic to ultramafic plutonic rocks, mafic volcanics, massive carbonate and chert. This sequence was structurally emplaced as thrust bounded klippen on YTT rocks or as thrust slices imbricated within YTT rocks during a period of crustal shortening (D2). The SMT is thought to represent a disrupted oceanic crust and volcanic arc assemblage thought to be located between the YTT and ancestral North America(?).

A sub-horizontal to moderately north to northeast dipping, penetrative ductile deformation fabric (S2) and associated middle greenschist facies (chlorite-biotite grade) metamorphism affects all YTT rocks. This fabric reflects the first, and most significant, deformational and metamorphic event (D1) perhaps related to a continent-arc collision during late Permian to early Triassic time.

Late Triassic immature clastics comprising micaceous argillite, siltstone and sandstone unconformably(?) overlie the deformed and metamorphosed YTT rocks. These sediments are often closely associated with SMT volcanics and are invariably in fault contact with YTT rocks.

The SMT, Late Triassic sediments and Late Triassic to Middle Jurassic plutons are all affected by a period of Middle Jurassic to Late Cretaceous thrust faulting (D2), during which the Finlayson Lake Fault Zone was formed. This complex fault zone contains both thrust and steep, transcurrent(?) faults and separates the YTT from autochthonous North America (Mortensen, 1983a; Mortensen and Jilson, 1985).

6.0 1997 FIELD WORK

GEOPHYSICS & LINECUTTING

The River grid consists of 4.3 kilometres of cut line located as shown on figure 2. The grid was established on March 21 and 22, 1997 by a Coureur des Bois Lte. linecutting crew from Whitehorse. Geophysical surveys on this grid were conducted by an in-house Cominco Ltd. crew based out of the Kudz de Kayah exploration camp on May 9, 1997 and consisted of 3.7 line kilometres of HLEM/MAG. The purpose of these surveys was to define an airborne electromagnetic/magnetic anomaly on the ground and assess requirements for additional work.

DIAMOND DRILLING

A 203.6 m NQ diamond drill hole was drilled during the period August 9-12 at 6765023 N, 453221 E (Nad27) to test the favourable geophysical response on this property. This hole intersected sedimentary units with minor pyrrhotite mineralization. The core from this drill hole is stored at the Cominco Kudz ze Kayah core shack/storage facility on the TAG claim block.

7.0 RIVER PROPERTY

7.1 GEOPHYSICS

On May 9, 1997, a Cominco Ltd. geophysical crew completed 3.7 kms of HLEM/MAG surveys on the River grid. This target was located on a linear airborne EM/MAG feature in an area thought to have potential for economic mineralization. No outcrop is available in the immediate vicinity of the airborne anomaly. The object of the survey was to locate a possible drill target using geophysical methods.

Results of the surveys indicate a 700 metre wide, roughly east-west trending zone of elevated magnetics cutting across all grid lines giving it a strike length in excess of 600 metres. The zone consists of a number of individual magnetic "peaks" with amplitudes up to 2500 nT and widths of 150 metres. The HLEM survey defined a broad, conductive trend, which shows a high degree of correlation with the magnetics. The strongest part of the HLEM anomaly is a shallow zone 75-100 metres wide with conductivities in the 30-45 siemens range. This is directly associated with the highest amplitude magnetic responses.

A drill hole was proposed to test the strongest HLEM/MAG feature. The collar location was on line 400E at 630N drilling 60° to grid south.

7.2 DIAMOND DRILLING

The NQ hole drilled on claim 22 at location 6765023N,453221E at an elevation of 1014m (differentially corrected GPS). The hole was drilled to a depth of 203.6m with the complete cross section seen in Figure 3. The hole as seen in section intercepted approximately 15 m of overburden (OVB) followed by alternating sections of carbonaceous arigillaceous diamictite to debris flow sediments (SD), intermingled with sections of fine-grained carbonaceous argillite (CSA). Through the hole, the rock units encountered continued ~1% pyrrhotite with small sections containing up to 5% pyrrhotite.

8.0 CONCLUSIONS AND RECOMMENDATIONS

A Cominco Ltd. geophysical survey crew completed 3.7 kms of HLEM/Mag surveys on the River grid on May 9, 1997 for the purpose of evaluating an anomalous airborne survey feature. Ground results indicate a well defined linear magnetic trend with coincident conductivity.

A drill hole testing the strongest part of the ground geophysical response shows the presence of pyrrhotite within carbonaceous sediments in the core. This likely explains the magnetic-conductive anomaly found on the RIVER property. With this discovery, no further work is currently proposed.

Report by:

V.L. Bannister
Geologist

D.C. Hall
Geophysicist

Endorsed by:

D. Rhodes
Senior Geologist

Approved for
Release by:

D.W. Moore
Manager, Exploration
Western Canada

Distribution:

[2] Mining Recorder
[1] Western District, Central Files

9.0 REFERENCES

PLINT, H. E., 1994. GEOLOGICAL MAPPING IN THE CAMPBELL RANGE, SOUTHEASTERN YUKON (PARTS OF 105 G/8, G/9 AND 105 H/5,H/12); Yukon Exploration and Geology 1994: Part C, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs, Canada, p. 47-58.

MORTENSEN, J. K., 1983a. AGE AND EVOLUTION OF THE YUKON-TANANA TERRANE, SOUTHEASTERN YUKON TERRITORY [Ph.D. Thesis]; Santa Barbara, University of California, 155 p.

MORTENSEN, J. K. AND JILSON, G. A., 1985. EVOLUTION OF THE YUKON-TANANA TERRANE : EVIDENCE FROM SOUTHEASTERN YUKON TERRITORY; Geology, 13, p. 806-810.

MACROBBIE, P. A., 1995. YEAR END REPORT : PELLY MOUNTAIN PROPERTIES, SOIL GEOCHEMISTRY AND GEOLOGICAL MAPPING; Cominco Report, 41p.

APPENDIX I

STATEMENT OF EXPENDITURES

RIVER PROPERTY - 1997

1. GEOPHYSICS :	Staff costs, Equipment etc.		$ 1,450.00
	Helicopter		$ 1,680.00
		SUBTOTAL	$ 3,130.00
2. LINECUTTING:	Coureur des Bois invoice		$ 2,790.00
	Helicopter		$ 3,852.17
		SUBTOTAL	$ 6,642.17
6. DRILLING COSTS			$27,509.00
		TOTAL	**$37,281.17**

APPENDIX II

CERTIFICATION OF QUALIFICATIONS

I, DAVID C. HALL, of 3476 W. 22nd Avenue, in the City of Vancouver, in the Province of British Columbia, do hereby certify:

i. THAT I graduated with a B.Sc., Honours in Geophysics from the University of Manitoba in 1976.

ii. THAT I have been actively practising Geophysics from 1976 to 1997, and am presently an employee of Cominco Ltd.

David C. Hall, B.Sc.
Geophysicist

September, 1997

I, Victoria L. Bannister, of #103-2168 W. 2nd Ave., Vancouver, B.C. hereby declare that I:

1. Graduated from The University of Toronto, Toronto, Ontario, with a B.Sc. in Geology in May, 1993.

2. Graduated from Queen's University, Kingston, Ontario, with a M.Sc. in Geology in May, 1996.

3. Have acted as a contract geologist in Ontario and Yukon, Canada and in Martinique and Guyana since the summer of 1991.

4. Has been actively engaged in mineral exploration in Western Canada as a geological assistant with Cominco Ltd. during the summer and fall of 1996 and as a full-time geologist since November, 1996.

Date: September, 1997

V.L. Bannister, M.Sc.,
Geologist I

APPENDIX III-GEOPHYSICAL EQUIPMENT AND PROCEDURES

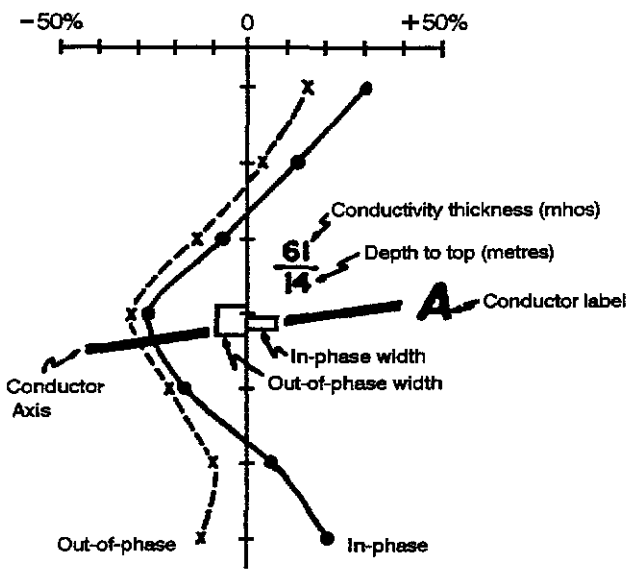
HORIZONTAL LOOP ELECTROMAGNETIC SURVEY

The HLEM system used was a Max-Min I-10 and a MMC data logger, manufactured by Apex Parametrics Ltd. The survey employed a 100 metre coil spacing. Three frequencies: 440, 1760, and 3520 Hz, were read at a 25 metre station interval.

For data collection, the receiver (Rx) and transmitter (Tx) were simultaneously tilted in a coplanar orientation paralleling the topographic slope (horizontal loop mode). The Rx-Tx separation of 100 metres was kept constant by using the interconnecting reference cable as a chain.

The HLEM results are presented in stacked profile form on 1:5000 plan maps, one map for each frequency. Data points are plotted half way between the Tx-Rx location. In-Phase (IP) data points are indicated by dots joined by a solid line; Out-of-Phase (OP) data is indicated by a dashed line. The conductor width, conductivity-thickness, and depth to top are discussed below using the lowest frequency (usually 440 Hz) that adequately defines the conductor. An interpretation legend which describes these features is shown below.

A conductor will show a negative IP and/or OP trough of width (with respect to background values) equal to that of the conductor width plus the length of the coil separation. The IP and OP widths due to a conductive source are shown, respectively, above and below the zero line. The shallower a conductor is from the surface, the higher will be the amplitude of the IP and OP responses. Better conductors will respond on progressively lower frequencies whereas poor conductors are seen only on the higher frequencies. A higher IP/OP response amplitude ratio is also indicative of better conductance.



HLEM INTERPRETATION LEGEND

MAGNETIC SURVEY

The instrumentation for the magnetic survey consisted of a pair of GSM-19 magnetometres manufactured by GEM Systems of Ontario. One of these was set up as a recording base station (taking readings every 3 sec.) and the other as a field unit taking measurements at each point of the survey grid. The field magnetometer and base were synchronized so that a field reading was taken at the same instant as a base station record. Readings on the grid were taken every 12.5 metres, which was decreased to every 5 metres in locations where the magnetic response changed rapidly. At the end of a survey day the two units were connected to a computer and the day's data was transferred to the computer memory. Corrections for diurnal magnetic field variations were applied to each survey station value before plots were made. Reading accuracies of $\pm$5 nT were attained for the magnetics survey.

The total field magnetic data is presented in stacked profile form at a scale of 1:5000. Conductor locations for the highest HLEM frequency (3520 Hz) are traced on the magnetic profile map.

PRESENTATION OF RESULTS

Reduction and plotting of this data was carried out on Geosoft software . All data is presented in profile form at a scale of 1:5,000. HLEM conductor locations are plotted on the total field magnetic profiles.

Appendix IV

HOLE NO: RV97-1 | SECTION: | GRID:

PROJECT CODE : PELLY TT
TENEMENT : RIVER
PROSPECT :
GRID :
MAP REFERENCE : 105 H 4
LOCATION : YUKON
HOLE TYPE :

*** COLLAR COORDINATES AND RL ***

NOMINAL	0.00mN	0.00mE	0.00RL

Pre-collar depth: Final depth: 203.60

Purpose of hole: TEST COINCIDENT EM/MAG FEATURE

Hole status:

Comments:

*** SURVEY DATA ***

Survey Method:

Depth	Azimuth	Inclination
0.00	0.00	-90.00

*** SUMMARY LOG ***

0.00	18.00	OVERBURDEN
18.00	42.00	DEBRIS FLOW
42.00	79.50	CARBONACEOUS ARGILLITE
79.50	89.00	DEBRIS FLOW
89.00	145.70	CARBONACEOUS ARGILLITE
145.70	148.70	CARBONACEOUS ARGILLITE SILTSTONE
148.70	156.90	DEBRIS FLOW
156.90	159.10	CARBONACEOUS ARGILLITE SILTSTONE
159.10	162.80	CARBONACEOUS ARGILLITE
162.80	183.60	CARBONACEOUS ARGILLITE SILTSTONE
183.60	188.30	CARBONACEOUS ARGILLITE
188.30	189.80	CARBONACEOUS ARGILLITE SILTSTONE
189.80	193.40	CARBONACEOUS ARGILLITE
193.40	200.70	CARBONACEOUS ARGILLITE SILTSTONE
200.70	203.60	CARBONACEOUS ARGILLITE
203.60		END OF HOLE

*** DRILLING SUMMARY ***

	0.00 203.60 NQ
Drill contractor:	DJ DRILLING LTD
Drill rig:	LF-70
Date started:	23/9/97
Date finished:	23/9/97
Logged by:	TJB
Relogged by:	
Sampled by:	

Material left in hole:
Base of complete oxidation
Top of fresh rock:
Water first encountered:
Water inflow estimate:

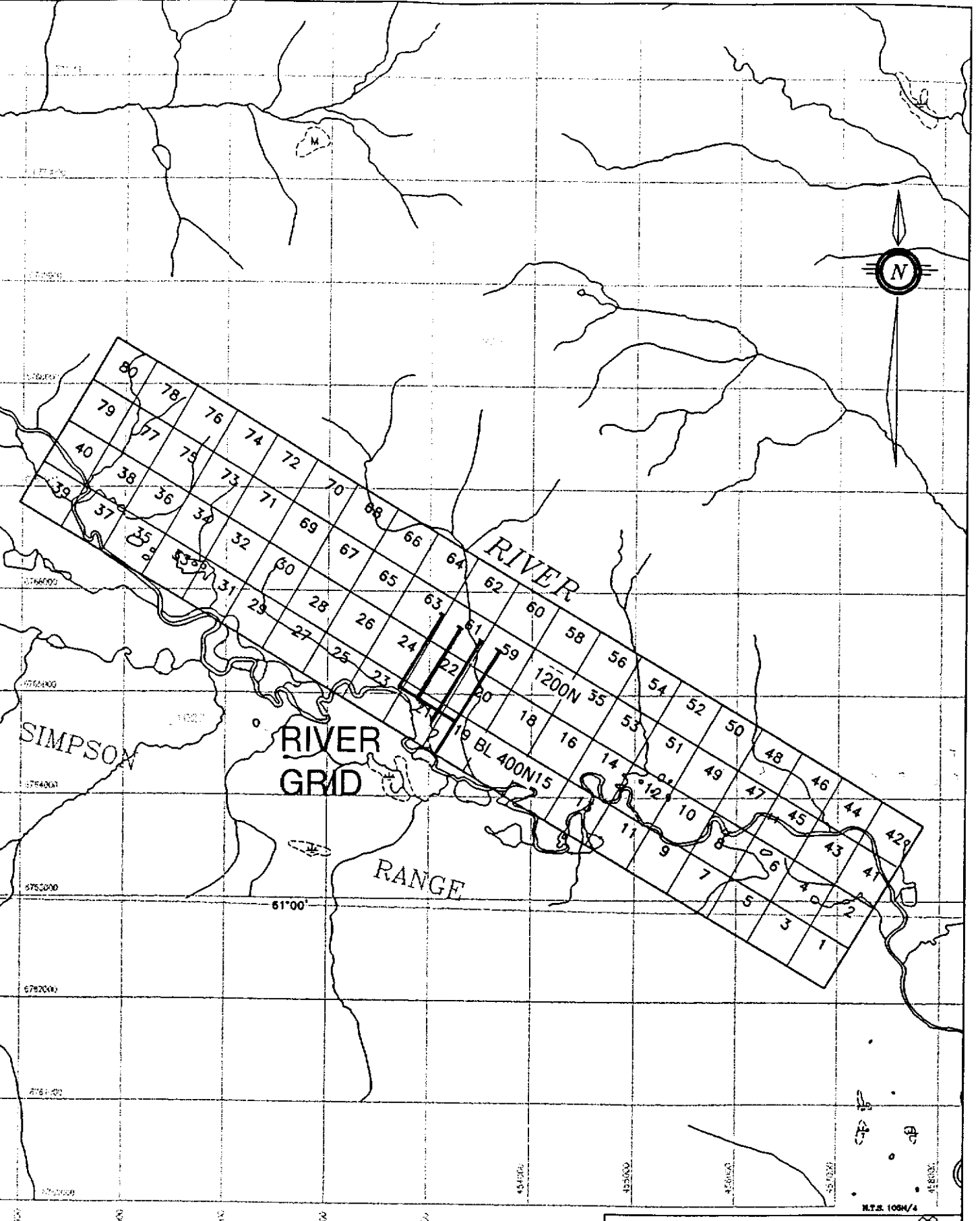
*** SIGNIFICANT ASSAYS ***

From	To	Width
30.00	30.10	0.10
40.00	40.10	0.10
51.20	51.30	0.10
61.60	61.70	0.10
71.10	71.20	0.10
81.40	81.50	0.10
91.20	91.30	0.10
102.70	102.80	0.10
108.00	108.10	0.10
113.20	113.30	0.10
118.30	118.40	0.10
130.30	130.40	0.10
140.00	140.10	0.10
151.80	151.90	0.10
164.60	164.70	0.10
178.00	178.10	0.10
193.30	193.40	0.10
203.40	203.50	0.10

Checked and signed: _____ Date: _____

From	To	Geological Log
0.00	18.00	OVERBURDEN
18.00	42.00	DEBRIS FLOW Dark grey green to black, chloritic and weakly calcareous argillite containing 55%, poorly sorted, angular to subrounded, 1-15 mm sized siltstone clasts. Fine to blebby disseminated and fine laminar pyrrhotite-pyrite (1-2%) and rare cpy occurs throughout, particularily along mudstone-siltstone contacts; occasional bands (veins?) up to 2 cms contain up to 60% py. Po-py content increases from 29.0-42.0 m up to 5%. Textures locally suggest soft sediment deformation/slumping. Thin quartz veins cross cut foliation. S2 foliation at 76 to ca.
42.00	79.50	Carbonaceous Argillite Black to dark grey, carbonaceous argillite with calcitic interbeds and cut by quartz-py(1-3%) veinlets. Po (1-2%) occurs as fine disseminations throughout. Sulphidic sections with associated quartz veins at 43.1-44.5 m, 59.0-61.6 m, 75.3 m and 79.0-79.3 m. Faulted intervals at 46.6-46.8 m and 71.0-75.0 m.
79.50	89.00	DEBRIS FLOW As above. Siltstone fragments appear to decrease in size and there is an appearance of 1-1.5 cm thick chert interbeds/fragments. Unit is moderately calcareous debris flow with 1% po-2%py as fine laminations and blebby disseminations. S2 foliation at 72 to ca.
89.00	145.70	Carbonaceous Argillite As above. Dark grey to black carbonaceous mudstone with thin interlaminated calcareous mudstone cut by abundant quartz veinlets. Po (3-5%) occurs as laminations, blebby disseminations and in veinlets. Silicified breccia zone (structure) present at 105.6 m. Graphitic fault zones at 109.2-109.3 m and 129.0-129.1 m. One 1 cm vein found to contain 60% po-20%py-20%aspy-trace pentlandite?. S2 foliations at 60-75 to ca.
145.70	148.70	Carbonaceous Argillite SILTSTONE Weakly calcareous and carbonaceous, more massive argillite/mudstone with occasional interbeds of calcareous/limy siltstone/silty mudstone. Po content decreases to about 1%. S2 at 79 to ca.
148.70	156.90	DEBRIS FLOW Similar to above argillaceous debris flows containing subangular to subrounded limy siltstone/silty mudstone fragments (1-6 cms, avg. About 4 cm) slightly larger than previous units. Pyrite (trace) and pyrrhotite (1%) occur throughout. S2 foliation at 75-78 to ca.
156.90	159.10	Carbonaceous Argillite SILTSTONE As above stripped unit with interbedded calcareous/limy siltstone/silty mudstone. Unit contains 3% po as foliation parallel laminations and fine to blebby disseminations.
159.10	162.80	Carbonaceous Argillite Similar to 145.7-148.7; however, increased po content to 3% as disseminations and laminations and as clots with trace cpy associated with ribbony calcite-quartz veins. S2 at 80 to ca.
162.80	183.60	Carbonaceous Argillite SILTSTONE Heavily fractured and quartz-calcite-py veined dark grey mudstone/argillite with 2% py and 4% po. Thin interval at 180.4-180.5 m with 20% py and 15% po disseminations parallel to foliation (vein?), similar to 113.0-113.1 m interval, however, no aspy. S2 at 78 to ca.
183.60	188.30	Carbonaceous Argillite Dark grey to black, carbonaceous to graphitic and weak to moderately calcareous mudstone with rare limy mudstone/silty mudstone interbeds. Up to 2% po throughout. S2 at 82 to ca.
188.30	189.80	Carbonaceous Argillite SILTSTONE As above; heavily fractured and quartz-calcite veined as well. Weakly mineralized with 1-2% po and trace pyrite. S2 at 76 to ca.
189.80	193.40	Carbonaceous Argillite More massive, homogenous mudstone/argillite with rare interbeds and occasional siltstone clasts. Weakly mineralized.
193.40	200.70	Carbonaceous Argillite SILTSTONE As above.
200.70	203.60	Carbonaceous Argillite Medium to dark grey, interbedded mudstone/argillite and 20%, moderately calcareous mudstone/argillite. Unitn is generally unmineralized contining only trace po. S2 foliation at 74 to ca.

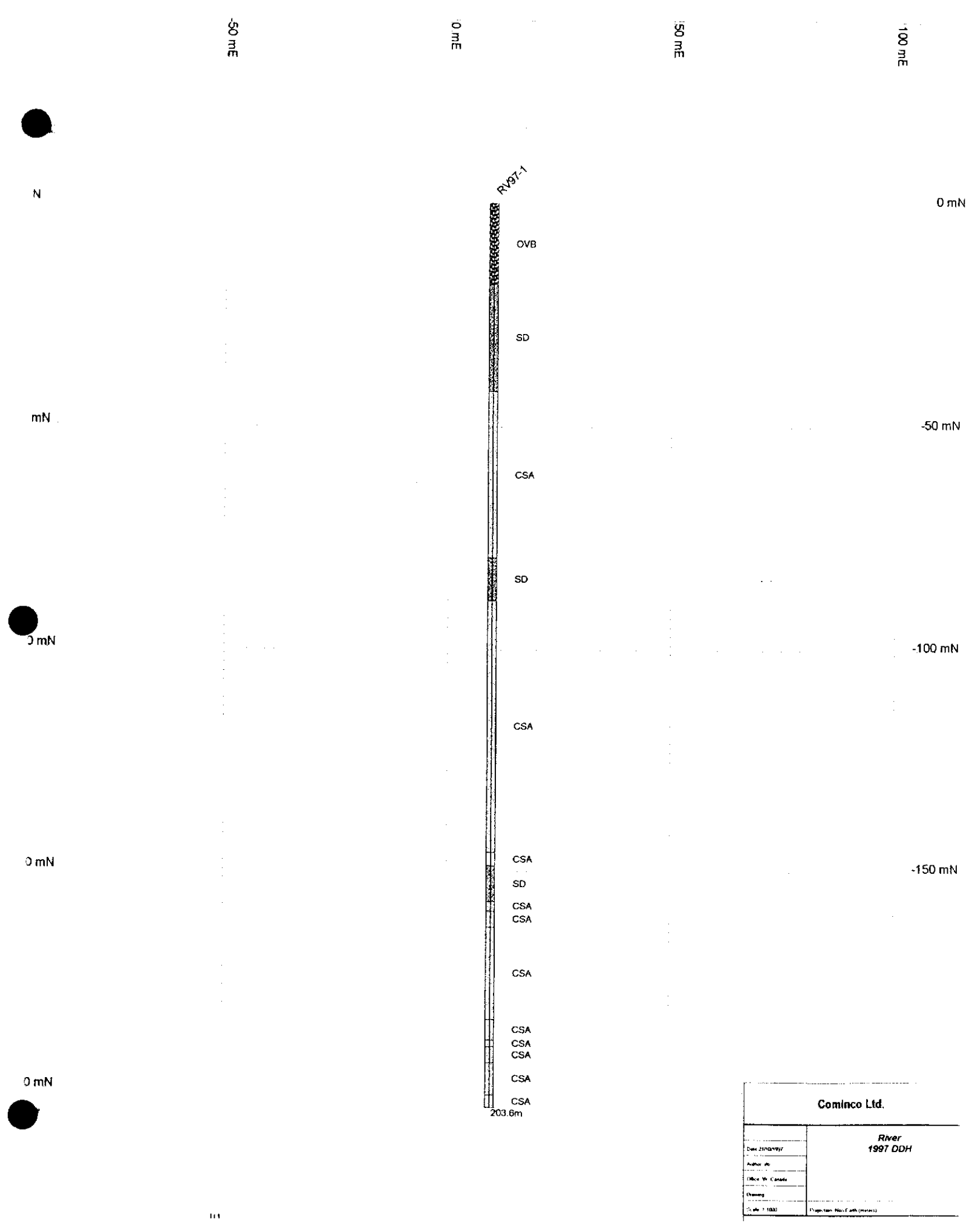
*** END OF HOLE *** 203.60



RIVER PROPERTY

CLAIM MAP

FIGURE 2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mN
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0 mN
0 mN
-50 mN
-100 mN
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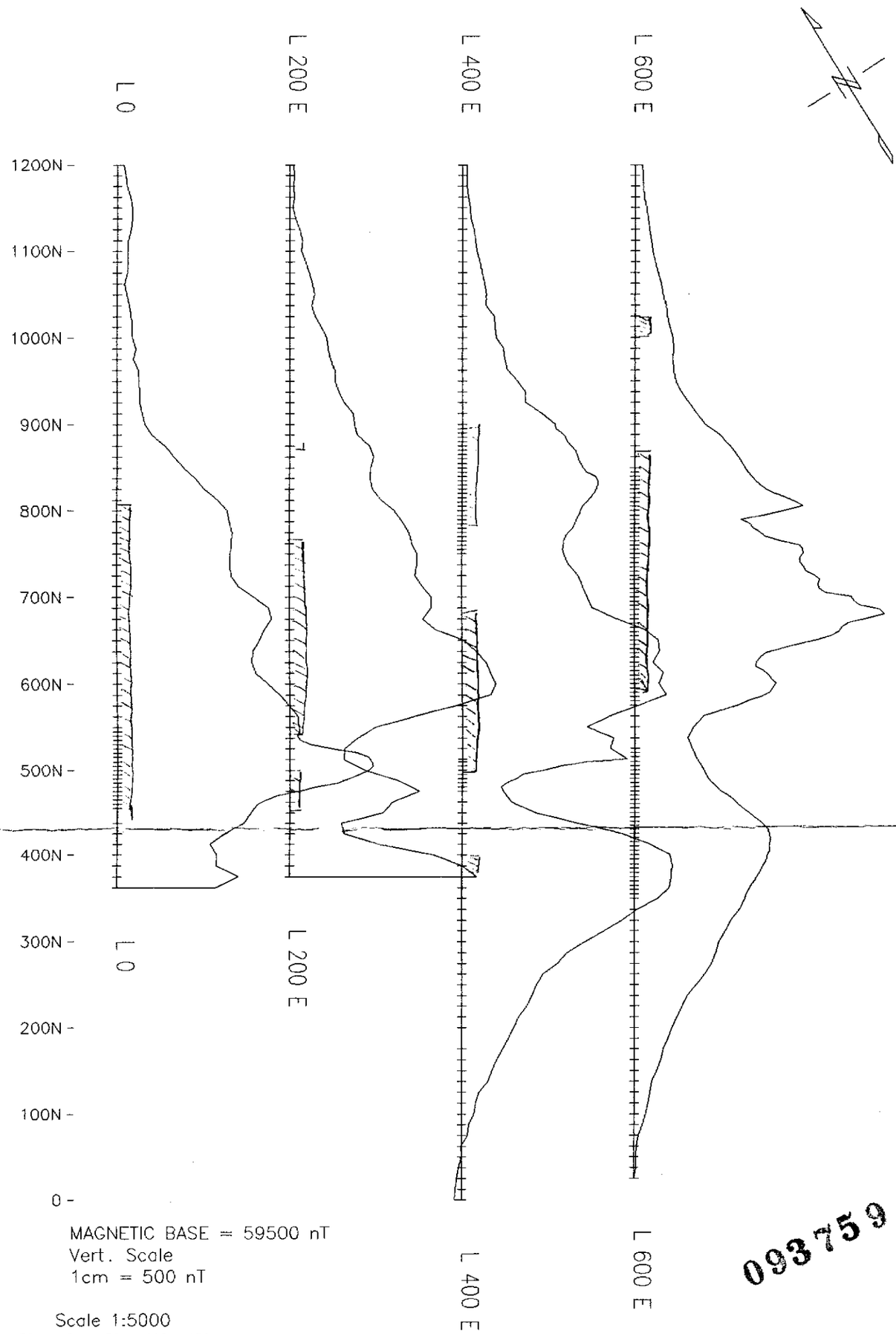
RV97-1
OVB
SD
CSA
SD
CSA
CSA
SD
CSA
CSA
CSA
CSA
CSA
CSA
CSA
203.6m
Cominco Ltd.
River
1997 DDH



093759

COMINCO EXPLORATION

Cominco

NTS 105G

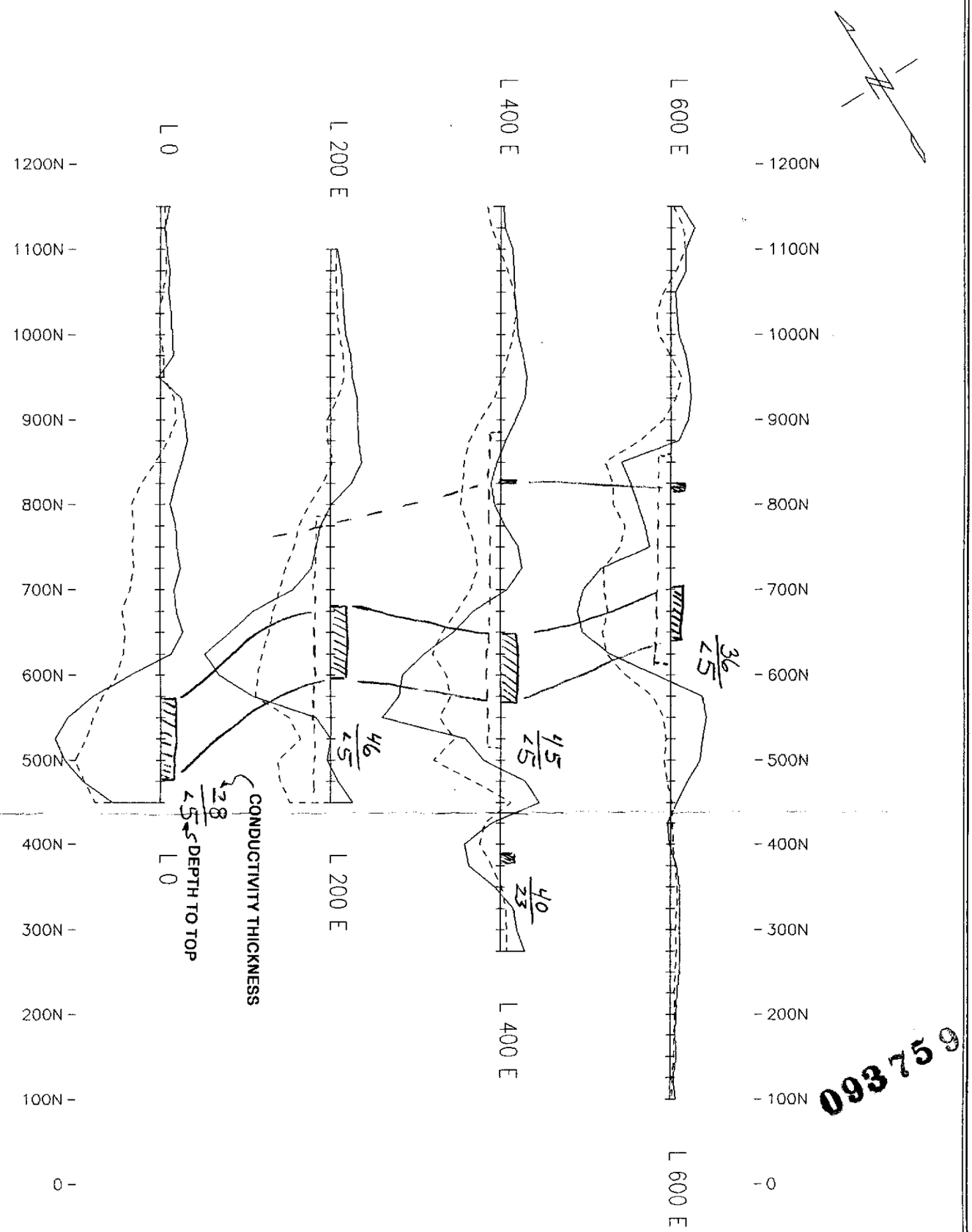
Drawn by:		Traced by:	
Revised by:	Date:	Revised by:	Date:

PELLY MTN PROPERTIES
RIVER GRID
TOTAL FIELD MAGNETICS SURVEY

Scale:

Date: AUGUST 1997

FIGURE 4



VERTICAL SCALE:
1cm = 20%

OUT OF PHASE ·····
IN PHASE———

Scale 1:5000
50 0 50 100 150
(metres)

093759

COMINCO EXPLORATION

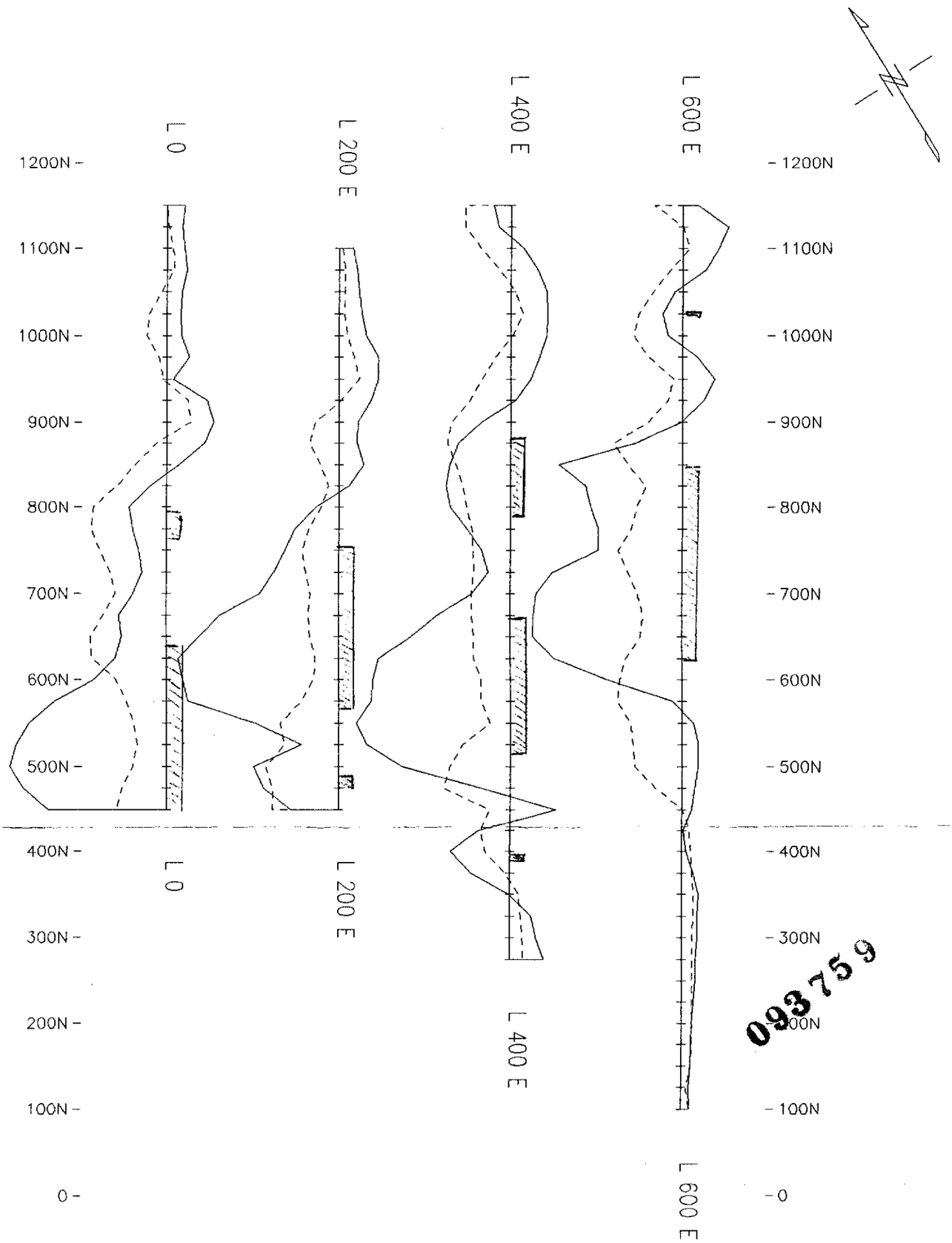
Cominco

NTS 105G

Drawn by:		Traced by:	
Revised by:	Date:	Revised by:	Date:

PELLY MTN PROPERTY
RIVER GRID
HORIZONTAL LOOP EM SURVEY: 440 HZ,
100 metre coil spacing

Scale: as shown | Date: AUGUST 1997 | FIGURE 5



093759

VERTICAL SCALE:
1cm = 20%

OUT OF PHASE ---------
IN PHASE———————

Scale 1:5000
50 0 50 100 150
(metres)

COMINCO EXPLORATION

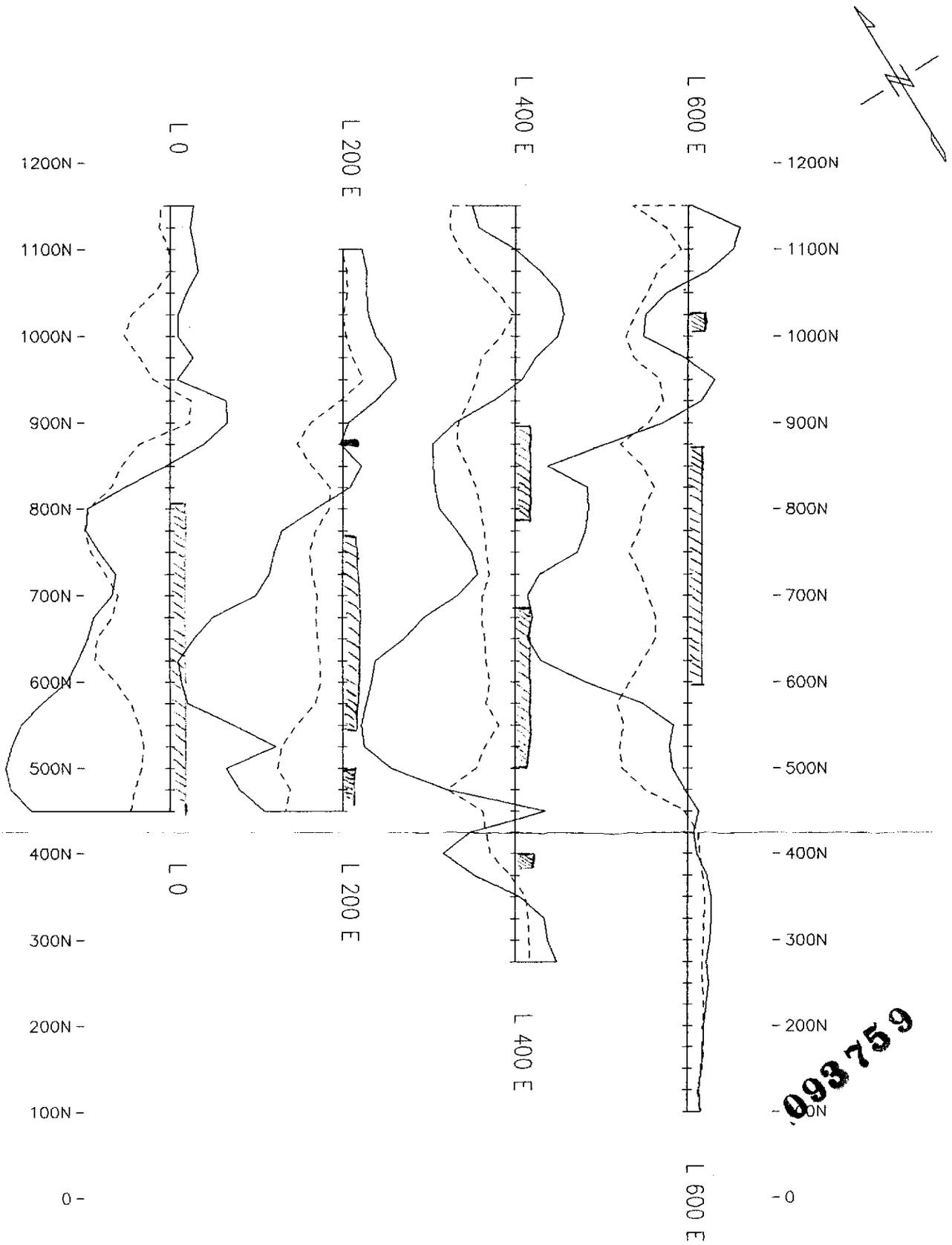
Cominco

NTS 105G

Drawn by:		Traced by:	
Revised by:	Date:	Revised by:	Date:

PELLY MTN PROPERTY
RIVER GRID
HORIZONTAL LOOP EM SURVEY:1760 HZ, 100 metre coil spacing

Scale: as shown | Date: AUGUST 1997 | FIGURE 6



093759

VERTICAL SCALE:
1cm = 20%

OUT OF PHASE ---------
IN PHASE----------

Scale 1:5000
50 0 50 100 150
(metres)

COMINCO EXPLORATION

Cominco

NTS 105G

Drawn by:		Traced by:	
Revised by:	Date:	Revised by:	Date:

PELLY MTN PROPERTY
RIVER GRID
HORIZONTAL LOOP EM SURVEY:3520 HZ,
100 metre coil spacing

Scale: as shown | Date: AUGUST 1997 | FIGURE 7