COMINCO LTD.

EXPLORATION | CANADA

NTS 105 G/8, 9 and H/5, 12

1998 ASSESSMENT REPORT

STRIKE PROPERTY

LINECUTTING, GEOPHYSICAL (UTEM, HLEM and MAG) AND SOIL GEOCHEMISTRY SURVEYS, GEOLOGICAL MAPPING AND DIAMOND DRILLING

WATSON LAKE M.D., YUKON

FRANCES LAKE AREA

WORK PERIOD

JUNE 3-18 & JULY 3-9, 1998

LATITUDE: 61°30'N

LONGITUDE: 130°00'E

NOVEMBER, 1998

PAUL A. MacROBBIE
RICHARD K. MANN
ROB D. JOHNSTON

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 $ 37,145.00.

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

TABLE OF CONTENTS

FIGURES

ATTACHMENTS

APPENDICES

1998 ASSESSMENT REPORT

STRIKE PROPERTY, YUKON TERRITORY

1.0 SUMMARY

The Strike property, composed of 319 units, was initially staked in 1995 to cover multi-element RGS stream silt anomalies on strike with mafic-type VMS showings on Atna Resources' MONEY Property. The *significant discovery of the mafic-type ICE VMS Deposit by Expatriate Resources in late 1996 and the* presence of strong Cu anomalies in stream silt and soils on the STRIKE lead to additional staking in 1997 and the subsequent 1998 exploration program reported here.

The rocks underlying this part of the southeastern Yukon have been assigned to two terranes: the Yukon Tanana Terrane (YTT) and the Slide Mountain Terrane (SMT).

The late Devonian to Triassic SMT is a heterogeneous package of mafic to ultramafic plutonic rocks, mafic volcanics, massive carbonates and cherts. This sequence was structurally emplaced as thrust bounded klippen on YTT rocks or as thrust slices imbricated within YTT rocks during a period of Middle Jurassic to Late Cretaceous crustal shortening. The SMT is thought to represent a disrupted oceanic crust and volcanic arc assemblage once located between the YTT and the North American craton. Mafic volcanics of the SMT are host to the Julia showing on Atna Resources' MONEY Property and Expatriate Resources' ICE VMS Deposit.

The STRIKE property is located within the Finlayson Fault Zone and is underlain predominantly by mafic volcanics and metasediments of the SMT. The stratigraphy over much of the property exhibits variable trends from west to north with shallow to steep north and east dipping units.

In 1998, linecutting, geological mapping/prospecting, soil geochemical surveys, ground geophysical surveys (UTEM, HLEM, MAG) and diamond drilling were focused on an area in the northeast corner of the property. This area was identified in 1997 to contain several significant ferricrete zones with highly anomalous copper soil and silt values and malachite stained fracture surfaces in locally derived talus. This area also corresponds with a previously identified AMAG high and a single line weak AEM feature.

Geological mapping outlined a series of massive to pillowed mafic volcanic subaqueous flows and associated monolithic flow breccias and epiclastic, hematitic breccias with minor hematitic argillite/chert, locally separated by discontinuous thin grey cherts. The sequence is intruded by a plagioclase-rich leucogabbro. Prospecting in the area of the ferricretes resulted in the discovery of talus containing malachite/calcite veined hematitic cherts, malachite veinlets in leucogabbro and malachite stained mafic volcanics. No significant sulphides were found.

Grid geochemical soil surveys resulted in highly anomalous copper values (up to 11,920 ppm) generally located within and downslope of the ferricretes.

Two diamond drill holes totalling 245.4 metres were drilled to test the EM/MAG anomalies and the anomalous Cu geochemistry. Results were generally poor.

DDH ST98-01 did intercept a fault zone between 31.1-38.6 metres with very poor core recovery (20.4%). Within the wash of this fault zone, several small pebbles of medium to light grey silica (chert) with 10-40%

fine to medium-grained pyrite and 1-5% fine chalcopyrite were recovered. Other pieces of core recovered include several veins (up to 3.5 cms) of fine massive pyrite with 3-10% disseminated fine chalcopyrite hosted by hematitic chert. Geochemistry of the pebble wash zone (32.5-35.5 m) returned 3.1% Cu and 6.4 g/t Ag; vein dominant mineralization from 36.1-38.0 m returned 1.9% Cu and 5.7 g/t Ag. This mineralization is strongly conductive when measured with an ohmmeter. Other than clay gouge in faults (weakly conductive), no other conductivity was encountered in the hole. Either of these 2 features (fault gouge or sulphides) could explain the weak EM at surface.

The results of geological mapping, soil geochemistry and diamond drilling suggest the ferricretes and related Cu anomalies are hydromorphic and result from periodic flooding of the soil by metal rich waters being sourced by springs that originate from faults at the base of slope. The source of the copper maybe ultramafic lithologies with a high background Ni/Cu content or sulphides (chalcopyrite/pyrite veins and/or a minor, undetected VHMS sulphide zone). The latter possibility is entirely based upon mineralization from DDH ST98-01.

The ground geophysical surveys identified two, NNW-trending, very strong, linear magnetic anomalies and several, near parallel, weak EM anomalies. The ground magnetic anomalies are interpreted as reflecting the presence of several, linear fault bounded serpentinite bodies. The weak ground EM conductors are interpreted as reflecting conductivity of clay gouge along fault zones.

The sulphide veining and possible sulphidic chert, intercepted in DDH ST98-01, are of a favourable style for an ICE-type VHMS target; however, the lack of any EM/MAG targets, with a strong enough signature to represent significant mineralization, suggests that no significant sulphide deposit is present.

2.0 LOCATION AND ACCESS

The STRIKE property is located approximately 125 kms SE of Ross River, Yukon, about 3 kms south of Wolverine Creek, and 18 kms west of the west arm of Frances Lake (Figure 1).

The gravel, all-weather Robert Campbell Highway provides access to within 5 kms of the property. The 1998 program was helicopter supported and based out of the KZK camp located 30 kms west of the area of interest.

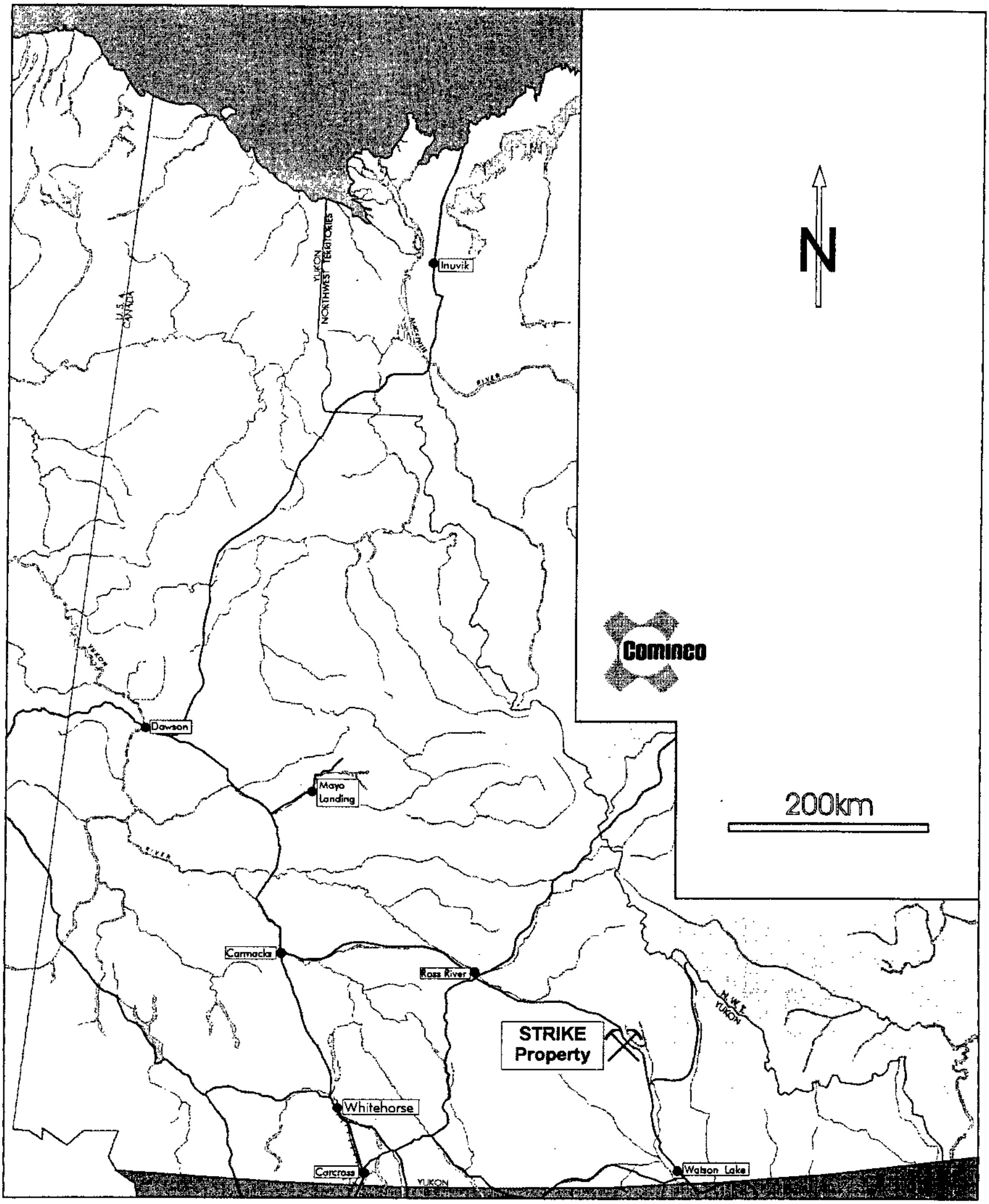
3.0 TOPOGRAPHY

The claim group covers a semi-mountainous zone on the northern edge of the Pelly Mountains. The elevation ranges from 1,100-1,700 m in gentle to steeply sloping ground. Small scrub coniferous and lesser deciduous vegetation ends at the 1,550 m contour and the ground cover is buck brush and alpine heather above 1,400 m.

4.0 PROPERTY AND OWNERSHIP

The property consists of the following claims (215 units) owned 100% by Cominco Ltd. (Figure 2):

Claims	Units	Tag No.	Date Rec.	Due Date
STRIKE 1-25	25	YB59582-606	May 5/95	Feb 5/99
STRIKE 30-75	46	YB59611-656	May 5/95	Feb 5/99
STRIKE 77	1	YB59658	May 5/95	Feb 5/99
STRIKE 106-131	26	YB59687-712	May 5/95	Feb 5/99
STRIKE 133	1	YB59714	May 5/95	Feb 5/99



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

STRIKE
PROPERTY LOCATION

WATSON LAKE M.D. YUKON

N.T.S. 105 G/8

Scale: As shown	Date: September 1998	Plate: 1

STRIKE 164	1	YB59745	May 5/95	Feb 5/99
STRIKE 166-189	24	YB59747-770	May 5/95	Feb 5/99
STRIKE 220	1	YB59801	May 5/95	Feb 5/99
STRIKE 222-249	28	YB59803-830	May 5/95	Feb 5/99
STRIKE 276	1	YB59857	May 5/95	Feb 5/99
STRIKE 278-312	35	YB59859-893	May 5/95	Feb 5/99
STRIKE 321-346	26	YB89608-633	July 28/97	July 28/99

5.0 PREVIOUS WORK

The STRIKE property lies a few kms to the north of the Julia showing (Minfile #78). The showing comprises low grade, pyritic mafic-type VMS mineralization and related gossans developed along a tuff/chert horizon within a thick pile of mafic volcanics. This occurence was initially staked in 1980 by Welcome North Minerals Ltd. and Esperanza Exploration Ltd. They optioned the property to Arbor Resources Ltd., who carried out gravity surveys in 1981 and later performed EM, Mag and soil geochemistry surveys and drilled 3 holes (totaling 329 metres) in a joint venture with Esso Minerals Ltd. The claims were later dropped. In 1990 the ground was restaked by YGC Resources Ltd., who completed soil and rock geochemical sampling and prospecting. The property has been subsequently acquired by Atna Resources Ltd., who carried out geological mapping, soil geochemistry, ground geophysical surveys and diamond drilling (7 holes in 1996; best intercept is 1.0 m of 1.75% Cu, 21 g/t Ag and 0.4 g/t Au) between 1995 and 1997.

In 1995, Cominco carried out a program of geological mapping and helicopter-supported stream silt sampling in the STRIKE claim area. A total of 80 silt samples were collected from streams on or near the properties. Results returned several anomalous values for Cu, Zn, and Ba. An airborne geophysical survey, flown over the properties by Aerodat in 1995, outlined several conductive zones, five of which possess moderate to stong AEM responses associated with strong, linear magnetic features.

In 1996, Cominco established 3 ground grids (totalling 13.6 lkms) targeting AEM/Mag features identified from the 1995 airborne survey. All grids were surveyed with HLEM and Mag (totaling 11.4 lkms), which identified numerous conductors with flanking strong magnetics. Grid and contour soil sampling and stream silt sampling (totalling 689 samples) resulted in several moderate to strongly anomalous Cu-Ni anomalies on the grids and the identification of strong Cu (>2,300 ppm, up to 3,463 ppm)-Ni-Cr silt anomalies in a creek near the northeastern edge of the property. Geological mapping was focused on the grid areas with little work on other parts of the property. The predominance of mafic/ultramafic lithologies and metal association of the soils from the grid areas suggested low potential for felsic hosted VMS mineralization.

In late 1996, Expatriate Resources announced the discovery of significant Cu-rich VMS mineralization in similar, mafic-dominant stratigraphy on their ICE property located 80 kms to the northwest. The final hole of a 34 DDH program intersected 20.5 m grading 5.2% Cu, 25.1 g/t Ag and 0.6 g/t Au. As a result, the very strong Cu silt anomalies identified on the STRIKE property became increasingly interesting.

In 1997, geological mapping identified a large area of ferricrete with talus of mafic volcanics with malachite stained fractures. Several contour soil lines were run up-slope of the stream silt anomalies and identified a strong Cu soil anomaly (>250 ppm, up to 9,300 ppm) over a 1.5 km strike length, centered over the ferricrete zone. A single line, weak AEM conductor is present upslope of the anomalous soil line.

6.0 1998 FIELD WORK

To test the potential for an ICE-like, Cu-rich mafic-type VMS deposit, the 1998 program involved linecutting, grid based ground geophysical surveys, soil geochemistry and geological mapping and subsequent diamond drilling.

6.1 Linecutting

Between June 3-10/98, a 4-man crew from Coureur des Bois Ltd. of Whitehorse completed a total of 12.5 lkms of cut and chained lines and 3.3 lkms of brushed out lines (no chaining).

This grid (Figure 2) was used primarily for UTEM, MAG and HLEM surveys and soil geochemistry, in addition to geological mapping.

6.2 Geophysical Surveys (UTEM, MAG, HLEM)

Between June 10-18/98, a total 11.2 lkms of UTEM and MAG and 3.1 lkms of HLEM were completed by a Cominco geophysical crew. All data is provided in Appendix 3. A magnetics/UTEM interpretation map is shown as Figure 98-10-3.

6.3 Geological Mapping

Between June 10-16/98, detailed geological mapping by PAM and RKM was carried out in the grid area. Results of 1998 mapping can be seen in Figure 4.

6.4 Geochemistry

Between June 10-15/98, a total of 323 soil samples were collected (8 man-days) along the grid lines at 50 metre spacing and along several contour lines, at 100 metre spacing, located to the north and south of the grid (Figures 5-7). During the course of mapping, a total of 10 rock samples were also collected.

On July 8/98, 5 pits were hand dug at the sites of four highly Cu anomalous and one non-anomalous soil site (Figure 5), in order to identify and characterize the source of the copper anomalies. Pits were roughly one meter deep and 0.6 meters in diameter. A total of 19 samples in total were collected from different horizons in each hole.

All geochemical data is available in Appendix 4 while geochemical sample locations can be seen in Figure 6. All soil and rock samples were analyzed for Cu, Pb, Zn, Ag, As, Cd, Co, Ni, Fe, Mo, Cr, Bi, Sb, V, Sn, W, Sr, Y, La, Mn, Mg, Ti, Al, Ca, Na and K by ICP at Cominco Exploration Research Laboratory (CERL) in Vancouver.

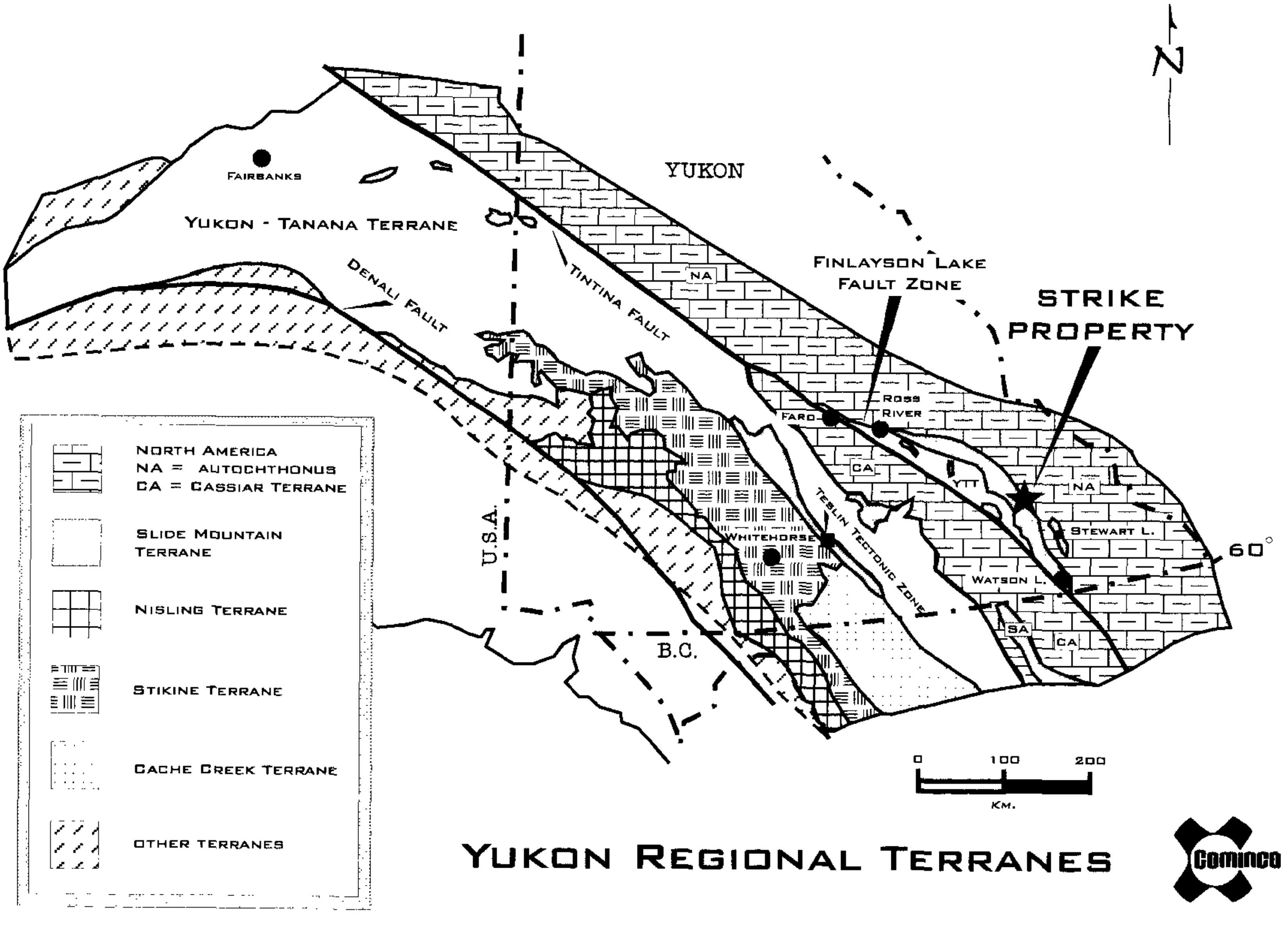
6.5 Diamond Drilling

Diamond drilling was helicopter supported and based out of Cominco's KZK camp. The drilling was carried out by DJ Drilling Company of Surrey, B.C. and was conducted between July 3-9/98.

Two drill holes (ST98-01 and ST98-02) were completed for a total of 245.4 metres (Figure 2). Diamond drill hole logs and geochemistry (ICP) may be found in Appendix 5 and diamond drill hole cross sections may be seen in Figures 8 and 9. All core is stored at KZK.

7.0 REGIONAL GEOLOGY

The rocks underlying this part of the southeastern Yukon have been assigned to two terranes: the Yukon Tanana Terrane (YTT) and the Slide Mountain Terrane (SMT) (Figure 3) (Mortensen, 1983a; Mortensen and Jilson, 1985).



YUKON REGIONAL TERRANES

The YTT consists of a 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" comprising carbonaceous phyllite and schist with interbanded mafic, and locally significant, felsic meta-volcanics, and an "upper unit" of Pennsylvanian marbles and quartzite (Mortensen, 1983a). Volcanism within the middle unit was accompanied by the intrusion of 2-3 late Devonian to Mississippian, mafic to felsic, meta-plutonic suites (Simpson Range Suite and augen and monzonitic orthogneisses). This sequence appears to reflect a stable platformal/shelf sedimentation with and intervening period of mafic to felsic arc volcanism developed within a more reduced basinal setting. The felsic meta-volcanics of the "middle unit" are host to 2 significant VMS deposits: Cominco's ABM Deposit and Boliden/Atna's Wolverine/Lynx Deposit.

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

Late Triassic (?) immature clastics, comprising micaceous argillites, siltstones and sandstones, unconformably (?) overlie the deformed and metamorphosed YTT rocks. These sediments are often closely associated with SMT mafic metavolcanics and are invariably in fault contact with YTT rocks.

The Devonian to Permian SMT is composed of a heterogeneous package of mafic to ultramafic plutonic rocks, mafic volcanics, massive carbonates and cherts. The SMT is thought to represent a disrupted oceanic and volcanic arc assemblage once located between the YTT and the North American craton.

The STRIKE property is underlain predominantly by SMT stratigraphy located within a large area (Campbell Range Belt) studied by Plint and Gordon (1997). In this area, they define the SMT as containing 5 units consisting of:

- Mafic metavolcanic breccia/flows and gabbros sills,
- Hematitic metacherts interbedded with minor grey to maroon metasiltstone/argillite,
- Varied coloured metacherts with argillaceous partings and phyllite,
- Medium to coarse-grained, ophitic leucogabbro sills, and
- Medium to coarse-grained serpentinite sills and thrust slices.

Mafic volcanics of the SMT are host to mafic-type (Cyprus-type) VMS mineralization at the Julia showing on Atna Resources' MONEY property and on Expatriate's ICE property.

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, 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). Thrust faulting continued after the formation of the Finlayson Lake Fault Zone as indicated by the presence of over thrust sheets of SMT rocks (Campbell Range Belt) above the fault zone (Plint, 1994).

8.0 PROPERTY GEOLOGY

Geological mapping was focussed on the area of the 1998 geophysical/geochemical grid (Figure 4).

Outcrop exposure is generally good on the higher part of the grid, above the 1,530 m elevation. The lower portions of the grid (below the upslope cut-off of the ferricretes at about 1,530 m) have minimal (<2%) outcrop exposure and high geological complexity resulting in a poor understanding of the rocks underlying this portion of the grid area. Ground geophysics has been used to interpret the geology in these areas.

Detailed geological mapping has outlined 6 main rock units:

1) A distinctive hematitic, red/green weathering, dark green to maroon/green coloured mafic volcanic (basalt?) breccia unit is particularly well exposed over the higher, northeastern part of the grid. This epiclastic unit is heterolithic containing abundant weakly hematite altered, aphanitic mafic flow and breccia fragments (few cms to near metric sized) and minor medium green mafic flow and maroon, hematitic argillite/chert fragments set in a hematitic argillaceous matrix. Rare pillows fragments with chloritic and often calcareous inter-pillow matrix are present. Also rare fragments of leucogabbro were noted from south of the grid area. This unit is weakly to moderately magnetic. Distinctive hematitic cherts/cherty argillite subunits, up to 5-7 metres thick, are present but appear to be somewhat discontinuous and were not mapped as separate units.

Two to three horizons of this breccia are developed in the grid area as interflow units between mafic flow/breccia units described below.

2) A tan to light green weathering, light to medium green coloured mafic volcanic (basalt/andesite?) flow breccia and hyaloclastite unit occurs throughout the middle of the grid. This unit is monolithic. Fragments comprise black to dark green weathering, dark grey to dark green coloured, aphanitic mafic flow fragments (5-25 cm in size) with occasionally well developed dark, rounded chlorite amygdules (<1.5 mms). Locally developed hyaloclastite is typified by angular (cuspate) to subrounded, medium grey mafic clasts (<0.5-4 cms) set within a wispy/ribboned/contorted textured, dark chlorite+calcite altered glassy matrix. This unit is weakly to moderately magnetic.

The flow breccias and hyaloclastite units grade laterally into:

3) Tan to medium green weathering, dark green coloured, massive mafic volcanic (basalt?) flow units, which occur in the north and south central part of the grid. This unit is characterised by its massive, fine-grained texture and presence of rare chloritized phenocrysts (after pyroxene?).

4) Thin (1-10 m), discontinuous units of maroon to pink-green to light green grey coloured, massive to weakly laminated chert and fine tuff or tuffaceous siltstone/wackes occur (conformably?) within the monolithic mafic flow/breccia sequence and along the contact with the hematitic, heterolithic breccia piles. Bedding measurements are restricted to this unit.

5) A brown/orange weathering, white to light green coloured, fine to coarse-grained leucogabbro sill (?) intrudes the sequence as thin sills/dykes (with possible peperitic margins) in several outcrops above the 1,500 m elevation. The lower slope below about 1,500 metres appears to be underlain by a single thick intrusion. This intrusive unit is characterised by medium-grained to pegmatitic textures composed of euhedral plagioclase and serpentine? (after pyroxene?) crystals and minor biotite+muscovite. This unit is weakly to moderately magnetic.

6) An orange to light greenish buff weathering, very dark green coloured, strongly serpentinized and strongly magnetic, ultramafic unit occurs only as scattered talus across the grid area. Angularity and abundance suggests this unit is present in the grid area; however, it does not occur in outcrop. The ground magnetics was used to infer the presence of several ultramafic intrusives/fault slices (Figure 4).

Dip/bedding indicators are rare and generally only found within the chert units. Where present, the stratigraphy appears to be northwest trending with shallow dips (20-45^0) to the southwest. Deformation is weak with only a locally developed, weak foliation; no penetrative fabric is present. The presence of ultramafic bodies and weak linear EM features, which cut across geological boundaries, suggest the presence of numerous thrust and cross faults.

The rocks in the map area all exhibit a prehnite-pumpellyite to greenschist (epidote-actinolite) grade of metamorphism.

No significant sulphide mineralization was found in outcrop or talus. Mafic volcanic units may contain up to 1-2 % fine to medium-grained disseminated pyrite locally. In the area of the ferricrete, malachite-stained calcite veinlets in mafic volcanics, leucogabbro and cherts are present.

9.0 GROUND GEOPHYSICAL SURVEYS

The objective of the ground geophysics performed over this area was to locate potentially deep conductors associated with VMS mineralization. The series of surveys described below was prompted by an earlier airborne electromagnetic (AEM) survey which reported a weak anomaly in the area covered by this year's grid. In order to maximize the possibility of detecting mineralization, a range of geophysical tools was used, including Lamontage Geophysics Ltd.'s UTEM III large-loop EM system, Apex Parametrics' Max-Min HLEM system and two GEM Systems' magnetometers.

The type of mineralization expected here would show distinct signatures with a large-loop, deep-penetrating EM system such as UTEM, since the electromagnetic (EM) energy generated by the UTEM transmitter would couple with any large conductive body in the ground and be detectable by the equipment. The HLEM system was brought to independently confirm any shallow anomalies revealed by the UTEM survey, and the magnetometer was used primarily to reveal geological structural trends, which would help in the interpretation of the EM data.

In this scenario, potential VMS mineralization is expected to have a strong EM signature, which would manifest itself as late-time UTEM anomalies. A coincident magnetic anomaly could also be a good indicator of VMS mineralization. The grid location for these surveys was designed by Jules Lajoie and was based on an examination of the AEM data and geological considerations.

The geophysical surveys were conducted by Cominco staff, consisting of Jules Lajoie (Cominco's chief geophysicist,) Gil Graham (technician,) Scott Billows (GIS technician,) Jason Allardyce (temporary geophysical operator) and Scott Nachtigall (temporary geophysical operator). Grid preparation and laying of *the loop for the UTEM survey was done by Jason Allardyce and Scott Billows before the start of the data* collection.

A total of 11.2 line-kilometres of grid lines and an additional 3.3 km of loop-trail were set up in advance of the survey. The grid was set with its 11 parallel lines orientated at N69^{0}E of the UTM (NAD 27) co-ordinate system, with a common baseline (BL 0+00E) established at the south-west end of each line, at the location of the north-east UTEM-loop front.

During the period of June 10th to the 16th, 11.2 line-kilometres of both total field magnetics (TFMag) and vertical component (Hz) UTEM data were collected, using only a single loop position for the UTEM. In addition to this, 3.1 line-kilometres of HLEM data were collected over the anomalies revealed by the UTEM work. During this period of time, one bad-weather day was spent processing data rather than surveying.

INSTRUMENTATION AND DATA PRESENTATION

TOTAL FIELD MAGNETIC SURVEY

Two GEM Systems GSM-19 magnetometers were used for the total-field magnetic survey; one as a base station recorder, and the second as a field recorder. All survey-line readings were taken using a staff mounted sensor (2.5m above ground level) at 25m stations, while base station readings were recorded every 30 seconds. The field data were transferred to a field computer and then were corrected using the diurnal drift correction calculated from the base station readings. This produced relative difference values (in nT) between the assumed background field values measured by the base station and the field values measured over the site in question. For this survey, a reference field value of 58500 nT (which is judged to be representative of the background TFMag values in this area) was added to the relative difference values calculated from the readings. This was done so the data produced from this survey will show values that can be compared to previous magnetics work over this area and so that the data values will not confuse a casual observer. The posting profiles of the TFMag data (measured values with the base value of 58500 nT subtracted) have been plotted on a 1:5 000 scale map, which has been included as Figure 98-10-1 in Appendix 3 at the end of this report. A magnetics/UTEM interpretation map is included as Figure 98-10-3.

UTEM SURVEY

Lamontage Geophysics Ltd.'s UTEM III system was used for the EM portion of the survey. This system is a deep-penetrating, time-domain EM system whose design characteristics have been optimized for the detection of conductive bodies in mineral exploration environments. Also, the design of this system offers advantages over other EM systems in the detection of very conductive bodies in relatively resistive environments, thus allowing it to detect conductive bodies that other EM system might miss.

The field procedure consisted of laying out a large loop of single-strand insulated wire and creating a time-varying magnetic field in the area around the loop by forcing an electric current though the wire, using a transmitter unit powered by a motor generator. Survey lines, which were laid out to take advantage of the geometry of potential structures inferred from a geological model of the area, were then surveyed. This was done by measuring, with a coil of wound copper wire, the "step-response" of the local magnetic field (which includes loop's magnetic-field and any fields generated by any in-earth conductors present). The fields from in-earth conductors are generated by the physical process of electromagnetic induction with the loop's source field, and are quite distinguishable from the system's response when no conductors are present.

In general, survey lines are oriented perpendicular to one side of the loop and surveying can be performed both inside and outside the loop. For this project, the transmitter-loop dimensions were 1000 m x 1300m, with the one side of the loop forming the starting point for the survey lines. Measurements were made on the survey lines at 50 m station intervals (with detailing measurements made at 25m spacing) and only at positions outside of the loop. The layout of the survey lines with the positioning of the loop with respect to the lines is shown in Figure 98-10-2 in Appendix 3.

The transmitter loop is driven with a precise triangular current-waveform, which repeats itself at a carefully controlled frequency, which for this survey was 30.974 Hz. The UTEM receiver gathers and records 10 *time-windows ("channels") of information at each station. The earliest time channel, 10, is not normally* plotted since it is usually too noisy to be of any use. The higher number channels (7 to 9) correspond to early time information (or high frequency, in an analogy to frequency-domain systems) while the lower number channels (1 to 3) correspond to late time information (or low frequency). Therefore, poor conductors will respond on channels 9,8,7, and 6, while progressively better conductors will also give responses on lower numbered channels as well. In real field-surveys, conductive units often occur in slightly conductive host rocks and/or are overlain by conductive overburden. These environments will produce complex responses due to several conductive sources and thus will require interpretation to reveal the locations of the desired conductive bodies.

Simple physics dictates that the magnitude of the magnetic field generated by the transmitter-loop (the "primary field") will fall off significantly with distance from the loop. Also, the UTEM system employs a transmitter that is continuously on during the surveying process and the effects of the primary field need to be mathematically removed from the measured signal for interpretation to occur. For this reason, "normalizing" schemes are used in presenting the data, which give us the best opportunity to identify anomalous conductivity-structure in the ground. The two normalization schemes used here are described in Appendix 4 at the end of this report.

The UTEM data sections are plotted in units of "percentage of the primary field" and using a linear scale. The inflection point of any Hz crossovers in point-normalized, surface, UTEM data normally indicates the positions of conductors on a line. Weaker conductors are seen only on the early time-channels while the better conductors are seen on progressively later time-channels, with a characteristic signature appearing on later and later time channels as the strength of the conductor increases. The assembly of plots of the UTEM data collected during this survey is presented as data sections (DS) 1 to 11 in Appendix 3. Note that the letter "P" appended to a data section number in the Appendix indicates a point-normalized version of the data plot, as opposed to a continuously-normalized one. An interpretation map is also included (as Figure 98-10-3) which shows, in plan, the interpreted UTEM conductors, the TFMag profiles and a colour grid of the TFMag data. A legend of symbols used on the UTEM data sections and on the interpretation plan-map is also included in Appendix 4. The symbol "**X**" is used to represent the interpreted position of conductors on the data plots and maps, when one is present. Note that the solid curve the one without station markers) at the bottom of each UTEM data-profile is a plot of the terrain topography associated with each line.

HORIZONTAL-LOOP ELECTROMAGNETIC SURVEY

The HLEM system used was a Max-Min model I-9, coupled with an MMC data logger; both of which are manufactured by Apex Parametrics Ltd. of Uxbridge, Ontario. The receiver (Rx) and transmitter (Tx) were used in "horizontal co-planar" mode, in which both the Rx and Tx are simultaneously tilted in a coplanar orientation which is always kept parallel to the topographic slope. An inclinometer was used to determine the tilt-angle of the system with respect to horizontal; information which is critical to the processing of the data. The readings were recorded using a 25-meter station-spacing interval throughout the entire survey. Survey readings were recorded in the MMC data logger in the field and later transferred to a computer for processing and plotting.

A total of 3.1 line-kilometres of HLEM were collected over the entire grid, using a frequencies range consisting of 220, 880, 3520 and 14080 Hz and a 75m Tx/Rx coil separation. Results were plotted in stacked profiles on plan maps; one map for each frequency. These maps are included in Appendix 3 as Figures 98-10-4 to 98-10-7. Data points were plotted halfway between the transmitter and receiver location with the in-phase plotted as a solid line and the out-of-phase plotted as a dashed line.

DISCUSSION OF THE DATA

The UTEM results indicate the airborne anomaly to be a weak EM conductor (channel 4, 1.3 mhos on line 800N at station 500E) that has no late-time response. Although weak, and perhaps discontinuous, it is visible on lines 500N to 1000N (over a 500m strike length) and appears to flank (on the west side) a strong linear magnetic feature of 1000 – 2000 nT.

The conductor can also be seen in the HLEM data. A numerical simulation computer-program was use to provide estimates of the properties of a conductive body necessary to produce the HLEM anomalies seen in this survey. This simulation compares field HLEM profiles to mathematical models using a thin, dipping sheet to arrive at estimates for conductor thickness, depth-to-top and conductance. The HLEM results from this survey indicate that the anomaly on line 800N is a steeply dipping, 1.6 mho conductor approximately 25 metres wide which has a depth-to-top of less than 10m. This set of EM anomalies is thought to be caused primarily by faults, which in the area of the AEM anomaly flank a strong, narrow and linear magnetic feature. This and other strong, linear magnetic features are interpreted to represent fault slices of ultramafic rock.

The conductor on lines 700N and 800N is located near the contact between green mafic flow breccias and cherts and maroon, hematitic breccias, which is thought to be a favourable horizon for VMS mineralization. The weak conductivity of the conductor and its near vertical EM signature, however, suggests that a fault rather than mineralization cause the anomaly.

093914

FIGURE 2

COMINCO EXPLORATION

Date:30/9/1998
Author:
Office:
Drawing:

STRIKE ASSESSMENT
TENURE WITH 1998 GRIDS
AND DDH ST98-01, ST98-02

Dwg 1

Projection: UTM Zone 9 (NAD 27 for Canada)

Scale : 1:20000
(Inset) 1:2500

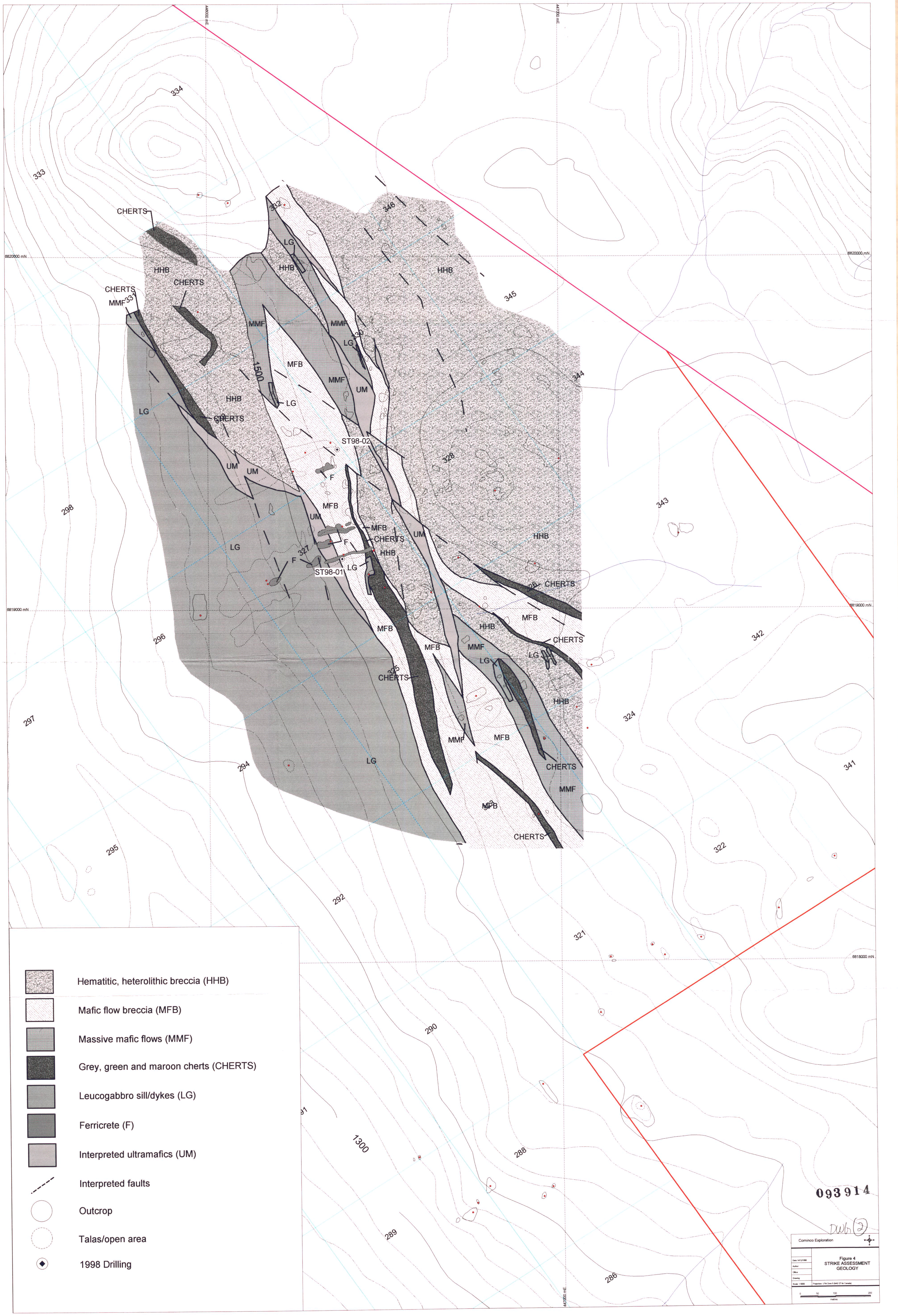


Figure 4
STRIKE ASSESSMENT
GEOLOGY

093914

DWb (2)

The best UTEM anomaly of the survey (2.7 mho, channel 3 anomaly) appears on line 1300N at station 913E, however it still falls into the category of a weak anomaly. This conductor also appears in the HLEM readings over this line at station 920E, and also on line 1100N at station 835E. This conductor appears (over the location of its best response, on line 1300N) to be a weak, steeply dipping, 0.8 mho conductor approximately 25 metres wide or less, and has a depth-to-top of less than 4m. Given the local geology in this area, this conductor also appears to be fault related.

There are two other UTEM conductivity features that are evident in the data set, however both are weak and are judged to have little chance of representing mineralization. One occurs on lines 800N to 1300N, spanning stations 775E to 838E on individual lines. This feature consistently has a channel 4 UTEM response over the lines on which it appears and seems to be caused by weak, fault related conductivity.

The second UTEM feature mentioned above appears on lines 500N to 800N, roughly at station 175E on all lines. This feature is even weaker than the one described above, having its best UTEM response showing up on channel 7, and only on one line; the other lines in this group showed a weaker anomaly. Because of the weakness of this feature, it is judged to be unlikely to represent any significant mineralization in the ground.

HLEM was not attempted over either of the weak features described above, since they were considered unlikely to be revealing anything but fault-related conductivity.

In summary, the electromagnetic and magnetic surveys over the grid did not reveal any EM/MAG targets with a strong enough signature to represent significant mineralization in the near-surface geological environment.

10.0 SOIL GEOCHEMISTRY

Results of the geochemical soil survey (Figures 5-7) confirmed the presence of highly anomalous copper values (>100 ppm Cu, up to 11,920 ppm).

Two anomalous areas are of note:

1) One area lies between L400N and L800N, where 2 strong (>300 ppm Cu; peaks of 11,610 ppm and 8,788 ppm) linear anomalies are present. These anomalies coincide with 2 "kill zone" areas with locally well developed zones of surface hydromorphic ferricrete; the upslope cut-off of the soil anomalies is very close to the break in slope and the position of water seeps and the first appearance of ferricrete. These soil anomalies and ferricrete/"kill zones" are both elongated downslope. Cu soil geochemistry lows between these 2 soil anomalies are either reflects deeper buried ferricrete or a lack of ferricrete development.

2) The second anomalous area lies between L1000N and L1300N, where 2 strong (>300 ppm Cu; peaks of 2,736 ppm and 11,920 ppm) linear anomalies are present. These anomalies occur on a gentle, vegetated slope with little outcrop exposure and no evidence for the presence of ferricrete. The anomalies are also elongate downslope and appear to follow topographic lows suggesting a hydromorphic/groundwater origin.

The Cu soil anomalies in both areas have a strong Cr (>100 ppm; peak of 1,155 ppm), Ni (>125 ppm; peak of 755 ppm) association and a weaker Co (>20 ppm; peak of 401 ppm) association, suggesting an ultramafic source.

Soil geochemical results from the higher grid area (mapped as mafic volcanics) are relatively non to weakly Cu anomalous; local high values of up to 611 ppm Cu are present.

Rock samples of ferricrete contain 14-49% Fe, 1,866-3,806 ppm Cu, 4-1,339 ppm Ni, 61-1,533 ppm Cr and 9-37 ppm Co. The ferricrete sample containing cemented ultramafic fragments (RKMR-10B) contains the highest Cu, Ni, Cr and Mg (16%) values. This supports an ultramafic source for these metals. Talus of mafic volcanics with malachite stained fractures contains between 360-1,047 ppm Cu, 65-119 Ni, 44-121 ppm Cr and relatively higher (18-59 ppm) Co.

Sampling from 5 hand dug pits (Figure 6) defined no obvious source for the Cu anomalies. Although not conclusive, high Cu values in Pit 4 and possibly Pit 5 are associated with wet, Fe-stained horizons (Fe-rich groundwater seeps) at 43-51 cms (1,288 ppm Cu) and 59-69 cms (1,610 ppm Cu) depth in Pit 4 and 30-60 cms (2,178 ppm Cu) in Pit 5. Very strong Cu anomalies in Pit 1 (25,900 ppm Cu from 0-25 cms and 20,390 ppm Cu from 29-60 cms) and Pit 2 (9,565 ppm Cu from 0-23 cms) from dark brown to black organic-rich near surface horizons may indicate entrapment/concentration of metals by organics.

11.0 DIAMOND DRILLING

Two DDHs (ST98-01 and ST98-02) were drilled for a total of 245.4 metres (Figure 2). The rock conditions were very poor with recovery rates of 78.0% and 70.1%, respectively.

DDH ST98-01 (-45^0, 133.5 m) was drilled to test the weak HLEM/UTEM anomaly located at 500E on L800N (Figure 8). This hole intersected a badly broken and faulted, sequence of variably hematitic mafic volcanics breccias intruded by a strongly faulted/sheared, magnetic serpentinite. Between 31.1-38.6 metres is a fault zone with very poor core recovery (20.4%). Within the wash of this fault zone, several small pebbles of medium to light grey silica (chert?) with 10-40% fine to medium-grained pyrite and 1-5% fine chalcopyrite were recovered. Other pieces of core recovered include several veins (up to 3.5 cms) of fine massive pyrite with 3-10% disseminated fine chalcopyrite hosted by hematitic chert. Geochemistry of the pebble wash zone (32.5-35.5 m) returned 3.1% Cu and 6.4 g/t Ag; vein dominant mineralization from 36.1-38.0 m returned 1.9% Cu and 5.7 g/t Ag. This mineralization is strongly conductive when measured with an ohmmeter. Other than clay gouge in faults (weakly conductive), no other conductivity was encountered in the hole. Either of these 2 features (fault gouge or sulphides) could explain the weak EM at surface.

DDH ST98-02 (-45^0, 111.9 m) was drilled to test the upslope cutoff of the coincident ferricrete and Cu soil anomaly on L500N, 300 metres SE of ST98-01 (Figure 9). This hole intersected several strongly faulted and sheared slivers (12-18 metres thick) of variably magnetic serpentinite with screens of more competent mafic volcanic breccias and grey chert locally intruded by leucogabbro dykes. No significant sulphide mineralization was encountered.

12.0 CONCLUSIONS AND RECOMMENDATIONS

The results of geological mapping, soil geochemistry and diamond drilling suggest the ferricrete and related Cu anomalies are hydromorphic and result from periodic flooding of the soil by metal rich waters being sourced by springs that originate from faults at the base of slope. The source of the copper maybe ultramafic lithologies with a high background Ni/Cu content or sulphides (chalcopyrite/pyrite veins and/or a minor, undetected VHMS sulphide zone; the latter possibility is based upon mineralization from DDH ST98-01).

The ground magnetic anomalies are interpreted as reflecting the presence of several, linear fault bounded serpentinite bodies. The weak ground EM conductors are interpreted as reflecting conductivity of clay gouge along fault zones.

The sulphide veining and possible sulphidic chert, intercepted in DDH ST98-01, are of a favourable style for an ICE-type VHMS target; however, the lack of any EM/MAG targets, with a strong enough signature to represent significant mineralization, suggests that no significant sulphide deposit is present.

As a result, no further work is recommended.

Reported by:____________________

Paul A. MacRobbie
Project Geologist

Approved for
Release by:____________________

D.W. Moore
Manager, Canadian Exploration

13.0 REFERENCES

Mortensen, J.K., 1983a. Age and Evolution of the Yukon-Tanana Terrane, Southeastern Yukon Territory (unpublished Ph.D. Thesis); Santa Barbara, University of California, 155p.

Mortensen, J.K., and Jilson, G.A., 1985. Evolution of the Yukon-Tanana Terrane: Evidence from Southeastern Yukon Territory; Geology, 13, p.806-810

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

Plint, H.E., and Gordon, T.M., 1997. The Slide Mountain Terrane and the Structural Evolution of the Finlayson Lake Fault Zone, Southeastern Yukon: Can Journal Earth Science. 34, p.105-126

APPENDIX 1

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

Linecutting	June 3-10	Coureur des Bois Ltd., Whitehorse		
		15.8 kms	$6,662.50	
Helicopter Support		5.1 hrs	$3,594.20	**$10,256.70**
Geophysical Surveys	June 9-18	11.2 kms UTEM/MAG, 3.05 km HLEM		
Staff Costs	JJL	9 mdays	$3,810.24	
	SN	9 mdays	$1,343.97	
	JA	6 mdays	$864.00	
	SB	1 mday	$186.00	
Helicopter Support		3.2 hrs	$2,000.00	**$ 8,204.21**
Geology/Geochem	June 9-17, July 8			
Staff Costs	PAM	13 mdays	$4,467.84	
	GKG	4 mdays	$996.04	
	RKM	11 mdays	$1,760.00	
	JA	4 mdays	$576.00	
	SB	8 mdays	$1,488.00	
	SN	1 mday	$149.33	
	Office	(PAM-5, RKM-7)	$2,838.40	
Helicopter Support		10.2 hrs	$6,375.00	
Analyses		323 samples	$3,027.00	**$21,677.61**
Diamond Drilling	July 3-9	DJ Drilling Company Ltd., Surrey B.C.		
		2 holes, 242 metres	$23,849.00	
Helicopter Support		28.4 hrs	$17,750.00	**$41,599.00**
Domicile				
Staff Costs	GKG	4 mdays	$996.04	
	DT	13 mdays	$2,669.29	
Groceries			$3,032.30	
Supplies etc.			$1,001.24	**$7,698.87**
Truck Rental				**$1,677.46**
Expediting				**$1,794.43**
TOTAL				**$92,908.28**

APPENDIX 2

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Paul A. MacRobbie, of 11164 Southridge Rd., Delta, B.C. hereby declare that I:

1. Graduated from Carleton University, Ottawa, Ontario with a B.Sc. in Geology in May, 1986 and a M.Sc. in Geology in June, 1988.

2. Have been actively engaged in mineral exploration in Western Canada as a permanent geologist with Cominco Ltd. since June, 1988.

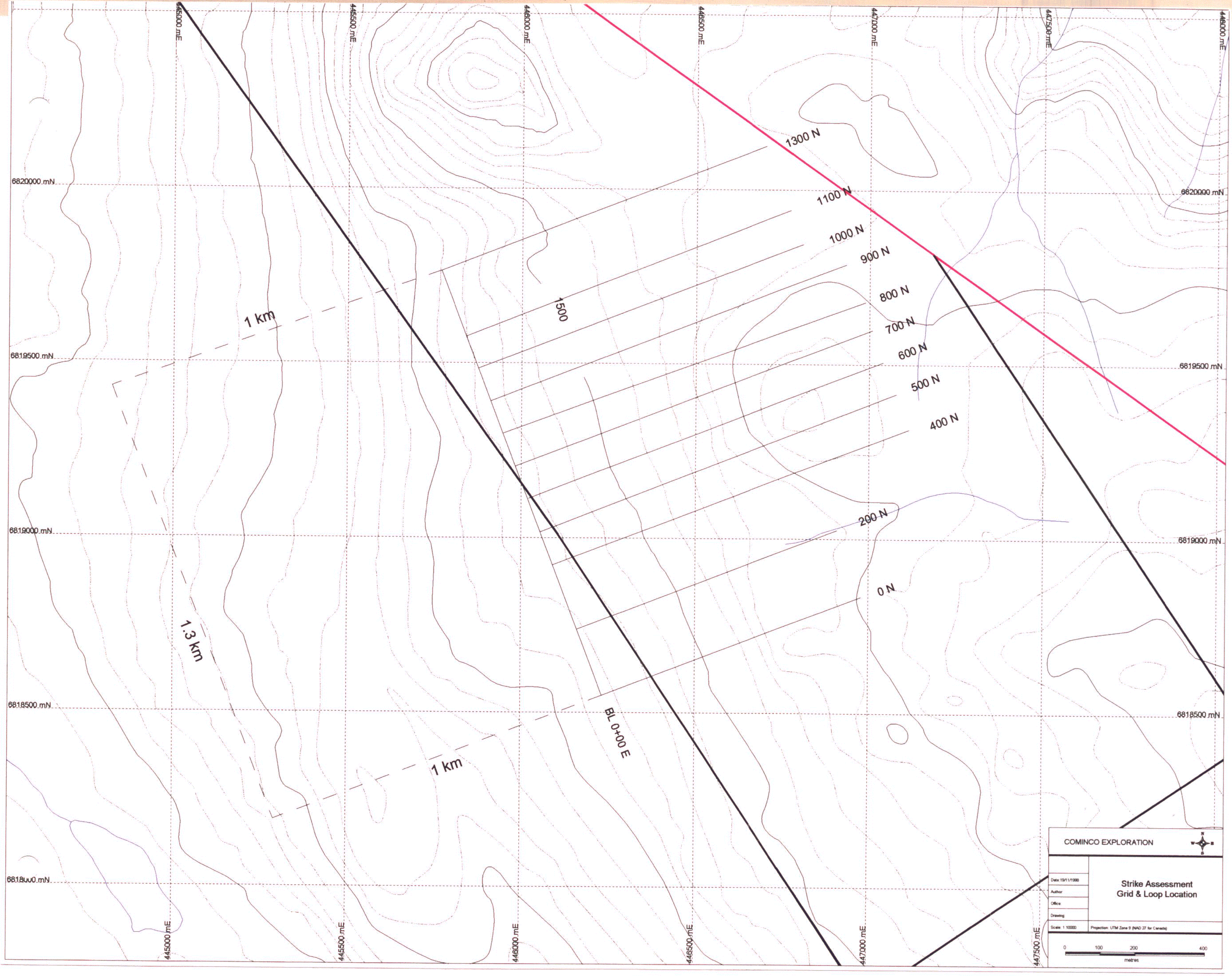
3. Am a registered member of The Association of Professional Engineers and Geoscientists of the Province of British Columbia.

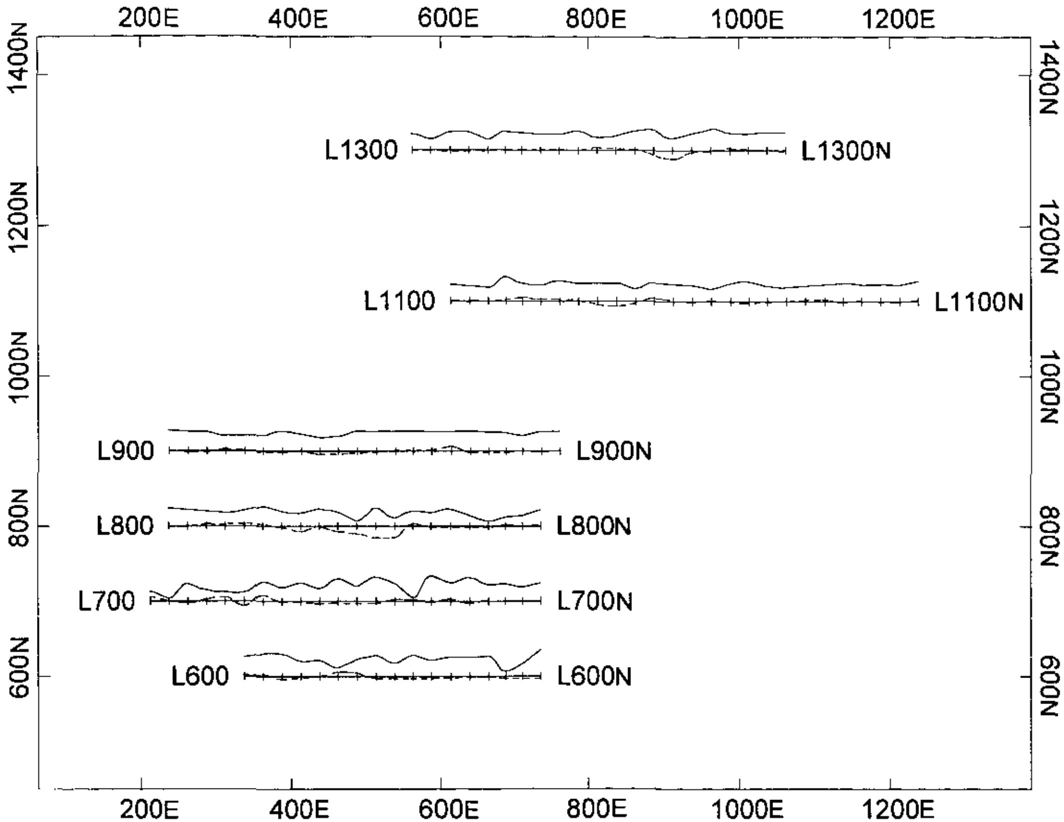
Date: October, 1998

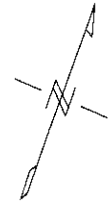
P.A MacRobbie, P.Geo
Project Geologist

APPENDIX 3

1998 GEOPHYSICAL SURVEYS DATA


445000 mE
445500 mE
446000 mE
446500 mE
447000 mE
447500 mE
448000 mE
6820000 mN
6819500 mN
6819000 mN
6818500 mN
6818000 mN
1300 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
200 N
0 N
1500
BL 0+00 E
1 km
1.3 km
1 km
COMINCO EXPLORATION
N
W
E
S
Date: 19/11/1998
Author:
Office:
Drawing:
Scale: 1:10000
Strike Assessment
Grid & Loop Location
Projection: UTM Zone 9 (NAD 27 for Canada)
0
100
200
400
metres





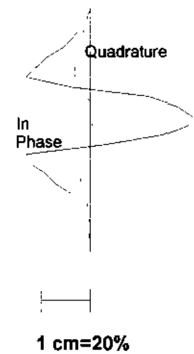
Instrumentation

Max-Min: I-9

Data Logger: MMC

Operators: JJL , SB

HLEM Legend



Scale 1:10000

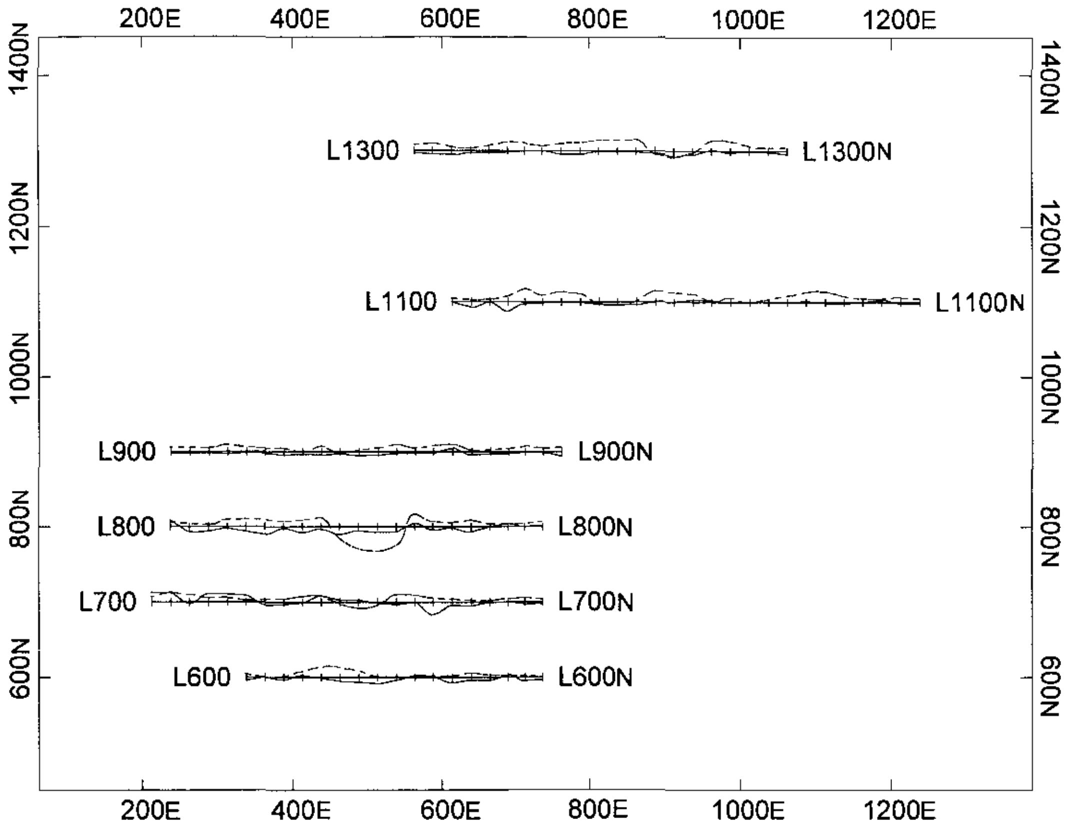
100 0.0 100 200 300 400 500

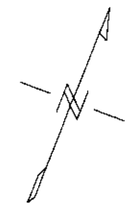
(meters)

COMINCO LTD.

STRIKE PROPERTY
HORIZONTAL LOOP EM
Coil Sep. = 75M; freq. = 220 Hz

June 1998 **Figure: 98-09-4**





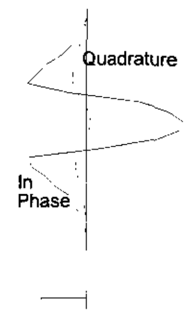
Instrumentation

Max-Min: I-9

Data Logger: MMC

Operators: JJL, SHB

HLEM Legend



1 cm=20%

Note: The in-phase profile has had the in-phase channel of 220Hz subtracted from it befoe plotting as a noise-correction measure.

Scale 1:10000

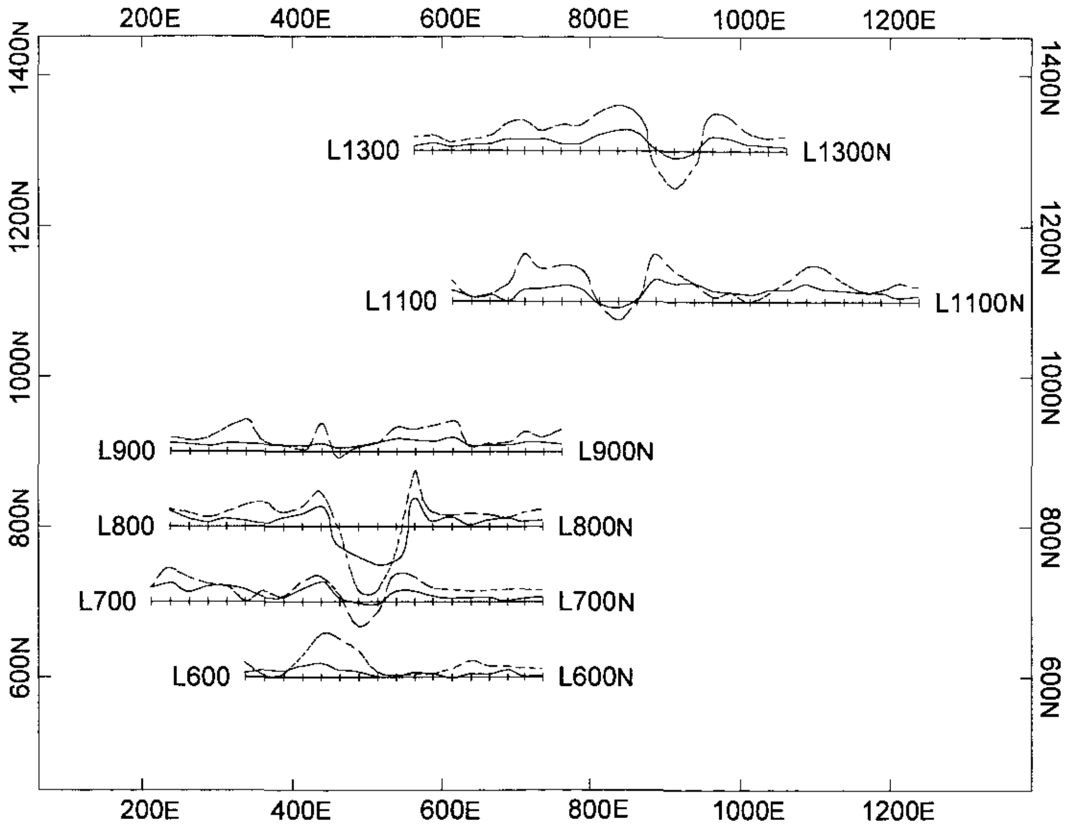
100 0.0 100 200 300 400 500

(meters)

COMINCO LTD.

STRIKE PROPERTY
HORIZONTAL LOOP EM
Coil Sep. = 75M; freq. = 880 Hz

June 1998 **Figure: 98-09-5**



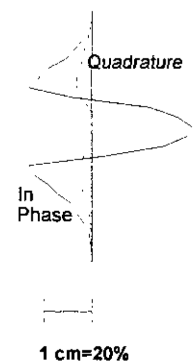
Instrumentation

Max-Min: I-9

Data Logger: MMC

Operators: JJL, SHB

HLEM Legend



Note: The in-phase profile has had the in-phase channel of 220Hz subtracted from it before plotting as a noise-correction measure.

Scale 1:10000

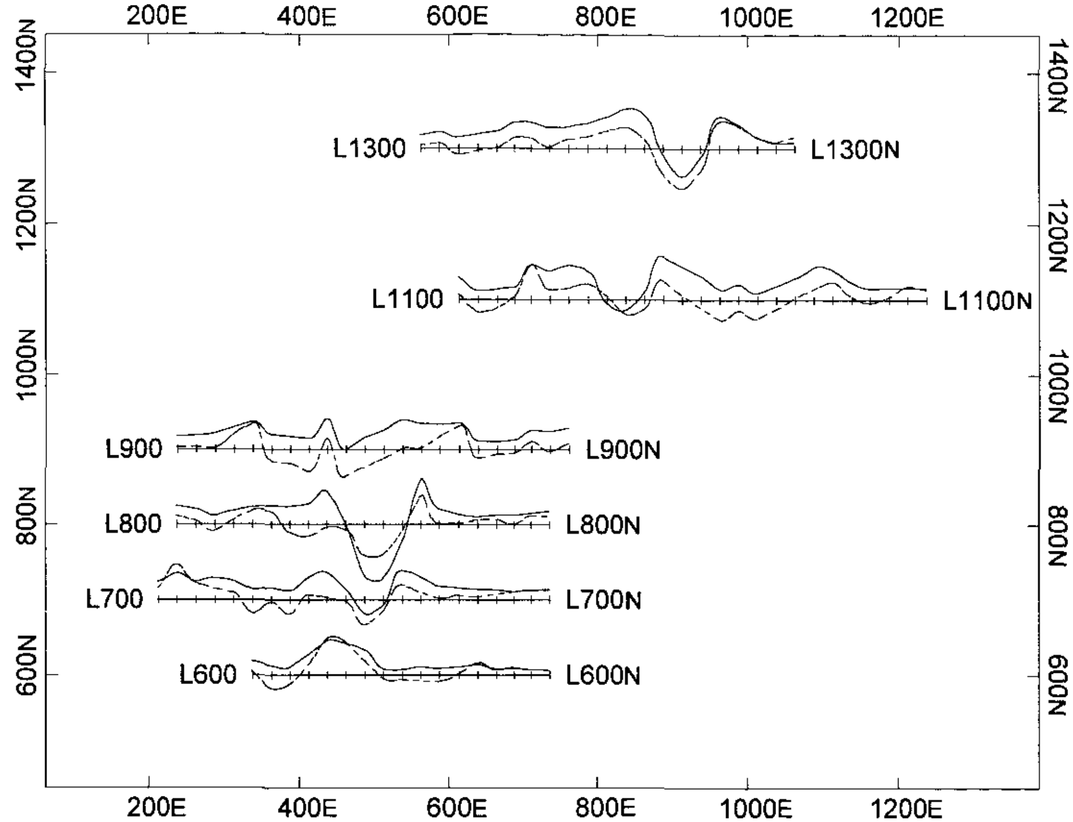
100 0.0 100 200 300 400 500

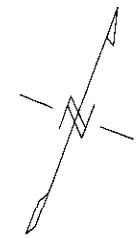
(meters)

COMINCO LTD.

STRIKE PROPERTY
HORIZONTAL LOOP EM
Coil Sep. = 75M; freq. = 3520 Hz

June 1998 **Figure: 98-09-6**





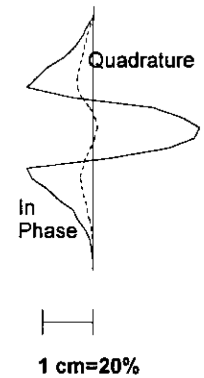
Instrumentation

Max-Min: I-9

Data Logger: MMC

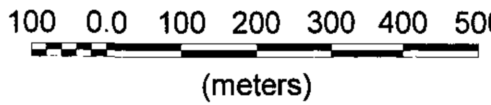
Operators: JJL, SHB

HLEM Legend



Note: The in-phase profile has had the in-phase channel of 220Hz subtracted from it before plotting as a noise-correction measure.

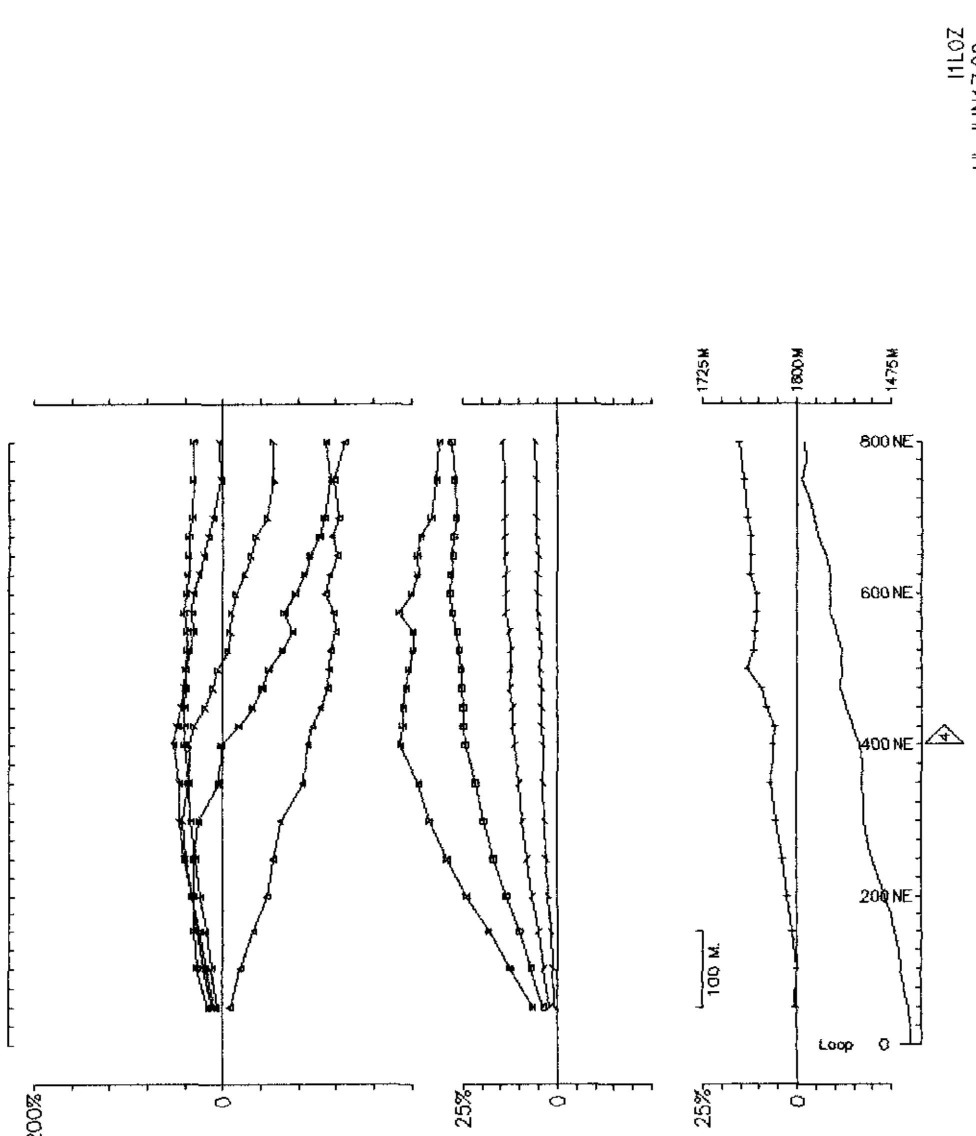
Scale 1:10000



COMINCO LTD.

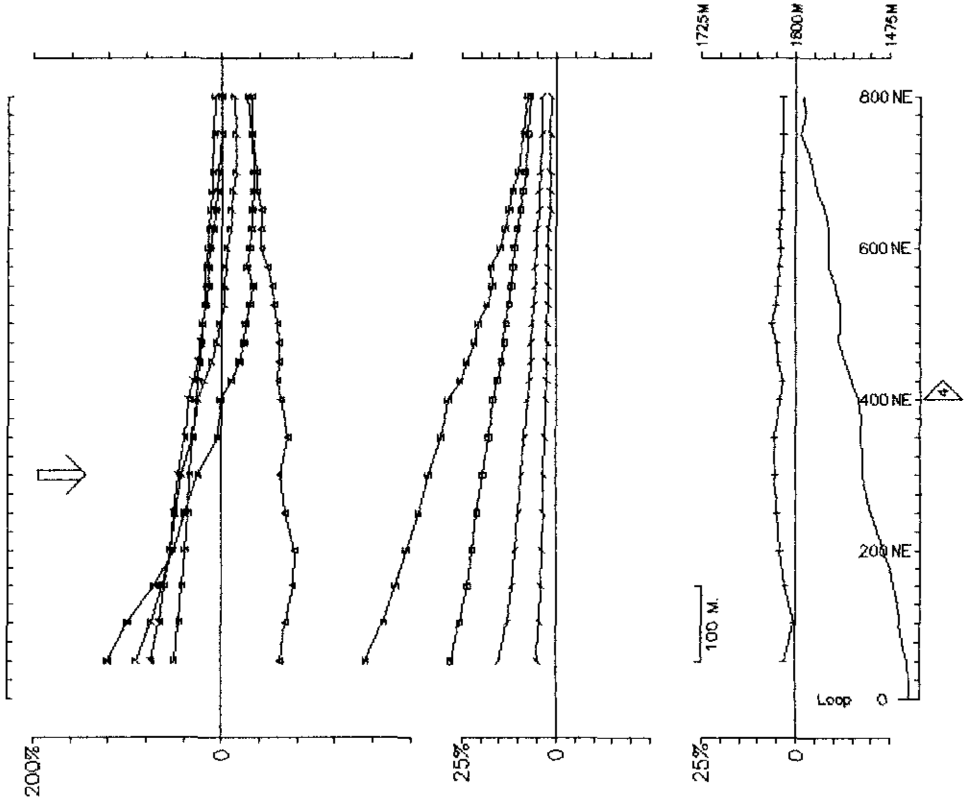
STRIKE PROPERTY
HORIZONTAL LOOP EM
Coil Sep. = 75M; freq. = 14080 Hz

June 1998 **Figure: 98-09-7**



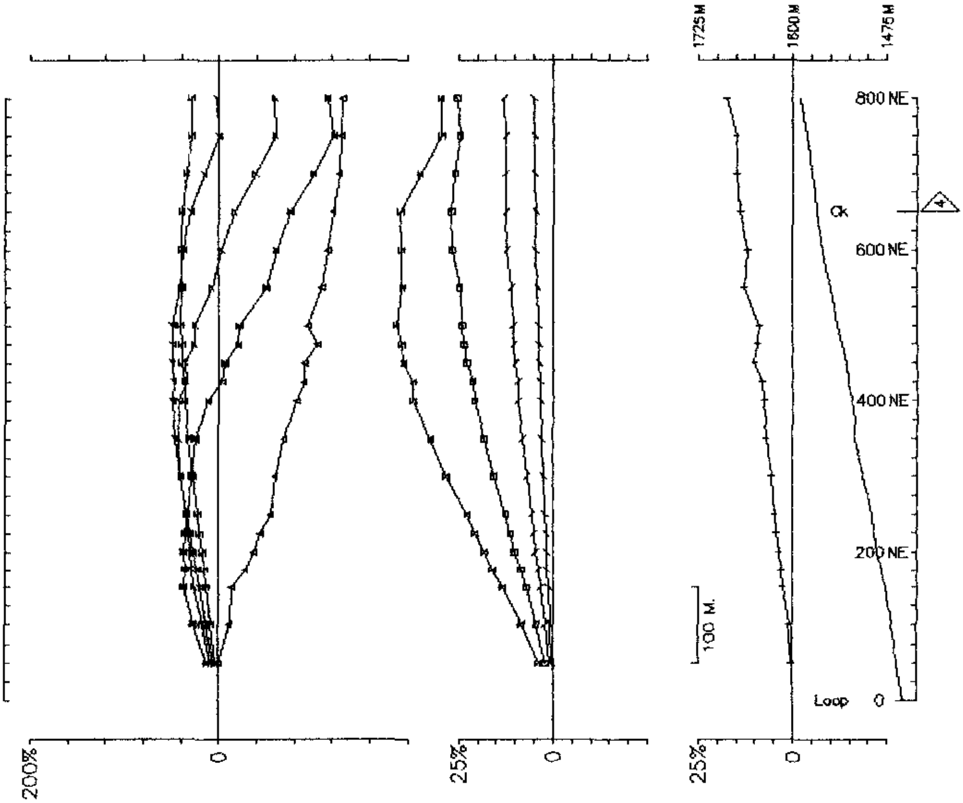
STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 22 Loop: 1 Line: 0 DS: 1
Ch1 reduced. Ch1 normalized. Totals:P-749M. /L-799M. Line Azim.: 69 . Rx Label: 0

I1LOZ
JJL JUN17,98



STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 22 Loop: 1 Line: 0 DS:1 P
Ch1 reduced. Ch1 normalized. Totals:P-749M. /L-799M. Line Azim.: 69 . Rx Label: 0 Point Normalized.

H1L2Z
JJL JUN17,98

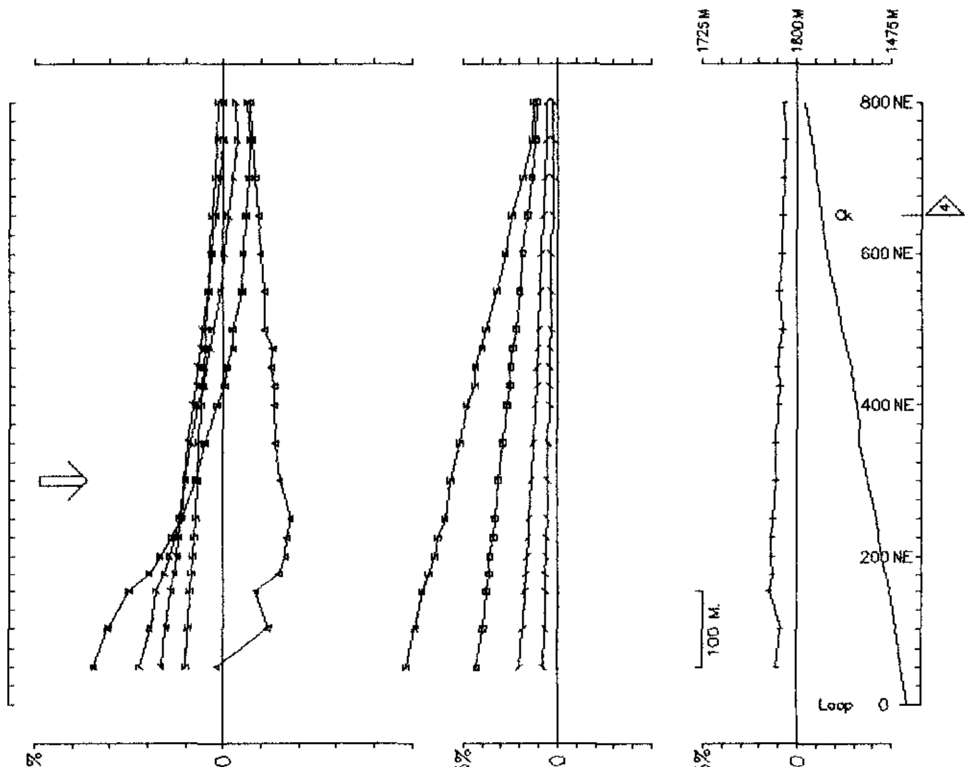


STRIKE '98 COMINCO Hz

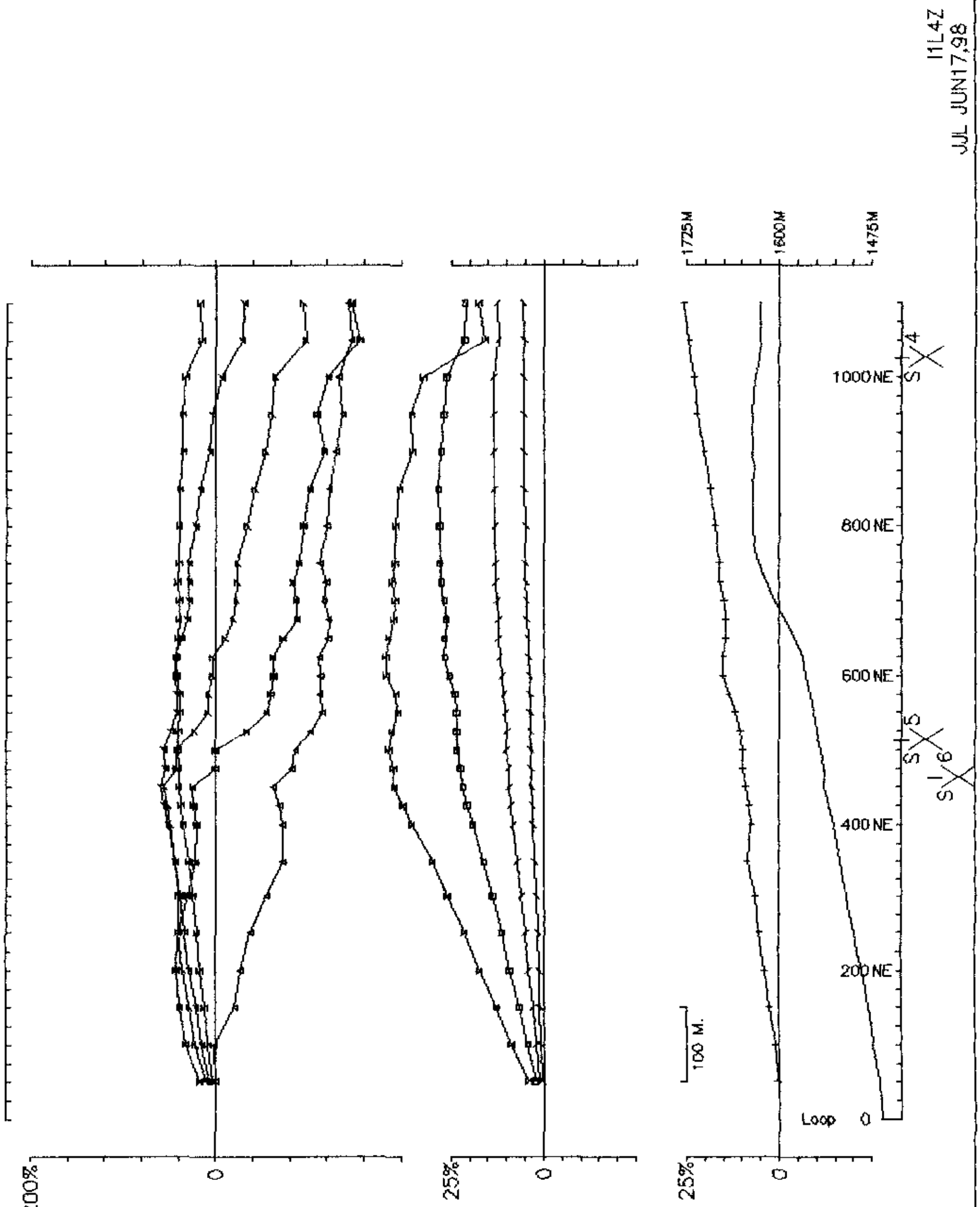
Op: JJL&SN Freq(Hz): 30.974 #Stns: 20 Loop: 1 Line: 200NW DS:2

Ch1 reduced. Ch1 normalized. Totals:P– 749M. /L– 799M. Line Azim.: 69 . Rx Label: 2

I1L2Z
JJL JUN17,98



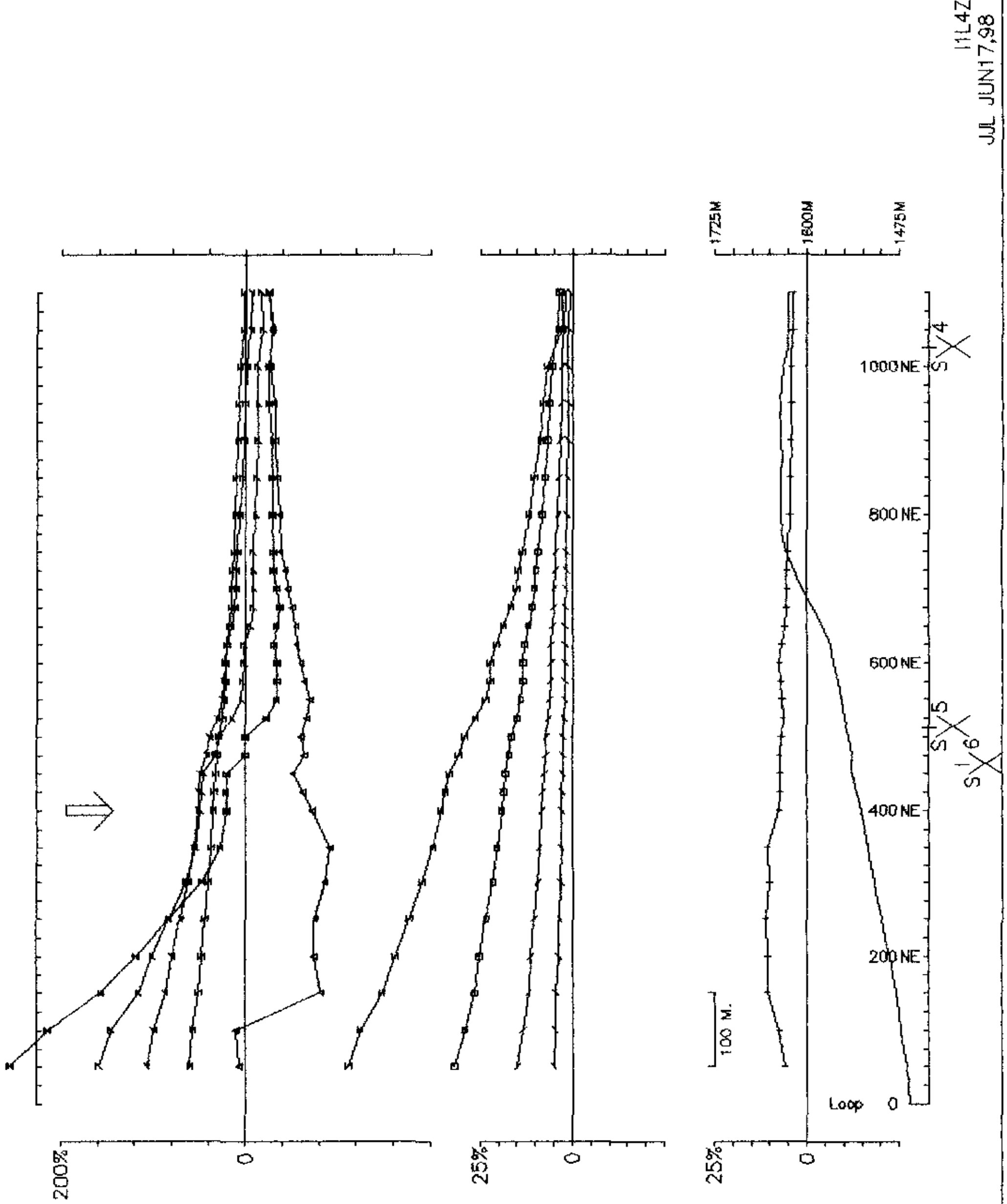
STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 20 Loop: 1 Line: 200NW DS:2 P
Ch1 reduced. Ch1 normalized. Totals:P– 749M. /L– 799M. Line Azim.: 69 . Rx Label: 2 Point Normalized.



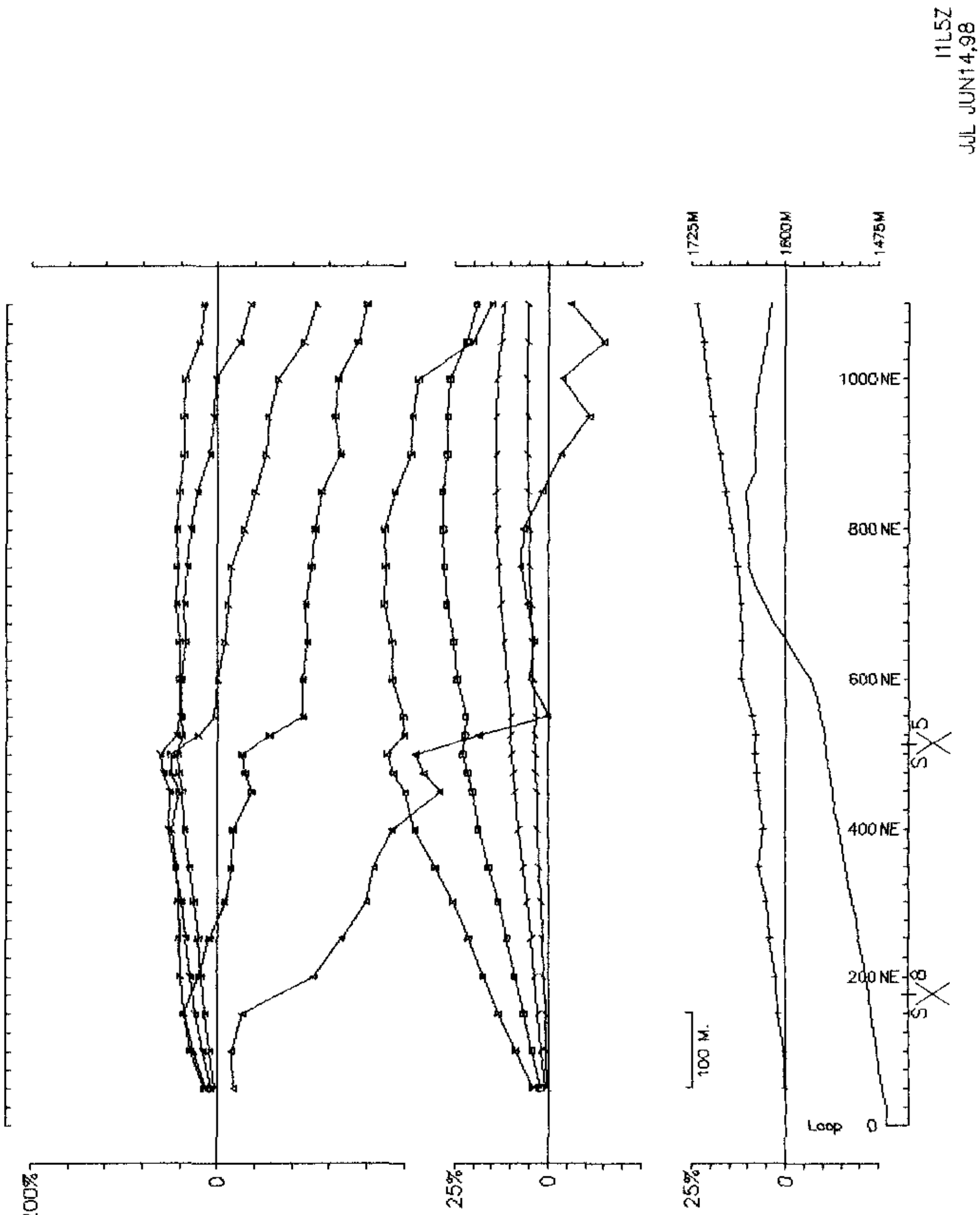
STRIKE '98 COMINCO Hz

Op: JJL&SN Freq(Hz): 30.974 #Stns: 29 Loop: 1 Line: 400NW DS:3

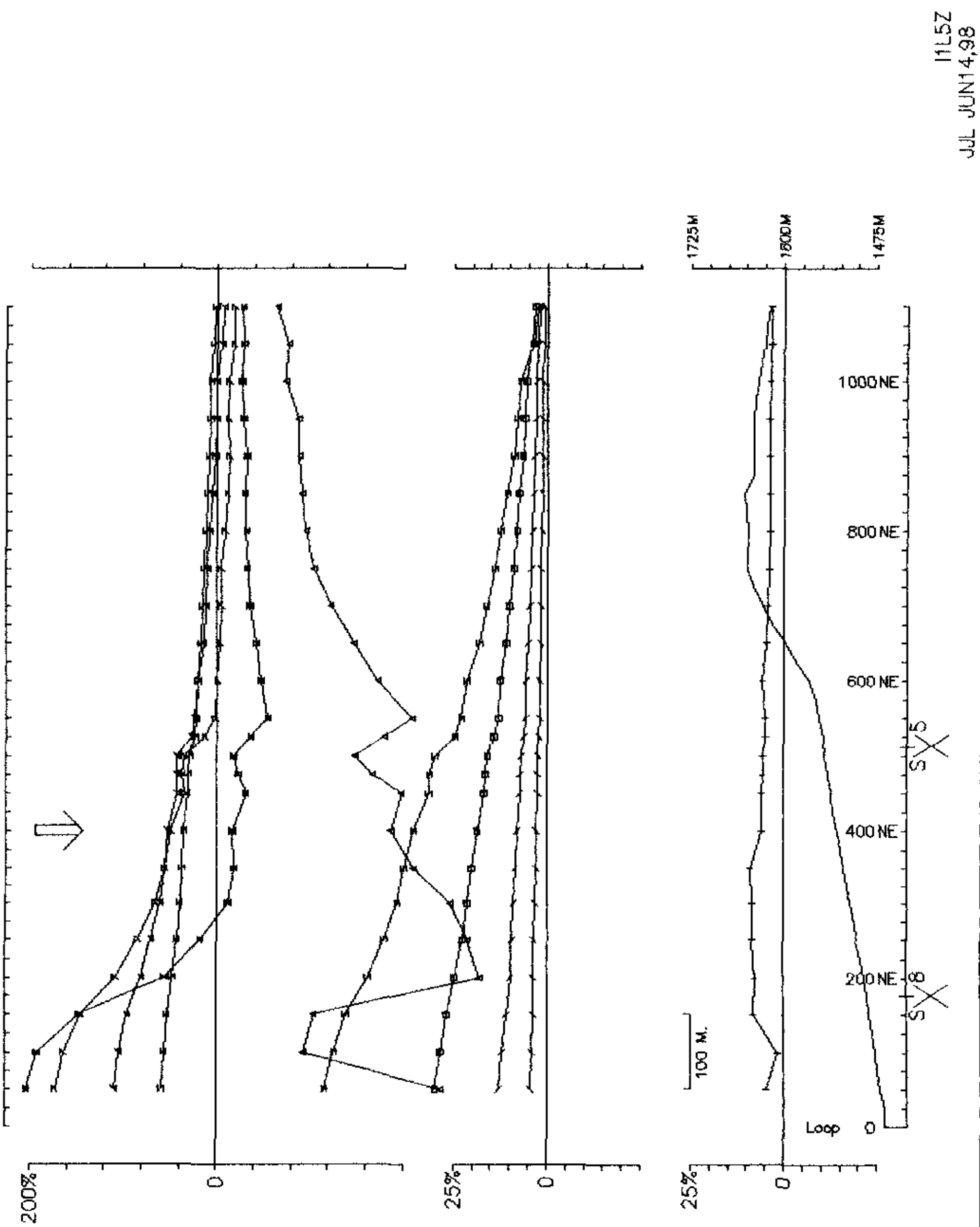
Ch1 reduced. Ch1 normalized. Totals:P– 1050M./L–1100M. Line Azim.: 69 . Rx Label: 4



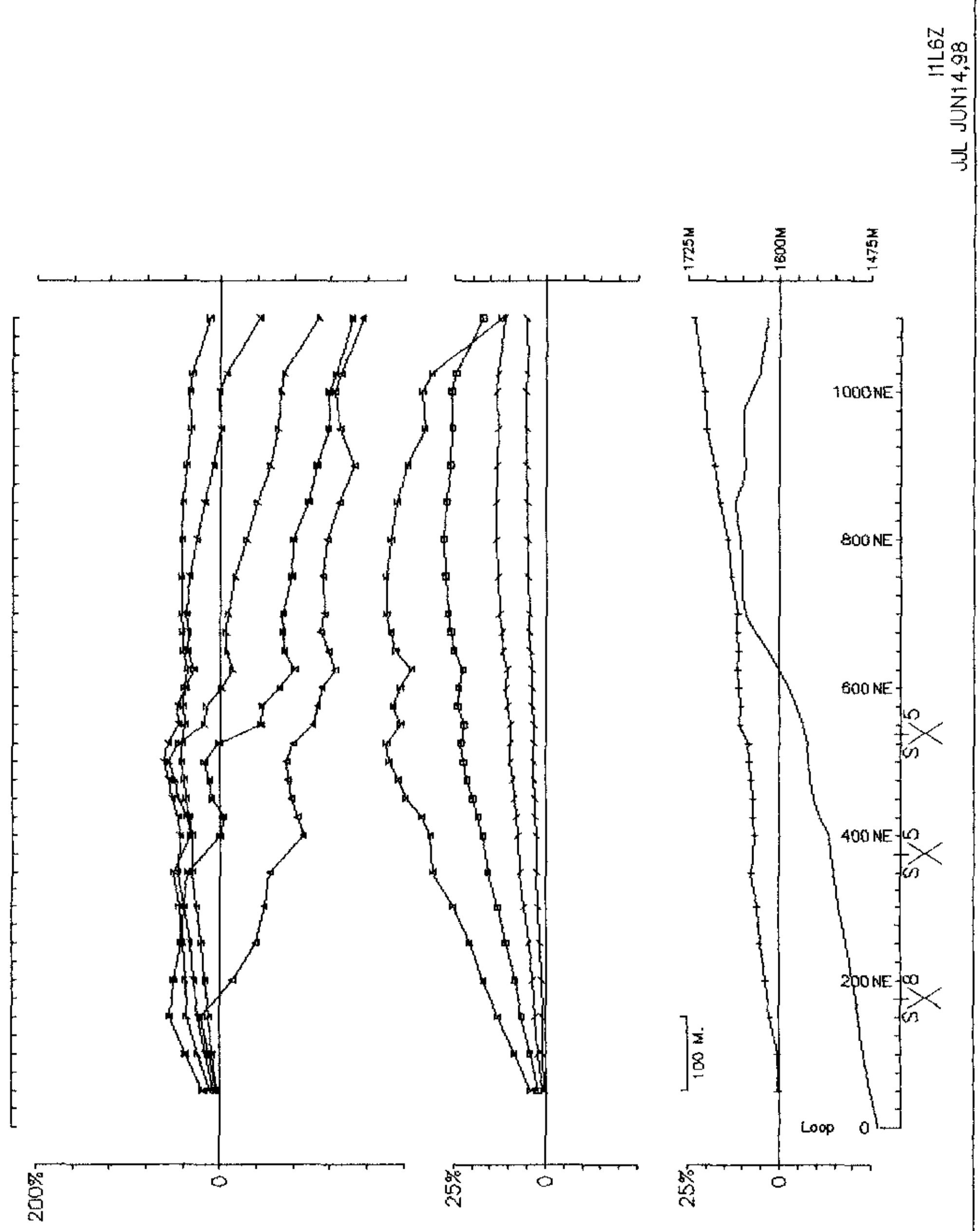
STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 29 Loop: 1 Line: 400NW DS:3P
Ch1 reduced. Ch1 normalized. Totals:P-1050M./L-1100M. Line Azim.: 69 . Rx Label: 4 Point Normalized.



STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 25 Loop: 1 Line: 500NW DS:4
Ch1 reduced. Ch1 normalized. Totals:P–1050M./L–1099M. Line Azim.: 69 . Rx Label: 5



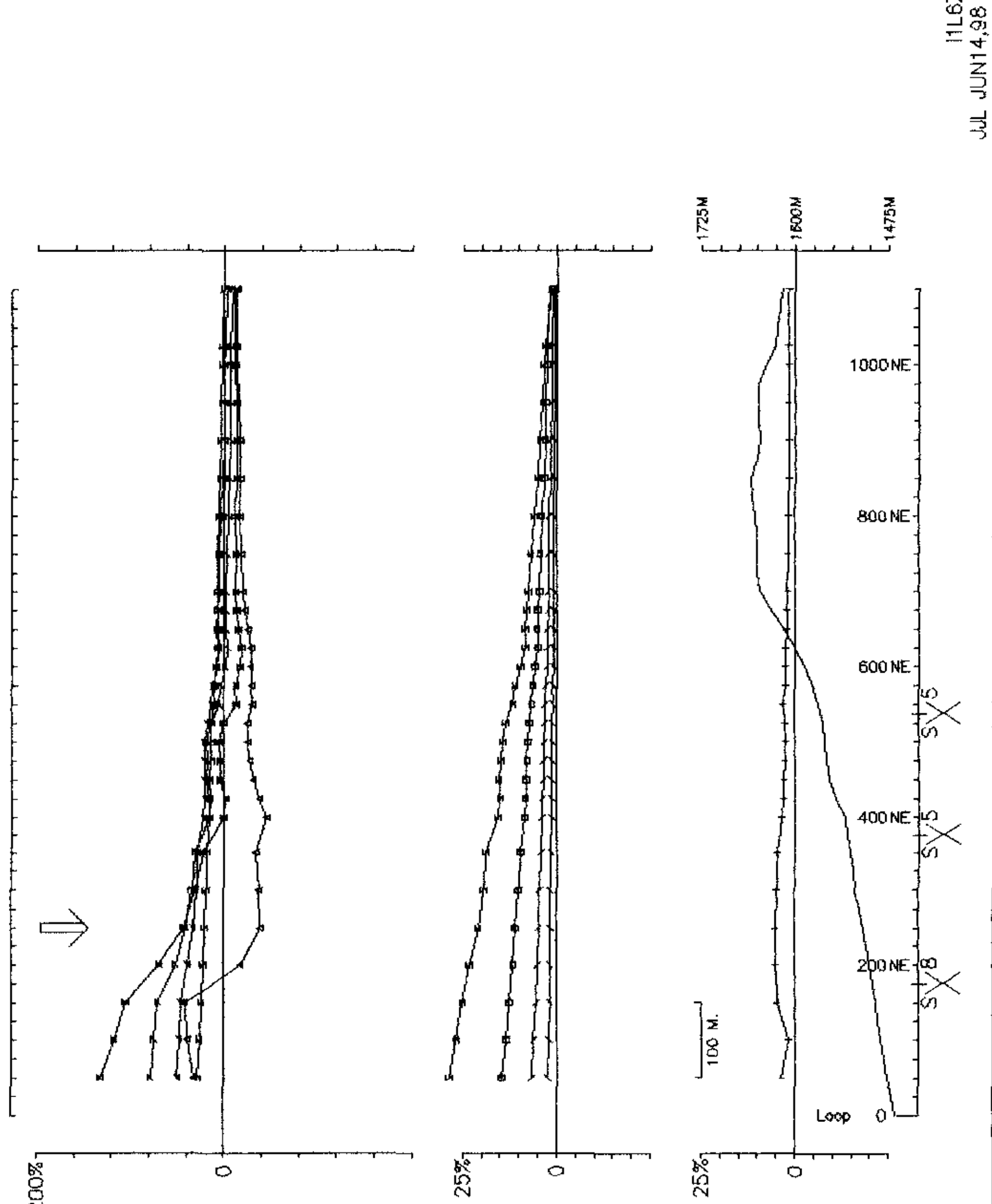
STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 25 Loop: 1 Line: 500NW DS:4 P
Ch1 reduced. Ch1 normalized. Totals:P- 1050M./L-1099M. Line Azim.: 69 . Rx Label: 5 Point Normalized.



STRIKE '98 COMINCO Hz

Op: JJL&SN Freq(Hz): 30.974 #Stns: 28 Loop: 1 Line: 600NW DS:5

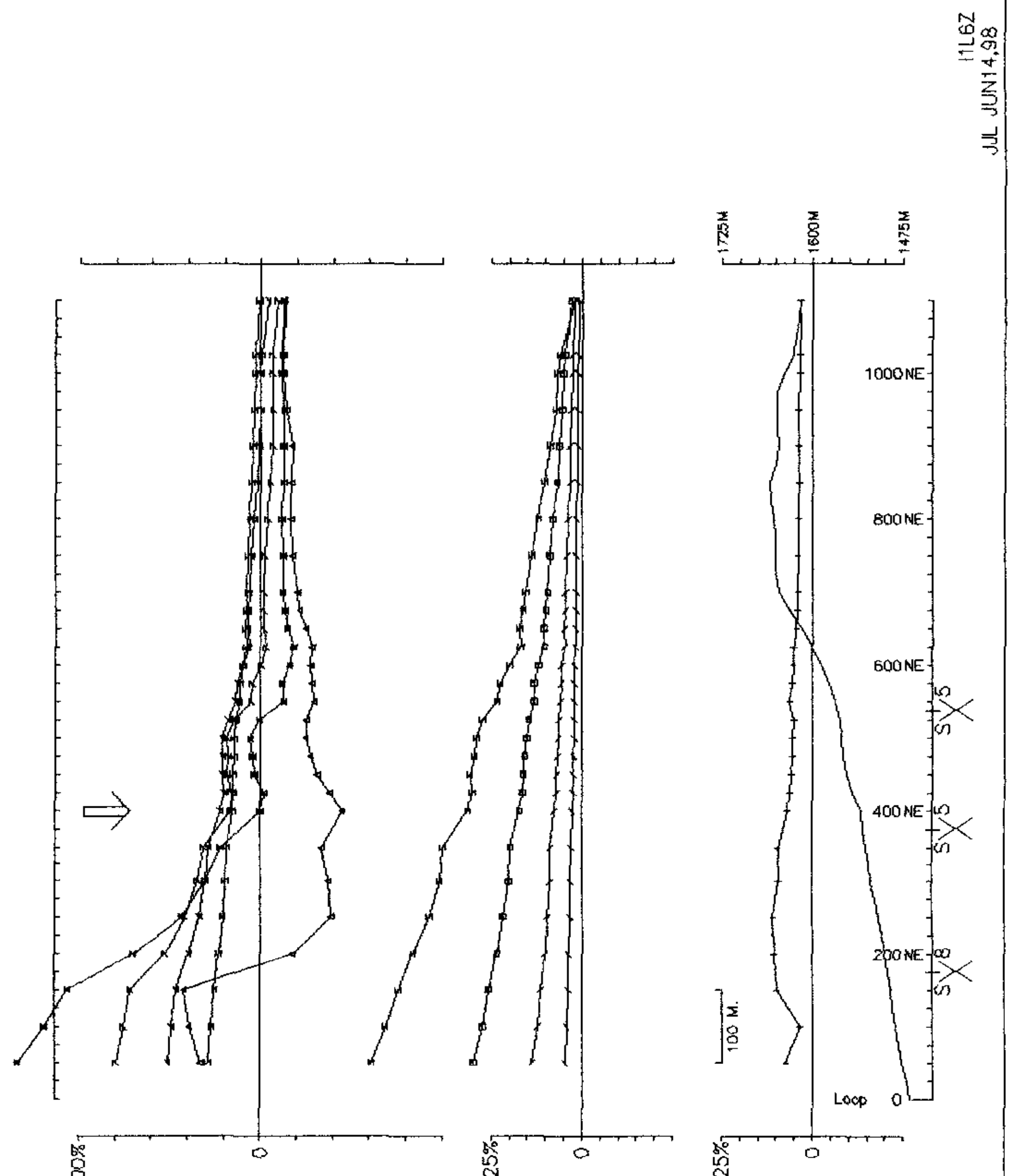
Ch1 reduced. Ch1 normalized. Totals:P-1050M./L-1100M. Line Azim.: 69 . Rx Label: 6 . Base Shift: .4 %



STRIKE '98 COMINCO Hz

Op: JJL&SN Freq(Hz): 30.974 #Stns: 28 Loop: 1 Line: 600NW DS:5 P

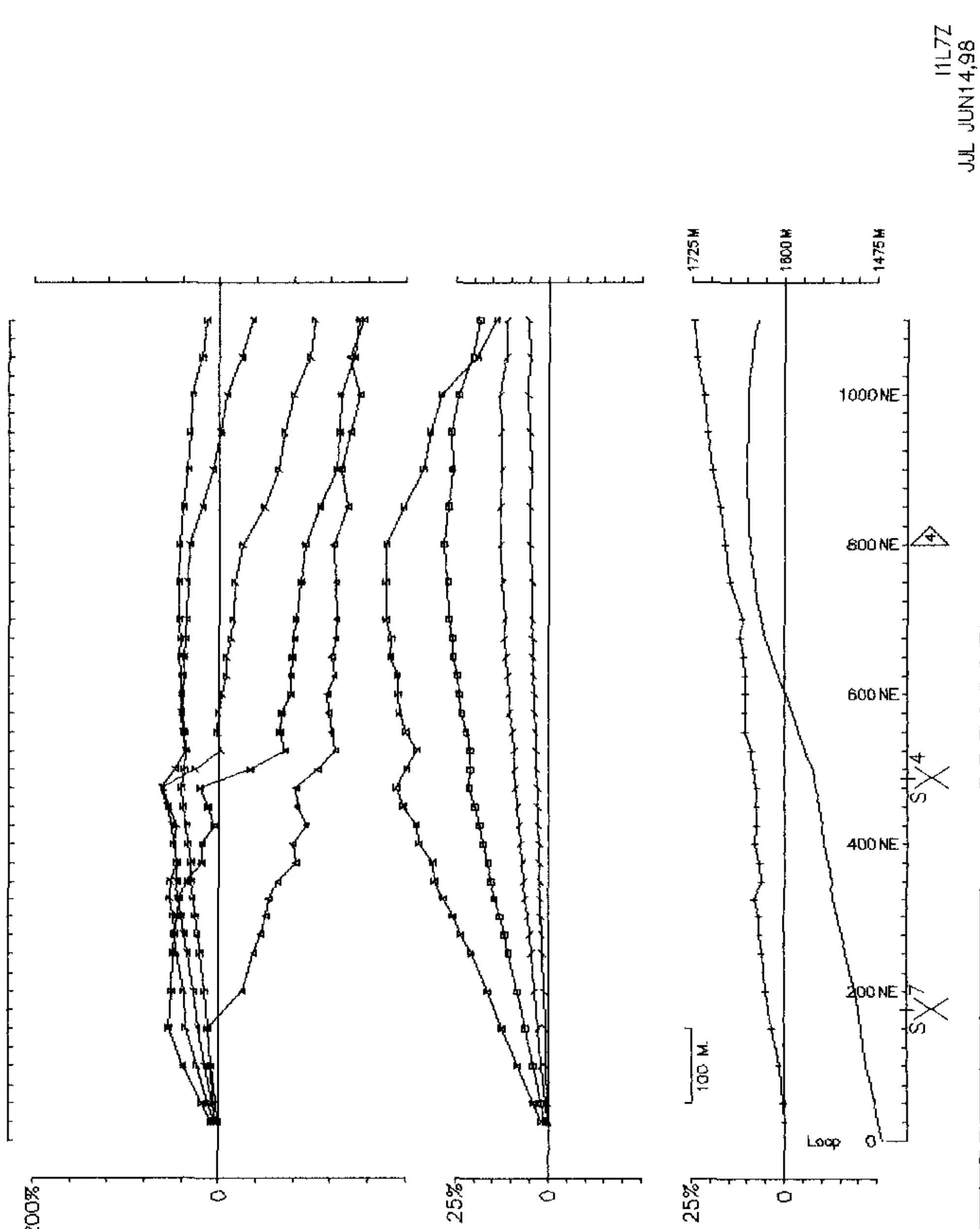
Ch1 reduced. Ch1 normalized. Totals:P- 1050M./L-1100M. Line Azim.: 69 , Rx Label: 6 . Base Shift: .4 % Point Normal



STRIKE '98 COMINCO Hz

Op: JJL&SN Freq(Hz): 30.974 #Stns: 28 Loop: 1 Line: 600NW DS:5P

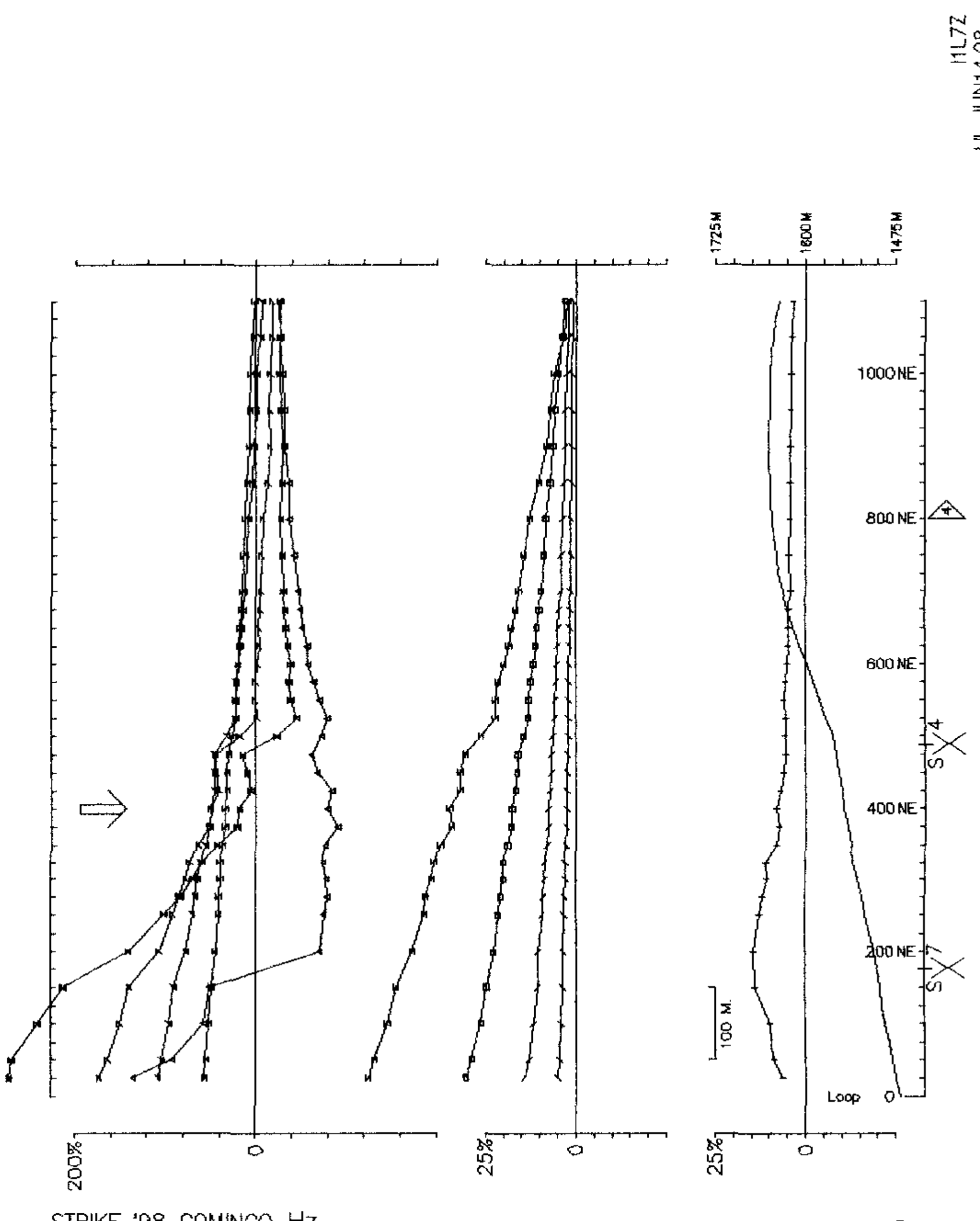
Ch1 reduced. Ch1 normalized. Totals:P-1050M./L-1100M. Line Azim.: 69 . Rx Label: 6 . Base Shift: .4 % Point Normal



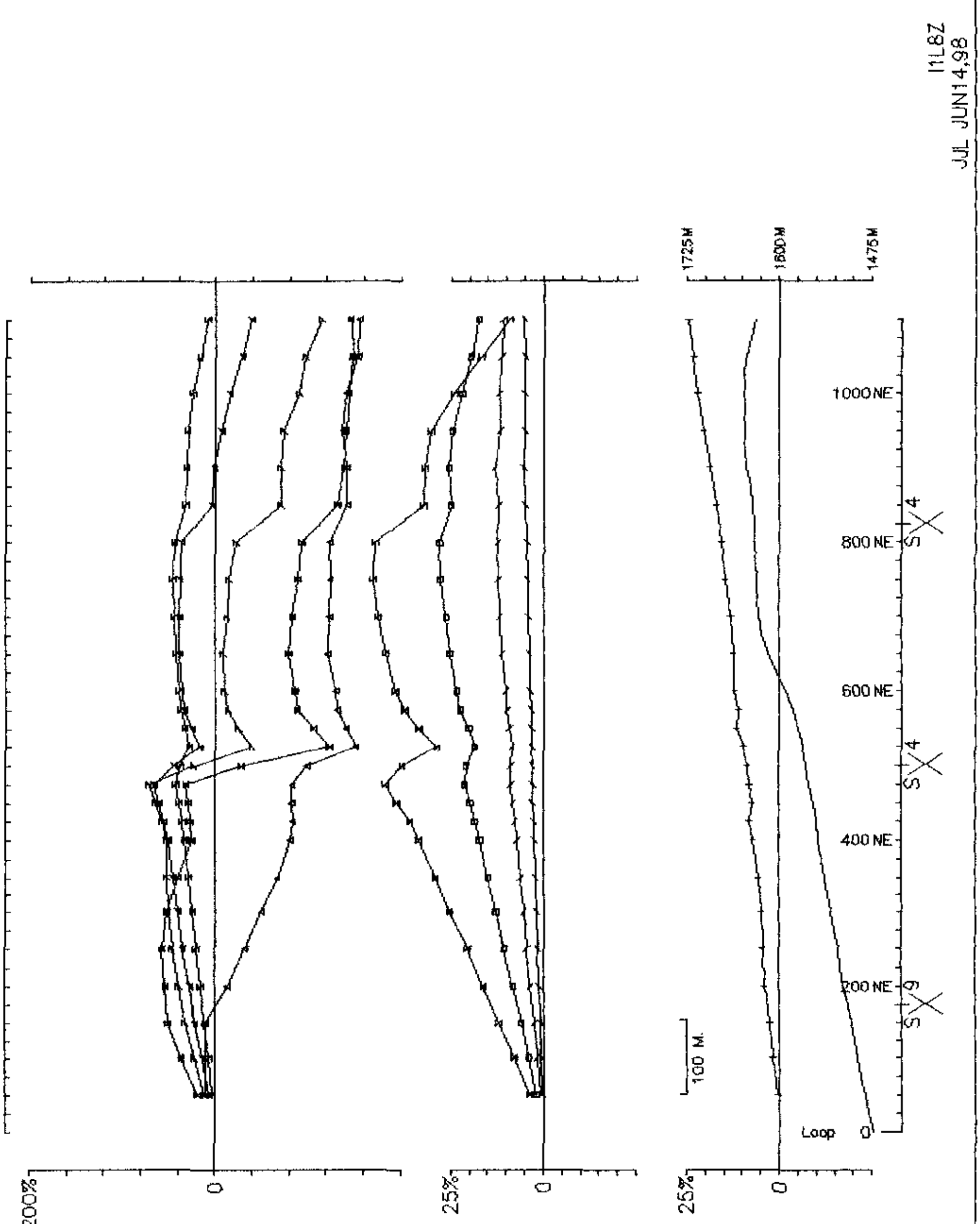
STRIKE '98 COMINCO Hz

Op: JJL&SN Freq(Hz): 30.974 #Stns: 32 Loop: 1 Line: 700NW DS:6

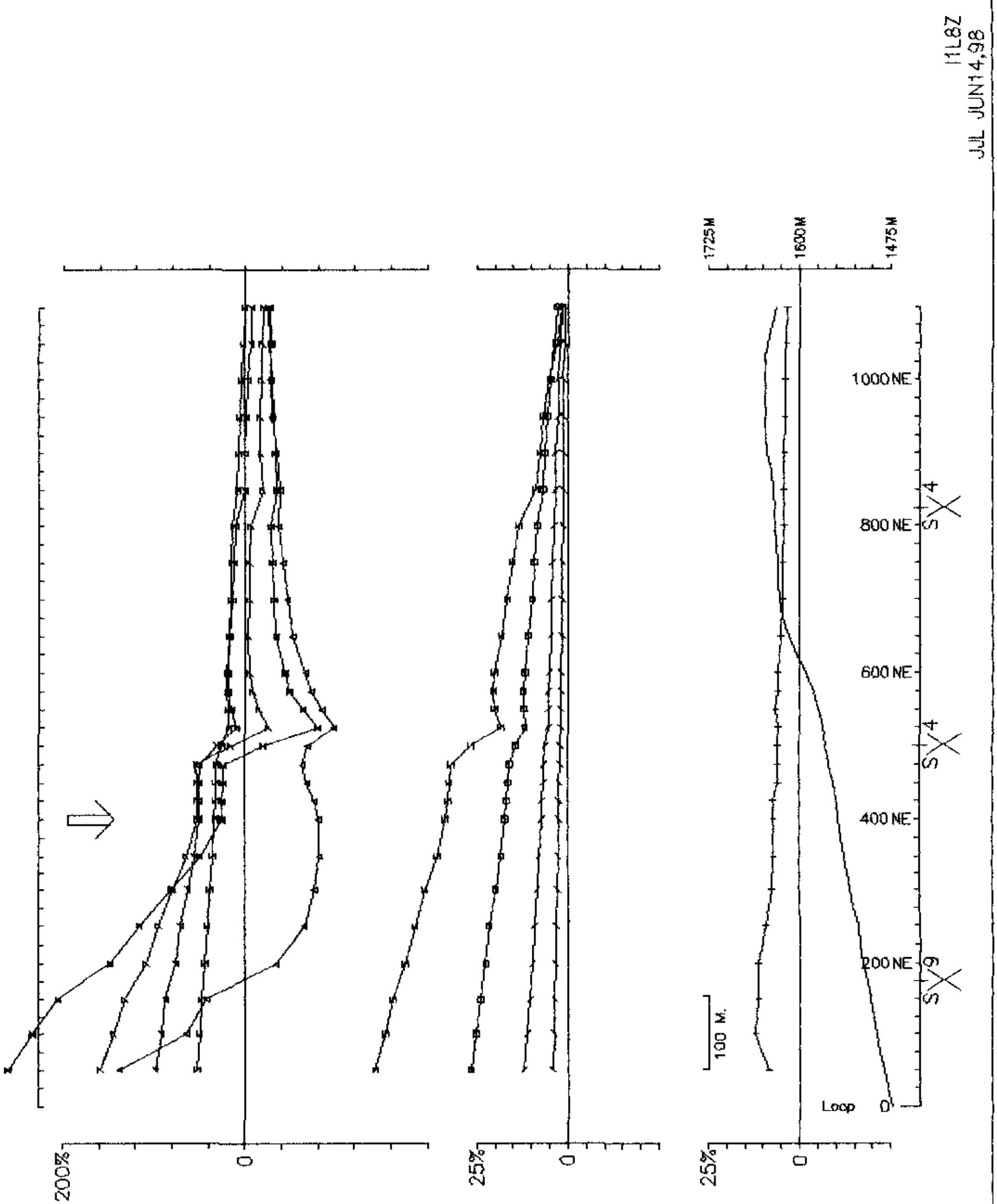
Ch1 reduced. Ch1 normalized. Totals:P– 1076M. /L– 1101M. Line Azim.: 69 . Rx Label: 7 . Base Shift: –.5 %



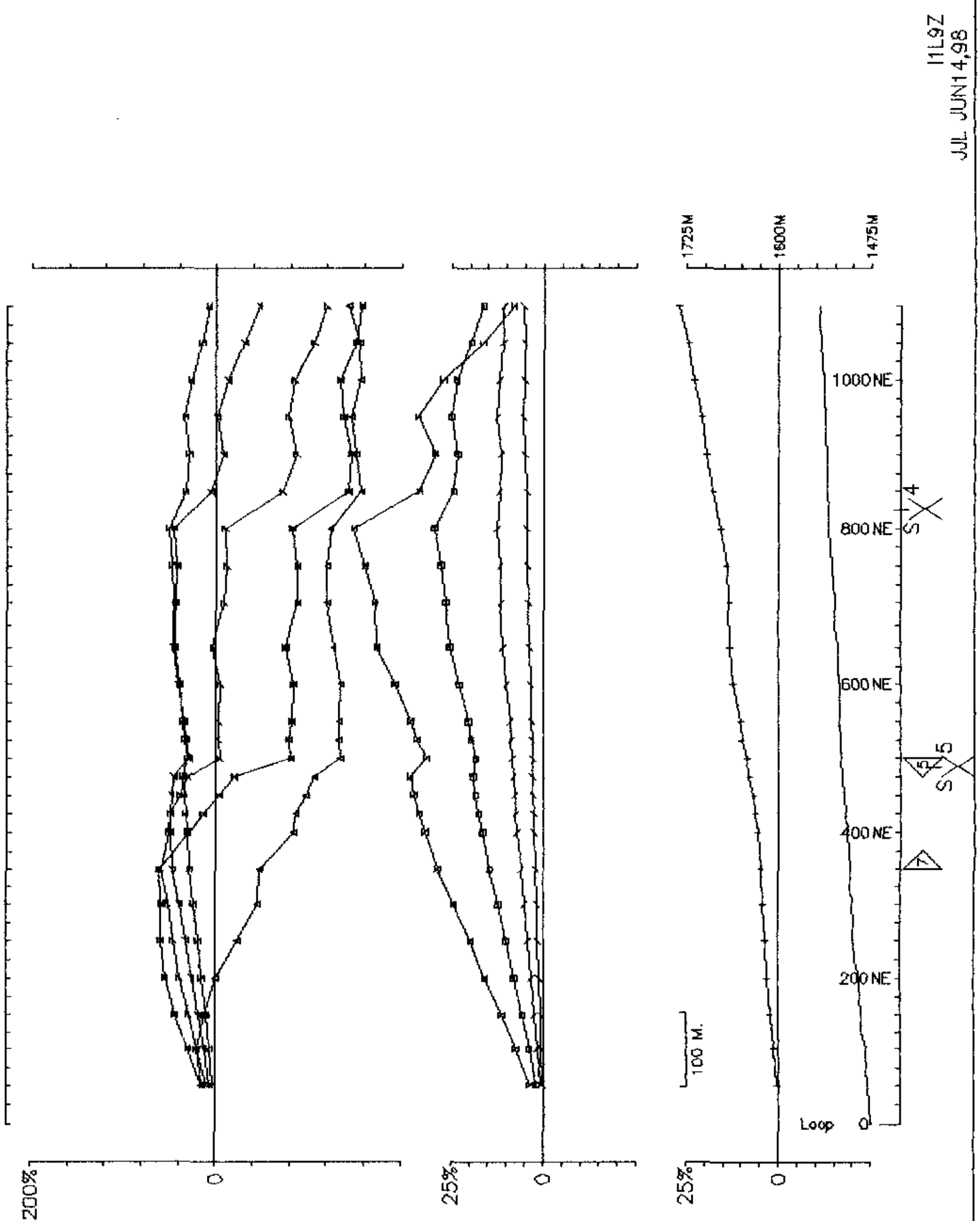
STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 32 Loop: 1 Line: 700NW DS:6 P
Ch1 reduced. Ch1 normalized. Totals:P– 1076M./L– 1101M. Line Azim.: 69 . Rx Label: 7 . Base Shift: –.5 % Point Norm



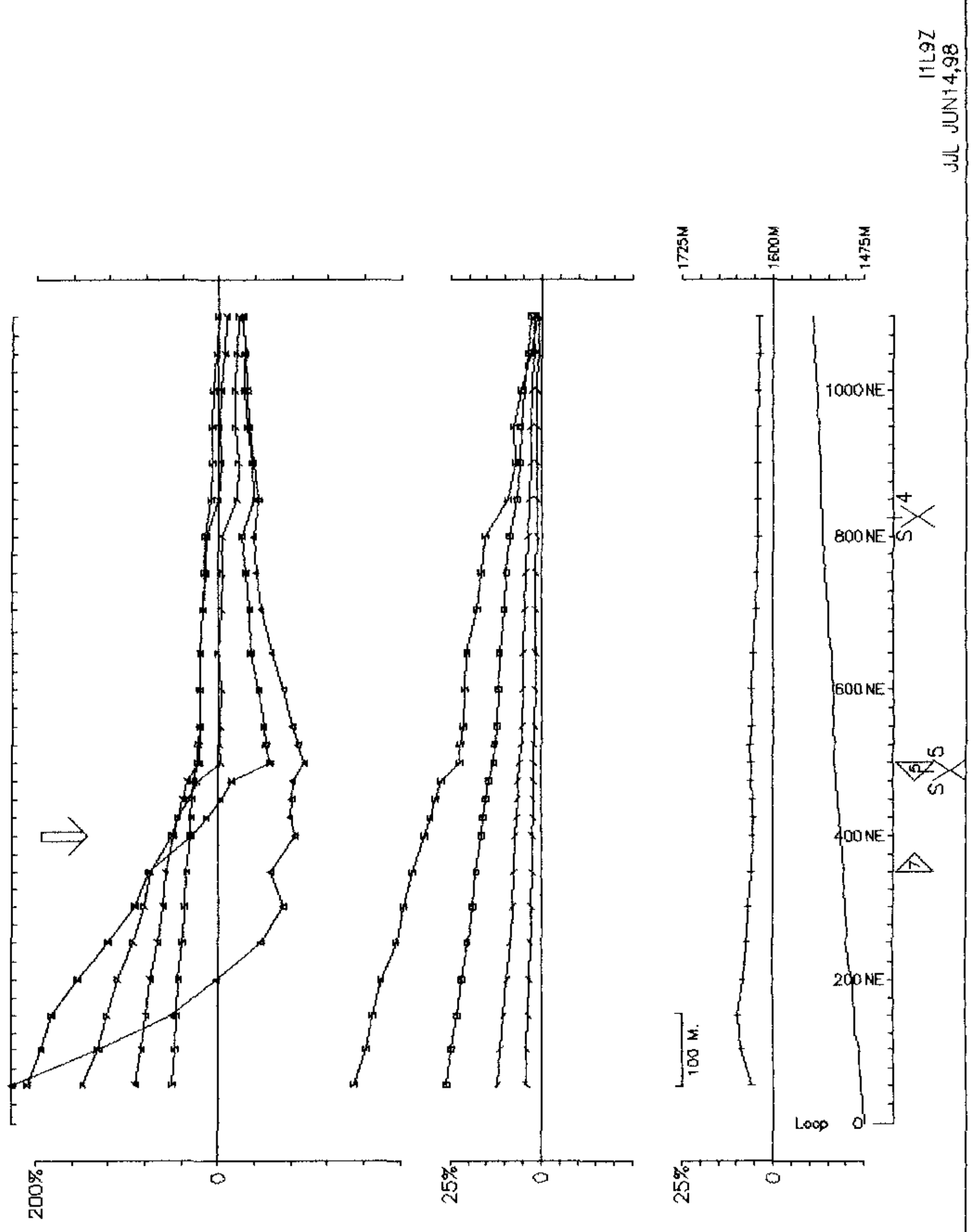
STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 26 Loop: 1 Line: 800NW DS:7
Ch1 reduced. Ch1 normalized. Totals:P– 1046M. /L– 1096M. Line Azim.: 69 . Rx Label: 8 . Base Shift: .9 %



STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 26 Loop: 1 Line: 800NW DS:7 P
Ch1 reduced. Ch1 normalized. Totals:P-1046M./L-1096M. Line Azim.: 69 . Rx Label: 8 . Base Shift: .9 % Point Normal

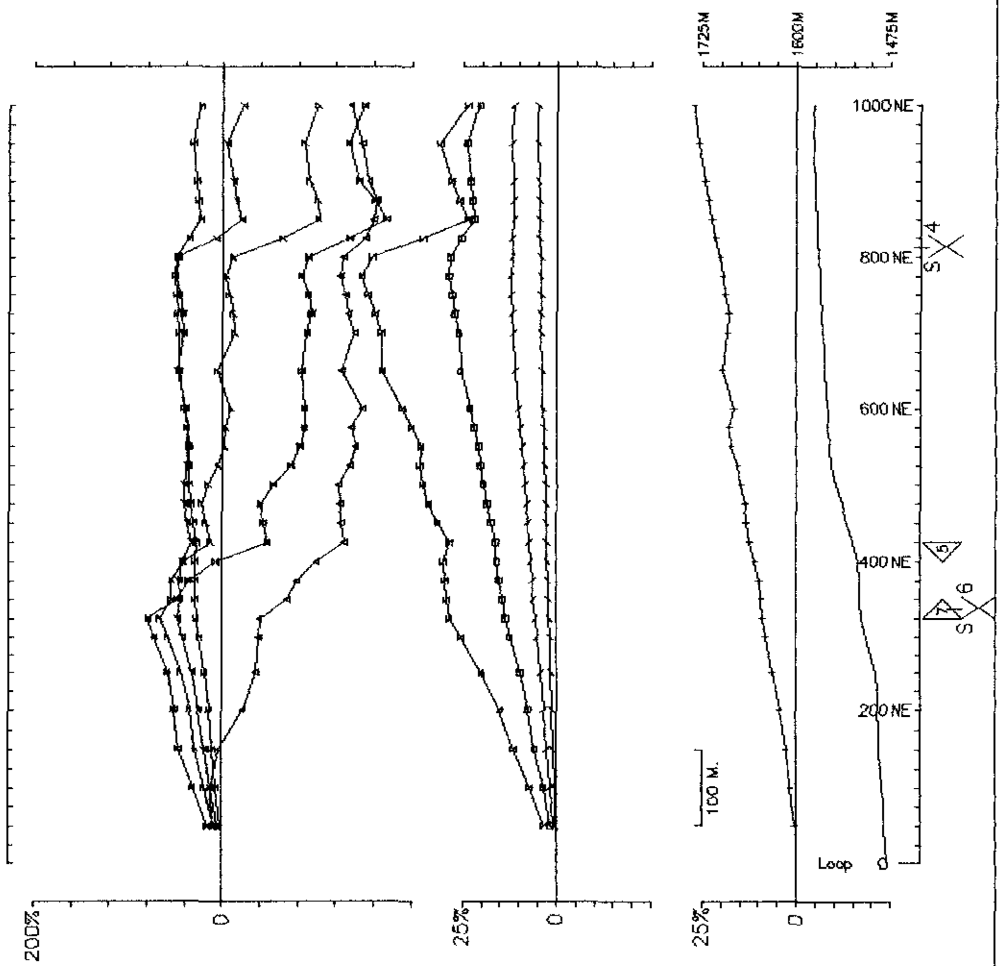


STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 25 Loop: 1 Line: 900NW DS:8
Ch1 reduced. Ch1 normalized. Totals:P-1053M./L-1105M. Line Azim.: 69 . Rx Label: 9 . Base Shift: -1.0 %

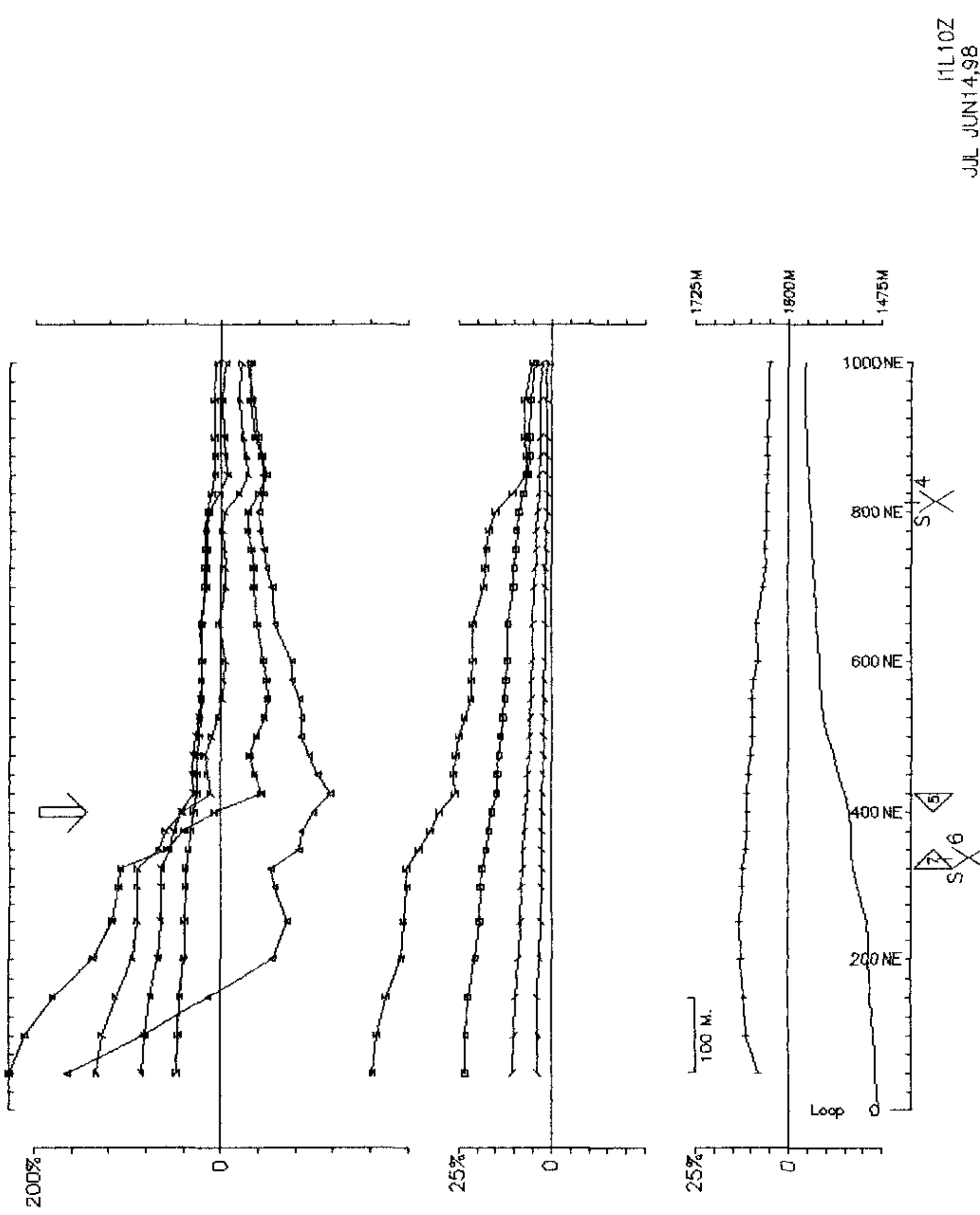


STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 25 Loop: 1 Line: 900NW DS:8 P
Ch1 reduced. Ch1 normalized. Totals:P– 1053M./L–1105M. Line Azim.: 69 . Rx Label: 9 . Base Shift: –1.0 % Point Norr

I1L10Z
JJL JUN14,98

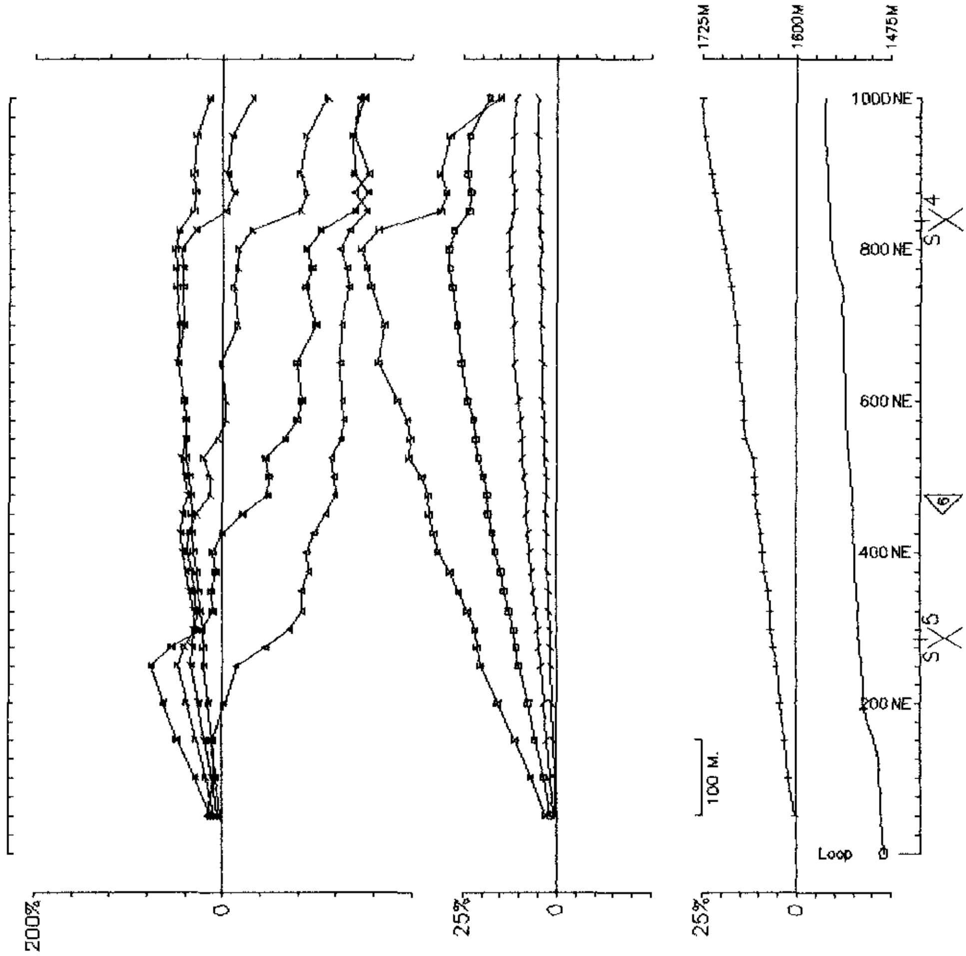


STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 30 Loop: 1 Line: 1000NW DS:9
Ch1 reduced. Ch1 normalized. Totals:P– 954M. /L– 1004M. Line Azim.: 69 . Rx Label: 10 . Base Shift: .6 %

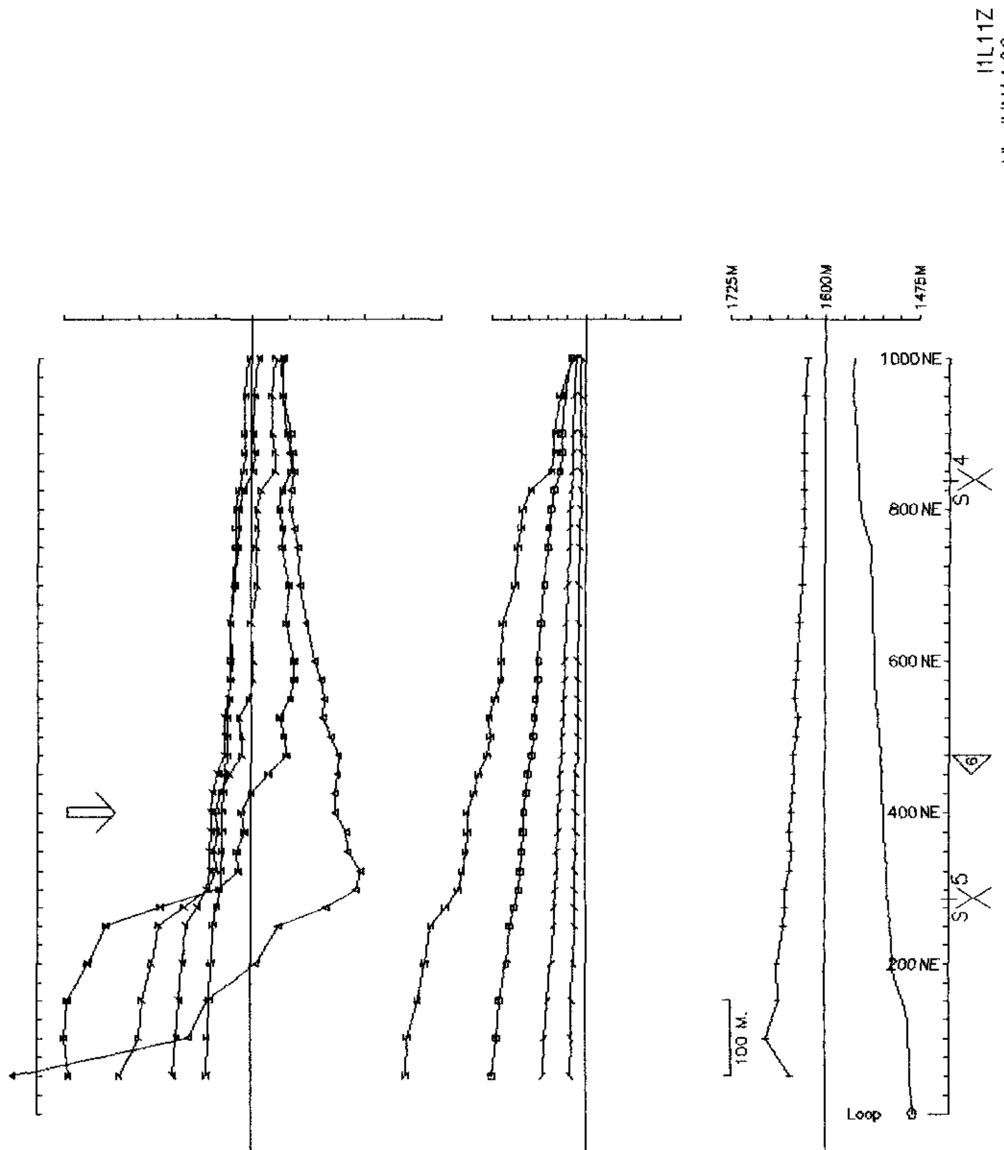


STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 30 Loop: 1 Line: 1000NW DS:9 P
Ch1 reduced. Ch1 normalized. Totals:P-954M./L-1004M. Line Azim.: 69 . Rx Label: 10 . Base Shift: .6 % Point Normal

I1L11Z
JJL JUN14,98

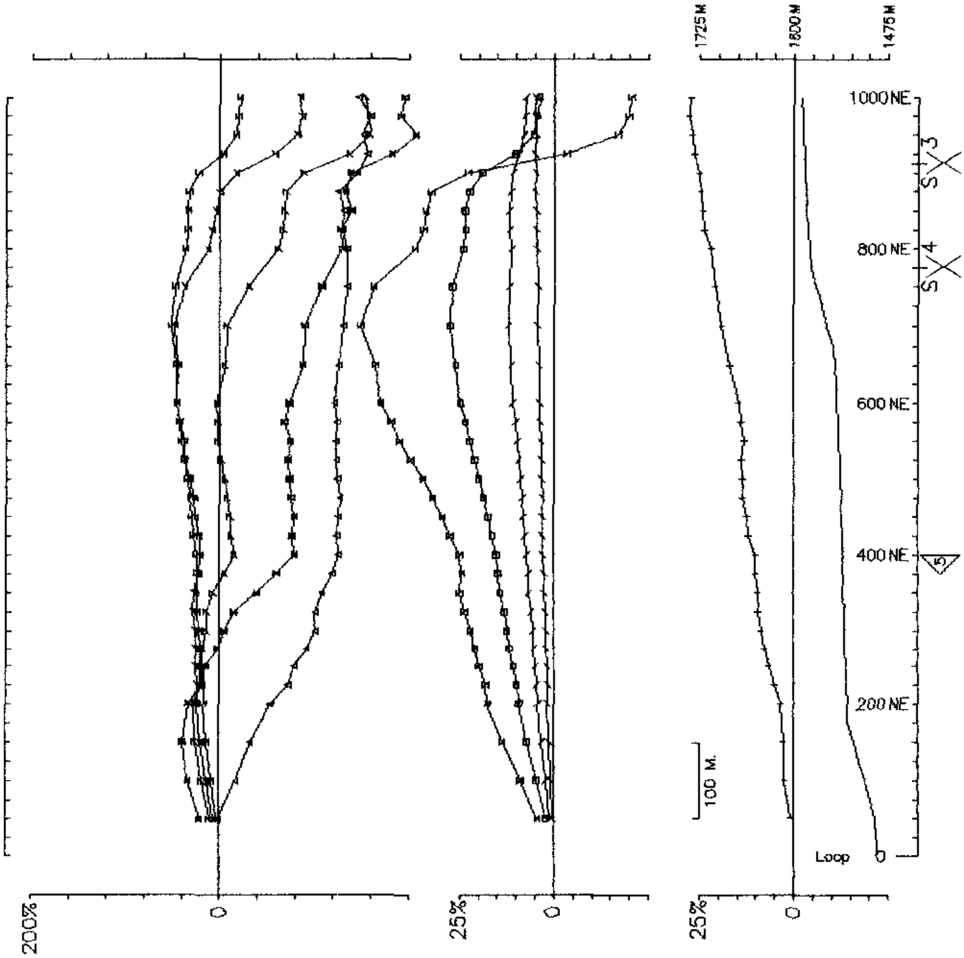


STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 30 Loop: 1 Line: 1100NW DS:10
Ch1 reduced. Ch1 normalized. Totals:P-951M./L-1001M. Line Azim.: 69 . Rx Label: 11 . Base Shift: .9 %



STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 30 Loop: 1 Line: 1100NW DS:10P
Ch1 reduced. Ch1 normalized. Totals:P-951M./L-1001M. Line Azim.: 69 , Rx Label: 11 . Base Shift: .9 % Point Normal

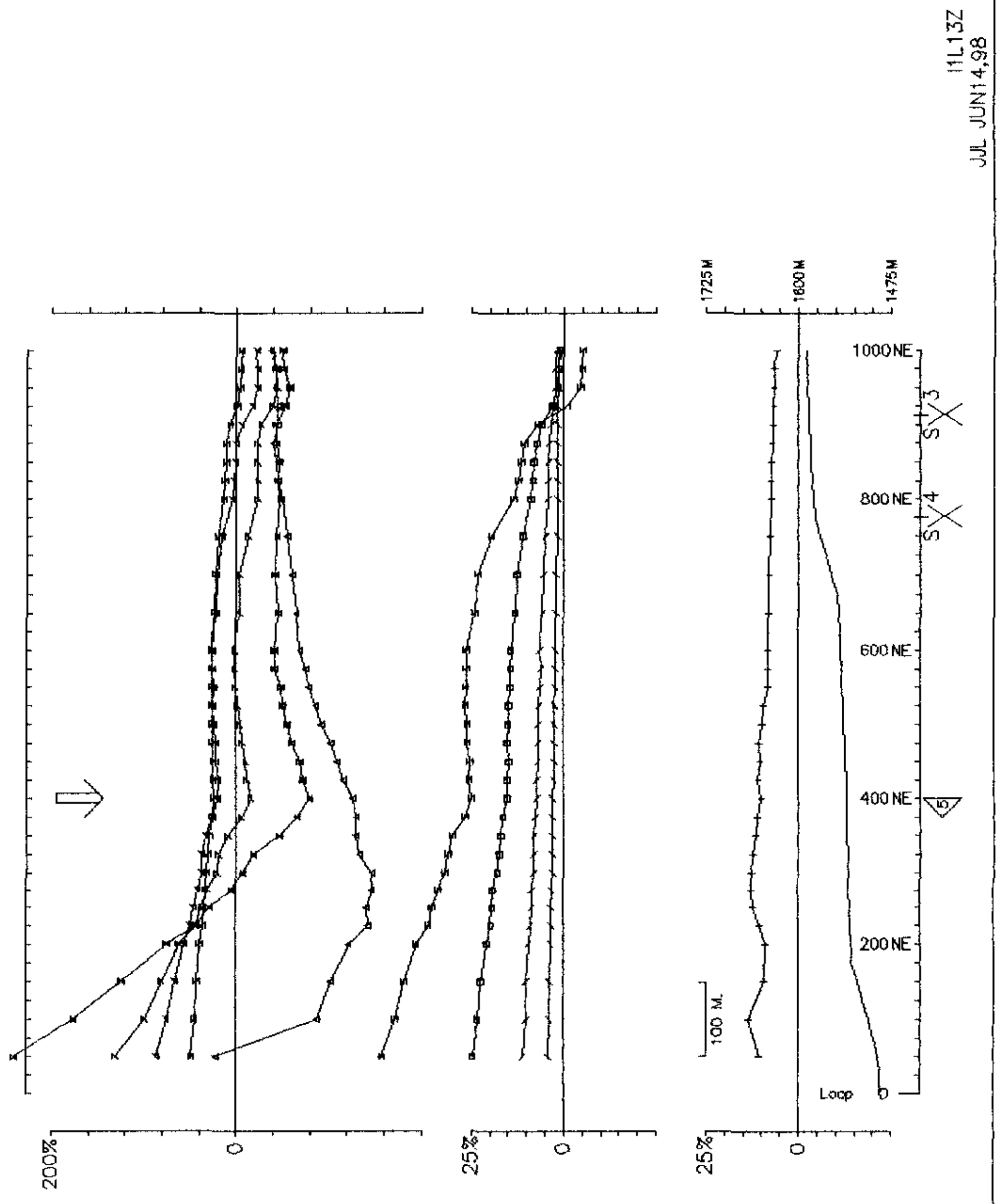
I1L13Z
JJL JUN14,98



STRIKE '98 COMINCO Hz

Op: JJL&SN Freq(Hz): 30.974 #Stns: 32 Loop: 1 Line: 1300NW DS:11

Ch1 reduced. Ch1 normalized. Totals:P-955M./L-1005M. Line Azim.: 69 . Rx Label: 13 . Base Shift: .9 %



STRIKE '98 COMINCO Hz
Op: JJL&SN Freq(Hz): 30.974 #Stns: 32 Loop: 1 Line: 1300NW DS:11P
Ch1 reduced. Ch1 normalized. Totals:P-955M. /L-1005M. Line Azim.: 69 . Rx Label: 13 . Base Shift: .9 % Point Normal

Appendix 3

PLOTTING CONVENTIONS FOR UTEM DATA

The following conventions are used in the plotting of UTEM data. These schemes are necessary because the UTEM system uses a continuous-wave source signal (which is always on during the response recording) and the effects of the source signal need to be removed from the recorded data before effects due to anomalous conductivity in the ground can be identified.

Continuous Normalized Plotting:

The calculation of the data value at each station in the profile is given by the formulae:

a) For channel 1:

$$\%\ \text{Channel 1 data value} = \frac{\text{Ch}\ 1 - \text{P}}{\text{P}} \times 100\%$$

where P is the primary field from the loop at each station in the profile and 'Ch *1*' is the measured amplitude for Channel number 1 at the same station.

b) For the remaining channels (channel 'n', n= 2 to 10):

$$\%\ \text{Channel '}n\text{' data value} = \frac{\text{Ch}\ n - \text{Ch 1}}{\text{Ch 1}} \times 100\%$$

where 'Ch *1*' is the measured amplitude for Channel number 1 at each station in the profile and 'Ch *n*' is the measured amplitude for Channel number 'n'. This scheme preserves the relative anomaly-size of equal strength conductors, regardless of their distance away from the loop generating the source EM field. Normally, the strength of the *response* of a conductor also diminishes naturally with its distance from the loop.

Point Normalized Plotting:

The point normalizing formulae are:

a) For channel 1:

$$\%\ \text{Channel 1 data value} = \frac{\text{Ch}\ 1 - \text{P}_{pn}}{\text{P}_{pn}} \times 100\%$$

where P_{pn} is the primary field from the loop at a chosen, "point norm station" and 'Ch *1*' is the measured amplitude for Channel number 1 at each station in the profile.

b) For the remaining channels (channel 'n', n= 2 to 10):

$$\%\ \text{Channel '}n\text{' data value} = \frac{\text{Ch}\ n - (\text{Ch 1})_{\text{pn}}}{(\text{Ch 1})_{\text{pn}}} \times 100\%$$

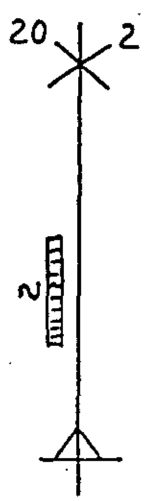
where 'Ch *n*' is the measured amplitude for Channel number 'n' at each station in the profile and '$(Ch\ 1)_{pn}$' is the measured amplitude for Channel 1 at the point norm station.

The aim of point normalizing data plots is to reduce the distortion to anomalies' shapes which is introduced by the continuous normalizing scheme, and thus allowing quantitative interpretation of anomalies based on physical arguments. *Note that in plotting, this style of normalization displays an arrow at the top of the section indicating the station whose value of the primary field is taken for* P_{pn} *in normalizing all the stations in the profile.*

SYMBOLS USED IN THE PLOTTING OF UTEM DATA AND INDICATION OF ANOMALIES

SYMBOL	CHANNEL	MEAN DELAY TIME 30 Hz
|	1	12.8 ms
/	2	6.4
\	3	3.2
□	4	1.6
Σ	5	0.8
⧍	6	0.4
7	7	0.2
⧖	8	0.1
△	9	0.05
◇	10	0.025

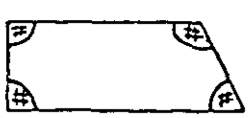
In the data sections, the upper graph contains Channels 9 to 5, the centre graph contains Channels 5 to 2, and the lower graph contains Channel 1. Station numbers are indicated along the abscissa. Elevations along the survey line are shown by the solid profile in the lower graph, the scale for which is the ordinate on the right hand side of the graph.



Axis of a crossover anomaly. The right superscript indicates the latest anomalous channel. The left superscript indicates depth to current axis in metres, or S = shallow depth, M = moderate depth and D = deep.

Indicates a negative anomaly of width shown by the dash. The latest anomalous channel is shown. Can sometimes be confused with the negative part of a crossover anomaly.

Indicates contact between two regions of differing resistivity. Arrow points to low resistivity zone.



Outline of a transmitter loop

APPENDIX 4

1998 SOIL AND ROCK GEOCHEMISTRY DATA

Strike 1998 Soil Geochemistry																											
	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281851	20	4	81	<.4	4	110	<1	8	21	3.7	<2	39	<5	<5	89	<2	<2	6	4	3	363	0.34	0.12	1.48	0.16	0.04	0.04
281852	9	<4	15	<.4	<2	80	<1	3	8	0.55	<2	16	<5	<5	12	<2	<2	6	<2	3	151	0.12	0.01	0.51	0.09	0.05	0.02
281853	34	<4	47	<.4	<2	513	<1	8	24	1.41	<2	67	<5	<5	35	<2	<2	22	7	4	680	0.41	<.01	1.19	0.71	0.06	0.03
281854	38	<4	54	<.4	2	197	<1	15	38	2.14	<2	60	<5	<5	46	<2	<2	11	9	7	432	0.76	0.09	1.14	0.53	0.01	0.02
281855	31	<4	41	<.4	<2	228	<1	13	37	2.2	<2	66	<5	<5	54	<2	<2	12	9	6	374	0.87	0.12	1.26	0.63	0.01	0.02
281856	19	5	76	<.4	5	69	<1	9	25	4.39	<2	59	<5	<5	88	<2	<2	6	3	4	344	0.41	0.12	1.96	0.14	0.05	0.04
281857	8	<4	18	<.4	<2	40	<1	2	6	0.89	<2	14	<5	<5	20	<2	<2	4	2	3	143	0.07	0.02	0.67	0.09	0.06	0.02
281858	80	4	81	<.4	<2	258	<1	20	73	2.71	<2	94	<5	<5	57	<2	<2	19	11	9	582	1.23	0.09	1.5	0.69	0.01	0.03
281859	21	<4	57	<.4	<2	148	<1	6	6	0.63	<2	18	<5	<5	9	<2	<2	17	3	4	237	0.13	<.01	0.53	0.55	0.04	0.06
281860	85	<4	73	<.4	<2	323	<1	19	64	2.25	<2	91	<5	<5	59	<2	<2	20	14	9	707	1	0.02	1.74	0.5	0.05	0.03
281861	55	<4	23	<.4	<2	170	<1	3	33	0.76	<2	34	<5	<5	18	<2	<2	15	15	9	146	0.19	<.01	1.27	0.34	0.04	0.02
281862	37	4	49	<.4	<2	125	<1	16	82	2.29	<2	110	<5	<5	51	<2	<2	9	7	7	490	1.28	0.05	1.57	0.32	0.05	0.02
281863	75	4	74	<.4	3	348	<1	14	56	2.01	<2	79	<5	<5	73	<2	<2	18	23	12	679	0.61	0.01	2.19	0.54	0.06	0.03
281864	231	5	142	<.4	2	498	<1	15	108	2.6	<2	144	<5	<5	64	<2	<2	26	40	16	524	1.14	0.02	2.42	0.94	0.05	0.04
281865	491	<4	31	<.4	<2	128	<1	8	41	0.48	<2	36	<5	<5	7	<2	<2	11	6	4	343	0.23	<.01	0.48	0.28	0.07	0.03
281866	981	4	92	<.4	<2	413	<1	36	88	1.78	<2	78	<5	<5	38	<2	<2	16	11	7	1650	0.45	0.02	0.84	0.34	0.05	0.04
281867	31	5	49	<.4	<2	182	<1	12	15	2.09	<2	31	<5	<5	51	<2	<2	8	2	5	554	0.19	0.1	0.7	0.17	0.06	0.06
281868	42	5	96	<.4	2	328	<1	15	29	3.78	<2	68	<5	<5	83	<2	<2	7	2	4	1183	0.57	0.15	1.37	0.16	0.04	0.05
281869	33	6	63	<.4	2	97	<1	8	14	2.28	<2	35	<5	<5	64	<2	<2	5	2	3	363	0.23	0.14	0.94	0.15	0.05	0.04
281870	E11920	<4	120	0.8	<2	321	<1	29	65	0.89	<2	44	<5	<5	14	<2	2	13	37	9	558	0.49	0.01	0.72	0.78	0.07	0.04
281871	1787	<4	128	0.9	<2	162	<1	19	268	1.8	<2	203	<5	<5	42	<2	<2	14	12	6	384	2.01	0.02	1.15	1.4	0.05	0.03
281872	3706	<4	212	<.4	<2	274	<1	13	306	1.72	<2	185	<5	<5	42	<2	<2	23	32	11	383	1.21	0.01	1.14	2.16	0.04	0.02
281873	4802	4	153	<.4	<2	258	<1	12	244	1.28	<2	110	<5	<5	34	<2	<2	24	27	9	468	0.96	<.01	0.78	1.91	0.04	0.02
281874	1733	<4	89	<.4	<2	137	<1	12	176	1.32	<2	131	<5	<5	22	<2	<2	14	19	8	232	0.86	0.01	0.89	0.87	0.06	0.03
281875	788	<4	66	<.4	<2	129	<1	10	201	1.2	<2	121	<5	<5	20	<2	<2	14	13	7	328	0.86	<.01	0.83	1.2	0.05	0.03
281876	1173	<4	184	<.4	<2	199	<1	17	380	2.54	<2	216	<5	<5	43	<2	<2	18	25	9	352	1.81	0.01	1.63	1.66	0.06	0.03
281877	986	<4	136	<.4	<2	160	<1	29	268	3.39	<2	280	<5	<5	53	<2	<2	10	14	7	545	2.56	0.04	1.48	0.76	0.05	0.03
281878	1893	<4	162	<.4	<2	258	<1	11	213	1.51	<2	101	<5	<5	25	<2	<2	27	36	13	261	1.12	0.01	1.11	1.86	0.05	0.03
281879	1072	<4	41	<.4	<2	85	<1	2	49	0.38	<2	31	<5	<5	5	<2	<2	7	12	4	60	0.24	<.01	0.37	0.4	0.07	0.02
281880	3917	<4	130	<.4	3	278	<1	15	101	2.31	<2	94	<5	<5	52	<2	<2	15	37	11	570	0.78	0.05	1.34	0.53	0.06	0.03
281881	103	<4	29	<.4	<2	77	<1	8	12	1.34	<2	27	<5	<5	38	<2	<2	4	2	2	280	0.11	0.06	0.52	0.13	0.05	0.03
281882	231	6	161	<.4	<2	170	1	21	57	5.89	<2	101	<5	<5	202	<2	<2	8	4	2	843	0.69	0.33	1.43	0.3	0.04	0.07
281883	1062	4	163	<.4	2	275	<1	60	197	2.7	<2	204	<5	<5	53	<2	<2	13	13	6	793	1.84	0.02	1.83	0.37	0.05	0.03
281884	59	<4	97	<.4	<2	154	<1	21	373	2.82	<2	440	<5	<5	40	<2	<2	15	5	3	535	3.62	<.01	1.19	0.58	0.04	0.03
281885	27	<4	40	<.4	<2	101	<1	34	353	2.56	<2	371	<5	<5	32	<2	<2	7	4	4	430	4.5	0.01	1.12	0.23	0.02	0.02
281886	49	<4	37	<.4	<2	198	<1	13	213	1.74	<2	264	<5	<5	28	<2	<2	12	16	5	278	1.76	0.01	1.36	0.38	0.05	0.02
281887	18	<4	20	<.4	<2	75	<1	3	35	0.66	<2	49	<5	<5	13	<2	<2	5	3	3	60	0.43	0.01	0.58	0.13	0.05	0.02
281888	45	<4	27	<.4	<2	133	<1	5	20	1.04	<2	40	<5	<5	31	<2	<2	7	8	6	273	0.18	<.01	1.16	0.15	0.04	0.03

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281889	24	<4	46	<.4	2	144	<1	11	39	2.29	<2	65	<5	<5	63	<2	<2	7	3	3	312	0.55	0.15	1.09	0.25	0.04	0.05
281890	24	<4	56	<.4	<2	84	<1	12	29	3.05	<2	75	<5	<5	103	<2	<2	4	6	3	554	0.39	0.19	1.52	0.32	0.04	0.05
281891	22	<4	64	<.4	<2	76	<1	21	17	4.32	<2	57	<5	<5	132	<2	<2	4	4	<2	1797	0.3	0.24	1.25	0.16	0.04	0.03
281892	69	<4	17	<.4	<2	81	<1	5	10	0.75	<2	22	<5	<5	17	<2	<2	6	2	4	125	0.17	0.03	0.6	0.12	0.03	0.02
281893	953	<4	136	<.4	3	316	<1	36	108	3.37	<2	119	<5	<5	68	<2	<2	16	10	6	576	1.4	0.05	1.24	0.44	0.02	0.04
281894	184	4	90	<.4	<2	247	<1	28	97	2.42	<2	103	<5	<5	47	<2	<2	14	11	7	866	1.2	0.05	1.17	0.44	0.02	0.03
281895	44	<4	13	<.4	<2	119	<1	2	11	0.26	<2	34	<5	<5	11	<2	<2	7	9	6	150	0.1	<.01	1.04	0.16	0.05	0.01
281896	33	4	131	<.4	<2	75	<1	42	299	4.73	<2	425	<5	<5	60	<2	<2	5	<2	2	622	3.13	0.05	1.35	0.24	0.05	0.03
281897	43	<4	37	<.4	<2	86	<1	20	273	2.33	<2	242	<5	<5	27	<2	2	4	<2	3	251	3.02	0.01	1.28	0.17	0.02	0.01
281898	57	<4	42	<.4	<2	98	<1	21	299	2.29	<2	277	<5	<5	31	<2	<2	6	2	3	356	2.96	0.01	1.02	0.27	0.02	0.02
281899	42	5	41	<.4	<2	78	<1	19	306	2.12	<2	254	<5	<5	29	<2	<2	4	2	4	281	2.94	0.02	0.87	0.17	0.02	0.01
281900	64	6	212	<.4	<2	132	<1	106	755	5.74	<2	1155	<5	<5	51	<2	<2	11	3	3	1288	6.36	0.01	1.07	0.43	0.04	0.06
281901	485	5	89	<.4	<2	222	<1	47	419	2.75	<2	342	<5	<5	46	<2	<2	16	15	8	833	2.66	0.01	1.29	1.47	0.05	0.02
281902	287	<4	66	<.4	<2	176	<1	18	393	1.87	<2	218	<5	<5	52	<2	<2	16	22	9	564	1.34	0.01	1.44	1.88	0.06	0.02
281903	268	<4	37	<.4	<2	161	<1	5	123	1.24	<2	112	<5	<5	17	<2	<2	16	15	8	159	0.69	<.01	1.04	1.04	0.05	0.02
281904	1096	<4	54	<.4	<2	283	<1	20	524	2.53	<2	283	<5	<5	51	<2	<2	17	47	15	434	1.24	<.01	1.61	2.74	0.05	0.02
281905	246	4	115	<.4	<2	107	<1	30	461	5.74	<2	646	<5	<5	72	<2	<2	7	2	2	567	5.78	0.05	1.33	0.33	0.02	0.02
281906	81	6	150	<.4	<2	94	<1	29	307	5.06	<2	482	<5	<5	73	<2	<2	8	2	3	506	4.2	0.07	1.23	0.21	0.04	0.03
281907	87	4	135	<.4	<2	98	<1	25	338	5.67	<2	568	<5	<5	82	<2	<2	9	3	3	527	4.47	0.09	1.23	0.27	0.05	0.02
281908	2736	4	82	<.4	<2	349	<1	20	510	3.49	<2	520	<5	<5	45	<2	<2	18	37	11	381	3.8	0.01	1.54	0.8	0.06	0.03
281909	33	<4	11	<.4	<2	52	<1	1	72	0.23	<2	49	<5	<5	4	<2	<2	7	5	4	56	0.22	<.01	0.35	0.28	0.04	0.01
281910	27	<4	40	<.4	<2	122	<1	35	530	3.42	<2	641	<5	<5	43	<2	<2	7	5	2	502	6.32	0.01	1.15	0.27	0.02	0.02
281911	47	<4	62	<.4	2	484	<1	20	91	3.03	<2	114	<5	<5	69	<2	<2	19	8	4	624	1.69	0.14	1.82	0.68	0.02	0.03
281912	18	<4	66	<.4	<2	85	<1	14	21	3.9	<2	46	<5	<5	125	<2	<2	4	5	2	767	0.34	0.25	1.5	0.28	0.04	0.04
281913	11	<4	32	<.4	<2	49	<1	10	9	2.32	<2	31	<5	<5	67	<2	<2	4	3	2	592	0.16	0.14	1.09	0.1	0.04	0.02
281914	61	4	86	<.4	5	194	<1	25	43	3.51	<2	80	<5	<5	73	<2	<2	10	6	5	1024	0.53	0.16	1.28	0.19	0.04	0.05
281915	32	<4	4	<.4	<2	16	<1	<1	<1	0.15	<2	<4	<5	<5	2	<2	<2	5	<2	2	5	0.01	0.01	0.36	0.08	0.02	0.01
281916	316	<4	97	<.4	3	346	<1	19	78	3.06	<2	102	<5	<5	66	<2	<2	14	8	5	538	1.24	0.12	1.61	0.43	0.02	0.04
281917	268	4	61	<.4	<2	206	<1	17	53	2.24	<2	70	<5	<5	46	<2	<2	12	9	7	419	0.84	0.08	1.07	0.39	0.02	0.03
281918	355	4	78	<.4	3	227	<1	24	72	3.11	<2	111	<5	<5	76	<2	<2	10	7	5	598	1.23	0.15	1.66	0.38	0.02	0.03
281919	191	<4	65	<.4	2	144	<1	16	57	2.64	<2	82	<5	<5	58	<2	<2	10	10	8	351	0.97	0.1	1.53	0.39	0.01	0.02
281920	114	<4	57	<.4	2	249	<1	17	42	2.71	<2	66	<5	<5	65	<2	<2	10	6	4	464	0.78	0.14	1.37	0.42	0.01	0.03
281921	214	<4	85	<.4	2	111	<1	21	84	3.79	<2	123	<5	<5	92	<2	<2	8	7	4	540	1.23	0.2	2.12	0.38	0.02	0.03
281922	137	<4	80	<.4	<2	315	<1	26	82	3.11	<2	114	<5	<5	72	<2	2	22	10	5	572	1.32	0.18	1.65	0.61	0.01	0.04
281923	732	8	129	<.4	7	287	<1	30	114	5.19	<2	182	<5	<5	116	<2	<2	12	11	6	684	1.97	0.1	3.34	0.4	0.06	0.04
281924	7	<4	12	<.4	2	36	<1	<1	2	0.3	<2	5	<5	<5	4	<2	<2	3	<2	<2	18	0.02	<.01	0.32	0.04	0.05	0.02
281925	33	4	50	<.4	2	149	<1	7	16	1.89	<2	59	<5	<5	67	<2	<2	6	4	3	561	0.19	0.08	0.83	0.25	0.04	0.05
281926	29	5	73	<.4	3	192	<1	13	19	4.75	<2	54	<5	<5	153	<2	<2	10	5	3	557	0.33	0.3	1.38	0.33	0.04	0.04
281927	73	<4	32	<.4	<2	556	<1	12	26	1.22	<2	30	<5	<5	22	<2	<2	33	33	13	353	0.25	0.02	1.14	0.75	0.05	0.05
281928	31	4	44	<.4	<2	95	<1	16	11	2.64	<2	53	<5	<5	91	<2	<2	5	3	2	1807	0.22	0.14	0.84	0.23	0.04	0.06

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281929	3	<4	5	<.4	<2	9	<1	<1	<1	0.09	<2	<4	<5	<5	<2	<2	<2	2	<2	<2	11	<.01	<.01	0.07	0.05	0.05	0.02
281930	4	<4	6	<.4	2	17	<1	3	37	0.61	<2	61	<5	<5	4	<2	<2	2	<2	<2	58	0.29	<.01	0.21	0.03	0.06	0.02
281931	682	<4	76	<.4	<2	138	<1	24	223	2.23	<2	240	<5	<5	47	<2	<2	10	8	5	254	2.82	0.02	1.02	0.27	0.02	0.02
281932	24	<4	4	<.4	2	10	<1	<1	2	0.14	<2	6	<5	<5	2	<2	<2	2	<2	<2	5	0.02	<.01	0.13	0.01	0.04	0.02
281933	1563	4	175	<.4	<2	112	<1	27	107	2.36	<2	155	<5	<5	52	<2	<2	12	8	6	393	1.01	0.02	1.3	0.38	0.05	0.02
281934	439	<4	16	<.4	<2	22	<1	1	9	0.68	<2	24	<5	<5	11	<2	<2	3	<2	2	25	0.07	0.01	0.35	0.08	0.05	0.03
281935	4951	<4	247	<.4	2	97	<1	51	256	2.85	<2	268	<5	<5	54	<2	<2	11	20	7	595	2.3	0.02	1.77	0.53	0.04	0.03
281936	3581	<4	126	<.4	<2	94	<1	38	210	2.54	<2	293	<5	<5	40	<2	2	8	23	10	568	2.58	0.02	1.31	0.29	0.05	0.03
281937	253	<4	6	<.4	<2	10	<1	<1	5	0.09	<2	7	<5	<5	<2	<2	<2	2	<2	<2	<5	0.01	<.01	0.09	0.03	0.03	0.01
281938	8788	4	182	0.5	2	138	1	72	189	1.61	<2	146	<5	<5	28	<2	<2	18	33	12	712	0.68	<.01	1.22	0.61	0.04	0.03
281939	1340	<4	92	0.5	<2	161	<1	10	249	1.21	<2	125	<5	<5	11	<2	<2	13	17	8	116	0.68	<.01	0.71	0.4	0.05	0.02
281940	163	<4	18	<.4	<2	20	<1	<1	17	0.17	<2	10	<5	<5	2	<2	<2	3	<2	2	9	0.04	<.01	0.13	0.04	0.05	0.01
281941	26	<4	36	<.4	<2	67	<1	10	117	1.48	<2	107	<5	<5	23	<2	<2	3	<2	3	132	1.22	0.02	1	0.13	0.04	0.02
281942	2918	<4	66	0.6	<2	105	<1	10	112	1.89	<2	129	<5	<5	26	<2	<2	8	9	7	162	1.16	0.02	1.15	0.19	0.06	0.03
281943	388	<4	126	<.4	<2	165	<1	14	231	1.71	<2	159	<5	<5	25	<2	<2	16	8	6	341	1.25	0.02	1.23	0.59	0.07	0.03
281944	64	<4	25	<.4	<2	81	<1	3	106	0.54	<2	42	<5	<5	9	<2	<2	23	4	5	241	0.24	<.01	0.57	0.72	0.06	0.02
281945	42	<4	31	<.4	<2	88	<1	9	103	1.13	<2	121	<5	<5	18	<2	<2	10	2	4	195	1.16	0.01	0.77	0.4	0.05	0.02
281946	66	<4	75	<.4	<2	130	<1	12	180	0.9	<2	84	<5	<5	15	<2	<2	27	6	6	605	1.19	<.01	0.96	1.92	0.06	0.04
281947	31	<4	12	<.4	<2	34	<1	1	83	0.27	<2	29	<5	<5	8	<2	<2	7	2	3	101	0.25	<.01	0.36	0.54	0.05	0.02
281948	175	<4	26	<.4	<2	124	<1	8	167	1.18	<2	421	<5	<5	19	<2	<2	18	14	7	138	1.17	<.01	1.31	1.32	0.04	0.02
281949	31	<4	37	<.4	<2	124	<1	21	143	1.44	<2	97	<5	<5	25	<2	<2	9	4	4	639	0.77	0.01	0.95	0.27	0.05	0.03
281950	16	<4	117	<.4	<2	85	<1	60	530	4.6	<2	605	5	<5	57	<2	<2	4	<2	2	957	5.94	0.03	1.08	0.14	0.04	0.03
281951	26	<4	75	<.4	2	126	<1	15	101	2.75	<2	180	<5	<5	60	<2	<2	7	2	3	395	1.26	0.06	1.2	0.17	0.04	0.02
281952	127	<4	54	<.4	<2	167	<1	24	205	2.45	<2	225	<5	<5	42	<2	<2	12	5	6	359	2.8	0.07	1.18	0.44	0.01	0.01
281953	103	<4	56	<.4	<2	201	<1	16	144	2.28	<2	211	<5	<5	73	<2	<2	12	7	5	327	2.28	0.03	1.21	0.36	0.02	0.02
281954	10	<4	7	<.4	<2	27	<1	<1	2	0.26	<2	5	<5	<5	5	<2	<2	4	<2	2	20	0.03	<.01	0.42	0.07	0.03	0.02
281955	46	<4	48	<.4	2	185	<1	12	41	2.48	<2	58	<5	<5	55	<2	<2	14	4	5	257	0.88	0.1	1.28	0.38	0.01	0.02
281956	58	6	119	<.4	<2	334	<1	26	26	3.77	<2	77	<5	<5	120	<2	<2	17	6	6	2441	0.4	0.07	1.25	0.67	0.03	0.13
281957	22	<4	47	<.4	<2	38	<1	6	8	1.15	<2	23	<5	<5	27	<2	<2	5	4	3	268	0.15	0.04	0.98	0.14	0.04	0.03
281958	5	<4	13	<.4	<2	24	<1	<1	1	0.23	<2	4	<5	<5	3	<2	<2	3	<2	<2	18	<.01	<.01	0.21	0.05	0.05	0.03
281959	174	5	92	<.4	3	165	<1	18	65	3.25	<2	93	<5	<5	74	<2	<2	9	9	7	679	1.03	0.08	1.66	0.31	0.01	0.03
281960	76	4	54	<.4	3	127	<1	12	44	2.05	<2	58	<5	<5	38	<2	<2	9	6	6	398	0.8	0.04	1.18	0.27	0.01	0.03
281961	47	<4	55	<.4	6	52	<1	8	31	2.1	<2	42	<5	<5	39	<2	<2	5	4	5	188	0.51	0.06	1.19	0.17	0.04	0.02
281962	123	5	78	<.4	4	167	<1	19	53	2.87	<2	69	<5	<5	55	<2	<2	13	10	8	530	0.92	0.08	1.43	0.41	0.01	0.02
281963	150	4	59	<.4	<2	194	<1	23	110	2.81	<2	158	<5	<5	63	<2	<2	11	10	6	399	1.36	0.09	1.55	0.37	0.01	0.02
281964	87	<4	53	<.4	2	129	<1	12	47	2.05	<2	76	<5	<5	42	<2	<2	9	8	6	316	0.69	0.08	0.95	0.38	0.01	0.02
281965	184	<4	68	<.4	<2	198	<1	28	59	2.49	<2	80	<5	<5	56	<2	<2	9	9	5	769	0.93	0.11	1.33	0.42	0.02	0.04
281966	64	<4	37	<.4	2	66	<1	8	25	1.3	<2	34	<5	<5	27	<2	<2	6	3	4	222	0.38	0.05	0.77	0.16	0.02	0.02
281751	78	4	50	<.4	<2	99	<1	25	351	2.68	<2	330	<5	<5	36	<2	<2	6	4	4	349	3.57	0.02	1.14	0.3	0.01	0.02
281752	31	<4	19	<.4	<2	54	<1	19	66	0.52	<2	59	<5	<5	7	<2	<2	5	<2	<2	396	0.1	<.01	0.2	0.16	0.05	0.02

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281753	21	<4	52	<.4	<2	63	<1	24	158	2.29	<2	240	<5	<5	40	<2	<2	5	<2	3	565	1.54	0.05	0.75	0.18	0.04	0.03
281754	22	<4	24	<.4	<2	74	<1	4	41	0.34	<2	24	<5	<5	6	<2	<2	10	2	3	164	0.19	<.01	0.34	0.53	0.05	0.01
281755	41	<4	54	<.4	<2	66	<1	12	108	1.99	<2	128	<5	<5	32	<2	<2	6	2	4	222	1.39	0.03	0.89	0.2	0.01	0.02
281756	12	<4	13	<.4	<2	44	<1	<1	12	0.19	<2	5	<5	<5	2	<2	<2	7	<2	2	<5	0.06	<.01	0.27	0.37	0.04	0.02
281757	1	<4	3	<.4	<2	6	<1	<1	<1	0.09	<2	<4	<5	<5	<2	<2	<2	2	<2	<2	<5	<.01	<.01	0.06	0.02	0.03	0.01
281758	41	<4	41	<.4	<2	66	<1	9	74	1.61	<2	92	<5	<5	28	<2	<2	6	3	5	182	0.99	0.04	0.79	0.18	0.01	0.02
281759	39	<4	19	<.4	<2	141	<1	10	76	1.18	<2	97	<5	<5	20	<2	<2	11	5	4	349	0.63	0.01	0.81	0.2	0.02	0.01
281760	46	<4	63	<.4	<2	199	<1	35	228	3.21	<2	357	<5	<5	57	<2	<2	12	6	5	681	2.6	0.03	1.17	0.34	0.05	0.04
281761	42	<4	49	<.4	<2	142	<1	25	230	2.2	<2	239	<5	<5	36	<2	<2	9	6	5	380	3.26	0.05	1.15	0.32	0.01	0.01
281762	33	<4	25	<.4	<2	145	<1	14	243	1.18	<2	201	<5	<5	30	<2	<2	9	15	6	636	1.2	<.01	1.11	0.38	0.06	0.02
281763	20	<4	33	<.4	<2	115	<1	15	191	1.55	<2	181	<5	<5	21	<2	<2	10	4	4	264	2.19	0.01	0.78	0.28	0.02	0.01
281764	44	5	55	<.4	4	247	<1	12	46	2.89	<2	73	<5	<5	80	<2	<2	13	8	5	415	0.95	0.12	1.5	0.38	0.04	0.02
281765	32	4	69	0.5	<2	273	<1	20	24	3.72	<2	60	<5	<5	134	<2	<2	10	11	5	1322	0.27	0.12	1.64	0.47	0.04	0.06
281766	60	4	51	<.4	<2	304	<1	15	45	2.17	<2	72	<5	<5	53	<2	<2	14	8	7	280	0.83	0.11	1.32	0.43	0.02	0.02
281767	28	<4	6	<.4	<2	37	<1	1	5	0.38	<2	12	<5	<5	7	<2	<2	5	2	2	76	0.05	0.01	0.66	0.09	0.03	0.01
281768	208	<4	21	<.4	<2	94	<1	5	17	0.95	<2	25	<5	<5	21	<2	<2	6	3	2	128	0.28	0.02	0.74	0.11	0.02	0.01
281769	509	<4	72	<.4	<2	204	<1	21	67	2.87	<2	90	<5	<5	60	<2	<2	12	9	5	443	1.03	0.09	1.13	0.49	0.01	0.02
281770	611	<4	59	<.4	<2	180	<1	17	48	2.49	<2	60	<5	<5	51	<2	<2	11	8	5	321	0.65	0.05	0.82	0.32	0.01	0.02
281771	149	<4	75	<.4	<2	185	<1	24	61	3.02	<2	83	<5	<5	61	<2	<2	13	11	6	714	1.16	0.07	1.43	0.51	0.01	0.03
281772	97	<4	65	<.4	<2	246	<1	24	46	2.38	<2	69	<5	<5	49	<2	<2	10	21	9	1203	0.72	0.05	1.31	0.36	0.04	0.02
281773	130	5	81	<.4	3	185	<1	19	49	3.09	<2	76	<5	<5	62	<2	<2	12	11	7	550	0.88	0.06	1.37	0.33	0.01	0.03
281774	36	5	54	<.4	2	108	<1	8	10	2.1	<2	29	<5	<5	54	<2	<2	8	9	7	846	0.11	0.03	1.59	0.08	0.04	0.02
281775	73	<4	59	0.4	3	99	<1	12	39	2.67	<2	54	<5	<5	47	<2	<2	8	5	5	272	0.63	0.07	1.48	0.22	0.02	0.03
281776	19	<4	13	<.4	<2	48	<1	1	7	0.51	<2	12	<5	<5	11	<2	<2	4	3	2	69	0.09	0.01	0.68	0.09	0.06	0.02
281777	129	<4	66	<.4	<2	254	<1	18	72	3.13	<2	95	<5	<5	58	<2	<2	15	10	5	486	1.04	0.12	1.43	0.44	0.01	0.03
281778	410	4	84	<.4	2	102	<1	17	37	5.23	2	78	<5	<5	93	<2	<2	6	5	3	309	0.83	0.1	1.65	0.26	0.01	0.02
281779	17	6	151	<.4	<2	244	<1	19	15	1.53	<2	31	<5	<5	51	<2	<2	10	2	3	3150	0.2	0.06	0.67	0.6	0.03	0.06
281780	50	<4	44	<.4	2	99	<1	9	28	1.78	<2	43	<5	<5	34	<2	<2	9	7	7	285	0.52	0.05	0.96	0.32	0.01	0.03
281781	17	<4	63	<.4	<2	611	<1	7	14	0.73	<2	23	<5	<5	19	<2	<2	50	2	4	1588	0.2	0.01	0.56	1.37	0.03	0.05
281782	19	13	151	<.4	<2	1106	<1	9	12	0.57	<2	9	<5	<5	9	<2	<2	61	2	3	2400	0.5	0.01	0.36	2.5	0.03	0.08
281783	52	<4	51	<.4	<2	407	<1	8	15	1.13	<2	29	<5	<5	22	<2	<2	31	5	4	819	0.31	0.02	0.6	0.88	0.03	0.05
281784	127	<4	64	<.4	<2	155	<1	21	38	3.69	<2	95	<5	<5	106	<2	<2	11	5	3	666	1.24	0.19	2	0.27	0.03	0.04
281785	2	<4	5	<.4	<2	10	<1	<1	<1	0.25	<2	<4	<5	<5	8	<2	<2	<2	<2	<2	49	0.01	0.02	0.1	0.03	0.04	0.01
281786	3	<4	2	<.4	<2	13	<1	<1	2	0.13	<2	5	<5	<5	2	<2	<2	<2	<2	<2	8	<.01	<.01	0.08	<.01	0.02	0.01
281787	7	<4	5	<.4	<2	29	<1	1	11	0.22	<2	15	<5	<5	4	<2	<2	3	<2	<2	34	0.09	<.01	0.11	0.02	0.02	0.01
281788	1827	293	7	<.4	119	57	<1	8	<1	E41.5	76	7	<5	<5	423	3	<2	<2	<2	<2	7	0.01	0.14	0.15	0.01	0.04	0.13
281789	469	5	69	<.4	<2	96	<1	22	172	5.01	<2	325	<5	<5	69	<2	<2	5	4	2	591	2.15	0.04	1.06	0.14	0.03	0.03
281790	1931	11	41	<.4	<2	79	<1	12	46	E20.54	<2	228	<5	<5	87	<2	<2	3	3	<2	255	0.32	0.12	0.89	0.15	0.02	0.03
281791	1082	8	39	<.4	<2	130	<1	13	96	9.86	<2	412	<5	<5	69	<2	<2	3	3	<2	240	0.73	0.12	0.97	0.06	0.01	0.01
281792	1311	4	56	<.4	<2	140	<1	25	208	3.29	<2	509	<5	<5	44	<2	<2	6	4	3	446	2.29	0.02	1.35	0.16	0.03	0.01

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281793	2104	<4	55	<.4	<2	157	<1	24	197	3.77	<2	383	<5	<5	42	<2	<2	6	9	5	422	2.22	0.02	1.11	0.15	0.03	0.02
281794	1098	8	39	<.4	<2	82	<1	23	139	8.96	<2	468	<5	<5	72	<2	<2	3	2	<2	447	1.11	0.12	0.91	0.09	0.03	0.01
281795	1632	4	57	<.4	2	80	<1	30	173	2.23	<2	201	<5	<5	33	<2	<2	3	7	4	541	1.58	0.02	1.05	0.12	0.01	0.02
281796	5770	6	121	<.4	<2	216	<1	49	246	3.87	<2	372	<5	<5	54	<2	<2	9	41	16	1100	1.62	0.01	2.39	0.31	0.04	0.04
281797	1566	<4	73	1.1	<2	100	<1	16	144	0.51	<2	45	<5	<5	5	<2	<2	11	7	4	200	0.24	<.01	0.35	0.29	0.05	0.02
281798	100	<4	37	<.4	<2	60	<1	10	112	1.22	<2	112	<5	<5	18	<2	<2	5	2	3	173	1.16	0.01	0.68	0.15	0.03	0.01
281799	210	<4	100	<.4	<2	117	<1	14	157	1.7	<2	198	<5	<5	23	<2	<2	8	3	4	248	1.52	<.01	1.03	0.2	0.04	0.01
281800	262	<4	42	0.9	<2	34	<1	4	63	0.35	<2	40	<5	<5	5	<2	<2	4	<2	<2	77	0.18	<.01	0.3	0.1	0.05	0.01
281801	1408	<4	150	<.4	<2	132	<1	30	167	1.35	<2	150	<5	<5	20	<2	<2	13	7	5	551	0.93	<.01	0.87	0.38	0.04	0.02
281802	2979	<4	396	<.4	<2	165	<1	179	204	2.15	<2	169	<5	<5	44	<2	<2	16	19	8	2342	0.65	<.01	1.17	0.39	0.04	0.02
281803	3504	<4	468	<.4	<2	230	<1	281	321	2.39	<2	205	<5	<5	44	<2	<2	19	29	9	2663	1.14	<.01	1.45	0.57	0.05	0.02
281804	9	<4	4	<.4	<2	7	<1	<1	<1	0.07	<2	<4	<5	<5	<2	<2	<2	2	<2	<2	5	<.01	<.01	0.04	0.01	0.02	0.01
281805	123	<4	159	<.4	<2	50	<1	71	145	1.85	<2	156	<5	<5	17	<2	<2	4	3	2	926	0.96	<.01	0.82	0.15	0.03	0.01
281806	35	5	179	<.4	<2	9	<1	9	3	E17.18	<2	<4	<5	<5	2	<2	<2	2	<2	<2	42	0.01	<.01	0.07	0.05	0.04	0.01
281807	27	<4	30	<.4	<2	44	<1	4	12	1.53	<2	38	<5	<5	35	<2	<2	3	<2	2	129	0.09	0.04	0.49	0.11	0.05	0.02
281808	190	<4	75	<.4	<2	148	<1	18	120	2.65	<2	155	<5	<5	55	<2	<2	16	10	8	268	1.85	0.03	1.26	0.46	0.02	0.02
281809	55	<4	47	<.4	<2	210	<1	14	35	1.97	<2	65	<5	<5	52	<2	<2	13	5	4	627	0.8	0.02	1.21	0.52	0.04	0.03
281810	127	6	87	<.4	<2	593	<1	24	38	4.36	<2	91	<5	<5	120	<2	<2	28	23	11	965	1.12	0.07	2.29	0.69	0.04	0.05
281811	16	<4	89	<.4	<2	126	1	4	6	0.43	<2	9	<5	<5	13	<2	<2	23	<2	2	152	0.15	0.01	0.17	0.76	0.04	0.1
281812	77	5	55	<.4	<2	131	<1	14	41	2.45	<2	65	<5	<5	49	<2	<2	11	10	8	348	0.83	0.06	1.28	0.33	0.01	0.02
281813	101	6	69	<.4	2	191	<1	18	76	2.77	<2	95	<5	<5	52	<2	<2	12	10	7	539	1.06	0.05	1.25	0.38	0.01	0.02
281814	64	4	61	<.4	<2	148	<1	13	39	2.42	<2	61	<5	<5	49	<2	<2	12	11	8	363	0.8	0.05	1.22	0.35	0.01	0.02
281815	17	<4	36	0.4	<2	68	<1	2	9	1.08	<2	30	<5	<5	32	<2	<2	4	3	2	239	0.12	0.02	0.83	0.15	0.04	0.04
281816	53	<4	44	0.5	<2	160	<1	7	22	1.52	<2	44	<5	<5	30	<2	<2	9	12	9	155	0.33	0.02	1.15	0.27	0.03	0.03
281817	56	<4	67	<.4	<2	140	<1	19	61	3.64	<2	85	<5	<5	82	<2	<2	12	6	4	544	1.1	0.2	1.64	0.44	0.02	0.02
281818	22	<4	26	<.4	<2	45	<1	5	18	1.14	<2	26	<5	<5	27	<2	<2	4	<2	2	168	0.27	0.05	0.58	0.09	0.02	0.02
281819	44	<4	26	<.4	<2	96	<1	4	16	1.19	<2	31	<5	<5	27	<2	<2	6	5	4	103	0.25	0.01	1.02	0.13	0.04	0.03
281820	11	<4	28	<.4	<2	130	<1	13	6	0.65	<2	14	<5	<5	17	<2	<2	6	7	5	3326	0.04	<.01	0.62	0.14	0.05	0.02
281821	81	<4	19	0.6	<2	68	<1	3	13	0.82	<2	18	<5	<5	20	<2	<2	7	15	8	152	0.17	<.01	1.3	0.17	0.05	0.01
281822	66	4	51	<.4	<2	140	<1	15	37	2.3	<2	55	<5	<5	50	<2	<2	10	8	7	364	0.71	0.08	1.26	0.28	0.02	0.02
281823	221	<4	68	<.4	<2	121	<1	21	75	3.33	<2	103	<5	<5	66	<2	<2	9	7	4	532	1.09	0.11	1.44	0.31	0.02	0.02
281824	446	<4	60	<.4	<2	94	<1	20	105	3.31	<2	166	<5	<5	63	<2	<2	8	7	5	326	1.28	0.06	1.25	0.37	0.01	0.01
281825	570	5	82	<.4	<2	97	<1	18	27	3.72	2	51	<5	<5	61	<2	<2	7	5	4	324	0.66	0.04	1.15	0.17	0.01	0.02
281826	45	4	52	0.7	4	77	<1	9	27	2.26	<2	44	<5	<5	45	<2	<2	9	4	7	264	0.52	0.05	1.2	0.3	0.04	0.03
281827	33	5	56	<.4	5	172	<1	12	26	2.31	<2	41	<5	<5	46	<2	<2	11	6	8	400	0.56	0.05	1.29	0.27	0.01	0.03
281828	13	5	61	<.4	3	93	<1	6	10	1.91	<2	28	<5	<5	76	<2	<2	5	<2	2	361	0.15	0.13	0.52	0.17	0.04	0.04
281829	50	5	85	<.4	2	281	<1	26	24	3.05	<2	75	<5	<5	94	<2	<2	13	10	6	1372	0.41	0.03	1.36	0.53	0.04	0.07
281830	98	4	50	<.4	4	386	<1	19	35	2.64	<2	77	<5	<5	70	<2	<2	20	12	8	903	0.84	0.02	1.57	0.44	0.05	0.04
281831	2	<4	2	<.4	<2	10	<1	<1	<1	0.12	<2	<4	<5	<5	<2	<2	<2	2	<2	<2	<5	<.01	<.01	0.26	0.01	0.03	0.01
281832	13	<4	11	<.4	<2	55	<1	2	40	0.4	<2	36	<5	<5	9	<2	<2	6	<2	<2	26	0.43	<.01	0.38	0.11	0.05	0.01

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281833	120	23	94	<.4	3	406	<1	42	276	3.49	<2	320	<5	<5	84	<2	<2	14	15	6	1559	3.6	0.01	2.16	0.54	0.05	0.04
281834	106	4	43	<.4	<2	167	<1	17	145	2.57	<2	179	<5	<5	5	<2	<2	6	2	3	361	1.81	0.04	0.98	0.18	0.01	0.01
281835	43	6	44	<.4	8	74	<1	8	55	2.13	<2	64	<5	<5	37	<2	<2	6	3	6	171	0.6	0.02	1.03	0.12	0.01	0.02
281836	45	<4	43	<.4	<2	139	<1	22	282	2.1	<2	254	<5	<5	30	<2	<2	9	4	9	322	3.05	0.02	1.18	0.26	0.02	0.02
281837	40	<4	48	<.4	<2	138	<1	17	243	1.88	<2	247	<5	<5	26	<2	<2	11	5	8	277	2.54	0.02	1.26	0.32	0.02	0.02
281838	34	<4	41	<.4	<2	127	<1	17	274	2.04	<2	276	<5	<5	24	<2	<2	10	4	5	222	3.22	0.01	1.14	0.26	0.04	0.02
281839	63	<4	34	<.4	<2	136	<1	23	184	1.32	<2	161	<5	<5	19	<2	<2	11	3	4	508	1.21	<.01	0.69	0.21	0.05	0.03
281840	39	<4	16	<.4	<2	138	<1	17	103	0.63	<2	59	<5	<5	9	<2	<2	16	5	4	487	0.5	<.01	0.41	0.35	0.06	0.03
281841	26	<4	62	<.4	<2	69	<1	11	98	2.82	<2	163	<5	<5	43	<2	<2	5	<2	2	248	0.84	0.03	0.72	0.13	0.05	0.02
281842	E11610	5	200	<.4	<2	292	<1	401	376	2.67	<2	235	<5	<5	38	<2	3	17	29	15	3699	0.96	<.01	2.33	0.46	0.04	0.03
281843	1343	6	43	0.9	2	93	<1	19	164	6.53	<2	325	<5	<5	44	<2	<2	4	5	3	309	1.69	0.03	1.28	0.13	0.01	0.01
281844	2284	10	46	1	<2	168	<1	20	131	E11.02	<2	472	<5	<5	70	<2	<2	4	5	2	367	0.93	0.05	1.27	0.09	0.04	0.03
281659	246	<4	64	<.4	<2	295	<1	14	122	1.43	<2	133	<5	<5	29	<2	<2	15	20	10	239	0.86	<.01	1.27	0.55	0.05	0.02
281660	157	<4	59	1.1	<2	180	<1	11	121	1.14	<2	118	<5	<5	22	<2	<2	8	13	7	160	0.87	0.01	1.28	0.28	0.03	0.02
281661	352	<4	116	<.4	2	327	<1	24	230	2.68	<2	260	<5	<5	56	<2	<2	14	26	14	332	1.89	0.01	2.27	0.52	0.02	0.03
281662	337	<4	114	<.4	<2	360	<1	28	263	2.82	<2	300	<5	<5	56	<2	<2	14	22	12	417	2.44	0.01	2.3	0.52	0.02	0.03
281663	328	4	124	0.7	2	385	<1	32	272	3.02	<2	311	<5	<5	62	<2	<2	16	15	8	501	2.64	0.01	2.28	0.57	0.02	0.03
281664	303	<4	94	<.4	3	353	<1	30	223	2.49	<2	251	<5	<5	51	<2	<2	15	18	10	509	2.21	0.01	1.74	0.59	0.02	0.02
281665	38	<4	23	1.3	<2	76	<1	4	34	0.84	<2	71	<5	<5	20	<2	<2	4	<2	3	74	0.34	0.01	0.5	0.14	0.02	0.01
281666	50	<4	14	0.7	<2	33	<1	2	17	0.56	<2	32	<5	<5	12	<2	<2	2	<2	2	44	0.15	<.01	0.36	0.03	0.02	0.01
281667	140	<4	61	0.9	<2	194	<1	11	56	1.5	<2	119	<5	<5	35	<2	<2	9	3	4	147	0.53	0.01	0.96	0.24	0.05	0.03
281668	210	<4	29	<.4	<2	132	<1	13	28	0.67	<2	40	<5	<5	11	<2	<2	7	6	4	306	0.23	<.01	0.52	0.18	0.03	0.02
281669	904	6	168	0.4	6	279	<1	36	168	3.55	<2	199	<5	<5	67	<2	<2	10	8	4	442	1.57	0.01	2.08	0.27	0.02	0.02
281670	260	<4	72	0.7	3	200	<1	11	77	1.66	<2	99	<5	<5	36	<2	<2	10	11	6	160	0.75	0.01	1.76	0.26	0.05	0.02
281671	232	<4	105	<.4	4	269	<1	19	145	2.87	<2	196	<5	<5	66	<2	<2	12	11	7	332	1.5	0.01	2.47	0.36	0.04	0.02
281672	115	<4	90	<.4	<2	329	<1	16	78	1.57	<2	95	<5	<5	39	<2	<2	23	23	12	1333	0.74	0.01	1.91	0.69	0.05	0.05
281673	28	<4	53	<.4	2	192	<1	11	104	2.38	<2	255	<5	<5	51	<2	<2	6	6	5	261	1.2	0.01	1.58	0.24	0.02	0.02
281674	41	<4	43	<.4	2	170	<1	10	42	1.12	<2	61	<5	<5	34	<2	<2	9	13	7	723	0.4	<.01	1.36	0.23	0.05	0.02
281675	62	<4	42	0.4	2	192	<1	5	37	1.05	<2	63	<5	<5	42	<2	<2	11	13	9	98	0.41	0.01	1.92	0.28	0.05	0.02
281676	52	<4	33	<.4	<2	148	<1	27	185	2.05	<2	237	<5	<5	43	<2	<2	9	11	5	659	1.95	0.01	1.49	0.33	0.03	0.02
281677	9	4	46	0.6	<2	140	<1	2	11	0.73	<2	29	<5	<5	30	<2	<2	5	2	4	113	0.11	0.03	0.53	0.2	0.05	0.04
281678	32	4	35	<.4	<2	189	<1	6	52	1.54	<2	90	<5	<5	24	<2	<2	8	5	5	111	0.58	0.01	1.16	0.21	0.05	0.03
281679	4	<4	7	0.4	<2	35	<1	<1	1	0.19	<2	4	<5	<5	3	<2	<2	2	<2	<2	31	<.01	<.01	0.4	0.02	0.02	0.01
281680	17	5	65	<.4	2	141	<1	25	315	3.82	<2	433	<5	<5	63	<2	<2	9	4	7	776	3.68	0.05	1.35	0.26	0.05	0.05
281681	23	<4	43	0.6	<2	113	<1	23	330	2.52	<2	331	<5	<5	37	<2	<2	9	3	5	444	3.57	0.02	1.32	0.21	0.05	0.03
281682	<1	<4	4	<.4	<2	7	<1	<1	1	0.15	<2	<4	<5	<5	4	<2	<2	3	<2	<2	8	<.01	<.01	0.08	0.01	0.04	0.01
281683	96	4	79	<.4	<2	348	<1	40	119	4.26	<2	200	<5	<5	112	<2	<2	19	13	7	3020	1.62	0.09	1.88	0.81	0.06	0.08
281684	6	<4	8	1	<2	24	<1	1	7	0.24	<2	19	<5	<5	6	<2	<2	4	<2	<2	112	0.03	<.01	0.17	0.06	0.07	0.03
281685	31	<4	45	0.4	<2	136	<1	18	236	2.14	<2	279	<5	<5	35	<2	<2	20	7	9	288	2.72	0.04	1.5	0.4	0.02	0.03
281686	13	<4	13	<.4	<2	45	<1	1	13	0.32	<2	23	<5	<5	9	<2	<2	5	<2	3	26	0.09	0.01	0.29	0.11	0.06	0.03

Field ID	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281687	22	<4	50	<.4	<2	150	<1	12	98	2.38	<2	128	<5	<5	41	<2	<2	6	2	8	289	1.29	0.02	1.81	0.18	0.04	0.02
281688	9	<4	25	<.4	<2	63	<1	4	39	1.15	<2	50	<5	<5	19	<2	<2	3	<2	3	132	0.46	0.01	0.65	0.1	0.05	0.04
281689	11	<4	16	<.4	<2	56	<1	8	38	0.74	<2	41	<5	<5	14	<2	<2	4	<2	3	277	0.52	<.01	0.69	0.12	0.05	0.02
281690	110	<4	55	0.4	<2	187	1	17	186	2.23	<2	208	<5	<5	34	<2	<2	15	5	10	214	1.4	0.01	2.54	0.63	0.05	0.07
281691	57	<4	37	0.5	<2	164	<1	25	208	2.28	<2	210	<5	<5	36	<2	<2	12	5	9	372	2.46	0.02	2.91	0.54	0.05	0.04
281692	23	<4	35	0.6	<2	42	<1	8	70	1.63	<2	81	<5	<5	36	<2	<2	7	<2	6	190	0.94	0.02	1.54	0.28	0.06	0.04
281693	36	<4	47	<.4	<2	98	<1	17	175	1.97	<2	202	<5	<5	38	<2	<2	9	3	6	301	2.07	0.05	1.6	0.49	0.06	0.03
281694	15	<4	33	<.4	<2	49	<1	7	51	1.28	<2	99	<5	<5	23	<2	<2	7	<2	3	172	0.38	0.02	0.45	0.18	0.05	0.02
281695	61	<4	83	<.4	<2	126	1	15	88	1.26	<2	100	<5	<5	29	<2	<2	17	2	4	455	0.6	0.01	0.64	0.65	0.06	0.05
281696	121	<4	59	0.4	<2	297	<1	21	197	2.43	<2	200	<5	<5	42	<2	<2	17	10	9	556	1.7	0.01	1.84	0.51	0.06	0.04
281697	35	<4	31	0.4	<2	102	<1	19	102	0.91	<2	78	<5	<5	12	<2	<2	10	3	4	442	0.62	<.01	0.75	0.36	0.07	0.04
281698	692	<4	23	<.4	<2	125	<1	42	98	0.84	<2	58	<5	<5	14	<2	<2	10	5	3	545	0.35	<.01	0.59	0.22	0.06	0.03
281617	62	<4	53	<.4	<2	97	<1	22	156	3.88	<2	412	<5	<5	105	<2	<2	8	3	3	797	1.73	0.11	1.82	0.41	0.04	0.03
281618	245	<4	58	<.4	2	235	<1	28	276	3.01	<2	397	<5	<5	85	<2	<2	12	23	9	619	2.92	0.02	1.87	0.58	0.06	0.05
281619	98	<4	43	<.4	<2	217	<1	24	125	1.53	<2	157	<5	<5	29	<2	<2	11	10	7	429	1.21	0.02	1.1	0.34	0.06	0.03
281620	177	5	68	<.4	2	120	<1	17	114	3.69	<2	219	<5	<5	81	<2	<2	9	4	11	344	1.33	0.12	1.6	0.42	0.02	0.02
281621	32	4	128	<.4	<2	199	<1	18	94	3.81	<2	171	<5	<5	73	<2	<2	13	5	9	488	1.25	0.05	1.96	0.48	0.05	0.05
281622	23	<4	35	<.4	<2	95	<1	16	139	1.29	<2	181	<5	<5	20	<2	<2	8	8	7	321	1.15	0.02	0.99	0.25	0.06	0.03
281623	12	<4	61	<.4	<2	74	<1	34	234	3.33	<2	385	<5	<5	49	<2	<2	7	<2	4	657	2.88	0.04	1.23	0.18	0.05	0.03
281624	23	<4	29	0.4	<2	115	<1	10	55	1.25	<2	122	<5	<5	30	<2	<2	8	4	5	331	0.67	0.02	0.77	0.3	0.06	0.03
281625	31	5	58	<.4	3	116	<1	15	99	2.41	<2	161	<5	<5	56	<2	<2	9	6	10	312	1.36	0.07	1.56	0.44	0.04	0.02
281626	31	<4	52	<.4	<2	169	<1	12	83	1.74	<2	127	<5	<5	43	<2	<2	10	6	7	271	1.06	0.02	1.35	0.45	0.04	0.02
281627	20	<4	23	<.4	<2	82	<1	4	31	1.03	<2	49	<5	<5	22	<2	<2	6	4	6	150	0.16	<.01	0.84	0.11	0.05	0.02
281628	29	<4	53	<.4	<2	103	<1	23	245	2.59	<2	343	<5	<5	39	<2	<2	8	2	4	450	2.68	0.03	1.15	0.28	0.04	0.03
281629	25	5	63	<.4	<2	78	<1	55	236	2.79	<2	323	<5	<5	47	<2	<2	8	2	3	1150	2.42	0.02	0.89	0.25	0.05	0.03
281630	13	<4	38	<.4	<2	77	<1	8	27	1.81	<2	66	<5	<5	48	<2	<2	7	<2	3	336	0.27	0.03	0.7	0.15	0.04	0.03
281631	27	<4	193	<.4	<2	280	<1	65	692	6.14	<2	895	6	<5	67	<2	<2	10	4	<2	1200	8.31	0.01	1.83	0.43	0.03	0.02
281632	36	<4	47	<.4	<2	157	<1	12	75	2.06	<2	82	<5	<5	40	<2	<2	11	12	14	307	0.86	0.02	1.2	0.28	0.01	0.02
281633	27	5	161	<.4	<2	113	<1	31	207	5.42	<2	465	5	<5	88	<2	<2	9	4	5	621	2.54	0.04	1.8	0.42	0.03	0.03
281634	74	<4	54	0.4	<2	158	<1	22	230	2.96	<2	347	<5	<5	55	<2	<2	14	17	8	315	2.29	0.02	2.04	0.61	0.04	0.02
281635	32	<4	61	<.4	<2	219	<1	21	89	2.17	<2	154	<5	<5	44	<2	<2	13	6	6	790	0.94	0.01	1.38	0.37	0.05	0.03
281636	26	<4	25	<.4	<2	128	<1	6	81	0.96	<2	77	<5	<5	16	<2	<2	13	6	5	95	0.56	<.01	0.72	0.32	0.06	0.02
281637	29	<4	47	<.4	<2	149	<1	24	175	2.69	<2	250	<5	<5	46	<2	<2	10	6	7	415	2.02	0.04	1.47	0.41	0.01	0.01
281638	31	<4	17	<.4	<2	76	<1	2	39	0.57	<2	27	<5	<5	12	<2	<2	25	32	6	209	0.23	<.01	0.54	1.05	0.05	0.02
281639	22	<4	24	<.4	<2	99	<1	5	44	0.91	<2	51	<5	<5	19	<2	<2	12	4	3	211	0.29	0.01	0.62	0.41	0.06	0.02
281640	69	<4	40	<.4	<2	161	<1	11	128	1.35	<2	121	<5	<5	26	<2	<2	20	22	7	397	0.72	<.01	0.85	0.93	0.04	0.03
281641	42	<4	33	<.4	<2	167	<1	19	104	2.09	2	165	<5	<5	47	<2	<2	10	6	5	747	1.01	0.03	0.97	0.43	0.04	0.03
281642	66	<4	54	<.4	<2	321	<1	10	155	1.82	2	113	<5	<5	40	<2	<2	35	25	9	494	0.87	<.01	1.2	1.68	0.05	0.03
281643	54	5	48	<.4	<2	195	<1	22	185	2.88	<2	245	<5	<5	57	<2	<2	11	8	7	611	1.6	0.02	1.24	0.55	0.04	0.03
281645	50	<4	17	<.4	<2	225	<1	8	48	0.67	<2	54	<5	<5	19	<2	<2	13	4	4	266	0.26	<.01	0.46	0.59	0.04	0.02

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281646	22	<4	45	<.4	<2	464	<1	18	70	3.49	<2	135	<5	<5	77	<2	<2	10	2	5	807	0.95	0.07	1.44	0.25	0.04	0.05
281647	17	<4	47	<.4	<2	82	<1	14	117	2.83	<2	200	<5	<5	70	<2	<2	4	2	3	225	1.12	0.05	0.9	0.13	0.04	0.02
281648	39	<4	49	<.4	<2	96	<1	7	71	1.2	<2	101	<5	<5	27	<2	<2	10	3	5	133	0.67	<.01	0.93	0.5	0.04	0.02
281649	22	4	59	<.4	<2	182	<1	22	96	3.95	2	212	<5	<5	66	<2	<2	8	2	4	894	0.89	0.05	1.39	0.24	0.04	0.15
281650	94	<4	58	<.4	<2	199	<1	12	242	1.4	<2	143	<5	<5	24	<2	<2	25	22	10	435	1.22	<.01	1.04	0.99	0.04	0.04
281651	28	<4	20	<.4	<2	74	<1	20	99	0.98	<2	111	<5	<5	22	<2	<2	10	4	3	417	0.53	<.01	0.6	0.33	0.05	0.02
281652	54	<4	37	<.4	<2	148	<1	21	309	2.44	<2	327	<5	<5	44	<2	<2	7	12	6	384	2.84	0.04	1.43	0.34	0.03	0.02
281653	15	<4	14	<.4	<2	83	<1	3	23	0.54	<2	42	<5	<5	12	<2	<2	5	<2	4	288	0.24	<.01	0.64	0.16	0.05	0.01
281654	12	<4	6	<.4	<2	48	<1	<1	9	0.17	<2	13	<5	<5	3	<2	<2	5	<2	<2	5	0.03	<.01	0.18	0.13	0.05	0.01
281655	10	<4	15	<.4	<2	74	<1	8	47	1.02	<2	97	<5	<5	22	<2	<2	4	<2	2	223	0.4	0.02	0.47	0.14	0.04	0.02
281656	59	<4	38	<.4	<2	160	<1	17	239	1.7	<2	253	<5	<5	25	<2	<2	12	10	5	409	1.72	<.01	1.26	0.59	0.04	0.03
281657	14	<4	27	<.4	<2	106	<1	20	57	1.12	<2	83	<5	<5	25	<2	<2	6	<2	3	637	0.58	0.01	0.71	0.14	0.04	0.02
281658	15	<4	37	<.4	<2	61	<1	9	48	1.43	2	70	<5	<5	20	<2	<2	4	<2	3	245	0.6	0.01	0.83	0.1	0.03	0.03
281967	127	4	101	<.4	2	378	<1	20	81	3.05	<2	132	<5	<5	114	<2	<2	18	18	9	468	1.17	0.05	2.42	0.61	0.04	0.04
281968	38	4	51	<.4	3	184	<1	11	27	2.06	<2	38	<5	<5	43	<2	<2	9	5	7	426	0.39	0.05	1.26	0.2	0.04	0.04
281969	25	<4	47	<.4	<2	159	<1	17	35	2.1	<2	48	<5	<5	56	<2	<2	14	10	7	446	0.65	0.12	1.25	0.58	0.01	0.02
281970	12	<4	39	<.4	<2	126	<1	4	11	1.61	2	22	<5	<5	44	<2	<2	10	4	8	228	0.11	0.02	0.82	0.2	0.04	0.03
281971	30	<4	52	<.4	<2	139	<1	12	27	1.73	<2	52	<5	<5	54	<2	<2	9	8	7	417	0.61	0.04	1.6	0.36	0.04	0.02
281972	35	<4	42	<.4	<2	128	<1	6	17	1.51	<2	32	<5	<5	47	<2	<2	9	16	9	441	0.25	0.01	1.38	0.21	0.04	0.03
281973	39	<4	56	<.4	<2	585	<1	14	39	2.35	<2	54	<5	<5	56	<2	<2	36	12	9	456	0.91	0.05	1.52	0.57	0.02	0.03
281974	21	4	127	<.4	<2	217	<1	12	21	2.52	<2	57	<5	<5	74	<2	<2	11	4	5	956	0.34	0.06	1.27	0.52	0.04	0.05
281975	18	<4	34	<.4	<2	71	<1	7	14	1.25	<2	28	<5	<5	31	<2	<2	6	4	7	243	0.36	0.04	0.78	0.3	0.03	0.02
281976	30	4	48	<.4	2	251	<1	8	21	1.66	<2	31	<5	<5	35	<2	<2	14	6	9	232	0.45	0.04	1.04	0.34	0.02	0.02
281977	17	4	34	<.4	2	97	<1	5	15	1.27	<2	20	<5	<5	31	<2	<2	5	4	6	145	0.27	0.04	0.84	0.12	0.04	0.02
281978	16	<4	32	<.4	<2	159	<1	7	15	1.34	<2	22	<5	<5	30	<2	<2	12	5	6	134	0.41	0.05	0.84	0.29	0.01	0.02
281979	13	4	63	<.4	<2	217	<1	7	10	1.11	2	15	<5	<5	26	<2	<2	12	<2	3	942	0.13	0.01	0.49	0.35	0.03	0.07
281980	13	6	50	<.4	3	166	<1	5	14	2.51	2	33	<5	<5	111	<2	<2	7	2	5	251	0.18	0.12	0.86	0.24	0.03	0.03
281981	8	5	51	<.4	<2	184	<1	13	10	1.19	<2	19	<5	<5	43	<2	<2	8	<2	4	1195	0.2	0.07	0.49	0.27	0.04	0.07
281982	14	<4	30	<.4	<2	102	<1	8	14	1.26	<2	23	<5	<5	31	<2	<2	7	5	8	219	0.34	0.05	0.79	0.21	0.03	0.02
281983	26	<4	33	<.4	<2	192	<1	8	11	0.9	<2	12	<5	<5	23	<2	<2	9	4	6	658	0.14	0.01	0.57	0.16	0.04	0.04
281984	38	7	53	<.4	5	300	<1	8	24	1.85	2	43	<5	<5	50	<2	<2	13	7	6	206	0.42	0.02	1.63	0.26	0.04	0.05
281985	7	<4	25	<.4	<2	58	<1	2	7	0.74	<2	16	<5	<5	20	<2	<2	5	<2	4	96	0.09	0.03	0.43	0.14	0.04	0.02
281987	23	<4	14	<.4	<2	79	<1	2	7	0.51	<2	10	<5	<5	13	<2	<2	6	8	6	111	0.09	<.01	0.66	0.13	0.04	0.01
281988	39	5	53	<.4	<2	278	<1	10	19	1.47	2	29	<5	<5	41	<2	<2	15	5	5	1062	0.36	0.01	0.74	0.49	0.04	0.03
281989	5	<4	7	<.4	<2	17	<1	<1	1	0.21	<2	4	<5	<5	6	<2	<2	2	<2	<2	20	0.01	0.01	0.16	0.03	0.04	0.01
281990	3	<4	11	<.4	<2	17	<1	<1	3	0.3	<2	6	<5	<5	10	<2	<2	2	<2	<2	37	0.02	0.02	0.14	0.04	0.04	0.01
281991	30	4	44	<.4	3	157	<1	9	22	1.9	<2	35	<5	<5	47	<2	<2	9	5	6	271	0.51	0.02	1.26	0.27	0.03	0.03
281992	3	<4	5	<.4	<2	9	<1	<1	1	0.18	<2	<4	<5	<5	4	<2	<2	2	<2	<2	22	0.01	<.01	0.21	0.04	0.02	0.01
281993	23	4	45	<.4	<2	116	<1	13	21	2.08	<2	34	<5	<5	53	<2	<2	8	4	5	516	0.5	0.06	1.1	0.27	0.04	0.03
281994	22	4	53	<.4	<2	102	<1	8	16	2.07	2	28	<5	<5	59	<2	<2	7	2	3	497	0.34	0.07	0.78	0.24	0.04	0.05

	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
Field ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
281995	25	<4	42	<.4	<2	132	<1	6	7	0.6	<2	11	<5	<5	13	<2	<2	11	2	3	654	0.05	<.01	0.45	0.25	0.04	0.03
281996	8	<4	22	<.4	<2	116	<1	2	4	0.06	<2	<4	<5	<5	2	<2	<2	14	<2	<2	310	0.08	<.01	0.04	0.71	0.03	0.04
281997	10	<4	25	<.4	<2	275	<1	1	4	0.42	<2	8	<5	<5	10	<2	<2	17	<2	2	89	0.04	0.02	0.23	0.54	0.03	0.06

Strike Rock Geochemistry 1998																										
	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K
FIELD ID	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
RKMR-7	360	<4	25	0.4	<2	25	<1	19	119	1.64	<2	70	<5	<5	10	<2	3	18	<2	<2	297	2.46	0.03	2.03	0.79	0.03	<.01
RKMR-7C	449	<4	87	<.4	<2	37	<1	28	65	5.5	<2	80	<5	<5	130	<2	2	7	21	5	651	1.38	0.32	2.36	2.27	0.08	0.01
RKMR-7E	364	27	37	1.2	<2	81	<1	18	90	1.38	<2	88	<5	13	16	113	<2	16	<2	2	199	1.61	0.05	1.58	0.99	0.02	<.01
RKMR-8	1866	95	13	<.4	10	111	<1	9	9	E37.09	<2	61	<5	<5	283	3	<2	3	<2	<2	37	0.06	0.15	0.25	0.04	0.04	0.06
RKMR-10A	3616	10	55	<.4	<2	248	<1	29	1018	E14.85	<2	1345	<5	<5	34	2	3	3	<2	<2	247	8.64	<.01	1.62	0.04	<.01	<.01
RKMR-10B	3806	<4	56	<.4	<2	105	<1	37	1339	7.26	<2	1533	<5	5	37	<2	3	<2	2	<2	422	16.29	<.01	1.71	0.01	0.01	<.01
PAM-98002	310	<4	50	<.4	<2	41	<1	27	67	6.46	<2	100	<5	<5	147	<2	<2	10	14	3	613	1.59	0.33	3.29	3.4	0.06	0.01
PAM-98003	2077	17	391	<.4	<2	114	<1	16	4	E49.49	<2	92	<5	<5	9	5	<2	2	<2	<2	160	0.08	0.02	0.16	0.02	0.04	<.01
PAM-98013	783	<4	204	<.4	<2	56	<1	59	94	5.95	<2	121	<5	<5	173	<2	<2	8	18	4	1024	1.71	0.39	2.67	2.35	0.08	0.05
PAM-98015	1047	<4	134	<.4	<2	28	<1	49	69	4.57	<2	44	<5	<5	107	<2	<2	44	12	<2	1025	2.29	0.56	2.55	4.79	0.05	0.07

Strike Pit Geochemistry 1998																												
FIELD	NUMBER	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K	P
depth	(cm)	ppm	pp	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm
HOLE1	0-25	E25900	<4	220	0.9	<2	702	<1	10	101	1.39	2	78	<5	<5	20	<2	<2	25	82	13	374	0.84	0.01	1.16	1.71	0.02	0.03	1232
HOLE1	25-29	1739	<4	37	0.9	11	64	<1	1	19	0.36	<2	15	<5	<5	6	<2	<2	5	5	<2	33	0.14	<.01	0.39	0.17	0.03	0.02	528
HOLE1	29-59	E20390	4	245	0.9	16	612	<1	33	115	2.26	2	123	<5	<5	32	<2	<2	23	75	17	453	1.2	0.02	1.68	1.55	0.02	0.05	1434
HOLE1	59-89	E10920	4	247	0.4	29	591	<1	10	113	2.21	2	124	<5	5	25	<2	<2	20	52	16	164	1.14	0.02	1.77	1.36	<.01	0.05	1473
HOLE2	0-23	9565	<4	194	<.4	7	93	1	58	171	1.38	<2	115	<5	<5	25	<2	<2	12	27	9	529	0.5	<.01	1.01	0.39	0.01	0.02	1469
HOLE2	33-68	1958	<4	136	<.4	21	79	<1	29	243	2.75	2	302	<5	<5	47	<2	<2	11	12	8	461	3.32	0.05	1.3	0.49	<.01	0.02	935
HOLE2	68-80	1319	<4	128	<.4	5	80	<1	23	239	2.41	<2	272	<5	<5	43	<2	<2	10	8	6	332	2.9	0.06	1.12	0.5	<.01	0.02	796
HOLE3	0-12	25	<4	67	<.4	15	121	<1	46	258	2.87	<2	366	<5	<5	41	<2	<2	7	2	3	1401	2.68	0.02	0.81	0.18	0.03	0.04	939
HOLE3	0-32	61	<4	81	<.4	20	292	<1	58	587	4.77	<2	704	<5	<5	74	<2	<2	13	8	5	2011	4.25	0.02	1.4	0.35	<.01	0.03	1794
HOLE3	32-57	28	<4	39	<.4	<2	104	<1	29	444	2.91	<2	512	<5	5	45	<2	<2	6	4	4	447	5.21	0.01	1.06	0.15	<.01	0.02	1003
HOLE3	57-67	38	<4	38	<.4	25	71	<1	24	412	2.39	<2	342	<5	<5	34	<2	<2	7	4	5	303	5.03	0.02	0.95	0.2	<.01	0.02	535
HOLE4	0-43	2358	<4	59	<.4	<2	160	<1	18	194	4.26	<2	475	<5	<5	50	<2	<2	7	9	5	387	2.81	0.04	1.39	0.2	<.01	0.02	1472
HOLE4	43-51	1288	<4	46	<.4	<2	112	<1	17	162	8.87	<2	426	<5	<5	61	<2	<2	4	3	<2	325	2.27	0.09	1.05	0.13	<.01	0.02	1345
HOLE4	51-59	1149	<4	53	<.4	30	123	<1	25	194	4.71	<2	461	<5	6	52	<2	<2	5	6	4	444	2.85	0.06	1.26	0.2	<.01	0.01	1236
HOLE4	59-69	1610	<4	49	<.4	50	154	<1	19	172	9.96	<2	486	<5	<5	66	<2	<2	4	3	<2	391	2.24	0.12	1.17	0.15	<.01	0.01	1341
HOLE4	69-99	677	<4	41	<.4	<2	153	<1	18	148	4.3	<2	373	<5	<5	49	<2	<2	5	3	3	350	2.15	0.07	1.04	0.17	<.01	0.01	992
HOLE5	0-30	406	<4	53	<.4	<2	57	<1	7	39	1.23	<2	81	<5	<5	28	<2	<2	7	3	3	123	0.44	0.01	0.7	0.17	0.01	0.01	761
HOLE5	30-60	2178	<4	203	<.4	19	125	<1	27	132	2.54	2	201	<5	<5	64	<2	<2	14	12	7	385	1.48	0.01	1.59	0.61	<.01	0.01	1851
HOLE5	60-80	489	<4	151	<.4	16	83	<1	19	186	2.63	2	218	<5	<5	48	<2	<2	11	7	6	246	2.88	0.04	1.09	0.49	<.01	0.01	975

APPENDIX 5

1998 DIAMOND DRILL HOLE LOGS AND GEOCHEMISTRY DATA

Summary Log ST98-01

ST98-01 446370 E 6819452 N 1530 m a.s.l.

Location Yukon **Azimuth** 69

Project STRIKE **Dip** -45

MapSheet 105 G 8 **Total Length** 130 m

From	To	Code1	Code2	Code3
0.0	5.2	OVB		
5.2	5.3	GSC		
5.3	9.1	LMBX		
9.1	10.1	MBX		
10.1	10.4	GSC	MT	
10.4	13.0	MBX		
13.0	15.0	FLT		
15.0	17.1	MBX		
17.1	20.9	HMBX		
20.9	22.6	FLT		
22.6	25.7	HMBX		
25.7	26.2	MBX		
26.2	27.0	HMBX		
27.0	28.6	FLT		
28.6	31.1	MBX		
31.1	35.4	FLT		
35.4	38.1	HMBX		
38.1	41.4	MF		
41.4	43.5	HMBX		
43.5	44.3	MT		
44.3	46.4	FLT		
46.4	46.9	MF		
46.9	47.2	HSC		
47.2	48.8	HMBX		
48.8	51.8	HSC		
51.8	52.1	HMBX		
52.1	53.8	MT		
53.8	70.6	UM		
70.6	97.2	HMBX		
97.2	99.1	FLT		
99.1	101.6	MBX		

101.6	103.1	FLT	UM
103.1	104.2	FLT	
104.2	104.5	FLT	UM
104.5	105.0	FLT	
105.0	105.9	LMBX	
105.9	133.5	HMBX	

Hole_ID	**ST98-01**	**Hole_Type**	Diamond	*Purpose/Comments*	
x	446370	**Survey_Type**		test weak UTEM/HLEM conductor located at 500E on L800N, upslope of ferricrete and a coincident, strong Cu soil anomaly. Casing left in the hole.	
y	6819452	**Drill_Type**	LF-70		
z	1530	**Hole_Diamete**	NQ		
Azimuth	69	**Drill_Operator**	D.J. Drilling		
Dip	-45	**Drill_Rig**	Fly drill		
Total Length	133.5				
Location	Yukon	**StartDate**	98/07/03		
Grid	Strike1	**EndDate**	98/07/06		
Project	STRIKE	**Loggedby**	PAM		
Claim	Strike 329	**Sampledby**			
MapSheet	**105 G 8**	**Reloggedby**			

Sperry Sun Survey Data

From	*To*	*Azimuth*	*Dip*
0	69	-45	

Cominco

From (m)	*To (m)*	*Geological Description*	*Lab #*	*FROM*	*TO*	*Cu ppm*	*Ni ppm*	*Cr ppm*
0.0	5.2	Overburden						
5.2	5.3	Grey Chert Light grey to green grey, buff and dark grey coloured, thin bedded to laminated chert with 1-4 mm interbeds at 62 deg to CA. Interval is badly broken with a sharp (conformable) lower contact.						
5.3	9.1	Heterolithic (Epiclastic) Mafic Volcanic Breccia Light to medium green, reworked, epiclastic breccia comprising 50-80%, angular to subangular fragments ranging in size from 2 mm to 4.5 cm. Fragments consist of dark to medium grey green, fine-grained mafic flow, light to medium green grey mafic-intermediate flow, light grey dacitic(?) flow and light grey to buff and pinkish grey chert. Mafic flow fragments predominate. Matrix comprises light grey, very fine-grained hyalotuff and/or fine, granular hyaloclastite with chloritic glassy shards. Siliceous cherty interbeds (or strong cross cutting tectonic foliation) are present. Interval is cut by locally abundant late, dark green, quartz-chlorite+carbonate tension gashes/veins containing trace-1% fine disseminated pyrite. Malachite and Mn-stained, quartz-chlorite-pyrite-chalcopyrite fractures are present from 5.2-5.7 m. Unit becomes badly broken from 7.6-7.9 m. Foliation at 68 deg to CA at 6.9 m. Bedding(?) at 60 deg to CA at 7.1 m. The lower contact is gradational.	R9809727	5.9	6	454	75	123
9.1	10.1	Mafic Volcanic Breccia Monolithic, medium green grey mafic flow breccia and hyalotuff containing 5-25%, fine-grained mafic fragments, up to 2.5 cm, set in a siliceous, light green grey to dark grey cherty hyalotuff matrix (locally hyaloclastitic textures preserved). Sharp lower contact sheared parallel to foliation at 64 deg to CA.						

From (m)	To (m)	Geological Description	Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
10.1	10.4	Grey Chert Laminated, dark grey to light green coloured chert and minor greenish hyalotuff containing trace-2% blebs and fine-grained disseminations of pyrite elongate parallel to bedding. Bedding is generally at 10-15 deg to CA, up to 45 deg to CA at the lower, conformable contact.	R9809728	10.1	10.2	92	135	200
10.4	13.0	Mafic Volcanic Breccia Broken and sheared interval of mafic breccias, as above. Shearing has produced a foliation parallel, tectonic breccia fabric which overprints the original breccia. Unit is cut by thin to 10 cm wide, fine-grained quartz-kspar(pinkish colour)+epidote-chlorite veins with trace pyrite. Unit becomes less deformed and veined from 11.2 m and more massive mafic flow in character from 12.4 m. Bedding is at 45 deg to CA at 12.3 m.						
13.0	15.0	Fault Very rubbly and broken interval with abundant rusty weathering fractures and quartz-kspar(?)-epidote veins in a mafic breccia.						
15.0	17.1	Mafic Volcanic Breccia Broken (locally faulted) interval of mafic breccia and hyalotuff, as above, with numerous reddish-brown veinlets/fractures (?) oriented parallel to the foliation and an increased degree of epidote alteration. Unit still shows good breccia textures locally.						
17.1	20.9	Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia Badly broken interval containing mafic flow and hematite-altered mafic flow fragments, up to 2 cm, in a hematitic argillite matrix. Where mafics are hematitic, the fragments are fine to medium-grained and chlorite-epidote altered. Fine- to medium-grained quartz-epidote+chlorite-hematite-carbonate veins are locally present. 18.3 20.2 Vein Strong, fine to medium-grained epidote-quartz veining and faulting (i.e.. 18.6-19.4 m) at about 10-20 deg to CA.						
20.9	22.6	Fault Badly broken, rubbly core with poor recovery.						
22.6	25.7	Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia As above. 23.7 25.7 Vein Strong, fine to medium-grained epidote-quartz veining at 10-15 deg to CA.						
25.7	26.2	Mafic Volcanic Breccia As above.						

From (m)	To (m)	Geological Description	Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
26.2	27.0	Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia As above. 26.8 27.0 Vein Very fine-grained, silica+kspar(?)-epidote altered chert or vein. Lack of any internal texture suggests a vein rather than chert. Several late quartz-chlorite+epidote-pyrite veinlets are present. Foliation at 55 deg to CA.						
27.0	28.6	Fault Badly broken, rubbly core with poor recovery.						
28.6	31.1	Mafic Volcanic Breccia Strongly broken interval of green mafic breccias and hyalotuff with minor grey chert which are generally strongly brecciated and locally, quartz-epidote+carbonate veined. Foliation is at 60 deg to CA at 29.5 m.						
31.1	35.4	Fault Broken zone with strong fault gouge and lost core. Box contains washed sand from this structure (see also Box 6) containing sulphide-rich pebbles. 32.5 38.1 Very poor recovery. Area of wash from 32.5-35.4 m. Recovered core is as pebbles only. Two styles of sulphides are present. Several pieces of medium grey to light grey silica are present containing 10-40% fine to medium-grained disseminated pyrite and 1-5% fine chalcopyrite (possible sulphidic chert). Other core pieces contain massive, very fine-grained pyrite (up to 3.5 cms wide) with 3-8% disseminated fine chalcopyrite and possible trace bornite(?). These appear to be late sulphide-quartz+carbonate veins which cross cut the hematitic cherts.	R9809729	32.5	35.5	31310	13	69
35.4	38.1	Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia Badly broken and faulted interval of hematitic, heterolithic breccias, as above, and lesser rubble of mafic flow and flow breccia.	R9809730	36.1	38	18560	24	78
38.1	41.4	Mafic Volcanic Flow Strongly faulted, gouged and calcite-carbonate-quartz-epidote veined, light green, fine-grained, massive, epidote+chlorite altered mafic volcanic flow (tuff?). Unit has more appearance of a hyalotuff between 40.8-41.4 m. Foliation at 50 deg to CA at 40.9 m. 38.1 38.6 Fault Strong gouge and broken zone marked by abundant low angle calcite-carbonate-quartz veins. 39.2 40.3 Fault Gouge zone with poor recovery. Upper contact at 52 deg to CA; lower contact at 76 deg to CA. Fault contains crushed quartz-calcite-carbonate-epidote veins. Internal "foliation" maybe more like 55-60 deg to CA.						

From (m)	To (m)	Geological Description	Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
41.4	43.5	**Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia** Maroon to medium green coloured, variably hematitic mafic flow and flow breccia with intervals of green mafic breccia/massive flow. Where fragmental textured, the matrix is fine chlorite-quartz+epidote. Unit is locally badly broken and veined. *41.8 42.2 Vein* Strongly sheared interval with several epidote-carbonate-quartz-calcite veins. Minor fault gouge is present.	R9809731	42.6	42.7	91	78	117
43.5	44.3	**Mafic Tuff/Hyalotuff** Well foliated and locally strongly broken interval of medium green fine-grained, finely banded mafic tuff/tuff breccia (hyaloclastite). Veining comprises late calcite-chlorite+carbonate-quartz and, slightly earlier, fine epidote-quartz-carbonate+calcite chlorite veins. Upper contact is sharp and conformable. Banding/bedding/foliation at 43.6 m is at 46 deg to CA. Lower contact is a fault.						
44.3	46.4	**Fault** Strongly gouged and crushed zone with poor core recovery. Includes hematitic and non hematitic mafic lithologies and variable quartz-calcite-epidote veining. Lower contact is sharp at 38 deg to CA.						
46.4	46.9	**Mafic Volcanic Flow** Massive, fine-grained, aphyric, light to medium grey green coloured mafic flow/dyke(?). Possibly a fine-grained tuff(?). Cut by numerous thin white quartz-carbonate+calcite veins/veinlets. Lower 20 cms appears more banded/foliated (bedded?) in conformable contact with underlying chert.						
46.9	47.2	**Hematitic Chert** Light to medium maroon coloured, banded (foliation parallel) hematitic chert cut by abundant clear grey quartz veinlets and fractures. Banding is at 51 deg to CA. Lower contact is sharp and conformable.						
47.2	48.8	**Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia** Mottled bright maroon to bright green, mixed hematitic argillite and interlaminated, dark green chlorite-quartz-rich, mafic hyalotuff with large variably epidote(and hematite) altered mafic flow fragments up to few 10s of cms. Mafics are generally aphyric and fine-grained, however, the fragments are often finely mottled with epidote and lesser hematite. Foliation/bedding at 43 deg to CA at 47.6 m. Lower contact is a narrow fault gouge zone.						
48.8	51.8	**Hematitic Chert** Medium to bright maroon coloured, banded/bedded hematitic chert, as above. Also cut by abundant cleat grey quartz veinlets/tension gashes. Hematite-rich seams/argillite laminations(?) are developed parallel to the foliation and help define the internal banding. Banding is consistent at about 59 deg to CA. Late quartz-carbonate+calcite-chlorite veins are present.	R9809732	50.8	50.9	44	23	62
51.8	52.1	**Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia** Thin interval of brecciated/epidote-quartz-calcite-chlorite veined, hematitic volcanic. Interval is somewhat sheared and broken.						

From (m)	To (m)	Geological Description
52.1	53.8	**Mafic Tuff/Hyalotuff**

Thin banded to laminated, light green to green grey, weakly epidote altered chloritic tuff containing light green epidote altered mafic flow fragments up to 4 cms which locally contain quartz amygdules (as at 52.3 m) up to 1.5 mms. Tuff contains isolated oval quartz amygdules and wisps/streaks of dark chlorite after glassy fragments. Bedding is at 74 deg to CA at 52.5 m. After 52.6 m, unit becomes thicker banded/bedded with a few large (20-30 cms) massive mafic flow fragments, which are cut by epidote-hematite-quartz+chlorite veins. Basal 35 cms becomes very light coloured and strongly talc-chlorite(?) altered representing alteration adjacent to the underlying ultramafic. The lower contact is sharp and fault gouged at 72 deg to CA.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809733	52.3	52.4	51	[illegible]	203

From (m)	To (m)	Geological Description
53.8	70.6	**Serpentinite/Ultramafic**

Strongly sheared and crushed/gouged, dark green to black coloured, magnetic serpentinite. Unit is cut by abundant hairline to thin calcite veinlets and lesser, light green talc/chlorite veinlets. Fault gouge/foliation oriented at 43 deg to CA at 57.0 m and 49 deg at 69.0 m. Fault zone with poor recovery/lost core from 57.2-66.3 m. Lower contact is sharp.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809734	56.5	56.6	16	[illegible]	1144
R9809735	70.2	70.3	14	[illegible]	1212

From (m)	To (m)	Geological Description
70.6	97.2	**Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia**

Thick, poorly foliated sequence of densely packed, variably hematitic mafic flow fragments (1-30 cm) set in a matrix of fine hematitic argillite and carbonate-calcite-epidote-chlorite. Fragments range from relatively unaltered, light to medium olive grey, fine aphanitic flow with quartz altered mafics and occasional amygdules, to weak to moderately altered, light maroon hematite mottled flow to strongly hematitic mafic flow fragments with trace-5%, <1 mm calcite amygdules and bright green chlorite-quartz altered mafics(?). Fragment margins are sharp and only rarely show chilled rims. Abundant calcite-epidote-chlorite-quartz-hematite veins and veinlets are present throughout. The amygdaloidal (calcite+silica and/or chlorite) and amphibole(?) porphyritic (silica-chlorite+epidote?) textures are quite diagnostic of this interval. No obvious argillite fragments were seen. From 95.8-97.2 m, unit is non-hematitic and takes on a tuffaceous character. Lower contact is sharp and a fault.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809736	77.5	77.6	129	179	377
R9809737	91.7	91.8	67	149	194

From (m)	To (m)	Geological Description
97.2	99.1	**Fault**

Strong fault gouge development and crushed rock. Poor core recovery.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809738	97.7	97.8	58	1061	1067

From (m)	To (m)	Geological Description
99.1	101.6	**Mafic Volcanic Breccia**

Badly broken to rubbly interval of predominantly light olive grey mafic flow fragments and very weakly hematitic fragments which are cut by abundant epidote-quartz-chlorite-carbonate veins and veinlets. Lower contact is sharp. Foliation at 46 deg to CA at 100.2 m.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809739	100.3	100.4	36	[illegible]	116

From (m)	To (m)	Geological Description
101.6	103.1	**Fault**

Light green grey to slightly bluish grey coloured, strongly foliated and sheared talc-rich rock containing minor fragments of serpentinite. This interval is very similar to the talc-rich alteration margin above to top contact of the serpentinite at 53.8 m. Bottom 25 cms is strongly fault gouged. Shearing/foliation at 33 deg to CA at 102.7 m.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809740	102.3	102.4	20	[illegible]	1080

From (m)	To (m)	Geological Description
103.1	104.2	**Fault** Strongly fault gouged and crushed, locally hematitic, mafic volcanics.
104.2	104.5	**Fault** As above. Foliation at 52 deg to CA.
104.5	105.0	**Fault** Strongly fault gouged and crushed interval with poor recovery.
105.0	105.9	**Heterolithic (Epiclastic) Mafic Volcanic Breccia** Light to medium greenish grey coloured, poorly foliated breccia containing 2 mm to 5 cm sized angular to subrounded fragments set in an epidote-Fe carbonate matrix. Fragments are generally matrix supported. Clasts include light to dark greenish grey aphanitic flow fragments, light grey, variolitic flow fragments and light to medium green chloritic, glassy fragments. Epidote-calcite+chlorite-quartz veinlets are common. Unit becomes more massive and broken from 105.5-105.9 m. Lower contact is gradational.
105.9	133.5	**Hematitic, Heterolithic (Epiclastic) Mafic Volcanic Breccia** Weak to non foliated unit with good fragmented textures throughout. Fragments are predominantly fine-grained, greenish mafic volcanics which range from relatively fresh looking to weakly hematitic (especially rimming fragments) to pervasively hematite altered. Fragments range from a few mms to 40 cms in size and are generally angular to subrounded. Matrix is minor to locally more abundant, supporting the fragments. The matrix is variable from fine to medium-grained epidote-chlorite-quartz-hematite (locally veins and veinlets) to hematite to calcite-hematite (locally veins and veinlets also). The nature of the matrix (epidote or calcite rich) may suggest that the volcanic has been fractured/fragmented insitu or along calcite/epidote vein structures. Hematitic mafic fragments are locally bleached adjacent to epidote veins. Minor thin fault gouge is developed at 106.9 m, 117.9 m and 118.5 m. Unit contains nil-trace disseminated pyrite.

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809741	107.8	107.9	96	155	151
R9809742	116.2	116.3	50	115	145
R9809743	124.3	124.4	42	105	110
R9809744	132.2	132.3	91	137	188

ST98-01 RUN and RECOVERIES

From	To	Interval	Actual	% Recovery
5.2	5.8	0.60	0.60	100.0
5.8	6.4	0.60	0.60	100.0
6.4	7.6	1.20	1.20	100.0
7.6	7.9	0.30	0.25	83.3
7.9	9.1	1.20	1.20	100.0
9.1	10.7	1.60	1.50	93.8
10.7	11.3	0.60	0.40	66.7
11.3	12.5	1.20	1.00	83.3
12.5	14.3	1.80	0.75	41.7
14.3	15.5	1.20	0.35	29.2
15.5	16.8	1.30	0.85	65.4
16.8	17.4	0.60	0.40	66.7
17.4	19.2	1.80	0.90	50.0
19.2	19.8	0.60	0.35	58.3
19.8	21.9	2.10	0.70	33.3
21.9	22.6	0.70	0.20	28.6
22.6	23.5	0.90	0.50	55.6
23.5	26.2	2.70	1.00	37.0
26.2	27.4	1.20	0.45	37.5
27.4	27.7	0.30	0.20	66.7
27.7	28.7	1.00	0.15	15.0
28.7	29.6	0.90	0.90	100.0
29.6	31.1	1.50	1.20	80.0
31.1	32.5	1.40	0.20	14.3
32.5	35.4	2.90	0.20	6.9
35.4	36.3	0.90	0.60	66.7
36.3	37.8	1.50	0.00	0.0
37.8	38.7	0.90	0.55	61.1
38.7	39.5	0.80	0.70	87.5
39.5	40.8	1.30	0.90	69.2
40.8	42.7	1.90	1.90	100.0
42.7	44.8	2.10	2.00	95.2
44.8	47.9	3.10	2.20	71.0
47.9	50.9	3.00	3.00	100.0
50.9	52.6	1.70	1.70	100.0
52.6	53.9	1.30	1.20	92.3
53.9	57.0	3.10	3.00	96.8
57.0	60.0	3.00	1.30	43.3
60.0	62.8	2.80	0.80	28.6
62.8	64.6	1.80	0.40	22.2
64.6	66.1	1.50	0.65	43.3
66.1	68.0	1.90	1.30	68.4
68.0	69.2	1.20	1.20	100.0
69.2	72.3	3.10	2.75	88.7
72.3	75.3	3.00	3.00	100.0
75.3	78.3	3.00	3.00	100.0
78.3	78.5	0.20	0.20	100.0
78.5	81.4	2.90	2.90	100.0
81.4	82.3	0.90	0.90	100.0
82.3	84.4	2.10	2.10	100.0
84.4	86.9	2.50	2.50	100.0
86.9	90.1	3.20	3.20	100.0
90.1	92.0	1.90	1.90	100.0
92.0	95.1	3.10	3.10	100.0
95.1	95.7	0.60	0.60	100.0
95.7	96.6	0.90	0.90	100.0
96.6	99.5	2.90	1.70	58.6
99.5	100.9	1.40	1.40	100.0
100.9	103.9	3.00	2.00	66.7
103.9	105.5	1.60	1.20	75.0
105.5	108.4	2.90	2.80	96.6
108.4	108.8	0.40	0.40	100.0
108.8	111.3	2.50	2.40	96.0
111.3	113.4	2.10	2.00	95.2
113.4	114.9	1.50	1.50	100.0
114.9	118.0	3.10	3.20	103.2
118.0	121.0	3.00	3.00	100.0
121.0	124.1	3.10	3.10	100.0
124.1	125.9	1.80	1.80	100.0
125.9	126.5	0.60	0.40	66.7
126.5	129.2	2.70	2.60	96.3
129.2	130.1	0.90	0.90	100.0
130.1	132.0	1.90	1.70	89.5
132.0	133.2	1.20	1.20	100.0
133.2	133.5	0.30	0.30	100.0
133.5 EOH				
		128.30	100.10	78.0 % recovery

Summary Log ST98-02

ST98-02 446395 E 6819150 N 1518 m a.s.l.

Location Yukon **Azimuth** 69

Project STRIKE **Dip** -45

MapSheet 105 G 8 **Total Length** 110 m

From	To	Code1	Code2	Code3
0.0	11.9	OVB		
11.9	24.1	UM		
24.1	24.9	LGB		
24.9	27.0	GSC		
27.0	39.9	LGB		
39.9	53.8	FLT		
53.8	58.2	MBX		
58.2	59.5	LGB		
59.5	63.1	MBX		
63.1	78.3	UM		
78.3	91.0	MBX		
91.0	111.9	UM		

Hole_ID	ST98-02	Hole_Type	Diamond
x	446395	Survey_Type	Acid
y	6819150	Drill_Type	LF-70
z	1518	Hole_Diamete	NQ
Azimuth	69	Drill_Operator	D.J. Drilling
Dip	-45	Drill_Rig	Fly drill
Total Length	111.9		
Location	Yukon	StartDate	98/07/07
Grid	Strike	EndDate	98/07/08
Project	STRIKE	Loggedby	RKM
Claim	Strike 329	Sampledby	
MapSheet	105 G 8	Reloggedby	

Purpose/Comments

test upslope of ferricrete and a strong coincident Cu soil anomaly. Casing (10') left in the hole.

Sperry Sun Survey Data

From	To	Azimuth	Dip
0	69	-45	
111	69	-52	

Cominco

From (m)	To (m)	Geological Description	Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
0.0	11.9	Overburden Two 5 cm hematitic chert fragments and one 5 cm medium green mafic volcanic fragment.						
11.9	24.1	Serpentinite/Ultramafic Dark green strongly magnetic serpentinite breccia comprising 40-90 % angular fragments, ranging in size from 0.2 to 3 cm. Fragments consist of medium green, dark green and dark red green serpentinite in a green black matrix. Minor massive 10-45 cm sections occur and a minor 30 cm section with dark red green and dark green bands reflecting a foliation 40 deg to CA occurs from 22.1-23.5. Minor red brown oxidation occurs on some fracture faces. 11.9-14.4 has a porous finely fractured texture due to tension/shearing. 11.9-14.7 is moderately broken while 14.7-23.5 is badly broken. The unit is bounded downward by a fault breccia containing angular fragments of serpentinite in a white fault gouge matrix.	R9809716 R9809717	16.4 23	16.5 23.1	108 11	2377 2300	113 1367
24.1	24.9	Leuco Gabbro Complex unit consisting of UM fault breccia with a white clayey gouge matrix which is underlain by a light green grey chlorite altered plagioclase, mica? pegmatitic phase of leuco gabbro. The pegmatite also contains 0.2-4 cm angular fragments of green chert and medium green serpentine. This is underlain by a light green beige very fine grained breccia with angular light green fragments (serpentine, mafic volcanic?) and a grey matrix. This is underlain by a leuco gabbro pegmatite/dike breccia similar to that above. The fault and light green beige breccia units are mostly rubble and recovery is poor.						
24.9	27.0	Grey Chert Massive medium grey to light green chert with common wispy quartz veinlets and trace pyrite disseminations. This unit is badly broken and is rubble from 25.3-27 and recovery is very poor. The unit is unconformably intruded at upper and lower contacts by LGB intrusive.						

From (m)	To (m)	Geological Description	Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
27.0	39.9	Leuco Gabbro Medium green to grey pegmatite to large grained leuco gabbro intrusive/dike with abundant zenoliths of angular to subrounded fragments (0.2 -3 cm) of maroon hematitic mafic volcanic, green mafic volcanic and larger (up to 6 cm) fragments of medium green chert. From 28.3-28.8 is a xenolith of medium grey green fine grained ash tuff (andesite?) or grey wacke? The unit is moderately broken and is terminated down-section by a fault.	R9809718	28.5	28.6	463	196	170
			R9809719	33.3	33.4	984	326	178
39.9	53.8	Fault Moderately to badly broken and rubbly zone with poor recovery consisting of strong fault gouge with green chert, light to medium green mafic/intermediate volcanic and dark green serpentinite. The volcanics predominate. Locally exists a 30-32 deg to CA foliation in the larger fragments of volcanic. Very strong fault gouge separates this upper part of the unit from a lower dominantly magnetic serpenite breccia with short (20 cm) massive sections and more fault gouge.						
53.8	58.2	Mafic Volcanic Breccia Bilithic, medium green grey mafic flow breccia and hyalotuff containing 15-50%, fine-grained angular to subrounded dark green and lilac green grey mafic volcanic fragments, up to 12 cm, set in a siliceous, light green to dark grey hyalotuff matrix. Fine dark green chloritic angular fragments in the matrix may represent glass shards. Locally 2-3 mm grey grains (spherulites?) (30-90 %) may be found in medium green volcanic clasts. A minor foliation at 55 deg to CA has been developed in the matrix. Trace pyrite disseminations occur sporadically in the lilac green grey clasts. Minor calcite blebs and veinlets occur generally in clasts while epidote alteration as veinlets in the matrix, parallel to the foliation is common. The unit is terminated down dip by an intrusion/dike. Recovery was good due to the unbroken core.	R9809720	54.3	54.4	56	107	127
58.2	59.5	Leuco Gabbro Light to medium green pegmatitic dike with light to dark green mafic volcanic fragments up to 2 cm. Mineralogy is same as LGB (see above). This unit is moderately broken.						
59.5	63.1	Mafic Volcanic Breccia Medium grey to green mafic volcanic breccia with predominantly medium grey with minor chlorite filled amygdules in clasts up to 5 cm in a light green chloritic hyalotuff matrix. This unit is moderately broken and recovery was less than 20%.						
63.1	78.3	Serpentinite/Ultramafic Serpentinite (see above) with intervals of white fault gouge with serpentinite breccia at 63.1-73.9 and 75.7-78.3. The unit is moderately to badly broken but recovery is decent due to sections of fault gouge/breccia not being broken.	R9809721	64.6	64.7	11	1318	1737
			R9809722	74	74.1	7	1667	1381

From (m)	To (m)	Geological Description
78.3	91.0	Mafic Volcanic Breccia

Monolithic, medium green mafic flow breccia and hyalotuff containing 50-70%, fine-grained angular to subrounded dark green and medium green mafic volcanic fragments, up to 25 cm, set in a siliceous, light green to dark grey hyalotuff matrix. Minor dark green chloritic rounded grains in clasts may represent chloritized pyroxene phenocrysts. A weak foliation at 47 deg to CA has been developed locally in the matrix. From 79.6-79.65 2-5% 2-3 mm pyrite disseminations occurs in a dark green mafic clast. Similarly from 90.0-91 is 4% pyrite disseminations up to 3mm. Minor 2-15% calcite blebs and veinlets occur throughout while epidote alteration occurs sporadically as veinlets in the matrix parallel to the foliation. The unit is terminated down dip by an UM/fault unit. Recovery was reasonably good due to the unbroken core until 88.4 where the unit is more broken..

80.6 80.9 Leuco Gabbro

Dike of light to medium green large grained leuco gabbro with minor mafic volcanic breccia.

80.6 80.9 Leuco Gabbro

Medium to light green large grained dike of leuco gabbro with minor <4 cm breccia fragments of medium green mafic volcanic

Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809723	81.5	81.6	53	126	99
R9809724	90.8	90.9	260	106	194

From (m)	To (m)	Geological Description
91.0	111.9	*Serpentinite/Ultramafic*

Large interval of serpentinite and serpentinite breccia with an interval of strong white fault gauge at 100.7-105. Minor light green clasts of siliceous cherty rock. Minor 1 cm talc veins crosscut the zone at 45 deg to the CA while minor calcite veinlets with a pink fine grained alteration mineral occur locally. One minor interval of red brown weathering serpentinite breccia (oxidation?).

96.4 96.8 Serpentinite/Ultramafic

Light pink grey breccia with calcite and an unknown fine crystalline mineral as the matrix and serpentinite as clasts.

107.9 108.6 Serpentinite/Ultramafic

Dark red brown serpentinite breccia (oxidized?).

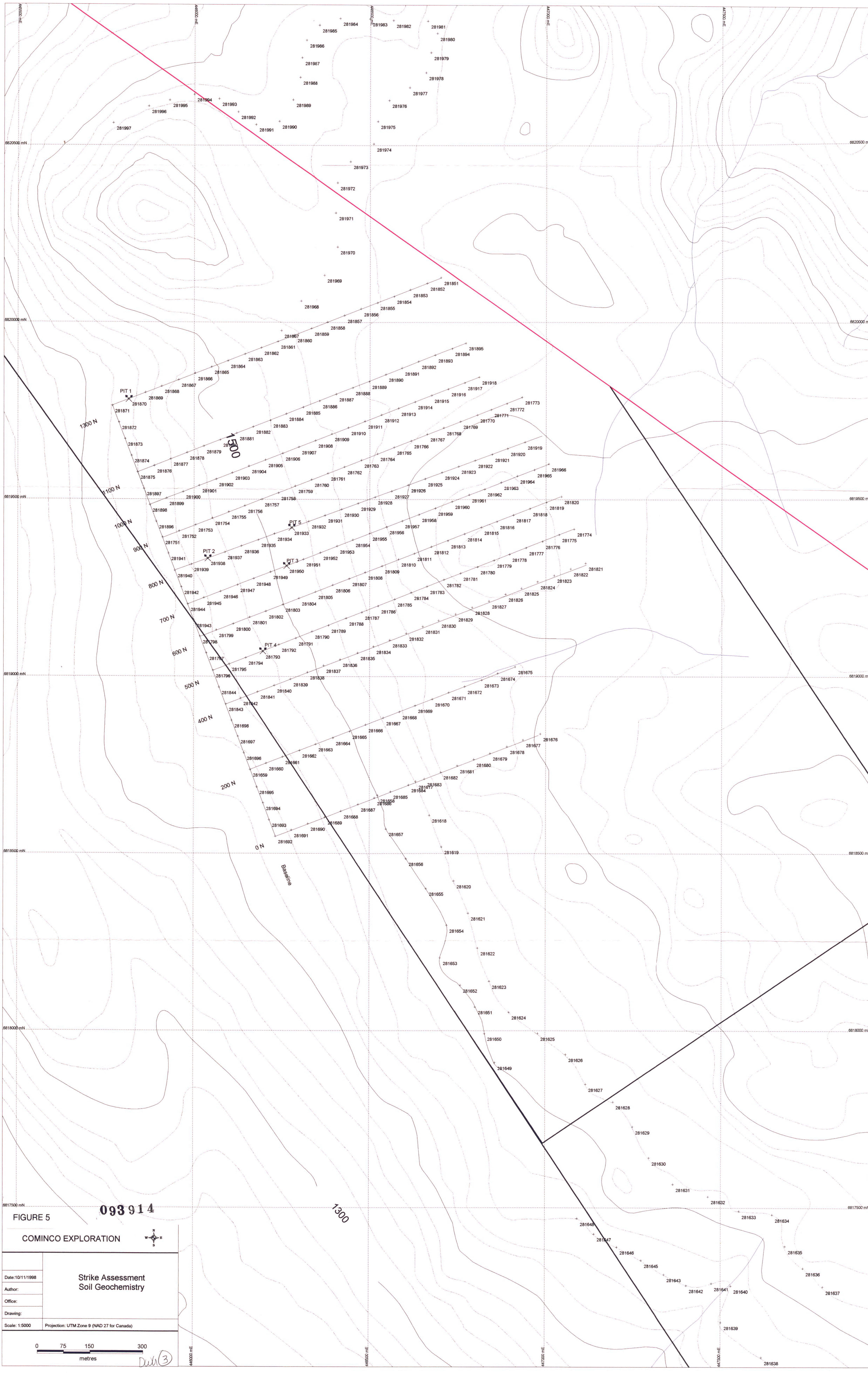
Lab #	FROM	TO	Cu ppm	Ni ppm	Cr ppm
R9809725	100.2	100.3	91	111	240

ST98-02 RUN and RECOVERIES

From	To	Interval	Actual	% Recovery
11.9	14.3	2.40	2.10	87.5
14.3	17.4	3.10	1.80	58.1
17.4	19.5	2.10	0.70	33.3
19.5	20.4	0.90	0.50	55.6
20.4	21.9	1.50	0.50	33.3
21.9	23.5	1.60	0.60	37.5
23.5	24.4	0.90	0.75	83.3
24.4	25.3	0.90	0.60	66.7
25.3	26.5	1.20	0.10	8.3
26.5	27.4	0.90	0.11	12.2
27.4	29.6	2.20	1.90	86.4
29.6	30.8	1.20	0.70	58.3
30.8	31.4	0.60	0.55	91.7
31.4	31.7	0.30	0.20	66.7
31.7	34.4	2.70	2.30	85.2
34.4	35.7	1.30	0.40	30.8
35.7	36.1	0.40	0.30	75.0
36.1	38.7	2.60	0.15	5.8
38.7	39.9	1.20	0.02	1.7
39.9	41.8	1.90	1.10	57.9
41.8	43.3	1.50	0.55	36.7
43.3	44.2	0.90	0.70	77.8
44.2	44.8	0.60	0.25	41.7
44.8	46.0	1.20	0.70	58.3
46.0	47.9	1.90	1.50	78.9
47.9	49.9	2.00	1.00	50.0
49.9	50.9	1.00	0.90	90.0
50.9	51.8	0.90	0.4	44.4
51.8	53.3	1.50	1.35	90.0
53.3	56.4	3.10	2.70	87.1
56.4	59.1	2.70	3.00	111.1
59.1	63.1	4.00	0.85	21.3
63.1	64.9	1.80	1.70	94.4
64.9	66.6	1.70	1.20	70.6
66.6	69.2	2.60	2.30	88.5
69.2	70.7	1.50	1.00	66.7
70.7	72.2	1.50	1.35	90.0
72.2	73.9	1.70	1.40	82.4
73.9	75.7	1.80	1.70	94.4
75.7	78.3	2.60	2.40	92.3
78.3	80.8	2.50	2.30	92.0
80.8	82.3	1.50	1.00	66.7
82.3	84.1	1.80	1.80	100.0
84.1	85.0	0.90	0.70	77.8
85.0	87.5	2.50	2.20	88.0
87.5	87.8	0.30	0.10	33.3
87.8	88.4	0.60	0.55	91.7
88.4	90.5	2.10	1.15	54.8
90.5	92.0	1.50	1.00	66.7
92.0	93.6	1.60	1.55	96.9
93.6	96.0	2.40	2.30	95.8
96.0	96.9	0.90	1.00	111.1
96.9	99.1	2.20	1.90	86.4
99.1	102.1	3.00	2.90	96.7
102.1	105.0	2.90	1.70	58.6
105.0	107.9	2.90	2.00	69.0
107.9	110.0	2.10	1.90	90.5
110.0	111.9	1.90	1.70	89.5
111.9 EOH				
		100.00	*70.08*	*70.1 % recovery*

1998 STRIKE DDH geochemistry

Lab#	Field#	Hole_ID	From	To	Interval	Cu	Pb	Zn	Ag	As	Ba	Cd	Co	Ni	Fe	Mo	Cr	Bi	Sb	V	Sn	W	Sr	Y	La	Mn	Mg	Ti	Al	Ca	Na	K	P
						ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm
R9809727		ST98-01	5.9	6.0	0.1	454	24	150	0.4	2	11	1	38	75	2.74	2	123	5	5	52	5	2	14	6	2	438	2.21	0.18	1.97	0.8	0.06	0.01	374
R9809728		ST98-01	10.1	10.2	0.1	92	7	74	0.4	2	34	1	43	135	2.16	2	200	5	5	30	2	2	5	2	2	584	3.32	0.06	2.57	1.01	0.04	0.03	102
R9809729		ST98-01	32.5	35.5	3.0	31310	55	273	8.4	14	5	4	142	18	18.45	23	69	5	5	9	2	4	2	2	2	77	0.13	0.01	0.2	0.01	0.01	0.01	50
R9809730		ST98-01	36.1	38.0	1.9	18560	68	978	5.7	8	6	8	159	24	19.67	17	78	5	5	50	3	2	5	3	2	568	1.05	0.01	1.12	0.66	0.01	0.01	598
R9809731		ST98-01	42.6	42.7	0.1	91	7	88	0.4	2	58	1	35	78	4.77	2	117	6	5	132	2	2	2	12	2	749	2.18	0.19	2.75	1.71	0.05	0.03	728
R9809732		ST98-01	50.8	50.9	0.1	44	13	34	0.4	2	565	1	8	23	1.12	2	62	5	5	7	2	2	4	4	10	521	0.33	0.01	0.45	0.12	0.01	0.12	171
R9809733		ST98-01	52.3	52.4	0.1	51	22	68	0.4	2	16	1	30	78	3.92	2	203	5	6	82	24	2	21	10	2	863	3.18	0.33	2.76	0.9	0.04	0.02	636
R9809734		ST98-01	56.5	56.6	0.1	16	4	27	0.4	2	15	1	88	1898	4.69	2	1144	5	5	30	2	2	19	2	2	803	9.96	0.01	0.53	8.13	0.01	0.01	10
R9809735		ST98-01	70.2	70.3	0.1	14	4	20	0.4	2	5	1	54	779	4.84	2	1212	5	5	19	2	2	2	2	2	426	9.66	0.01	0.49	0.56	0.01	0.01	10
R9809736		ST98-01	77.5	77.6	0.1	129	18	121	0.4	2	31	1	51	179	4.88	2	377	5	5	98	2	2	6	9	3	961	2.61	0.24	3.26	1.97	0.04	0.15	643
R9809737		ST98-01	91.7	91.8	0.1	67	23	131	0.4	2	20	1	40	149	4.14	2	194	5	5	79	4	2	17	10	3	825	2.06	0.37	2.48	1.74	0.06	0.07	605
R9809738		ST98-01	97.7	97.8	0.1	58	4	59	0.4	2	14	1	50	1061	4.46	2	1067	5	5	98	2	2	13	14	3	801	4.65	0.28	3.29	4.05	0.03	0.05	675
R9809739		ST98-01	100.3	100.4	0.1	36	4	112	0.4	2	14	1	34	65	4.4	2	116	5	5	81	2	2	11	11	3	1064	2.84	0.36	2.99	1.18	0.05	0.02	1475
R9809740		ST98-01	102.3	102.4	0.1	20	4	18	0.4	2	5	1	30	606	2.95	2	1080	5	5	48	2	2	2	4	2	628	2.79	0.03	1.45	2.92	0.01	0.01	77
R9809741		ST98-01	107.8	107.9	0.1	96	9	103	0.4	2	25	1	38	156	3.33	2	151	5	5	40	4	2	12	5	2	547	2.28	0.25	2.03	0.65	0.06	0.09	759
R9809742		ST98-01	116.2	116.3	0.1	50	4	49	0.4	2	17	1	22	115	2.8	2	145	5	5	34	2	2	5	4	2	456	2.2	0.13	1.83	2.82	0.04	0.1	690
R9809743		ST98-01	124.3	124.4	0.1	42	4	42	0.4	2	11	1	23	106	2.65	2	110	5	5	40	3	2	6	5	2	474	2.33	0.17	1.96	2.99	0.04	0.04	518
R9809744		ST98-01	132.2	132.3	0.1	91	4	42	0.4	2	11	1	27	137	1.84	2	188	5	5	47	2	2	55	4	3	418	1.97	0.24	1.8	4	0.04	0.03	569
R9809716		ST98-02	16.4	16.5	0.1	108	10	37	0.4	2	7	1	101	2377	8.19	2	113	5	5	4	2	2	2	2	2	511	18.39	0.01	0.17	0.02	0.01	0.01	11
R9809717		ST98-02	23.0	23.1	0.1	11	10	35	0.4	2	5	1	133	2300	5.24	2	1367	5	5	23	2	2	2	2	2	1458	18.75	0.01	0.36	0.05	0.04	0.01	10
R9809718		ST98-02	28.5	28.6	0.1	463	10	49	0.4	2	5	1	20	196	2.34	2	170	5	5	29	2	2	3	5	2	279	2.7	0.1	3.07	1.85	0.04	0.01	329
R9809719		ST98-02	33.3	33.4	0.1	964	22	76	0.4	2	6	1	21	226	2.21	2	178	5	5	20	2	2	2	4	2	263	3.08	0.06	2.47	0.76	0.03	0.01	203
R9809720		ST98-02	54.3	54.4	0.1	56	4	52	0.4	2	51	1	26	107	3.44	2	127	5	5	52	2	2	13	6	2	497	3.2	0.15	2.62	0.85	0.04	0.01	696
R9809721		ST98-02	64.6	64.7	0.1	11	5	29	0.4	2	5	1	96	1818	5.38	2	1737	5	5	27	2	2	2	2	2	652	15.73	0.01	0.54	0.61	0.01	0.01	10
R9809722		ST98-02	74.0	74.1	0.1	7	4	24	0.4	2	5	1	80	1667	4.56	2	1381	5	5	21	2	2	2	2	2	690	16.37	0.01	0.44	0.12	0.01	0.01	10
R9809723		ST98-02	81.5	81.6	0.1	53	10	62	0.4	2	11	1	26	126	3.6	2	99	5	5	47	3	2	3	10	2	813	3.41	0.13	2.88	0.96	0.04	0.01	532
R9809724		ST98-02	90.8	90.9	0.1	280	4	82	0.4	2	6	1	32	108	4.15	2	194	5	5	49	2	2	12	3	2	1209	6.15	0.07	4.01	0.3	0.01	0.01	224
R9809725		ST98-02	100.2	100.3	0.1	91	4	28	0.4	2	5	1	21	111	2.64	2	240	5	5	57	2	2	2	5	2	612	6.77	0.09	4.73	0.17	0.01	0.01	90



093914

FIGURE 5

COMINCO EXPLORATION

Strike Assessment
Soil Geochemistry

Date: 10/11/1998
Author:
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 9 (NAD 27 for Canada)

0 75 150 300
metres

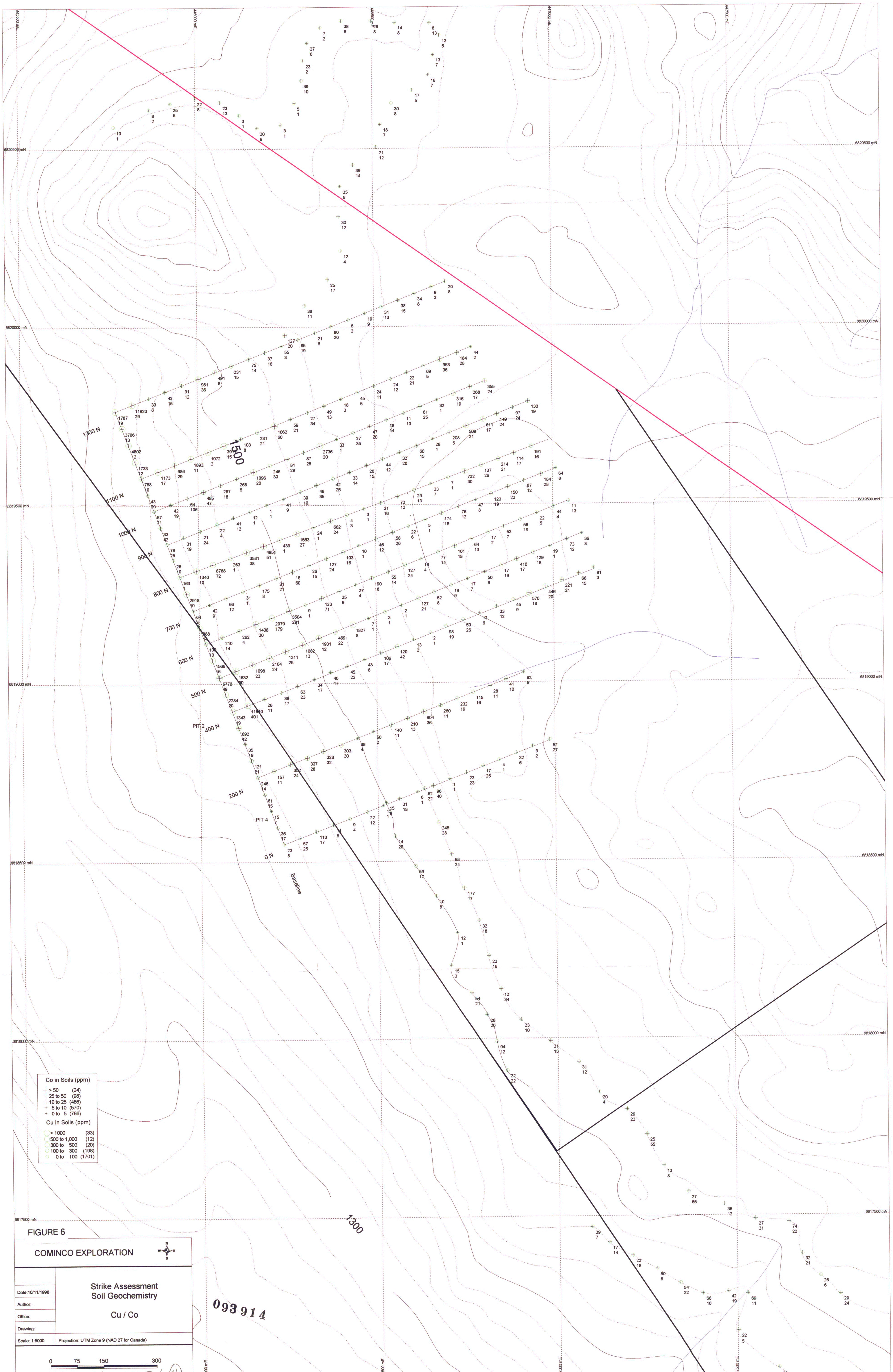


FIGURE 6
COMINCO EXPLORATION
N
W
E
S
Date:10/11/1998
Author:
Office:
Drawing:
Strike Assessment
Soil Geochemistry
Cu / Co
Scale: 1:5000
Projection: UTM Zone 9 (NAD 27 for Canada)
0
75
150
300
metres
Co in Soils (ppm)
> 50 (24)
25 to 50 (98)
10 to 25 (486)
5 to 10 (570)
0 to 5 (786)
Cu in Soils (ppm)
> 1000 (33)
500 to 1,000 (12)
300 to 500 (20)
100 to 300 (198)
0 to 100 (1701)
6820500 mN
6820000 mN
6819500 mN
6819000 mN
6818500 mN
6818000 mN
6817500 mN
445500 mE
446000 mE
446500 mE
447000 mE
447500 mE
1500
1300
1300 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
200 N
0 N
PIT 2
PIT 4
Baseline

093914

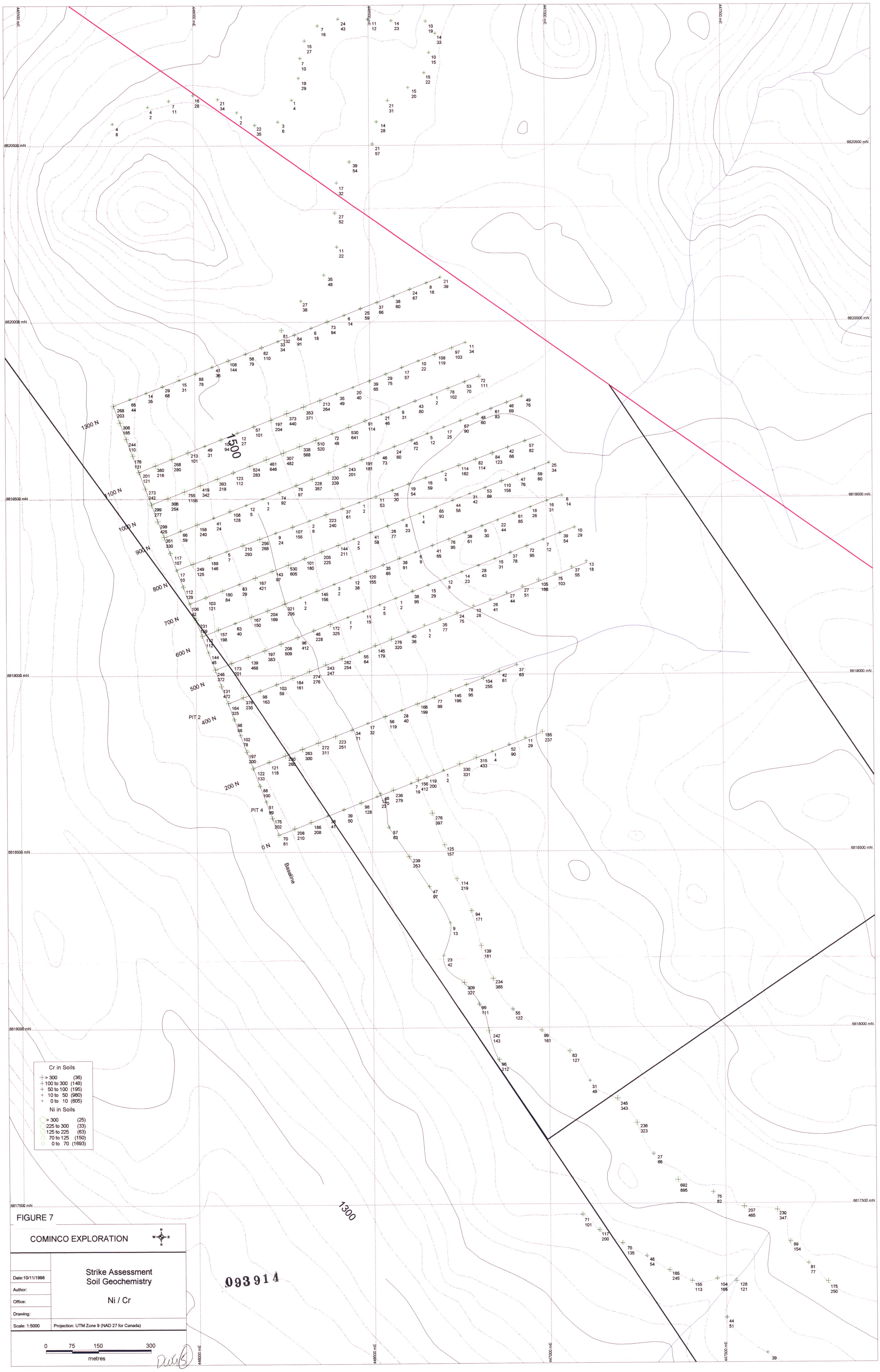
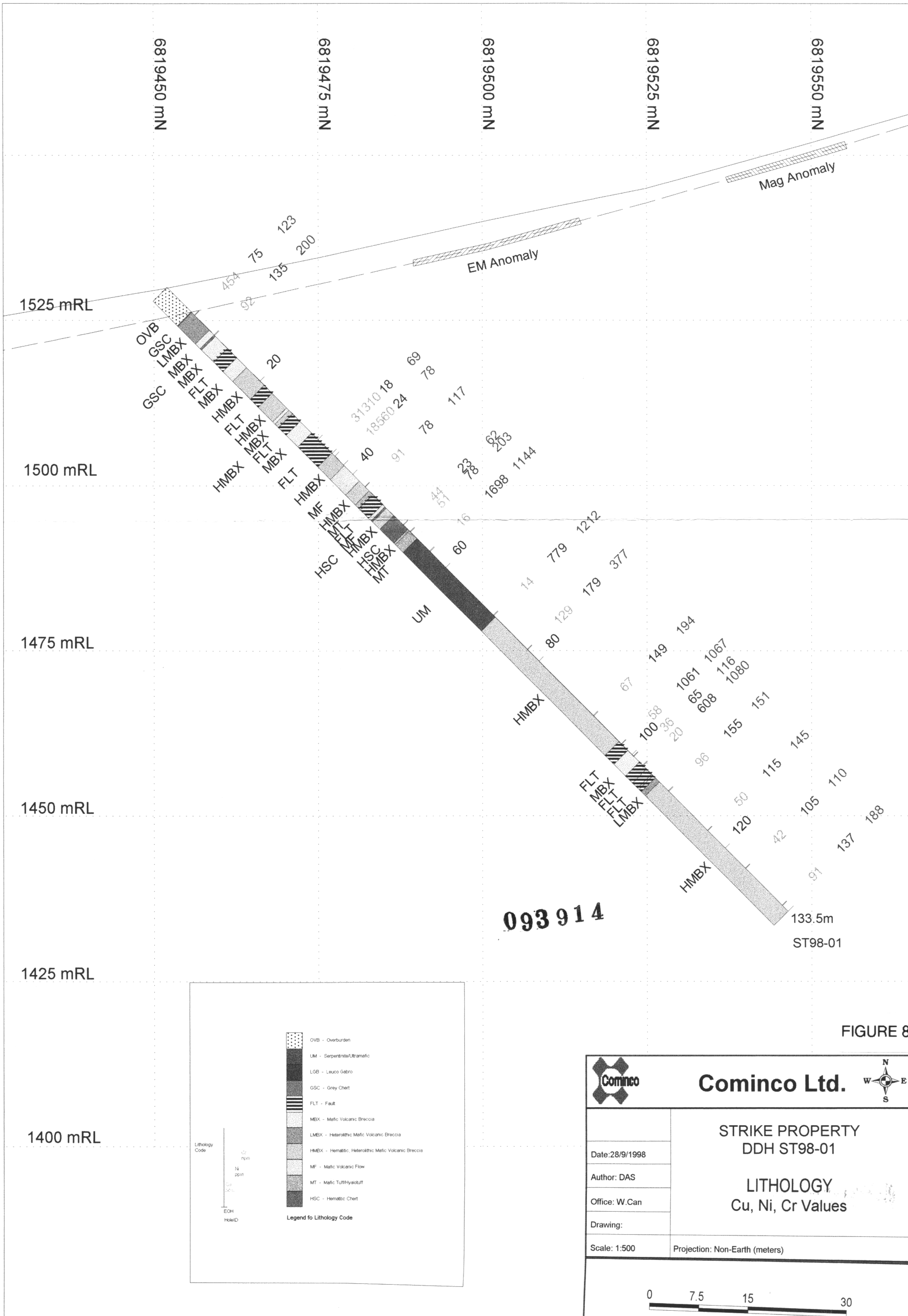
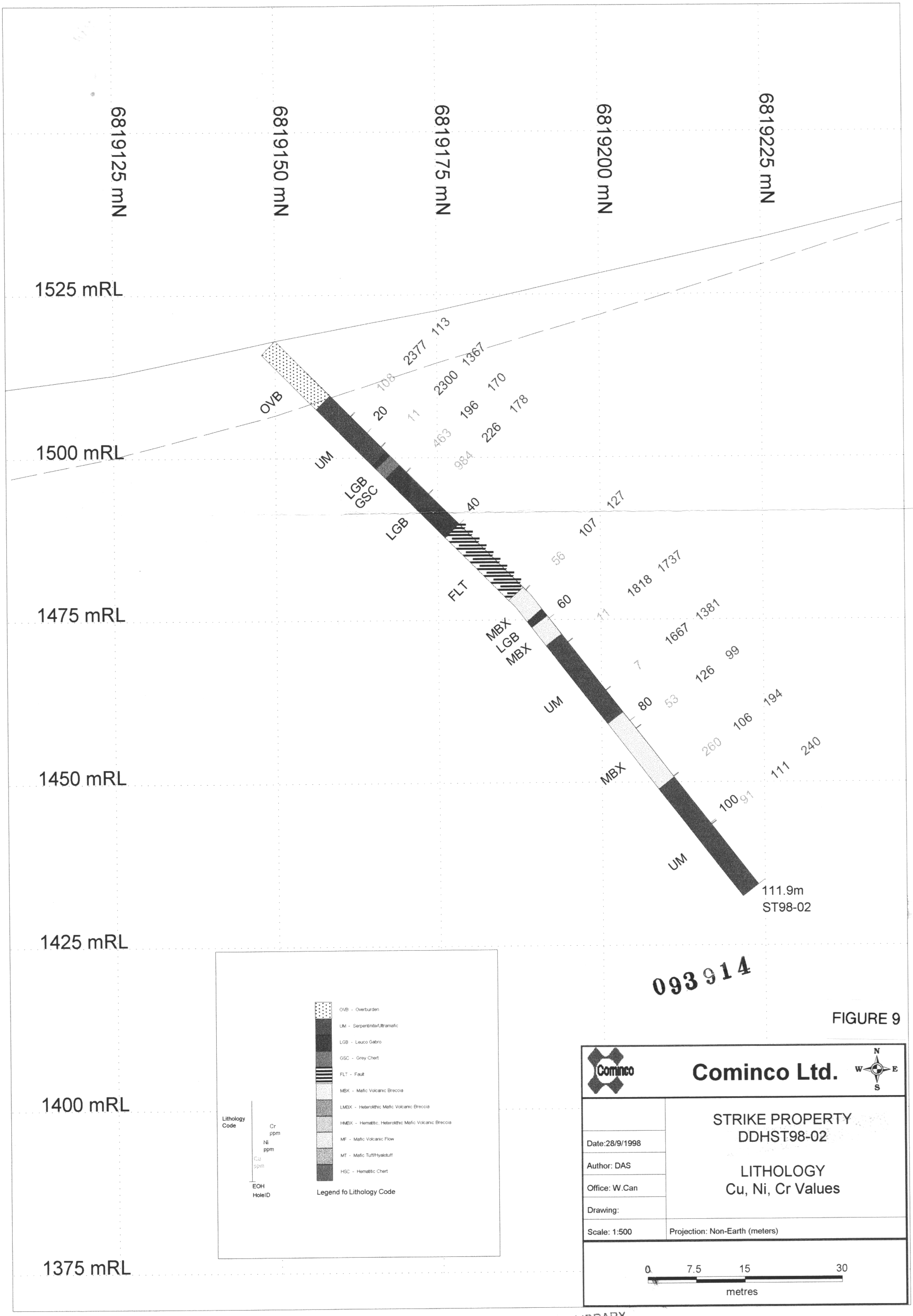


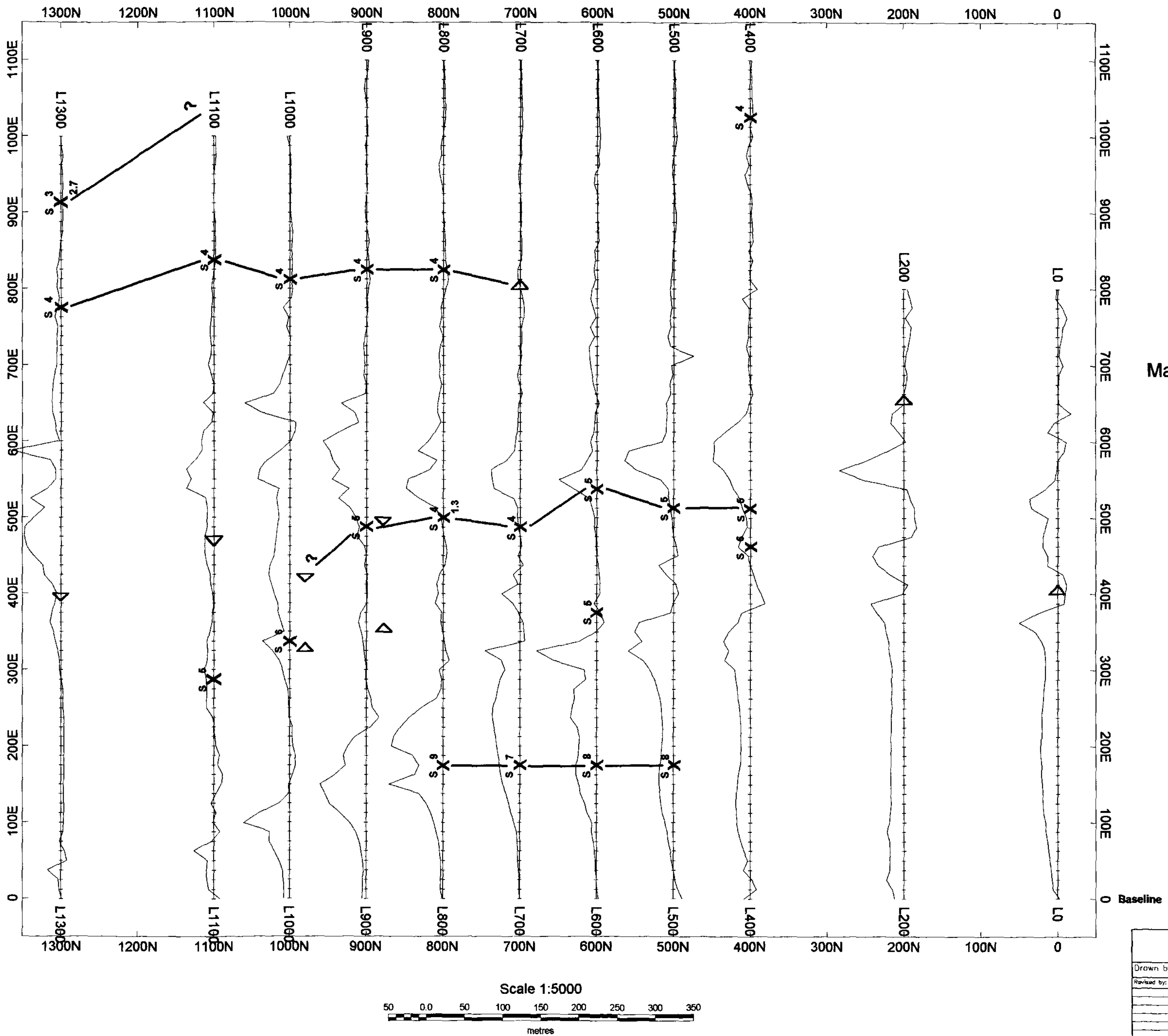
FIGURE 7
COMINCO EXPLORATION
Strike Assessment
Soil Geochemistry
Ni / Cr
Date:10/11/1998
Author:
Office:
Drawing:
Scale: 1:5000
Projection: UTM Zone 9 (NAD 27 for Canada)
0 75 150 300
metres
Cr in Soils
> 300 (36)
100 to 300 (148)
50 to 100 (195)
10 to 50 (980)
0 to 10 (605)
Ni in Soils
> 300 (25)
225 to 300 (33)
125 to 225 (63)
70 to 125 (150)
0 to 70 (1693)
6820500 mN
6820000 mN
6819500 mN
6819000 mN
6818500 mN
6818000 mN
6817500 mN
446000 mE
446500 mE
447000 mE
447500 mE
Baseline
PIT 2
PIT 4
0 N
200 N
400 N
500 N
600 N
700 N
800 N
900 N
1000 N
1100 N
1300 N
1300
1500
093914



6819450 mN
6819475 mN
6819500 mN
6819525 mN
6819550 mN
Mag Anomaly
EM Anomaly
1525 mRL
1500 mRL
1475 mRL
1450 mRL
1425 mRL
1400 mRL
OVB
GSC
LMBX
MBX
FLT
HMBX
MF
MT
HSC
UM
133.5m
ST98-01
OVB - Overburden
UM - Serpentinite/Ultramafic
LGB - Leuco Gabro
GSC - Grey Chert
FLT - Fault
MBX - Mafic Volcanic Breccia
LMBX - Heterolithic Mafic Volcanic Breccia
HMBX - Hematitic, Heterolithic Mafic Volcanic Breccia
MF - Mafic Volcanic Flow
MT - Mafic Tuff/Hyalotuff
HSC - Hematitic Chert
Legend fo Lithology Code
Lithology Code
Ni ppm
EOH
HoleID
FIGURE 8
Cominco
Cominco Ltd.
N
W
E
S
STRIKE PROPERTY
DDH ST98-01
Date:28/9/1998
Author: DAS
Office: W.Can
Drawing:
Scale: 1:500
LITHOLOGY
Cu, Ni, Cr Values
Projection: Non-Earth (meters)
0
7.5
15
30
metres

093914


6819125 mN
6819150 mN
6819175 mN
6819200 mN
6819225 mN
1525 mRL
1500 mRL
1475 mRL
1450 mRL
1425 mRL
1400 mRL
1375 mRL
OVB
UM
LGB
GSC
LGB
FLT
MBX
LGB
MBX
UM
MBX
UM
20
40
60
80
100
108 2377 113
2300 1367
11 196 170
463 226 178
984
127
107
56
1818 1737
11
1667 1381
7
126 99
53
106 194
260
111 240
91
111.9m
ST98-02
093914
Lithology Code
Cr ppm
Ni ppm
Cu ppm
EOH
HoleID
OVB - Overburden
UM - Serpentinite/Ultramafic
LGB - Leuco Gabro
GSC - Grey Chert
FLT - Fault
MBX - Mafic Volcanic Breccia
LMBX - Heterolithic Mafic Volcanic Breccia
HMBX - Hematitic, Heterolithic Mafic Volcanic Breccia
MF - Mafic Volcanic Flow
MT - Mafic Tuff/Hyalotuff
HSC - Hematitic Chert
Legend fo Lithology Code
FIGURE 9
Cominco
Cominco Ltd.
N
W
E
S
STRIKE PROPERTY
DDHST98-02
Date:28/9/1998
Author: DAS
Office: W.Can
Drawing:
Scale: 1:500
LITHOLOGY
Cu, Ni, Cr Values
Projection: Non-Earth (meters)
0 7.5 15 30
metres



Magnetics profile scale:

1 cm = 2000 nT

Positive deflection is to the left on profiles

Magnetics Instrumentation (base & field): Gem GSM-19

Data Base-Station Corrected

Profile Base: 58500 nT

Datum: 58510 nT

UTEM INTERPRETATION SYMBOLS

UTEM INSTRUMENT : UTEM III

Base Frequency: 31 Hz

CONDUCTOR

Latest Channel — Conductivity (Siemens) — CONDUCTOR AXIS — Depth Indicator

CONTACT RESPONSE

MORE RESISTIVE — LESS RESISTIVE

Dwh (1)

FIGURE 98-10-3

COMINCO LTD. NTS

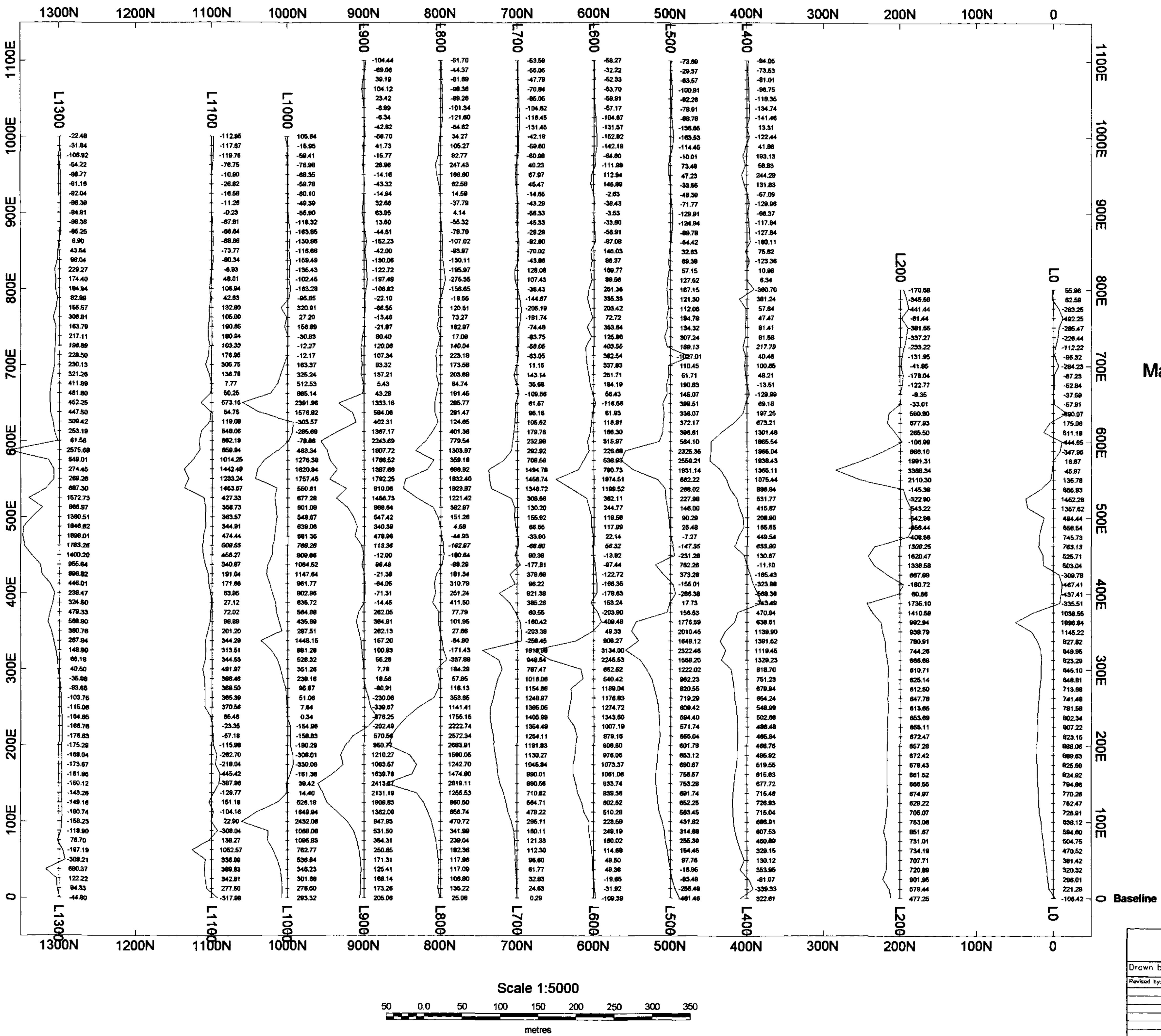
Drawn by: RDJ		Traced by:	
Revised by:	Date:	Revised by:	Date:

StrikeProperty, Yukon Territory

Magnetics/UTEM Interpretation Map

Plotted: Oct. 1998 - NAD 27

Scale: 1:5000	Date: June 13, 1998	Figure: 98-10-3



Magnetics profile scale:

1 cm = 2000 nT

Positive deflection is
to the left on profiles

Magnetics Instrumentation (base & field): Gem GSM-19

Data Base-Station Corrected

Profile Base: 58500 nT

Datum: 58510 nT

Posted Total Field Mag Values have
had 58500 nT subtracted before plotting

Duh
(2)

COMINCO LTD.

NTS

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

StrikeProperty, Yukon Territory

Magnetics Profiles and Posting Map

Plotted: Oct. 1998 - NAD 27

Scale: 1:5000
Date: June 13, 1998
Figure: 98-10-1