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→ KATIE
Tom Schwartz
(From John Chapman)
Apr. 4/85

REPORT ON

THE KATIE PROPERTY

NELSON MINING DIVISION
BRITISH COLUMBIA

Latitude 49°08'N

Longitude 117°19'50"W

NTS 82F/3

FOR

YELLOWJACK RESOURCES LTD
198 Baker Street,
Nelson, B.C.

BY

R.C. WELLS, P.GEO., F.G.A.C.
Kamloops Geological Services, Ltd.
910 Heatherton Court,
Kamloops, B.C.

October 4, 1994

R.C. Wells P.Geo., FGAC. Kamloops Geological Services Ltd.

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SUMMARY

The 38 unit Katie Property is held 57% by Yellowjack Resources and 43% by Hemlo Gold Mines Inc. Yellowjack is the operator.

The property is favourably located 7 kilometres southwest of Salmo, B.C. with good road access.

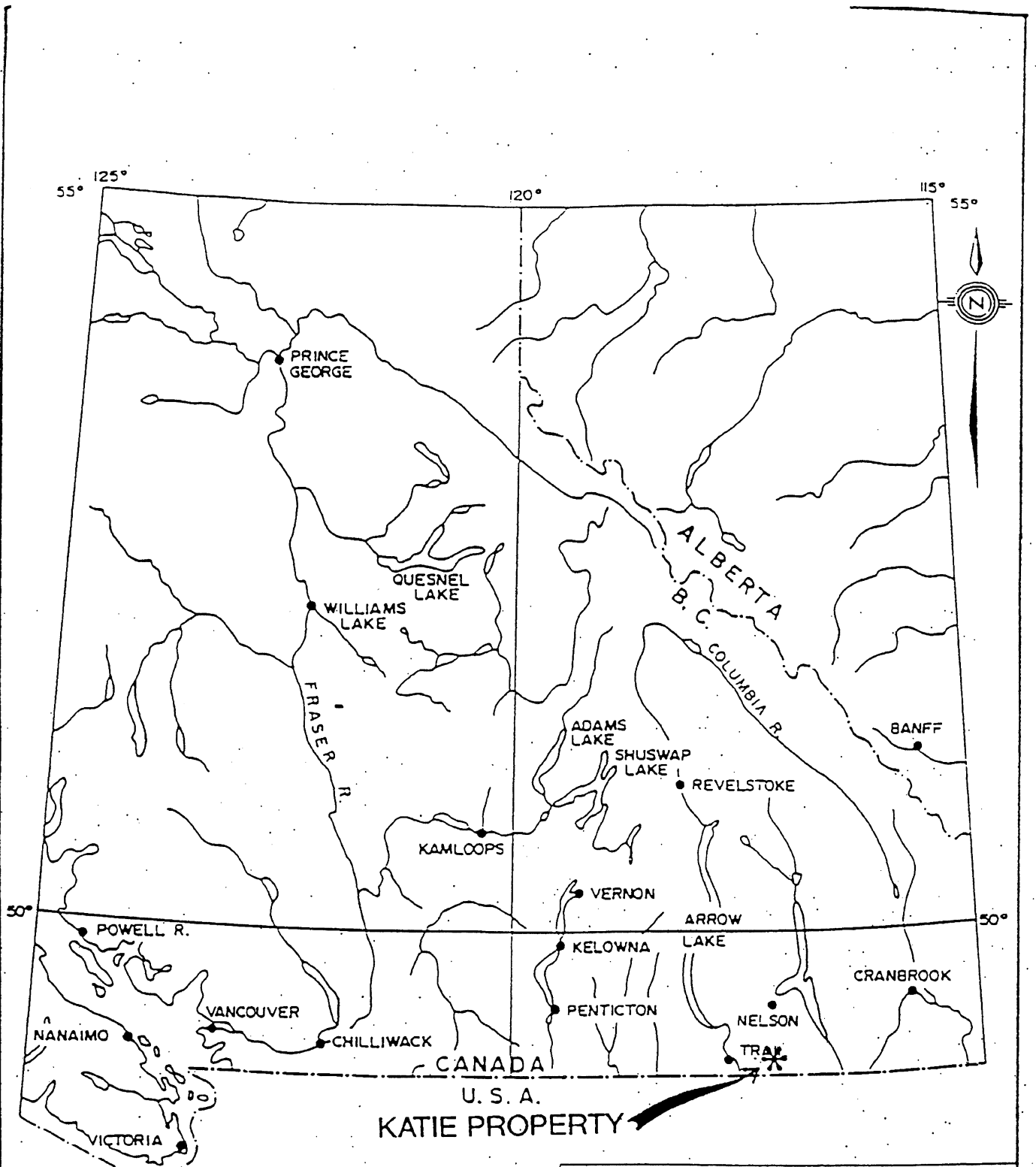
Exploration by Yellowjack and Noranda Exploration (Hemlo) on the property between 1989 and 1992 has consisted of integrated geological, geochemical and geophysical programs with follow up diamond drilling. A total of 56 diamond drill holes have tested three main areas on an extensive copper-gold soil anomaly with coincident chargeability and magnetic anomalies.

This exploration has identified a zoned, high level alkaline porphyry copper-gold system hosted by Rossland Group, Elise volcanics near the eastern edge of the Quesnel Terrane. Much of the stronger mineralization is associated with potassic altered monzodiorite to monzogabbro intrusion (dyke swarms) and fractured andesitic country rocks. More extensive and pervasive propylitic alteration with lower copper values envelope the potassic altered core zones.

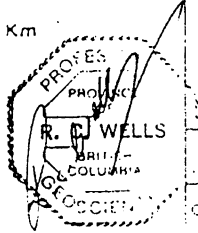
A detailed study of the property geology and mineralization in 1992 by the author indicated a northwest trend (structural control) for intrusions and associated copper-gold mineralization in the Main Zone area. This trend is subparallel to the drilling direction. With this interpretation the zone has not been adequately tested and is open down dip, across dip and along strike. Core zones of potassic alteration with associated copper gold mineralization indicated in the 17 and West Zone have also not been adequately drill tested.

A two stage diamond drilling program is strongly recommended for the Katie Property. This drilling will test mineralization trends in the Main Zone in Stage 1 and cost approximately \$200,000. If the new interpretation is proved valid further drilling will take place in the Main Zone in Stage 2 as well as drilling on the 17 and West Zones.

Significant potential exists for one or more copper-gold zones with characteristics similar to other alkaline porphyry systems like Copper Mountain at Princeton, B.C.



YELLOWJACK RESOURCES LTD		
KATIE PROPERTY		
PROPERTY LOCATION MAP		
KAMLOOPS GEOLOGICAL SERVICES LTD.		
COMPILED BY RCW	DATE 10/94	FIGURE 1



1.0 INTRODUCTION

The author was engaged by Yellowjack Resources Ltd to produce a comprehensive report with recommendation for future work on the Katie Property located near Salmo, B.C. This property hosts significant copper gold mineralization associated with one or more alkaline porphyry system.

This report is largely based on a detailed property examination conducted by the author in 1992. Placer Dome Limited (Canada) kindly granted permission for data from the 1992 examination to be used in this report. The author has spent a significant amount of time in the Nelson-Salmo area over the last ten years and has worked on numerous alkaline porphyry prospects in B.C.

1.1 LOCATION AND ACCESS

The Katie property is located seven kilometres southwest of the town of Salmo in southern British Columbia NTS 82F/3W (Figure 1).

Access to the property from Salmo is for two kilometres to the south by Highway 3 then six kilometres west along the Hellroaring Creek logging (gravel) road. These are good roads; with a minimal amount of ploughing in the winter, exploration could take place year round. Logging activities in the area have led to increasing road density and improved access.

1.2 PROPERTY AND OWNERSHIP

The Katie property (the property) is located in the Nelson Mining Division of British Columbia and consists of the following claims:

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Assessment Expiry Date</u>
Katie 1	233295	16	26/2/2000
Katie 2	233547	4	24/4/2000
Katie 3	233548	10	24/4/2000
Katie 4	233638	6	26/8/2000
Katie 5	234560	1	23/2/2001
Katie 6	234561	1	23/2/2001

These claims are shown on a property map, Figure 2.

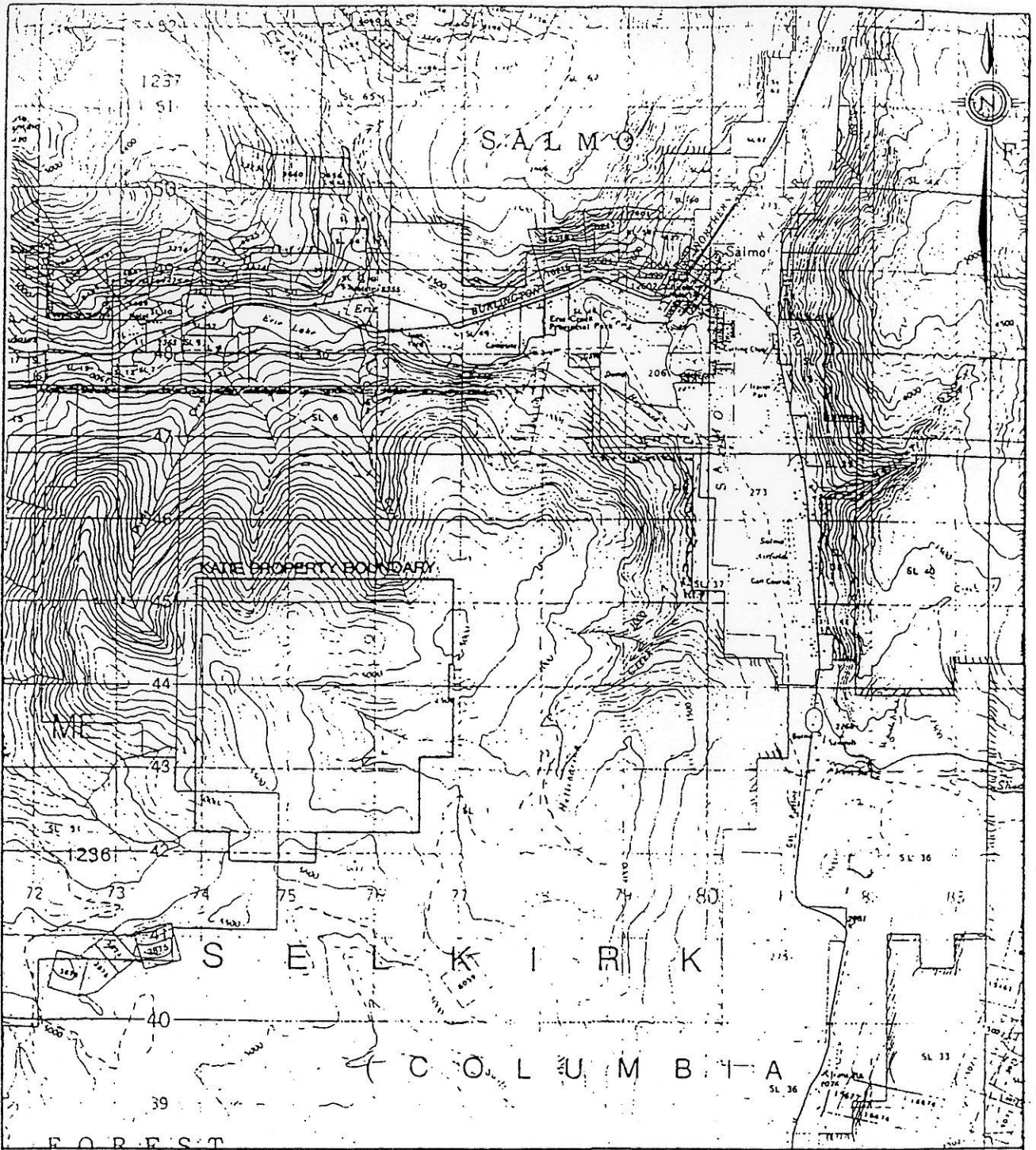
At present time Yellowjack Resources Ltd. hold a 57% interest and are operators, Hemlo Gold Mines Inc. holds 43%. Yellowjack can earn back a 100%

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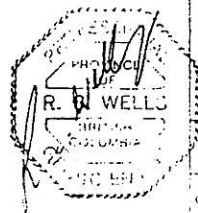
interest through \$3.5M expenditures, Noranda will retain a 10% net profit interest after payout. The Murray Agreement (March 5, 1990) involves a royalty payment equal to the greater of \$25,000 or 7% of net profits pursuant to the Katie claims (K. Murray staked the claims in 1985).

These net profit payments have caps or buyouts. Hemlo's NPI has a \$2.0M cap or buyout. The K. Murray agreement has a buyout of \$1.0M before December 31, 1997 and \$1.5M after.

Beaumont Timber Company has land holdings in the area and an access agreement has to be obtained.



0 1 KM.



YELLOWJACK RESOURCES LTD	
KATIE PROPERTY	
PROPERTY LOCATION AND TOPOGRAPHY	
KAMLOOPS GEOLOGICAL SERVICES LTD	
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FIGURE	3

1.3 TOPOGRAPHY, VEGETATION AND CLIMATE.

The property covers an undulating upland region at the headwaters of Hellroaring Creek with elevations ranging from 1200 up to 1700 metres. Slopes are generally gentle to moderate. The western area features the watershed between Hellroaring and Archibald Creeks; Divide and Gilliam Creeks drain north (Figure 3).

Large parts of the property feature second growth timber, especially in the south. Some areas in the west show evidence of relatively recent burn.

Climate in the area is generally mild, summers are warm and dry, winters are cool. Snow accumulations of up to 1 metre occur between mid December and March. Greater accumulations can be expected in the watershed area and parts of the basin.

1.4 EXPLORATION HISTORY

There is no recorded work on the area covered by the Katie claims prior to 1980 though the area does have a long prospecting history. A number of old workings which explored gold silver targets, in particular shear or fracture hosted veins, occur on the adjacent properties such as the Lisa and Gus.

- 1980: Amoco Petroleum conducted regional geochemical and prospecting programs in the area. Soils indicated an area 1200 m by 400 m in the Katie area with anomalous copper.
- 1983
to
1985: Ken Murray, a prospector from Nelson staked a number of claims to cover the Amoco copper soil anomaly and potential source areas for gold anomalies.
- 1986: On the Katie property Murray conducted more detailed soil surveys over the Amoco anomaly and outlined an area 400 m by 500 m with copper values between 200 and 1200 ppm.
- 1987: Further grid work by Murray including geophysical surveys-VLF-electromagnetic and Total Field Magnetic. These surveys outlined four conductors and a magnetic anomaly semi coincident with the soil anomaly.
- 1989: Baloil Lassiter Petroleum Ltd. optioned the property and tested Murray's EM conductors with a number of trenches and four diamond drill holes (total 249.1 m). This drilling intersected elevated gold values in shear zones northwest of what is now the Main Zone. The best intersection, in Hole KT-

89-4 assayed 0.24% Cu and 0.2 g/t over 6.0 metres. Baloil dropped the option.

Late in 1989 Yellowjack Resources Ltd made an agreement with the Murrays to acquire 100% interest in the Katie claims. By December 31, 1990 all the terms had been met, including an underlying royalty agreement.

Noranda Exploration Company (including Hemlo and Brenda) entered into an option agreement with Yellowjack to earn 51% property interest by spending a minimum of \$400,000 on exploration.

1990: Noranda conducted an integrated geological, geochemical and geophysical program on the Katie with follow up diamond drilling including seven holes (NKT 90-5 to 90-11) for 1693 metres total. Magnetic and IP chargeability anomalies were identified by Lloyd Geophysics in the Main and West Zone areas. These were coincident with a large copper (gold) soil anomaly. Noranda drilled seven holes at the western end of the Main Zone (Baloil area) and two on the West Zone. Hole NKT 90-9 on the West Zone produced the best intersection averaging 0.16% Cu over 169 metres (includes 17 metres at 0.53% Cu, 0.033 opt Au). Wide, low grade (0.1 to 0.3% Cu) intersections came from some of the Main Zone holes.

1991: Noranda's 1990 exploration program indicated that there was good potential for a large copper-gold porphyry style system associated with dioritic intrusives below the extensive copper (and gold) soil anomaly. This anomaly was greater than 2 km long by 1.5 km wide and open to the north. Noranda appears to have encountered problems deciding which areas to test on the large anomaly. This is clearly evident from drilling patterns and hole sequences.

In 1991 a drill program was designed to test flanking moderate chargeability zones and coincident soil Cu-Au anomalies using Cariboo Bell and Ingerbell type models. The first phase of drilling consisted of six widely spaced holes (1572 m) NKT 91-12 to 17 on all three zones (Main, West and 17/East). In this program holes on the Main and 17 zones produced the best results with NKT 91-13 (Main) 132.5 metres averaging 0.22% Cu and 0.011 opt Au and NKT 91-17 (17 Zone) 67.5 metres averaging 0.32% Cu and 0.011 opt Au.

Phase 2 drilling consisted of 23 holes (NKT 91-18 to 91-38) for a total of 5431 metres. These concentrated on the Main and 17 zones and were widely spaced (greater than 150 metres apart). Many of these holes produced long low grade copper intersections.

1992: Noranda at the end of 1991 held a 51% interest in the Katie Property. Early in 1992 a decision was made by Noranda to cease funding exploration on the Katie. On March 5, 1992 an amending agreement between Noranda and Yellowjack designated Katie a separate prospect. Yellowjack could earn back 100% working interest by further exploration expenditures of \$3.5 M. Noranda would retain a 10% net profits interest after payout.

In 1992 Yellowjack conducted two drill programs on the property, CME Consulting Ltd were contracted as project operators. Phase 1 consisted of 12 holes (YKT-39 to 50) totalling 3062 metres and in all cases were follow up on previous drilled anomalies. Holes YKT 40 to 43 in the core of the Main Zone produced long intersections between 50 and 150 metres averaging 0.12 to 0.36% Cu and up to 0.014 opt Au. Holes YKT 46 to 49 in the West Zone and Hole YKT 50 in the 17 Zone produced low grade Cu intersections.

Phase 2 drilling consisted of 6 holes for 1415 metres. Two Holes YKT 51 and 52 in the 17 Zone and one wild cat hole YKT-56 produced low grade intersections. Holes YKT 53 to 55 in the Main Zone produced similar values to those in Phase 1.

Exploration statistics for the Katie Property for the period January 1989 to October 1992 are as follows:

Grids (linecutting)	49.4 km	100 m spaced lines
Geological mapping	Grid coverage 1:2500 scale	
Geochemical surveys		
Soils	Grid coverage 50 m spaced samples	
Stream silts	Silts and pan concentrates most drainages	
Geophysical surveys		
Magnetic	36.25 km (Total field)	
Induced Polarization	14.25 km (possibly up to 20 km)	
Diamond drilling	13,421 m 56 holes (NQ)	

So far exploration expenditures on Katie have exceeded two million dollars. Drilling has delineated three areas of copper-gold porphyry style mineralization named the 'Main', 'West' and '17' zones. To date, no mineral inventory figure has been released by the owners.

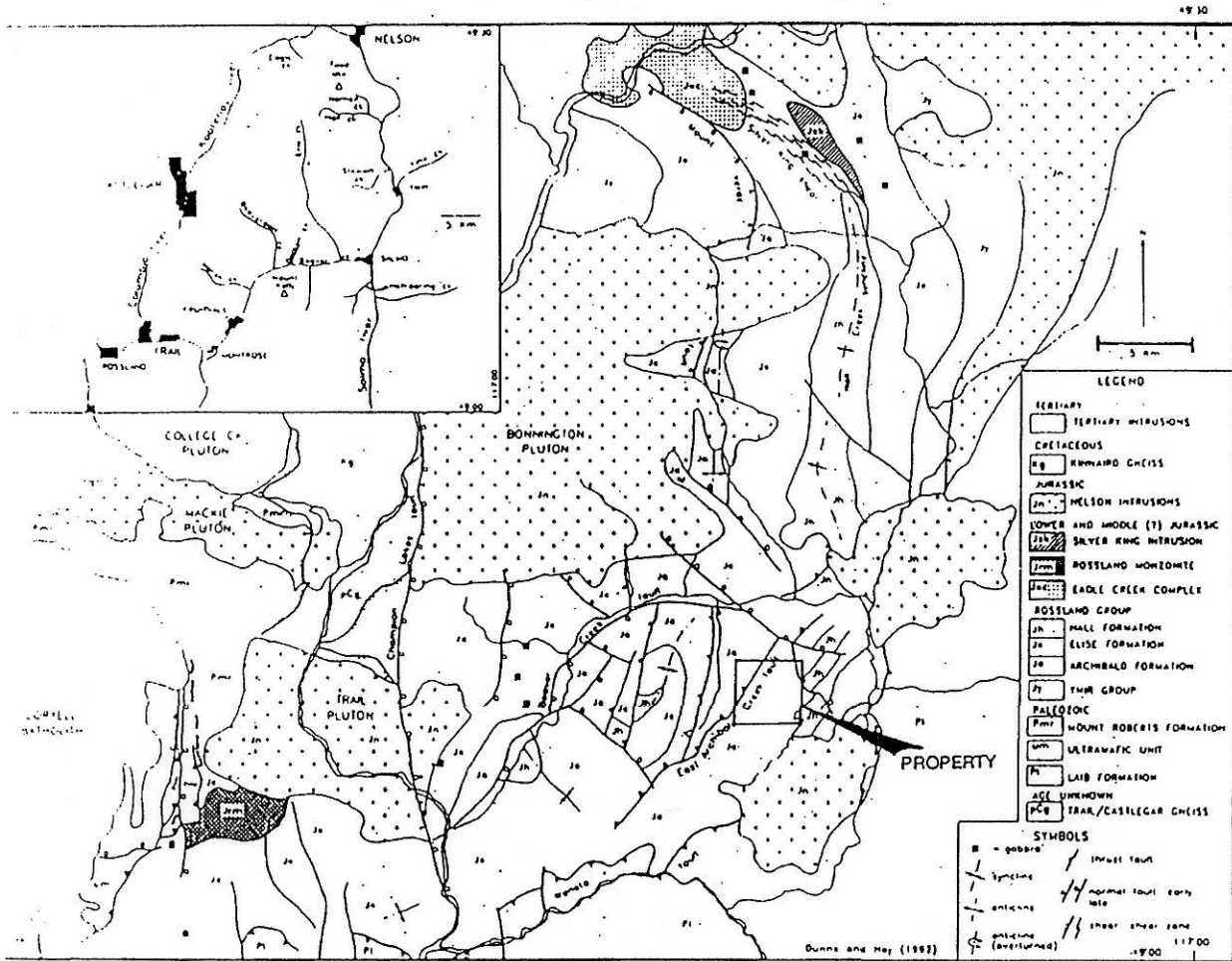
2.0 REGIONAL GEOLOGY

The Salmo area lies within a northerly trending arcuate belt of volcanics and sediments making up the Rossland Group (Lower Jurassic) at the eastern edge of the Quesnel Terrane. To the north, east and west these rocks are in contact with the late Jurassic Nelson batholith. To the south the Rossland Group is juxtaposed against Paleozoic rocks of the Kootenay Terrane by the Waneta thrust fault (west dipping) shown in Figure 4.

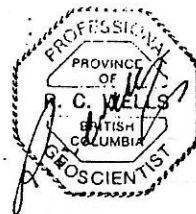
The Rossland Group comprises a basal succession of clastic sediments of the Archibald Formation, a thick package of volcanic and epiclastic rocks of the Elise Formation, and overlying fine grained clastic rocks of the Hall Formation.

In the Nelson-Salmo section of the Rossland belt a variety of intrusions are present, varying in age and composition. These include a suite of synvolcanic intrusions, syncollisional early to middle Jurassic plutons, Middle Jurassic to Cretaceous granitic intrusions (Nelson, Wallack etc), Middle Eocene Coryell intrusions and numerous felsic to mafic Tertiary dikes (Dunne and Hoy 1992).

The Rossland Group hosts a variety of mineral deposit types, including the mesothermal veins of the Rossland gold-copper camp and possible alkalic porphyry associated copper-gold disseminated and vein mineralization south and west of Nelson.



After Dunne and Hoy 1992.



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KATIE PROPERTY

REGIONAL GEOLOGY MAP

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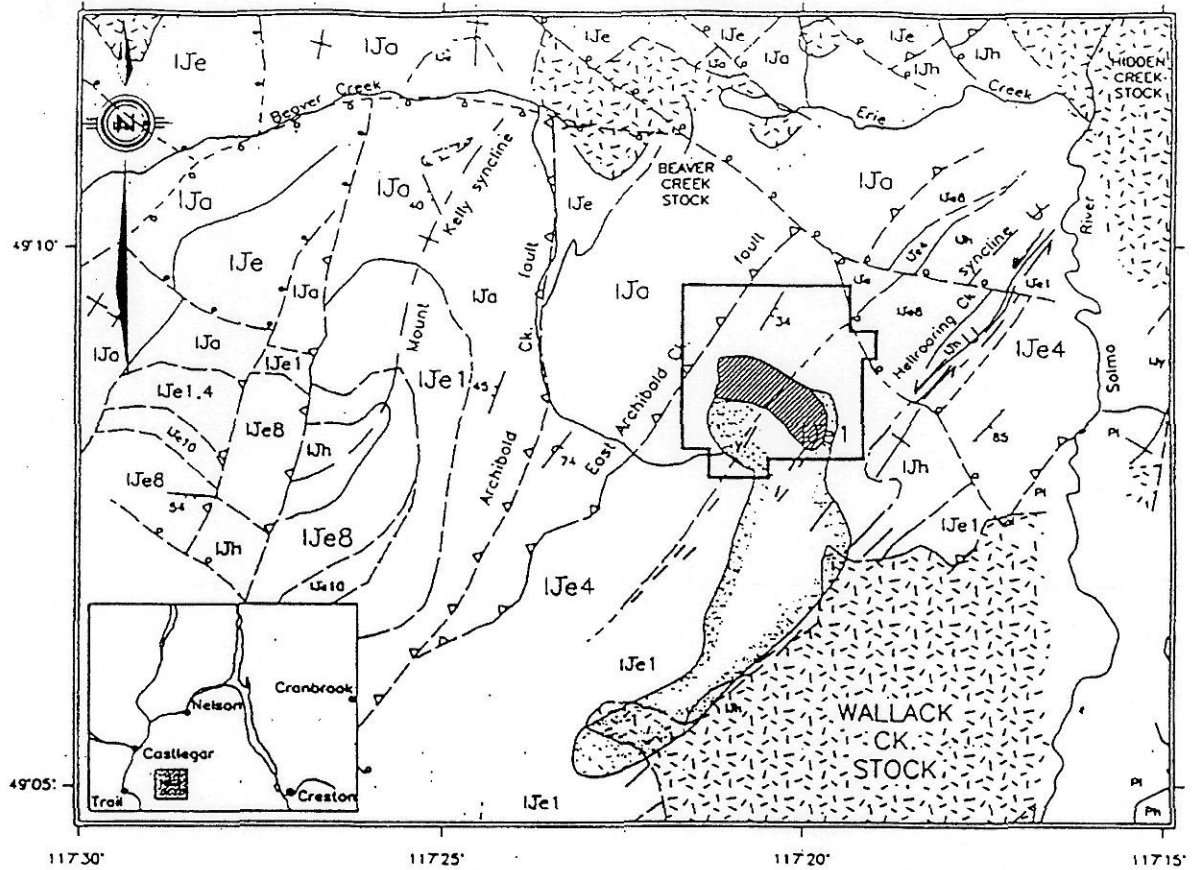
3.0 PROPERTY GEOLOGY

3.1 LITHOLOGY

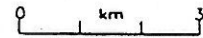
Outcrop in the property area is quite sparse, limited to ridge tops, logging roads and clear cuts. Many areas have an extensive cover of glacial overburden up to 50 metres thick. Geological mapping by Hoy and Andrew (Open File 1990-8) shows the area to be underlain largely by Elise Formation intermediate to mafic volcanic flows and volcanoclastic rocks (Figure 5). The flows are commonly pyroxene and, or plagioclase phyric. Volcanoclastics include monolithic pyroclastic breccia, lapilli and crystal tuffs, fine bedded tuffs. Intrusives were not identified by Hoy and Andrew on the property. However, a few outcrops of diorite, monzonite (Jurassic), Tertiary rhyolite, monzonite and lamprophyre dikes were noted in the Elise east of the Archibald thrust.

From recent company drilling and geological mapping results (post 1989) on the property it is clear that large areas are underlain by high level subvolcanic monzodiorite intrusions surrounded by altered and fractured Elise country rocks. The intrusions have been referred to as 'Katie intrusions' by Cathro et al. (1992) and based on limited petrographic study described as monzonite to monzogabbro (with the latter predominant). Elise volcanics include andesite tuffs, feldspar crystal tuffs, volcanic breccias and more massive porphyritic flows. Later (post mineral) feldspar porphyry, rhyolite, lamprophyre and diabase dikes crosscut the stratigraphy and Katie intrusion.

Detailed examination of Katie drill core with follow up lithogeochemical and petrographic study was conducted by the author in 1992. 18 samples of (less altered) representative rock types were taken from drill core for whole rock analyses. The mineralized intrusions on Katie appear to be predominantly monzodiorites with some monzogabbro. Post mineral plagioclase to hornblende microdiorite dikes and Elise volcanic rocks have similar lithogeochemistry. The monzodiorites and microdiorites possibly represent a suite of synvolcanic intrusions with the Elise volcanics (Lower Jurassic). Based on alkali-silica plots the diorites are mildly alkalic (alkali-calcic). Later rhyolite and feldspar porphyry dikes are of unknown age but do appear similar to past Elise intrusions in the Nelson area (Cathro et al. 1992). Biotite lamprophyre dikes are clearly post mineral and probably Tertiary in age (Coryell?).



LEGEND



JURASSIC - CRETACEOUS

granite, granodiorite

LOWER JURASSIC

ROSSLAND GROUP

IJh HALL FORMATION; argillite, siltstone

IJe ELISE FORMATION

IJe10 siltstone, argillite

IJe8 intermediate to mafic tuff

IJe1.4 mafic flows, tuff, Katie intrusions

IJa ARCHIBALD FORMATION; siltstone, conglomerate, argillite, tuff

LOWER JURASSIC AND UPPER TRIASSIC (?)

IJy YMIR GROUP

PALEOZOIC

PI LAIB FORMATION

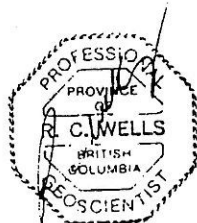
Ph HAMILL GROUP

>58,000 gamma aeromagnetic contour

area of drilling

After Cathro, Dunne, Naciuk 1993.

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KATIE PROPERTY		
LOCAL GEOLOGY		
KAMLOOPS GEOLOGICAL SERVICES LTD.		



3.2 STRUCTURAL GEOLOGY

The property lies within a generally northeast trending, southeast dipping panel of lower Elise rocks on the western limb of the Hellroaring Creek syncline (Cathro et al 1992). Hoy and Andrews' mapping (1990) indicates that many of the main fold and fault structures (shown in Figure 5) have this northeast trend. An interpreted northeast trending fault zone appears to separate the Main and 17 zones in the drilled area and follows the axis of the main basin.

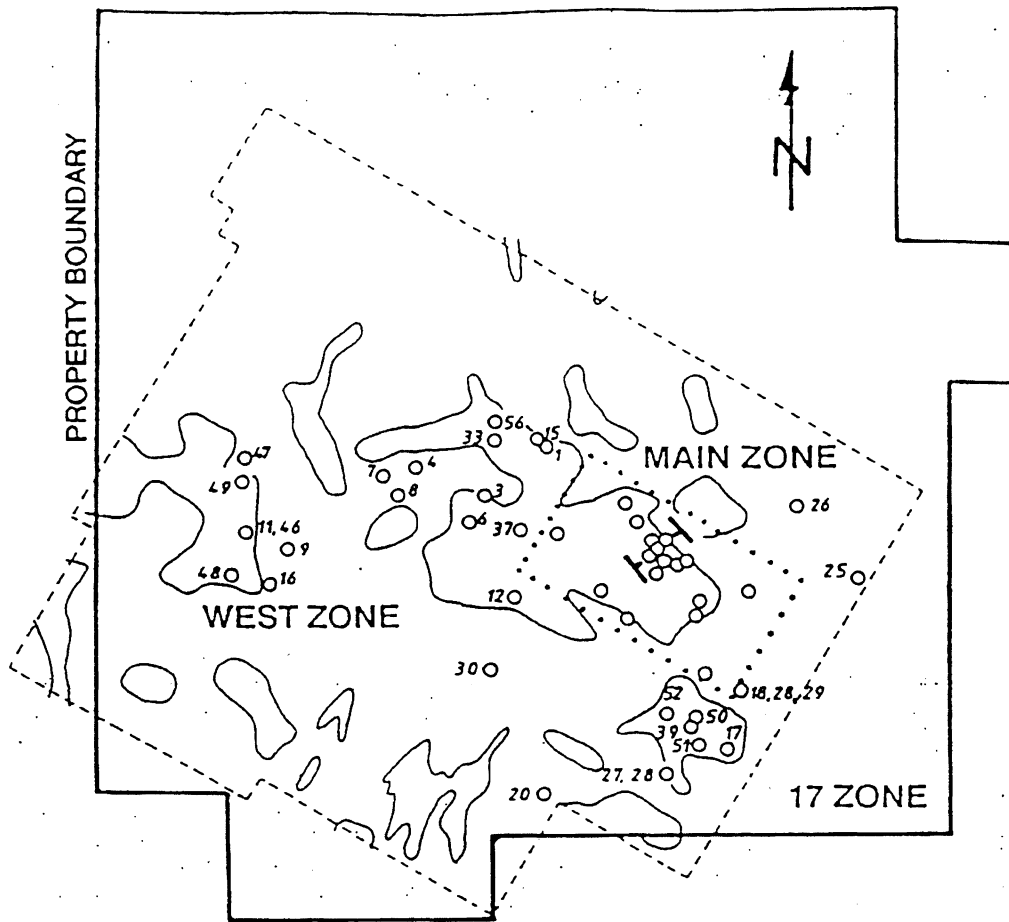
The trend of the volcanics in the drilled area is unclear, largely because of the multitude of intrusions and associated alteration. Careful drill core study by the author in 1992 clearly indicated that intrusive contacts for many dikes in the Main Zone had northwest trend with steep northeast dips. Fractures controlling both potassic and propylitic alteration associated with these dike swarms appeared to have similar orientation. Cathro et. al. (1992) suggest that the Elise volcanics in the drilled area may also have this trend.

3.3 MINERALIZATION AND ALTERATION

Copper-gold mineralization is widespread throughout the area that has been drill tested with dimensions of 2.5 kilometres east-west by 1.75 kilometres north-south. Within this area, fairly wide spaced drilling has distinguished three zones: the Main, West and 17 (East) shown in Figure 6.

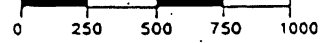
Alkaline porphyry style copper-gold mineralization occurs in all three zones. Hypogene copper mineralization features pyrite with lesser chalcopyrite as disseminated grains, fracture fillings and veins associated with the contact zones between monzodiorite intrusions (dikes) and andesitic volcanics. Total sulfide content ranges from 1 to well 10 per cent. Significant fine disseminated magnetite is present in most rock types. In mineralized areas this magnetite may be coarse, up to 1 cm and is secondary.

The higher copper (up to 1%) and gold (0.5 gram per tonne) values are associated with strong potassic alteration in the form of pervasive, vein and vein stockwork, K-feldspar and, or biotite with some quartz and chlorite. Coarse secondary magnetite is rare in these zones. These potassic core zones are enveloped by broad zones of propylitically altered volcanics and monzodiorite. Mineral assemblages generally include pervasive or fracture controlled chlorite, epidote, hematite and magnetite. Gold values in these zones tend to be lower relative to copper. Copper contents however, are rarely below 400 ppm.



PROPERTY BOUNDARY

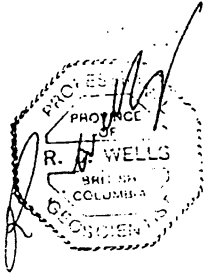
metres



LEGEND

- Claim boundary
- - - - Limit of soil geochemical data
- > 100 ppm Cu in soil
- Detail area
- A-A Cross-section line See Figure 9
- Drillhole collar

After Cathro, Dunne, Naciuk 1993.



YELLOWJACK RESOURCES LTD		
KATIE PROPERTY COMPILATION MAP SOIL GEOCHEMISTRY, HOLE COLLARS AND CU-AU ZONES		
KAMLOOPS GEOLOGICAL SERVICES LTD		
COMPILED BY RCW	DATE 10/94	FIGURE : 6

The alteration and mineralization for the most part appears to be lithologically and structurally controlled. A zoned alkaline copper-gold porphyry system is strongly suggested with potassic altered core zones and propylitic haloes. Peripheral gold mineralization with silver values and local copper occurs in silicified and sericitic altered zones. In Hole NKT 91-37 fracture controlled hydrothermal alteration in volcanics features strong silicification and local secondary k.feldspar with associated gold values up to 0.6 g/t and little copper. Similar zones occur on the Swift Property 1.5 kilometres to the southwest in Elise volcanoclastics.

In the drilled area the effects of surface weathering commonly reaches depths of 20 metres or more. Secondary malachite, azurite and local chalcocite mineralization occurs above hypogene copper-gold zones.

4.0 DISCUSSION ON THE PROPERTY GEOLOGY AND RESULTS FROM PREVIOUS EXPLORATION

In 1992 several days were spent by the author in Salmo examining drill core and visiting the property. A further ten days involved examination of all available property data and making interpretations. A summary of my main observations follows. These observations were made and documented several months before publication of a paper on the Katie deposit by Cathro, Dunne and Naciuk in 1993 (Geological Fieldwork 1992, Paper 1993-1).

4.1 GEOLOGY

It was not until the 1989 to 91 drill programs on the Katie property that porphyry style environments were identified in this section of the Rossland belt. Subvolcanic intrusions with porphyry style mineralization had been recognized in the Nelson and New Denver areas.

Examination of the local geology, alteration, Cu-Au mineralization, geochemical and petrographic study clearly indicates the presence of zoned, subvolcanic, alkalic type porphyry systems in the Katie area (Epp 1991, Wells 1992, Cathro et al. 1993). This porphyry system involves monzodiorite intrusions (dike swarm) into Elise volcanic and volcanoclastic rocks and may continue for several kilometres to the southwest and northeast (diorite trend, Figure 5). Copper-gold mineralization is associated with potassic altered core zones with broad propylitic haloes with copper (low gold). Vein and breccia zones are more peripheral with gold plus or minus silver. Katie is the most easterly (significant) example of an alkaline type Cu-Au porphyry found to date in the Canadian Cordillera (Cathro et al. 1993).

Virtually all the useful geological information regarding the mineralization and geological setting comes from diamond drilling. Outcrop in the property area is sparse (2 per cent or less) and the potential for other zones is considered excellent.

4.2 GEOCHEMISTRY

Many of the creeks draining the Katie property area have produced anomalous gold and copper values from silts and pan concentrates. Divide and Gillam Creeks

(Figure 3) with source areas in the northern part of Katie produced strongly anomalous gold up to 10,000 ppb from pan concentrates (Noranda).

Soil geochemistry works well in the property area and copper plus or minus gold anomalies occur throughout the diorite trend. On the Katie property copper with gold anomalies outline the drilled area (Figure 6). Between these anomalies occur valley floors with deeper overburden. Limited drilling in these areas has encountered copper-gold mineralization. To the north of the drilled area there appears to have been very limited soil coverage.

A preliminary examination of assay data from the drilling indicated a fairly good visual correlation between gold and copper. This was tested statistically taking values from representative holes from each zone (well mineralized holes). Copper-gold plots for copper values greater than 1000 ppm display good correlation for the potassic core to the Main Zone (Figure 7A) with a correlation coefficient of 0.602 (183 samples, 4 holes). Single holes from the West (Figure 7B) and 17 zones (Figure 7C) display a weaker correlation at 0.47 and 0.35. However, other styles of mineralization such as propylitic hosted copper (little gold) and fracture gold (little copper) are present. The conclusion here is that the potassic core zones to the copper systems are gold mineralized. In these areas copper values in the 0.3 to 0.5% range commonly correspond with 0.2 to 0.6 gt gold.

Examination of a limited amount of multi element data (ICP) on drill core with copper gold mineralization does not show any consistent or economically significant silver or molybdenum, arsenic and antimony values are low.

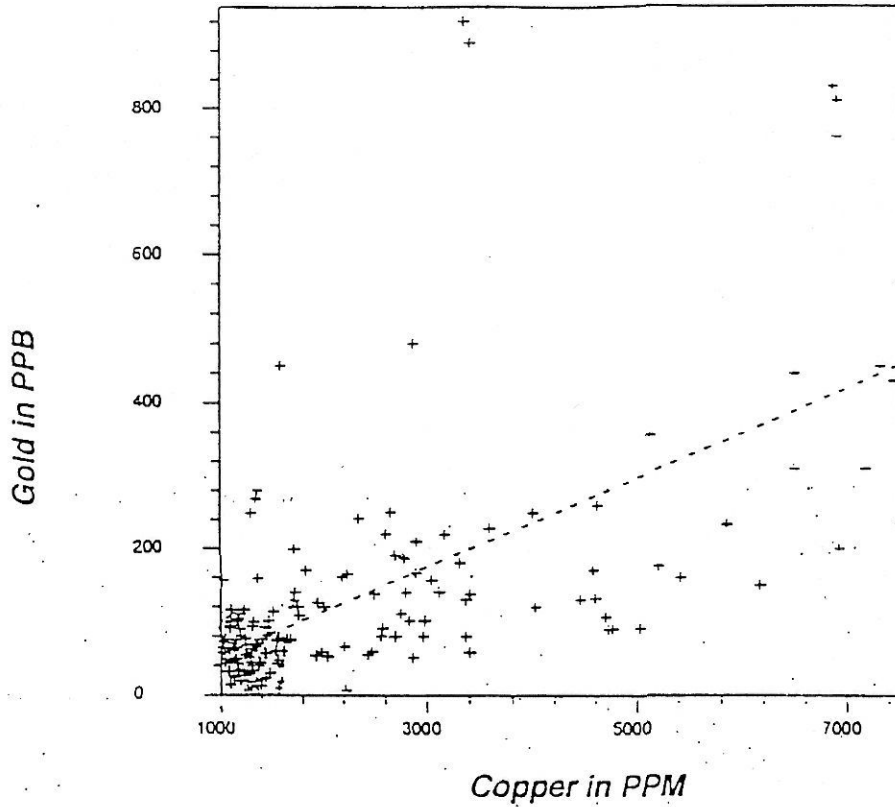
4.3 GEOPHYSICS

Because of the poor bedrock exposure much of the exploration on the Katie has been guided by geophysics and geochemistry.

Airborne geophysical data for the property area (DEMR 1970, Map 8479 G) outlines a strong northeast trending magnetic feature along the diorite trend (as shown in Figure 5). The property lies at the northern end of this feature in some of the strongest magnetics and also where there is a widening and bend to the west). One valid geological interpretation of the magnetic data is that it represents a zone of shallow buried intrusives plus hornfelsed (with magnetite) volcanic country rocks.

MAIN ZONE

NKT9135 NKT9140 NKT9134 NKT9113



Number of data: 183

287 Data trimmed

Correlation coefficient = 0.6020

T Statistic (for different means) = 19.0821

Regression Lines

LS y on x: $Y = -7.3011 + 0.0607 X$

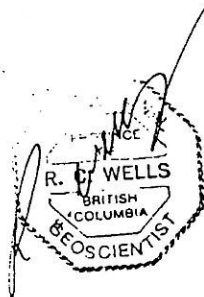
Mean and Variance of X: 2299.0930

LS x on y: $X = 1509.4667 + 5.9667 Y$

Mean and Variance of Y: 132.3388 27025.7773

UNBIASED: $Y = -8.2099 + 0.0611 X$

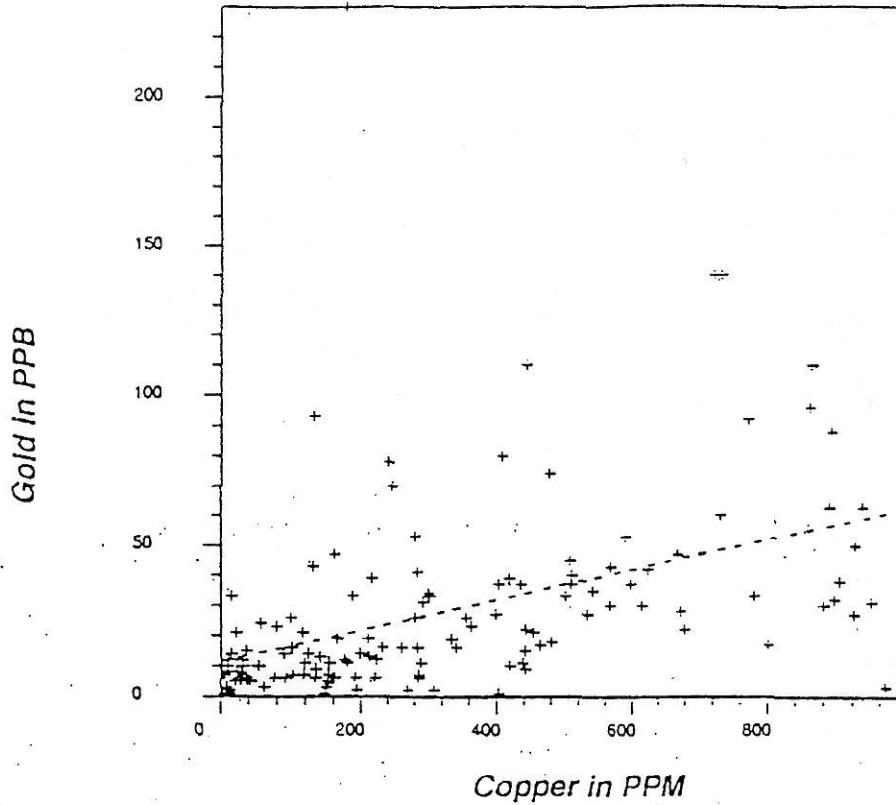
FILE: three



YELLOWJACK RESOURCES LTD		
KATIE PROPERTY COPPER - GOLD CORRELATION MAIN ZONE		
KAMLOOPS GEOLOGICAL SERVICES LTD		
COMPILED BY	DATE	FIGURE
RCW	10/14	7A

WEST ZONE

NKT 90-9



Number of data: 141

63 Data trimmed

Correlation coefficient = 0.4670

T Statistic (for different means) = 13.2322

Regression Lines

LS y on x: $Y = 11.6488 + 0.0505 X$

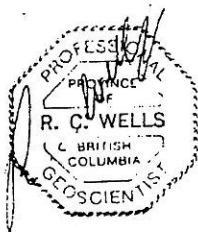
Mean and Variance of X: 349.2482 90530.0156

LS x on y: $X = 222.7214 + 4.3228 Y$

Mean and Variance of Y: 29.2695 1056.6082

UNBIASED: $Y = 11.4870 + 0.0509 X$

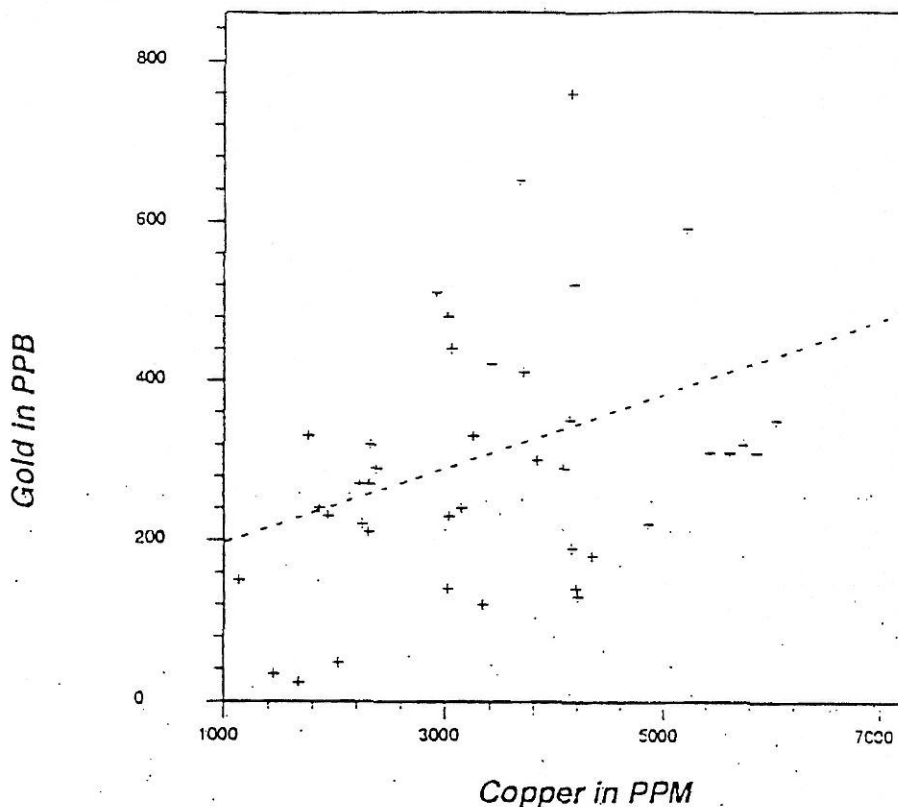
FILE: two



YELLOWJACK RESOURCES LTD		
KATIE PROPERTY COPPER - GOLD CORRELATION WEST ZONE		
KAMLOOPS GEOLOGICAL SERVICES LTD.		
COMPILED BY RCW	DATE 10/94	FIGURE : 7B

17 (EAST) ZONE

NKT 91-17



Number of data: 42

112 Data trimmed

Correlation coefficient = 0.3555

T Statistic (for different means) = 15.5507

Regression Lines

LS y on x: $Y = 153.3592 + 0.0457 X$

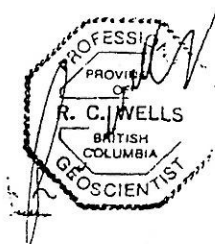
Mean and Variance of X: 3530.4524

LS x on y: $X = 2660.0022 + 2.7665 Y$

Mean and Variance of Y: 314.6429 32059.1406

UNBIASED: $Y = 151.0030 + 0.0464 X$

FILE: one



YELLOWJACK RESOURCES LTD		
KATIE PROPERTY COPPER - GOLD CORRELATION 17 (EAST) ZONE		
KAMLOOPS GEOLOGICAL SERVICES LTD.		
COMPILED BY RCW	DATE 10/94	FIGURE : 7C

Ground geophysical and geochemical surveys were along northwest trending survey lines. These were perpendicular to the main airborne magnetic feature and regional stratigraphy. On the Katie property however, there is presently very strong evidence for a change in the strike of intrusives to northwest in the Main Zone area.

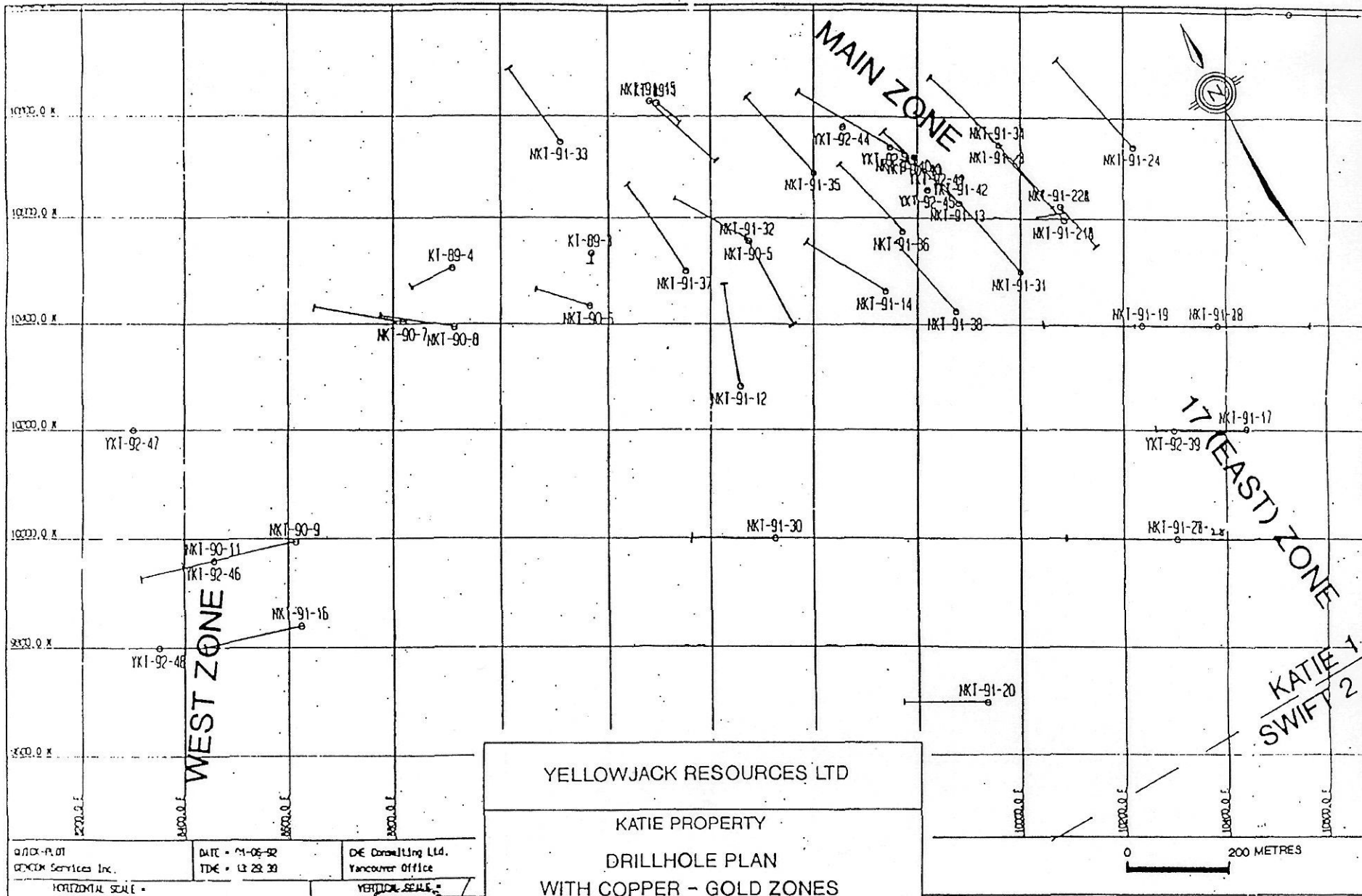
Noranda's 1989-1990 ground total field magnetic data outlines easterly to ENE trending features in the Main Zone area. In the West and 17 East zone areas the magnetic trends are more northeasterly to northerly. An induced polarization survey on the same grid using alternate lines (200 m) has strong chargeability zones centred on the Main Zone, in the western part West Zone and half way between. Contouring suggests easterly and northerly trends to the chargeability zones.

The trend of the grid lines in the Main Zone area was far from optimal in orientation (poor coupling). Much of Noranda's drilling was guided by alkalic porphyry I.P. models where the best potential areas are flanking moderate chargeability zones coinciding with soil anomalies. This model is valid, however, the survey lines should have been orientated northeast not northwest in the Main Zone area.

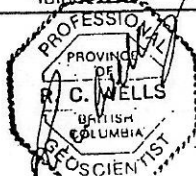
4.4 DIAMOND DRILLING

The most recent drilling summary by CME Consulting Limited is appended to this report (Appendix 1). During drill core examination in Salmo it was clearly evident that many of the better copper gold intersections in the Main Zone and to a lesser extent the other zones were subparallel to the drilling direction (structural and vein fabrics). Backing this was the inability to correlate intersections between holes even when 50 metres apart. A drill hole plan is shown in Figure 8.

Core examination and reinterpretation of CME drill sections and longitudinals for the Main Zone provided much evidence for a northwest trend to the intrusives and mineralization with steep dips to the northeast (Figure 9). As there are far fewer and wider spaced holes in the West and 17 Zones it is very difficult to make similar interpretations. Problems clearly exist in these areas from a correlation point of view. The Main and 17 Zones lie along a northwest trend but appear to be separated by an easterly trending structural zone following the valley. Drilling to date shows more biotite in the 17 Zone and proximal siliceous hydrothermal breccias.



0/100-R.01 D/C/K Services Inc.	DATE = 11-06-92 TDE = 13 28 39	DE Consulting Ltd. Vancouver Office
HORIZONTAL SCALE =		VERTICAL SCALE =

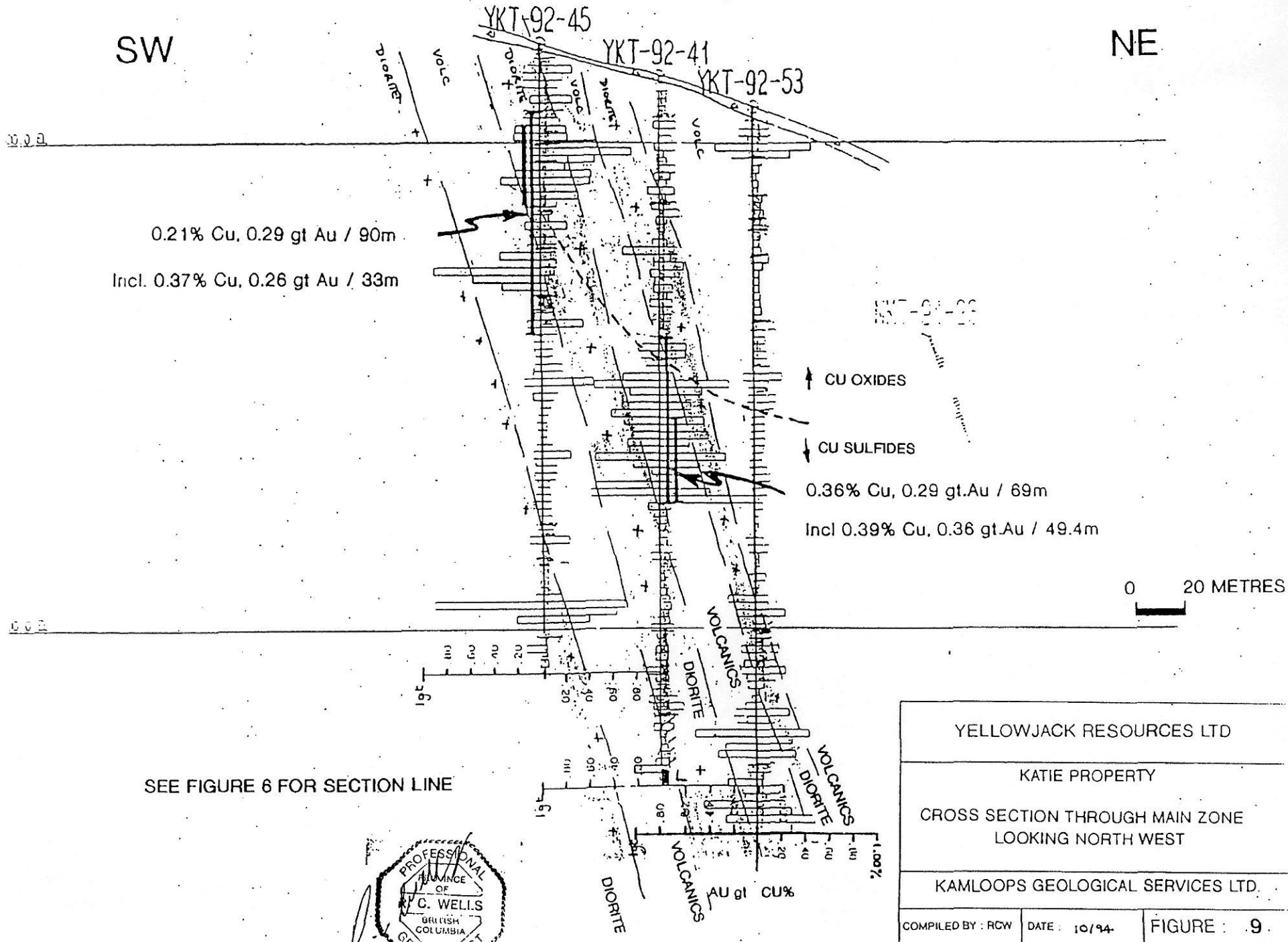


YELLOWJACK RESOURCES LTD		
KATIE PROPERTY		
DRILLHOLE PLAN WITH COPPER - GOLD ZONES		
KAMLOOPS GEOLOGICAL SERVICES LTD.		
COMPILED BY: RCW	DATE: 10/94	FIGURE: 8

KATIE 1
SWIFT 2

SW

NE



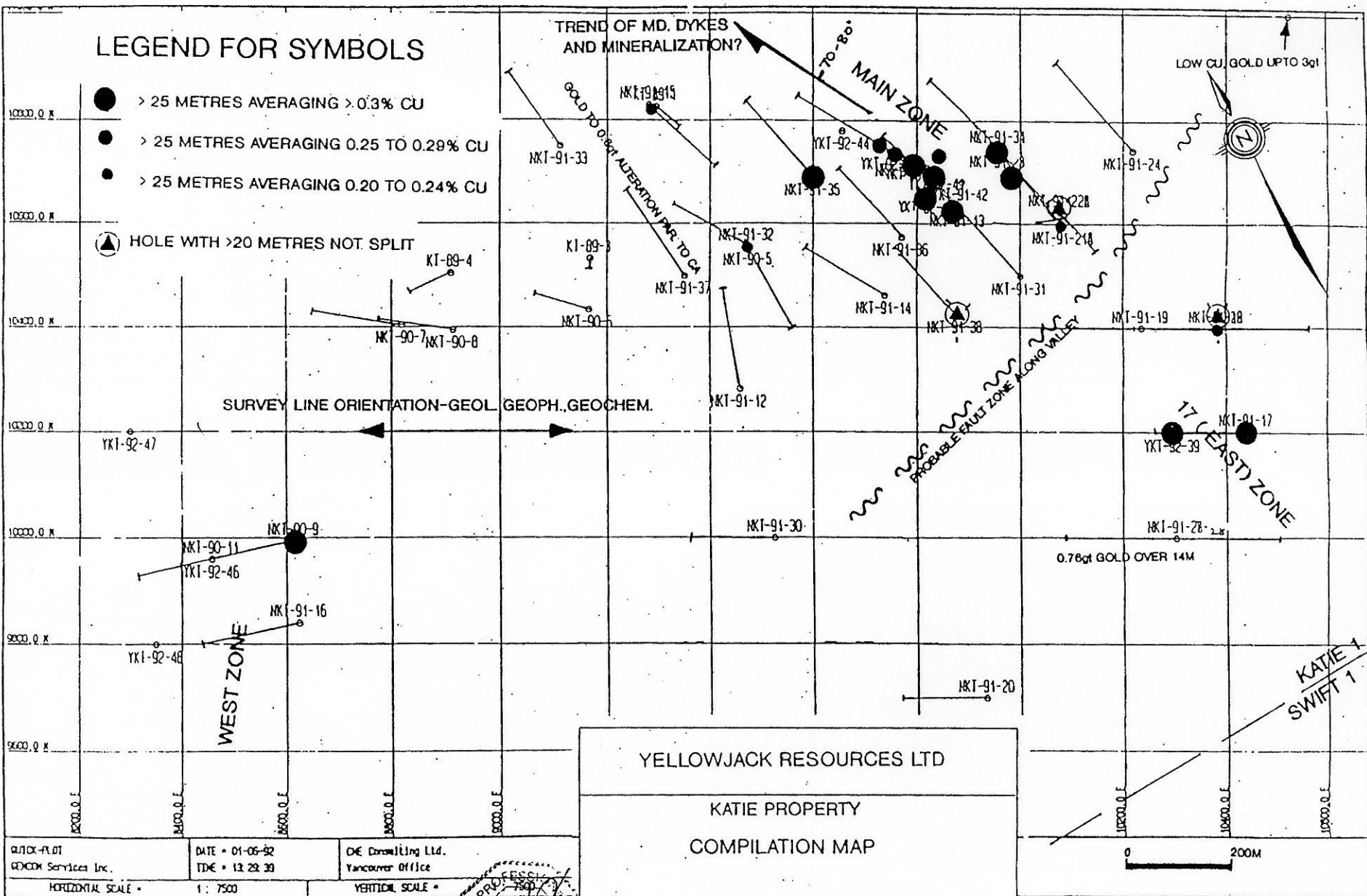
As there appears to be a close coincidence between the trend of mineralization and plane of drilling in the Main Zone area, a tonnage calculation and many basic geological correlations are not possible. To isolate areas with high potential, holes were classified according to average copper grades over their best 25 metre intersection (see Figure 10). The first order holes (>0.3% copper over 25 metres core length) always contain significant potassic alteration and semi-coincident gold values, thus defining core zones. In the Main Zone there is a distinct cluster of such holes in an area 300 by 200 metres with northwest trend open in both directions. With a depth of mineralization greater than 200 metres, a tonnage exceeding 100 MT is possible. In the 17 and West Zones, the first order holes are located at the edges of drill clusters, indicating large areas with good potential that have not been tested.

A last and very significant point regarding diamond drilling results is that a large number of core sections from Noranda's program were not split or assayed. A very good example is hole NKT 91-36 which is located at the southwestern edge (of the core) to the Main Zone. This hole has structurally controlled chalcopyrite mineralization and associated K.feldspar alteration over a wide interval. Large sections at the top of the hole which is well mineralized have not been assayed.

LEGEND FOR SYMBOLS

- > 25 METRES AVERAGING > 0.3% CU
- > 25 METRES AVERAGING 0.25 TO 0.29% CU
- > 25 METRES AVERAGING 0.20 TO 0.24% CU
- ⊙ HOLE WITH > 20 METRES NOT SPLIT

TREND OF MD. DYKES AND MINERALIZATION?



YELLOWJACK RESOURCES LTD

KATIE PROPERTY

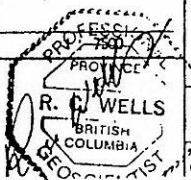
COMPILATION MAP

KAMLOOPS GEOLOGICAL SERVICES LTD.

DATE - 01-05-92
 TIME - 12:28:30
 O/E Drawing Ltd.
 Vancouver Office

HORIZONTAL SCALE = 1:7500

VERTICAL SCALE =



COMPILED BY: RCW

DATE: 10/94

FIGURE: 10



5.0 CONCLUSIONS

The Katie property hosts an alkaline porphyry copper-gold system. This is associated with monzodiorite to monzogabbro intrusions that may be synvolcanic with Rosslund Group, Elise Formation intermediate to mafic volcanics.

The alteration associated with the mineralized system is zoned with potassic core zones (k.feldspar and biotite) with significant fracture controlled and disseminated pyrite, chalcopyrite. Broad zones of pervasive propylitic alteration envelope the potassic cores and contain usually less chalcopyrite. The better copper and gold values (good correlation) occur in core areas. Gold-copper correlations are generally poor in the peripheral (propylitic altered) copper mineralized zones.

A total of 56 diamond drill zones have tested three main areas on a large copper-gold soil anomaly with dimensions of 2 by 1.5 kilometres. A large proportion of the drilling is on the Main Zone. Confident correlation of geology and mineralization between fairly close spaced holes in the Main Zone is presently very difficult.

The Katie has many features consistent with a high level porphyry system. There is very strong evidence for significant structural control to intrusions and mineralization. Stronger mineralization often occurs along the contact zones between monzodiorite dikes and fractured volcanic wallrocks in areas of strong potassic alteration.

Re-interpretation of the existing exploration data on the Katie property indicates a northwest trend for mineralization and intrusions in the Main Zone area. This is subparallel to the drilling direction. If this is the case the copper gold mineralized zone has not been adequately tested and is open along strike, down and across dip. Southwest directed diamond drill holes are required to test this interpretation.

The 17 and West Zones have received far less drilling than the Main Zone. Some of the better copper-gold mineralized holes with associated potassic alteration occur near the edges of drilled area. More drilling is required to test these zones.

The Katie alkaline porphyry copper gold system has a similar features to other porphyry systems in British Columbia, in particular, Copper Mountain near Princeton. Like Copper Mountain, Katie has significant potential for one or more copper-gold zones. With the new interpretation tonnages greater than 100 M tonnes are possible. The actual copper and gold grades are unknown until the system has been drilled across dip.

6.0 RECOMMENDATIONS

A two stage NQ diamond drill program is strongly recommended to further test the economic potential of the copper-gold alkaline porphyry mineralization on the Katie Property. The first stage tests the new geological interpretation of the Main Zone. If favourable results are returned Stage 2 involves an expanded drill program on the Main Zone and some further drill testing of the 17 and West Zones.

6.1 Stage 1

A fence of five holes should test the interpreted core to the Main Zone (Figure 11). These holes (-45 to -50) are drilled in a southwest direction, 300 metres in length and are spaced approximately 100 metres apart. A sixth hole would test shallower elevations and give a third dimension along the middle drill section. A minimal amount of road building and pad construction with an excavator is required in the drilling area.

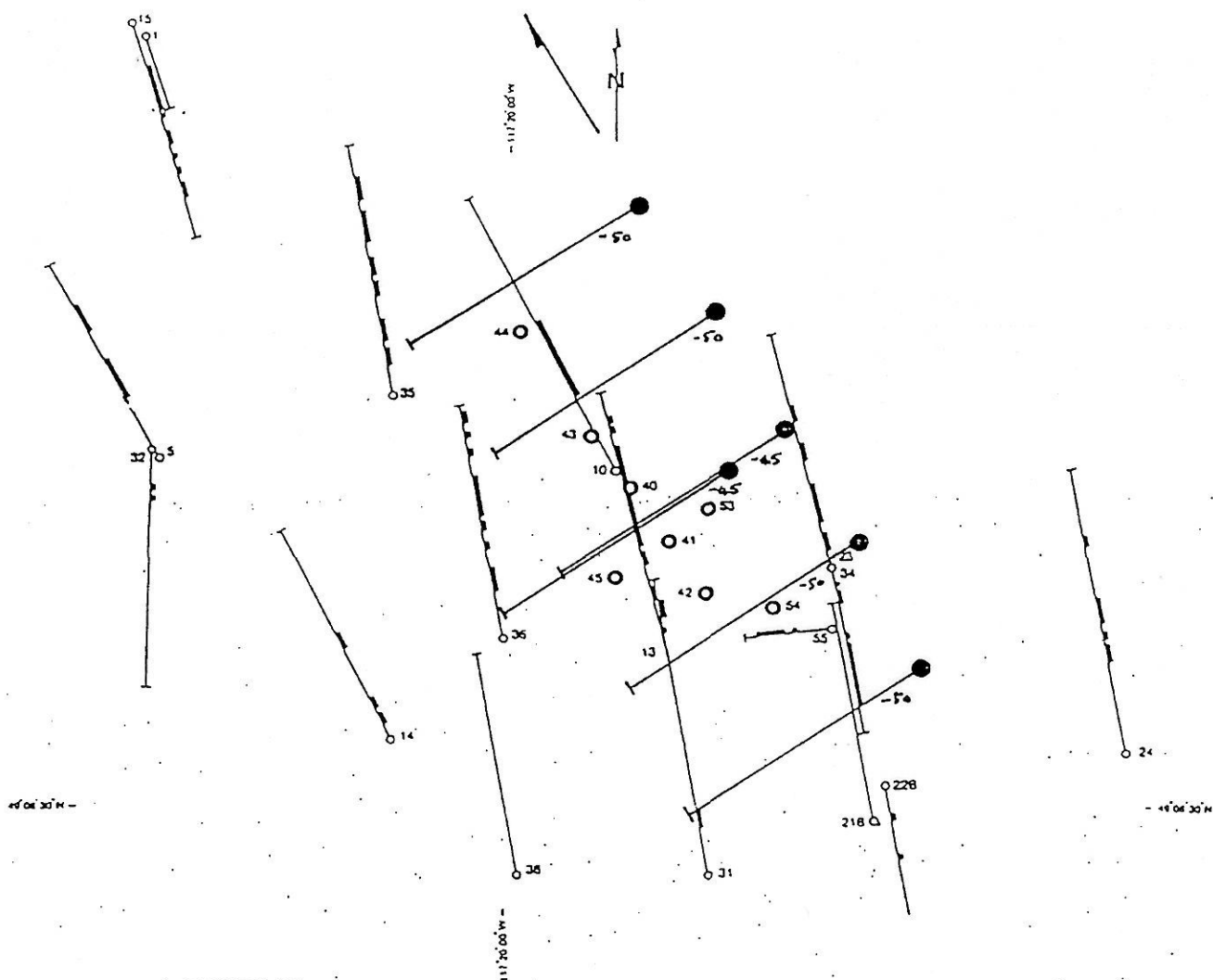
During this stage it is important that a geologist examine the core from previous drilling. Any untested copper mineralized core should be split and analyzed for copper and gold.

6.2 Stage 2

With favourable results from Stage 1 a further 3500 metres of NQ drilling would be warranted on the Main Zone. These holes would be on regular spaced sections and targeted at specific depths of mineralization (pierce points). The aim here is to produce a confident initial tonnage and grade estimate at the end of the program. All relevant drill collars should be surveyed during this stage.

Further diamond drilling should be conducted on the 17 and West Zones at this stage. The focus should be on untested areas adjacent to previous holes with potassic alteration and copper-gold values. Holes 91-17 and 92-39 in the 17 Zone and 90-9 in the West Zone are the main examples.

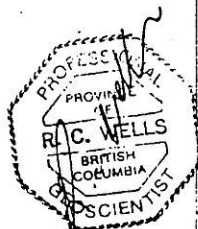
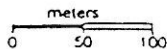
AZ. 330



LEGEND

● — PROPOSED NQ DIAMOND DRILL HOLE

- — Drillholes (inclined, vertical)
- — Stockwork and pervasive potassium feldspar and biotite alteration (inclined, vertical drillholes)



YELLOWJACK RESOURCES LTD		
KATIE PROPERTY RECOMMENDED DRILL PROGRAM MAIN ZONE		
KAMLOOPS GEOLOGICAL SERVICES LTD		
COMPILED BY: RCW	DATE: 10/94	FIGURE: 11

7.0 COST ESTIMATE

STAGE 1

Total Cost \$200,000.00

Road and Pad Construction

One 200 LC excavator 50 hrs @\$120 per hr \$6,000.00

Drilling Costs

1800 metres total at all in cost of \$100 per metre \$180,000.00
Includes geologist, core splitter, assays, all
drilling costs.

Report and Maps. Allow \$4,000.00

Assay old core, miscellaneous costs. Allow \$10,000.00
\$200,000.00

Stage 2 (contingent on Stage 1)

Total Cost \$573,100.00

Road and Pad Construction

One 200 LC excavator 100 hrs @\$120 per hr \$12,000.00

Drilling Costs

- 1) 3500 metres Main Zone
- 2) 750 metres West Zone
- 3) 750 metres 17 Zone

Total: 5000 metres at an all in cost of \$100 per metre \$500,000.00

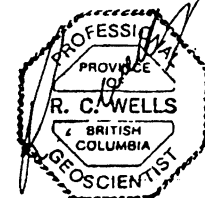
Hole Survey \$3,000.00

Reports and Maps \$6,000.00

10% contingency \$52,100.00

\$573,100.00

R.C. Wells P.Geo., FGAC. Kamloops Geological Services Ltd.



8.0 REFERENCES

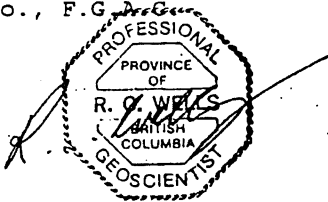
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- Yellowjack Resources Ltd.: Supplied numerous reports including several from Noranda Exploration, CME Consulting Ltd. and K. Murray. Assessment and summary reports.

9.0 STATEMENT OF QUALIFICATIONS

I, Ronald C. Wells, of the City of Kamloops, British Columbia, hereby certify that:

1. I am a Fellow of the Geological Association of Canada
2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.
3. I am a graduate of the University of Wales, U.K. with a B. Sc. Hons. in Geology (1974), did post graduate (M. Sc.) studies at Laurentian University, Sudbury, Ontario (1976-77) in Economic Geology.
4. I am presently employed as Consulting Geologist and President of Kamloops Geological Services Ltd., Kamloops, B.C.
5. I have practised continuously as a geologist for the last 18 years throughout Canada and USA and have past experience and employment as a geologist in Europe.
6. Ten of these years were in the capacity of Regional Geologist for Lacana Mining Corp. then Corona Corporation in both N. Ontario/Quebec and S. British Columbia.
7. I have no direct or indirect interest in either the Katie Property or Yellowjack Resources Ltd., nor do I expect to receive any.
8. I consent to use this Report on the Katie Property in a prospectus for statement of material facts so long as it is not condensed or excerpted in any way such as to portray a meaning different from that of the whole.

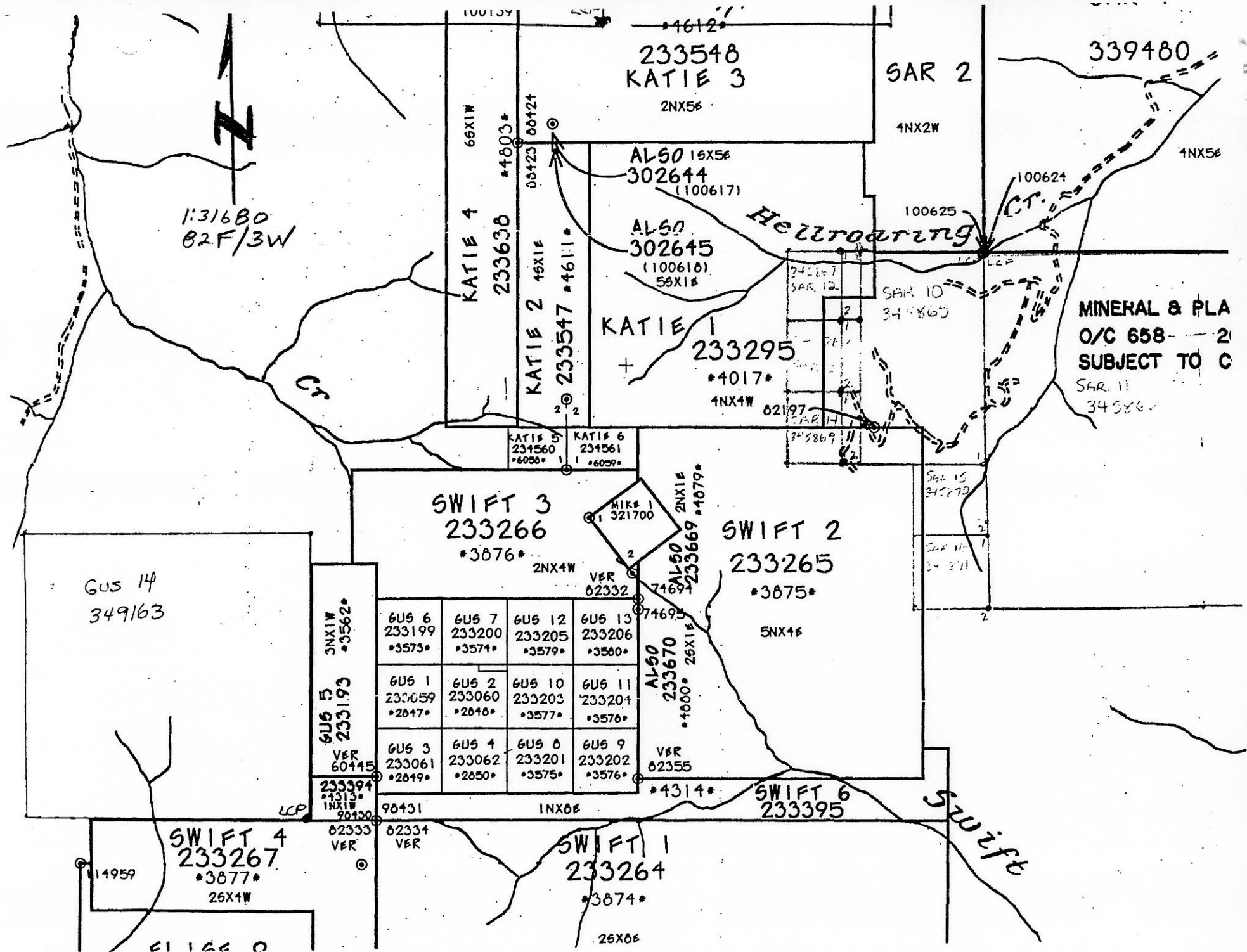
R.C. Wells, P.Geo., F.G.A.C.



Dated October 4, 1994.

R.C. Wells P.Geo., FGAC. Kamloops Geological Services Ltd.

APPENDIX 1



1:31680
82F/3W

233548
KATIE 3
2NX56

SAR 2
1NX2W

339480

KATIE 4
65X1W
233638
KATIE 2
15X1E
233547
4611

ALSO 15X56
302644
(100617)

ALSO
302645
(100618)
56X1E

Herrington Ct.

KATIE 1
233295
4017
1NX1W

MINERAL & PLA
O/C 658-2
SUBJECT TO C
SAR 11
343866

KATIE 5
234560
6056

KATIE 6
234561
6059

SWIFT 3
233266
3876
2NX4W

MIX 1
321700
ALSO
233669
4079
2NX1E

SWIFT 2
233265
3875
5NX1E

GUS 14
349163

GUS 5
3NX1W
233193
3562
VER
60445

GUS 6 233199 *3573*	GUS 7 233200 *3574*	GUS 12 233205 *3579*	GUS 13 233206 *3580*
GUS 1 233059 *2647*	GUS 2 233060 *2648*	GUS 10 233203 *3577*	GUS 11 233204 *3578*
GUS 3 233061 *2649*	GUS 4 233062 *2650*	GUS 8 233201 *3575*	GUS 9 233202 *3576*

ALSO
233670
4080
25X1E

233394
3513
1NX1W
20130
VER
02333

SWIFT 4
233267
3877
25X4W

SWIFT 1
233264
3874
25X0E

SWIFT 6
233395

Swift

14959

611660

SUMMARY

KATIE PROJECT

Nelson Mining Dist., B.C.

August 27, 1992

1992 Exploration on Yellowjack Resources Ltd.'s Katie Project was conducted from March 17 to July 6, 1992. The program, consisting of pre-fieldwork data compilation and plotting, 14 684 feet of NQ diamond drilling, infill soil geochemical analysis, and thin-section petrology, has successfully demonstrated the presence of a large alkaline copper-gold porphyry system hosted within altered Rossland Group volcanics located on the Katie property.

Compilation of pre-1992 data (drillhole results, ground geophysics, and soil geochemistry) established three priority target areas (the Main and 17 Zones and the West Anomaly) for 1992 drilling and for future exploration. They are summarized below.

Main Zone geology consists of steeply dipping Elise Formation andesitic tuffs and coarse mafic phyrlic flows with local minor coeval dioritic sills and Coryell lamprophyric dykes. Copper-gold enrichment occurs with chalcopyrite-pyrite-bornite-chalcocite (trace) mineralization, mainly within extreme potassic-altered andesites. Gold values are also found in pyrite-tetrahedrite-chalcopyrite mineralized quartz-carbonate stockworks in propylitically-altered volcanics. The Main Zone has an apparent true thickness of 230 to 440 feet, has a 1600 foot strike length (open in both directions) and has been intersected to 1150 feet down dip from surface (1000 feet vertically). A copper-gold anomaly to the southwest, intersected during pre-1992 drilling (NKT-91-32 and others), may represent a parallel or fault repeated zone(s).

Drillhole highlights from the Main Zone are as follows:

<u>DDH</u>	<u>From</u> ft	<u>To</u> ft	<u>Length</u> ft	<u>Cu</u> %	<u>Au</u> oz/T
NKT-90-5	50	580	530	0.15	0.005
including	452	580	128	0.28	0.009
NKT-90-10	29	1113	1084	0.13	-
including	282	336	54	0.23	0.010
and	470	523	44	0.30	0.008
NKT-91-13	144	579	435	0.22	0.009
including	317	422	105	0.37	0.018
NKT-91-15	382	535	153	0.16	0.002

Katie Project Summary

Main Zone cont.

<u>DDH</u>	<u>From</u> ft	<u>To</u> ft	<u>Length</u> ft	<u>Cu</u> %	<u>Au</u> oz/T
NKT-91-21B	160	870	710	0.13	0.005
including	663	768	105	0.19	0.018
including	669	735	66	0.25	0.028
NKT-91-34	35	853	818	0.10	0.015
including	610	853	243	0.18	0.023
NKT-91-35	83	787	704	0.14	0.003
including	187	423	236	0.15	0.003
and	674	787	113	0.28	0.005
NKT-91-37	95	810	715	0.09	0.004
including	95	154	59	0.18	0.010
YKT-92-40	223	541	318	0.23	0.012
including	390	492	102	0.34	0.010
including	399	448	49	0.42	0.011
YKT-92-41	226	650	424	0.20	0.008
including	345	570	225	0.29	0.013
including	403	570	167	0.36	0.014
YKT-92-42	417	899	482	0.13	0.003
YKT-92-43	25	525	500	0.19	0.005
including	298	525	227	0.25	0.006
including	476	525	49	0.40	0.007
YKT-92-44	249	584	335	0.12	0.004
YKT-92-45	89	384	295	0.21	0.010
including	108	216	108	0.37	0.009
YKT-92-53	285	987	702	0.10	0.003
including	816	987	171	0.20	0.006
YKT-92-54	413	954	541	0.13	0.004
including	560	698	138	0.17	0.006
YKT-92-55	354	570	216	0.22	0.005
including	482	551	69	0.36	0.005

The 17 Zone is located 2200 feet south of the Main Zone. Geologically similar to the Main Zone, it is underlain by andesitic tuffs and flows with minor dioritic sills and local feldspar porphyry dykes. Copper-gold enrichment occurs with chalcopyrite-pyrite-tetrahedrite (trace) mineralization. Potassic alteration (k-spar and biotite) of host andesitic tuffs(?) is intense and pervasive through the mineralized zone. Limited drilling in the 17 Zone has outlined an area 1000 feet by 350 feet which is underlain by the favourable mineralized zone. The zone appears to strike northwest-southeast, has a shallow dip to the northeast, and may be a faulted extension to the Main Zone. It is open in both directions along strike and has been intersected to a vertical depth of 425 feet.

Katie Project Summary

4

Drillhole highlights from the 17 Zone are as follows:

<u>DDH</u>	<u>From</u> ft	<u>To</u> ft	<u>Length</u> ft	<u>Cu</u> %	<u>Au</u> oz/T
NKT-91-17	523	745	222	0.32	0.009
including	607	687	80	0.42	0.012
YKT-92-39	148	413	265	0.25	0.009
including	266	374	108	0.36	0.010
YKT-92-50	197	354	157	0.13	0.004
YKT-92-52	12	256	244	0.10	0.003
including	207	256	49	0.19	0.006

Exploration within the **West Anomaly** is centred approximately 5150 feet west of the Main Zone. The anomaly is underlain mainly by andesitic flows with minor tuffs and intercalated coarse crystalline diorite. Sparse surface showings of malachite and spot copper soil geochemistry highs correlate well with the anomaly's high chargeability and resistivity geophysical signatures. The resultant anomaly is approximately 4000 feet long and open to the west. Drilling of this anomaly has yielded the following intersections:

<u>DDH</u>	<u>From</u> ft	<u>To</u> ft	<u>Length</u> ft	<u>Cu</u> %	<u>Au</u> oz/T
NKT-90-9	313	873	560	0.16	0.005
including	359	410	51	0.27	0.005
and	818	873	55	0.53	0.033
YKT-92-46	138	846	708	0.09	0.005
including	216	364	148	0.12	0.006
and	423	512	89	0.20	0.002

Strong advanced argillic to phyllic alteration (quartz-sericite-pyrite) in drillholes YKT-92-47 and -49, and copper-gold enrichment in holes NKT-90-9 and YKT-92-46 suggest that the explored area of the West Anomaly potentially lies to the flank of a potassic copper-gold zone similar to the Main Zone.