

TRENCHING, GEOLOGICAL & GEOCHEMICAL SURVEY REPORT

COL CLAIM GROUP

Omineca Mining Division

Latitude: 55° 15'
Longitude: 124° 45'

NTS: 93 N/2,7

by

John Nebocat

January 12, 1990

Owner: Colin J. Campbell

Operator: Kookaburra Gold Corporation

LOG NO: 0305	RD.
ACTION:	
FILE NO:	

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PART 2
OF 2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,748

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INTRODUCTION

The Col claim group is situated approximately 108 km north of the town of Fort St. James, B.C. The claims sit along the southern flank of the Swannell Range, about 5 km north of the west end of Chuchi Lake and are centered at the intersection of NTS map sheets 93 N/2 & 93 N/7 ($55^{\circ} 15'$ x $124^{\circ} 45'$).

Access is via the "Omineca", or "North", road 100 km north from Fort St. James, then, 30 km west along the "Germansen-Indata" Forest Service road. A newly constructed 6.5 km long 4 x 4 road links the forestry road with an old "tote" road built by the previous operator, which leads to the property from the west end of Chuchi Lake.

The claims are on an east-west trending ridge and for the most part are on the southerly facing slope. Relief is in the order of 600 m, ranging from 950 m to 1550 m ASL. The area of the previous and present work is not too steep but cliffs with talus slopes occur along the NE margin of the claims.

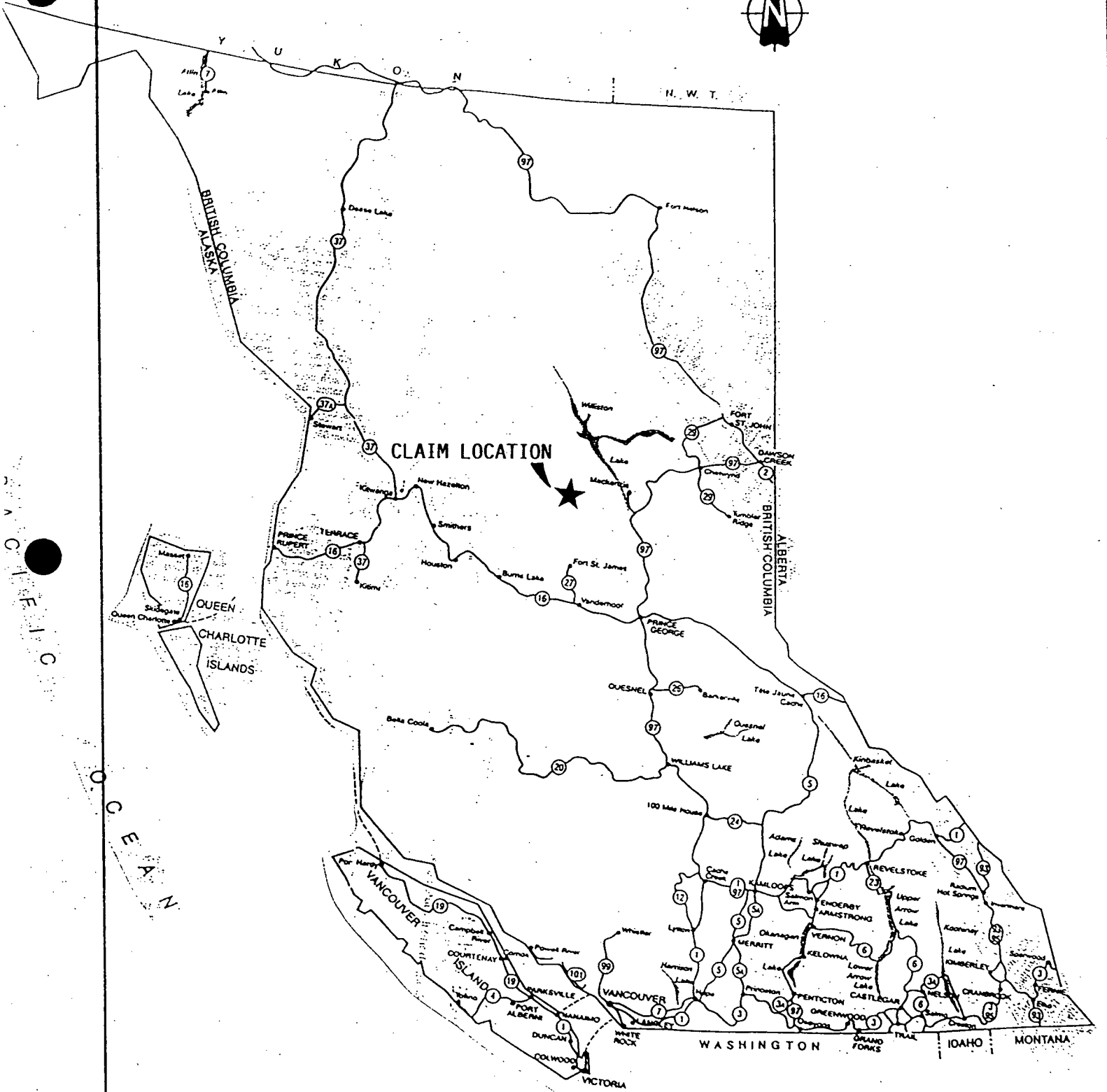
Copper showings were discovered by Colin Campbell in 1969 following a stream sediment survey. Mr. Campbell has held the ground since that time. **Falconbridge Nickel Mines Ltd.** optioned the claims in 1970 and performed work on them until 1972. This work included soil geochemistry, ground magnetic, V.L.F. and I.P. surveys and 7741 feet of diamond drilling in 32 holes comprised of x-ray, AQ and BQ core sizes. **Falconbridge** explored the property as a porphyry Cu-Mo deposit. Broad geochemical anomalies in Cu were obtained, but Mo and Ag anomalies were weak and scattered. The generally weak IP anomalies can be attributed partly to the high bornite/chalcopyrite content relative to low amounts of pyrite. The "A Zone" was drilled in detail, and a reserve of 2,000,000 tons of 0.6% Cu was indicated. Following disappointing drill results from IP anomalies tested SE from the "A Zone", **Falconbridge** returned the property to the vendor in 1972.

In 1984, Campbell sampled a number of 10 foot segments of core for gold. The results indicated the presence of gold with analyses up to 2.17 ppm (0.063 oz/s.ton) over ten feet. A correlation with anomalous Au and greater than 0.5% Cu was suggested.

David M. Jenkins, of **Ainsworth-Jenkins Holdings Inc.**, examined the property on October 23, 1987. His sampling of core, and outcrop from a trench excavated by Campbell, confirmed the presence of gold. A 12 foot width from the trench averaged 2.2 ppm Au and 3.16% Cu, including a 2.5 foot sample assaying 5.2 ppm Au and 4.60% Cu. Values up to 1.4 ppm Au and 1.68% Cu over 8 feet were obtained from drill core.

Kookaburra Gold Corporation entered into an option agreement with Colin Campbell on March 14, 1988 agreeing to perform work on the **COL #1, COL #2 and KAEL #2** mineral claims. **Kookaburra** staked additional claims in 1988 and 1989.

The work described in this report was performed on the **Kael #2, Col #1, Col #2 and Col #7** claims between June 21, 1989 and October 12, 1989.



K O O K A B U R R A

0 100 200 KM
1:7,150,000 approx.

KOOKABURRA GOLD CORP.
INDEX MAP
COL CLAIM GROUP
Date: Jan. 12/90 Fig. 1

Between June 21, 1989 and June 23, 1989 a D7 caterpillar re-established road access to the property and constructed 1.9 km of access roads and sites for an excavator to dig trenches. From June 24 to June 28, 1989 a Drott 40 excavator dug approximately 490 lineal meters of trench in 9 trenches; the trenches are 1 m wide and range in depth from $\frac{1}{2}$ m to over 2 m. The trenches were sampled and mapped between June 25 and July 3, 1989. One hundred and sixteen rock samples were collected from the trenches and surrounding areas; they were analyzed for Cu, Au and As.

On July 2 and 3, 1989, lines 500E to 800E were extended from 500S to 1000S using a hip chain and compass. Seventy-eight soil samples were collected and analyzed for Au and 6 element ICP.

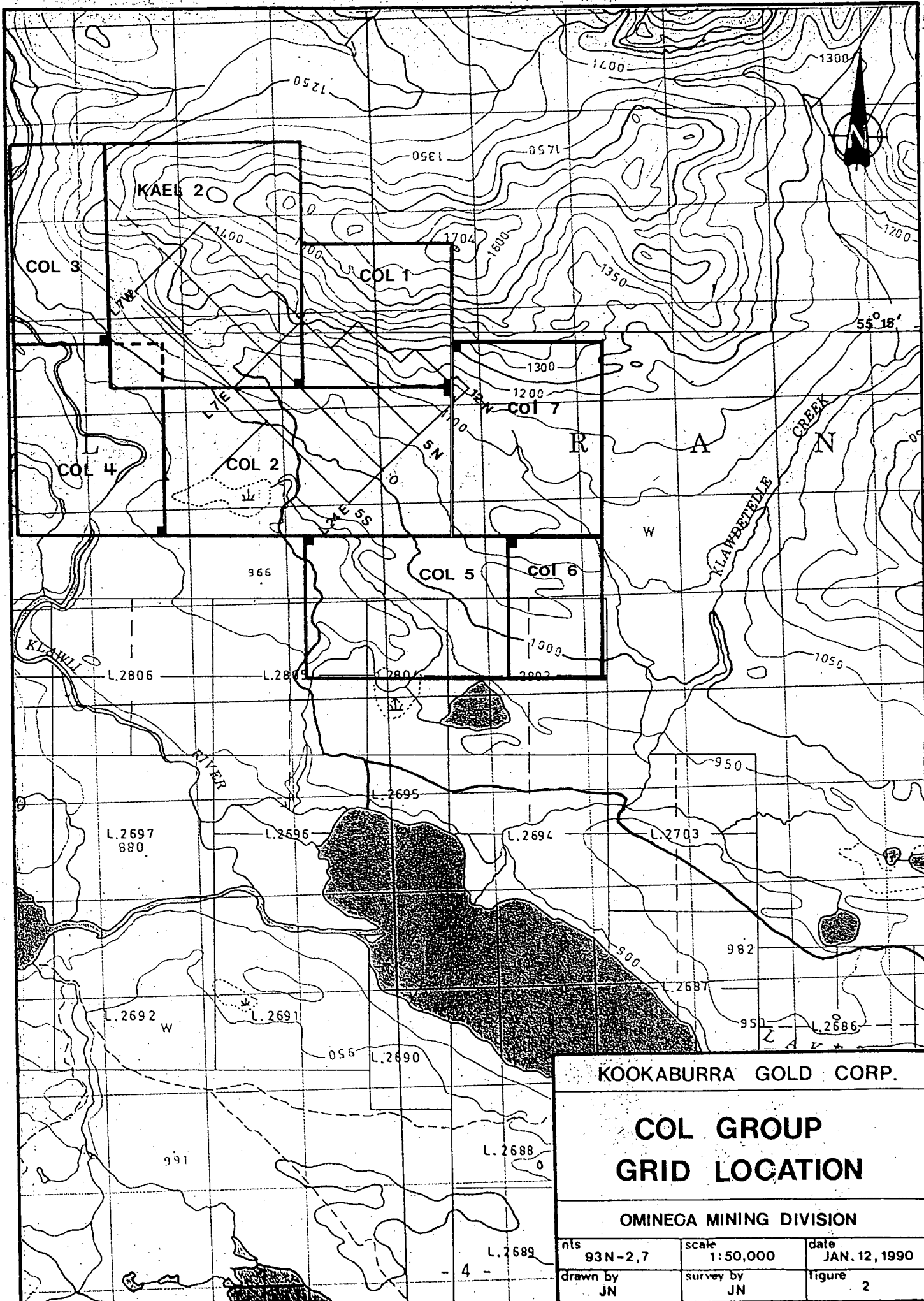
Between July 17 and July 30, 1989, and from September 19 to 22, 1989, 27.2 km of line were cut to IP standards southeast of and contiguous with the grid established by Kookaburra in 1988. 22.4 km of pole-dipole IP survey was run on this grid between July 31 and August 10, 1989 and from September 24 to 26, 1989. On August 28 and between October 5 and October 8, 1989, 217 soil samples were collected on select lines of the grid to test portions of the IP anomalies obtained in the above-mentioned survey. The samples were analyzed for Au and for 31 elements by ICP.

The grid was geologically mapped and prospected between October 5 and October 11, 1989.

A table showing the claim status of the Col Group is shown below.

Table 1. Claim Status

<u>Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Record Date</u>	<u>Expiry Date</u>
Kael #2	20	6531	Sept. 28/84	Sept. 28/93
Col #1	9	8651	Aug. 5/87	Aug. 5/93
Col #2	18	8652	Aug. 5/87	Aug. 5/93
Col #3	8	9487	June 21/88	June 21/90
Col #4	12	9571	July 20/88	July 20/90
Col #5	12	9824	Oct. 3/88	Sept. 17/90
Col #6	6	10879	July 14/89	July 14/90
Col #7	12	10696	Oct. 9/89	Oct. 9/90



KOOKABURRA GOLD CORP.		
COL GROUP GRID LOCATION		
OMINEGA MINING DIVISION		
nts 93N-2,7	scale 1:50,000	date JAN. 12, 1990
drawn by JN	survey by JN	figure 2

TRENCHING PROGRAM

The purpose of the trenching program was to test gold, gold-copper and arsenic anomalies obtained in soil samples collected by Kookaburra in 1988. Since the samples were not analyzed until after the field season (October, 1988), the anomalies were not examined on the ground prior to mobilization with a caterpillar in June of 1989. About 1.9 km of road and excavator sites were constructed, and a Drott 40 excavator was used to excavate the anomalous sites. The trenches are about 1 m wide and range in depth from $\frac{1}{2}$ m to in excess of 2 m depending on rock competence and overburden thickness.

Trenches were mapped and sampled at a scale of 1:250 (see Figures 3-11) and a geology map of the trench area was prepared at 1:1000 scale (see Map 1). The rock assays from this area are tabulated in Appendix I.

Regional Geology

The regional geology is best described by Garnett, 1978, in the B.C. Department of Mines Bulletin 70 titled "Geology and Mineral Occurrences of the Southern Hagem Batholith". The Col property is on the eastern contact of the batholith with the Takla Group Volcanics, with the majority of the property underlain by the intrusive complex.

Garnett describes the Hagem Batholith as being composed of at least three phases of varying chemical composition. Phase I granodiorite and Phase III granite are characterized as calcalkaline while Phase II syenite and Phase I basic suite are predominantly alkaline. Copper mineralization is associated with syenitic intrusions of the Hagem Batholith in a number of areas. Structure of the area is vague, in a large part due to the extensive drift cover of the lower areas. The predominant structural direction is northwest as shown by strong trends of the aeromagnetic maps. It is probable that the anomalous east-west trend of Chuchi Lake represents a cross-cutting structural trend.

The superficial geology is complex. Alpine glaciation occurred in the higher ground and is expressed by the presence of cirques. The area to the south was covered by continental glaciation. The area in between was the location of a large post-glacial lake whose shorelines are now indicated by several obvious terraces. The Col property occurs on the margin of these terrains with the soil sampling grid being largely in the alpine terrain the southwest corner shows evidence of terraces.

Trench Geology (Map 1)

The area in which the trenching was done is underlain exclusively by alkaline intrusive rocks, in order of decreasing abundance: medium grained biotite/hornblende monzonite; fine to medium grained syenite and syeno-monzonite; and a fine grained, magnetic and holocrystalline syenite with aplite and pegmatite phases.

The "monzonite" is quite dark giving it a dioritic appearance, but petrographic work done by Falconbridge indicates an abundance of interstitial potassic feldspar. The rock is quite crystalline and the biotite, and rock as a whole, appears relatively unaltered. Hornblende alters to chlorite and tremolite and most certainly much of the biotite is of secondary origin.

Syenite (unit 2) is a generally fine grained facies which grades from a crystalline, mafic-bearing phase to a fleshy-pink, mafic-absent phase where it has been intensely altered by potash metasomatism. Locally the rock resembles a flow-banded rhyolite due to alteration envelopes of potash feldspar, magnetic, quartz and tremolite-chlorite emanating from parallel, uni-directional fractures. It is not clear if any of this phase is a "true" magmatic syenite or just a metasomatic alteration of the monzonite; but a transition, exemplified by a decrease in mafics, is evident in outcrops seen in line 100W.

A fresh looking, holocrystalline syenite with less than 5% mafics intrudes the monzonite as irregular masses and as tabular structures. Pegmatitic and fleshy coloured aplite dykes occur with it and are probably genetically related. Some finely disseminated magnetite is seen in this unit locally, but magnetics are a poor mapping tool in that all three units demonstrate varying magnetic strengths. The most diagnostic feature of this syenite is its cross-cutting features in the monzonite, whereas the Unit 2 syenite has gradational characteristics as well as being strongly altered by potassic feldspar.

Structure

At least four major structural trends are noted both in mapping and in air photo and landsat imagery. Most of these have been documented by Falconbridge, but a new one has been identified in the trenching program.

The dominant structural grain trends 145° AZ/vertical; this trend is represented by a strong unidirectional fracture set in all three lithologies, but primarily seen in the Unit 2 syenite. A lineament parallel to this trend is seen as a creek/gulley between L 050W and L 400E, and this is believed to be a fault.

Another set trends between 120° AZ. and 125° AZ. with dips ranging from steeply NE to steeply SW. This fault/fracture set is seen cross-cutting the 145° /vert. set at L 100W, 430S. A fault parallel to this trend is seen separating the two syenite units in Trench 1 (Figure 4) and separating the Unit 3 syenite from Unit 1 monzonite in Trench 6 (Figure 8). A dominant fracture set does not accompany this fault direction, but major lineaments parallel to this trend are observed in airphotos.

A major fault direction that was previously not recognized trends between 035° AZ. and 045° AZ. with steep dips to the SE and NW. This fault set appears quite young and ranges from 1 m to several m in width. It is exposed in Trench 1 where it brecciates Unit 3 syenite over several meters and is also seen in Trenches 6, 8 and 9. The only outcropping of this fault trend is seen along L 0E and in Trench 2 (Figure 5) where it is exposed over a 1 m width and trends $045^{\circ}/80^{\circ}$ SE. Here it separates the altered and mineralized Unit 2 syenite from massive, unaltered monzonite. Shallow, overburden-filled depressions occur in various sites and are believed to be underlain by these NE-trending faults.

Another set that appears on air photos but seldom appears in outcrop is along a north-south direction. It appears as a creek/lineament just west of the "A Zone" outcrop between L 500E and L 600E. It intersects the 125° fault linear at L 400E, 315S but cannot be traced beyond it. Airphotos suggest that it reappears several hundred meters to the north. A fracture set trending 010° /vert. is seen in the "A Zone" outcrop.

Mineralization and Geochemistry

The purpose of the trenches was to expose mineralization in areas where anomalous gold, gold-copper and gold-arsenic anomalies were obtained in the 1988 soil survey. Since the samples were not analyzed until after the field season, the anomalies were not investigated prior to mobilization of the caterpillar in June, 1989.

Gold anomalies of 495 ppb and 370 ppb were obtained on L 100W at 425S and 450S, respectively. This is an area of cliffy outcrops and could only be chip sampled at surface (see Figure 3). Widespread, but low grade malachite mineralization is seen throughout the 145°/vert. fracture sets in the intensely altered syenite. Some quartz veins carrying chalcopryrite and ?chalcocite? occupy some of the fractures along with magnetite, chlorite, tremolite and traces of molybdenite. At the base of the cliff (450S) a shear zone filled with quartz, chlorite, tremolite, malachite and chalcocite over a 15 cm width assayed 2700 ppm Cu and 574 ppb Au. Aplite dykes appear to post-date the mineralization in this outcrop area, but they always seem to be nearby.

The soil geochem values obtained in 1988 seem to reflect bedrock (C horizon) values as indicated in the rock samples collected on that line (1900 ppm Cu and 280 ppb Au, maximum).

Trench 2 was located over a 200 ppb Au anomaly on L 00E, 350S. Chalcopryrite, bornite and malachite were observed on fractures trending 035°/20SE and 140°/86SW. The mineralization and alteration seen in outcrop here is similar to that seen on L 100W, and the gold and copper values reached similar thresholds.

Unit 3 syenite is exposed in Trench 1 (Figure 4) and has been extensively brecciated due to faulting. Bornite, chalcopryrite, malachite and pyrite occurs with it, and the thresholds are slightly higher than in the previous two locations (up to 3900 ppm Cu and 400 ppb Au).

Trench 3 was located to test a 75 ppb and a 50 ppb Au anomaly on L 100E, 400S and L 100E, 425S, respectively. Only minor malachite and one narrow (5 cm) massive chalcopryrite/pyrite stringer was seen in the otherwise barren monzonite. A grab sample of the chalcopryrite (#2425) assayed 0.106 opt Au and 15% Cu. Maximum values for Cu and Au were 1530 ppm and 71 ppb, respectively, for Trench 3.

Just a few meters west and southwest of the trench outcrop numerous aplite and pegmatite dykes and irregular masses of the Unit 3 syenite. Chalcopryrite and malachite occur as fracture fillings as well as matrix filling along with chlorite, tremolite, pyrite and bornite in brecciated syenite and aplite. Grab samples of this material ran up to 1.55% Cu and 0.036 opt Au in sample number 2426.

A gold in soil anomaly of 70 ppb on L 200E, 375S was tested with Trench 4. Intermixed monzonite and syenite with little mineralization was observed. The analyses were generally low, but one 3.0 m width containing malachite and aplitic material ran 1630 ppm Cu and 115 ppb Au. The north end of the trench, where the anomalous soil sample originates, is underlain by up to 3 m of glacial overburden; the bottom is a very hard basal till admixed with syenite and monzonite clasts. This overburden thickness indicates that the gold in soil anomaly is transported down-ice, presumably from a near source to the WSW.



L 100 W

2468 / 3.0, 318, 110
 2467 / 3.0, 288, 50
 2466 / 3.0, 920, 249
 2465 / 3.0, 374, 280
 2464 / 3.0, 690, 207
 2463 / 3.0, 880, 121
 2462 / 3.0, 223, 4
 2461 / 3.0, 340, 69
 2460 / 3.0, 830, 119
 2459 / 3.0, 291, 21
 2458 / 3.0, 495, 63
 2457 / 3.0, 480, 76
 2456 / 3.0, 720, 57
 2455 / 3.0, 1900, 181
 2454 / 3.0, 1200, 120
 2453 / 3.0, 890, 42
 2452 / 3.0, 485, 43
 2451 / 3.0, 510, 26

400 S

2

SEE MAP 1 FOR LEGEND

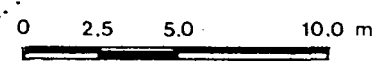
2

425 S

2

2

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU ; PPB AU



KOOKABURRA GOLD CORP.

COL PROJECT
ASSAY PLAN: L100W

OMINECA MINING DIVISION

nts 93 N - 2, 7	scale 1 : 250	date JAN 12, 1990
drawn by JN	survey by JN	figure 3

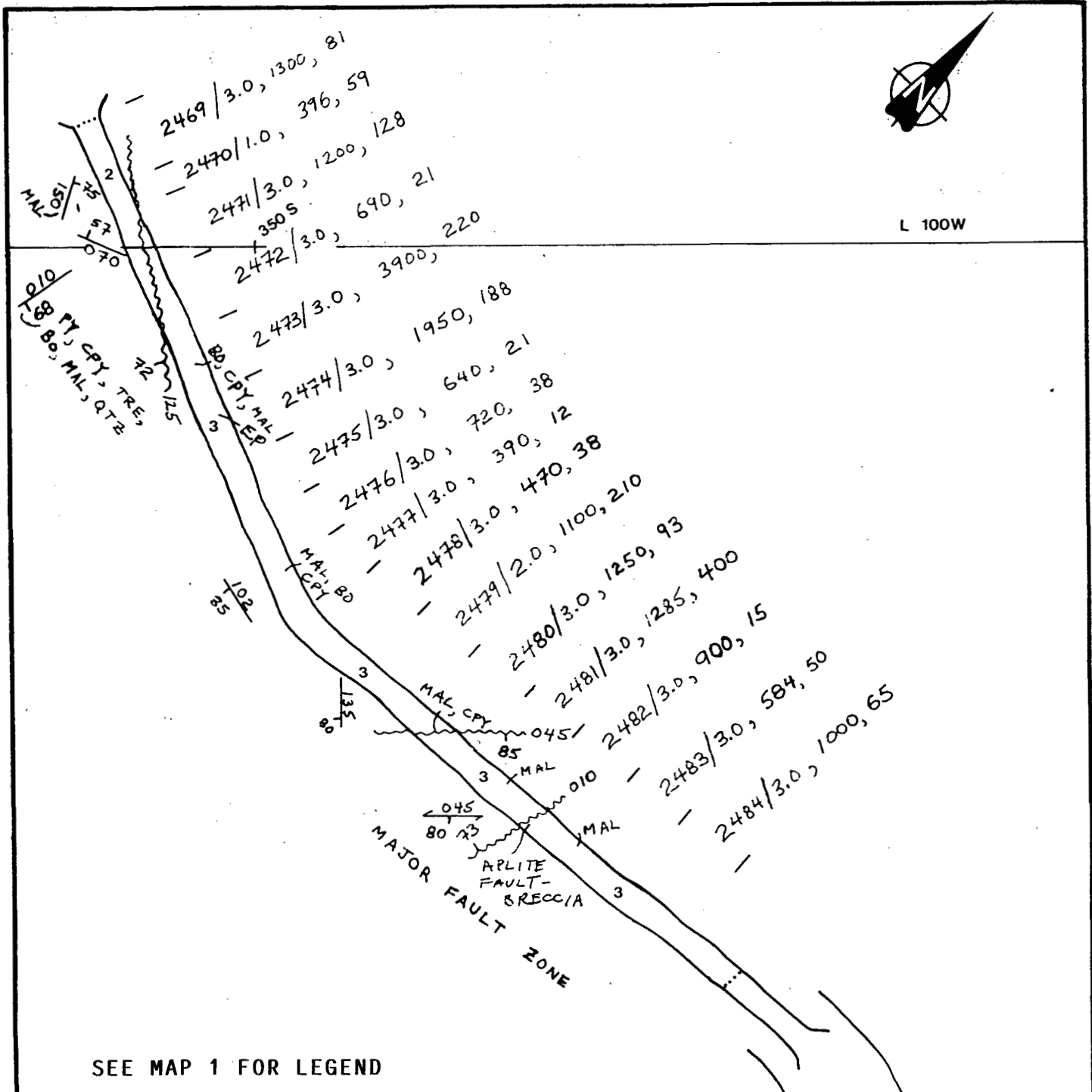
450 S

8 -

+ 2415

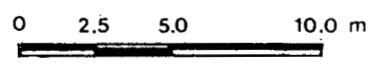


L 100W



SEE MAP 1 FOR LEGEND

SAMPLE NUMBER ; WIDTH (m)
ASSAYS: PPM CU ; PPB AU

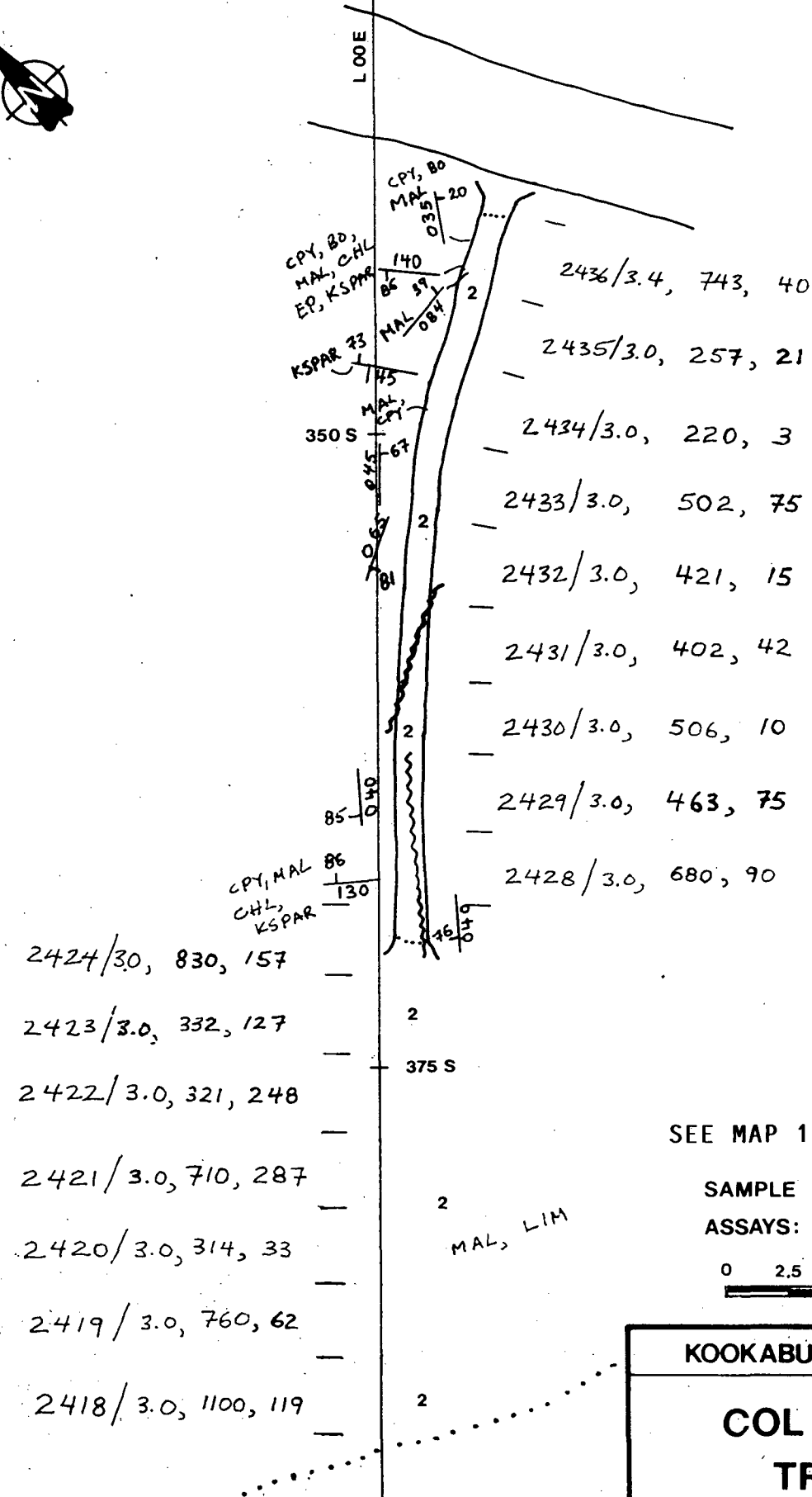


KOOKABURRA GOLD CORP.

COL PROJECT TRENCH 1

OMINECA MINING DIVISION

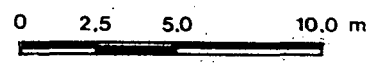
nts 93 N - 2, 7	scale 1:250	date JAN 12, 1990
drawn by JN	survey by JN	figure 4



2436/3.4, 743, 40
 2435/3.0, 257, 21
 2434/3.0, 220, 3
 2433/3.0, 502, 75
 2432/3.0, 421, 15
 2431/3.0, 402, 42
 2430/3.0, 506, 10
 2429/3.0, 463, 75
 2428/3.0, 680, 90

SEE MAP 1 FOR LEGEND

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU ; PPB AU



KOOKABURRA GOLD CORP.		
COL PROJECT TRENCH 2		
OMINECA MINING DIVISION		
nts 93N-2,7	scale 1:250	date JAN 12 1990
drawn by JN	survey by JN	figure 5

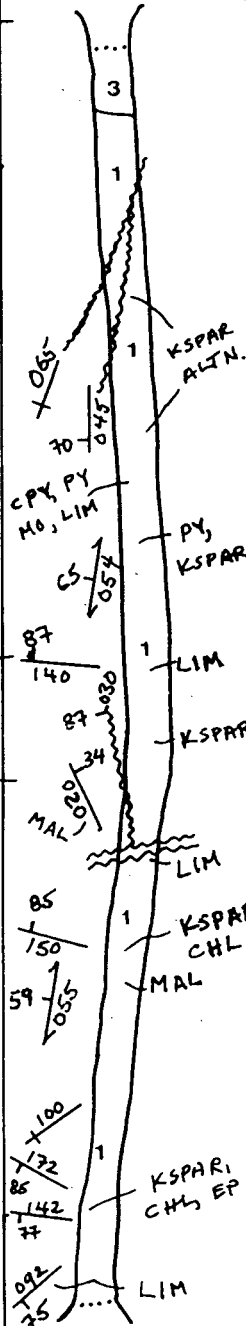


375 S

400 S

425 S

L 100 E



- 2450/3.0, 304, 3
- 2449/3.0, 663, 40
- 2448/3.0, 283, 3
- 2447/3.0, 172, 2
- 2446/3.0, 1530, 16
- 2445/3.0, 283, 3
- 2444/3.0, 177, 6
- 2443/3.0, 245, 4
- 2442/3.0, 680, 43
- 2441/3.0, 700, 40
- 2440/3.0, 670, 18
- 2439/3.0, 442, 17
- 2438/3.0, 540, 71
- 2437/3.0, 546, 42

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU ; PPB AU



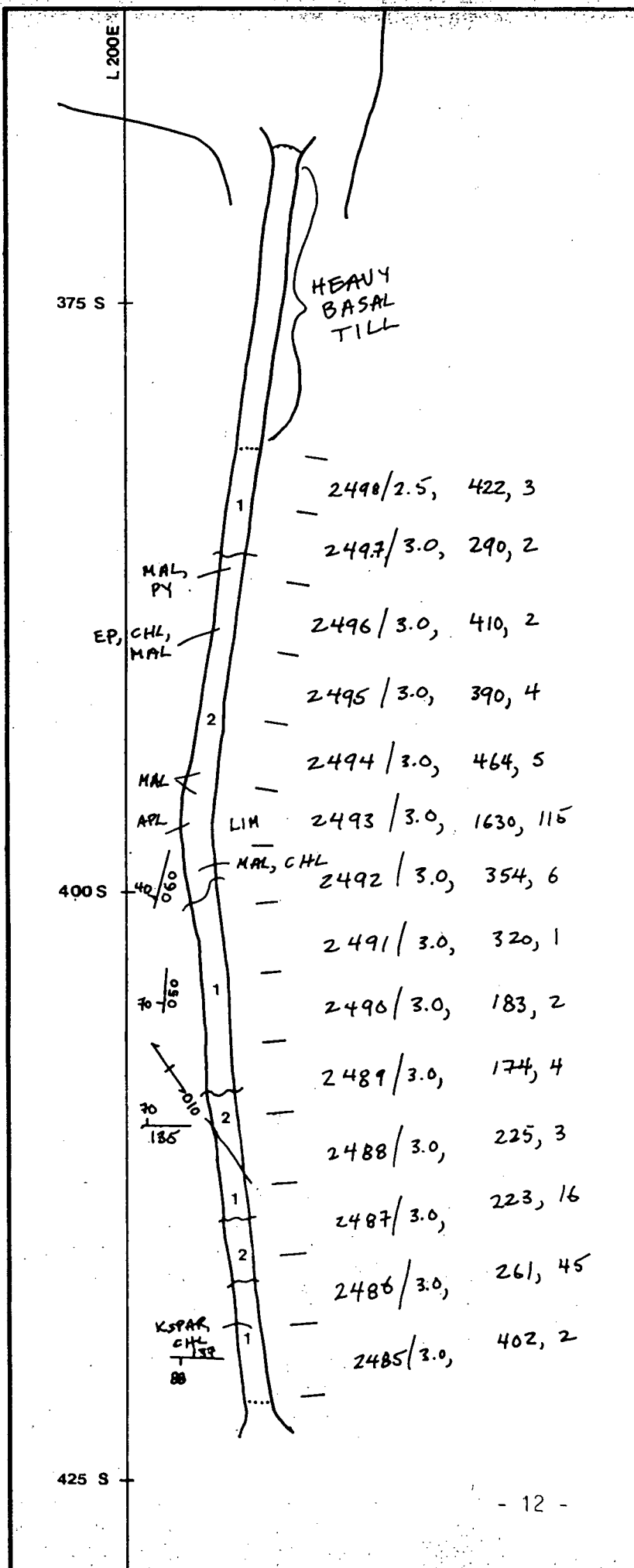
SEE MAP 1 FOR LEGEND

KOOKABURRA GOLD CORP.

**COL PROJECT
 TRENCH 3**

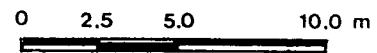
OMINECA MINING DIVISION

nts 93 N - 2.7	scale 1 : 250	date JAN 12, 1990
drawn by JN	survey by JN	figure 6



SEE MAP 1 FOR LEGEND

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU; PPB AU



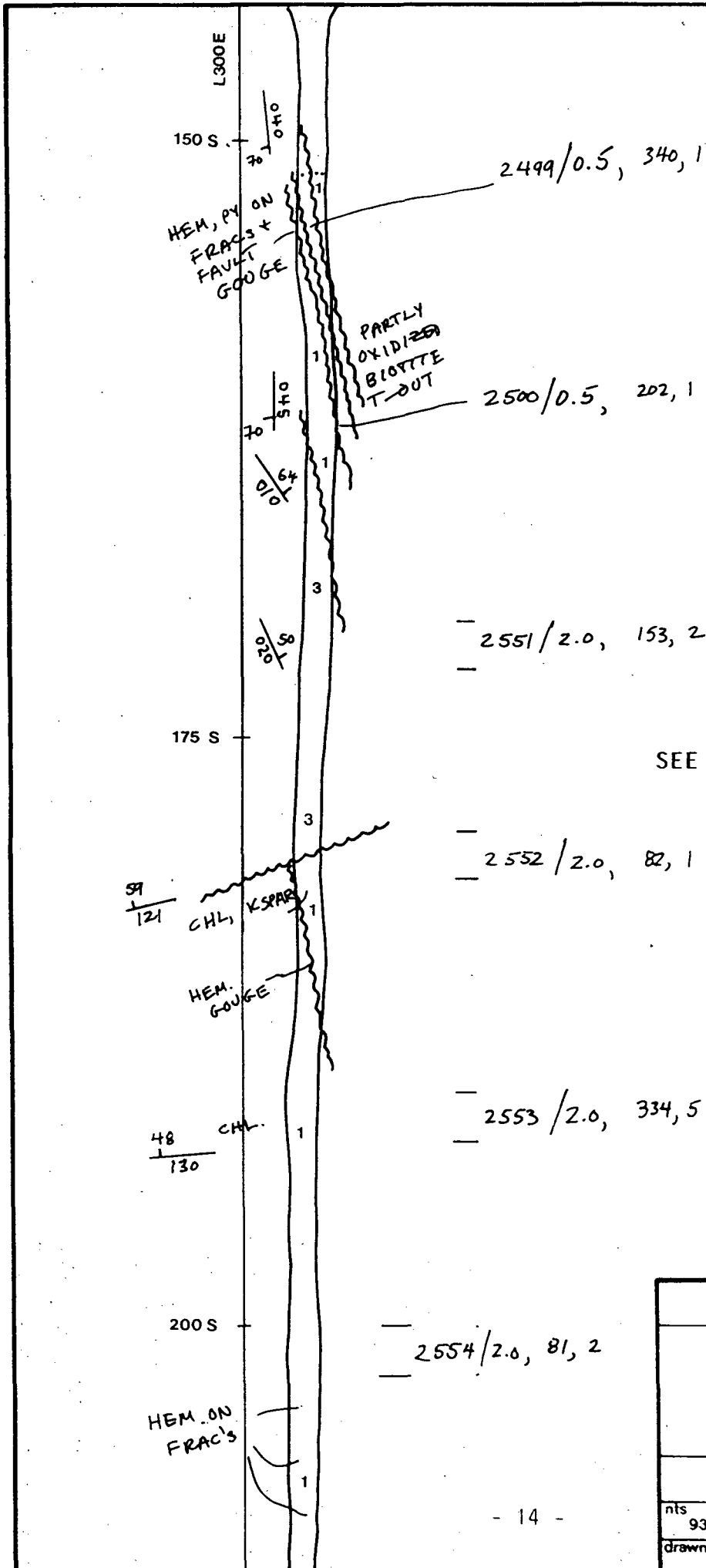
KOOKABURRA GOLD CORP.		
COL PROJECT TRENCH 4		
OMINECA MINING DIVISION		
nts 93 N - 2, 7	scale 1: 250	date JAN 12, 1990
drawn by JN	survey by JN	figure 7

Trench 5 was excavated to test a 120 ppb Au anomaly. No bedrock was reached, and it appears that the anomaly is mechanically transported in talus and colluvium from a source near L 00E, 25S-75S.

A series of low threshold Au anomalies (20, 25, 45 ppb) lie along L 300E from 175S to 225S; arsenic in soil anomalies of 38 ppm and 52 ppm occur at L 300E, 125S and L 300E, 275S, respectively. The rock in Trenches 6 and 7 revealed no Cu mineralization, and the assays for Au were very low (8 ppb maximum). The As values were elevated near the intersection of the two trenches where traces of disseminated pyrite were noted. Values of 32, 73, 150 and 175 ppm As were obtained. A narrow fault zone occurs at the north end of Trench 6 (Figure 8) and is filled with a red hematitic gouge. Oxidized biotite is seen in the wallrock monzonite. This fault, which trends $040^{\circ}/70^{\circ}$ NW, separates the monzonite from the Unit 3 syenite. Chlorite alterations is more prevalent in Trenches 6 and 7 along with minor potassic alteration and disseminated pyrite.

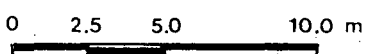
Trenches 8 and 9 tested the source of anomalous As values of 124 ppm, 83 ppm and 131 ppm along L 400E, 150S, 175S and 200S, respectively, and a gold in soil anomaly of 180 ppb at L 400E, 200S. Again, Cu and Au values were quite low (463 ppm Cu and 5 ppb Au maximum). The As values were also quite low suggesting that these anomalies are transported from a source to the SW, perhaps near Trenches 6 and 7. Monzonite is the dominant rock type again in Trenches 8 and 9; chlorite is common on fractures. Hematite is common as gouge and fracture coatings along a trend from $025^{\circ}/60^{\circ}$ NW to $043^{\circ}/86^{\circ}$ SE. The two highest As in soil anomalies occur on L 400E, 275S and L 400E, 300S, just downslope from the south end of Trench 9, but select samples of hematitic material yielded only up to 27 ppm As while the soils ran 178 ppm As and 203 ppm As. The anomalies remain unexplained.

An excavator site was located on L 500E to test a 90 ppb Au in soil anomaly; however, the amount of glacial-fluvial material present suggested that this was a transported anomaly, so it was not trenched.

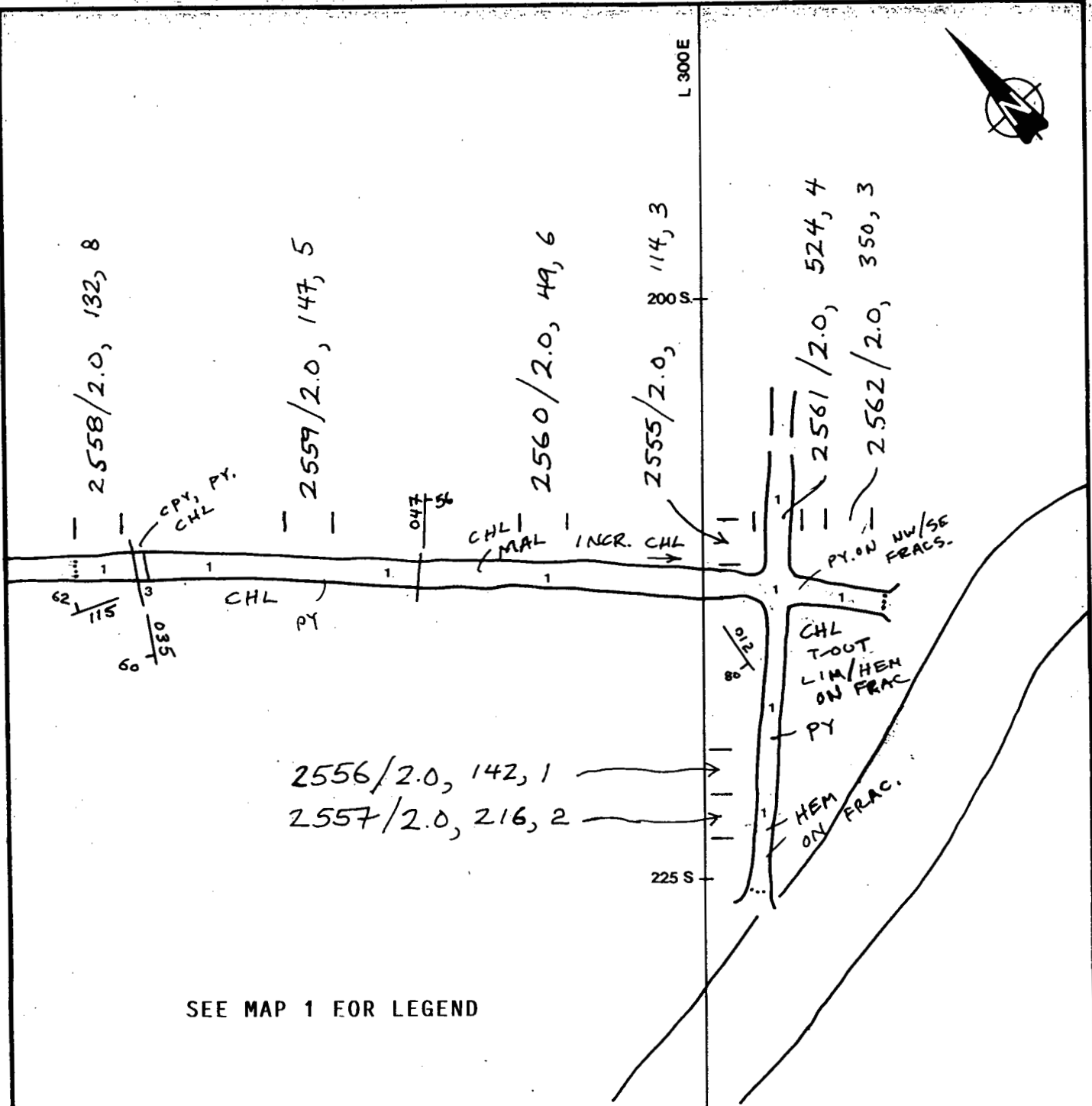


SEE MAP 1 FOR LEGEND

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU; PPB AU



KOOKABURRA GOLD CORP.		
COL PROJECT TRENCH 6		
OMINECA MINING DIVISION		
nts 93 N -2, 7	scale 1: 250	date JAN 12, 1990
drawn by JN	survey by JN	figure 8



2556/2.0, 142, 1
 2557/2.0, 216, 2

SEE MAP 1 FOR LEGEND

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU ; PPB AU

0 2.5 5.0 10.0 m.

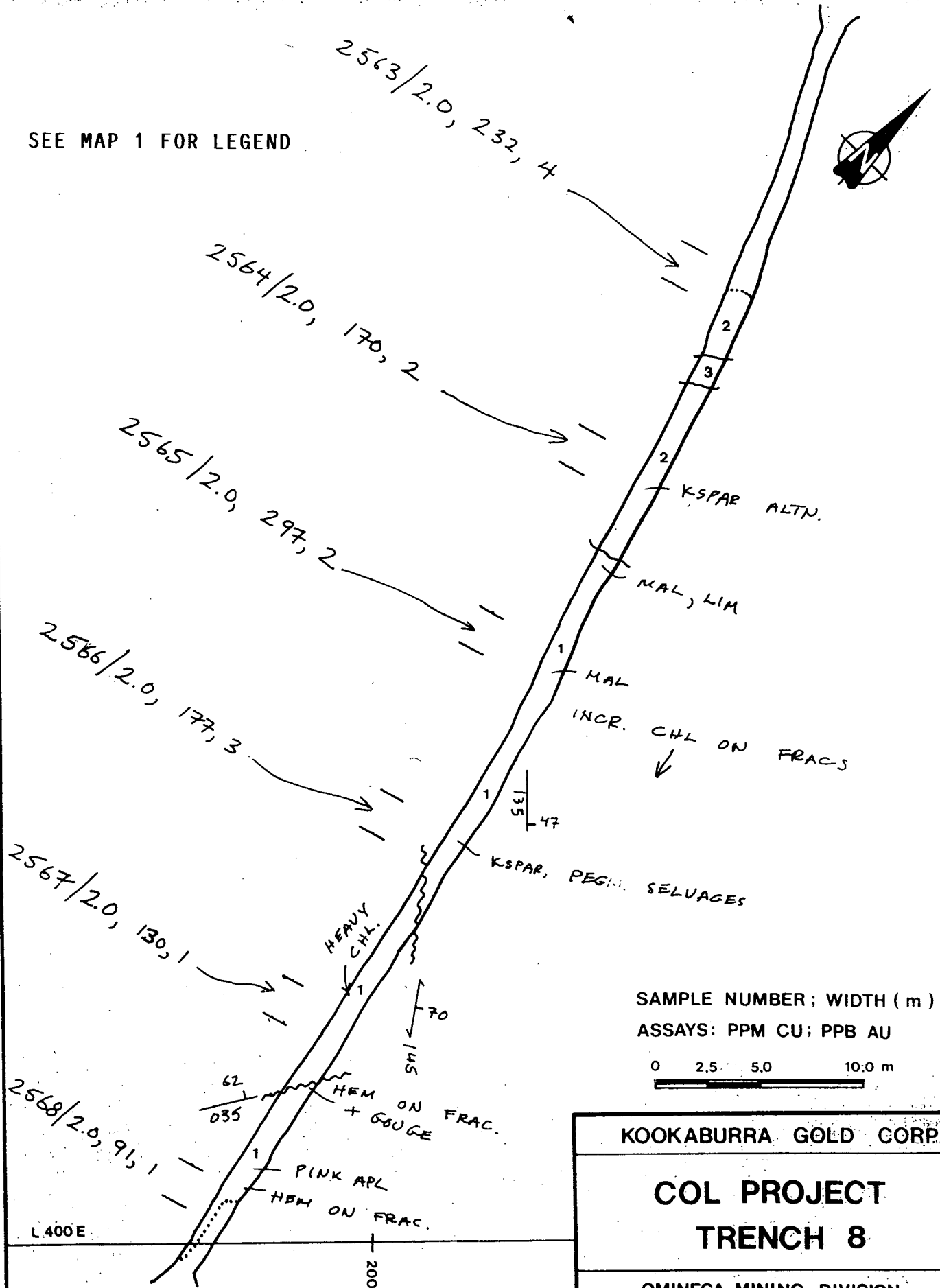
KOOKABURRA GOLD CORP.

**COL PROJECT
 TRENCH 7**

OMINECA MINING DIVISION

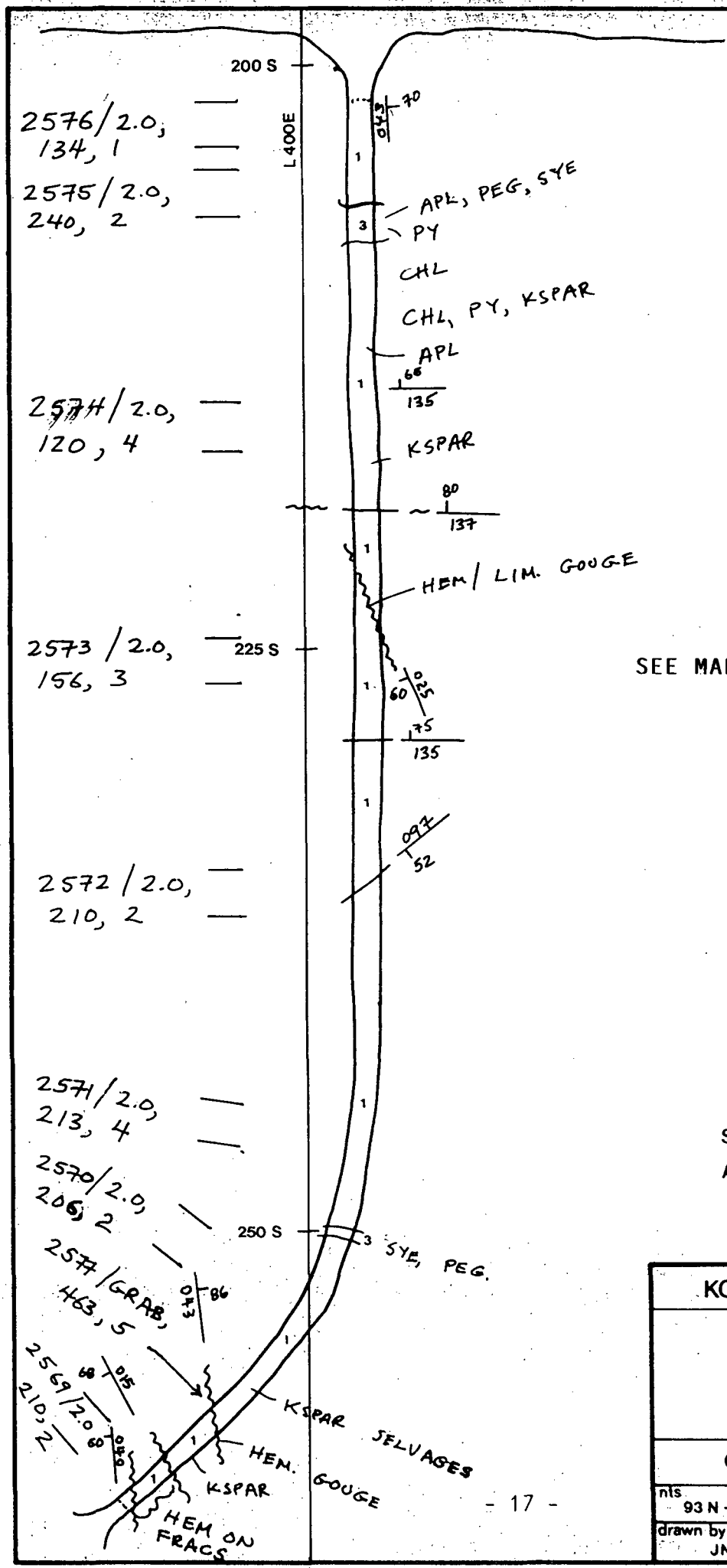
nts 93 N -2, 7	scale 1: 250	date JAN 12, 1990
drawn by JN	survey by JN	figure 9

SEE MAP 1 FOR LEGEND



SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU ; PPB AU

KOOKABURRA GOLD CORP.		
COL PROJECT TRENCH 8		
OMINECA MINING DIVISION		
nts 93 N -2,7	scale 1:250	date JAN 12, 1990
drawn by JN	survey by JN	figure 10



SEE MAP 1 FOR LEGEND

SAMPLE NUMBER ; WIDTH (m)
 ASSAYS: PPM CU ; PPB AU

0 2.5 5.0 10.0 m

KOOKABURRA GOLD CORP.		
COL PROJECT TRENCH 9		
OMINECA MINING DIVISION		
nts 93 N - 2, 7	scale 1: 250	date JAN 12, 1990
drawn by JN	survey by JN	figure 11

A ZONE - SOUTH GRID (Figure 12)

A follow-up survey of a few copper in soil anomalies obtained by **Falconbridge** in 1970, topographically below the "A Zone", where roughly 2 million tons of 0.6% Cu are drill indicated, was done in late June, 1989. Four lines were extended from 500 S to 1000 S to cover the anomalies. Seventy-eight soil samples were collected and analyzed for Au and 31 element ICP.

Kookaburra's survey confirmed the previous Cu anomalies obtaining results as high as 1343 ppm. A broad north-south anomaly (greater than 250 ppm), 150 m wide by 500 m long, is underlain by slow draining, swampy ground; many of the samples contained high organic content (A horizon) and required the -40 mesh fraction to be sampled. No outcrop was observed here.

This area was believed by **Falconbridge** to be caused by leakage from the "A Zone" which outcrops just 200 m north of the anomaly. The north-south fault/creek described earlier cuts the "A Zone" and debouches into this anomalous area, and it may have served as the transporting mechanism. The IP survey performed by **Falconbridge** in 1971 yielded only a weak metal factor anomaly in this vicinity, based primarily on low resistivity values.

The exact cause of the anomaly is not yet understood; if a source underneath it is postulated, then a retest by modern IP should be carried out, although the previous survey yielded only low frequency effect responses.



600 S

700 S

800 S

900 S

1000 S

1231 31
 1232 32
 1233 27
 1234 29
 1235 39
 1236 70
 1237 44
 1238 43
 1239 35
 1240 42
 1241 19
 1242 12
 1243 14
 1244 25
 1245 13
 1246 26
 1247 39
 1248 28
 1249 359
 1250 391

L500E

1211 50
 1212 60
 1213 14-250
 1214 1343
 1215 1027
 1216 828
 1217 1091
 1218 229
 1219 749
 1220 240
 1221 159
 1222 208
 1223 55
 1224 92
 1225 99
 1226 36
 1227 55
 1228 15
 1229 164
 1230 104

L800E

1191 61
 1192 45
 1193 19
 1194 121
 1195 23
 1196 155
 1197 193
 1198 23
 1199 638
 1200 1008
 1201 958
 1202 682
 1203 438
 1204 590
 1205 678
 1206 715
 1207 963
 1208 414
 1209 221
 1210 28

L700E

1251 69
 1252 187
 1253 187
 1254 70
 1255 14
 1256 25
 1257 43
 1258 72
 1259 79
 1260 40
 1261 29
 1262 115
 1263 239
 1264 223
 1265 70
 1266 393
 1267 673
 1268 694
 NS
 NS



Sample Number | PPM Cu

KOOKABURRA GOLD CORP.

COL PROJECT A ZONE, SOUTH GRID

OMINECA MINING DIVISION

nts 93 N - 2, 7	scale 1: 2500	date JAN. 12, 1990
drawn by JN	survey by JN	figure 12

SOUTHEAST GRID

From the work done by **Kookaburra** in 1988, based on airphoto analysis and reinterpretation of drillcore, it was felt that the mineralization explored by **Falconbridge**, on the "A Zone" and further to the west, is satellitic and that the main target area lies to the southeast. Some of the late drilling by **Falconbridge** intersected intensely kaolinized and locally brecciated rock veined with ankerite, siderite and minor secondary biotite 500 m to 1000 m southeast of the A Zone. This is interpreted to be a late-stage, barren breccia pipe and that better grade and larger size mineralization would be peripheral to this feature; lineaments observed on aerial photographs indicate a conjugate radial-explosive/concentric-collapse phenomenon centered about this altered zone. (See Nebocat & Rotherham, 1988)

As a result of the above observations and interpretation, it was decided to extend the existing grid southeast, into a previously untested and largely overburden covered area to test this hypothesis using IP and soil geochemistry, where possible. A total of 27.2 km of line was cut to IP standards of which 22.4 km was tested with IP using a pole-dipole configuration.

IP Survey

The results of the 1989 IP survey are discussed in an accompanying report by John Lloyd. The author of this report will not attempt to interpret the raw data, but reference to the IP results will be made in the following discussion of geology and geochemistry.

Geology

The Southeast Grid, Lines 700E to 2400 E, was geologically mapped at a scale of 1:2500, and the results are shown on **Map 2**. Not all lines were mapped south of tie-line 500 N, hence, gaps in geographical features are present, though no outcrops are envisaged in this largely overburden covered part of the grid. Also, the absence of certain claim I.D. posts is a result of not having encountered them during mapping and in no way suggests that they are not present.

Outcrop was observed only east and north from the 500 N tie-line. Topography strikes roughly east-west and becomes steeper north of the common claim line between Col #1 and Col #2, approximately. Variations of syenite and later apophyses of syenite and aplitic dykes are the dominant lithologies (Unit 4). Compositionally they range from medium grained hornblende ± biotite monzonite, syenite, porphyritic syenite; fine grained biotite syenite and aplitic syenitic dykes with local pegmatitic phases. Epidote, plus chlorite, and tremolite in quartz stringers, are found locally.

A pyritic hornblende diorite outcrops between L 1700E and L 2000E near the east end of the grid. About 0.5% to 1% disseminated and fracture filled pyrite is seen in subcrop; the rock, where pyritic, is somewhat recessive weathering, and the soil admixed with these occurrences is slightly orange-brown in colour. Near the contact with the Unit 4 syenite the diorite is biotitic rather than hornblende bearing. The biotite is quite foliated and suggestive of a contact/gradational effect caused by the syenite. Dykes of the syenite, to several centimeters in width, cut the diorite locally.

On L 1900E, 915N occurs one small outcrop of a dark green amphibolite. Subhedral crystals of ?actinolite?, to 10 cm in length, occur as intergrowths with mm size crystals of the same. It appears to be monomineralic, and minor limonite coats some of the crystals. This appears to be an isolated pegmatite rather than a skarn as it seems to be surrounded by intrusive rocks.

An old, moss-covered talus fan comprised exclusively of andesitic volcanic debris is found on the grid extending to about 225N between L 1400E and L 1500E. The fan projects northward to its source and is quite juvenile from about L 1100E, 550N.

Moderate to intense propylitic alteration is abundant in the volcanics (Unit 1) and no less than 50% of the talus material contains some epidote. Epidote is the most abundant alteration mineral, followed by albite (saussarite), quartz and magnetite; the latter two minerals occur as cores to epidote/albite envelopes. A fleshy coloured mineral coats fractures throughout; it is nonreactive to acid and locally forms radiating crystal masses. It is probably a zeolite mineral--perhaps laumontite.

Chalcopyrite, limonite, malachite, bornite and lesser neotocite, azurite and chalcocite are seen as vein/fracture fillings locally. Again, as in the syenites, pyrite is scarce. Select samples taken from chalcopyrite/bornite/chalcocite vein material assayed as high as 3.34% Cu, 0.106 opt Au and 1.6 opt (56.6 ppm) Ag.

Only one outcrop of the Takla Volcanics (Unit 1) outcrops on the grid, at L 1100E, 900N. Minor epidote, albite, limonite and potassic alteration was noted, but no economic mineralization was seen.

Geochemistry

217 soil and silt samples and 3 rock samples were collected on the grid. All samples were analyzed for 31 elements by ICP and for Au.

The purpose of the soil survey was to test portions of the grid underlain by IP anomalies. The northern tie-line, 500N, was sampled from L 2400E to L 1000E in late August because it transected a broad east-west trending IP anomaly. The extended lines (L 1100E to L 2100E) were sampled in October, 1989 partly to test IP anomalies and partly because the terrain is steeper and overburden is not as thick. Lines 1300E and 1400E tested an IP anomaly straddling these lines just north of the baseline. Not all of the grid was sampled because the overburden was believed to be too thick; however, a fairly good response, particularly in Cu, was obtained.

Interpretation

Of the 32 elements tested, the only ones that seemed to have any significant presence and/or correlation were Cu, Au and As.

Copper (Map 4)

Elevated levels in Cu (greater than 200 ppm) are found throughout much of the grid sampled thus far. The amount of overburden in the more subdued terrain was at first believed to be quite thick, but the response of Cu in soils was relatively good.

Anomalous values ranging from 250 ppm (thresholds determined by inspection) to 740 ppm are common; one 3855 ppm Cu value stands out above the rest of the population.

A significant feature is observed on L 2100E where a 400 m long zone yielded values from 172 ppm to 731 ppm Cu. The anomaly occurs just over 200 m ESE of the margin of a broad IP anomaly of similar dimensions found on L 1900E (see IP report by John Lloyd). This "displaced" anomaly is most likely caused by west-to-east glacial transport rather than down-slope dispersion because the topography is not steep here and it also strikes E-W. A similar feature is found on L 1300E between 175N and 500N. The underlying IP anomaly here yielded only weak to moderate chargeability values, yet copper in soil values range from 210 ppm to 535 ppm. Again, a larger and stronger IP chargeability anomaly occurs on lines 900E and 1000E from 100N to 400N, and this could be the source of the Cu anomalies. Soil samples collected over this IP anomaly in 1988 yielded only spotty or narrow linear Cu anomalies.

The IP anomaly on L 1300E and L 1400E, extending from the baseline to about 200N, yielded no significant Cu values, suggesting a masking by overburden derived from a non-mineralized source to the west.

Sandy, cobble-filled soil is found on L 1300E and L 1400E straddling the baseline. This area is underlain by glacial-lacustrine terraces which mask the "alpine" glacial deposits underlying it and found to the north and east. Copper values drop off drastically in this material: 19 ppm - 33 ppm.

Gold (Map 5)

Anomalous Au (15 ppb) occurs throughout the grid but not necessarily coincident with the anomalous Cu samples. Values are generally lower than those obtained from the 1988 grid to the NW; this may be a function of thicker overburden on the **southeast** grid inhibiting migration of Au in particulate form. The highest value obtained was 60 ppb, and it is coincident with the 3855 ppm Cu anomaly; a 40 ppb Au value occurs at the next station south of this site.

Arsenic (Map 6)

Anomalous As values (30 ppb) do not seem to correspond as well with Cu as they do with Au. Although the values are generally lower than those obtained on the 1988 soil grid, there are considerably more of them.

One interesting set occurs along the 500N tie-line between L 2250E and L 2400E: seven consecutive samples run from 20 ppm As to 93 ppm As. Two silt samples, taken at the tie-line and 500 meters upstream, ran 41 ppm and 62 ppm, respectively. The IP survey shows a strong E-W discontinuity just south from here, and a major fault may underly this area.

Elsewhere, the As anomalies are mostly scattered single station sites, some occur with anomalous Au, anomalous Cu and some by themselves. For the most part they occur within or near the IP anomalies.

Field Procedures

Soil samples collected on the **A Zone-South** and **Southeast** grids were taken from depths ranging from 10 cm to 70 cm. The B-horizon was sampled wherever possible, but the A-horizon had to be sampled in those areas where poor drainage in gentle topography dictated (note in Appendix II, the 40 mesh samples generally indicate A-horizon). The A-horizon is generally black to grey and contains abundant water-saturated humus. Fine, black loam and clay-rich silt material is admixed with the organic mulch.

The transition to B-horizon is marked by an increase in sand-size material and the presence of weathered biotite in areas presumably underlain by syenite; the soil is generally a medium to dark grey colour.

C-horizon is found on the steeper slopes on and near outcrops in the northern parts of the **southeast grid**.

Rusty brown sand-, gravel- and cobble-bearing, glacial-lacustrine deposits mask the more mature soil developed on the grids. This material was observed just north of the baseline on L 1300E and L 1400E, and extending further south.

The soil and silt samples were placed in kraft paper envelopes using a stainless steel trowel. The soil was exposed using either a mattock or shovel. Rock samples were chipped from outcrops or talus debris with a hammer and/or moil and placed in plastic bags.

All the soil, silt and rock samples were sent to Min-En Labs, North Vancouver, B.C. for preparation and analysis, as described in Appendix III.

CONCLUSIONS

Mapping the trenches and surrounding area has revealed a fairly complex system of faults. At least 4 different sets are present trending c. 125° AZ., c. 145° AZ., 040° - 045° AZ. and north-south to c. 010° AZ; the latter two are post-mineral.

Sampling and mapping in the trenches has revealed widespread by generally low grade Cu and Au mineralization, but narrow, higher grade material exists. The mineralization is generally confined to a unidirectional fracture set in the syenite and monzonite trending roughly NW-SE.

The IP survey done on the **Southeast Grid** has revealed a new zone of chargeability anomalies within an area roughly 800 m by 1700 m. The low amplitude responses may be due to the lack of a pyritic aureole in this low sulphide system.

Soil sampling performed on the **Southeast Grid** has revealed significant Cu, Au and As values largely within the area of the IP anomalies. The Cu anomalies appear to be somewhat displaced from the IP anomalies which suggests some glacial transport from west to east.

Mapping and prospecting on and north of the grid has revealed moderate to intense propylitic alteration in the Takla Volcanics in contact with the syenite, monzonite and diorite of the Hogem Batholith.

RECOMMENDATIONS

1. The portions of the **Southeast Grid** not soil sampled and geologically mapped should be completed.
2. The IP anomalies obtained in 1989 should be drill tested with no less than 600 m of NQ core. Five, or more, short (100 m - 150 m) angle holes should be sited between L 900E and L 1900E to intercept the highest chargeability anomalies first.
3. Pending the results of the first drill program, fill-in drilling is recommended for the remaining IP anomalies.
4. Backhoe trenching is not recommended. Although good copper in soil anomalies were obtained, it is felt that overburden overlying the IP anomalies is probably at least a few metres thick.

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- Harper, G., 1972, Quarterly Report (#3-72) Describing Work Undertaken on the Optioned Col Claims Between the 1st May and the 31st July, 1972 and Also Being a Final Report on Work Completed, Falconbridge Nickel Mines Ltd., unpublished report.
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STATEMENT OF COSTS

Labour

John Nebocat: June 21-30, July 1-4, 13-15; Aug. 27-29; Oct. 4-12; Nov. 8, 9, 17, 23, 1989; Jan. 4-6, 10-12, 1990. 39 days @ \$177.27/day	\$ 6,913.53
Bruce Anderson: June 21-30; July 1-4, 1989. 14 days @ \$120.00/day	1,680.00
Eldon Buck: June 25-30; July 1, 1989. 7 days @ \$90.00/day	630.00

Analyses

84 rocks for Cu, Au geochem; 29 rocks for Cu, Au, As geochem; 3 rocks for Au & 31 element ICP geochem; 4 rocks for Au assay; 217 soils for Au & 31 element ICP geochem; 78 soils for Au & 6 element ICP geochem. costs: rock geochem prep--\$3.00 (1 assay ton); Au geochem--\$9.00; Cu geochem--\$2.50; As geochem-- \$3.95; Au assay--\$8.50; Soil geochem prep--\$1.00; Au wet analysis--\$4.75; 31 element ICP--\$7.00; misc. fax and freight charges--\$203.05.	5,727.55
---	----------

Line-Cutting

27.2 kilometers: July 17-30; Sept. 19-22, 1989	16,438.00
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Geophysics

22.4 kilometers of induced polarization survey: July 31, Aug. 1-10, Sept. 24-26, 1989	20,846.22
Report Preparation: Dec. 4, 5, 6, 1989	2,753.75

Physical Work

D7 caterpillar: 21.5 hours @ \$80/hour June 21-23, 1989	1,720.00
Drott 40 excavator: 52 hours @ \$90/hour + 820 l diesel @ \$0.38/liter. June 24-28, 1989	4,992.00
Lowbed transport: 23 hours @ \$75.50/hour (avg) June 21, 24, 29, 1989	1,731.75

Camp Supplies

1,392.94

Food & Accommodations

\$25.00/man-day x 50 man-days	1,250.00
-------------------------------	----------

4 x 4 Charges

29 days @ \$50/day	1,450.00
--------------------	----------

Fuel, Oil & Service

827.73

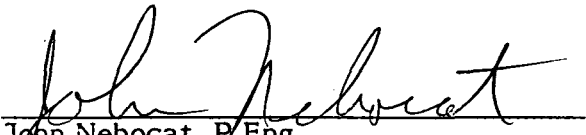
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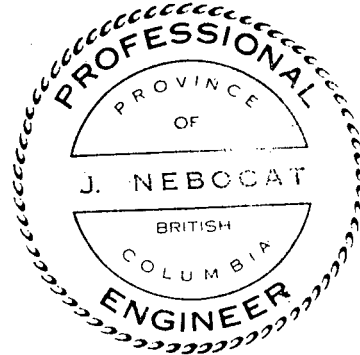
\$ 68,353.47

STATEMENT OF QUALIFICATIONS

I, John Nebocat, residing at 13 - 230 West 14th Street, North Vancouver, British Columbia, declare that:

1. I am a geologist and Regional Manager in the employ of Kookaburra Gold Corporation, with an office at 203 - 698 Seymour Street, Vancouver, British Columbia.
2. I obtained a technical diploma at the British Columbia Institute of Technology in 1974 and subsequently graduated with a B.Sc. in Geological Engineering from the Montana College of Mineral Science & Technology, Butte, Montana, in 1984.
3. I am a registered Professional Engineer with the Association of Professional Engineers of British Columbia.
4. I have been employed in mineral exploration and earth science studies with industry and government since 1973.
5. I carried out and supervised parts of the work described within this report.


John Nebocat, P.Eng.
Regional Manager,
Kookaburra Gold Corp.



APPENDIX I

Rock Sample Results



MIN-EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
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705 WEST 15TH STREET
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TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Assay Certificate

9V-1356-RAI

Company: KOOKABURRA GOLD

Date: OCT-22-89

Project: COL

Copy 1 KOOKABURRA GOLD, VANCOUVER, B.C.

Attn: JOHN NEBOCAT

We hereby certify the following Assay of 1 ROCK samples submitted OCT-16-89 by JOHN NEBOCAT.

Sample Number	AU G/TONNE	AU OZ/TON
2631	3.62	106

Certified by

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TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate 9V-0630-RG

Company: KOOKABURRA GOLD
Project: COL
Attn: J.NEBOCAT

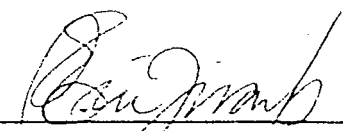
Date: JUL-10
Copy 1. KOOKABURRA GOLD, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 1 ROCK samples submitted JUL-04-89 by J.NEBOCAT.

Sample Number	CU PPM	AUX PPB
2578	24000	152

* 1 ASSAY TON

- 32 -

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P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Assay Certificate

9V-0623-RA

Company: KOOKABURRA GOLD
Project: COL
Attn: J. NEBOCAT

Date: JUL-15-
Copy 1. KOOKABURRA GOLD, VANCOUVER, B.C.

We hereby certify the following Assay of 2 ROCK samples
submitted JUN-30-89 by J. NEBOCAT.

Sample Number	AU G/TONNE	AU OZ/TON
2425	3.62	.106
2426	1.24	.036

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TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-0623-RG1

Company: KOOKABURRA GOLD
Project: COL
Attn: J.NEBOCAT

Date: JUL-15-
Copy 1. KOOKABURRA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 ROCKS sample submitted JUN-30-89 by J.NEBOCAT.

Sample Number	CU *AU-FIRE PPM	AS PPM
2425	150000	3000
2426	15500	1120
2427	400	95
2428	680	90
2429	463	75
2430	506	10
2431	402	42
2432	421	15
2433	502	75
2434	220	3
2435	257	21
2436	743	40
2437	546	42
2438	540	71
2439	442	17
2440	670	18
2441	700	40
2442	680	43
2443	245	4
2444	177	5
2445	283	3
2446	1530	16
2447	172	2
2448	283	1
2449	663	40
2450	304	3
2481	1285	400
2482	900	15
2483	584	50
2484	1000	65

*1 assay ton.

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TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-0623-RG2

Company: KOOKABURRA GOLD
Project: COL
Attn: J.NEBOCAT

Date: JUL-15-1989
Copy 1. KOOKABURRA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 ROCK samples submitted JUN-30-89 by J.NEBOCAT.

Sample Number	CU* AU-FIRE		AS PPM
	PPM	PPB	
2485	402	2	3
2486	261	45	2
2487	223	16	3
2488	225	3	5
2489	174	4	64
2490	183	2	2
2491	320	1	2
2492	354	6	3
2493	1630	115	5
2494	464	5	2
2495	390	4	2
2496	410	2	3
2497	290	2	3
2498	422	3	3
2499	340	1	14
2500	202	1	37
2551	153	2	4
2552	82	1	5
2553	334	5	7
2554	81	2	6
2555	114	3	25
2556	142	1	175
2557	216	2	150
2558	132	8	4
2559	147	5	3
2560	49	6	73
2561	524	4	12
2562	350	3	32
2563	232	4	26
2564	170	2	7

*1 assay ton

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TELEX: VIA U.S.A. 7601067 • FAX (604) 980

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-0623-RG3

Company: KOOKABURRA GOLD
Project: COL
Attn: J.NEBOCAT

Date: JUL-15-89
Copy 1. KOOKABURRA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 13 ROCK samples submitted JUN-30-89 by J.NEBOCAT.

Sample Number	CU PPM	*AU-FIRE PPB	AS PPM
2565	297	2	5
2566	177	3	3
2567	130	1	3
2568	91	1	3
2569	210	2	27
2570	206	2	5
2571	213	4	2
2572	210	2	1
2573	156	3	2
2574	120	4	2
2575	240	2	2
2576	134	1	3
2577	463	5	15

*1 assay ton.

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705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1
TELEPHONE (604) 980-5814 OR (604) 988
TELEX: VIA U.S.A. 7801067 • FAX (604) 988

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Assay Certificate 9V-0573-RA1

Company: KOOKABURRA GOLD
Project: COL
Attn: J.NEBOCAT

Date: JUL-04-89
Copy 1. KOOKABURRA GOLD, VANCOUVER, B.C.

We hereby certify the following Assay of 1 ROCK samples
submitted JUN-29-89 by J.NEBOCAT.

Sample Number	AU G/TONNE	AU OZ/TON
2417	4.25	.124

Certified by 



MINERAL ENVIRONMENTS LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1
TELEPHONE (604) 980-5814 OR (604) 988
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TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9296

Geochemical Analysis Certificate

9V-0573-RG1

Company: KOOKABURRA GOLD
Project: CDL
Attn: J. NEBOCAT

Date: JUL-04-89
Copy 1. KOOKABURRA GOLD, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 ROCK samples submitted JUN-29-89 by J. NEBOCAT.

Sample Number	CU PPM	AU-FIRE PPB
2415	2700	574
2416	610	87
2417	9900	2850
2418	1100	119
2419	760	62
2420	314	33
2421	710	287
2422	321	248
2423	332	127
2424	830	157
2451	510	26
2452	485	43
2453	890	42
2454	1200	120
2455	1900	181
2456	720	57
2457	480	76
2458	495	63
2459	291	21
2460	830	119
2461	340	69
2462	223	4
2463	880	121
2464	690	207
2465	374	280
2466	920	249
2467	283	50
2468	318	110
2469	1300	81
2470	396	59

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Certified by

MIN-EN LABORATORIES



MINERAL ENVIRONMENTS LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T
TELEPHONE (604) 980-5814 OR (604) 988-
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TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-0573-RG2

Company: KOOKABURRA GOLD
Project: COL
Attn: J.NEBOCAT

Date: JUL-04-88
Copy 1. KOOKABURRA GOLD, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 10 ROCK samples submitted JUN-29-89 by J.NEBOCAT.

Sample Number	CU PPM	AU-FIRE FPB
2471	1200	128
2472	690	21
2473	3900	220
2474	1950	188
2475	640	21
2476	720	38
2477	390	12
2478	470	38
2479	1100	210
2480	1250	93

Certified by 
MIN-EN LABORATORIES

APPENDIX II
Soil Sample Results

COMP: KOOKABURRA GOLD
 PROJ: COL
 ATTN: JOHN NEBOCAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 9V-1356-SJ1+2
 DATE: OCT-26-99

* TYPE SOIL GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
1397	.9	15050	1	1	128	1.1	6	11440	1.1	18	327	32780	1690	14	8500	531	6	130	23	1390	20	1	34	1	1	116.0	65	1	2	1	60	5
1398	.3	13190	1	1	148	.8	6	3390	.1	15	53	32560	1120	13	4640	263	4	90	12	460	4	1	21	1	1	123.9	47	1	1	1	38	45
1399	.7	16260	1	1	148	.8	7	4900	.1	22	49	39600	1390	16	6260	280	5	100	11	510	2	1	25	1	1	157.9	51	2	2	1	47	10
1400	1.2	15420	10	1	157	1.5	9	5750	.4	25	283	41690	2190	13	7800	1208	6	110	13	2360	29	3	48	2	1	121.4	90	2	2	1	36	5
1401	.9	14950	1	1	173	1.0	8	7730	.1	21	128	39420	1040	22	8060	322	5	150	20	1220	11	1	25	1	1	170.2	54	2	1	1	67	15
1402	.8	17780	1	1	200	1.7	8	9450	.5	20	296	43080	1040	17	9710	437	6	140	16	1790	22	1	25	1	1	161.0	65	2	2	1	53	5
1403	1.1	16920	11	1	132	1.2	10	7230	.1	21	123	44360	2360	17	8950	300	6	110	16	1890	15	1	32	1	1	136.3	69	2	2	1	57	5
1404	.7	13000	16	1	66	.6	6	5860	.1	16	58	31840	920	10	5130	302	2	110	17	1690	6	1	26	1	1	111.4	53	1	1	1	42	5
1405	.6	16040	7	1	45	1.0	8	5700	.1	15	90	34680	790	11	5550	206	4	120	17	1810	11	1	25	1	1	120.7	48	2	2	1	46	5
1406	.9	21120	7	1	125	1.1	8	6640	.1	22	84	40640	1370	14	6990	438	4	120	18	2860	6	1	50	1	1	140.2	82	2	2	1	48	5
1407	1.1	18800	11	1	187	.9	9	5790	.1	21	58	38730	2070	13	6110	865	6	120	11	2080	16	1	30	1	1	130.3	67	2	2	1	40	5
1408	.7	10930	12	1	99	.7	6	5780	.3	16	29	32500	920	10	4350	415	4	120	11	1500	13	1	25	1	1	123.5	48	1	1	1	50	5
1409	.9	12360	25	1	69	.6	6	5770	.1	16	40	30970	1150	13	4670	292	4	130	12	810	17	1	23	1	1	127.9	46	2	1	1	50	5
1410	1.0	19190	1	1	120	1.1	6	6360	.1	16	266	36230	790	21	5120	250	3	120	15	770	11	1	37	1	1	147.6	58	2	2	1	46	5
1411	.9	18050	1	1	113	1.3	6	6820	.2	18	161	35900	1130	20	6930	509	5	130	15	1190	19	1	32	1	2	151.6	64	2	1	1	48	5
1412	.7	18290	22	1	131	1.3	6	7960	.1	21	165	37650	1090	16	5710	1053	5	120	18	1060	16	1	32	1	1	159.9	60	2	2	1	48	5
1413	.8	13740	18	1	91	.9	5	16940	.1	14	113	31970	840	17	6470	278	6	130	14	1290	13	1	51	1	2	127.7	55	2	1	1	47	5
1414	.9	19240	44	1	107	1.4	5	9980	.1	22	249	48070	960	29	7210	326	5	130	18	1230	13	1	43	1	2	179.5	61	2	2	1	68	15
1415	1.1	13320	14	1	75	1.0	5	12640	.3	15	206	31100	860	17	5520	296	9	120	14	910	26	1	44	1	2	117.6	58	2	1	1	40	5
1416	1.1	16710	1	1	124	1.5	5	16340	.2	17	399	33550	1180	16	5750	845	10	110	22	1120	10	1	47	1	2	124.6	56	2	1	1	49	15
1417	.8	11950	17	1	56	.7	5	6150	.1	15	118	33390	990	8	5360	234	7	110	11	600	9	1	23	1	1	123.4	45	2	2	1	47	5
1418	.9	14540	19	1	67	.9	6	5130	.1	14	193	33000	750	15	4330	179	8	130	14	690	7	1	28	1	2	114.9	52	2	1	1	43	5
1419	.6	5860	23	1	44	.5	4	23120	.2	8	94	16330	610	6	3030	565	6	110	8	790	3	2	54	1	3	74.1	38	1	1	1	28	5
1420	1.0	1200	25	1	41	.2	2	49920	1.3	3	77	3400	350	1	1910	502	5	2510	8	820	8	3	94	2	9	28.4	32	2	1	1	13	5
1421	1.3	12860	42	1	53	1.0	8	17440	.1	19	145	31050	1550	10	8480	374	16	200	22	2340	14	3	46	1	3	121.8	54	2	2	1	50	5
1422	.6	10060	1	1	29	.7	6	4210	.1	11	27	26350	580	10	2790	164	5	100	6	230	4	1	21	1	1	116.1	37	1	2	1	40	5
1423	.8	14790	1	1	61	.9	7	4830	.1	16	74	34580	1020	14	5500	267	3	100	10	1420	11	1	24	1	1	122.1	67	2	1	1	50	5
1424	.4	13620	8	1	37	.9	7	3880	.1	14	58	34430	860	12	4740	267	4	100	11	1060	9	1	16	1	1	126.6	56	1	1	1	45	5
1425	.9	12500	9	1	85	.8	7	4740	.1	17	50	35590	1200	11	4470	381	3	110	13	1830	7	1	21	1	1	129.1	73	2	2	1	48	5
1426	.9	19870	18	1	109	.9	10	4080	.2	23	91	44170	1390	16	10400	505	7	160	13	1380	23	1	30	1	1	157.5	119	2	1	1	31	5
1427	1.2	22070	20	1	179	1.1	11	4080	.2	28	145	48670	2500	16	12150	525	8	260	15	1220	33	1	84	1	1	162.7	110	2	3	1	38	5
1428	1.5	25560	10	1	90	1.0	13	4470	.1	33	77	56230	1950	28	14140	417	7	190	13	2600	30	1	26	1	1	203.1	223	3	3	1	23	5
1429	2.8	29020	34	1	98	2.2	19	4210	.1	54	175	91750	5520	19	14850	704	10	490	16	1370	30	1	19	1	1	306.9	148	3	5	2	50	5
1430	2.0	26470	30	1	99	1.4	15	3710	.1	44	88	64760	3330	20	16350	654	7	170	33	1470	48	1	14	1	1	233.0	145	3	3	2	81	10
1431	.8	8730	1	1	33	.9	1	37990	.1	5	586	9830	200	3	1950	60	3	890	32	1820	4	1	73	2	4	35.3	47	1	1	1	8	5
1432	1.6	22650	14	1	100	1.1	14	4450	3.6	28	112	57690	2070	22	13320	380	7	150	8	1960	32	1	17	1	1	240.5	142	3	3	2	23	5
1433	1.5	24390	3	1	94	1.4	12	5220	.1	29	150	57840	2630	27	11440	431	6	150	13	2340	24	1	20	1	1	210.9	146	3	3	2	42	5
1434	1.3	19550	1	1	84	1.1	11	5460	.6	25	57	40980	1400	21	9140	351	5	250	11	1170	18	1	17	1	1	163.6	127	2	2	1	30	5
1435	1.4	18010	14	1	105	1.1	11	6200	.1	24	73	45650	2380	20	8230	366	7	120	12	600	20	1	23	1	1	192.6	94	2	3	1	37	10
1436	.2	13240	3	1	42	.8	3	3830	.1	10	27	28780	1250	15	2610	198	6	490	5	780	2	1	12	1	1	91.3	76	2	1	1	14	5
1437	1.0	23760	1	1	117	2.5	10	8700	.1	28	241	48280	2160	25	9640	2383	8	840	22	1480	40	1	23	1	1	141.6	116	2	3	1	50	5
1438	.8	12860	8	1	36	.9	8	6760	.1	17	75	35340	790	11	4960	258	4	610	15	1120	15	1	20	1	1	142.8	52	2	2	1	66	10
1439	1.0	15830	9	1	47	1.0	8	5000	.1	22	132	44600	1190	18	6740	399	5	110	17	770	21	1	16	1	1	185.4	57	2	2	2	72	5
1440	1.0	17100	5	1	53	1.0	7	6490	.1	19	74	42560	870	16	6060	237	5	120	16	2840	20	1	23	1	1	151.1	54	2	2	1	60	5
1441	1.5	20600	1	1	81	1.5	1	12550	.1	27	3855	38050	1330	15	7080	2869	7	370	27	1180	35	4	22	1	1	121.0	101	1	2	1	35	60
1442	.4	11760	20	1	41	.7	5	4630	.1	17	191	33730	630	12	4350	291	3	100	11	680	19	1	17	1	1	134.7	48	1	2	1	51	40
1443	.3	1740	8	1	18	.1	2	27980	.5	2	147	3320	740	1	1700	73	4	710	4	750	8	1	31	1	1	9.5	29	1	1	1	9	5
1444	1.9	17440	52	1	56	1.5	11	14650	.1	31	588	50340	2130	24	11820	669	8	150	21	1500	42	3	36									

COMP: KOOKABURRA GOLD
 PROJ: COL
 ATTN: JOHN NEBOCAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 9V-1356-SJ3+4

DATE: OCT-26-89

• TYPE SOIL GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
1457	.9	19910	22	12	45	1.2	8	5010	.1	24	438	51110	1550	23	7760	243	8	140	13	1270	15	1	13	1	1	167.3	67	2	3	1	31	5
1458	.5	10210	1	1	34	.7	6	4840	.1	12	53	31520	1050	7	4130	146	4	90	7	870	10	1	19	1	1	119.8	37	1	1	1	33	5
1459	.5	13770	1	1	39	.8	5	4980	.1	13	231	30850	840	21	4720	164	4	70	8	570	7	1	11	1	1	112.3	64	1	2	1	30	10
1460	.5	16850	16	1	63	1.0	9	5310	.1	19	203	42170	1380	16	7390	232	5	80	17	1650	17	1	15	1	1	144.9	66	2	2	1	55	5
1461	.5	7400	1	1	66	.5	7	7760	.4	11	67	23440	2310	5	3810	255	5	70	9	740	14	1	17	1	1	87.3	43	1	1	1	38	5
1462	1.2	23660	55	1	124	1.6	12	5350	.1	31	177	54990	3380	19	11950	404	12	100	22	1610	23	1	23	1	1	172.4	107	2	3	2	53	5
1463	1.5	18030	16	1	135	1.2	13	3560	.1	36	130	47870	4200	17	10650	840	8	110	15	890	30	1	14	1	1	212.9	99	2	3	1	26	5
1464	1.0	19280	30	1	103	1.5	11	4950	.1	28	134	46070	2860	19	10100	574	7	120	17	1390	20	1	19	1	1	186.2	101	2	2	1	27	5
1465	.4	20140	8	1	117	1.6	11	5810	.1	54	175	64260	1250	19	7280	3104	5	90	19	1140	41	1	24	1	1	235.3	179	2	3	1	22	5
1466	.8	13420	9	1	152	1.3	9	5360	.2	29	43	40640	1230	15	5240	763	4	70	11	640	15	1	62	1	1	170.0	104	2	3	1	20	5
1467	1.5	18360	4	1	162	1.4	13	4450	1.0	47	141	63150	1540	17	9150	1813	8	540	10	1370	37	2	37	1	1	264.2	144	2	4	2	22	5
1468	1.1	13120	13	1	85	.9	8	4730	.1	20	52	40440	1470	16	8150	250	5	120	12	1250	15	1	15	1	1	169.7	63	2	2	1	38	5
1469	.6	9550	20	1	88	.7	3	37030	1.4	9	287	13860	980	9	4580	488	4	60	15	1080	13	1	62	1	3	46.0	53	1	2	1	16	10
1470	1.7	24570	18	1	182	1.4	14	7000	1.2	42	148	62070	6750	19	16610	704	8	150	14	1200	33	1	24	1	1	254.8	94	3	4	2	30	5
1471	1.9	27230	39	1	117	1.4	15	4100	.1	36	79	70330	4110	31	14430	350	10	190	11	700	29	1	25	1	1	296.9	87	3	4	2	43	5
1472	.4	7190	1	1	87	.4	6	3260	.1	9	13	21800	910	3	2030	893	2	80	7	370	12	1	13	1	1	98.2	43	1	1	1	33	5
1473	.5	10350	12	1	85	.9	6	5150	.7	13	44	33230	630	6	4790	180	5	110	11	2180	11	1	19	1	1	118.6	44	1	1	1	42	5
1474	.7	9290	14	1	50	.6	6	3710	.1	13	17	31180	870	4	3050	174	2	150	7	580	10	1	16	1	1	146.2	53	2	1	1	42	5
1475	.6	8210	3	1	35	.5	7	3580	.1	12	18	27100	790	5	2900	150	3	100	6	280	7	1	15	1	1	126.4	43	1	2	1	44	5
1476	.7	14790	9	1	54	.9	7	4900	.1	16	102	33970	1060	12	5800	224	5	140	16	770	8	1	21	1	1	121.4	54	2	1	1	47	5
1477	.5	14540	1	1	65	.9	7	4420	.1	21	129	37750	1050	27	5210	951	2	110	15	760	16	1	16	1	1	140.7	57	1	2	1	51	5
1478	.6	14130	2	1	80	.9	6	6800	.1	19	207	35620	730	21	5370	942	6	110	19	620	23	1	21	1	1	126.0	52	2	1	1	44	5
1479	.6	11060	1	1	76	.7	6	10740	.2	18	286	32820	890	10	4910	982	4	70	22	530	19	1	21	1	1	115.0	62	1	3	1	42	5
1480	.6	12860	13	1	99	.9	5	15100	.4	16	176	29170	1280	12	6930	546	4	170	17	1170	24	1	30	1	1	100.6	55	2	2	1	43	10
1481	1.0	17150	12	1	99	1.3	5	11190	.1	22	375	39960	1770	19	7950	737	8	130	22	1450	16	1	26	1	1	138.1	76	2	2	1	58	5
1482	1.1	10840	5	1	118	.9	5	21170	.8	14	669	25500	1530	10	5600	747	4	90	21	1450	9	1	35	1	1	83.7	78	1	2	1	30	5
1483	1.2	12470	16	1	102	.9	4	18160	1.5	16	603	28900	1230	9	5540	1230	6	110	26	1060	13	1	35	1	1	98.0	71	1	2	1	32	5
1484	1.8	16210	23	1	144	1.5	9	8990	.6	28	731	49280	3040	14	8060	773	7	100	25	850	27	2	25	1	1	153.5	85	2	3	1	45	5
1485	1.0	15360	22	1	60	1.3	8	7450	.1	24	308	47450	1860	10	8850	712	7	110	17	1610	20	2	18	1	1	166.0	65	2	2	1	54	10
1486	.7	5660	19	1	69	.6	3	27950	.2	10	530	16030	950	3	3740	454	4	60	18	1120	13	1	37	1	2	49.0	59	1	2	1	19	5
1487	.1	4240	1	1	62	.4	1	27330	.2	6	397	9020	400	3	2760	528	4	830	13	1180	6	1	34	1	1	30.0	61	1	1	1	12	5
1488	.6	7600	16	1	78	.6	3	24220	.1	11	417	16950	1130	6	4820	833	5	1000	15	1200	11	2	31	1	1	59.1	65	1	1	1	19	5
1489	.2	7030	1	1	48	.5	3	16130	.1	8	172	19350	600	8	2870	136	2	560	9	640	4	1	27	1	1	70.9	43	1	1	1	25	5
1490	.5	4020	8	1	68	.4	2	32700	.1	3	224	7630	300	2	2350	53	3	870	8	1190	4	1	39	1	1	22.4	44	1	1	1	15	10
1491	.8	8440	13	1	85	.8	2	26410	1.2	9	333	15810	740	7	3800	381	3	1160	18	1260	10	1	42	1	4	48.9	46	1	1	1	22	5
1492	.8	5590	1	1	84	.7	1	31000	.1	6	422	9960	380	3	2630	436	3	2190	17	1250	10	1	45	1	8	31.1	38	1	1	1	16	5
1493	.9	9070	12	1	76	.8	3	18670	.1	9	184	20840	610	7	3290	247	4	130	12	950	10	1	37	1	5	73.1	38	1	1	1	26	5
1494	.9	15920	22	1	99	1.1	4	11620	.1	16	195	36080	1020	14	6250	419	5	190	20	910	13	1	32	1	2	122.7	53	2	1	1	42	5
1495	.1	2080	1	1	68	.3	1	24540	.6	1	64	2140	320	1	1650	190	6	1080	6	840	2	1	35	1	1	9.1	33	1	1	1	6	5
1496	.1	600	1	1	43	.1	1	26230	2.7	1	70	650	290	1	1450	24	12	1460	4	490	4	1	34	1	1	7.9	37	1	1	1	5	5
1497	.9	14140	62	1	109	1.1	6	11420	.1	21	129	45850	1130	16	7150	560	4	190	16	1390	16	1	36	1	1	192.9	66	1	2	2	76	5
1498	.6	11150	41	1	71	1.1	7	9710	.1	18	77	42710	820	11	6630	541	4	170	16	1370	16	2	30	1	1	191.6	56	2	2	1	66	10
1499	.1	13700	101	1	78	1.4	3	8070	.1	29	607	47780	1730	15	5350	878	6	80	65	990	21	2	13	1	1	100.7	122	1	1	1	40	5
1500	.6	14820	1	1	53	.6	4	4130	.1	9	21	23050	340	8	2100	140	1	100	6	400	2	1	24	1	1	86.8	36	1	1	1	23	5
1501	.4	11160	4	1	72	.6	4	6380	.2	10	28	19760	420	6	4410	198	4	120	7	1010	9	1	30	1	1	94.7	32	1	1	1	22	5
1502	.3	17780	8	1	79	.9	5	3790	.1	14	33	30960	400	7	4180	189	3	110	14	870	3	1	20	1	1	95.0	40	1	1	1	33	5
1503	.5	14680	1	1	70	.7	5	4940	.1	11	32	28960	420	7	3850	190	3	120	8	890	6	1	24	1	1	94.4	41	1	2	1	28	5
1504	.8	17700	21	1	143	1.2	6	9330	.1	21	224	46000	1150	15	8340	1095	9	160	24	1390	16	1	27	1	1	127.9	62	2	2	1	52	15
1505	.9																															

COMP: KOOKABURRA GOLD

PROJ: COL

ATTN: JOHN NEBOCAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 9V-1356-SJ5+6

DATE: OCT-26-89

* TYPE SOIL GEOCHEM * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
1517	.6	19640	1	1	794	1.3	5	12160	.1	24	267	40680	1480	11	9850	858	5	90	12	1780	29	1	102	1	1	110.3	67	2	3	1	17	10
1518	.6	22220	1	1	530	1.4	6	10670	.1	25	278	44860	1250	14	10750	977	8	90	7	1630	26	1	91	2	1	119.7	72	2	3	1	12	5
1519	.9	18340	13	1	648	1.3	6	16280	.1	22	210	35500	2280	10	8130	950	5	70	12	1660	25	1	90	1	1	95.3	60	2	2	1	20	5
1520	.8	16930	32	1	348	1.5	6	9840	.1	23	181	40070	1630	15	7920	957	6	90	13	1490	17	1	59	2	1	120.5	60	2	2	1	35	5
1521	.5	10080	15	1	111	.8	4	11640	.1	12	249	23340	820	9	4910	485	5	100	21	710	15	1	35	1	1	74.0	40	1	1	1	35	5
1522	.6	9660	25	1	65	.8	5	6330	.1	16	108	36710	600	8	6330	366	7	120	17	930	14	1	18	1	1	155.1	51	1	2	1	69	5
1523	.6	11710	5	1	93	.7	5	7470	.1	14	156	26810	680	11	5370	415	7	110	16	850	16	1	23	1	1	101.3	45	1	2	1	42	55
1524	.6	9180	3	1	93	.6	4	10470	.1	11	140	23510	600	11	4700	242	5	90	11	820	9	1	28	1	1	96.2	39	1	2	1	39	5
1525	.3	2960	1	1	87	.3	2	23940	.1	4	160	5380	240	2	1640	262	5	50	9	660	4	1	49	1	8	22.6	33	1	1	1	12	5
1526	.4	6380	7	1	100	.5	3	17490	.1	8	130	14800	720	8	3950	259	4	70	13	650	4	1	39	1	1	55.2	34	1	2	1	26	10
1527	.7	10850	18	1	99	.9	5	9430	.2	15	164	30470	720	10	5800	397	6	120	14	1170	13	1	28	1	1	130.4	46	1	2	1	56	5
1528	.1	3400	1	1	147	.5	3	18750	.1	14	115	13870	210	2	1940	2372	11	100	14	730	13	2	52	1	1	56.8	28	1	2	1	14	20
1529	.7	14210	1	1	136	.9	5	9210	.1	13	170	28980	770	17	5510	218	9	130	16	620	13	1	31	1	1	116.5	49	1	2	1	44	5
1530	.9	11590	19	1	112	.9	5	11360	.1	13	148	22570	770	11	5960	368	7	140	17	1160	14	1	36	1	1	84.0	51	1	2	1	41	5
1531	.7	13010	25	1	102	1.0	5	11490	.1	15	214	25960	790	11	6060	556	7	130	17	1120	10	1	38	1	2	95.9	53	2	2	1	45	5
1532	.3	10140	7	1	180	.8	5	9490	.3	14	145	27260	780	10	5480	889	7	120	17	1300	15	2	39	1	1	88.8	48	1	1	1	36	5
1533	.5	11350	1	1	164	.8	2	10440	.1	11	139	23960	740	12	4150	240	5	100	7	630	8	1	54	1	1	78.6	43	1	1	1	26	5
1534	.5	12900	10	1	268	1.0	5	12490	.1	16	167	29280	1260	12	6540	764	7	130	9	1410	26	1	67	1	1	88.2	55	1	2	1	30	35
1535	.5	7300	31	1	143	.7	4	8650	.1	14	94	34890	570	8	4500	738	6	90	9	1590	20	2	30	1	1	101.6	37	1	2	1	39	10
1536	.8	20060	26	1	1484	1.8	5	12900	.1	26	459	37330	1690	13	10490	1169	6	570	12	1580	30	1	73	2	1	93.8	68	2	2	1	14	5
1537	.6	17390	1	1	394	.8	4	12540	.1	19	128	28320	1240	8	5970	658	4	500	6	940	14	1	94	1	1	73.8	62	2	2	1	12	5
1538	.3	6680	11	1	219	.5	4	9950	.1	12	87	27890	350	6	3640	1315	7	90	9	1220	16	3	33	1	1	49.3	35	1	2	1	22	5
1539	.4	7830	19	1	207	.5	3	8140	.1	11	99	22740	420	8	4170	601	8	90	10	1050	5	1	30	1	1	55.9	44	1	2	1	26	5
1540	.5	10360	17	1	142	.8	5	7930	.1	13	148	22190	450	11	5670	326	6	110	12	1450	10	1	25	1	1	92.3	47	1	2	1	35	10
1541	.5	8440	7	1	90	.6	4	8660	.1	9	83	16160	460	9	5090	218	3	110	12	1750	10	1	24	1	1	75.7	34	1	2	1	41	5
1542	.5	6960	25	1	166	1.1	4	7670	.1	16	73	54800	370	6	3820	808	8	80	3	1540	21	2	26	1	1	76.7	44	1	3	1	22	5
1543	.9	12450	24	1	87	1.2	6	9220	.1	21	179	47750	1040	13	8150	1001	7	110	19	2070	29	4	22	1	1	184.2	60	2	3	2	33	5
1544	.3	4960	19	1	58	.6	4	2400	.1	10	12	36150	320	2	1290	133	2	60	3	520	4	2	13	1	1	146.7	25	1	2	1	33	5
1545	.3	9640	1	1	66	.4	4	3170	.1	7	19	16970	340	5	2280	134	3	90	6	570	7	1	17	1	1	64.1	30	1	1	1	22	15
1546	.3	7490	16	1	36	.5	3	3340	.1	9	27	24460	290	4	3310	171	3	70	7	1120	6	1	14	1	1	91.9	28	1	1	1	24	5
1547	.3	9080	5	1	60	.3	3	2860	.1	8	32	18100	270	6	3180	129	2	70	7	740	8	1	13	1	1	77.0	28	1	1	1	15	5
1548	.2	9980	10	1	46	.2	3	2710	.1	7	21	20780	250	5	2600	112	1	60	6	940	5	1	13	1	1	76.1	28	1	1	1	17	10
1549	.6	17290	1	1	448	.7	5	10620	.1	24	48	35230	1660	14	6400	1143	5	80	8	2600	14	1	64	1	1	93.9	62	1	1	1	26	5
1550	.4	15760	1	1	209	.5	3	4990	.1	12	20	26850	1630	14	4270	344	2	50	6	1270	6	1	33	1	1	75.6	42	1	1	1	17	5
1551	.7	14240	18	1	119	.9	6	5060	.4	15	116	33410	1460	18	6800	234	4	60	8	1780	16	1	14	2	1	104.3	59	1	2	1	15	5
1552	1.0	14870	1	1	310	1.3	5	9640	.2	21	162	41370	2740	15	6800	1370	5	60	10	2720	30	1	26	1	1	110.4	92	1	1	1	16	5
1553	1.0	21300	1	1	962	.8	6	13930	.1	35	292	46360	1740	13	11360	1162	6	90	15	1670	30	1	95	1	1	118.0	77	1	2	1	18	5
1554	.7	10830	10	1	500	.5	4	21770	.1	16	112	22810	1900	8	6430	957	2	70	13	1700	19	1	66	1	1	53.3	114	1	1	1	18	5
1555	.8	17040	6	1	497	.9	5	11080	.1	28	126	45620	2230	12	9260	822	5	90	13	2080	23	1	63	1	1	115.4	71	1	2	1	26	5
1556	.5	12810	1	1	509	1.0	3	14400	.2	22	178	33470	1320	9	6670	1067	5	70	9	1400	21	3	59	1	6	76.3	65	1	1	1	18	5

COMP: KOOKABURRA GOLD
 PROJ: COL
 ATTN: JOHN NEBOCAT

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 9V-1052-SJ1+2

DATE: SEP-13-89

* TYPE SOIL GEOCHEM * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
134040M	.1	6500	85	1	187	1.7	4	15100	.1	19	104	96410	270	5	3330	3920	6	60	1	1450	35	6	30	1	1	78.0	58	1	3	1	1	5
134140M	.1	3060	93	1	376	1.8	6	21820	.1	25	94	102690	240	1	2530	8962	9	40	6	1710	53	8	44	1	1	48.9	64	1	3	1	1	5
134240M	.8	19240	46	1	163	1.3	9	13720	.1	23	167	35050	1260	19	7960	1520	5	170	19	1260	24	1	33	1	1	98.3	69	1	1	1	28	10
134340M	.7	14420	60	1	105	1.2	9	13780	.4	17	147	31050	1110	15	7280	471	3	160	12	1080	20	1	31	1	2	95.7	60	1	2	1	22	5
134440M	.1	9150	59	1	194	1.2	5	23610	.7	24	198	47090	540	5	4010	3609	11	670	14	1640	38	3	49	1	1	124.5	72	1	2	1	1	5
134540M	.2	4300	44	1	129	.7	3	32160	1.3	10	203	22670	450	2	2910	1156	6	730	9	1460	20	1	59	1	3	72.5	61	1	1	1	1	5
134640M	.1	3580	20	1	140	.5	2	33510	1.4	5	153	16080	200	1	2620	799	4	1030	8	1210	17	1	76	1	6	51.3	36	1	1	1	1	5
134740M	.1	1440	9	1	121	.2	1	31880	1.3	6	42	13150	340	1	2160	1578	5	1220	7	890	21	1	50	1	1	2.7	45	1	1	1	1	5
134840M	.1	3210	17	1	97	.4	1	31710	1.2	4	226	18520	170	1	1960	58	4	1270	7	1480	12	1	41	1	6	74.0	74	1	1	1	1	10
134940M	.2	2360	5	1	83	.3	1	38320	1.2	5	253	3140	340	1	2190	288	7	790	10	1040	9	1	45	1	6	7.3	43	1	1	1	5	5
135040M	.4	3930	11	1	113	.5	2	41880	1.3	4	390	4940	320	1	2460	943	8	70	16	1480	10	1	51	1	10	3.3	36	1	1	1	7	5
135140M	.5	5750	6	1	124	.8	1	38180	1.5	7	431	9240	320	1	2560	1349	10	1390	13	2090	20	2	48	2	14	31.1	43	1	1	1	13	5
135240M	.1	1420	12	1	108	.1	1	35710	2.3	1	146	1400	300	1	1990	45	4	1340	9	470	12	1	45	1	3	1	61	1	1	1	4	5
135340M	.1	1330	8	1	69	.2	1	45080	2.3	1	247	1430	380	1	1920	130	5	790	9	740	9	1	42	1	6	4.0	42	1	1	1	4	10
135440M	.4	10920	3	1	98	.9	3	32100	.1	6	459	12270	480	4	2940	742	6	90	13	1910	14	1	34	1	6	30.6	55	1	1	1	12	5
135540M	.5	4510	2	1	72	.4	1	42740	4.7	2	395	3240	260	1	1700	205	3	1840	13	1050	17	1	29	1	4	1	58	1	1	1	5	5
135640M	.4	9370	2	1	101	.8	2	27830	1.4	12	357	14770	230	1	1440	1368	8	680	11	1990	13	1	37	1	6	40.1	51	1	1	1	17	10
135740M	.1	4630	5	1	127	.6	2	38570	3.8	8	273	19080	240	1	2210	2377	13	1110	16	1780	23	3	49	1	2	59.9	51	1	1	1	1	5
1358	.2	9940	6	1	46	.7	5	10210	.1	9	70	22590	510	8	2900	217	4	120	6	570	8	1	25	1	4	85.0	30	1	1	1	13	5
1359	.2	8870	8	1	64	.6	7	4860	.1	10	19	32310	590	4	2610	211	1	130	5	1370	13	1	20	1	4	116.3	37	1	1	1	19	5
1360	.2	11410	9	1	51	.8	6	6410	.2	11	66	27950	450	9	3930	194	4	130	10	830	9	1	19	1	1	96.6	31	1	1	1	15	5
1361	.3	11430	4	5	98	1.1	4	18900	1.6	12	375	24360	510	5	3630	1019	5	160	17	1850	20	1	43	1	5	66.9	55	1	1	1	12	10
136240M	.4	4360	8	1	87	.3	1	37740	4.0	2	226	2770	520	1	1860	124	4	2340	8	1120	16	1	52	1	5	1	65	1	1	1	5	5
1363	.2	9060	1	1	65	.8	4	16050	.7	9	202	19490	450	7	3700	378	3	120	11	780	12	1	28	1	3	54.7	34	1	1	1	12	5
1364	.3	8400	2	1	57	.6	6	5050	.1	9	14	22260	530	6	2410	170	1	120	4	430	10	1	20	1	1	81.3	36	1	1	1	14	5
136540M	.6	6120	3	1	69	.6	2	26210	.1	6	266	12420	360	2	2120	372	2	90	13	1120	9	1	27	1	4	29.3	40	1	1	1	7	10
1366	.7	8820	5	1	91	.9	2	35040	.6	8	654	12820	390	4	3130	1011	5	80	18	2240	14	1	41	2	7	27.3	56	1	1	1	11	5
1367	.7	11410	17	1	55	1.1	6	13960	.1	16	373	34560	790	12	6540	514	4	130	15	1080	23	2	29	1	4	117.0	56	1	1	1	23	5
136840M	.6	3890	15	1	49	.6	1	44350	1.3	2	500	5130	250	1	2100	115	4	1430	12	860	14	1	72	1	11	1	70	1	1	1	6	5
136940M	.1	1220	7	1	29	.2	1	45820	.9	1	321	1910	140	1	1800	97	7	830	5	550	14	1	75	1	9	1	69	1	1	1	4	55
137040M	.6	4750	6	1	38	.5	3	33260	1.0	6	371	11050	470	3	2980	893	13	620	9	1190	17	3	71	1	1	41.6	50	1	1	1	10	5
137140M	.8	3440	16	1	46	.6	2	36300	1.8	3	367	4680	280	1	1580	745	19	640	9	970	17	2	82	3	39	14.6	61	1	1	1	8	5
137240M	.3	1540	5	1	30	.2	2	42780	1.3	2	75	3320	340	1	1910	95	6	920	6	660	12	2	88	1	1	15.6	41	1	1	1	6	5
1373	.7	14070	16	1	93	1.1	6	16020	.1	15	357	26970	880	10	6230	703	9	150	21	1300	22	1	45	1	1	99.9	55	2	1	1	24	5
1374	.3	14740	12	1	103	1.0	7	12250	.1	16	170	28990	1030	14	6890	531	6	160	13	1430	22	1	41	1	1	117.6	50	1	1	1	22	10
1375	.4	13140	22	1	105	1.1	5	14020	.1	14	192	33030	930	11	5780	390	4	140	10	1560	17	1	45	1	1	145.4	49	1	1	1	33	25
1376	.5	15370	15	1	117	1.3	8	13820	.1	15	222	31620	940	15	6620	436	5	160	15	1490	22	1	45	1	1	133.3	51	1	1	1	31	5
1377	.5	15330	18	1	160	1.1	6	14990	.1	15	265	27510	1030	12	6210	572	7	160	16	1480	19	1	52	1	1	121.1	58	2	1	1	27	5
1378	.4	11710	20	1	200	1.1	5	22530	.1	12	313	23280	890	9	4790	518	6	120	15	1330	15	1	70	1	1	98.1	53	1	1	1	25	10
1379	.2	11740	4	1	96	.9	5	10050	.1	12	139	20490	860	10	5600	206	4	160	13	1350	15	1	33	1	1	82.9	43	1	1	1	27	5
1380	.4	15370	7	1	175	1.2	8	12490	.1	15	183	34730	1020	20	5300	301	8	150	15	600	15	1	44	1	1	145.9	49	1	1	1	29	25
1381	.2	11940	10	1	100	1.0	7	9890	.1	15	106	26970	870	11	5690	402	7	160	14	750	18	1	35	1	1	106.8	45	1	1	1	26	5
1382	.1	8560	1	1	43	.6	5	5760	.1	8	59	20700	720	5	2350	111	4	120	9	350	13	1	26	1	1	71.0	35	1	1	1	16	10
1383	.1	5020	4	1	52	.4	3	12750	.1	5	42	14200	540	3	1870	76	2	100	6	460	5	1	39	1	1	52.6	27	1	1	1	19	5
1384	2.7	24700	1	1	604	1.8	8	12720	.1	26	312	44090	2580	17	9090	1128	4	120	11	1760	28	1	110	1	1	119.1	77	2	2	1	4	15
1385	.7	21420	13	1	382	1.8	9	10070	.1	24	326	42320	2290	16	8970	982	5	130	19	1700	24	1	81	1	1	132.7	67	1	2	1	15	20
138640M	.1	2640	8	1	237	.4	1	34810	.7	4	267	4000	850	1	2300	428	5	80	3	1150	8	2	76	1	1	16.8	68	1	1	1	3	5
1387	.8	28600	1	1	608	2.1	10	25510	.1	24	448	38960	2430	8	7490	689	3	90	2	1620	20	1	159	2	1	106.2	72	2	1	1	1	10

COMP: KOOKABURRA GOLD
 PROJ: COL
 ATTN: J.NEBOCAT

MIN-EN LABS ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 9V-0630-SJ1
 DATE: JUL-14-89
 * TYPE SOIL GEOCHEM * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB
1191	.2	19000	1	1	130	1.0	5	4770	2.9	14	61	28770	620	1	5370	584	3	100	17	960	16	1	24	2	1	85.3	53	4	2	4	27	1
1192	.4	16830	3	1	150	.8	6	4170	2.9	12	45	27060	720	1	3480	221	2	90	11	750	12	1	25	2	4	87.0	59	4	3	3	23	1
1193	.2	7230	8	1	72	.4	5	4080	1.5	7	19	19550	480	1	2090	130	1	110	5	290	12	1	24	2	4	75.4	26	3	3	2	20	4
1194	1.0	22090	5	1	215	.9	10	9590	3.4	16	121	32530	1150	1	7630	547	3	160	21	1460	17	1	34	6	8	93.8	66	7	4	5	34	2
1195	.6	8950	11	1	58	.4	6	4020	2.3	9	23	21610	500	1	3090	156	3	140	7	440	11	1	23	2	5	85.6	28	4	2	3	23	1
1196	.4	11240	11	1	120	.5	6	6400	2.0	8	155	19560	320	1	3060	152	2	140	8	320	13	1	28	2	5	70.5	28	4	2	2	25	3
1197	.5	14900	6	1	135	.8	7	7480	2.7	17	193	34430	660	1	6760	516	6	170	12	720	25	1	32	3	2	122.0	49	4	5	5	34	1
1198	.5	10480	11	1	94	.5	7	4760	2.1	10	23	25520	510	1	3250	204	7	130	8	240	14	1	29	3	6	105.9	31	4	3	4	27	1
1199	.9	18410	6	1	173	1.1	6	8490	3.6	17	638	31040	930	1	6610	681	12	170	17	680	21	1	35	4	8	93.5	53	6	4	4	37	2
1200	.8	18120	11	1	183	1.0	3	11210	3.8	13	1008	28820	910	1	6020	571	18	150	18	1180	20	1	36	3	10	80.8	50	5	3	4	34	1
1201	.9	16480	15	1	159	1.0	3	10610	2.8	13	958	29330	1040	1	5770	590	17	140	17	1170	17	1	34	3	8	89.0	51	5	3	4	33	2
1202	1.1	18510	18	1	192	1.1	5	9470	3.8	16	682	30840	970	1	6710	675	22	140	19	940	22	1	37	3	11	98.3	55	6	4	5	36	1
1203	.8	18210	7	1	173	.9	6	8570	3.4	15	438	28480	1120	1	6420	533	23	170	17	830	20	1	35	3	6	91.3	55	5	2	4	36	1
1204	.9	20500	9	1	166	1.1	6	8310	2.6	15	590	31010	1140	1	6510	414	22	140	21	920	18	1	34	4	8	92.7	54	5	2	5	39	3
1205	.7	18560	6	1	186	1.0	5	12060	3.0	13	678	27610	1050	1	6210	462	14	140	19	1120	19	1	38	3	4	76.1	54	4	4	4	32	1
1206	1.1	22530	12	1	221	1.2	6	9080	4.1	17	715	34970	1270	1	7260	620	19	150	25	870	19	1	36	4	9	99.9	58	6	2	4	40	2
120745M	1.5	32400	14	1	359	1.5	6	13880	4.7	19	963	39570	1730	1	8350	696	23	140	36	1100	24	1	42	4	11	101.9	78	8	3	5	48	3
120845M	1.4	40660	11	1	433	1.8	7	11320	5.4	25	414	52090	2010	1	9630	1121	23	160	39	1140	28	1	34	5	8	122.7	99	9	2	6	54	2
120945M	1.4	38160	11	1	433	1.7	10	12530	4.6	26	221	57770	1970	1	10560	979	11	220	31	2240	23	1	33	5	8	172.2	98	8	3	7	52	1
1210	.7	11670	8	1	81	.6	8	7630	2.5	11	28	18850	750	1	5810	293	2	180	9	1000	16	1	35	4	7	69.0	31	4	3	4	23	2
1211	.5	13290	7	1	82	.8	8	5260	2.4	13	50	32790	590	1	4180	245	2	120	12	720	13	1	28	3	4	114.4	40	4	3	4	34	1
1212	.2	15260	2	1	96	1.0	6	5050	2.6	13	60	34670	680	1	4130	268	2	120	11	1690	16	1	27	3	4	113.2	40	3	2	4	30	1
1213	.3	12250	7	1	82	.7	5	4560	1.9	11	14	34860	560	1	2250	180	1	110	4	1980	13	1	30	3	4	116.8	52	4	2	4	28	1
1214	1.1	19890	17	1	196	1.3	5	8470	3.1	17	1343	38600	980	1	6600	671	14	140	22	1050	21	1	32	3	6	121.4	47	5	4	5	42	4
1215	.9	19650	18	1	173	1.3	5	8210	3.7	19	1027	50370	980	1	6240	620	16	130	21	1120	19	1	31	3	6	178.5	52	5	4	6	53	2
1216	.9	18400	14	1	184	1.3	6	8950	3.9	23	828	58530	1270	1	6920	921	17	170	18	1290	25	1	34	3	5	219.6	60	5	4	7	60	4
1217	.7	19470	11	1	158	1.3	5	8490	2.8	17	1091	35150	1000	1	6560	700	27	150	22	1120	20	1	31	3	5	110.0	45	5	2	5	40	3
1218	.4	10130	6	1	78	.6	5	6070	2.8	10	229	24750	500	1	3750	203	16	110	11	320	13	1	27	2	3	85.6	33	3	3	3	28	15
1219	.4	20000	8	1	167	1.2	5	8770	2.8	17	749	32680	1060	1	5960	707	21	140	22	950	21	1	30	3	2	98.1	50	3	2	4	35	2
1220	.3	10700	8	1	110	.8	4	6530	2.2	10	248	23160	470	1	3540	276	15	110	8	500	14	1	25	2	3	83.3	40	2	2	3	25	2
1221	.1	12240	1	1	120	.6	4	5250	2.3	12	159	22950	520	1	4920	423	15	140	13	410	13	1	21	1	1	77.5	33	2	2	3	25	2
1222	.4	18270	1	1	219	.9	4	9160	2.6	13	208	31020	950	1	6780	470	5	140	22	1000	17	1	28	2	1	89.0	50	3	2	4	33	5
1223	.6	13510	1	1	134	.7	6	6820	2.2	14	55	28460	760	1	6000	412	4	160	14	620	16	1	30	3	1	103.2	42	3	3	4	30	2
1224	.7	19030	1	1	215	1.0	6	7550	3.3	15	92	31800	1000	1	7320	558	4	160	18	510	18	1	29	3	1	96.2	50	4	3	4	37	8
122545M	.4	21920	1	1	233	1.1	6	8090	3.9	17	99	41230	1360	1	7400	641	2	190	24	800	17	1	28	3	1	134.3	57	4	3	5	45	4
1226	.6	15680	1	1	177	.7	8	6930	2.8	14	36	23590	750	1	7090	359	2	150	16	450	17	1	30	3	1	78.6	50	4	3	4	29	1
1227	.6	20190	1	1	222	1.0	7	8780	3.4	15	55	26610	1180	1	7270	607	2	160	25	740	13	1	33	3	1	79.7	54	4	4	4	38	2
1228	.3	13040	1	1	92	.6	7	5150	1.6	10	15	22360	610	1	4040	196	1	120	10	710	11	1	28	2	1	77.1	55	2	3	3	24	1
122945M	.9	47080	1	1	544	2.1	7	10910	5.8	28	164	53470	2330	1	11960	1333	5	160	46	1090	22	1	35	4	1	130.0	115	7	2	6	61	2
123045M	.7	31240	1	1	357	1.3	7	7650	3.9	21	104	41800	1540	1	8700	770	4	150	31	820	15	1	31	2	1	121.7	78	6	2	5	45	2
1231	.4	12470	1	1	74	.6	7	4490	2.0	14	31	38330	680	1	3550	281	2	130	8	1000	11	1	23	2	1	139.7	33	3	2	4	38	1
1232	.4	8580	3	1	65	.6	6	5980	2.3	13	32	29310	870	1	4210	363	2	140	9	1140	12	1	24	3	1	105.0	28	3	2	3	27	1
1233	.4	11610	1	1	76	.7	5	3850	1.1	11	27	29080	560	1	3120	184	1	100	10	580	13	1	21	2	1	100.4	44	3	3	3	30	2
1234	.3	11020	2	1	86	.5	6	5580	2.4	11	29	22130	670	1	4700	320	1	140	10	820	10	1	27	1	1	74.7	31	2	3	3	24	1
1235	.3	9880	1	1	83	.8	5	6650	3.1	18	39	50180	750	1	4580	369	1	170	8	1450	16	1	25	2	1	190.1	38	2	4	5	37	1
1236	.6	15370	1	1	209	.6	6	8250	3.0	15	70	32230	970	1	5580	502	3	150	17	910	19	1	31	3	1	103.6	50	3	3	4	31	2
1237	.6	11880	2	1	116	.6	7	7770	2.5	14	44	29720	780	1	6000	362	2	190	11	1000	15	1	32	3	1	102.7	43	3	3	4	29	2
1238	.6	11260	2	1	109	.9	5	8090	2.1	15	43	37910	690	1	4920	510	2	150	9	1450	16	1	31	3	1	141.3	33	4	3	4	3	

COMP: KOOKABURRA GOLD
 PROJ: COL
 ATTN: J.NEBOCAT

MIN-EN LABS ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 9V-0630-8J2
 DATE: JUL-14-89

* TYPE SOIL GEOCHEM • (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
1251	.9	15410	6	1	142	.6	7	7130	2.8	14	59	28700	1140	1	5010	308	3	170	12	700	22	1	32	3	8	98.8	69	5	4	4	36	23
1252	1.3	32970	2	1	366	1.5	8	8940	5.0	25	187	47760	1770	1	8990	1218	5	180	29	1100	24	1	36	4	11	140.8	79	7	6	6	51	12
1253	1.3	25870	10	1	278	1.0	7	7650	3.8	18	187	40170	1060	1	6420	653	6	130	27	700	19	1	31	3	13	120.7	62	6	2	5	45	4
1254	.8	18580	3	1	153	.7	6	6760	2.3	11	70	24390	820	1	4870	261	3	130	17	760	12	1	32	2	9	82.0	44	4	2	4	34	1
1255	.5	12380	2	1	108	.5	5	4060	3.2	14	14	35070	540	1	2740	387	2	110	5	2760	12	1	27	1	7	114.8	60	3	2	4	34	2
1256	.4	11760	1	1	83	.4	5	4530	2.1	9	25	21750	440	1	3130	190	3	130	9	380	9	1	27	1	8	85.4	32	5	1	3	26	15
1257	.7	15130	2	1	139	.6	7	6910	2.8	12	43	24670	870	1	5540	318	4	160	14	580	16	1	33	2	9	83.2	43	4	3	4	29	4
1258	.8	19510	8	1	198	.8	6	8040	3.3	15	72	29740	1130	1	6030	411	3	170	19	660	16	1	37	2	11	97.4	50	5	3	4	36	2
1259	1.1	31430	1	1	284	1.1	8	5680	4.1	23	79	40470	1670	1	9600	706	5	200	26	510	19	1	30	4	11	123.2	84	7	3	6	48	3
1260	1.1	20280	10	1	234	.8	8	7930	3.2	19	40	29760	970	1	6820	1010	3	180	18	430	24	1	36	4	13	94.7	80	6	5	5	37	4
1261	1.0	12580	10	1	99	.5	9	8220	3.6	13	29	24320	860	1	6680	371	3	170	15	970	20	1	37	3	13	81.3	42	5	4	4	34	6
1262	1.1	21720	8	1	217	.9	9	9070	4.2	18	115	34650	1280	1	8690	575	5	180	23	700	24	1	38	4	10	106.3	65	6	4	5	42	4
1263	1.5	41900	1	1	519	1.8	8	12720	5.5	24	239	54530	2540	1	12110	1052	8	1560	45	890	25	1	40	4	10	130.7	111	7	2	7	66	1
1264	1.4	45440	1	1	649	1.8	8	14560	6.1	26	223	54340	2400	1	13320	1174	11	1300	49	1060	23	1	41	3	11	125.1	138	8	4	7	65	2
1265	.9	14630	4	1	117	.5	8	9030	2.9	15	70	26270	1140	1	6310	405	8	190	12	1010	19	1	40	3	9	89.5	43	5	4	4	30	10
1266	1.2	22640	2	1	226	.8	8	11690	3.7	19	393	37070	1670	1	7940	700	13	200	24	1040	22	1	42	3	11	110.6	59	6	4	5	42	34
1267	1.3	22360	7	1	262	.9	7	9160	4.7	18	673	35340	1160	1	7420	684	14	170	22	910	22	1	35	4	11	99.9	58	6	3	5	40	8
1268	1.0	21470	6	1	226	1.0	5	10690	4.1	17	694	33130	1120	1	7390	762	21	150	24	1110	22	1	37	3	13	94.5	58	6	3	4	38	14

APPENDIX III
Analytical Procedures

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bawicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

Analytical Procedure Report for Assessment Work

31 Element ICP

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu, Fe, K, Li,
Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, U, V, Zn, Ga, Sn, W,
Cr

Samples are processed by Min-En Laboratories Ltd., at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

1.0 gram of the sample is digested for 4 hours with an aqua regia HClO₄ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a dot-matrix printer.



**MINERAL
• ENVIRONMENTS
LABORATORIES LTD.**

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories., at 705 West 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers.

Copper, lead, zinc, silver, cadmium, cobalt, nickel and manganese are analysed using the CH_2H_2 -Air Flame combination but the molybdenum determination is carried out by C_2H_2 - N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

Background corrections for Pb, Ag, Cd upon request are completed.

FOR ARSENIC analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzeit method using $\text{Ag Cs}_2\text{N} (\text{C}_2\text{H}_5)_2$ as a reagent. The detection limit obtained is 1. ppm

FOR FLUORINE analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pretreated with HNO_3 and HClO_4 mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 0.005 ppm (5ppb).

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

FIRE GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Fire Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

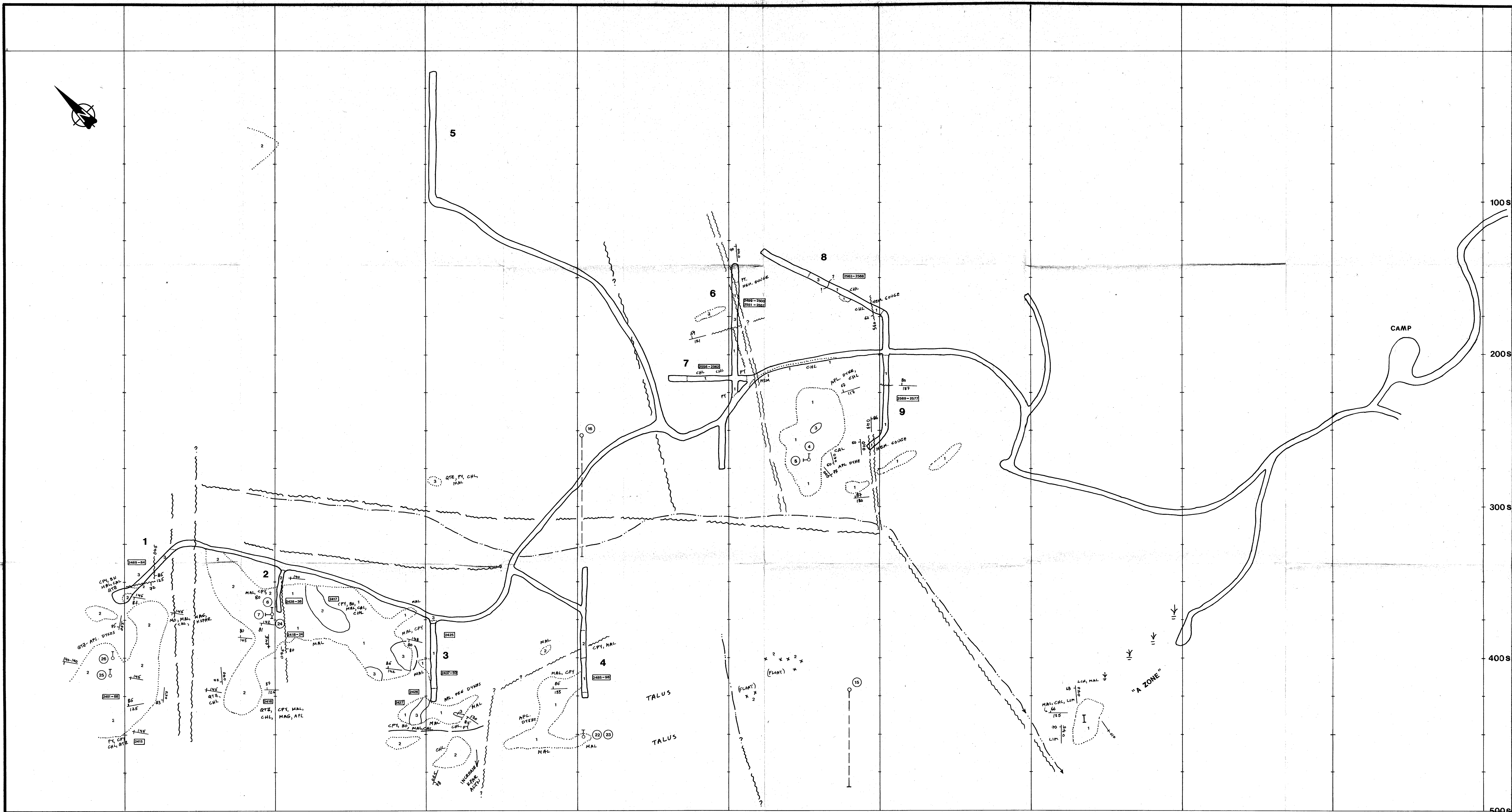
After drying the samples at 95^oC soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams are fire assay preconcentrated.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

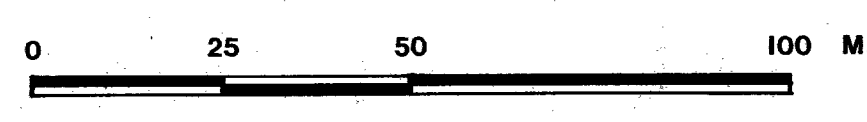
Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.



- 3 Fine grained, locally holocrystalline syenite; minor apfite, pegmatite dykes and quartz veins.
- 2 biotite ± hornblende syenite; gradational to monzonite, locally. Some intense potassic alteration and foliation.
- 1 Medium grained hornblende/biotite monzonite and monzodiorite. Locally gradational to syenite of unit 2.
- area of outcrop
- fault
- joint or fault fracture: inclined, vertical
- contact
- lineament
- 3 trench number
- drill hole (1970-1972), where noted in field.
- rock sample number(s)

- apf apfite
- cpy chalcopyrite
- bo bornite
- chl chlorite
- cal calcite
- ep epidote
- lim limonite
- hem hematite
- qtz quartz
- mag magnetite
- peg pegmatite
- py pyrite
- mo molybdenite
- mal malachite



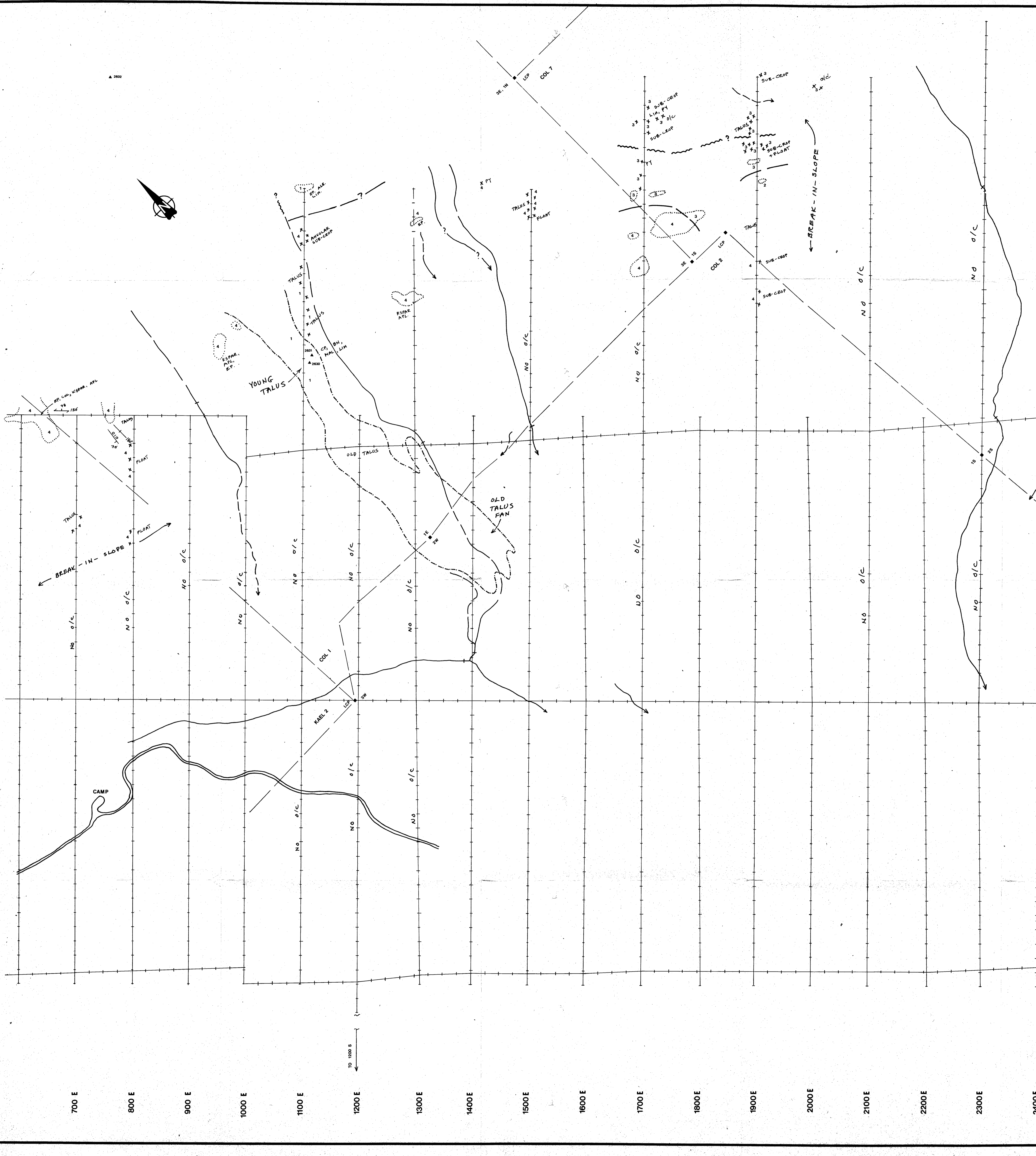
GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,748

PART 2
OF 2

KOOKABURRA GOLD CORP.		
COL PROJECT TRENCH PLAN		
OMINECA MINING DIVISION		
LOCATION 93N-2.7	SCALE 1:1000	DATE JAN 12, 1990
SURVEY BY JH	DRAWN BY JH	FIGURE MAP 1

A 2832



1200 N

LEGEND

- 1100 N 4 SYENITE, MONZONITE
- 3 DIORITE
- 2 AMPHIBOLITE
- 1000 N 1 ANDESITE, BASALT

- ALB. ALBITE
- 900 N APL. APLITE
- BN. BORNITE
- CPY. CHALCOPYRITE
- EP. EPIDOTE
- 800 N KSPAR POTASSIC ALTERATION
- LIM. LIMONITE
- MAL. MALACHITE
- O/C OUTCROP
- 700 N PY. PYRITE
- OUTCROP AREA
- 600 N CONTACT
- FAULT
- JOINT, FRACTURE
- 500 N SHEAR
- CREEK
- 400 N CLAIM LINE & I.D. POST

300 N

200 N

100 N

00 N

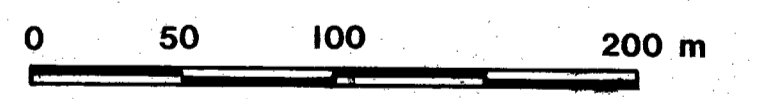
100 S CLAIMS LOCATED BY CHAIN & COMPASS

200 S

300 S

400 S

500 S



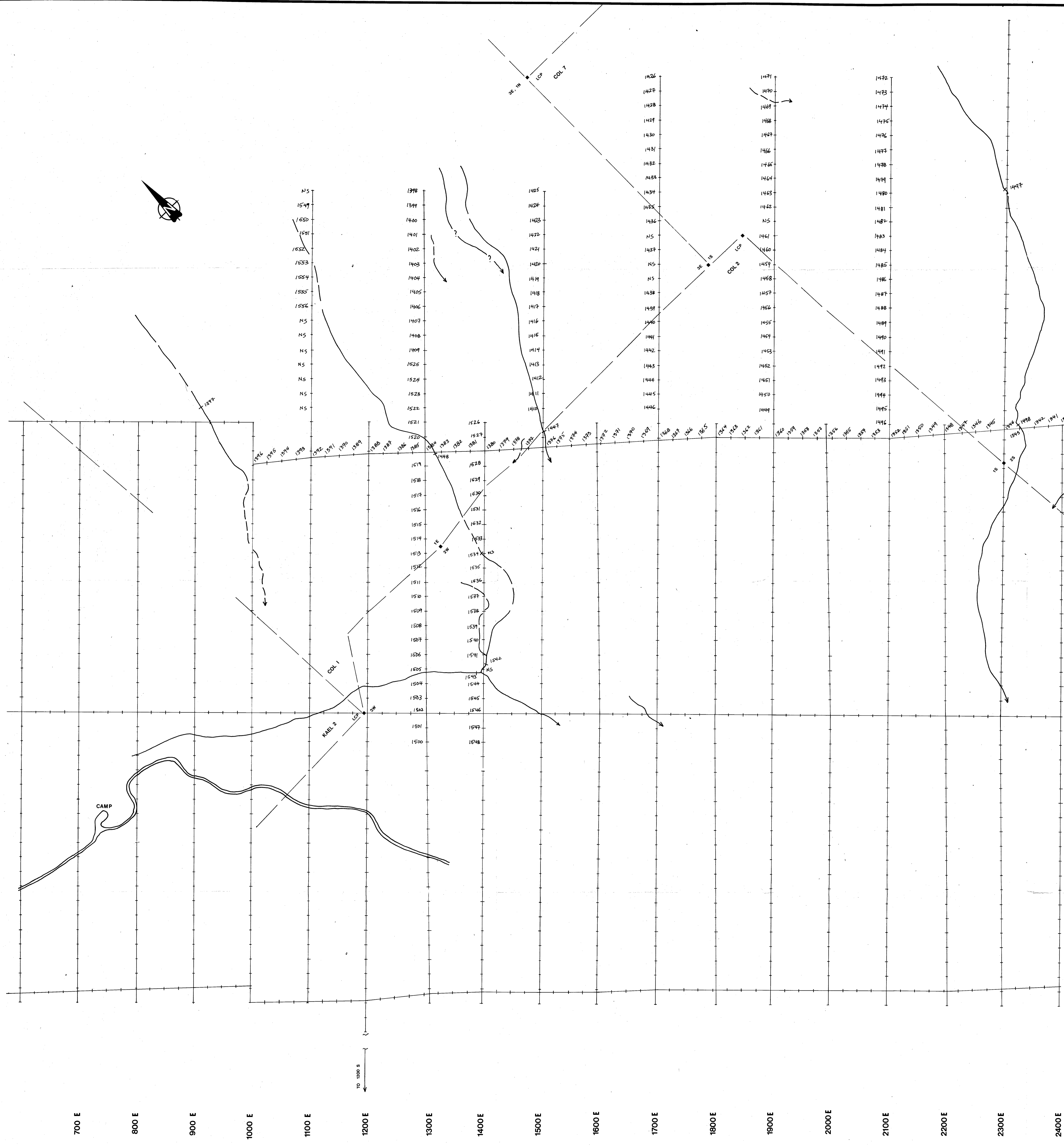
GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,748

**PART 2
OF 2**

KOOKABURRA GOLD CORP.		
COL PROJECT GEOLOGY		
OMINECA MINING DIVISION		
LOCATION 93N-2.7	SCALE 1:2500	DATE JAN 12, 1990
SURVEY BY JN	DRAWN BY JN	FIGURE MAP 2

700 E 800 E 900 E 1000 E 1100 E 1200 E 1300 E 1400 E 1500 E 1600 E 1700 E 1800 E 1900 E 2000 E 2100 E 2200 E 2300 E 2400 E

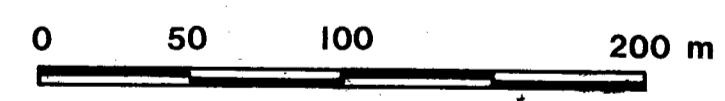


1200 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
200 N
100 N
00 N
100 S
200 S
300 S
400 S
500 S

LEGEND

- SOIL SAMPLE
- SILT SAMPLE

CLAIMS LOCATED BY CHAIN & COMPASS



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,748
PART 2
OF 2

KOOKABURRA GOLD CORP.		
COL PROJECT SAMPLE LOCATIONS		
OMINECA MINING DIVISION		
LOCATION 93N-2,7	SCALE 1:2500	DATE JAN 12, 1990
SURVEY BY JN	DRAWN BY JN	FIGURE MAP 5

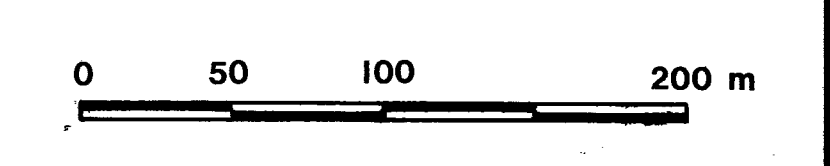
700 E 800 E 900 E 1000 E 1100 E 1200 E 1300 E 1400 E 1500 E 1600 E 1700 E 1800 E 1900 E 2000 E 2100 E 2200 E 2300 E 2400 E

1200 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
200 N
100 N
00 N
100 S
200 S
300 S
400 S
500 S

LEGEND

	Au	As
SUB-ANOMALOUS:	10	20
ANOMALOUS:	15	30
	(ppb)	(ppm)

CLAIMS LOCATED BY
CHAIN & COMPASS

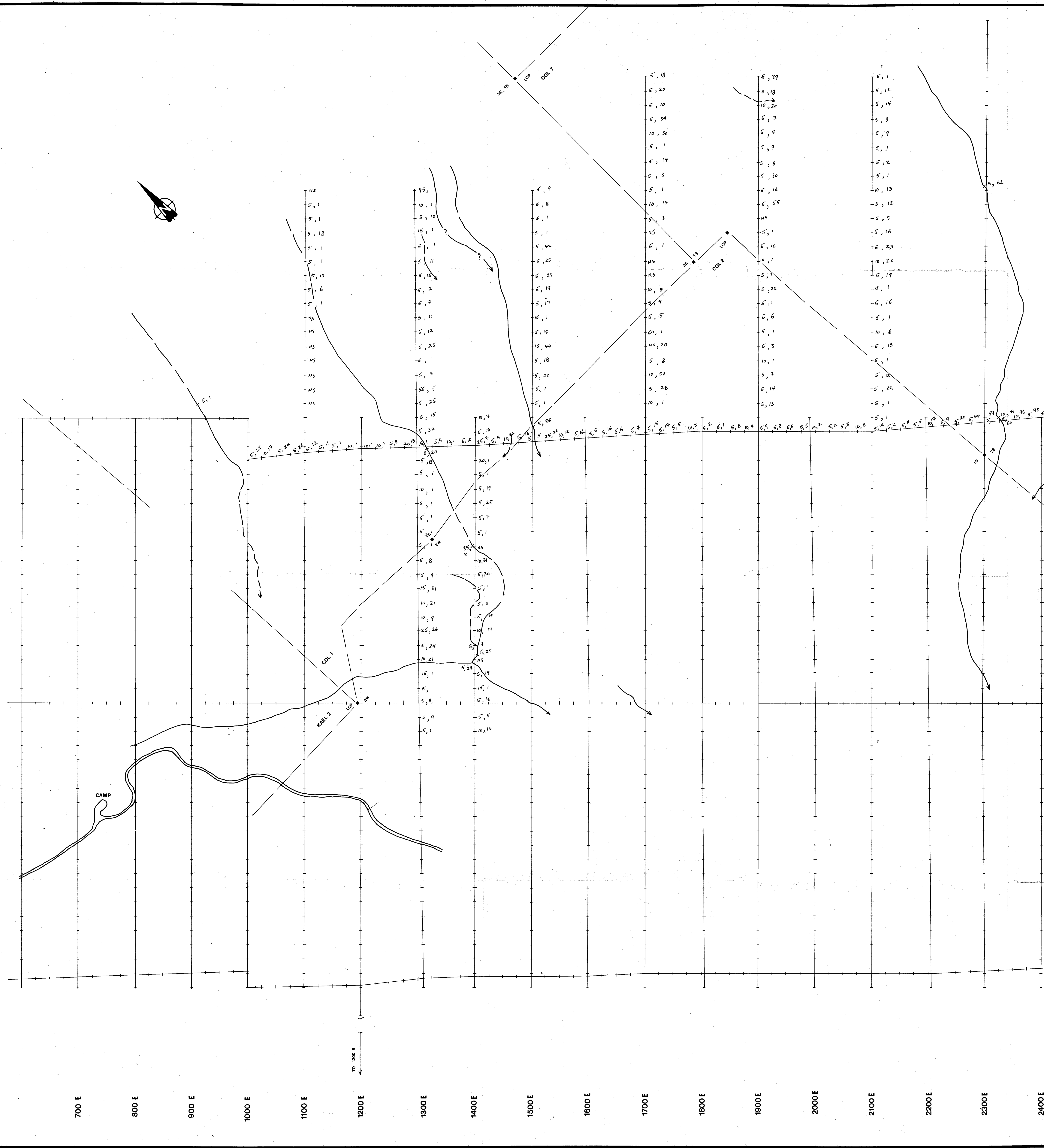


GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,748

**PART 2
OF 2**

KOOKABURRA GOLD CORP.		
COL PROJECT GEOCHEM: Au, As		
OMINECA MINING DIVISION		
LOCATION: 93N-2.7	SCALE: 1:2500	DATE: JAN 12, 1990
SURVEY BY: JN	DRAWN BY: JN	FIGURE: MAP 4



700 E 800 E 900 E 1000 E 1100 E 1200 E 1300 E 1400 E 1500 E 1600 E 1700 E 1800 E 1900 E 2000 E 2100 E 2200 E 2300 E 2400 E

1200 N

LEGEND

1100 N

SUB ANOMALOUS 200 PPM

ANOMALOUS 250 PPM

1000 N

900 N

800 N

700 N

600 N

500 N

400 N

300 N

200 N

100 N

00 N

100 S

200 S

300 S

400 S

500 S

CLAIMS LOCATED BY CHAIN & COMPASS

0 50 100 200 m

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,748

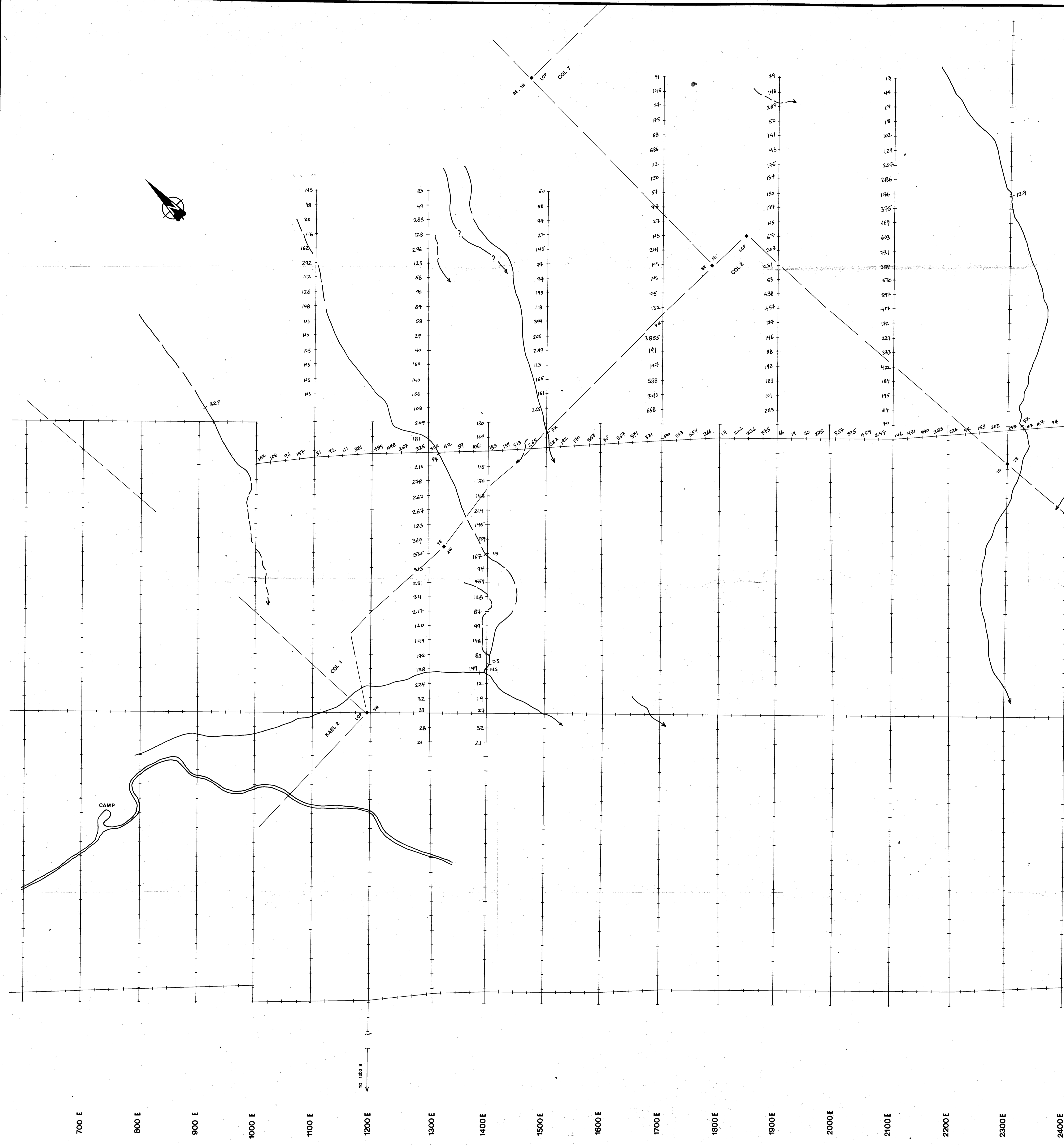
PART 2 OF 2

KOOKABURRA GOLD CORP.

COL PROJECT GEOCHEM: Cu

OMINECA MINING DIVISION

LOCATION 93N-2.7	SCALE 1:2500	DATE JAN 12, 1990
SURVEY BY JN	DRAWN BY JN	FIGURE MAP 3



700 E 800 E 900 E 1000 E 1100 E 1200 E 1300 E 1400 E 1500 E 1600 E 1700 E 1800 E 1900 E 2000 E 2100 E 2200 E 2300 E 2400 E

TO 200 S