URANERZ AUSTRALIA PTY. LTD.

INCORPORATED IN W.A.

FOR THE

ALLIGATOR RIVERS JOINT VENTURE

BETWEEN

URANERZ AUSTRALIA PTY. LTD. (50%)

AND

KUMAGAI GUMI CO. LTD. (50%)

ANNUAL REPORT

ON

EXPLORATION LICENCE 3421

KUKALAK

ARNHEM LAND, NORTHERN TERRITORY

COVERING THE PERIOD

14 SEPTEMBER 1989 TO 13 SEPTEMBER 1990

Compiled by

K.S. TAYLOR

PERTH

SEPTEMBER 1990

SUMMARY

Exploration on EL 3421 is carried out by Uranerz, as operator of the Alligator Rivers Joint Venture, a 50:50 joint venture between Uranerz Australia Pty. Ltd. and Kumagai Gumi Co. Ltd.

Work carried out during the third year of tenure included the drilling of one percussion and one percussion/diamond holes totalling 167m percussion and 267.3m diamond. Soil sampling and stream sediment surveys were carried out to test the gold potential of the tenement.

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1. INTRODUCTION

Exploration Licence 3421 was granted to Uranerz Australia Pty. Ltd. (UAL) on 14 September 1987, after an agreement had been signed with the Northern Land Council (NLC), representing the Aboriginal owners of the land on 10 September 1987.

The tenement consists of 125 blocks (403km2) bounded by latitudes 12^{o} 25'S and 12^{o} 40'S and longitudes 133^{o} 25'E and 133^{o} 35'E.

Exploration on this and other licences in Arnhem Land are carried out by UAL on behalf of the Alligator Rivers Joint Venture (ARJV) in which Kumagai Gumi Co. Ltd. is a 50% partner. The northern portion of EL 3421 was worked from a base camp on the southern bank of Tin Camp Creek in EL 3418, with an outcamp on the Goomadeer River within EL 3421 providing a base for work on the southern portion.

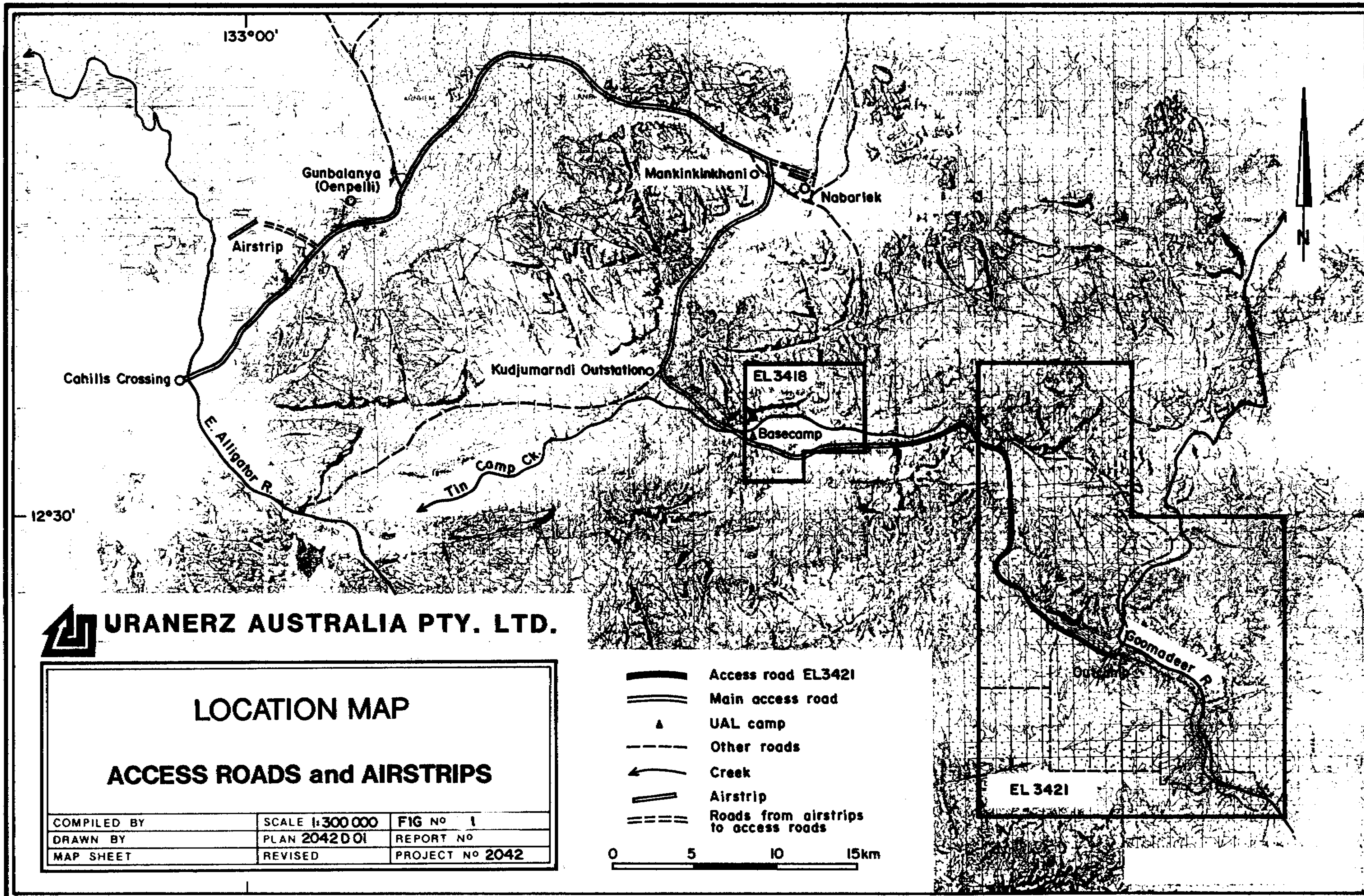
This report details work carried out during the third year of tenure.

2. LOCATION

EL 3421 lies approximately 50kms ESE of Oenpelli, in Western Arnhem Land. It is located on the ALLIGATOR RIVER 1:250,000 map sheet SD53-1 and the OENPELLI, HOWSHIP and LIVERPOOL 1:100,000 map sheets 5573, 5572 and 5672 (see Figure 1).

3. GEOLOGY

The majority of the licence area is covered by the Middle Proterozoic Kombolgie Formation. Significant exposures of the early Middle Proterozoic Oenpelli Dolerite occur both in the Caramal East Inlier and in the Goomadeer Valley (curvilinear fault controlled feature) surrounded by Kombolgie Formation. Dolerite is also exposed in a prominent fault-bounded valley at the eastern



133°00'
12°30'
Gunbalanya
(Oenpelli)
Airstrip
Mankinkinkhani
Nabarlek
Cahills Crossing
Kudjumarndi Outstation
E. Alligator R.
Tin Camp Ck
EL 3418
Basecamp
EL 3421
Goomadeer R.
N
URANERZ AUSTRALIA PTY. LTD.
LOCATION MAP
ACCESS ROADS and AIRSTRIPS
COMPILED BY
DRAWN BY
MAP SHEET
SCALE 1:300 000
PLAN 2042 D 01
REVISED
FIG No 1
REPORT No
PROJECT No 2042
Access road EL3421
Main access road
UAL camp
Other roads
Creek
Airstrip
Roads from airstrips to access roads
0
5
10
15km

extremity of the Caramal East Inlier. The Goomadeer Valley trends SE and cuts diagonally across the tenement to its SE corner. The dolerite displays intrusive contacts with the Kombolgie Formation. Northeast of the Goomadeer Valley are extensive exposures of the Nungbalgarri Volcanic member and the Upper Kombolgie sandstone. The lower sandstone is exposed in two broad anticlines. Remnants of lateritised Nungbalgarri Volcanics are preserved on the lower sandstone. This surface represents the top of the lower member and is commonly hornfelsed and silicified and marked by load casts varying in diameter from 1 to 100m. The thickness of this lower Kombolgie sandstone unit is estimated to be in the order of 200m. The Nungbalgarri Volcanics and Upper Sandstone represent an additional 100-150m of cover.

4. WORK DONE

4.1 Deep Drilling

A further two holes (KLD 21, KLP 22) were drilled to complete the 1989 deep drilling program, using the Universal UDR 850 drill rig. Drill statistics are tabulated below:-

Table 1 - Drill Statistics

Hole No.	Co-ordinates N	Co-ordinates E	Hole Depth	Percussion	Diamond
KLD 021	5570	41470	384.3	117	267.3
KLP 022	5560	42150	50	50	-
	Totals		434.3	167	267.3

KLD 21 was drilled to test a prominent gravity low on Line 5600N and to provide structural information. The results show that the Oenpelli Dolerite intrudes the area, rather than being thrust over the Kombolgie Formation lithologies as was previously thought. It also strongly suggests that the Oenpelli is younger than the

Kombolgie Sandstones. The gravity low is now attributed to an island of lower Kombolgie Sandstone, within the Oenpelli Dolerite.

KLP 22 was collared 150m south of KLD 19 to further test the lateritic mineralisation found in Trench T2. No lateritic profile was developed within this hole although minor downhole anomalism was located (5m @ 12ppm U_3O_8). (Map 1) (Appendix 1, 2).

4.2 Gold Exploration

Results from the 1988 work indicated that targets for precious metal mineralisation could be found within the Nungbalgarrie Volcanics and Oenpelli Dolerite. A soil and stream sediment survey was undertaken during the 1989 field season to outline possible target areas. A seive fraction of -40 mesh was used for both soil and stream samples, with the soil samples being sent for fire assay and the stream sediment samples analysed by bulk cyanide leach treatment.

4.2.1 Soil Sampling Survey

Soil samples were taken north and south of the Devils Elbow area.

To the north composite samples were taken along headlands on both sides of the valley at 500m spacing. No anomalism was recorded.

To the south samples were taken every 25m along the Upper Sandstone escarpment. Only one result assayed above 1 pp Av.

4.2.2 Stream Sediment Survey

An extensive stream sediment sampling program was carried out over the entire exposure of the Nungbalgarrie Volcanics and parts of the Oenpelli Dolerite. Problems were encountered with the repeatability of the bulk cyanide leach results: initial anomalous results could not always be repeated by resampling at the same location and duplicate samples did not correlate to a satisfactory degree with the original samples. The initial work located a total of 17 anomalies (K1 - K17) with results greater than 5 ppb Au (Table 2). Of these anomalies K3, 4, 5, 8, 16 and 17 were not considered significant and follow-up work was undertaken on the remaining anomalies. The results of this work indicated that further work was justified in five areas; K1, K7, K10/11, K13 and K14 (Figure 2) (Appendix 3).

4.2.2.1 Anomaly K1

Initial soil follow-up of this anomaly in 1989 was disappointing (Figure 3). In 1990 the area was extensively traversed and grab samples were collected. The results indicate that the anomalism can be satisfactorily explained in terms of local concentrations in a sporadic lateritic profile.

4.2.2.2 Anomaly K7

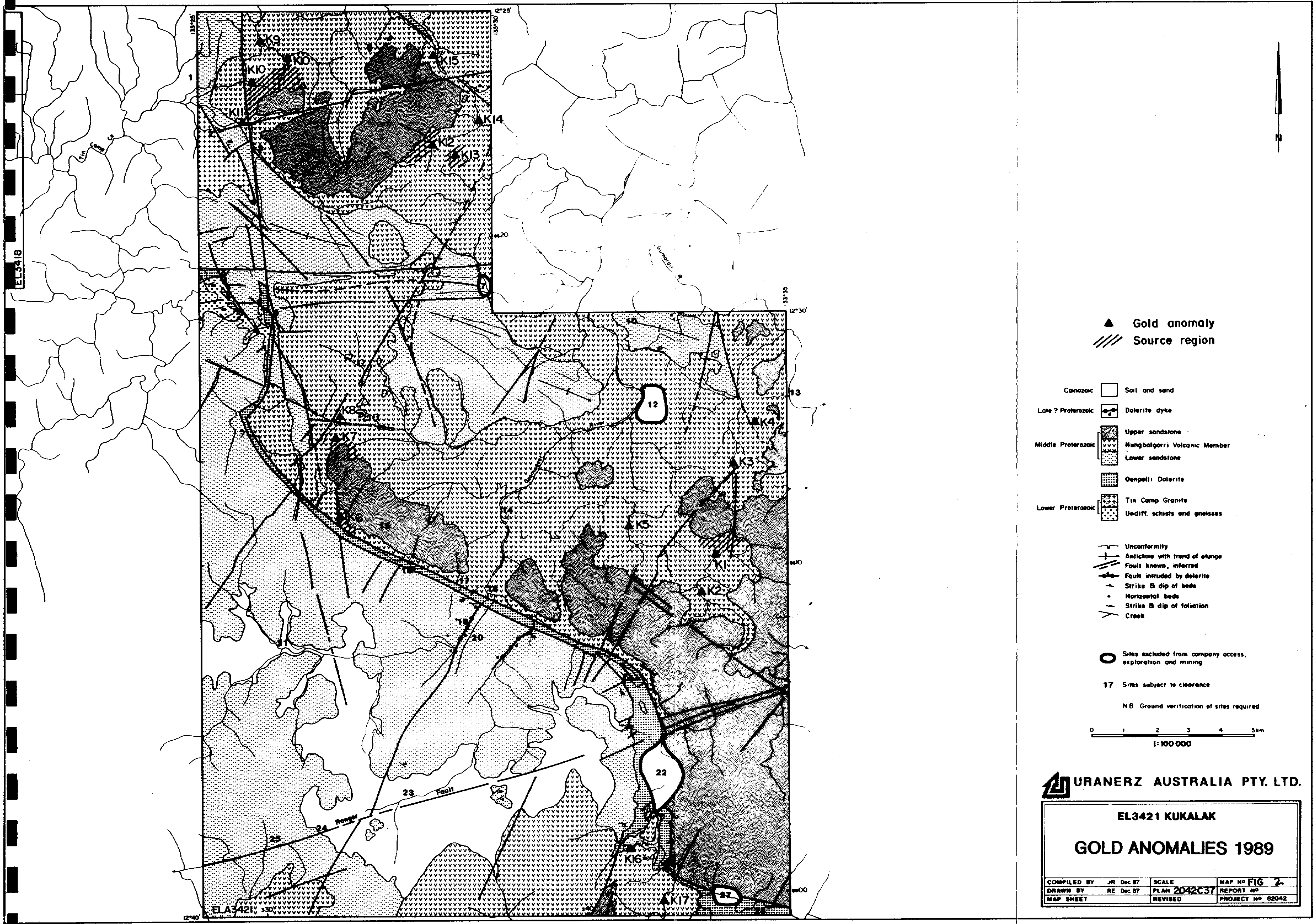
The 1989 work had indicated a broad east-west trending zone of anomalous Au, with highs in the 10-20 ppb Au range. In 1990 the area was geologically mapped and samples taken on lines 100m apart and at 25m intervals. This work failed to reproduce many of the initial anomalies and no broad zone could be discerned. The majority of the point anomalies (<12 ppb Au) could be explained in terms of exposed laterite or accumulations of pisolite (Figure 4, 5).

4.2.2.3 Anomaly K10/11

The source region for this anomaly is considered to be the nearby Upper Kombolgie Sandstone/Nungbalgarrie Volcanic contact. Soil sampling and ground traversing outlined a narrow zone of slightly elevated results in the south west of the area. Grab sampling in this area did not yield any anomalous results (Figure 6).

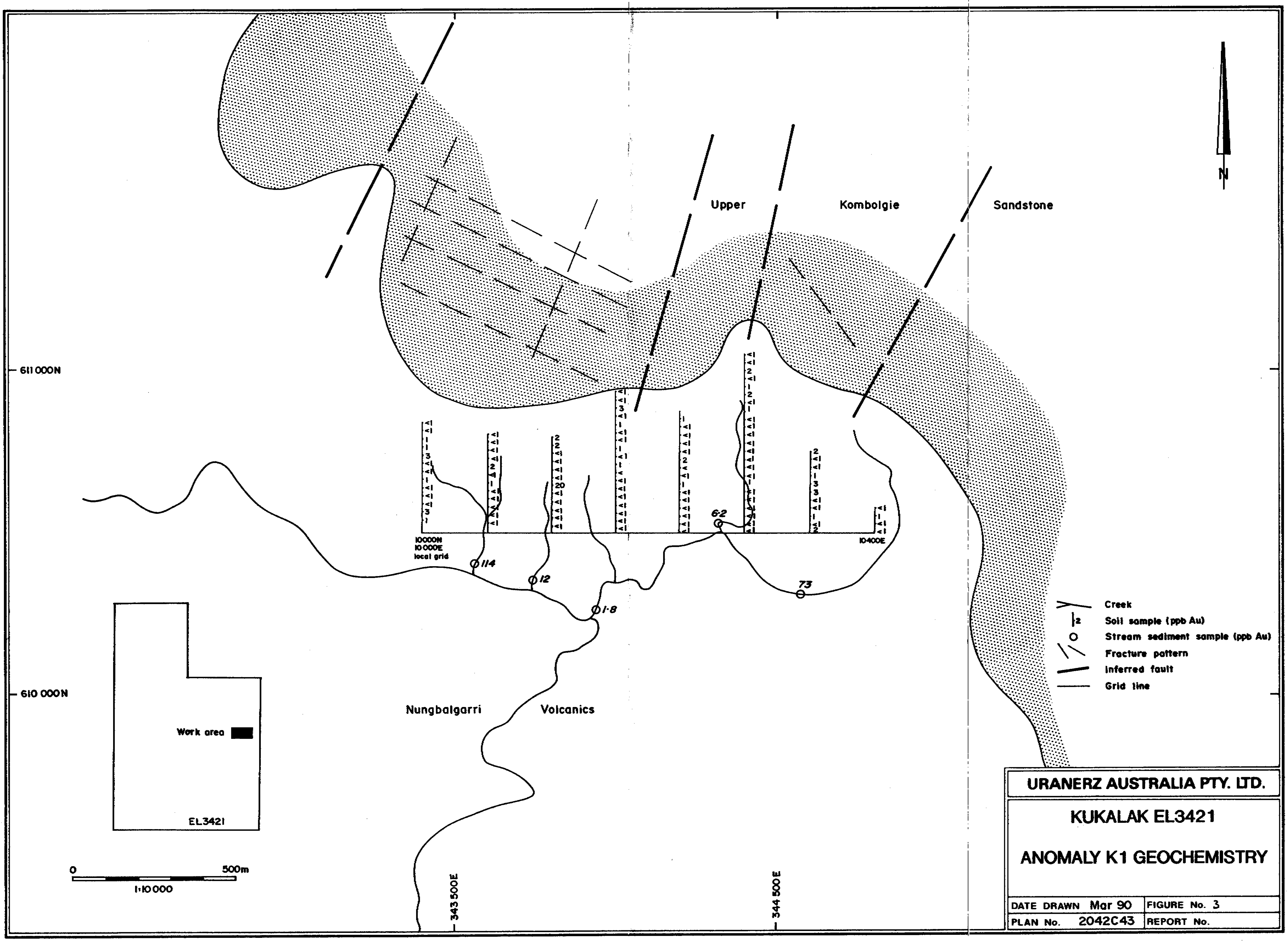
TABLE 2 Details of Initial Stream Sediment Anomalies

Anomaly	No. Samples	Samples	Values (ppb)
K1	5	2466	114.0
		2467	12.0
		2468	1.8
		2469	6.2
		2470	73.0
K2	3	2475	31.0
		2477	16.0
		2479	6.4
K3	1	2447	5.0
K4	1	2440	5.8
K5	1	2457	6.8
K6	3	2309	2.2
		2311	5.2
		2312	13.5
K7	1	2247	11.5
K8	1	2245	5.9
K9	2	2224	15.0
		2225	3.5
K10	2	2223	11.4
		2226	10.6
K11	2	2228	16.0
		2229	4.9
K12	1	2232	10.7
K13	1	2235	10.7
K14	2	2237	5.4
		2238	6.0
K15	1	2202	7.5
K16	1	2328	6.0
K17	1	2500	6.1

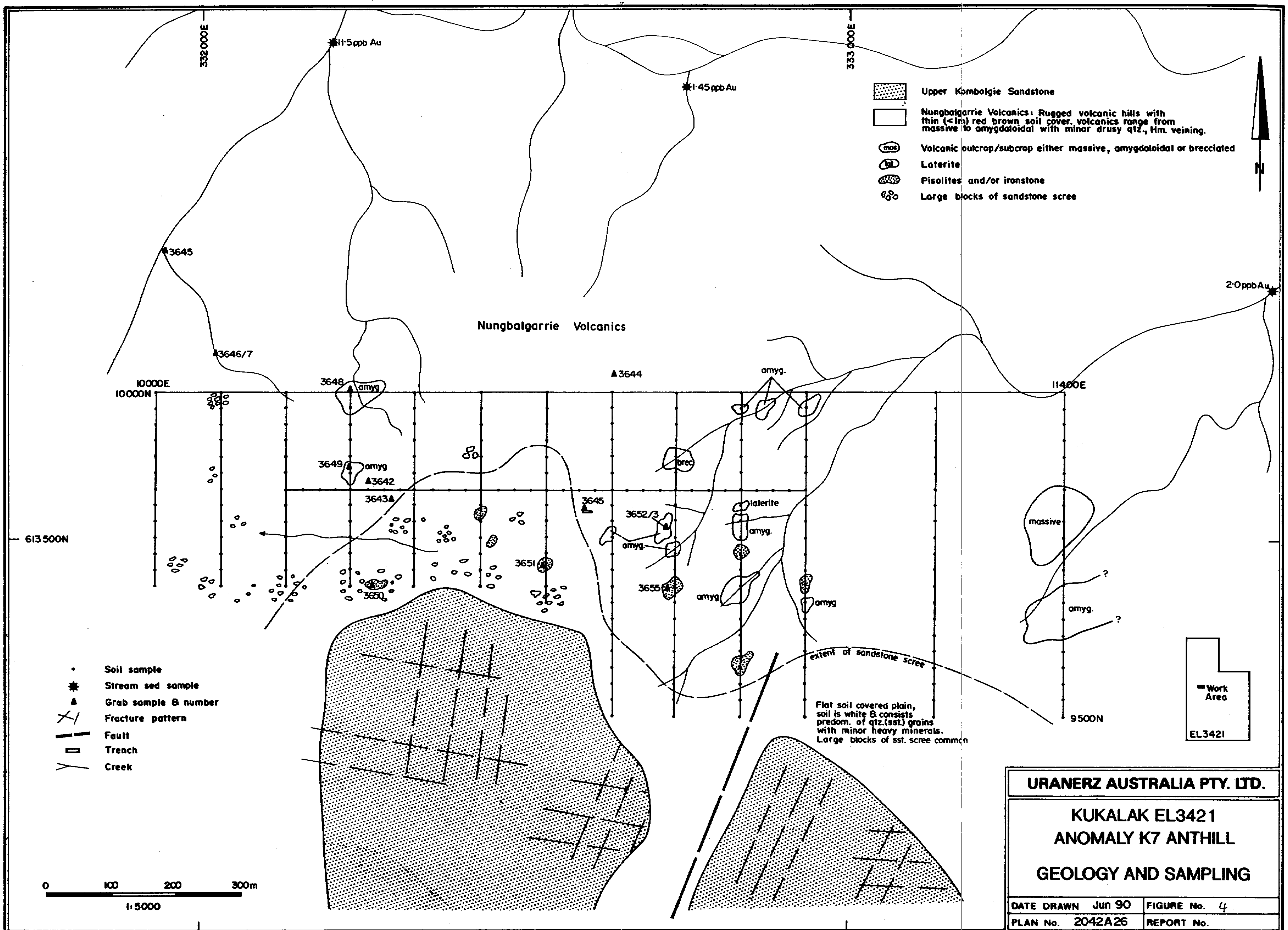


EL3421 KUKALAK

GOLD ANOMALIES 1989



N
Upper Kombolgie Sandstone
611 000N
610 000N
Nungbalgarri Volcanics
10000N
10 000E
local grid
10400E
114
12
1·8
6·2
73
20
Creek
Soil sample (ppb Au)
Stream sediment sample (ppb Au)
Fracture pattern
Inferred fault
Grid line
Work area
EL3421
0
500m
1:10 000
343 500E
344 500E
URANERZ AUSTRALIA PTY. LTD.
KUKALAK EL3421
ANOMALY K1 GEOCHEMISTRY
DATE DRAWN Mar 90
FIGURE No. 3
PLAN No. 2042C43
REPORT No.

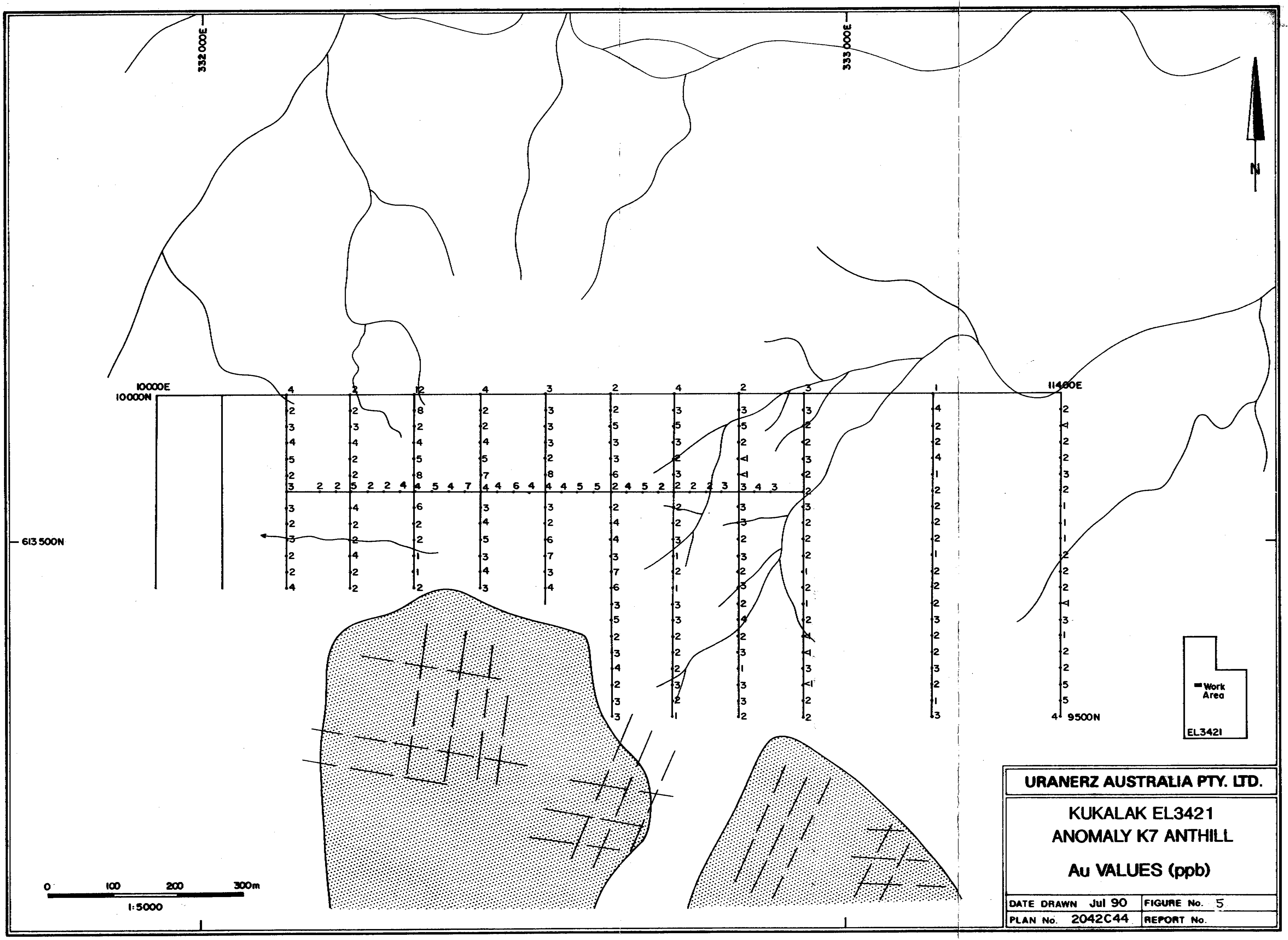


URANERZ AUSTRALIA PTY. LTD.

KUKALAK EL3421
ANOMALY K7 ANTHILL

GEOLOGY AND SAMPLING

DATE DRAWN	Jun 90	FIGURE No.	4
PLAN No.	2042A26	REPORT No.	

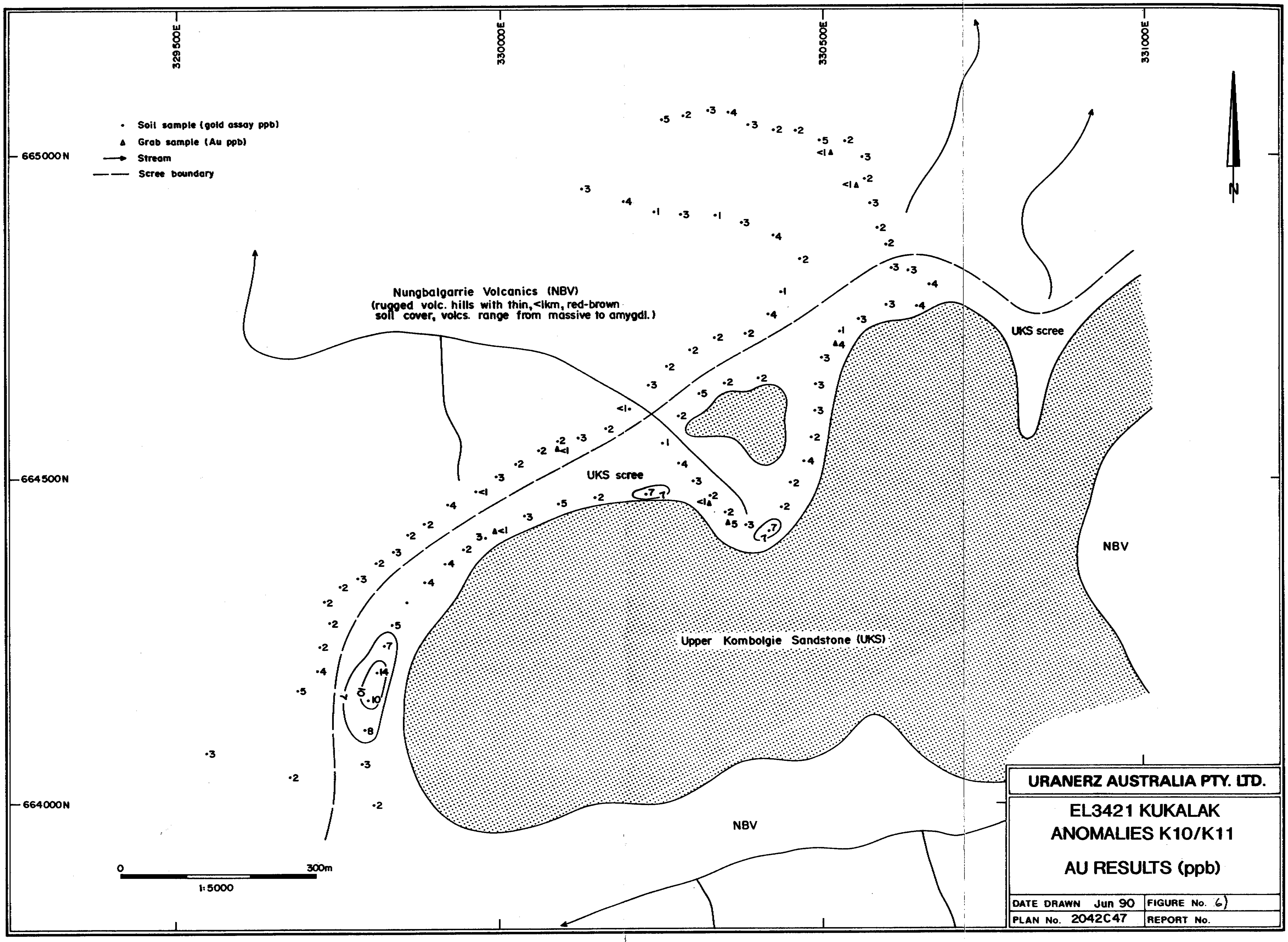


URANERZ AUSTRALIA PTY. LTD.

KUKALAK EL3421
ANOMALY K7 ANTHILL

Au VALUES (ppb)

DATE DRAWN	Jul 90	FIGURE No.	5
PLAN No.	2042C44	REPORT No.	



329500E
330000E
330500E
331000E
665000N
664500N
664000N
N
Soil sample (gold assay ppb)
Grab sample (Au ppb)
Stream
Scree boundary
Nungbalgarrie Volcanics (NBV)
(rugged volc. hills with thin, <lkm, red-brown soil cover, volcs. range from massive to amygdl.)
UKS scree
Upper Kombolgie Sandstone (UKS)
NBV
0
300m
1:5000
URANERZ AUSTRALIA PTY. LTD.
EL3421 KUKALAK
ANOMALIES K10/K11
AU RESULTS (ppb)
DATE DRAWN Jun 90
FIGURE No. 6)
PLAN No. 2042C47
REPORT No.

4.2.2.4 Anomaly K13

A work grid was established over this area with samples collected at 25m intervals on lines 200m apart. Higher point values are attributed to laterite (Figure 7, 8).

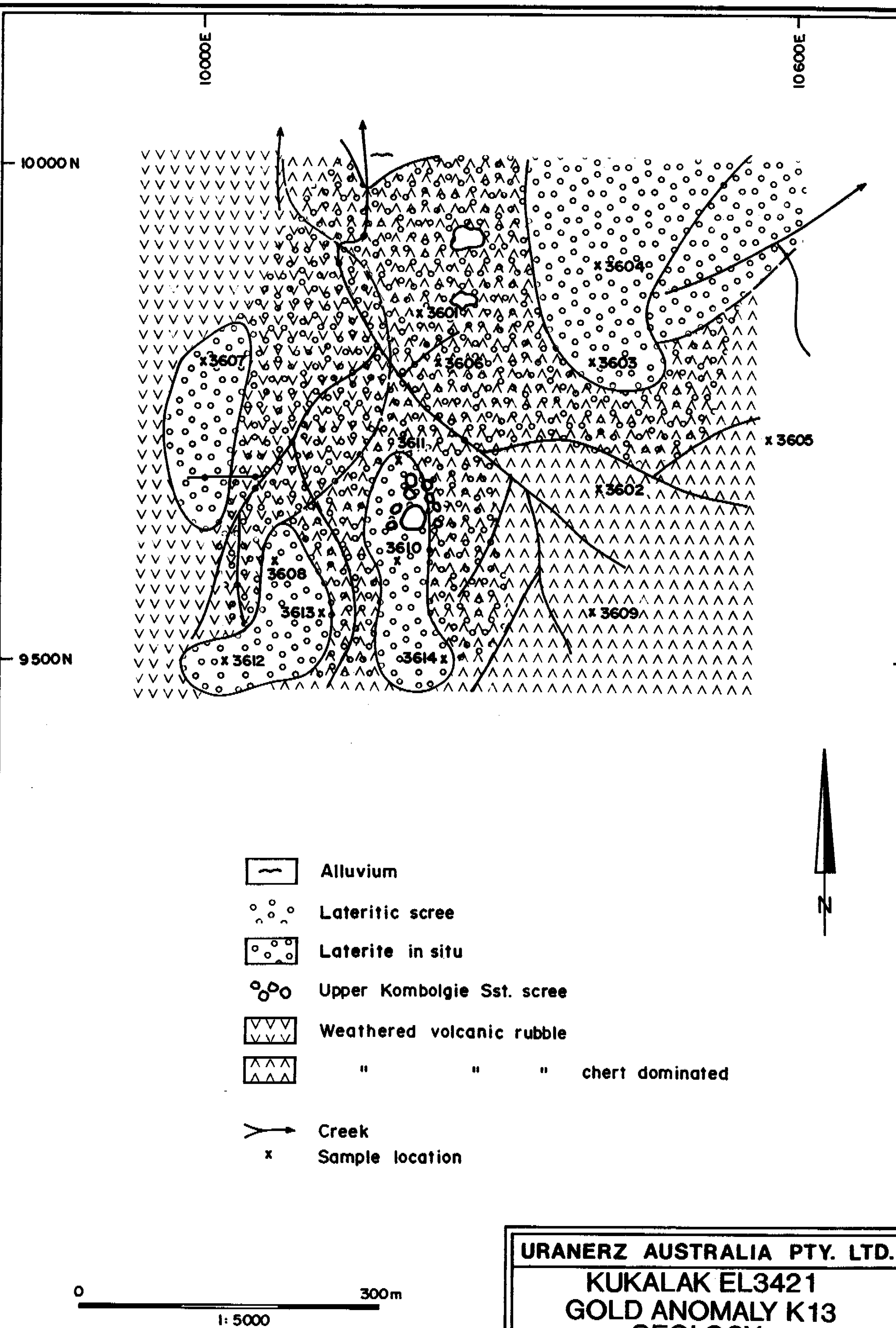
4.2.2.5 Anomaly K14

Samples were taken from ground traverses at 25m intervals from just below the Sandstone/Volcanic contact. No significant anomalism was outlined (Figure 9).

The results of the 1990 work significantly down-graded the prospectivity of the previously outlined anomalies and the planned follow-up drill testing was abandoned.

4.3 Petrographic Studies

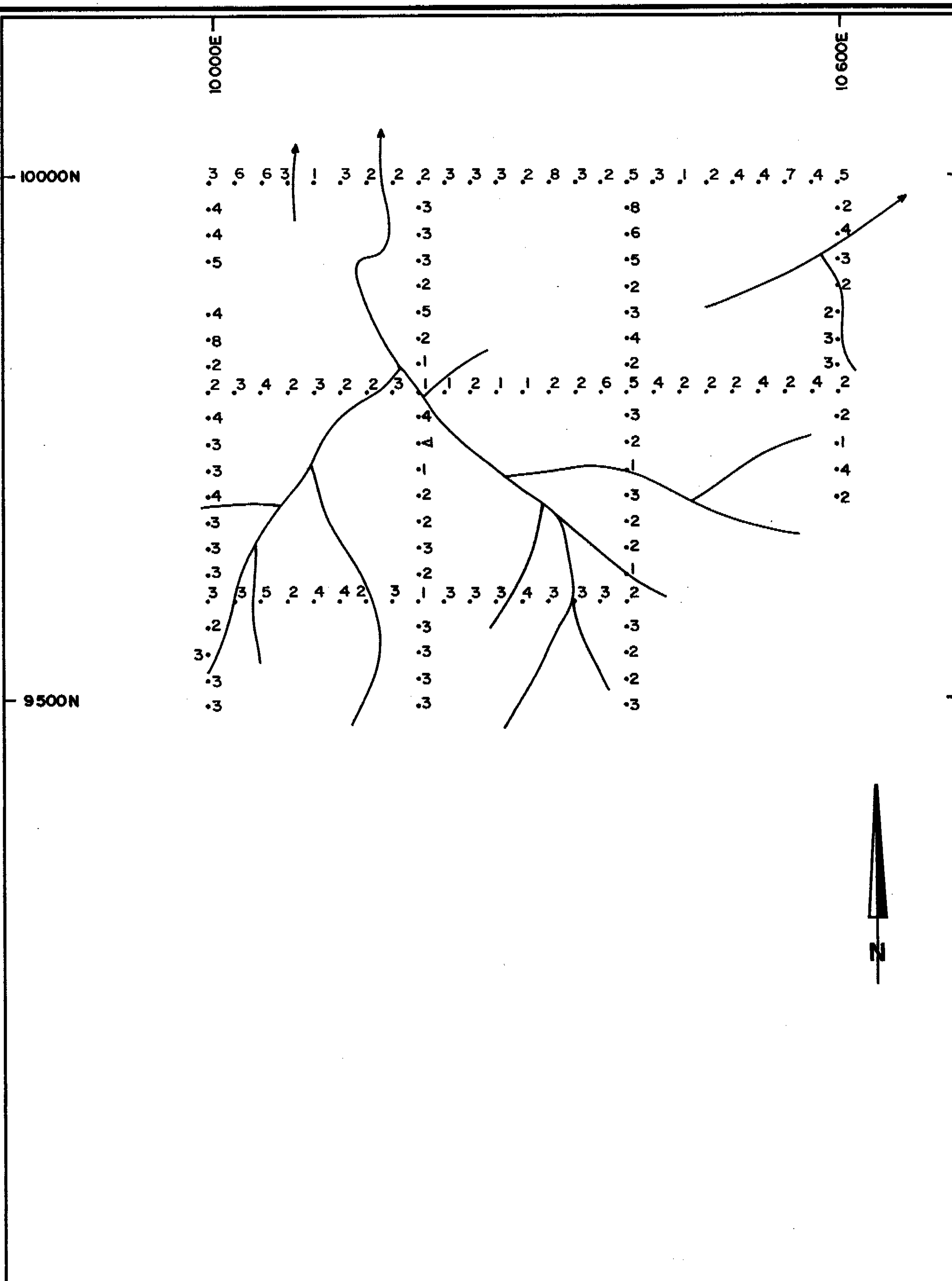
A detailed petrographic study was carried out in UEB's laboratory in Bonn, on mineralized samples from trenches at Devils Elbow. Detailed transmitted and reflected light microscopy and X-ray diffractometery has identified the primary ore mineral as uraninite, with minor coffinite, and allowed a complete paragenetic sequence for the mineralization in the trenches to be determined (Appendix 4).



URANERZ AUSTRALIA PTY. LTD.

KUKALAK EL3421
GOLD ANOMALY K13
GEOLOGY

DATE Jul 90	FIGURE No. 7
PLAN No. 2042A27	REPORT No.

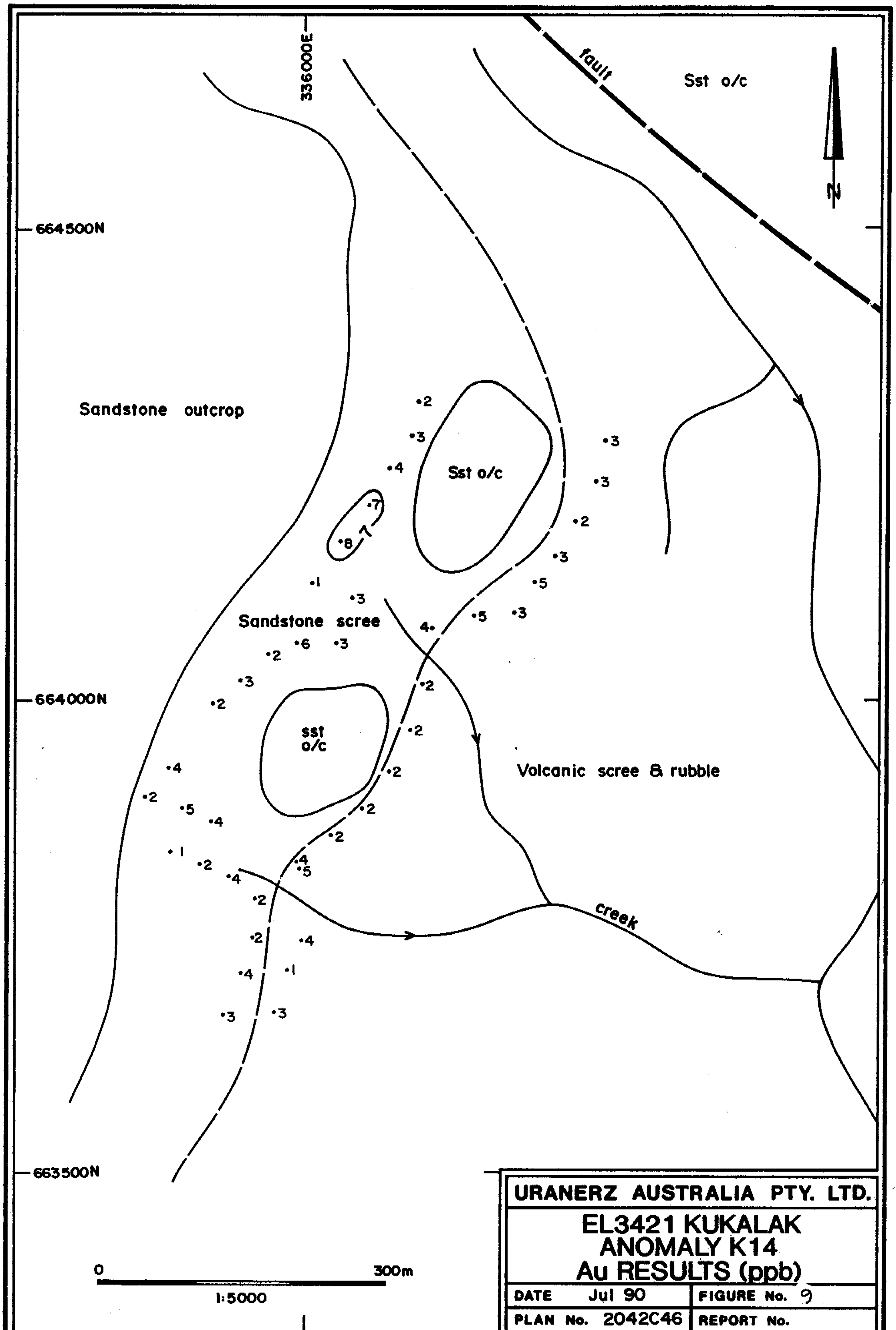


0 300m
1:5000

URANERZ AUSTRALIA PTY. LTD.

EL3421 KUKALAK
ANOMALY K13
Au VALUES (ppb)

DATE	Jul 90	FIGURE No.	8
PLAN No.	2042C45	REPORT No.	



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EL3421 KUKALAK
ANOMALY K14
Au RESULTS (ppb)

DATE	Jul 90	FIGURE No.	9
PLAN No.	2042C46	REPORT No.	

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EXPLORATION LICENCE: 3 4 2 1

STATEMENT OF EXPENDITURE

covering the period: 14.09.1989 - 13.09.1990

SALARIES & WAGES	$ 129,537
DRILLING CONTRACTORS	$ 120,246
FIELD OPERATION COSTS INCLUDING CONSUMABLES, VEHICLE OPERATIONG & REPAIRS, AIRFARES, FREIGHT ETC.	$ 207,324
DEPRECIATION OF VEHICLES AND GEOPHYSICAL EQUIPMENT, MANAGEMENT & DISTRIBUTION OF HEAD OFFICE COSTS	$ 151,009
	$ 608,116

APPENDIX 1

Diamond Drill Logs (KLD 21, KLP 22)

URANERZ AUSTRALIA P.L.

HOLE LOGGING DATA

FORM 39

PROJECT 8204/2	HOLE Nº KLD 21	Unit Operator C. Blackstone
State N.T. Tenement EL 3421	Depth Drilled 384.3 m. Started	Unit Number NS 2500 266
Grid Reference	Collar Elevation m. Completed 23/9/89	Date Logged 23/9/89

Location Devils Elbow	CASING DATA	HOLE DATA	REMARKS
	Cased From 0 To 384.3 m.	Dia. HQ Fr 0 To 117 m.	
	Diam. In Casing NC NQ mm.	Dia. NQ Fr 117 To 319.3 m.	
	Casing Material STEEL	Dia. BQ Fr 319.3 To 384.3 m.	K Factor
		Type	
	Core Interval	Fluid Level m.	α =
		Mud Type	
		Mud Density	

GAMMA RAY	Initial Run	2	3	4
Probe Nº	429			
Type	γ			
Size Diam. mm.				
Standard CPS				
Dead Time				
Logged Depth m.	383.4			
Logging Spd. m/min	4.5			
Range CPS/Div	20			
Start Dig. Printout	✓			
Finish Dig. Printout				
Digital Printout Int.				
Bg. Count CPS				
Chart Drive				
Ratio 100/1	✓			
Ratio 200/1				
Dir. Logged Up	✓			
Dir. Logged Down				

GAMMA RERUNS

5	6	7	8	9	10	11	12

ELECTRIC		
Probe Nº		
Type		
Logged Depth		
Logging Speed		
Chart Select. Left		
Chart Select. Right		
S. P. Scale mV/Div		
S.P. Bias		
S.P. Polarity		
Pnt. Res. Scale Ω/Div		
Pnt. Res. Disp.		
Resistivity Ωm/Div		
Chart Drive		
Ratio 100/1		
Ratio 200/1		
Dir. Logged Up		
Dir. Logged Down		

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº 82042 TENEMENT 3421 PROSPECT KUKALAK HOLE Nº KLD 21

HOLE TYPE PDH / DDH CO-ORDS 341470 E 8605570 N DRILLED BY GADENS.

COMMENCED ______ COMPLETED 23-9-89 BY HODGKISS GEOL. BY SCC

TOTAL DEPTH 383.30 WATER TABLE ______ SRAT BG 25 cps. ELEVATION 282.4

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
0–1	Earthy red/brown massive soil with minor cream clay, trace ironstone. Weathered Oenpelli Dolerite.	25	
1–2		25	
2–3		25	
3–4	Black ironstone with abundant cream coloured clay. ∴ Weathered Dolerite	25	
4–5		25	
5–6	Dark grey/green massive dolerite with abundant pale cream/green clay flecks throughout. Moderately ferruginised throughout.	25	
6–7		25	
7–8		25	
8–9		25	
9–10		25	
10–11		25	
11–12	Hard, massive grey/green, fresh Oenpelli Dolerite with white subhedral feldspar phenocrysts + occasional altered apple green olivines. Some feldspars altered to a pinky orange colouration.	25	
12–13		15	
13–14		25	
14–15	v. few feldspar phenocrysts, mainly olivines ∴ Olivine Dolerite.	25	
15–16		15	
16–17	Abundant pink/orange altered feldspars.	25	
17–18		25	
18–19		25	
19–20	Dark grey/green olivine bearing dolerite with abundant pinky orange altered feldspar phenocrysts.	15	
20–21		15	
21–22		15	
22–23		15	

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT N°: ______ TENEMENT: ______ PROSPECT: ______ HOLE N°: ______

HOLE TYPE: ______ CO-ORDS: ______ E ______ N DRILLED BY: ______

COMMENCED: ______ COMPLETED: ______ BY: ______ GEOL. BY: ______

TOTAL DEPTH: ______ WATER TABLE: ______ SRAT BG: ______ ELEVATION: ______

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
24		25	
25		25	
26		25	
27		25	
28		25	
29		25	
30		25	
31		30	
32		25	
33		25	
34	33 - 48m. Dark grey/green massive dolerite with abundant pinky red altered feldspars. (upto 20% of sample). Altered feldspars have an almost jasperlike looking appearance. V. little olivine	25	
35		25	
36		25	
37		25	
38		25	
39		25	
40		25	
41		20	
42		20	
43		25	
44		25	
45		25	
46		25	

 F50

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº ______ TENEMENT ______ PROSPECT ______ HOLE Nº ______

HOLE TYPE ______ CO-ORDS ______ E ______ N DRILLED BY ______

COMMENCED ______ COMPLETED ______ BY ______ GEOL. BY ______

TOTAL DEPTH ______ WATER TABLE ______ SRAT BG ______ ELEVATION ______

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
47		25	
48		25	
49	Dark grey/green olivine bearing dolerite with minor creamy	40	
50	white feldspar phenocrysts. Dolerite fresh + massive.	50	
51		25	
52	52-75m.	25	
53	As Above + minor pinky orange altered feldspar grains	25	
54		25	
55		25	
56		25	
57		25	
58		25	
59		25	
60		25	
61		25	
62		25	
63		25	
64		25	
65		25	
66		25	
67		25	
68		25	
69		25	

 F30

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº ______ TENEMENT ______ PROSPECT ______ HOLE Nº ______

HOLE TYPE ______ CO-ORDS ______ E ______ N DRILLED BY ______

COMMENCED ______ COMPLETED ______ BY ______ GEOL. BY ______

TOTAL DEPTH ______ WATER TABLE ______ SRAT BG ______ ELEVATION ______

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
		25	
70			
		25	
71			
		25	
72			
		25	
73			
		25	
74			
		25	
75	Dark grey/green, hard, fresh dolerite with apple green olivine phenocrysts + minor pale cream euhedral feldspar phenocrysts.		
		25	
76			
		25	
77			
		25	
78			
		25	
79			
		20	
80	~~Dark~~ 80 - 117m. Dark grey/green to black dolerite with abundant creamy green feldspar phenocrysts. rare olivines throughout. Hard, fresh.		
		20	
81			
		25	
82			
		15	
83			
		20	
84			
		25	
85			
		25	
86			
		20	
87			
		20	
88			
		20	
89			
		20	
90			
		20	
91			
		20	
92			

F50

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº ______ TENEMENT ______ PROSPECT ______ HOLE Nº ______

HOLE TYPE ______ CO-ORDS ______ E ______ N DRILLED BY ______

COMMENCED ______ COMPLETED ______ BY ______ GEOL. BY ______

TOTAL DEPTH ______ WATER TABLE ______ SRAT BG ______ ELEVATION ______

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
		20	
93		20	
94		20	
95		20	
96		20	
97		20	
98		15	
99		15	
100		15-20	
101		15-20	
102		15-20	
103		15-20	
104		15-20	
105		15→20	
106		15→20	
107		15→20	
108		20	
109		25	
110		25-30	
111		20	
112		20	
113		20	
114		20	
115			

F50

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº ______ TENEMENT ______ PROSPECT ______ HOLE Nº ______

HOLE TYPE ______ CO-ORDS ______ E ______ N DRILLED BY ______

COMMENCED ______ COMPLETED ______ BY ______ GEOL. BY ______

TOTAL DEPTH ______ WATER TABLE ______ SRAT BG ______ ELEVATION ______

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
116		20	
117.		20.	
	START OF DIAMOND CORING 117m.		

URANERZ AUST. PTY. LTD.

Form 19/77

DRILL LOG

Hole No.	KLD 21	Co-ords	8605570N 341470E	Prospect	KUKALAK 3421	Project	82042	Hole Type	PDH / DDH	Depth	384·30
Elevation	282·4	Core Size	NQ / BQ	Bearing	90°	Dip	70°	Recovery (%)	100	Water Table	
Contractor	GADENS	Commenced	10·9·89.	Completed	23·9·89.	Logged By	SCC	Date	2·10·89.	Casing Depth	117.
Depth Probed	338.	Instrument	MS MARK II	Monitored By	C. Blackstone.	Date	23·9·89				

Depth (Metres)		DESCRIPTION	Assay Data			
From	To		Sample Number	From (m)	To (m)	TYPE
117·0	190·20.	117·0 - 190·92. Oenpelli Dolerite				

117·0 - 190·92. Oenpelli Dolerite

117·0 - 137·80. Light grey/green. Medium to coarse grained. Homogenous dolerite Rock consists of white to pale green feldspar phenocrysts in a dark green to black, fine grained amphibole + pyroxine groundmass. Feldspars vary from ragged to euhedral. Biotite throughout the rock. (<10%).

- Rare qtz veins at 22° to LCA. Veins are thin, <2mm wide - contain no carbonate. <1 per 5m.
- Abundant chlorite rich ± $CaCO_3$ microveins at 75-90° to LCA. Slightly anastomosing << 1mm wide
- The Dolerite is moderately altered throughout. Feldspars are strongly sericitised + mafics are partially altered to chlorite. Biotite is generally fresh.

137·8 → 140·0. Finer grained more altered zone in the dolerite. Rock has undergone moderate to strong chlorite alteration. Rock still contains some feldspar phenocrysts, + rare olivine phenocrysts (altered). Chlorite rich micro fracturing common + at steeper angle than above, generally at ~10-12° to LCA. Zone of intense chloritisation between 138·55 + 138·70 related to steep (≈10° to LCA) thin chlorite rich fractures. True thickness of the zone is probably ≈5cm. Zone gives readings upto 200 cps on SRAT.

140·0 - 160·22 m. Light grey, medium to coarse grained Oenpelli Dolerite. Similar to 117 - 190·92. except lighter in colour. Abundant feldspar phenocrysts + rare olivines?

- Chlorite ± $CaCO_3$ microveins are common throughout the rock. Veins generally cut the core at 75-90° to LCA. However they can be steeper, upto 10° to LCA. Veins generally <1mm wide but can vary upto 2mm. V. little if any effect on wall rocks. Micro veins ~10-20 per metre.
- Two zones of intense alteration at 145·12m (3cm wide) + 145·43 (4·5cm wide).

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DRILL LOG Hole No. KLD 21 Page 2 Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	TYPE
		In these zones rock is totally altered to olive green massive clay. Zones at ~ 80° to LCA. Rock shows strong fracturing immediately adjacent to these zones + v. minor qtz veining minor leucozones in the adjacent rocks. No anomalous readings on SRAT. - Rock texture changes slightly as ~~chlorite~~ underlying chlorite rich zone is approached between 158.39 + 160.22m rock is finer grained. Rock is light grey + consists of pale green phenocrysts (altered olivines?) in a fine grained grey groundmass with minor ~~tra~~ leucozones. V. little ~~of~~ chlorite microveining in this zone. 160.22 – 160.70m. Intensely chloritised zone in Oenpelli Dolerite. Zone is v. dark green chlorite rich with abundant pale cream/brown leucoxene flecks throughout. Alteration related to steep (~12° to LCA), thin (< 5mm wide) chlorite rich with minor sericite microveins. Slicken-slides developed on fracture planes in these zones. Slick-n-slides developed at right angles to the core. Lateral sense of movement. Zone gives upto 100 cps on SRAT. 160.70 – 188.50. Light grey medium to coarse grained dolerite with large feldspar ± olivine phenocrysts. Essentially the same as 117 → 190.92m. Numerous chlorite + carbonate microveins at 75-90° to LCA. Less than 2mm wide. V. minor affects on wall rock. Where chlorite + carbonate veins are thicker wall rocks are partially altered to olive green clay. - Slight change in rock texture at ~ 175.0 m. After 175.0m rock has more typical Oenpelli appearance. Change is gradational over several metres. Below 175.0m rock is ~~mainly~~ consists of pale green altered phenocrysts (olivines?) in a light grey v. fine grained ground mass. - Between 181.5 + 183.0m slight increase in biotite content. - Numerous ~~qtz - CO_3 -~~ chlorite - CO_3 ± qtz microveins at 75 - 90° to LCA. - Steep, thin, chlorite rich vein between 180.1 + 180.30m has caused fracturing + minor clay alteration of the core. V minor carbonate. Only 25 cps on SRAT. 188.50 – 190.92 CHILLED MARGIN V. fine grained Oenpelli Dolerite with pale green, altered phenocrysts (olivines). Set in a v. fine dark grey/green ground mass.				

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DRILL LOG

Hole No. KLD 21 | Page 3. | Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	TYPE
		From 189.6 - 190.92 Rock is V. fine grained showing classic chilled contact with underlying sandstone. In this interval rock is V. strongly chloritised. Phenocrysts altered to Dark green/green → black chlorite clots. Crystal shape still preserved. - probably ~~pyroxenes~~ possible olivines				
		- 3cm wide qtz-CO_3-chl rich vein at 189.0m. Vein at 65° to LCA.				
		- Numerous chl-CO_3 microveins throughout this interval at 75-90° to LCA. approx 5-10 per metre.				
		- Lower contact with sandstone at ~37° to LCA. This contact is definitely intrusive - no evidence of tectonics.				
190.2	337.3	**190.20m - 337.30m. LOWER KOMBOLGIE SANDSTONE.**				
		190.92 - 192.50m. White to off white. V. hard. fine grained intensely silicified sandstone, bordering on quartzite - Bedding completely destroyed. - Numerous drusey qtz filled fractures at numerous angles to LCA. Fractures vary from 10 to 90° to LCA. Fractures generally less than 5mm wide Fractures can contain minor Kaolinite clay + chlorite.				
		192.50 - 192.56 Oenpelli Dolerite 6cm wide vein of V. fine grained intensely chloritised Oenpelli Dolerite. Minor black intensely chloritised phenocrysts. Exactly the same as the chilled margin between 189.6 + 192.2m. [signature]				
		192.56 - 200.0m. White. V. fine grained intensely silicified sandstone. primary bedding destroyed. bordering on a quartzite. Minor small chlorite vugs throughout. Weak layering defined by chlorite rich zones at 30-35° to LCA. Minor chlorite filled stylolite fractures at 80-90° to LCA - Numerous qtz filled microfractures at numerous angles to LCA. Minor drusey qtz.				

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DRILL LOG Hole No. KLD 21 Page 4 Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	TYPE
		200.0 - 206.40. Fine grained, intensely silicified sandstone. Similar to above except light purple in colour, minor hematite alteration throughout. - Weak banding of the rock developed at 30-35° to LCA. Banding defined on basis of colour / iron content. Some bands are chlorite rich - Numerous fractures: fractures developed at high angle (<10°) to LCA. Fracture planes often have a drusy qtz and/or pale green chlorite coating. - Minor chlorite rich stylolitic fractures at ~90° to LCA.				
		206.40 - 215.70 Silicified L Kom SST. - Pale pink to salmon fine grained intensely silicified sandstone fine → medium grained - Abundant small (<2mm diameter) chlorite filled vugs. - Numerous high angle (<10° to LCA) fractures. Fractures are coated with drusy qtz, pale green chlorite + specular hematite. - Numerous purple hematite filled microfractures. Various angles to LCA. though generally steep. (<25° to LCA). - Minor chlorite filled stylolitic fractures at 80-90° to LCA.				
		215.70m. Steep (<10° to LCA), thin (<2mm) chlorite - hematite filled fracture. hematite varies from grey specular variety to red / maroon ochreish variety. Minor pale cream clay developed on fracture surfaces at ~30° to LCA at this point also.				
		215.70 - appx 235.0 m. Silicified L. Kom SST. Fine grained, intensely silicified, pink to salmon coloured sandstone. Slightly darker in colour than the above - Numerous small chlorite filled vugs throughout. - Numerous steep (<10° to LCA), thin chlorite, hematite drusy qtz filled fractures. hematite of grey specular or red/maroon ochreish varieties. - Weak banding in the rocks at 88° to LCA. Not bedding. bedding has been destroyed.				

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DRILL LOG Hole No. KLD 21. Page 5 Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data: Sample Number	From (m)	To (m)	TYPE

235.0 - 246.5 Silicified L. Kom SST.

- Cream to Salmon coloured. V. fine grained intensely silicified sandstone. Less fractured & more homogenous than above.
- Less vuggy though still contains occassional chlorite filled vugs.
- Fracture angles tend to be shallower 40-70° to LCA.
- Minor limonite on some fracture surfaces.
- Minor qtz veining throughout, at various angles to LCA. Veins thin (<1mm) and are slightly anastamosing in nature.
- Rare chlorite filled stylolitic fractures at 80-90° to LCA.
- Less hematite on fracture surfaces than above.

246.5 - 287.30. Mottled More Altered L. Kom SST.

- Cream to purple fine to medium grained intensely silicified sandstone.
- Rock has a weakly mottled appearance due to bleaching of the rock adjacent to qtz microveins. Original pink purple rock is bleached to pale cream/off-white colour.
- Slightly more chlorite alteration in this zone, generally concentrated around stylolitic microfractures varying from 40-90° to LCA.
- Abundant fracturing of the core, 10-20 fractures per metre varying from 10° to 60° to LCA. Minor drusy qtz on some fractures. Minor Carbonate associated with some of the fractures.
- At 274.5 & 275.5 two 10cm zones containing abundant chloritic stylolitic microfractures and purple hematite
- From 276.5 Rock has a higher hematite content & is purplish in colour.
- Rock is coarse to pebbly near the contact with the underlying more intense alteration zone.
- Abundant drusy qtz ~~of~~ on fracture planes in lower portion of this interval.

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DRILL LOG

Hole No. KLD 21 | Page 6. Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	Type

287·30 → 287·40. Massive Chlorite zone - totally altered sandstone. Sandstone altered to 100% massive chlorite. Minor qtz veining on upper + lower margins.
Large qtz vein directly above this zone. Chlorite alteration in the rocks around the vein. Minor CO_3 in the vein.

287·40 - 293·40. Broken Core.
- Cream to Salmon, intensely silicified, fine grained sandstone. Core intensely fractured + broken.
- Abundant drusy qtz throughout this zone. Minor orange brown iron oxides.
- No chlorite
- Rare Carbonate.

293·40 - 293·50 Chlorite Zone. + Py.
Generally this zone of intense chlorite alteration with abundant drusy quartz and minor pyrite
Exact thickness of zone uncertain due to intensely broken core.
~~Minor white~~ Abundant carbonate associated with the drusy qtz.

293·50 - 294·30. L Kom SST. + Py.
- Pale Pink, fine grained intensely silicified sandstone. Fairly competent section of sandstone in the broken core.
- Massive, primary bedding destroyed.
- Rare chlorite filled fractures at 80-90° to LCA.
- Minor drusy filled qtz veins + vugs. Some of the veins + vugs have white carbonate and pyrite associated with them.

294·30 - 294·58 Chlorite Alteration Zone.
- Intensely vuggy section of sandstone which has undergone moderate to intense chlorite alteration.
- abundant drusy quartz + minor pyrite. Chlorite, qtz + pyrite are all intergrown.
- abundant carbonate.

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DRILL LOG

Hole No. KLD 21 — Page 7 Of 12

Depth (Metres) From	To	DESCRIPTION	Sample Number	From (m)	To (m)	TYPE
		294.58 - 295.05 L. Kort SST. - Pale Pink, fine grained, massive, intensely silicified sandstone. V. few vugs. - Minor chlorite rich veins throughout. Veins < 3mm wide + cut the core at various angles. - Minor drusy qtz + chlorite + CO_3 microveins at 75-90° to LCA. Veins thin, < 2mm. 295.05 - 295.30 Chlorite Alteration zone. - Very Vuggy section of sandstone. - Vugs infilled with dark green chlorite, drusy quartz, white carbonate + rare pyrite. with - the quartz there is a very minor amount of reddish brown jasperoidal looking material - These vuggy chlorite alteration zones show contact with the wall rocks at approx 55-65° to LCA. 295.30 - 296.90m. L Kort SST. - Buff to salmon, fine grained, intensely silicified sandstone. Competent very few layer - Banding defined by purple hematite rich layers at 37-40° to LCA may represent primary bedding. - No Vugs. - Rare chlorite rich ~~xxxxxxx~~ microveins at ~40° to LCA. 296.90 - 298.38. Vuggy Chlorite Rich Sandstone. - Light grey, fine grained, intensely silicified vuggy sandstone. - Vugs infilled with drusy quartz, dark green chlorite + minor carbonate. - rare pyrite - qtz vein between 297.42 + 297.54m. Vein is (5cm wide) white, slightly vuggy contains v. minor CO_3 and is cut by some latter, thinner steep (20-30° to LCA) qtz veins - Chlorite alteration particularly intense between 297.63m - 297.95m. Core intensely broken in this zone, abundant drusy quartz + carbonate. 298.38 - 298.60m. L Kort SST As for 295.3 - 296.90 - no banding, massive				

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DRILL LOG

Hole No. KLD 21 | Page 8 Of 12

Depth (Metres)		DESCRIPTION	Assay Data			
From	To		Sample Number	From (m)	To (m)	TYPE

298.60 - 299.30m. Vuggy Chlorite rich Sandstone.

298.60 - 298.88 Massive Chlorite zone. Rock consists of massive chlorite + drusy quartz and minor carbonate. Rock has vuggy brecciated appearance near base of this interval.

298.88 - 299.0m As for 295.8 - 295.90m. Banding at ~42° to LCA.

299.0 - 299.30. Green Vuggy chlorite rich sandstone, abundant drusy quartz minor carbonate.

- Contact with underlying chlorite poor sandstone is sharp at ~50° to LCA.

299.30 - 303.90 L. Kom SST

- Cream - buff → pink, medium grained, massive, intensely silicified sandstone.
- minor thin, ~3mm wide qtz veins at 35° to LCA. often vuggy + contain drusy qtz.
- Rare chlorite filled microfractures at ~70° to LCA.
- weak bleaching of the rock by some thin qtz veins

303.90 - 307.0m. L. Kom SST.

- Purple, medium grained sandstone, intensely silicified
- Weak banding developed in the rock at 80° to LCA.
- Minor thin quartz veins at various angles to LCA. Some bleaching of the sandstone adjacent to these veins

307.0 - 312.13 L Kom SST. (Broken Core).

As Above except were paler in colour (salmon) and is intensely fractured at various angles to LCA.

312.13 - 314.20. L Kom SST

- Salmon, medium to coarse grained sandstone, silicified
- Essentially homogeneous, V. little fracturing
- Minor chloritic stylolites micro fractures

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DRILL LOG Hole No. KLD 21 Page 9. Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	Type
		314.20. - 319.10 Course to Pebbly L. KOM SST.				
		- Buff to Salmon, course grained to pebbly sandstone with minor dark green chloritic clots				
		- Mod → intensely silicified				
		- Bedding is obscure due to silicification. Appears to be at ~65° to LCA.				
		- Abundant drusy qtz + carbonate on fracture planes. Fractures at 60-90° to LCA.				
		- Minor pinky red hematite clots.				
		319.10 → 319.15 SHALE HORIZON				
		Approx 3-5 cm wide shale horizon. V. fine grained. well ~~lam~~ laminated, strongly ferruginised purple to maroon in colour. Contacts obscure due to broken core.				
		319.15 - 322.74 As for 314.20 - 319.10				
		322.74 - 323.10 Massive Chlorite				
		Zone of massive chlorite containing v. rare pyrite. Upper + lower contacts sharp at 55° + 35° respectively to LCA. Original sandstone fabric is totally destroyed.				
		323.10 - 323.65 L KOM SST.				
		- Pale salmon, medium grained. intensely silicified sandstone with occassional green chlorite clots.				
		- bedding has been destroyed by silicification				
		323.65 - 324.0 Chloritic Sandstone.				
		Intensely chloritised sandstone original mineralogy + texture has been totally destroyed. Rock consists of massive chlorite between 323.10 + 323.83 m.				
		324.0 → 324.46m As for 323.10 - 323.65 m.				

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DRILL LOG   Hole No. KLD 21   Page 10. Of 12

Depth (Metres) From	To	ROCK TYPE	DESCRIPTION	Assay Data: Sample Number	From (m)	To (m)	TYPE
			324.46. - 325.16. Massive Chlorite Rock. - 100% massive chlorite with rare clots of original sandstone. - Original rock mineralogy + texture has been totally destroyed. - Contacts obscure due to broken core. 325.16 - 325.47 As for 323.10 - 323.65m. 325.47 - 326.92. Massive Chlorite Rock. - As for 324.46 - 325.16, except contacts sharp. - upper contact at 42° to LCA Lower " " 82° " " 326.92 - 328.15. L. KOM SST. Vuggy Chlorite Salmon, medium to coarse grained strongly silicified sandstone. Abundant vugs throughout infilled with chlorite, drusy quartz, minor/rare carbonate. Abundant pyrite associated with the chlorite 328.15 - 331.0m LKOM SST - off white, bleached, intensely silicified, coarse to pebbly sandstone. - Intense fracturing + abundant drusy quartz at 330.30m. 331 - 331.2 LKOM SST. Salmon coarse grained intensely silicified sandstone, strong hematite + clay alteration in this zone Abundant chlorite, pale yellow/green clay + purple/black hematite 331.20 - 337.30m. LKOM SST - V. coarse grained to pebbly sandstone. Mod → intensely silicified. - Rock varies from buff to deep purple in colour. - Abundant pale cream clay throughout. Minor bright apple green clay at 336.50m. - Probable bedding at 52° to LCA - Clays seen in sandstone are very similar to those seen in the underlying altered granitoids. - Rare steep quartz veins - Occassional vugs infilled with black specular hematite				

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DRILL LOG — Hole No. KLD 21 — Page 11. Of 12

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	TYPE
337·3	384·30	337·30 → 384·30 m Granodiorite (Nimbuwah Complex?).				

337·30 → 346·45 m Red Zone. (Hm-Se rock).

- Intensely altered granomonzonite. Rock has undergone intense alteration + essentially
- consists of pale green to white sericitised feldspars in an earthy red/brown to maroon groundmass
- Apparent foliation developed at 50-60° to LCA.
- Unconformity contact is sharp at 70° to LCA.
- Rare qtz veins ± feldspar throughout at various angles to LCA.
- Minor earthy red/brown ocherish hematitic veins throughout. This ocherish hematite alteration overprints the more pervasive earthy red/brown to purple hematite alteration.

346·45 - ~~385~~·50 m Transition Zone

- Transition zone between the above red zone and the underlying green zone.
- Essentially the same as above except greener in colour due to less intense hematite alteration + the greater abundance of pale green sericitised feldspars.
- Minor dark green chlorite clots throughout.
- Intense ocherish red/brown hematite alteration overprints the rock towards the base of this interval.
- Abundant ~~Minor~~ tourmaline in the rock between 246·5 + 248·5 m.
- Rare pegmatitic segregations in the unit. Feldspars have been altered to green sericite + chlorite

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DRILL LOG | Hole No. RLD 21 | Page 12 Of 12.

Depth (Metres) From	To	DESCRIPTION	Assay Data Sample Number	From (m)	To (m)	Type
		365.50 → 374.20 GREEN ZONE				

365.50 → 374.20 GREEN ZONE

Intensely altered Hb-granitoid. Rock consists of variably altered feldspar phenocrysts in a green chlorite-sericite groundmass. Original rock contained feldspar-hornblende-biotite + qtz. All minerals altered to sericite + chlorite.

- Minor thin qtz microveins throughout the unit. Where they are more intense (usually upto 3cm wide zones) they give the rock a brecciated appearance + the chlorite content is higher. Qtz-Chl veining generally at ~50-60° to LCA.
- Minor pale pink feldspars throughout.
- Minor ocherish red/brown hematite alteration throughout, overprints all other alteration events.
- V. minor carbonate disseminated throughout the entire unit.
- Rare qtz-Fs pegmatitic veins throughout. Veins typically ~1cm wide at 47° to LCA with feldspars altered to a pinky orange colour. Can be upto 3cm wide (eg 369.3m). Abundant pegmatitic segregations/veins between 370.0m + 373.3m.

372.30 → 373.15 intense pinky /orange feldspar alteration in this zone, abundant pale cream/green clay. Tourmaline common.

374.20 → 384.30 Granodiorite

- Relatively fresh Fs-Hb-Bi-qtz granodiorite, medium – coarse grained
- generally massive
- Rare thin pegmatitic veins upto 5cm wide, more common towards base, cut the core almost at right angles, contain qtz-Fs + possible tourmaline. Feldspars altered to pinky-orange/brown colour + have an almost jasperoidal appearance.
- Feldspars are generally still quite altered in the grano
- Rare qtz-chl-CO_3 microveining

379.18 - 379.27 Pegmatitic segregation. Minor qtz-chl-CO_3 microveining, trace chalcopyrite

E.O.H 384.30m.

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº 82042 TENEMENT EL 3421 PROSPECT Devils Elbow HOLE Nº KLP22
HOLE TYPE Percussion CO-ORDS 342150 E 8605560 N DRILLED BY GADEN DRILLING
COMMENCED 24/9/84 COMPLETED 24/9/84 BY ______ GEOL. BY E.R.
TOTAL DEPTH 50m WATER TABLE 24m SRAT BG 30cps ELEVATION 216.

m	DESCRIPTION	SRAT cps	GAMMA LOGS COMMENTS
	red soil + gravel (scree)		
1	red + purple altered amygdaloidal volcanic	45	- Hole not logged -
	+ motled clay	50	
		50	
	green + purple altered amygdaloidal volcanic	50	
5	± chlorite ± Hematite alt.	50	
	chlorite in amygdaloids	50	
		50	
		50	
	green + red altered massive volcanics	50	
10	± chlorite ± Hematite alt	50	
	Hematite decreasing ↓	45	
	minor Hematite left	45	
		45	
		50	
15	intense Hematite less chlorite	60	
		60	
		60	
		60	
		55	
20	green and red altered amygdaloidal volcanics	50	
	± chlorite - Hematite	50	
	chlorite + agate in amygdaloidals	50	
		55	
	increased Hematite	55	

 F50

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº ______ TENEMENT ______ PROSPECT ______ HOLE Nº KLP22

HOLE TYPE ______ CO-ORDS ______ E ______ N DRILLED BY ______

COMMENCED ______ COMPLETED ______ BY ______ GEOL. BY ______

TOTAL DEPTH ______ WATER TABLE ______ SRAT BG ______ ELEVATION ______

m	DESCRIPTION	SRAT CPS	GAMMA LOGS COMMENTS
25	green altered amygdaloidal volcanics	50	
	± chlorite – hematite alt. chlorite + quartz in	45	
	amygdaloids	50	
	green massive altered volcanic	50	
	± chlorite – hematite alt.	50	
	green + red altered		
30	amygdaloidal volcanics	55	
	± chlorite ± hematite alt.	55	
	chlorite + agate in amygdaloids	50	
		50	
	massive green altered volcanics	50	
35	± chlorite alteration	50	
	minor hematite on joints	50	
	green altered amygdaloidal volcanics ± chlorite alt. (–) hematite	55	
		55	
	green massive altered volcanics ± chlorite alt.	60	
40	green mineral altered amygdaloidal volcanics	60	
	± chlorite – hematite alt.	60	
	amygdaloids filled with chlorite, agate + hematite	60	
		55	
		50	
45		45	
		50	
	decreasing hematite	50	
		50	

SHALLOW HOLE LITHOLOGIC DRILL LOG

PROJECT Nº ______ TENEMENT ______ PROSPECT ______ HOLE Nº ______

HOLE TYPE ______ CO-ORDS ______ E ______ N DRILLED BY ______

COMMENCED ______ COMPLETED ______ BY ______ GEOL. BY ______

TOTAL DEPTH ______ WATER TABLE ______ SRAT BG ______ ELEVATION ______

m	DESCRIPTION	SRAT	GAMMA LOGS COMMENTS
49	green amygdaloidal volcanics	45	
50	± chlorite calt amygdaloids filled with chlorite, agate & Hematite	45	
	E.o.H.		

APPENDIX 2

Gamma Logs (KLD 21)

APPENDIX 3

Geochemical Results

ABBREVIATION CODE FOR SAMPLE RESULT PRINTOUTS

GRP	ROCK GROUP
TY	ROCK TYPE
IM	INDICATOR MINERAL
A1	ALTERATION TYPE 1
S1	STRENGTH OF ALTERATION 1
A2	ALTERATION TYPE 2
S2	STRENGTH OF ALTERATION 2
A3	ALTERATION TYPE 3
S3	STRENGTH OF ALTERATION 3
MN	MINERALISATION
G	GRAIN SIZE
TX	TEXTURE
SCINT	SCINTILLOMETER
PET	PETROLOGY
CODE	INTERNAL MANAGEMENT FILE

N.B ALL RESULTS IN PPM

SAMPLE TYPE CODE

FIRST COLUMN

SAMPLE TYPE

Point Sample	1
Channel Sample, Drillhole Section	2
Composite Sample	3
Bulk Sample	4
Other	5

SECOND & THIRD COLUMNS

BEDROCK - NATURAL EXPOSURES — 00

Rock in situ (Outcrop)	01
Rock not in situ (scree, boulders)	02
Specimen	03
Other	04

SOIL - NATURAL EXPOSURES — 10

Residual	11
Transported	12
Cryogenic	13
Other	14

STREAM SEDIMENTS — 20

Sediments - Active	21
Sediments from bank or bar	22
Other	23

DRILLHOLE CUTTINGS OF BEDROCK — 30

Hand Auger	31
Auger	32
Vacuum	33
Rotary Air Blast	34
Percussion	35
Reverse Circulation	36
Air Core	37
Diamond Core	38
Other	39

SECOND & THIRD COLUMNS

DRILLHOLE CUTTINGS OF SURFICIAL DEPOSITS — 40

Hand Auger	41
Auger	42
Vacuum	43
Rotary Air Blast	44
Percussion	45
Reverse Circulation	46
Air Core	47
Diamond Core	48
Other	49

TRENCHES/PITS — 50

Surficial Deposits	51
Bedrock (in general)	52
Wall Rock of Ore	53
Ore	54
Others	55

MINE/SHAFT/OPEN CUT — 60

Surficial Deposits	61
Bedrock (in general)	62
Wall Rock of Ore	63
Ore	64
Tailings	65
Dump Material	66
Other	67

WATER — 70

Spring/Seeping	71
Swamp	72
Earth Dam	73
Lake	74
River	75
Bore/Well	76
Other	77

GEOBOTANICAL SAMPLES — 80

TECHNOLOGICAL SAMPLES — 90

ROCK TYPE

AI	ACID ROCK
AV	ACID VOLCANIC
AD	ADAMELLITE
AG	AGGLOMERATE
AA	ALASKITE
AL	ALBITITE
AE	ALNOITE
AM	AMPHIBOLITE
AN	ANDESITE
AT	ANDESITIC TUFF
AO	ANORTHOSITE
AP	APLITE
AB	ARENITE
AR	ARGILLITE
AK	ARKOSE
AS	ASH
BF	BANDED IRON FORMATION
BS	BASALT
BK	BASALTIC KOMATILITE
BT	BASALTIC TUFF
BA	BASANITE
BI	BIOCLASTIC ROCK
BL	BLACK SHALE
BX	BRECCIA (GEN)
BR	BRONZITITE (=ORPX)
CS	CALC-SILICATE
CC	CALCRETE
CB	CARBONATITE
CT	CATACLASITE
CM	CEMENT (=FONDUE)
CK	CHARNOCKITE
CH	CHERT
CL	CHLOTIRE SCHIST
CR	CHROMITITE
CU	CLAY, UNCONSOLIDATED
CY	CLAYSTONE
CX	CLINOPYROXENITE
CG	CONGLOMERATE
CQ	COQUINA
XT	CRYSTAL TUFF
DC	DACITE
DB	DIABASE
DT	DIATOMITE
DR	DIORITE
DL	DOLERITE
DO	DOLOMITE
DK	DOLOMITIC LIMESTONE
DU	DUNITE
DI	DURICRUST
EC	ECLOGITE
EV	EVAPORITE
FG	FAULT GOUGE
FL	FELSITE
FP	FELSPAR PORPHYRY
FE	FERRICRETE
FZ	FERRUGINOUS ZONE
GB	GABBRO
GL	GLASS
GN	GNEISS
GO	GOSSAN
GR	GRANITE
GD	GRANODIORITE
GF	GRANOFELS
GP	GRANOPHYRE
GL	GRANULITE
GS	GREENSCHIST
GE	GREISEN
GW	GREYWACKE
GT	GRIT
HZ	HARZBURGITE
HF	HORNFELS
IG	IGNEOUS (GEN)
IN	IGNIMBRITE
IN	INTRUSIVE (GEN)
IR	IRONSTONE (GEN)
JA	JASPER (GEN)
KM	KIMBERLITE
KP	KIMBERLITIC PERIDOTITE
KO	KOMATIITE
LM	LAMPROPHYRE
LT	LAPILLI TUFF
LP	LAPILLI
LH	LATERITE CAP, HARD
LS	LATERITE CAP, SOFT
LO	LATERITE MOTTLED ZONE
LL	LATERITE PALLID ZONE
LR	LATERITE
LA	LATITE
LH	LHERZOLITE
LI	LIMBURGITE
LE	LIMESTONE
LC	LOST CORE
LU	LUTITE
MF	MAFIC VOLCANIC
MA	MAGNETITITE
MR	MARBLE
ML	MARL
MP	MASSIVE SULPHIDES
MS	METASEDIMENT
MV	METAVOLCANIC
MC	MICA SCHIST
MI	MIGMATITE
MK	MILL-ROCK
MZ	MONZONITE
MU	MUD, UNCONSOLIDATED
MD	MUDSTONE
MO	MULLOCK
MY	MYLONITE
NR	NORITE
OB	OBSIDIAN
OW	OLD WORKINGS
OL	OLIVINE GABRO
OP	OPAL
OM	ORTHOGNEISS
OY	ORTHOPYROXENITE
PN	PRAGNEISS
PC	PEBBLE CONGLOMERATE
PB	PEBBLES, UNCONSOLIDATED
PA	PEBBLY SANDSTONE
PG	PEGMATITE
PL	PELITE
PR	PERIDOTITE
PT	PHONOLITE
PO	PHOSPHORITE
PH	PHYLLITE
PF	PHYLLONITE
PI	PICRITE
PS	PISOLITE
PD	PORCELLANITE
PP	PORPHYRY
PM	PSAMMITE
PE	PSEPHITE
PU	PUMICE
PK	PYROCLASTIC AGGLOMERATE
PY	PYROCLASTIC ROCK (GEN)
PX	PYROXENITE
QB	QUARTZ BASALT
QD	QUARTZ DIORITE
QF	QUARTZ FELSPAR PORPHYRY
QG	QUARTZ GABBRO
QL	QUARTZ LATITE
QM	QUARTZ MONZONITE
QP	QUARTZ PORPHYRY
QT	QUARTZITE
RO	RHYODACITE
RY	RHYOLITE
RC	ROCK (GEN)
RU	RUDITE
SA	SAND, UNCONSOLIDATED
SN	SANDSTONE
SP	SAPROLITE
SC	SCHIST
SF	SCORIA
SE	SEDIMENT (GEN)
SD	SEDIMENTARY ROCK
SR	SERPENTINITE
SH	SHALE
ST	SILCRETE
SU	SILT, UNCONSOLIDATED
SI	SILTSTONE
SK	SKARN
SL	SLATE
SO	SOIL
SB	SPILITE
SY	SYENITE
SM	SYENODIORITE
TO	TACONITE
TT	TACTITE
TL	TAILINGS
TS	TALC SCHIST
TX	TECTONIC BRECCIA
TI	TILLITE
TN	TONALITE
TA	TRACHY-ANDESITE
TC	TRACHYTE
TR	TROCTOLITE
TF	TUFF
UR	UNIDENTIFIED ROCK
VN	VEIN
VA	VOLCANIC AGGLOMERATE
VC	VOLCANIC CONGLOMERATE
WC	WACKE
WB	WEBSTERITE
WT	WELDED TUFF
WH	WEHRLITE

MINERAL TYPE

AC	ACTINOLITE
AD	ADULARIA
AE	AEGIRINE
QG	AGATE
AB	ALBITE
AM	ALMANDINE
AL	ALUNITE
QA	AMETHYST
AX	AMPHIBOLE (GEN)
AA	ANDALUSITE
AI	ANGLESITE
AH	ANHYDRITE
AK	ANKERITE
AN	ANORTHITE
AF	ANORTHOCLASE
AP	ANTHOPHYLLITE
AQ	ANTIGORITE
AT	APATITE
AR	ARAGONITE
AS	ARSENOPYRITE
AO	ASBESTOS
AZ	AZURITE
BA	BARITE
BE	BERYL
BI	BIOTITE
BM	BISMUTHINITE
BC	BLOOM (COBALT)
BO	BORNITE
BR	BROCHANTITE
BZ	BRONZITE
BU	BRUCITE
CA	CALCITE
CB	CARBONATE (GEN)
CQ	CARNOTITE
CT	CASSITERITE
CE	CERUSSITE
QT	CHALCEDONY
CC	CHALCOCITE
CP	CHALCOPYRITE
CH	CHERT
CL	CHLORITE
CD	CHLORITOID
CR	CHROMITE
CK	CHRYSOCOLLA
CS	CHRYSOTILE
CN	CINNABAR
CY	CLAY
CX	CLINOPYROXENE (GEN)
CZ	CLINOZOISITE
BC	COBALT BLOOM
CF	COFFINITE
CU	COPPER (NATIVE)
CO	CORDIERITE
CM	CORUNDUM
CV	COVELLITE
CW	CROCIDOLITE
CG	CROCOITE
CI	CUPRITE
DD	DIAMOND
DC	DICKITE
DG	DIGENITE
DI	DIOPSIDE
DO	DOLOMITE
EN	ENARGITE
ES	ENSTATITE
EP	EPIDOTE
ER	ERYTHRITE
FA	FAYALITE
FD	FELSPARS (GEN)
FE	FELSPATHOIDS (GEN)
FM	FERRIMOLYBDITE
FL	FLUORITE
FO	FORSTERITE
FU	FUCHSITE
GH	GAHNITE
GL	GALENA
GA	GARNET
GI	GIBBSITE
GS	GLASS, GLASSY MATRIX
GN	GLAUCONITE
GC	GLAUCOPHANE
GO	GOETHITE
AU	GOLD
GD	GOLD (alternate)
GR	GRAPHITE
GY	GYPSUM
HA	HALITE
HE	HEMATITE (EARTHY)
HS	HEMATITE (SPECULARITE)
HM	HEMIMORPHITE
HB	HORNBLENDE
HZ	HYDROZINCITE
HY	HYPERSTHENE
IL	ILLITE
IM	ILMENITE
JD	JADEITE
JA	JAROSITE
KM	K-FELSPAR MICROCLINE
KF	K-FELSPAR ORTHOCLASE
KA	KAOLINITE
KY	KYANITE
LM	LAUMONTITE
LW	LAWSONITE
LU	LEUCITE
LE	LEUCOXENE
LI	LIMONITE
MF	MAFIC MINERALS (GEN)
MH	MAGHEMITE
MA	MAGNESITE
MT	MAGNETITE
MC	MALACHITE
MN	MANGANITE
MR	MARCASITE
MP	MARTITE
MI	MICA (GEN)
KM	MICROCLINE
MO	MOLYBDENITE
MZ	MONZITE
MM	MONTMORILLONITE
MU	MUSCOVITE
NF	NEPHELINE
NI	NICCOLITE
OL	OLIVINE
OP	OPAL, OPALINE SILICA
OQ	OPAQUES (GEN)
OM	ORPIMENT
KF	ORTHOCLASE
OR	ORTHOPYROXENE (GEN)
OS	OSMIRIDIUM
OX	OXIDES (GEN)
PN	PENTLANDITE
PH	PHLOGOPITE
PF	PLAGIOCLASE
PT	PLATINOIDS (GEN)
PW	POWELLITE
PE	PREHNNITE
PS	PSILOMELANE
PY	PYRITE
PL	PYROLUSITE
PP	PYROPHYLITE
PR	PYROXENE (GEN)
PO	PYRRHOTITE
QR	QUARTZ (RUTILATED)
QZ	QUARTZ
QG	QUARTZ (AGATE)
QA	QUARTZ (AMATHYST)
QY	QUARTZ (CHALCEDONY)
QX	QUARTZ CRYSTALS
QV	QUARTZ VEIN, MASSIVE
QC	QUARTZ-CARBONATE
QS	QUARTZ-SERICITE
QT	QUARTZ-TOURMALINE
RE	REALGAR
RC	RHODOCHROSITE
RN	RHODONITE
RU	RUTILE
SC	SCAPOLITE
SH	SCHEELITE
SR	SERICITE
SE	SERPENTINE
SO	SERPENTINISED OLIVINE
SD	SIDERITE
SI	SILLIMANITE
AG	SILVER
SV	SILVER (alternate)
SS	SILVER, SUPHOSALTS
SM	SMITHSONITE
HS	SPECULARTIE
SP	SPHALERITE
SN	SPHENE
ST	STAUROLITE
SB	STIBNITE
SA	SULPHATES (GEN)
SU	SULPHIDES (GEN)
TA	TALC
TC	TALC-CARBONATE
TT	TANTALITE
TL	TELLURIDES (GEN)
TN	TENNANTITE
TE	TENORITE
TH	TETRAHEDRITE
TZ	TOPAZ
TB	TORBERNITE
TO	TOURMALINE
TV	TRAVERTINE
TR	TREMOLITE
TU	TURQUOISE
UR	URANINITE (PITCHBLENDE)
UX	URANIUM MINERALS (GEN)
VA	VANADINITE
VM	VERMICULITE
VE	VESUVIANITE
WA	WAD (MANGANESE)
WL	WILLEMITE
WF	WOLFRAMITE
WO	WOLLASTONITE
WN	WULFENITE
ZE	ZEOLITE
ZC	ZINCITE
ZI	ZIRCON
ZO	ZOISITE

ROCK TEXTURE

<	MICROVEINED
>	MACROVEINED
AB	ANIMAL BURROWED
AG	ALGAL MATTED
AM	AMYGDALOIDAL
AO	AMORPHOUS
AP	APLITIC
AU	AUGEN
BC	BIOCLASTIC
BD	BEDDED
BI	BIOTURBACEOUS
BK	BLOCKY
BN	BANDED
BR	BRECCIATED
BT	BOTRYOIDAL
BW	BOX WORKS
CA	CATACLASTIC
CC	CASTED
CF	FLUTE CASTED
CG	CLAY GALLED
CL	LOAD CASTED
CM	CHILLED MARGIN
CN	CONCRETIONARY
CR	CRENULATED
CS	CLOSE STRUCTURED (FRAME SUP)
CT	CLASTIC
CU	CUMULATE
DF	DRAG FOLDED
EQ	EQUIGRANULAR
FB	FLOW BANDED
FC	FOSSILIFEROUS CALCAREOUS
FD	FOSSILIFEROUS CARBONACEOUS
FF	FOSSILIFEROUS FAUNAL
FG	FOSSILIFEROUS GRAPHITIC
FI	FISSILE
FM	FOSSILIFEROUS MARINE
FN	FOSSILIFEROUS NON-MARINE
FO	FOLIATED
FP	FOSSILIFEROUS PLANTS
FR	FRAGMENTAL
FS	FOSSILIFEROUS
FT	FOLDED
FX	FAULT BRECCIA
FY	FLAGGY
GB	GRANOBLASTIC
GD	GRADED BEDDED
GF	GRAPHIC
GL	GRANULOSE
GN	GNEISSIC
GO	GRANOPHYRIC
GP	GLOMERO-PORPHYRITIC
GR	GRANITIC
GY	GREASY
HA	HARRISITIC
HF	HORNFELSIC
HO	HOMOGENEOUS
HT	HETEROGENEOUS
IB	INTERBEDDED
IC	INTERCUMULATE
IM	IMBRICATE
IN	INTERSTITIAL
IQ	INEQUIGRANULAR
KR	CRACKLED
LB	LENSOID BANDED
LE	LINEATED
LL	LIT-PAR-LIT
LM	LAMINATED
LN	LENTICULAR
LS	LISTRIC SURFACED
LT	LITHIC
MC	MUD CRACKED
MX	MASSIVE
MY	MULONITIC
ND	NODULAR
OR	ORBICULAR
OS	OPEN STRUCTURED, MATRIX SUPPORT
PB	POPHYROBLASTIC
PC	POIKILOBLASTIC
PG	PEGMATITIC
PH	PHYLLITIC
PI	PISOLITIC
PK	POIKILITIC
PL	PELETAL
PM	PILLOWED MARGIN
PO	PILLOWED
PP	PORPHYRITIC
PS	SLUMPED
PW	PARTINGS
PX	PILLOWED BRECCIA
RB	RIBBON-LIKE
RM	RIPPLE MARKED
RP	RAIN PRINTED
RW	REWORKED
SB	SLABBY
SC	SCHISTOSE
SD	SPINIFEX RANDOM
SF	SPINIFEX SHEAF
SH	SHEARED
SK	STOCKWORK
SL	SLATY
SP	SPARRY
SR	SCOURED
SS	SOFT SED SLUMPING
ST	STYLOLITIC
SU	SPHERULITIC
SW	STROMATOLITIC
SX	SPINIFEX
TC	TRACHYTIC
TF	TUFFACEOUS (SHARDY)
TG	PTIGMATIC
UF	UNIFORM
VG	VUGGY
VQ	QUARTZ VEINED
VR	VARIOLITIC
VS	VESICULAR
VV	VEINED
WL	WELDED
WS	WISPY

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IN	A1	S1	A2	S2	A3	S3	MN	G	TX	U308	TH	CU	PB	ZN	NI	CO	LI	LA	AU	AG	AS	MO	ZR	SR	RB	BI	Y	GA	PT	PD
82042	592		K1			10900	43400		28460	NBV	AN		LR	M								<4	12	15	5	15	60	20		30	<0.01	<1	5	<4	140	<10		<4			<10	<10
82042	593		K1			10935	44420		28460		SO											88	20	15	15	10	35	<5		20	0.01	<1	15	<4	210	<10		<4			<10	10
82042	1500		KL0026	2.0	6.0	5690.0	41980.0		28451	NBV	AN																				<0.01											
82042	1926		KL0027	9.0	14.0	5690.0	41920.0		28451	NBV	AN																				<0.01											
82042	1927		KL0027	14.0	19.0	5690.0	41920.0		28451	NBV	AN																				<0.01											
82042	1925		KL0028	2.0	7.0	5690.0	41940.0		28451	NBV	AN																				<0.01											
82042	1924		KL0029	8.0	12.5	5690.0	41930.0		28451	NBV	AN																				<0.01											
82042	1370		KLD001	131.1		5600.0	39000.0		25091	NIM	GR																															
82042	1371		KLD001	134.5		5600.0	39000.0		25091	NIM	GR																															
82042	1424		KLD002	145.8	146.0	7200.0	28600.0		26482	TGG	GR		HE	S						F	GR	5	75.0	<2	4.0	<2	<2	<2	29.0	65	<0.01	<1	8		270	160		<10	3			
82042	1372		KLD002	146.1		7200.0	28600.0		25091	NIM	GR																															
82042	1425		KLD002	155.2	156.3	7200.0	28600.0		26482	TGG	GR		HE	W	SR	S			PY	F	GR	4	55.0	<2	4.0	4.0	<2	<2	28.0	60	<0.01	<1	4		180	120		<10	5			
82042	1373		KLD002	158.2	158.3	7200.0	28600.0		25092	NIM	GR											<3	60.0	<2	4.0	7.0	6.0	<2	<10	80.0	<0.01	<1	4	7	1700	1100	160	<10	20	14		
82042	1426		KLD003	210.1	210.3	4000.0	32500.0		26482	CAH	GN		HE	S	CL	W	SR	W		F	FO	25	16.0	<2	4.0	7.0	16.0	3.0	29.0	25	<0.01	<1	<3		320	14		<10	10			
82042	1427		KLD003	212.8	213.0	4000.0	32500.0		26482	CAH	GN		HE	M	CL	M				M	FO	<3	17.0	<2	<2	23.0	9.0	7.0	63.0	55	<0.01	<1	<3		180	90		<10	9			
82042	1374		KLD003	216.4	216.5	4000.0	32500.0		25092	NIM	GR											5.0	15.0	15	23.0	51.0	23.0	11.0	<10	55.0	<0.01	<1	<3	3	710	330	150	<10	30	20		
82042	1428		KLD004	216.9	217.1	2400.0	34800.0		26482	CAH	GN		HE	M	SR	M				M	GN	8	18.0	<2	<2	30.0	9.0	6.0	30.0	55	<0.01	<1	<3		170	80		<10	14			
82042	1405		KLD004	217.4	217.5	2400.0	34800.0		25089	NIM	GR											130.0	19.0	14	48.0	84.0	42.0	25.0			0.032											
82042	1406		KLD004	217.5	217.6	2400.0	34800.0		25089	NIM	GR											70.0	18.0	4	24.0	46.0	47.0	22.0			0.029											
82042	1407		KLD004	217.6	217.7	2400.0	34800.0		25089	NIM	GR											340.0	20.0	4	35.0	20.0	43.0	16.0			0.018											
82042	1408		KLD004	217.7	217.8	2400.0	34800.0		25089	NIM	GR											100.0	25.0	4	19.0	12.0	45.0	9.0			0.010											
82042	1429		KLD004	219.0	219.2	2400.0	34800.0		26482	CAH	GN	KF	HE	M	SR	M				M	FO	8	25.0	<2	<2	11.0	<2	2.0	60.0	45	<0.01	<1	3		120	130		<10	6			
82042	1375		KLD004	221.3	221.3	2400.0	34800.0		25092	NIM	GR											3.0	9.0	3	10.0	61.0	13.0	6.0	<10	45.0	<0.01	<1	<3	10	1700	210	150	<10	11	18		
82042	1630		KLD004	230.3	230.5	2400.0	34800.0		26482	MTH	GN									F	FO	<3	25.0	<2	10.0	34.0	<2	4.0	10.0	60	<0.01	<1	<3		240	240		<10	30			
82042	1376		KLD004	232.3		2400.0	34800.0		25091	NIM	GR																															
82042	1438		KLD005	0.0	5.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1439		KLD005	5.0	10.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1440		KLD005	10.0	15.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1441		KLD005	15.0	20.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1442		KLD005	20.0	25.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1443		KLD005	25.0	30.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1444		KLD005	30.0	35.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1445		KLD005	35.0	40.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1446		KLD005	40.0	45.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1447		KLD005	45.0	50.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1448		KLD005	50.0	55.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1449		KLD005	55.0	60.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1450		KLD005	60.0	65.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1451		KLD005	65.0	70.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1452		KLD005	70.0	75.0	5720.0	41850.0		28451	000	DL	OL																			<0.01											
82042	1453		KLD005	75.0	80.0	5720.0	41850.0		28451	NBV	AN																				0.010											
82042	1454		KLD005	80.0	85.0	5720.0	41850.0		28451	NBV	AN																				<0.01											
82042	1455		KLD005	85.0	90.0	5720.0	41850.0		28451	NBV	AN																				<0.01											
82042	1456		KLD005	90.0	95.0	5720.0	41850.0		28451	NBV	AN																				<0.01											
82042	1387		KLD005	95.0	96.0	5720.0	41850.0		25089	NBV	BS											60.0	11.0	4	55.0	221.0	96.0	33.0			0.011											
82042	1457		KLD005	95.0	100.0	5720.0	41850.0		28451	NBV	AN																				<0.01											
82042	1388		KLD005	96.0	97.0	5720.0	41850.0		25089	NBV	BS											19.0	9.0	3	18.0	230.0	96.0	30.0			0.003											
82042	1389		KLD005	97.0	98.0	5720.0	41850.0		25089	NBV	BS											35.0	12.0	4	11.0	193.0	99.0	28.0			0.002											
82042	1390		KLD005	98.0	99.0	5720.0	41850.0		25089	NBV	BS											20.0	11.0	4	8.0	228.0	120.0	48.0			0.002											
82042	1391		KLD005	99.0	100.0	5720.0	41850.0		25089	NBV	BS											35.0	10.0	3	17.0	245.0	95.0	34.0			0.008											
82042	1458		KLD005	100.0	105.0	5720.0	41850.0		28451	NBV	AN																				0.010											
82042	1392		KLD005	100.0	101.0	5720.0	41850.0		25089	NBV	BS											16.0	11.0	3	7.0	197.0	103.0	37.0			0.003											
82042	1393		KLD005	101.0	102.0	5720.0	41850.0		25089	NBV	BS											11.0	11.0	4	15.0	180.0	90.0	31.0			0.005											
82042	1459		KLD005	105.0	110.0	5720.0	41850.0		28451	NBV	AN																															
82042	1460		KLD005	110.0	115.0	5720.0	41850.0		28451	NBV	AN																				<0.01											

[redacted]

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IN	A1	S1	A2	S2	A3	S3	MN	G	TX	U308	TH	CU	PB	ZN	NI	CO	LI	LA	AU	AG	AS	MO	ZR	SR	RB	BI	Y	GA	PT	PD
82042	1461		KLD005	115.0	120.0	5720.0	41850.0		28451	NBV	AN																				< 0.01											
82042	1631		KLD005	277.3	277.5	5720.0	41850.0		26482	CAH	GN	BI	SR	M	CL	W				M	GR	6	14.0	< 2	8.0	27.0	4.0	4.0	50.0	30	< 0.01	< 1	< 3		110	35		< 10	5			
82042	1632		KLD005	281.3	281.5	5720.0	41850.0		26482	CAH	GN	KF	SR	M						F	GR	3	5.0	< 2	4.0	10.0	< 2	< 2	25.0	40	< 0.01	< 1	< 3					< 10	15			
82042	1377		KLD005	281.9		5720.0	41850.0		25091	NIM	GR																															
82042	1378		KLD005	284.9	285.0	5720.0	41850.0		25092	NIM	GR											3.0	9.0	3	10.0	45.0	15.0	4.0	< 10	35.0	< 0.01	< 1	< 3	< 3	480	330	180	< 10	6	17		
82042	1462		KLD006	0.0	5.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1463		KLD006	5.0	10.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1464		KLD006	10.0	15.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1465		KLD006	15.0	20.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1466		KLD006	20.0	25.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1467		KLD006	25.0	30.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1468		KLD006	30.0	35.0	5690.0	41886.0		28451	000	DL	OL																			< 0.01											
82042	1469		KLD006	35.0	40.0	5690.0	41886.0		28451	NBV	AN																				< 0.01											
82042	1470		KLD006	40.0	45.0	5690.0	41886.0		28451	NBV	AN																				< 0.01											
82042	1471		KLD006	45.0	50.0	5690.0	41886.0		28451	NBV	AN																				< 0.01											
82042	1472		KLD006	50.0	55.0	5690.0	41886.0		28451	NBV	AN																				< 0.01											
82042	1473		KLD006	55.0	61.0	5690.0	41886.0		28451	NBV	AN																				< 0.01											
82042	1379		KLD006	272.1	272.2	5690.0	41886.0		25092	NIM	GR											6.0	45.0	< 2	6.0	9.0	8.0	< 2	< 10	90.0	< 0.01	< 1	3	4	830	60	100	< 10	6	10		
82042	1433		KLD006	290.8	291.0	5690.0	41886.0		26482	TGG	GR		SR	M						F	GR	4	20.0	< 2	6.0	8.0	4.0	< 2	44.0	160	< 0.01	< 1	3		180	45		< 10	4			
82042	1380		KLD006	291.7		5690.0	41886.0		25091	NIM	GR																															
82042	1434		KLD006	292.8	293.0	5690.0	41886.0		26482	TGG	GR		SR	W						C	GR	9	40.0	< 2	6.0	16.0	< 2	< 2	34.0	80	< 0.01	< 1	4		210	160		< 10	11			
82042	1474		KLD007	0.0	5.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1475		KLD007	5.0	10.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1476		KLD007	10.0	15.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1477		KLD007	15.0	20.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1478		KLD007	20.0	25.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1479		KLD007	25.0	30.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1480		KLD007	30.0	35.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1481		KLD007	35.0	40.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1482		KLD007	40.0	45.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1483		KLD007	45.0	50.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1484		KLD007	50.0	55.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1485		KLD007	55.0	60.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1486		KLD007	60.0	65.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1487		KLD007	65.0	70.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1488		KLD007	70.0	75.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1489		KLD007	75.0	80.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1490		KLD007	80.0	85.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1491		KLD007	85.0	90.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1492		KLD007	90.0	95.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1493		KLD007	95.0	100.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1494		KLD007	100.0	105.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1495		KLD007	105.0	110.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1394		KLD007	110.0	111.0	5690.0	41970.0		25089	NBV	BS											25.0	15.0	6	8.0	120.0	93.0	39.0			0.005											
82042	1496		KLD007	110.0	115.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1395		KLD007	111.0	112.0	5690.0	41970.0		25089	NBV	BS											19.0	13.0	8	13.0	182.0	96.0	43.0			0.003											
82042	1396		KLD007	112.0	113.0	5690.0	41970.0		25089	NBV	BS											16.0	16.0	5	15.0	168.0	87.0	43.0			0.007											
82042	1397		KLD007	113.0	114.0	5690.0	41970.0		25089	NBV	BS											16.0	14.0	7	24.0	163.0	93.0	48.0			0.007											
82042	1398		KLD007	114.0	115.0	5690.0	41970.0		25089	NBV	BS											19.0	10.0	6	21.0	154.0	96.0	47.0			0.008											
82042	1399		KLD007	115.0	116.0	5690.0	41970.0		25089	NBV	BS											65.0	13.0	19	27.0	103.0	96.0	43.0			0.002											
82042	1497		KLD007	115.0	120.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1400		KLD007	116.0	117.0	5690.0	41970.0		25089	NBV	BS											300.0	14.0	49	44.0	87.0	105.0	39.0			0.005											
82042	1401		KLD007	117.0	118.0	5690.0	41970.0		25089	NBV	BS											710.0	13.0	73	57.0	67.0	102.0	36.0			< 0.001											
82042	1402		KLD007	118.0	119.0	5690.0	41970.0		25089	NBV	BS											1200.0	14.0	88	86.0	59.0	110.0	37.0			0.007										5.000	12.000
82042	1403		KLD007	119.0	120.0	5690.0	41970.0		25089	NBV	BS											1500.0	12.0	116	114.0	56.0	110.0	39.0			0.003											

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	U308	TH	CU	PB	ZN	NI	CO	LI	LA	AU	AG	AS	MO	ZR	SR	RB	BI	Y	GA	PT	PD
82042	1498		KLD007	120.0	125.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1404		KLD007	120.0	121.0	5690.0	41970.0		25089	NBV	BS											1000.0	14.0	82	85.0	69.0	104.0	35.0			< 0.001										< 2	12.000
82042	1499		KLD007	125.0	130.0	5690.0	41970.0		28451	NBV	AN																				< 0.01											
82042	1414		KLD008	98.0	99.0	4392.0	41872.0		25089	000	DL											35.0	< 3	43	20.0	59.0	74.0	30.0			0.003											
82042	1415		KLD008	99.0	100.0	4392.0	41872.0		25089	000	DL											4.0	5.0	42	18.0	60.0	81.0	32.0			< 0.001											
82042	1416		KLD008	100.0	101.0	4392.0	41872.0		25089	000	DL											20.0	4.0	45	34.0	67.0	83.0	33.0			0.017											
82042	1417		KLD008	101.0	102.0	4392.0	41872.0		25089	000	DL											55.0	< 3	50	44.0	59.0	99.0	33.0			0.057											
82042	1418		KLD008	102.0	103.0	4392.0	41872.0		25089	000	DL											60.0	< 3	53	37.0	58.0	89.0	32.0			0.037											
82042	1419		KLD008	113.0	114.0	4392.0	41872.0		25089	000	DL											8.0	7.0	58	19.0	64.0	70.0	33.0			0.007											
82042	1420		KLD008	114.0	115.0	4392.0	41872.0		25089	000	DL											11.0	5.0	55	14.0	63.0	78.0	35.0			0.009											
82042	1421		KLD008	115.0	116.0	4392.0	41872.0		25089	000	DL											< 3	7.0	61	11.0	70.0	86.0	39.0			0.002											
82042	1422		KLD008	116.0	117.0	4392.0	41872.0		25089	000	DL											70.0	< 3	49	44.0	59.0	92.0	30.0			0.075											
82042	1423		KLD008	117.0	118.0	4392.0	41872.0		25089	000	DL											30.0	< 3	55	31.0	60.0	94.0	35.0			0.041											
82042	1409		KLD008	262.2		4392.0	41872.0		25091		DL																															
82042	1410		KLD008	270.8		4392.0	41872.0		25091		DL																															
82042	1411		KLD008	292.8		4392.0	41872.0		25091	NIM	GR																															
82042	1435		KLD008	298.1	298.3	4392.0	41872.0		26482	CAH	QZ									C	GN	4	12.0	< 2	< 2	< 2	< 2	< 2	10.0	45	< 0.01	< 1	< 3					< 10	8			
82042	1436		KLD008	318.6	318.8	4392.0	41872.0		26482	CAH	GN		SR	W						C	GR	10	40.0	< 2	4.0	13.0	8.0	5.0	10.0	65	< 0.01	< 1	< 3		210	45		< 10	17			
82042	1412		KLD008	322.3		4392.0	41872.0		25091	NIM	GR																															
82042	1413		KLD008	327.3	327.4	4392.0	41872.0		25092	NIM	GR											15.0	6.0	4	6.0	9.0	6.0	4.0	< 10	19.0	< 0.01	< 1	< 3	3	710	20	280	< 10	10	16		
82042	1437		KLD008	330.6	330.9	4392.0	41872.0		26482	CAH	GN		SR	W	CL	M				F	GR	10	6.0	< 2	4.0	4.0	< 2	< 2	19.0	30	< 0.01	< 1	< 3		45	30		< 10	15			
82042	582	1	KLD011	86.3	86.4	15750	29270		28460	NIM	GD											24	4	<5	<5	<5	20	<5		30	<0.01	<1	5	<4	60	<10		<4			<10	<10
82042	2126	1	KLD011	120.2	120.3	15750	29270		26681	CAH	GR											< 3	3.0	14	17.0	38.0	10.0	9.0	23.0	30.0	< 0.01	< 1	< 3		160	420		< 10	13			
82042	584	1	KLD011	123.3	123.4	15750	29270		28460	NIM	GD											<4	<4	<5	<5	35	5	5		20	<0.01	<1	10	<4	40	90		<4			<10	<10
82042	2128	1	KLD011	139.4	139.5	15750	29270		26681	CAH	GR											3	7.0	5	18.0	75.0	7.0	10.0	29.0	55.0	< 0.01	< 1	< 3		280	310		< 10	13			
82042	2129	1	KLD011	176.1	176.2	15750	29270		26681	CAH	GR											8	8.0	14	19.0	72.0	8.0	5.0	19.0	60.0	< 0.01	< 1	< 3		1400	540		< 10	18			
82042	583	1	KLD012	139.1	139.2	16110	28750		28460	NIM	GD											64	4	<5	<5	10	<5	<5		<10	<0.01	<1	15	<4	40	100		<4			<10	<10
82042	585	1	KLD012	143.0	144.0	16110	28750		28460	NIM	GD											<4	<4	<5	<5	65	65	25		10	<0.01	<1	10	<4	20	120		<4			<10	<10
82042	586	1	KLD012	144.0	145.0	16110	28750		28460	NIM	GD											<4	<4	5	5	20	40	10		<10	<0.01	<1	10	<4	<20	30		<4			<10	<10
82042	587	1	KLD012	145.0	146.0	16110	28750		28460	NIM	GD											<4	<4	115	15	15	25	15		<10	<0.01	<1	10	<4	40	80		<4			<10	<10
82042	2140	1	KLD012	154.0	159.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2141	1	KLD012	159.0	164.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2142	1	KLD012	164.0	169.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2143	1	KLD012	169.0	174.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2144	1	KLD012	174.0	179.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2145	1	KLD012	179.0	184.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2146	1	KLD012	184.0	189.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2147	1	KLD012	189.0	194.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2148	1	KLD012	194.0	199.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2149	1	KLD012	199.0	204.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2150	1	KLD012	204.0	209.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2151	1	KLD012	209.0	214.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2152	1	KLD012	214.0	219.0	16110	28750		28458	NIC	GB																				< 0.02											
82042	2130	1	KLD013	81.8	81.9	16135	28485		26681	CAH	GR											5	7.0	14	18.0	62.0	18.0	11.0	20.0	40.0	< 0.01	< 1	4		260	490		< 10	15			
82042	2131	1	KLD013	84.6	84.7	16135	28485		26681	CAH	GR											< 3	10.0	7	6.0	24.0	10.0	3.0	14.0	35.0	< 0.01	< 1	< 3		180	110		< 10	3			
82042	2135	1	KLD014	122.0	122.1	15670	29640		26681	CAH	GR											7	13.0	45	6.0	58.0	25.0	19.0	49.0	60.0	< 0.01	< 1	< 3		380	410		< 10	19			
82042	2132	1	KLD014	140.5	140.6	15670	29640		26681	CAH	GR											5	7.0	20	12.0	81.0	21.0	19.0	40.0	50.0	< 0.01	< 1	< 3		340	400		11	18			
82042	2118	1	KLD015	113.1	113.2	14250	28450		26681	CAH	GR											3	4.0	3	5.0	39.0	31.0	10.0	66.0	45.0	< 0.01	< 1	< 3		1200	11		< 10	17			
82042	2119	1	KLD015	120.0	120.1	14250	28450		26681	CAH	GR											< 3	4.0	25	13.0	39.0	13.0	9.0	19.0	35.0	< 0.01	< 1	< 3		570	390		< 10	13			
82042	2120	1	KLD015	150.7	150.8	14250	28450		26681	ARC	GR											< 3	9.0	3	12.0	38.0	8.0	4.0	10.0	50.0	< 0.01	< 1	< 3		300	350		< 10	9			
82042	2121	1	KLD015	158.7	158.8	14250	28450		26681	ARC	GR											6	25.0	12	14.0	36.0	5.0	4.0	17.0	65.0	< 0.01	< 1	3		190	250		< 10	20			
82042	2133	1	KLD016	81.7	81.8	15040	28490		26681	CAH	CL		CL	S	HM	S						11	11.0	6	12.0	< 2	19.0	< 2	32.0	50.0	< 0.01	< 1	3		1100	16		< 10	20			
82042	2134	1	KLD016	87.8	87.9	15040	28490		26681	CAH	CL		CL	S	HM	S						9	45.0	5	5.0	18.0	27.0	10.0	60.0	130.0	< 0.01	< 1	< 3		1400	20		< 10	18			
82042	2123	1	KLD016	97.2	97.3	15040	28490		26681	CAH	GR											6	8.0	31	14.0	47.0	4.0	6.0	14.0	50.0	< 0.01	< 1	3		1400	610		11	30			
82042	2124	1	KLD016	101.7	101.8	15040	28490		26681	CAH	GR											< 3	3.0	10	11.0	58.0	8.0	12.0	21.0	20.0	< 0.01	< 1	< 3		2100	500		11	25			

[redacted]

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	U308	TH	CU	PB	ZN	NI	CO	LI	LA	AU	AG	AS	MO	ZR	SR	RB	BI	Y	GA	PT	PD
82042	2125	1	KLD016	149.5	149.6	15040	28490		26681	CAH	GR											5	<3	15	13.0	45.0	9.0	10.0	23.0	50.0	<0.01	<1	4		900	580		<10	14			
82042	2161	1	KLD017	58.0	58.1	16470	28820		28465	NBV	AN													<5	20	<5	10	<5		40	<0.01	<1	20	<4	<20	40		<4			<10	<10
82042	2162	1	KLD017	59.0	59.1	16470	28820		28465	NBV	AN													<5	15	10	10	<5		20	<0.01	<1	15	<4	<20	100		<4			<10	<10
82042	2165	1	KLD017	60.5	60.6	16470	28820		28465	NBV	AN													<5	20	<5	5	<5		40	<0.01	<1	15	<4	<20	20		<4			<10	<10
82042	2163	1	KLD017	61.1	61.2	16470	28820		28465	NBV	AN													<5	30	5	10	<5		70	<0.01	<1	20	<4	<20	<10		<4			<10	<10
82042	2164	1	KLD017	62.1	62.2	16470	28820		28465	NBV	AN													<5	35	<5	10	<5		20	<0.01	<1	20	<4	<20	<10		<4			<10	<10
82042	588	1	KLD017	65.9	66.0	16470	28820		28460	NIM	GD											320	12	<5	15	20	25	10		30	0.010	<1	10	<4	180	<10		<4			<10	<10
82042	2166	1	KLD017	66.2	66.3	16470	28820		28465	NBV	AN													<5	40	25	30	15		30	<0.01	<1	20	<4	<20	<10		<4			<10	<10
82042	2167	1	KLD017	70.0	70.1	16470	28820		28465	NBV	AN													<5	30	40	20	15		30	<0.01	<1	20	<4	<20	<10		<4			<10	<10
82042	2168	1	KLD017	74.1	74.2	16470	28820		28465	NBV	AN													<5	15	<5	5	5		70	<0.01	<1	10	<4	<20	<10		<4			<10	<10
82042	2169	1	KLD017	80.0	80.1	16470	28820		28465	NBV	AN													<5	25	55	10	15		40	<0.01	<1	15	<4	<20	<10		<4			<10	<10
82042	2170	1	KLD017	84.3	84.4	16470	28820		28465	NBV	AN													55	30	60	10	15		40	<0.01	<1	20	<4	<20	<10		<4			<10	<10
82042	2138	1	KLD017	96.1	96.2	16470	28820		26681	CAH	GR											3	12.0	16	11.0	70.0	18.0	12.0	19.0	70.0	<0.01	<1	<3		380	400		<10	20			
82042	589	1	KLD017	122.0	123.0	16470	28820		28460	NIM	GP											4	12	45	10	45	60	25		<10	<0.01	<1	10	<4	80	70		<4			<10	<10
82042	590	1	KLD017	123.0	124.0	16470	28820		28460	NIM	GP											20	32	5	15	15	<5	10		10	<0.01	<1	5	<4	80	10		<4			<10	<10
82042	2137	1	KLD017	147.2	147.3	16470	28820		26681	ARC	GR											4	15.0	13	10.0	45.0	13.0	8.0	16.0	70.0	<0.01	<1	3		330	410		<10	30			
82042	2171	1	KLD017	240.0	240.1	16470	28820		28465	NBV	AN											<4	16	15	<5	10	45	15			<0.01										<10	<10
82042	2172	1	KLD017	241.0	241.1	16470	28820		28465	NBV	AN											<4	4	80	<5	35	35	15			<0.01										<10	<10
82042	2181	1	KLD017	242.1	242.2	16470	28820		28465	NIM	GD											<4	<4	30	<5	40	30	20														
82042	2173	1	KLD017	243.3	243.4	16470	28820		28465	NBV	AN											<4	<4	30	<5	45	5	25			<0.01										<10	<10
82042	2174	1	KLD017	244.0	244.1	16470	28820		28465	NBV	AN											<4	20	260	<5	15	35	20			<0.01										<10	<10
82042	2175	1	KLD017	245.0	245.1	16470	28820		28465	NBV	AN											<4	24	70	<5	<2	30	10			<0.01										<10	<10
82042	2176	1	KLD017	246.0	246.2	16470	28820		28465	NBV	AN											<4	8	30	<5	<2	25	15			<0.01										<10	10
82042	2177	1	KLD017	247.0	247.1	16470	28820		28465	NBV	AN											<4	20	25	<5	2	30	10			<0.01										<10	<10
82042	2178	1	KLD017	248.1	248.2	16470	28820		28465	NIM	GD											<4	20	5	<5	<2	30	10			<0.01										<10	<10
82042	2179	1	KLD017	249.1	249.2	16470	28820		28465	NIM	GD											<4	<4	25	5	15	30	25			<0.01										<10	<10
82042	2180	1	KLD017	250.3	250.4	16470	28820		28465	NIM	GD											<4	<4	85	15	55	75	65			<0.01										<10	<10
82042	2136	1	KLD017	252.2	252.3	16470	28820		26681	NIM	MS											<3	13.0	21	9.0	175.0	157.0	30.0	71.0	60.0	<0.01	<1	3		270	100		<10	40			
82042	2139	1	KLD017	263.0	263.1	16470	28820		26681	NIM	MS											3	25.0	18	6.0	33.0	61.0	17.0	54.0	85.0	<0.01	<1	<3		280	30		<10	25			
82042	591	1	KLD018	209.1	209.2	14180	39130		28460	NIM	GD											180	32	<5	5	25	15	5		60	0.040	<1	5	<4	230	<10		<4			<10	<10
82042	2712	1	KLD019	0.0	5.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2713	1	KLD019	5.0	7.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2714	1	KLD019	7.0	10.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2715	1	KLD019	10.0	15.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2716	1	KLD019	15.0	20.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2717	1	KLD019	20.0	25.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2718	1	KLD019	25.0	30.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2751	1	KLD019	30.0	31.0	5685	42053		28458	NBV	AN											18.9		10	<5	<2	105.0	30.0			0.001										<10	10.000
82042	2719	1	KLD019	30.0	35.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2752	1	KLD019	31.0	32.0	5685	42053		28458	NBV	AN											47.2		20	<5	2.0	90.0	25.0			0.052										<10	10.000
82042	2753	1	KLD019	32.0	33.0	5685	42053		28458	NBV	AN											9.4		10	<5	10.0	90.0	30.0			0.011										<10	10.000
82042	2754	1	KLD019	33.0	34.0	5685	42053		28458	NBV	AN											37.7		5	5.0	<2	90.0	30.0			0.039										<10	10.000
82042	594	1	KLD019	33.2	33.4	5685	42053		28460	NBV	AN											444	20	195	30	20	50	10		<10	0.230	<1	10	<4	160	<10		<4			<10	20.000
82042	2755	1	KLD019	34.0	35.0	5685	42053		28458	NBV	AN											9.4		5	<5	2.0	80.0	35.0			0.010										<10	<10
82042	2756	1	KLD019	35.0	36.0	5685	42053		28458	NBV	AN											9.4		20	<5	30.0	90.0	40.0			<0.001										<10	<10
82042	2720	1	KLD019	35.0	40.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2757	1	KLD019	36.0	37.0	5685	42053		28458	NBV	AN											193.4		5	15.0	<2	80.0	35.0			0.044										<10	20.000
82042	595	1	KLD019	36.7	36.8	5685	42053		28460	NBV	AN											844	16	<5	50	15	60	15		10	0.080	<1	15	<4	160	20		<4			<10	40.000
82042	2758	1	KLD019	37.0	38.0	5685	42053		28458	NBV	AN											<4		10	<5	2.0	85.0	35.0			0.003										<10	10.000
82042	2759	1	KLD019	38.0	39.0	5685	42053		28458	NBV	AN											4.7		5	<5	10.0	85.0	40.0			<0.001										<10	10.000
82042	2760	1	KLD019	39.0	40.0	5685	42053		28458	NBV	AN											9.4		5	<5	<2	80.0	30.0			0.005										<10	10.000
82042	2721	1	KLD019	40.0	45.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2722	1	KLD019	45.0	50.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2723	1	KLD019	50.0	55.0	5685	42053		28458	NBV	AN																				<0.02											
82042	2724	1	KLD019	55.0	60.0	5685	42053		28458	NBV	AN																				<0.02											

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	U308	TH	CU	PB	ZN	NI	CO	LI	LA	AU	AG	AS	MO	ZR	SR	RB	BI	Y	GA	PT	PD
82042	2725	1	KLD019	60.0	65.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2726	1	KLD019	65.0	70.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2761	1	KLD019	68.0	69.0	5685	42053		28458	NBV	AN											9.4		5	<5	20.0	90.0	20.0			< 0.001										<10	10.000
82042	2762	1	KLD019	69.0	70.0	5685	42053		28458	NBV	AN											23.6		5	<5	30.0	85.0	30.0			0.001										<10	70.000
82042	2763	1	KLD019	70.0	71.0	5685	42053		28458	NBV	AN											160.3		10	10.0	30.0	80.0	20.0			0.018										<10	70.000
82042	2727	1	KLD019	70.0	75.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2764	1	KLD019	71.0	72.0	5685	42053		28458	NBV	AN											141.5		10	10.0	15.0	65.0	15.0			0.015										<10	20.000
82042	2765	1	KLD019	72.0	73.0	5685	42053		28458	NBV	AN											122.6		15	10.0	25.0	85.0	15.0			0.001										<10	30.000
82042	2766	1	KLD019	73.0	74.0	5685	42053		28458	NBV	AN											23.6		25	5.0	35.0	80.0	20.0			0.002										<10	10.000
82042	2767	1	KLD019	74.0	75.0	5685	42053		28458	NBV	AN											4.7		5	<5	20.0	95.0	25.0			< 0.001										<10	<10
82042	2728	1	KLD019	75.0	80.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2768	1	KLD019	75.0	76.0	5685	42053		28458	NBV	AN											9.4		10	<5	5.0	80.0	25.0			< 0.001										<10	10.000
82042	2769	1	KLD019	76.0	77.0	5685	42053		28458	NBV	AN											4.7		10	<5	20.0	85.0	35.0			< 0.001										<10	10.000
82042	2770	1	KLD019	77.0	78.0	5685	42053		28458	NBV	AN											141.5		15	10.0	45.0	80.0	25.0			0.016										<10	210.000
82042	2771	1	KLD019	78.0	79.0	5685	42053		28458	NBV	AN											N.R.		N.R.	N.R.	N.R.	N.R.	N.R.														
82042	2772	1	KLD019	79.0	80.0	5685	42053		28458	NBV	AN											14.1		15	<5	<2	85.0	35.0			0.002										<10	10.000
82042	2729	1	KLD019	80.0	85.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2773	1	KLD019	80.0	81.0	5685	42053		28458	NBV	AN											4.7		10	<5	5.0	85.0	45.0			< 0.001										<10	10.000
82042	2730	1	KLD019	85.0	90.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2731	1	KLD019	90.0	95.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2732	1	KLD019	95.0	100.0	5685	42053		28458	NBV	AN																				< 0.02											
82042	2733	1	KLD020	0.0	3.0	6150	41940		28458	NBV	AN											424.4		135	230.0	820.0	35.0	20.0			0.180										<10	30.000
82042	2153	1	KLD020	2.0	3.0	6150	41940		28465	NBV	AN											608	156	80	220	530	10	5			0.22										20	40
82042	2734	1	KLD020	3.0	4.0	6150	41940		28458	NBV	AN										480.5	412.7		115	30.0	230.0	45.0	5.0			0.026										<10	30.000
82042	2154	1	KLD020	3.0	4.0	6150	41940		28465	NBV	AN											548	28	110	25	280	45	<5			0.04										10	20
82042	2735	1	KLD020	4.0	5.0	6150	41940		28458	NBV	AN										563.5	707.4		195	15.0	490.0	115.0	10.0			0.004										<10	10.000
82042	2155	1	KLD020	4.0	5.0	6150	41940		28465	NBV	AN											420	24	120	10	440	105	5			0.02										<10	<10
82042	2736	1	KLD020	5.0	6.0	6150	41940		28458	NBV	AN											51.9		15	5.0	380.0	125.0	15.0			< 0.001										<10	<10
82042	2156	1	KLD020	5.0	6.0	6150	41940		28465	NBV	AN											60	20	15	15	250	70	5			0.01										<10	<10
82042	2737	1	KLD020	6.0	7.0	6150	41940		28458	NBV	AN											47.2		20	5.0	130.0	75.0	10.0			0.005										<10	<10
82042	2157	1	KLD020	6.0	7.0	6150	41940		28465	NBV	AN											16	12	<2	5	55	50	<5			<0.01										<10	<10
82042	2738	1	KLD020	7.0	8.0	6150	41940		28458	NBV	AN											28.3		5	<5	50.0	80.0	10.0			0.001										<10	10.000
82042	2158	1	KLD020	7.0	8.0	6150	41940		28465	NBV	AN											8	12	<2	<5	40	60	5			<0.01										<10	10
82042	2739	1	KLD020	8.0	9.0	6150	41940		28458	NBV	AN											66.0		10	<5	100.0	115.0	20.0			0.001										<10	30.000
82042	2159	1	KLD020	8.0	9.0	6150	41940		28465	NBV	AN											24	12	2	5	75	100	10			<0.01										<10	20
82042	2740	1	KLD020	9.0	10.0	6150	41940		28458	NBV	AN											33.0		15	<5	85.0	160.0	25.0			< 0.001										<10	10.000
82042	2160	1	KLD020	9.0	10.0	6150	41940		28465	NBV	AN											12	4	<2	<5	50	95	15			<0.01										<10	10
82042	2741	1	KLD020	10.0	15.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2742	1	KLD020	15.0	20.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2743	1	KLD020	20.0	25.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2744	1	KLD020	25.0	30.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2745	1	KLD020	30.0	35.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2746	1	KLD020	35.0	40.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2747	1	KLD020	40.0	45.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2748	1	KLD020	45.0	50.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2749	1	KLD020	50.0	55.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2750	1	KLD020	55.0	60.0	6150	41940		28458	NBV	AN																				< 0.02											
82042	2774	1	KLD021	136.0	137.0	5570.0	41470.0		28458	000	DL		CL	S								<4		40	25.0	25.0	50.0	30.0			0.017										<10	<10
82042	2775	1	KLD021	137.0	138.0	5570.0	41470.0		28458	000	DL		CL	S								<4		50	<5	40.0	55.0	30.0			0.001										<10	<10
82042	2776	1	KLD021	138.0	139.0	5570.0	41470.0		28458	000	DL		CL	S								297.1		50	55.0	2.0	80.0	25.0			0.018										<10	<10
82042	2777	1	KLD021	159.0	160.0	5570.0	41470.0		28458	000	DL		CL	S								<4		35	<5	20.0	80.0	30.0			0.002										<10	<10
82042	2778	1	KLD021	160.0	161.0	5570.0	41470.0		28458	000	DL		CL	S								56.6		45	10.0	20.0	80.0	30.0			0.011										<10	<10
82042	2779	1	KLD021	161.0	162.0	5570.0	41470.0		28458	000	DL		CL	S								4.7				70		30			0.001										<10	<10
82042	1901	1	KLP009	0.0	5.0	17800	29180		28451	CAH	SC																				< 0.01											
82042	1902	1	KLP009	5.0	10.0	17800	29180		28451	CAH	SC																				< 0.01											

[redacted]

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	U308	TH	CU	PB	ZN	NI	CO	LI	LA	AU	AG	AS	MO	ZR	SR	RB	BI	Y	GA	PT	PD
82042	1903	1	KLP009	10.0	15.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1904	1	KLP009	15.0	20.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1928	1	KLP009	19.0	20.0	17800	29180		28451	CAH	SC											30	13.0	20	10.0	15.0	4.0	5.0	106.0	(5		(1	(3	4				(10	70			
82042	1905	1	KLP009	20.0	25.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1906	1	KLP009	25.0	30.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1929	1	KLP009	29.0	30.0	17800	29180		28451	CAH	SC											25	25.0	(2	6.0	12.0	(2	(2	179.0	19.0		(1	3	3				(10	90			
82042	1907	1	KLP009	30.0	35.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1908	1	KLP009	35.0	40.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1930	1	KLP009	35.0	36.0	17800	29180		28451	CAH	SC											40	25.0	4	(2	11.0	(2	3.0	71.0	19.0		(1	4	9				(10	370			
82042	1909	1	KLP009	40.0	45.0	17800	29180		28451	CAH	SC																				(0.01											
82042	1910	1	KLP009	45.0	50.0	17800	29180		28451	000	DL	OL																			(0.01											
82042	1911	1	KLP009	50.0	55.0	17800	29180		28451	000	DL	OL																			(0.01											
82042	1912	1	KLP009	55.0	60.0	17800	29180		28451	000	DL	OL																			(0.01											
82042	1913	1	KLP009	60.0	65.0	17800	29180		28451	000	DL	OL																			(0.01											
82042	1914	1	KLP009	65.0	70.0	17800	29180		28451	000	DL	OL																			(0.01											
82042	1915	1	KLP010	0.0	5.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1916	1	KLP010	5.0	10.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1917	1	KLP010	10.0	15.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1918	1	KLP010	15.0	20.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1919	1	KLP010	20.0	25.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1920	1	KLP010	25.0	30.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1921	1	KLP010	30.0	35.0	17730	29200		28451	CAH	SC																				(0.01											
82042	1922	1	KLP010	35.0	40.0	17730	29200		28451	TCG	GR																				(0.01											
82042	1923	1	KLP010	40.0	45.0	17730	29200		28451	TCG	GR																				(0.01											
82042	2517	1	KLP022	0.0	5.0	5560.0	42150.0		26704	NBV	AN		LR	S								12		5	(5	60	65	20														
82042	2518	1	KLP022	5.0	10.0	5560.0	42150.0		26704	NBV	AN											4		5	(5	20	60	25														
82042	2519	1	KLP022	10.0	15.0	5560.0	42150.0		26704	NBV	AN											8		5	(5	25	60	20														
82042	2520	1	KLP022	15.0	20.0	5560.0	42150.0		26704	NBV	AN											4		10	(5	55	60	25														
82042	2521	1	KLP022	20.0	25.0	5560.0	42150.0		26704	NBV	AN											(4		5	(5	25	60	30														
82042	2522	1	KLP022	25.0	30.0	5560.0	42150.0		26704	NBV	AN											12		5	(5	20	55	25														
82042	2523	1	KLP022	30.0	35.0	5560.0	42150.0		26704	NBV	AN											8		10	(5	35	60	30														
82042	2524	1	KLP022	35.0	40.0	5560.0	42150.0		26704	NBV	AN											(4		15	(5	60	60	30														
82042	2525	1	KLP022	40.0	45.0	5560.0	42150.0		26704	NBV	AN											4		75	5	65	55	25														
82042	2526	1	KLP022	45.0	50.0	5560.0	42150.0		26704	NBV	AN											4																				

PROJ	SAMP	D	ORDER	NORTH	EAST	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	SCINT	PET	U308	TH	Y	CU	PB	ZN	NI	CO	AU	AG	AS
82042	136		28451	602400.0	331760.0	NBV	AN		CL	W	HE	W	OV				VS											(0.01		
82042	137		28451	609350.0	336480.0	NBV	AN				HE	W	OY				VS											(0.01		
82042	138		28451	609440.0	336500.0	NBV	AN				HE	W	OY				VS											(0.01		
82042	139		28451	609530.0	336430.0	NBV	AN				HS		OV				VS											(0.01		
82042	140		28451	613390.0	336280.0	NBV	AN				HE		OY				VS											(0.01		
82042	141		28451	613350.0	336210.0	NBV	AN				HE		OV				VS											(0.01		
82042	142		28451	613290.0	336190.0	NBV	AN				HE		OV				VS											(0.01		
82042	143		28451	612950.0	336270.0	NBV	.		CH		HE		OV				VS											(0.01		
82042	144		28451	605680.0	342010.0	NBV	AN		CL		HE		OY				VS											0.020		
82042	145		28451	605680.0	342010.0	NBV	AN		CL		HE						VS											0.320		
82042	146		28451	605680.0	342010.0	NBV	AN		CL		HE						VS											0.120		
82042	147		28451	605680.0	342010.0	NBV	AN		CL		HE		OY				VS											0.010		
82042	148		28451	605680.0	342010.0	NBV	AN		CL		HE		OY				VS											0.010		
82042	149		28451	605680.0	342025.0	NBV	AN		CL		HE		OY				VS											(0.01		
82042	150		28451	605655.0	342025.0	NBV	AN		CH		HE		OV				VS											(0.01		
82042	151		28451	605650.0	342025.0	NBV	AN		CH				SR				VS											(0.01		
82042	152		28451	605540.0	342040.0	NBV	AN						OV				VS											(0.01		
82042	153		28451	605940.0	341940.0	NBV	AN						OY				VS											(0.01		
82042	154		28451	605940.0	341930.0	NBV	AN		CH				OV				VS											(0.01		
82042	155		28451	606070.0	341860.0	NBV	AN		CL				OV				VS											(0.01		
82042	156		28451	606080.0	341870.0	NBV	AN		CH				OV				VS											(0.01		
82042	157		28451	606120.0	341900.0	NBV	AN		CL				HE				VS											(0.01		
82042	158		28451	605380.0	342620.0		LS																					0.110		
82042	159		28451	605380.0	342605.0		LS																					0.130		
82042	160		28451	605380.0	342605.0		SP																					0.090		
82042	161		28451	605360.0	342400.0	NBV	SP		CL		HE	S																(0.01		
82042	162		28451	608300.0	342700.0		LO		LH																			0.440		
82042	163		28451	608300.0	342700.0	NBV	AN		CL	W			OV				VS											0.020		
82042	164		28451	606240.0	341890.0	NBV	AN		CL	S			OV				VS											0.030		
82042	165		28451	605680.0	342010.0	NBV	AN		CL	S			OV				VS											0.010		
82042	166		28451	606240.0	341890.0	NBV	AN													7										
82042	167		28451	606240.0	341890.0	NBV	AN		HE	S	CY	S								13										
82042	2701		28688	613715	332320	LO	CY													13	16	25	25	11	40	53	45	(0.01	(1	(3
82042	2702		28688	613747	332136	LO	CY													6	14	20	71	9	38	58	47	(0.01	(1	(3
82042	2703		28688	613450	331934	LO	CY													4	3	13	24	17	12	47	16	(0.01	(1	4
82042	2704		28688	613476	332240	LO	CY													15	18	20	6	11	5	29	6	(0.01	(1	6
82042	2705		28688	613535	332507	LO	CY													18	20	60	16	11	13	47	14	(0.01	(1	(3
82042	2706		28688	610624	344981	LO	CY													11	25	45	27	20	4	33	7	(0.01	(1	3
82042	2707		28688	610635	344980	NBV	AN		FZ											5	(3	19	63	22	9	27	8	(0.01	(1	3
82042	2708		28688	613462	345967	LO	CY													8	10	14	8	10	(2	14	3	(0.01	(1	(3
82042	2709		28688	613747	346120	NBV	AN		FZ											7	6	16	3	4	52	195	39	(0.01	(1	(3
82042	2710		28688	613475	332300	NBV	AN		FZ											7	14	16	26	16	32	55	36	(0.01	(1	3
82042	2711		28688	613747	346120	NBV	AN		FZ											6	8	20	154	9	44	70	61	(0.01	(1	(3

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	SCINT	PET	U308	TH	PB	ZN	NI	CO	LI	LA	V
82042	1149		KL0001	5.0	10.0	3200.0	32500.0		25085	LKO	SN													0.4	2.8	4.4	24.0	0.6	0.3	1.1	9.0	7.6
82042	1150		KL0001	10.0	15.0	3200.0	32500.0		25085	LKO	SN													0.4	2.6	3.2	26.0	0.7	0.5	0.5	6.3	1.6
82042	1151		KL0001	15.0	20.0	3200.0	32500.0		25085	LKO	SN													0.4	2.6	2.7	1.1	0.9	0.4	0.5	7.3	1.6
82042	1152		KL0001	20.0	25.0	3200.0	32500.0		25085	LKO	SN													0.4	2.3	1.7	2.0	0.5	(0.2	0.9	7.3	11.0
82042	1153		KL0001	25.0	30.0	3200.0	32500.0		25085	LKO	SN													0.5	2.6	1.4	2.4	0.9	(0.2	0.7	6.9	159.0
82042	1154		KL0001	30.0	35.0	3200.0	32500.0		25085	LKO	SN													0.4	2.5	2.1	2.8	0.6	(0.2	0.6	7.8	137.0
82042	1155		KL0001	35.0	40.0	3200.0	32500.0		25085	LKO	SN													0.3	2.0	(0.2	(0.2	0.5	(0.2	0.5	5.4	4.4
82042	1156		KL0002	9.0	10.0	4000.0	32500.0		25085	LKO	SN													0.3	2.2	5.7	17.0	1.1	0.4	0.4	7.7	2.3
82042	1157		KL0002	19.0	24.0	4000.0	32500.0		25085	LKO	SN													0.3	11.0	2.5	0.4	0.7	(0.2	0.4	6.5	2.1
82042	1158		KL0003	1.0	2.0	4400.0	32500.0		25085	LKO	SN													0.3	2.5	8.9	11.0	2.7	1.6	(0.2	5.3	3.2
82042	1159		KL0003	16.0	21.0	4400.0	32500.0		25085	LKO	SN													0.4	2.8	2.9	3.4	5.6	37.0	1.0	5.2	1.9
82042	1160		KL0004	5.0	6.0	4800.0	32500.0		25085	LKO	SN													0.4	2.7	7.0	2.4	3.0	1.3	1.9	7.3	6.7
82042	1161		KL0004	16.0	21.0	4800.0	32500.0		25085	LKO	SN													0.3	2.3	1.2	1.6	2.1	0.6	1.9	5.9	1.2
82042	1162		KL0005	5.0	6.0	5600.0	32500.0		25085	LKO	SN													0.5	5.1	3.4	1.9	8.6	2.9	5.7	20.0	21.0
82042	1163		KL0006	5.0	6.0	6400.0	32500.0		25085	LKO	SN													0.5	3.0	9.6	3.8	5.8	1.1	5.3	9.6	1.9
82042	1164		KL0006	16.0	21.0	6400.0	32500.0		25085	LKO	SN													0.5	2.4	26.0	6.3	1.7	5.6	1.5	4.5	1.6
82042	1165		KL0007	2.0	3.0	7100.0	32500.0		25085	LKO	SN													0.5	2.2	18.0	16.0	1.4	1.0	1.0	7.2	1.2
82042	1166		KL0007	12.0	17.0	7100.0	32500.0		25085	LKO	SN													0.5	2.7	7.5	4.9	4.1	1.3	4.7	5.0	2.0
82042	1167		KL0008	6.0	7.0	8000.0	32500.0		25085	LKO	SN													0.5	2.5	2.2	(0.2	0.4	0.3	2.3	7.7	1.4
82042	1168		KL0008	16.0	21.0	8000.0	32500.0		25085	LKO	SN													0.4	2.1	1.0	(0.2	1.0	6.6	2.8	7.3	1.0
82042	1169		KL0009	5.0	6.0	9550.0	32600.0		25085	LKO	SN													0.4	3.4	1.7	(0.2	1.4	0.5	1.6	8.1	1.4
82042	1170		KL0009	16.0	21.0	9550.0	32600.0		25085	LKO	SN													0.4	3.1	(0.2	7.4	1.7	0.9	3.9	5.2	0.3
82042	1171		KL0010	7.0	8.0	8800.0	32600.0		25085	LKO	SN													0.4	3.8	0.6	2.8	2.9	1.2	2.8	21.0	5.0
82042	1172		KL0011	2.0	3.0	7200.0	31700.0		25085	LKO	SN													0.7	3.2	2.1	26.0	2.4	1.3	7.8	9.7	29.0
82042	1173		KL0011	15.0	20.0	7200.0	31700.0		25085	LKO	SN													0.5	2.6	1.2	22.0	1.7	0.7	4.8	6.9	3.4
82042	1174		KL0012	0.0	1.0	7200.0	30900.0		25085	LKO	SN													0.6	3.1	3.4	203.0	2.1	2.6	1.4	6.7	3.7
82042	1175		KL0012	10.0	15.0	7200.0	30900.0		25085	LKO	SN													0.6	3.2	2.0	65.0	2.7	44.0	1.1	6.9	6.6
82042	1176		KL0013	3.0	4.0	7200.0	30200.0		25085	LKO	SN													0.7	3.3	0.4	31.0	0.9	1.2	4.9	24.0	1.4
82042	1177		KL0013	13.0	18.0	7200.0	30200.0		25085	LKO	SN													0.6	3.2	1.0	11.0	2.2	1.5	2.0	7.1	1.4
82042	1178		KL0014	1.0	2.0	7200.0	29400.0		25085	LKO	SN													0.5	4.0	1.5	38.0	2.2	1.3	1.3	6.5	21.0
82042	1179		KL0014	13.0	18.0	7200.0	29400.0		25085	LKO	SN													0.5	4.2	0.7	20.0	3.1	1.5	1.4	8.0	0.8
82042	1180		KL0015	3.0	4.0	7200.0	28600.0		25085	LKO	SN													0.6	3.8	2.5	56.0	2.8	1.4	2.7	20.0	4.2
82042	1181		KL0015	13.0	18.0	7200.0	28600.0		25085	LKO	SN													0.4	3.4	2.1	4.7	3.7	1.5	0.9	6.6	(0.2
82042	1182		KL0016	3.0	4.0	2400.0	32600.0		25085	LKO	SN													0.6	6.1	3.1	0.8	6.2	2.2	2.5	16.0	8.6
82042	1183		KL0016	13.0	18.0	2400.0	32600.0		25085	LKO	SN													0.4	3.4	2.0	0.8	1.1	0.6	1.9	9.9	0.3
82042	1184		KL0017	16.0	17.0	2400.0	33300.0		25085	LKO	SN													1.4	5.4	11.0	24.0	13.0	3.5	8.9	48.0	45.0
82042	1185		KL0018	2.0	3.0	2400.0	34100.0		25085	LKO	SN													0.4	3.4	1.0	107.0	2.9	1.2	2.5	7.6	4.2
82042	1186		KL0018	13.0	18.0	2400.0	34100.0		25085	LKO	SN													0.4	3.5	1.1	15.0	4.5	2.1	(0.2	5.4	1.3
82042	1187		KL0019	1.0	2.0	2400.0	34800.0		25085	LKO	SN													0.4	2.9	0.9	53.0	4.2	1.9	2.0	11.0	1.1
82042	1188		KL0019	10.0	14.5	2400.0	34800.0		25085	LKO	SN													0.4	3.2	(0.2	2.8	2.5	0.9	2.4	6.4	0.2
82042	1189		KL0020	1.0	2.0	2415.0	35470.0		25085	LKO	SN													0.7	2.6	1.0	11.0	1.8	1.1	2.3	6.4	18.0
82042	1190		KL0020	10.0	14.5	2415.0	35470.0		25085	LKO	SN													0.5	2.4	(0.2	3.3	2.7	1.5	1.5	6.0	1.1
82042	1191		KL0021	2.0	3.0	2400.0	37200.0		25085	LKO	SN													0.5	2.6	1.1	30.0	1.5	0.8	2.1	5.8	1.6
82042	1192		KL0021	10.0	15.0	2400.0	37200.0		25085	LKO	SN													0.5	2.5	(0.2	4.0	1.9	1.5	1.6	6.4	1.3
82042	1193		KL0022	5.0	6.0	2400.0	38000.0		25085	LKO	SN													0.5	2.6	1.4	64.0	0.4	0.4	1.6	13.0	1.3
82042	1194		KL0022	15.0	20.0	2400.0	38000.0		25085	LKO	SN													0.4	1.8	1.0	12.0	0.3	0.3	1.6	9.9	0.4
82042	1195		KL0023	7.0	8.0	3200.0	39000.0		25085	LKO	SN													0.8	5.9	3.1	14.0	9.3	2.4	8.8	14.0	30.0
82042	1196		KL0023	15.0	20.0	3200.0	39000.0		25085	LKO	SN													0.4	3.5	0.7	7.4	1.7	0.7	1.6	13.0	2.6
82042	1197		KL0024	5.0	6.0	4000.0	39000.0		25085	LKO	SN													0.4	4.4	1.6	76.0	1.9	0.8	3.1	8.0	1.6
82042	1198		KL0024	10.0	15.0	4000.0	39000.0		25085	LKO	SN													0.3	2.3	0.5	(0.2	0.6	0.4	2.7	4.7	0.7
82042	1199		KLD001	0.0	5.0	5600.0	39000.0		25085	LKO	SN													0.4	3.1	2.1	(0.2	4.3	1.3	3.9	8.1	16.0
82042	1200		KLD001	5.0	10.0	5600.0	39000.0		25085	LKO	SN													0.4	3.3	9.8	8.2	2.4	2.6	2.6	7.9	1.1
82042	1201		KLD001	10.0	15.0	5600.0	39000.0		25085	LKO	SN													0.3	3.1	34.0	39.0	12.0	13.0	2.3	6.1	(0.2
82042	1202		KLD001	15.0	20.0	5600.0	39000.0		25085	LKO	SN													0.3	3.1	2.0	0.4	2.7	5.9	2.4	5.6	(0.2
82042	1203		KLD001	20.0	25.0	5600.0	39000.0		25085	LKO	SN													0.5	2.8	1.0	(0.2	1.0	0.7	2.4	5.5	(0.2

PROJ	SAMP	D HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	SCINT	PET	U308	TH	PB	ZN	NI	CO	LI	LA	V
82042	1204	KLD001	25.0	30.0	5600.0	39000.0		25085	LKO	SN													0.5	2.9	8.9	13.0	3.0	4.2	2.8	5.0	0.3
82042	1205	KLD001	30.0	35.0	5600.0	39000.0		25085	LKO	SN													0.4	3.1	20.0	23.0	2.5	1.3	3.9	5.7	<0.2
82042	1206	KLD001	35.0	40.0	5600.0	39000.0		25085	LKO	SN													0.5	3.4	0.3	0.8	1.3	0.4	5.0	7.5	0.8
82042	1207	KLD001	40.0	45.0	5600.0	39000.0		25085	LKO	SN													0.7	4.2	1.3	1.5	2.4	0.7	4.3	6.2	1.2
82042	1208	KLD001	45.0	50.0	5600.0	39000.0		25085	LKO	SN													0.7	3.1	1.0	<0.2	1.2	0.5	5.0	7.7	1.8
82042	1209	KLD001	50.0	55.0	5600.0	39000.0		25085	LKO	SN													0.6	3.8	0.9	<0.2	1.5	0.5	3.6	8.3	3.2
82042	1210	KLD001	55.0	60.0	5600.0	39000.0		25085	LKO	SN													0.5	4.1	1.2	<0.2	1.6	0.5	4.4	10.0	2.7
82042	1211	KLD001	60.0	65.0	5600.0	39000.0		25085	LKO	SN													0.5	3.2	3.3	2.3	1.1	0.5	4.9	8.0	2.9
82042	1212	KLD001	65.0	70.0	5600.0	39000.0		25085	LKO	SN													0.4	3.6	2.2	3.1	1.7	0.5	5.8	7.6	3.6
82042	1213	KLD001	70.0	75.0	5600.0	39000.0		25085	LKO	SN													0.5	4.1	2.2	0.4	1.5	0.6	4.0	9.0	2.4
82042	1214	KLD001	75.0	80.0	5600.0	39000.0		25085	LKO	SN													0.5	3.2	1.9	3.8	1.3	0.4	4.8	12.0	1.4
82042	1215	KLD001	80.0	85.0	5600.0	39000.0		25085	LKO	SN													0.8	5.3	1.9	0.4	2.5	0.6	3.8	13.0	4.9
82042	1216	KLD001	85.0	90.0	5600.0	39000.0		25085	LKO	SN													1.5	6.0	1.9	2.8	4.5	1.7	3.9	11.0	9.5
82042	1217	KLD001	90.0	95.0	5600.0	39000.0		25085	LKO	SN													0.9	4.6	2.6	0.8	2.9	1.0	3.6	14.0	5.7
82042	1218	KLD001	95.0	100.0	5600.0	39000.0		25085	LKO	SN													1.3	7.8	2.8	7.0	8.7	3.1	14.0	26.0	14.0
82042	1219	KLD001	100.0	105.0	5600.0	39000.0		25085	LKO	SN													1.0	5.2	1.6	<0.2	4.0	1.1	4.7	25.0	5.6
82042	1220	KLD001	105.0	110.0	5600.0	39000.0		25085	LKO	SN													1.1	2.9	2.0	<0.2	2.6	0.9	4.8	29.0	7.1
82042	1221	KLD001	110.0	115.0	5600.0	39000.0		25085	LKO	SN													1.0	2.7	2.4	0.4	3.7	1.1	5.8	30.0	8.2
82042	1222	KLD001	115.0	120.0	5600.0	39000.0		25085	LKO	SN													2.9	9.7	2.3	12.0	13.0	3.5	15.0	94.0	23.0
82042	1223	KLD001	120.0	125.0	5600.0	39000.0		25085	LKO	SN													12.0	37.0	3.0	5.0	10.0	5.0	30.0	329.0	95.0
82042	1224	KLD002	2.0	10.0	7200.0	28600.0		25094	LKO	SN													0.7	4.0	1.1	0.5	1.5	0.9	1.6	12.0	13.0
82042	1225	KLD002	10.0	20.0	7200.0	28600.0		25094	LKO	SN													0.6	3.1	0.7	2.0	1.0	0.9	1.6	7.2	2.1
82042	1226	KLD002	20.0	30.0	7200.0	28600.0		25094	LKO	SN													0.6	3.1	0.6	0.3	<0.2	1.5	0.9	8.2	1.0
82042	1227	KLD002	30.0	40.0	7200.0	28600.0		25094	LKO	SN													0.6	3.3	0.5	0.9	0.8	<0.2	1.1	9.2	1.1
82042	1228	KLD002	40.0	50.0	7200.0	28600.0		25094	LKO	SN													0.7	4.4	0.7	0.9	0.6	0.8	0.9	7.2	5.3
82042	1229	KLD002	50.0	60.0	7200.0	28600.0		25094	LKO	SN													0.6	4.2	0.6	0.5	2.2	1.3	1.1	7.2	4.1
82042	1230	KLD002	60.0	70.0	7200.0	28600.0		25094	LKO	SN													0.6	2.9	0.6	0.5	0.6	1.4	0.8	3.8	1.0
82042	1231	KLD002	70.0	78.0	7200.0	28600.0		25094	LKO	SN													0.6	2.8	0.6	0.6	0.6	1.2	<0.2	4.4	1.3
82042	1232	KLD002	78.0	90.0	7200.0	28600.0		25094	LKO	SN													1.1	4.3	1.0	0.2	2.1	2.4	1.2	9.4	9.2
82042	1233	KLD002	90.0	100.0	7200.0	28600.0		25094	LKO	SN													1.1	6.2	1.1	0.3	3.0	4.6	1.5	15.0	11.0
82042	1234	KLD002	100.0	110.0	7200.0	28600.0		25094	LKO	SN													1.1	4.7	0.8	0.8	1.5	1.4	1.0	9.4	1.8
82042	1235	KLD002	110.0	120.0	7200.0	28600.0		25094	LKO	SN													0.9	4.3	0.7	<0.2	1.4	0.9	0.9	8.4	4.2
82042	1236	KLD002	120.0	130.0	7200.0	28600.0		25094	LKO	SN													1.1	7.3	1.1	<0.2	2.6	2.4	0.3	16.0	2.8
82042	1237	KLD002	130.0	140.0	7200.0	28600.0		25094	LKO	SN													1.0	10.0	1.3	<0.2	2.9	1.9	0.3	22.0	3.9
82042	1238	KLD002	140.0	145.8	7200.0	28600.0		25094	LKO	SN													1.1	12.0	2.4	<0.2	3.3	2.1	0.4	25.0	0.8
82042	1239	KLD003	3.0	10.0	4000.0	32500.0		25094	LKO	SN													0.5	2.6	0.6	0.4	0.6	0.8	2.0	7.0	12.0
82042	1240	KLD003	10.0	20.0	4000.0	32500.0		25094	LKO	SN													1.1	2.0	0.6	0.5	0.3	0.9	1.7	5.2	1.0
82042	1241	KLD003	20.0	30.0	4000.0	32500.0		25094	LKO	SN													0.8	2.7	0.4	<0.2	0.3	4.7	1.4	5.6	3.4
82042	1242	KLD003	30.0	40.0	4000.0	32500.0		25094	LKO	SN													0.6	2.0	0.4	<0.2	1.8	17.0	1.4	4.2	0.4
82042	1243	KLD003	40.0	50.0	4000.0	32500.0		25094	LKO	SN													0.5	2.9	0.4	<0.2	1.4	72.0	1.1	6.0	0.4
82042	1244	KLD003	50.0	60.0	4000.0	32500.0		25094	LKO	SN													0.9	2.2	0.5	0.2	1.0	1.7	1.1	5.0	1.8
82042	1245	KLD003	60.0	69.0	4000.0	32500.0		25094	LKO	SN													0.8	2.4	0.6	<0.2	<0.2	2.2	1.3	5.4	1.8
82042	1246	KLD003	69.0	80.0	4000.0	32500.0		25094	LKO	SN													0.7	3.6	1.5	<0.2	0.5	0.5	1.1	6.2	1.4
82042	1247	KLD003	80.0	90.0	4000.0	32500.0		25094	LKO	SN													0.9	3.7	0.7	<0.2	0.6	0.7	1.0	7.0	3.8
82042	1248	KLD003	90.0	100.0	4000.0	32500.0		25094	LKO	SN													0.7	4.3	3.0	<0.2	1.4	1.2	0.8	8.4	3.1
82042	1249	KLD003	100.0	110.0	4000.0	32500.0		25094	LKO	SN													0.7	3.9	1.2	<0.2	2.0	2.4	0.6	7.2	2.4
82042	1250	KLD003	110.0	120.0	4000.0	32500.0		25094	LKO	SN													1.2	7.7	1.0	<0.2	2.0	1.4	0.4	8.6	4.8
82042	1251	KLD003	120.0	130.0	4000.0	32500.0		25094	LKO	SN													0.8	4.9	0.9	<0.2	2.4	1.6	0.6	9.6	5.5
82042	1252	KLD003	130.0	140.0	4000.0	32500.0		25094	LKO	SN													1.2	4.7	0.9	<0.2	2.4	2.2	0.4	8.4	6.5
82042	1253	KLD003	140.0	150.0	4000.0	32500.0		25094	LKO	SN													0.8	4.7	1.0	<0.2	3.0	2.4	0.4	8.8	6.8
82042	1254	KLD003	150.0	160.0	4000.0	32500.0		25094	LKO	SN													1.1	5.1	1.9	<0.2	2.3	1.8	0.3	9.2	6.6
82042	1255	KLD003	160.0	170.0	4000.0	32500.0		25094	LKO	SN													1.0	4.8	0.8	<0.2	2.8	1.5	0.3	14.0	6.6
82042	1256	KLD003	170.0	180.0	4000.0	32500.0		25094	LKO	SN													0.8	4.9	0.6	<0.2	1.9	0.9	<0.2	9.4	3.1
82042	1257	KLD003	180.0	190.0	4000.0	32500.0		25094	LKO	SN													1.5	8.7	0.6	<0.2	3.2	4.2	0.4	23.0	13.0
82042	1258	KLD003	190.0	203.0	4000.0	32500.0		25094	LKO	SN													1.3	12.0	0.6	<0.2	3.8	6.8	0.6	23.0	16.0

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	SCINT	PET	U308	TH	PB	ZN	NI	CO	LI	LA	V
82042	1259		KLD004	0.0	10.0	2400.0	34800.0		25094	LKO	SN													0.5	2.1	0.8	<0.2	0.6	0.7	0.3	7.6	2.2
82042	1260		KLD004	10.0	20.0	2400.0	34800.0		25094	LKO	SN													0.6	2.2	1.0	0.4	0.4	1.3	0.3	5.2	1.4
82042	1261		KLD004	20.0	30.0	2400.0	34800.0		25094	LKO	SN													0.4	2.1	1.0	<0.2	0.8	1.2	0.4	5.0	1.6
82042	1262		KLD004	30.0	40.0	2400.0	34800.0		25094	LKO	SN													1.0	2.1	0.8	<0.2	1.1	7.6	0.3	6.6	2.6
82042	1263		KLD004	40.0	50.0	2400.0	34800.0		25094	LKO	SN													0.6	2.6	0.9	<0.2	0.3	0.5	<0.2	8.4	3.2
82042	1264		KLD004	50.0	60.0	2400.0	34800.0		25094	LKO	SN													0.5	2.7	0.4	<0.2	0.6	2.8	<0.2	10.0	1.4
82042	1265		KLD004	60.0	70.0	2400.0	34800.0		25094	LKO	SN													0.8	2.7	1.1	<0.2	2.5	4.2	2.5	9.8	5.1
82042	1266		KLD004	70.0	80.0	2400.0	34800.0		25094	LKO	SN													0.6	2.6	0.8	<0.2	0.8	0.7	1.5	12.0	2.6
82042	1267		KLD004	80.0	90.0	2400.0	34800.0		25094	LKO	SN													0.8	3.1	1.0	<0.2	0.8	0.9	1.5	11.0	3.8
82042	1268		KLD004	90.0	100.0	2400.0	34800.0		25094	LKO	SN													0.8	3.0	1.2	<0.2	1.3	1.2	1.0	8.4	3.4
82042	1269		KLD004	100.0	110.0	2400.0	34800.0		25094	LKO	SN													1.1	3.2	1.1	<0.2	0.6	0.8	1.3	7.4	2.7
82042	1270		KLD004	110.0	120.0	2400.0	34800.0		25094	LKO	SN													0.7	8.3	1.7	<0.2	5.0	4.4	1.9	17.0	13.0
82042	1271		KLD004	120.0	130.0	2400.0	34800.0		25094	LKO	SN													0.5	4.6	1.4	<0.2	2.4	1.5	1.3	12.0	6.2
82042	1272		KLD004	130.0	140.0	2400.0	34800.0		25094	LKO	SN													0.6	5.1	1.5	0.4	2.9	2.1	0.9	10.0	8.5
82042	1273		KLD004	140.0	150.0	2400.0	34800.0		25094	LKO	SN													0.8	4.3	1.3	<0.2	1.9	1.5	1.9	8.8	6.6
82042	1274		KLD004	150.0	160.0	2400.0	34800.0		25094	LKO	SN													0.6	4.6	1.8	<0.2	3.6	1.7	4.8	8.6	10.0
82042	1275		KLD004	160.0	170.0	2400.0	34800.0		25094	LKO	SN													1.0	4.2	1.4	<0.2	2.2	1.5	3.2	8.2	6.4
82042	1276		KLD004	170.0	180.0	2400.0	34800.0		25094	LKO	SN													1.1	5.3	1.3	<0.2	2.4	1.6	1.4	11.0	6.6
82042	1277		KLD004	180.0	190.0	2400.0	34800.0		25094	LKO	SN													1.1	9.7	2.2	<0.2	4.9	2.8	6.1	18.0	13.0
82042	1278		KLD004	190.0	200.0	2400.0	34800.0		25094	LKO	SN													0.9	10.0	2.4	<0.2	4.0	2.8	3.9	20.0	12.0
82042	1279		KLD006	123.0	130.0	5690.0	41886.0		25094	LKO	SN													1.3	3.6	1.1	2.3	1.1	1.2	1.8	6.0	5.3
82042	1280		KLD006	130.0	140.0	5690.0	41886.0		25094	LKO	SN													3.7	2.7	0.8	0.8	0.6	0.7	1.6	3.0	4.1
82042	1281		KLD006	140.0	150.0	5690.0	41886.0		25094	LKO	SN													2.8	4.3	0.9	1.2	1.5	1.1	1.8	2.0	9.3
82042	1282		KLD006	150.0	160.0	5690.0	41886.0		25094	LKO	SN													1.6	3.8	1.0	1.5	2.3	1.9	1.5	2.0	13.0
82042	1283		KLD006	160.0	170.0	5690.0	41886.0		25094	LKO	SN													0.6	3.5	0.8	1.6	2.2	1.6	1.3	1.9	5.0
82042	1284		KLD006	170.0	180.0	5690.0	41886.0		25094	LKO	SN													0.8	3.7	0.9	4.7	8.8	8.8	1.4	1.5	23.0
82042	1285		KLD006	180.0	190.0	5690.0	41886.0		25094	LKO	SN													1.3	3.7	0.7	10.0	9.7	9.0	1.3	1.8	27.0
82042	1286		KLD006	190.0	200.0	5690.0	41886.0		25094	LKO	SN													3.6	4.8	0.8	15.0	16.0	11.0	1.8	1.9	33.0
82042	1287		KLD006	200.0	210.0	5690.0	41886.0		25094	LKO	SN													0.6	2.0	0.8	14.0	2.6	2.2	0.4	1.9	2.6
82042	1288		KLD006	210.0	220.0	5690.0	41886.0		25094	LKO	SN													0.8	2.0	0.5	4.3	0.5	1.3	0.3	3.7	2.2
82042	1289		KLD006	220.0	230.0	5690.0	41886.0		25094	LKO	SN													0.9	9.3	0.6	9.9	15.0	12.0	1.3	2.6	35.0
82042	1290		KLD006	230.0	240.0	5690.0	41886.0		25094	LKO	SN													1.7	5.3	0.9	14.0	35.0	11.0	2.2	36.0	72.0
82042	1291		KLD006	240.0	250.0	5690.0	41886.0		25094	LKO	SN													1.2	5.7	0.6	1.1	4.7	1.7	0.4	57.0	14.0
82042	1292		KLD006	250.0	264.0	5690.0	41886.0		25094	LKO	SN													1.0	7.5	1.1	0.4	4.8	4.2	4.1	39.0	16.0
0820421293									25094	LKO	SN													0.6	35.0	1.4	<0.2	<0.2	0.5	1.4	2.1	1.6
82042	1294		KLD008	151.5	160.0	4392.0	41872.0		25094	LKO	SN													0.6	1.6	0.6	1.1	1.3	1.4	1.3	2.1	4.3
82042	1295		KLD008	160.0	170.0	4392.0	41872.0		25094	LKO	SN													0.5	1.7	0.8	1.3	<0.2	1.2	2.0	1.3	1.6
82042	1296		KLD008	170.0	180.0	4392.0	41872.0		25094	LKO	SN													0.5	1.4	0.9	1.1	1.3	1.2	2.1	1.5	3.2
82042	1297		KLD008	180.0	190.0	4392.0	41872.0		25094	LKO	SN													0.6	3.2	0.6	1.2	1.8	1.6	2.3	1.4	2.5
82042	1298		KLD008	190.0	200.0	4392.0	41872.0		25094	LKO	SN													0.7	3.6	1.0	0.6	0.9	1.6	1.8	1.8	2.8
82042	1299		KLD008	200.0	210.0	4392.0	41872.0		25094	LKO	SN													1.4	4.0	1.6	1.2	0.8	1.3	2.4	1.6	3.2
82042	1300		KLD008	210.0	220.0	4392.0	41872.0		25094	LKO	SN													0.6	3.6	0.5	3.0	1.0	1.4	2.5	1.3	2.6
82042	1501		KLD008	220.0	230.0	4392.0	41872.0		25094	LKO	SN													0.8	3.5	0.7	2.7	1.4	3.1	2.0	1.3	2.8
82042	1502		KLD008	230.0	240.0	4392.0	41872.0		25094	LKO	SN													0.5	2.6	1.7	9.0	50.0	21.0	7.5	9.8	301.0
82042	1503		KLD008	240.0	250.0	4392.0	41872.0		25094	LKO	SN													<0.1	1.4	5.0	13.0	74.0	64.0	5.6	14.0	403.0
82042	1504		KLD008	250.0	260.0	4392.0	41872.0		25094	LKO	SN													0.9	2.9	1.5	3.4	37.0	15.0	2.6	4.0	112.0
82042	1505		KLD008	260.0	270.0	4392.0	41872.0		25094	LKO	SN													0.8	2.8	1.1	1.0	22.0	14.0	1.4	6.4	115.0
82042	1506		KLD008	270.0	280.0	4392.0	41872.0		25094	LKO	SN													3.8	2.2	10.0	5.2	70.0	54.0	6.7	6.4	465.0
82042	1507		KLD008	280.0	290.0	4392.0	41872.0		25094	LKO	SN													1.3	21.0	3.1	0.8	20.0	11.0	7.8	32.0	42.0
82042	1508		KLD008	290.0	300.0	4392.0	41872.0		25094	LKO	SN													1.8	20.0	2.5	0.3	19.0	12.0	1.2	39.0	29.0
82042	1509		KLD008	300.0	310.0	4392.0	41872.0		25094	LKO	SN													3.2	16.0	2.5	1.1	24.0	27.0	3.6	19.0	4.6
82042	1510		KLD008	310.0	320.0	4392.0	41872.0		25094	LKO	SN													15.0	15.0	5.0	1.3	22.0	19.0	3.8	31.0	1.9
82042	1511		KLD008	320.0	333.0	4392.0	41872.0		25094	LKO	SN													9.7	4.0	4.0	0.8	29.0	12.0	2.4	11.0	1.1
82042	1931	1	KLD012	0	10	16110	28750		28455	LKO	SN																					
82042	1932	1	KLD012	10.0	20.0	16110	28750		28455	LKO	SN																					

[redacted]

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IM	A1	S1	A2	S2	A3	S3	MN	G	TX	SCINT	PET	U308	TH	PB	ZN	NI	CO	LI	LA	V
82042	1933	1	KLD012	20.0	30.0	16110	28750		28455	LK0	SN																					
82042	1934	1	KLD012	30.0	40.0	16110	28750		28455	LK0	SN																					
82042	1935	1	KLD012	40.0	50.0	16110	28750		28455	LK0	SN																					
82042	1936	1	KLD011	0	10	15750	29270		28455	LK0	SN																					
82042	1937	1	KLD011	10.0	20.0	15750	29270		28455	LK0	SN																					
82042	1938	1	KLD011	20.0	30.0	15750	29270		28455	LK0	SN																					
82042	1939	1	KLD011	30.0	40.0	15750	29270		28455	LK0	SN																					
82042	1940	1	KLD011	40.0	50.0	15750	29270		28455	LK0	SN																					
82042	1941	1	KLD011	50.0	60.0	15750	29270		28455	LK0	SN																					
82042	1942	1	KLD011	60.0	70.0	15750	29270		28455	LK0	SN																					
82042	1943	1	KLD013	0	10	16135	28485		28455	LK0	SN																					
82042	1944	1	KLD013	10.0	20.0	16135	28485		28455	LK0	SN																					
82042	1945	1	KLD013	20.0	30.0	16135	28485		28455	LK0	SN																					
82042	1946	1	KLD014	0	10	15670	29640		28455	LK0	SN																					
82042	1947	1	KLD014	10.0	20.0	15670	29640		28455	LK0	SN																					
82042	1948	1	KLD014	20.0	30.0	15670	29640		28455	LK0	SN																					
82042	1949	1	KLD014	30.0	40.0	15670	29640		28455	LK0	SN																					
82042	1950	1	KLD014	40.0	50.0	15670	29640		28455	LK0	SN																					
82042	1951	1	KLD014	50.0	60.0	15670	29640		28455	LK0	SN																					
82042	1952	1	KLD014	60.0	70.0	15670	29640		28455	LK0	SN																					
82042	1953	1	KLD014	70.0	80.0	15670	29640		28455	LK0	SN																					
82042	1954	1	KLD014	80.0	90.0	15670	29640		28455	LK0	SN																					
82042	1955	1	KLD015	0	10	14250	28450		28455	LK0	SN																					
82042	1956	1	KLD015	10.0	20.0	14250	28450		28455	LK0	SN																					
82042	1957	1	KLD015	20.0	30.0	14250	28450		28455	LK0	SN																					
82042	1958	1	KLD015	30.0	40.0	14250	28450		28455	LK0	SN																					
82042	1959	1	KLD015	40.0	50.0	14250	28450		28455	LK0	SN																					
82042	1960	1	KLD015	50.0	60.0	14250	28450		28455	LK0	SN																					
82042	1961	1	KLD015	60.0	70.0	14250	28450		28455	LK0	SN																					
82042	1962	1	KLD015	70.0	80.0	14250	28450		28455	LK0	SN																					
82042	1963	1	KLD015	80.0	90.0	14250	28450		28455	LK0	SN																					
82042	1964	1	KLD015	90.0	100.0	14250	28450		28455	LK0	SN																					
82042	1965	1	KLD012	50	60	16110	28750		28455	LK0	SN																					
82042	1966	1	KLD012	60	63	16110	28750		28455	LK0	SN																					
82042	1967	1	KLD013	30	40	16135	28485		28455	LK0	SN																					
82042	1968	1	KLD013	40	45.3	16135	28485		28455	LK0	SN																					
82042	1969	1	KLD011	70	80	15750	29270		28455	LK0	SN																					
82042	1970	1	KLD011	80	84	15750	29270		28455	LK0	SN																					
82042	1986	1	KLD016	0	10	15040	28490		28456	LK0	SN													0.5	3.3					0.4	12	
82042	1987	1	KLD016	10.0	20.0	15040	28490		28456	LK0	SN													0.8	8.0					0.4	18	
82042	1988	1	KLD016	20.0	30.0	15040	28490		28456	LK0	SN													0.7	6.1					0.4	18	
82042	1989	1	KLD016	30.0	40.0	15040	28490		28456	LK0	SN													0.7	6.9					0.4	20	
82042	1990	1	KLD016	40.0	50.0	15040	28490		28456	LK0	SN													0.8	6.7					0.6	23	
82042	1991	1	KLD016	50.0	60.0	15040	28490		28456	LK0	SN													0.8	4.0					0.7	21	
82042	1992	1	KLD016	60.0	70.0	15040	28490		28456	LK0	SN													1.2	4.8					0.7	46	
82042	1993	1	KLD016	70.0	80.0	15040	28490		28456	LK0	SN													1.5	13					1.6	49	
82042	1994	1	KLD016	80.0	81	15040	28490		28456	LK0	SN													0.5	7.1					6.4	55	
82042	1995	1	KLD017	0	10	16480	28830		28456	LK0	SN													0.6	5.3					0.8	12	
82042	1996	1	KLD017	10.0	20.0	16480	28830		28456	LK0	SN													1.5	5.7					0.7	17	
82042	1997	1	KLD017	20.0	30.0	16480	28830		28456	LK0	SN													0.8	4.2					2.3	17	
82042	1998	1	KLD017	30.0	40.0	16480	28830		28456	LK0	SN													0.8	4.5					4.1	17	
82042	1999	1	KLD017	40.0	50.0	16480	28830		28456	LK0	SN													1.4	4.9					1.8	49	
82042	2000	1	KLD017	50.0	57	16480	28830		28456	LK0	SN													1.4	8.1					1.2	17	
82042	1971	1	KLD018	0	10	14180	39130		28456	LK0	SN													15	6.4					10	13	
82042	1972	1	KLD018	10.0	20.0	14180	39130		28456	LK0	SN													0.8	2.3					3.0	7.6	

PROJ	SAMP	D	HOLE	FROM	TO	NORTH	EAST	RL	ORDER	GRP	TY	IN	A1	S1	A2	S2	A3	S3	MN	G	TX	SCINT	PET	U308	TH	PB	ZN	NI	CO	LI	LA	V
82042	1973	1	KLD018	20.0	30.0	14180	39130		28456	LKO	SN													0.8	2.5					1.9	7.9	
82042	1974	1	KLD018	30.0	40.0	14180	39130		28456	LKO	SN													4.6	4.1					6.3	7.4	
82042	1975	1	KLD018	40.0	50.0	14180	39130		28456	LKO	SN													1.5	2.9					2.9	7.0	
82042	1976	1	KLD018	50.0	60.0	14180	39130		28456	LKO	SN													1.1	2.6					2.0	7.0	
82042	1977	1	KLD018	60.0	70.0	14180	39130		28456	LKO	SN													0.8	2.6					1.2	5.3	
82042	1978	1	KLD018	70.0	80.0	14180	39130		28456	LKO	SN													0.6	2.4					0.9	6.0	
82042	1979	1	KLD018	80.0	90.0	14180	39130		28456	LKO	SN													1.1	3.1					0.9	7.0	
82042	1980	1	KLD018	90.0	100.0	14180	39130		28456	LKO	SN													1.1	2.9					0.8	5.7	
82042	1981	1	KLD018	100.0	110.0	14180	39130		28456	LKO	SN													1.5	2.8					0.7	5.7	
82042	1982	1	KLD018	110.0	120.0	14180	39130		28456	LKO	SN													1.1	3.4					0.7	7.1	
82042	1983	1	KLD018	120.0	130.0	14180	39130		28456	LKO	SN													0.9	3.4					0.7	7.4	
82042	1984	1	KLD018	130.0	140.0	14180	39130		28456	LKO	SN													0.9	3.4					0.8	8.8	
82042	1985	1	KLD018	140.0	150.0	14180	39130		28456	LKO	SN													0.9	3.2					0.8	8.8	
82042	2501	1	KLD018	150.0	160.0	14180	39130		28456	LKO	SN													0.9	3.2					0.9	7.1	
82042	2502	1	KLD018	160.0	170.0	14180	39130		28456	LKO	SN													0.8	6.7					1.0	10	
82042	2503	1	KLD018	170.0	180.0	14180	39130		28456	LKO	SN													0.7	5.7					0.5	9.5	
82042	2504	1	KLD018	180.0	187	14180	39130		28456	LKO	SN													1.1	6.4					1.5	12	

[redacted]

PROJ	SAMP	D HOLE	FROM	TO	ORDER	NORTH	EAST	RL	SIO2	TIO2	AL203	FE203	MGO	K20	P
82042	1149	KL0001	5.0	10.0	25085	3200.0	32500.0		984000		5800	1400	130	500	30
82042	1150	KL0001	10.0	15.0	25085	3200.0	32500.0		985000		3900	800	130		30
82042	1151	KL0001	15.0	20.0	25085	3200.0	32500.0		986000		4300	700	80	280	20
82042	1152	KL0001	20.0	25.0	25085	3200.0	32500.0		987000		3000	1700	70	200	30
82042	1153	KL0001	25.0	30.0	25085	3200.0	32500.0		981000		5700	7000	70	300	70
82042	1154	KL0001	30.0	35.0	25085	3200.0	32500.0		976000		6200	10900	60	300	70
82042	1155	KL0001	35.0	40.0	25085	3200.0	32500.0		988000		2500	800	80	280	30
82042	1156	KL0002	9.0	10.0	25085	4000.0	32500.0		988000		4400	800	70	300	40
82042	1157	KL0002	19.0	24.0	25085	4000.0	32500.0		982000		4300	1700	70	300	30
82042	1158	KL0003	1.0	2.0	25085	4400.0	32500.0		962000		2600	3400	240	390	70
82042	1159	KL0003	16.0	21.0	25085	4400.0	32500.0		984000		4000	2700	120	750	50
82042	1160	KL0004	5.0	6.0	25085	4800.0	32500.0		982000		4100	2900	90	500	60
82042	1161	KL0004	16.0	21.0	25085	4800.0	32500.0		987000		4500	1000	70	300	10
82042	1162	KL0005	5.0	6.0	25085	5600.0	32500.0		948000		37300	2200	90	290	60
82042	1163	KL0006	5.0	6.0	25085	6400.0	32500.0		981000		7700	1000	90	570	30
82042	1164	KL0006	16.0	21.0	25085	6400.0	32500.0		987000		2500	800	90	400	30
82042	1165	KL0007	2.0	3.0	25085	7100.0	32500.0		972000		3300	500	110	290	40
82042	1166	KL0007	12.0	17.0	25085	7100.0	32500.0		978000		5700	1100	90	470	70
82042	1167	KL0008	6.0	7.0	25085	8000.0	32500.0		988000		4100	700	70	290	160
82042	1168	KL0008	16.0	21.0	25085	8000.0	32500.0		985000		4600	600	60	190	60
82042	1169	KL0009	5.0	6.0	25085	9550.0	32600.0		983000		4600	2500	90	500	50
82042	1170	KL0009	16.0	21.0	25085	9550.0	32600.0		982000		3600	4200	130	780	20
82042	1171	KL0010	7.0	8.0	25085	8800.0	32600.0		972000		18900	900	70	300	80
82042	1172	KL0011	2.0	3.0	25085	7200.0	31700.0		964000		10900	11800	90	390	70
82042	1173	KL0011	15.0	20.0	25085	7200.0	31700.0		985000		4200	1100	90	480	30
82042	1174	KL0012	0.0	1.0	25085	7200.0	30900.0		967000		7100	13300	80	900	100
82042	1175	KL0012	10.0	15.0	25085	7200.0	30900.0		966000		7100	13600	120	880	80
82042	1176	KL0013	3.0	4.0	25085	7200.0	30200.0		983000		5500	1800	170	980	70
82042	1177	KL0013	13.0	18.0	25085	7200.0	30200.0		980000		4700	3400	150	1090	30
82042	1178	KL0014	1.0	2.0	25085	7200.0	29400.0		947000		7200	26000	140	1290	110
82042	1179	KL0014	13.0	18.0	25085	7200.0	29400.0		960000		4100	5100	940	1170	70
82042	1180	KL0015	3.0	4.0	25085	7200.0	28600.0		979000		6100	3700	150	1380	300
82042	1181	KL0015	13.0	18.0	25085	7200.0	28600.0		982000		4800	2100	150	990	50
82042	1182	KL0016	3.0	4.0	25085	2400.0	32600.0		955000		29000	3900	150	290	40
82042	1183	KL0016	13.0	18.0	25085	2400.0	32600.0		976000		7700	700	130	100	30
82042	1184	KL0017	16.0	17.0	25085	2400.0	33300.0		857000		92600	15300	150	400	170
82042	1185	KL0018	2.0	3.0	25085	2400.0	34100.0		909000		4500	3600	170	580	50
82042	1186	KL0018	13.0	18.0	25085	2400.0	34100.0		982000		3200	3800	200	590	40
82042	1187	KL0019	1.0	2.0	25085	2400.0	34800.0		980000		8400	1300	130	200	60
82042	1188	KL0019	10.0	14.5	25085	2400.0	34800.0		990000		3500	1300	120	500	40
82042	1189	KL0020	1.0	2.0	25085	2415.0	35470.0		965000		6500	16800	90	100	80
82042	1190	KL0020	10.0	14.5	25085	2415.0	35470.0		990000		3000	1400	90	280	40
82042	1191	KL0021	2.0	3.0	25085	2400.0	37200.0		980000		7200	1500	120	390	60
82042	1192	KL0021	10.0	15.0	25085	2400.0	37200.0		987000		2800	1100	120	460	30
82042	1193	KL0022	5.0	6.0	25085	2400.0	38000.0		984000		3700	1600	80	100	50
82042	1194	KL0022	15.0	20.0	25085	2400.0	38000.0		989000		2100	500	70	100	30
82042	1195	KL0023	7.0	8.0	25085	3200.0	39000.0		905000		66500	13200	100	100	100
82042	1196	KL0023	15.0	20.0	25085	3200.0	39000.0		986000		3900	1000	90	490	60
82042	1197	KL0024	5.0	6.0	25085	4000.0	39000.0		975000		9200	1400	140	370	30
82042	1198	KL0024	10.0	15.0	25085	4000.0	39000.0		985000		5100	900	80	190	70
82042	1199	KLD001	0.0	5.0	25085	5600.0	39000.0		974000		14400	2200	120	190	70
82042	1200	KLD001	5.0	10.0	25085	5600.0	39000.0		980000		7400	1300	170	1270	30
82042	1201	KLD001	10.0	15.0	25085	5600.0	39000.0		981000		5300	2000	120	690	40
82042	1202	KLD001	15.0	20.0	25085	5600.0	39000.0		980000		3200	600	270	300	40
82042	1203	KLD001	20.0	25.0	25085	5600.0	39000.0		988000		2600	500	110	370	40

PROJ	SAMP	D	HOLE	FROM	TO	ORDER	NORTH	EAST	RL	SIO2	TIO2	AL203	FE203	MGO	K20	P
82042	1204		KLD001	25.0	30.0	25085	5600.0	39000.0		986000		3500	700	120	600	20
82042	1205		KLD001	30.0	35.0	25085	5600.0	39000.0		987000		3200	900	130	700	40
82042	1206		KLD001	35.0	40.0	25085	5600.0	39000.0		985000		4200	800	130	600	40
82042	1207		KLD001	40.0	45.0	25085	5600.0	39000.0		983000		5100	2100	110	670	20
82042	1208		KLD001	45.0	50.0	25085	5600.0	39000.0		982000		4200	800	120	700	40
82042	1209		KLD001	50.0	55.0	25085	5600.0	39000.0		982000		6700	1200	120	1180	70
82042	1210		KLD001	55.0	60.0	25085	5600.0	39000.0		982000		7100	700	150	1300	40
82042	1211		KLD001	60.0	65.0	25085	5600.0	39000.0		982000		5200	1000	210	780	50
82042	1212		KLD001	65.0	70.0	25085	5600.0	39000.0		983000		7100	900	150	1150	30
82042	1213		KLD001	70.0	75.0	25085	5600.0	39000.0		979000		7200	700	160	1290	40
82042	1214		KLD001	75.0	80.0	25085	5600.0	39000.0		990000		3900	800	120	670	30
82042	1215		KLD001	80.0	85.0	25085	5600.0	39000.0		976000		10100	2400	320	2270	50
82042	1216		KLD001	85.0	90.0	25085	5600.0	39000.0		958000		16400	2700	390	3340	70
82042	1217		KLD001	90.0	95.0	25085	5600.0	39000.0		959000		17000	3600	410	3690	70
82042	1218		KLD001	95.0	100.0	25085	5600.0	39000.0		894000		45400	6200	930	10300	90
82042	1219		KLD001	100.0	105.0	25085	5600.0	39000.0		965000		15300	1800	480	3200	50
82042	1220		KLD001	105.0	110.0	25085	5600.0	39000.0		964000		15500	1700	480	3240	70
82042	1221		KLD001	110.0	115.0	25085	5600.0	39000.0		952000		20900	2700	670	4050	80
82042	1222		KLD001	115.0	120.0	25085	5600.0	39000.0		914000		42800	2200	3080	5200	180
82042	1223		KLD001	120.0	125.0	25085	5600.0	39000.0		771000		131000	9600	7700	31700	720
82042	1224		KLD002	2.0	10.0	25094	7200.0	28600.0		934000		7300	11600	130	1120	40
82042	1225		KLD002	10.0	20.0	25094	7200.0	28600.0		966000		2600	1700	170	1000	30
82042	1226		KLD002	20.0	30.0	25094	7200.0	28600.0		978000		1200	800	120	630	30
82042	1227		KLD002	30.0	40.0	25094	7200.0	28600.0		978000		2200	1000	140	850	10
82042	1228		KLD002	40.0	50.0	25094	7200.0	28600.0		982000		4500	2000	130	1260	20
82042	1229		KLD002	50.0	60.0	25094	7200.0	28600.0		962000		10400	1200	180	2520	30
82042	1230		KLD002	60.0	70.0	25094	7200.0	28600.0		988000		3300	1000	100	1060	20
82042	1231		KLD002	70.0	78.0	25094	7200.0	28600.0		982000		4600	800	150	1380	30
82042	1232		KLD002	78.0	90.0	25094	7200.0	28600.0		959000		23200	2100	340	5500	40
82042	1233		KLD002	90.0	100.0	25094	7200.0	28600.0		933000		33100	4000	670	9100	90
82042	1234		KLD002	100.0	110.0	25094	7200.0	28600.0		964000		15300	2300	410	3690	50
82042	1235		KLD002	110.0	120.0	25094	7200.0	28600.0		967000		11200	3200	220	2810	50
82042	1236		KLD002	120.0	130.0	25094	7200.0	28600.0		938000		32300	4400	230	4940	130
82042	1237		KLD002	130.0	140.0	25094	7200.0	28600.0		929000		38900	4900	270	3890	120
82042	1238		KLD002	140.0	145.0	25094	7200.0	28600.0		908000		47100	5300	290	3980	130
82042	1239		KLD003	3.0	10.0	25094	4000.0	32500.0		967000		2100	3100	110	500	50
82042	1240		KLD003	10.0	20.0	25094	4000.0	32500.0		951000		600	1600	110	340	40
82042	1241		KLD003	20.0	30.0	25094	4000.0	32500.0		988000		1000	2700	130	400	20
82042	1242		KLD003	30.0	40.0	25094	4000.0	32500.0		992000		100	2100	110	350	20
82042	1243		KLD003	40.0	50.0	25094	4000.0	32500.0		993000		100	2100	110	360	20
82042	1244		KLD003	50.0	60.0	25094	4000.0	32500.0		984000		200	2900	100	380	30
82042	1245		KLD003	60.0	69.0	25094	4000.0	32500.0		985000		800	2900	110	510	20
82042	1246		KLD003	69.0	80.0	25094	4000.0	32500.0		981000		3500	3900	180	1160	30
82042	1247		KLD003	80.0	90.0	25094	4000.0	32500.0		982000		6000	3600	220	1640	30
82042	1248		KLD003	90.0	100.0	25094	4000.0	32500.0		975000		6700	2400	410	1810	50
82042	1249		KLD003	100.0	110.0	25094	4000.0	32500.0		972000		5500	3000	270	1580	40
82042	1250		KLD003	110.0	120.0	25094	4000.0	32500.0		974000		14100	4000	200	3690	40
82042	1251		KLD003	120.0	130.0	25094	4000.0	32500.0		965000		18100	1800	550	4310	50
82042	1252		KLD003	130.0	140.0	25094	4000.0	32500.0		961000		19600	3700	450	4870	40
82042	1253		KLD003	140.0	150.0	25094	4000.0	32500.0		956000		21700	2900	600	5400	40
82042	1254		KLD003	150.0	160.0	25094	4000.0	32500.0		958000		24600	3300	590	5700	50
82042	1255		KLD003	160.0	170.0	25094	4000.0	32500.0		964000		21500	1900	560	5500	60
82042	1256		KLD003	170.0	180.0	25094	4000.0	32500.0		975000		11000	2900	540	2590	40
82042	1257		KLD003	180.0	190.0	25094	4000.0	32500.0		946000		33700	2800	450	8900	100
82042	1258		KLD003	190.0	203.0	25094	4000.0	32500.0		925000		47000	3400	610	12300	100

[redacted]

PROJ	SAMP	D	HOLE	FROM	TO	ORDER	NORTH	EAST	RL	SIO2	TIO2	AL2O3	FE2O3	MGO	K2O	P
82042	1259		KLD004	0.0	10.0	25094	2400.0	34800.0		984000		4500	400	80	100	40
82042	1260		KLD004	10.0	20.0	25094	2400.0	34800.0		995000		400	300	100	250	20
82042	1261		KLD004	20.0	30.0	25094	2400.0	34800.0		995000		< 100	200	100	180	20
82042	1262		KLD004	30.0	40.0	25094	2400.0	34800.0		997000		200	200	100	180	10
82042	1263		KLD004	40.0	50.0	25094	2400.0	34800.0		992000		200	200	80	140	20
82042	1264		KLD004	50.0	60.0	25094	2400.0	34800.0		994000		600	400	80	250	30
82042	1265		KLD004	60.0	70.0	25094	2400.0	34800.0		991000		5000	600	170	1160	30
82042	1266		KLD004	70.0	80.0	25094	2400.0	34800.0		993000		4100	1000	140	880	20
82042	1267		KLD004	80.0	90.0	25094	2400.0	34800.0		990000		8000	600	170	1200	30
82042	1268		KLD004	90.0	100.0	25094	2400.0	34800.0		984000		6100	800	210	1480	20
82042	1269		KLD004	100.0	110.0	25094	2400.0	34800.0		994000		6500	900	190	1450	30
82042	1270		KLD004	110.0	120.0	25094	2400.0	34800.0		937000		41100	3500	520	10400	80
82042	1271		KLD004	120.0	130.0	25094	2400.0	34800.0		965000		17000	2600	260	3950	60
82042	1272		KLD004	130.0	140.0	25094	2400.0	34800.0		964000		23300	1400	290	4770	90
82042	1273		KLD004	140.0	150.0	25094	2400.0	34800.0		958000		19000	900	240	2790	60
82042	1274		KLD004	150.0	160.0	25094	2400.0	34800.0		961000		25500	1900	220	2890	60
82042	1275		KLD004	160.0	170.0	25094	2400.0	34800.0		975000		21300	1900	130	2230	90
82042	1276		KLD004	170.0	180.0	25094	2400.0	34800.0		966000		16800	1600	200	3850	80
82042	1277		KLD004	180.0	190.0	25094	2400.0	34800.0		925000		42400	4600	190	5900	150
82042	1278		KLD004	190.0	200.0	25094	2400.0	34800.0		930000		35100	5200	220	5800	160
82042	1279		KLD006	123.0	130.0	25094	5690.0	41800.0		984000		2500	2200	1920	150	390
82042	1280		KLD006	130.0	140.0	25094	5690.0	41800.0		989000		500	1900	1230	40	610
82042	1281		KLD006	140.0	150.0	25094	5690.0	41800.0		986000		2000	2300	2270	60	130
82042	1282		KLD006	150.0	160.0	25094	5690.0	41800.0		975000		5300	2400	3830	290	100
82042	1283		KLD006	160.0	170.0	25094	5690.0	41800.0		979000		3000	2000	3650	60	110
82042	1284		KLD006	170.0	180.0	25094	5690.0	41800.0		964000		10700	10900	8100	50	100
82042	1285		KLD006	180.0	190.0	25094	5690.0	41800.0		954000		11300	13300	8600	80	160
82042	1286		KLD006	190.0	200.0	25094	5690.0	41800.0		928000		19500	16500	15900	< 10	130
82042	1287		KLD006	200.0	210.0	25094	5690.0	41800.0		985000		2800	5500	3600	30	70
82042	1288		KLD006	210.0	220.0	25094	5690.0	41800.0		984000		2200	4100	2690	90	40
82042	1289		KLD006	220.0	230.0	25094	5690.0	41800.0		935000		17900	20500	11000	20	210
82042	1290		KLD006	230.0	240.0	25094	5690.0	41800.0		840000		46900	42000	30600	60	320
82042	1291		KLD006	240.0	250.0	25094	5690.0	41800.0		966000		13900	8000	2890	2230	190
82042	1292		KLD006	250.0	264.0	25094	5690.0	41800.0		943000		35600	3100	570	9200	120
82042	1293					25094				994000		1100	700	240	110	40
82042	1294		KLD008	151.5	160.0	25094	4392.0	41870.0		977000		2500	1600	3610	< 10	120
82042	1295		KLD008	160.0	170.0	25094	4392.0	41870.0		988000		2400	1800	3290	30	10
82042	1296		KLD008	170.0	180.0	25094	4392.0	41870.0		982000		2000	2500	3260	20	30
82042	1297		KLD008	180.0	190.0	25094	4392.0	41870.0		973000		2100	2500	3200	20	70
82042	1298		KLD008	190.0	200.0	25094	4392.0	41870.0		991000		2500	2000	3400	30	120
82042	1299		KLD008	200.0	210.0	25094	4392.0	41870.0		985000		2100	2000	3090	20	110
82042	1300		KLD008	210.0	220.0	25094	4392.0	41870.0		995000		2600	2200	3890	< 10	80
82042	1501		KLD008	220.0	230.0	25094	4392.0	41870.0		981000		2400	2600	3620	< 10	50
82042	1502		KLD008	230.0	240.0	25094	4392.0	41870.0		603000		98500	99100	48600	5300	620
82042	1503		KLD008	240.0	250.0	25094	4392.0	41870.0		442000		140000	135000	67400	10000	920
82042	1504		KLD008	250.0	260.0	25094	4392.0	41870.0		833000		50500	39100	22200	2230	270
82042	1505		KLD008	260.0	270.0	25094	4392.0	41870.0		896000		36000	22700	17200	3090	200
82042	1506		KLD008	270.0	280.0	25094	4392.0	41870.0		549000		142000	101000	69600	10200	940
82042	1507		KLD008	280.0	290.0	25094	4392.0	41870.0		805000		114000	14000	6000	19100	470
82042	1508		KLD008	290.0	300.0	25094	4392.0	41870.0		742000		151000	8600	9600	30600	420
82042	1509		KLD008	300.0	310.0	25094	4392.0	41870.0		716000		149000	18600	22900	27700	360
82042	1510		KLD008	310.0	320.0	25094	4392.0	41870.0		694000		151000	23700	31600	36700	390
82042	1511		KLD008	320.0	333.0	25094	4392.0	41870.0		712000		147000	11100	16900	58300	410
82042	1971	1	KLD018	0	10	28456	14180	39130		570000		156000	116000	33900	23900	460
82042	1972	1	KLD018	10.0	20.0	28456	14180	39130		993000		2900	1900	100	740	40

PROJ	SAMP	D	HOLE	FROM	TO	ORDER	NORTH	EAST	RL	SIO2	TIO2	AL203	FE203	MGO	K20	P
82042	1973	1	KLD018	20.0	30.0	28456	14180	39130		991000		3100	3700	100	880	30
82042	1974	1	KLD018	30.0	40.0	28456	14180	39130		955000		25700	5800	3950	3260	60
82042	1975	1	KLD018	40.0	50.0	28456	14180	39130		982000		9700	4000	1390	1390	50
82042	1976	1	KLD018	50.0	60.0	28456	14180	39130		988000		6300	2900	590	1080	50
82042	1977	1	KLD018	60.0	70.0	28456	14180	39130		992000		3500	3100	200	950	30
82042	1978	1	KLD018	70.0	80.0	28456	14180	39130		988000		4200	5400	100	1090	50
82042	1979	1	KLD018	80.0	90.0	28456	14180	39130		987000		4500	5600	100	1280	50
82042	1980	1	KLD018	90.0	100.0	28456	14180	39130		989000		4000	4700	100	1100	50
82042	1981	1	KLD018	100.0	110.0	28456	14180	39130		992000		3200	2900	100	940	50
82042	1982	1	KLD018	110.0	120.0	28456	14180	39130		986000		3500	7800	100	1110	60
82042	1983	1	KLD018	120.0	130.0	28456	14180	39130		984000		6900	5600	100	1880	60
82042	1984	1	KLD018	130.0	140.0	28456	14180	39130		978000		7100	11800	100	1990	40
82042	1985	1	KLD018	140.0	150.0	28456	14180	39130		985000		5800	5900	100	1980	50
82042	1986	1	KLD016	0	10	28456	15040	28490		978000		11700	2700	200	2470	50
82042	1987	1	KLD016	10.0	20.0	28456	15040	28490		976000		15300	2600	300	5300	50
82042	1988	1	KLD016	20.0	30.0	28456	15040	28490		975000		15700	2900	300	4930	70
82042	1989	1	KLD016	30.0	40.0	28456	15040	28490		972000		16700	4400	300	4530	100
82042	1990	1	KLD016	40.0	50.0	28456	15040	28490		960000		23200	7900	390	6600	120
82042	1991	1	KLD016	50.0	60.0	28456	15040	28490		971000		18900	2800	490	5000	90
82042	1992	1	KLD016	60.0	70.0	28456	15040	28490		934000		44800	4400	600	13000	250
82042	1993	1	KLD016	70.0	80.0	28456	15040	28490		912000		58600	6900	2090	16900	210
82042	1994	1	KLD016	80.0	81	28456	15040	28490		649000		216000	21900	6900	74300	850
82042	1995	1	KLD017	0	10	28456	16480	28830		973000		17700	1600	680	4870	50
82042	1996	1	KLD017	10.0	20.0	28456	16480	28830		945000		34900	2000	790	7100	60
82042	1997	1	KLD017	20.0	30.0	28456	16480	28830		977000		16200	1100	400	3470	40
82042	1998	1	KLD017	30.0	40.0	28456	16480	28830		972000		13300	2500	2980	2480	70
82042	1999	1	KLD017	40.0	50.0	28456	16480	28830		982000		11500	800	500	2680	120
82042	2000	1	KLD017	50.0	57	28456	16480	28830		928000		49400	2500	1190	13800	120
82042	2501	1	KLD018	150.0	160.0	28456	14180	39130		977000		6400	4500	200	2150	30
82042	2502	1	KLD018	160.0	170.0	28456	14180	39130		962000		25100	4700	300	6300	70
82042	2503	1	KLD018	170.0	180.0	28456	14180	39130		971000		14900	7200	200	5500	90
82042	2504	1	KLD018	180.0	187	28456	14180	39130		948000		29600	14100	200	6800	110

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PROJ	SAMP	D	HOLE	FROM	TO	ORDER	NORTH	EAST	SI02	TI02	AL203	FE203	FEO	MNO	MGO	CAO	NA20	K20	LOI	S	P205	CR	SN	BAO	CE	S03	HG	CD	SE	TE	V	B	SB	W	NB	TA
82042	1928		KLP009	19	20		17800	29180																	25											
82042	1929		KLP009	29	30		17800	29180																	20											
82042	1930		KLP009	35	36		17800	29180																	35											
82042	2118	a	KLD015	113.1	113.2	26681	14250	28450	507000	11400	208000	73700	51000		74500	5400	(100	37200	79100	(100	3030			100	20											
82042	2119	a	KLD015	120.0	120.1	26681	14250	28450	485000	9500	216000	98600	72000		24500	80900	14300	41000	24000	500	3270			500	(20											
82042	2120	a	KLD015	150.7	150.8	26681	14250	28450	673000	3600	161000	33400	27000		7300	31100	27800	48000	10600	(100	750			2100	25											
82042	2121	a	KLD015	158.7	158.8	26681	14250	28450	700000	2800	148000	28000	23000		5900	30200	28100	41500	12900	200	630			1100	45											
82042	2123	Q	KLD016	97.2	97.3	26681	15040	28490	503000	10400	202000	109000	87000		15900	78000	25800	32000	15100	1200	3920			400	65											
82042	2124	Q	KLD016	101.7	101.8	26681	15040	28490	496000	12000	199000	135000	120000		30000	63400	22500	15800	19300	(100	4440			700	(20											
82042	2125	Q	KLD016	149.5	149.6	26681	15040	28490	500000	9700	240000	64800	52000		15900	110000	25300	12600	16100	100	3180			300	(20											
82042	2126	a	KLD011	120.2	120.3	26681	15750	29270	491000	7900	237000	65000	49000		20500	103000	18800	25600	27300	100	2150			300	(20											
82042	2128	a	KLD011	139.4	139.5	26681	15750	29270	664000	3800	160000	41500	34000		14600	21400	28900	38300	19500	(100	950			1200	(20											
82042	2129	a	KLD011	176.1	176.2	26681	15750	29270	525000	8900	206000	98400	80000		11600	70200	37900	20400	11800	200	2330			500	(20											
82042	2130	a	KLD013	81.8	81.9	26681	16135	28485	625000	5400	169000	53100	26000		15300	42000	17300	49100	18300	200	1540			2100	30											
82042	2131	a	KLD013	84.6	84.7	26681	16135	28485	727000	2000	140000	25300	19000		10000	1600	3000	57100	30800	(100	410			900	65											
82042	2132	a	KLD014	140.5	140.6	26681	15670	29640	583000	9100	171000	78100	61000		25800	51600	23000	31400	21200	500	2500			1100	95											
82042	2133	Q	KLD016	81.7	81.8	26681	15040	28490	582000	10100	221000	56700	3400		16900	6800	700	55800	43700	100	4620			100	100											
82042	2134	Q	KLD016	87.8	87.9	26681	15040	28490	473000	8800	243000	54900	23000		76600	4600	500	55200	78200	200	2300			600	220											
82042	2135	a	KLD014	122.0	122.1	26681	15670	29640	575000	9300	178000	76000	61000		35400	34700	21100	36200	28400	300	2540			1600	30											
82042	2136	a	KLD017	252.2	252.3	26681	16470	28820	546000	6400	111000	99400	89000		122000	43800	5100	22200	36700	200	1050			1400	65											
82042	2137	a	KLD017	147.2	147.3	26681	16470	28820	644000	5100	165000	46200	35000		10700	44400	28100	36800	15700	200	1470			2100	95											
82042	2138	a	KLD017	96.1	96.2	26681	16470	28820	598000	8100	171000	70900	55000		18800	56200	25200	29500	16400	600	2150			1300	65											
82042	2139	a	KLD017	263.0	263.1	26681	16470	28820	654000	6500	166000	57800	51000		32200	2200	1600	41000	36900	300	440			600	100											
82042	582		KLD011	86.3	86.4	28460	15750.0	29270.0														280	(5				(10	(1	(10	(10	60	2900	(5	(10	14	(10
82042	583		KLD012	139.1	139.2	28460	16110.0	28750.0														95	15				(10	(1	(10	(10	(10	1300	(5	(10	6	(10
82042	584		KLD011	123.3	123.4	28460	15750.0	29270.0														45	(5				(10	(1	(10	(10	50	2850	(5	(10	8	(10
82042	585		KLD012	143.0	144.0	28460	16110.0	28750.0														300	25				(10	(1	(10	(10	90	2550	(5	(10	6	(10
82042	586		KLD012	144.0	145.0	28460	16110.0	28750.0														300	5				(10	(1	(10	(10	30	1600	(5	(10	8	(10
82042	587		KLD012	145.0	146.0	28460	16110.0	28750.0														220	30				(10	(1	(10	(10	30	1800	(5	(10	4	(10
82042	588		KLD017	65.9	66.0	28460	16470.0	28820.0														110	(5				(10	(1	(10	(10	70	2850	(5	(10	4	(10
82042	589		KLD017	122.0	123.0	28460	16470.0	28820.0														120	(5				(10	(1	(10	(10	140	1900	(5	(10	34	(10
82042	590		KLD017	123.0	124.0	28460	16470.0	28820.0														60	(5				(10	(1	(10	(10	30	1100	(5	(10	56	(10
82042	591		KLD018	209.1	209.2	28460	14180.0	39130.0														55	(5				(10	(1	(10	(10	60	1800	(5	(10	10	(10
82042	594		KLD19	33.2	33.4	28460																85	15				(10	(1	(10	(10	340	1900	(5	40	10	(10
82042	595		KLD19	36.7	36.8	28460																75	10				(10	(1	(10	(10	230	3900	(5	(10	(2	(10
82042	2153		KLD020	2.0	3.0	28465																	10														
82042	2154		KLD020	3.0	4.0	28465																	(5														
82042	2155		KLD020	4.0	5.0	28465																	5														
82042	2156		KLD020	5.0	6.0	28465																	5														
82042	2157		KLD020	6.0	7.0	28465																	5														
82042	2158		KLD020	7.0	8.0	28465																	(5														
82042	2159		KLD020	8.0	9.0	28465																	(5														
82042	2160		KLD020	9.0	10.0	28465																	(5														
82042	2161		KLD017	58.0	58.1	28465	16470	28820														10					(10	(1	(10	(10	10	60	(5			
82042	2162		KLD017	59.0	59.1	28465	16470	28820														25					(10	(1	(10	(10	20	50	(5			
82042	2163		KLD017	61.1	61.2	28465	16470	28820														5					(10	(1	(10	(10	30	120	(5			
82042	2164		KLD017	62.1	62.2	28465	16470	28820														10					(10	(1	(10	(10	30	150	(5			
82042	2165		KLD017	60.5	60.6	28465	16470	28820														10					(10	(1	(10	(10	(10	120	(5			
82042	2166		KLD017	66.2	66.3	28465	16470	28820														15					(10	(1	(10	(10	40	310	(5			
82042	2167		KLD017	70.0	70.1	28465	16470	28820														10					(10	(1	(10	(10	40	270	(5			
82042	2168		KLD017	74.1	74.2	28465	16470	28820														20					(10	(1	(10	(10	10	70	(5			
82042	2169		KLD017	80.0	80.1	28465	16470	28820														15					(10	(1	(10	(10	40	60	(5			
82042	2170		KLD017	84.3	84.4	28465	16470	28820														15					(10	(1	(10	(10	30	50	(5			
82042	2171		KLD017	240.0	240.1	28465	16470	28820															(5														
82042	2172		KLD017	241.0	241.1	28465	16470	28820															(5														

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PROJ	SAMP	D HOLE	FROM	TO	ORDER	NORTH	EAST	SIO2	TIO2	AL2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	LOI	S	P2O5	CR	SN	BAO	CE	SO3	HG	CD	SE	TE	V	B	SB	W	NB	TA
82042	2173	KLD017	243.3	243.4	28465	16470	28820															<5													
82042	2174	KLD017	244.0	244.1	28465	16470	28820															<5													
82042	2175	KLD017	245.0	245.1	28465	16470	28820															<5													
82042	2176	KLD017	246.0	246.2	28465	16470	28820															<5													
82042	2177	KLD017	247.0	247.1	28465	16470	28820															<5													
82042	2178	KLD017	248.1	248.2	28465	16470	28820															<5													
82042	2179	KLD017	249.1	249.2	28465	16470	28820															<5													
82042	2180	KLD017	250.3	250.4	28465	16470	28820															<5													
82042	2181	KLD017	242.1	242.2	28465	16470	28820															<5													

PROJ	SAMP	D	ORDER	NORTH	EAST	SIO2	TIO2	AL2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	LOI	LA	S	P	BA	P2O5	CE	CR	LI
82042	2701		28688	613715	332320	541000		147000	140000						75700		75				600			
82042	2702		28688	613747	332136	614000		126000	124000						54900		70				880			
82042	2703		28688	613450	331934	557000		96100	263000						7700		65				1310			
82042	2704		28688	613476	332240	546000		174000	151000						6800		75				690			
82042	2705		28688	613535	332507	504000		213000	83200						7500		150				1150			
82042	2706		28688	610624	344981	510000		267000	73200						6900		100				430			
82042	2707		28688	610635	344980	789000		55800	91400						27800		40				260			
82042	2708		28688	613462	345967	576000		210000	59500						31500		60				840			
82042	2709		28688	613747	346120	634000		116000	123000						8600		45				290			
82042	2710		28688	613475	332300	545000		154000	130000						90500		55				420			
82042	2711		28688	613747	346120	563000		137000	136000						50300		75				810			

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	593	28460		610935.00	344420.00	10.00				
82042	2322	28685		608843.40	337324.50	5.00				
82042	2323	28685		609038.50	337481.20	2.00				
82042	2324	28685		608463.40	337693.90	5.00				
82042	2325	28685		608641.70	337846.30	<1				
82042	2326	28685		608318.40	338106.80	5.00				
82042	2331	28685		606513.90	341576.70	<1				
82042	2332	28685		606622.10	341729.60	<1				
82042	2333	28685		605907.50	341861.10	<1				
82042	2334	28685		605897.90	341736.40	<1				
82042	2335	28685		605440.60	341984.30	<1				
82042	2336	28685		605453.30	341852.20	<1				
82042	2337	28685		605026.90	342149.30	<1				
82042	2338	28685		605025.80	342062.70	1.00				
82042	2374	26702		0.00		72.00				
82042	2375	26702		0.00		17.00				
82042	2376	26702		0.00		5.00				
82042	2377	26702		0.00		1.00				
82042	2378	26702		0.00		1.00				
82042	2379	26702		0.00		12.00				
82042	2380	26702		0.00		<1				
82042	2381	26702		0.00		8.00				
82042	2382	26702		0.00		15.00				
82042	2383	26702		602551.00	342206.70	<1				
82042	2384	26702		602517.40	342274.80	<1				
82042	2385	26702		602406.90	342391.50	<1				
82042	2386	26702		602335.90	342406.80	<1				
82042	2387	26702		602255.40	342449.10	<1				
82042	2388	26702		602537.30	342233.50	<1				
82042	2389	26702		602505.00	342301.40	<1				
82042	2390	26702		602472.60	342346.50	<1				
82042	2391	26702		602384.70	342420.60	<1				
82042	2392	26702		602306.70	342430.20	<1				
82042	2393	26702		602230.20	342453.00	<1				
82042	2394	26702		602525.60	342255.10	<1				
82042	2395	26702		602485.30	342324.20	12.00				
82042	2396	26702		602457.20	342365.10	<1				
82042	2397	26702		602335.60	342407.50	<1				
82042	2398	26702		602287.70	342444.20	<1				
82042	2399	26702		602196.10	342451.60	<1				
82042	2400	26702		602084.50	342460.80	<1				
82042	2484	26702		608053.60	338581.10	<1				
82042	2485	26702		608255.70	338657.50	11.00				
82042	2486	26702		607990.90	339130.60	<1				
82042	2487	26702		607806.10	339064.20	9.00				
82042	2488	26702		607574.90	339496.80	3.00				
82042	2489	26702		607743.40	339597.40	6.00				
82042	2490	26702		607558.60	340113.70	<1				
82042	2491	26702		607367.40	340113.30	7.00				
82042	2492	26702		607056.90	340762.10	1.00				
82042	2493	26702		607249.00	340880.10	<1				
82042	2494	26702		606981.00	341358.20	<1				
82042	2495	26702		606773.30	341281.20	<1				
82042	2527	26702		610650.00	344600.00	3.00				
82042	2528	26702		610675.00	344600.00	1.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	2529	26702		610700.00	344600.00	<1				
82042	2530	26702		610725.00	344600.00	<1				
82042	2531	26702		610750.00	344600.00	2.00				
82042	2532	26702		610500.00	344800.00	<1				
82042	2533	26702		610525.00	344800.00	<1				
82042	2534	26702		610550.00	344800.00	1.00				
82042	2535	26702		610575.00	344800.00	<1				
82042	2536	26702		613729.80	331941.10	<1				
82042	2537	26702		613706.20	331941.10	<1				
82042	2538	26702		613678.10	331941.90	<1				
82042	2539	26702		613655.50	331940.90	<1				
82042	2540	26702		613627.60	331941.70	2.00				
82042	2541	26702		613603.50	331941.40	1.00				
82042	2542	26702		613580.20	331942.40	1.00				
82042	2543	26702		613551.80	331941.90	4.00				
82042	2544	26702		613524.70	331941.70	<1				
82042	2545	26702		613501.30	331942.20	1.00				
82042	2546	26702		613476.50	331942.50	<1				
82042	2547	26702		613453.60	331942.70	<1				
82042	2548	26702		613729.40	332140.10	1.00				
82042	2549	26702		613704.50	332140.10	<1				
82042	2550	26702		613679.10	332139.90	<1				
82042	2551	26702		613653.80	332139.60	<1				
82042	2552	26702		613629.10	332139.20	<1				
82042	2553	26702		613603.30	332139.40	7.00				
82042	2554	26702		613576.90	332137.70	1.00				
82042	2555	26702		613550.80	332138.00	1.00				
82042	2556	26702		613526.90	332137.70	<1				
82042	2557	26702		613501.60	332138.00	<1				
82042	2558	26702		613478.70	332138.20	<1				
82042	2559	26702		613453.10	332137.50	<1				
82042	2560	26702		613727.80	332333.40	<1				
82042	2561	26702		613704.20	332335.10	<1				
82042	2562	26702		613676.90	332336.20	<1				
82042	2563	26702		613652.00	332335.70	<1				
82042	2564	26702		613625.60	332334.00	<1				
82042	2565	26702		613601.30	332334.70	4.00				
82042	2566	26702		613574.90	332334.50	2.00				
82042	2567	26702		613550.00	332333.70	3.00				
82042	2568	26702		613521.90	332333.30	<1				
82042	2569	26702		613499.60	332333.80	<1				
82042	2570	26702		613473.90	332332.80	5.00				
82042	2571	26702		613449.80	332333.30	<1				
82042	2572	26702		613724.70	332540.20	<1				
82042	2573	26702		613700.60	332539.90	<1				
82042	2574	26702		613677.00	332539.90	1.00				
82042	2575	26702		613650.60	332539.20	6.00				
82042	2576	26702		613625.00	332538.20	1.00				
82042	2577	26702		613600.10	332537.70	17.00				
82042	2578	26702		613574.70	332537.20	3.00				
82042	2579	26702		613550.60	332537.20	2.00				
82042	2580	26702		613523.70	332536.50	4.00				
82042	2581	26702		613497.60	332536.30	3.00				
82042	2582	26702		613472.50	332535.80	13.00				
82042	2583	26702		613448.90	332534.00	3.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	2584	26710		611035.80	332470.90	<1				
82042	2585	26710		611057.80	332481.40	<1				
82042	2586	26710		611079.60	332493.60	4.00				
82042	2587	26710		611100.60	332505.40	1.00				
82042	2588	26710		611123.10	332518.10	<1				
82042	2589	26710		611144.40	332530.10	<1				
82042	2590	26710		611167.60	332543.30	1.00				
82042	2591	26710		611189.10	332554.60	<1				
82042	2592	26710		611209.10	332566.10	2.00				
82042	2593	26710		611231.20	332579.60	<1				
82042	2594	26710		611252.20	332592.60	2.00				
82042	2595	26710		611274.70	332604.10	1.00				
82042	2596	26710		611296.90	332616.10	<1				
82042	2597	26710		611316.90	332625.60	<1				
82042	2598	26710		610942.10	332642.20	<1				
82042	2599	26710		610964.60	332654.10	<1				
82042	2600	26710		610984.60	332666.40	<1				
82042	2801	26702		610540.00	343400.00	1.00				
82042	2802	26702		610565.00	343400.00	3.00				
82042	2803	26702		610590.00	343400.00	<1				
82042	2804	26702		610615.00	343400.00	<1				
82042	2805	26702		610640.00	343400.00	<1				
82042	2806	26702		610665.00	343400.00	1.00				
82042	2807	26702		610690.00	343400.00	<1				
82042	2808	26702		610715.00	343400.00	<1				
82042	2809	26702		610740.00	343400.00	3.00				
82042	2810	26702		610765.00	343400.00	1.00				
82042	2811	26702		610890.00	343400.00	1.00				
82042	2812	26702		610915.00	343400.00	<1				
82042	2813	26702		610940.00	343400.00	<1				
82042	2814	26702		610530.00	343600.00	<1				
82042	2815	26702		610555.00	343600.00	<1				
82042	2816	26702		610580.00	343600.00	<1				
82042	2817	26702		610605.00	343600.00	<1				
82042	2818	26702		610630.00	343600.00	<1				
82042	2819	26702		610655.00	343600.00	1.00				
82042	2820	26702		610680.00	343600.00	<1				
82042	2821	26702		610705.00	343600.00	2.00				
82042	2822	26702		610730.00	343600.00	<1				
82042	2823	26702		610755.00	343600.00	<1				
82042	2824	26702		610780.00	343600.00	<1				
82042	2825	26702		610805.00	343600.00	<1				
82042	2826	26702		610520.00	343800.00	<1				
82042	2827	26702		610545.00	343800.00	<1				
82042	2828	26702		610570.00	343800.00	<1				
82042	2829	26702		610595.00	343800.00	<1				
82042	2830	26702		610620.00	343800.00	<1				
82042	2831	26702		610645.00	343800.00	20.00				
82042	2832	26702		610670.00	343800.00	<1				
82042	2833	26702		610695.00	343800.00	<1				
82042	2834	26702		610720.00	343800.00	<1				
82042	2835	26702		610845.00	343800.00	<1				
82042	2836	26702		610870.00	343800.00	2.00				
82042	2837	26702		610895.00	343800.00	2.00				
82042	2838	26702		610510.00	344000.00	<1				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	2839	26702		610535.00	344000.00	<1				
82042	2840	26702		610560.00	344000.00	<1				
82042	2841	26702		610585.00	344000.00	<1				
82042	2842	26702		610610.00	344000.00	<1				
82042	2843	26702		610635.00	344000.00	<1				
82042	2844	26702		610660.00	344000.00	<1				
82042	2845	26702		610685.00	344000.00	<1				
82042	2846	26702		610710.00	344000.00	1.00				
82042	2847	26702		610735.00	344000.00	<1				
82042	2848	26702		610760.00	344000.00	1.00				
82042	2849	26702		610885.00	344000.00	<1				
82042	2850	26702		610910.00	344000.00	<1				
82042	2851	26702		610935.00	344000.00	1.00				
82042	2852	26702		610960.00	344000.00	<1				
82042	2853	26702		610985.00	344000.00	3.00				
82042	2854	26702		611010.00	344000.00	<1				
82042	2855	26702		611035.00	344000.00	<1				
82042	2856	26702		610500.00	344200.00	<1				
82042	2857	26702		610525.00	344200.00	<1				
82042	2858	26702		610550.00	344200.00	<1				
82042	2859	26702		610575.00	344200.00	<1				
82042	2860	26702		610600.00	344200.00	<1				
82042	2861	26702		610625.00	344200.00	<1				
82042	2862	26702		610650.00	344200.00	1.00				
82042	2863	26702		610675.00	344200.00	<1				
82042	2864	26702		610700.00	344200.00	<1				
82042	2865	26702		610725.00	344200.00	2.00				
82042	2866	26702		610750.00	344200.00	<1				
82042	2867	26702		610775.00	344200.00	<1				
82042	2868	26702		610800.00	344200.00	<1				
82042	2869	26702		610825.00	344200.00	<1				
82042	2870	26702		610850.00	344200.00	1.00				
82042	2871	26702		610875.00	344200.00	<1				
82042	2872	26702		610500.00	344400.00	<1				
82042	2873	26702		610525.00	344400.00	<1				
82042	2874	26702		610550.00	344400.00	<1				
82042	2875	26702		610575.00	344400.00	<1				
82042	2876	26702		610600.00	344400.00	<1				
82042	2877	26702		610625.00	344400.00	<1				
82042	2878	26702		610650.00	344400.00	1.00				
82042	2879	26702		610675.00	344400.00	<1				
82042	2880	26702		610700.00	344400.00	<1				
82042	2881	26702		610725.00	344400.00	<1				
82042	2882	26702		610750.00	344400.00	<1				
82042	2883	26702		610775.00	344400.00	<1				
82042	2884	26702		610800.00	344400.00	<1				
82042	2885	26702		610825.00	344400.00	<1				
82042	2886	26702		610850.00	344400.00	<1				
82042	2887	26702		610875.00	344400.00	1.00				
82042	2888	26702		610900.00	344400.00	<1				
82042	2889	26702		610925.00	344400.00	2.00				
82042	2890	26702		610950.00	344400.00	1.00				
82042	2891	26702		610975.00	344400.00	<1				
82042	2892	26702		611000.00	344400.00	2.00				
82042	2893	26702		611025.00	344400.00	<1				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	2894	26702		611050.00	344400.00	<1				
82042	2895	26702		610500.00	344600.00	2.00				
82042	2896	26702		610525.00	344600.00	<1				
82042	2897	26702		610550.00	344600.00	1.00				
82042	2898	26702		610575.00	344600.00	<1				
82042	2899	26702		610600.00	344600.00	<1				
82042	2900	26702		610625.00	344600.00	3.00				
82042	2901	26702		602163.30	342448.50	<1				
82042	2902	26702		602059.60	342444.40	<1				
82042	2903	26702		601984.30	342447.70	<1				
82042	2904	26702		601865.90	342442.50	<1				
82042	2905	26702		601778.00	342433.60	<1				
82042	2906	26702		601685.80	342414.50	<1				
82042	2907	26702		601536.40	342428.90	<1				
82042	2908	26702		601436.80	342426.80	<1				
82042	2909	26702		602132.00	342454.90	<1				
82042	2910	26702		602035.10	342440.50	<1				
82042	2911	26702		601937.00	342447.70	<1				
82042	2912	26702		601831.50	342427.40	<1				
82042	2913	26702		601747.20	342432.70	<1				
82042	2914	26702		601655.30	342415.10	<1				
82042	2915	26702		601592.90	342422.40	<1				
82042	2916	26702		601503.10	342427.00	<1				
82042	2917	26702		601403.70	342426.70	<1				
82042	2918	26702		601360.90	342415.60	<1				
82042	2919	26702		602102.00	342458.80	<1				
82042	2920	26702		602009.10	342436.70	<1				
82042	2921	26702		601899.70	342449.90	<1				
82042	2922	26702		601802.30	342429.50	<1				
82042	2923	26702		601713.80	342418.40	<1				
82042	2924	26702		601569.20	342424.70	<1				
82042	2925	26702		601619.50	342418.30	<1				
82042	2926	26702		601470.30	342427.40	<1				
82042	2927	26702		601386.10	342410.00	<1				
82042	2928	26702		601338.30	342418.00	<1				
82042	2929	26702		602572.00	342186.60	1.00				
82042	2930	26702		602638.10	342192.10	<1				
82042	2931	26702		602711.60	342176.30	<1				
82042	2932	26702		601263.50	342424.80	<1				
82042	2933	26702		602745.80	342144.20	<1				
82042	2934	26702		602675.70	342201.50	<1				
82042	2935	26702		602603.70	342182.30	<1				
82042	2936	26702		601314.60	342422.50	<1				
82042	2937	26702		601239.00	342418.40	<1				
82042	2938	26702		601189.90	342417.80	<1				
82042	2939	26702		601154.80	342405.00	<1				
82042	2940	26702		601294.60	342422.60	<1				
82042	2941	26702		601213.20	342423.20	<1				
82042	2942	26702		601169.90	342415.90	<1				
82042	2943	26702		601137.80	342401.80	<1				
82042	2944	26702		601105.70	342384.90	4.00				
82042	2945	26710		611005.10	332679.40	2.00				
82042	2946	26710		611028.10	332692.10	1.00				
82042	2947	26710		611049.60	332702.60	1.00				
82042	2948	26710		611072.90	332714.40	<1				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	2949	26710		611094.40	332726.40	<1				
82042	2950	26710		611115.60	332737.90	<1				
82042	2951	26710		611139.60	332749.10	<1				
82042	2952	26710		611162.60	332761.10	<1				
82042	2953	26710		610849.40	332818.70	1.00				
82042	2954	26710		610869.60	332828.40	2.00				
82042	2955	26710		610890.60	332840.20	1.00				
82042	2956	26710		610911.90	332851.40	<1				
82042	2957	26710		610934.60	332862.70	1.00				
82042	2958	26710		610955.60	332874.20	1.00				
82042	2959	26710		610976.60	332886.70	1.00				
82042	2960	26710		610998.10	332898.40	<1				
82042	3001	28479	K7	613477.80	332433.40	3.00				
82042	3002	28479	K7	613502.80	332433.40	5.00				
82042	3003	28479	K7	613477.80	332233.40	4.00				
82042	3004	28479	K7	613727.80	332433.40	4.00				
82042	3005	28479	K7	613652.80	332633.40	3.00				
82042	3006	28479	K7	613627.80	332233.40	2.00				
82042	3007	28479	K7	613702.80	332533.40	3.00				
82042	3008	28479	K7	613702.80	332133.40	2.00				
82042	3009	28479	K7	613252.80	332633.40	3.00				
82042	3010	28479	K7	613702.80	332633.40	2.00				
82042	3011	28479	K7	613577.80	332433.40	4.00				
82042	3012	28479	K7	613627.80	332333.40	5.00				
82042	3013	28479	K7	613452.80	332433.40	4.00				
82042	3014	28479	K7	613377.80	332633.40	5.00				
82042	3015	28479	K7	613502.80	332133.40	3.00				
82042	3016	28479	K7	613277.80	332633.40	2.00				
82042	3017	28479	K7	613452.80	332133.40	2.00				
82042	3018	28479	K7	613602.80	332433.40	7.00				
82042	3019	28479	K7	613727.80	332133.40	6.00				
82042	3020	28479	K7	613427.80	332433.40	3.00				
82042	3021	28479	K7	613577.80	332433.40	6.00				
82042	3022	28479	K7	613602.80	332733.40	3.00				
82042	3023	28479	K7	613727.80	332533.40	3.00				
82042	3024	28479	K7	613427.80	332633.40	6.00				
82042	3025	28479	K7	613677.80	332633.40	5.00				
82042	3026	28479	K7	613727.80	332333.40	12.00				
82042	3027	28479	K7	613727.80	332733.40	4.00				
82042	3028	28479	K7	613652.80	332433.40	4.00				
82042	3029	28479	K7	613402.80	332633.40	3.00				
82042	3030	28479	K7	613502.80	332533.40	6.00				
82042	3031	28479	K7	613427.80	332533.40	4.00				
82042	3032	28479	K7	613677.80	332533.40	3.00				
82042	3033	28479	K7	613727.80	332133.40	4.00				
82042	3034	28479	K7	613602.80	332533.40	8.00				
82042	3035	28479	K7	613627.80	332133.40	5.00				
82042	3036	28479	K7	613527.80	332633.40	4.00				
82042	3037	28479	K7	613602.80	332333.40	8.00				
82042	3038	28479	K7	613427.80	332133.40	4.00				
82042	3039	28479	K7	613552.80	332333.40	6.00				
82042	3040	28479	K7	613627.80	332533.40	2.00				
82042	3041	28479	K7	613502.80	332333.40	2.00				
82042	3042	28479	K7	613602.80	332633.40	2.00				
82042	3043	28479	K7	613702.80	332233.40	2.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3044	28479	K7	613602.80	332633.40	6.00				
82042	3045	28479	K7	613577.80	332233.40	5.00				
82042	3046	28479	K7	613677.80	332133.40	3.00				
82042	3047	28479	K7	613302.80	332633.40	4.00				
82042	3048	28479	K7	613577.80	332533.40	4.00				
82042	3049	28479	K7	613502.80	332633.40	4.00				
82042	3050	28479	K7	613677.80	332233.40	3.00				
82042	3051	28479	K7	613652.80	332333.40	4.00				
82042	3052	28479	K7	613702.80	332333.40	8.00				
82042	3053	28479	K7	613652.80	332733.40	3.00				
82042	3054	28479	K7	613627.80	332633.40	3.00				
82042	3055	28479	K7	613577.80	332733.40	2.00				
82042	3056	28479	K7	613627.80	332733.40	2.00				
82042	3057	28479	K7	613577.80	332633.40	2.00				
82042	3058	28479	K7	613727.80	332633.40	2.00				
82042	3059	28479	K7	613527.80	332733.40	2.00				
82042	3060	28479	K7	613727.80	332233.40	2.00				
82042	3061	28479	K7	613527.80	332533.40	2.00				
82042	3062	28479	K7	613552.80	332133.40	3.00				
82042	3063	28479	K7	613452.80	332633.40	7.00				
82042	3064	28479	K7	613227.80	332633.40	3.00				
82042	3065	28479	K7	613527.80	332333.40	2.00				
82042	3066	28479	K7	613477.80	332533.40	7.00				
82042	3067	28479	K7	613677.80	332433.40	2.00				
82042	3068	28479	K7	613702.80	332433.40	2.00				
82042	3069	28479	K7	613677.80	332333.40	2.00				
82042	3070	28479	K7	613452.80	332333.40	1.00				
82042	3071	28479	K7	613727.80	332733.40	2.00				
82042	3072	28479	K7	613702.80	332733.40	3.00				
82042	3073	28479	K7	613677.80	332733.40	5.00				
82042	3074	28479	K7	613502.80	332233.40	2.00				
82042	3075	28479	K7	613527.80	332233.40	2.00				
82042	3076	28479	K7	613552.80	332233.40	4.00				
82042	3077	28479	K7	613652.80	332233.40	4.00				
82042	3078	28479	K7	613327.80	332633.40	3.00				
82042	3079	28479	K7	613477.80	332633.40	3.00				
82042	3080	28479	K7	613652.80	332133.40	4.00				
82042	3081	28479	K7	613452.80	332233.40	2.00				
82042	3082	28479	K7	613477.80	332133.40	2.00				
82042	3083	28479	K7	613577.80	332133.40	3.00				
82042	3084	28479	K7	613427.80	332233.40	2.00				
82042	3085	28479	K7	613502.80	332733.40	3.00				
82042	3086	28479	K7	613627.80	332433.40	5.00				
82042	3087	28479	K7	613552.80	332733.40	2.00				
82042	3088	28479	K7	613527.80	332433.40	4.00				
82042	3089	28479	K7	613602.80	332233.40	2.00				
82042	3090	28479	K7	613527.80	332133.40	2.00				
82042	3091	28479	K7	613602.80	332133.40	2.00				
82042	3092	28479	K7	613552.80	332433.40	3.00				
82042	3093	28479	K7	613452.80	332533.40	3.00				
82042	3094	28479	K7	613552.80	332533.40	3.00				
82042	3095	28479	K7	613427.80	332333.40	2.00				
82042	3096	28479	K7	613352.80	332633.40	2.00				
82042	3097	28479	K7	613477.80	332333.40	1.00				
82042	3098	28479	K7	613577.80	332333.40	4.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3099	28479	K7	613652.80	332533.40	3.00				
82042	3100	28479	K7	613552.80	332633.40	2.00				
82042	3101	28479	K7	613727.80	332833.40	2.00				
82042	3102	28479	K7	613652.80	332833.40	2.00				
82042	3103	28479	K7	613302.80	332833.40	1.00				
82042	3104	28479	K7	613227.80	332733.40	1.00				
82042	3105	28479	K7	613452.80	333333.40	2.00				
82042	3106	28479	K7	613502.80	333333.40	1.00				
82042	3107	28479	K7	613527.80	333333.40	1.00				
82042	3108	28479	K7	613552.80	333333.40	1.00				
82042	3109	28479	K7	613727.80	333133.40	1.00				
82042	3110	28479	K7	613702.80	333333.40	2.00				
82042	3111	28479	K7	613677.80	333333.40	<1				
82042	3112	28479	K7	613352.80	333333.40	1.00				
82042	3113	28479	K7	613602.80	333133.40	1.00				
82042	3114	28479	K7	613402.80	332933.40	1.00				
82042	3115	28479	K7	613677.80	332933.40	2.00				
82042	3116	28479	K7	613477.80	333133.40	1.00				
82042	3117	28479	K7	613227.80	332833.40	2.00				
82042	3118	28479	K7	613452.80	332833.40	2.00				
82042	3119	28479	K7	613452.80	332933.40	1.00				
82042	3120	28479	K7	613602.80	332933.40	2.00				
82042	3121	28479	K7	613627.80	332933.40	3.00				
82042	3122	28479	K7	613477.80	332733.40	1.00				
82042	3123	28479	K7	613527.80	332833.40	3.00				
82042	3125	28479	K7	613652.80	333133.40	2.00				
82042	3126	28479	K7	613652.80	333333.40	2.00				
82042	3127	28479	K7	613627.80	333133.40	4.00				
82042	3128	28479	K7	613277.80	333333.40	5.00				
82042	3129	28479	K7	613677.80	332833.40	5.00				
82042	3130	28479	K7	613702.80	333133.40	4.00				
82042	3131	28479	K7	613327.80	332833.40	3.00				
82042	3132	28479	K7	613227.80	333133.40	3.00				
82042	3133	28479	K7	613402.80	333133.40	2.00				
82042	3134	28479	K7	613402.80	332733.40	3.00				
82042	3135	28479	K7	613527.80	333133.40	2.00				
82042	3136	28479	K7	613602.80	333333.40	3.00				
82042	3137	28479	K7	613327.80	333333.40	2.00				
82042	3138	28479	K7	613227.80	332833.40	1.00				
82042	3139	28479	K7	613477.80	332933.40	2.00				
82042	3140	28479	K7	613577.80	332833.40	3.00				
82042	3141	28479	K7	613427.80	333133.40	2.00				
82042	3142	28479	K7	613502.80	332933.40	2.00				
82042	3143	28479	K7	613477.80	333333.40	2.00				
82042	3144	28479	K7	613352.80	332733.40	2.00				
82042	3145	28479	K7	613327.80	332733.40	2.00				
82042	3146	28479	K7	613577.80	333333.40	2.00				
82042	3147	28479	K7	613252.80	333333.40	5.00				
82042	3148	28479	K7	613702.80	332833.40	3.00				
82042	3149	28479	K7	613227.80	332933.40	2.00				
82042	3150	28479	K7	613427.80	332833.40	3.00				
82042	3151	28479	K7	613252.80	332833.40	3.00				
82042	3152	28479	K7	613352.80	333133.40	2.00				
82042	3153	28479	K7	613577.80	332933.40	2.00				
82042	3154	28479	K7	613252.80	333133.40	1.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3155	28479	K7	613402.80	332833.40	2.00				
82042	3156	28479	K7	613252.80	332933.40	2.00				
82042	3157	28479	K7	613427.80	332933.40	2.00				
82042	3158	28479	K7	613527.80	332933.40	2.00				
82042	3159	28479	K7	613227.80	333133.40	2.00				
82042	3160	28479	K7	613327.80	332933.40	<1				
82042	3161	28479	K7	613327.80	333133.40	2.00				
82042	3162	28479	K7	613602.80	332833.40	<1				
82042	3163	28479	K7	613402.80	333333.40	<1				
82042	3164	28479	K7	613427.80	333333.40	2.00				
82042	3165	28479	K7	613627.80	332833.40	<1				
82042	3166	28479	K7	613352.80	332933.40	<1				
82042	3167	28479	K7	613427.80	332733.40	1.00				
82042	3168	28479	K7	613277.80	332933.40	<1				
82042	3169	28479	K7	613377.80	332833.40	4.00				
82042	3170	28479	K7	613552.80	332833.40	3.00				
82042	3171	28479	K7	613302.80	332933.40	3.00				
82042	3172	28479	K7	613352.80	332833.40	2.00				
82042	3173	28479	K7	613277.80	332733.40	3.00				
82042	3174	28479	K7	613377.80	333133.40	3.00				
82042	3175	28479	K7	613702.80	332933.40	3.00				
82042	3176	28479	K7	613302.80	333133.40	3.00				
82042	3177	28479	K7	613552.80	332933.40	3.00				
82042	3178	28479	K7	613377.80	332733.40	3.00				
82042	3179	28479	K7	613677.80	333133.40	2.00				
82042	3180	28479	K7	613377.80	332933.40	2.00				
82042	3181	28479	K7	613502.80	332833.40	2.00				
82042	3182	28479	K7	613277.80	332833.40	3.00				
82042	3183	28479	K7	613377.80	333333.40	3.00				
82042	3184	28479	K7	613302.80	333333.40	2.00				
82042	3185	28479	K7	613727.80	332933.40	3.00				
82042	3186	28479	K7	613252.80	332733.40	2.00				
82042	3187	28479	k7	613652.80	332933.40	2.00				
82042	3188	28479	K7	613552.80	333133.40	2.00				
82042	3189	28479	K7	613302.80	332733.40	2.00				
82042	3190	28479	K7	613277.80	333133.40	2.00				
82042	3191	28479	K7	613502.80	333133.40	2.00				
82042	3193	28479	K7	613627.80	333333.40	2.00				
82042	3194	28479	K7	613227.80	333333.40	1.00				
82042	3195	28479	K7	613577.80	333133.40	2.00				
82042	3196	28479	K7	613452.80	332733.40	2.00				
82042	3197	28479	K7	613452.80	333133.40	2.00				
82042	3198	28479	k7	613577.80	332158.40					
82042	3199	28479	K7	613227.80	333333.40	4.00				
82042	3200	28479	K7	613477.80	332833.40	3.00				
82042	3201	28479	K13	662820.00	335925.00	4.00				
82042	3202	28479	K13	662820.00	335500.00	2.00				
82042	3203	28479	K13	662770.00	335550.00	3.00				
82042	3204	28479	K13	662670.00	335550.00	2.00				
82042	3205	28479	K13	662745.00	335750.00	5.00				
82042	3206	28479	K13	662470.00	335550.00	3.00				
82042	3207	28479	K13	662620.00	335950.00	2.00				
82042	3208	28479	K13	662420.00	335550.00	1.00				
82042	3209	28479	K13	662570.00	335550.00	<1				
82042	3210	28479	K13	662420.00	335675.00	3.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3211	28479	K13	662645.00	335550.00	2.00				
82042	3212	28479	K13	662620.00	335700.00	2.00				
82042	3213	28479	K13	662470.00	335750.00	2.00				
82042	3214	28479	K13	662720.00	335950.00	2.00				
82042	3215	28479	K13	662420.00	335650.00	4.00				
82042	3216	28479	K13	662545.00	335950.00	4.00				
82042	3217	28479	K13	662420.00	335625.00	3.00				
82042	3218	28479	K13	662620.00	335875.00	4.00				
82042	3219	28479	K13	662820.00	335625.00	3.00				
82042	3220	28479	K13	662820.00	335425.00	3.00				
82042	3221	28479	K13	662695.00	335950.00	2.00				
82042	3222	28479	K13	662670.00	335950.00	3.00				
82042	3223	28479	K13	662695.00	335550.00	5.00				
82042	3224	28479	K13	662745.00	335550.00	3.00				
82042	3225	28479	K13	662595.00	335750.00	3.00				
82042	3226	28479	K13	662420.00	335700.00	3.00				
82042	3227	28479	K13	662620.00	335925.00	4.00				
82042	3228	28479	K13	662820.00	335475.00	3.00				
82042	3229	28479	K13	662420.00	335600.00	3.00				
82042	3230	28479	K13	662645.00	335950.00	3.00				
82042	3232	28479	K13	662320.00	335750.00	3.00				
82042	3233	28479	K13	662745.00	335950.00	3.00				
82042	3234	28479	K13	662820.00	335700.00	3.00				
82042	3235	28479	K13	662495.00	335550.00	2.00				
82042	3236	28479	K13	662770.00	335750.00	6.00				
82042	3237	28479	K13	662820.00	335650.00	2.00				
82042	3238	28479	K13	662670.00	335750.00	4.00				
82042	3239	28479	K13	662820.00	335900.00	7.00				
82042	3240	28479	K13	662795.00	335750.00	8.00				
82042	3241	28479	K13	662470.00	335550.00	3.00				
82042	3242	28479	K13	662345.00	335750.00	2.00				
82042	3243	28479	K13	662620.00	335625.00	1.00				
82042	3244	28479	K13	662420.00	335725.00	3.00				
82042	3245	28479	K13	662820.00	335525.00	2.00				
82042	3246	28479	K13	662370.00	335750.00	2.00				
82042	3247	28479	K13	662820.00	335675.00	8.00				
82042	3248	28479	K13	662620.00	335725.00	6.00				
82042	3249	28479	K13	662795.00	335550.00	3.00				
82042	3250	28479	K13	662620.00	335750.00	5.00				
82042	3251	28479	K13	662620.00	335675.00	2.00				
82042	3252	28479	K13	662420.00	335575.00	3.00				
82042	3253	28479	K13	662820.00	335725.00	2.00				
82042	3254	28479	K13	662620.00	335900.00	2.00				
82042	3255	28479	K13	662820.00	335575.00	3.00				
82042	3256	28479	K13	662820.00	335950.00	5.00				
82042	3257	28479	K13	662395.00	335750.00	3.00				
82042	3258	28479	K13	662820.00	335750.00	5.00				
82042	3259	28479	K13	662820.00	335850.00	4.00				
82042	3260	28479	K13	662695.00	335750.00	3.00				
82042	3261	28479	K13	662820.00	335550.00	2.00				
82042	3262	28479	K13	662820.00	335600.00	3.00				
82042	3263	28479	K13	662370.00	335550.00	3.00				
82042	3264	28479	K13	662820.00	335450.00	1.00				
82042	3265	28479	K13	662545.00	335550.00	1.00				
82042	3266	28479	K13	662445.00	335750.00	1.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3267	28479	K13	662620.00	335600.00	2.00				
82042	3268	28479	K13	662820.00	335800.00	1.00				
82042	3269	28479	K13	662620.00	335575.00	1.00				
82042	3270	28479	K13	662495.00	335750.00	2.00				
82042	3271	28479	K13	662645.00	335750.00	2.00				
82042	3272	28479	K13	662820.00	335550.00	1.00				
82042	3273	28479	K13	662820.00	335875.00	4.00				
82042	3274	28479	K13	662595.00	335950.00	2.00				
82042	3275	28479	K13	662795.00	335950.00	2.00				
82042	3276	28479	K13	662820.00	335750.00	3.00				
82042	3277	28479	K13	662620.00	335850.00	2.00				
82042	3278	28479	K13	662570.00	335750.00	2.00				
82042	3279	28479	K13	662420.00	335750.00	2.00				
82042	3280	28479	K13	662620.00	335650.00	1.00				
82042	3281	28479	K13	662720.00	335750.00	2.00				
82042	3282	28479	K13	662345.00	335550.00	3.00				
82042	3283	28479	K13	662520.00	335950.00	2.00				
82042	3284	28479	K13	662820.00	335825.00	2.00				
82042	3285	28479	K13	662820.00	335775.00	3.00				
82042	3286	28479	K13	662720.00	335550.00	2.00				
82042	3287	28479	K13	662445.00	335550.00	2.00				
82042	3288	28479	K13	662545.00	335750.00	1.00				
82042	3289	28479	K13	662620.00	335550.00	1.00				
82042	3290	28479	K13	662320.00	335550.00	3.00				
82042	3291	28479	K13	662620.00	335800.00	2.00				
82042	3292	28479	K13	662520.00	335750.00	3.00				
82042	3293	28479	K13	662620.00	335825.00	2.00				
82042	3294	28479	K13	662570.00	335950.00	1.00				
82042	3295	28479	K13	662620.00	335800.00	3.00				
82042	3296	28479	K13	662620.00	335775.00	4.00				
82042	3297	28479	K13	662395.00	335550.00	3.00				
82042	3298	28479	K13	662595.00	335550.00	4.00				
82042	3299	28479	K13	662770.00	335950.00	4.00				
82042	3300	28479	K13	662520.00	335550.00	2.00				
82042	3301	28479	k14	663824.12	335993.97	5.00				
82042	3302	28479	k13	662695.00	335350.00	4.00				
82042	3303	28479	k14	663857.06	336028.44	2.00				
82042	3304	28479	k13	662620.00	335350.00	2.00				
82042	3305	28479	K7	613577.80	332383.40	4.00				
82042	3306	28479	K7	613577.80	332708.40	2.00				
82042	3307	28479	k13	662620.00	335425.00	2.00				
82042	3308	28479	K7	613577.80	332883.40	3.00				
82042	3309	28479	k13	662395.00	335350.00	2.00				
82042	3310	28479	k14	623967.47	335887.82	8.00				
82042	3311	28479	k13	662420.00	335450.00	4.00				
82042	3312	28479	K7	613577.80	332783.40	2.00				
82042	3313	28479	k13	662370.00	335350.00	3.00				
82042	3314	28479	k14	664088.98	336180.07	5.00				
82042	3315	28479	k13	662420.00	335525.00	3.00				
82042	3316	28479	K7	613577.80	332608.40	5.00				
82042	3317	28479	k13	662795.00	335350.00	4.00				
82042	3318	28479	k14	663711.35	335933.53	4.00				
82042	3319	28479	K7	613577.80	332458.40	4.00				
82042	3320	28479	k14	663670.46	335968.28	3.00				
82042	3321	28479	k14	664153.60	336266.42	3.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3322	28479	K14	663872.00	335901.00	4.00				
82042	3323	28479	k13	662420.00	335400.00	5.00				
82042	3324	28479	k14	664061.04	335991.64	6.00				
82042	3325	28479	k14	663667.67	335915.50	3.00				
82042	3326	28479	K7	613577.80	332683.40	5.00				
82042	3327	28479	K7	613577.80	332858.40	4.00				
82042	3328	28479	k14	664017.02	336124.91	2.00				
82042	3329	28479	k13	662345.00	335350.00	3.00				
82042	3330	28479	k13	662645.00	335350.00	2.00				
82042	3331	28479	k14	663923.95	336089.79	2.00				
82042	3332	28479	k14	664169.40	336037.62	8.00				
82042	3333	28479	k14	664280.12	336113.47	3.00				
82042	3334	28479	k14	664316.27	336121.41	2.00				
82042	3335	28479	K7	613577.80	332583.40	5.00				
82042	3336	28479	k14	663814.46	335919.25	4.00				
82042	3337	28479	k14	664206.71	336068.43	7.00				
82042	3338	28479	k13	662820.00	335375.00	6.00				
82042	3339	28479	k13	662620.00	335400.00	4.00				
82042	3340	28479	K7	613577.80	332658.40	4.00				
82042	3341	28479	k13	662420.00	335475.00	4.00				
82042	3342	28479	k13	662620.00	335450.00	3.00				
82042	3343	28479	k14	664048.95	335961.81	2.00				
82042	3344	28479	K7	613577.80	332758.40	2.00				
82042	3345	28479	k14	664060.74	336032.68	3.00				
82042	3346	28479	k13	662595.00	335350.00	4.00				
82042	3347	28479	k13	662620.00	335375.00	3.00				
82042	3348	28479	K7	613577.80	332908.40					
82042	3349	28479	k13	662745.00	335350.00	5.00				
82042	3350	28479	k14	663750.36	335945.16	2.00				
82042	3351	28479	k14	663929.63	335856.52	4.00				
82042	3352	28479	K7	613577.80	332808.40	3.00				
82042	3353	28479	k13	662620.00	335525.00	3.00				
82042	3354	28479	k14	663714.99	335981.49	1.00				
82042	3355	28479	k14	664108.41	336050.59	3.00				
82042	3356	28479	k13	662420.00	335500.00	2.00				
82042	3357	28479	k13	662545.00	335350.00	3.00				
82042	3358	28479	k14	663827.81	335889.14	2.00				
82042	3359	28479	K7	613577.80	332558.40	4.00				
82042	3360	28479	K7	613577.80	332483.40	6.00				
82042	3361	28479	k13	662320.00	335350.00	3.00				
82042	3362	28479	k14	663968.00	336111.83	2.00				
82042	3363	28479	k14	664092.97	336222.99	3.00				
82042	3364	28479	k13	662620.00	335500.00	2.00				
82042	3365	28479	k14	663828.30	335991.82	4.00				
82042	3366	28479	k13	662520.00	335350.00	4.00				
82042	3367	28479	k13	662470.00	335350.00	3.00				
82042	3368	28479	K7	613577.80	332208.40	2.00				
82042	3369	28479	K7	613577.80	332183.40	2.00				
82042	3370	28479	k14	664189.90	336287.69	2.00				
82042	3371	28479	k14	664231.67	336308.80	3.00				
82042	3372	28479	k13	662670.00	335350.00	8.00				
82042	3373	28479	K7	613577.80	332408.40	7.00				
82042	3374	28479	k14	664275.10	336318.28	3.00				
82042	3375	28479	k13	662620.00	335475.00	2.00				
82042	3376	28479	k13	662495.00	335350.00	3.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3377	28479	k13	662445.00	335350.00	3.00				
82042	3378	28479	k14	663886.16	335871.21	5.00				
82042	3379	28479	k14	664125.79	336244.88	5.00				
82042	3380	28479	k14	663746.36	335996.38	4.00				
82042	3381	28479	K7	613577.80	332508.40	4.00				
82042	3382	28479	k13	662820.00	335350.00	3.00				
82042	3383	28479	k14	663872.57	335901.59	2.00				
82042	3384	28479	k13	662420.00	335375.00	3.00				
82042	3385	28479	k14	664020.92	335933.23	3.00				
82042	3386	28479	k13	662420.00	335425.00	2.00				
82042	3387	28479	K7	613577.80	332258.40	2.00				
82042	3388	28479	k14	664246.02	336090.37	4.00				
82042	3389	28479	k14	663885.91	336060.01	2.00				
82042	3390	28479	k14	663790.10	335947.70	2.00				
82042	3391	28479	k13	662620.00	335350.00	3.00				
82042	3392	28479	k13	662820.00	335400.00	6.00				
82042	3393	28479	k13	662570.00	335350.00	3.00				
82042	3394	28479	k14	663840.61	335857.52	<1				
82042	3395	28479	k14	663997.12	335904.02	2.00				
82042	3396	28479	k14	663898.24	335832.07	2.00				
82042	3397	28479	k14	664125.88	336008.01	1.00				
82042	3398	28479	k13	662770.00	335350.00	4.00				
82042	3399	28479	k14	664076.94	336135.13	4.00				
82042	3400	28479	k13	662420.00	335350.00	3.00				
82042	3401	28479	K10/11	664470.43	330146.83	2.00				
82042	3402	28479	K10/11	665053.44	330250.56	5.00				
82042	3403	28479	k7	613577.80	332308.40	4.00				
82042	3404	28479	K10/11	665045.38	330384.98	3.00				
82042	3405	28479	K10/11	664388.95	329944.46	2.00				
82042	3406	28479	K10/11	664717.30	330331.99	2.00				
82042	3407	28479	K10/11	664276.93	329738.26	2.00				
82042	3408	28479	K10/11	664912.61	330237.32	1.00				
82042	3409	28479	K10/11	664838.85	330462.88	2.00				
82042	3409	28479	K10/11	665045.57	330382.96	2.00				
82042	3410	28479	K10/11	664725.41	330525.05	1.00				
82042	3411	28479	K10/11	664473.88	330325.45	2.00				
82042	3412	28479	K10/11	664820.08	330632.37	3.00				
82042	3413	28479	K10/11	663997.02	329806.10	2.00				
82042	3414	28479	K10/11	664595.96	330277.10	2.00				
82042	3415	28479	K10/11	664752.63	330414.71	4.00				
82042	3416	28479	K10/11	664369.33	329810.15	2.00				
82042	3417	28479	K10/11	664040.87	329675.86	2.00				
82042	3418	28479	K10/11	664346.58	329782.66	3.00				
82042	3419	28479	K10/11	664561.20	330120.10	3.00				
82042	3420	28479	K10/11	664923.36	330572.27	3.00				
82042	3421	28479	K10/11	665019.76	330533.28	2.00				
82042	3422	28479	K10/11	664745.53	330556.40	3.00				
82042	3423	28479	K10/11	664824.07	330606.57	3.00				
82042	3424	28479	K10/11	664908.37	330280.24	3.00				
82042	3425	28479	K10/11	664995.84	330559.95	3.00				
82042	3426	28479	K10/11	664560.03	330088.42	2.00				
82042	3427	28479	K10/11	664458.83	329919.64	4.00				
82042	3428	28479	K10/11	664413.16	329859.13	2.00				
82042	3429	28479	K10/11	665037.76	330422.98	2.00				
82042	3430	28479	K10/11	664158.42	329797.57	10.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3431	28479	K10/11	664643.74	330230.31	3.00				
82042	3432	28479	K10/11	664419.63	330415.74	7.00				
82042	3433	28479	K10/11	664113.38	329792.92	8.00				
82042	3434	28479	K10/11	664908.06	330278.24	4.00				
82042	3435	28479	K10/11	664523.60	330276.58	4.00				
82042	3436	28479	K10/11	664202.79	329719.16	4.00				
82042	3437	28479	K10/11	664947.84	330127.73	3.00				
82042	3438	28479	K10/11	664239.33	329723.31	2.00				
82042	3439	28479	K10/11	664460.78	330089.49	5.00				
82042	3440	28479	K10/11	664643.00	330230.00	3.00				
82042	3441	28479	K10/11	664766.32	330645.11	4.00				
82042	3442	28479	K10/11	665059.91	330284.09	2.00				
82042	3443	28479	K10/11	664859.98	330597.65	2.00				
82042	3444	28479	K10/11	664448.64	330349.39	2.00				
82042	3445	28479	K10/11	664684.95	330497.61	3.00				
82042	3446	28479	K10/11	664077.82	329548.10	3.00				
82042	3447	28479	K10/11	664475.51	330227.22	7.00				
82042	3448	28479	K10/11	665064.91	330353.16	4.00				
82042	3449	28479	K10/11	664501.14	329993.34	3.00				
82042	3450	28479	K10/11	664542.70	330058.50	2.00				
82042	3451	28479	K10/11	664368.42	329915.90	4.00				
82042	3452	28479	K10/11	664407.92	329978.86	3.00				
82042	3453	28479	K10/11	664630.32	330309.26	5.00				
82042	3454	28479	K10/11	664174.45	329688.32	5.00				
82042	3455	28479	K10/11	664644.29	330489.31	3.00				
82042	3456	28479	K10/11	665068.23	330321.59	3.00				
82042	3457	28479	K10/11	664556.10	330090.30	2.00				
82042	3458	28479	K10/11	664553.54	330250.98	1.00				
82042	3459	28479	K10/11	664788.38	330434.49	1.00				
82042	3460	28479	K10/11	664479.56	329963.55	<1				
82042	3461	28479	K10/11	664906.38	330331.90	1.00				
82042	3462	28479	K10/11	664526.50	330470.57	4.00				
82042	3463	28479	K10/11	664059.36	329788.31	3.00				
82042	3464	28479	K10/11	665021.85	330493.70	5.00				
82042	3465	28479	K10/11	664275.23	329834.21	7.00				
82042	3466	28479	K10/11	664875.81	330421.46	4.00				
82042	3467	28479	K10/11	664894.65	330374.56	3.00				
82042	3468	28479	K10/11	664562.98	330481.26	2.00				
82042	3469	28479	K10/11	664799.56	330664.22	4.00				
82042	3470	28479	K10/11	664274.79	329835.99	5.00				
82042	3471	28479	K10/11	664603.07	330487.07	3.00				
82042	3472	28479	K10/11	664430.64	329885.27	2.00				
82042	3473	28479	K10/11	664340.56	329884.54	4.00				
82042	3474	28479	K10/11	664930.73	330191.44	4.00				
82042	3475	28479	K10/11	664767.70	330598.25	3.00				
82042	3476	28479	K10/11	664387.06	329836.53	3.00				
82042	3477	28479	k7	613577.80	332358.40	5.00				
82042	3478	28479	k10/11	664428.57	330379.97	3.00				
82042	3479	28479	k10/11	664962.05	330564.53	2.00				
82042	3479	28479	k10/11	664927.46	330190.29	2.00				
82042	3480	28479	k10/11	664520.98	330023.68	2.00				
82042	3481	28479	k10/11	664203.00	329719.00	2.00				
82042	3482	28479	k10/11	664497.09	330300.06	3.00				
82042	3483	28479	k10/11	664240.73	329822.95	7.00				
82042	3484	28479	k10/11	664723.67	330379.61	2.00				

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3485	28479	k10/11	664697.97	330293.57	2.00				
82042	3486	28479	k10/11	664672.73	330257.85	2.00				
82042	3487	28479	K10/11	664441.82	330038.22	3.00				
82042	3488	28479	k7	613577.80	332283.40	2.00				
82042	3489	28479	k10/11	664455.67	330436.77	2.00				
82042	3490	28479	k10/11	664493.21	330449.70	2.00				
82042	3491	28479	k10/11	664653.91	330399.90	2.00				
82042	3492	28479	k10/11	664576.71	330164.17	2.00				
82042	3493	28479	k10/11	664646.94	330349.02	2.00				
82042	3494	28479	k10/11	664332.52	329753.90	2.00				
82042	3495	28479	k10/11	664887.28	330584.22	2.00				
82042	3496	28479	k10/11	664605.19	330200.04	<1				
82042	3497	28479	k10/11	664200.99	329811.60	14.00				
82042	3498	28479	k10/11	665037.50	330456.97	2.00				
82042	3499	28479	k10/11	664309.77	329855.29	3.00				
82042	3500	28479	k10/11	664310.84	329729.15	2.00				
82042	3601	28479	k13	662670.00	335575.00	4.00			3.000	<2
82042	3602	28479	k13	662495.00	335750.00	2.00			<2	<2
82042	3603	28479	k13	662620.00	335750.00	3.00			5.000	5.00
82042	3604	28479	k13	662720.00	335750.00	2.00			2.000	3.00
82042	3605	28479	k13	662545.00	335925.00	3.00			3.000	2.00
82042	3606	28479	k13	662620.00	335640.00	3.00			2.000	<2
82042	3607	28479	k13	662620.00	335350.00	3.00			6.000	2.00
82042	3608	28479	k13	662420.00	335425.00	4.00			3.000	2.00
82042	3609	28479	k13	662370.00	335750.00	5.00			<2	2.00
82042	3610	28479	k13	662420.00	335550.00	3.00			5.000	4.00
82042	3611	28479	k13	662545.00	335350.00	5.00			2.000	8.00
82042	3612	28479	k13	662320.00	335375.00	1.00			<2	<2
82042	3613	28479	k13	662370.00	335475.00	4.00			>2	4.00
82042	3614	28479	k13	662320.00	335600.00	<1			3.000	2.00
82042	3615	28479	k10/11	663860.65	335783.40	<1			<2	4.00
82042	3616	28479	k10/11	663862.55	335780.07	5.00			<2	<2
82042	3617	28479	k10/11	664108.28	336012.08	1.00			2.000	<2
82042	3618	28479	k10/11	664108.28	336012.08	5.00			3.000	8.00
82042	3619	28479	k10/11	664084.18	336012.12	2.00			4.000	6.00
82042	3620	28479	k10/11	664077.17	336091.58	50.00			<2	4.00
82042	3621	28479	k10/11	664079.16	336134.06	6.00			<2	<2
82042	3622	28479	k10/11	664231.46	336310.07	2.00			<2	4.00
82042	3623	28479	k10/11	663823.42	335995.50	6.00			<2	3.00
82042	3624	28479	k10/11	664448.87	330331.76	3.00			<2	3.00
82042	3625	28479	k10/11	664447.09	330407.58	1.00			<2	6.00
82042	3626	28479	k10/11	664758.46	330494.83	<1			<2	<2
82042	3627	28479	k10/11	664942.24	330484.09	5.00			<2	<2
82042	3628	28479	k10/11	664962.12	330352.83	4.00			<2	7.00
82042	3629	28479	k10/11	664717.29	330331.73	<1			6.000	3.00
82042	3630	28479	k10/11	664825.41	330609.55	<1			<2	2.00
82042	3631	28479	k10/11	665069.03	330323.33	<1			3.000	2.00
82042	3632	28479	k10/11	664386.55	329836.04	<1			<2	<2
82042	3633	28479	k10/11	664330.56	329755.22	<1			3.000	<2
82042	3634	28479	k10/11	664672.00	330257.00	4.00			2.000	<2
82042	3635	28479	k10/11	664078.00	329548.00	2.00			2.000	3.00
82042	3636	28479	k1	610520.00	343450.00	5.00			4.000	5.00
82042	3637	28479	k1	610610.00	343430.00	1.00			2.000	4.00
82042	3638	28479	k1	610730.00	343400.00	4.00			5.000	8.00
82042	3639	28479	k1	610710.00	343710.00	275.00			15.000	79.0

PROJ	SAMP	ORDER	ANOMALY	NORTH	EAST	AU (PPB)	U308	TH	PT	PD
82042	3640	28479	k1	610250.00	343520.00	5.00			8.000	7.00
82042	3642	28479	k7	613590.00	332260.00	7.00			2.000	4.00
82042	3643	28479	k7	613570.00	332300.00	3.00			<2	<2
82042	3644	28479	k7	613760.00	332640.00	2.00			<2	2.00
82042	3645	28479	k7	613945.00	331945.00	2.00			4.000	7.00
82042	3646	28479	k7	613780.00	332025.00	1.00			<2	<2
82042	3647	28479	k7	613780.00	332025.00	1.00			2.000	<2
82042	3648	28479	k7	613730.00	332235.00	1.00			3.000	6.00
82042	3649	28479	k7	613625.00	332235.00	<1			<2	<2
82042	3650	28479	k7	613430.00	332265.00	1.00			3.000	5.00
82042	3651	28479	k7	613460.00	332535.00	1.00			<2	4.00
82042	3652	28479	k7	613520.00	332725.00	3.00			3.000	6.00
82042	3653	28479	k7	613520.00	332725.00	2.00			2.000	6.00
82042	3654	28479	k7	613550.00	332600.00	3.00			7.000	10.0
82042	3655	28479	k7	613455.00	332735.00	<1			<2	2.00

P[redacted]MP E[redacted]EET NO[redacted] EAST[redacted]LOC ORDER AREA HWD SO FLOW BANK CONT SITE DERIV SIEVE COL KGS BY SRAT AU[redacted]

82042	2201	625852.7	335082.9	1.900
82042	2202	625792.0	335042.7	7.500
82042	2203	625918.5	334955.3	1.500
82042	2204	626514.1	334392.7	1.300
82042	2205	626497.3	334306.2	2.000
82042	2206	626680.3	334181.7	4.250
82042	2207	626693.8	333855.7	0.550
82042	2208	626863.6	333834.1	1.150
82042	2209	626395.7	332707.1	0.550
82042	2210	626330.0	332651.4	0.200
82042	2211	626385.8	332516.5	0.950
82042	2212	626796.1	332313.9	(0.05
82042	2213	624578.1	333619.9	0.200
82042	2214	624505.4	333556.1	0.200
82042	2215	624666.7	333457.3	(0.05
82042	2216	623602.6	332301.5	1.300
82042	2217	623640.0	332399.7	(0.05
82042	2218	624431.4	332575.0	(0.05
82042	2219	624529.9	332697.2	(0.05
82042	2220	624759.2	332523.8	(0.05
82042	2221	625296.9	331674.9	(0.05
82042	2222	625492.3	330768.2	2.050
82042	2223	625447.0	330582.2	0.011
82042	2224	625939.3	329850.7	0.015
82042	2225	625465.8	329326.3	3.550
82042	2226	624806.4	329431.3	0.011
82042	2227	624801.1	329286.1	0.200
82042	2228	623554.0	329228.2	0.017
82042	2229	623486.3	329561.4	1.150
82042	2230	623408.8	329602.4	4.900
82042	2231	623529.4	329073.8	3.200
82042	2232	622996.3	335006.1	0.011
82042	2233	622929.6	334992.1	0.350
82042	2234	622856.7	335181.4	3.500
82042	2235	622904.1	335491.5	(0.05
82042	2236	623012.7	335432.8	1.850
82042	2237	623599.8	336497.4	5.400
82042	2238	623695.4	336545.5	6.000
82042	2239	623381.9	336612.2	0.011
82042	2240	621717.7	336863.4	(0.05
82042	2241	621722.2	336495.1	(0.05
82042	2242	621493.0	336384.9	0.200
82042	2243	621073.0	336258.5	0.500
82042	2244	620988.5	336282.0	4.100
82042	2245	614579.5	331765.1	5.900
82042	2246	614453.8	331846.4	1.800
82042	2247	614273.1	332149.5	0.012
82042	2248	614463.9	331635.6	1.850
82042	2249	614799.8	331348.2	1.550
82042	2250	613471.0	330885.5	0.900
82042	2251	615082.3	330628.6	0.900
82042	2252	615765.0	332997.5	2.250
82042	2253	622822.0	329675.7	1.100
82042	2254	622043.2	330509.3	1.850
82042	2255	621105.7	331760.1	2.400

PROJ	SAMP	EL	SHEET	NORTH	EAST	LOC	ORDER	AREA	HWD	SO	FLOW	BANK	CONT	SITE	DERIV	SIEVE	COL	KGS	BY	SRAT	AU
82042	2256			621080.6	332518.0																1.850
82042	2257			621021.1	332656.1																1.500
82042	2258			621095.2	333445.3																1.500
82042	2259			621128.3	333372.1																1.450
82042	2260			619979.2	335322.8																2.400
82042	2261			619622.1	335875.9																1.850
82042	2262			619496.5	336394.5																4.300
82042	2263			619300.2	336367.0																3.200
82042	2264			618820.7	336675.9																3.500
82042	2265			614187.6	332742.4																1.450
82042	2266			613849.9	333653.8																2.050
82042	2267			614186.8	334365.1																0.900
82042	2268			614235.7	333703.3																0.350
82042	2269			613204.8	333965.3																<0.05
82042	2270			613408.2	334645.8																<0.05
82042	2271			613159.6	335403.3																0.350
82042	2272			613159.8	335585.3																0.350
82042	2273			613278.1	335894.3																0.200
82042	2274			612329.6	334939.3																1.300
82042	2275			612352.2	335674.2																2.950
82042	2276			612155.3	336896.9																2.750
82042	2277			611323.4	336745.4																1.650
82042	2278			610897.2	336939.9																<0.05
82042	2279			610209.3	336965.6																<0.05
82042	2280			609840.1	336972.7																1.200
82042	2281			612842.1	338506.1																0.200
82042	2282			612181.6	337834.3																0.550
82042	2283			612352.6	338152.2																<0.05
82042	2284			612572.8	338343.1																0.550
82042	2285			613184.6	338684.7																0.900
82042	2286			613428.5	338850.1																<0.05
82042	2287			613566.2	338969.9																0.550
82042	2288			613990.7	339587.2																<0.05
82042	2289			613951.2	339877.5																<0.05
82042	2290			614163.4	340862.0																1.700
82042	2291			613477.7	342212.3																1.750
82042	2292			613586.4	341753.9																0.350
82042	2293			613833.6	341305.7																2.050
82042	2294			613617.6	341272.4																0.200
82042	2295			612809.5	342627.5																<0.05
82042	2296			612847.9	342719.8																3.700
82042	2297			611795.8	341442.6																2.800
82042	2299			612102.4	340716.0																3.150
82042	2300			611739.7	340290.0																0.950
82042	2301			617855.2	330105.9																1.000
82042	2302			617261.2	330252.1																0.350
82042	2303			613485.9	330027.0																1.100
82042	2304			612526.6	330760.4																0.300
82042	2305			612441.6	330799.0																0.950
82042	2306			612059.9	330960.8																0.950
82042	2307			611744.0	331562.9																1.300
82042	2308			611286.2	332250.2																2.050
82042	2309			611244.6	332412.6																2.250
82042	2310			611054.4	332302.4																0.550
82042	2311			610848.3	332462.3																5.250

PROJ	SAMP	EL	SHEET	NORTH	EAST	LOC	ORDER	AREA	HWD	SO	FLOW	BANK	CONT	SITE	DERIV	SIEVE	COL	KGS	BY	SRAT	AU
82042	2312			610905.4	332825.9																0.014
82042	2313			610869.7	333031.3																3.750
82042	2314			610808.2	333216.3																0.550
82042	2315			610622.0	333448.3																1.500
82042	2316			610511.1	333744.6																2.250
82042	2317			610425.5	333950.4																0.950
82042	2318			610148.9	334478.0																(0.05
82042	2319			609792.8	335188.2																0.200
82042	2320			609473.8	335866.3																0.200
82042	2321			609351.7	336482.6																4.500
82042	2328			600647.2	340440.5																6.000
82042	2329			600700.3	340412.8																1.500
82042	2330			600910.0	340652.7																1.400
82042	2339			604699.3	341836.6																(0.05
82042	2340			604777.1	341738.9																2.200
82042	2341			603767.3	341508.2																2.800
82042	2342			603598.3	341544.5																0.900
82042	2343			602921.0	341827.0																1.850
82042	2344			602307.2	341884.9																0.400
82042	2345			602057.6	341756.9																1.850
82042	2346			601715.6	341132.4																0.950
82042	2347			601324.8	340855.9																1.500
82042	2348			601169.9	340716.0																0.350
82042	2349			601488.2	342114.1																1.500
82042	2350			601436.6	341781.7																2.500
82042	2351			601516.9	342219.6																1.150
82042	2352			600853.4	342153.2																2.000
82042	2353			600601.2	342156.6																0.450
82042	2354			600314.8	342681.9																1.450
82042	2355			600033.5	343181.7																0.300
82042	2356			599809.1	343431.4																1.250
82042	2357			601021.4	342170.4																0.200
82042	2358			610360	338668																(0.05
82042	2359			611880	339941																(0.05
82042	2360			610287	342270																1.200
82042	2361			599750	342351																(0.05
82042	2362			614259	345093																(0.05
82042	2363			609473	335866																(0.05
82042	2364			608482	344428																0.200
82042	2365			604770	341738																1.150
82042	2366			609840	336972																0.250
82042	2367			625852	350082																(0.05
82042	2368			619979	335322																(0.05
82042	2369			621717	336863																(0.05
82042	2370			611739	340290																(0.05
82042	2371			624759	332523																6.750
82042	2401			611880.6	339941.3																0.950
82042	2402			611751.1	339710.0																0.400
82042	2403			621567.9	330984.5																0.550
82042	2404			618754.4	336433.9																2.250
82042	2405			618318.5	336537.5																3.000
82042	2406			618295.1	336969.5																(0.05
82042	2407			615834.7	341218.7																0.950
82042	2408			616579.4	341198.5																0.950
82042	2409			616585.7	341085.8																(0.05

PROJ	SAMP	EL	SHEET	NORTH	EAST	LOC	ORDER	AREA	HWD	SO	FLOW	BANK	CONT	SITE	DERIV	SIEVE	COL	KGS	BY	SRAT	AU
82042	2410			616466.4	342058.7																(0.05
82042	2411			615454.0	343437.8																0.400
82042	2412			615520.8	341902.3																1.700
82042	2413			615485.0	341721.0																1.150
82042	2414			611534.7	339449.4																(0.05
82042	2415			611396.2	339480.9																1.300
82042	2416			611294.8	339154.4																1.550
82042	2417			611109.0	339225.8																2.450
82042	2418			610765.2	339037.2																1.150
82042	2419			610180.6	338747.3																1.450
82042	2420			610360.2	338668.5																1.850
82042	2421			609656.3	338837.0																(0.05
82042	2422			609466.1	338985.6																1.150
82042	2423			611023.6	338550.4																2.450
82042	2424			611088.5	338319.3																2.450
82042	2425			611062.0	338181.0																1.500
82042	2427			617481.5	344018.6																0.750
82042	2428			616745.4	345402.5																0.750
82042	2429			616653.8	345641.6																0.750
82042	2430			616604.5	345378.6																0.550
82042	2431			615643.5	344694.0																0.550
82042	2432			616579.9	345192.3																1.900
82042	2433			616192.4	344738.3																0.550
82042	2434			616078.9	344769.9																0.550
82042	2435			615108.9	344640.3																2.450
82042	2436			615833.0	344617.0																2.050
82042	2437			614998.2	344280.1																3.550
82042	2438			614935.4	344786.5																3.350
82042	2439			614358.0	344658.6																1.700
82042	2440			614259.3	345093.3																5.800
82042	2441			614191.0	345063.9																0.200
82042	2442			615106.9	346011.4																0.200
82042	2443			614034.9	344319.3																2.050
82042	2444			613735.9	344551.2																0.750
82042	2445			613661.8	344675.7																1.800
82042	2446			612711.4	344419.0																1.500
82042	2447			612602.5	344538.5																5.000
82042	2448			612516.3	344441.8																1.300
82042	2449			612358.3	345966.6																2.200
82042	2450			612209.8	346030.6																0.500
82042	2451			609752.5	337157.0																2.500
82042	2452			610016.2	337321.8																1.700
82042	2453			610262.7	337381.3																2.250
82042	2454			610531.5	337399.7																1.500
82042	2455			610764.8	337978.1																1.100
82042	2456			610995.2	341105.7																1.800
82042	2457			610752.3	341177.7																6.800
82042	2458			610512.2	341384.2																0.700
82042	2459			610472.0	341757.3																1.100
82042	2460			610287.4	342270.3																2.000
82042	2461			610295.4	342353.8																1.850
82042	2462			610690.5	342675.2																0.750
82042	2463			610654.3	342783.5																1.900
82042	2464			610446.5	343057.3																0.750
82042	2465			610227.8	343168.6																1.700

PROJ	SAMP	EL	SHEET	NORTH	EAST	LOC	ORDER	AREA	HWD	SO	FLOW	BANK	CONT	SITE	DERIV	SIEVE	COL	KGS	BY	SRAT	AU
82042	2466			610325.4	343522.5																0.114
82042	2467			610277.9	343729.3																0.012
82042	2468			610216.2	343911.1																1.850
82042	2469			610456.5	344341.3																6.200
82042	2470			610250.5	344653.7																0.073
82042	2471			610142.5	344636.1																0.750
82042	2472			609615.8	343762.7																1.700
82042	2473			610432.3	342582.0																3.250
82042	2474			609393.5	343326.9																0.950
82042	2475			609266.8	343341.1																0.031
82042	2476			608981.6	343424.2																1.650
82042	2477			608786.3	343647.6																0.017
82042	2478			608775.8	344030.7																2.300
82042	2479			608620.5	344038.6																6.400
82042	2480			608482.8	344428.3																2.050
82042	2481			608555.2	344592.9																2.300
82042	2482			607355.6	344406.3																1.150
82042	2483			607290.4	344402.4																2.450
82042	2496			605035.8	341244.6																1.150
82042	2497			599381.6	337426.1																2.450
82042	2498			599378.3	337578.1																2.400
82042	2499			599295.4	341472.6																0.900
82042	2500			599750.0	342351.4																6.150
82042	2601			609216.0	343326.0																<0.05
82042	2602			609170.3	343138.7																1.450
82042	2603			609066.3	342946.5																1.250
82042	2604			609092.4	342731.1																<0.05
82042	2605			608533.4	344040.3																<0.05
82042	2606			608319.7	344030.6																<0.05
82042	2607			608132.0	344015.9																0.800
82042	2608			608939.6	343450.4																<0.05
82042	2609			608775.0	343359.0																<0.05
82042	2610			608709.2	343671.2																<0.05
82042	2611			608520.8	343649.1																<0.05
82042	2612			608330.9	343538.3																<0.05
82042	2613			608305.4	343337.4																<0.05
82042	2614			608250.6	343117.2																1.100
82042	2615			625937.2	329893.1																<0.05
82042	2616			626066.0	329792.4																<0.05
82042	2617			626219.3	329812.3																1.000
82042	2618			626393.7	329756.9																0.550
82042	2619			626515.5	329825.7																0.350
82042	2620			626648.4	329907.8																0.200
82042	2621			626758.8	329933.0																0.015
82042	2622			625399.0	330629.2																2.200
82042	2623			625211.9	330643.3																2.150
82042	2624			625123.4	330680.7																1.100
82042	2625			625011.2	330654.3																0.950
82042	2626			624818.9	330615.4																2.600
82042	2627			625155.4	330561.8																1.050
82042	2628			625053.9	330516.2																1.900
82042	2629			624747.6	329484.9																1.150
82042	2630			624615.6	329607.4																1.750
82042	2631			624564.0	329764.1																1.450
82042	2632			624510.1	329830.5																1.600

PROJ	SAMP	EL	SHEET	NORTH	EAST	LOC	ORDER	AREA	HWD	SO	FLOW	BANK	CONT	SITE	DERIV	SIEVE	COL	KGS	BY	SRAT	AU
82042	2633			624343.4	329929.0																2.250
82042	2634			624581.0	330059.2																2.050
82042	2635			624453.7	330209.8																5.650
82042	2636			624315.3	330347.2																3.500
82042	2637			624707.9	330194.7																2.000
82042	2638			624715.8	330402.3																2.150
82042	2639			623674.0	329102.0																2.650
82042	2640			623876.0	329096.7																0.900
82042	2641			624065.0	329079.4																0.500
82042	2642			623521.6	329280.4																2.400
82042	2643			623634.9	329334.9																0.013
82042	2644			623752.4	329403.8																4.500
82042	2645			623912.9	329461.8																3.000
82042	2646			624119.2	329531.9																2.700
82042	2647			623862.1	329515.0																5.100
82042	2648			624011.4	329649.0																1.500
82042	2649			622939.8	335026.0																0.750
82042	2650			623039.7	334958.2																0.550
82042	2651			622792.4	335536.2																1.850
82042	2652			622584.2	335534.6																2.350
82042	2653			622448.9	335432.6																2.800
82042	2654			622332.0	335378.1																3.800
82042	2655			622439.8	335487.4																3.250
82042	2656			622303.0	335502.0																2.800
82042	2657			622589.4	335589.6																4.800
82042	2658			622504.9	335670.6																1.500
82042	2659			622361.8	335695.1																0.057
82042	2660			622558.2	335843.1																0.950
82042	2661			622549.2	335719.6																1.950
82042	2662			623523.9	336515.2																0.200
82042	2663			623637.5	336363.3																2.500
82042	2665			623692.2	335965.2																0.027
82042	2666			623785.0	335777.0																0.750
82042	2667			623709.8	336255.9																4.400
82042	2668			623895.7	336163.8																0.350
82042	2669			623996.0	335965.0																0.014
82042	2670			623629.6	336589.6																0.900
82042	2671			623837.5	336608.0																0.500
82042	2672			624061.2	336519.9																0.700
82042	2673			624255.2	336498.9																0.350
82042	2674			624426.3	336390.5																0.900
82042	2675			624375.3	336564.1																1.050
82042	2676			624389.0	336322.2																0.200
82042	2677			624246.3	336297.4																0.950
82042	2678			624458.4	336256.0																0.200
82042	2679			624350.8	336113.0																0.550
82042	2680			624592.4	336210.9																0.750
82042	2681			624694.7	335840.6																0.350
82042	2682			624561.8	335752.3																0.150
82042	2683			624687.2	336075.7																1.450
82042	2684			624791.4	336179.4																0.750
82042	2685			624842.9	336343.7																1.850
82042	2686			624956.0	336268.5																1.250
82042	2687			625671.5	335095.4																0.350
82042	2688			625453.9	335193.5																0.550

PROJ	SAMP	EL	SHEET	NORTH	EAST	LOC	ORDER	AREA	HWD	SO	FLOW	BANK	CONT	SITE	DERIV	SIEVE	COL	KGS	BY	SRAT	AU
82042	2689			625263.1	335286.2																0.800
82042	2690			625079.1	335382.7																1.550
82042	2691			624929.5	335518.8																0.600
82042	2692			624800.5	335657.5																0.600

APPENDIX 4

Petrographic Studies

CRA REPORT No.
TR 2042-4

URANERZBERGBAU GMBH

ACCESS No. 1421

Mineralogical Report 89-16
Project 8204 Alligator Rivers

Mineralogical Investigations of 10 Radioactive Samples from Trenches at Devil's Elbow, Kukalak (EL 3421), N.T., Australia

Bonn, Dec. 29, 1989
E-vPe/abu
8204-625

Exploration Department
E. von Pechmann

1. Summarized Results: Kukalak/Devil's Elbow Mineralogy

Ten samples taken from trenches at Devil's Elbow (EL 3421), N.T., Australia, have been investigated by microscopy and X-ray diffractometry.

Two of the samples are ferricretes consisting of haematite and goethite and subordinate to sparse intercalations of mica and quartz. Their source of (partly very weak) radioactivity is not yet determined.

Eight samples are basic volcanic rocks or basic dyke rocks (Nungbalgarri Volcanics). The ophitically textured rocks (partly also amygdaloidal) are altered by a Fe-rich chlorite, by sericite, by quartz (in veins), by fluorapatite, by goethite, by haematite, by siderite, and by uranium oxides/silicate and Cu and Au minerals.

An almost complete paragenetic sequence can be constructed from one sample only which contains microscopically visible native gold (204/2A-1356/ Aus 2046) from oldest to youngest:

> ophitic rock - chloritization/sericitization - quartz veining - fluorapatite - anisotropic uraninite - higher oxidized uraninite/coffinite - goethite and native gold - haematite.

Some of the samples contain coffinite, galena, pyrite and marcasite, and chalcopyrite replaced by chalcocite and covellite; a paragenetic sequence can also be constructed for a sample from T2 (Aus 2065):

> uraninite - higher oxidized uranium minerals - pyrite - chalcopyrite - marcasite - galena - goethite - haematite.

Minerals of the PGE could not be detected/determined microscopically.

Key words: Australia, Northern Territory, Pine Creek Geosyncline, Kukalak, EL 3421, Devil's Elbow, ferricrete, Nungbalgarri volcanics, volcanic rock, basic volcanic rock, alteration, chloritization, silicification, siderite, quartz veins, haematitization, goethite, iron hydroxide, iron oxide, uranium, uranium oxide, uraninite, silicates, coffinite, sulphides, iron, pyrite, marcasite, copper, chalcopyrite, chalcocite, covellite, lead, galena, zinc, sphalerite, titanium, anatase, gold, native gold, mineralogy.

2. The Samples

Samples sent by/on:	a) J. Rich/April 1989; b) Dr. Bianconi, Dr. Gatzweiler/Aug. 28, 1989; c) Dr. Bianconi, Dr. Gatzweiler/Aug. 28, 1989.
Arrival in Bonn:	a) April 27, 1989; b) and c) Aug. 28, 1989.
Arrival nos.:	a) 918; b) 960; c) 964.
UEB nos.:	a) Aus 2045-2049; b) Aus 2062-2065; c) Aus 2068.
UAL nos.:	a) 8204/2A 1355, 1356, 1358, 1360, 1361; b) and c) ./.
Investigations required:	petrography, ore mineralogy.
Work performed:	preparation and partial autoradiography of 7 polished thin sections and 1 polished section; microscopy of 10 polished thin sections and of 1 polished section; preparation and evaluation of 5 X-ray diffractograms.

URANERZ MINERALOGY

Project:	Alligator Rivers
Project No.:	8204
Area:	Kukalak, Devil's Elbow, EL3421
UAL Sample No.:	8204/2A 1355
Mineralogical Report No.:	89-16
UEB Sample No.:	Aus 2045
Mineralogy by / Date:	E.v.Pechmann/ Dec. 28, 1989
Sample taken by:	J. Rich / 1988
Sample location:	Devil's Elbow, trench 2, sample 1 (T 2 ?)
Arrival No./Date:	918 / April 27, 1989
Sample Type:	Core ,Outcrop X ,Boulder ,Other
Investigation:	Thin Section(s), Polished Section(s) ,Other: 1 pol. TS
Sample stored at:	UEB
Radioactivity:	6370 cps (bg=50cps)

Macroscopy: an ophitic rock (dark green-black laths in red matrix), fine grained; cut by 5-10 mm thick veins of ferruginous comb apatite(?); the veins enclose dark green ophitic rock relics. Tha apatite zones have a pale purple colour (slightly resembling erythrite).

Chemical assay (UAL): 3.7 % U_3O_8; 45 ppb Th; 2250 ppm Pb; 36 ppb Au.

Microscopy: ophitic texture, laths 0.15-0.5 mm long (Fig. 1); one part biotitic and chloritized biotitic; the larger part sericitic and (Fe-Mg)-chloritic.

Vesicles occur occasionally, they are chloritic and partly carbonate coated.

The matrix (40-50 vol.-%) is brown due to iron oxydes/hydroxydes; these occur either as rims along the laths or as patches.

Quartz is rare occurring together with opaque patches.

Haematite in sheaf-like bushes is the dominant opaque mineral. Goethite appears in irregular patches, as dust in the matrix and as late, partly net-like veinlets.

Uranium appears in loosely distributed patches in the matrix. The size of the patches is from 0.05 mm to 0.2 mm; they consist of medium grey reflecting, colloform uraninite, which is replaced by semitranslucent coffinite and predominant very dark grey reflecting uraninite (Figs. 2-7).

Field Name of Specimen: Nungbalgarri Volcanics

Main Minerals (%):

Subordinate Minerals:

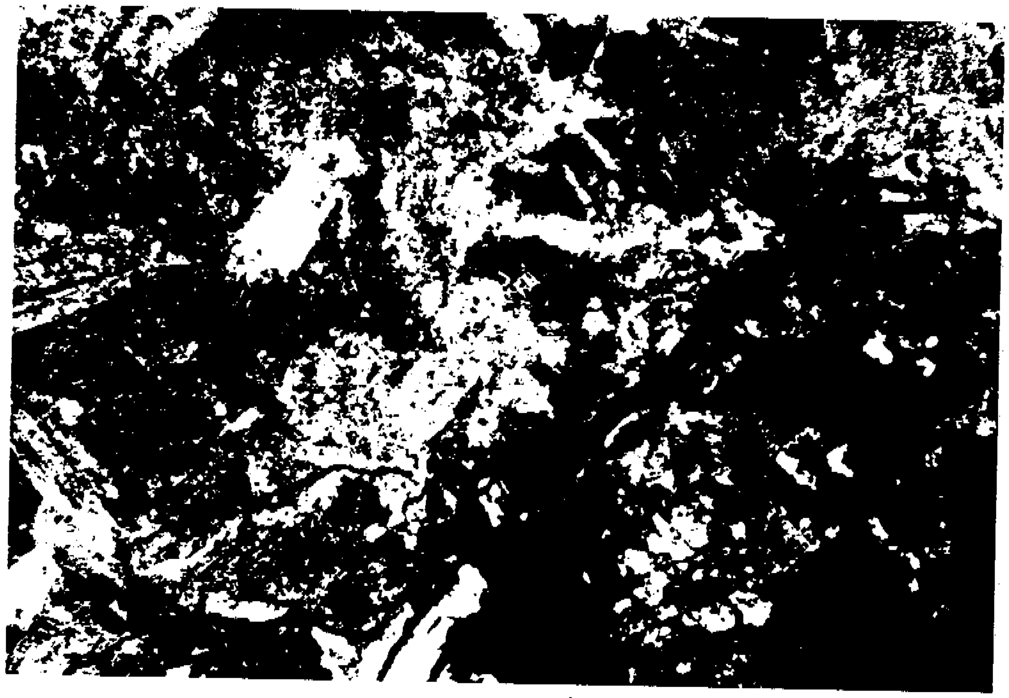
Accessories:

Ore Minerals: uraninite, coffinite, pyrite, galena, chalcopyrite, haematite, goethite

Petrographic Classification: uraniferous sericitic chloritized haematitized basic volcanic rock

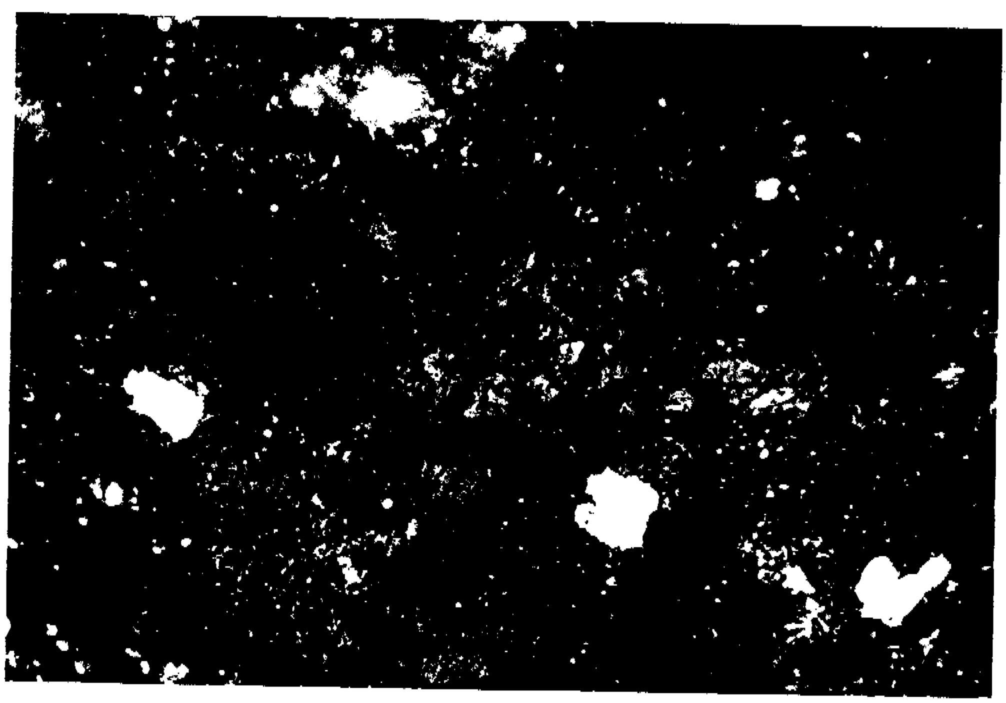
The uranium is partly associated with carbonate (Fig. 6) and minor galena (cubes up to 0.02 mm large) and with anatase; pyrite is rare (Figs. 5, 7). A very fine grained, ill defined, white mineral might be pyrite, too (Fig. 4). Chalcopyrite is very rare.

URANERZ MINERALOGY	Project: Alligator Rivers		5
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL342	
	UAL Sample No.: 8204/2A 1355	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2045	Photomicrographs	



0.2 mm

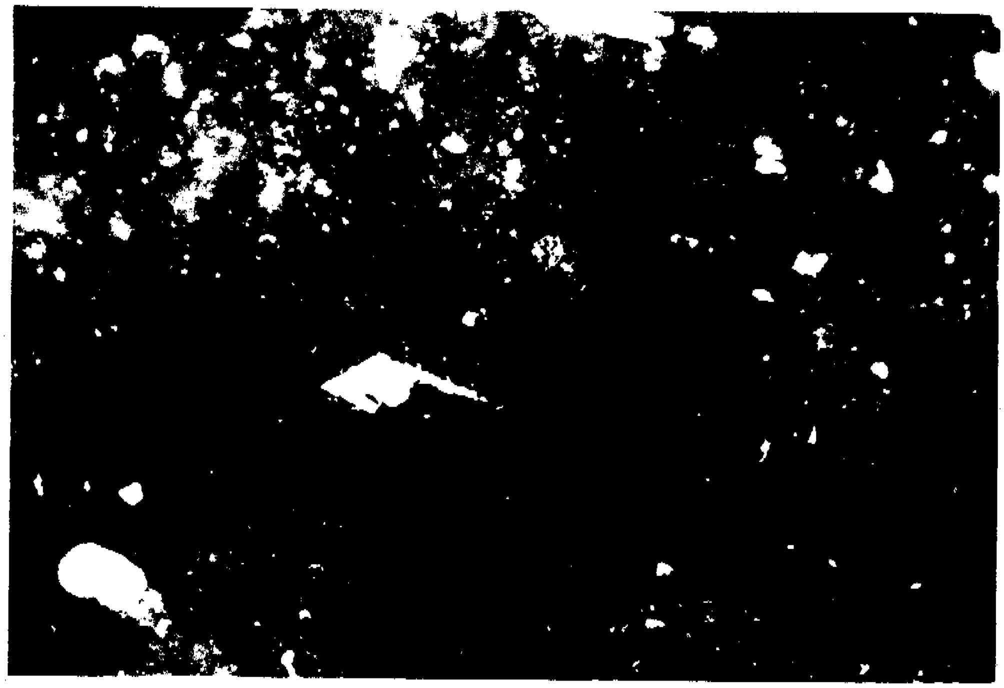
Fig. 1: 8204/2A-1355/Aus 2045; polished thin section, transmitted light; obj. 6.3 x air; nic. x; neg. no. C 31-11.
Ophitic, chloritic texture; opaque minerals associated with quartz (grey to white).



0.02 mm

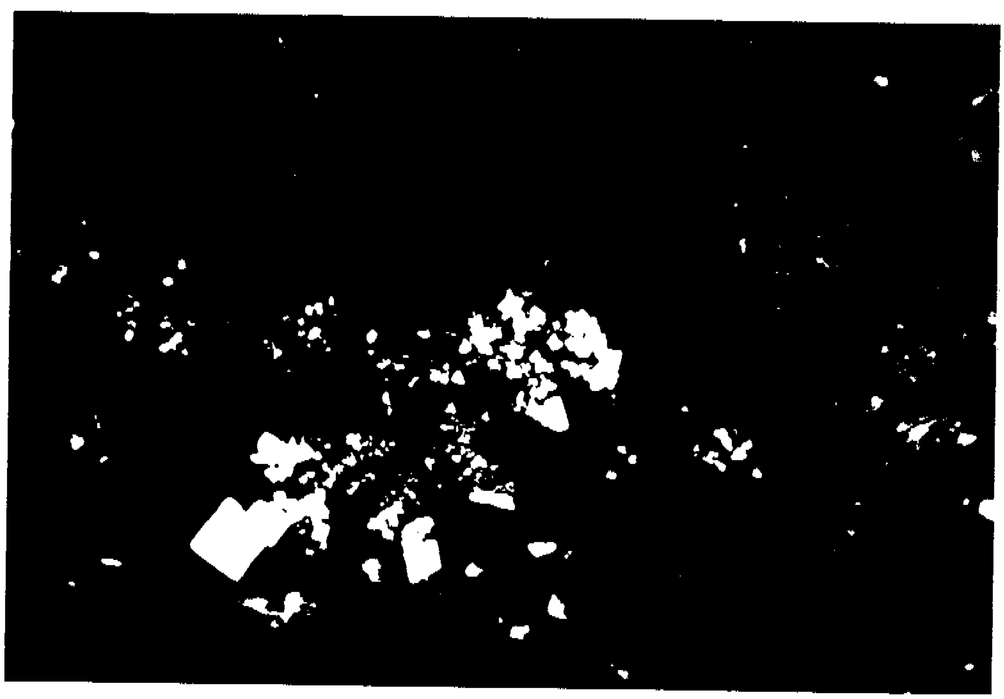
Fig. 2: 8204/2A-1355/Aus 2045; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-2.
Part of Fig. 1 showing very dark grey reflecting uranium oxide (partly semitranslucent coffinite) associated with cubes of galena (white).

URANERZ MINERALOGY	Project: Alligator Rivers		6
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A 1355	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2045	Photomicrographs	



0.02 mm

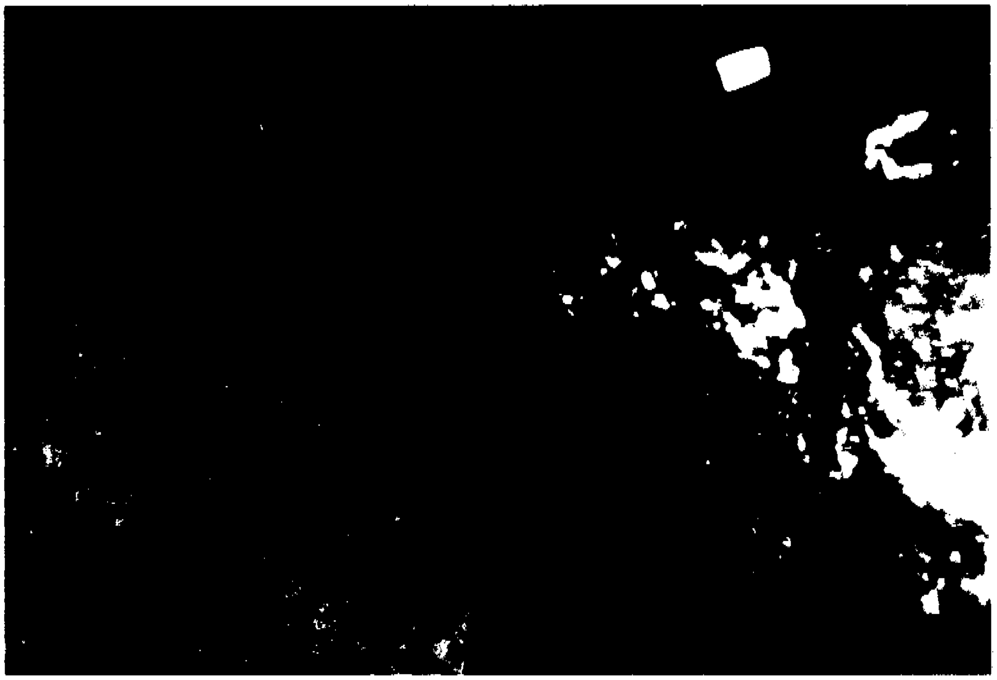
Fig. 3: 8204/2A-1355/Aus 2045; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-1.
Very dark grey reflecting uranium mineral associated with anatase (glassy, whitish). Anatase (whitish) and limonite (reddish) are dusting the surrounding rock constituents.



0.02 mm

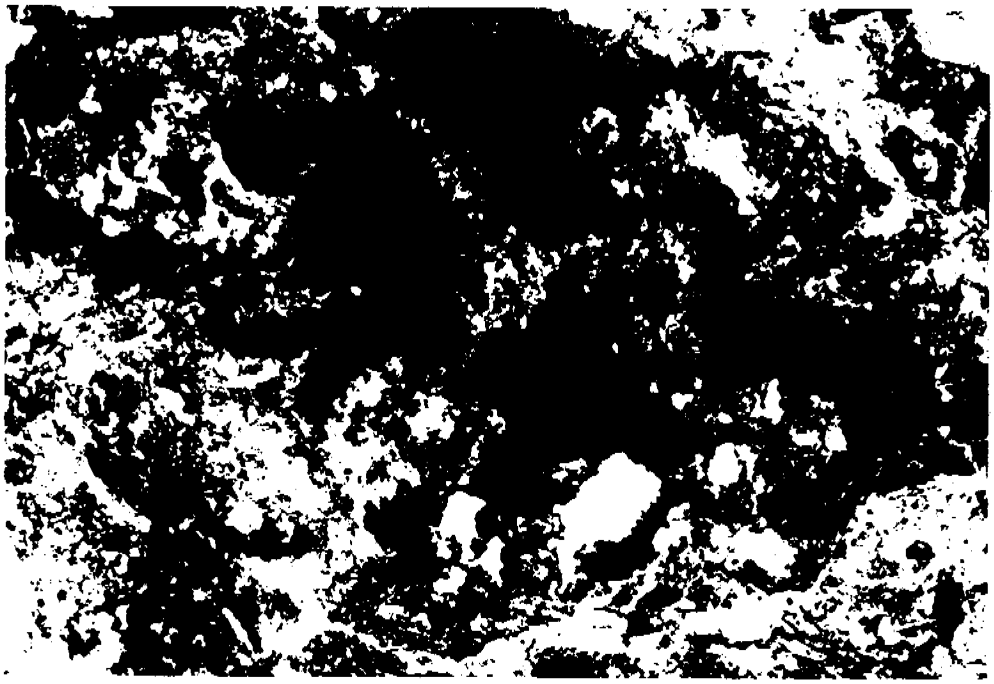
Fig. 4: 8204/2A-1355/Aus 2045; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-3.
Very dark grey reflecting uranium mineral associated with galena cubes (white) and an even whiter reflecting, filigrane mineral (pyrite?, gersdorffite??).

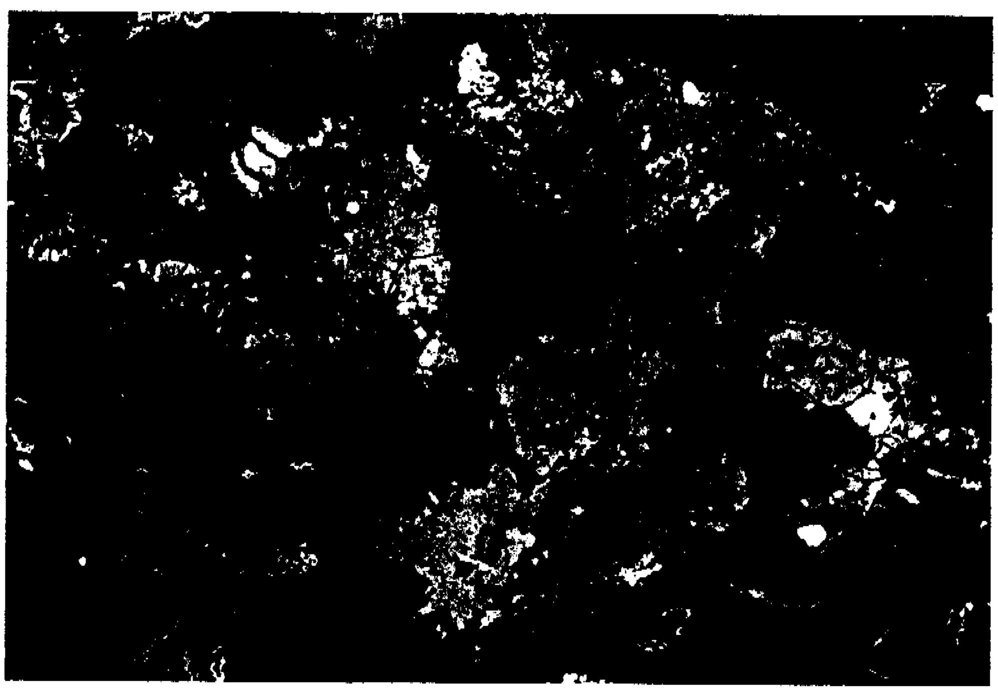
URANERZ MINERALOGY	Project: Alligator Rivers		7
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A 1355	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2045	Photomicrographs	



0.02 mm

Fig. 5: 8204/2A-1355/Aus 2045; polished thin section, reflected light;
obj. 50 x imm.; 1 nic.; neg. no. C 31-4.
Uranium oxide with various grey shades (reflecting various oxidation grades), partly glassy uranium mineral (coffinite, very dark grey); a pyrite cube (white), pyrite (white)?





0.1 mm

Figs. 6-7: 8204/2A-1355/Aus 2045; polished thin section; top: transmitted light, nic. x; bottom: reflected light, 1 nic.; obj. 10 x air; neg. nos. C 31/5-6.
Reiteration of Fig. 4: One of the largest uranium mineral aggregates (top: black) associated with carbonate (top: light brownish translucent); the uranium aggregate shows various grey shades (bottom); it contains galena (bottom and top in the lower picture) and pyrite (right part).

URANERZ MINERALOGY	Project: Alligator Rivers		9
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A 1356	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2046	Mineralogy by / Date:	
Sample taken by: J. Rich / 1988		E.v.Pechmann/ Dec. 11, 1989	

Sample location: Devil's Elbow, tr 1, sample 2 (T 2 ?)

Arrival No./Date: 918 / April 27, 1989 — Sample Type: Core , Outcrop x , Boulder , Other

Investigation: Thin Section(s), Polished Section(s), Other: 1 pol. TS (from UAL, no.60868)

Sample stored at: UAL — Radioactivity: 7480 cps (bg=50cps)

Macroscopy: dark red rock with 10-20 % dark ophitic laths; irregular short vein structures filled by acicular apatite associated in places with specularite; irregular black chloritic patches, in one case more than 1 cm large and containing yellow ore minerals (5 mm) (this patch is in connection with an irregular apatitic-specularitic vein system); an irregularly curved, 1.5 mm thick specularite vein; specularite irregularly distributed in the matrix; the ferruginization of the rock is patchwise weaker (here is the rock more green). Light ochre coating on the rock surface; light purple hue due to apatite.

X-ray diffractometry:

black vein: uraninite d(111)=3.135Å (a_0=5.434Å), quartz, goethite.

1000

Chemical assay (UAL): 5.8 % U_3O_8; 60 ppm Th; 0.5 % Pb; 141 ppm Cu; 38100 ppb Au; 12 ppb Pt; 3140 ppb Pd.

3.1 g/t Pd — 38.1 ppm g/t

Microscopy: despite the large amount of opaque minerals present in the section, an ophitic texture of its components: predominantly a chlorite with grain sizes below 0.005 mm growing in form of laths ophitically intergrown with each other and with the opaque components (Figs. 8-9). The component of second importance is mica occurring alike the chlorite but also as schlieren/flames (Figs. 8-9).

Field Name of Specimen: Nungbalgarri Volcanics

Main Minerals (%):

Subordinate Minerals: fluorapatite

Accessories:

Ore Minerals: uraninite, goethite, native gold, pyrite, haematite, chalcopyrite, chalcocite covellite

Petrographic Classification: apatitic, silicified, sericitized, chloritized, uraniferous basic volcanic rock with native gold and Fe- and Cu-sulphides

Wide areas of this matrix are stained yellowish, likely by limonitic components so that it cannot be decided with certainty whether yellowish rosette-shaped phyllosilicates are micas or "uranium micas".

The section contains rather numerous up to 0.4 mm large grains of apatite which are coated/stained by limonite and which also occur in veins (Figs. 10-11). The rock contains irregular roundish areas which seem to be limonite-coated vesicles filled by phyllosilicate minerals.

The rock is cut by a number of veins of comb quartz (Fig. 9). The individual quartz crystals and cracks within them are filled by limonite and opaque substances. The goethite is replacing the quartz (self-evident).

The quartz crystals and their cracks are coated/filled by uraninite which is older than the a.m. goethite (Figs. 12-15). Dark grey reflecting, i.e. higher oxidized uraninite is replacing less oxidized (lighter grey) uraninite and is replaced by goethite (Figs. 13, 19).

In some places, also dark grey reflecting uraninite is the vein quartz (Fig. 16).

Especially the darker grey reflecting uraninite is showing shrinkage cracks (Figs. 17-19). The shrinkage cracks are locally pathways for fibrous/lustry aggregates of hematite (Fig. 17) which appears to be younger than the goethite (Figs. 20-21) on which it is growing as needles.

The original, oldest uraninite locally occurs in up to several tenths of a millimetre size and shows rather distinct anisotropy.

It is conspicuous that almost no galena is visible in the section (cf. Fig. 18); in other deposits (at least those of Middle Proterozoic age) numerous cubelets of galena are common in the younger, darker reflecting uraninite replacing the old, anisotropic variety and found especially near the border of these two varieties. In this section galena in this younger uraninite generation is fairly rare.

Native gold is fairly commonly encountered occurring in flakes of 1-2 microns thickness and up to 10µ length or in up to 0.008-0.01 mm large grainlets or up to 0.037 mm large grain aggregates (Fig. 23).

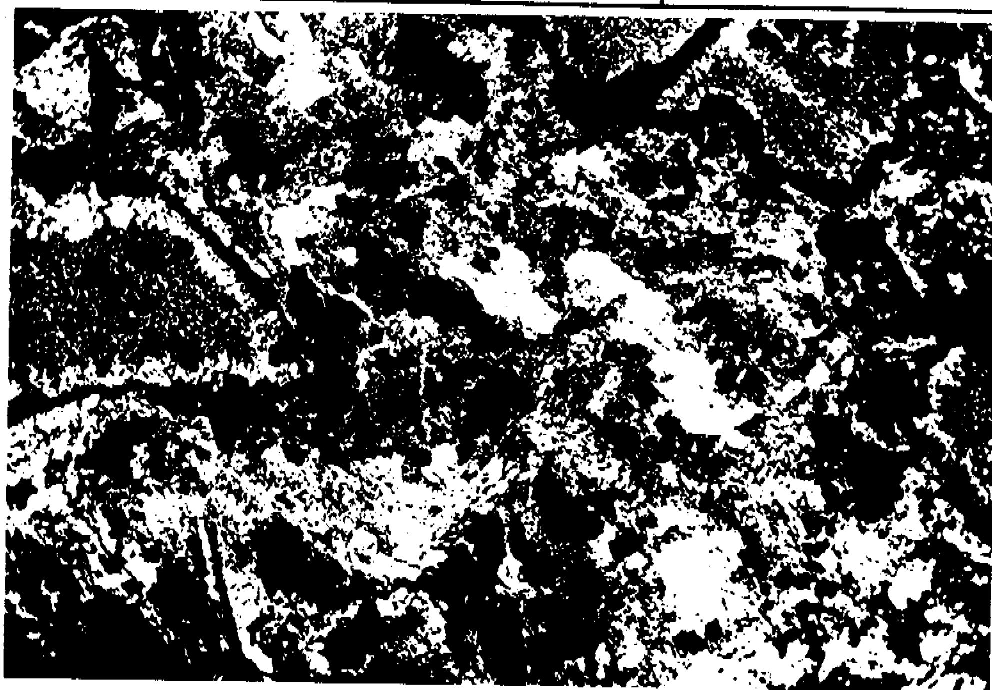
Seldom is it found within uraninite (Figs. 13-14); it is much more common in goethite (Figs. 21-24) and it is clear, that it has been emplaced together with this goethite (cf. esp. Fig. 24).

Microscopy allows to construct the following paragenetic sequence (from oldest to youngest):

rock - chloritization/sericitization(?) - quartz veining - anisotropic uraninite - higher oxidized uraninite - goethite and native gold - haematite.

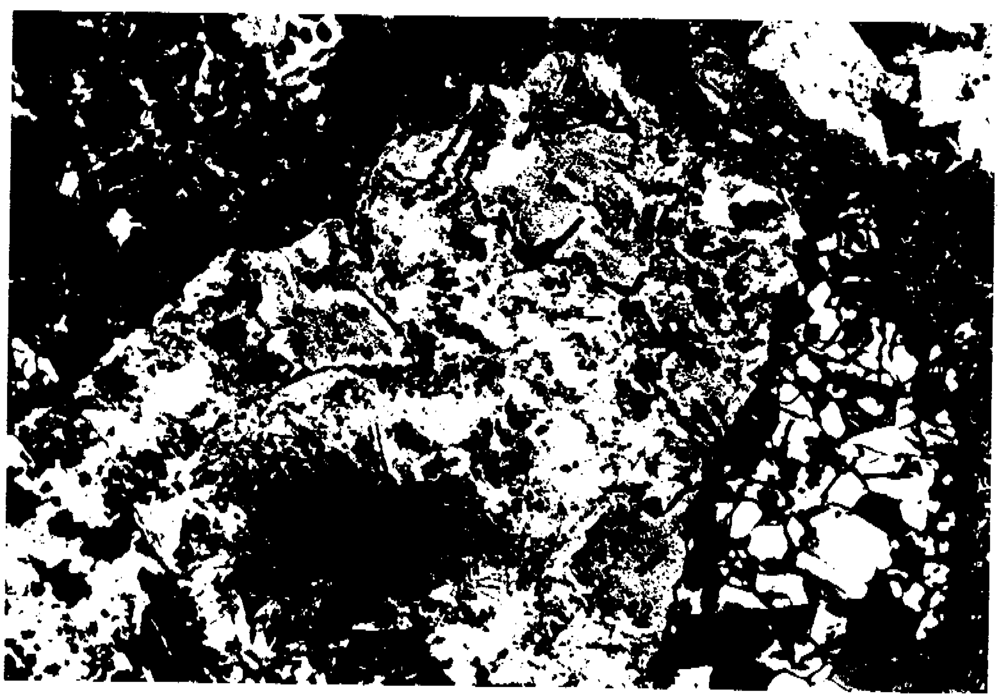
The section contains several mm large aggregates of chalcopyrite replaced by chalcocite and covellite and of pyrite; goethite is replacing/coating these aggregates. The chemical assay value of 141 ppm Cu is quite doubtful.

Pd or Pt minerals could not be detected resp. recognized by visual microscopy.



0.2 mm

Fig. 8: 8204/2A 1356/Aus 2046; polished thin section, transmitted light; obj. 6.3 x air; nic. x; neg. no. C 23-1.
Ophitic texture composed of laths of chlorite (greyish?), mica (multicoloured), opaque components (black - also ophitic in places); at top right and at the centre left (?)vesicles appear, coated by (opaque) goethite seams.

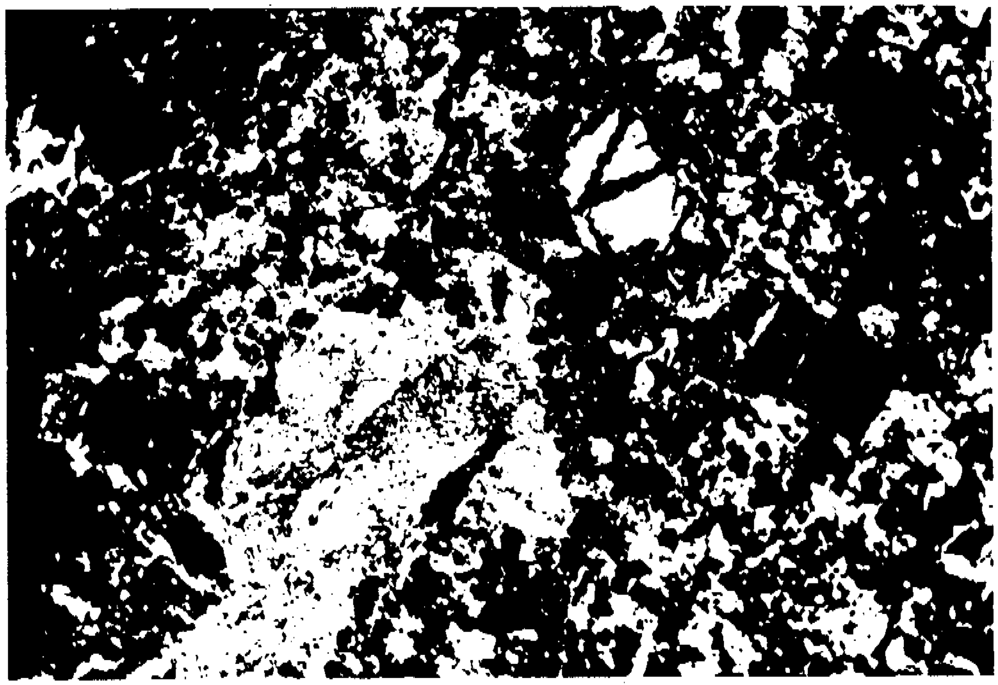


0.5 mm

Fig. 9: 8204/2A 1356/Aus 2046; polished thin section, transmitted light; obj. 2.5 x air; nic. x; neg. no. C 23-2.
Lower magnification of Fig. 8: Ophitic texture of the matrix bordered at left by opaque masses and at right by a quartz vein (grey to white); the quartz grains are separated from one another by opaque material.

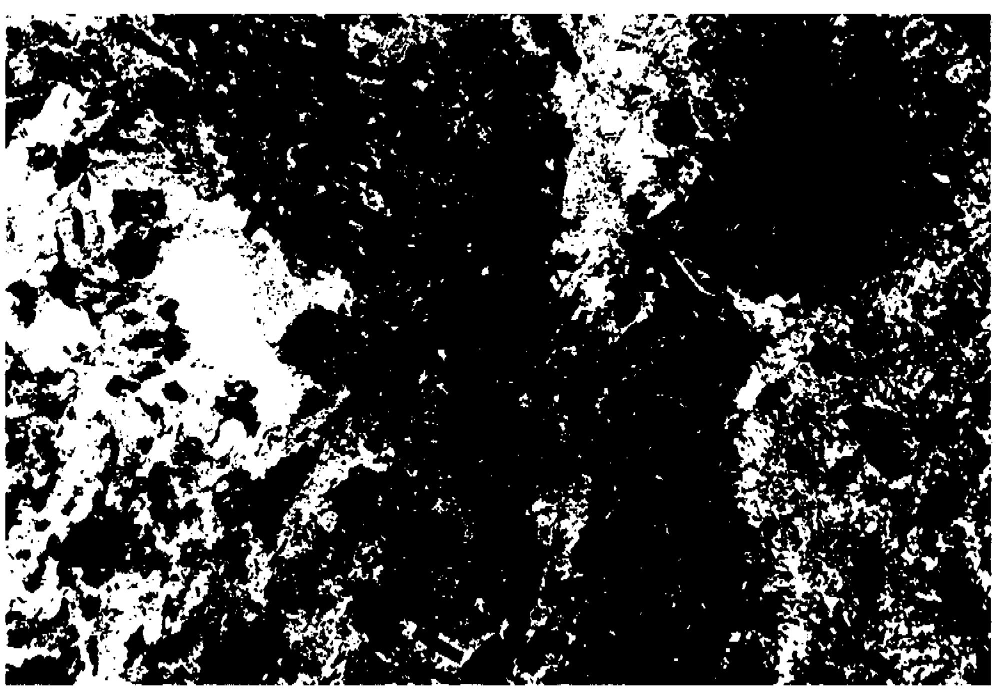
Project: Alligator Rivers		13
Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
UAL Sample No.: 8204/2A 1356	Mineralogical Report No.: 89-16	
UEB Sample No.: Aus 2046	Photomicrographs	

URANERZ MINERALOGY



0.2 mm

Fig. 10: 8204/2A 1356/Aus 2046; polished thin section, transmitted light, obj. 6.3 x air; nic. x; condensor; neg. no. C 23-4. Limonite-coated/veined apatite (far right-dark grey), limonite-veined quartz (light grey-top left of the apatite), a sericite-filled area (bottom left).



0.2 mm

Fig. 11: 8204/2A 1356/Aus 2046, polished thin section, transmitted light, obj. 6.3 x air; nic. x, condensor; neg. no. C 23-5. A limonite-rich apatite vein system cutting the chloritic-sericitic rock.

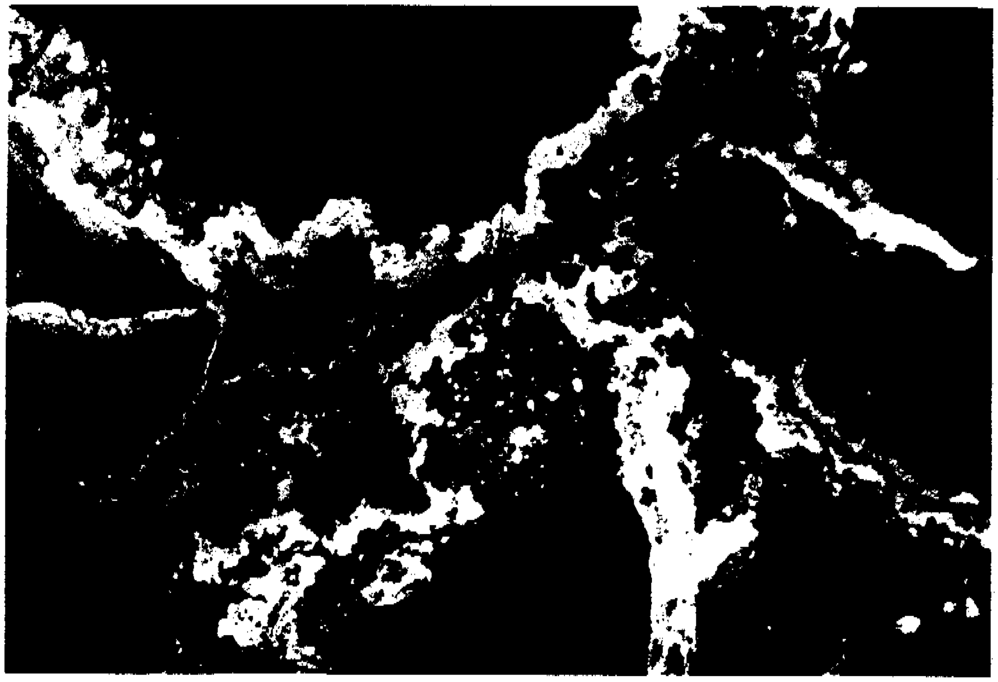


Fig. 12: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-11.
Part of a quartz vein (blackish): goethite (light grey, reddish internal reflection) is replacing/attached to the quartz; dark grey reflecting uraninite is mostly occurring in the middle of two goethite coatings.

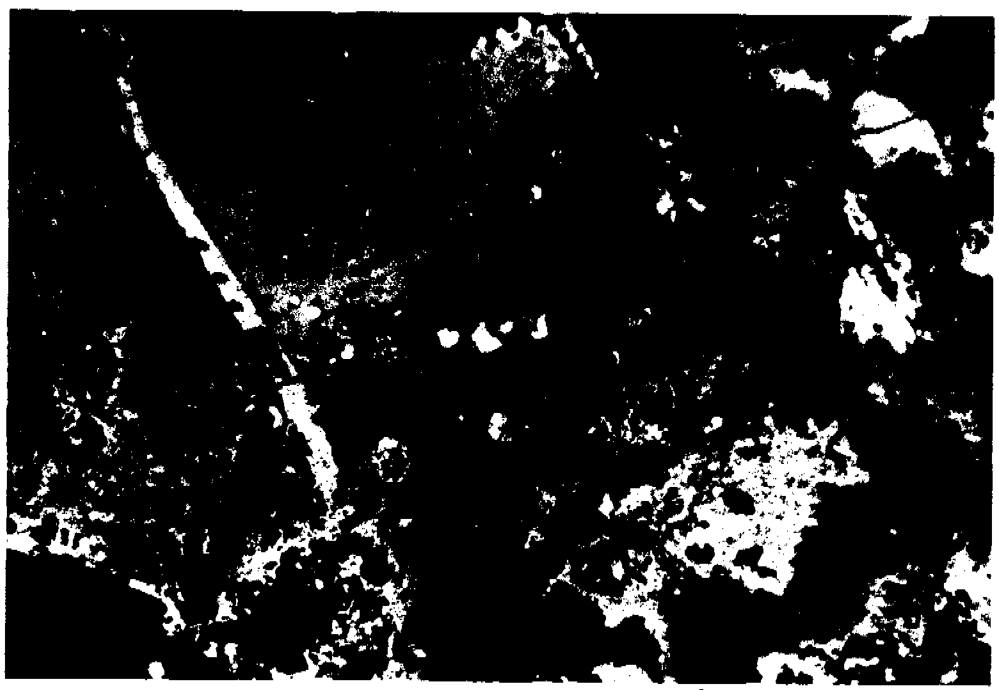
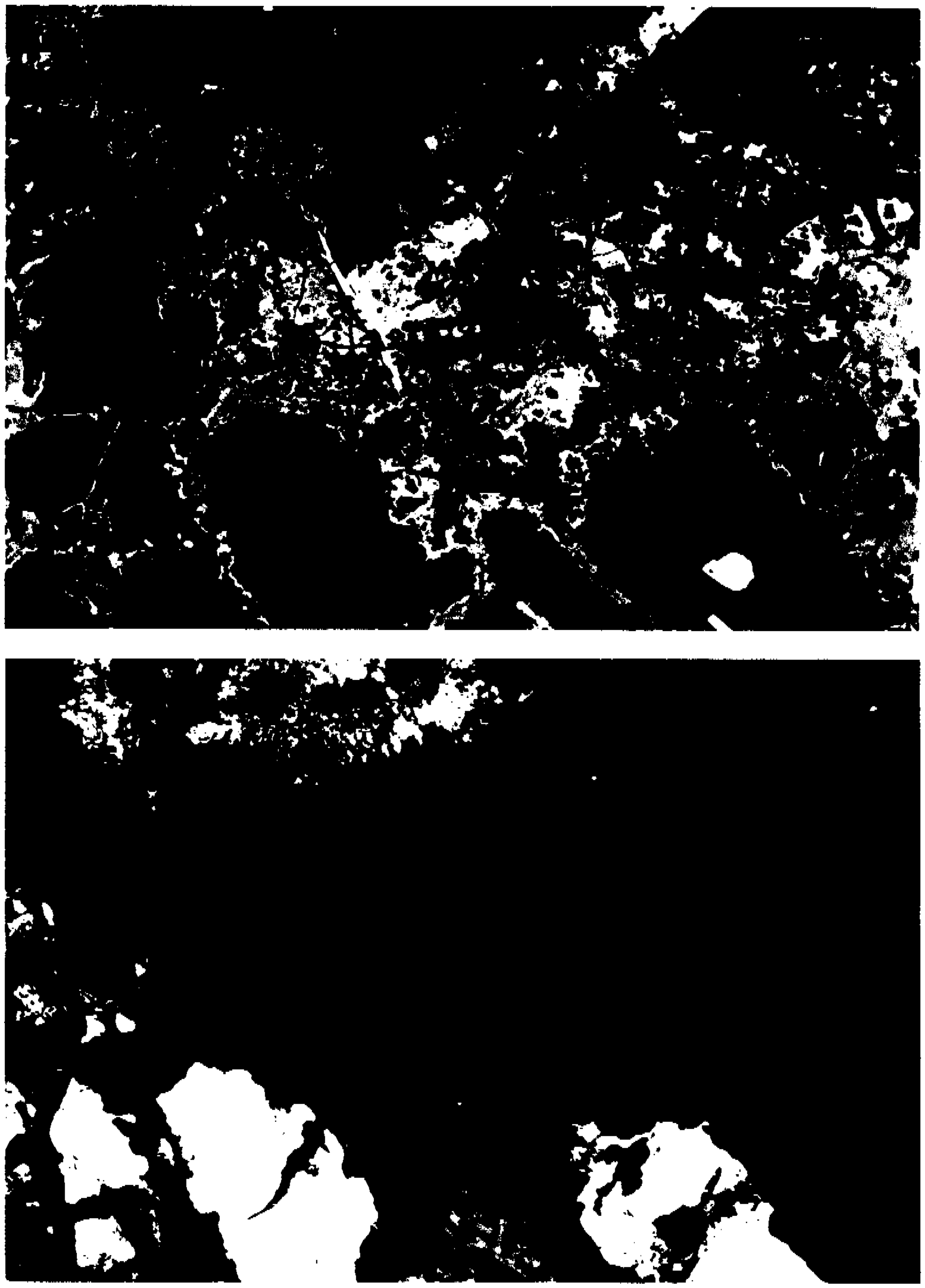


Fig. 13: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-12.
Lighter grey uraninite containing minute grains of native gold (just below the centre) is replaced by dark grey reflecting uraninite and finally veined and replaced by goethite (light grey) which is on its side replaced by hematite (whitish-right side).

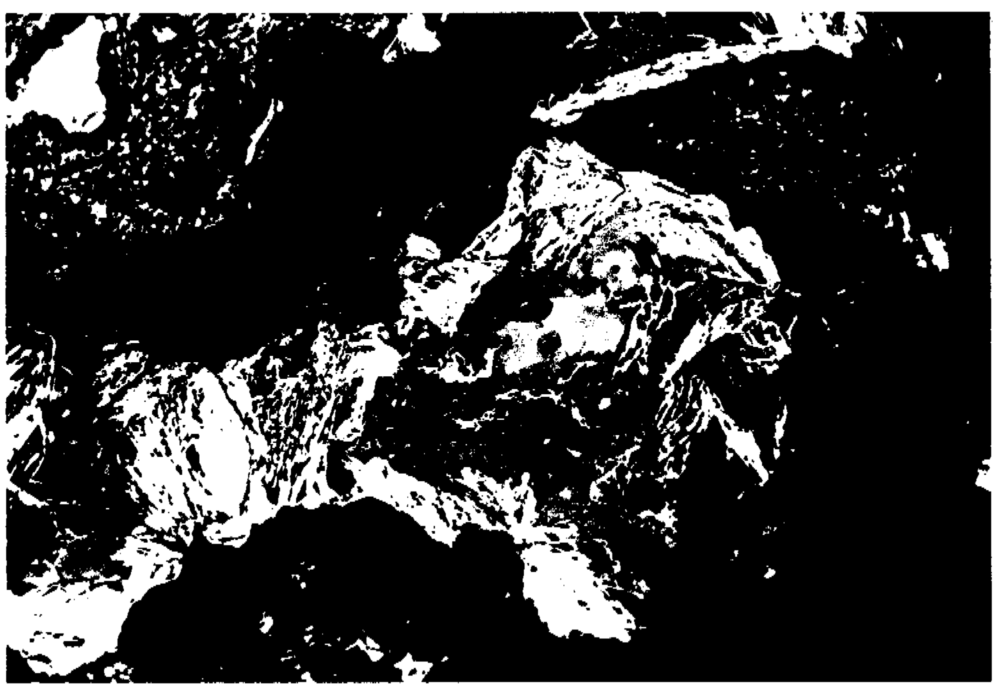


0.05 mm

Figs. 14-15: 8204 2A 1356/Aus 2046; polished thin section; obj. 20 x imm.; top: reflected light, 1 nic.; bottom: transmitted light, nic. x; neg. nos. C 23/13-14.
These photographs (cf. Fig. 13) show that the ore minerals occur admidst formerly euhedral quartz crystals.

0.02 mm

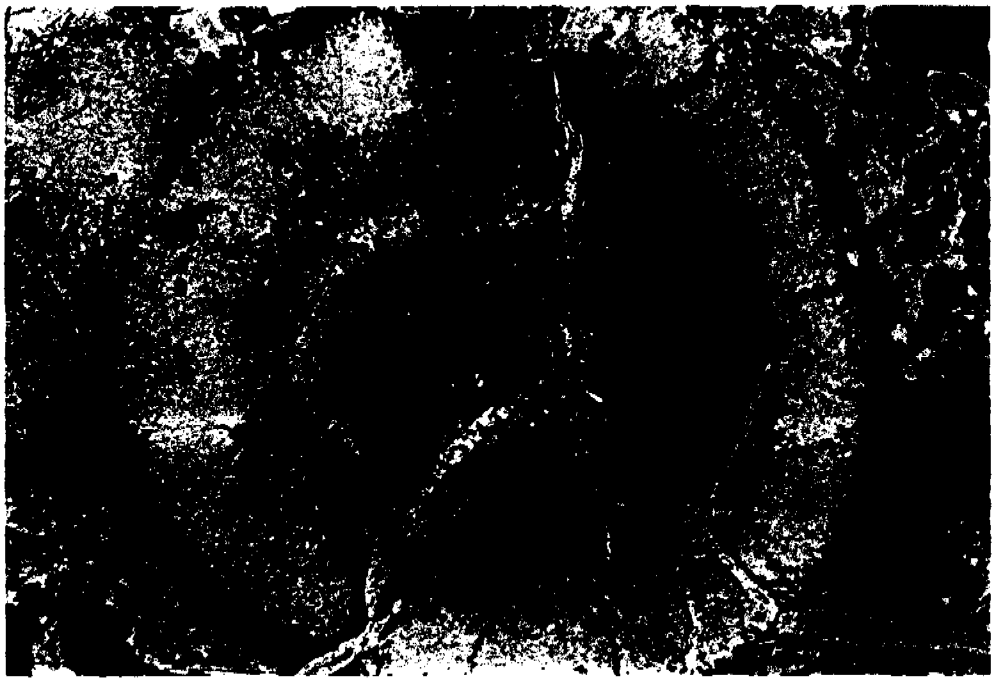
Fig. 16: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 24-3.
Late (dark grey reflecting) colloform coatings of uraninite on quartz.



0.05 mm

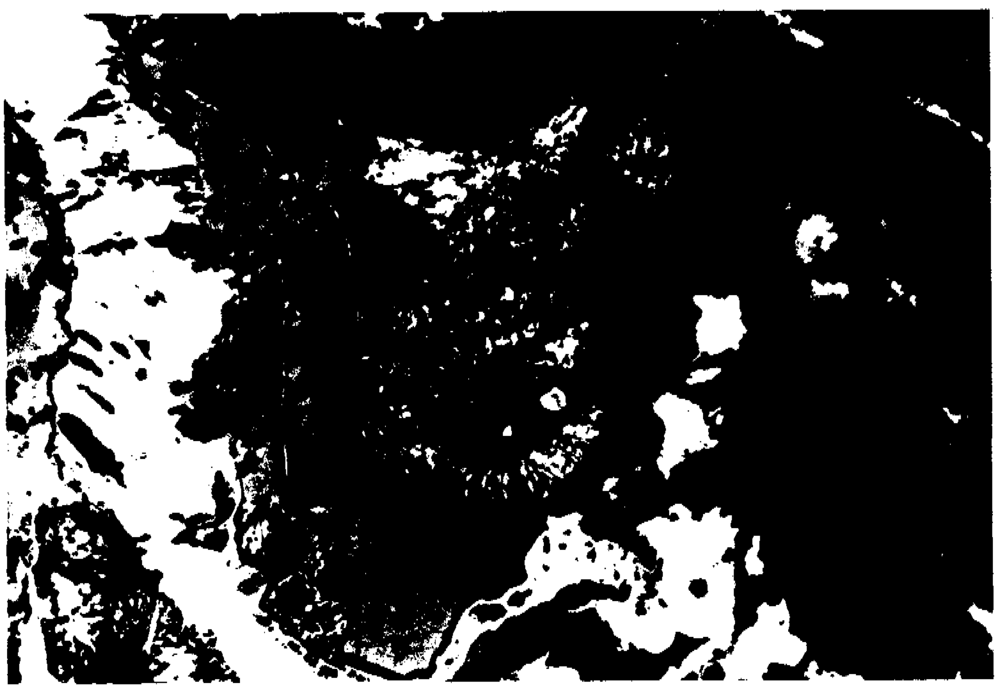
Fig. 17: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 20 x imm.; 1 nic.; neg. no. C 23-7.
Medium grey uraninite replaced by dark grey uraninite replaced by goethite veinlets (light grey) replaced by haematite (white-grey); at top left chalcopyrite (yellow-white) replaced by chalcocite (light grey) replaced by covellite (purple).

URANERZ MINERALOGY	Project: Alligator Rivers		17
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A 1356	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2046	Photomicrographs	



0.05 mm

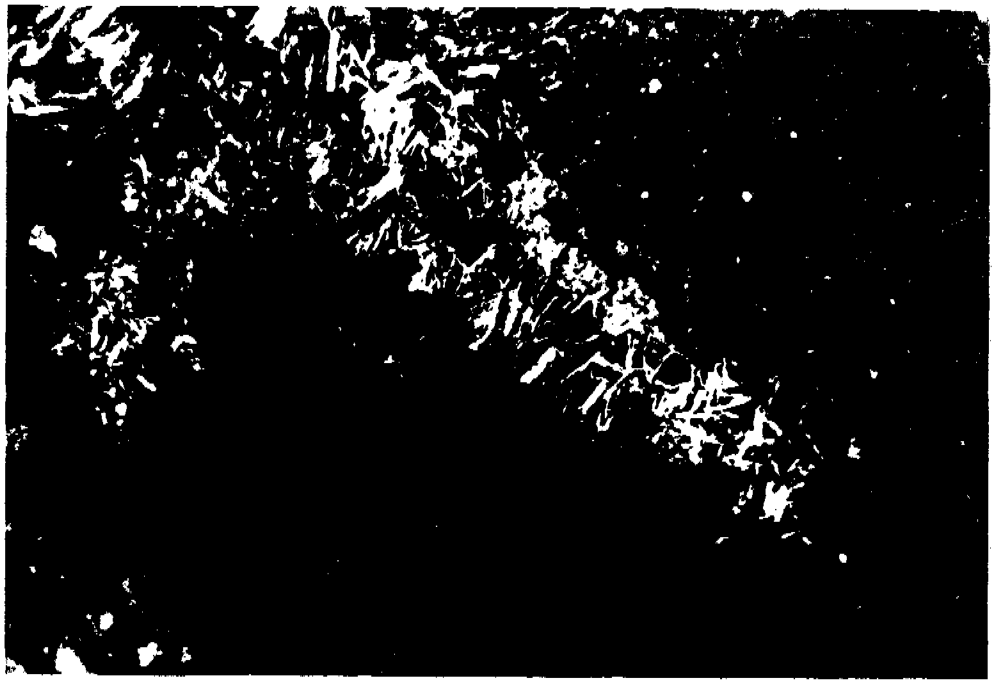
Fig. 18: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 20 x imm.; 1 nic.; neg. no. C 23-6.
Relictic circular light grey (anisotropic) uraninite replaced by younger dark grey uraninite and cut by (steel-grey) goethite.



0.02 mm

Fig. 19: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 24-1.
Dark grey, colloform uraninite developed from/after lighter grey reflecting uraninite; besides limonite veinlets.

URANERZ MINERALOGY	Project: Alligator Rivers		18
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A 1356	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2046	Photomicrographs	

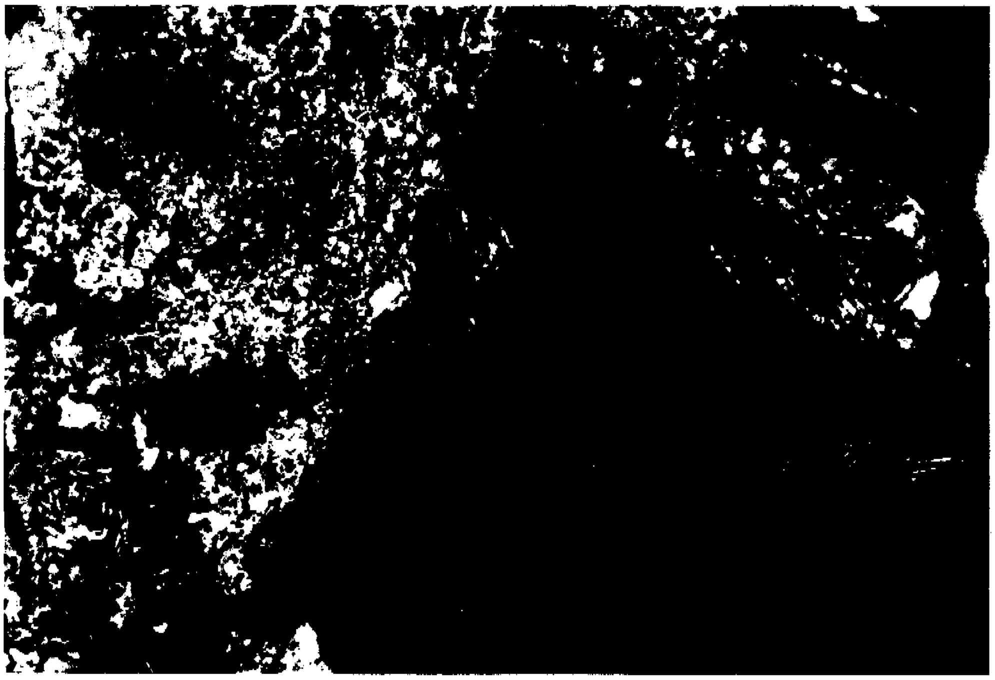


0.02 mm

Fig. 20: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-15.
Needles of haematite (white grey) growing on/at the expense of goethite (dull steel grey) growing on uraninite (varyingly brown grey).

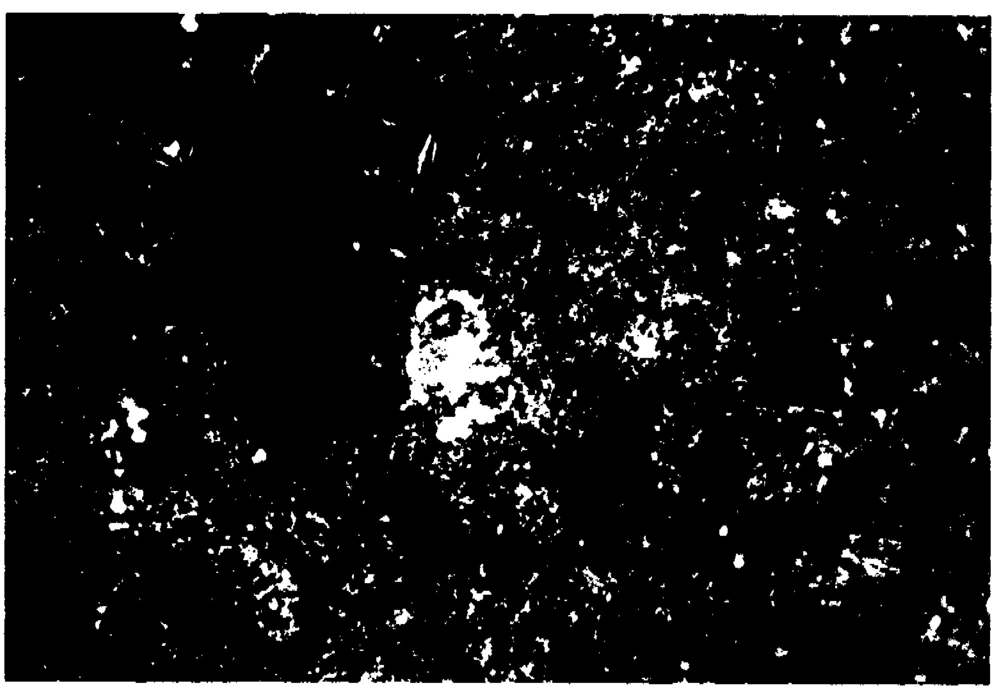
0.02 mm

Fig. 21: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-9.
Haematite (light grey) growing into/after goethite (here red brown) which contains grainlets of native gold (centre, golden).



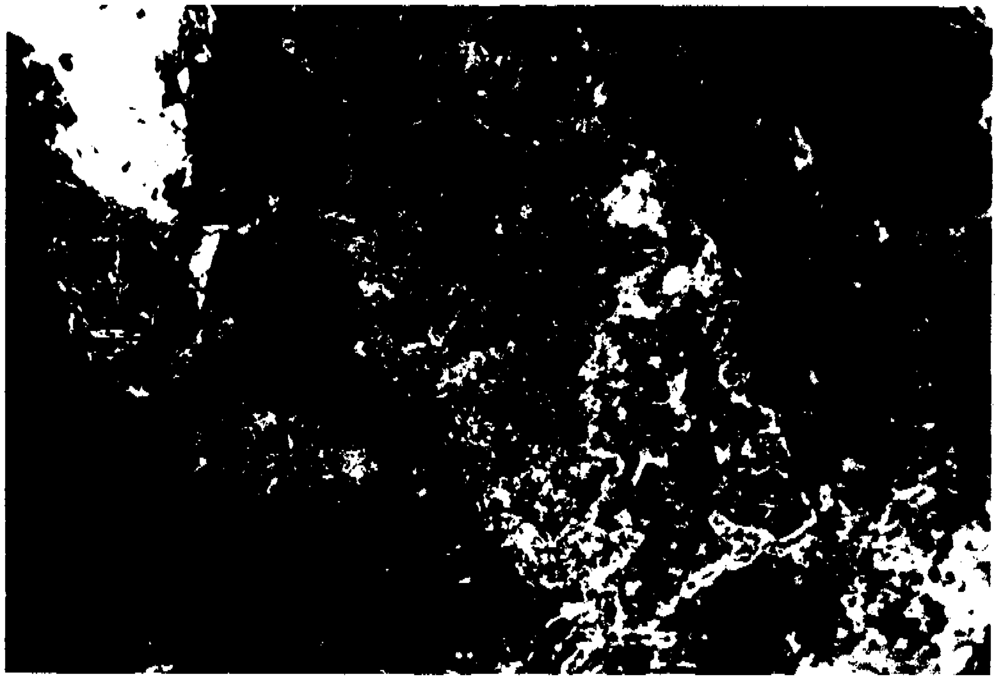
0.02 mm

Fig. 22: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-8.
Very dark grey reflecting uraninite (centre); goethite (dull grey and red brown) with inclusion of native gold (left from centre) and containing flakes of haematite (light grey).



0.02 mm

Fig. 23: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-10.
Goethite (red brown and dull grey) enclosing a 0.037 mm large aggregate of native gold (centre).



0.02 mm

Fig. 24: 8204 2A 1356/Aus 2046; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 23-17.
Mostly dark grey reflecting uraninite (left), haematite (white grey, top left); a goethite vein (dull grey with common red internal reflections) carrying grainlets of native gold (arrows).

URANERZ MINERALOGY

Project:	Alligator Rivers
Project No.:	8204
Area:	Kukalak, Devil's Elbow, EL3421
UAL Sample No.:	8204/2A 1358
Mineralogical Report No.:	89-16
UEB Sample No.:	Aus 2047
Mineralogy by / Date:	E.v.Pechmann/ Dec. 28, 1989
Sample taken by:	J. Rich / 1988
Sample location:	Devil's Elbow, Trench 1, sample 4 (T 2?)
Arrival No./Date:	918 / April 27, 1989
Sample Type:	Core ,Outcrop X ,Boulder ,Other
Investigation:	Thin Section(s), Polished Section(s), Other: 1 pol. TS
Sample stored at:	UEB
Radioactivity:	6880 cps (bg=50cps)

Macroscopy: dark red rock like sericitized fine grained volcanic rock(?) (similar to Aus 2065 but much more red) with several up to several cm long black schlieren, up to 1 cm large specularitic patches; dark red layers with fine grained ophitic texture; a sandstone-like zone with a goethitic net mediating the grains (apatite? - cf. Aus 2045; same pale purple colour hues as in Aus 2045).

1.17g/t

Chemical assay (UAL): 4.4 % U_3O_8; 45 ppb Th; 2090 ppm Pb; 1170 ppb Au; 185 ppm Pt; 28020 ppb Pd.

28g/t Pd

Microscopy: an ore specimen from a widely siliceous (silicified) zone. Pure coarse quartz (0.1-1.2 mm) and finer grained impure quartz zones are separated from a several millimetres wide opaque zone and a zone rich in limonitic apatite (cf. Aus 2046/8204/2A-1356).

Especially the coarse quartz is cut and covered by a net of thin opaque, partly semiopaque veinlets.

Chloritic patches are rare in the section.

Haematite is the dominant ore mineral. Of second priority is goethite. Both minerals occur in very similar a way as in Aus 2046/8204/2A-1356. The haematite encloses domains consisting of anisotropic uraninite which are replaced by the haematite (Fig. 25). The uraninite locally displays about

Field Name of Specimen: Nungbalgarri Volcanics

Main Minerals (%):

Subordinate Minerals: fluorapatite

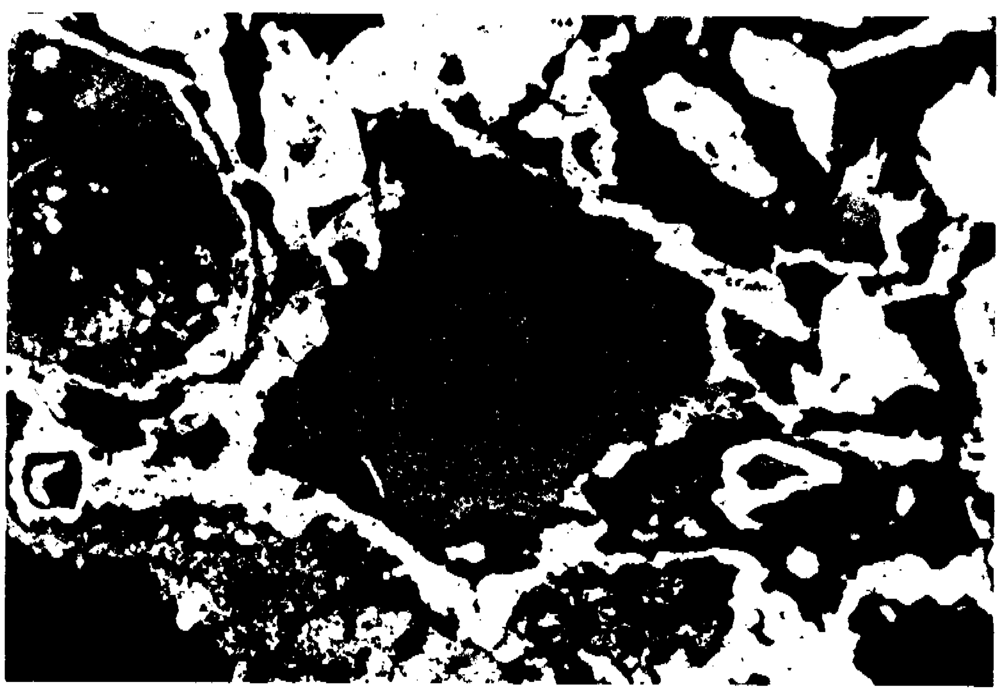
Accessories:

Ore Minerals: uraninite, haematite, goethite

Petrographic Classification: silicified apatite-rich zone (in volcanic rock) euhedral habits probably due to its euhedral quartz environment (Fig. 26). Haematite also occurs in veinlets cutting the uraninite (Fig. 27). In some areas, the uraninite has been highly oxydized; in this case it shows shrinkage cracks and a much lower reflectance (Fig. 28).

0.02 mm

Fig. 25: 8204/2A-1358/Aus 2047; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-9.
Radially textured (anisotropic) uraninite (light brown-grey) corroded by haematite (steel-grey).



0.02 mm

Fig. 26: 8204/2A-1358/Aus 2047; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-7.
Almost euhedral (anisotropic) uraninite (light brown-grey) in haematite (steel-grey) and goethite (dark grey) in a quartz zone (black).

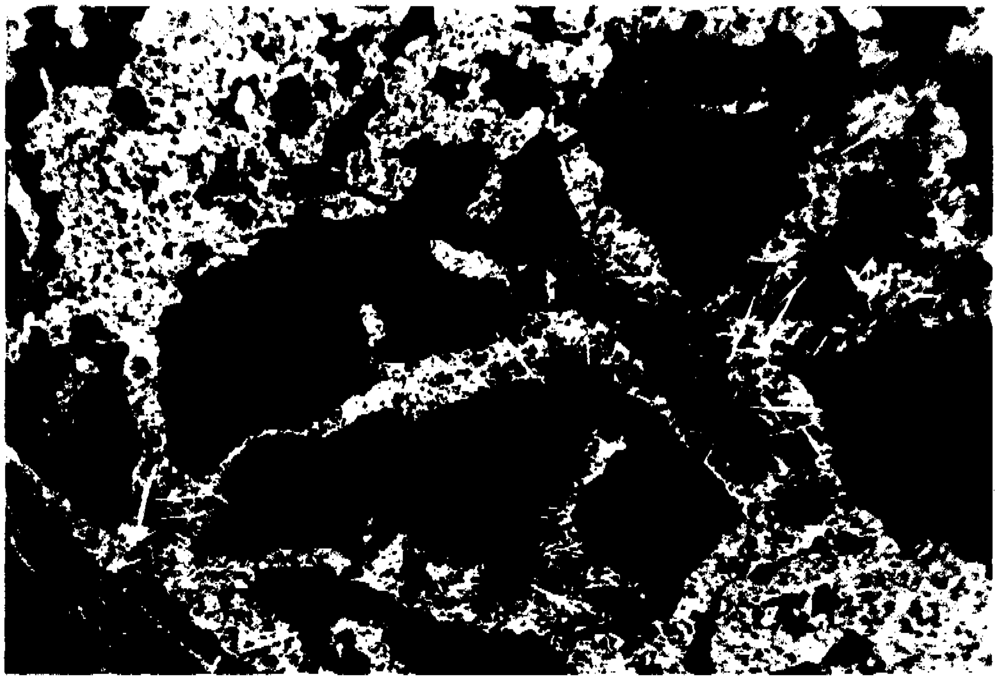


Fig. 27: 8204/2A-1358/Aus 2047; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-8.
(Anisotropic) uraninite (light brown-grey) cut by a veinlet of haematite (steel-grey).

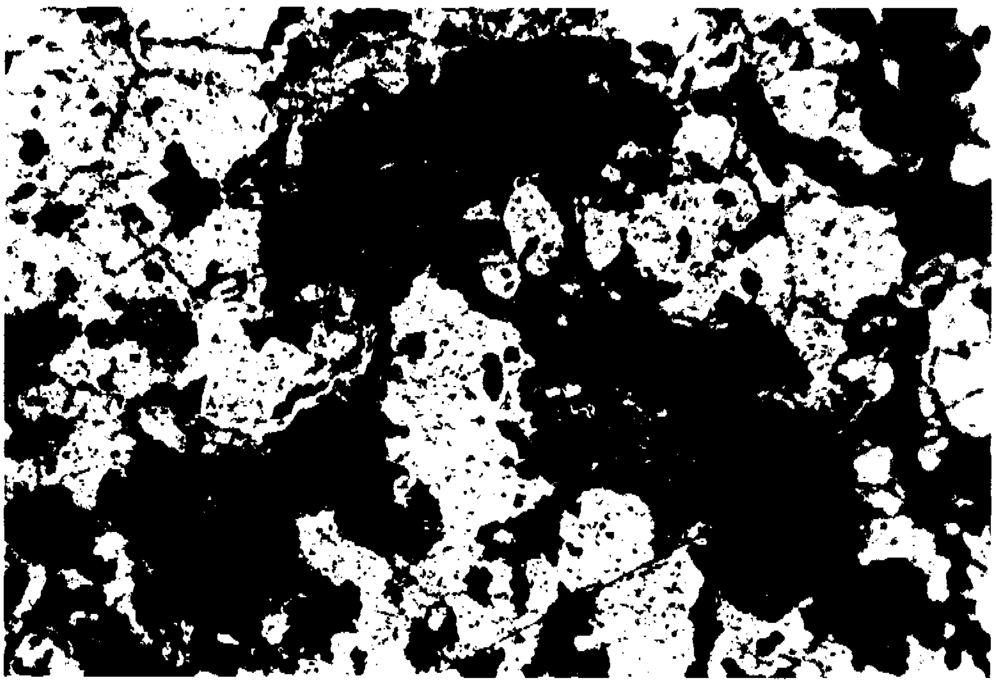


Fig. 28: 8204/2A-1358/Aus 2047; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 31-10.
Very dark grey reflecting uraninite with shrinkage cracks (black) in haematite (light steel-grey); in the centre limonite (dull grey).

URANERZ MINERALOGY	Project: Alligator Rivers	25
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421
	UAL Sample No.: 8204/2A 1360	Mineralogical Report No.: 89-16
	UEB Sample No.: Aus 2048	Mineralogy by / Date:
Sample taken by: J. Rich / 1988		E.v.Pechmann/ Dec. 12, 1989
Sample location: Devil's Elbow, Trench 4, sample 1 (T 5?)		
Arrival No./Date: 918 / April 27, 1989	Sample Type: Core ,Outcrop ,Boulder ,Other	
Investigation: Thin Section(s), Polished Section(s), Other: 1 pol. TS (UAL 60869)		
Sample stored at: UEB	Radioactivity: 90 cps	(bg=50cps)

Macroscopy: fine grained, finely ophitic greenish rock (mildly ferruginous) with several up to 2 mm thick quartz veins partly bordered by 1 mm thick haematite layers occurring 1 mm apart in the greenish matrix; also the centres of the quartz veins carry specularite.

Chemical assay (UAL): 0.22 % U_3O_8; 25 ppm Th; 316 ppm Pb; 110 ppb (230 ppb) Au. 0.011 ppm

Microscopy: an ophitic texture consisting of 30-40 vol.-%, 0.09-1 mm long sericitic (partly Fe-Mg-chloritized) laths and a ground mass of extremely fine grained (?)chlorite (not discernable because of grain size and thickness of section). This ground mass occurs in tabular ?pseudomorphs (Figs. 29-30) which contain numerous laths and spindles of anatase and to a minor degree of limonite. Reflected light microscopy also shows up to 0.3 mm large aggregates of haematite fibres.

The section is cut by a mm wide vein of comb quartz which is accompanied by haematite stringers on both sides. Light ochre limonitic material coats the individual quartz crystals.

The ophitic texture and some irregular vesicles, some of which showing euhedral outlines (porphyroblasts?) (Fig. 31) show the rock to be a volcanic or a basic dyke.

Field Name of Specimen:

Main Minerals (%):

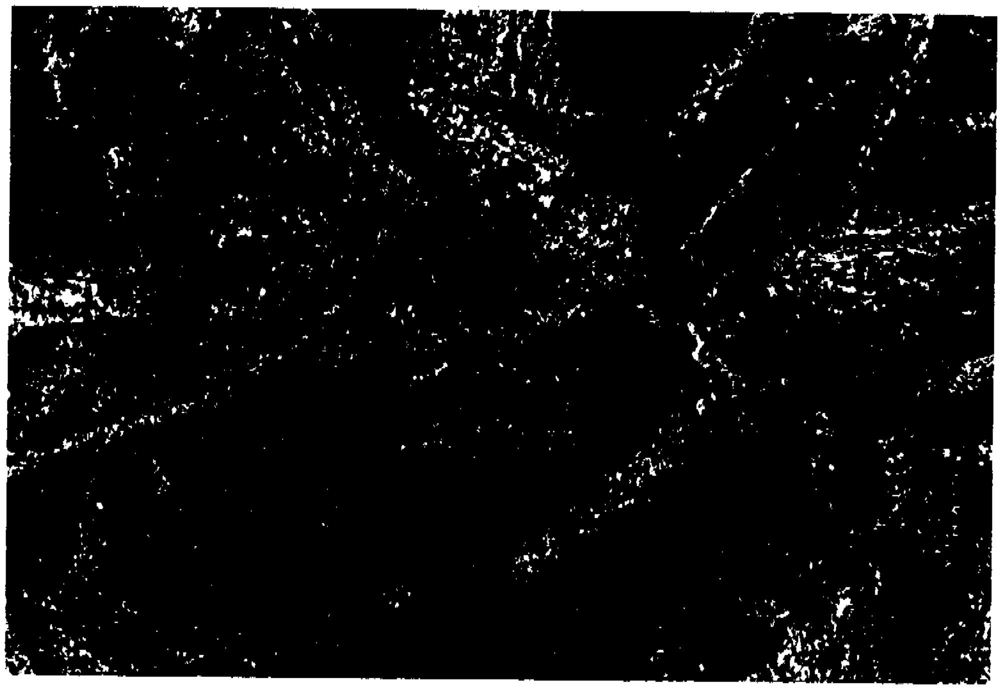
Subordinate Minerals:

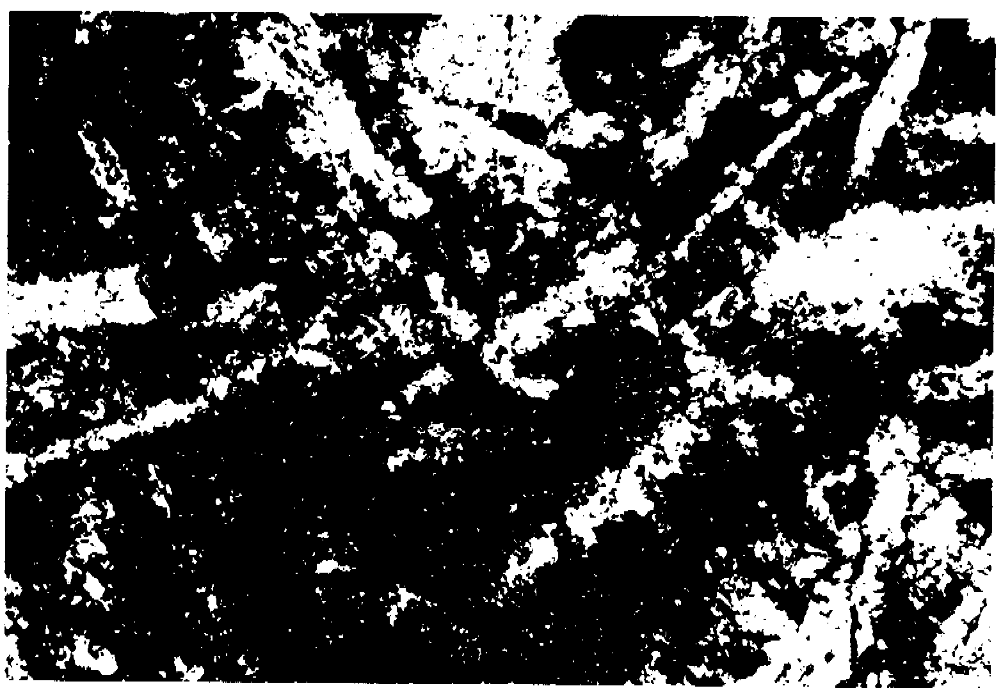
Accessories:

Ore Minerals:

Petrographic Classification: haematitized anatase-rich sericitized-chloritized volcanic rock / basic dyke with quartz vein

URANERZ MINERALOGY	Project: Alligator Rivers		26
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A 1360	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2048	Photomicrographs	





Figs. 29-30: 8204/2A 1360/Aus 2048; polished thin section 60869, transmitted light; top: 1 nic.; bottom: nic. x; obj. 16 x air; neg. nos. C 24/4-5.
Ophitic texture: sericitic laths; finest grained chloritic matrix (tabular pseudomorphs?; dark blue-grey on the lower photograph) with dots and laths of anatase (+subordinately limonite).

0.2 mm

Fig. 31: 8204/2A 1360/Aus 2048; polished thin section 60869, transmitted light; top: 1 nic.; bottom: nic. x; obj. 6.3 x air; 1 nic.; neg. no. C 24-6.
Zoned ?euhedral intraclast (chloritic) in ophitic ground mass.

URANERZ MINERALOGY

Project: Alligator Rivers	
Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421
UAL Sample No.: 8204/2A 1360	Mineralogical Report No.: 89-16
UEB Sample No.: Aus 2049	Mineralogy by / Date: E.v.Pechmann/ Dec. 12, 1989
Sample taken by: J. Rich / 1988	
Sample location: Devil's Elbow, trench 3, sample 2 (T 4?)	
Arrival No./Date: 918 / April 27, 1989	Sample Type: Core ,Outcrop ,Boulder ,Other
Investigation: Thin Section(s), Polished Section(s), Other: 1 pol. TS (UAL - 60870)	
Sample stored at: UAL	Radioactivity: 70 cps (bg=50cps)

Macroscopy: finest grained greenish rock (10-15 % ophitic laths in light green, finest grained matrix) with numerous up to 1 cm large light coloured amygdules commonly rimmed by limonite and with quartz centres; one domain of the rock deep reddish (limonitic) stained.

Chemical assay (UAL): 830 ppm U_3O_8; 25 ppm Th; 110 ppb Au.

Microscopy: an ophitic texture with about 20 % sericitic laths of 0.09 - 1 mm size, 30 % 1-10 mm large vesicles and a strongly tarnished finest grained ?chloritic matrix (Fig. 32). The vesicles are well zoned in that commonly their rims consist of quartz, the centres of finest grained chlorite. Some vesicles are more varyingly zoned with quartz also in the centre (Figs. 33-34). The matrix is, where tarnished, intensively dusted with anatase; up to 10 % of the matrix consist of up to 0.05 mm large roundish haematite patches; red matrix areas also contain up to 10 % up to 0.05 mm long haematite spindles.

Field Name of Specimen: amygdaloidal volc.

Main Minerals (%):

Subordinate Minerals:

Accessories:

Ore Minerals:

Petrographic Classification: amygdaloidal silicified, sericitized, chloritized, haematitized volcanic rock

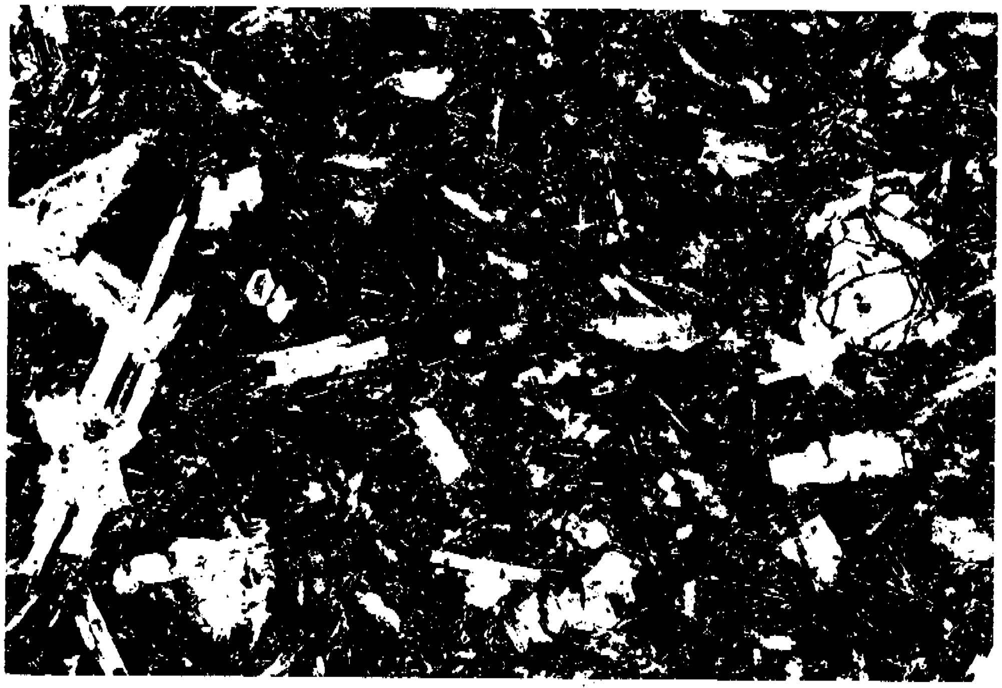
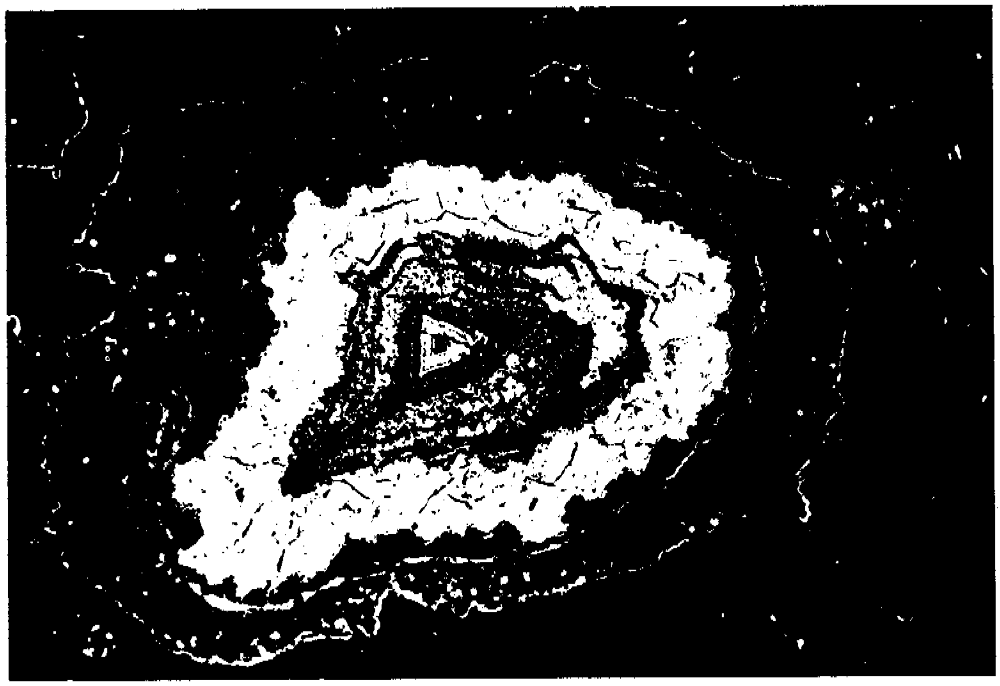


Fig. 32: 8204 2A 1360/Aus 2049; polished thin section 60870; transmitted light; obj. 2.5 x air; 1 nic.; neg. no. C 24/9.
Ophitic texture with tarnished matrix containing haematitic patches and sericitic, (partly) euhedral laths.



0.5 mm

Figs. 33-34: 8204 2A 1360/Aus 2049; polished thin section 60870; transmitted light; obj. 2.5 x air; top: 1 nic.; bottom: nic. x; neg. nos. C 24/7-8.
Zoned, chloritic, silicified vesicle.

URANERZ MINERALOGY

Project: Alligator Rivers	
Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421
UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16
UEB Sample No.: Aus 2062	Mineralogy by / Date:
Sample taken by: Dr.Bianconi,Dr.Gatzweiler/Aug. 28,89	E.v.Pechmann/Dec.13,1989
Sample location: Devil's Elbow,	
Arrival No./Date: 960 / Aug. 28, 1989	Sample Type: Core ,Outcrop X ,Boulder ,Other
Investigation: Thin Section(s), Polished Section(s) ,Other: 1 pol. TS, 2 XRD	
Sample stored at:	Radioactivity: 1700 cps (bg=50cps)

Macroscopy: a red ophitic rock (ophitic laths partly light yellowish) cut by some red limonitic veinlets containing clear apatite crystals. Black patches (parts of a mm large) are mostly chloritic, in some places black ore.

X-ray diffractometry:

apatite? and limonite: quartz, F-apatite, kaolinite; minor coffinite; minor mica;

macroscopically black: F-apatite, coffinite, kaolinite; minor mica.

Microscopy: an ophitic rock with laths mostly of biotite-chlorite and partly of sericite; the matrix is finest grained chloritic (Fe-chlorite after biotite). The matrix is irregularly, patch-wise limonitic. Some vugs/vesicles contain extremely fine grained phyllosilicates and 0.001-0.002 and some 0.035 mm large haematite/limonite dots. Rims of such vugs partly consist of bushy sericite (Fig. 35).

Quartz is locally displaying a system of 0.09-0.2 mm thick veins.

The matrix is dusted by anatase which is found along the contours of the laths; it contains relatively much limonite, and locally bushes and flames of haematite, partly in thick parcels.

Field Name of Specimen:

Main Minerals (%):

Subordinate Minerals:

Accessories:

Ore Minerals:

Petrographic Classification: sericitic-chloritic-haematitic-limonitic ophitic rock (basic volcanic/dyke rock) with uranium-apatite ore zone

This also macroscopically rather homogeneously looking rock domain is neighboured by a tectonically, hydrothermally destroyed/overprinted zone rich in limonite and characterized by abundant, 0.1 - over 2 mm large apatite.

The apatite is rich in limonite (Figs. 36-37). It is coated/replaced by dark grey reflecting uraninite (Figs. 38-40).

Uraninite on its side is widely replaced by limonite (Figs. 40-43) but also by a dark grey reflecting variety of uranium oxide. The uraninite occurs either as 0.015-0.04 mm large euhedral grains (Figs. 42, 44) or as colloform masses of up to 0.35 mm size, mostly of quite irregular shape and locally showing shrinkage cracks.

The X-ray diagram also shows the presence of coffinite which, as usual, is hard to determine microscopically; it can be faintly recognized on Fig. 44 as matrix in the apatite-rich zone.

Locally up to 0.025 mm large cubes and parts of cubes of galena are associated with/occur within the colloform uraninite. Galena also shows its known affinity to anatase in that it occurs in anatase stringers/veinlets.

The matrix apart from the apatite-rich ore zone shows very randomly distributed, irregular patches of dark grey reflecting uranium oxide, partly associated with irregular pyrite, locally veined by anatase (Fig. 45).

At one place an aggregate of chalcopyrite was observed (0.15 mm large).

0.2 mm

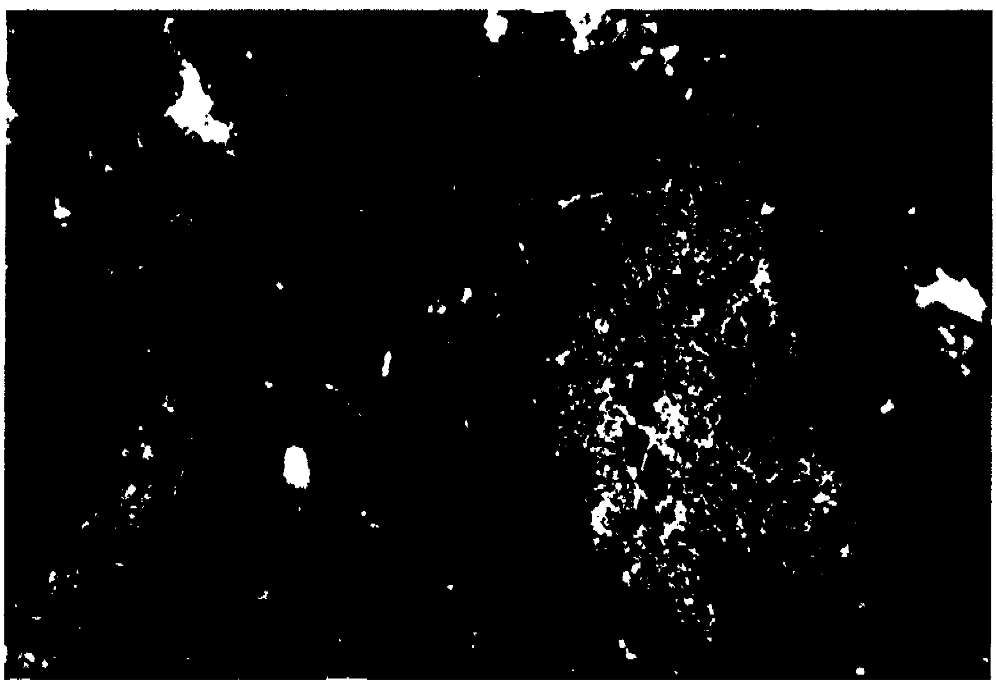
Fig. 35: Aus 2062; polished thin section; transmitted light; obj. 6.3 x air; nic. x; neg. no. C 24-12.
A chloritic, sericite-coated vug besides a biotitic-chloritic ophitic domain and a zone of quartz and limonite dust.

0.5 mm

Fig. 36: Aus 2062; polished thin section; transmitted light; obj. 2.5 x air; 1 nic.; neg. no. C 24-10.
Apatite-rich line; the matrix is chloritic green, limonitic in places as is the apatite.

0.2 mm

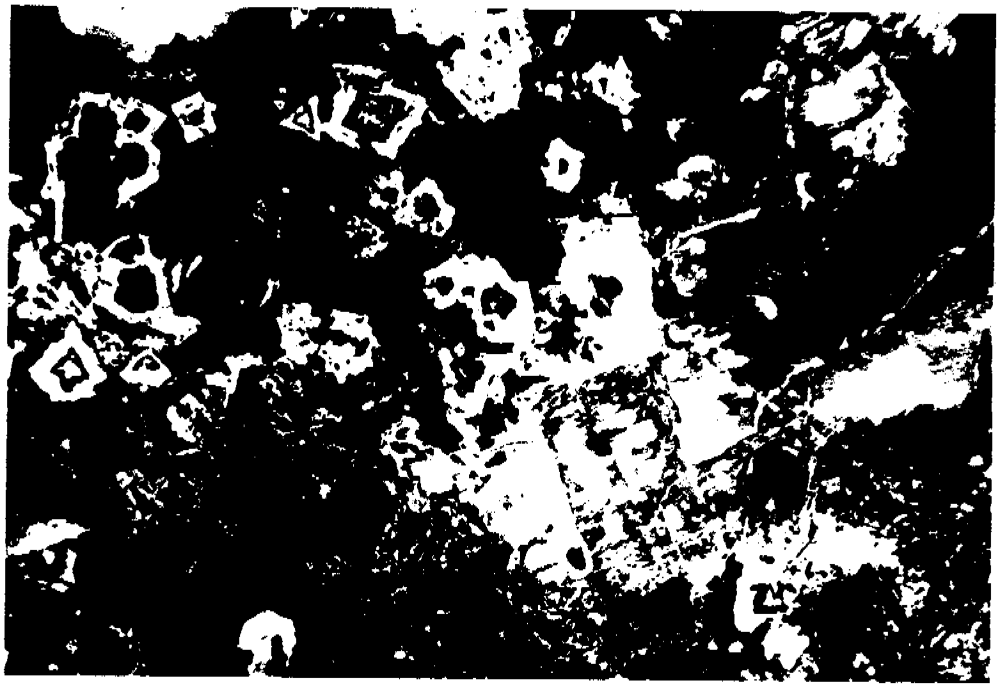
Fig. 37: Aus 2062, polished thin section; transmitted light; obj. 6.3 x air; 1 nic.; neg. no. C24-11.
Zone of a chloritized ophitic zone (green; right) bordering a zone rich in zoned, limonite-stained apatite (white; left).



0.05 mm

Fig. 38: Aus 2062, polished thin section; reflected light; obj. 32 x imm.; 1 nic.; neg. no. C24-17.
Limonite-stained apatite (left and centre; brownish) coated/replaced by uraninite (medium grey; above centre).

URANERZ MINERALOGY	Project: Alligator Rivers		35
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2062	Photomicrographs	

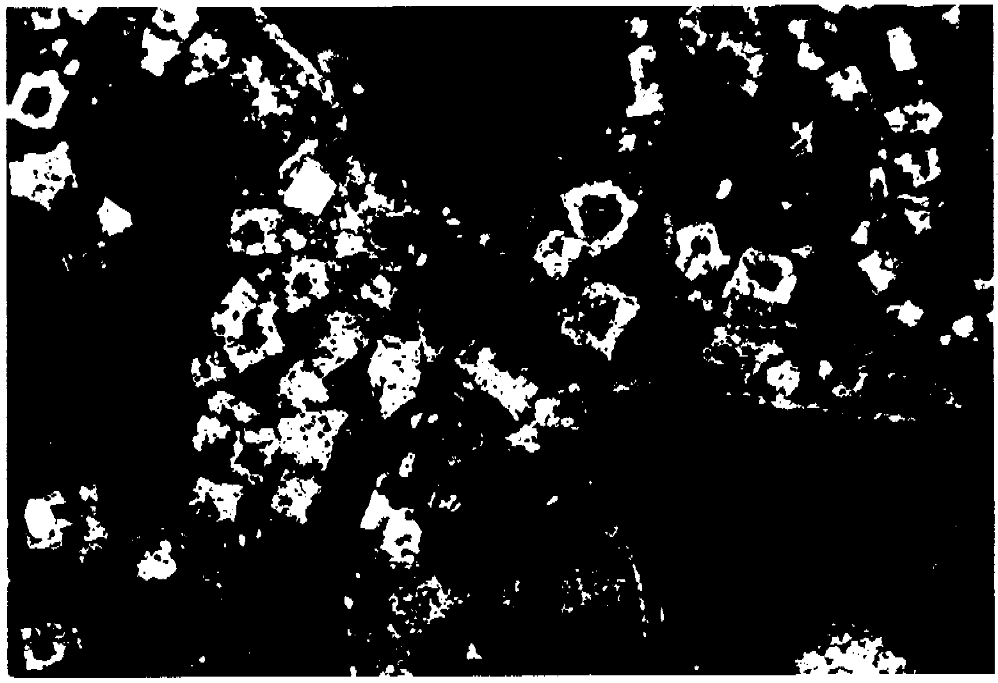


0.05 mm

Fig. 39: Aus 2062, polished thin section; reflected light; obj. 32 x imm.; 1 nic.; neg. no. C25-1.
Uraninite (grey) in a crack in/after apatite (arrow), around the apatite and in euhedral forms independent of the apatite.

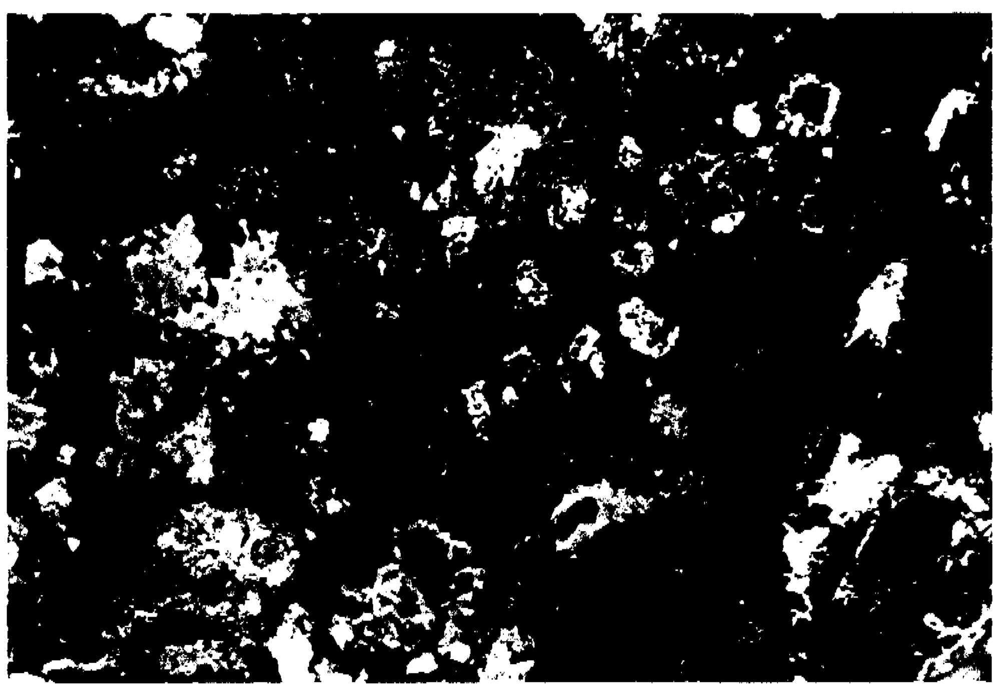
0.02 mm

Fig. 40: Aus 2062, polished thin section; reflected light; obj. 50 x imm.; 1 nic.; neg. no. C25-3.
A limonitic veinlet (brown-red; left); uraninite (medium grey, various shades) replacing apatite (glassy, dark grey; right) and replaced by goethite (light grey, red internal reflections); minor pyrite(?) (white) in uraninite.



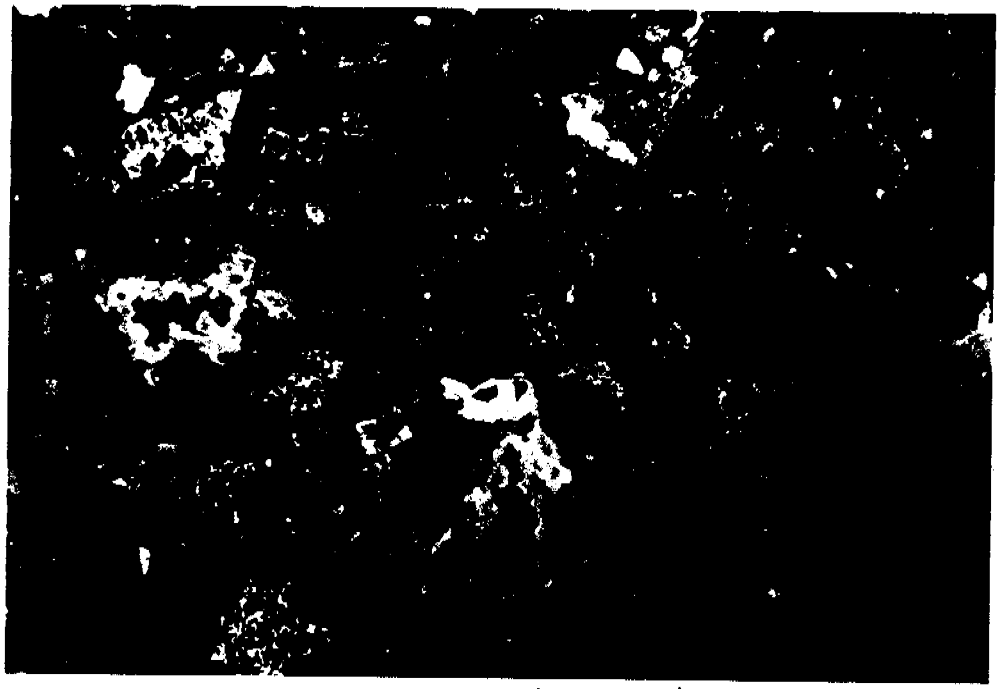
0.05 mm

Fig. 41: Aus 2062, polished thin section; reflected light; obj. 32 x imm.; 1 nic.; neg. no. C24-13.
Pseudomorphs of euhedral uraninite replaced by goethite (light grey; abundant red internal reflections visible with crossed nichols); minor pyrite (white).



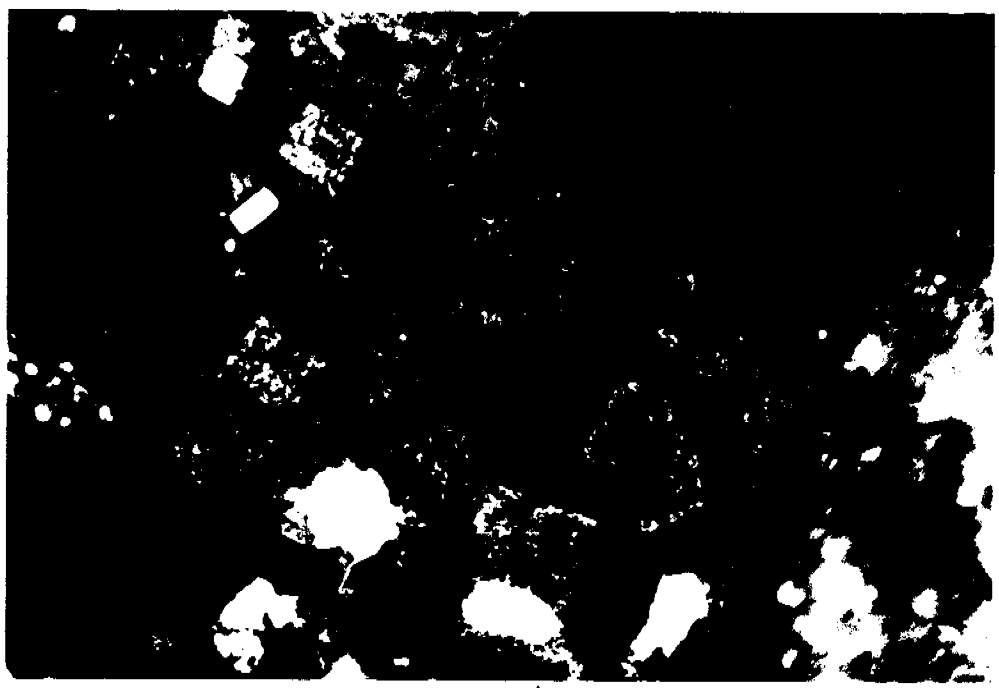
0.05 mm

Fig. 42: Aus 2062, polished thin section; reflected light; obj. 32 x imm.; 1 nic.; neg. no. C24-14.
Partly colloform uraninite (two grey shades); euhedral pseudomorphs(?) of goethite; galena and pyrite (both white).



0.05 mm

Fig. 43: Aus 2062, polished thin section; reflected light; obj. 32 x imm.; 1 nic.; C24-15.
Colloform uraninite (various grey shades); euhedral goethite; goethite veinlets (whitish grey) in apatite (bottom left).



0.05 mm

Fig. 44: Aus 2062, polished thin section; reflected light; obj. 32 x imm.; 1 nic.; neg. no. C24-16.
Euhedral, zoned uraninite (medium grey), limonitized (light grey) colloform uraninite; euhedral galena (white); anatase (nebulous white); coffinite (extremely dark grey in the matrix) (e.g. half top right); apatite (bottom and bottom right; glassy lustre).

0.02 mm

Fig. 45: Aus 2062, polished thin section; reflected light; obj. 50 x imm.; 1 nic.; neg. no. C25-4.
Dark grey reflecting uraninite associated with anatase (white).

URANERZ MINERALOGY

Project: Alligator Rivers	
Project No.: 8204	**Area:** Kukalak, Devil's Elbow, EL3421
UAL Sample No.: 8204/2A	**Mineralogical Report No.:** 89-16
UEB Sample No.: Aus 2063	**Mineralogy by / Date:**
Sample taken by: UAL / August 1989	E.v.Pechmann/ Dec. 29, 1989
Sample location: Devil's Elbow,	
Arrival No./Date: 960 / Aug. 28, 1989	**Sample Type:** Core ,Outcrop X, Boulder ,Other
Investigation: Thin Section(s), Polished Section(s), Other: 1 pol. TS, 1 XRD	
Sample stored at: UEB	**Radioactivity:** 730 cps (bg=50cps)

Macroscopy: dense red rock with specularitic matrix domains and 3-5 vol.-% light yellowish patchlets of 1-2 mm size, veined by limonite.

X-ray diffractometry:

matrix and rutile(?): haematite, subordinate to minor goethite, anatase, kaolinite, mica.

Microscopy: the section consists of 70 to 90 vol.-% opaque material, commonly as brown, limonite-rich honeycomb-like (semiopaque) aggregates in opaque material and muscovitic-sericitic and partly Mg-Fe-chloritic intercalations.

Reflected light microscopy shows that there is a network of fine grained haematite resp. goethite (Fig. 46), net wall thickness 0.05-0.15 mm, and honeycomb-/ladder-like structures of haematite with colloform goethite infillings (Figs. 46-47).

The centres of these "honey"combs contain limonitic staining, yellow (stained?) sheet minerals and anatase.

The autoradiograph of the hand specimen as well as of the polished thin section shows a vein and net-like blackening corresponding to limonitic/haematitic lines (Fig. 48). It was nevertheless not possible to detect a discrete radioactive mineral (U adsorption to limonite?).

Field Name of Specimen: ferricrete anomaly: weathered fractured mafic volcanic? (anomalous sandstone)

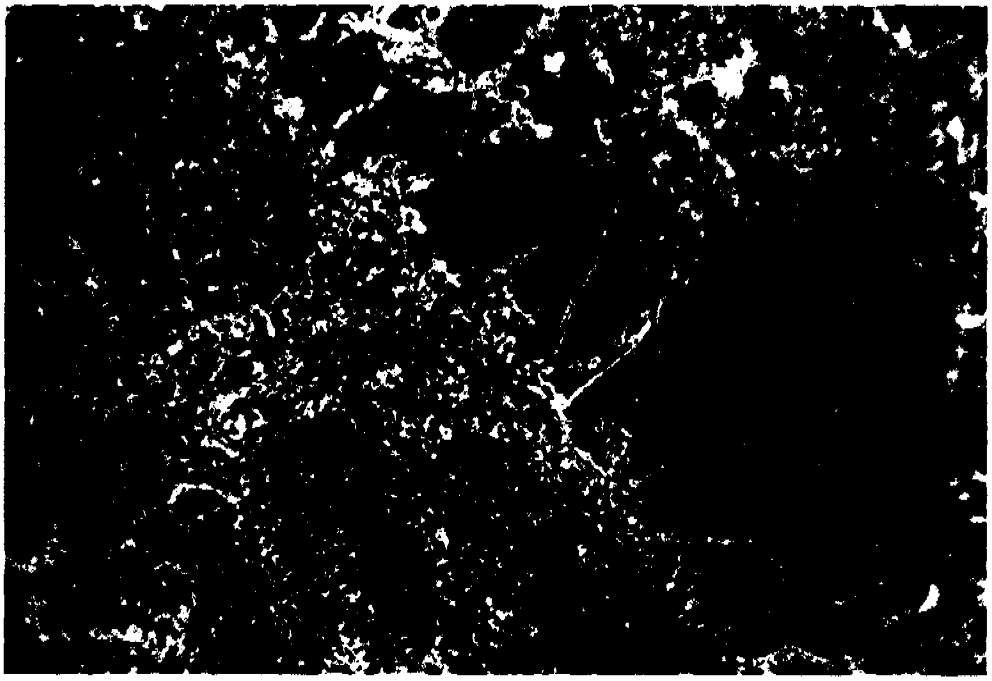
Main Minerals (%):

Subordinate Minerals:

Accessories:

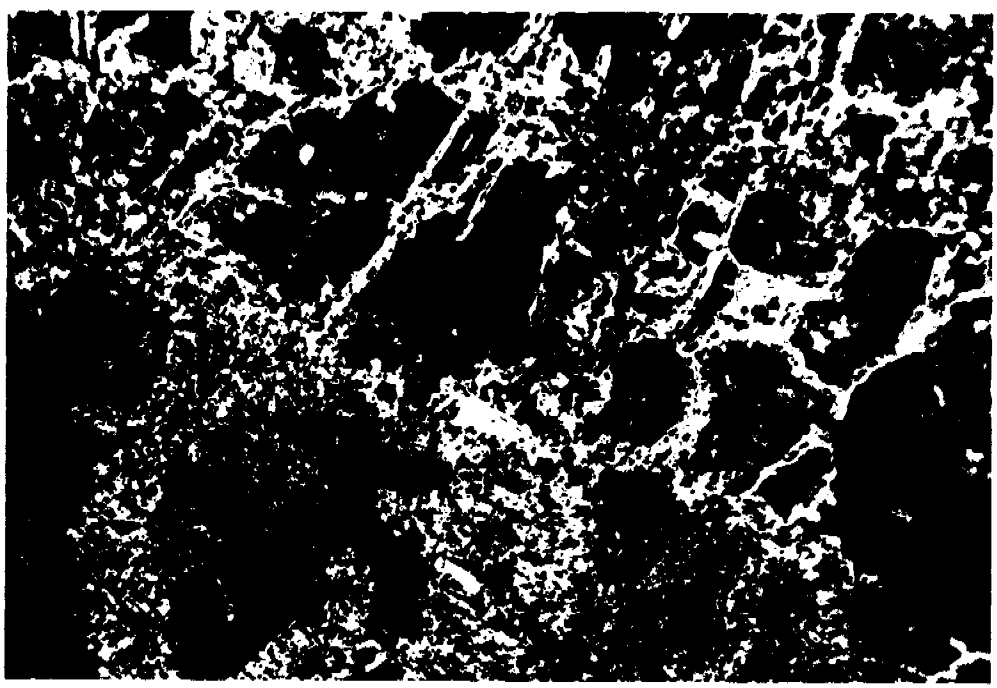
Ore Minerals:

Petrographic Classification: haematitic-goethitic ferricrete



0.02 mm

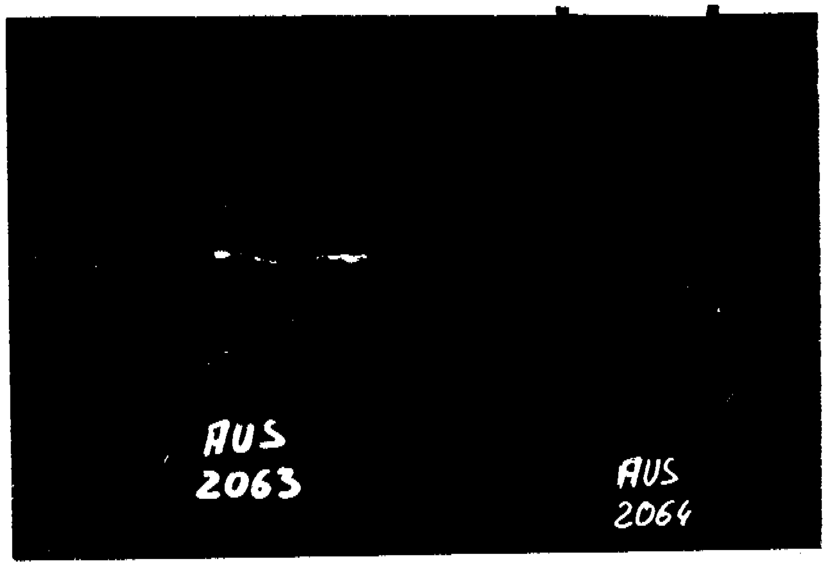
Fig. 46: Aus 2063; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-5.
Ladder-like and fine grained haematite and goethite (predominant) (both grey).



0.02 mm

Fig. 47: Aus 2063; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-6.
Alike Fig. 46.

URANERZ MINERALOGY	Project: Alligator Rivers		41
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2063/2064	Photomicrographs	



1 cm

Fig. 48: Aus 2063/Aus 2064; autoradiographs of polished thin sections.
Aus 2063 shows a strongly radioactive line and faint net-like radioactivity.
Aus 2064 shows very faint radioactivity only (the borders of this section are indicated by short lines at the top right).

URANERZ MINERALOGY

Project: Alligator Rivers	
Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421
UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16
UEB Sample No.: Aus 2064	Mineralogy by / Date: E.v.Pechmann/ Dec. 29, 1989
Sample taken by: UAL / August 1989	
Sample location: Devil's Elbow,	
Arrival No./Date: 960 / Aug. 28, 1989	Sample Type: Core ,Outcrop X ,Boulder ,Other
Investigation: Thin Section(s), Polished Section(s) ,Other: 1 pol. TS	
Sample stored at:	Radioactivity: 140 cps (bg=50cps)

Macroscopy: appearance of an extremely ferruginized gneiss due to mildly folded light grey layers (40 %) in dark red and specularitic black matrix, partly as layers in the folded domain, partly occurring in up to several centimetres large patches.

Microscopy: much more dense than Aus 2063; only below 10 vol.-% semi-opaque brownish and also sericitic.

Nets or honeycombs are absent. Instead, limonitized haematite displays a commonly dense texture in limonite-stained matrix (Figs. 49-50).

The source of the very weak radioactivity could not be determined by visual optical microscopy (Fig. 48).

Field Name of Specimen: ferricrete anomaly: ironstone laterite cap (anomalous sandstone

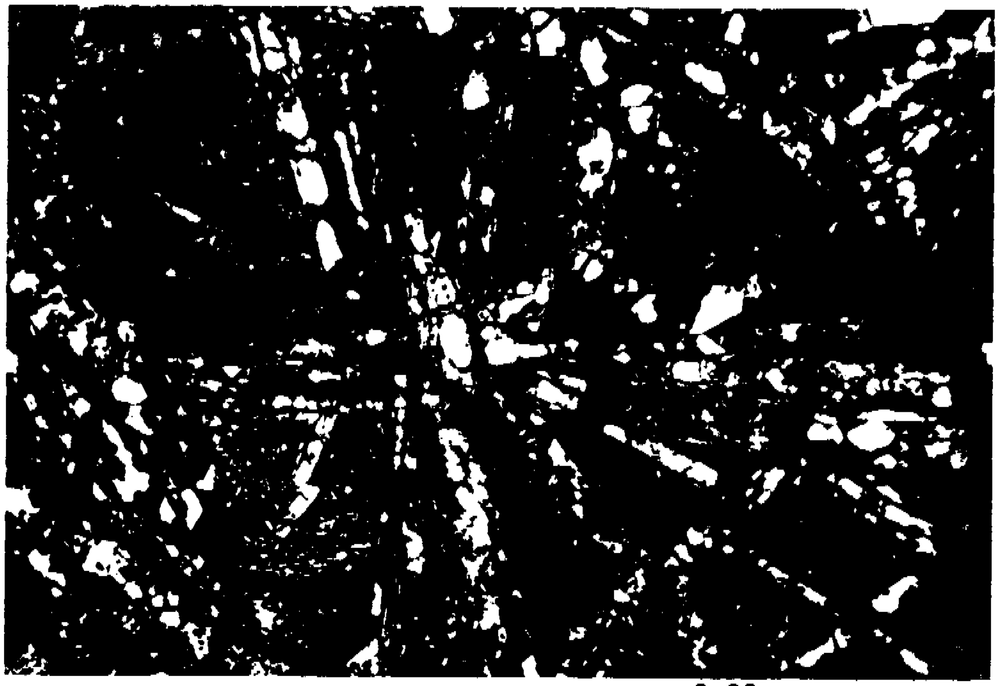
Main Minerals (%):

Subordinate Minerals:

Accessories:

Ore Minerals:

Petrographic Classification: haematitic-goethitic ferricrete



0.02 mm

Fig. 49: Aus 2064; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-7.
Rosette-like haematite (light grey) replaced by goethite (dark grey) which also stains the matrix yellowish-redbrown.

0.02 mm

Fig. 50: Aus 2064; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-8.
Ophitic texture of haematite laths (light grey) in goethitic matrix (redbrown).

URANERZ MINERALOGY	Project: Alligator Rivers		44
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2065	Mineralogy by / Date: E.v.Pechmann/ Dec. 29, 1989	
Sample taken by: UAL / August 1989			

Sample location: Devil's Elbow, T 2

Arrival No./Date: 960 / Aug. 28, 1989 — Sample Type: Core, Outcrop X, Boulder, Other

Investigation: Thin Section(s), Polished Section(s), Other: 1 pol. TS, 1 XRD

Sample stored at: UEB — Radioactivity: 2300 cps (bg=50cps)

Macroscopy: below 1 to 3 mm large dark green to blackish vesicles (appr. 10 %) in an irregularly worm-like texture of dark, blackish components surrounded by light coloured, sericite-like rims; the rock might be an altered basic dyke(?); strongly ferruginized at one side; local dark red patches within the rock; light purple hues due to apatite.

X-ray diffractometry:

black: uraninite, siderite, fluorapatite.

Microscopy: ophitic texture with 0.09-0.55 mm long, partly coarse tabular 0.3 x 0.5 mm large laths of sericite or biotitic-Fe-chloritic. Limonite laths underline the ophitic texture (Fig. 51).

The Fe-chloritic laths tend to become Fe-Mg-chloritic in one area, where the limonite content increases.

Vesicles filled by Fe-Mg-chlorite occur occasionally (Fig. 52), as do chlorite-coated quartz vugs.

Chloritic vugs partly contain up to 0.15 mm starlike patches of haematite.

Locally carbonate (siderite) appears in the matrix and also in a 3 mm wide band with quartz and many Fe-oxy/hydroxides (Fig. 53).

Field Name of Specimen: weakly sheared chloritized mafic volcanic (Nungbalgarri); uraninite and native Au + PGE

Main Minerals (%):

Subordinate Minerals: fluorapatite, siderite, anatase

Accessories:

Ore Minerals: uraninite, pyrite, chalcopyrite, marcasite, galena, goethite, haematite, sphalerite

Petrographic Classification: chloritized, sericitized apatite-rich basic volcanic rock, haematitic, goethitic, sulphidic, with uraninite

This zone is neighboured by a zone rich in quartz and zoned apatite, partly carrying quartz-apatite veinlets (Fig. 53).

The limonite-quartz-siderite zone contains up to 0.2 mm large, dark grey reflecting, partly ragged uraninite, coated and veined by goethite. A 0.3 mm thick vein of very dark grey uranium oxide (Figs. 54-56) is grading into a veinlet rich in chalcopyrite and pyrite/marcasite (Fig. 55). Goethite is continuously replacing the uraninite (Fig. 56).

Fig. 57 shows a part of the paragenetic sequence that can be constructed (from oldest to youngest):

> uraninite - darker grey/higher oxidic uraninite - pyrite - chalcopyrite - marcasite - galena - goethite - haematite.

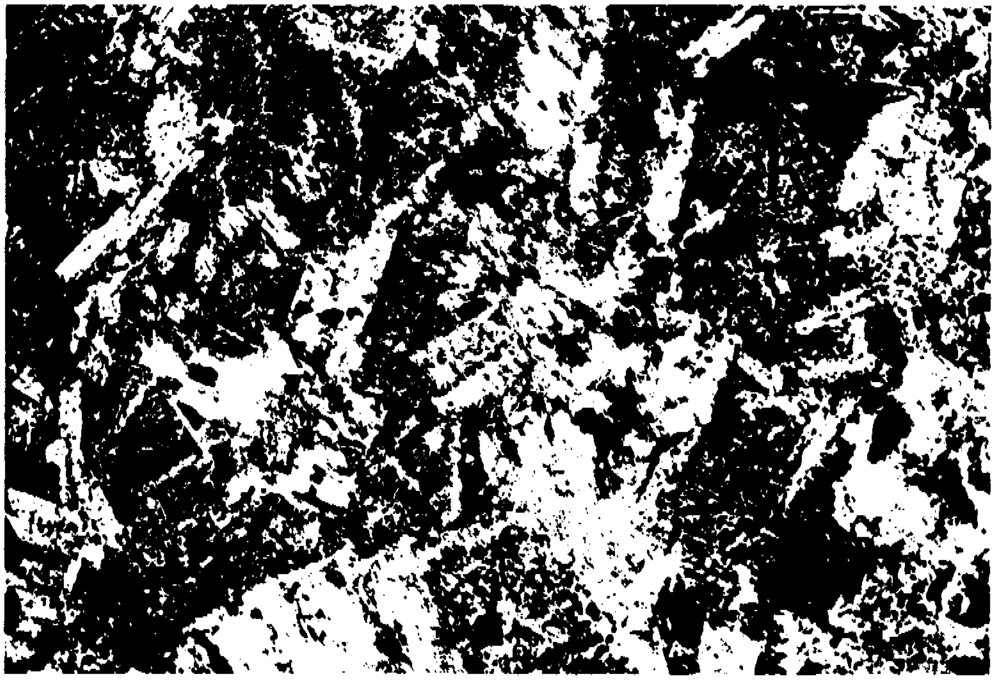
Up to 0.1 mm large uraninite patches are irregularly distributed (Fig. 58). A very dark U phase (coffinite?) is associated with anatase (Fig. 59).

Galena in some places appears within anatase patches. Anatase is also disseminated in the matrix as dust. The red colour of the matrix derives from 0.01-0.3 mm flame-like aggregates of goethite.

Carbonate (siderite) is in one place directly associated with colloform uraninite (Fig. 60).

Sphalerite(?) might be present in a 0.05 mm large aggregate of chalcopyrite-galena-pyrite.

Neither gold nor PGE minerals have been observed.



0.2 mm

Fig. 51: Aus 2065; polished thin section, transmitted light; obj. 6.3 x air; 1 nic.; neg. no. C 25-9.
Ophitic texture: chloritic laths (green); limonitic laths and coatings (black).

0.2 mm

Fig. 52: Aus 2065; polished thin section, transmitted light; obj. 6.3 x air; 1 nic.; neg. no. C 25-10.
Vug filled by a Fe-Mg-chlorite with bright blue interference colours. Limonite is brown.

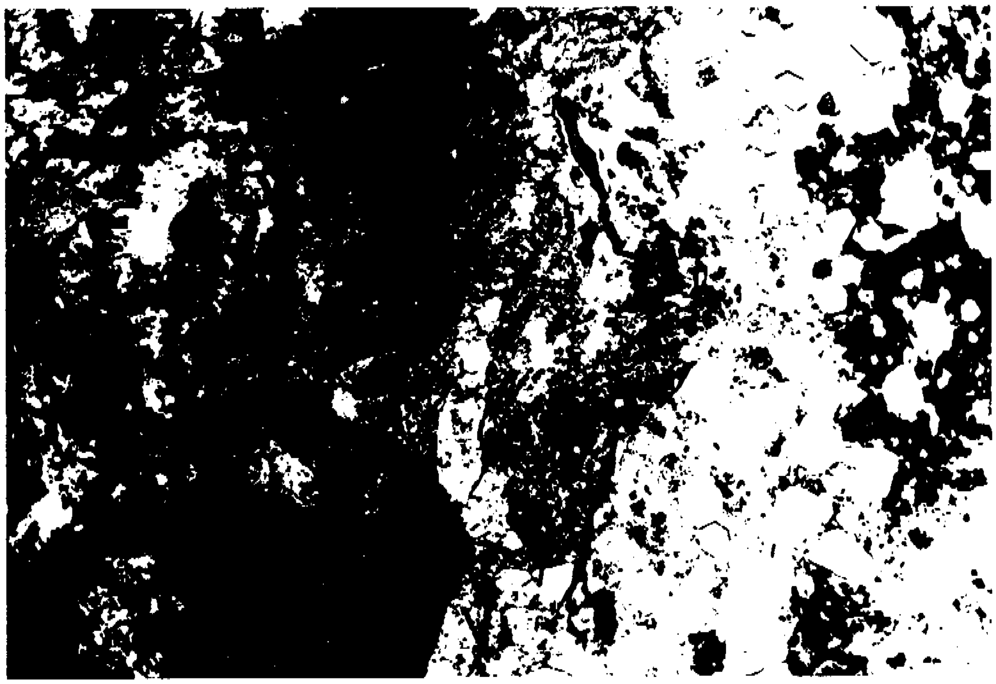
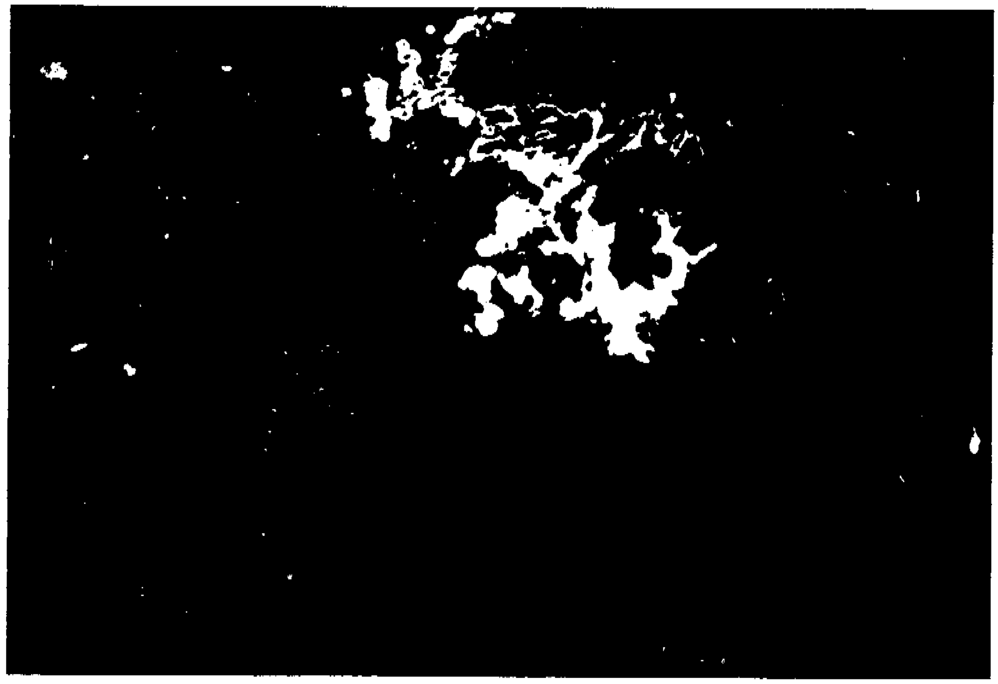


Fig. 53: Aus 2065; polished thin section, transmitted light; obj. 6.3 x air, 1 nic.; neg. no. C 25-11.
Limonite-quartz zone (left) with siderite (top left - brownish rimmed); zone with chlorite (green), apatite (high n; euhedral), quartz, opaque ore (right).

Fig. 54: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-12.
Uraninite in two forms: top left, rather plain, medium grey reflecting; bottom right, scarred, dark grey reflecting. Matrix limonite-stained (brownish).



0.02 mm

Fig. 55: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-15.
Continuation of the non-contiguous uraniferous veinlet here showing goethite (steel-grey, bottom), colloform uraninite (dark grey with goethite in its centre), chalcopyrite (yellowish), pyrite and marcasite (both white); the matrix is widely stained by limonite (brown) and shows a few grains of anatase (right half, whitish).

0.02 mm

Fig. 56: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-14.
Uraninite (medium grey) with inclusion of galena (white) is grading into goethite (dark grey to steel-grey) and thus becoming very ragged, scarred.

Fig. 57: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-16.
Pyrite (light yellow) veined and coated by chalcopyrite (khaki) which in turn is coated by euhedral galena (grey).

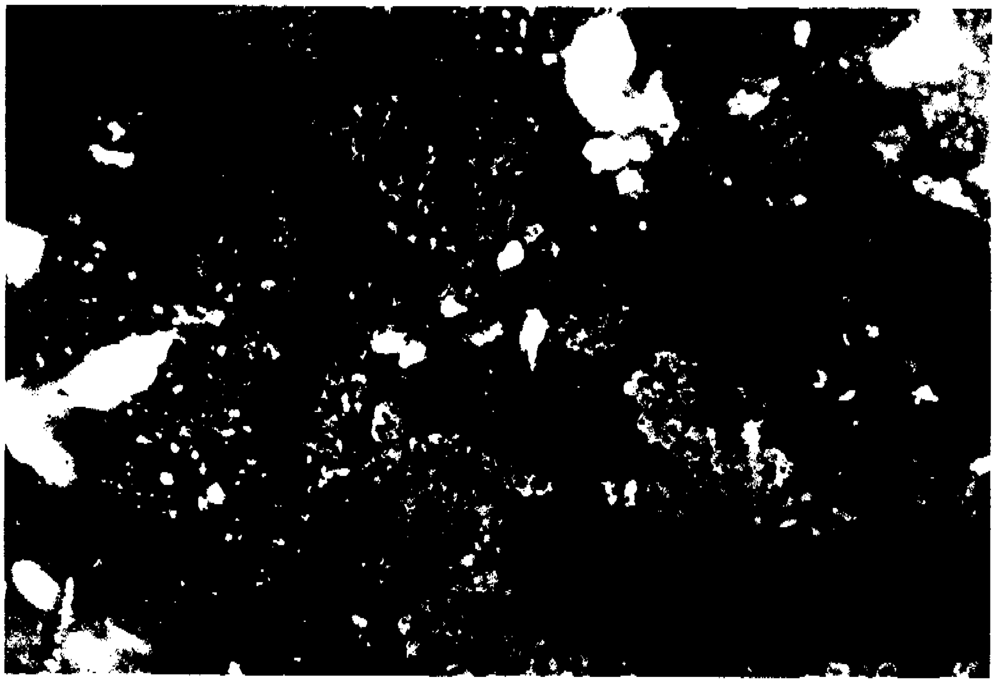
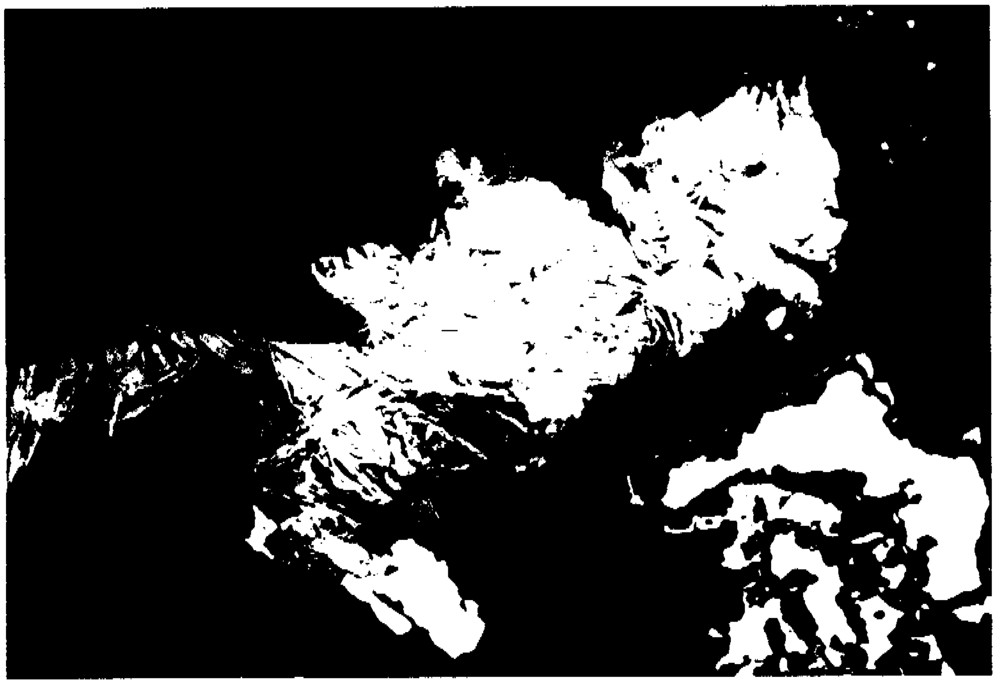


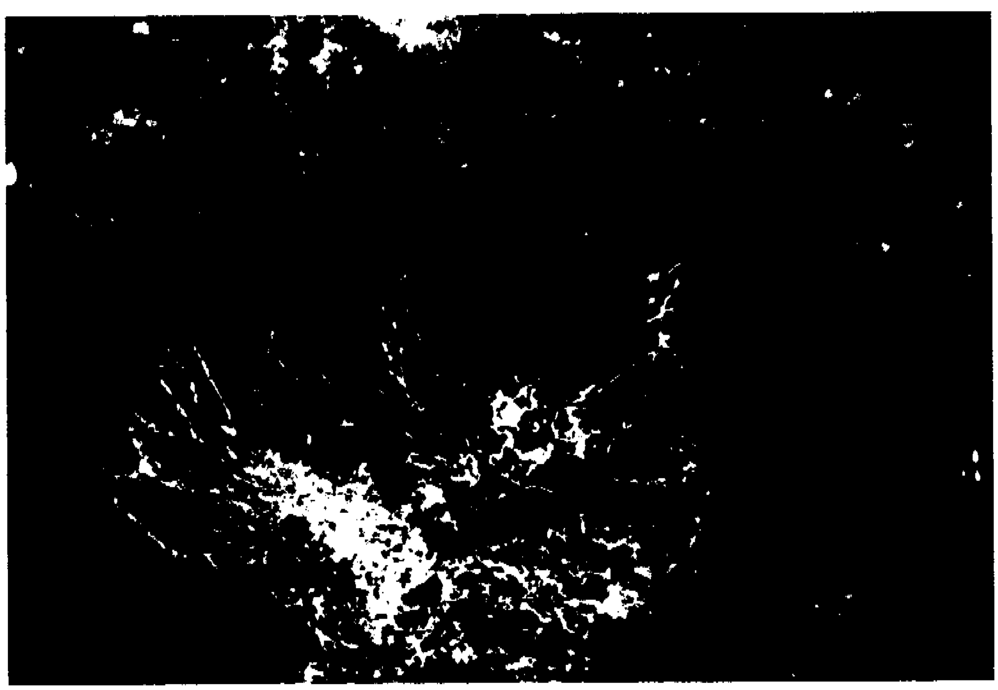
Fig. 58: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 26-1.
Uraninite (grey) in anatase-rich (white) matrix.

URANERZ MINERALOGY	Project: Alligator Rivers		50
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2065	Photomicrographs	



0.02 mm

Fig. 59: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 26-2.
Anatase (light grey centre) coated by a very dark grey uraniferous phase (coffinite?); chalcopyrite (light yellow), pyrite (white).



0.02 mm

Fig. 60: Aus 2065; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 25-14.
Limonite-veined nodule of carbonate (glassy, dark grey) associated with uraninite (medium grey) which is grading into limonite at top.

URANERZ MINERALOGY

Project:	Alligator Rivers
Project No.:	8204
Area:	Kukalak, Devil's Elbow, EL3421
UAL Sample No.:	8204/2A
Mineralogical Report No.:	89-16
UEB Sample No.:	Aus 2068
Mineralogy by / Date:	E.v.Pechmann/ Dec. 29, 1989
Sample taken by:	E.Becker, Dr.Gatzweiler/Aug. 1989
Sample location:	Devil's Elbow, T 2
Arrival No./Date:	964 / Aug. 28, 1989
Sample Type:	Core ,Outcrop x ,Boulder ,Other
Investigation:	Thin Section(s), 1 Polished Section(s) ,Other: 1 pol. TS
Sample stored at:	UEB
Radioactivity:	570 cps (bg=50cps)

Macroscopy: up to 2 cm large angular fragments of dark green, slightly ferruginous ophitic rock in a goethite-coloured matrix (20 %) (quartz veins); the ophitic fragments contain few spots of yellow sulphide.

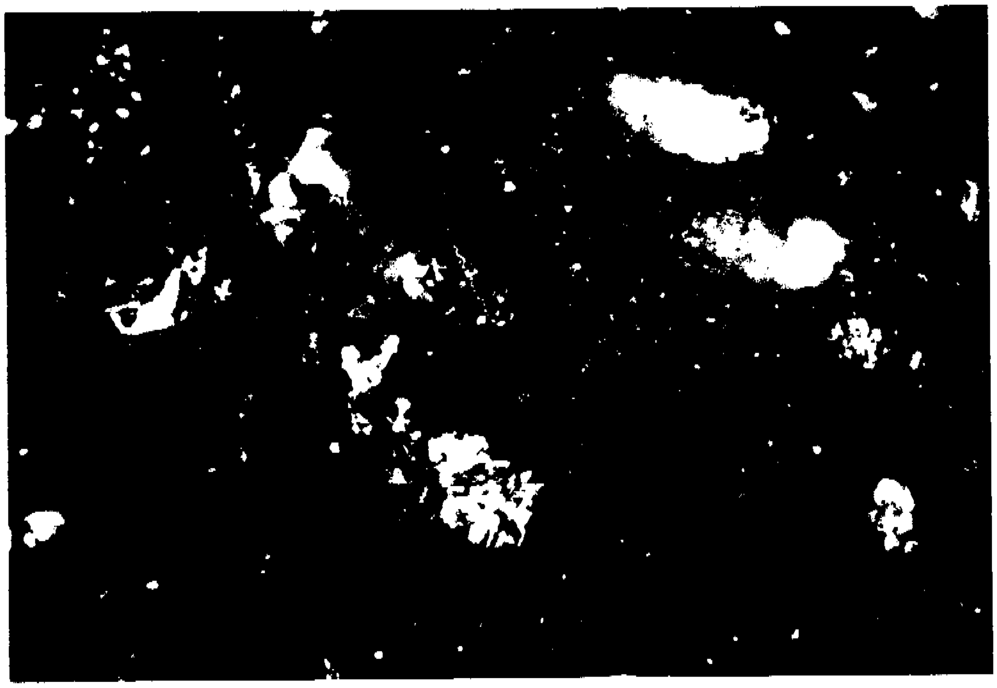
Microscopy: similar to Aus 2065, i.e. ophitic, but even more chloritic and stronger tarnished by limonitic material and regularly by anatase (Fig. 61). There are few quartz veinlets and patches and a few vugs/vesicles filled with finest grained chlorite.

One of the quartz patches is veined by dark grey reflecting uranium oxide (Figs. 62-63).

The uraninite is commonly colloform (Figs. 63-65) and shows various grey shades (Figs. 64-65). It is associated with goethite (Figs. 64-65), and with pyrite (Fig. 64).

The rock contains minor chalcopyrite and chalcocite.

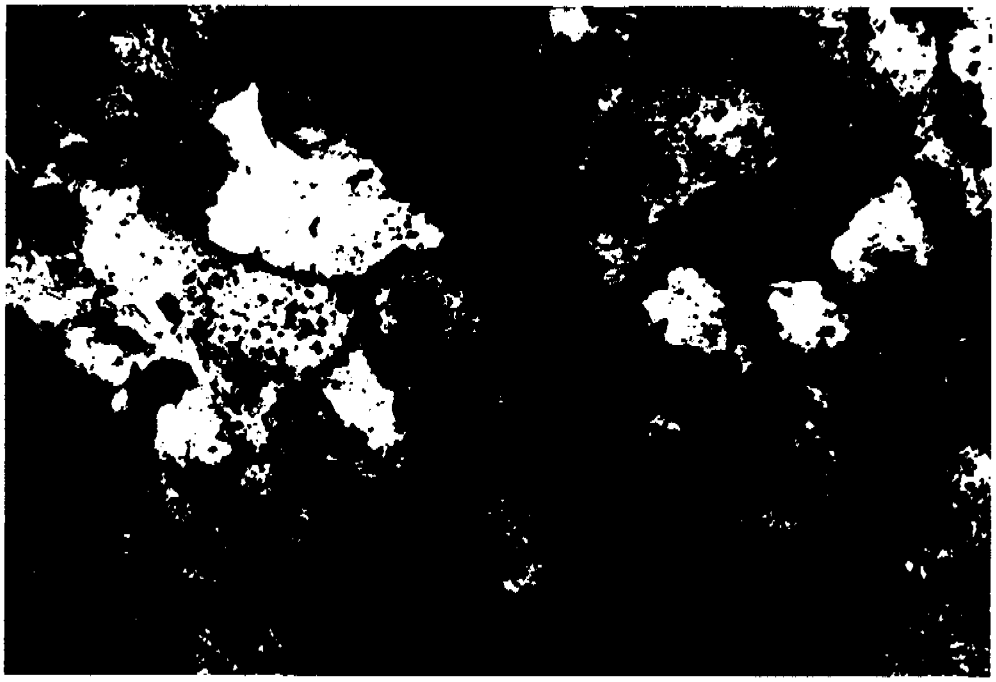
Field Name of Specimen:	anomalous breccia
Main Minerals (%):	
Subordinate Minerals:	anatase, goethite
Accessories:	
Ore Minerals:	uraninite, pyrite, chalcopyrite, chalcocite
Petrographic Classification:	uraniferous basic volcanic rock

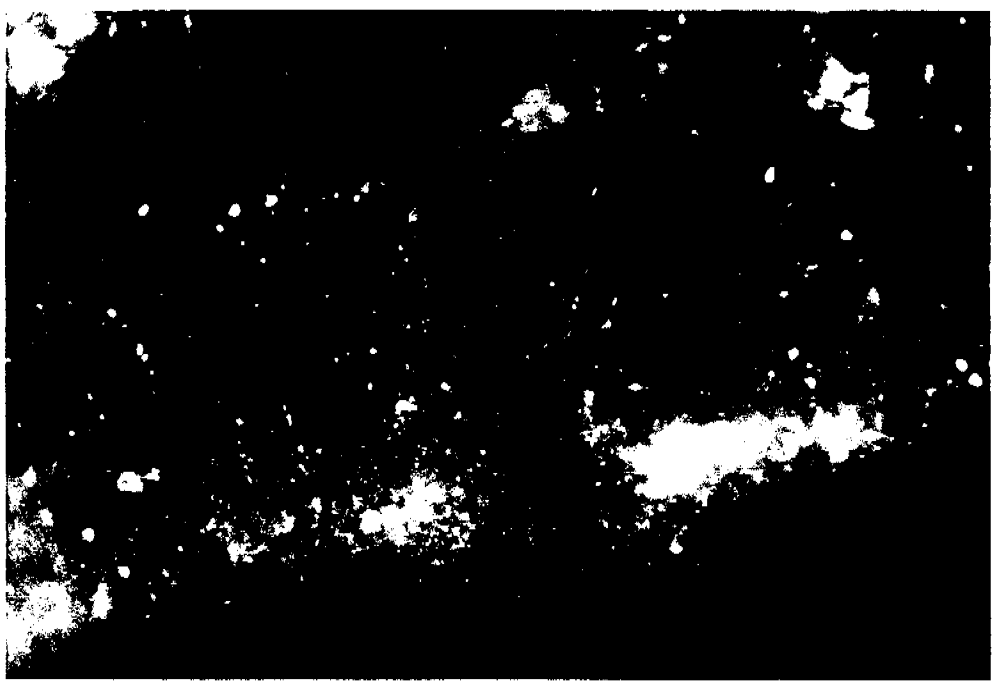


0.02 mm

Fig. 61: Aus 2068; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 26-8.
Disseminated anatase (white) and limonite (brown) in the matrix apart from ophitic domains.

URANERZ MINERALOGY	Project: Alligator Rivers		53
	Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
	UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16	
	UEB Sample No.: Aus 2068	Photomicrographs	





0.02 mm

Figs. 62-63: Aus 2068; polished thin section; top: transmitted light, nic. x; bottom: reflected light, 1 nic.; obj. 50 x imm.; neg. nos. C 26-4, C 27-17.
Limonite-dusted (brown) quartz (top: grey to white) veined by dark grey reflecting uraninite.

Project: Alligator Rivers		54
Project No.: 8204	Area: Kukalak, Devil's Elbow, EL3421	
UAL Sample No.: 8204/2A	Mineralogical Report No.: 89-16	
UEB Sample No.: Aus 2068	Photomicrographs	

0.02 mm

Fig. 64: Aus 2068; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 26-5.
Colloform uraninite with various grey shades, associated with goethite (e.g. top right, centre bottom - light coloured internal reflections, vugs in uraninite), and with pyrite (white).

0.02 mm

Fig. 65: Aus 2068; polished thin section, reflected light; obj. 50 x imm.; 1 nic.; neg. no. C 26-6.
Colloform uraninite (grey) and limonite (light red - whitish grey) in a crack in quartz.


7000N
6000N
5000N
4000N
41000E
42000E
43000E
N
Terrace Anomaly
KLD20
perm water
KLD5
KLD19
KLD21
KLD22
A
B
Ranger Fault
Ferricrete Anomaly
T7
T8
Goomadeer River
Within sacred site airphoto interpretation only
Oenpelli Dolerite
Upper Kombolgie
Nungbalgarrie Volc.
Lower Kombolgie
M.Prot
Tin Camp Granite
Nimbuwah Complex
L.Prot
Sandstone sample
Creek
Road
Trench
Drill hole 1988/89
Airphoto lineament
Fault
Anom. downhole radiometry
SRAT anomaly (cps)
0 100 200 300m
1:5000
50gu
40gu
30gu
Gravity Profile
KLD021
KLD006
KLD005
KLD007
T2
KLD019
KLD20
CR90/592
URANERZ AUSTRALIA PTY. LTD.
EL3421 KUKALAK
DEVILS ELBOW AREA
GEOLOGICAL COMPILATION
COMPILED BY SC Jan 90
DRAWN BY RE
MAP SHEET
SCALE 1:5000
PLAN 2042 A 25
REVISED
MAP No 1
REPORT No
PROJECT No 2042


MT SOPRIS ~~1000~~ 2500
Hole KLD.21 Cased Open
Date 23/11/89 Speed 4.5 m/min
Op C. Blodestone Time Const.
Logger No 266 Range
Probe No. 429 Gamma 20 cpc
Botom

CR90/592