

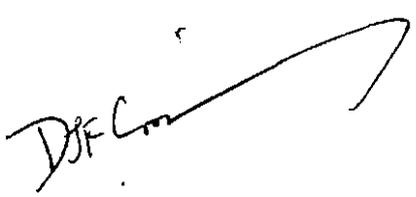
**MICROFILMED**  
**FICHE No. 012168 - 72**

E.L. 21/86  
HOWARDS ROAD AREA  
ANNUAL REPORT FOR 1989/90

**OPEN FILE**

91-3230

<b>MINES</b>	
File Ref. E.L. 21/86	
22 FEB 1991	
Doc. Ref.	
Action Officer	Initials
Refer to	
Cover Sheet	
30.1.91	
Resubmit to	Date



Compiled by: D.J.F. Crossing  
Senior Geologist

S.W. Halley  
Geologist

Report No. T/91/3  
January, 1991

Endorsed by: M.J. Fleming  
Senior Exploration Geologist

Distribution: Div. Mines & Mineral Resources (1)  
RGC Exploration - Hobart (2)

CONTENTS

SUMMARY

1.	INTRODUCTION	1
2.	PREVIOUS EXPLORATION	2
3.	GEOLOGY	4
4.	WORK COMPLETED AND RESULTS, 1988/89	5
	4.1 Gridding	
	4.2 Geology	
	4.3 Geochemistry	
5.	CONCLUSIONS & RECOMMENDATIONS	

REFERENCES

FIGURES - IN TEXT

<u>Fig.</u>	<u>Drawing No.</u>	<u>Title</u>	<u>Scale</u>
1		Location Plan	1:250,000
2	5520/013	Litho-geochemical Facies Map	1:5,000

PLANS - IN POCKETS

<u>Plan</u>	<u>Drawing No.</u>	<u>Title</u>	<u>Scale</u>
1	5520/001	Geological Interpretation	1:5,000
2	5520/009	Geological Fact Map, Sheet 1	1:1,000
3	5520/008	Geological Fact Map, Sheet 2	1:1,000
4	5520/012	Geological Fact Map, Sheet 2A	1:1,000
5	5520/011	Geological Fact Map, Sheet 3	1:1,000
6	5520/010	Geological Fact Map, Sheet 4	1:1,000
7	5520/014	Wacker Sample Location Plan	1:5,000
8	5520/001	Rock Chip Sample Location Plan	1:5,000

TABLES

1	Howards Wacker rock correlation coefficients
---	--

APPENDICES

Appendix 1	Expenditure 1989/90
Appendix 2	Rock Chip Sample Analytical Reports
Appendix 3	Wacker Sample Analytical Reports
Appendix 4	Sample Locations/Field Data

SUMMARY

E.L. 21/86, the Howards Road area, was acquired in late 1986 because of its perceived potential for Henty-style gold mineralisation along the possible southern extension of the Rosebery Fault and/or the western splay/extension of the North Henty Fault.

Previous work on the E.L. includes compiling past explorers' stream sediment geochemical data and carrying out further stream sediment sampling and reconnaissance geological mapping. This work focussed attention on the Henty Fault extensions and in 1988 a 20 line km grid was established to explore these structures. The grid was geologically mapped and rock chip sampled, both producing quite disappointing results.

Ground magnetics and a dipole-dipole I.P. survey were completed over the grid during the 1988/89 field season. The surveys delineated two promising coincident IP-magnetic anomalies related to the interpreted position of the North Henty Fault.

Infill gridding was completed during 1989/90 over the southern portion of the original grid, to cover these geophysical anomalies. The infill grid was remapped and the eastern half covered by a wacker geochemical programme. As a result of this work a weak Cu-Zn anomaly was defined in the general vicinity of the geophysical anomalies in the eastern half of the infill grid. The "co-incident" magnetic anomalies were found to correspond to the position of ultramafic bodies.

1. INTRODUCTION

The Howards Road Licence, E.L. 21/86, covers an area of 22 sq. km. south of Rosebery and east of Zeehan, in Western Tasmania (Figure 1). This is a rugged, forested area which includes the southern flanks of Mt. Dundas and is dissected by the tributaries of the Farrell Rivulet and the Henty River.

The area was relinquished by C.S.R. in April, 1984. Prior to that time, the block formed part of E.L. 15/76, which then covered 145 sq. km.

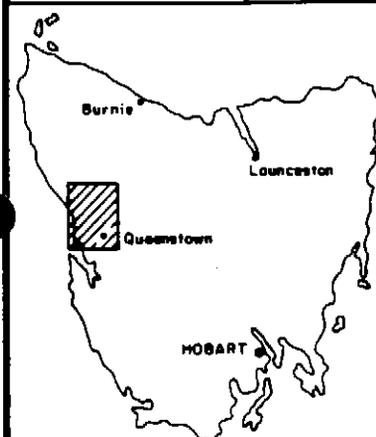
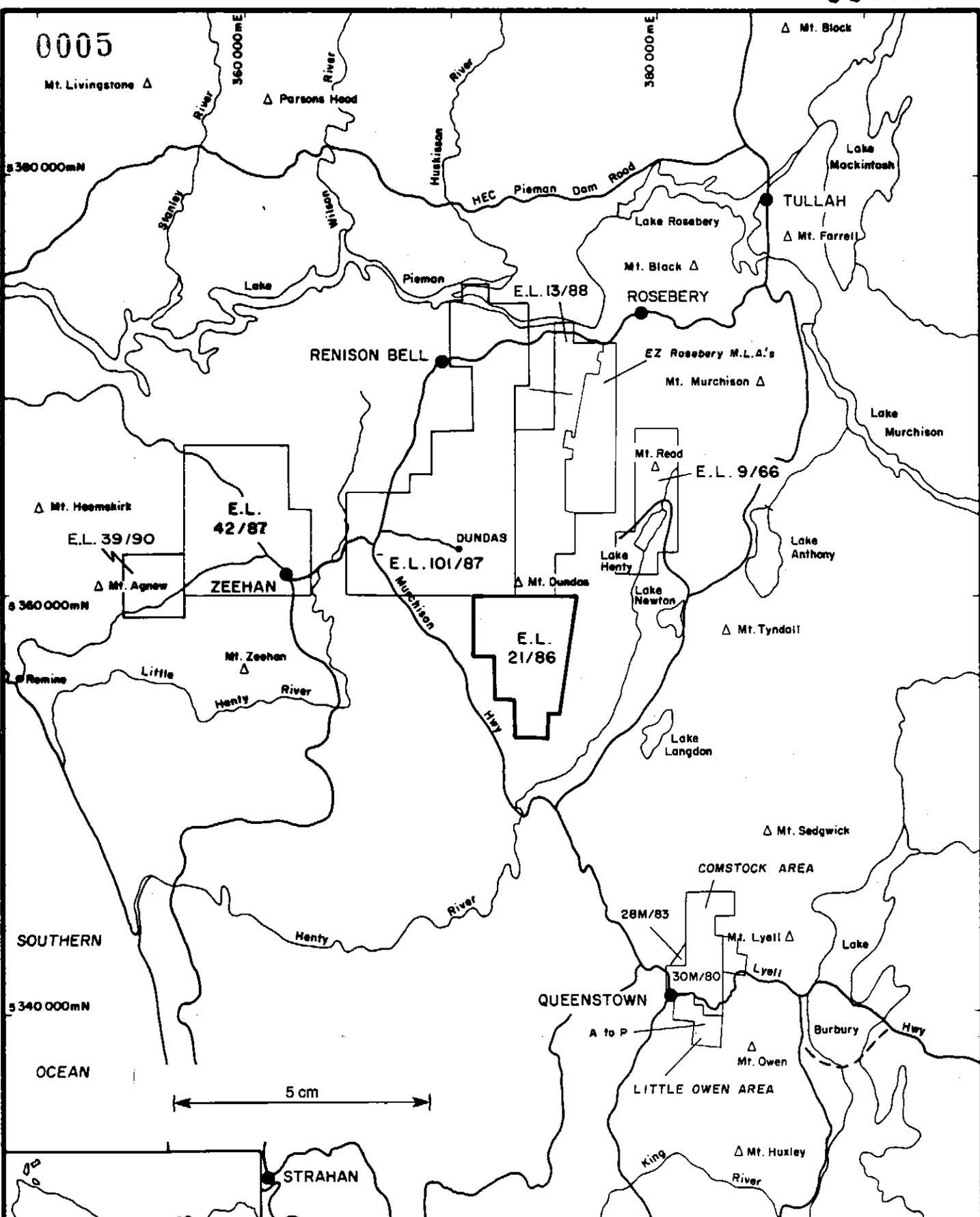
Geologically, this area covers volcanoclastics and sediments (the White Spur Formation) of the Cambrian Dundas Group in faulted contact with gabbros and andesitic volcanics of the Cambrian Henty River Sequence (Corbett, 1986). A moderately extensive fluvio-glacial cover occurs in the Howards Road E.L. also.

The E.L. was pegged in September, 1986 for the following reasons:

- (1) It covers the postulated southern extension of the Rosebery Fault (south of Mt. Dundas) and the southwestern extension of the western splay of the Henty Fault. Both structures are known to be associated with primary gold mineralisation and therefore the Howards Road block was considered prospective for fault-related gold mineralisation.
- (2) C.S.R. had obtained substantial gold values from pan concentrates within the area. Although their follow-up work had suggested that the gold's immediate source lay within glacials they had not shown what the ultimate source of the gold was.

Since the licence was granted in December, 1986, RGC Exploration has compiled all previous exploration data, and completed a stream sediment sampling programme (for gold) and reconnaissance geological

0005



<b>RGC EXPLORATION PTY. LIMITED</b>	
E.L. 21/86	
<b>LOCALITY MAP</b>	
SCALE 1: 250 000	
DRAWN BY	DRAFTSMAN: G.B.
DATE	Nov. '88
REVISIONS	
FILE NO.	FIG. 1

0006

2

mapping. In 1988 the Howards Road grid was cut and mapped and in 1989 a ground magnetic and dipole-dipole IP survey were completed. Finally, in 1989/90, infill gridding, mapping and bedrock (wacker drill) geochemistry were extended over anomalous areas.

## PREVIOUS EXPLORATION

### 2.1 Pre-1986 (Non RGC Exploration)

A total of eight different companies have held licences over the Howards Road area between the years 1960-1986. Of these, Rio Tinto, Comstaff, McIntyre, Geophoto and C.S.R. were the companies that completed some work within E.L. 21/86. A more detailed description of this work is given in the 1987 Annual Report (Roberts, 1987).

### 2.2 Post-1986 (RGC Exploration)

During 1986/87, the stream sediment data collected by McIntyre and C.S.R. were plotted onto a series of standard 1:5,000 base sheets. An evaluation of this data indicated that the elongate base metal anomaly obtained by McIntyre on their Anomaly 1 Grid could represent mineralisation associated with the Rosebery Fault. Also, the poor gold soil geochemical results obtained by CSR as a follow-up to their stream geochemical gold anomalies; were questionable for a number of reasons.

Based on these conclusions a field programme was undertaken in 1987 to carry out further gold geochemical stream sediment sampling, rock chip sampling and reconnaissance mapping on the E.L. This work was completed by contract geologist R. Poltock. The stream sediment geochemistry was concentrated on streams that were thought to drain the southern extension of the Rosebery Fault and western extensions of the North Henty Fault.

The results of the 1987 programme severely diminished the potential of the E.L. for everything except possible Henty-style mineralisation adjacent to the western extensions of the North Henty Fault. To test this possibility, a 20 line-km grid was extended along the extrapolated positions of two interpreted North Henty Fault extensions during 1988. This grid was geologically mapped and rock chip sampled. A dipole-dipole I.P. survey was begun but was abandoned after 7.4

line-km because of spurious readings.

The 1988 programme failed to adequately test the gridded area because of the abandonment of the I.P. programme. However the mapping and rock-chip geochemistry did not produce any encouraging results.

In 1989 the I.P. survey, and a ground magnetic survey, were completed. The IP survey produced a number of anomalies, the most significant of which were coincident IP-magnetic anomalies at the southern end of the grid. These latter anomalies are approximately co-incident with the interpreted position of the North Henty Fault.

## GEOLOGY

### 3.1 Henty River Sequence

A series of andesitic tuffs, agglomerates and minor lavas occurs in the southern section of the grid (see Plan 1), faulted (by the North Henty Fault) against the White Spur Formation to the north. These andesitic volcanics are interpreted to form part of the Cambrian Henty River Sequence. A suite of contemporaneous gabbros intrudes the andesites in the Howards Road area. All the rocks are either unaltered or extremely weakly altered, with no noticeable increase in alteration near the North Henty Fault. Outcrop of the andesites is poor while the gabbros are exposed as large blocky boulders.

Within the Henty River Volcanic Sequence, basalts and andesites from the western area, near the Zeehan Highway, have a tholeiite signature with a strong iron enrichment trend similar to the Miners Ridge Basalt. However, andesites from the central part of the Henty River wedge in the Halls Rivulet area are geochemically similar to the Que-Hellyer andesites and group closely with them on geochemical discrimination diagrams.

### 3.2 White Spur Formation

A sequence of fine grained, fissile siltstones, interbedded with lenses of coarse gritty sandstone/greywacke and quartz-feldspar phyric tuffs and epiclastics occurs over the northern two-thirds of the grid (Plan 1). These units are interpreted to be part of the Cambrian White Spur Formation, which forms a basal, turfaceous sedimentary section of the Dundas Group (Corbett, 1986). The siltstones are bedded, striking north-south and steeply dipping. All the sediments are very weakly altered or unaltered. The sandstones and siltstones are often found finely interbedded (1-5m), however several thick lenses of predominantly sandstone/greywacke were distinguished. Exposures of these sedimentary units are scarce, being restricted to creek beds and a few steep slopes.

### 3.3 Fluvioglacial Deposits

A series of poorly sorted coarse boulders to fine sands occurs in lenses up to several tens of metres thick along the fluvial system of the Farrell Rivulet. This sequence has been alluvially deposited from a more widespread sequence of glacials that once covered most of the ranges surrounding the Farrell Rivulet. At present, remnants of these glacials occur on the flanks and tops of the ranges as very large boulders of Owen Conglomerate and small pockets (1-2m deep) of sand and cobbles. It appears likely that the glacial deposits were derived from the West Coast Range to the east as the deposits contain many rocks and boulders of Mt. Read Volcanics and Owen Conglomerate.

WORK COMPLETED AND RESULTS, 1989/904.1 Gridding

The southern portion of the existing grid was infill gridded at a spacing of 25m x 100m east of line 3200E, and at 25m x 200m west of 3200E. A sub-baseline was constructed, starting from 4200E/1500S. The sub-baseline was nominated as 5000N and existing grid lines in the area covered by the infill gridding were re-labelled to conform to this new co-ordinate system.

4.2 Geology

Detailed geological mapping at 1:1,000 scale was completed over the infill grid by contract geologist Dave Simpson. The mapping included logging of all wacker (bedrock geochem) samples (refer Sub-section 4.3). The results are presented as Plans 2-6.

Outcrop proved extremely limited over much of the grid, and significant quantities of fluvioglacial material (Qg) was encountered in valleys in the western half of the infill grid. As a result, geological interpretation relied primarily on wacker sample logging and trace element geochemistry, supplemented by geophysical data. The geological interpretation is presented as Plan 1.

The interpreted position of the North Henty Fault was modified as a result of the extra work, and the presence of a Serpentinite body was recognised for the first time. Otherwise, as in previous interpretations, observed lithologies are assigned to the Cambrian White Spur Formation (Cdw) and the Henty River Sequence (Chf).

4.3 Geochemistry

The 25m x 100m portion of the infill gridding was bedrock sampled by a Wacker drill at 10m intervals, reduced to 5m intervals over the geophysical anomalies on line 4,000E. The aim was to provide bedrock

samples for analysis in an attempt to determine if any anomalous values co-incide with the geophysical anomalies and/or the interpreted position of the North Henty Fault.

The soil profile averaged 1-2m, and bedrock samples were successfully obtained from most wacker holes. Anticipated problems with fluvio-glacials did not eventuate in the area sampled.

The samples were logged and dried, then submitted to Analabs and analysed for Cu, Pb, Zn (101-AAS), and Sn (401-XRF). The pulps were then re-submitted to Becquerel and analysed for Sb, As, Ba, Br, Ce, Cs, Cr, Co, Eu, Au, Hf, Ir, Fe, La, Lv, Mo, K, Rb, Sm, Sc, Se, Ag, Ta, Th, Sn, W, U, Yb, Zn and Zr, using neutron activation (1801-NAA). These results were entered into RGC's prime database.

The results are presented as Appendix 3. Sample locations are provided as Plan 7, and in Appendix 4.

A number of rock chip samples were also collected, and analysed as for the wacker samples. Results are presented as Appendix 2, and sample locations provided as Plan 8, and in Appendix 4.

Gold standards were inserted generally as every twentieth sample, to check precision in gold analysis. Standard data is given in Appendix 4.

Although outcrop is generally poor over the Howards Road grid, the geochemistry provided a powerful aid to mapping. On the basis of the trace analyses, the grid area can be divided into distinct litho-geochemical domains. The most apparent division is between a "felsic element suite" (domain A, relatively enriched in K, Rb, Th La, and Ba) and a "mafic element suite" (domain B, relatively enriched in Cr, Co, Zn, Sc and Br). Refer to Figure 2.

Domain A can be sub-divided into A1 and A2, with A1 being enriched in Sc, Zn and Cu relative to A2.

Within domain B, area B2 has low Ba, K, Rb, Th and La relative to B1 and generally higher Co, Zn and Cu. There is quite a bit of variability within area B1 but no clear boundaries can be defined.

Domain A is interpreted to be the White Spur Formation, with A1 being the micaceous siltstones and A2, felsic volcanoclastics. Domain B is the Henty River volcanic sequence. B2 is serpentinite and B1 is probably an area of mixed andesitic pyroclastics and gabbro. The North Henty Fault is interpreted to occur along the boundary between Domains A and B. This interpretation is consistent with observations made to the north along the North Henty Fault, where serpentinites occur within the Henty River volcanic sequence immediately adjacent to the fault. (Corbett, 1986).

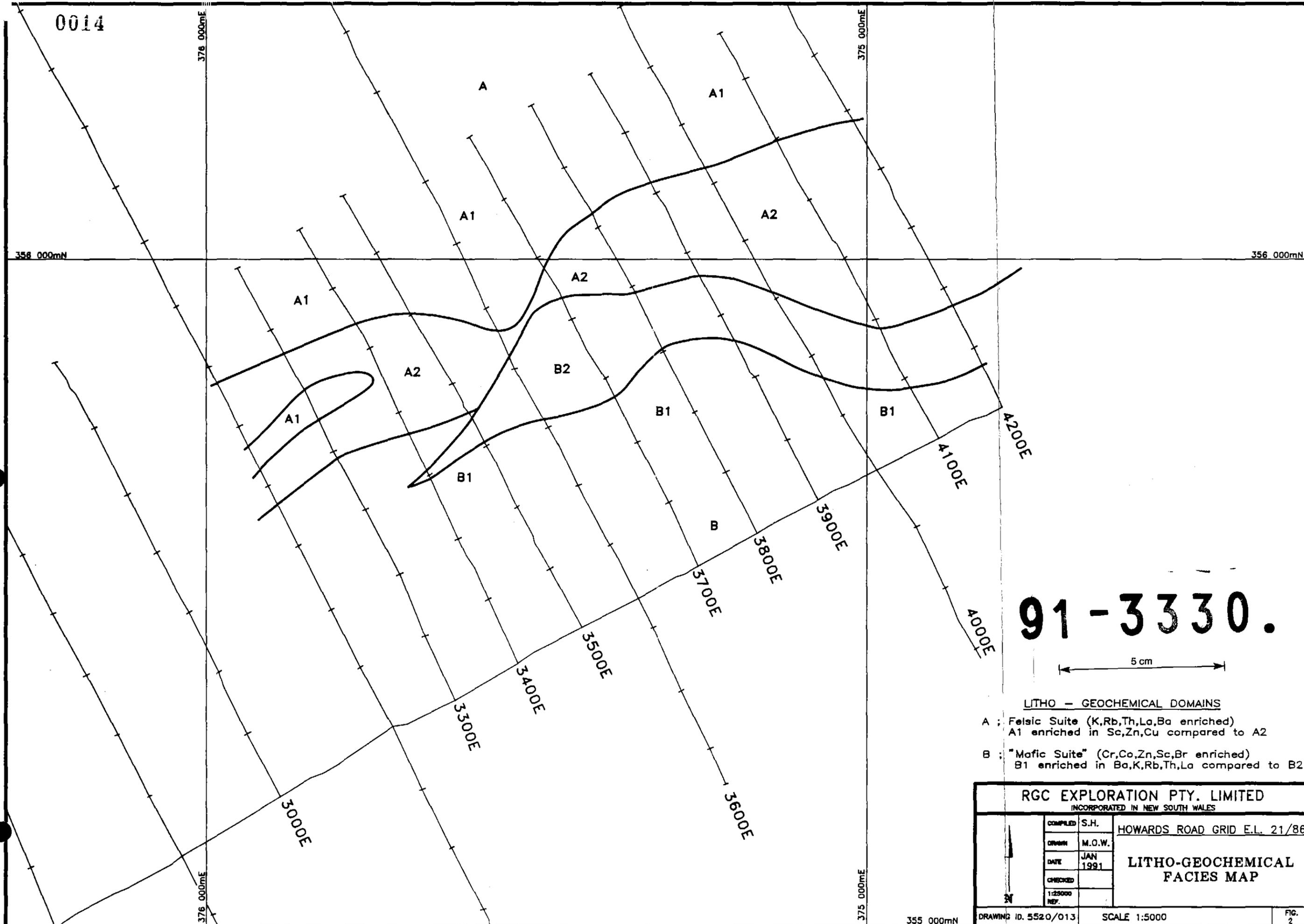
0014

376 000mE

375 000mE

358 000mN

356 000mN



# 91-3330.

5 cm

**LITHO - GEOCHEMICAL DOMAINS**

- A : Felsic Suite (K,Rb,Th,La,Ba enriched)  
A1 enriched in Sc,Zn,Cu compared to A2
- B : "Mafic Suite" (Cr,Co,Zn,Sc,Br enriched)  
B1 enriched in Ba,K,Rb,Th,La compared to B2

**RGC EXPLORATION PTY. LIMITED**  
INCORPORATED IN NEW SOUTH WALES

N	COMPILED	S.H.	<b>LITHO-GEOCHEMICAL FACIES MAP</b>
	DRAWN	M.O.W.	
	DATE	JAN 1991	
	CHECKED		
DRAWING ID. 5520/013		SCALE 1:5000	FIG. 2

355 000mN

TABLE 1

## HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY:HOWARDS STATS

HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY:HOWARDS STATS  
CORRELATION COEFFS.

	1818	CU	PB	ZN	SN	SB	AS	BA	BR	CE	CR	CO	FE	LA	K	RB	SM	SC	TH
CU	1.00	0.00	-0.0	0.07	0.23	0.60	-0.1	-0.0	-0.1	-0.0	-0.0	-0.0	0.35	-0.1	0.19	-0.0	-0.1	-0.1	-0.1
PB	0.00	1.00	0.20	-0.0	-0.0	0.13	-0.0	0.00	-0.0	-0.0	-0.0	-0.0	0.24	-0.0	-0.0	0.00	-0.0	-0.1	-0.0
ZN	-0.0	0.20	1.00	-0.0	-0.0	-0.1	-0.2	0.26	-0.3	0.25	0.38	0.34	-0.3	-0.0	-0.1	-0.2	0.46	-0.3	
SN	0.07	-0.0	-0.0	1.00	0.04	0.05	0.00	0.00	0.03	-0.0	-0.0	-0.0	0.04	0.03	-0.0	0.02	-0.0	0.02	
SB	0.23	-0.0	-0.0	0.04	1.00	0.68	0.06	0.04	-0.0	-0.0	0.00	0.25	-0.0	0.98	-0.0	-0.0	-0.0	-0.0	
AS	0.60	0.13	-0.1	0.05	0.68	1.00	-0.0	0.01	-0.1	-0.0	-0.0	0.49	-0.1	0.63	-0.0	-0.1	-0.2	-0.1	
BA	-0.1	-0.0	-0.2	0.00	0.06	-0.0	1.00	-0.1	0.74	-0.3	-0.5	-0.4	0.74	0.17	0.74	0.71	-0.2	0.76	
BR	-0.0	0.00	0.26	0.00	0.04	0.01	-0.1	1.00	-0.1	-0.0	0.14	0.23	-0.1	0.01	-0.1	-0.1	0.20	-0.1	
CE	-0.1	-0.0	-0.3	0.03	-0.0	-0.1	0.74	-0.1	1.00	-0.4	-0.5	-0.5	0.99	0.04	0.65	0.97	-0.3	0.93	
CR	-0.0	-0.0	0.25	-0.0	-0.0	-0.0	-0.3	-0.0	-0.4	1.00	0.83	0.23	-0.4	-0.0	-0.3	-0.4	0.04	-0.4	
CO	-0.0	-0.0	0.38	-0.0	0.00	-0.0	-0.5	0.14	-0.5	0.83	1.00	0.37	-0.5	-0.0	-0.4	-0.5	0.28	-0.6	
FE	0.35	0.24	0.34	-0.0	0.25	0.49	-0.4	0.23	-0.5	0.23	0.37	1.00	-0.5	0.15	-0.2	-0.5	0.11	-0.5	
LA	-0.1	-0.0	-0.3	0.04	-0.0	-0.1	0.74	-0.1	0.99	-0.4	-0.5	-0.5	1.00	0.03	0.66	0.97	-0.4	0.94	
K	0.19	-0.0	-0.0	0.03	0.98	0.63	0.17	0.01	0.04	-0.0	-0.0	0.15	0.03	1.00	0.10	0.06	-0.0	0.05	
RB	-0.0	0.00	-0.1	-0.0	-0.0	-0.0	0.74	-0.1	0.65	-0.3	-0.4	-0.2	0.66	0.10	1.00	0.62	-0.1	0.69	
SM	-0.1	-0.0	-0.2	0.02	-0.0	-0.1	0.71	-0.1	0.97	-0.4	-0.5	-0.5	0.97	0.06	0.62	1.00	-0.3	0.89	
SC	-0.1	-0.1	0.46	-0.0	-0.0	-0.2	-0.2	0.20	-0.3	0.04	0.28	0.11	-0.4	-0.0	-0.1	-0.3	1.00	-0.3	
TH	-0.1	-0.0	-0.3	0.02	-0.0	-0.1	0.76	-0.1	0.93	-0.4	-0.6	-0.5	0.94	0.05	0.69	0.89	-0.3	1.00	

CONCLUSIONS AND RECOMMENDATIONS

Conclusions from work completed prior to 1988/89 can be summarised as follows:-

- (1) Generally disappointing gold results were obtained from rock chip and stream sediment sampling.
- (2) The stream sediment sampling indicated that high gold values resulting from C.S.R.'s geochemical survey were derived from glacials. The ultimate source of the gold probably lies to the east of the E.L. in Mt. Read Volcanics.
- (3) No evidence was found to support the possible existence of the Rosebery Fault, however the presence of the Henty Fault was confirmed.
- (4) The limited exposures of bedrock exhibit only very weak alteration at best.

The geophysical programme of the 1988/89 season revived interest in the area by locating IP-magnetic anomalies approximately co-incident with the interpreted position of the North Henty Fault.

The 1989/90 programme followed-up these geophysical anomalies with detailed wacker geochemistry, but succeeded only in locating a weak Cu-Zn anomaly associated with the (revised) interpreted position of the North Henty Fault.

The main conclusions from this programme are summarised below:

- i) The magnetic anomalies are due to the presence of magnetic Serpentinite bodies, and variably magnetic gabbros.

- ii) The Low Resistivity-High Chargeability anomalies have not been explained. Graphites recognised on an access road alongstrike from these anomalies to the northeast have not been recognised on the grid.
  
- iii) Two major lithological boundaries have been recognised on the basis of wacker logging and geochemistry. The northernmost separates White Spur sediments and felsic tuffs, whilst the southernmost separates the White Spur Formation from Henty River sequence andesitic volcanics and gabbros. The North Henty Fault marks the latter contact, and as is the case elsewhere (Corbett, 1986) the fault is spatially related to serpentinite bodies.
  
- iv) Some quartz-sericite alteration occurs within the Cdw felsic volcanics.

These results do not justify follow-up drilling in view of other Company priorities, and it is recommended that a review of all data obtained to date be undertaken to determine if any other anomalies warrant further work. If no other exploration targets are outlined, the tenement should be relinquished in its entirety, subject to review.

REFERENCES

- BLISSETT, A.H., 1962: Geological Survey Explanatory Report. One Mile Geological Map Series K'55-5-50 Zeehan. Tas. Dept. Mines Report.
- CARTWRIGHT, A.J., 1988: E.L. 21/86, Howards Road Area, Annual Report. Unpublished RGC Exploration Report.
- CORBETT, K.D., 1986: Map 3: Geology of the Henty River - Mt. Read area, Geological Survey of Tasmania Map, Mt. Read Volcanics Project.
- CROSSING, D.J.F., 1989: E.L. 21/86, Howards Road Area, Annual Report for 1988/89. Unpublished RGC Exploration Report.
- ROBERTS, P.A., 1987: E.L. 21/86, Howards Road Area, Annual Report. Unpublished RGC Exploration Report.

APPENDIX 1

Expenditure 1989/90

1989/90 EXPENDITURE TO DECEMBER 24TH 1990

PERSONNEL	14,293
TRAVEL AND ACCOMMODATION	1,706
CONSULTANTS AND CONTRACTORS	48,572
ASSAYING	24,476
STORES AND SUPPLIES	1,400
VEHICLES	3,974
LAND ACQUISITION	530
OFFICE AND COMPUTING	3,764
	<hr/>
TOTAL	98,715
	<hr/>
On-costs (10%)	9,872
	<hr/>
	\$108,587
	<hr/> <hr/>

APPENDIX 2

Rock Chip Sample Analytical Reports

0022

# ANALABS

396023

5520/321

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8990

ANALYTICAL REPORT No. 95.1.08.07025

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

ORDER No.	PROJECT
01630	T5520
DATE RECEIVED	RESULTS REQUIRED
18/04/90	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
1	30/04/90	1	17

STATE OF SAMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						OTHER SEE REMARKS	NONE	ANALYSIS		
			DRY	CRUSH	SPLIT	PULVERISE	SIEVE	REFER TO ANALYSIS SECTION			PREPARATION	METHOD	
		KT264,01/17	RD	Prep: 001,016							Au, Ag, As, Ba, Br, Ca, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo		
		KT264,01/17	RD								Cu, Pb, Zn/101		
		KT264,01/17	RD								Sn/401		

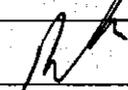
RESULTS TO	<p>Mark Flemming R.G.C. Exploration Pty Limited P.O. Box 320 Rosny Park Tasmania 7018</p>
RESULTS TO	

REMARKS

EC 26/85 HOWARDS ROAD

Howards Rd inhib grid  
Raw chip samples.

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	perchloric acid	atomic absorption
split core	hydrochloric acid	x-ray fluorescence
cutting	nitric acid	spectrophotometry
rock	aqua regia	colorimetry
slip	nitric-perchloric	chromatography
water	HF mixture	titration
tissue	HF under pressure	other chemicals means
stream sediment	fusion	miscellaneous
heavy mineral		fluorescence
		inductively coupled plasma

AUTHORISED OFFICER 

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

95.1.08.07025

30/04/96

01630

1 OF 1

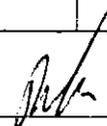
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Sn				
1	T26401	15	20	280	<3				
2	T26402	25	135	270	<3				
3	T26403	10	20	70	6				
4	T26404	5	<5	40	<3				
5	T26405	5	5	200	3				
6	T26406	10	5	140	4				
7	T26407	5	<5	115	<3				
8	T26408	10	20	250	6				
9	T26409	5	<5	120	<3				
10	T26410	10	<5	100	<3				
11	T26411	40	5	50	<3				
12	T26412	20	30	100	<3				
13	T26413	10	5	20	<3				
14	T26414	10	<5	15	<3				
15	T26415	35	10	95	3				
16	T26416	10	<5	20	3				
17	T26417	15	<5	30	3				
18									
19									
20									
21									
22									
23	DETECTION	5	5	5	3				
24	UNITS	ppm	ppm	ppm	ppm				
25	METHOD	101	101	101	401				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER


1

## NEUTRON ACTIVATION ANALYSIS

0024

BECQUEREL JOB # 955

ELEMENT	DL	# 26401	# 26402	# 26403	# 26404	# 26405	# 26406	# 26407	# 26408	# 26409	# 26410
ANTIMONY	.2	8.10	6.50	1.90	1.70	1.40	2.90	1.00	1.10	1.40	1.10
ARSENIC	2.0	17.00	10.00	4.30	-2.00	6.10	5.00	-2.00	7.90	2.10	-2.00
BARIUM	100.0	2800.0	660.0	160.0	140.0	800.0	560.0	190.0	-100.0	340.0	-100.0
BROMINE	2.0	-2.00	3.80	2.00	3.20	3.00	2.40	-2.00	2.40	-2.00	-2.00
CERIUM	2.0	64.00	100.00	62.00	10.00	35.00	32.00	26.00	18.00	29.00	10.00
CAESIUM	1.0	8.80	5.60	-1.00	2.10	3.40	8.40	1.40	-1.00	2.60	-1.00
CHROMIUM	5.0	62.0	35.0	270.0	96.0	480.0	350.0	370.0	2430.0	250.0	370.0
COBALT	1.0	31.00	1.70	15.00	9.10	72.00	58.00	39.00	147.00	42.00	31.00
EUROPIUM	.5	.88	1.70	1.30	-.50	.53	.57	.61	-.50	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.80	7.40	5.30	2.50	1.70	2.70	2.10	-1.00	3.20	-1.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.520	2.200	3.000	1.600	5.420	5.770	4.900	7.230	6.130	3.700
LANTHANUM	.5	33.00	57.30	33.00	6.30	13.00	16.00	13.00	5.20	14.00	5.40
LUTETIUM	.2	.55	.79	.47	-.20	.23	.33	.29	-.20	.38	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	2.800	2.900	.790	1.400	1.900	3.700	.650	-.200	1.000	-.200
RUBIDIUM	20.0	140.0	110.0	-20.0	55.0	110.0	160.0	47.0	-20.0	54.0	-20.0
SAMARIUM	.20	6.50	10.00	7.20	1.00	3.20	2.80	3.40	1.20	3.70	1.30
SCANDIUM	.10	14.10	10.60	13.70	12.80	32.70	34.20	30.50	23.80	30.90	14.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	2.40	-1.00	2.40	-1.00	1.30	-1.00	-1.00	1.10	-1.00
THORIUM	.5	11.00	19.00	11.00	1.90	4.10	6.30	4.30	1.10	5.90	1.80
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.60	4.50	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	2.70	3.80	2.20	-.50	1.30	1.80	1.60	-.50	1.80	.64
ZINC	100.0	330.0	380.0	150.0	-100.0	330.0	220.0	220.0	350.0	220.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	590.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

0025

BECQUEREL JOB # 955

ELEMENT	DL	# 26411	# 26412	# 26413	# 26414	# 26415	# 26416	# 26417	# 26501	# 26502	# 26503
ANTIMONY	.2	1.20	5.00	2.10	1.50	1.20	.50	.52	1.70	.81	.94
ARSENIC	2.0	-2.00	7.80	2.40	2.90	8.50	2.50	2.30	11.00	3.10	2.10
BARIUM	100.0	-100.0	430.0	180.0	-100.0	870.0	940.0	-100.0	720.0	800.0	490.0
BROMINE	2.0	4.10	2.90	-2.00	-2.00	2.30	-2.00	-2.00	8.00	8.80	14.00
CERIUM	2.0	89.00	34.00	8.30	8.90	83.00	70.00	2.50	60.00	93.00	110.00
CAESIUM	1.0	-1.00	2.50	1.10	-1.00	9.20	4.90	1.10	11.00	6.40	4.60
CHROMIUM	5.0	52.0	16.0	40.0	11.0	130.0	10.0	62.0	170.0	21.0	49.0
COBALT	1.0	10.00	4.30	1.10	-1.00	7.30	2.90	1.40	5.30	3.00	3.10
EUROPIUM	.5	-.50	1.70	-.50	-.50	1.60	.78	-.50	1.10	1.20	.88
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.40	1.70	-1.00	-1.00	5.30	4.90	-1.00	5.70	6.60	7.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.000	2.900	1.400	1.200	4.400	1.100	1.600	4.800	2.500	1.400
LANTHANUM	.5	67.30	17.00	4.00	4.90	43.00	37.00	1.10	32.00	51.90	64.20
LEAD	.2	-.20	.50	-.20	-.20	.62	.49	-.20	.58	.75	.73
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.520	1.400	.630	-.200	3.300	2.700	-.200	2.900	2.700	1.500
RUBIDIUM	20.0	-20.0	57.0	-20.0	-20.0	170.0	120.0	-20.0	150.0	130.0	75.0
SAMARIUM	.20	4.50	4.50	.62	1.00	9.00	5.50	.22	6.00	7.50	9.10
SCANDIUM	.10	10.00	3.90	1.00	1.00	20.60	4.60	.35	22.10	7.70	8.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.30	-1.00	-1.00	-1.00	1.90	1.20	-1.00	1.30	1.20	-1.00
THORIUM	.5	2.30	5.90	1.10	1.40	12.00	17.00	-.50	14.00	27.00	30.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	3.40	3.00	-2.00	2.50	6.00	7.30
YTTERBIUM	.5	.64	2.70	-.50	.56	3.10	2.30	-.50	2.90	3.90	3.60
ZINC	100.0	150.0	130.0	-100.0	-100.0	160.0	-100.0	-100.0	120.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

U30  
 T26402  
 26520, 40, 60  
 26563 - 600  
 26701 - 745

396027

**ANALABS**

A Division of Incharge Inspection and Testing Services Australia Pty Ltd

**ANALYTICAL DATA**

SAMPLE PREFIX      REPORT NUMBER      REPORT DATE      CLIENT ORDER No      PAGE

95.1.08.07093      23/05/90      0169      1 OF 6

TUBE No	SAMPLE No	Cu	Pb	Zn	Bi	Sn				
1	T26442	30	190	569	<10	5				
	T26520									
3	T26540	-	-	-	-	-				
4	T26560	-	-	-	-	-				
5	T26563	20	35	65	<10	8				
6	T26564	25	10	100	<10	14				
7	T26565	100	70	125	<10	5				
8	T26566	20	25	85	<10	8				
9	T26567	35	20	80	<10	10				
10	T26568	30	15	90	<10	9				
11	T26569	35	30	85	<10	1				
	T26570	20	10	130	<10	7				
13	T26571	10	5	150	<10	8				
14	T26572	10	5	115	<10	6				
15	T26573	10	15	95	<10	18				
16	T26574	30	20	8	<10	11				
17	T26575	15	20	45	<10	10				
18	T26576	10	15	125	<10	9				
19	T26577	15	5	40	<10	12				
20	T26578	20	10	85	<10	12				
21	T26579	1	20	70	<10	8				
22	T26580	-	-	-	-	-				
23	T26581	30	20	75	<10	10				
	T26582	35	25	95	<10	9				
25	T26583									

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER *Jenkins*

T26442  
26563-600  
26701-795

NEUTRON ACTIVATION ANALYSIS

0027

NEUTRON ACTIVATION ANALYSIS REPORT

Date: 01-06-90

RGC TASMANIA SAMPLE Nos:T26442, T26563-T26600, T26701-T26795  
BECQUEREL JOB # 989

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".  
- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT DL # 26442 # 26563 # 26564 # 26565 # 26566 # 26567 # 26568

ELEMENT	DL	# 26442	# 26563	# 26564	# 26565	# 26566	# 26567	# 26568
ANTIMONY	.2	17.00	1.80	3.60	12.00	3.00	2.00	2.00
ARSENIC	2.0	160.00	3.00	14.00	10.00	15.00	5.00	2.00
BARIUM	100.0	370.0	80.00	-10.00	10.00	35.00	590.00	2.00
BROMINE	2.0	328.00	-2.00	-1.00	-2.00	-2.00	-2.00	-2.00
CERIUM	2.0	43.00	74.00	-1.00	3.00	30.00	55.00	3.00
CAESIUM	1.0	1.60	9.00	-1.00	1.00	2.00	4.00	3.00
CHROMIUM	5.0	17.0	15.00	33.00	253.00	33.00	589.00	20.00
COBALT	1.0	142.00	8.00	8.00	74.00	5.00	26.00	60.00
EUROPIUM	.5	1.30	0.00	0.00	-	0.00	-	0.00
GOLD, ppb	5.0	-5.0	0.00	0.00	-	0.00	-5.00	-
HAFNIUM	1.0	-1.00	-	-	-1.00	-	4.00	2.00
IRIDIUM, ppb	20.0	-20.0	-	-	-20.00	-	-20.00	-2.00
PLATINUM, %	.05	26.600	2.00	8.00	7.00	5.00	3.00	5.00
LANTHANUM	.5	18.00	3.00	0.00	2.00	1.00	28.00	17.00
LUTETIUM	.2	.37	0.30	0.00	-	0.20	-	-
MOLYBDENUM	5.0	-5.0	0.00	0.00	-5.00	0.00	-	-
POTASSIUM, %	.2	-2.00	2.00	-	-	0.00	1.00	-
RUBIDIUM	20.0	-20.0	1.00	-2.00	-2.00	0.00	5.00	2.00
SAMARIUM	.20	5.50	0.00	0.00	0.00	0.00	5.00	0.00
SCANDIUM	.10	3.40	1.00	27.00	25.00	12.00	15.00	1.00
SELENIUM	5.0	-5.0	0.00	0.00	-	0.00	-	0.00
SILVER	5.0	-5.00	-	-5.00	-5.00	-5.00	-5.00	-
TANTALUM	1.0	-1.00	0.00	-	-1.00	-	2.00	-
THORIUM	.5	4.50	1.00	0.00	0.00	0.00	10.00	0.00
TIN	500.0	-500.0	-5.00	-50.00	-50.00	-5.00	-50.00	-
TUNGSTEN	2.0	-2.00	-	-2.00	-2.00	-	-2.00	0.00
URANIUM	2.0	-2.00	-	-2.00	-2.00	-	-2.00	0.00
YTTERBIUM	.5	1.90	0.00	0.00	0.00	0.00	2.00	0.50
ZINC	100.0	460.0	1.00	15.00	20.00	1.00	12.00	0.00
ZIRCONIUM	500.0	-500.0	-5.00	-500.00	-5.00	-5.00	-500.00	-500.00



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES, NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW  
Telephone: (02) 543 2644 P.O. BOX 93  
Facsimile: (02) 543 2655 MENAI, NSW, 2234

APPENDIX 3

Wacker Sample Analytical Reports

0029

5520/324 & 5522/325

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8890  
**ANALYTICAL REPORT No.** 95 1 08 07120

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited  
 P.O. Box 320  
 Rosny Park  
 Tasmania 7018

ORDER No.	PROJECT
0171	T5521/T5522
DATE RECEIVED	RESULTS REQUIRED
28/05/90	ASAF

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES									
1	05/06/90	1	19									
STATE OF SAMPLES	REFER BELOW	PRE-TREATMENT								ANALYSIS		
		SAMPLE NUMBERS	DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
Various		RC	Prep: 002,016							Au, Ag, As, Ba, Br, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Rb		
Various		RC							Cu, Pb, Zn, Bi/101			
Various		RC							Sn/401			

RESULTS TO

Mark Flemming  
 R.G.C. Exploration Pty Limited  
 P.O. Box 320  
 Rosny Park  
 Tasmania 7018

RESULTS TO

REMARKS  
 21/86 HOWARDS  
 E.C.'s ~~42/87 - ZEEHAN~~  
 101/87 - DUNDAS.  
 Wacker  
 Rock Chips T26796-800  
 & T27001-008  
 Comstock Grid Mapping  
 & Paring Lake Grid.  
 HOWARDS  
 Drill Core T28290-96.  
 M3004.

STATE OF SAMPLES	ANALYSIS — PREPARATION						ANALYSIS — METHOD	
whole core	WC	perchloric acid	A1	cold acid	CA	atomic absorption	AAS	
split core	SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF	
cutting	CU	nitric acid	A3	other mixed acids	Ma	spectrophotometry	SPEC	
rock	Ro	aqua regia	A4	alkaline attack	AA	colorimetry	COL	
soil	SO	nitric-perchloric	A5	volatilization	VO	chromatography	CHR	
pulp	PU	HF mixture	A6	ignition	IG	titration	TTN	
water	WA	HF under pressure	A7	pressed powder (XRF)	PP	other chemicals means	CHEM	
tissue	TI	fusion	A8	glass fusion (XRF)	GF	miscellaneous	MISC	
stream sediment	SS					fluorescence	FLUOR	
heavy mineral	HM					inductively coupled plasma	ICP	

AUTHORISED OFFICER Gentkins

0030

## ANALABS

A Division of Incharge Inspection and Testing Services Australia Pty. Ltd.

396031

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07120

05/06/90

0171

1 OF 1

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26796	25	15	205	<10	<3				
2	T26797	5	<5	285	<10	5				
3	T26798	30	25	240	<10	<3				
4	T26799	5	200	325	<10	7				
5	T26800	-	-	-	-	-				
6	T27001	5	55	140	<10	3				
7	T27002	5	15	100	<10	5				
8	T27003	5	<5	145	<10	6				
9	T27004	15	15	95	<10	10				
10	T27005	15	15	75	<10	7				
11	T27006	10	15	60	<10	4				
12	T27007	10	25	50	<10	7				
13	T27008	15	10	80	<10	5				
14	<del>T28290</del>	<del>95</del>	<del>&lt;5</del>	<del>80</del>	<del>&lt;10</del>	<del>11</del>				
15	T28292	95	<5	135	<10	10				
16	T28293	125	10	150	<10	10				
17	T28294	150	5	110	<10	16				
18	T28295	120	<5	85	<10	9				
19	<del>T28296</del>	<del>105</del>	<del>&lt;5</del>	<del>75</del>	<del>&lt;10</del>	<del>9</del>				
20										
21										
22										
23	DETECTION	5	5	5	10	3				
24	UNITS	ppm	ppm	ppm	ppm	ppm				
25	METHOD	101	101	101	101	401				

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED  
OFFICER

*Gentians*

NEUTRON ACTIVATION ANALYSIS

0031

NEUTRON ACTIVATION ANALYSIS REPORT

Date: 21-06-90

RGC TASMANIA SAMPLE Nos: T26796-T26868, T27001-T27008, T28290-T28296

BECQUEREL JOB # 005

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 26796	# 26797	# 26798	# 26799	# 26800	# 26802	# 26803	# 26807	# 26808	# 26810
ANTIMONY	.2	4.80	8.60	7.90	10.00	2.90	14.00	5	10	8.00	15.00
ARSENIC	2.0	5.20	6.30	12.00	5.10	298.00	17.00	-1.00	110	80	18.00
BARIUM	100.0	-100.0	150.0	-100.0	-100.0	480.0	35.00	2.00	21	0	-1.00
BROMINE	2.0	2.50	-2.00	4.40	2.10	-2.00	-2.00	-2.00	2	-1.00	0
CL M	2.0	11.00	8.00	20.00	14.00	28.00	4.00	4.00	48	7.00	0
CAESIUM	1.0	-1.00	-1.00	-1.00	1.00	1.20	4.00	0	43	0	-1.00
CHROMIUM	5.0	3540.0	3180.0	3670.0	1800.0	53.0	4.00	0	0	0	0
COBALT	1.0	76.00	91.00	72.00	62.00	16.00	45.00	4.00	42	1.00	12.00
EUROPIUM	.5	-.50	.55	.81	1.20	1.10	1.7	.9	0	0	0
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	230.0	5	0	0	0	0
HAFNIUM	1.0	-1.00	1.30	-1.00	1.40	2.40	3.00	0	0	0	-1.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-2.00	-1.00	-1.00	-1.00	-2.00
IRON, %	.05	9.520	7.700	8.670	10.800	4.600	8.00	11.00	32	5.00	46.00
LANTHANUM	.5	3.80	6.00	7.60	6.90	14.00	23	2.00	2	3.00	6
LUTETIUM	.2	-.20	-.20	.23	.21	.31	0	.4	8	7	0
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-1.00	0	0	0	.9
POTASSIUM, %	.2	-.200	-.200	-.200	-.200	2.000	0	0	0	0	0
RUBIDIUM	20.0	27.0	20.0	-20.0	23.0	39.0	6	0	1	0	7.00
SAMARIUM	.20	1.30	1.90	2.90	3.10	4.20	4	20	0	0	0
SCANDIUM	.10	29.40	25.90	28.60	14.00	13.00	9	1.00	1	1.00	3.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-1.00	0	0	0	0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-1.00	-1.00	-1.00	-5.00
TANTALUM	1.0	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00	0	0	-1.00
TI UM	.5	.84	1.20	1.50	.95	1.60	0	0	0	1.00	0
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-5.00	-5.00	-5.00	-5.00	-5.00
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	3.30	-1.00	-1.00	-1.00	-1.00	-1.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-1.00	-1.00	-1.00	-1.00	-1.00
YTTERBIUM	.5	.60	1.10	1.20	1.20	1.70	0	0	0	0	50
ZINC	100.0	220.0	310.0	250.0	340.0	840.0	-1.00	1.00	6	0	0.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-5.00	-5.00	-5.00	-5.00	-1.00



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW  
 Telephone: (02) 543 2644  
 Facsimile: (02) 543 2655  
 P.O. BOX 93  
 MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0032

BECQUEREL JOB # 005

STD

ELEMENT	DL	# 26855	# 26856	# 26859	# 26860	# 26862	# 26863	# 26866	# 26868	# 27001	# 27002
ANTIMONY	.2	[REDACTED]	5.20	1.90							
ARSENIC	2.0	[REDACTED]	3.70	3.80							
BARIUM	100.0	[REDACTED]	110.0	-100.0							
BROMINE	2.0	[REDACTED]	-2.00	3.10							
CERIUM	2.0	[REDACTED]	13.00	31.00							
CAESIUM	1.0	[REDACTED]	8.30	2.40							
CHROMIUM	5.0	[REDACTED]	45.0	52.0							
COPPER	1.0	[REDACTED]	34.00	22.00							
EUROPIUM	.5	[REDACTED]	-.50	.62							
GOLD, ppb	5.0	[REDACTED]	-5.0	-5.0							
HAFNIUM	1.0	[REDACTED]	4.20	2.70							
IRIDIUM, ppb	20.0	[REDACTED]	-20.0	-20.0							
IRON, %	.05	[REDACTED]	3.800	3.700							
LANTHANUM	.5	[REDACTED]	7.20	14.00							
LUTETIUM	.2	[REDACTED]	-.20	-.20							
MOLYBDENUM	5.0	[REDACTED]	-5.0	-5.0							
POTASSIUM, %	.2	[REDACTED]	2.000	.730							
RUBIDIUM	20.0	[REDACTED]	85.0	25.0							
SAMARIUM	.20	[REDACTED]	1.90	3.30							
SCANDIUM	.10	[REDACTED]	12.50	14.70							
SELENIUM	5.0	[REDACTED]	-5.0	-5.0							
SILVER	5.0	[REDACTED]	-5.00	-5.00							
TANTALUM	1.0	[REDACTED]	-1.00	-1.00							
THORIUM	.5	[REDACTED]	2.90	3.40							
TIN	500.0	[REDACTED]	-500.0	-500.0							
TUNGSTEN	2.0	[REDACTED]	-2.00	-2.00							
URANIUM	2.0	[REDACTED]	-2.00	-2.00							
YTERBIUM	.5	[REDACTED]	.80	.81							
ZINC	100.0	[REDACTED]	160.0	120.0							
ZIRCONIUM	500.0	[REDACTED]	-500.0	-500.0							



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW  
Telephone: (02) 543 2644 P.O. BOX 93  
Facsimile: (02) 543 2655 MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0035

BECQUEREL JOB # 005

ELEMENT	DL	# 27003	# 27004	# 27005	# 27006	# 27007	# 27008	# 28290	# 28292	# 28293	# 28294
ANTIMONY	.2	1.20	1.50	1.90	2.70	2.70	1.90	3.90	2.10	1.60	0
ARSENIC	2.0	4.40	5.40	5.50	3.70	2.70	3.70	20.00	0	0	0
BARIUM	100.0	110.0	420.0	530.0	610.0	620.0	590.0	4	0	0	0
BROMINE	2.0	2.50	-2.00	8.20	4.70	5.10	-2.00	-	0	0	0
CERIUM	2.0	25.00	32.00	69.00	94.00	87.00	46.00	7	0	0	0
CAESIUM	1.0	-1.00	2.90	3.80	4.30	3.30	3.60	5	0	0	0
CESIUM	5.0	539.0	250.0	170.0	190.0	180.0	623.0	1	0	0	0
COBALT	1.0	43.00	8.30	9.40	5.50	3.70	26.00	4	0	0	0
EUROPIUM	.5	.50	.52	1.20	1.50	1.50	.84	0	0	0	0
GOLD, ppb	5.0	-5.0	-5.0	5.4	-5.0	-5.0	-5.0	0	0	0	0
HAFNIUM	1.0	2.30	3.10	5.60	6.90	7.90	3.60	0	0	0	0
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-	0	0	0
IRON, %	.05	5.970	2.000	2.400	1.300	1.500	3.500	6	0	0	0
LANTHANUM	.5	12.00	17.00	36.00	51.30	46.00	25.00	3	0	0	0
LUTETIUM	.2	.24	.32	.49	.63	.59	.33	0	8	53	7
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	0	0	0	0
POTASSIUM, %	.2	.410	.840	1.500	1.600	2.100	1.400	3	0	0	0
RUBIDIUM	20.0	27.0	78.0	76.0	93.0	89.0	66.0	3	0	0	0
SAMARIUM	.20	2.60	3.50	6.20	8.40	8.20	4.50	0	0	30	0
SCANDIUM	.10	27.40	9.40	11.70	8.10	8.40	14.60	2	0	40	2
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	0	0	0	0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	0	0	0	0
TANTALUM	1.0	1.40	-1.00	-1.00	1.20	-1.00	-1.00	0	0	50	0
THORIUM	.5	4.80	8.60	16.00	17.00	15.00	9.00	1	0	0	0
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-5	0	0	0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	0	0	0	0
URANIUM	2.0	-2.00	-2.00	3.40	3.20	2.20	-2.00	-2	0	40	0
YTTERBIUM	.5	1.50	1.60	2.70	3.50	3.30	2.00	3	0	10	20
ZINC	100.0	170.0	140.0	110.0	-100.0	-100.0	120.0	11	0	19	0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-5	0	0	0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0034

BECQUEREL JOB # 005

ELEMENT	DL	# 28295	# 28296	# 26807x2	# 26863x2	# 27003x2
ANTIMONY	.2			11.00	1.20	1.30
ARSENIC	2.0	1.00	1.00	110.00	3.40	6.70
BARIUM	100.0	6.00	5.00	300.0	-100.0	190.0
BROMINE	2.0	1.00	1.00	4.10	8.90	4.30
CL H	2.0	6.00	6.00	48.00	8.60	25.00
CAESIUM	1.0	2.00	2.00	44.00	-1.00	1.00
CHROMIUM	5.0	3.00	1.00	95.0	8010.0	553.0
COBALT	1.0	3.00	3.00	43.00	147.00	44.00
EUROPIUM	.5	1.50	1.00	2.10	-.50	-.50
GOLD, ppb	5.0	1.00	1.00	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.00	1.00	4.20	1.00	2.50
IRIDIUM, ppb	20.0	1.00	1.00	-20.0	-20.0	-20.0
IRON, %	.05	7.00	7.00	32.800	6.920	6.210
LANTHANUM	.5	3.00	3.00	25.00	6.10	13.00
NIPTETIUM	.2	1.6	1.4	.59	-.20	.28
MOLYBDENUM	5.0	1.00	1.00	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.00	2.00	.890	.200	.560
RUBIDIUM	20.0	1.00	1.00	120.0	-20.0	34.0
SAMARIUM	.20	1.00	1.00	8.60	.39	2.60
SCANDIUM	.10	2.00	2.00	19.70	9.30	28.30
SELENIUM	5.0	1.00	1.00	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.00	2.00	-1.00	-1.00	-1.00
TUNGSTEN	.5	10.00	10.00	7.10	1.00	4.80
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	3.00	3.00	3.40	-.50	1.50
ZINC	100.0	12.00	1.00	710.0	170.0	180.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

0035

T27009 - 099  
26601 - 023

396036 5520/324.

## ANALABS

A division of MacDonald Hamilton &amp; Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 95.1.08.07128

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited P.O. Box 320 Rosny Park Tasmania 7018		ORDER No. 0172A	PROJECT T 5520								
DATE RECEIVED 30/05/90		RESULTS REQUIRED ASAP									
No. OF PAGES OF RESULTS 5	DATE REPORTED 18/06/90	No. OF COPIES 1	TOTAL No. OF SAMPLES 114								
STATE OF SAMPLES	PRE-TREATMENT								ANALYSIS		
REFER BELOW	SAMPLE NUMBERS	DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
	<270,09/039,40/99,<266,01/23	RD	Prep: 002,016								Au,Ag,As,Ba,Br,Ce,Co,Cr,Cs,Eu,Fe,Hf,Ir,La,Lu,Mo
Various		RD									Cu,Pb,Zn,Bi/101
Various		RD									Sn/401

RESULTS TO	Mark Flemming R.G.C. Exploration Pty Limited P.O. Box 320 Rosny Park Tasmania 7018	REMARKS
RESULTS TO		E.U. 21/86 - HOWARDS RD Howards Rd Grid Wacker Samples.

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	perchloric acid	A1 cold acid
split core	hydrochloric acid	A2 specific sulphide
cutting	nitric acid	A3 other mixed acids
rock	aqua regia	A4 alkaline attack
oil	nitric-perchloric	A5 volatilization
pulp	HF mixture	A6 ignition
water	HF under pressure	A7 pressed powder (XRF)
tissue	fusion	A8 glass fusion (XRF)
stream sediment		CA
heavy mineral		SS
		Mo
		AA
		VO
		IG
		PP
		GF
		atomic absorption
		x-ray fluorescence
		spectrophotometry
		colorimetry
		chromatography
		titration
		other chemicals means
		miscellaneous
		fluorescence
		Inductively coupled plasma
		AAS
		XRF
		SPEC
		COL
		CHR
		TTN
		CHEM
		MISC
		FLUOR
		ICP

AUTHORISED OFFICER

Jenkins

1

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		95.1.08.07128				18/06/90	0172A		1	OF	5
TYPE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn					
1	27009	10	15	165	<10	4					
2	27010	10	20	135	<10	5					
3	27011	10	15	75	<10	9					
4	27012	10	30	120	<10	5					
5	27013	10	25	150	<10	4					
6	27014	10	20	115	<10	<3					
7	27015	65	25	125	<10	8					
8	27016	35	10	120	<10	<3					
9	27017	115	5	90	<10	<3					
10	27018	15	10	115	<10	4					
11	27019	5	5	90	<10	3					
12	27020	-	-	-	-	-	STD				
13	27021	5	5	100	<10	3					
14	27022	5	10	65	<10	<3					
15	27023	10	30	85	<10	<3					
16	27024	5	5	95	<10	5					
17	27025	5	15	75	<10	3					
18	27026	35	20	130	<10	7					
19	27027	10	65	125	<10	3					
20	27028	5	35	90	<10	4					
21	27029	5	10	110	<10	3					
22	27030	10	25	100	<10	6					
23	27031	5	5	160	<10	7					
24	27032	5	10	70	<10	8					
25	27033	10	10	100	<10	4					

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jenkins*

## ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		95.1.08.07128				18/06/90		0172A		2 OF 5	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn					
1	27034	10	25	100	<10	8					
2	27035	5	10	85	<10	9					
3	27036	95	30	195	<10	7					
4	27037	35	25	155	<10	5					
5	27038	10	15	115	<10	9					
6	27039	5	15	90	<10	<3					
7	27040	-	-	-	-	-	STD				
8	27041	10	10	85	<10	5					
9	27042	5	20	85	<10	<3					
10	27043	10	50	90	<10	12					
11	27044	5	15	85	<10	6					
12	27045	10	25	75	<10	7					
13	27046	5	25	60	<10	10					
14	27047	5	25	125	<10	<3					
15	27048	5	20	25	<10	5					
16	27049	10	10	100	<10	11					
17	27050	10	10	145	<10	8					
18	27051	10	25	55	<10	6					
19	27052	10	15	85	<10	<3					
20	27053	15	25	100	<10	3					
21	27054	5	15	75	<10	5					
22	27055	10	10	95	<10	9					
23	27056	10	5	140	<10	4					
24	27057	60	5	120	<10	7					
25	27058	20	5	145	10	9					

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jenkins*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07128

18/06/90

0172A

3 of 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	27059	25	5	140	10	9				
2	27060	--	--	--	--	--	STD			
3	27061	15	<5	180	10	5				
4	27062	55	<5	140	10	8				
5	27063	20	5	200	10	5				
6	27064	100	<5	210	<10	10				
7	27065	480	5	150	<10	3				
8	27066	10	<5	130	10	6				
9	27067	5	5	135	<10	<3				
10	27068	5	<5	110	<10	8				
11	27069	<5	<5	85	<10	8				
12	27070	<5	<5	95	<10	5				
13	27071	5	<5	110	<10	<3				
14	27072	20	10	135	10	5				
15	27073	5	5	45	<10	5				
16	27074	5	5	15	<10	3				
17	27075	5	65	20	<10	7				
18	27076	5	20	20	10	5				
19	27077	5	20	30	10	3				
20	27078	10	40	60	<10	8				
21	27079	5	35	80	<10	<3				
22	27080	--	--	--	--	--	STD			
23	27081	5	15	65	10	6				
24	27082	5	85	40	<10	8				
25	27083	<5	30	45	<10	5				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

-- = element not determined

AUTHORISED  
OFFICER*Jenkins*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07128

18/06/90

0172A

4 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ri	Sn				
1	27084	5	15	40	<10	5				
2	27085	5	10	110	<10	6				
3	27086	5	45	95	<10	7				
4	27087	5	40	120	<10	9				
5	27088	5	80	60	<10	8				
6	27089	15	40	185	<10	8				
7	27090	10	20	80	<10	5				
8	27091	30	60	115	<10	8				
9	27092	20	40	100	<10	5				
10	27093	20	40	100	<10	9				
11	27094	55	40	130	10	5				
12	27095	70	25	135	<10	7				
13	27096	40	45	125	<10	7				
14	27097	30	35	110	<10	5				
15	27098	50	40	175	<10	7				
16	27099	55	45	150	<10	9				
17	26601	50	70	350	<10	4				
18	26602	45	50	120	<10	8				
19	26603	40	30	110	<10	9				
20	26604	10	20	65	<10	7				
21	26605	30	40	165	<10	5				
22	26606	20	50	55	<10	4				
23	26607	50	30	115	<10	4				
24	26608	15	35	70	<10	5				
25	26609	55	55	265	<10	7				

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Genkins*

0040

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07128

18/06/90

0172A

5 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn			
1	26610	80	80	270	<10	5			
2	26611	55	135	160	<10	6			
3	26612	55	40	195	<10	7			
4	26613	20	25	75	<10	3			
5	26614	60	40	85	<10	9			
6	26615	45	30	135	<10	9			
7	26616	30	55	140	<10	11			
8	26617	45	30	105	<10	9			
9	26618	40	55	200	<10	4			
10	26619	55	140	245	<10	<3			
11	26620	-	-	-	-	-	STD		
12	26621	10	90	165	<10	6			
13	26622	40	155	250	10	6			
14	26623	55	300	150	10	14			
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	5	5	5	10	3			
24	UNITS	ppm	ppm	ppm	ppm	ppm			
25	METHOD	101	101	101	101	401			

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



1

## NEUTRON ACTIVATION ANALYSIS

0041

## IRON ACTIVATION ANALYSIS REPORT

Date: 25-06-90

RGC TASMANIA SAMPLE Nos: 26601-26623, 27009-27099

BECQUEREL JOB # 022

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 26601	# 26602	# 26603	# 26604	# 26605	# 26606	# 26607	# 26608	# 26609	# 26610
ANTIMONY	.2	5.10	3.10	1.60	1.80	6.60	3.90	1.60	2.20	2.00	7.30
ARSENIC	2.0	69.00	11.00	12.00	4.20	37.00	16.00	9.20	10.00	16.00	28.00
BARIUM	100.0	590.0	560.0	510.0	850.0	1200.0	550.0	520.0	570.0	370.0	430.0
BROMINE	2.0	5.30	10.00	19.00	22.00	7.10	17.00	28.00	21.00	23.00	14.00
CERIUM	2.0	87.00	78.00	72.00	92.00	96.00	94.00	77.00	87.00	110.00	59.00
CAESIUM	1.0	8.10	9.50	10.00	8.10	13.00	11.00	11.00	12.00	7.00	11.00
CHROMIUM	5.0	140.0	170.0	250.0	33.0	74.0	140.0	210.0	190.0	72.0	210.0
COBALT	1.0	25.00	19.00	17.00	2.50	10.00	2.30	22.00	4.50	20.00	13.00
EUROPIUM	.5	1.60	1.30	1.10	.72	1.80	1.60	1.00	1.40	2.70	2.10
GOLD, ppb	5.0	11.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.80	6.70	5.90	5.80	9.30	6.70	5.90	6.40	8.90	5.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.010	5.420	5.600	2.500	7.350	3.900	7.480	4.900	10.300	10.000
LANTHANUM	.5	44.00	41.00	37.00	52.30	48.00	50.00	38.00	45.00	53.70	31.00
LU CETIUM	.2	.65	.63	.55	.69	1.00	.61	.62	.68	1.20	.57
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.000	2.700	2.900	3.000	4.300	2.700	2.900	3.200	1.800	3.200
RUBIDIUM	20.0	130.0	150.0	170.0	150.0	230.0	140.0	170.0	170.0	120.0	170.0
SAMARIUM	.20	8.50	8.20	7.10	6.60	12.00	8.90	7.50	8.40	15.00	6.60
SCANDIUM	.10	20.40	22.20	23.60	6.40	25.50	18.80	24.40	22.20	24.70	26.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.90	1.30	1.40	1.60	1.70	1.70	1.60	1.80	1.30
THORIUM	.5	15.00	15.00	12.00	24.00	20.00	14.00	12.00	13.00	18.00	12.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.20	-2.00	-2.00	5.30	3.20	-2.00	-2.00	2.70	3.20	3.20
YTTERBIUM	.5	3.50	3.40	2.70	3.30	5.40	3.30	3.20	3.30	6.30	3.10
ZINC	100.0	380.0	160.0	150.0	-100.0	200.0	-100.0	150.0	120.0	290.0	320.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0042

BEQUEREL JOB # 022

ELEMENT	DL	# 26611	# 26612	# 26613	# 26614	# 26615	# 26616	# 26617	# 26618	# 26619	# 26620
ANTIMONY	.2	3.20	2.10	5.30	10.00	4.20	10.00	7.30	5.80	18.00	2.80
ARSENIC	2.0	22.00	11.00	14.00	33.00	13.00	17.00	25.00	10.00	49.00	301.00
BARIUM	100.0	670.0	570.0	590.0	800.0	680.0	660.0	720.0	240.0	560.0	440.0
BROMINE	2.0	26.00	14.00	23.00	6.40	8.40	8.50	4.40	8.30	4.10	-2.00
CERIUM	2.0	82.00	100.00	98.00	80.00	83.00	100.00	78.00	100.00	77.00	31.00
CAESIUM	1.0	10.00	7.90	10.00	12.00	11.00	8.70	11.00	5.80	12.00	-1.00
CHROMIUM	5.0	190.0	93.0	180.0	230.0	160.0	120.0	160.0	320.0	230.0	52.0
COBALT	1.0	21.00	21.00	3.40	4.80	22.00	10.00	10.00	28.00	30.00	16.00
EUROPIUM	.5	1.40	2.00	1.40	1.20	1.50	1.60	1.30	1.80	1.10	1.10
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	240.0
HAFNIUM	1.0	5.50	9.20	7.30	6.10	6.20	7.10	6.30	7.80	5.20	2.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.830	9.220	5.050	5.590	5.810	4.400	4.600	5.850	7.400	4.600
LANTHANUM	.5	44.00	50.40	50.20	41.00	42.00	52.30	42.00	51.70	39.00	15.00
LUTETIUM	.2	.55	1.10	.70	.57	.61	.72	.63	.78	.57	.37
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	3.500	2.000	3.100	4.300	3.200	3.400	3.900	1.800	3.300	1.600
ROBIDIUM	20.0	160.0	140.0	160.0	210.0	180.0	160.0	200.0	95.0	160.0	38.0
SAMARIUM	.20	7.30	12.00	9.30	7.30	7.70	10.00	7.60	10.00	7.70	4.30
SCANDIUM	.10	23.10	25.00	21.50	25.90	23.00	19.40	23.90	20.10	23.40	13.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.60	1.70	1.10	2.00	1.70	1.90	1.30	2.40	-1.00	1.10
THORIUM	.5	14.00	17.00	14.00	14.00	15.00	17.00	14.00	16.00	12.00	2.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	4.50	-2.00	2.80	5.30	-2.00	3.10	-2.00
YTTERBIUM	.5	2.90	5.90	3.70	3.00	3.20	3.80	3.30	4.10	3.20	1.70
ZINC	100.0	200.0	230.0	120.0	140.0	170.0	190.0	150.0	250.0	300.0	870.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW  
 Telephone: (02) 543 2644  
 Facsimile: (02) 543 2655  
 P.O. BOX 93  
 MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0043

BECQUEREL JOB # 022

ELEMENT	DL	# 26621	# 26622	# 26623	# 27009	# 27010	# 27011	# 27012	# 27013	# 27014	# 27015
ANTIMONY	.2	8.50	18.00	10.00	3.20	1.70	3.00	2.60	2.90	3.40	1.60
ARSENIC	2.0	24.00	64.00	11.00	4.00	4.40	6.00	5.70	4.60	6.50	5.20
BARIUM	100.0	260.0	780.0	790.0	690.0	380.0	390.0	410.0	290.0	230.0	-100.0
BROMINE	2.0	12.00	4.40	-2.00	-2.00	3.90	11.00	12.00	5.10	5.50	3.90
CERIUM	2.0	91.00	64.00	95.00	59.00	29.00	61.00	45.00	34.00	35.00	13.00
CAESIUM	1.0	2.40	9.20	15.00	5.00	2.70	3.40	2.90	1.10	3.40	1.30
CHROMIUM	5.0	44.0	120.0	150.0	589.0	755.0	1440.0	1470.0	880.0	1530.0	2290.0
COBALT	1.0	12.00	14.00	5.80	18.00	34.00	18.00	29.00	29.00	30.00	63.00
EUROPIUM	.5	1.50	1.10	1.30	.91	.56	1.00	1.00	.64	.65	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.60	4.50	5.70	4.70	3.10	4.60	3.80	3.40	3.40	1.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.050	8.700	2.700	3.800	5.080	2.500	5.360	4.500	4.700	7.160
LANTHANUM	.5	46.00	33.00	53.50	31.00	15.00	33.00	23.00	19.00	19.00	7.50
LEAD	.2	.66	.48	.69	.36	.24	.41	.33	.29	.25	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.100	3.500	4.100	2.100	1.300	1.000	.730	.580	.770	.490
RUBIDIUM	20.0	70.0	170.0	190.0	100.0	57.0	60.0	50.0	32.0	42.0	24.0
SAMARIUM	.20	8.60	5.90	7.90	5.10	2.90	5.50	4.50	3.70	3.20	1.60
SCANDIUM	.10	10.00	19.60	22.60	14.20	19.40	14.40	21.70	18.80	13.30	22.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.20	1.30	1.10	1.20	-1.00	1.30	-1.00	-1.00	-1.00
THORIUM	.5	15.00	13.00	18.00	13.00	7.30	7.90	8.60	6.60	6.50	2.40
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.60	3.30	5.90	3.90	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	3.30	2.60	3.80	2.10	1.60	1.90	1.80	1.40	1.40	.63
ZINC	100.0	210.0	290.0	200.0	190.0	190.0	110.0	180.0	180.0	140.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0044

BECQUEREL JOB # 022

ELEMENT	DL	# 27016	# 27017	# 27018	# 27019	# 27020	# 27021	# 27022	# 27023	# 27024	# 27025
ANTIMONY	.2	2.80	.50	3.40	3.90	.26	2.20	1.20	1.80	3.10	4.00
ARSENIC	2.0	4.00	3.10	3.60	6.90	3.20	5.20	2.50	4.50	3.80	4.90
BARIUM	100.0	-100.0	-100.0	220.0	150.0	480.0	160.0	340.0	390.0	320.0	180.0
BROMINE	2.0	3.80	2.00	8.60	8.20	-2.00	13.00	5.40	10.00	11.00	27.00
CERIUM	2.0	12.00	2.60	26.00	20.00	70.00	20.00	41.00	29.00	19.00	30.00
CAESIUM	1.0	-1.00	-1.00	2.70	2.50	18.00	2.50	2.00	2.80	2.90	2.20
CHROMIUM	5.0	1640.0	4520.0	1720.0	673.0	460.0	1290.0	806.0	689.0	667.0	809.0
COBALT	1.0	39.00	84.00	29.00	26.00	24.00	44.00	22.00	31.00	30.00	32.00
EUROPIUM	.5	-.50	-.50	.61	-.50	1.20	-.50	-.50	.59	-.50	.93
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	49.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.10	1.00	3.40	3.30	8.70	3.00	3.00	3.20	2.60	3.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.000	7.650	4.500	4.100	4.400	6.100	3.800	4.700	4.900	5.670
LANTHANUM	.5	7.00	1.10	13.00	10.00	37.00	9.40	23.00	15.00	9.10	16.00
LUTETIUM	.2	-.20	-.20	.25	-.20	.43	-.20	.23	.25	.20	.34
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.460	-.200	.720	.420	1.800	.450	.830	1.200	.670	.810
RUBIDIUM	20.0	21.0	-20.0	45.0	25.0	200.0	36.0	39.0	51.0	44.0	37.0
STRONTIUM	.20	1.60	.40	2.70	2.00	7.60	2.40	3.40	3.10	2.10	3.70
SCANDIUM	.10	16.90	13.10	17.00	14.60	12.10	21.90	14.70	23.50	24.10	27.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	1.10	3.00	-1.00	-1.00	-1.00	-1.00	1.20
THORIUM	.5	2.40	1.30	5.50	3.80	15.00	4.00	7.80	7.10	3.00	5.70
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	6.30	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	3.60	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	.65	-.50	1.30	1.00	2.20	1.10	1.40	1.40	1.20	1.80
ZINC	100.0	160.0	140.0	150.0	130.0	110.0	150.0	120.0	140.0	160.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0045

BECQUEREL JOB # 022

ELEMENT	DL	# 27026	# 27027	# 27028	# 27029	# 27030	# 27031	# 27032	# 27033	# 27034	# 27035
ANTIMONY	.2	.81	.85	1.30	.65	1.00	.64	.49	.41	.81	.82
ARSENIC	2.0	4.40	2.80	5.10	2.90	5.80	4.10	3.30	2.90	3.70	3.30
BARIUM	100.0	210.0	230.0	260.0	-100.0	150.0	290.0	210.0	300.0	290.0	220.0
BROMINE	2.0	27.00	9.00	27.00	14.00	10.00	35.00	49.00	27.00	16.00	18.00
CERIUM	2.0	15.00	21.00	17.00	14.00	17.00	12.00	17.00	15.00	18.00	21.00
CAESIUM	1.0	1.90	3.70	1.70	1.60	1.60	2.40	3.20	1.50	2.00	1.90
CHROMIUM	5.0	566.0	380.0	600.0	555.0	681.0	420.0	380.0	551.0	518.0	521.0
COBALT	1.0	57.00	40.00	44.00	50.00	45.00	43.00	34.00	46.00	42.00	38.00
EUROPIUM	.5	-.50	.51	-.50	-.50	-.50	.58	-.50	-.50	.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.70	1.60	1.70	-1.00	1.40	2.10	1.70	1.50	1.90	2.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.560	5.770	5.390	7.740	6.190	6.330	5.150	5.760	6.030	5.550
LANTHANUM	.5	7.00	11.00	8.20	6.60	8.10	5.40	7.50	6.20	8.50	10.00
LUTETIUM	.2	-.20	.23	-.20	-.20	-.20	-.20	-.20	-.20	-.20	.23
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	.760	1.100	.320	.240	.260	.710	.640	.530	.640	.670
RUBIDIUM	20.0	43.0	49.0	-20.0	-20.0	29.0	44.0	24.0	27.0	24.0	27.0
SAMARIUM	.20	1.90	2.80	2.00	1.80	2.00	1.60	2.10	2.00	2.30	2.40
SCANDIUM	.10	33.70	34.90	26.70	31.20	31.30	35.40	29.10	32.80	32.70	31.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	1.10	-1.00	-1.00	-1.00
THORIUM	.5	4.50	3.10	3.40	2.80	2.60	3.60	2.50	2.70	2.80	3.40
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.00	1.50	1.00	.94	1.10	1.10	1.10	1.00	1.10	1.20
ZINC	100.0	190.0	190.0	150.0	180.0	180.0	220.0	170.0	160.0	200.0	180.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0046

BECQUEREL JOB # 022

ELEMENT	DL	# 27036	# 27037	# 27038	# 27039	# 27040	# 27041	# 27042	# 27043	# 27044	# 27045
ANTIMONY	.2	1.20	.82	.62	1.30	.30	2.30	2.90	2.90	.65	2.50
ARSENIC	2.0	5.00	6.30	4.00	3.70	3.20	3.10	4.80	4.90	5.40	4.30
BARIUM	100.0	220.0	350.0	310.0	210.0	430.0	310.0	240.0	230.0	560.0	590.0
BROMINE	2.0	29.00	29.00	18.00	41.00	-2.00	19.00	15.00	22.00	4.10	4.80
CERIUM	2.0	24.00	27.00	30.00	16.00	65.00	28.00	24.00	43.00	29.00	68.00
CAESIUM	1.0	1.00	2.60	2.30	2.40	16.00	3.10	2.00	2.80	1.60	3.80
CHROMIUM	5.0	574.0	430.0	370.0	725.0	440.0	661.0	824.0	1450.0	566.0	1200.0
COBALT	1.0	46.00	41.00	38.00	32.00	23.00	26.00	23.00	26.00	35.00	11.00
EUROPIUM	.5	-5.0	.67	.62	-5.0	.85	.53	-5.0	.76	.62	1.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	48.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.40	2.40	2.20	2.60	8.10	3.20	2.80	3.80	2.00	5.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.130	6.080	5.770	5.540	4.100	4.300	3.700	4.100	5.560	2.900
LANTHANUM	.5	13.00	13.00	15.00	8.40	35.00	15.00	12.00	24.00	14.00	36.00
LIITHIUM	.2	.23	.26	.32	-.20	.39	.29	.22	.31	.26	.50
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.300	.810	.690	.440	1.600	.590	.780	.780	1.300	1.800
RUBIDIUM	20.0	-20.0	28.0	25.0	37.0	200.0	38.0	34.0	44.0	53.0	81.0
SAMARIUM	.20	2.70	3.10	3.50	1.90	7.20	3.30	2.40	4.40	3.20	6.60
SCANDIUM	.10	29.40	32.30	31.30	18.00	11.30	19.00	14.30	19.10	29.30	10.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.60	1.00	1.60	2.80	1.30	-1.00	1.50	2.20	1.20
THORIUM	.5	4.50	5.00	4.80	3.30	14.00	6.20	4.30	6.40	4.20	12.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	5.10	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	3.80	-2.00	-2.00	-2.00	-2.00	2.40
YTTERBIUM	.5	1.30	1.60	1.60	.89	2.20	1.60	1.00	1.80	1.50	2.60
ZINC	100.0	280.0	240.0	220.0	150.0	130.0	140.0	120.0	140.0	180.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES, NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW  
 Telephone: (02) 543 2644  
 Facsimile: (02) 543 2655  
 P.O. BOX 93  
 MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0047

BECQUEREL JOB # 022

ELEMENT	DL	# 27046	# 27047	# 27048	# 27049	# 27050	# 27051	# 27052	# 27053	# 27054	# 27055
ANTIMONY	.2	2.40	1.70	1.90	1.30	1.70	2.20	2.40	1.80	.83	1.10
ARSENIC	2.0	5.10	5.00	2.90	5.10	3.70	6.10	6.70	4.90	2.60	2.80
BARIUM	100.0	430.0	350.0	300.0	420.0	220.0	330.0	660.0	210.0	560.0	180.0
BROMINE	2.0	15.00	23.00	19.00	8.40	11.00	42.00	14.00	30.00	10.00	10.00
CERIUM	2.0	48.00	34.00	71.00	37.00	18.00	59.00	48.00	45.00	26.00	37.00
CAESIUM	1.0	2.20	3.10	2.90	2.30	1.80	3.30	3.70	3.40	1.80	1.50
CHROMIUM	5.0	795.0	707.0	410.0	430.0	230.0	350.0	514.0	664.0	380.0	350.0
COBALT	1.0	18.00	37.00	3.50	23.00	50.00	8.90	25.00	30.00	35.00	32.00
EUROPIUM	.5	.74	.83	1.20	.58	-.50	1.20	.75	.78	.61	.76
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.20	3.60	7.00	3.70	2.90	5.30	3.50	3.40	1.90	2.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	3.900	6.220	1.200	4.700	6.150	2.500	4.400	4.900	5.300	5.320
LANTHANUM	.5	25.00	18.00	38.00	20.00	9.30	31.00	24.00	24.00	13.00	19.00
LUTETIUM	.2	.39	.31	.50	.34	.29	.44	.39	.36	.28	.30
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.300	1.000	.800	1.100	.830	1.100	1.400	.730	1.000	.930
RUBIDIUM	20.0	54.0	66.0	51.0	67.0	57.0	62.0	76.0	45.0	63.0	27.0
STRONTIUM	.20	4.70	3.50	6.30	3.90	1.80	5.40	4.30	4.50	3.10	3.80
SCANDIUM	.10	15.80	24.80	6.00	18.40	32.10	10.00	18.00	20.70	29.20	26.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.80	2.00	-1.00	1.70	1.50	2.50	1.60	-1.00	1.10
THORIUM	.5	7.90	6.60	10.00	10.00	6.00	10.00	8.90	7.40	4.20	6.80
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	2.30	2.10	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	2.00	1.80	2.40	1.80	1.50	2.20	1.90	1.80	1.40	1.70
ZINC	100.0	110.0	210.0	-100.0	170.0	210.0	-100.0	130.0	170.0	160.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0048

BECQUEREL JOB # 022

ELEMENT	DL	# 27056	# 27057	# 27058	# 27059	# 27060	# 27061	# 27062	# 27063	# 27064	# 27065
ANTIMONY	.2	3.40	2.70	1.30	1.40	2.70	1.80	1.80	1.00	1.40	1.20
ARSENIC	2.0	98.00	5.10	3.10	3.40	291.00	2.60	2.90	2.60	-2.00	3.10
BARIUM	100.0	160.0	360.0	390.0	220.0	420.0	200.0	280.0	290.0	140.0	-100.0
BROMINE	2.0	10.00	75.00	19.00	27.00	-2.00	27.00	21.00	31.00	18.00	25.00
CERIUM	2.0	21.00	36.00	31.00	22.00	27.00	25.00	29.00	18.00	33.00	29.00
CAESIUM	1.0	-1.00	4.80	2.60	1.20	-1.00	1.90	2.70	1.60	-1.00	-1.00
CHROMIUM	5.0	1590.0	523.0	665.0	576.0	52.0	789.0	480.0	612.0	410.0	833.0
COBALT	1.0	52.00	50.00	46.00	43.00	15.00	60.00	45.00	50.00	50.00	58.00
EUROPIUM	.5	.55	.83	.63	-.50	.92	.63	.82	-.50	.91	.66
GOLD, ppb	5.0	23.0	-5.0	-5.0	-5.0	210.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.90	2.10	2.50	2.30	2.60	2.20	2.40	1.00	3.00	2.10
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	10.400	4.900	5.650	5.750	4.400	7.450	5.980	6.480	6.350	7.610
LANTHANUM	.5	12.00	17.00	14.00	12.00	14.00	13.00	16.00	8.30	17.00	14.00
LUTETIUM	.2	-.20	.28	.24	.22	.34	.26	.30	-.20	.35	.29
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.610	1.600	1.000	.650	1.600	.640	1.600	1.000	.290	.210
RUBIDIUM	20.0	36.0	78.0	63.0	42.0	43.0	55.0	100.0	32.0	-20.0	-20.0
SAMARIUM	.20	2.50	3.70	3.20	2.60	4.10	3.10	4.20	2.10	4.10	3.00
SCANDIUM	.10	15.20	32.10	28.10	26.50	12.60	33.90	37.40	34.40	35.90	27.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	1.80	-1.00	1.20	1.20	1.40	-1.00	1.80	1.10
THORIUM	.5	4.30	4.50	5.00	4.50	1.60	3.80	5.00	2.80	5.30	4.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.00	1.70	1.40	1.20	1.70	1.30	1.60	1.10	1.90	1.40
ZINC	100.0	180.0	180.0	190.0	180.0	830.0	250.0	210.0	280.0	290.0	190.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0049

BECQUEREL JOB # 022

ELEMENT	DL	# 27066	# 27067	# 27068	# 27069	# 27070	# 27071	# 27072	# 27073	# 27074	# 27075
ANTIMONY	.2	1.10	1.00	.84	.62	.64	1.10	2.30	4.30	2.30	2.80
ARSENIC	2.0	4.00	3.20	3.10	-2.00	-2.00	21.00	10.00	11.00	10.00	17.00
BARIUM	100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	360.0	350.0	300.0	830.0
BROMINE	2.0	13.00	15.00	25.00	6.40	8.90	3.50	4.20	-2.00	-2.00	2.70
CERIUM	2.0	8.90	11.00	7.40	13.00	6.20	8.60	100.00	68.00	57.00	140.00
CAESIUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	3.30	2.60	3.40	3.90
CHROMIUM	5.0	3320.0	2730.0	1460.0	360.0	504.0	3410.0	240.0	40.0	44.0	30.0
COBALT	1.0	52.00	51.00	40.00	29.00	44.00	43.00	24.00	1.10	-1.00	-1.00
EUROPIUM	.5	-.50	-.50	-.50	-.50	-.50	-.50	2.20	.77	.55	2.10
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.60	1.40	1.60	3.50	2.30	-1.00	4.20	3.30	3.10	7.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.890	8.030	6.570	5.010	5.940	7.250	7.070	1.800	.770	1.700
LANTHANUM	.5	5.50	5.70	4.50	6.20	3.40	4.10	55.00	39.00	34.00	74.80
LITHIUM	.2	-.20	-.20	-.20	-.20	-.20	-.20	.61	.47	.39	.93
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.200	-.200	-.200	.380	.400	-.200	2.100	2.800	2.200	3.300
RUBIDIUM	20.0	24.0	22.0	21.0	-20.0	-20.0	20.0	120.0	120.0	97.0	160.0
SAMARIUM	.20	1.30	1.20	.90	1.20	1.00	1.20	11.00	5.30	3.60	12.00
SCANDIUM	.10	32.00	24.90	14.70	12.30	11.60	21.90	24.40	4.80	4.70	5.50
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	1.30	-1.00	1.70	-1.00
THORIUM	.5	2.20	2.70	2.30	1.60	1.10	1.10	12.00	20.00	13.00	25.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	5.40	4.80	6.00
YTTERIUM	.5	-.50	.72	-.50	.61	-.50	-.50	3.00	2.50	2.00	4.60
ZINC	100.0	200.0	220.0	150.0	120.0	130.0	150.0	190.0	-100.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0050

BECQUEREL JOB # 022

ELEMENT	DL	# 27076	# 27077	# 27078	# 27079	# 27080	# 27081	# 27082	# 27083	# 27084	# 27085
ANTIMONY	.2	3.80	3.50	3.60	4.40	-2.0	4.30	12.00	3.80	5.70	8.40
ARSENIC	2.0	-2.00	-2.00	3.10	6.80	2.40	6.20	14.00	2.40	4.90	10.00
BARIUM	100.0	650.0	410.0	620.0	670.0	570.0	820.0	800.0	440.0	260.0	520.0
BROMINE	2.0	2.20	-2.00	4.20	10.00	-2.00	10.00	4.50	3.90	4.50	9.00
CERIUM	2.0	150.00	110.00	100.00	140.00	65.00	110.00	150.00	170.00	150.00	100.00
CAESIUM	1.0	5.30	3.60	4.10	4.10	16.00	4.50	5.40	3.20	2.90	3.40
CHROMIUM	5.0	18.0	9.4	19.0	16.0	450.0	20.0	21.0	10.0	19.0	20.0
COBALT	1.0	-1.00	-1.00	2.20	1.80	24.00	1.30	-1.00	1.10	-1.00	1.70
EUROPIUM	.5	2.30	2.00	2.00	2.50	.92	2.10	2.40	2.50	2.60	1.90
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	50.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	9.10	8.50	10.00	9.40	8.50	9.00	13.00	8.10	6.50	8.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	.710	.720	1.300	2.200	4.200	2.100	1.600	.900	1.100	2.700
LANTHANUM	.5	82.80	57.00	52.70	73.70	36.00	59.10	79.70	88.20	84.30	54.20
LUTETIUM	.2	1.00	.85	.85	.86	.45	.86	1.10	.94	.82	.78
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.200	2.700	2.800	2.200	1.600	2.800	4.200	2.500	1.800	3.000
RUBIDIUM	20.0	150.0	130.0	110.0	110.0	210.0	150.0	190.0	110.0	58.0	150.0
ROSENIUM	.20	13.00	10.00	10.00	13.00	7.20	11.00	13.00	15.00	14.00	10.00
SCANDIUM	.10	7.20	7.60	10.00	10.00	11.50	10.00	12.80	5.30	4.40	11.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.00	1.10	1.70	1.60	4.50	1.20	2.40	1.10	-1.00	1.50
THORIUM	.5	27.00	19.00	23.00	23.00	14.00	23.00	33.00	27.00	21.00	19.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	6.10	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.50	2.80	5.30	3.70	2.70	3.80	6.20	3.60	4.00	4.00
YTTERBIUM	.5	5.00	4.30	4.20	4.50	2.20	4.20	5.50	4.70	4.10	3.90
ZINC	100.0	-100.0	-100.0	110.0	120.0	120.0	110.0	-100.0	-100.0	-100.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	590.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0051

BECQUEREL JOB # 022

ELEMENT	DL	# 27086	# 27087	# 27088	# 27089	# 27090	# 27091	# 27092	# 27093	# 27094	# 27095
ANTIMONY	.2	12.00	7.30	14.00	32.30	5.20	6.60	7.80	6.50	8.10	2.50
ARSENIC	2.0	7.20	15.00	7.50	11.00	11.00	25.00	56.00	53.00	20.00	10.00
BARIUM	100.0	640.0	690.0	1200.0	1300.0	760.0	680.0	650.0	580.0	670.0	580.0
BROMINE	2.0	7.90	7.50	3.10	4.10	11.00	4.40	7.10	6.10	6.20	2.80
CERIUM	2.0	120.00	96.00	86.00	87.00	100.00	93.00	94.00	99.00	94.00	85.00
CAESIUM	1.0	5.00	3.80	4.00	7.40	5.30	7.50	7.10	7.20	9.30	10.00
CHROMIUM	5.0	13.0	18.0	11.0	110.0	34.0	100.0	130.0	140.0	140.0	190.0
COBALT	1.0	3.40	3.40	-1.00	4.40	3.70	7.70	6.40	11.00	21.00	23.00
EUROPIUM	.5	2.50	2.50	1.70	1.10	2.20	1.60	1.80	1.60	1.40	1.40
GOLD, ppb	5.0	-5.0	-5.0	-5.0	7.2	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.90	8.20	8.90	5.80	8.20	6.00	7.40	7.10	6.70	6.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	3.100	5.320	1.600	2.500	2.700	4.800	3.800	4.600	5.160	5.130
LANTHANUM	.5	69.00	49.00	45.00	48.00	57.80	49.00	50.60	51.80	48.00	44.00
LUTETIUM	.2	.78	.78	.84	.62	.81	.71	.70	.77	.71	.64
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	2.600	1.400	2.900	4.100	2.300	3.200	2.800	2.800	3.400	3.400
ROBIDIUM	20.0	110.0	78.0	140.0	180.0	110.0	150.0	150.0	130.0	170.0	190.0
SAMARIUM	.20	12.00	10.00	9.20	6.90	10.00	9.20	9.00	10.00	9.10	8.20
SCANDIUM	.10	15.90	14.30	10.50	14.10	12.70	17.60	14.70	16.80	21.20	22.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.20	1.40	1.20	-1.00	-1.00	1.30	2.10	1.50	1.70
THORIUM	.5	17.00	16.00	21.00	19.00	18.00	16.00	18.00	16.00	16.00	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.40	2.40	4.30	5.20	4.00	3.50	4.10	3.70	2.80	3.20
YTTERBIUM	.5	3.90	3.90	4.20	3.10	3.80	3.90	3.70	3.80	3.70	3.30
ZINC	100.0	140.0	160.0	100.0	230.0	140.0	150.0	150.0	160.0	190.0	180.0
ZIRCONIUM	500.0	630.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0052

BECQUEREL JOB # 022

ELEMENT	DL	# 27096	# 27097	# 27098	# 27099	# 27015x2	# 27035x2	# 27064x2	# 27076x2	# 27095x2	# 26612x2
ANTIMONY	.2	4.60	6.70	1.60	5.40	1.30	.81	1.40	3.80	2.60	2.10
ARSENIC	2.0	11.00	19.00	7.40	17.00	5.50	3.40	2.10	-2.00	11.00	10.00
BARIUM	100.0	640.0	670.0	540.0	720.0	130.0	330.0	170.0	660.0	770.0	650.0
BROMINE	2.0	19.00	12.00	6.80	9.40	3.80	17.00	19.00	-2.00	4.00	12.00
CERIUM	2.0	86.00	98.00	80.00	80.00	15.00	21.00	34.00	130.00	87.00	100.00
CAESIUM	1.0	12.00	9.40	11.00	10.00	1.30	1.30	-1.00	5.20	10.00	7.50
CHROMIUM	5.0	150.0	160.0	200.0	200.0	2290.0	503.0	390.0	8.1	190.0	89.0
COBALT	1.0	24.00	7.50	29.00	13.00	62.00	39.00	49.00	-1.00	23.00	21.00
EUROPIUM	.5	1.20	1.60	1.50	1.60	-.50	.63	.82	2.50	1.60	1.90
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.40	7.20	6.10	6.50	1.60	1.80	2.50	8.50	6.20	8.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.380	4.700	5.830	5.300	7.040	5.650	6.320	.710	5.200	9.350
LANTHANUM	.5	45.00	51.60	42.00	43.00	7.30	10.00	17.00	76.50	46.00	51.00
TIUM	.2	.68	.68	.63	.68	-.20	.20	.34	1.00	.69	1.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.700	3.100	3.000	3.200	.220	.560	.360	3.400	3.600	2.100
RUBIDIUM	20.0	190.0	180.0	170.0	180.0	27.0	44.0	31.0	140.0	200.0	150.0
SAMARIUM	.20	8.20	10.00	8.10	8.50	1.50	2.50	4.10	12.00	8.60	12.00
SCANDIUM	.10	22.50	21.30	25.10	24.20	22.40	32.50	36.60	7.00	23.10	25.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	1.80	2.00	1.40	-1.00	1.10	-1.00	1.60	1.90	1.80
THORIUM	.5	15.00	16.00	14.00	15.00	2.20	3.10	5.40	25.00	15.00	18.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	4.10	2.40	-2.00	-2.00	-2.00	-2.00	3.50	3.60	-2.00
YTTERBIUM	.5	3.30	3.50	3.30	3.20	.69	1.40	2.10	5.00	3.40	5.70
ZINC	100.0	190.0	170.0	230.0	210.0	170.0	160.0	270.0	-100.0	180.0	250.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

0055  
 126624-040  
 26514-549  
 26551-562

396054 5520/324.

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.  
 52 Murray Road, Welshpool, W.A. 6106

Phone (09) 458 7999

Telex AA92560

FAX: 004 31 8890

ANALYTICAL REPORT No. 95.1.08.07129

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited  
 P.O. Box 320  
 Rosny Park  
 Tasmania 7018

ORDER No. 0172B PROJECT T 5520

DATE RECEIVED 30/05/90 RESULTS REQUIRED ASAF

No. OF PAGES OF RESULTS: 5  
 DATE REPORTED: 19/06/90  
 No. OF COPIES: 1  
 TOTAL No. OF SAMPLES: 115

STATE OF SAMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS			
			DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
		<266,24/90, <265,14/49, 51/62	RO									Au, Ag, As, Ba, Br, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo
		Various	RO									Cu, Pb, Zn, Bi/101
		Various	RO									Sn/401
		Various	RO									Sn/404

RESULTS TO

Mark Flemming  
 R.G.C. Exploration Pty Limited  
 P.O. Box 320  
 Rosny Park  
 Tasmania 7018

RESULTS TO

REMARKS

EL. 21/86 - HOWARDS RD  
 Howards Rd Grid  
 Wacker Samples

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	perchloric acid A1	atomic absorption AAS
split core	hydrochloric acid A2	x-ray fluorescence XRF
cutting	nitric acid A3	spectrophotometry SPEC
rock	aqua regia A4	colorimetry COL
soil	nitric-perchloric A5	chromatography CHR
pulp	HF mixture A6	titration TTN
water	HF under pressure A7	other chemicals means CHEM
tissue	fusion A8	miscellaneous MISC
stream sediment		fluorescence FLUOR
heavy mineral		inductively coupled plasma ICP

AUTHORISED OFFICER Gentianis

0054

## ANALABS

396055

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		95.1.08.07129				19/06/90	0172B		1 OF 5	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn	Sn			
1	26624	15	80	125	<10	11	--			
2	26625	30	125	125	<10	10	--			
3	26626	20	110	70	<10	9	--			
4	26627	<5	25	35	<10	6	--			
5	26628	<5	45	160	<10	11	--			
6	26629	<5	30	140	<10	5	--			
7	26630	<5	35	75	<10	4	--			
8	26631	5	20	30	<10	6	--			
9	26632	5	30	35	<10	11	--			
10	26633	15	65	65	<10	11	--			
11	26634	10	15	115	<10	9	--			
12	26635	5	5	70	<10	4	--			
13	26636	5	10	70	<10	6	--			
14	26637	5	10	90	<10	6	--			
15	26638	5	5	95	<10	10	--			
16	26639	5	15	75	10	9	--			
17	26640	--	--	--	--	--	--	STD		
18	26641	5	10	100	<10	<3	--			
19	26642	5	5	115	10	5	--			
20	26643	5	5	80	<10	7	--			
21	26644	5	10	120	<10	6	--			
22	26645	10	5	175	<10	5	--			
23	26646	5	5	460	<10	6	--			
24	26647	190	5	280	<10	10	--			
25	26648	5	5	125	<10	4	--			

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

-- = element not determined

AUTHORISED  
OFFICER*Jenkins*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SAMPLE PREFIX		REPORT NUMBER				REPORT DATE		CLIENT ORDER No.		PAGE	
		95.1.08.07129				19/06/90		0172B		2 OF 5	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn	Sn				
1	26649	10	5	190	<10	6	--				
2	26650	<5	10	210	<10	9	--				
3	26651	10	10	155	<10	<3	--				
4	26652	10	10	140	<10	4	--				
5	26653	5	10	125	<10	3	--				
6	26654	5	15	100	<10	4	--				
7	26655	5	15	120	<10	5	--				
8	26656	10	10	130	<10	6	--				
9	26657	10	15	130	<10	7	--				
10	26658	15	10	110	<10	15	--				
11	26659	15	10	100	<10	6	--				
12	26660	--	--	--	--	--	--	STD			
13	26661	10	10	115	<10	6	--				
14	26662	10	10	125	<10	5	--				
15	26663	10	10	120	<10	10	--				
16	26664	15	10	115	<10	7	--				
17	26665	15	35	150	<10	8	--				
18	26666	20	15	135	<10	4	--				
19	26667	10	15	100	<10	5	--				
20	26668	10	20	85	<10	8	--				
21	26669	5	20	90	<10	7	--				
22	26670	5	25	95	<10	6	--				
23	26671	15	20	80	<10	5	--				
24	26672	5	5	75	10	11	--				
25	26673	5	5	70	<10	11	--				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Genkins*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SAMPLE PREFIX		REPORT NUMBER				REPORT DATE		CLIENT ORDER No.		PAGE	
		95.1.08.07129				19/06/90		0172B		3 OF 5	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn	Sn				
1	26674	5	5	65	<10	6	-				
2	26675	5	<5	80	<10	8	-				
3	26676	<5	10	85	<10	5	-				
4	26677	5	15	115	<10	6	-				
5	26678	<5	<5	60	<10	3	-				
6	26679	5	5	70	<10	7	-				
7	26680	-	-	-	-	-	-	STD			
8	26681	10	5	80	<10	9	-				
9	26682	105	5	110	<10	8	-				
10	26683	15	<5	80	<10	3	-				
11	26684	5	15	125	<10	11	-				
12	26685	5	5	95	<10	4	-				
13	26686	5	15	155	<10	10	-				
14	26687	15	10	170	<10	3	-				
15	26688	20	20	105	<10	9	-				
16	26689	15	20	90	<10	6	-				
17	26690	15	5	70	<10	6	-				
18	26514	20	5	80	<10	10	-				
19	26515	25	15	90	<10	11	-				
20	26516	25	10	80	<10	7	-				
21	26517	50	20	140	<10	8	-				
22	26518	30	20	90	<10	11	-				
23	26519	25	15	95	<10	9	-				
24	26520	-	-	-	-	-	-				
25	26521	45	5	110	<10	6	-				

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 C = element concentration is below detection limit  
 - = element not determined

AUTHORISED  
OFFICER

*Genkins*

# ANALABS

396058

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

0057

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn	Sn				
		95.1.08.07129			19/06/90		0172B		4 OF 5		
1	26522	25	55	135	<10	12	--				
2	26523	55	55	110	<10	7	--				
3	26524	45	45	125	<10	16	--				
4	26525	10	35	145	<10	5	--				
5	26526	45	80	135	<10	8	--				
6	26527	20	25	85	<10	3	--				
7	26528	<5	5	50	<10	8	--				
8	26529	<5	5	55	<10	9	--				
9	26530	<5	5	65	<10	14	--				
10	26531	5	135	150	<10	9	--				
11	26532	<5	<5	25	<10	5	--				
12	26533	<5	15	55	<10	6	--				
13	26534	<5	<5	30	<10	<3	--				
14	26535	<5	<5	25	<10	10	--				
15	26536	<5	<5	10	<10	7	--				
16	26537	<5	5	20	<10	4	--				
17	26538	<5	<5	15	<10	7	--				
18	26539	<5	5	20	<10	5	--				
19	26540	--	--	--	--	--	--		STD		
20	26541	<5	20	55	<10	6	--				
21	26542	25	40	85	<10	8	--				
22	26543	10	<5	60	<10	7	--				
23	26544	10	5	40	<10	8	--				
24	26545	25	25	75	<10	7	--				
25	26546	10	8	95	<10	6	--				

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER

*Gentle*

# ANALABS

A Division of Inchoape Inspection and Testing Services Australia Pty Ltd.

0058

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SAMPLE PREFIX		REPORT NUMBER				REPORT DATE	CLIENT ORDER No.		PAGE	
		95.1.08.07129				19/06/90	0172B		5	OF 5
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn	Sn			
1	26547	10	15	130	<10	>10000	1.31			
2	26548	10	15	70	<10	4	-			
3	26549	5	10	40	<10	9	-			
4	26551	5	15	30	<10	5	-			
5	26552	5	15	30	<10	<3	-			
6	26553	5	5	65	<10	4	-			
7	26554	5	45	100	<10	10	-			
8	26555	25	10	95	<10	9	-			
9	26556	40	15	90	<10	7	-			
10	26557	55	15	95	<10	6	-			
11	26558	50	15	75	<10	4	-			
12	26559	50	5	85	<10	7	-			
13	26560	-	-	-	-	-	-	STD		
14	26561	15	5	50	<10	11	-			
15	26562	10	5	105	<10	<3	-			
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	10	3	0.01			
24	UNITS	ppm	ppm	ppm	ppm	ppm	%			
25	METHOD	101	101	101	101	401	404			

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER

*C. Jenkins*

0059

## NEUTRON ACTIVATION ANALYSIS REPORT

Date: 28-06-90

RGC TASMANIA SAMPLE Nos: 26514-26562, 26624-26690

BECQUEREL JOB # 029

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 26514	# 26515	# 26516	# 26517	# 26518	# 26519	# 26520	# 26521	# 26522	# 26523
ANTIMONY	.2	1.60	1.80	1.90	3.70	3.20	2.80	.36	1.60	3.10	4.80
ARSENIC	2.0	10.00	13.00	10.00	19.00	13.00	7.80	3.10	8.20	12.00	22.00
BARIUM	100.0	620.0	550.0	900.0	590.0	630.0	550.0	600.0	520.0	1400.0	530.0
BROMINE	2.0	-2.00	-2.00	22.00	6.10	17.00	17.00	-2.00	10.00	15.00	11.00
CERIUM	2.0	45.00	59.00	72.00	62.00	75.00	75.00	66.00	88.00	100.00	88.00
CAESIUM	1.0	3.10	3.50	5.10	10.00	8.30	5.90	17.00	7.40	8.40	11.00
CHROMIUM	5.0	380.0	340.0	64.0	200.0	92.0	89.0	450.0	150.0	89.0	190.0
COBALT	1.0	31.00	22.00	8.00	9.50	5.20	6.40	23.00	22.00	8.20	8.60
EUROPIUM	.5	.93	1.00	1.20	.89	1.30	1.70	.64	1.40	1.40	1.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	48.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.40	4.60	6.10	5.20	6.90	7.00	8.20	7.40	7.40	6.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.300	5.040	3.400	5.690	3.800	4.000	4.100	5.110	4.500	5.920
LANTHANUM	.5	26.00	28.00	38.00	32.00	41.00	39.00	35.00	46.00	56.80	46.00
LITHIUM	.2	.43	.43	.58	.52	.66	.68	.42	.73	.66	.70
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.600	1.600	2.400	3.400	2.500	1.800	1.500	2.700	3.200	3.200
RUBIDIUM	20.0	86.0	71.0	89.0	170.0	120.0	66.0	180.0	130.0	130.0	180.0
SAMARIUM	.20	4.80	5.20	7.10	6.30	7.90	8.40	7.20	9.00	7.60	8.30
SCANDIUM	.10	18.70	18.20	16.00	24.50	17.70	17.50	11.30	20.00	15.60	24.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.10	1.40	1.90	1.70	2.60	3.30	4.20	2.90	2.10	1.50
THORIUM	.5	12.00	11.00	14.00	11.00	15.00	14.00	14.00	14.00	20.00	16.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	6.20	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	3.00	3.70	-2.00	2.00	3.80	-2.00	5.60	3.90
YTTERBIUM	.5	2.20	2.10	3.00	2.50	3.30	3.60	2.00	3.50	3.40	3.50
ZINC	100.0	120.0	140.0	150.0	200.0	170.0	150.0	130.0	180.0	180.0	180.0
ZIRCONIUM	500.0	-500.0	-500.0	520.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	540.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0000

BECQUEREL JOB # 029

ELEMENT	DL	# 26524	# 26525	# 26526	# 26527	# 26528	# 26529	# 26530	# 26531	# 26532	# 26533
ANTIMONY	.2	2.00	3.40	10.00	5.80	2.30	2.30	3.90	11.00	2.80	2.40
ARSENIC	2.0	14.00	12.00	61.00	59.00	5.30	7.40	4.60	10.00	2.10	4.00
BARIUM	100.0	560.0	720.0	610.0	980.0	1500.0	430.0	550.0	1000.0	1000.0	860.0
BROMINE	2.0	4.30	14.00	29.00	5.00	2.60	4.00	3.20	14.00	2.00	2.90
CERIUM	2.0	79.00	100.00	87.00	77.00	80.00	90.00	110.00	120.00	130.00	140.00
CAESIUM	1.0	9.20	3.20	6.70	7.70	1.50	2.40	2.40	4.80	2.90	4.50
CHROMIUM	5.0	240.0	22.0	86.0	69.0	10.0	17.0	6.5	13.0	-5.0	18.0
COBALT	1.0	26.00	5.00	24.00	2.90	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
EUROPIUM	.5	1.10	1.50	1.40	1.00	1.90	2.20	2.30	2.30	2.40	2.90
GOLD, ppb	5.0	-5.0	-5.0	7.5	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.80	7.80	5.60	5.60	7.60	8.60	9.00	9.40	8.30	8.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.690	4.000	5.450	4.100	2.200	2.100	1.000	3.800	1.000	1.300
LANTHANUM	.5	44.00	53.70	46.00	42.00	43.00	48.00	57.20	67.20	73.40	74.80
LUTETIUM	.2	.61	.93	.68	.55	.72	.79	.84	.87	.82	.88
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.800	1.400	2.300	3.000	1.400	1.000	1.500	3.100	3.200	2.400
RADIUM	20.0	150.0	25.0	110.0	150.0	35.0	27.0	38.0	110.0	130.0	83.0
Samarium	.20	7.80	11.00	8.40	6.60	9.30	10.00	12.00	11.00	12.00	14.00
SCANDIUM	.10	23.90	16.60	15.90	13.20	13.60	13.90	15.50	15.90	6.80	8.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.70	3.20	-1.00	-1.00	-1.00	2.90	4.70	1.20	1.70	-1.00
THORIUM	.5	13.00	19.00	17.00	17.00	13.00	16.00	16.00	23.00	20.00	21.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	3.70	7.00	2.40	-2.00	-2.00	3.70	2.70	3.50
YTTERBIUM	.5	3.00	4.40	3.40	2.90	3.80	3.70	4.20	4.30	4.20	4.30
ZINC	100.0	200.0	230.0	190.0	150.0	130.0	160.0	150.0	220.0	-100.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0081

BECQUEREL JOB # 029

ELEMENT	DL	# 26534	# 26535	# 26536	# 26537	# 26538	# 26539	# 26540	# 26541	# 26542	# 26543
ANTIMONY	.2	2.60	2.20	2.60	2.50	3.30	1.90	-2.20	2.70	5.30	1.70
ARSENIC	2.0	5.60	4.60	2.40	2.40	-2.00	2.10	2.20	3.50	20.00	13.00
BARIUM	100.0	1100.0	660.0	730.0	860.0	780.0	670.0	530.0	830.0	1300.0	1100.0
BROMINE	2.0	2.40	4.20	2.10	3.30	-2.00	3.50	-2.00	2.40	5.30	2.90
CERIUM	2.0	130.00	130.00	120.00	120.00	130.00	120.00	65.00	120.00	95.00	83.00
CAESIUM	1.0	3.60	2.90	3.00	3.90	3.00	4.00	16.00	4.70	8.80	9.30
CHROMIUM	5.0	10.0	19.0	6.3	18.0	7.9	10.0	450.0	11.0	130.0	120.0
COBALT	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	24.00	1.10	2.50	7.70
EUROPIUM	.5	2.50	2.20	2.20	2.50	2.10	2.60	.64	2.10	1.20	1.00
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	55.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	9.00	8.90	7.70	9.10	7.70	10.00	8.80	8.90	6.20	5.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.000	2.000	1.100	1.000	.620	.760	4.200	1.600	2.800	4.000
LANTHANUM	.5	72.30	72.00	62.80	67.20	69.40	63.40	36.00	62.40	52.60	46.00
LUTETIUM	.2	.93	.92	.78	.89	.76	.95	.42	.91	.72	.56
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.600	2.300	3.300	2.900	2.600	2.500	1.900	2.300	3.800	3.300
RUBIDIUM	20.0	110.0	75.0	130.0	120.0	95.0	80.0	190.0	98.0	180.0	170.0
SAMARIUM	.20	12.00	13.00	11.00	12.00	12.00	12.00	7.30	11.00	7.90	6.60
SCANDIUM	.10	8.50	8.30	7.00	7.80	7.70	9.10	11.50	7.40	17.70	19.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.40	1.50	1.20	2.30	1.30	2.40	4.40	2.30	1.30	1.50
THORIUM	.5	21.00	21.00	18.00	22.00	18.00	22.00	14.00	22.00	17.00	14.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	4.70	-2.00	-2.00	2.70
URANIUM	2.0	4.80	4.30	3.10	4.30	2.80	4.40	4.90	4.80	3.40	2.10
YTTERBIUM	.5	4.70	4.40	3.80	4.40	4.00	4.50	2.20	4.50	3.60	3.00
ZINC	100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	120.0	-100.0	130.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	560.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0062

BECQUEREL JOB # 029

ELEMENT	DL	# 26544	# 26545	# 26546	# 26547	# 26548	# 26549	# 26551	# 26552	# 26553	# 26554
ANTIMONY	.2	2.00	8.00	3.60	2.20	3.90	2.60	2.10	6.20	2.70	2.30
ARSENIC	2.0	3.30	16.00	4.90	7.60	4.90	6.80	9.40	14.00	9.10	8.70
BARIIUM	100.0	1100.0	1100.0	1200.0	630.0	940.0	910.0	490.0	710.0	760.0	850.0
BROMINE	2.0	3.80	3.30	2.70	13.00	-2.00	-2.00	22.00	5.00	3.40	2.50
CERIUM	2.0	110.00	120.00	120.00	120.00	120.00	94.00	74.00	75.00	66.00	63.00
CAESIUM	1.0	5.90	7.20	7.40	3.50	4.80	3.00	2.30	3.80	5.00	4.10
CHROMIUM	5.0	19.0	56.0	15.0	51.0	29.0	15.0	37.0	34.0	14.0	35.0
COBALT	1.0	-1.00	3.00	2.90	1.50	2.10	1.10	-1.00	3.00	5.40	4.80
EUROPIUM	.5	1.70	1.60	1.50	1.30	1.20	1.10	1.20	1.20	1.50	1.60
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	8.20	7.60	7.40	5.60	7.20	5.40	3.70	4.40	4.50	4.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.200	2.200	1.700	1.500	1.900	2.400	2.400	1.600	3.400	3.100
LANTHANUM	.5	61.00	62.80	68.90	65.20	63.30	50.90	41.00	41.00	37.00	34.00
LUTETIUM	.2	.91	.81	.85	.70	.84	.68	.49	.50	.44	.57
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.300	3.800	3.400	1.400	2.900	2.300	1.300	2.200	2.300	2.400
RUBIDIUM	20.0	150.0	150.0	170.0	70.0	98.0	110.0	66.0	100.0	110.0	120.0
STRONTIUM	.20	11.00	10.00	10.00	10.00	9.10	7.60	6.00	7.00	6.60	6.80
SCANDIUM	.10	11.50	13.10	6.40	5.20	5.20	5.00	4.30	8.40	10.70	10.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	1.40	-1.00	-1.00	-1.00	-1.00	-1.00	1.80	-1.00	-1.00
THORIUM	.5	21.00	19.00	24.00	19.00	25.00	19.00	12.00	11.00	8.70	9.50
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.10	5.30	4.30	2.20	5.40	4.80	-2.00	2.70	-2.00	-2.00
YTTERBIUM	.5	4.50	4.10	4.10	3.50	4.00	3.30	2.40	2.70	2.40	2.80
ZINC	100.0	-100.0	130.0	130.0	170.0	130.0	-100.0	-100.0	-100.0	110.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0063

BECQUEREL JOB # 029

ELEMENT	DL	# 26555	# 26556	# 26557	# 26558	# 26559	# 26560	# 26561	# 26562	# 26624	# 26625
ANTIMONY	.2	2.30	3.10	2.60	3.70	1.40	.22	2.00	1.20	1.30	3.00
ARSENIC	2.0	4.10	9.40	8.00	7.50	2.80	2.70	3.90	5.90	11.00	17.00
BARIUM	100.0	780.0	680.0	560.0	500.0	270.0	350.0	680.0	-100.0	690.0	650.0
BROMINE	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.20	5.00	6.50
CERIUM	2.0	76.00	63.00	71.00	63.00	41.00	64.00	68.00	8.70	85.00	85.00
CAESIUM	1.0	8.40	6.10	3.70	4.20	2.40	17.00	4.20	-1.00	7.10	4.90
CHROMIUM	5.0	130.0	140.0	250.0	240.0	170.0	430.0	120.0	2970.0	140.0	120.0
COBALT	1.0	11.00	12.00	16.00	11.00	25.00	22.00	7.00	77.00	14.00	6.80
EUROPIUM	.5	1.10	1.00	1.30	1.10	.69	.92	.95	-.50	1.20	1.50
GOLD, ppb	5.0	-5.0	-5.0	14.0	-5.0	-5.0	51.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.90	4.80	6.20	4.70	3.10	8.20	5.30	1.40	4.60	4.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.000	4.500	3.400	3.500	4.800	4.100	2.500	7.920	4.300	4.100
LANTHANUM	.5	39.00	33.00	36.00	32.00	20.00	35.00	36.00	4.30	44.00	44.00
LUTETIUM	.2	.61	.48	.51	.46	.36	.42	.53	-.20	.51	.57
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	3.100	2.600	1.500	1.500	.930	1.700	1.900	-.200	2.700	2.300
RHOIDIUM	20.0	140.0	130.0	80.0	70.0	53.0	210.0	83.0	-20.0	130.0	110.0
SAMARIUM	.20	7.10	6.20	7.50	6.60	4.50	7.40	6.70	1.30	7.60	7.90
SCANDIUM	.10	21.10	20.80	18.40	15.90	19.60	11.20	11.90	20.80	19.50	16.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.70	1.40	1.10	1.30	-1.00	4.20	1.20	-1.00	-1.00	-1.00
THORIUM	.5	13.00	11.00	12.00	11.00	5.30	14.00	14.00	.77	15.00	16.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	5.30	-2.00	-2.00	-2.00	2.20
URANIUM	2.0	3.30	3.50	2.70	-2.00	-2.00	3.40	3.70	-2.00	3.70	2.90
YTTERBIUM	.5	3.00	2.60	2.80	2.70	2.10	2.20	2.80	.55	2.90	2.90
ZINC	100.0	130.0	130.0	130.0	110.0	120.0	120.0	120.0	130.0	140.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENA, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0064

BECQUEREL JOB # 029

ELEMENT	DL	# 26626	# 26627	# 26628	# 26629	# 26630	# 26631	# 26632	# 26633	# 26634	# 26635
ANTIMONY	.2	10.00	3.40	4.10	3.10	6.10	2.90	4.90	7.60	3.10	.89
ARSENIC	2.0	6.80	7.00	16.00	10.00	11.00	2.70	21.00	27.00	10.00	3.40
BARIUM	100.0	950.0	440.0	530.0	510.0	700.0	640.0	520.0	490.0	150.0	-100.0
BROMINE	2.0	6.10	21.00	12.00	17.00	11.00	3.40	4.70	17.00	5.60	26.00
CERIUM	2.0	78.00	96.00	97.00	100.00	160.00	120.00	100.00	94.00	54.00	15.00
CAESIUM	1.0	11.00	3.20	2.70	2.80	4.20	4.60	3.70	4.80	1.10	-1.00
CHROMIUM	5.0	170.0	25.0	29.0	35.0	40.0	24.0	35.0	190.0	1570.0	1270.0
COBALT	1.0	2.50	-1.00	2.50	2.40	-1.00	-1.00	-1.00	2.80	54.00	26.00
EUROPIUM	.5	1.00	1.90	2.30	2.20	2.20	1.90	.89	1.50	1.60	.55
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.00	9.20	8.70	8.70	8.20	8.30	3.80	5.90	1.80	2.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.300	1.800	5.710	2.500	2.100	.870	1.700	4.600	10.100	7.970
LANTHANUM	.5	43.00	50.70	48.00	56.60	87.50	61.50	59.40	49.00	17.00	6.90
NIETIUM	.2	.63	.78	.84	.80	.78	.78	.53	.66	.27	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	4.100	1.900	1.500	1.500	2.800	3.000	3.000	3.100	.490	-.200
RUBIDIUM	20.0	190.0	39.0	58.0	65.0	140.0	160.0	140.0	160.0	45.0	-20.0
SAMARIUM	.20	6.60	10.00	11.00	12.00	14.00	11.00	7.00	9.10	4.70	2.00
SCANDIUM	.10	19.00	16.00	17.20	15.10	8.50	8.50	3.10	12.20	28.80	22.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.20	2.00	2.00	1.20	1.80	1.20	1.70	-1.00	-1.00	-1.00
THORIUM	.5	15.00	20.00	18.00	17.00	21.00	20.00	27.00	20.00	5.80	3.20
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.80	2.90	5.60	-2.00	5.90	4.10	5.70	5.90	-2.00	-2.00
YTTERBIUM	.5	3.10	3.80	4.60	4.00	3.80	4.00	2.70	3.40	1.60	.71
ZINC	100.0	-100.0	110.0	210.0	210.0	110.0	-100.0	-100.0	100.0	140.0	100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0085

WEREL JOB # 029

ELEMENT	DL	# 26636	# 26637	# 26638	# 26639	# 26640	# 26641	# 26642	# 26643	# 26644	# 26645
ANTIMONY	.2	1.50	.68	.79	1.00	.31	.42	.50	1.50	1.00	3.20
ARSENIC	2.0	5.10	-2.00	-2.00	2.20	2.70	-2.00	-2.00	-2.00	2.50	3.90
BARIUM	100.0	-100.0	-100.0	130.0	-100.0	480.0	-100.0	-100.0	-100.0	-100.0	-100.0
BROMINE	2.0	35.00	12.00	5.50	26.00	-2.00	9.10	20.00	18.00	18.00	6.70
CERIUM	2.0	6.10	7.40	42.00	11.00	65.00	5.70	5.50	3.30	8.60	43.00
CAESIUM	1.0	2.00	1.40	-1.00	1.10	17.00	-1.00	-1.00	1.80	-1.00	1.60
CHROMIUM	5.0	622.0	549.0	360.0	240.0	440.0	410.0	948.0	220.0	490.0	2090.0
COBALT	1.0	22.00	45.00	35.00	25.00	22.00	41.00	46.00	25.00	52.00	100.00
EUROPIUM	.5	-.50	-.50	.58	-.50	.93	-.50	-.50	-.50	-.50	1.00
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	59.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.90	1.50	1.20	2.60	8.40	1.60	1.30	1.40	1.60	2.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.730	5.270	6.040	4.500	4.100	4.900	6.720	4.300	6.820	11.900
LANTHANUM	.5	2.90	4.00	20.00	4.70	35.00	2.50	1.80	1.70	3.70	9.10
LUTETIUM	.2	-.20	-.20	-.20	-.20	.38	-.20	-.20	-.20	-.20	.25
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.780	1.100	1.100	.520	1.700	-.200	-.200	2.200	.560	.230
RUBIDIUM	20.0	48.0	78.0	78.0	47.0	220.0	-20.0	-20.0	120.0	45.0	-20.0
SAMARIUM	.20	1.10	1.20	4.10	1.10	7.40	.65	.58	.48	.87	3.80
SCANDIUM	.10	15.40	17.10	19.40	12.90	11.30	16.30	15.20	15.80	18.80	30.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	2.60	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	1.40	1.30	1.50	2.20	14.00	1.30	1.00	1.10	2.40	6.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	5.70	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	4.60	-2.00	-2.00	-2.00	-2.00	3.70
YTTERBIUM	.5	-.50	-.50	-.50	.56	2.10	-.50	-.50	-.50	-.50	1.70
ZINC	100.0	-100.0	110.0	120.0	-100.0	110.0	140.0	140.0	110.0	150.0	230.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0066

BECQUEREL JOB # 029

ELEMENT	DL	# 26646	# 26647	# 26648	# 26649	# 26650	# 26651	# 26652	# 26653	# 26654	# 26655
ANTIMONY	.2	.94	1.20	.86	.66	.40	.85	1.20	1.00	1.10	1.20
ARSENIC	2.0	3.30	-2.00	-2.00	2.20	11.00	-2.00	4.50	2.90	3.10	3.40
BARIUM	100.0	-100.0	-100.0	-100.0	120.0	-100.0	-100.0	270.0	380.0	140.0	160.0
BROMINE	2.0	-2.00	11.00	3.80	7.50	2.60	7.60	18.00	9.40	5.90	15.00
CERIUM	2.0	9.50	4.20	20.00	9.00	12.00	17.00	21.00	21.00	20.00	26.00
CAESIUM	1.0	1.40	-1.00	-1.00	-1.00	-1.00	-1.00	1.60	1.50	-1.00	1.90
CHROMIUM	5.0	3020.0	6080.0	390.0	440.0	609.0	805.0	615.0	640.0	680.0	801.0
COBALT	1.0	62.00	30.00	52.00	42.00	52.00	49.00	40.00	43.00	38.00	38.00
EUROPIUM	.5	1.00	-.50	.70	.58	.50	-.50	.50	.52	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.80	-1.00	1.90	2.50	1.40	2.50	3.00	2.30	2.20	2.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.510	6.020	8.000	10.300	8.280	7.800	6.880	6.630	5.890	6.760
LANTHANUM	.5	11.00	1.10	7.50	8.00	7.60	8.10	11.00	11.00	10.00	12.00
LUTETIUM	.2	.30	-.20	.24	.31	.21	.25	.27	.24	-.20	.27
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.200	-.200	.410	-.200	-.200	-.200	.560	.880	.610	.630
RHODIUM	20.0	22.0	-20.0	22.0	23.0	-20.0	27.0	44.0	36.0	34.0	33.0
SAMARIUM	.20	4.60	.83	2.60	2.90	2.00	2.30	2.70	2.80	2.20	2.90
SCANDIUM	.10	29.50	28.50	38.20	39.60	32.50	34.50	30.40	29.20	20.60	25.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	-1.00	1.30
THORIUM	.5	3.10	-.50	4.00	4.20	3.20	4.50	5.50	4.50	4.30	5.40
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.60	-.50	1.60	1.90	1.20	1.60	1.60	1.40	1.00	1.40
ZINC	100.0	500.0	360.0	190.0	230.0	260.0	210.0	190.0	170.0	150.0	160.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0067

BEQUEREL JOB # 029

ELEMENT	DL	# 26656	# 26657	# 26658	# 26659	# 26660	# 26661	# 26662	# 26663	# 26664	# 26665
ANTIMONY	.2	1.20	1.10	1.50	1.30	2.50	1.00	2.40	1.30	1.90	3.00
ARSENIC	2.0	3.70	4.50	6.10	5.60	295.00	4.30	4.30	2.80	9.00	11.00
BARIIUM	100.0	250.0	-100.0	-100.0	-100.0	410.0	160.0	170.0	200.0	130.0	280.0
BROMINE	2.0	7.20	8.40	40.00	51.00	-2.00	26.00	9.00	17.00	5.60	44.00
CERIUM	2.0	34.00	32.00	31.00	29.00	28.00	21.00	26.00	27.00	36.00	40.00
CAESIUM	1.0	1.40	-1.00	1.70	2.50	-1.00	1.30	2.10	1.40	-1.00	2.50
CHROMIUM	5.0	1200.0	1190.0	932.0	908.0	56.0	829.0	980.0	719.0	1640.0	790.0
COBALT	1.0	73.00	62.00	33.00	29.00	17.00	37.00	41.00	34.00	46.00	31.00
EUROPIUM	.5	-.50	-.50	.59	.60	.86	-.50	.63	-.50	.78	.59
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	330.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.50	2.40	3.10	3.50	2.40	2.30	3.00	3.00	2.30	3.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.970	7.410	7.100	6.880	4.400	6.960	6.050	4.800	8.160	5.090
LANTHANUM	.5	8.70	7.40	14.00	14.00	14.00	9.50	15.00	13.00	16.00	22.00
LUTETIUM	.2	.22	.20	.25	.27	.29	-.20	.24	.22	.24	.36
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.550	.380	.640	.670	1.700	.590	1.200	.600	.630	1.000
RUBIDIUM	20.0	35.0	33.0	47.0	34.0	46.0	45.0	56.0	36.0	50.0	38.0
SAMARIUM	.20	2.20	2.00	3.10	3.10	4.20	2.00	3.00	2.70	3.30	4.20
SCANDIUM	.10	29.60	27.90	24.90	23.00	12.60	22.30	24.30	21.30	25.80	19.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	1.20	-1.00	1.30	-1.00	-1.00	1.40	-1.00	1.30
THORIUM	.5	4.50	4.20	6.30	7.20	2.20	4.60	5.30	5.50	4.80	8.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	3.80	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.10	1.10	1.40	1.40	1.80	1.10	1.30	1.20	1.30	1.90
ZINC	100.0	160.0	170.0	160.0	140.0	830.0	150.0	190.0	180.0	150.0	210.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

BECQUEREL JOB # 029

ELEMENT	DL	# 26666	# 26667	# 26668	# 26669	# 26670	# 26671	# 26672	# 26673	# 26674	# 26675
ANTIMONY	.2	2.20	3.70	1.90	2.30	1.60	1.50	1.40	1.00	.95	.55
ARSENIC	2.0	7.40	10.00	3.30	5.10	3.90	2.80	3.00	4.30	6.80	3.10
BARIUM	100.0	130.0	260.0	490.0	280.0	440.0	190.0	170.0	140.0	130.0	260.0
BROMINE	2.0	31.00	7.40	2.30	3.00	52.00	78.00	16.00	130.00	78.00	85.00
CERIUM	2.0	28.00	56.00	52.00	37.00	29.00	30.00	31.00	23.00	33.00	21.00
CAESIUM	1.0	1.90	2.20	3.20	2.40	2.00	4.00	1.80	2.30	6.90	2.20
CHROMIUM	5.0	1180.0	1440.0	635.0	1680.0	624.0	480.0	350.0	400.0	290.0	440.0
COBALT	1.0	42.00	27.00	28.00	42.00	27.00	26.00	29.00	30.00	23.00	37.00
EUROPTIUM	.5	.72	1.00	.85	.64	.67	.54	.95	.59	.67	.75
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.00	3.90	4.20	3.40	2.60	4.20	3.40	2.70	3.50	2.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.670	4.700	4.100	4.600	5.000	4.400	6.200	6.500	5.050	7.110
LANTHANUM	.5	17.00	29.00	29.00	21.00	15.00	16.00	16.00	12.00	15.00	11.00
LUTETIUM	.2	.25	.40	.38	.32	.29	.31	.28	.30	.36	.28
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.710	.890	1.100	1.100	.870	.510	.540	.720	.550	1.000
RUBIDIUM	20.0	22.0	37.0	54.0	55.0	43.0	-20.0	49.0	24.0	40.0	-20.0
SMARIUM	.20	3.20	5.20	4.70	4.00	3.30	3.50	3.70	2.80	4.40	2.70
SCANDIUM	.10	22.80	13.60	12.80	18.50	23.10	23.20	26.00	27.70	29.90	32.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.60	1.90	-1.00	-1.00	1.60	1.60	-1.00	2.10	1.40
THORIUM	.5	6.10	8.90	10.00	6.30	5.00	7.30	4.50	4.20	6.50	4.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.40	2.10	2.00	1.70	1.50	1.70	1.80	1.50	2.20	1.60
ZINC	100.0	160.0	160.0	110.0	130.0	140.0	140.0	130.0	130.0	140.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0069

BECQUEREL JOB # 029

ELEMENT	DL	# 26676	# 26677	# 26678	# 26679	# 26680	# 26681	# 26682	# 26683	# 26684	# 26685
ANTIMONY	.2	1.00	1.00	.65	.85	-.20	.95	1.20	.54	.34	.52
ARSENIC	2.0	3.70	4.90	2.30	6.80	2.50	3.30	4.10	-2.00	3.60	-2.00
BARIUM	100.0	240.0	350.0	380.0	280.0	460.0	200.0	-100.0	-100.0	360.0	420.0
BROMINE	2.0	54.00	190.00	14.00	8.90	-2.00	67.00	12.00	9.30	36.00	38.00
CERIUM	2.0	27.00	25.00	21.00	31.00	63.00	28.00	15.00	22.00	18.00	18.00
CAESIUM	1.0	3.80	4.60	2.30	1.80	17.00	2.00	-1.00	-1.00	2.20	1.60
CHROMIUM	5.0	430.0	551.0	518.0	698.0	430.0	573.0	340.0	210.0	410.0	430.0
COBALT	1.0	31.00	32.00	40.00	29.00	22.00	29.00	31.00	28.00	35.00	30.00
EUROPIUM	.5	.59	-.50	.58	.76	.68	.56	.73	-.50	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	55.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.20	2.60	1.40	3.50	7.90	2.20	2.10	2.60	1.80	2.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.690	5.680	5.200	4.300	4.000	5.000	5.380	5.070	7.540	4.500
LANTHANUM	.5	14.00	12.00	10.00	16.00	34.00	13.00	8.00	12.00	3.70	8.50
LUTETIUM	.2	.29	.28	.22	.32	.41	.26	.25	.33	-.20	.21
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	.700	.620	.910	.450	1.700	1.000	-.200	-.200	1.100	.770
ROSEMIUM	20.0	44.0	32.0	30.0	35.0	200.0	44.0	22.0	-20.0	65.0	62.0
SAMARIUM	.20	3.00	2.70	2.40	3.50	7.00	2.90	2.00	3.30	1.30	2.40
SCANDIUM	.10	27.70	24.60	30.70	18.40	11.10	25.10	33.80	29.50	41.30	29.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.60	-1.00	-1.00	2.30	3.40	-1.00	3.50	1.60	-1.00	-1.00
THORIUM	.5	6.20	5.10	3.20	5.70	14.00	4.90	3.40	4.20	2.40	5.90
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	3.70	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	3.90	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.60	1.30	1.30	1.50	2.10	1.40	1.20	1.60	.82	1.30
ZINC	100.0	180.0	160.0	140.0	140.0	130.0	170.0	210.0	180.0	200.0	180.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

917



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0070

BECQUEREL JOB # 029

ELEMENT	DL	# 26686	# 26687	# 26688	# 26689	# 26690	# 26522x2	# 26529x2	# 26556x2	# 26625x2	# 26646x2
ANTIMONY	.2	.52	1.10	1.20	.90	1.00	3.20	2.20	3.10	2.90	.93
ARSENIC	2.0	4.10	2.70	2.60	2.00	3.50	12.00	6.30	8.80	17.00	3.30
BARIUM	100.0	610.0	310.0	370.0	330.0	600.0	1400.0	460.0	630.0	670.0	-100.0
BROMINE	2.0	50.00	48.00	17.00	8.40	5.60	14.00	2.20	-2.00	7.40	2.10
CERIUM	2.0	21.00	25.00	37.00	46.00	56.00	100.00	87.00	66.00	84.00	9.40
CAESIUM	1.0	2.20	-1.00	2.10	2.40	3.00	7.30	1.10	6.50	5.10	-1.00
CHROMIUM	5.0	320.0	360.0	837.0	549.0	589.0	89.0	17.0	140.0	120.0	2850.0
COBALT	1.0	32.00	40.00	33.00	25.00	16.00	8.20	-1.00	14.00	8.10	65.00
EUROPIUM	.5	.54	.61	.57	.84	1.20	1.40	2.30	1.30	1.60	1.30
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.50	1.90	3.40	3.70	5.10	8.00	9.00	4.60	4.90	1.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.760	5.960	4.500	3.800	2.600	4.500	2.000	4.700	4.200	7.940
LANTHANUM	.5	10.00	11.00	20.00	25.00	33.00	57.30	46.00	33.00	45.00	12.00
NIPTIUM	.2	.20	.24	.34	.38	.42	.65	.79	.47	.57	.28
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.500	.490	1.400	1.000	1.800	3.100	.500	2.600	2.000	-2.200
RUBIDIUM	20.0	72.0	-20.0	57.0	49.0	76.0	130.0	-20.0	120.0	130.0	-20.0
SAMARIUM	.20	2.40	3.10	3.50	4.70	5.40	7.70	10.00	6.20	7.70	4.80
SCANDIUM	.10	25.00	32.50	16.20	19.50	11.70	15.60	13.80	21.60	16.80	31.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.60	-1.00	1.80	1.40	1.80	2.00	-1.00	1.40	1.30	-1.00
THORIUM	.5	5.50	5.90	10.00	11.00	14.00	19.00	15.00	11.00	15.00	3.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.50	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	4.30	2.10	-2.00	4.70	-2.00
YTTERBIUM	.5	1.10	1.40	1.60	1.90	2.10	3.50	3.70	2.70	2.90	1.60
ZINC	100.0	210.0	260.0	170.0	160.0	110.0	190.0	140.0	160.0	160.0	480.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	640.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

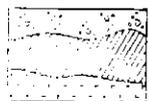
## NEUTRON ACTIVATION ANALYSIS

0071

SERIAL JOB # 029

ELEMENT DL # 26677x2

ANTIMONY	.2	1.20
ARSENIC	2.0	4.70
BARIUM	100.0	310.0
BROMINE	2.0	190.00
CERIUM	2.0	25.00
CAESIUM	1.0	3.70
CHROMIUM	5.0	558.0
COBALT	1.0	33.00
EUROPIUM	.5	.57
GOLD, ppb	5.0	-5.0
HAFNIUM	1.0	2.40
IRIDIUM, ppb	20.0	-20.0
IRON, %	.05	5.810
LANTHANUM	.5	12.00
LUTETIUM	.2	.26
MOLYBDENUM	5.0	-5.0
POTASSIUM, %	.2	.710
RUBIDIUM	20.0	35.0
STRONTIUM	.20	2.80
SCANDIUM	.10	25.30
SELENIUM	5.0	-5.0
SILVER	5.0	-5.00
TANTALUM	1.0	1.10
THORIUM	.5	5.60
TIN	500.0	-500.0
TUNGSTEN	2.0	-2.00
URANIUM	2.0	-2.00
YTTERBIUM	.5	1.40
ZINC	100.0	180.0
ZIRCONIUM	500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

0072 24 MAY 1990

396073

5520/324.

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8890

ANALYTICAL REPORT No.

95.1.08.07093

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

ORDER No.	PROJECT
0169	T5520
DATE RECEIVED	RESULTS REQUIRED
16/05/90	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
6	23/05/90	1	133

STATE OF SAMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS				
			DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
	Various		RC	Prep: 002,016							Au, Ag, As, Ba, Br, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo		
	Various		RO								Cu, Pb, Zn, Bi/101		
	Various		RO								Sn/401		

RESULTS

TO

Mark Flemming  
R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

RESULTS

TO

REMARKS

EU 21/86 - Howards Rd

Howards Rd Grid

Wacker Samples

T26442 - Rock Chip Sample

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rod RO	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
sludge SL	HF mixture A6	titration TTN
slurry SU	HF under pressure A7	other chemicals means CHEM
water WA	fusion A8	miscellaneous MISC
tissue TI		fluorescence FLUOR
stream sediment SS		inductively coupled plasma ICP
heavy mineral HM		

AUTHORISED OFFICER

*Jenkins*

0073

## ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		95.1.08.07093				23/05/90	0169	1 OF 6	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn			
1	T26442	30	190	560	<10	5			
2	T26520	--	--	--	--	--			
3	T26540	--	--	--	--	--			
4	T26560	--	--	--	--	--			
5	T26563	20	35	65	<10	8			
6	T26564	25	10	100	<10	14			
7	T26565	100	70	125	<10	5			
8	T26566	20	25	85	<10	8			
9	T26567	35	20	80	<10	10			
10	T26568	30	15	90	<10	9			
11	T26569	35	30	85	<10	11			
12	T26570	20	10	130	<10	7			
13	T26571	10	5	150	<10	8			
14	T26572	10	5	115	<10	6			
15	T26573	10	15	95	<10	18			
16	T26574	30	20	90	<10	11			
17	T26575	15	20	45	<10	10			
18	T26576	10	15	125	<10	9			
19	T26577	15	25	40	<10	12			
20	T26578	20	10	85	<10	12			
21	T26579	25	20	70	<10	8			
22	T26580	--	--	--	--	--	STD		
23	T26581	30	20	75	<10	10			
24	T26582	35	25	95	<10	9			
25	T26583	25	25	65	<10	8			

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jenkins*

0074

## ANALABS

396075

A Division of Incharge Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

95.1.08.07093

23/05/90

0169

2 OF 6

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26584	15	20	65	<10	8				
2	T26585	10	5	105	<10	8				
3	T26586	10	5	165	<10	6				
4	T26587	10	10	145	<10	9				
5	T26588	10	5	130	<10	12				
6	T26589	10	20	120	<10	7				
7	T26590	10	5	120	<10	5				
8	T26591	5	<5	170	<10	4				
9	T26592	5	<5	120	<10	13				
10	T26593	20	40	125	<10	7				
11	T26594	5	20	105	<10	10				
12	T26595	15	25	170	<10	6				
13	T26596	10	20	95	<10	9				
14	T26597	35	10	70	<10	5				
15	T26598	35	25	85	<10	10				
16	T26599	5	20	45	<10	8				
17	T26600	-	-	-	-	-	STD			
18	T26701	10	25	65	<10	10				
19	T26702	5	25	30	<10	8				
20	T26703	5	30	50	<10	10				
21	T26704	15	20	40	<10	10				
22	T26705	15	25	40	<10	13				
23	T26706	35	25	100	<10	12				
24	T26707	15	30	55	<10	9				
25	T26708	55	30	90	<10	8				

Results in ppm unless otherwise specified

f = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED OFFICER

*gentians*

0075

## ANALABS

396076

A Division of Inchcape Inspection and Testing Services Australia Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

95.1.08.07093

23/05/90

0169

3 OF 6

TUSE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26709	35	30	45	<10	9				
2	T26710	55	5	110	<10	6				
3	T26711	20	20	55	<10	8				
4	T26712	15	10	75	<10	6				
5	T26713	25	10	70	<10	13				
6	T26714	5	15	35	<10	8				
7	T26715	30	30	95	<10	10				
8	T26716	15	15	55	<10	11				
9	T26717	20	40	130	<10	12				
10	T26718	35	125	205	<10	9				
11	T26719	30	35	115	<10	11				
12	T26721	5	10	55	<10	11				
13	T26722	15	5	30	<10	13				
14	T26723	5	10	30	<10	6				
15	T26724	30	10	20	<10	12				
16	T26725	10	10	25	<10	11				
17	T26726	5	5	30	<10	8				
18	T26727	15	5	10	<10	11				
19	T26728	<5	<5	10	<10	7				
20	T26729	15	5	15	<10	10				
21	T26730	5	5	30	<10	11				
22	T26731	10	25	50	<10	8				
23	T26732	5	5	105	<10	7				
24	T26733	5	5	15	<10	9				
25	T26734	5	5	30	<10	10				

Results in ppm unless otherwise specified  
 - element present; but concentration too low to measure  
 < element concentration is below detection limit  
 - element not determined

AUTHORISED  
OFFICER

*gentris*

## ANALABS

A Division of Incharge Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07093

23/05/90

0169

4 OF 6

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26735	10	15	50	<10	13				
2	T26736	40	35	65	<10	12				
3	T26737	40	20	70	<10	13				
4	T26738	10	30	110	<10	11				
5	T26739	55	10	105	<10	11				
6	T26741	60	30	90	<10	10				
7	T26742	60	50	100	<10	12				
8	T26743	55	10	105	<10	11				
9	T26744	60	165	150	<10	12				
10	T26745	50	25	115	<10	9				
11	T26746	75	25	155	<10	11				
12	T26747	70	55	115	<10	10				
13	T26748	20	<5	130	<10	6				
14	T26749	60	10	105	<10	14				
15	T26750	20	5	50	<10	9				
16	T26751	15	5	65	<10	7				
17	T26752	20	10	65	<10	14				
18	T26753	10	15	45	<10	10				
19	T26754	45	15	110	<10	12				
20	T26755	10	15	60	<10	6				
21	T26756	30	15	70	<10	12				
22	T26757	65	25	160	<10	7				
23	T26758	10	5	35	<10	11				
24	T26759	10	15	65	<10	4				
25	T26761	25	65	195	<10	10				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jentaris*

0077

## ANALABS

396078

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07093

23/05/90

0169

5 OF 6

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26762	25	15	135	<10	10				
2	T26763	60	30	135	<10	16				
3	T26764	70	50	125	<10	15				
4	T26765	45	20	80	<10	12				
5	T26766	50	30	110	<10	11				
6	T26767	70	75	140	<10	15				
7	T26768	60	40	140	<10	10				
8	T26769	70	30	160	<10	8				
9	T26770	60	20	185	<10	9				
10	T26771	75	30	135	<10	13				
11	T26772	15	15	40	<10	15				
12	T26773	35	50	135	<10	11				
13	T26774	15	60	85	<10	8				
14	T26775	5	35	70	<10	7				
15	T26776	5	30	120	<10	6				
16	T26777	35	385	320	<10	13				
17	T26778	5	40	240	<10	6				
18	T26779	<5	10	20	<10	5				
19	T26781	<5	5	15	<10	12				
20	T26782	5	10	60	<10	8				
21	T26783	<5	25	85	<10	6				
22	T26784	<5	10	25	<10	10				
23	T26785	<5	10	25	<10	10				
24	T26786	<5	5	35	<10	12				
25	T26787	5	5	10	<10	8				

Results in ppm unless otherwise specified

+ = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jenkins*

0078

# ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX      REPORT NUMBER      REPORT DATE      CLIENT ORDER No.      PAGE

		95.1.08.07093			23/05/90		0169		6 OF 6	
--	--	---------------	--	--	----------	--	------	--	--------	--

TUBE No	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26788	<5	20	5	<10	12				
2	T26789	<5	5	35	<10	8				
3	T26790	<5	<5	5	<10	8				
4	T26791	5	<5	10	<10	8				
5	T26792	20	85	250	<10	8				
6	T26793	35	5	150	<10	5				
7	T26794	115	85	390	<10	9				
8	T26795	15	<5	290	<10	9				
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	10	3				
24	UNITS	ppm	ppm	ppm	ppm	ppm				
25	METHOD	101	101	101	101	401				

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER *gentkins*

## NEUTRON ACTIVATION ANALYSIS

0079

## NEUTRON ACTIVATION ANALYSIS REPORT

Date: 01-06-90

RGC TASMANIA SAMPLE Nos:T26442, T26563-T26600, T26701-T26795

BECQUEREL JOB # 989

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 26442	# 26563	# 26564	# 26565	# 26566	# 26567	# 26568
ANTIMONY	.2	17.00	1.80	3.60	12.00	3.00	2.90	2.20
ARSENIC	2.0	160.00	3.80	14.00	10.00	15.00	5.10	21.00
BARIUM	100.0	370.0	800.0	-100.0	100.0	350.0	590.0	290.0
BROMINE	2.0	328.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
CERIUM	2.0	43.00	74.00	-2.00	3.20	30.00	55.00	35.00
CAESIUM	1.0	1.60	9.20	-1.00	1.10	2.20	4.30	3.10
CHROMIUM	5.0	17.0	150.0	3330.0	2530.0	3380.0	589.0	2040.0
COBALT	1.0	142.00	8.90	83.00	74.00	56.00	26.00	60.00
EUROPIUM	.5	1.30	1.10	-.50	-.50	-.50	.87	.85
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	-1.00	5.90	-1.00	-1.00	2.40	4.40	2.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	26.600	2.400	8.310	7.110	5.110	3.400	5.580
LANTHANUM	.5	18.00	36.00	2.30	2.80	15.00	28.00	17.00
LEAD	.2	.37	.53	-.20	-.20	.22	.39	.32
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.200	2.200	-.200	-.200	.690	1.300	.900
RUBIDIUM	20.0	-20.0	100.0	-20.0	-20.0	29.0	50.0	43.0
SAMARIUM	.20	5.50	6.50	.70	.61	2.70	5.10	3.70
SCANDIUM	.10	3.40	12.20	27.90	25.80	12.90	15.60	18.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.00	-1.00	-1.00	-1.00	2.20	-1.00
THORIUM	.5	4.50	13.00	.52	.83	5.60	10.00	5.60
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.90	2.90	-.50	.50	1.30	2.10	1.60
ZINC	100.0	460.0	100.0	150.0	200.0	130.0	120.0	140.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0080

BECQUEREL JOB # 989

ELEMENT	DL	# 26569	# 26570	# 26571	# 26572	# 26573	# 26574	# 26575	# 26576	# 26577	# 26578
ANTIMONY	.2	2.70	1.00	.93	1.20	1.00	2.50	2.90	3.40	3.10	2.00
ARSENIC	2.0	14.00	-2.00	-2.00	-2.00	4.60	10.00	5.20	2.50	2.30	2.30
BARIUM	100.0	700.0	-100.0	-100.0	-100.0	-100.0	490.0	700.0	170.0	750.0	440.0
BROMINE	2.0	-2.00	-2.00	3.90	-2.00	7.20	-2.00	5.30	2.60	7.00	-2.00
CERIUM	2.0	67.00	9.40	10.00	17.00	76.00	57.00	83.00	22.00	110.00	53.00
CAESIUM	1.0	5.10	-1.00	-1.00	-1.00	-1.00	4.20	4.10	-1.00	4.50	4.50
CHROMIUM	5.0	507.0	1280.0	1010.0	1160.0	42.0	862.0	130.0	1220.0	170.0	703.0
COBALT	1.0	23.00	54.00	60.00	58.00	25.00	47.00	4.10	46.00	3.30	29.00
EUROPIUM	.5	.84	-.50	-.50	-.50	1.00	.86	1.30	.51	1.50	.69
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.00	2.00	2.00	1.80	4.10	3.60	5.90	2.70	7.30	3.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.000	6.400	6.570	5.730	3.400	4.400	1.900	4.100	1.500	2.900
LANTHANUM	.5	34.00	6.00	6.20	10.00	40.00	30.00	42.00	11.00	52.80	27.00
LUTETIUM	.2	.47	-.20	-.20	-.20	.44	.40	.59	.20	.71	.33
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.700	-.200	-.200	-.200	-.410	1.400	1.900	.440	2.200	1.300
RODNIUM	20.0	77.0	-20.0	-20.0	-20.0	-20.0	72.0	91.0	-20.0	110.0	62.0
SAMARIUM	.20	6.00	1.00	1.10	1.60	6.80	5.10	7.00	2.20	9.10	4.80
SCANDIUM	.10	12.20	13.20	16.30	22.40	25.00	12.80	8.70	9.30	9.00	12.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	1.60	-1.00	1.60	1.30	1.50	-1.00
THORIUM	.5	13.00	3.10	3.10	2.90	8.20	12.00	16.00	4.20	18.00	10.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	2.70	3.00	-2.00	3.20	3.00
YTTERBIUM	.5	2.50	.57	.65	.86	2.40	2.00	3.10	1.00	3.60	1.80
ZINC	100.0	130.0	150.0	200.0	150.0	160.0	130.0	-100.0	160.0	-100.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0081

BECQUEREL JOB # 989

ELEMENT	DL	# 26579	# 26580	# 26581	# 26582	# 26583	# 26584	# 26585	# 26586	# 26587	# 26588
ANTIMONY	.2	1.30	3.70	1.80	2.30	2.30	.84	.95	.55	.59	3.20
ARSENIC	2.0	-2.00	1280.00	7.00	11.00	4.80	-2.00	-2.00	-2.00	-2.00	2.00
BARIUM	100.0	610.0	990.0	620.0	610.0	390.0	300.0	160.0	120.0	-100.0	260.0
BROMINE	2.0	-2.00	2.20	-2.00	-2.00	15.00	-2.00	2.10	18.00	8.40	13.00
CERIUM	2.0	63.00	19.00	67.00	66.00	64.00	19.00	24.00	9.30	3.80	42.00
CAESIUM	1.0	4.30	1.10	4.50	4.60	3.20	2.20	1.90	1.70	-1.00	5.30
CHROMIUM	5.0	617.0	200.0	702.0	532.0	1700.0	320.0	1940.0	1830.0	2320.0	551.0
COBALT	1.0	21.00	10.00	28.00	20.00	11.00	25.00	40.00	69.00	71.00	49.00
EUROPIUM	.5	1.00	.70	1.00	1.10	1.10	-.50	.63	-.50	-.50	.88
GOLD, ppb	5.0	-5.0	390.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.30	-1.00	4.50	4.80	5.90	2.50	2.00	2.40	1.70	3.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.300	2.500	3.600	4.000	1.500	3.000	7.040	6.700	7.660	5.830
LANTHANUM	.5	31.00	12.00	35.00	34.00	33.00	8.70	11.00	4.40	3.30	26.00
LUTETIUM	.2	.39	.31	.43	.46	.49	-.20	.24	.22	-.20	.35
YBONIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.800	1.500	1.700	1.700	1.000	-.200	.260	.230	-.200	1.400
RUBIDIUM	20.0	63.0	35.0	73.0	76.0	62.0	25.0	27.0	21.0	-20.0	72.0
SAMARIUM	.20	5.60	3.00	6.20	6.20	5.80	2.20	3.30	1.30	.65	5.20
SCANDIUM	.10	12.10	10.10	12.50	13.70	8.70	30.40	35.00	35.50	19.60	29.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.10	-1.00	1.90	2.20	1.80	1.80	-1.00	1.60	-1.00	1.50
THORIUM	.5	12.00	2.50	13.00	13.00	10.00	2.60	3.20	5.70	1.70	7.30
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	4.00	4.10	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	2.10	1.10	2.40	2.50	2.40	1.00	1.60	1.10	-.50	2.10
ZINC	100.0	110.0	1500.0	120.0	130.0	-100.0	140.0	150.0	220.0	210.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	510.0	-500.0	-500.0	-500.0	-500.0

917



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0082

BECQUEREL JOB # 989

ELEMENT	DL	# 26589	# 26590	# 26591	# 26592	# 26593	# 26594	# 26595	# 26596	# 26597	# 26598
ANTIMONY	.2	3.10	4.70	3.60	.75	1.10	.77	.91	1.30	.38	1.90
ARSENIC	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	7.90
BARIUM	100.0	100.0	220.0	-100.0	-100.0	-100.0	120.0	-100.0	130.0	-100.0	500.0
BROMINE	2.0	10.00	2.10	11.00	-2.00	-2.00	11.00	5.50	5.20	-2.00	-2.00
CERIUM	2.0	10.00	10.00	-2.00	14.00	15.00	18.00	3.90	31.00	-2.00	45.00
CAESIUM	1.0	8.20	8.60	-1.00	-1.00	-1.00	-1.00	-1.00	1.10	-1.00	4.10
CHROMIUM	5.0	1290.0	1540.0	1270.0	4990.0	1750.0	780.0	1920.0	300.0	1850.0	1440.0
COBALT	1.0	48.00	116.00	43.00	149.00	107.00	38.00	60.00	23.00	76.00	49.00
EUROPIUM	.5	-.50	-.50	-.50	.53	-.50	-.50	-.50	.62	-.50	.84
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.00	1.40	1.70	1.30	1.80	2.20	1.70	3.80	-1.00	2.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.130	5.970	8.030	8.520	7.480	6.010	8.060	3.800	7.240	5.050
LANTHANUM	.5	5.30	3.20	1.10	6.70	9.30	11.00	2.90	15.00	1.70	22.00
LUTETIUM	.2	-.20	-.20	-.20	-.20	-.20	-.20	-.20	.21	-.20	.34
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.000	1.800	-.200	-.200	-.200	-.200	-.200	.360	-.200	1.100
RUBIDIUM	20.0	95.0	90.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	60.0
THALLIUM	.20	1.10	1.00	.43	1.80	1.30	1.50	.56	3.30	.41	4.00
SCANDIUM	.10	19.20	25.10	16.00	21.20	16.90	16.50	14.10	10.00	32.10	18.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	1.60	.88	.32	2.40	3.40	3.50	.91	5.00	.54	8.30
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	.55	-.50	-.50	.86	.52	.70	-.50	1.30	-.50	1.80
ZINC	100.0	140.0	140.0	200.0	140.0	160.0	170.0	220.0	120.0	160.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

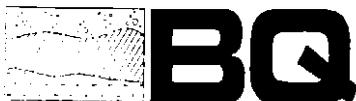
## N E U T R O N      A C T I V A T I O N      A N A L Y S I S

0083

BECQUEREL JOB # 989

ELEMENT	DL	# 26599	# 26600	# 26701	# 26702	# 26703	# 26704	# 26705	# 26706	# 26707	# 26708
ANTIMONY	.2	1.70	3.90	1.80	1.20	2.40	1.90	2.50	4.70	3.00	3.20
ARSENIC	2.0	2.40	2620.00	2.30	7.60	2.50	-2.00	4.00	6.60	3.80	10.00
BARIUM	100.0	690.0	320.0	540.0	610.0	690.0	770.0	650.0	1100.0	540.0	900.0
BROMINE	2.0	2.50	4.20	4.20	12.00	-2.00	-2.00	-2.00	-2.00	4.30	-2.00
CERIUM	2.0	66.00	14.00	70.00	54.00	100.00	82.00	89.00	110.00	86.00	110.00
CAESIUM	1.0	3.10	6.90	4.50	-1.00	3.30	2.60	3.50	6.90	3.30	3.90
CHROMIUM	5.0	120.0	270.0	500.0	36.0	100.0	130.0	71.0	18.0	95.0	45.0
COBALT	1.0	3.60	15.00	7.30	1.90	4.20	2.40	1.80	14.00	2.40	5.20
EUROPIUM	.5	1.10	.93	1.00	.83	1.90	1.70	1.50	1.90	1.70	1.00
GOLD, ppb	5.0	-5.0	574.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.60	1.20	6.60	6.30	7.40	7.70	7.40	5.80	7.10	4.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.500	12.300	1.500	1.500	1.200	1.100	1.000	3.400	1.500	1.100
LANTHANUM	.5	33.00	10.00	38.00	29.00	53.60	43.00	47.00	55.00	45.00	64.50
LUTETIUM	.2	.57	-.20	.54	.56	.72	.64	.69	.77	.81	.57
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
CESIUM, %	.2	1.600	.610	1.600	1.400	1.800	1.800	2.000	3.200	1.700	3.300
ROBIDIUM	20.0	63.0	58.0	76.0	31.0	88.0	87.0	99.0	150.0	73.0	140.0
SAMARIUM	.20	6.20	2.10	6.70	5.40	9.40	8.00	8.30	11.00	8.10	7.70
SCANDIUM	.10	7.00	5.90	9.00	6.90	8.30	7.80	7.30	16.40	8.00	5.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.60	-1.00	1.00	1.60	-1.00	1.20	1.30	-1.00	-1.00	2.00
THORIUM	.5	13.00	2.00	12.00	15.00	16.00	14.00	16.00	19.00	15.00	29.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	13.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.20	-2.00	2.40	3.80	3.80	-2.00	4.10	4.30	3.80	5.40
YTTERBIUM	.5	2.90	-.50	2.60	2.70	3.50	3.20	3.30	3.90	3.10	2.90
ZINC	100.0	-100.0	110.0	-100.0	-100.0	-100.0	-100.0	-100.0	140.0	-100.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

519



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0084

BECQUEREL JOB # 989

ELEMENT	DL	# 26709	# 26710	# 26711	# 26712	# 26713	# 26714	# 26715	# 26716	# 26717	# 26718
ANTIMONY	.2	3.40	3.30	1.30	1.20	2.40	1.00	2.50	2.90	7.30	14.00
ARSENIC	2.0	3.70	7.70	6.10	3.50	4.00	4.30	7.10	3.90	7.00	10.00
BARIUM	100.0	400.0	600.0	780.0	850.0	650.0	1800.0	750.0	680.0	1000.0	710.0
BROMINE	2.0	3.00	2.70	5.40	-2.00	2.60	-2.00	3.30	-2.00	-2.00	2.10
CERIUM	2.0	57.00	86.00	77.00	59.00	100.00	110.00	63.00	73.00	120.00	99.00
CAESIUM	1.0	3.30	6.70	3.50	5.20	4.20	7.40	4.20	4.60	6.50	6.50
CHROMIUM	5.0	180.0	190.0	150.0	76.0	130.0	16.0	320.0	140.0	54.0	59.0
COBALT	1.0	2.80	17.00	4.90	5.50	6.40	3.00	12.00	7.40	7.20	5.50
EUROPIUM	.5	.94	1.50	1.40	1.30	1.70	2.30	1.00	1.40	2.30	1.80
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.50	6.40	5.80	5.60	6.80	8.20	5.10	6.50	8.00	6.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.300	5.830	2.300	2.200	2.000	3.500	2.900	2.800	2.100	2.100
LANTHANUM	.5	30.00	44.00	41.00	32.00	54.00	59.70	33.00	40.00	62.30	53.50
NETIUM	.2	.42	.66	.58	.47	.71	.87	.47	.63	.91	.77
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.500	2.800	2.000	2.200	1.800	4.200	1.900	2.100	2.600	3.100
RUBIDIUM	20.0	64.0	140.0	87.0	98.0	88.0	240.0	98.0	110.0	130.0	120.0
SAMARIUM	.20	5.40	8.20	7.50	5.80	10.00	11.00	5.70	7.10	11.00	9.30
SCANDIUM	.10	10.50	24.10	11.00	12.20	11.20	13.90	11.10	10.30	11.40	13.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	2.60	1.50	1.70	1.30	-1.00	-1.00	-1.00	1.90	-1.00
THORIUM	.5	8.30	14.00	15.00	12.00	16.00	21.00	14.00	15.00	21.00	16.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	3.20	3.60	2.10	-2.00	3.20	3.60	3.20	3.30	-2.00
YTTERBIUM	.5	2.00	3.40	2.80	2.40	3.50	4.00	2.40	3.00	4.50	3.90
ZINC	100.0	-100.0	180.0	110.0	140.0	120.0	100.0	150.0	120.0	200.0	260.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

00000

N E U T R O N      A C T I V A T I O N      A N A L Y S I S

0085

BEQUEREL JOB # 989

ELEMENT	DL	# 26719	# 26720	# 26721	# 26722	# 26723	# 26724	# 26725	# 26726	# 26727	# 26728
ANTIMONY	.2	6.00	2.80	3.50	3.10	2.20	3.10	2.40	2.40	2.80	2.50
ARSENIC	2.0	9.00	306.00	6.00	2.40	5.70	5.50	5.60	5.70	2.50	2.30
BARIUM	100.0	640.0	470.0	980.0	1100.0	690.0	780.0	680.0	1100.0	760.0	1100.0
BROMINE	2.0	3.20	-2.00	5.50	-2.00	4.00	13.00	3.80	6.60	5.40	4.20
CERIUM	2.0	82.00	29.00	120.00	120.00	100.00	120.00	120.00	130.00	150.00	43.00
CAESIUM	1.0	5.50	1.90	3.40	4.30	1.90	3.40	3.20	2.30	2.50	2.90
CHROMIUM	5.0	110.0	50.0	13.0	18.0	6.7	19.0	12.0	22.0	13.0	13.0
COBALT	1.0	13.00	16.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
EUROPIUM	.5	1.40	.52	2.80	1.80	2.40	2.00	2.80	2.70	3.40	1.10
GOLD, ppb	5.0	-5.0	240.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.10	2.10	9.00	8.90	8.70	8.50	9.00	10.00	12.00	11.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.900	4.500	1.700	1.800	3.100	2.400	1.700	1.900	.760	.690
LANTHANUM	.5	43.00	15.00	64.10	62.00	56.50	64.30	61.30	70.70	78.70	24.00
LUTETIUM	.2	.56	.35	.93	.91	.79	.87	.80	1.00	1.00	.90
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.600	1.900	2.500	2.800	1.500	1.900	1.700	2.300	1.900	2.500
RUBIDIUM	20.0	100.0	31.0	110.0	150.0	63.0	81.0	79.0	86.0	62.0	97.0
SMARIUM	.20	7.50	4.40	12.00	11.00	11.00	12.00	11.00	13.00	15.00	5.00
SCANDIUM	.10	16.20	13.10	9.10	7.70	8.70	7.90	8.30	10.00	10.00	10.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.00	-1.00	2.20	2.50	1.50	1.60	1.60	2.20	2.40	2.90
THORIUM	.5	15.00	2.30	20.00	24.00	19.00	20.00	20.00	21.00	20.00	16.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	2.80	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.00	-2.00	3.40	4.70	3.20	2.20	2.70	4.20	4.60	4.40
YTTERBIUM	.5	3.00	1.70	4.50	4.30	3.90	4.20	4.00	4.80	4.90	4.50
ZINC	100.0	170.0	860.0	100.0	-100.0	130.0	-100.0	110.0	130.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	650.0	-500.0	-500.0	-500.0	-500.0	500.0	700.0	540.0

STP



**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0086

BECQUEREL JOB # 989

ELEMENT	DL	# 26729	# 26730	# 26731	# 26732	# 26733	# 26734	# 26735	# 26736	# 26737	# 26738
ANTIMONY	.2	2.30	3.50	4.40	7.40	6.20	7.00	6.30	3.80	3.80	1.30
ARSENIC	2.0	-2.00	3.90	3.10	13.00	5.90	7.90	10.00	13.00	21.00	4.20
BARIUM	100.0	840.0	660.0	480.0	930.0	890.0	730.0	1100.0	1100.0	880.0	570.0
BROMINE	2.0	3.00	3.30	3.20	3.60	3.60	6.00	16.00	4.40	10.00	11.00
CERIUM	2.0	110.00	120.00	33.00	140.00	110.00	120.00	110.00	110.00	66.00	120.00
CAESIUM	1.0	2.80	3.00	3.70	2.40	2.20	3.50	2.90	11.00	13.00	5.40
CHROMIUM	5.0	8.6	23.0	11.0	13.0	12.0	16.0	15.0	80.0	170.0	19.0
COBALT	1.0	-1.00	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	1.80	3.50	3.80
EUROPIUM	.5	2.70	2.70	.81	2.40	2.70	3.20	2.60	1.70	.93	1.60
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	7.9	-5.0	-5.0
HAFNIUM	1.0	12.00	10.00	8.00	8.40	9.50	10.00	9.00	5.70	5.00	8.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	.740	1.200	1.600	3.300	1.100	3.300	3.600	3.600	4.600	4.300
LANTHANUM	.5	57.90	63.60	14.00	72.40	59.10	63.80	58.00	59.90	35.00	57.50
LUTETIUM	.2	1.00	.90	1.00	.94	.89	1.00	.85	.74	.45	.95
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	2.600	2.500	2.000	2.200	1.900	1.600	2.000	3.300	3.700	1.700
RUBIDIUM	20.0	98.0	110.0	120.0	87.0	39.0	72.0	75.0	160.0	190.0	67.0
SAMARIUM	.20	11.00	12.00	2.90	12.00	13.00	13.00	11.00	10.00	5.80	10.00
SCANDIUM	.10	12.90	10.50	4.90	7.50	16.40	17.80	15.80	14.60	22.40	16.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.40	2.10	1.20	2.00	3.30	4.00	3.50	-1.00	1.60	1.40
THORIUM	.5	20.00	19.00	25.00	20.00	16.00	17.00	18.00	21.00	12.00	19.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	3.20	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	5.60	4.10	6.80	2.50	3.50	-2.00	2.30	5.30	2.80	2.00
YTTERBIUM	.5	5.20	4.60	5.30	4.70	4.40	4.70	4.10	3.80	2.50	4.60
ZINC	100.0	-100.0	-100.0	-100.0	150.0	140.0	110.0	140.0	110.0	130.0	150.0
ZIRCONIUM	500.0	810.0	650.0	-500.0	-500.0	620.0	-500.0	-500.0	-500.0	-500.0	520.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

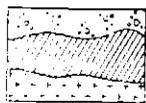
## NEUTRON ACTIVATION ANALYSIS

0087

BECQUEREL JOB # 989

ELEMENT	DL	# 26739	# 26740	# 26741	# 26742	# 26743	# 26744	# 26745	# 26746	# 26747	# 26748
ANTIMONY	.2	1.30	.81	3.90	4.80	1.50	2.00	1.80	2.40	1.00	.83
ARSENIC	2.0	5.50	3.70	44.00	37.00	8.10	11.00	11.00	17.00	14.00	3.50
BARIUM	100.0	490.0	660.0	900.0	820.0	580.0	590.0	620.0	590.0	730.0	850.0
BROMINE	2.0	9.40	-2.00	3.90	4.50	6.80	8.10	15.00	7.80	4.00	5.40
CERIUM	2.0	76.00	94.00	110.00	88.00	82.00	91.00	80.00	68.00	85.00	130.00
CAESIUM	1.0	8.90	11.00	11.00	12.00	11.00	8.50	10.00	11.00	9.40	11.00
CHROMIUM	5.0	200.0	350.0	120.0	170.0	200.0	160.0	190.0	220.0	190.0	28.0
COBALT	1.0	20.00	34.00	31.00	6.00	19.00	20.00	27.00	17.00	35.00	22.00
EUROPIUM	.5	1.20	1.20	1.40	1.40	1.30	1.50	1.50	1.30	1.70	2.60
GOLD, ppb	5.0	-5.0	270.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.80	9.00	4.80	5.30	6.50	5.70	6.00	6.10	5.60	7.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.930	5.640	4.800	5.700	5.930	6.400	5.000	6.080	5.790	7.300
LANTHANUM	.5	41.00	46.00	58.60	46.00	42.00	49.00	41.00	35.00	46.00	66.30
LEAD	.2	.60	.58	.69	.56	.63	.65	.61	.60	.69	1.80
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.400	1.300	12.000	3.600	3.000	2.500	2.800	3.500	2.900	2.700
RUBIDIUM	20.0	130.0	110.0	160.0	180.0	160.0	120.0	170.0	190.0	160.0	140.0
SAMARIUM	.20	7.70	9.20	12.00	8.20	8.00	8.90	7.90	7.10	8.80	12.00
SCANDIUM	.10	21.50	13.50	19.40	23.50	23.40	20.60	23.30	25.70	23.70	13.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.10	1.70	1.70	1.60	2.30	1.70	1.20	1.50	2.00	1.30
THORIUM	.5	12.00	18.00	11.00	15.00	13.00	15.00	13.00	13.00	14.00	22.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	6.50	-2.00	2.20	2.20	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.90	-2.00	2.20	2.80	-2.00	-2.00	2.30	-2.00	3.00	6.50
YTTERBIUM	.5	3.00	3.00	3.60	2.70	3.10	3.20	3.20	3.00	3.40	8.30
ZINC	100.0	140.0	-100.0	120.0	160.0	170.0	210.0	180.0	230.0	170.0	180.0
ZIRCONIUM	500.0	-500.0	520.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

519



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0088

BECQUEREL JOB # 989

ELEMENT	DL	# 26749	# 26750	# 26751	# 26752	# 26753	# 26754	# 26755	# 26756	# 26757	# 26758
ANTIMONY	.2	1.20	.62	.89	1.60	1.20	3.20	1.30	3.40	3.00	3.40
ARSENIC	2.0	16.00	3.00	6.30	14.00	2.70	13.00	3.60	24.00	20.00	11.00
BARIUM	100.0	770.0	850.0	590.0	820.0	530.0	1100.0	940.0	970.0	830.0	780.0
BROMINE	2.0	9.50	3.10	5.70	6.80	5.40	6.30	8.60	14.00	6.20	6.60
CERIUM	2.0	68.00	62.00	99.00	79.00	130.00	110.00	120.00	75.00	80.00	76.00
CAESIUM	1.0	11.00	7.30	5.10	9.20	4.20	8.00	7.70	11.00	12.00	7.40
CHROMIUM	5.0	190.0	31.0	12.0	29.0	11.0	27.0	21.0	140.0	220.0	34.0
COBALT	1.0	11.00	5.20	11.00	4.50	2.80	3.60	2.10	6.50	15.00	2.50
EUROPIUM	.5	1.20	1.00	1.00	1.20	1.40	1.50	1.50	1.30	1.30	1.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.50	4.80	7.20	7.20	7.80	8.90	9.30	6.00	5.80	5.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.020	2.100	3.400	3.500	1.400	3.600	1.800	5.840	6.230	3.000
LANTHANUM	.5	37.00	34.00	53.70	46.00	74.90	61.10	66.10	42.00	45.00	43.00
LUTETIUM	.2	.60	.39	.74	.79	1.00	1.00	1.10	.54	.61	.53
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.200	3.200	2.100	3.200	2.200	3.400	3.400	3.900	3.200	2.800
RUBIDIUM	20.0	160.0	130.0	110.0	170.0	98.0	160.0	160.0	180.0	170.0	130.0
RURIUM	.20	6.90	4.40	7.70	6.70	10.00	10.00	10.00	6.70	7.50	5.30
SCANDIUM	.10	23.10	12.30	11.30	16.70	8.50	12.20	11.50	18.90	23.30	4.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	1.40	-1.00	1.60	1.60	-1.00	-1.00	1.80	-1.00
THORIUM	.5	14.00	12.00	23.00	17.00	31.00	23.00	25.00	16.00	15.00	19.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	4.60	4.30	6.60	4.90	4.80	5.50	3.30	4.60
YTTERBIUM	.5	3.00	1.90	3.60	3.90	4.50	4.90	5.20	2.50	3.10	2.60
ZINC	100.0	160.0	-100.0	110.0	120.0	-100.0	160.0	110.0	130.0	200.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0089

BECQUEREL JOB # 989

ELEMENT	DL	# 26759	# 26760	# 26761	# 26762	# 26763	# 26764	# 26765	# 26766	# 26767	# 26768
ANTIMONY	.2	1.00	.28	2.40	1.50	2.70	2.40	2.10	1.00	1.20	1.40
ARSENIC	2.0	5.80	3.00	9.40	10.00	18.00	26.00	19.00	6.60	15.00	9.00
BARIUM	100.0	730.0	460.0	1100.0	1100.0	630.0	820.0	490.0	690.0	600.0	660.0
BROMINE	2.0	5.60	-2.00	3.00	7.00	7.50	3.40	7.40	8.50	2.20	2.20
CERIUM	2.0	100.00	74.00	140.00	110.00	67.00	63.00	58.00	86.00	67.00	78.00
CAESIUM	1.0	6.80	18.00	12.00	10.00	10.00	12.00	10.00	11.00	10.00	11.00
CHROMIUM	5.0	28.0	440.0	30.0	33.0	180.0	240.0	190.0	230.0	160.0	240.0
COBALT	1.0	8.90	22.00	22.00	20.00	17.00	31.00	12.00	33.00	37.00	39.00
EUROPIUM	.5	1.40	.90	2.30	1.90	1.20	1.40	1.10	1.60	1.10	1.50
GOLD, ppb	5.0	-5.0	51.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	5.7	-5.0
HAFNIUM	1.0	7.30	8.60	9.10	8.20	5.30	5.60	5.70	6.50	6.30	5.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	3.300	4.200	6.190	6.810	5.480	6.280	4.600	5.840	6.670	5.960
LANTHANUM	.5	56.20	36.00	65.50	62.40	39.00	31.00	30.00	46.00	35.00	42.00
LUTETIUM	.2	.78	.42	.87	.81	.62	.61	.59	.67	.66	.66
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTAASSIUM, %	.2	2.100	1.600	3.900	3.400	3.100	3.200	2.500	3.000	2.600	3.000
RUBIDIUM	20.0	100.0	190.0	200.0	180.0	160.0	170.0	130.0	160.0	150.0	160.0
SAMARIUM	.20	8.90	7.60	11.00	12.00	6.70	6.40	5.90	9.00	7.00	9.40
SCANDIUM	.10	11.70	11.80	13.60	16.60	21.80	26.70	19.90	25.20	26.90	25.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.40	2.60	1.80	1.20	1.40	1.70	1.10	1.10	1.20	1.40
THORIUM	.5	23.00	14.00	30.00	23.00	15.00	13.00	12.00	13.00	15.00	12.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	6.20	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.80	3.50	5.90	4.10	4.70	3.40	3.30	2.60	-2.00	3.20
YTTERBIUM	.5	3.70	2.20	4.10	4.10	3.30	3.10	3.10	3.60	3.30	3.40
ZINC	100.0	120.0	140.0	240.0	170.0	190.0	190.0	130.0	170.0	200.0	200.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	500.0	-500.0	-500.0	520.0	-500.0	-500.0	-500.0

417



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

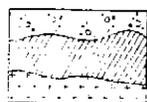
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0090

BECQUEREL JOB # 989

ELEMENT	DL	# 26769	# 26770	# 26771	# 26772	# 26773	# 26774	# 26775	# 26776	# 26777	# 26778
ANTIMONY	.2	6.70	2.90	4.70	7.50	12.00	11.00	10.00	7.50	31.70	18.00
ARSENIC	2.0	38.00	15.00	77.00	11.00	33.00	18.00	5.50	11.00	6.40	8.80
BARIUM	100.0	680.0	570.0	600.0	490.0	820.0	1100.0	800.0	850.0	670.0	680.0
BROMINE	2.0	16.00	5.70	8.10	2.80	2.50	4.60	10.00	4.50	2.70	-2.00
CERIUM	2.0	72.00	82.00	77.00	96.00	72.00	89.00	150.00	120.00	120.00	110.00
CAESIUM	1.0	12.00	11.00	10.00	4.40	7.90	10.00	5.00	5.00	2.40	2.80
CHROMIUM	5.0	200.0	210.0	230.0	36.0	130.0	94.0	10.0	16.0	15.0	12.0
COBALT	1.0	25.00	25.00	26.00	2.80	12.00	5.80	2.20	-1.00	1.50	2.30
EUROPIUM	.5	1.10	1.40	1.40	1.40	1.10	1.30	2.70	2.80	2.70	2.40
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	5.3	-5.0	-5.0	6.8	-5.0
HAFNIUM	1.0	6.30	6.70	6.00	8.60	5.40	6.00	10.00	9.20	8.70	8.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.770	6.900	8.350	2.400	4.000	2.900	2.500	3.700	2.900	2.800
LANTHANUM	.5	38.00	43.00	41.00	50.80	37.00	45.00	74.40	56.20	58.60	52.50
LEAD	.2	.85	.75	.68	.87	.63	.61	.92	.86	.78	.79
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.400	3.200	3.200	2.600	3.400	4.300	2.800	2.700	1.500	1.500
RUBIDIUM	20.0	180.0	170.0	160.0	130.0	160.0	200.0	120.0	100.0	56.0	54.0
SAMARIUM	.20	7.70	8.70	8.30	9.00	6.60	7.60	14.00	13.00	13.00	11.00
SCANDIUM	.10	27.00	24.70	24.20	12.80	18.20	20.70	23.70	20.90	22.50	14.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.10	2.10	2.00	1.10	-1.00	1.40	1.70	1.90	2.30	1.40
THORIUM	.5	14.00	14.00	14.00	19.00	14.00	16.00	23.00	16.00	17.00	16.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	2.40	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.10	-2.00	-2.00	3.50	2.10	4.40	4.30	4.70	3.10	-2.00
YTTERBIUM	.5	3.20	3.60	3.40	4.30	2.90	3.10	4.70	4.50	4.00	4.10
ZINC	100.0	220.0	270.0	190.0	-100.0	180.0	140.0	140.0	160.0	400.0	310.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	650.0	-500.0	-500.0	-500.0


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0091

BECQUEREL JOB # 989

ELEMENT	DL	# 26779	# 26781	# 26782	# 26783	# 26784	# 26785	# 26786	# 26787	# 26788
ANTIMONY	.2	8.40	4.00	4.30	4.20	3.20	3.80	4.00	4.00	3.40
ARSENIC	2.0	8.90	2.10	5.00	2.50	-2.00	3.60	2.20	2.80	3.10
BARIIUM	100.0	490.0	610.0	780.0	670.0	620.0	510.0	490.0	460.0	650.0
BROMINE	2.0	-2.00	3.80	3.50	4.80	4.90	4.70	-2.00	2.60	3.70
CERIUM	2.0	63.00	160.00	140.00	180.00	170.00	150.00	130.00	110.00	97.00
CAESIUM	1.0	6.20	3.10	3.80	6.40	5.30	4.10	4.10	3.70	3.70
CHROMIUM	5.0	84.0	14.0	6.3	17.0	8.9	19.0	6.9	18.0	39.0
COBALT	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
EUROPIUM	.5	1.00	2.20	2.40	3.30	3.00	2.40	2.40	2.30	1.00
GOLD, ppb	5.0	6.8	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.40	8.50	9.40	12.00	10.00	8.80	8.70	7.60	5.10
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	.820	1.300	1.800	1.300	1.200	1.200	1.200	1.200	1.000
LANTHANUM	.5	33.00	81.90	70.60	85.50	86.20	74.60	64.80	52.70	48.00
LUTETIUM	.2	.49	.93	.90	1.10	.94	.84	.86	.84	.71
MOLYBDENUM	5.0	7.0	-5.0	-5.0	8.0	-5.0	9.0	-5.0	-5.0	7.0
POTASSIUM, %	.2	2.800	2.500	3.400	3.000	3.500	2.700	2.600	2.000	3.200
RUBIDIUM	20.0	130.0	110.0	150.0	150.0	170.0	120.0	120.0	94.0	130.0
STRONTIUM	.20	5.20	14.00	13.00	16.00	15.00	13.00	12.00	11.00	7.40
SCANDIUM	.10	12.10	5.90	8.90	10.90	9.10	8.60	7.90	6.40	8.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.10	1.80	-1.00	2.00	1.40	1.10	-1.00	1.30	1.30
THORIUM	.5	11.00	23.00	21.00	28.00	24.00	20.00	18.00	19.00	17.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.90	4.40	3.30	2.70	4.10	2.60	4.90	2.40	-2.00
YTTERBIUM	.5	2.50	4.80	4.30	5.70	4.70	4.20	4.50	4.30	3.30
ZINC	100.0	-100.0	-100.0	110.0	140.0	-100.0	-100.0	-100.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	810.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

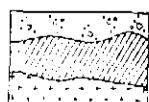
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0092

BECQUEREL JOB # 989

ELEMENT	DL	# 26789	# 26790	# 26791	# 26792	# 26793	# 26794	# 26795	# 26574x2	# 26579x2	# 26710x2
ANTIMONY	.2	4.60	3.20	3.20	3.70	.81	2.90	52.40	2.80	1.50	3.60
ARSENIC	2.0	4.20	4.00	-2.00	53.00	2.50	25.00	218.00	9.30	2.10	8.00
BARIUM	100.0	520.0	430.0	690.0	-100.0	-100.0	-100.0	720.0	550.0	570.0	530.0
BROMINE	2.0	2.80	3.70	-2.00	5.20	4.50	4.40	2.90	-2.00	-2.00	2.60
CERIUM	2.0	93.00	110.00	130.00	7.20	4.90	12.00	19.00	57.00	62.00	90.00
CAESIUM	1.0	3.70	3.80	4.00	-1.00	-1.00	-1.00	1.60	4.10	4.10	6.80
CHROMIUM	5.0	17.0	8.4	16.0	3520.0	1380.0	3780.0	14300.0	855.0	627.0	200.0
COBALT	1.0	-1.00	-1.00	-1.00	55.00	53.00	74.00	146.00	48.00	20.00	17.00
EUROPIUM	.5	1.40	1.30	1.10	-.50	-.50	-.50	.56	1.10	1.00	1.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.70	6.90	6.80	-1.00	-1.00	2.30	-1.00	3.70	4.50	6.20
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.600	1.200	1.200	12.900	8.840	9.640	12.100	4.500	2.400	5.750
LANTHANUM	.5	47.00	57.70	64.60	4.20	3.20	7.70	4.10	29.00	31.00	44.00
LUTETIUM	.2	.79	.80	.82	-.20	-.20	.26	.21	.38	.42	.69
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSSIUM, %	.2	2.700	2.500	3.900	-.200	-.200	-.200	-.200	1.400	1.500	2.900
RUBIDIUM	20.0	110.0	110.0	170.0	30.0	30.0	130.0	-20.0	73.0	77.0	150.0
SAMARIUM	.20	7.60	8.40	8.70	1.90	.77	2.00	2.00	5.00	5.70	8.50
SCANDIUM	.10	6.40	5.30	4.80	32.50	29.40	28.30	16.70	12.80	12.30	24.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.10	1.50	1.40	-1.00	-1.00	-1.00	-1.00	1.50	1.50	1.90
THORIUM	.5	19.00	20.00	25.00	2.10	1.40	3.00	1.10	11.00	12.00	13.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.60	3.50	4.50	-2.00	-2.00	-2.00	-2.00	2.90	-2.00	-2.00
YTTERBIUM	.5	4.00	4.00	4.00	.92	-.50	1.40	-.50	2.00	2.20	3.50
ZINC	100.0	-100.0	-100.0	-100.0	290.0	190.0	450.0	320.0	120.0	100.0	170.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0093

BECQUEREL JOB # 989

ELEMENT	DL	# 26731x2 #	26742x2 #	26769x2 #	26792x2
ANTIMONY	.2	4.60	5.00	6.80	3.80
ARSENIC	2.0	3.60	39.00	39.00	54.00
BARIUM	100.0	520.0	910.0	590.0	-100.0
BROMINE	2.0	3.20	4.20	17.00	6.20
CERIUM	2.0	37.00	95.00	77.00	7.40
CAESIUM	1.0	3.30	14.00	11.00	1.10
CHROMIUM	5.0	6.0	170.0	200.0	3560.0
COBALT	1.0	-1.00	5.70	25.00	57.00
EUROPIUM	.5	.66	1.50	1.30	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	8.10	5.70	6.10	-1.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.600	5.970	7.970	13.400
LANTHANUM	.5	14.00	47.00	38.00	4.20
LEAD	.2	1.00	.56	.64	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.100	3.700	3.400	-.200
RUBIDIUM	20.0	120.0	190.0	180.0	26.0
SAMARIUM	.20	2.90	8.70	7.90	1.90
SCANDIUM	.10	4.90	24.50	27.70	34.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.90	1.70	1.40	-1.00
THORIUM	.5	25.00	15.00	14.00	1.70
TIN	500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	7.70	3.10	3.00	-2.00
YTTERBIUM	.5	5.30	2.90	3.40	1.00
ZINC	100.0	-100.0	150.0	200.0	310.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENA, NSW, 2234

.0094

396095  
5520/324

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8870

ANALYTICAL REPORT No. 95.1.08.07033

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

ORDER No.	PROJECT
0164	T5520
DATE RECEIVED	RESULTS REQUIRED
20/04/90	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
5	08/05/90	1	113

STATE OF SAMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS				
			DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
		<T26,301/400,501/513	DC	Prep: 002,016							Au, Ag, As, Ba, Br, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo		
		Various	DC								Cu, Pb, Zn/101		
		Various	DC								Sn/401		

RESULTS TO

Mark Flemming  
R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

RESULTS TO

REMARKS

E.C.21/86 HOWARDS RD.  
  
Wacker Samples  
Howards Rd Grid  
Line

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Ra	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration ITN
water WA	HF under pressure A7	other chemicals means CHEM
tissue TI	fusion A8	miscellaneous MISC
stream sediment SS		fluorescence FLUOR
heavy mineral HM		inductively coupled plasma ICP
	cold acid CA	
	specific sulphide SS	
	other mixed acids MA	
	alkaline attack AA	
	volatilization VO	
	ignition IG	
	pressed powder (XRF) PP	
	glass fusion (XRF) GF	

AUTHORISED OFFICER *G Jenkins*

## ANALABS

A Division of Inchoape Inspection and Testing Services Australia Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07033

08/05/90

0164

1 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Sn					
1	T26301	10	10	145	19					
2	T26302	15	20	136	9					
3	T26303	25	<5	100	17					
4	T26304	15	10	70	12					
5	T26305	25	25	215	3					
6	T26306	10	<5	75	<3					
7	T26307	15	<5	125	10					
8	T26308	20	<5	95	9					
9	T26309	20	<5	100	14					
10	T26310	10	<5	105	5					
11	T26311	5	5	95	8					
12	T26312	10	5	100	7					
13	T26313	5	15	95	7					
14	T26314	5	10	180	<3					
15	T26315	5	10	135	13					
16	T26316	10	5	115	<3					
17	T26317	10	5	110	16					
18	T26318	10	<5	130	8					
19	T26319	5	<5	145	8					
20	T26320	-	-	-	-	STD				
21	T26321	5	5	50	4					
22	T26322	40	10	195	<3					
23	T26323	30	<5	95	6					
24	T26324	10	<5	100	9					
25	T26325	55	<5	75	<3					

Results in ppm unless otherwise specified  
 - element present; but concentration too low to measure  
 < element concentration is below detection limit  
 - element not determined

AUTHORISED OFFICER

Jenkins

## ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07033

08/05/90

0164

2 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Sn					
1	T26326	5	<5	85	<3					
2	T26327	10	<5	95	<3					
3	T26328	5	<5	75	3					
4	T26329	30	<5	100	<3					
5	T26330	5	<5	110	3					
6	T26331	5	<5	90	8					
7	T26332	5	15	95	7					
8	T26333	40	40	65	3					
9	T26334	35	20	135	12					
10	T26335	45	20	105	9					
11	T26336	55	25	125	9					
12	T26337	25	<5	145	5					
13	T26338	20	45	310	9					
14	T26339	80	80	270	7					
15	T26340	-	-	-	-	STD				
16	T26341	90	60	250	<3					
17	T26342	80	75	260	3					
18	T26343	110	125	265	<3					
19	T26344	30	75	55	8					
20	T26345	15	55	95	9					
21	T26346	10	25	55	6					
22	T26347	25	55	95	<3					
23	T26348	30	60	70	5					
24	T26349	30	55	80	8					
25	T26350	10	20	25	7					

Results in ppm unless otherwise specified  
 - element present; but concentration too low to measure  
 < element concentration is below detection limit  
 - element not determined

AUTHORISED  
OFFICER

*Gentkins*

## ANALABS

A Division of Incharge Inspection and Testing Services Australia Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07033

08/05/90

0164

3 OF 5

TURE No.	SAMPLE No.	Cu	Pb	Zn	Sn				
1	T26351	5	15	25	8				
2	T26352	50	60	50	12				
3	T26353	35	20	75	10				
4	T26354	35	30	45	6				
5	T26355	35	25	75	8				
6	T26356	60	25	55	<3				
7	T26357	35	45	70	6				
8	T26358	5	<5	25	7				
9	T26359	<5	10	20	11				
10	T26360	-	-	-	-	STD			
11	T26361	5	10	25	11				
12	T26362	<5	10	25	9				
13	T26363	<5	10	25	9				
14	T26364	5	10	35	5				
15	T26365	<5	20	40	6				
16	T26366	<5	<5	25	6				
17	T26367	<5	10	40	8				
18	T26368	5	35	30	10				
19	T26369	5	15	30	7				
20	T26370	5	30	45	<3				
21	T26371	5	20	25	9				
22	T26372	5	10	25	9				
23	T26373	5	5	25	7				
24	T26374	5	10	35	6				
25	T26375	5	30	45	7				

Results in ppm unless otherwise specified

□ = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jenkins*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

95.1.08.07033

08/05/90

0164

4 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Sn				
1	T26376	5	15	75	9				
2	T26377	5	5	25	6				
3	T26378	5	10	30	4				
4	T26379	<5	20	70	6				
5	T26380	-	-	-	-	STD			
6	T26381	<5	20	65	8				
7	T26382	<5	35	70	6				
8	T26383	<5	5	70	7				
9	T26384	5	15	45	5				
10	T26385	5	25	75	4				
11	T26386	5	25	65	11				
12	T26387	10	15	40	4				
13	T26388	30	50	110	9				
14	T26389	50	45	75	3				
15	T26390	10	30	65	4				
16	T26391	70	30	130	5				
17	T26392	50	25	80	8				
18	T26393	65	25	120	5				
19	T26394	50	20	100	7				
20	T26395	55	40	160	5				
21	T26396	55	40	105	6				
22	T26397	50	20	105	7				
23	T26398	30	45	65	8				
24	T26399	15	5	55	<3				
25	T26400	-	-	-	-	STD			

Results in ppm unless otherwise specified  
 - element present; but concentration too low to measure  
 < element concentration is below detection limit  
 - element not determined

AUTHORISED  
OFFICER

*Jenkins*

0099

## ANALABS

396100

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07033

08/05/90

0164

5 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Sn					
1	T26501	40	10	60	4					
2	T26502	15	5	45	<3					
3	T26503	15	10	45	5					
4	T26504	25	10	80	5					
5	T26505	15	80	75	8					
6	T26506	40	60	200	5					
7	T26507	30	20	90	5					
8	T26508	30	25	110	8					
9	T26509	20	15	65	8					
10	T26510	35	20	105	4					
11	T26511	40	25	85	13					
12	T26512	15	10	70	6					
13	T26513	30	15	80	9					
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	3					
	UNITS	ppm	ppm	ppm	ppm					
25	METHOD	101	101	101	401					

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

 AUTHORISED  
 OFFICER



# NEUTRON ACTIVATION ANALYSIS

0100

## NEUTRON ACTIVATION ANALYSIS REPORT

Date: 17-05-90

RGC TASMANIA SAMPLE NOS: T26301 - T26504

BECQUEREL JOB # 955

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 26301	# 26302	# 26303	# 26304	# 26305	# 26306	# 26307	# 26308	# 26309	# 26310
ANTIMONY	.2	.79	1.00	.57	.41	.69	.36	.89	1.90	.82	1.90
ARSENIC	2.0	3.10	3.20	-2.00	-2.00	-2.00	-2.00	3.00	4.20	-2.00	3.30
BARIUM	100.0	350.0	250.0	-100.0	240.0	120.0	-100.0	-100.0	160.0	270.0	180.0
BROMINE	2.0	21.00	30.00	11.00	10.00	16.00	11.00	23.00	26.00	10.00	26.00
CERIUM	2.0	26.00	21.00	4.80	18.00	2.40	6.10	4.30	20.00	17.00	20.00
CAESIUM	1.0	2.10	1.30	2.30	1.10	1.90	-1.00	-1.00	1.90	1.20	3.10
CHROMIUM	5.0	380.0	490.0	1130.0	515.0	2340.0	56.0	1120.0	330.0	250.0	796.0
COBALT	1.0	41.00	28.00	43.00	34.00	58.00	19.00	51.00	24.00	34.00	42.00
EUROPIUM	.5	.72	-.50	-.50	-.50	-.50	-.50	-.50	-.50	-.50	.61
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.00	2.70	2.20	2.80	2.10	2.50	1.70	2.40	2.50	2.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.430	5.110	5.690	5.350	8.470	6.220	7.630	5.230	5.400	6.110
LANTHANUM	.5	13.00	10.00	3.80	9.20	2.60	5.20	3.50	11.00	7.70	11.00
LUTETIUM	.2	.30	.22	-.20	-.20	-.20	-.20	-.20	-.20	-.20	.24
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.750	.730	.550	.540	-.200	-.200	.290	.320	-.400	.630
RUBIDIUM	20.0	23.0	35.0	-20.0	43.0	24.0	-20.0	25.0	-20.0	-20.0	35.0
SAMARIUM	.20	3.20	2.30	1.40	2.20	.72	1.20	.79	2.00	1.80	2.50
SCANDIUM	.10	33.40	23.70	25.80	25.70	19.50	23.30	22.50	21.10	29.40	24.50
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.10	1.40	1.80	-1.00	-1.00	-1.00	-1.00	2.90	-1.00
THORIUM	.5	5.80	3.70	1.90	3.50	2.30	1.30	1.90	2.70	4.20	4.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.70	1.20	.64	1.20	-.50	.58	-.50	1.00	1.30	1.30
ZINC	100.0	160.0	140.0	160.0	-100.0	260.0	150.0	170.0	120.0	180.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0101

BEQUEREL JOB # 955

ELEMENT	DL	# 26311	# 26312	# 26313	# 26314	# 26315	# 26316	# 26317	# 26318	# 26319	# 26320
ANTIMONY	.2	.69	1.50	.88	1.90	3.00	5.50	2.90	2.70	2.70	.41
ARSENIC	2.0	-2.00	3.50	2.10	2.80	2.50	-2.00	3.10	-2.00	-2.00	2.60
BARIUM	100.0	180.0	440.0	570.0	390.0	140.0	110.0	-100.0	-100.0	-100.0	570.0
BROMINE	2.0	28.00	53.00	20.00	25.00	8.10	2.20	10.00	-2.00	2.20	-2.00
CERIUM	2.0	29.00	26.00	23.00	4.70	7.80	13.00	10.00	3.90	2.90	70.00
CAESIUM	1.0	-1.00	3.20	2.30	1.40	1.10	5.30	-1.00	1.20	2.90	19.00
CHROMIUM	5.0	270.0	1100.0	593.0	810.0	400.0	1430.0	964.0	1310.0	1330.0	460.0
COBALT	1.0	44.00	37.00	51.00	55.00	30.00	46.00	29.00	44.00	54.00	24.00
EUROPIUM	.5	.63	.56	-.50	-.50	-.50	-.50	-.50	-.50	-.50	1.10
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	62.0
HAFNIUM	1.0	2.90	3.50	2.70	2.30	1.60	1.80	2.10	1.40	2.10	8.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.480	5.210	6.310	6.830	5.880	4.900	5.320	5.430	6.900	4.200
LANTHANUM	.5	15.00	14.00	11.00	2.00	5.10	7.00	5.90	2.10	3.10	36.00
LUTETIUM	.2	.28	.23	.26	-.20	-.20	-.20	-.20	-.20	-.20	.38
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.750	1.000	1.000	-.200	.450	.630	-.200	.300	-.200	1.700
RUBIDIUM	20.0	51.0	35.0	-20.0	-20.0	28.0	42.0	-20.0	23.0	-20.0	200.0
SAMARIUM	.20	3.40	2.60	3.20	.67	1.10	1.50	1.40	.60	.94	7.30
SCANDIUM	.10	35.70	21.80	33.50	25.40	19.00	22.70	13.90	13.90	19.10	11.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	1.70	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	3.50
THORIUM	.5	6.30	6.70	5.40	1.90	1.70	2.70	1.70	-.50	1.10	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	3.60
YTTERBIUM	.5	1.80	1.40	1.70	.52	-.50	.69	-.50	-.50	-.50	2.40
ZINC	100.0	150.0	120.0	130.0	230.0	170.0	150.0	140.0	160.0	190.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STB



BEQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW Telephone: (02) 543 2644 P.O. BOX 93 Facsimile: (02) 543 2655 MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0102

BECQUEREL JOB # 955

ELEMENT	DL	# 26321	# 26322	# 26323	# 26324	# 26325	# 26326	# 26327	# 26328	# 26329	# 26330
ANTIMONY	.2	10.00	40.80	4.00	3.10	3.00	3.80	2.70	3.10	1.70	2.20
ARSENIC	2.0	3.60	24.00	7.10	6.70	10.00	10.00	11.00	8.30	3.10	6.40
BARIUM	100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
BROMINE	2.0	3.40	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
CERIUM	2.0	8.10	28.00	3.10	-2.00	-2.00	-2.00	15.00	3.20	20.00	4.10
CAESIUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	1.10	1.20	-1.00	-1.00	-1.00
CHROMIUM	5.0	140.0	18800.0	4440.0	9310.0	7990.0	6330.0	5690.0	4600.0	5650.0	7210.0
COBALT	1.0	11.00	319.00	167.00	163.00	154.00	131.00	102.00	129.00	161.00	120.00
EUROPIUM	.5	-.50	.81	-.50	-.50	-.50	-.50	-.50	-.50	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.60	-1.00	1.10	-1.00	-1.00	-1.00	1.10	-1.00	1.90	-1.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.700	13.300	11.200	9.000	6.160	5.420	5.350	5.610	8.300	6.260
LANTHANUM	.5	4.60	10.00	4.90	2.40	2.20	1.50	5.40	1.60	12.00	1.70
LUTETIUM	.2	-.20	.34	-.20	-.20	-.20	-.20	-.20	-.20	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.200	.240	-.200	-.200	-.200	-.200	-.200	-.200	-.200	-.200
RUBIDIUM	20.0	-20.0	-20.0	26.0	22.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
SAMARIUM	.20	1.00	2.50	.84	.42	.66	.31	1.30	.52	1.70	.49
SCANDIUM	.10	4.90	10.40	14.90	4.40	3.70	2.90	13.50	4.10	15.70	5.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	1.00	.83	1.40	-.50	.58	-.50	1.70	-.50	3.30	-.50
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	2.60	-2.00	-2.00	-2.00	-2.00	-2.00	4.80	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	.54	.59	-.50	-.50	-.50	-.50	.70	-.50	.59	-.50
ZINC	100.0	-100.0	200.0	120.0	110.0	-100.0	-100.0	120.0	-100.0	-100.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW  
Telephone: (02) 543 2644 P.O. BOX 93  
Facsimile: (02) 543 2655 MENAI, NSW, 2234

0103

BECQUEREL JOB # 955

ELEMENT	DL	# 26331	# 26332	# 26333	# 26334	# 26335	# 26336	# 26337	# 26338	# 26339	# 26340
ANTIMONY	.2	1.80	1.70	1.30	1.60	2.10	2.40	3.30	1.80	2.00	2.80
ARSENIC	2.0	5.00	5.10	87.00	19.00	8.80	7.70	12.00	29.00	5.90	304.00
BARIUM	100.0	-100.0	-100.0	-100.0	-100.0	670.0	640.0	-100.0	-100.0	-100.0	520.0
BROMINE	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	4.70	-2.00
CERIUM	2.0	2.20	3.80	5.10	27.00	76.00	64.00	5.30	16.00	11.00	29.00
CAESIUM	1.0	1.30	1.50	-1.00	1.60	5.20	4.50	-1.00	-1.00	-1.00	1.00
CHROMIUM	5.0	7480.0	7660.0	6240.0	1100.0	210.0	570.0	3190.0	2220.0	2760.0	50.0
COBALT	1.0	108.00	185.00	161.00	77.00	22.00	29.00	86.00	80.00	67.00	16.00
EUROPIUM	.5	-.50	-.50	-.50	.79	1.50	1.30	-.50	.77	-.50	1.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	330.0
HAFNIUM	1.0	-1.00	-1.00	-1.00	2.80	4.90	4.80	-1.00	1.10	1.10	2.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.610	7.520	4.700	8.760	4.700	4.900	7.220	9.590	7.970	4.700
LANTHANUM	.5	2.70	2.50	3.60	13.00	38.00	31.00	3.60	8.60	5.80	15.00
LUTETIUM	.2	-.20	-.20	-.20	.22	.54	.49	-.20	-.20	-.20	.30
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.200	-.200	-.200	-.200	1.600	1.700	-.200	-.200	-.200	2.100
RUBIDIUM	20.0	-20.0	-20.0	-20.0	34.0	90.0	72.0	-20.0	25.0	-20.0	42.0
SAMARIUM	.20	.65	.64	.34	3.30	7.60	6.10	.83	2.60	1.40	4.20
SCANDIUM	.10	5.20	5.90	4.70	17.00	15.60	18.70	20.60	24.60	23.70	13.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	1.40	-1.00	-1.00	-1.00	-1.00	1.10
THORIUM	.5	.72	1.00	-.50	4.40	12.00	12.00	1.50	3.30	2.50	2.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	-.50	-.50	-.50	1.40	3.00	2.60	-.50	1.30	.81	1.90
ZINC	100.0	110.0	-100.0	-100.0	180.0	140.0	160.0	160.0	350.0	320.0	870.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

000100

NEUTRON ACTIVATION ANALYSIS

0104

BECQUEREL JOB # 955

ELEMENT	DL	# 26341	# 26342	# 26343	# 26344	# 26345	# 26346	# 26347	# 26348	# 26349	# 26350
ANTIMONY	.2	1.90	1.80	1.90	3.00	5.50	2.50	2.40	1.50	5.10	2.80
ARSENIC	2.0	6.90	13.00	5.10	3.80	4.90	-2.00	-2.00	-2.00	6.40	-2.00
BARIUM	100.0	-100.0	-100.0	630.0	450.0	820.0	570.0	560.0	740.0	880.0	880.0
BROMINE	2.0	4.30	2.40	2.10	-2.00	2.00	2.60	2.70	2.30	-2.00	-2.00
CERIUM	2.0	16.00	5.70	50.00	70.00	100.00	81.00	69.00	86.00	120.00	110.00
CAESIUM	1.0	-1.00	-1.00	6.40	4.00	6.50	5.00	4.90	4.80	6.50	4.80
CHROMIUM	5.0	2580.0	2720.0	450.0	28.0	78.0	12.0	12.0	26.0	18.0	19.0
COBALT	1.0	61.00	70.00	32.00	2.90	1.90	2.10	1.60	2.50	2.50	-1.00
EUROPIUM	.5	-.50	-.50	1.00	.89	1.00	1.50	1.20	1.20	1.70	1.40
GOLD, ppb	5.0	-5.0	-5.0	-5.0	5.3	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.30	-1.00	3.20	4.50	5.20	6.40	5.20	6.50	8.00	7.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.350	8.570	5.300	2.100	1.400	1.200	1.200	1.100	2.300	1.000
LANTHANUM	.5	8.60	3.10	25.00	37.00	64.80	43.00	37.00	46.00	67.40	62.30
LUTETIUM	.2	-.20	-.20	.41	.55	.61	.74	.53	.61	.92	.84
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.200	-.200	2.700	2.100	4.100	2.900	2.100	2.600	3.300	3.400
RUBIDIUM	20.0	-20.0	30.0	140.0	93.0	180.0	130.0	110.0	140.0	160.0	150.0
SAMARIUM	.20	1.50	.87	6.00	6.60	6.60	7.80	6.30	8.10	11.00	10.00
SCANDIUM	.10	19.50	26.70	42.20	8.40	10.00	11.00	8.40	10.00	8.50	6.40
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	1.80	1.20	1.40	1.80	1.20
THORIUM	.5	3.30	1.60	9.10	13.00	29.00	15.00	15.00	16.00	28.00	25.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	3.50	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	5.10	7.20	-2.00	3.70	2.60	9.20	5.80
YTTERBIUM	.5	.68	-.50	2.30	2.70	2.90	3.60	2.70	3.10	4.80	4.30
ZINC	100.0	280.0	320.0	310.0	110.0	-100.0	-100.0	120.0	110.0	120.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0105

BECQUEREL JOB # 955

ELEMENT	DL	# 26351	# 26352	# 26353	# 26354	# 26355	# 26356	# 26357	# 26358	# 26359	# 26360
ANTIMONY	.2	2.20	5.50	2.80	13.00	6.10	7.90	7.60	1.90	2.20	3.00
ARSENIC	2.0	2.40	14.00	6.40	41.00	21.00	28.00	22.00	-2.00	-2.00	294.00
BARIUM	100.0	870.0	830.0	890.0	870.0	970.0	1200.0	1600.0	2000.0	1200.0	500.0
BROMINE	2.0	-2.00	2.40	3.70	3.10	2.60	2.10	2.50	-2.00	2.90	-2.00
CERIUM	2.0	110.00	78.00	73.00	54.00	82.00	87.00	99.00	130.00	180.00	28.00
CAESIUM	1.0	3.90	6.90	7.80	7.70	6.70	9.50	6.50	6.10	4.40	1.60
CHROMIUM	5.0	64.0	130.0	130.0	130.0	120.0	140.0	110.0	8.7	17.0	57.0
COBALT	1.0	1.20	1.90	16.00	2.20	9.40	6.20	4.00	-1.00	-1.00	14.00
EUROPIUM	.5	1.90	1.20	1.00	.95	1.00	1.10	1.50	1.60	2.40	.83
GOLD, ppb	5.0	-5.0	-5.0	-5.0	8.2	-5.0	7.7	-5.0	-5.0	-5.0	210.0
HAFNIUM	1.0	7.40	4.00	4.80	3.90	5.50	5.00	6.40	7.00	7.90	2.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	.890	2.900	3.900	3.300	3.900	2.700	2.600	.820	.690	4.400
LANTHANUM	.5	61.00	41.00	40.00	28.00	42.00	48.00	54.70	72.90	97.90	14.00
LUTETIUM	.2	.87	.53	.50	.48	.62	.61	.70	.83	.94	.35
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.900	2.900	2.800	3.300	2.700	4.100	3.800	3.900	2.500	1.600
RUBIDIUM	20.0	130.0	140.0	140.0	150.0	130.0	200.0	180.0	190.0	140.0	52.0
SAMARIUM	.20	11.00	7.50	5.80	5.00	7.10	7.00	8.70	11.00	17.00	4.10
SCANDIUM	.10	8.60	18.10	19.10	20.60	17.20	19.30	16.30	5.20	6.30	12.50
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	1.20	-1.00	2.10	1.10	1.10	1.60	2.70	-1.00
THORIUM	.5	20.00	13.00	13.00	11.00	14.00	16.00	17.00	23.00	23.00	2.40
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	3.10
URANIUM	2.0	3.90	3.70	2.80	4.40	4.00	-2.00	6.50	5.10	2.90	-2.00
YTTERBIUM	.5	4.10	2.70	2.60	2.30	3.40	3.10	3.60	4.10	4.80	1.60
ZINC	100.0	-100.0	100.0	120.0	-100.0	120.0	120.0	110.0	-100.0	-100.0	830.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

0106

BECQUEREL JOB # 955

ELEMENT	DL	# 26361	# 26362	# 26363	# 26364	# 26365	# 26366	# 26367	# 26368	# 26369	# 26370
ANTIMONY	.2	3.30	3.00	3.50	4.30	4.40	3.10	5.10	3.90	4.70	3.70
ARSENIC	2.0	2.50	-2.00	3.00	4.40	4.00	3.40	4.70	4.20	2.70	2.60
BARIUM	100.0	1700.0	1100.0	590.0	550.0	640.0	490.0	570.0	580.0	770.0	710.0
BROMINE	2.0	2.40	3.00	3.20	2.60	5.30	4.80	4.10	-2.00	-2.00	8.00
CERIUM	2.0	120.00	160.00	140.00	130.00	120.00	170.00	130.00	170.00	110.00	110.00
CAESIUM	1.0	6.90	4.70	3.20	3.50	2.90	2.20	2.70	2.50	2.60	3.50
CHROMIUM	5.0	30.0	22.0	19.0	9.5	18.0	8.8	21.0	10.0	17.0	8.2
COBALT	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
EUROPIUM	.5	1.50	2.70	1.50	2.30	2.40	3.50	2.90	3.10	2.30	2.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	14.0	-5.0	-5.0
HAFNIUM	1.0	7.90	10.00	9.10	11.00	8.90	8.90	10.00	9.40	9.10	8.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.100	.850	.860	1.000	1.300	.910	1.400	1.100	1.000	1.700
LANTHANUM	.5	64.30	87.50	75.70	70.30	63.60	91.60	70.10	91.80	53.70	57.20
LUTETIUM	.2	1.00	1.00	1.10	1.10	1.00	.93	1.00	1.00	.91	.87
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	4.000	2.300	2.300	1.900	2.200	1.200	2.400	2.200	2.200	2.500
RUBIDIUM	20.0	200.0	130.0	98.0	83.0	75.0	64.0	85.0	81.0	83.0	87.0
SAMARIUM	.20	11.00	16.00	13.00	13.00	12.00	16.00	13.00	15.00	11.00	11.00
SCANDIUM	.10	8.80	8.40	6.60	9.00	8.50	8.00	9.50	7.90	8.40	8.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	2.30	1.90	2.20	1.10	-1.00	-1.00	1.30	1.50	2.00
THORIUM	.5	22.00	23.00	27.00	25.00	23.00	20.00	22.00	26.00	22.00	22.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.80	2.10	5.20	5.00	4.50	4.80	3.50	3.50	3.70	4.90
YTTERBIUM	.5	4.60	5.10	5.40	5.20	4.60	4.80	4.90	4.90	4.50	4.40
ZINC	100.0	-100.0	-100.0	-100.0	-100.0	120.0	-100.0	-100.0	-100.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	510.0	-500.0	-500.0	-500.0	580.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0107

BECQUEREL JOB # 955

ELEMENT	DL	# 26371	# 26372	# 26373	# 26374	# 26375	# 26376	# 26377	# 26378	# 26379	# 26380
ANTIMONY	.2	3.40	4.10	3.90	4.50	4.00	12.00	5.20	7.50	4.90	.32
ARSENIC	2.0	4.50	2.80	-2.00	2.70	2.80	8.70	2.40	3.20	2.90	3.50
BARIUM	100.0	640.0	630.0	950.0	870.0	750.0	590.0	610.0	540.0	680.0	380.0
BROMINE	2.0	5.40	5.60	5.70	-2.00	11.00	-2.00	3.40	3.20	5.50	-2.00
CERIUM	2.0	140.00	160.00	140.00	120.00	130.00	110.00	130.00	90.00	140.00	66.00
CAESIUM	1.0	1.50	2.90	3.20	2.60	4.20	3.40	1.40	2.60	3.00	18.00
CHROMIUM	5.0	16.0	-5.0	19.0	11.0	15.0	18.0	-5.0	19.0	8.6	460.0
COBALT	1.0	-1.00	-1.00	-1.00	1.20	-1.00	1.20	-1.00	-1.00	-1.00	23.00
EUROPIUM	.5	2.80	3.00	2.70	2.70	3.40	2.40	2.30	2.40	2.60	.81
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	76.0
HAFNIUM	1.0	8.80	10.00	9.10	8.70	11.00	8.70	9.40	8.00	10.00	8.10
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.400	.630	.920	1.000	.860	1.800	1.000	1.400	1.400	4.200
LANTHANUM	.5	71.90	88.30	75.10	65.40	73.80	53.10	72.80	47.00	77.80	36.00
LUTETIUM	.2	1.00	1.00	.87	.81	.86	.86	.82	.77	1.10	.44
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.700	2.300	3.300	2.500	2.800	3.400	2.100	2.200	2.600	1.900
RUBIDIUM	20.0	53.0	80.0	130.0	91.0	120.0	150.0	93.0	96.0	100.0	200.0
SAMARIUM	.20	13.00	16.00	13.00	12.00	14.00	11.00	12.00	10.00	14.00	7.30
SCANDIUM	.10	7.70	8.60	8.50	9.20	12.50	8.80	8.10	8.90	7.80	11.40
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.90	1.40	1.30	1.70	-1.00	1.80	1.30	-1.00	2.40	2.90
THORIUM	.5	22.00	23.00	20.00	19.00	18.00	21.00	20.00	16.00	28.00	14.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	6.40
URANIUM	2.0	3.00	4.60	4.90	3.20	4.00	3.40	3.70	2.60	5.10	4.30
YTTERBIUM	.5	4.50	5.00	4.30	4.00	4.40	4.30	4.50	3.80	5.20	2.20
ZINC	100.0	-100.0	-100.0	-100.0	-100.0	-100.0	120.0	-100.0	-100.0	130.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

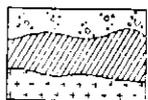
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0100

BECQUEREL JOB # 955

ELEMENT	DL	# 26381	# 26382	# 26383	# 26384	# 26385	# 26386	# 26387	# 26388	# 26389	# 26390
ANTIMONY	.2	5.00	4.50	4.30	5.40	3.60	8.00	6.40	6.40	6.20	2.90
ARSENIC	2.0	5.40	3.70	7.00	6.90	9.20	11.00	13.00	14.00	22.00	7.20
BARIUM	100.0	480.0	230.0	1300.0	500.0	430.0	580.0	580.0	1000.0	680.0	350.0
BROMINE	2.0	6.10	4.90	2.00	7.30	3.70	7.50	3.10	5.10	7.50	10.00
CERIUM	2.0	150.00	120.00	140.00	100.00	91.00	110.00	100.00	110.00	68.00	99.00
CAESIUM	1.0	1.70	2.70	2.00	3.20	2.40	2.10	3.20	8.60	6.50	3.30
CHROMIUM	5.0	15.0	13.0	19.0	7.3	-5.0	10.0	10.0	95.0	100.0	47.0
COBALT	1.0	-1.00	-1.00	-1.00	-1.00	3.50	-1.00	1.90	3.60	2.70	2.70
EUROPIUM	.5	1.80	1.80	2.40	2.10	2.70	2.40	2.00	1.90	1.20	1.60
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.60	6.70	7.70	8.20	9.00	8.40	7.10	5.60	4.70	7.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.000	1.700	2.100	2.400	3.400	2.600	1.900	3.600	3.600	2.900
LANTHANUM	.5	79.90	63.60	78.20	54.40	48.00	54.90	54.40	61.70	37.00	53.90
LUTETIUM	.2	.93	.90	.94	.81	.90	.92	.63	.65	.57	.80
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.000	1.500	2.900	2.300	1.800	1.700	2.300	3.000	2.500	1.300
RUBIDIUM	20.0	93.0	54.0	110.0	98.0	74.0	41.0	83.0	150.0	130.0	66.0
SAMARIUM	.20	13.00	12.00	13.00	11.00	12.00	12.00	10.00	10.00	6.60	10.00
SCANDIUM	.10	5.00	4.30	7.10	11.50	18.80	16.90	11.70	14.30	15.00	10.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-10.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.10	3.70	-1.00	2.60	2.10	-2.10	1.10	1.70	1.60	2.30
THORIUM	.5	25.00	26.00	23.00	19.00	15.00	16.00	14.00	20.00	14.00	18.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.30	-2.00
URANIUM	2.0	4.90	5.20	3.40	3.20	-2.00	-2.00	-2.00	5.20	3.50	4.70
YTTERBIUM	.5	4.40	4.40	4.30	3.80	4.10	4.10	3.30	3.40	3.00	4.10
ZINC	100.0	-100.0	-100.0	120.0	140.0	150.0	200.0	-100.0	150.0	130.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	690.0	-500.0	-500.0	-500.0	-500.0

**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

0103

BECQUEREL JOB # 955

ELEMENT	DL	# 26391	# 26392	# 26393	# 26394	# 26395	# 26396	# 26397	# 26398	# 26399	# 26400
ANTIMONY	.2	2.80	3.00	1.30	2.10	3.30	1.40	1.50	2.20	1.10	3.00
ARSENIC	2.0	16.00	20.00	7.70	9.30	9.10	7.00	7.40	4.70	3.30	305.00
BARIUM	100.0	640.0	610.0	570.0	580.0	570.0	450.0	580.0	690.0	760.0	540.0
BROMINE	2.0	6.80	13.00	5.10	10.00	10.00	6.70	4.20	15.00	16.00	-2.00
CERIUM	2.0	73.00	85.00	75.00	76.00	53.00	74.00	64.00	93.00	95.00	28.00
CAESIUM	1.0	13.00	11.00	12.00	12.00	6.00	10.00	9.50	11.00	12.00	1.50
CHROMIUM	5.0	230.0	150.0	170.0	200.0	53.0	230.0	230.0	130.0	36.0	51.0
COBALT	1.0	22.00	6.60	26.00	16.00	15.00	25.00	21.00	14.00	3.00	16.00
EUROPIUM	.5	1.00	1.30	1.20	1.00	1.10	1.10	1.10	1.10	1.30	.70
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	290.0
HAFNIUM	1.0	6.20	6.10	5.30	5.90	4.80	6.20	5.00	7.00	7.00	2.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.260	4.300	6.360	5.870	7.240	6.350	4.500	3.400	2.600	4.500
LANTHANUM	.5	38.00	46.00	41.00	40.00	28.00	39.00	33.00	49.00	53.20	14.00
LUTETIUM	.2	.64	.64	.54	.58	.62	.62	.54	.68	.77	.36
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.100	2.900	3.200	3.300	1.600	2.500	2.900	2.100	2.700	1.900
RUBIDIUM	20.0	160.0	160.0	180.0	180.0	90.0	140.0	150.0	130.0	140.0	29.0
SAMARIUM	.20	7.20	7.90	7.40	7.60	5.90	7.60	6.40	8.90	8.80	4.30
SCANDIUM	.10	24.70	19.00	21.90	23.00	27.70	23.90	22.00	17.00	12.10	13.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.20	2.00	2.00	2.00	1.50	1.80	1.40	-1.00	1.10	1.60
THORIUM	.5	15.00	15.00	14.00	13.00	12.00	14.00	11.00	14.00	19.00	2.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.50
URANIUM	2.0	5.40	3.20	3.70	3.30	-2.00	-2.00	3.20	2.70	3.40	-2.00
YTTERBIUM	.5	3.20	3.20	2.70	3.10	3.00	3.20	2.60	3.40	3.60	1.80
ZINC	100.0	190.0	130.0	180.0	150.0	250.0	170.0	150.0	110.0	-100.0	860.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



BECQUEREL LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0110

BECQUEREL JOB # 955

ELEMENT	DL	# 26411	# 26412	# 26413	# 26414	# 26415	# 26416	# 26417	# 26501	# 26502	# 26503
ANTIMONY	.2	1.20	5.00	2.10	1.50	1.20	.50	.52	1.70	.81	.94
ARSENIC	2.0	-2.00	7.80	2.40	2.90	8.50	2.50	2.30	11.00	3.10	2.10
BARIUM	100.0	-100.0	430.0	180.0	-100.0	870.0	940.0	-100.0	720.0	800.0	490.0
BROMINE	2.0	4.10	2.90	-2.00	-2.00	2.30	-2.00	-2.00	8.00	8.80	14.00
CERIUM	2.0	89.00	34.00	8.30	8.90	83.00	70.00	2.50	60.00	93.00	110.00
CAESIUM	1.0	-1.00	2.50	1.10	-1.00	9.20	4.90	1.10	11.00	6.40	4.60
CHROMIUM	5.0	52.0	16.0	40.0	11.0	130.0	10.0	62.0	170.0	21.0	49.0
COBALT	1.0	10.00	4.30	1.10	-1.00	7.30	2.90	1.40	5.30	3.00	3.10
EUROPIUM	.5	-.50	1.70	-.50	-.50	1.60	.78	-.50	1.10	1.20	.88
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.40	1.70	-1.00	-1.00	5.30	4.90	-1.00	5.70	6.60	7.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.000	2.900	1.400	1.200	4.400	1.100	1.600	4.800	2.500	1.400
LANTHANUM	.5	67.30	17.00	4.00	4.90	43.00	37.00	1.10	32.00	51.90	64.20
LUTETIUM	.2	-.20	.50	-.20	-.20	.62	.49	-.20	.58	.75	.73
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	-.520	1.400	.630	-.200	3.300	2.700	-.200	2.900	2.700	1.500
RUBIDIUM	20.0	-20.0	57.0	-20.0	-20.0	170.0	120.0	-20.0	150.0	130.0	75.0
SAMARIUM	.20	4.50	4.50	.62	1.00	9.00	5.50	.22	6.00	7.50	9.10
SCANDIUM	.10	10.00	3.90	1.00	1.00	20.60	4.60	.35	22.10	7.70	8.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.30	-1.00	-1.00	-1.00	1.90	1.20	-1.00	1.30	1.20	-1.00
THORIUM	.5	2.30	5.90	1.10	1.40	12.00	17.00	-.50	14.00	27.00	30.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	3.40	3.00	-2.00	2.50	6.00	7.30
YTTERBIUM	.5	.64	2.70	-.50	.56	3.10	2.30	-.50	2.90	3.90	3.60
ZINC	100.0	150.0	130.0	-100.0	-100.0	160.0	-100.0	-100.0	120.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0111

BECQUEREL JOB # 955

ELEMENT	DL	# 26504	# 26505	# 26506	# 26507	# 26508	# 26509	# 26510	# 26511	# 26512	# 26513
ANTIMONY	.2	1.70	1.10	8.20	1.70	4.40	1.00	1.70	2.50	.57	2.30
ARSENIC	2.0	7.30	-2.00	38.00	11.00	21.00	5.70	20.00	27.00	2.60	10.00
BARIUM	100.0	900.0	670.0	780.0	630.0	1300.0	710.0	990.0	660.0	220.0	770.0
BROMINE	2.0	16.00	6.50	6.00	10.00	4.10	4.50	21.00	14.00	6.60	11.00
CERIUM	2.0	100.00	140.00	62.00	88.00	100.00	87.00	95.00	78.00	46.00	96.00
CAESIUM	1.0	10.00	4.10	7.50	10.00	6.60	5.30	10.00	4.80	1.20	8.80
CHROMIUM	5.0	29.0	21.0	97.0	110.0	61.0	130.0	83.0	270.0	270.0	84.0
COBALT	1.0	6.20	3.30	2.60	7.30	6.80	5.10	8.80	93.00	25.00	7.80
EUROPIUM	.5	1.20	1.20	.78	1.20	1.60	1.10	1.00	1.90	.78	1.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	8.00	9.00	3.90	7.50	7.00	6.80	7.60	6.00	5.50	6.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.000	1.100	4.100	3.900	4.000	2.300	6.610	6.400	3.500	3.500
LANTHANUM	.5	54.80	81.30	34.00	48.00	54.00	48.00	52.60	40.00	19.00	52.50
LUTETIUM	.2	.72	1.00	.48	.68	.82	.66	.67	.61	.70	.75
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.300	2.000	3.000	2.900	3.300	1.700	3.700	2.300	.550	2.800
RUBIDIUM	20.0	170.0	93.0	140.0	150.0	140.0	100.0	170.0	97.0	27.0	120.0
SAMARIUM	.20	8.00	11.00	4.90	7.70	8.80	7.30	8.20	7.40	6.50	8.60
SCANDIUM	.10	13.10	10.00	13.50	16.50	13.90	13.00	15.90	19.10	28.20	15.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	1.60	-1.00	2.10	1.30	-1.00	-1.00	1.30	1.40	1.30
THORIUM	.5	27.00	35.00	14.00	20.00	22.00	23.00	26.00	17.00	11.00	20.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	3.90	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	5.70	8.60	4.20	3.70	4.80	5.10	5.00	2.90	-2.00	4.30
YTTERBIUM	.5	3.50	5.10	2.60	3.50	4.10	3.30	3.60	3.30	3.60	3.80
ZINC	100.0	120.0	120.0	240.0	130.0	160.0	110.0	140.0	140.0	120.0	140.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0114

BECQUEREL JOB # 955

ELEMENT	DL	# 26314x2 #	26323x2 #	26342x2 #	26376x2 #	26385x2 #	26405x2 #	26510x2
ANTIMONY	.2	1.70	4.00	1.90	12.00	3.90	1.60	1.70
ARSENIC	2.0	2.60	7.20	13.00	7.60	8.90	7.60	21.00
BARIUM	100.0	380.0	-100.0	-100.0	610.0	630.0	950.0	930.0
BROMINE	2.0	23.00	-2.00	2.80	-2.00	4.10	3.60	23.00
CERIUM	2.0	5.30	5.90	5.20	100.00	110.00	34.00	96.00
CAESIUM	1.0	2.80	1.10	-1.00	3.00	2.90	2.70	8.10
CHROMIUM	5.0	804.0	4480.0	2840.0	11.0	13.0	490.0	80.0
COBALT	1.0	52.00	167.00	73.00	1.60	4.20	75.00	8.70
EUROPIUM	.5	-.50	-.50	-.50	2.30	2.90	.63	1.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.00	-1.00	-1.00	8.60	9.10	2.40	8.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.440	11.300	8.950	1.700	3.900	5.640	6.610
LANTHANUM	.5	1.90	5.20	3.10	52.30	54.80	14.00	52.50
LUTETIUM	.2	-.20	-.20	-.20	.82	.85	-.20	.69
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.320	-.200	-.200	3.600	1.800	1.900	3.500
RUBIDIUM	20.0	32.0	-20.0	21.0	140.0	77.0	85.0	160.0
SAMARIUM	.20	.63	.83	.87	11.00	13.00	3.30	8.30
SCANDIUM	.10	23.80	14.40	27.70	8.70	21.20	34.30	16.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	1.00
THORIUM	.5	2.40	1.20	1.60	22.00	16.00	3.90	26.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	3.70	2.90	-2.00	4.90
YTTERBIUM	.5	-.50	-.50	.62	4.30	4.80	1.40	3.70
ZINC	100.0	240.0	100.0	310.0	110.0	120.0	330.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

0113

## ANALABS

396114

5520/324  
4 JUL 1990

Phone (09) 458 7999

A division of MacDonaid Hamilton & Co. Pty. Ltd.  
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8890

ANALYTICAL REPORT No. 95.1.08.07146

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

ORDER No.

PROJECT

01738

T 5520

DATE RECEIVED

RESULTS REQUIRED

05/06/90

ASAP

R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018No. OF PAGES  
OF RESULTSDATE  
REPORTEDNo.  
OF COPIES

TOTAL No. OF SAMPLES

5

03/07/90

1

105

STATE OF AMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS			
			DRY	CRUSH	SPLIT	PUL- VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
		(T26,047/099,157/199,691/699)	RD	Prep: 002,016								Au,Ag,As,Ba,Br,Ce,Co,Cr,Cs,EU,Fe,Hf,Ir,La,Lu,Md
		Various	RD									Cu,Pb,Zn,Bi/101
		Various	RD									Sn/401

RESULTS

TO

Mark Flemming  
R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

RESULTS

TO

REMARKS

EU 21/86 - HOWARDS ROAD

Howards Rd Grid

Wacker Samples.

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Ro	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration TTN
water WA	HF under pressure A7	other chemical means CHEM
tissue TI	fusion A8	miscellaneous MISC
stream sediment SS		fluorescence FLUOR
heavy mineral HM		inductively coupled plasma ICP

AUTHORISED OFFICER

*Gentleman*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07146

03/07/90

0173B

1 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26047	15	<5	115	<10	7				
2	T26048	15	10	30	<10	6				
3	T26049	10	<5	40	<10	9				
4	T26050	15	<5	60	<10	10				
5	T26051	15	<5	70	<10	10				
6	T26052	10	<5	75	<10	8				
7	T26053	10	<5	20	<10	6				
8	T26054	15	<5	50	<10	8				
9	T26055	40	<5	150	<10	11				
10	T26056	15	<5	160	<10	10				
11	T26057	35	60	70	<10	8				
12	T26058	30	35	310	<10	11				
13	T26059	25	15	40	<10	12				
14	T26060	--	--	--	--	--			STD	
15	T26061	65	45	130	<10	11				
16	T26062	20	20	85	<10	8				
17	T26063	25	15	105	<10	10				
18	T26064	20	20	100	<10	12				
19	T26065	65	10	110	<10	13				
20	T26066	35	25	200	<10	5				
21	T26067	60	40	155	<10	6				
22	T26068	30	25	145	<10	13				
23	T26069	20	30	125	<10	10				
24	T26070	35	10	130	<10	11				
25	T26071	35	<5	80	<10	13				

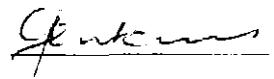
Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

-- = element not determined

AUTHORISED OFFICER



0110

## ANALABS

A Division of Incharge Inspection and Testing Services Australia Pty.Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07146

03/07/90

0173E

2 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26072	25	15	70	<10	4				
2	T26073	70	40	165	<10	10				
3	T26074	45	20	80	<10	14				
4	T26075	40	15	80	<10	9				
5	T26076	50	55	100	<10	13				
6	T26077	35	20	100	<10	8				
7	T26078	55	45	105	<10	14				
8	T26079	40	30	100	<10	10				
9	T26080	-	-	-	-	-	STD			
10	T26081	30	40	70	<10	9				
11	T26082	25	50	105	<10	11				
12	T26083	60	40	185	<10	14				
13	T26084	45	15	105	<10	9				
14	T26085	20	30	75	<10	6				
15	T26086	25	30	60	<10	12				
16	T26087	55	35	45	<10	7				
17	T26088	25	15	70	<10	12				
18	T26089	60	35	130	<10	13				
19	T26090	30	25	85	<10	10				
20	T26091	30	50	115	<10	13				
21	T26092	35	40	85	<10	9				
22	T26093	50	20	80	<10	12				
23	T26094	55	60	145	<10	15				
24	T26095	40	25	75	<10	10				
25	T26096	50	25	150	<10	11				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Chester*

0116

## ANALABS

396117

A Division of Inchcape Inspection and Testing Services Australia Pty.Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07146

03/07/90

0173B

3 OF 5

TUBE No	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26097	85	250	490	<10	9				
2	T26098	75	85	260	<10	12				
3	T26099	35	45	160	<10	10				
4	T26157	15	60	180	<10	11				
5	T26158	50	105	175	<10	13				
6	T26159	15	35	130	<10	4				
7	T26160	-	-	-	-	-	STD			
8	T26161	10	15	50	<10	6				
9	T26162	5	<5	15	<10	12				
10	T26163	85	30	30	<10	11				
11	T26164	10	<5	15	<10	9				
12	T26165	15	<5	120	<10	7				
13	T26166	10	<5	40	<10	11				
14	T26167	15	10	90	<10	12				
15	T26168	15	10	100	<10	8				
16	T26169	35	10	110	<10	10				
17	T26170	5	<5	10	<10	7				
18	T26171	5	<5	10	<10	5				
19	T26172	5	<5	30	<10	7				
20	T26173	10	10	30	<10	5				
21	T26174	10	5	25	<10	8				
22	T26175	5	<5	30	<10	8				
23	T26176	5	<5	20	<10	12				
24	T26177	10	<5	80	<10	6				
25	T26178	10	<5	135	<10	9				

Results in ppm unless otherwise specified  
 - Element present; but concentration too low to measure  
 < Element concentration is below detection limit  
 - Element not determined

AUTHORISED  
OFFICER

*Gf...*

0117

## ANALABS

396118

A Division of Incharge Inspection and Testing Services Australia Pty.Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07146

03/07/90

0173B

4 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26179	15	<5	130	<10	7				
2	T26180	-	-	-	-	-	STD			
3	T26181	45	<5	115	<10	6				
4	T26182	10	<5	80	<10	6				
5	T26183	25	25	170	<10	6				
6	T26184	85	5	135	<10	7				
7	T26185	65	<5	145	<10	3				
8	T26186	95	<5	145	<10	9				
9	T26187	15	<5	120	<10	8				
10	T26188	40	<5	135	<10	7				
11	T26189	50	10	150	<10	14				
12	T26190	15	<5	155	<10	8				
13	T26191	20	<5	125	<10	10				
14	T26192	30	5	115	<10	8				
15	T26193	25	5	100	<10	8				
16	T26194	30	<5	100	<10	8				
17	T26195	25	10	110	<10	4				
18	T26196	30	<5	130	<10	12				
19	T26197	15	<5	140	<10	7				
20	T26198	15	10	155	<10	10				
21	T26199	15	5	75	<10	10				
22	T26691	5	<5	105	<10	6				
23	T26692	10	5	100	<10	13				
24	T26693	5	5	95	<10	8				
25	T26694	5	<5	85	<10	9				

Results in ppm unless otherwise specified

- = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*[Signature]*

**ANALYTICAL DATA**

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07146

03/07/90

0173B

5 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ri	Sn				
1	T26695	10	10	115	<10	10				
2	T26696	10	<5	100	<10	5				
3	T26697	15	10	120	<10	5				
4	T26698	20	15	140	<10	5				
5	T26699	25	10	155	<10	9				
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	10	3				
	UNITS	ppm	ppm	ppm	ppm	ppm				
25	METHOD	101	101	101	101	401				

Results in ppm unless otherwise specified  
 □ = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



N E U T R O N                      A C T I V A T I O N                      A N A L Y S I S

0119

396120

NEUTRON ACTIVATION ANALYSIS REPORT

Date: 13-07-90

RGS TASMANIA SAMPLE Nos: T26047-T26099, T26157-T26199, T26691-T26699

BEQUEREL JOB # 037

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 26047	# 26048	# 26049	# 26050	# 26051	# 26052	# 26053	# 26054	# 26055	# 26056
ANTIMONY	.2	1.70	1.90	2.00	3.10	2.20	1.00	4.90	2.60	3.10	1.40
ARSENIC	2.0	9.20	9.10	7.50	15.00	-2.00	-2.00	8.60	6.80	-2.00	3.10
BARIUM	100.0	-100.0	250.0	-100.0	170.0	250.0	130.0	300.0	440.0	150.0	220.0
BROMINE	2.0	24.00	29.00	36.00	15.00	4.80	18.00	2.30	45.00	3.30	-2.00
CERIUM	2.0	7.40	68.00	21.00	66.00	7.40	12.00	110.00	84.00	17.00	13.00
CAESIUM	1.0	1.30	2.70	2.00	3.60	4.90	1.60	7.70	3.10	2.30	2.00
CHROMIUM	5.0	2310.0	601.0	861.0	1220.0	3000.0	606.0	80.0	220.0	5480.0	2570.0
COBALT	1.0	32.00	6.70	22.00	36.00	24.00	32.00	4.70	27.00	61.00	40.00
EUROPIUM	.5	-.50	.81	-.50	-.50	-.50	-.50	.92	1.00	.54	.75
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	-1.00	4.00	1.70	3.40	-1.00	2.20	6.00	5.20	1.50	1.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.500	2.800	4.400	5.010	5.670	6.140	3.600	4.900	10.300	9.360
LANTHANUM	.5	3.60	42.00	13.00	44.00	2.70	6.60	66.60	47.00	7.50	5.70
LEAD	.2	-.20	.36	-.20	.30	-.20	-.20	.63	.54	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.520	2.300	.840	1.800	2.600	.540	3.600	2.600	1.100	.670
RUBIDIUM	20.0	38.0	110.0	42.0	77.0	130.0	37.0	180.0	130.0	67.0	60.0
SAMARIUM	.20	.90	3.80	1.30	3.10	1.10	1.50	6.50	6.70	2.10	2.50
SCANDIUM	.10	18.50	10.00	11.20	11.10	30.00	17.90	13.10	11.70	32.00	23.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	1.20	-1.00	-1.00	-1.00
THORIUM	.5	1.70	12.00	2.80	16.00	1.50	4.10	19.00	18.00	1.20	.92
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	3.40	-2.00	3.50	-2.00	-2.00	3.10	3.80	-2.00	-2.00
YTTERBIUM	.5	-.50	1.90	.61	1.70	.51	.75	3.40	3.00	.72	.60
ZINC	100.0	140.0	-100.0	-100.0	-100.0	140.0	-100.0	-100.0	-100.0	210.0	220.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BEQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0120

BEVEREL JOB # 037

ELEMENT	DL	# 26057	# 26058	# 26059	# 26060	# 26061	# 26062	# 26063	# 26064	# 26065	# 26066
ANTIMONY	.2	14.00	14.00	13.00	3.40	13.00	4.90	2.90	4.00	2.70	1.80
ARSENIC	2.0	46.00	47.00	41.00	1270.00	35.00	18.00	15.00	19.00	13.00	16.00
BARIUM	100.0	370.0	390.0	600.0	1000.0	910.0	310.0	610.0	500.0	670.0	680.0
BROMINE	2.0	2.80	4.60	2.60	2.10	6.60	12.00	10.00	33.00	10.00	10.00
CERIUM	2.0	85.00	88.00	94.00	18.00	99.00	40.00	76.00	85.00	98.00	130.00
CAESIUM	1.0	5.00	2.90	4.10	1.10	6.80	1.70	4.30	5.20	8.10	6.70
CHROMIUM	5.0	110.0	100.0	60.0	190.0	170.0	696.0	390.0	470.0	310.0	160.0
COBALT	1.0	17.00	6.50	2.40	10.00	8.70	29.00	15.00	15.00	23.00	25.00
EUROPIUM	.5	1.10	1.30	1.50	.81	1.40	.58	1.40	1.70	1.50	2.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	400.0	11.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.80	5.70	6.60	1.00	6.10	3.00	6.10	6.60	7.60	10.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.600	4.100	3.100	2.400	4.400	5.210	4.900	5.560	6.140	5.240
LANTHANUM	.5	50.00	49.00	52.10	11.00	53.10	20.00	41.00	45.00	51.00	66.10
LUTETIUM	.2	.52	.58	.60	.31	.70	.25	.59	.66	.65	.94
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.300	2.600	2.900	1.400	4.000	1.500	2.600	2.300	2.800	2.100
RUBIDIUM	20.0	150.0	130.0	130.0	47.0	180.0	74.0	120.0	130.0	160.0	140.0
SAMARIUM	.20	6.80	7.60	8.20	2.80	8.30	3.70	7.80	8.70	10.00	13.00
STRONTIUM	.10	11.70	11.20	10.90	10.00	22.30	15.60	15.90	19.60	23.30	20.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	-1.00	-1.00	-1.00	-1.00	-1.00	2.30	-1.00	1.50	2.40
THORIUM	.5	22.00	17.00	18.00	1.80	20.00	8.60	12.00	16.00	16.00	22.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	5.70	7.00	5.70	2.20	5.50	2.10	-2.00	2.30	-2.00	4.00
YTTERBIUM	.5	2.90	3.20	3.20	.94	3.70	1.50	3.20	3.60	4.00	5.40
ZINC	100.0	-100.0	370.0	-100.0	1400.0	170.0	120.0	120.0	150.0	160.0	290.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

517



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENA, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0121

BECQUEREL JOB # 037

ELEMENT	DL	# 26067	# 26068	# 26069	# 26070	# 26071	# 26072	# 26073	# 26074	# 26075	# 26076
ANTIMONY	.2	3.40	4.60	2.60	1.40	2.00	1.60	3.60	2.30	2.50	1.50
ARSENIC	2.0	16.00	12.00	11.00	4.50	5.60	6.30	10.00	7.50	16.00	9.20
BARIUM	100.0	870.0	770.0	270.0	430.0	500.0	410.0	540.0	930.0	690.0	630.0
BROMINE	2.0	2.70	3.80	24.00	12.00	5.80	9.20	5.00	3.50	15.00	13.00
CERIUM	2.0	91.00	110.00	120.00	110.00	150.00	100.00	140.00	91.00	86.00	94.00
CAESIUM	1.0	8.10	6.80	1.10	5.10	4.40	5.80	11.00	14.00	10.00	10.00
CHROMIUM	5.0	130.0	83.0	26.0	240.0	53.0	170.0	190.0	200.0	170.0	150.0
COBALT	1.0	16.00	13.00	2.60	19.00	8.20	7.40	18.00	9.00	10.00	11.00
EUROPIUM	.5	1.30	2.00	1.80	1.70	2.60	1.40	2.50	1.60	1.50	1.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	7.7	-5.0
HAFNIUM	1.0	5.90	8.30	9.10	8.40	11.00	7.60	10.00	7.10	6.60	6.20
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.300	4.300	2.700	4.900	5.000	3.500	5.310	3.400	5.450	5.840
LANTHANUM	.5	47.00	56.40	62.20	55.90	80.20	53.10	68.80	47.00	45.00	47.00
LUTETIUM	.2	.65	.92	.89	.71	1.10	.76	1.00	.63	.58	.62
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.500	2.900	1.100	1.700	2.100	1.600	3.200	4.500	3.400	3.200
RADIUM	20.0	150.0	150.0	42.0	110.0	100.0	75.0	160.0	210.0	180.0	160.0
SAMARIUM	.20	8.40	11.00	12.00	10.00	15.00	10.00	14.00	8.90	8.50	9.20
SCANDIUM	.10	19.40	18.50	17.00	17.40	16.10	15.80	21.70	22.90	21.60	22.50
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	3.00	1.20	4.00	1.80	1.20	2.10	1.70	1.00
THORIUM	.5	17.00	18.00	20.00	18.00	24.00	16.00	20.00	15.00	14.00	13.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	4.10	3.20	4.00	4.10	4.00	-2.00	5.10	3.90	-2.00	3.80
YTTERBIUM	.5	3.70	4.90	4.70	4.20	5.70	4.00	5.20	3.40	3.50	3.30
ZINC	100.0	200.0	180.0	190.0	160.0	140.0	110.0	210.0	150.0	130.0	140.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	680.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0122

BECQUEREL JOB # 037

ELEMENT	DL	# 26077	# 26078	# 26079	# 26080	# 26081	# 26082	# 26083	# 26084	# 26085	# 26086
ANTIMONY	.2	1.90	1.60	3.60	-2.0	3.90	.93	2.70	6.80	1.00	2.20
ARSENIC	2.0	8.20	12.00	15.00	4.60	19.00	3.10	13.00	40.00	8.60	13.00
BARIUM	100.0	550.0	650.0	560.0	570.0	590.0	510.0	600.0	730.0	640.0	550.0
BROMINE	2.0	14.00	14.00	13.00	-2.00	19.00	4.20	29.00	2.40	-2.00	44.00
CERIUM	2.0	81.00	86.00	77.00	88.00	78.00	77.00	74.00	81.00	94.00	82.00
CAESIUM	1.0	11.00	9.20	11.00	11.00	11.00	11.00	13.00	10.00	3.70	8.80
CHROMIUM	5.0	170.0	180.0	190.0	360.0	180.0	190.0	200.0	190.0	47.0	130.0
COBALT	1.0	7.60	23.00	10.00	34.00	4.10	19.00	14.00	24.00	8.70	5.40
EUROPIUM	.5	1.30	1.30	1.10	1.30	1.00	1.30	1.20	1.10	1.10	1.40
GOLD, ppb	5.0	-5.0	-5.0	-5.0	290.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.90	6.40	6.20	9.10	6.20	5.90	5.60	6.40	6.80	6.20
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.460	6.700	5.770	5.720	4.500	5.760	5.140	5.900	3.500	4.200
LANTHANUM	.5	42.00	45.00	41.00	46.00	40.00	40.00	38.00	42.00	51.90	44.00
LUTETIUM	.2	.56	.54	.61	.61	.56	.55	.53	.61	.66	.58
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.500	2.600	3.600	1.400	2.800	3.200	3.600	3.700	1.600	2.400
RUBIDIUM	20.0	190.0	160.0	170.0	110.0	170.0	170.0	190.0	180.0	45.0	120.0
SAMARIUM	.20	7.60	8.10	7.70	9.00	7.40	8.10	7.10	8.10	7.90	7.20
SCANDIUM	.10	21.90	23.40	23.50	13.30	22.00	25.10	22.90	22.20	8.00	17.40
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.60	2.30	1.90	2.10	1.90	1.90	1.30	1.70	-1.00	1.70
THORIUM	.5	14.00	14.00	13.00	18.00	12.00	12.00	13.00	14.00	21.00	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	4.70	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.50	4.20	-2.00	3.60	-2.00	2.80	-2.00	4.90	5.50	2.00
YTTERBIUM	.5	2.90	3.10	3.10	3.00	2.80	3.00	2.80	3.60	3.40	3.00
ZINC	100.0	150.0	170.0	160.0	110.0	120.0	170.0	160.0	250.0	130.0	120.0
ZIRCONIUM	500.0	-500.0	610.0	-500.0	560.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

917



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0123

BECQUEREL JOB # 037

ELEMENT	DL	# 26087	# 26088	# 26089	# 26090	# 26091	# 26092	# 26093	# 26094	# 26095	# 26096
ANTIMONY	.2	1.70	2.30	2.30	6.80	1.40	5.80	3.90	4.30	3.70	4.10
ARSENIC	2.0	9.40	11.00	8.00	19.00	6.30	20.00	22.00	13.00	7.30	13.00
BARIUM	100.0	450.0	720.0	630.0	700.0	640.0	720.0	730.0	670.0	650.0	510.0
BROMINE	2.0	22.00	17.00	4.20	6.60	15.00	36.00	2.90	3.20	12.00	27.00
CERIUM	2.0	88.00	63.00	70.00	59.00	67.00	78.00	81.00	87.00	78.00	80.00
CAESIUM	1.0	5.10	8.00	9.30	11.00	12.00	10.00	9.40	10.00	9.30	6.50
CHROMIUM	5.0	38.0	130.0	240.0	200.0	190.0	170.0	220.0	190.0	140.0	220.0
COBALT	1.0	2.30	3.40	25.00	3.90	15.00	5.00	13.00	15.00	6.40	19.00
EUROPIUM	.5	.67	1.10	1.20	1.00	.93	1.10	1.10	1.20	.86	1.40
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	5.3	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.00	4.90	5.50	5.30	5.10	6.20	6.50	6.10	5.20	5.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.000	4.500	5.440	4.800	5.050	5.050	4.100	4.600	2.500	4.800
LANTHANUM	.5	45.00	35.00	36.00	31.00	34.00	40.00	41.00	45.00	42.00	41.00
LUTETIUM	.2	.59	.46	.56	.47	.52	.59	.61	.60	.53	.60
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.800	2.600	3.100	3.600	3.300	2.700	3.600	3.300	3.400	2.300
RUBIDIUM	20.0	72.0	130.0	160.0	190.0	180.0	160.0	180.0	180.0	170.0	130.0
SAMARIUM	.20	6.50	6.20	7.10	5.90	6.50	7.60	7.90	8.20	6.80	8.10
SELENIUM	.10	10.40	17.00	24.60	24.60	22.60	21.40	21.80	22.50	16.50	19.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	-1.00	1.40	1.60	1.50	1.90	1.20	1.60	1.10	1.70
THORIUM	.5	22.00	11.00	12.00	11.00	10.00	13.00	14.00	16.00	17.00	13.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	2.90	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	5.40	2.30	2.10	4.20	2.60	2.50	-2.00	3.90	4.00	3.00
YTTERBIUM	.5	2.90	2.40	2.80	2.40	2.50	3.10	3.20	3.30	2.70	3.20
ZINC	100.0	-100.0	120.0	190.0	130.0	160.0	140.0	120.0	200.0	120.0	170.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

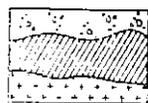
## NEUTRON ACTIVATION ANALYSIS

0124

BECQUEREL JOB # 037

ELEMENT	DL	# 26097	# 26098	# 26099	# 26157	# 26158	# 26159	# 26160	# 26161	# 26162	# 26163
ANTIMONY	.2	4.20	7.10	7.70	3.30	11.00	3.30	2.70	2.20	1.80	6.80
ARSENIC	2.0	15.00	29.00	25.00	8.90	48.00	8.90	290.00	6.30	6.30	59.00
BARIUM	100.0	800.0	720.0	490.0	450.0	530.0	440.0	420.0	400.0	410.0	460.0
BROMINE	2.0	-2.00	-2.00	2.00	2.10	-2.00	-2.00	-2.00	-2.00	3.20	4.70
CERIUM	2.0	80.00	75.00	86.00	90.00	80.00	97.00	27.00	96.00	98.00	61.00
CAESIUM	1.0	9.40	12.00	6.70	4.00	3.60	3.80	-1.00	2.60	4.50	5.10
CHROMIUM	5.0	210.0	200.0	160.0	95.0	86.0	140.0	49.0	17.0	29.0	210.0
COBALT	1.0	38.00	16.00	17.00	6.10	23.00	7.50	14.00	1.40	-1.00	33.00
EUROPIUM	.5	1.30	1.30	1.20	1.40	1.30	.66	.67	-.50	-.50	.84
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	210.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.70	5.50	4.50	5.90	4.00	4.20	2.50	4.00	4.20	4.20
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.360	3.500	3.500	2.800	4.200	2.100	4.300	1.300	1.100	10.400
LANTHANUM	.5	40.00	39.00	46.00	49.00	43.00	54.80	14.00	55.40	57.90	33.00
LUTETIUM	.2	.67	.62	.53	.60	.54	.46	.29	.49	.46	.53
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.000	3.100	3.200	2.800	3.000	2.500	1.800	2.700	3.000	3.500
RUBIDIUM	20.0	160.0	170.0	150.0	120.0	140.0	120.0	46.0	130.0	150.0	200.0
SAMARIUM	.20	8.70	7.90	7.10	8.50	6.70	6.60	4.00	5.70	5.40	5.00
SCANDIUM	.10	23.70	22.60	15.00	11.30	13.10	7.00	12.40	2.10	4.10	25.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.80	2.10	1.00	1.60	-1.00	1.70	1.30	2.50	1.20	1.30
THORIUM	.5	13.00	13.00	18.00	18.00	19.00	23.00	1.90	26.00	23.00	13.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	2.20	-2.00	4.10	-2.00	-2.00	-2.00
URANIUM	2.0	4.00	2.30	5.50	5.10	4.60	7.30	-2.00	6.60	5.30	4.40
YTTERBIUM	.5	3.40	3.00	2.80	3.20	2.70	2.50	1.60	2.50	2.40	2.70
ZINC	100.0	490.0	310.0	190.0	200.0	230.0	160.0	820.0	-100.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0125

BECQUEREL JOB # 037

ELEMENT	DL	# 26164	# 26165	# 26166	# 26167	# 26168	# 26169	# 26170	# 26171	# 26172	# 26173
ANTIMONY	.2	1.00	1.10	1.40	1.20	4.40	9.00	1.10	1.00	.84	1.80
ARSENIC	2.0	3.90	7.10	11.00	11.00	37.00	42.00	7.00	3.00	2.50	5.70
BARIUM	100.0	430.0	-100.0	300.0	240.0	310.0	250.0	340.0	320.0	250.0	350.0
BROMINE	2.0	4.50	10.00	5.50	11.00	6.30	8.20	2.50	-2.00	2.10	-2.00
CERIUM	2.0	97.00	8.90	91.00	67.00	69.00	55.00	71.00	88.00	91.00	100.00
CAESIUM	1.0	3.60	-1.00	3.20	4.00	4.30	2.90	2.20	2.40	2.20	2.90
CHROMIUM	5.0	30.0	2820.0	29.0	190.0	130.0	140.0	34.0	10.0	25.0	16.0
COBALT	1.0	8.00	64.00	4.10	14.00	9.10	152.00	1.60	-1.00	1.10	2.00
EUROPIUM	.5	1.00	-.50	.64	1.30	1.10	1.20	.53	.76	-.50	.69
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.60	-1.00	3.50	5.20	4.20	3.40	4.20	5.60	3.30	4.10
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.700	8.530	2.200	4.600	7.100	13.300	1.000	.850	.570	1.000
LANTHANUM	.5	52.00	4.30	51.10	35.00	38.00	25.00	42.00	50.20	51.40	60.60
LYSIUM	.2	.60	-.20	.42	.48	.51	.49	.39	.58	.36	.51
MOBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.900	-.200	2.100	1.900	2.200	1.900	2.300	2.700	2.000	3.000
RUBIDIUM	20.0	140.0	-20.0	120.0	91.0	120.0	99.0	110.0	130.0	96.0	110.0
SAMARIUM	.20	7.70	1.60	6.20	7.90	5.60	6.10	4.00	5.40	5.20	6.40
SCANDIUM	.10	4.70	28.50	3.00	18.40	16.60	23.90	5.60	5.00	2.60	3.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.20	-1.00	1.60	1.60	1.00	1.50	-1.00	1.20	1.00	1.40
THORIUM	.5	20.00	1.60	26.00	11.00	10.00	6.90	10.00	13.00	23.00	29.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	2.60	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	7.00	-2.00	6.40	2.20	3.30	3.30	2.50	4.60	3.90	6.80
YTTERBIUM	.5	3.10	.53	2.00	2.70	2.70	2.70	2.00	2.90	2.00	2.70
ZINC	100.0	-100.0	160.0	-100.0	130.0	120.0	150.0	-100.0	-100.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0126

BECQUEREL JOB # 037

ELEMENT	DL	# 26174	# 26175	# 26176	# 26177	# 26178	# 26179	# 26180	# 26181	# 26182	# 26183
ANTIMONY	.2	1.30	1.20	.80	1.00	.52	.33	3.40	.50	.48	.60
ARSENIC	2.0	4.80	8.10	2.60	6.50	2.80	-2.00	1210.00	-2.00	-2.00	-2.00
BARIUM	100.0	300.0	350.0	160.0	250.0	-100.0	-100.0	1000.0	-100.0	-100.0	490.0
BROMINE	2.0	-2.00	-2.00	4.30	-2.00	3.40	5.30	2.90	10.00	6.70	10.00
CERIUM	2.0	100.00	94.00	76.00	72.00	3.70	-2.00	16.00	3.20	-2.00	20.00
CAESIUM	1.0	3.60	3.50	2.00	5.50	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
CHROMIUM	5.0	30.0	11.0	38.0	240.0	310.0	2940.0	180.0	3030.0	3650.0	557.0
COBALT	1.0	1.30	3.10	1.40	23.00	34.00	78.00	10.00	79.00	69.00	58.00
EUROPIUM	.5	.78	.70	.71	1.40	-.50	-.50	.69	-.50	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	380.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.90	4.60	5.10	4.90	1.70	-1.00	-1.00	-1.00	-1.00	2.10
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRIDIUM, %	.05	.800	1.400	2.100	4.100	5.480	8.790	2.300	8.480	6.210	5.900
LANTHANUM	.5	58.70	55.60	44.00	36.00	2.70	1.40	11.00	2.10	1.40	10.00
LUTETIUM	.2	.51	.57	.54	.69	-.20	-.20	.29	-.20	-.20	.21
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.800	3.100	2.100	3.100	-.200	-.200	1.300	-.200	-.200	1.200
RUBIDIUM	20.0	120.0	130.0	99.0	130.0	-20.0	-20.0	37.0	-20.0	-20.0	41.0
SAMARIUM	.20	6.70	6.30	5.50	8.80	.72	.50	2.70	.47	.30	2.00
SCANDIUM	.10	3.10	4.30	5.90	26.40	12.30	29.60	9.30	23.60	15.50	32.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.40	1.70	-1.00	1.40	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	27.00	26.00	15.00	13.00	1.50	.54	2.10	.81	-.50	4.20
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	5.90	7.60	2.20	3.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	2.40	3.00	2.60	3.50	-.50	-.50	1.00	-.50	-.50	1.10
ZINC	100.0	-100.0	-100.0	-100.0	130.0	160.0	220.0	1300.0	250.0	150.0	220.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0127

BECQUEREL JOB # 037

ELEMENT	DL	# 26184	# 26185	# 26186	# 26187	# 26188	# 26189	# 26190	# 26191	# 26192	# 26193
ANTIMONY	.2	.56	1.00	1.00	.47	.65	.62	.80	1.30	1.40	1.00
ARSENIC	2.0	-2.00	2.50	2.70	-2.00	-2.00	-2.00	2.10	2.70	5.80	3.40
BARIUM	100.0	180.0	170.0	550.0	1000.0	320.0	190.0	430.0	130.0	120.0	340.0
BROMINE	2.0	17.00	6.90	18.00	3.90	4.60	3.50	4.30	17.00	20.00	16.00
CERIUM	2.0	34.00	60.00	39.00	24.00	32.00	45.00	25.00	30.00	36.00	34.00
CAESIUM	1.0	1.20	1.40	1.30	1.40	-1.00	-1.00	-1.00	1.20	2.50	1.60
CHROMIUM	5.0	370.0	250.0	390.0	340.0	230.0	300.0	528.0	350.0	727.0	490.0
COBALT	1.0	50.00	60.00	47.00	41.00	56.00	48.00	50.00	42.00	35.00	26.00
EUROPIUM	.5	.60	.69	.55	-.50	-.50	.70	.62	-.50	.56	.51
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.00	3.00	3.80	3.30	3.70	3.50	2.20	3.70	3.30	4.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.990	7.440	7.190	6.560	5.710	6.850	7.460	7.150	7.330	7.840
LANTHANUM	.5	10.00	7.80	14.00	10.00	7.60	12.00	11.00	7.70	11.00	13.00
LUTETIUM	.2	.33	.34	.33	-.20	.23	.27	.27	.22	.24	.35
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.300	.700	1.200	2.500	.540	.250	1.000	1.200	.880	1.200
RUBIDIUM	20.0	35.0	56.0	59.0	120.0	23.0	-20.0	52.0	54.0	48.0	54.0
ROSENIUM	.20	3.30	3.20	2.70	2.80	2.50	3.50	3.10	1.90	2.60	3.20
SCANDIUM	.10	39.30	44.80	27.80	33.20	29.90	31.20	33.70	26.30	30.60	26.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.70	-1.00	1.30	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	1.40
THORIUM	.5	6.00	5.50	7.90	6.90	4.60	4.70	4.60	7.10	7.20	8.80
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	2.40	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.80	2.10	1.80	1.30	1.30	1.40	1.50	1.40	1.50	2.00
ZINC	100.0	180.0	190.0	190.0	160.0	180.0	190.0	190.0	160.0	150.0	140.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

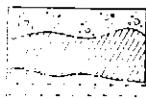
Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

0128

BECQUEREL JOB # 037

ELEMENT	DL	# 26194	# 26195	# 26196	# 26197	# 26198	# 26199	# 26691	# 26692	# 26693	# 26694
ANTIMONY	.2	1.10	1.40	1.30	1.00	.68	1.00	.81	1.10	1.00	1.00
ARSENIC	2.0	4.20	6.10	4.20	3.70	3.00	2.80	2.30	2.40	3.40	2.80
BARIUM	100.0	440.0	100.0	190.0	160.0	420.0	210.0	-100.0	150.0	190.0	140.0
BROMINE	2.0	5.00	31.00	5.70	9.00	45.00	46.00	24.00	27.00	49.00	47.00
CERIUM	2.0	35.00	21.00	30.00	28.00	40.00	30.00	13.00	19.00	19.00	19.00
CAESIUM	1.0	2.00	1.90	1.80	1.80	-1.00	2.50	1.50	-1.00	1.40	1.60
CHROMIUM	5.0	640.0	1080.0	1030.0	1050.0	170.0	540.0	929.0	890.0	810.0	886.0
COBALT	1.0	30.00	28.00	98.00	67.00	33.00	26.00	38.00	28.00	26.00	21.00
EUROPIUM	.5	.57	-.50	-.50	.60	.54	.58	-.50	-.50	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.90	2.70	2.20	2.50	3.70	3.20	2.40	2.80	3.10	3.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.340	6.920	10.200	7.910	6.030	4.300	5.890	4.700	4.800	4.800
LANTHANUM	.5	16.00	9.10	8.40	10.00	15.00	15.00	6.50	10.00	10.00	10.00
LUTETIUM	.2	.31	.20	-.20	.21	.27	.24	-.20	-.20	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NIOSIUM, %	.2	1.100	.340	.440	.540	1.100	.570	.380	.640	.430	.730
RUBIDIUM	20.0	57.0	38.0	51.0	37.0	43.0	36.0	29.0	37.0	23.0	39.0
SAMARIUM	.20	3.10	2.00	2.20	2.60	4.20	3.10	1.50	2.30	2.00	2.10
SCANDIUM	.10	23.50	22.60	32.60	27.60	30.20	20.50	15.40	16.80	15.70	15.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.60	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	9.20	4.60	4.10	4.50	7.70	6.10	3.50	4.80	4.40	5.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.70	1.20	1.20	1.20	1.60	1.50	.74	1.10	1.10	1.10
ZINC	100.0	140.0	130.0	160.0	180.0	170.0	120.0	140.0	130.0	120.0	110.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0129

BECQUEREL JOB # 037

ELEMENT	DL	# 26695	# 26696	# 26697	# 26698	# 26699	# 26057x2	# 26197x2	# 26696x2
ANTIMONY	.2	1.10	1.10	1.20	1.30	1.80	13.00	1.30	1.00
ARSENIC	2.0	2.70	3.60	4.00	3.70	6.50	44.00	4.40	3.70
BARIUM	100.0	-100.0	-100.0	150.0	420.0	260.0	430.0	130.0	-100.0
BROMINE	2.0	20.00	32.00	27.00	2.10	4.70	2.30	10.00	32.00
CERIUM	2.0	16.00	20.00	17.00	30.00	50.00	84.00	27.00	20.00
CAESIUM	1.0	-1.00	1.90	2.60	1.70	1.90	4.50	-1.00	2.70
CHROMIUM	5.0	1090.0	911.0	973.0	683.0	795.0	120.0	1210.0	946.0
COBALT	1.0	32.00	26.00	39.00	44.00	94.00	17.00	66.00	27.00
EUROPIUM	.5	-.50	-.50	-.50	.91	1.50	1.10	.52	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.80	3.10	2.30	2.40	2.90	4.50	2.40	3.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.960	5.810	6.820	6.830	7.750	2.500	8.170	6.060
LANTHANUM	.5	8.70	10.00	7.40	21.00	23.00	48.00	10.00	11.00
LITHIUM	.2	-.20	-.20	-.20	.30	.39	.53	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.390	.360	.490	.750	.490	3.500	.550	.340
RUBIDIUM	20.0	-20.0	28.0	29.0	41.0	44.0	140.0	34.0	36.0
SAMARIUM	.20	2.10	2.30	1.80	4.90	6.80	6.50	2.60	2.40
SCANDIUM	.10	19.40	18.40	20.50	31.90	42.30	11.50	27.70	19.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	1.60	-1.00	1.10	-1.00	-1.00
THORIUM	.5	4.00	4.70	3.60	5.30	5.20	21.00	4.50	4.90
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	5.50	-2.00	-2.00
YTTERBIUM	.5	.90	1.10	.76	2.00	2.40	2.80	1.30	1.10
ZINC	100.0	160.0	130.0	150.0	200.0	210.0	-100.0	180.0	140.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

0130

396131

5520/324

## ANALABS

A division of MacDonald Hamilton &amp; Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8890

ANALYTICAL REPORT No.

95.1.08.07216

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

ORDER No.

PROJECT

R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

~~0714~~ 174

T 5520

DATE RECEIVED

RESULTS REQUIRED

03/07/90

ASAP

No. OF PAGES  
OF RESULTSDATE  
REPORTEDNo.  
OF COPIES

TOTAL No. OF SAMPLES

7

17/07/90

1

148

STATE OF SAMPLES	PRE-TREATMENT								ANALYSIS		
	SAMPLE NUMBERS	DRY	CRUSH	SPLIT	PUL- VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
Various		RO	Prep: 002,016						Au, Ag, As, Ba, Br, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo		
Various		RO							Cu, Pb, Zn, Bi/101		
Various		RO							Sn/401		

RESULTS

TO

Mark Flemming  
R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

RESULTS

TO

REMARKS

EL 21/86 - HOWARD'S ROAD

Howards Road Grid

Wackes Samples.

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	WC	perchloric acid
split core	SC	hydrochloric acid
cutting	CU	nitric acid
rock	RO	aqua regia
soil	SO	nitric-perchloric
pulp	PU	HF mixture
water	WA	HF under pressure
issue	TI	fusion
stream sediment	SS	
heavy mineral	HM	
	A1	cold acid
	A2	specific sulphide
	A3	other mixed acids
	A4	alkaline attack
	A5	volatilization
	A6	ignition
	A7	pressed powder (XRF)
	A8	glass fusion (XRF)
	CA	atomic absorption
	SS	x-ray fluorescence
	Ma	spectrophotometry
	AA	colorimetry
	VO	chromatography
	IG	titration
	PP	other chemical means
	GF	miscellaneous
		fluorescence
		inductively coupled plasma
		AAS
		XRF
		SPEC
		COL
		CHR
		TTN
		CHEM
		MISC
		FLUOR
		ICP

AUTHORISED OFFICER

Gentiana

## ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07216

17/07/90

0714

1 OF 7

TUBE No	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T24286	15	15	40	<10	8				
2	T24287	15	35	20	<10	7				
3	T24288	40	15	75	<10	4				
4	T24289	20	15	25	<10	18				
5	T24290	35	10	40	<10	7				
6	T24291	60	35	55	<10	<3				
7	T24292	50	30	60	<10	23				
8	T24293	55	25	60	<10	<3				
9	T24294	60	30	45	<10	6				
10	T24295	60	20	85	<10	7				
11	T24296	70	10	85	<10	11				
12	T24297	10	5	10	<10	4				
13	T24298	60	40	45	<10	8				
14	T24299	80	5	130	<10	4				
15	T24300	-	-	-	-	-	910			
16	T26447	10	<5	25	<10	<3				
17	T26448	95	85	310	<10	10				
18	T26449	35	20	80	<10	5				
19	T26450	5	<5	<5	<10	<3				
20	T26451	<5	<5	<5	<10	<3				
21	T26452	25	5	70	<10	<3				
22	T26453	5	<5	10	<10	4				
23	T26454	70	70	200	<10	7				
24	T26455	55	35	160	<10	10				
25	T26456	80	95	225	<10	6				

Results in ppm unless otherwise specified

- element present; but concentration too low to measure
- < element concentration is below detection limit
- element not determined

AUTHORISED  
OFFICER


# ANALABS

A Division of Inchoape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SAMPLE PREFIX		REPORT NUMBER				REPORT DATE	CLIENT ORDER No.			PAGE
		95.1.08.07216				17/07/90	0714			2 OF 7
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26457	10	10	20	<10	5				
2	T26458	5	<5	<5	<10	7				
3	T26459	5	10	<5	<10	6				
4	T26460	-	-	-	-	-	STD			
5	T26461	10	50	<5	<10	<3				
6	T26462	5	5	5	<10	6				
7	T26463	5	5	10	<10	4				
8	T26464	20	50	115	<10	<3				
9	T26465	10	5	<5	<10	<3				
10	T26466	10	5	20	<10	<3				
11	T26467	95	155	35	<10	5				
12	T26468	40	115	25	<10	11				
13	T26469	10	40	5	<10	<3				
14	T26470	75	30	165	<10	5				
15	T26471	10	10	10	<10	<3				
16	T26472	105	20	180	<10	5				
17	T26473	45	45	115	<10	<3				
18	T26474	70	60	120	10	11				
19	T26475	80	50	110	<10	4				
20	T26476	90	60	125	<10	3				
21	T26477	70	70	70	<10	7				
22	T26478	100	70	115	<10	6				
23	T26479	95	55	120	<10	7				
24	T26480	-	-	-	-	-				
25	T26481	75	50	100	<10	11				

Results in ppm unless otherwise specified  
 - element present, but concentration too low to measure  
 X element concentration is below detection limit  
 - element not determined

AUTHORISED OFFICER

*Genkris*

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07216

17/07/90

0714

3 OF 7

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26901	55	20	45	<10	5				
2	T26902	85	20	55	<10	<3				
3	T26903	5	<5	20	<10	<3				
4	T26904	<5	<5	15	<10	7				
5	T26905	<5	<5	15	<10	<3				
6	T26906	<5	<5	15	<10	7				
7	T26907	155	10	55	<10	13				
8	T26908	45	20	150	<10	8				
9	T26909	15	<5	100	<10	<3				
10	T26910	45	<5	95	<10	10				
11	T26911	15	<5	85	<10	8				
12	T26912	30	5	70	<10	<3				
13	T26913	25	5	70	<10	6				
14	T26914	35	10	65	<10	11				
15	T26915	<5	<5	15	<10	7				
16	T26916	10	10	55	<10	<3				
17	T26917	15	10	35	<10	3				
18	T26918	30	10	60	<10	7				
19	T26919	10	10	45	<10	14				
20	T26920	--	--	--	--	--	STD			
21	T26921	<5	5	20	<10	11				
22	T26922	<5	<5	15	<10	6				
23	T26923	55	10	90	<10	5				
24	T26924	90	20	100	<10	5				
25	T26925	20	<5	120	<10	3				

Results in ppm unless otherwise specified

- 1 - element present; but concentration too low to measure
- 2 - element concentration is below detection limit
- 3 - element not determined

AUTHORISED  
OFFICER


## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07216

17/07/90

0714

4 OF 7

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Pi	Sn				
1	T26926	15	5	115	<10	7				
2	T26927	15	5	105	<10	11				
3	T26928	10	<5	60	<10	7				
4	T26929	15	5	105	<10	4				
5	T26930	15	<5	100	<10	<3				
6	T26931	10	5	95	<10	6				
7	T26932	15	<5	165	<10	5				
8	T26933	15	<5	160	<10	3				
9	T26934	40	<5	130	<10	7				
10	T26935	30	<5	115	<10	3				
11	T26936	15	<5	110	<10	3				
12	T26937	5	<5	35	<10	4				
13	T26938	10	10	140	<10	<3				
14	T26939	5	5	45	<10	5				
15	T26940	-	-	-	-	-	STD			
16	T26941	<5	10	40	<10	4				
17	T26942	<5	10	45	<10	4				
18	T26943	5	10	50	<10	<3				
19	T26944	15	5	95	<10	3				
20	T26945	15	25	130	<10	7				
21	T26946	75	40	170	<10	7				
22	T26947	10	30	95	<10	3				
23	T26948	10	25	85	10	6				
24	T26949	10	50	70	<10	5				
25	T26950	15	<5	115	<10	3				

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER


0130

## ANALABS

396136

A Division of Inchcape Inspection and Testing Services Australia Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		95.1.08.07216				17/07/90	0714	5 OF 7	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn			
1	T26951	15	5	95	<10	<3			
2	T26952	20	5	75	<10	4			
3	T26953	15	10	70	<10	3			
4	T26954	25	15	100	<10	6			
5	T26955	10	10	50	<10	7			
6	T26956	10	5	40	<10	5			
7	T26957	15	5	75	<10	5			
8	T26958	10	10	80	10	<3			
9	T26959	15	35	70	<10	9			
10	T26960	-	-	-	-	-	STD		
11	T26961	40	30	270	10	<3			
12	T26962	35	<5	220	10	<3			
13	T26963	20	10	80	<10	5			
14	T26964	35	5	115	<10	6			
15	T26965	10	5	70	<10	5			
16	T26966	95	5	120	<10	6			
17	T26967	15	5	60	<10	5			
18	T26968	20	5	90	<10	6			
19	T26969	20	5	90	<10	<3			
20	T26970	95	10	245	<10	5			
21	T26971	90	15	230	<10	5			
22	T26972	25	<5	240	<10	<3			
23	T26973	220	15	140	<10	6			
24	T26974	70	10	160	<10	8			
25	T26975	270	15	125	<10	<3			

Results in ppm unless otherwise specified

T element present; but concentration too low to measure

M element concentration is below detection limit

N element not determined

AUTHORISED  
OFFICER*Gentris*

0130

## ANALABS

396137

A Division of Incharge Inspection and Testing Services Australia Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07216

17/07/90

0714

6 OF 7

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26976	40	20	145	<10	8				
2	T26977	105	45	150	<10	5				
3	T26978	40	20	100	<10	8				
4	T26979	30	40	135	<10	9				
5	T26981	95	20	150	10	6				
6	T26982	190	5	140	<10	6				
7	T26983	20	<5	185	<10	4				
8	T26984	35	5	105	<10	4				
9	T26985	10	5	55	<10	4				
10	T26986	60	25	165	<10	5				
11	T26987	55	<5	190	<10	4				
12	T26988	65	5	165	<10	5				
13	T26989	55	10	150	<10	8				
14	T26990	35	10	105	<10	4				
15	T26991	50	25	140	<10	6				
16	T26992	25	5	75	<10	3				
17	T26993	25	20	105	<10	8				
18	T26994	20	10	70	<10	3				
19	T26995	45	5	70	<10	3				
20	T26996	15	<5	75	<10	3				
21	T26997	5	<5	65	<10	8				
22	T26998	25	<5	80	<10	7				
23	T26999	10	5	65	<10	8				
24										
25										

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Jenkins*

# ANALABS

A Division of Incharge Inspection and Testing Services Australia Pty Ltd.

0137

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

		95.1.08.07216				17/07/90		0714		7 OF 7	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn					
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22	DETECTION	5	5	5	10	3					
23	UNITS	ppm	ppm	ppm	ppm	ppm					
24	METHOD	101	101	101	101	401					
25											

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER

*Genkins*

## NEUTRON ACTIVATION ANALYSIS

0135

NEUTRON ACTIVATION ANALYSIS REPORT

Date: 25-07-90

RGC TASMANIA SAMPLE Nos: 24286-24300, T26446-T26481, T26901-T26999

BECQUEREL JOB # 051

Page 1 of 16

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 24286	# 24287	# 24288	# 24289	# 24290	# 24291	# 24292	# 24293	# 24294	# 24295
ANTIMONY	.2	2.90	2.90	8.20	4.20	4.70	4.30	4.70	4.40	4.50	1.80
ARSENIC	2.0	25.00	9.40	15.00	13.00	17.00	42.00	16.00	29.00	23.00	12.00
BARIUM	100.0	530.0	470.0	740.0	960.0	1000.0	890.0	720.0	740.0	480.0	540.0
BROMINE	2.0	4.40	14.00	8.00	2.40	11.00	15.00	10.00	9.20	6.60	16.00
CERIUM	2.0	100.00	91.00	96.00	96.00	77.00	81.00	94.00	80.00	76.00	73.00
CAESIUM	1.0	3.60	3.80	7.00	7.50	8.40	6.30	6.20	10.00	12.00	10.00
CHROMIUM	5.0	55.0	41.0	61.0	70.0	120.0	71.0	76.0	280.0	180.0	250.0
COBALT	1.0	2.10	-1.00	5.80	2.40	3.50	3.70	3.70	7.20	5.30	10.00
EUROPIUM	.5	.89	.71	1.40	1.00	1.10	1.10	1.40	.95	1.30	.91
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.20	6.60	7.10	7.30	6.40	5.90	7.00	6.20	5.70	5.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.700	1.700	3.700	2.400	4.000	7.610	3.700	4.800	6.620	8.060
LANTHANUM	.5	56.90	50.60	52.80	52.40	42.00	44.00	50.20	40.00	39.00	37.00
LEAD	.2	.81	.66	.73	.70	.59	.60	.67	.57	.60	.58
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.100	1.500	2.800	3.300	3.300	3.200	3.000	3.700	2.800	3.000
RUBIDIUM	20.0	95.0	74.0	170.0	150.0	160.0	170.0	150.0	190.0	160.0	160.0
SAMARIUM	.20	8.30	7.20	7.90	7.80	6.60	7.30	8.10	6.70	7.40	6.50
SCANDIUM	.10	9.00	8.20	13.40	14.00	18.00	15.90	17.10	24.30	22.90	23.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.40	1.80	1.50	-1.00	1.60	1.20	1.80	2.00	1.70	1.70
THORIUM	.5	23.00	19.00	23.00	21.00	17.00	18.00	20.00	14.00	14.00	13.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.10	-2.00
URANIUM	2.0	3.80	3.70	3.60	4.10	3.50	4.10	4.70	3.00	3.60	-2.00
YTTERBIUM	.5	3.90	3.00	3.60	3.50	3.10	3.10	3.40	2.90	3.20	3.10
ZINC	100.0	110.0	-100.0	120.0	-100.0	100.0	-100.0	120.0	120.0	100.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0133

BECQUEREL JOB # 051

Page 2 of 16

ELEMENT	DL	# 24296	# 24297	# 24298	# 24299	# 24300	# 26447	# 26448	# 26449	# 26450	# 26451
ANTIMONY	.2	1.70	1.10	3.00	1.10	-.20	.88	3.30	1.60	.89	.88
ARSENIC	2.0	8.50	4.90	26.00	13.00	2.80	4.10	10.00	2.20	-2.00	-2.00
BARIUM	100.0	680.0	740.0	670.0	390.0	510.0	210.0	360.0	400.0	-100.0	100.0
BROMINE	2.0	5.30	2.80	14.00	-2.00	-2.00	60.00	-2.00	-2.00	2.70	-2.00
CERIUM	2.0	78.00	96.00	81.00	52.00	68.00	24.00	80.00	96.00	25.00	15.00
CAESIUM	1.0	10.00	4.20	8.80	2.80	17.00	1.80	9.10	8.20	1.20	-1.00
CHROMIUM	5.0	270.0	18.0	140.0	230.0	460.0	250.0	300.0	330.0	260.0	200.0
COBALT	1.0	17.00	1.20	2.20	26.00	24.00	8.30	29.00	18.00	2.40	-1.00
EUROPIUM	.5	1.00	1.00	1.20	1.50	1.20	-.50	1.60	1.40	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	49.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.90	7.30	6.50	4.00	8.60	3.40	6.10	7.70	4.30	4.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.730	1.700	5.130	5.550	4.200	4.000	5.270	3.000	1.200	.620
LANTHANUM	.5	39.00	54.20	41.00	25.00	36.00	12.00	41.00	50.00	12.00	7.90
LUTETIUM	.2	.62	.66	.64	.60	.47	.26	.69	.67	.22	.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.500	3.000	3.200	1.800	1.800	.650	2.600	2.700	.620	.330
RUBIDIUM	20.0	170.0	130.0	170.0	88.0	200.0	35.0	150.0	140.0	25.0	22.0
SAMARIUM	.20	7.00	7.70	7.40	7.10	7.60	2.60	8.90	8.90	2.30	1.40
SCANDIUM	.10	26.00	11.50	22.70	29.60	11.80	10.40	25.30	17.00	3.80	1.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.60	1.20	1.60	3.60	1.20	2.80	1.80	-1.00	-1.00
THORIUM	.5	14.00	22.00	15.00	7.40	15.00	5.70	13.00	14.00	2.60	2.70
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	2.20	-2.00	-2.00	-2.00	5.50	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.10	4.10	2.40	-2.00	2.20	-2.00	2.90	3.00	-2.00	-2.00
YTTERBIUM	.5	3.10	3.40	3.30	3.40	2.10	1.40	3.60	3.40	1.00	1.00
ZINC	100.0	130.0	-100.0	110.0	200.0	140.0	-100.0	380.0	140.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW  
Telephone: (02) 543 2644  
Facsimile: (02) 543 2655  
P.O. BOX 93  
MENAİ, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0149

BECQUEREL JOB # 051

Page 3 of 16

ELEMENT	DL	# 26452	# 26453	# 26454	# 26455	# 26456	# 26457	# 26458	# 26459	# 26460	# 26461
ANTIMONY	.2	1.00	1.80	1.40	2.30	3.50	1.20	1.00	.86	.21	1.20
ARSENIC	2.0	2.60	2.60	22.00	22.00	21.00	-2.00	-2.00	-2.00	2.30	-2.00
BARIUM	100.0	480.0	400.0	410.0	440.0	500.0	320.0	600.0	570.0	540.0	790.0
BROMINE	2.0	38.00	6.80	-2.00	-2.00	-2.00	4.60	-2.00	6.70	-2.00	4.90
CERIUM	2.0	32.00	86.00	94.00	77.00	88.00	130.00	120.00	100.00	69.00	65.00
CAESIUM	1.0	3.10	12.00	7.30	10.00	11.00	6.40	3.30	2.80	18.00	3.90
CHROMIUM	5.0	666.0	260.0	290.0	310.0	280.0	80.0	12.0	27.0	460.0	13.0
COBALT	1.0	28.00	1.80	41.00	40.00	37.00	2.30	-1.00	-1.00	23.00	-1.00
EUROPIUM	.5	.57	1.30	1.60	1.20	1.50	1.20	.71	.58	1.10	1.00
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	54.0	-5.0
HAFNIUM	1.0	3.90	5.80	6.30	5.30	6.30	5.90	4.00	4.10	8.70	4.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.170	.910	4.200	5.250	4.500	.600	.580	.420	4.200	.630
LANTHANUM	.5	16.00	44.00	46.00	38.00	44.00	70.30	67.50	60.80	36.00	37.00
LUTETIUM	.2	.31	.65	.64	.58	.67	.76	.52	.49	.45	.43
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.200	3.300	2.400	2.900	3.200	2.100	3.200	2.400	1.900	3.000
RUBIDIUM	20.0	56.0	150.0	130.0	160.0	170.0	96.0	150.0	99.0	200.0	130.0
SAMARIUM	.20	3.40	7.70	10.00	7.60	9.10	10.00	7.20	6.20	7.70	5.30
SCANDIUM	.10	21.70	19.20	22.20	23.50	24.40	8.20	2.60	3.60	11.90	10.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.20	2.40	1.80	1.40	2.30	-1.00	1.80	3.30	-1.00
THORIUM	.5	9.50	14.00	14.00	13.00	15.00	36.00	27.00	23.00	15.00	11.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	4.40	-2.00
URANIUM	2.0	-2.00	2.30	-2.00	2.70	3.20	5.40	4.60	5.30	2.40	-2.00
YTTERBIUM	.5	1.60	3.30	3.30	3.10	3.60	3.80	2.50	2.50	2.30	2.10
ZINC	100.0	140.0	-100.0	270.0	220.0	300.0	-100.0	-100.0	-100.0	100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

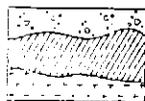
NEUTRON ACTIVATION ANALYSIS

013.

BECQUEREL JOB # 051

Page 4 of 16

ELEMENT	DL	# 26462	# 26463	# 26464	# 26465	# 26466	# 26467	# 26468	# 26469	# 26470	# 26471
ANTIMONY	.2	.74	1.20	2.70	.86	1.70	20.40	7.30	2.60	4.10	2.10
ARSENIC	2.0	-2.00	2.80	13.00	-2.00	6.50	72.00	45.00	2.10	56.00	8.70
BARIUM	100.0	620.0	600.0	640.0	530.0	520.0	650.0	510.0	890.0	630.0	490.0
BROMINE	2.0	4.50	4.70	6.00	2.30	6.60	11.00	3.90	-2.00	10.00	9.00
CERIUM	2.0	78.00	73.00	75.00	51.00	71.00	63.00	110.00	66.00	68.00	94.00
CAESIUM	1.0	3.00	3.50	3.20	2.80	3.70	6.10	4.00	6.10	11.00	4.20
CHROMIUM	5.0	26.0	6.8	27.0	-5.0	8.8	140.0	31.0	30.0	200.0	77.0
COBALT	1.0	-1.00	1.40	5.80	1.70	2.20	8.30	3.10	1.20	15.00	1.50
EUROPIUM	.5	1.40	1.00	1.50	.65	1.10	.87	1.50	1.60	1.50	1.20
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.00	5.40	5.20	4.40	5.20	3.90	5.80	5.70	5.70	6.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	.650	2.000	6.120	.950	2.100	5.520	4.300	1.100	11.300	1.800
LANTHANUM	.5	43.00	41.00	44.00	29.00	38.00	31.00	66.60	37.00	34.00	51.20
LUTETIUM	.2	.61	.62	.61	.44	.55	.54	.47	.50	.63	.65
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.500	2.900	2.800	1.900	2.700	3.000	2.400	3.500	3.400	1.800
RUBIDIUM	20.0	110.0	120.0	130.0	76.0	97.0	120.0	110.0	160.0	180.0	110.0
SAMARIUM	.20	7.40	5.90	6.30	4.40	6.00	5.50	8.20	6.70	7.60	7.60
SCANDIUM	.10	8.00	8.70	10.00	6.60	8.00	25.00	9.50	13.40	26.20	9.40
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.10	-1.00	1.10	1.20	-1.00	1.40	-1.00	1.40	-1.00
THORIUM	.5	13.00	15.00	16.00	11.00	13.00	12.00	19.00	10.00	12.00	17.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	2.30	4.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	3.10	4.30	2.00	-2.00	2.20	3.90	-2.00	-2.00	2.30
YTTERBIUM	.5	3.00	2.90	3.20	2.20	2.80	2.70	2.30	2.70	3.40	3.50
ZINC	100.0	-100.0	-100.0	170.0	-100.0	-100.0	-100.0	-100.0	-100.0	230.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BQ**

**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0122

BECQUEREL JOB # 051

Page 5 of 16

ELEMENT	DL	# 26472	# 26473	# 26474	# 26475	# 26476	# 26477	# 26478	# 26479	# 26480	# 26481
ANTIMONY	.2	6.90	7.30	3.00	2.30	1.70	3.10	2.30	2.60	-2.20	4.40
ARSENIC	2.0	18.00	20.00	7.70	18.00	19.00	19.00	16.00	6.50	2.90	19.00
BARIUM	100.0	630.0	630.0	450.0	500.0	570.0	580.0	380.0	420.0	420.0	560.0
BROMINE	2.0	4.40	12.00	3.80	11.00	4.70	3.30	2.80	7.10	-2.00	16.00
CERIUM	2.0	75.00	73.00	70.00	69.00	72.00	68.00	73.00	77.00	70.00	58.00
CAESIUM	1.0	13.00	11.00	11.00	11.00	12.00	13.00	10.00	11.00	17.00	10.00
CHROMIUM	5.0	270.0	280.0	260.0	190.0	350.0	330.0	340.0	310.0	460.0	250.0
COBALT	1.0	18.00	7.40	10.00	16.00	11.00	6.00	3.70	15.00	24.00	5.80
EUROPIUM	.5	1.20	1.40	1.00	1.20	1.30	1.20	1.10	1.40	1.00	1.00
GOLD, ppb	5.0	-5.0	-5.0	6.9	-5.0	-5.0	-5.0	-5.0	-5.0	55.0	-5.0
HAFNIUM	1.0	6.10	5.90	5.90	5.80	6.20	6.00	6.40	6.90	8.60	6.10
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.310	5.440	4.700	6.790	8.080	5.440	7.690	8.100	4.300	8.570
LANTHANUM	.5	39.00	38.00	37.00	36.00	38.00	34.00	36.00	37.00	37.00	29.00
LUTETIUM	.2	.66	.57	.58	.67	.68	.67	.72	.72	.42	.57
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.400	3.400	3.000	3.000	3.400	3.400	2.700	2.400	2.200	3.300
RUBIDIUM	20.0	250.0	190.0	170.0	180.0	180.0	180.0	160.0	150.0	210.0	190.0
SAMARIUM	.20	7.60	7.00	6.50	7.30	8.00	7.60	7.40	7.60	7.60	5.80
SCANDIUM	.10	33.00	25.90	28.70	24.00	28.50	27.80	32.50	30.80	12.00	26.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.00	1.10	1.20	2.00	1.70	2.00	1.80	1.40	3.50	1.40
THORIUM	.5	19.00	14.00	18.00	14.00	14.00	14.00	16.00	16.00	14.00	20.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	4.10	-2.00
URANIUM	2.0	-2.00	3.60	-2.00	2.50	2.90	2.20	2.60	-2.00	4.40	3.40
YTTERBIUM	.5	3.50	3.10	3.10	3.60	3.60	3.60	3.80	3.70	2.30	3.10
ZINC	100.0	260.0	190.0	190.0	160.0	190.0	130.0	180.0	200.0	110.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

0145

BECQUEREL JOB # 051

Page 6 of 16

ELEMENT	DL	# 26901	# 26902	# 26903	# 26904	# 26905	# 26906	# 26907	# 26908	# 26909	# 26910
ANTIMONY	.2	7.70	4.40	1.00	1.20	1.00	1.90	3.40	2.20	2.50	1.30
ARSENIC	2.0	73.00	28.00	2.70	2.40	-2.00	2.70	10.00	8.30	10.00	8.50
BARIUM	100.0	730.0	890.0	640.0	960.0	730.0	820.0	560.0	460.0	430.0	440.0
BROMINE	2.0	7.70	6.80	2.40	2.00	-2.00	2.20	15.00	4.30	5.90	7.70
CERIUM	2.0	110.00	120.00	41.00	97.00	92.00	84.00	90.00	74.00	83.00	83.00
CAESIUM	1.0	4.30	4.70	2.20	3.80	3.60	5.10	14.00	8.00	7.20	8.80
CHROMIUM	5.0	120.0	58.0	25.0	21.0	29.0	150.0	230.0	240.0	220.0	200.0
COBALT	1.0	1.50	2.00	-1.00	-1.00	-1.00	-1.00	16.00	34.00	17.00	27.00
EUROPIUM	.5	1.20	1.80	-.50	.67	.82	.54	.86	1.30	1.40	1.30
GOLD, ppb	5.0	7.3	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.30	7.50	3.80	4.10	3.70	4.80	6.50	5.50	6.10	6.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.000	5.200	.760	.500	.480	.480	2.600	6.630	5.780	6.490
LANTHANUM	.5	59.70	64.60	23.00	56.90	56.50	46.00	52.00	35.00	42.00	43.00
LEAD	.2	.60	.74	.40	.51	.54	.49	.59	.61	.62	.61
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.500	3.200	2.200	2.900	2.800	3.700	3.700	2.700	3.000	2.900
RUBIDIUM	20.0	130.0	150.0	98.0	140.0	130.0	180.0	180.0	150.0	150.0	160.0
SAMARIUM	.20	6.70	10.00	2.60	6.10	5.90	5.10	5.40	7.80	8.00	8.10
SCANDIUM	.10	17.20	16.50	2.30	3.40	3.10	17.10	23.10	26.40	23.80	22.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.80	1.40	-1.00	1.20	1.20	-1.00	1.10	1.40	1.70	1.90
THORIUM	.5	17.00	21.00	14.00	25.00	20.00	14.00	20.00	12.00	13.00	14.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.80	4.20	4.10	5.80	5.90	5.50	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	3.20	3.80	2.20	2.80	2.70	2.60	3.00	3.20	3.30	3.30
ZINC	100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	110.0	210.0	130.0	140.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0144

JEREL JOB # 051

Page 7 of 16

ELEMENT	DL	# 26911	# 26912	# 26913	# 26914	# 26915	# 26916	# 26917	# 26918	# 26919	# 26920
ANTIMONY	.2	.71	1.30	1.50	1.90	.63	1.10	1.10	1.20	2.20	-.20
ARSENIC	2.0	8.10	-2.00	4.00	12.00	-2.00	12.00	7.10	2.50	4.20	2.60
BARIUM	100.0	520.0	510.0	500.0	510.0	450.0	420.0	230.0	140.0	560.0	570.0
BROMINE	2.0	5.80	3.00	7.60	5.30	-2.00	5.30	8.10	6.00	6.50	-2.00
CERIUM	2.0	81.00	89.00	88.00	98.00	99.00	72.00	84.00	36.00	41.00	67.00
CAESIUM	1.0	11.00	11.00	10.00	10.00	2.80	3.50	1.90	-1.00	2.50	18.00
CHROMIUM	5.0	180.0	210.0	180.0	230.0	24.0	150.0	170.0	1560.0	320.0	470.0
COBALT	1.0	11.00	10.00	12.00	5.30	-1.00	11.00	7.20	30.00	10.00	23.00
EUROPTIUM	.5	1.30	1.20	1.20	1.20	1.00	1.00	.86	.52	.76	.92
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	94.0
HAFNIUM	1.0	6.20	6.60	6.90	7.00	6.60	5.40	5.00	3.10	6.20	8.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.080	3.800	4.300	4.400	.490	4.600	1.700	2.700	2.400	4.300
LANTHANUM	.5	42.00	46.00	46.00	49.00	53.90	38.00	45.00	19.00	21.00	37.00
LUTETIUM	.2	.60	.62	.57	.69	.67	.50	.49	.28	.52	.44
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.400	3.500	3.400	3.700	3.000	2.000	1.800	.790	1.700	1.800
RUBIDIUM	20.0	180.0	180.0	180.0	190.0	140.0	84.0	93.0	53.0	110.0	220.0
STRONTIUM	.20	7.60	7.90	7.80	8.50	6.60	5.90	6.00	2.80	3.70	7.40
SCANDIUM	.10	23.90	24.70	21.70	20.10	7.10	20.60	10.50	11.80	11.40	11.90
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.70	2.10	-1.00	1.50	1.20	-1.00	1.60	1.10	1.30	3.00
THORIUM	.5	13.00	15.00	14.00	15.00	20.00	11.00	12.00	7.10	12.00	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	3.20
URANIUM	2.0	-2.00	2.20	3.00	-2.00	3.90	-2.00	-2.00	2.10	-2.00	5.50
YTTERBIUM	.5	3.10	3.40	3.20	3.60	3.40	2.70	2.50	1.30	2.60	2.30
ZINC	100.0	110.0	110.0	120.0	120.0	-100.0	-100.0	-100.0	110.0	-100.0	100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0143

BECQUEREL JOB # 051

Page 8 of 16

ELEMENT	DL	# 26921	# 26922	# 26923	# 26924	# 26925	# 26926	# 26927	# 26928	# 26929	# 26930
ANTIMONY	.2	1.20	.78	1.20	1.20	1.10	.67	1.20	1.10	1.20	.90
ARSENIC	2.0	-2.00	2.40	6.00	4.80	5.10	2.40	5.60	4.60	5.20	-2.00
BARIUM	100.0	180.0	140.0	450.0	470.0	420.0	200.0	330.0	330.0	360.0	360.0
BROMINE	2.0	-2.00	7.40	32.00	36.00	44.00	51.00	62.00	120.00	70.00	34.00
CERIUM	2.0	45.00	31.00	38.00	27.00	25.00	15.00	29.00	29.00	31.00	8.80
CAESIUM	1.0	2.10	1.10	2.00	2.40	2.40	-1.00	1.00	2.10	2.40	1.10
CHROMIUM	5.0	140.0	280.0	440.0	623.0	668.0	526.0	554.0	440.0	546.0	210.0
COBALT	1.0	1.40	1.40	27.00	28.00	34.00	48.00	26.00	11.00	26.00	19.00
EUROPIUM	.5	.63	-.50	.64	.65	.59	-.50	.62	-.50	.76	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.30	4.90	4.00	3.50	2.90	2.00	3.50	3.70	4.10	3.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.000	1.400	5.820	6.930	8.140	5.870	5.660	4.500	6.120	5.570
LANTHANUM	.5	23.00	17.00	19.00	18.00	13.00	7.00	16.00	16.00	16.00	3.10
LUTETIUM	.2	.38	.31	.37	.29	.26	-.20	.34	.28	.34	.26
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.100	.450	1.200	1.100	.520	.240	1.200	.770	1.200	.890
RUBIDIUM	20.0	55.0	41.0	61.0	53.0	50.0	40.0	56.0	44.0	55.0	51.0
SAMARIUM	.20	3.60	2.40	3.50	3.70	3.10	1.60	3.20	2.80	3.50	1.10
SCANDIUM	.10	4.50	3.30	23.80	21.90	27.60	18.50	20.30	13.00	23.30	31.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	1.10	-1.00	-1.00	1.40	-1.00	-1.00	1.00
THORIUM	.5	6.90	7.10	9.40	8.70	7.60	5.20	9.20	7.30	9.10	6.90
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.90	1.60	1.80	1.50	1.50	.79	1.60	1.40	1.90	1.40
ZINC	100.0	-100.0	-100.0	150.0	130.0	180.0	140.0	140.0	100.0	160.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

NEUTRON ACTIVATION ANALYSIS

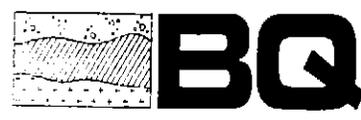
0146

BECQUEREL JOB # 051

Page 9 of 16

ELEMENT	DL	# 26931	# 26932	# 26933	# 26934	# 26935	# 26936	# 26937	# 26938	# 26939	# 26940
ANTIMONY	.2	1.30	.42	.80	1.60	1.50	.86	.82	1.40	1.10	.41
ARSENIC	2.0	4.60	-2.00	2.80	3.10	5.30	2.40	3.70	4.10	3.60	2.80
BARIUM	100.0	330.0	110.0	360.0	370.0	340.0	410.0	120.0	310.0	330.0	530.0
BROMINE	2.0	70.00	35.00	21.00	12.00	37.00	57.00	9.40	29.00	20.00	-2.00
CERIUM	2.0	35.00	7.00	17.00	68.00	26.00	35.00	23.00	32.00	40.00	63.00
CAESIUM	1.0	2.90	-1.00	1.60	-1.00	2.20	2.40	-1.00	1.70	1.80	17.00
CHROMIUM	5.0	440.0	310.0	290.0	110.0	792.0	577.0	300.0	1000.0	490.0	440.0
COBALT	1.0	11.00	27.00	26.00	73.00	24.00	20.00	2.40	19.00	6.20	20.00
EUROPIUM	.5	-.50	-.50	.72	.78	.54	.69	.52	.60	.68	1.10
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	73.0
HAFNIUM	1.0	4.30	3.20	2.50	5.00	4.10	4.20	4.40	3.10	4.10	7.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.100	6.010	6.480	9.020	6.140	5.360	1.500	4.700	2.400	4.100
LANTHANUM	.5	18.00	4.80	11.00	21.00	14.00	20.00	11.00	18.00	21.00	35.00
LITHIUM	.2	.34	-.20	.22	.42	.31	.38	.26	.34	.33	.46
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.000	-.200	1.500	.590	.750	1.100	.390	.890	1.000	1.700
RUBIDIUM	20.0	69.0	-20.0	94.0	64.0	37.0	70.0	21.0	35.0	54.0	190.0
SAMARIUM	.20	3.20	1.30	2.60	4.80	3.20	3.90	2.60	4.30	3.80	7.40
SCANDIUM	.10	13.70	15.60	33.40	35.80	20.50	21.50	3.60	21.90	8.20	11.40
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.00	-1.00	1.10	1.50	-1.00	2.60	-1.00	1.20	1.20	5.50
THORIUM	.5	8.40	2.90	4.50	12.00	7.60	11.00	3.20	7.80	8.10	14.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	5.50
URANIUM	2.0	-2.00	-2.00	-2.00	2.20	-2.00	-2.00	-2.00	-2.00	2.70	2.30
YTTERBIUM	.5	1.60	.75	1.40	2.20	1.60	1.70	1.30	1.90	1.60	2.10
ZINC	100.0	120.0	180.0	200.0	160.0	180.0	190.0	-100.0	220.0	-100.0	130.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW  
 Telephone: (02) 543 2644  
 Facsimile: (02) 543 2655  
 P.O. BOX 93  
 MENAI, NSW, 2234

N E U T R O N      A C T I V A T I O N      A N A L Y S I S

0147

BECQUEREL JOB # 051

Page 10 of 16

ELEMENT	DL	# 26941	# 26942	# 26943	# 26944	# 26945	# 26946	# 26947	# 26948	# 26949	# 26950
ANTIMONY	.2	1.00	1.10	1.00	1.00	1.20	1.20	.73	.57	.82	.70
ARSENIC	2.0	2.50	4.80	4.40	5.30	4.60	2.40	-2.00	2.80	-2.00	2.90
BARIUM	100.0	190.0	1800.0	130.0	530.0	850.0	280.0	180.0	-100.0	200.0	180.0
BROMINE	2.0	22.00	4.10	35.00	4.50	25.00	20.00	-2.00	14.00	22.00	2.60
CERIUM	2.0	40.00	95.00	40.00	58.00	33.00	18.00	35.00	32.00	19.00	20.00
CAESIUM	1.0	1.70	7.50	2.10	1.70	-1.00	3.00	1.80	1.40	1.90	3.40
CHROMIUM	5.0	688.0	120.0	818.0	639.0	536.0	230.0	310.0	569.0	554.0	120.0
COBALT	1.0	5.00	-1.00	8.20	23.00	29.00	23.00	26.00	30.00	29.00	25.00
EUROPIUM	.5	-.50	1.40	-.50	1.10	1.20	.56	1.20	.54	.53	1.00
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.00	8.50	3.40	3.30	2.50	2.50	3.20	2.20	1.90	2.70
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	1.500	2.700	1.900	5.590	5.780	7.690	4.300	4.900	4.700	5.110
LANTHANUM	.5	21.00	51.80	23.00	30.00	17.00	9.40	18.00	16.00	10.00	11.00
LUTETIUM	.2	.34	.77	.26	.33	.32	.24	.28	.26	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.710	2.700	.810	1.100	1.600	-.200	.390	.740	-.200	.390
RUBIDIUM	20.0	36.0	200.0	39.0	58.0	28.0	36.0	-20.0	36.0	32.0	-20.0
ROSENIUM	.20	3.20	8.20	3.10	6.00	3.90	2.80	4.10	3.00	2.30	2.90
SCANDIUM	.10	5.90	11.90	6.00	22.60	27.60	30.90	25.20	23.80	23.80	19.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-10.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	2.60	-1.00	2.30	2.50	-1.00	2.70	-1.00	1.70	-1.00
THORIUM	.5	6.00	22.00	6.00	7.90	5.80	4.40	5.20	5.40	3.40	3.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	4.20	-2.00	2.40	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.70	3.60	1.30	2.30	1.50	1.30	1.60	1.50	1.10	1.20
ZINC	100.0	-100.0	100.0	-100.0	190.0	230.0	270.0	230.0	180.0	190.0	210.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0146

BECQUEREL JOB # 051

Page 11 of 16

ELEMENT	DL	# 26951	# 26952	# 26953	# 26954	# 26955	# 26956	# 26957	# 26958	# 26959	# 26960
ANTIMONY	.2	1.00	1.00	.83	.85	.70	1.00	.94	.39	.70	.37
ARSENIC	2.0	4.30	4.60	-2.00	-2.00	-2.00	-2.00	2.60	2.70	2.20	2.80
BARIUM	100.0	380.0	340.0	340.0	310.0	250.0	370.0	190.0	260.0	330.0	480.0
BROMINE	2.0	63.00	33.00	16.00	11.00	12.00	7.40	7.70	7.40	7.80	-2.00
CERIUM	2.0	27.00	29.00	33.00	29.00	20.00	22.00	19.00	21.00	20.00	68.00
CAESIUM	1.0	1.80	2.80	1.80	2.10	2.50	2.80	1.90	1.80	1.50	18.00
CHROMIUM	5.0	726.0	1180.0	928.0	901.0	999.0	1080.0	779.0	795.0	921.0	460.0
COBALT	1.0	25.00	36.00	30.00	37.00	23.00	17.00	38.00	41.00	34.00	23.00
EUROPIUM	.5	.51	-.50	.67	.63	.53	.85	.55	-.50	.54	.81
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	58.0
HAFNIUM	1.0	2.70	3.70	3.40	3.80	2.60	3.10	1.90	2.10	2.90	8.80
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.800	4.800	3.800	3.700	3.200	2.300	4.700	5.170	4.300	4.200
LANTHANUM	.5	14.00	13.00	18.00	17.00	11.00	11.00	9.40	10.00	11.00	37.00
LUTETIUM	.2	.31	.27	.28	.25	.22	.22	.21	-.20	.25	.46
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
ROSENIUM, %	.2	1.000	1.000	1.000	.950	.880	1.100	.950	.860	1.000	2.000
RUBIDIUM	20.0	36.0	49.0	60.0	43.0	56.0	29.0	41.0	57.0	44.0	200.0
SAMARIUM	.20	3.00	2.80	3.40	3.20	2.30	2.20	2.10	2.60	2.70	7.40
SCANDIUM	.10	22.50	20.60	19.30	25.10	19.00	21.70	31.40	34.70	31.50	11.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.00	-1.00	1.30	1.20	-1.00	2.10	1.00	1.40	-1.00	3.70
THORIUM	.5	7.90	8.80	8.30	7.70	5.70	6.70	4.70	4.40	6.40	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	4.90
URANIUM	2.0	-2.00	-2.00	2.20	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	5.00
YTTERBIUM	.5	1.40	1.50	1.20	1.40	1.30	1.20	1.10	1.30	1.40	2.20
ZINC	100.0	170.0	140.0	120.0	190.0	120.0	-100.0	150.0	170.0	170.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

0129

BECQUEREL JOB # 051

Page 12 of 16

ELEMENT	DL	# 26961	# 26962	# 26963	# 26964	# 26965	# 26966	# 26967	# 26968	# 26969	# 26970
ANTIMONY	.2	1.40	1.00	.67	.76	-.20	.76	.91	.91	.65	.64
ARSENIC	2.0	13.00	14.00	2.80	3.90	2.70	-2.00	4.10	5.30	4.20	4.20
BARIUM	100.0	610.0	570.0	290.0	410.0	400.0	140.0	350.0	260.0	330.0	440.0
BROMINE	2.0	-2.00	-2.00	10.00	4.90	-2.00	-2.00	27.00	83.00	45.00	21.00
CERIUM	2.0	21.00	20.00	18.00	28.00	38.00	44.00	51.00	36.00	33.00	44.00
CAESIUM	1.0	1.80	1.50	1.50	2.60	3.20	28.00	1.70	3.00	2.50	2.20
CHROMIUM	5.0	1320.0	1050.0	713.0	490.0	360.0	170.0	691.0	946.0	801.0	649.0
COBALT	1.0	78.00	89.00	38.00	31.00	39.00	32.00	78.00	33.00	25.00	47.00
EUROPIUM	.5	.85	.77	-.50	.66	1.00	1.00	-.50	1.20	.86	.53
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	1.20	1.70	2.60	3.10	3.00	3.20	4.20	4.20	3.60	3.20
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	10.000	9.370	4.200	3.900	4.200	6.090	5.900	6.700	6.640	6.490
LANTHANUM	.5	12.00	9.00	10.00	14.00	19.00	23.00	11.00	25.00	23.00	14.00
LEAD	.2	.31	-.20	-.20	.22	.32	.57	.22	.33	.33	.29
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.560	.890	1.000	1.000	.670	1.700	1.100	1.000	1.300	1.000
RUBIDIUM	20.0	45.0	55.0	42.0	25.0	56.0	140.0	55.0	56.0	63.0	56.0
SAMARIUM	.20	4.00	3.40	2.10	2.90	4.40	5.70	2.60	5.70	4.60	3.30
SCANDIUM	.10	74.10	64.80	25.80	30.90	28.70	34.50	31.20	25.30	29.10	33.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	2.00	3.60	2.00	2.20	1.10	-1.00	-1.00	1.80
THORIUM	.5	2.50	3.70	5.50	5.30	5.60	7.70	8.40	10.00	8.20	6.40
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	2.50	2.20	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.80	1.40	1.00	1.30	1.90	3.20	1.50	1.80	1.80	1.60
ZINC	100.0	480.0	370.0	160.0	230.0	180.0	230.0	130.0	150.0	130.0	200.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0159

BECQUEREL JOB # 051

Page 13 of 16

ELEMENT	DL	# 26971	# 26972	# 26973	# 26974	# 26975	# 26976	# 26977	# 26978	# 26979	# 26980
ANTIMONY	.2	1.50	1.10	2.00	1.60	1.70	1.20	2.60	4.90	2.60	-.20
ARSENIC	2.0	10.00	4.80	10.00	15.00	15.00	19.00	55.00	52.00	99.00	2.40
BARIUM	100.0	340.0	210.0	460.0	290.0	230.0	120.0	390.0	470.0	480.0	560.0
BROMINE	2.0	9.30	20.00	27.00	4.40	-2.00	17.00	8.80	28.00	8.40	-2.00
CERIUM	2.0	38.00	27.00	47.00	86.00	60.00	43.00	48.00	72.00	57.00	66.00
CAESIUM	1.0	2.10	2.30	5.70	5.10	4.20	1.50	5.70	6.40	3.90	17.00
CHROMIUM	5.0	220.0	77.0	76.0	190.0	220.0	120.0	190.0	210.0	150.0	460.0
COBALT	1.0	45.00	39.00	24.00	48.00	30.00	30.00	8.40	2.90	19.00	22.00
EUROPIUM	.5	.90	.90	.94	1.70	.77	1.30	.63	1.00	.51	.83
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	56.0
HAFNIUM	1.0	2.70	2.60	4.60	6.50	4.50	3.00	5.70	5.20	6.00	8.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	8.230	9.200	7.460	7.950	5.560	8.570	6.380	5.730	7.430	4.300
LANTHANUM	.5	15.00	15.00	24.00	40.00	31.00	23.00	24.00	38.00	27.00	36.00
LUTETIUM	.2	.39	.36	.63	.73	.44	.48	.53	.49	.54	.48
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.400	1.100	2.700	1.700	2.000	1.000	2.800	2.700	2.900	1.900
RUBIDIUM	20.0	59.0	60.0	130.0	100.0	120.0	21.0	160.0	180.0	160.0	200.0
SMITHIUM	.20	4.10	3.90	6.00	10.00	6.30	5.90	4.50	6.60	5.90	7.60
SCANDIUM	.10	40.70	34.50	25.30	30.50	23.60	34.70	22.80	20.80	20.90	11.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	2.30	-1.00	2.60	1.60	-1.00	1.50	2.30	2.00	3.70
THORIUM	.5	6.40	6.10	12.00	11.00	10.00	5.00	12.00	12.00	16.00	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	5.30
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	2.70	-2.00	4.10	4.40	6.10	4.60
YTTERBIUM	.5	2.00	2.00	3.30	3.80	2.20	2.70	2.70	2.70	3.00	2.20
ZINC	100.0	350.0	330.0	180.0	220.0	170.0	220.0	210.0	150.0	190.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



BECQUEREL  
LABORATORIES

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0154

BECQUEREL JOB # 051

Page 14 of 16

ELEMENT	DL	# 26981	# 26982	# 26983	# 26984	# 26985	# 26986	# 26987	# 26988	# 26989	# 26990
ANTIMONY	.2	1.10	1.10	.79	1.00	.93	.87	.94	1.20	1.00	4.20
ARSENIC	2.0	37.00	67.00	4.00	3.40	-2.00	6.80	4.20	8.50	7.30	12.00
BARIUM	100.0	330.0	380.0	340.0	240.0	250.0	450.0	340.0	330.0	390.0	270.0
BROMINE	2.0	60.00	25.00	17.00	22.00	8.60	17.00	19.00	22.00	23.00	21.00
CERIUM	2.0	25.00	46.00	25.00	27.00	24.00	59.00	73.00	59.00	49.00	25.00
CAESIUM	1.0	2.50	2.30	2.50	2.30	1.70	6.50	7.40	8.90	5.40	3.60
CHROMIUM	5.0	250.0	130.0	140.0	539.0	534.0	390.0	360.0	340.0	470.0	3120.0
COBALT	1.0	25.00	28.00	34.00	29.00	14.00	26.00	21.00	26.00	30.00	31.00
EUROPIUM	.5	.54	.72	.75	.61	-.50	.91	1.00	.71	1.10	.54
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	5.10	4.80	2.90	2.90	3.80	5.10	6.00	5.40	4.30	2.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	8.160	11.000	7.260	4.300	2.400	5.530	6.010	6.360	7.180	6.210
LANTHANUM	.5	16.00	24.00	13.00	15.00	13.00	32.00	39.00	30.00	25.00	13.00
LUTETIUM	.2	.38	.47	.37	.22	.25	.41	.58	.44	.43	.27
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NIOSIUM, %	.2	1.100	1.600	1.700	.930	.890	2.200	2.400	2.700	2.100	1.100
RUBIDIUM	20.0	81.0	100.0	110.0	47.0	40.0	120.0	130.0	160.0	120.0	63.0
SAMARIUM	.20	2.60	5.10	3.20	2.80	2.20	5.80	7.10	5.60	5.40	2.90
SCANDIUM	.10	17.40	18.80	32.60	22.30	10.80	23.40	23.10	26.10	27.40	17.70
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.10	1.20	-1.00	-1.00	-1.00	1.50	1.90	1.20	2.10	-1.00
THORIUM	.5	11.00	10.00	6.40	6.90	4.30	11.00	13.00	11.00	10.00	5.80
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.10	3.80	-2.00	-2.00	-2.00	2.10	-2.00	2.30	-2.00	-2.00
YTTERBIUM	.5	1.90	2.70	2.20	1.40	1.20	2.40	2.90	2.30	2.30	1.30
ZINC	100.0	190.0	180.0	250.0	170.0	110.0	230.0	260.0	240.0	220.0	170.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

000100

**NEUTRON ACTIVATION ANALYSIS**

0154

BECQUEREL JOB # 051

Page 15 of 16

ELEMENT	DL	# 26991	# 26992	# 26993	# 26994	# 26995	# 26996	# 26997	# 26998	# 26999	# 26447x2
ANTIMONY	.2	1.10	1.30	1.30	1.20	1.30	1.00	1.10	1.00	1.10	.93
ARSENIC	2.0	12.00	4.20	3.80	4.00	5.10	2.70	4.00	5.70	4.90	3.70
BARIUM	100.0	410.0	350.0	370.0	630.0	110.0	520.0	380.0	550.0	420.0	250.0
BROMINE	2.0	14.00	16.00	11.00	23.00	18.00	21.00	33.00	59.00	73.00	58.00
CERIUM	2.0	59.00	18.00	58.00	35.00	26.00	38.00	29.00	28.00	29.00	22.00
CAESIUM	1.0	7.60	1.20	1.60	1.70	2.40	1.60	3.10	1.60	1.80	1.40
CHROMIUM	5.0	400.0	1140.0	420.0	390.0	525.0	531.0	340.0	889.0	410.0	260.0
COBALT	1.0	11.00	34.00	51.00	17.00	36.00	25.00	14.00	23.00	18.00	8.60
EUROPIUM	.5	.95	-.50	-.50	.88	.92	.94	.78	.53	.61	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.60	2.80	3.80	4.30	2.90	3.70	5.20	3.20	4.30	3.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.520	5.430	5.730	5.000	7.130	5.050	4.200	8.500	6.210	4.000
LANTHANUM	.5	31.00	10.00	10.00	21.00	14.00	20.00	14.00	15.00	15.00	12.00
NIODIUM	.2	.54	.24	.26	.38	.28	.31	.37	.24	.34	.27
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	2.500	.800	1.000	1.900	1.200	1.300	1.000	1.000	1.200	.690
RUBIDIUM	20.0	130.0	56.0	49.0	82.0	33.0	59.0	66.0	42.0	40.0	32.0
SAMARIUM	.20	5.90	2.00	2.40	3.90	3.60	4.20	3.10	3.00	3.20	2.40
SCANDIUM	.10	22.90	19.10	31.60	17.40	31.00	19.70	13.30	19.50	17.90	10.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	-1.00	-1.00	1.90	1.20	-1.00	1.50	-1.00	1.30	-1.00
THORIUM	.5	15.00	5.80	8.80	11.00	7.00	9.00	8.10	8.50	9.00	5.50
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.50	-2.00	-2.00	-2.00	-2.00	2.50	2.40	-2.00	-2.00	-2.00
YTTERBIUM	.5	2.70	1.20	1.20	2.00	1.60	1.70	1.80	1.30	1.80	1.40
ZINC	100.0	200.0	130.0	180.0	120.0	140.0	130.0	110.0	130.0	110.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

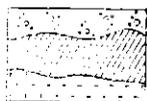
## NEUTRON ACTIVATION ANALYSIS

0159

BECQUEREL JOB # 051

Page 16 of 16

ELEMENT	DL	# 26452x2	# 26473x2	# 26914x2	# 26945x2	# 26964x2	# 26972x2
ANTIMONY	.2	1.00	7.40	1.90	1.10	1.00	1.00
ARSENIC	2.0	2.70	18.00	12.00	4.90	3.10	4.20
BARIUM	100.0	560.0	490.0	440.0	820.0	340.0	260.0
BROMINE	2.0	40.00	12.00	6.20	28.00	5.50	21.00
CERIUM	2.0	30.00	68.00	93.00	36.00	27.00	30.00
CAESIUM	1.0	1.80	10.00	10.00	3.30	2.80	1.20
CHROMIUM	5.0	665.0	260.0	220.0	553.0	522.0	78.0
COBALT	1.0	29.00	6.20	4.70	33.00	32.00	40.00
EUROPIUM	.5	.89	1.10	1.00	.72	.76	1.10
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.30	5.60	6.80	2.80	3.00	2.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.210	5.240	4.200	6.160	3.800	9.520
LANTHANUM	.5	16.00	37.00	48.00	17.00	14.00	15.00
LUTETIUM	.2	.33	.55	.64	.30	.25	.38
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.300	3.300	3.400	1.700	.720	.860
RUBIDIUM	20.0	54.0	190.0	180.0	57.0	45.0	48.0
SAMARIUM	.20	3.40	6.50	8.20	4.00	2.90	3.90
SCANDIUM	.10	21.60	24.40	19.30	29.10	30.60	35.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	1.30	2.50	1.50	-1.00
THORIUM	.5	10.00	14.00	14.00	6.40	5.10	6.30
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	3.70	3.10	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.70	2.90	3.50	1.70	1.40	2.20
ZINC	100.0	130.0	190.0	120.0	210.0	230.0	330.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	520.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

0134

**ANALABS**

396155

5520/324.

Phone (09) 458 7999

A division of MacDonald Hamilton & Co. Pty. Ltd.  
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

FAX: 004 31 8890

**ANALYTICAL REPORT No.** 95.1.08.07145

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

ORDER No.

PROJECT

0173A

T5520

DATE RECEIVED

RESULTS REQUIRED

05/06/90

ASAP

No. OF PAGES  
OF RESULTSDATE  
REPORTEDNo.  
OF COPIES

TOTAL No. OF SAMPLES

5

12/07/90

1

107

STATE OF AMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS			
			DRY	CRUSH	SPLIT	PUL- VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
	Various		RD	Prep: 002,016								Au, Ag, As, Ba, Br, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo
	Various		RD									Cu, Pb, Zn, Bi/101
	Various		RD									Sn/401

RESULTS

TO

Mark Flemming  
R.G.C. Exploration Pty Limited  
P.O. Box 320  
Rosny Park  
Tasmania 7018

RESULTS

TO

REMARKS

Eu. 21/86 - Howards Rd.

Howards Rd Grid

Wacker Samples.

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption CA
split core SC	hydrochloric acid A2	x-ray fluorescence SS
cutting CU	nitric acid A3	spectrophotometry MA
rock Ro	aqua regia A4	colorimetry AA
soil SO	nitric-perchloric A5	chromatography VO
pulp PU	HF mixture A6	titration IG
water WA	HF under pressure A7	other chemicals means PP
tissue TI	fusion A8	miscellaneous GF
stream sediment SS		fluorescence FLUOR
heavy mineral HM		inductively coupled plasma ICP

AUTHORISED OFFICER

*Jenkins*

0150

## ANALABS

396156

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SAMPLE PREFIX		REPORT NUMBER				REPORT DATE	CLIENT ORDER No.		PAGE	
		95.1.08.07145				12/07/90	0173A		1	5
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T11551	20	15	80	<10	4				
2	T11552	20	15	90	<10	3				
3	T11553	10	10	80	<10	4				
4	T11554	10	10	160	<10	6				
5	T11555	5	15	120	<10	4				
6	T11556	5	5	65	<10	<3				
7	T11557	10	40	135	<10	<3				
8	T11558	5	5	135	<10	<3				
9	T11559	5	10	60	<10	6				
10	T11560	--	--	--	--	--	STD			
11	T11561	5	10	115	<10	4				
12	T11562	<5	5	55	<10	7				
13	T11563	10	<5	70	<10	4				
14	T11564	5	<5	85	<10	5				
15	T11565	5	<5	50	<10	10				
16	T11566	20	<5	60	<10	5				
17	T11567	10	<5	70	<10	4				
18	T11568	5	5	75	<10	<3				
19	T11569	30	<5	155	<10	4				
20	T11570	30	15	125	<10	<3				
21	T11571	10	10	85	<10	<3				
22	T11572	10	10	200	<10	5				
23	T11573	10	<5	90	<10	7				
24	T11574	10	5	70	<10	<3				
25	T11575	10	5	75	<10	<3				

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED OFFICER



0156

## ANALABS

396157

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07145

12/07/90

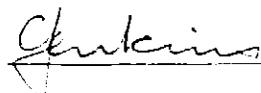
0173A

2 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T11576	10	5	65	<10	7				
2	T11577	15	45	85	<10	<3				
3	T11578	10	5	95	<10	4				
4	T11579	15	<5	130	<10	8				
5	T11580	--	--	--	--	--	STD			
6	T11581	30	<5	110	<10	4				
7	T11582	30	<5	115	<10	4				
8	T11583	20	<5	100	<10	3				
9	T11584	20	<5	95	<10	7				
10	T11585	35	<5	120	<10	<3				
11	T11586	25	<5	85	<10	3				
12	T11587	25	<5	75	<10	6				
13	T11588	25	<5	85	<10	6				
14	T11589	25	<5	75	<10	9				
15	T11590	15	5	120	<10	3				
16	T11591	15	5	115	<10	<3				
17	T11592	10	10	45	<10	4				
18	T11593	25	<5	90	<10	<3				
19	T11594	30	10	100	<10	5				
20	T11595	15	10	70	<10	<3				
21	T11596	40	15	135	<10	5				
22	T11597	65	5	125	<10	8				
23	T11598	25	<5	120	<10	4				
24	T11599	60	<5	120	<10	6				
25	T11567	25	<5	95	<10	6				

Results in ppm unless otherwise specified  
 -- element present; but concentration too low to measure  
 < element concentration is below detection limit  
 - element not determined

AUTHORISED OFFICER



0157

## ANALABS

A Division of Incape Inspection and Testing Services Australia Pty Ltd.

396158

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07145

12/07/90

0173A

3 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T11668	35	15	130	<10	5				
2	T11669	30	5	110	<10	4				
3	T11670	10	<5	15	<10	3				
4	T11671	15	10	30	<10	5				
5	T11672	10	<5	15	<10	5				
6	T11673	10	<5	25	<10	<3				
7	T11674	5	<5	10	<10	3				
8	T11675	15	5	15	<10	6				
9	T11676	10	<5	40	<10	4				
10	T11677	15	<5	100	<10	8				
11	T11678	10	<5	15	<10	<3				
12	T11679	25	30	30	<10	5				
13	T11680	-	-	-	-	-	STP			
14	T11681	10	5	30	<10	4				
15	T11682	15	5	35	<10	7				
16	T11683	15	<5	65	<10	8				
17	T11684	20	15	50	<10	5				
18	T11685	10	5	80	<10	9				
19	T11686	10	5	10	<10	6				
20	T11687	10	90	10	<10	6				
21	T11688	30	10	75	<10	6				
22	T11689	45	30	45	<10	4				
23	T11690	35	15	115	<10	5				
24	T11691	40	20	90	<10	8				
25	T11692	50	35	90	<10	5				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

- = element not determined

AUTHORISED  
OFFICER*Genovis*

0158

## ANALABS

396159

A Division of Incheape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

		95.1.08.07145				12/07/90	0173A		4 OF 5	
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T11693	65	30	140	<10	<3				
2	T11694	45	50	55	<10	4				
3	T11695	45	20	60	<10	3				
4	T11696	15	5	20	<10	5				
5	T11697	40	10	50	<10	10				
6	T11698	45	15	35	<10	4				
7	T11699	40	100	75	<10	4				
8	T24279	30	5	100	<10	6				
9	T24280	-	-	-	-	-	STD			
10	T24281	15	5	20	<10	<3				
11	T24282	75	35	175	<10	4				
12	T24283	25	15	60	<10	6				
13	T24284	25	15	75	<10	10				
14	T24285	25	15	50	<10	7				
15	T26029	15	<5	125	<10	<3				
16	T26030	25	<5	180	<10	6				
17	T26031	15	<5	135	<10	6				
18	T26032	10	<5	140	<10	3				
19	T26033	20	<5	135	<10	<3				
20	T26034	10	<5	120	<10	<3				
21	T26035	10	<5	100	<10	4				
22	T26036	10	<5	110	<10	5				
23	T26037	10	<5	100	<10	7				
24	T26038	10	<5	115	<10	3				
25	T26039	25	<5	110	<10	<3				

Results in ppm unless otherwise specified

1 Element present; but concentration too low to measure

2 Element concentration is below detection limit

3 Element not determined

AUTHORISED  
OFFICER


0159

## ANALABS

396160

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.07145

12/07/90

0173A

5 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Sn				
1	T26040	--	--	--	--	--	STD			
2	T26041	25	<5	105	<10	4				
3	T26042	20	<5	150	<10	7				
4	T26043	45	<5	165	<10	5				
5	T26044	35	5	115	<10	6				
6	T26045	10	<5	75	<10	5				
7	T26046	15	<5	85	<10	4				
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	10	3				
24	UNITS	ppm	ppm	ppm	ppm	ppm				
25	METHOD	101	101	101	101	401				

Results in ppm unless otherwise specified  
T = element present, but concentration too low to measure  
X = element concentration is below detection limit  
-- = element not determined

AUTHORISED  
OFFICER

*Chenkins*

## NEUTRON ACTIVATION ANALYSIS

0160

## NEUTRON ACTIVATION ANALYSIS REPORT

Date: 04-07-90

RGC TASMANIA SAMPLE Nos: T11551-11599, T11667-T11699, T24279-T24285, T26029-T26046

BECQUEREL JOB # 033

NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".

- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.

ELEMENT	DL	# 11551	# 11552	# 11553	# 11554	# 11555	# 11556	# 11557	# 11558	# 11559	# 11560
ANTIMONY	.2	1.20	1.50	1.10	.95	.68	.92	1.70	1.40	.90	3.70
ARSENIC	2.0	2.70	2.80	5.30	3.90	-2.00	2.30	4.00	2.60	3.20	1240.00
BARIUM	100.0	350.0	460.0	410.0	330.0	260.0	230.0	980.0	340.0	380.0	980.0
BROMINE	2.0	18.00	17.00	55.00	45.00	35.00	13.00	24.00	20.00	97.00	-2.00
CERIUM	2.0	37.00	34.00	36.00	24.00	36.00	28.00	25.00	30.00	37.00	20.00
CAESIUM	1.0	1.30	2.40	3.00	1.20	1.20	-1.00	2.10	-1.00	2.50	-1.00
CHROMIUM	5.0	574.0	587.0	667.0	240.0	200.0	270.0	290.0	240.0	390.0	190.0
COBALT	1.0	21.00	21.00	22.00	34.00	21.00	23.00	28.00	29.00	14.00	10.00
EUROPIUM	.5	.74	.71	.77	.69	.78	-.50	.53	.66	.85	.61
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	380.0
HAFNIUM	1.0	3.90	4.00	4.20	3.00	3.90	2.90	2.80	2.50	4.50	-1.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRIDIUM, %	.05	3.600	3.400	4.300	5.880	4.300	4.900	5.840	5.570	4.800	2.400
LANTHANUM	.5	18.00	17.00	19.00	14.00	18.00	13.00	12.00	14.00	19.00	11.00
LUTETIUM	.2	.35	.29	.37	.26	.28	.35	.21	.31	.34	.28
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	12.0
POTASSIUM, %	.2	1.300	1.600	1.700	.790	.870	.500	2.100	.940	1.100	1.200
RUBIDIUM	20.0	61.0	53.0	51.0	-20.0	32.0	-20.0	79.0	34.0	48.0	31.0
SAMARIUM	.20	3.90	3.30	3.50	3.10	3.60	3.00	2.40	3.30	3.40	2.70
SCANDIUM	.10	20.50	15.00	16.50	26.20	21.70	21.80	23.70	28.50	15.00	10.00
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.50	-1.00	1.40	1.30	1.80	1.60	1.40	1.20	-1.00	-1.00
THORIUM	.5	9.10	10.00	12.00	7.20	8.70	5.60	6.30	5.60	9.00	2.10
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.40
YTTERBIUM	.5	1.90	1.60	1.80	1.50	1.70	1.70	1.20	1.80	1.80	1.00
ZINC	100.0	150.0	140.0	130.0	230.0	180.0	130.0	180.0	200.0	110.0	1400.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

SD


**BQ**
**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0161

BECQUEREL JOB # 033

ELEMENT	DL	# 11561	# 11562	# 11563	# 11564	# 11565	# 11566	# 11567	# 11568	# 11569	# 11570
ANTIMONY	.2	.84	.53	.74	.46	1.00	1.20	.90	1.60	.85	.89
ARSENIC	2.0	2.60	2.10	4.90	3.00	4.00	2.70	3.50	4.50	3.40	4.00
BARIUM	100.0	330.0	-100.0	250.0	390.0	270.0	160.0	110.0	280.0	340.0	500.0
BROMINE	2.0	54.00	30.00	77.00	65.00	93.00	41.00	64.00	13.00	3.50	30.00
CERIUM	2.0	26.00	12.00	25.00	24.00	38.00	23.00	23.00	34.00	34.00	31.00
CAESIUM	1.0	2.40	-1.00	1.40	3.50	2.60	1.50	1.80	4.00	1.70	2.00
CHROMIUM	5.0	370.0	330.0	507.0	502.0	500.0	523.0	734.0	521.0	370.0	320.0
COBALT	1.0	35.00	32.00	31.00	36.00	13.00	32.00	34.00	22.00	49.00	29.00
EUROPIUM	.5	.62	-.50	.54	-.50	-.50	.60	-.50	-.50	.87	.60
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.20	1.50	3.50	3.60	5.80	2.40	2.50	3.50	2.50	2.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.350	4.700	6.200	6.490	4.500	5.040	5.740	5.310	6.300	5.830
LANTHANUM	.5	13.00	5.40	12.00	11.00	19.00	12.00	12.00	17.00	20.00	13.00
LUTETIUM	.2	.22	-.20	.25	.34	.39	.21	.25	.31	.32	.29
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	1.500	.490	.780	1.300	1.000	.570	.500	1.000	.560	1.100
RUBIDIUM	20.0	61.0	29.0	41.0	61.0	41.0	36.0	36.0	59.0	35.0	-20.0
SAMARIUM	.20	2.60	1.60	2.70	2.70	3.50	2.70	2.60	3.40	3.90	3.50
SCANDIUM	.10	23.60	26.20	22.40	27.00	13.50	29.30	24.00	23.20	33.40	29.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	2.00	1.00	1.20	-1.00	1.10	1.00	-1.00	1.80	-1.00
THORIUM	.5	6.70	2.80	6.20	6.10	10.00	4.20	5.30	6.30	4.50	4.90
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.20	1.00	1.50	1.60	2.00	1.40	1.40	1.80	1.70	1.50
ZINC	100.0	160.0	130.0	140.0	140.0	-100.0	130.0	130.0	130.0	200.0	200.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

**BQ****BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0152

JEREL JOB # 033

ELEMENT	DL	# 11571	# 11572	# 11573	# 11574	# 11575	# 11576	# 11577	# 11578	# 11579	# 11580
ANTHONY	.2	.76	1.00	1.00	1.00	.68	1.00	1.10	1.20	1.00	1.20
ARSENIC	2.0	2.60	2.10	2.30	2.00	-2.00	2.00	-2.00	4.50	2.70	3.10
BARIIUM	100.0	190.0	770.0	520.0	400.0	400.0	460.0	350.0	160.0	-100.0	670.0
BROMINE	2.0	81.00	66.00	45.00	51.00	26.00	21.00	16.00	4.10	4.10	-2.00
CERIUM	2.0	25.00	17.00	36.00	34.00	30.00	38.00	69.00	10.00	24.00	90.00
CAESIUM	1.0	1.60	1.20	2.50	1.90	1.70	2.20	2.20	1.90	1.10	11.00
CHROMIUM	5.0	240.0	320.0	937.0	845.0	507.0	587.0	659.0	1160.0	1320.0	340.0
COBALT	1.0	21.00	35.00	29.00	21.00	31.00	15.00	28.00	37.00	49.00	34.00
EUROPIUM	.5	-.50	.55	.73	.53	.89	.77	1.10	-.50	-.50	1.10
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	280.0
HAFNIUM	1.0	2.60	2.50	4.00	4.00	3.00	4.80	3.80	1.80	2.30	8.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	5.000	5.470	3.900	3.900	5.210	3.500	4.100	6.380	7.400	5.680
LANTHANUM	.5	12.00	10.00	18.00	17.00	15.00	19.00	31.00	4.60	7.60	46.00
LUTETIUM	.2	.26	-.20	.34	.31	.28	.35	.36	-.20	-.20	.56
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.240	1.900	1.100	1.300	.910	1.100	1.200	.810	.420	1.300
RUBIDIUM	20.0	-20.0	80.0	58.0	44.0	39.0	54.0	54.0	50.0	31.0	96.0
SAMARIUM	.20	3.10	2.00	3.50	3.20	3.30	3.60	6.30	1.20	2.00	9.00
SCANDIUM	.10	26.70	22.20	17.80	13.60	24.70	12.10	19.80	20.90	28.60	13.30
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.10	1.50	1.40	1.10	-1.00	-1.00	-1.00	-1.00	2.30
THORIUM	.5	5.00	5.50	9.20	8.30	6.40	9.40	8.80	2.30	4.40	18.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	2.60	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	5.90
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.90
YTTERBIUM	.5	1.60	1.10	1.60	1.60	1.60	1.90	1.90	.58	1.10	3.10
ZINC	100.0	180.0	260.0	130.0	120.0	150.0	110.0	160.0	150.0	170.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STD



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

101

N E U T R O N      A C T I V A T I O N      A N A L Y S I S

0168

BEQUEREL JOB # 033

ELEMENT	DL	# 11581	# 11582	# 11583	# 11584	# 11585	# 11586	# 11587	# 11588	# 11589	# 11590
ANTIMONY	.2	1.30	1.50	.84	1.10	1.20	1.10	1.30	1.40	1.40	1.10
ARSENIC	2.0	6.20	6.70	3.80	6.10	4.90	5.50	6.00	6.00	5.90	2.60
BARIUM	100.0	180.0	140.0	590.0	340.0	200.0	270.0	240.0	260.0	170.0	470.0
BROMINE	2.0	16.00	50.00	7.00	6.00	29.00	29.00	34.00	52.00	24.00	3.70
CERIUM	2.0	24.00	23.00	38.00	25.00	26.00	39.00	42.00	37.00	35.00	33.00
CAESIUM	1.0	2.00	1.60	3.70	2.80	1.60	2.60	2.60	3.50	2.20	1.50
CHROMIUM	5.0	1330.0	1370.0	814.0	1110.0	1500.0	915.0	879.0	798.0	1410.0	500.0
COBALT	1.0	38.00	28.00	36.00	31.00	36.00	30.00	20.00	25.00	24.00	45.00
EUROPIUM	.5	-.50	-.50	.67	-.50	-.50	-.50	.52	.59	-.50	.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.80	3.30	3.90	4.30	3.00	3.70	4.10	4.00	3.30	3.30
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.500	7.890	6.330	6.140	7.440	6.620	5.310	6.460	4.500	6.710
LANTHANUM	.5	11.00	13.00	18.00	14.00	13.00	18.00	22.00	21.00	19.00	12.00
LUTETIUM	.2	.22	.25	.35	.31	.26	.31	.31	.36	.23	.27
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.720	.680	1.500	1.300	.640	1.200	1.400	1.100	1.000	1.100
RUBIDIUM	20.0	27.0	41.0	84.0	69.0	49.0	60.0	61.0	66.0	60.0	42.0
SAMARIUM	.20	2.20	2.20	3.50	2.30	2.50	3.00	3.30	3.50	2.70	2.70
SCANDIUM	.10	27.50	25.90	24.60	19.80	24.20	21.10	17.20	20.60	11.20	30.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	5.20	6.70	10.00	8.40	6.00	9.50	10.00	11.00	8.20	6.60
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	2.90	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.30	1.40	1.90	1.50	1.30	1.70	1.80	1.80	1.40	1.50
ZINC	100.0	170.0	170.0	160.0	140.0	180.0	140.0	120.0	120.0	130.0	160.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BQ**

**BEQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0154

BECQUEREL JOB # 033

ELEMENT	DL	# 11591	# 11592	# 11593	# 11594	# 11595	# 11596	# 11597	# 11598	# 11599	# 11667
ANTIMONY	.2	1.10	1.70	1.60	1.60	1.40	.42	.69	.83	.70	1.30
ARSENIC	2.0	2.20	10.00	3.70	9.30	12.00	2.30	6.30	5.10	14.00	3.60
BARIUM	100.0	530.0	370.0	290.0	220.0	260.0	-100.0	-100.0	-100.0	-100.0	630.0
BROMINE	2.0	5.30	20.00	4.70	5.60	30.00	2.70	17.00	31.00	33.00	2.60
CERIUM	2.0	20.00	70.00	42.00	52.00	65.00	6.10	6.30	18.00	8.70	35.00
CAESIUM	1.0	1.30	4.90	1.20	3.10	4.20	-1.00	-1.00	-1.00	-1.00	1.60
CHROMIUM	5.0	310.0	500.0	300.0	1260.0	579.0	4730.0	3510.0	636.0	3200.0	790.0
COBALT	1.0	59.00	13.00	67.00	64.00	25.00	72.00	49.00	50.00	58.00	33.00
EUROPIUM	.5	-.50	.64	-.50	.50	.71	-.50	-.50	-.50	-.50	.69
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	3.50	5.00	2.30	3.00	4.30	-1.00	-1.00	1.50	-1.00	2.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	6.780	3.700	9.800	5.890	3.700	8.500	9.550	8.760	15.500	5.110
LANTHANUM	.5	8.90	39.00	4.70	20.00	36.00	3.00	2.20	9.00	3.20	20.00
LEAD	.2	.27	.45	-.20	.27	.39	-.20	-.20	-.20	-.20	.31
MOYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.670	2.300	.600	1.400	1.700	-.200	-.200	.490	-.200	1.100
RUBIDIUM	20.0	33.0	120.0	39.0	79.0	100.0	-20.0	-20.0	40.0	35.0	57.0
SAMARIUM	.20	2.80	4.90	2.00	3.40	5.00	.84	1.10	1.60	1.20	4.10
SCANDIUM	.10	33.40	13.60	57.10	23.10	13.00	31.80	43.90	28.10	28.40	23.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	6.80	16.00	5.00	7.70	12.00	.63	1.50	4.50	2.50	5.70
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	4.30	-2.00	-2.00	3.20	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.60	2.40	1.30	1.50	2.10	-.50	-.50	1.10	.52	1.60
ZINC	100.0	170.0	-100.0	140.0	160.0	110.0	220.0	210.0	160.0	200.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0165

SERIAL JOB # 033

ELEMENT	DL	# 11668	# 11669	# 11670	# 11671	# 11672	# 11673	# 11674	# 11675	# 11676	# 11677
ANTIMONY	.2	1.10	1.20	.73	1.00	.40	1.00	.72	1.90	.72	.60
ARSENIC	2.0	5.40	2.10	-2.00	13.00	-2.00	5.20	7.10	3.90	6.80	2.60
BARIUM	100.0	500.0	350.0	370.0	400.0	330.0	300.0	350.0	320.0	330.0	330.0
BROMINE	2.0	12.00	-2.00	-2.00	6.20	2.50	2.70	10.00	-2.00	9.10	11.00
CERIUM	2.0	27.00	34.00	90.00	73.00	70.00	65.00	81.00	70.00	60.00	92.00
CAESIUM	1.0	1.20	2.40	2.40	3.00	2.60	3.10	1.80	1.90	1.80	2.20
CHROMIUM	5.0	688.0	1010.0	40.0	150.0	22.0	39.0	24.0	42.0	17.0	15.0
COBALT	1.0	32.00	39.00	2.50	9.50	-1.00	2.50	-1.00	3.30	5.70	20.00
EUROPIUM	.5	.50	-.50	.74	1.80	.83	.74	.72	1.30	1.20	2.30
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.90	2.60	6.30	4.10	5.10	5.00	5.20	4.80	5.20	8.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	4.500	3.800	.810	3.900	.750	2.200	2.200	1.500	3.200	6.580
LANTHANUM	.5	14.00	18.00	51.00	36.00	40.00	37.00	44.00	38.00	34.00	42.00
LUTETIUM	.2	.26	.24	.57	.41	.47	.47	.65	.53	.50	.81
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.830	.940	2.400	2.600	2.900	2.700	2.700	2.300	1.900	1.400
RUBIDIUM	20.0	49.0	39.0	110.0	110.0	120.0	120.0	120.0	82.0	100.0	64.0
SMITHIUM	.20	2.90	3.40	6.40	10.00	5.70	5.20	6.70	6.80	6.30	11.00
SCANDIUM	.10	19.90	21.50	6.30	23.80	7.90	9.30	5.70	11.50	10.40	22.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.30	1.40	-1.00	1.20	-1.00	1.00	1.40	1.10	-1.00	1.20
THORIUM	.5	7.70	6.00	21.00	10.00	14.00	14.00	16.00	14.00	10.00	10.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.40	-2.00	3.70	2.80	3.50	4.00	2.80	3.90	-2.00	-2.00
YTTERBIUM	.5	1.50	1.40	2.90	2.40	2.40	2.40	3.10	2.70	2.40	4.10
ZINC	100.0	170.0	150.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	150.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93  
MENAI, NSW, 2234

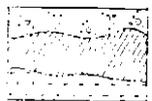
## NEUTRON ACTIVATION ANALYSIS

0156

BECQUEREL JOB # 033

ELEMENT	DL	# 11678	# 11679	# 11680	# 11681	# 11682	# 11683	# 11684	# 11685	# 11686	# 11687
ANTIMONY	.2	2.00	3.80	2.80	1.20	1.20	1.00	5.20	3.00	2.80	3.70
ARSENIC	2.0	11.00	25.00	295.00	15.00	18.00	11.00	8.00	7.40	3.20	-2.00
BARIUM	100.0	360.0	530.0	420.0	370.0	580.0	490.0	190.0	300.0	580.0	500.0
BROMINE	2.0	7.60	3.70	-2.00	10.00	10.00	3.70	5.70	12.00	5.10	2.40
CERIUM	2.0	80.00	90.00	27.00	120.00	100.00	110.00	72.00	87.00	120.00	74.00
CAESIUM	1.0	3.40	7.90	1.20	3.00	8.90	9.10	2.90	3.10	7.00	11.00
CHROMIUM	5.0	340.0	150.0	47.0	64.0	170.0	180.0	20.0	120.0	45.0	22.0
COBALT	1.0	3.50	2.30	15.00	4.00	12.00	19.00	4.60	4.80	-1.00	-1.00
EUROPIUM	.5	.68	.86	1.20	1.20	.90	1.80	1.10	1.00	1.50	1.00
GOLD, ppb	5.0	-5.0	-5.0	250.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	4.90	5.60	2.40	7.20	6.60	7.50	5.50	7.00	7.90	4.60
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.400	2.700	4.400	4.100	6.470	4.600	3.300	4.700	1.100	.430
LANTHANUM	.5	41.00	45.00	14.00	60.80	48.00	51.80	35.00	47.00	64.90	43.00
LUTETIUM	.2	.44	.62	.33	.72	.61	.82	.65	.65	.84	.49
MOLYBDENUM	5.0	-5.0	-10.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	2.100	3.500	2.000	2.200	3.400	3.300	2.100	2.300	4.200	2.300
ROBIDIUM	20.0	98.0	150.0	41.0	100.0	170.0	150.0	98.0	110.0	200.0	100.0
SAMARIUM	.20	4.90	7.10	4.20	8.70	7.40	10.00	7.10	7.50	11.00	6.10
SCANDIUM	.10	8.50	20.60	12.60	12.90	19.50	20.00	10.40	18.00	10.00	5.80
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.30	1.20	1.10	2.50	1.70	-1.00	1.90	1.40	-1.00
THORIUM	.5	11.00	16.00	2.10	16.00	14.00	16.00	17.00	15.00	26.00	15.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	3.00	-2.00	-2.00	2.20	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.30	5.70	-2.00	3.20	3.60	3.20	5.30	3.00	6.70	4.30
YTTERBIUM	.5	2.00	3.10	1.70	3.70	3.10	4.20	3.20	3.10	4.20	2.50
ZINC	100.0	-100.0	-100.0	820.0	-100.0	-100.0	140.0	-100.0	140.0	-100.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

STP

**BQ****BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0157

BECQUEREL JOB # 033

ELEMENT	DL	# 11688	# 11689	# 11690	# 11691	# 11692	# 11693	# 11694	# 11695	# 11696	# 11697
ANTIMONY	.2	4.00	4.90	1.90	.84	1.60	3.00	3.30	12.00	2.30	5.80
ARSENIC	2.0	14.00	17.00	10.00	3.10	10.00	8.20	16.00	78.00	6.30	31.00
BARIUM	100.0	710.0	630.0	610.0	730.0	700.0	510.0	580.0	770.0	760.0	1000.0
BROMINE	2.0	10.00	10.00	19.00	4.60	4.00	22.00	41.00	15.00	8.90	12.00
CERIUM	2.0	79.00	82.00	71.00	78.00	84.00	80.00	110.00	64.00	86.00	80.00
CAESIUM	1.0	7.60	8.90	7.80	10.00	8.90	4.20	4.60	11.00	5.10	12.00
CHROMIUM	5.0	200.0	140.0	140.0	250.0	190.0	81.0	72.0	200.0	29.0	200.0
COBALT	1.0	5.40	1.50	11.00	17.00	12.00	15.00	4.20	2.90	1.10	2.60
EUROPIUM	.5	1.20	1.10	1.20	.91	1.30	1.00	1.20	.77	1.30	.89
GOLD, ppb	5.0	-5.0	7.3	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.70	5.80	5.80	6.30	6.00	6.00	7.20	4.70	6.40	6.50
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	3.700	3.400	5.560	4.000	4.100	4.600	4.200	4.500	2.800	3.800
LANTHANUM	.5	42.00	44.00	38.00	40.00	44.00	45.00	62.00	33.00	48.00	43.00
LEAD	.2	.66	.58	.61	.59	.62	.59	.69	.51	.55	.62
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.200	3.000	2.500	3.600	3.000	1.600	2.200	3.800	3.100	4.400
RUBIDIUM	20.0	150.0	180.0	150.0	170.0	150.0	84.0	100.0	190.0	150.0	190.0
SAMARIUM	.20	7.60	7.20	7.00	6.80	7.40	6.90	8.10	5.40	6.80	6.70
SCANDIUM	.10	18.00	18.50	23.80	23.40	22.70	16.40	11.00	23.70	7.90	22.20
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	2.40	2.20	-1.00	1.90	-1.00	-1.00	-1.00	1.40	-1.00	1.10
THORIUM	.5	15.00	15.00	13.00	14.00	14.00	21.00	30.00	13.00	18.00	16.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	3.60	3.10	2.70	2.70	4.70	5.00	7.10	-2.00	5.20	3.30
YTTERBIUM	.5	3.10	2.80	3.10	2.80	3.10	2.80	3.60	2.50	2.80	3.00
ZINC	100.0	120.0	100.0	170.0	150.0	140.0	190.0	-100.0	110.0	-100.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD, LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

000100

**NEUTRON ACTIVATION ANALYSIS**

0158

BEQUEREL JOB # 033

ELEMENT	DL	# 11698	# 11699	# 24279	# 24280	# 24281	# 24282	# 24283	# 24284	# 24285	# 26029
ANTIMONY	.2	5.00	4.40	3.00	-.20	1.30	3.10	.65	1.80	1.90	1.00
ARSENIC	2.0	12.00	30.00	11.00	4.00	5.60	5.70	4.20	6.40	9.20	-2.00
BARIUM	100.0	910.0	690.0	940.0	640.0	360.0	700.0	690.0	600.0	730.0	120.0
BROMINE	2.0	17.00	10.00	15.00	-2.00	18.00	-2.00	10.00	8.60	20.00	5.80
CERIUM	2.0	77.00	81.00	65.00	86.00	70.00	78.00	81.00	78.00	68.00	20.00
CAESIUM	1.0	10.00	10.00	11.00	12.00	4.00	13.00	4.80	8.40	8.90	-1.00
CHROMIUM	5.0	180.0	200.0	180.0	350.0	55.0	210.0	53.0	190.0	100.0	834.0
COBALT	1.0	2.00	3.00	7.90	34.00	2.40	17.00	3.90	3.70	3.90	44.00
EUROPIUM	.5	1.00	1.20	.78	1.10	.88	1.20	1.50	1.00	.81	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	270.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	6.10	5.60	5.60	8.80	5.70	5.80	5.70	5.90	6.60	1.90
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	2.700	5.000	5.420	5.640	2.300	2.000	2.000	4.300	3.500	6.830
LANTHANUM	.5	41.00	43.00	34.00	46.00	40.00	40.00	45.00	41.00	37.00	8.90
LUTETIUM	.2	.55	.54	.53	.61	.49	.56	.59	.60	.47	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	3.500	3.500	4.000	1.300	.830	3.700	2.300	3.100	2.900	.350
RUBIDIUM	20.0	180.0	180.0	210.0	120.0	54.0	170.0	110.0	160.0	150.0	34.0
SMITHIUM	.20	7.10	7.90	6.30	8.90	5.70	7.80	7.30	7.40	5.80	2.10
SCANDIUM	.10	20.50	20.60	22.90	13.20	8.80	21.40	13.70	20.40	18.50	22.60
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	1.90	1.30	1.70	2.30	2.00	1.50	1.10	1.60	-1.00	-1.00
THORIUM	.5	14.00	13.00	12.00	18.00	13.00	12.00	15.00	13.00	15.00	3.50
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	8.60	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	2.90	4.00	2.40	2.20	3.20	3.20	2.70	-2.00	3.00	-2.00
YTTERBIUM	.5	2.80	2.90	2.70	2.90	2.60	3.00	3.00	3.00	2.50	1.00
ZINC	100.0	-100.0	130.0	150.0	120.0	-100.0	230.0	110.0	140.0	100.0	160.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	510.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

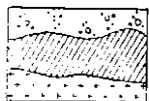
MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0159

BECQUEREL JOB # 033

ELEMENT	DL	# 26030	# 26031	# 26032	# 26033	# 26034	# 26035	# 26036	# 26037	# 26038	# 26039
ANTIMONY	.2	1.30	.80	.75	.63	.91	1.20	.92	.69	.92	.94
ARSENIC	2.0	3.20	2.40	-2.00	-2.00	2.60	4.30	2.20	2.30	2.40	2.50
BARIUM	100.0	420.0	-100.0	620.0	390.0	-100.0	210.0	150.0	120.0	230.0	370.0
BROMINE	2.0	2.70	15.00	4.30	2.60	8.20	37.00	57.00	18.00	20.00	14.00
CERIUM	2.0	40.00	19.00	40.00	34.00	12.00	18.00	13.00	12.00	13.00	17.00
CAESIUM	1.0	2.60	1.70	2.20	3.00	1.70	1.60	1.40	1.50	-1.00	-1.00
CHROMIUM	5.0	616.0	746.0	480.0	400.0	641.0	508.0	500.0	410.0	513.0	1140.0
COBALT	1.0	65.00	43.00	61.00	55.00	42.00	33.00	41.00	35.00	40.00	52.00
EUROPIUM	.5	.95	-.50	-.50	.59	-.50	-.50	-.50	-.50	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	6.9	-5.0	-5.0	-5.0
HAFNIUM	1.0	2.20	2.10	3.40	2.60	1.90	2.40	2.00	1.90	2.20	2.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	7.850	7.660	8.130	9.060	6.740	6.060	5.760	5.030	6.430	7.880
LANTHANUM	.5	17.00	8.20	11.00	11.00	4.90	7.70	6.20	5.90	8.90	7.90
LUTETIUM	.2	.30	-.20	.27	.23	-.20	-.20	-.20	-.20	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
NISSIUM, %	.2	.510	.240	1.000	1.000	.590	.550	.870	.730	.430	.540
RUBIDIUM	20.0	48.0	33.0	50.0	56.0	48.0	41.0	35.0	33.0	49.0	25.0
SAMARIUM	.20	4.30	2.20	3.00	3.10	1.50	1.70	1.30	1.30	2.00	2.10
SCANDIUM	.10	38.10	24.40	38.50	40.70	21.90	19.30	17.50	16.70	20.60	30.40
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	4.80	3.80	5.90	5.00	2.50	3.40	3.00	2.70	3.00	3.50
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
YTTERBIUM	.5	1.80	1.10	1.50	1.50	.82	.89	.63	.63	1.00	1.10
ZINC	100.0	260.0	170.0	220.0	200.0	170.0	140.0	150.0	130.0	160.0	170.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0170

BECQUEREL JOB # 033

ELEMENT	DL	# 26040	# 26041	# 26042	# 26043	# 26044	# 26045	# 26046	# 11583x2	# 11675x2
ANTIMONY	.2	4.40	.93	1.00	1.30	1.70	1.70	2.30	.68	1.80
ARSENIC	2.0	2670.00	3.50	2.20	2.80	9.00	5.40	8.40	3.60	3.80
BARIUM	100.0	400.0	430.0	160.0	-100.0	110.0	110.0	-100.0	610.0	320.0
BROMINE	2.0	5.10	23.00	10.00	11.00	54.00	22.00	15.00	6.90	-2.00
CERIUM	2.0	19.00	28.00	42.00	18.00	19.00	18.00	10.00	37.00	71.00
CAESIUM	1.0	6.50	-1.00	1.20	-1.00	1.90	2.30	3.20	4.70	1.60
CHROMIUM	5.0	270.0	420.0	290.0	450.0	1310.0	953.0	1960.0	850.0	19.0
COBALT	1.0	14.00	43.00	50.00	47.00	58.00	21.00	21.00	38.00	3.30
EUROPIUM	.5	.75	.58	.57	-.50	-.50	-.50	-.50	.65	1.30
GOLD, ppb	5.0	522.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	-1.00	2.80	3.00	1.60	1.50	1.80	1.40	3.90	5.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
IRON, %	.05	12.500	6.960	8.800	9.080	7.950	5.500	6.010	6.600	1.500
LANTHANUM	.5	10.00	11.00	19.00	10.00	11.00	9.40	7.00	18.00	38.00
LEAD	.2	-.20	.26	.34	-.20	-.20	-.20	-.20	.37	.55
MOLYBDENUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	.940	.830	.910	.550	.580	.900	1.500	1.500	2.400
RUBIDIUM	20.0	50.0	50.0	48.0	27.0	43.0	55.0	85.0	93.0	98.0
SAMARIUM	.20	2.20	2.90	4.30	2.30	1.70	1.60	1.20	3.40	6.60
SCANDIUM	.10	5.90	30.30	36.40	27.40	27.00	19.00	36.50	25.60	11.10
SELENIUM	5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
TANTALUM	1.0	-1.00	1.60	1.40	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
THORIUM	.5	1.70	5.30	6.30	3.00	3.80	3.70	2.70	10.00	14.00
TIN	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	16.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
URANIUM	2.0	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00	2.10	3.70
YTTERBIUM	.5	-.50	1.70	2.10	1.20	1.00	.78	.80	1.90	2.80
ZINC	100.0	100.0	180.0	220.0	230.0	180.0	120.0	160.0	170.0	-100.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0	-500.0

917



**BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

P.O. BOX 93

Facsimile: (02) 543 2655

MENAI, NSW, 2234

## NEUTRON ACTIVATION ANALYSIS

0171

BECQUEREL JOB # 033

ELEMENT	DL	# 11686x2	# 26036x2	# 26045x2
ANTIMONY	.2	2.60	1.10	2.00
ARSENIC	2.0	3.10	2.40	4.70
BARIUM	100.0	570.0	150.0	150.0
BROMINE	2.0	4.40	57.00	20.00
CERIUM	2.0	130.00	13.00	17.00
CAESIUM	1.0	6.70	-1.00	2.20
CHROMIUM	5.0	47.0	505.0	918.0
COBALT	1.0	-1.00	41.00	21.00
EUROPIUM	.5	1.60	-.50	-.50
GOLD, ppb	5.0	-5.0	-5.0	-5.0
HAFNIUM	1.0	7.70	2.10	2.00
IRIDIUM, ppb	20.0	-20.0	-20.0	-20.0
IRON, %	.05	.820	5.810	5.320
LANTHANUM	.5	68.10	5.90	9.40
LUTETIUM	.2	.82	-.20	-.20
MOLYBDENUM	5.0	-5.0	-5.0	-5.0
POTASSIUM, %	.2	4.100	.740	.740
RUBIDIUM	20.0	200.0	46.0	57.0
SAMARIUM	.20	11.00	1.30	1.60
SCANDIUM	.10	9.50	17.70	18.30
SELENIUM	5.0	-5.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-5.00
TANTALUM	1.0	1.90	-1.00	-1.00
THORIUM	.5	26.00	2.60	3.80
TIN	500.0	-500.0	-500.0	-500.0
TUNGSTEN	2.0	-2.00	-2.00	-2.00
URANIUM	2.0	7.10	-2.00	-2.00
YTTERBIUM	.5	4.10	.70	.68
ZINC	100.0	-100.0	170.0	120.0
ZIRCONIUM	500.0	-500.0	-500.0	-500.0

**BQ****BECQUEREL  
LABORATORIES**

LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS. NSW

Telephone: (02) 543 2644

Facsimile: (02) 543 2655

P.O. BOX 93

MENAI, NSW, 2234

0172

APPENDIX 4

Sample Locations/Field Data

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	--------------	------	-------

11551	5130	3500	374501	355566			
11552	5120	3500	374509	355556			
11553	5110	3500	374515	355548			
11554	5100	3500	374524	355531			
11555	5090	3500	374530	355521			
11556	5080	3500	374533	355513			
11557	5070	3500	374538	355502			
11558	5060	3500	374542	355496			
11559	5050	3500	374544	355491			
11560							
	Remark:STD FMC4 0.35 g/t						
11561	5040	3500	374548	355483			
	Remark:..						
11562	5030	3500	374552	355475			
11563	5020	3500	374557	355467			
11564	5010	3500	374561	355456			
11565	5000	3500	374568	355444			
	Remark:END OF LINE 3500E						
11566	5000	3400	374470	355394			
	Remark:START OF LINE 3400E						
11567	5010	3400	374464	355403			
	Remark:CREEK BED						
11568	5020	3400	374461	355411			
	Remark:TWO ATTEMPTS						
11569	5030	3400	374456	355421			
11570	5040	3400	374452	355430			
11571	5050	3400	374447	355441			
11572	5060	3400	374443	355452			
11573	5070	3400	374439	355460			
11574	5080	3400	374433	355471			
11575	5090	3400	374430	355478			
11576	5100	3400	374425	355489			
11577	5110	3400	374421	355500			
11578	5120	3400	374418	355510			
	Remark:IN A CREEK						

Laboratory:  
Method:  
t. Limit:

0177

396174

RGC EXPLORATION PTY.LTD.

DATA SHEET

Page 2  
JAN.1.21

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
-----------------	-----------------	----------------	-----------------	------------------	------------------	------	-------

11579	5130	3400	374411	355520			
11580							

Remark: STD B4 0.25 g/t

11581	5140	3400	374408	355527			
11582	5150	3400	374405	355537			
11583	5160	3400	374398	355545			
11584	5170	3400	374394	355552			
11585	5180	3400	374389	355564			
11586	5190	3400	374385	355573			
11587	5200	3400	374380	355582			
11588	5210	3400	374374	355592			
11589	5220	3400	374371	355600			
11590	5230	3400	374368	355606			
11591	5240	3400	374364	355619			
11592	5250	3400	374359	355629			
11593	5260	3400	374356	355637			
11594	5270	3400	374352	355648			
11595	5280	3400	374347	355659			
11596	5290	3400	374344	355666			
11597	5300	3400	374338	355677			
11598	5310	3400	374335	355686			
11599	5320	3400	374329	355697			
11600							
11667	5330	3400	374325	355706			
11668		3400	374323	355713			
11669	5350	3400	374315	355723			
11670	5360	3400	374313	355732			
11671	5370	3400	374308	355742			
11672	5380	3400	374305	355749			
11673	5390	3400	374299	355761			
11674	5400	3400	374293	355770			
11675	5410	3400	374291	355780			
11676	5420	3400	374285	355790			
11677	5430	3400	374282	355801			

laboratory:  
method:  
t. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	--------------	------	-------

11678	5440	3400	374278	355809			
11679	5450	3400	374272	355820			
11680							
	Remark: STD PWC -1 0.23 g/t						
11681	5460	3400	374269	355828			
	Remark:..						
11682	5470	3400	374264	355837			
	Remark:..						
11683	5480	3400	374261	355843			
	Remark:..						
11684	5490	3400	374255	355857			
	Remark:..						
11685	5500	3400	374251	355867			
	Remark:..						
11686	5510	3400	374247	355876			
	Remark:..						
11687	5520	3400	374242	355885			
	Remark:..						
11688	5530	3400	374239	355891			
	Remark:..						
11689	5540	3400	374231	355902			
	Remark:..						
11690	5550	3400	374221	355913			
	Remark:..						
11691	5560	3400	374218	355921			
	Remark:..						
11692	5570	3400	374213	355929			
	Remark:..						
11693	5580	3400	374206	355939			
	Remark:..						
11694	5590	3400	374201	355946			
	Remark:..						
11695	5600	3400	374195	355956			
	Remark:..						

Laboratory:  
Method:  
Det. Limit:

0170

396176

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	--------------	------	-------

11696	5610	3400	374190	355965			
	Remark:..						
11697	5620	3400	374186	355973			
	Remark:..						
11698	5630	3400	374180	355983			
	Remark:..						
11699	5640	3400	374175	355992			
	Remark:..						
24279	5650	3400	374170	356002			
24280	Remark:STD B4 0.25 g/t						
24281	5660	3400	374167	356010			1.3
24282	5670	3400	374162	356018			1.3
24283	5680	3400	374157	356024			
24284	5690	3400	374153	356038			-1.0
24285	5700	3400	374144	356047			-1.0
24286	5700	3300	374054	355987			-1.0
24287	5690	3300	374063	355970			-1.0
24288	5680	3300	374062	355968			-1.0
24289	5670	3300	374068	355960			-1.0
24290	5660	3300	374072	355950			-1.0
24291	5650	3300	374076	355942			-1.0
24292	5640	3300	374081	355932			-1.0
24293	5630	3300	374085	355925			-1.0
24294	5620	3300	374089	355917			-1.0
24295	5610	3300	374094	355907			-1.0
24296	5600	3300	374099	355897			-1.0
24297	5590	3300	374104	355889			-1.0
24298	5580	3300	374109	355881			-1.0
24299	5570	3300	374113	355870			-1.0
24300	Remark:STD B3						
26029	5190	3600	374566	355647			3.0
26030	5200	3600	374563	355657			5.0

Laboratory:  
Method:  
t. Limit:

0176

396177

## PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	---------------	------	-------

26031	5210	3600	374558	355665	4.0		
26032	5220	3600	374554	355674	7.0		
26033	5230	3600	374551	355681	6.0		
26034	5240	3600	374545	355692	1.5		
26035	5250	3600	374539	355705	1.0		
26036	5260	3600	374537	355711	1.5		
26037	5270	3600	374529	355724	2.0		
26038	5280	3600	374526	355730	1.0		
26039	5290	3600	374526	355730	1.0		
26040							

Remark:STD MAG 0.55 g/t

26041	5300	3600	374518	355745	1.0		
26042	5310	3600	374511	355754	1.0		
26043	5320	3600	374506	355764	1.0		
26044	5330	3600	374502	355769	1.0		
26045	5340	3600	374495	355781	1.0		
26046	5350	3600	374490	355789	1.5		
26047	5360	3600	374486	355800	1.5		
26048	5370	3600	374480	355807	1.2		
26049	5380	3600	374475	355817	1.0		
26050	5390	3600	374471	355825	1.0		
26051	5400	3600	374464	355841	1.5		
26052	5410	3600	374459	355851	1.0		
26053	5420	3600	374456	355862	1.0		
26054	5430	3600	374451	355872			
26055	5440	3600			1.0		
26056	5450	3600	374448	355880	1.0		
26057	5460	3600	374444	355888	2.0		
26058	5470	3600	374440	355896	2.0		
26059	5480	3600	374437	355902	1.5		
26060							

Remark:STD FMC -4 0.35 g/t

26061	5490	3600	374432	355916	2.0		
26062	5500	3600	374427	355927	2.5		

boratory:  
thod :  
t. Limit:

0177

396178

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
26063	5510	3600	374424	355935	2.0		
26064	5520	3600	374419	355943	1.5		
26065	5530	3600	374415	355948	2.0		
26066	5540	3600	374410	355961	2.3		
26067	5550	3600	374405	355973	3.5		
26068	5560	3600	374400	355982	1.5		
26069	5570	3600	374396	355990	1.3		
26070	5580	3600	374390	356001	2.0		
26071	5590	3600	374385	356013			
26072	5600	3600	374382	356023			
26073	5610	3600	374377	356032	3.0		
26074	5620	3600	374374	356039			
26075	5630	3600	374368	356052	1.5		
26076	5640	3600	374364	356061			
26077	5650	3600	374360	356070			
26078	5660	3600	374355	356078			
26079	5670	3600	374351	356083	1.0		
26080							
	Remark: STD B4 0.25 g/t						
26081	5680	3600	374346	356095	1.0		
26082	5690	3600	374341	356103			
26083	5700	3600	374335	356118			
26084	5700	3500	374212	356097			
26085	5690	3500	374220	356090			
26086	5690	3500	374223	356081	1.0		
26087	5690	3500	374230	356070	1.7		
26088	5660	3500	374235	356062	1.2		
26089	5650	3500	374239	356056	1.0		
26090	5640	3500	374245	356045			
26091	5630	3500	374248	356037			
26092	5620	3500	374255	356026	1.0		
26093	5610	3500	374259	356018	1.5		
26094	5600	3500	374263	356011			
26095	5590	3500	374272	356000	1.5		

laboratory:  
method:  
t. Limit:

01/79

396179

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	EAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	-------------	---------------	--------------	------	-------

26096	5580	3500	374277	355988	1.2		
26097	5570	3500	374282	355981	1.4		
26098	5560	3500	374286	355973	3.5		
26099	5550	3500	374291	355966	7.5		
26100							
26157	5540	3500	374297	355955	5.5		
26158	5530	3500	374302	355945	4.5		
26159	5520	3500	374307	355935	3.0		
26160							

Remark:STD FMC-1 --.23 g/t

26161	5510	3500	374313	355927			
26162	5500	3500	374315	355917	1.2		
26163	5490	3500	374321	355911	1.8		
26164	5480	3500	374325	355903	1.8		
26165	5470	3500	374332	355891	1.5		
26166	5460	3500	374338	355882	1.0		
26167	5450	3500	374344	355875	1.2		
26168	5440	3500	374355	355859	1.3		
26169	5430	3500	374361	355846	1.0		
26170	5420	3500	374367	355835	1.4		
26171	5410	3500	374372	355827	1.3		
26172	5400	3500	374378	355811	1.0		
26173	5390	3500	374384	355800	2.8		
26174	5380	3500	374388	355792	2.5		
26175	5370	3500	374393	355783	1.5		
26176	5360	3500	374397	355772			
26177	5350	3500	374401	355766			
26178	5340	3500	374407	355755			
26179	5330	3500	374411	355747	1.0		
26180							

Remark:STD

26181	5320	3500	374416	355737	1.0		
26182	5310	3500	374422	355728	1.1		
26183	5300	3500	374425	355720	1.0		

Laboratory:  
Method:  
T. Limit:

0179  
R710

396180

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	--------------	------	-------

26184	5290	3500	374430	355710	1.1		
26185	5280	3500	374434	355702	1.1		
26186	5270	3500	374437	355698			
26187	5260	3500	374444	355682	2.9		
26188	5250	3500	374447	355673	4.9		
26189	5240	3500	374453	355665	7.0		
26190	5230	3500	374457	355658	2.9		
26191	5220	3500	374462	355647	1.1		
26192	5210	3500	374468	355638	1.1		
26193	5200	3500	374469	355627	1.9		
26194	5190	3500	374477	355619	7.1		
26195	5180	3500	374482	355612	5.5		
26196	5170	3500	374487	355601	3.5		
26197	5160	3500	374492	355593	4.5		
26198	5150	3500	374495	355585	1.5		
26199	5140	3500	374500	355574	1.2		
26200							
26301	5000	4000	365009	355673			
26302	5010	4000	365002	355685			
26303	5020	4000	374998	355692			
26304	5030	4000	374992	355702			
26305	5040	4000	374987	355710			
26306	5050	4000	374981	355719			
26307	5060	4000	374976	355728			
26308	5070	4000	374972	355737			
26309	5080	4000	374966	355746			
26310	5090	4000	374961	355754			
26311	5100	4000	374959	355760			
26312	5110	4000	374953	355771			
26313	5120	4000	374949	355780			
26314	5130	4000	374942	355792			
26315	5140	4000	374936	355801			
26316	5150	4000	374931	355809			
26317	5160	4000	374928	355817			

Laboratory:  
 Method:  
 t. Limit:

0180

396181

RGC EXPLORATION PTY.LTD.

DATA SHEET

Page 9  
JAN.1.21

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	--------------	------	-------

26318	5170	4000	374923	355825			
26319	5180	4000	374920	355831			
26320							

Remark:STD B3 0.05 g/t

26321	5195	4000	374912	355845			
26322	5200	4000	374908	355854			
26323	5205	4000	374906	355857			
26324	5210	4000	374902	355862			
26325	5215	4000	374901	355867			
26326	5220	4000	374898	355870			
26327	5225	4000	374895	355876			
26328	5230	4000	374891	355880			
26329	5235	4000	374890	355884			
26330	5240	4000	374888	355888			
26331	5245	4000	374885	355892			
26332	5250	4000	374883	355895			
26333	5255	4000	374880	355899			
26334	5260	4000	374877	355905			
26335	5265	4000	374874	355909			
26336	5270	4000	374872	355913			
26337	5275	4000	374868	355918			
26338	5280	4000	374865	355923			
26339	5285	4000	374864	355928			
26340							

Remark:STD FMC1 0.23 g/t

26341	5290	4000	374861	355933			
26342	5295	4000	374859	355936			
26343	5300	4000	374858	355940			
26344	5305	4000	374854	355943			
26345	5310	4000	374853	355947			
26346	5315	4000	374849	355952			
26347	5320	4000	374849	355956			
26348	5325	4000	374845	355962			
26349	5330	4000	374842	355966			

Laboratory:  
Method:  
t. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
-----------------	-----------------	----------------	-----------------	------------------	-----------------	------	-------

26350	5335	4000	374840	355971			
26351	5340	4000	374838	355974			
26352	5345	4000	374836	355978			
26353	5350	4000	374832	355983			
26354	5355	4000	374829	355987			
26355	5360	4000	374827	355991			
26356	5365	4000	374824	355997			
26357	5370	4000	374822	356000			
26358	5375	4000	374819	356006			
26359	5380	4000	374815	356010			
26360							

Remark:STD FHC1 0.23 g/t

26361	5385	4000	374814	356014			
26362	5390	4000	374812	356018			
26363	5395	4000	374810	356020			
26364	5400	4000	374809	356026			
26365	5405	4000	374806	356030			
26366	5410	4000	374802	356033			
26367	5415	4000	374800	356039			
26368	5420	4000	374798	356042			
26369	5425	4000	374795	356047			
26370	5430	4000	374793	356051			
26371	5435	4000	374791	356057			
26372	5440	4000	374789	356059			
26373	5445	4000	374779	356078			
26374	5450	4000	374781	356074			
26375	5455	4000					
26376	5460	4000					
26377	5465	4000	374777	356082			
26378	5470	4000	374775	356086			
26379	5475	4000	374772	356090			
26380							

Remark:STD B3 0.05 g/t

26381	5480	4000	374769	356098			
-------	------	------	--------	--------	--	--	--

boratory:  
thod :  
t. Limit:

0182

396183

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	---------------	------	-------

26382	5485	4000	374767	356102			
26383	5490	4000	374765	356104			
26384	5495	4000	374763	356108			
26385	5500	4000	374760	356112			
26386	5510	4000	374756	356120			
26387	5520	4000	374752	356127			
26388	5530	4000	374749	356135			
26389	5540	4000	374741	356144			
26390	5550	4000	374736	356154			
26391	5560	4000	374732	356162			
26392	5570	4000	374728	356171			
26393	5580	4000	374720	356184			
26394	5590	4000	374716	356191			
26395	5600	4000	374711	356201			
26396	5610	4000	374706	356208			
26397	5620	4000	374701	356219			
26398	5630	4000	374696	356229			
26399	5640	4000	374691	356237			
26400							

Remark:STD FMC1 0.23 g/t

26401

26402 5525 3700 ACID LC CL

Remark:FLOAT FROM OM DOWNSLOPE OF INTERPRETED N.H. FAULT POSITION

26403 5550 2600 ANDS KAWTCL

Remark:FLOAT 40M DOWNSTREAM OF INTERPRETED FAULT ZONE. VOLC ONLY SAMPL IN CK

26404 5250 3800 ANDS MSSIWT

Remark:START OF CREEK TRAVERSE - ROCK CHIPS SAMPLES

26405 ANDS WT

26406 -1 -1 ANDS WT

26407 -1 -1 ANDS WT HS

26408 -1 -1 ANDS WT CL

26409 -1 -1 ANDS CL

26410 -1 -1 ANDS WT MS

26411 -1 -1 ANDS WT CL

Laboratory:

Method:

Det. Limit:

0183

396184

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
26412	-1	-1				ANDS	WT
	Remark: RC TRAVERSE OF QUARTZ VEINS						
26413	-1	-1				VEIN	MS WT
26414	-1	-1				VEIN	WT
26415	-1	-1				SILT	
	Remark: ADJACENT OF FAULT ZONE						
26416	-1	-1				?	MS SI
	Remark: STATION #4 EAST OF PHOTO & MARKER						
26417	-1	-1				VEIN	
26442	3700	5525					
	Remark: SPONGY IRON OX DEPOSIT FROM INTERPRETED POSITION OF N.H FAULT						
26443	5675	3000					
	Remark: GRAB SAMPLE FROM APPARENT WORKINGS JUST OFF GRID LINE						
26447	5380	3200	374106	355637			
26448	5390	3200	374103	355644			
26449	5400	3200	374097	355653			
26450	5410	3200	374093	355662			
6451	5420	3200	374088	355671			
6452	5430	3200	374084	355679			
6453	5440	3200	374080	355689			
6454	5450	3200	374074	355696			
6455	5460	3200	374071	355706			
6456	5470	3200	374066	355715			
6457	5480	3200	374061	355720			
6458	5490	3200	374059	355733			
6459	5500	3200	374054	355741			
6460							
	Remark: STD B3						
6461	5510	3200	374047	355751			
6462	5520	3200	374042	355758			
6463	5530	3200	374038	355764			
6464	5540	3200	374035	355778			
6465	5550	3200	374028	355786			
6466	5560	3200	374025	355795			

laboratory:  
method:  
Limit:

0184

396185

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
-----------------	-----------------	----------------	-----------------	------------------	-----------------	------	-------

26467	5570	3200	374021	355804			
26468	5580	3200	374016	355814			
26469	5590	3200	374010	355822			
26470	5600	3200	374004	355830			
26471	5610	3200	374000	355838			
26472	5620	3200	373998	355847			
26473	5630	3200	373993	355858			
26474	5640	3200	373989	355866			
26475	5650	3200	373983	355876			
26476	5660	3200	373980	355883			
26477	5670	3200	373975	355893			
26478	5680	3200	373970	355904			
26479	5690	3200	373967	355910			
26480							

Remark: STD B3

26481	5700	3200	373961	355918			
26482	5700	3200					
26501	5650	4000	374687	356246			
26502	5660	4000	374683	356254			
26503	5670	4000	374679	356263			
26504	5680	4000	374673	356273			
26505	5690	4000	374669	356282			
26506	5700	4000	374664	356290			
26507	5700	4200	374871	356393			
26508	5690	4200	374876	356383			
26509	5680	4200	374880	356375			
26510	5670	4200	374885	356365			
26511	5660	4200	374889	356355			
26512	5650	4200	374892	356345			
26513	5640	4200	374902	356339			
26514	5630	4200	374905	356331			
26515	5620	4200	374912	356322			
26516	5610	4200	374916	356312			
26517	5600	4200	374922	356305			

Laboratory:  
Method:  
t. Limit:

0183

396186

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
--------------	--------------	-------------	--------------	---------------	---------------	------	-------

26518	5590	4200	374924	356297			
26519	5580	4200	374929	356288			
26520							

Remark:STD FMC1 REC 0.23 g/t RANGE (0.15 -> 0.32) CARBONATE PYRITE

26521	5570	4200	374936	356277			
26522	5560	4200	374941	356271			
26523	5550	4200	374945	356262			
26524	5540	4200	374951	356254			
26525	5530	4200	374957	356246			
26526	5520	4200	374961	356235			
26527	5510	4200	374966	356227			
26528	5500	4200	374971	356219			
26529	5490	4200	374977	356211			
26530	5480	4200	374981	356202			
26531	5470	4200	374987	356193			
26532	5460	4200	374991	356184			
26533	5450	4200	374996	356176			
26534	5440	4200	375001	356168			
26535	5430	4200	375005	356159			
26536	5420	4200	375011	356149			
26537	5410	4200	375015	356141			
26538	5400	4200	375020	356132			
26539	5390	4200	375025	356126			
26540							

Remark:STD B4 REC 0.25 g/t RANGE (0.18 - 0.33) HC QTZ CHLORITE

26541	5380	4200	375029	356118			
26542	5370	4200	375033	356110			
26543	5360	4200	375038	356100			
26544	5350	4200	375043	356090			
26545	5340	4200	375048	356082			
26546	5330	4200	375052	356073			
26547	5320	4200	375058	356064			
26548	5310	4200	375063	356055			
26549	5300	4200	375068	356044			

laboratory:  
method:  
t. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
26550	5290	4200	375073	356035			
26551	5280	4200	375078	356026			
26552	5270	4200	375084	356015			
26553	5260	4200	375088	356005			
26554	5250	4200	375091	355998			
26555	5240	4200	375098	355988			
26556	5230	4200	375102	355980			
26557	5220	4200	375106	355970			
26558	5210	4200	375111	355961			
26559	5200	4200	375115	355952			
26560							
Remark: B3 REC 0.05 g/t RANGE (0.04 - 0.06) HC QTZ CHLORITE							
26561	5190	4200	375120	355944	2.9		
26562	5180	4200	375125	355935	3.5		
26563	5170	4200	375131	355926	2.2		
26564	5160	4200	375135	355917	1.9		
26565	5150	4200	375138	355907	1.8		
26566	5140	4200	375143	355900	1.2		
26567	5130	4200	375148	355891	5.8		
26568	5120	4200	375153	355880	6.2		
26569	5110	4200	375157	355872	5.9		
26570	5100	4200	375160	355864	2.2		
26571	5090	4200	375165	355855			
26572	5080	4200	375171	355846			
26573	5070	4200	375175	355835			
26574	5060	4200	375179	355828	2.8		
26575	5050	4200	375183	355818	3.0		
26576	5040	4200	375188	355809	1.9		
26577	5030	4200	375192	355799	1.2		
26578	5020	4200	375196	355790	4.1		
26579	5010	4200	375200	355781	5.8		
26580			375203	355773			
Remark: STD FMC4 REC 0.35 g/t RANGE (0.32 - 0.39) CHERTY SILT							
26581	5000	4200	375205	355765	5.0		

laboratory:  
method:  
t. Limit:

0187

396183

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
---------------	--------------	-------------	--------------	---------------	--------------	------	-------

26582	5000	4100	375107	355728	5.8		
26583	5010	4100	375102	355737	6.1		
26584	5020	4100	375100	355745	7.2		
26585	5030	4100	375095	355755	4.8		
26586	5040	4100	375089	355763	1.9		
26587	5050	4100	375085	355772	1.4		
26588	5060	4100	375080	355782	3.4		
26589	5070	4100	375076	355791	1.5		
26590	5080	4100	375071	355799	1.5		
26591	5090	4100	375066	355808			
26592	5100	4100	375063	355821	2.7		
26593	5110	4100	375058	355829			
26594	5120	4100	375053	355837			
26595	5130	4100	375046	355847			
26596	5140	4100	375042	355854			
26597	5150	4100	375036	355862			
26598	5160	4100	375031	355873	4.5		
26599	5170	4100	375025	355880	1.5		
26600							

Remark: STD MAG REC 0.54 g/t

26601	5660	3800	374514	356184			
26602	5670	3800	374508	356195			
26603	5680	3800	374502	356204			
26604	5690	3800	374499	356213			
26605	5700	3800	374493	356222	1.0		
26606	5700	3700	374399	356181	1.0		
26607	5690	3700	374404	356170			
26608	5680	3700	374408	356163			
26609	5670	3700	374414	356153	1.5		
26610	5660	3700	374419	356144	1.2		
26611	5650	3700	374422	356136	1.1		
26612	5640	3700	374429	356126	1.0		
26613	5630	3700	374433	356119	1.0		

Remark: END OF THE LINE 2800

Laboratory:  
Method:  
Det. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMFLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
26614	5620	3700	374437	356109	1.2		
26615	5610	3700	374442	356101	2.5		
26616	5600	3700	374448	356092	2.5		
26617	5590	3700	374452	356082	4.0		
26618	5580	3700	374456	356075	2.5		
26619	5570	3700	374461	356066	1.2		
26620							
	Remark: STD						
26621	5560	3700	374467	356056	1.8		
26622	5550	3700	374471	356046			
26623	5540	3700	374477	356034	3.5		
26624	5530	3700	374481	356026			
26625	5520	3700	374486	356016	1.5		
26626	5510	3700	374490	356009	1.5		
26627	5500	3700	374498	356000			
26628	5490	3700	374502	355990	1.0		
26629	5480	3700	374506	355981	1.0		
26630	5470	3700	374512	355971	1.0		
26631	5460	3700	374517	355963	1.5		
26632	5450	3700	374522	355954	1.3		
26633	5440	3700	374527	355943			
26634	5430	3700	374531	355933	1.5		
26635	5420	3700	374536	355923			
26636	5410	3700	374540	355915	1.2		
26637	5400	3700	374548	355907	1.2		
26638	5390	3700	374551	355898	1.2		
26639	5380	3700	374556	355889			
26640							
26641	5370	3700	374561	355877	1.1		
26642	5360	3700	374566	355870	1.2		
26643	5350	3700	374569	355860	1.8		
26644	5340	3700	374576	355850	1.5		
26645	5330	3700	374581	355843	3.6		
26646	5320	3700	374585	355833	1.0		

Laboratory:  
Method:  
L. Limit:

RGC EXPLORATION PTY.LTD.

DATA SHEET

Page 18  
JAN. 1. 21

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

SAMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
26647	5310	3700	374590	355824	1.1		
26648	5300	3700	374595	355816	2.0		
26649	5290	3700	374601	355804	4.5		
26650	5280	3700	374608	355793	5.5		
26651	5270	3700	374610	355787	4.0		
26652	5260	3700	374615	355779	4.5		
26653	5250	3700	374620	355770	5.5		
26654	5240	3700	374625	355759	5.5		
26655	5230	3700	374629	355752	6.3		
26656	5220	3700	374635	355741	11.0		
26657	5210	3700	374638	355733	11.4		
26658	5200	3700	374644	355724	11.3		
26659	5190	3700	374648	355715	8.5		
26660							
26661	5180	3700	374654	355700	3.5		
26662	5170	3700	374658	355695	4.5		
26663	5160	3700	374663	355688	4.5		
26664	5150	3700	374668	355678	3.5		
26665	5140	3700	374674	355667	2.0		
26666	5130	3700	374678	355659	2.5		
26667	5120	3700	374683	355650	2.5		
26668	5110	3700	374688	355640	2.2		
26669	5100	3700	374692	355631	2.5		
26670	5090	3700	374698	355620	1.5		
26671	5080	3700	374703	355612	2.5		
26672	5070	3700	374709	355601	7.5		
26673	5060	3700	374713	355593	2.5		
26674	5050	3700	374718	355584	6.5		
26675	5040	3700	374722	355575	3.5		
26676	5030	3700	374725	355566	2.5		
26677	5020	3700	374730	355557	1.8		
26678	5010	3700	374736	355547	1.0		
26679	5000	3700	374740	355538			
26680							

Laboratory:  
Method:  
Detection Limit:

## PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
26681	5000	3600	374653	355486	1.0		
26682	5010	3600	374650	355491	1.0		
26683	5020	3600	374648	355498	1.0		
26684	5030	3600	374640	355510	1.0		
26685	5040	3600	374637	355518	1.8		
26686	5050	3600	374632	355524	1.5		
26687	5060	3600	374626	355537	1.5		
26688	5070	3600	374619	355547	2.5		
26689	5080	3600	374616	355553	2.0		
26690	5090	3600	374611	355562	2.5		
26691	5100	3600	374606	355570	1.5		
26692	5110	3600	374601	355580	2.5		
26693	5120	3600	374595	355592	4.5		
26694	5130	3600	374593	355597	4.5		
26695	5140	3600	374588	355605	5.5		
26696	5150	3600	374584	355613	5.8		
26697	5160	3600	374580	355620	9.7		
26698	5170	3600	374577	355630	9.5		
26699	5180	3600	374573	355635	10.0		
26700							
26701	5180	4100	375019	355890			
26702	5190	4100	375017	355898			
26703	5200	4100	375012	355907			
26704	5210	4100	375006	355917			
26705	5220	4100	375001	355924			
26706	5230	4100	374996	355934			
26707	5240	4100	374991	355943			
26708	5250	4100	374987	355952			
26709	5260	4100	374983	355961			
26710	5270	4100	374976	355973			
26711	5280	4100	374973	355980			
26712	5290	4100	374968	355988			
26713	5300	4100	374963	355997			
26714	5310	4100	374960	356006			

Laboratory:  
Method:  
Alt. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
-----------------	-----------------	----------------	-----------------	------------------	------------------	------	-------

26715	5320	4100	374955	356017			
26716	5330	4100	374950	356025			
26717	5340	4100	374945	356034			
26718	5350	4100	374940	356041			
26719	5360	4100	374936	356051			
26720							

Remark:STD FMC1 0.23 g/t

26721	5370	4100	374931	356060			
26722	5380	4100	374926	356070			
26723	5390	4100	374920	356077			
26724	5400	4100	374912	356085			
26725	5410	4100	374908	356093			
26726	5420	4100	374903	356103			
26727	5430	4100	374898	356111			
26728	5440	4100	374894	356120			
26729	5450	4100	374888	356129			
26730	5460	4100	374883	356138			
26731	5470	4100	374877	356148			
26732	5480	4100	374872	356159			
26733	5490	4100	374869	356166			
26734	5500	4100	374866	356174			
26735	5510	4100	374859	356186			
26736	5520	4100	374852	356196			
26737	5530	4100	374846	356206			
26738	5540	4100	374842	356215			
26739	5550	4100	374837	356222			
26740							

Remark:STD B3 0.05 g/t

26741	5560	4100	374833	356231			
26742	5570	4100	374828	356240			
26743	5580	4100	374822	356249			
26744	5590	4100	374820	356259			
26745	5600	4100	374816	356268			
26746	5610	4100	374811	356276			

boratory:  
thod :  
t. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
-----------------	-----------------	----------------	-----------------	------------------	-----------------	------	-------

26747	5620	4100	374808	356285			
26748	5630	4100	374802	356296			
26749	5640	4100	374797	356303			
26750	5650	4100	374792	356312			
26751	5660	4100	374789	356320			
26752	5670	4100	374786	356330			
26753	5680	4100	374778	356340			
26754	5690	4100	374774	356350			
26755	5700	4100	374766	356359			
26756	5700	3900	374763	356368			
26757	5690	3900	374586	356265			
26758	5680	3900	374590	356254			
26759	5670	3900	374595	356248			
26760							
	Remark: STD	FMC1	0.23	g/t			
26761	5660	3900	374596	356249			
26762	5650	3900	374600	356240			
26763	5640	3900	374603	356230			
26764	5630	3900	374608	356221			
26765	5620	3900	374613	356213			
26766	5610	3900	374620	356202			
26767	5600	3900	374625	356194			
26768	5590	3900	374629	356186			
26769	5580	3900	374635	356177			
26770	5570	3900	374640	356169			
26771	5560	3900	374645	356158			
26772	5550	3900	374650	356150			
26773	5540	3900	374655	356141			
26774	5530	3900	374661	356132			
26775	5520	3900	374667	356122			
26776	5510	3900	374671	356115			
26777	5500	3900	374675	356105			
26778	5490	3900	374680	356096			
26779	5480	3900	374685	356086			

Laboratory:  
Method:  
Limit:

0193

336194

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
----------------	-----------------	----------------	-----------------	------------------	------------------	------	-------

26780	Remark:STD B3 0.05 g/t						
26781	5470	3900	374689	356078			
26782	5460	3900	374695	356068			
26783	5450	3900	374700	356059			
26784	5440	3900	374708	356041			
26785	5430	3900	374713	356033			
26786	5420	3900	374718	356023			
26787	5410	3900	374722	356013			
26788	5400	3900	374728	356005			
26789	5390	3900	374733	355994			
26790	5380	3900	374738	355985			
26791	5370	3900	374744	355975			
26792	5360	3900	374749	355967			
26793	5350	3900	374753	355958			
26794	5340	3900	374759	355949			
26795	5330	3900	374763	355940			
26796	5320	3900	374769	355930			
26797	5310	3900	374773	355923			
26798	5300	3900	374780	355914			
26799	5290	3900	374783	355901			
26800	Remark:STD FMC1 0.23 g/tA						
26901	5560	3300	374120	355857			
26902	5550	3300	374127	355845			
26903	5540	3300	374131	355836			
26904	5530	3300	374134	355827			
26905	5520	3300	374140	355818			
26906	5510	3300	374146	355810			
26907	5500	3300	374150	355800			
26908	5490	3300	374153	355793			
26909	5480	3300	374158	355782			
26910	5470	3300	374163	355773			
26911	5460	3300	374167	355765			

Laboratory:  
Method:  
Limit:

0106

396195

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
----------------	-----------------	----------------	-----------------	------------------	------------------	------	-------

26912	5450	3300	374172	355755			
26913	5440	3300	374177	355746			
26914	5430	3300	374180	355737			
26915	5420	3300	374186	355729			
26916	5410	3300	374190	355721			
26917	5400	3300	374195	355713			
26918	5390	3300	374200	355702			
26919	5380	3300	374204	355694			
26920							

Remark: STD B3

26921	5370	3300	374210	355685			
26922	5360	3300	374213	355677			
26923	5350	3300	374217	355668			
26924	5340	3300	374224	355659			
26925	5330	3300	374228	355649			
26926	5320	3300	374232	355640			
26927	5310	3300	374236	355632			
26928	5300	3300	374239	355625			
26929	5290	3300	374245	355613			
26930	5280	3300	374249	355607			
26931	5270	3300	374253	355596			
26932	5260	3300	374258	355586			
26933	5250	3300	374263	355578			
26934	5240	3300	374269	355567			
26935	5230	3300	374272	355561			
26936	5220	3300	374278	355552			
26937	5210	3300	374280	355543			
26938	5200	3300	374286	355535			
26939	5190	3300	374289	355525			
26940							

Remark: STD B3

26941	5180	3300	374294	355516			
26942	5170	3300	374297	355506			
26943	5160	3300	374301	355497			

boratory:  
thod :  
t. Limit:

0199

336196

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE NUMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
-----------------	-----------------	----------------	-----------------	------------------	-----------------	------	-------

26944	5150	3300	374305	355487			
26945	5140	3300	374310	355476			
26946	5130	3300	374313	355468			
26947	5120	3300	374316	355460			
26948	5110	3300	374321	355450			
26949	5100	3300	374324	355443			
26950	5090	3300	374329	355432			
26951	5080	3300	374333	355423			
26952	5070	3300	374337	355414			
26953	5060	3300	374341	355405			
26954	5050	3300	374345	355397			
26955	5040	3300	374347	355389			
26956	5030	3300	374355	355376			
26957	5020	3300	374360	355365			
26958	5010	3300	374363	355356			
26959	5000	3300	374370	355341			
26960							

Remark: STD B3

26961	5000	3200	374273	355295			
26962	5010	3200	374270	355304			
26963	5020	3200	374266	355311			
26964	5030	3200	374262	355321			
26965	5040	3200	374257	355331			
26966	5050	3200	374253	355340			
26967	5060	3200	374248	355348			
26968	5070	3200	374244	355357			
26969	5080	3200	374240	355367			
26970	5090	3200	374235	355375			
26971	5100	3200	374230	355385			
26972	5110	3200	374226	355394			
26973	5120	3200	374222	355402			
26974	5130	3200	374217	355412			
26975	5140	3200	374213	355421			
26976	5150	3200	374207	355429			

laboratory:  
method:  
t. Limit:

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

HPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
26977	5160	3200	374204	355439			
26978	5170	3200	374199	355446			
26979	5180	3200	374196	355452			
26980			374195	355457			
Remark: STD B3							
26981	5190	3200	374190	355466			
26982	5200	3200	374186	355475			
26983	5210	3200	374182	355484			
26984	5220	3200	374177	355493			
26985	5230	3200	374173	355501			
26986	5240	3200	374168	355510			
26987	5250	3200	374162	355519			
26988	5260	3200	374160	355528			
26989	5270	3200	374155	355536			
26990	5280	3200	374151	355545			
26991	5290	3200	374147	355554			
26992	5300	3200	374142	355563			
26993	5310	3200	374137	355574			
26994	5320	3200	374133	355581			
26995	5330	3200	374129	355589			
26996	5340	3200	374124	355599			
26997	5350	3200	374119	355608			
26998	5360	3200	374115	355617			
26999	5370	3200	374111	355625			
27001	5280	3900	374787	355892	2.3		
27002	5270	3900	374793	355882	1.5		
27003	5260	3900	374797	355873			
27004	5250	3900	374800	355863	1.8		
27005	5240	3900	374806	355856	1.2		
27006	5230	3900	374811	355848	1.0		
27007	5220	3900	374816	355838	2.5		
27008	5210	3900	374820	355828	5.9		
27009	5200	3900	374826	355819	3.5		
27010	5190	3900	374832	355807	1.5		

boratory:  
thod :  
t. Limit:

0197

396198

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
27011	5180	3900	374837	355798	1.0		
27012	5170	3900	374841	355789			
27013	5160	3900	374845	355780			
27014	5150	3900	374851	355771	1.0		
27015	5140	3900	374856	355762	2.3		
27016	5130	3900	374860	355754	1.2		
27017	5120	3900	374866	355745	1.2		
27018	5110	3900	374871	355735	1.2		
27019	5100	3900	374875	355725	1.8		
27020							
27021	5090	3900	374881	355714	3.5		
27022	5080	3900	374886	355705	3.5		
27023	5070	3900	374891	355695	1.5		
27024	5060	3900	374896	355687	1.5		
27025	5050	3900	374900	355679	2.5		
27026	5040	3900	374905	355669	2.3		
27027	5030	3900	374909	355660	1.5		
27028	5020	3900	374915	355652			
27029	5010	3900	374919	355642			
27030	5000	3900	374923	355632			
27031	5000	3800	374830	355585	1.0		
27032	5010	3800	374826	355595			
27033	5020	3800	374822	355604			
27034	5030	3800	374817	355614	1.0		
27035	5040	3800	374813	355621	1.0		
27036	5050	3800	374808	355630	1.2		
27037	5060	3800	374804	355640	1.0		
27038	5070	3800	374799	355648	1.1		
27039	5080	3800	374794	355654	2.0		
27040	5090	2800					
27041	5090	3800	374789	355668	3.5		
27042	5100	3800	374783	355677	2.0		
27043	5110	3800	374779	355686			
27044	5120	3800	374774	355695			

boratory:  
thod :  
t. Limit:

0199

396199

## PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTHT metres	ROCK	ALTER
27045	5130	3800	374770	355704	1.5		
27046	5140	3800	374765	355712	1.0		
27047	5150	3800	374759	355721	1.5		
27048	5160	3800	374756	355731	1.0		
27049	5170	3800	374752	355739	1.0		
27050	5180	3800	374746	355748	1.5		
27051	5190	3800	374742	355756	1.0		
27052	5200	3800	374736	355766	1.0		
27053	5210	3800	374732	355775			
27054	5220	3800	374727	355784	1.0		
27055	5230	3800	374722	355793	1.0		
27056	5240	3800	374718	355801	2.0		
27057	5250	3800	374714	355810	1.2		
27058	5260	3800	374709	355818	1.0		
27059	5270	3800	374705	355828	1.5		
27060							
27061	5280	3800	374700	355837	2.0		
27062	5290	3800	374695	355846	1.5		
27063	5300	3800	374690	355856	1.0		
27064	5310	3800	374685	355865			
27065	5320	3800	374681	355873	1.2		
27066	5330	3800	374676	355883			
27067	5340	3800	374671	355892			
27068	5350	3800	374667	355900			
27069	5360	3800	374662	355911			
27070	5370	3800	374658	355919			
27071	5380	3800	374652	355931	1.5		
27072	5390	3800	374647	355939			
27073	5400	3800	374642	355948	1.5		
27074	5410	3800	374638	355956	1.0		
27075	5420	3800	374633	355967			
27076	5430	3800	374626	355979	1.2		
27077	5440	3800	374621	355988	2.8		
27078	5450	3800	374616	355995	2.8		

boratory:  
thod :  
t. Limit:

0199

396200

PROJECT: HOWARDS ROAD WACKER/ROCK GEOCHEMISTRY

AMPLE UMBER	NORTH metres	EAST metres	TEAST metres	TNORTH metres	DEPTH metres	ROCK	ALTER
27079	5460	3800	374610	356005	2.8		
27080							
27081	5470	3800	374607	356012	3.0		
27082	5480	3800	374600	356022	2.4		
27083	5490	3800	374597	356032	1.5		
27084	5500	3800	374591	356039			
27085	5510	3800	374587	356048	1.2		
27086	5520	3800	374581	356056	3.5		
27087	5530	3800	374577	356068	3.0		
27088	5540	3800	374572	356076	1.5		
27089	5550	3800	374566	356084	3.5		
27090	5560	3800	374563	356090	2.5		
27091	5570	3800	374556	356102	1.8		
27092	5580	3800	374551	356113	4.5		
27093	5590	3800	374547	356121	5.0		
27094	5600	3800	374542	356129	4.0		
27095	5610	3800	374536	356140	2.0		
27096	5620	3800	374532	356148	1.5		
27097	5630	3800	374525	356159	1.0		
27098	5640	3800	374522	356169	1.0		
27099	5650	3800	374517	356176	4.0		
27100							

Laboratory:  
Method:  
T. Limit:

0200

396201



**LEGEND**

- WHITE SPUR FM
  - CdW** Micaceous siltstone & lenses of gritty sandstone/grayscale
  - EdW** Quartz - feldspar phytic tuffs/epiclastics
- HENRY RIVER SEQUENCE
  - Chf** Andesitic tuffs, agglomerates & minor lavas
  - Cg** Gabbro
  - Cus** Serpentine
- Fault
- - - Inferred Fault

91-3230

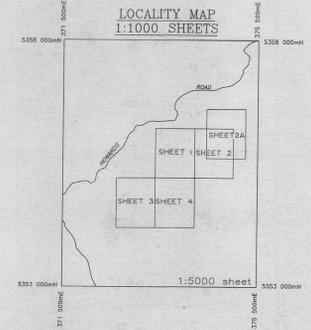
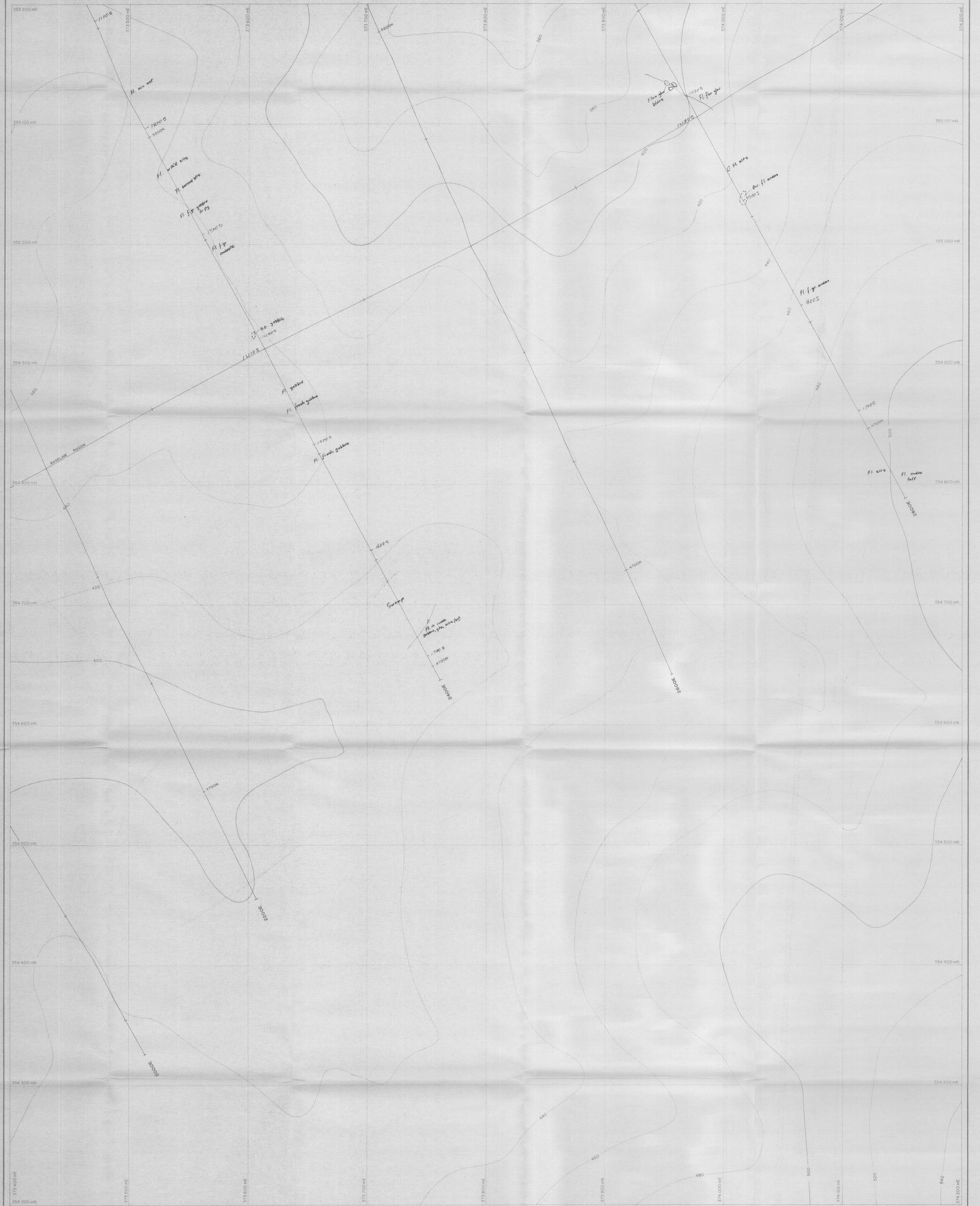
<b>RGC EXPLORATION PTY. LIMITED</b>				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">J. Crossing</td></tr> <tr><td style="font-size: 8px;">M. Walter</td></tr> <tr><td style="font-size: 8px;">JAN 1991</td></tr> </table>	J. Crossing	M. Walter	JAN 1991	<p style="font-size: 8px; text-align: center;">HOWARDS ROAD GRID E.L. 21/86</p> <p style="text-align: center;"><b>GEOLOGICAL INTERPRETATION</b></p> <p style="text-align: center;"><b>396202</b></p>
J. Crossing				
M. Walter				
JAN 1991				
5520 001	15000			
PLAN I				





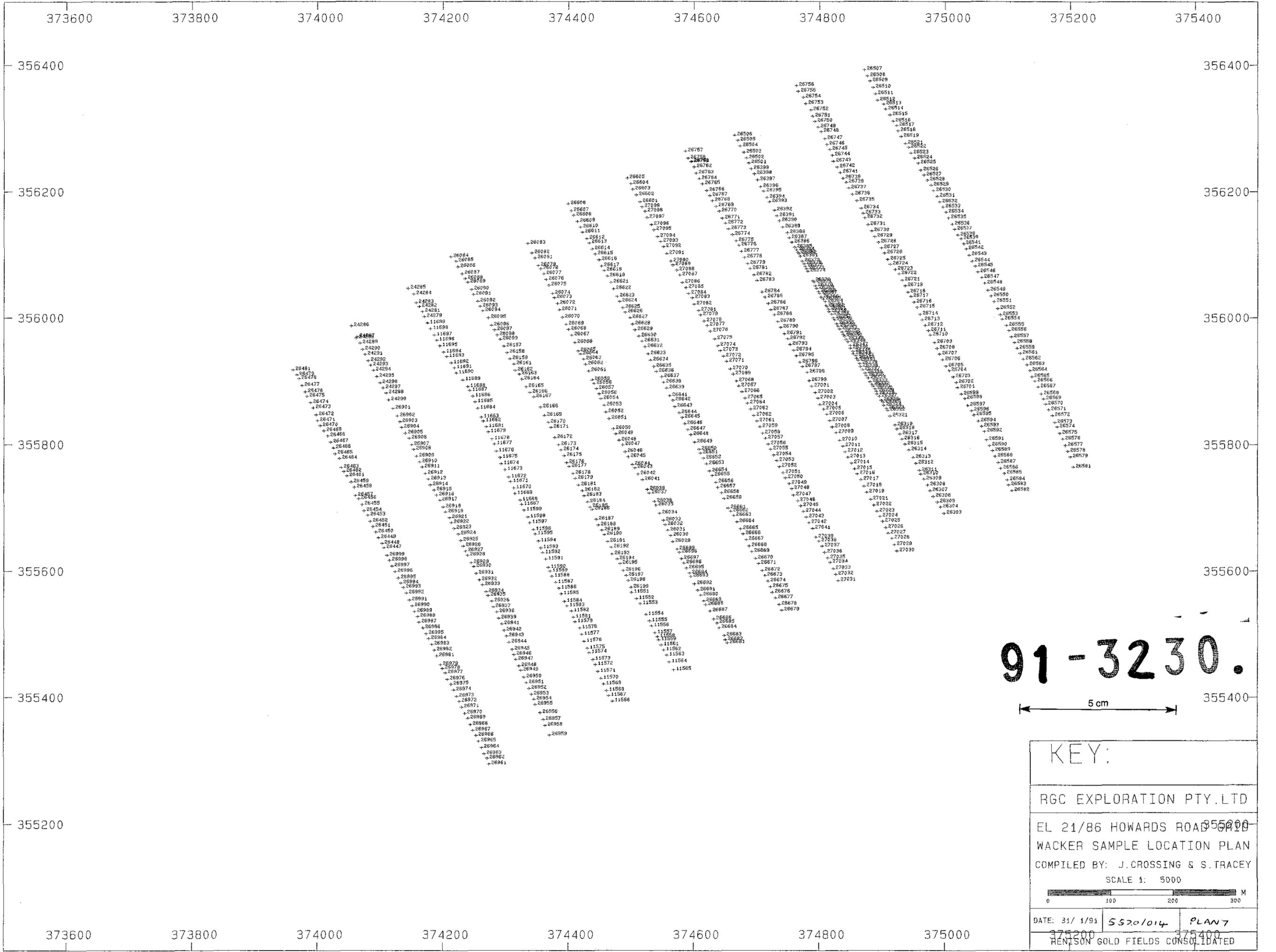






91-3230.1

RGCEXPLORATION PTY. LIMITED		HOWARDS ROAD GRID	
FACT. MAP		SHEET 4	
306207		PLAN 6	
COMPILED		SCALE	1:1000
DRAWN			
DATE			
CHECKED			
1:25,000 REFERENCE			
BASE PLAN NO. 5320/070			
OVERLAY PLAN NO.			



91-3230.

5 cm

KEY:

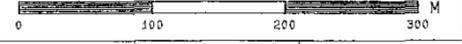
RGC EXPLORATION PTY. LTD

EL 21/86 HOWARDS ROAD

WACKER SAMPLE LOCATION PLAN

COMPILED BY: J. CROSSING & S. TRACEY

SCALE 1: 5000



DATE: 31/1/91 5520/014 PLAN 7

REYNOLDS GOLD FIELDS CONSOLIDATED



T26416 • Location of sample No.

5m

91-3230

<b>RGC EXPLORATION PTY. LIMITED</b>	
MR. J. Cressing M. Walter JAN 1991	<b>HOWARDS ROAD GRID EL. 21/86</b>  <b>ROCKCHIP</b> <b>SAMPLE LOCATIONS</b> <b>396209</b>
5520/001	1:5000
PLAN 8	