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SPECTRUM RESOURCES AUSTRALIA PTY. LTD.

E.L. 5/88

90-3129

ROYAL GEORGE AREA

EASTERN TASMANIA

REPORT FOR PERIOD ENDING 30 MARCH, 1990

MINES	
File Ref.	E.L.5/88
15 MAY 1990	
Doc. No.	
Action Officer	Initials
Refer to	
Corres.	
Submitted to	Date

AMG REFERENCE POINTS ADDED

By: *L.A. Newnham*
L.A. Newnham
30 April, 1990

MINES
E.L. 5/88
15 MAY 1990

OPEN FILE

CONTENTSTEXT:

	Page
1. Summary	2
2. Geography	3
3. Land Tenure	3
4. Previous Work	4
5. Work Completed by Spectrum 1989	5
5.1 Data Collection and Collation	
5.2 Environmental Considerations	
5.3 Drilling Results	
6. Project Discussion	8

MAPS:

- Fig 1: Locality Map (in Text.)
- 2: Surface Plan
- 3: Longitudinal Projection
- 4: Cross - Section 1000N
- 5: Cross - Section 1080N
- 6: Cross - Section 1160N
- 7: Cross - Section 1240N

APPENDIX:

Metrificated Drill Logs.

1. SUMMARY

A program of four cored drill holes was completed on E.L. 5/88 in 1989 by Spectrum Resources Australia Pty. Limited.

The object of the program was to confirm a previously indicated tin resource beneath the former Royal George mine. Holes were specially designed so as to maximise core recovery.

Results indicate that a resource of approximately 300,000 tonnes of sulfidic greisen averaging 0.4-0.6% tin as cassiterite may exist as a mineable block in a steeply West dipping zone, which possibly plunges to the North-West, to a depth of 100m. beneath the former underground workings.

Scope exists for the development of a larger resource by way of extensions at depth or the inclusion of lower grade mineralisation.

2. GEOGRAPHY:

E.L. 5/88 is located around the small township of Royal George, South of Avoca in Eastern Tasmania. (See Fig.1)

The area is readily accessible by sealed road from Avoca or dirt road from Bicheno. A network of good quality minor dirt roads exists within the E.L.

Rainfall is low (approx, 600mm. p.a.) and falls mainly in Winter. Grazing properties cover most of the area, with the balance being lightly timbered unoccupied Crown Land and Crown Leasehold.

Considerable surface disturbance South of Royal George as a result of previous mining operations, occurs in the form of a substantial open-cut, waste dumps and tailings dams. Because the mineralisation is weakly sulfidic, revegetation has been slow.

3. LAND TENURE:

E.L. 5/88 of 6 square kms. is held by Spectrum Resources of Australia Pty. Limited and is current to the 11th July, 1990. A Performance Bond of \$6,000 and a Private Land Bond of \$4,000 are held by the Department of Mines with respect to the E.L.

The Licence covers both Crown land and Private land. The latter is largely comprised of the Property "Royslea" owned by Mr. Alexander Gee and managed by Mr. R. and Mrs. A. Gee. The Crown land is both unoccupied Crown land and leasehold Crown land. (leasee Mr. R. Gee).

The Crown land - Royslea boundary cut through the Northern end of the Royal George deposit, and if the deposit has a North-West plunge, it plunges to an increasing degree onto Mr. Gee's property at depth. Because "Royslea" was granted prior to 1893, legal opinion confirms that the owner of "Royslea" has mineral rights except for royal minerals (gold and silver), and therefore minerals could not be removed from the property without the agreement of the owner.

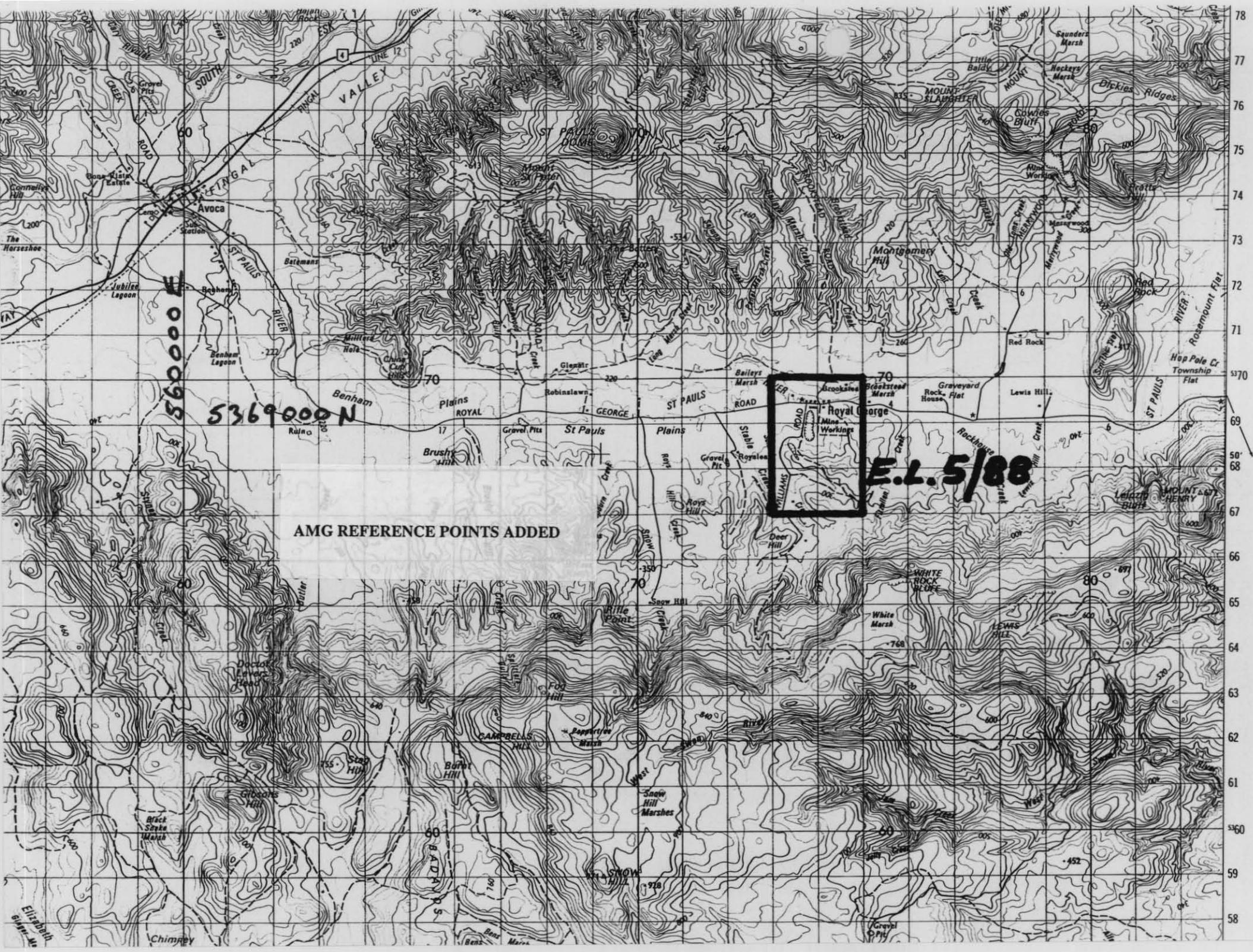
The vacant Crown land - leased Crown land boundary passes East-West through the southern end of the Royal George open-cut.

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SWANSEA 41 km

487005

FIG. 1



5369000 N

E.L. 5/88

AMG REFERENCE POINTS ADDED

4. PREVIOUS WORK:

A large volume of data on the mining and exploration activities in the Royal George area exists in the public domain. A summary only follows, together with the writers comments on this work.

The Royal George deposit was mined for tin from 1911-1922, and production has been quoted as 170,000 tonnes 0.65 tin.

In addition to a shallow open-cut which stretched along a prominent N.W. trending ridge for a total strike length of 250m., the sulfidic stanniferous greisen zone was developed underground on four levels off an inclined shaft. Most production came from levels 1 and 2. The deepest level (L4) is 80 vertical metres beneath surface.

The deposit dips S.W. at approximately 70° and if the above production figure is accepted, then the 0.65% tin production grade must have been achieved from stoping widths of approximately 5-6m. overall.

The ore was treated in a mill to the N.E. of the open-cut. Due to the sulfidic nature of the ore, it was roasted in order to achieve modest cassiterite recoveries. Tails were empounded in an area lying between the mill and the Royal George township.

Following the discovery at Royal George of the secondary uranium mineral "torbenite" during the uranium boom of the 1950's, one cored hole was drilled between 3 and 4 levels approx. 70m. S.E. of those levels. Known as "Ringwood 1", this hole intersected a mineralised greisen zone 6-7m. wide averaging approx. 0.6% tin.

In the late 1950's, BHP drilled three cored holes along the deposit at approx. 100m. below the main No. 2 Level. Results quoted are generally disappointing (0.2-0.3% tin) but are not regarded with confidence because of poor core recoveries, unrepeatable assays, and lack of survey data.

From 1965-1971, the Cornwall Coal Company, with assistance from the Department of Mines, core drilled 12 holes into the deposit and completed extensive underground chip sampling of the main No. 2 level. Cornwall's drill holes were EX size and drilled at relatively shallow depths. Recoveries were generally very poor through the main greisen zone, hence results are somewhat inconclusive. The channel sampling on No. 2 level was done on the floor. The 20 samples taken averaged 0.75% tin over widths of 1.5-4.0m.

From 1979-1981, in joint venture with CRA, the C.C.C. channel sampled 3 and 4 levels and completed one deep cored drill hole RGC1. Channel sampling on the walls of 3 Level cross-cut gave an arithmetic averaging of 0.65% tin, 0.35% Zinc and 16 g/t silver over a 6m. width. Channel sampling on the walls of 4 level cross-cuts gave an arithmetic average of 0.47% tin, 0.37% Zinc and 15 g/t. silver over an 8m. width. The deep drill hole intersected a weakly stanniferous sulfidic greisen zone 6m. wide, 200m. beneath surface.

5. WORK COMPLETED BY SPECTRUM - 1989:

In order to confirm and better define the resource potential beneath the former workings, Spectrum completed a four hole drilling program between August - October 1989.

5.1. Data Collection and Collation:

Prior to the commencement of this program, the immediate mine area was resurveyed and all previous data including former drill logs was metrified. The surface surveying was undertaken by Mr. Andrew Macgregor, Licenced Surveyor of St. Helens. He surveyed the lip of the open-cut, the inclined shaft collar and as many of the old drill hole collars as he could find. All of his data was presented on AMG and several AMG reference stations for later survey control were also established.

All former drilling data was metrified and replotted on AMG plans, sections and projections on scales of 1:500 and 1:1000. Metric base plans were compiled by Tasmanian Geological Drafting Services using CAD techniques. The metrified drill logs are appended to this report.

The Spectrum drilling program consisted of four holes, spaced at approximately 80m. intervals along strike, and designed to intersect the mineralised zone approx. 30m. beneath No. 2 Level.

Total meterage drilled was 524m.

The drilling was completed by Mr. Wayne How of East Coast Drilling, using a skid mounted Longyear 38 rig. The core was logged by a Consultant, Mr. Mick McKeown.

Because of previous core loss problems at these shallow depths due to the deep weathering in the steep structures on this prominent ridge, it was decided to drill HQ sized holes and HQ tripple tube through the main mineralised zones. Core recoveries resulting from this policy were excellent, with the exception of one interval in S2.

Drill hole collars were surveyed by Macgregor on AMG and down hole surveys were completed at 30m. intervals by Eastman Camera.

All core was logged and photographed. Mineralised intervals were sawn and half core submitted to the Mines Department Laboratories in Launceston for assay. All split and unsplit core is currently stored in galvabond coretrays at the Anchor Mine.

Initial assaying was for tin only and was by XRF.

Zones regarded as generally tin anomalous were further assayed for Cu, Pb, Zn, As, S, Ag, Sb, Bi, Cd, and U.

Pulverised and crushed rejects from this assaying are currently held at the Mines Department in Launceston.

5.2 Environmental Considerations:

All drill collars were sited on the sparsely treed, poorly grassed ridge which hosts the deposit. The northern most site (S1) was on the "Royslea" property and the southern most site (S4) was on Crown land leased by Mr. Gee. The other two sites were on unoccupied Crown Land.

All collars were sited in detail so as to avoid large trees and minimise surface disturbance. They were established with an excavator and the rig was moved by excavator.

In order to prevent return water run-off and to confine drilling fluids to the site, two sumps were dug by excavator adjacent to each site. Water was initially obtained from the underground workings viz. standing water in the inclined shaft and the No. 1 Level Tunnel access, both of which were re-opened for this purpose. When this source dried up, water was obtained from a small dam on the creek immediately West of the mine on "Royslea". This dam was enlarged slightly by excavator, with the kind permission of Mr. Gee.

Upon completion of the program, all materials and rubbish were removed from the sites. Sumps were backfilled and sites reprofiled by excavator. Fertiliser and grass seed were then applied to the disturbed areas.

5.3 Drilling Results:

The results of the program accompany this report in the form of drill logs, core photos, 1.500 plan, longitudinal projection and four sections.

The major results are summarised below:

Hole	D.T. (m.)	E.T.T. (m.)	Sn	Cu	Pb	Zn %	As	S	Ag	Sb	Bi g/t	Cd	U
S1	2.4	2.0	0.47	0.09	0.09	0.31	0.19	2.5	23	14	36	72	41
S2	11.5	10.0	0.46	0.07	0.03	0.42	0.24	2.6	19	15	40	71	26
S3	8.2	7.1	0.59	0.11	0.03	0.37	0.5	3.7	27	19	69	46	65
S4	8.8	7.1	0.12	<0.01	<0.01	0.10	<0.01	0.4	<12	<10	<5	16	28

In summary, the mineralisation occurs in an 8-12m. wide N.W. trending greisenised structural zone which transects several granite types, including coarse porphyritic granite, feldspar porphyry granite, microgranites and pegmatitic types.

The main zone varies in strength of greisenisation and mineralisation but is otherwise, remarkably persistent in strike, width and dip over the now drilled 300m. of strike and 200m. of depth.

In the central section, in the vicinity of S2 and S3, the zone is represented by an 8-10m. dark gray zone of almost continuous greisenisation accompanied by significant sulfides (pyrite, chalcopyrite, sphalerite and arsenopyrite) and visible cassiterite. Tourmaline is pervasive.

North and South, and apparently down dip of this main central section, the zone persists but consists of a collection of narrower classic greisen veins, often with quartz centres and micaceous - tourmaline rich borders. Most of the cassiterite and sulfides is present in these veins.

Hence in a hole such as S1, the zone of greisenised veins is still about 12m. wide, but the widest vein for practical mining considerations is only 2.0m. wide.

Greisen veins are not confined to this main mineralised zone, and narrow dark gray greisen veins are not infrequent in all granite types well away from the main zone. Observations in drill core of greisen vein orientation suggest most veins have a persistent N.W. trend but occasionally small veins cross-cutting this general direction were noted.

6. PROJECT DISCUSSION:

Past mining history combined with core drilling results, suggests there is a modest tin resource present at Royal George which may have a future commercial value as a medium sized mining operation.

Various attempts have been made to quantify the resource and these are listed below together with the writer's estimate of a resource potential based on the current drilling limits:

Mines Department 1970: 160,000 tonnes 0.61% tin

C.R.A. 1981 : 600,000 - 1,200,000 tonnes 0.3-0.4%
tin

Spectrum : 300,000 tonnes 0.4-0.6% tin

The Spectrum estimate is based on a minimum grade of 0.4% and a grade by width factor of 12. It occurs in a single block approx. 170m. long by 80 metres deep by an average of 7m. horizontal width, and dipping 70 directly beneath the NO. 2 Level. Such a body would contain approx. 3,500 tonnes of ore and 17 tonnes tin per vertical metre.

Using the existing drilling data, it is very difficult to determine the plunge of this main mineralised zone, but there is a reasonable suggestion that it plunges approx. 50 to the N.W. as shown on the longitudinal projection. If this is correct, then potential exists down dip in that direction for the development of a further resource.

The steep dip, relatively good ground conditions and reasonable widths combined with the access topographic advantage provided by the sharp ridge combine to suggest that this would not be a difficult deposit to mine with modern trackless equipment.

No recent mineralogical, petrological or metallurgical studies have been conducted on drill core samples. Whilst much of the cassiterite is relatively coarse, there is undoubtedly a proportion of finer cassiterite present and there will be a close cassiterite - sulfide relationship. It could be anticipated that milling and waste disposal costs would be reasonably high.

The resource indicated by drilling and the inferred resource potential indicate that a future mining operation might be feasible on this deposit, but that a sustained tin price substantially above that currently prevailing would be required.

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010

PROJECT: *ROYAL GEORGE*

HOLE: *RINGWOOD*

Commenced	
Completed	<i>1955.</i>
Logged by	<i>Ringwood.</i>
Drilled by	

Purpose
<i>To test the central section of the Royal George deposit at shallow depth.</i>

Comments on Completion
<i>No record of recoveries. Probably poor due to shallowness of hole. U assays are generally higher than later CRA ones. Possibly 1955 methodology? (CRA-U; Ringwood-U₃O₈?)</i>

Northing	Easting	Level	Dip	Bearing	Length
		<i>297.</i>	<i>43.5</i>		<i>112.8</i>

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
<i>Unknown.</i>	

Recovery	
Depth	%

Summary

Depth		Level		Recovery %	Description	Assays				
From	To	From	To			Length(m)	Sn.	U ₃ O ₈		
<i>90.22</i>	<i>98.19</i>	<i>234.9</i>	<i>229.4</i>	<i>Unknown</i>		<i>7.97</i>	<i>0.64.</i>	<i>Approx 100 p.p.m.</i>		
<i>65.2</i>	<i>71.7</i>					<i>[E.T.T. 7.0m]</i>				

487011

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Project: *ROYAL GEORGE*

Hole: *RINGWOOD*

Page: *1.*

Tas. Mines Dept?

From	To	Rec (m)	Rec (%)	Description	Structural	Assays / BMR?			
						From	To	Sn%	Uppm
0	74.2			<i>Tourmaline granite and kaolinised qtz. porphyry</i>		0	73.2	NOT SAMPLED	
						73.2	74.2	Tr.	12
74.2	80.77			<i>Qtz. porphyry, some tourmaline, feldspars kaolinised, oxidised, sheared</i>	<i>Strongly sheared in places.</i>	74.2	75.89	Nil	43.
						75.89	77.72	Nil	57
						77.72	79.25	Nil	120
80.77	81.53			<i>As above but silicified</i>	<i>Strongly sheared</i>	79.25	80.77	Nil	49.
						80.77	81.53	Nil	58
81.53	81.99			<i>Quartz with abundant galena and pyrite, oxidised and leached to some extent.</i>		81.53	81.99	0.58	190
81.99	83.82			<i>Kaolinised, aplitic granite with minor greisen and sulfides</i>		81.99	83.82	Nil	140
83.82	85.04			<i>Quartz porphyry, altered, greisen and minor sulfides.</i>		83.82	85.04	Nil	98
85.04	86.56			<i>Quartz and sulfides, some leaching; some kaolinised granite</i>		85.04	86.56	Tr.	100
86.56	88.24			<i>Mica Greisen, oxidised</i>		86.56	88.24	Nil	70
88.24	93.57			<i>Quartz and sulfides; leached in parts</i>		88.24	90.22	0.11	61
						90.22	92.05	0.67	110.
93.57	95.40			<i>Kaolinised porphyry with minor greisen; 30cms. qtz. and sulfides.</i>		92.05	93.57	0.64	40.
						93.57	95.40	Tr.	130
95.40	98.45			<i>Quartz and sulfide.</i>		95.40	96.32	0.89	175.
						96.32	98.45	1.00	76
98.45	101.35			<i>Granite with zones of kaolinisation and greisenisation</i>	<i>Oxidised and altered</i>	98.45	99.36	Tr.	130.
						99.36	101.35	Nil	180
101.35	102.87			<i>Granite, often fresh; few greisen veins</i>		101.35	102.87	Nil	77
102.87	104.39			<i>Mica greisen with minor sulfides</i>	<i>Well oxidised.</i>	102.87	104.39	0.16	150

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PROJECT: ROYAL GEORGE

HOLE: BHP 1

Commenced	May 1957
Completed	
Logged by	N. MCLAREN
Drilled by	BHP

Purpose
To test the northern section of the main Royal George lode at depth.

Comments on Completion
According to CRA Log, recoveries through mineralised zone look good. No recovery data at time of drilling available.

All collar data approx. only.

Northing	Easting	Level	Dip	Bearing	Length
8,292	3,417	292	-60	060	188.4 m.

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
All	AX 30mm. core

Recovery	
Depth	%

No data available.

487014

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Sn	V	Zn	Cu
147.10	155.76	164.6	157.1		One 1.7m. interval approx. 1.9% Remainder 0.1-0.2.	8.66 [E.T.T. 6m]	0.29	20	0.11	0.06.
147.10	155.76	164.6	157.1		Incl. 1.7m. interval approx. 1.6%.		0.49			
140	157				Thin anomalous unit, generally > 0.1%.	17m [E.T.T. 13m]				

CRA =>

BHP (Mines Dept.) =>

BHP assays 1/2 AX core
CRA assays 1/4 AX core
Core at Mines Dept. Hdb.

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: BHP 2

Commenced	
Completed	July 1957.
Logged by	N. McLAREN
Drilled by	BHP.

Purpose
Testing the southern section of the main Royal George look at moderate depth.

Comments on Completion
No log is available. Core recoveries not available. When CRA re-sampled core, the core through the interval BHP assayed was missing.

Northing	Easting	Level	Dip	Bearing	Length
		283	-60°		190.2

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
All	AX: 30 m. m.

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Str.			
136.86	140.51	170.5	167.3	Unknown		3.65	0.21.			
68.4	70.3					[ETT. 2.8m]				
182.88	184.71			50	Only 50% core (AX 1/4) remaining.	1.83	0.22.			
						[ETT 1.40m.]				

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: BHP 2

Page: 1

487018

From	To	Rec (m)	Rec (g)	Description	Structural	Assays												
						From	To	Sn										
	0	79.48																
	79.48	79.88																
	79.88	135.86																
	135.86	136.09						0.11										
	136.09	136.86						0.08										
	136.86	138.07						0.22										
	138.07	138.84						0.37										
	138.84	139.60						0.11										
	139.60	140.51						0.14										
	140.51	184.10																
	184.10	190.20						Tr.										
									50	U	Zn	Cu	As					
									CR									
									0.32	24	1300	270	5.					

Only 0.9 m. of 1/4 AX core available for assay



SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: BHP 3

Commenced	
Completed	SEP 57
Logged by	N. McLAREN
Drilled by	BHP.

Purpose
To test the central section of the Royal George lode at moderate depth.

Comments on Completion
No log available. Core recoveries unknown. Generally very poor mineralisation which is unusual in this central section.

Northing	Easting	Level	Dip	Bearing	Length
		293.3	-60		155.6 ← Possibly longer. (190?)

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
All	AX (30mm core).

Recovery	
Depth	%

Summary

	Depth		Level		Recovery %	Description	Assays			
	From	To	From	To			Length(m)	Sn.		
B.H.P.	139.11	142.44	172.8	169.9	Unknown	Half AX Core.	3.33	0.27		
	62.5	71.2					E.T.T. 2.5m			
C.R.A.	138.99	142.04			85%	Quartered AX core	3.05	0.28		
							E.T.T. 0.22			

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SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 1

Commenced	24 Jan 66.
Completed	Feb. 1966
Logged by	G. Urquhart
Drilled by	Mines Dept.

Purpose
To test Northern extension of Royal George lodes at shallow depths.

Comments on Completion
The best assays appear to be in the H.W. of what was logged as the main lode, but this may simply be a reflection of poor recoveries.

Northing	Easting	Level	Dip	Bearing	Length
8,470	3,412	273.5	-60	57°	43.8

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
	EX ?

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Sn	V	W	Pb
19.4	26.1	256.7	250.9	40 (Average)	Best assayed intersection	6.7	1360	28	20	1700

Zn Cu Ag ^{CRA} ppm
3700 600 56*

* Weighted by one high assay.

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021

Project: ROYAL GEORGE

Hole: C001

Page: 1

From	To	Rec (m)	Rec (g)	Description	Structural	Assays <i>Analysed AMS (p.p.m.)</i>																	
						From	To	Sn (C.R.A)	V	W	Pb	Zn	Cu	Ag									
0	3.05	0.36	12	0-1.5m: 15cm. broken core; coarse grained porphyritic granite, slightly greisenised in places. Cassiterite very sparse. Tourmaline spangles at 1.5m.	broken	0	10.0	1900	54	130	50	1600	100	3									
3.05	7.62	1.04	23												10.0	18.6	305	110	140	10	1600	105	1
7.62	11.6	0.71	18																				
				1.5-3.05: 24 cm. core Partly greisenised coarse grained granite. Tourmaline sparse, cassiterite very sparse.	Broken.																		
				3.05-6.1m: 0.4m. core. Partly greisenised coarse grained granite. Pyrite sporadic, Tourmaline sparse. Tin sparse to sporadic in first 15cm. of core.	Broken.																		
				6.1-7.62m: 0.45m. core. Partly greisenised coarse grained granite. Tin sporadic first 10 cm. and last 10cm. of core. Pyrite coats fractures. 0.5cm wide arsenopyrite veinlet and tourmaline in top 6cm. of core.	Broken.																		
				7.62-9.1m: 15cm. core; coarse granite	Broken.																		
				9.1-10.0m: 5cm. core; Partly greisenised, tourmalinised, otherwise barren.	Fragmented																		
				10.0-11.6m.: 30cm. Partly greisenised coarse granite. Tin sparse to sporadic in last 15cm.	Strongly sheared in top 15 cm.																		
11.6	14.9	0.6	18	11.6-13.4m: 0.1m. core; Coarse granite; Tin sporadic	Broken and fragmented																		
				13.4-14.9m. 0.38m. core; Coarse granite; Tin sparse; tourmaline and biotite common.	Broken																		

Sampled with core grinder

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Project: ROYAL GEORGE

Hole: CCC 1

Page: 2

487023
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From	To	Rec (m)	Rec (%)	Description	Structural	Assays							CRA assays				
						From	To	Sn	Sr	V	W	Pb	Zn	Cu	Ag		
14.9	18.6	0.64	17	14.9-15.5: 0.45m. core; Coarse biotite granite; Barren, not greisenised	Broken												
				15.5-18.6: 0.12m. core; Biotite granite. Barren as above.	Fragment.												
18.6	21.3	0.99	37	18.6-19.3: 0.35m. core; Slightly greisenised coarse granite. Tin sporadic tourmaline sporadic; pyrite sparse.	Broken	18.5	19.3	Nil	470	32	<10	370	2400	60	4		
				19.3-21.3: 0.52 core; Greisenised coarse granite. Tin and tourmaline sporadic. Tourmaline stringers parallel to shearing. Pyrite, chalcoc, Galena sporadically disseminated.	Broken and sheared 40° e.a.	19.3	21.3	0.16	1750	28	15	200	4000	320	9		
21.3	22.5	0.1	8	21.3-22.5: 5cm. core. Greisenised coarse granite. Arsenopyrite, pyrite and marmatite sparse. No tin.	Fragments	21.3'											
22.5	25.3	1.4	51	22.5-24.3: 0.3m. core; Greisenised and altered coarse granite; Galena, marmatite, chalcoc. sporadic to common. Tin sporadic; Green fibrous mineral maybe a secondary phosphate.	Broken.	22.5	23.7	Nil	740	24	<10	7400	7700	2100	250		
				24.3-25.3: Partly greisenised coarse granite; top 0.6m. oxidised. Tourmaline (+ tin?) sporadic to common; no sulfides		23.7	25.3	Nil	1200	30	40	110	910	100	4		
25.3	28.9	2.8	79	25.3-26.1: 0.7m. core; Greisen and granite/greisen. Tin sporadic, sulfides sporadic.	Strongly sheared; 43° to e.a.	25.3	26.2	Tr.	1600	30	10	530	2900	150	5		
				26.1-29.1		26.2	?27.7	Nil	490	28	10	2100	2700	220	20		
				P.T.O.		?27.7*	29.1	Nil	370	26	<10	430	4700	130	10		
						* Approx. half way along recovered core in interval.											

487027
025

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 3.

Commenced	17 May 66
Completed	02 Jun 66
Logged by	G. Upphart.
Drilled by	Mines Dept.

Purpose
Drilled from No. 2 level to test northern section of main lode.

Comments on Completion
Hole drilled down dip, and poor recoveries. Actual results probably approx. 4m. (horiz) @ 0.3 g.

Northing	Easting	Level	Dip	Bearing	Length
8,390.0	3,487	263.4	-42	221.0	28.9

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
	EX ?

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Sn	V	Zn	Cu
18.3	25.9	251.2	246.1	Poor (65%)	Best Intersection	7.6	2855	28	2310	230.
13.6	19.2						(0.28)			
						True Width				
						Approx. Len.				
						3.6				

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

028

Project: *ROYAL GEORGE*

Hole: *CCC3*

Page: *2*

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						C.R.A.							
						From	To	SA	U	W	Pb	Zn	Cu	Ag					
				Thus from 16.7-18.0m, a possible max. intersection of 1.05m. of sulfide bearing greisen if 100% core recovered. Actual width of greisen recovered 0.28m.															
				18.0-18.6m: 5cms. recovered, consisting of greisenized granite. Sulfides lacking.	Fragmented.														
				18.6-19.2m: 30cms. recovered. First 10cms. is pyr. + asp. bearing greisen, changing to coarse grained granite. Possible 0.4m. greisen if 100% core recovered.	Broken.														
				19.2-20.1: 35cms. core; Consisting, (except for first 3cms.) of pyr. - arsenop. - sphal. bearing greisen. Thus a possible maximum intersection of 0.88m. of sulfidic greisen if 100% core recovered. Actual greisen width 33cms.															
				20.1-21.6: 1.2m. recovered. First 19cms. of pyr. - sphal. - Arsenop. - bearing qtz. greisen vein followed by 58cms. of coarse grained tourmaline granite. Last 45cms. composed of pyr. - sphal. - Arsenop. bearing qtz. greisen.															
						18.3	21.6	3400	28	20	70	3100	330	6					

487029

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

023

Project: ROYAL GEORGE

Hole: CCC 3

Page: 3.

From	To	Rec (m)	Rec (%)	Description	Structural	Assays												
						From	To	Sn	Su	U	W	Pb	Zn	Cu	Ag			
				21.6 - 24.4: Barren coarse grained granite.	2 Samples combined but not including 24.4 - 25.9.													
				24.4 - 25.9: Greisen. Recovered 1.25m.														
24.4	25.9	1.25	83.			21.6	28.9		900	28	10	35	1400	120	3			
				25.9 - 26.3: 15cms. core recovered. Slightly greisenised, slightly pyritic rock.		24.4	25.9	0.53										
25.9	26.3	0.15	37.															
26.3	27.7	0.5	36.	26.3 - 27.7: 48cms. core recovered. of which first 17cms. is coarse grained barren granite. Last 31cms. of pyritic greisen.	Thus possible max. width of greisen if 100% recovered is 1.25m. Actual width of greisen = 30cms.													
27.7	28.5	0.15	19	27.7 - 28.9: 30cms. core recovered. Consisting of pyrr. - arsenop. - bearing greisen.	Fragmented. Thus possible maximum intersection of greisen if 100% core recovered = 1.2m. Actual recovered with = 0.3m.													
28.5	28.9	0.12	30.															

487030

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 4

Commenced	06 JUN 66
Completed	27 JUN 66
Logged by	G. Urquhart.
Drilled by	Mines Dept.

Purpose
To test the northern extension of the main Royal George lode at a shallow depth.

Comments on Completion
Very poor core recoveries through best intersection zones.

Northing	Easting	Level	Dip	Bearing	Length
8,439	3,423	278.3	-60	057	38.1

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
	? EX.

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Sr	U ₃₀₈	Zn	Cu
13.7	18.2	266.4	262.5	30.	Best Intersection	4.5	0.25	105	0.2700	0.03.
6.8	9.1									
24.2	28.0	257.3	254.1	38	Best Intersection.	3.8	0.17	45	0.12	0.02
12.1	14.0									

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC4

Page: 1

031

From	To	Rec (m)	Rec (%)	Description	Structural	Assays							Zn	Cu	Ag		
						From	To	Sn	Sr	U	W	Pb					
0	7.9	0.53	07	Coarse grained biotite granite; scattered small tourmaline specks.													
								(c.c.c.)									
7.9	9.4	0.35	23	Coarse quartz biotite granite. Slightly gneissified.		0	9.4	200	75	30	10	450	40	<1			
9.4	10.9	0.35	23	Quartz - mica gneiss and altered granite. Minor sphalerite and pyrite. Possible maximum width 1.5m.		9.4	10.9	1600	1700	620	20	100	4300	90	1		
10.9	13.7	0.75	27	Coarse quartz - biotite granite	Fragmental core recovery.	10.9	13.7	560	55	10	20	1100	40	<1			
13.7	15.2	0.48	32	Quartz - gneiss, quartz - mica gneiss and gneissified coarse quartz granite; Minor disseminated sphalerite	Fractured 45° to C.A. Possible max. width 1.5m.	13.7	15.2	1800	1930	195		3900	605	7			
15.2	16.7	0.45	30	Coarse quartz - tourmaline biotite granite.		15.2	16.7	5800	6600	65	180	190	3600	400	10		
16.7	18.2	0.33	22	First 20cms. coarse quartz granite; Last 13cms. quartz mica gneiss. No sulfides.	Max. possible width of gneiss if 100% recovery = 1.30m. Actual width of gneiss = 13 cms.	15.2	18.2	540	55	<10	30	1200	50	<1			
18.2	19.8	0.28	17	Coarse quartz - biotite granite.		18.2	21.3	320	40	30	20	920	30	<1			
19.8	21.3	0.10	07	Quartz - mica gneiss. No sulfides	Fragments only.												
21.3	22.8	0.90	60	First 0.95m. in coarse quartz - biotite granite. Last 10cms. of fragments of quartz - mica gneiss; no sulfides.	Max. possible width of gneiss if 100% recovery = 0.55m. Actual width of gneiss = 0.10m.	21.3	24.2	420	80	10	20	1100	30	<1			
22.8	24.3	0.95	63	Coarse quartz - biotite - tourmaline granite. Last 10cms. of quartz - mica gneiss fragments.	Possible max. width of gneiss if 100% recovery = 0.65m. Actual gneiss width = 10cms.												

487032

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487033
032

Project: ROYAL GEORGE

Hole: CCC 4

Page: 2

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						Zn	Cu	Ag			
						From	To	Si % Fe	Si	U	W				Pb		
24.3	25.9	0.40	27	First 18cms. of quartz - mica greisen. No sulfides Therefore between 22.8-25.9m, a possible max. greisen width of 1.95m if 100% core recovery. Actual greisen width 0.28m.	Close fractures at 43° C.A. Possible max. greisen width 1.25m. Actual greisen width 18cms.	24.2	24.6	2700									
						24.2	24.8		3050	85	30	130	2400	720	9		
						24.8	28.0		1500	40	25	60	990	75	1		
25.9	26.5	0.23	38	Greisenised coarse quartz granite. No sulfides	Fragment, strongly cleaved.												
26.5	28.3	0.76	42	Coarse quartz granite, partly greisenised; No sulfides													
28.3	29.5	1.1	93	Coarse quartz granite except for last 10cms. of greisenised granite. No sulfides	Possible max. greisen width of 50cms. Actual width 10cms.	28.0	30.5		360	36	25	35	820	40	1		
29.5	30.1	0.33	55	Coarse quartz granite.													
30.1	31.7	1.43	90	First 42cms. in coarse quartz granite followed by 50cms quartz - mica - greisen zone, no sulfides. Last 50cms. in coarse quartz granite	Fractured at 40° to C.A.	30.5	33.5		1070	24			780	50	1		
31.7	32.6	0.80	89	Coarse quartz - biotite - tourmaline granite.													
32.6	33.6	0.80	80	Altered coarse quartz - biotite - tourmaline granite.													
33.6	34.8	0.75	63	First 12cms in quartz - mica greisen. Last 62cms in coarse grained granite, partially altered.	Fractured and 35° to C.A. Possible max. greisen width 58cms. Actual greisen width 12cms.	33.5	38.1		500	28			460	70	1		
						34.7	36.3	77									
						36.3	37.8	1000									

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 5.

Commenced	06 JULY 66
Completed	31 AUG 66
Logged by	G. Urquhart
Drilled by	Mines Dept.

Purpose
To test the Southern extension of the main Royal George lode at shallow depth.

Comments on Completion
Main Zone 3m. wide from 69.8-73.3 but tin bearing greisen zone 60-80m. Contact between coarse grained biotite granite and finer grained porphyritic granite 69m. Hence main mineral within finer porphyritic granite.

Northing	Easting	Level	Dip	Bearing	Length
8,126	3,578	294	-60	59	81.7m.

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
	? EX.

Recovery	
Depth	%

Summary

Depth		Level		Recovery %	Description	Assays					
From	To	From	To			Length(m)	Sr.	UgHf	Zn	Cu	
69.8	73.3	233.6	230.5	80 (Approx)	Best Intersection	3.5	0.30	22	0.03	0.01	Ag 1.
36.9	36.7				Narrow tin bearing greisen veins 60-80m. Contact between granites 69.0m.						

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

033

Project: ROYAL GEORGE

Hole: CCC 5

Page: 1

From	To	Rec (m)	Rec (%)	Description	Structural	Assays							Zn	Cu	Ag		
						From	To	Sn	Sn	U	W	Pb					
0	10.5	0.15	2.	Quartz fragments													
10.5	16.1	0.75	13.	10.5-19.9m: Pale coarse grained biotite granite, tourmaline bearing, white feldspars. Torbanite (?) on fractures at 11.0m.		0	25.3	70	26	180	130	390	140	2			
16.1	17.1	0.15	15.														
17.1	18.3	0.52	43.														
18.3	19.9	0.33	21														
19.9	21.6	0.87.	51	19.9-21.6: Altered, greisenized coarse grained granite. Feldspars pink, becoming white. Biotite sparse. 15cm wide barren quartz greisen zone at 20.0m.													
21.6	23.8	1.10	50	Altered coarse grained biotite granite.	Fractured. Fractures 35° and 50° to C.A.												
23.8	25.3	1.15.	77.	23.8-31.1: Coarse grained biotite granite; incipient sporadic alteration of feldspars to pinitite in places, indicated by decomposition of feldspars to green clayey mineral	Shear zone at 26.4-26.9. Fractures 15-20° to core axis. Minor shear 10° to C.A. at 30.8.	25.3	28.6	60	24	160	10	280	180	1			
25.3	29.9	3.6	80.			28.6	34.4	75	28	120	10	290	85	1			
29.9	31.7	1.3	72.														
31.7	35.8	2.7	66.	31.1-42.7m: Coarse grained biotite granite, bearing tourmaline in a few places. Feldspar sporadically altered to pinitite. Rock slightly greisenized at 35.3m. A 5cm wide greisen band at 35.7m. carrying pyrite and tourmaline.		34.4	37.5	330	30	110	15	520	110	1			
35.8	39.6	3.1	82.		37.5	42.7	85	28	170	25	460	95	1				
39.6	42.7	7.32	43.														
42.7	45.7	1.72	58	42.7-44.7: Fine grained gray quartz greisen and partly greisenized rock. Thin (0.5cm.) sulfide stringers in fractures, mainly pyrite & arsenopy. Sporadic visible cassiterite, finely disseminated.		42.7	44.7	Tr.	750	100	220	1100	230	4			
						44.7	56.2	700.	40	110	60	940	190	3.			

487036

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC5

Page: 2

036

From	To	Rec (m)	Rec (#)	Description	Structural	Assays							Zn	Cu	A.		
						From	To	SA	Sn	U	W	Pb					
45.70	48.6	1.9	66.	44.7-47.4 m: Altered coarse grained biotite granite. Felspars pinitised. Not mineralised.													
48.6	51.7	2.1	69.	47.4-51.7 m: Coarse grained biotite granite, greisenised in local patches. Some felspars pinitised. Fractures 0.5 cms wide filled with arsenopyrite	Fractures 40-45° to C.A.												
51.7	54.7	2.9	97.	51.7-59.3 m: Coarse grained biotite granite. Sporadic felspars pinitised but overall not greatly altered. Tourmaline dispersed up to 52.1 m. Greisen zones in the following intersections:	58.6 m: 15cm. fracture zone at 20° to C.A.												
54.7	57.7	3.0	100.			56.2	61.2		290	26	15	20	450	15	1		
57.7	59.2	1.5	100.	52.5-52.75: 25cm. wide qtz. greisen carrying arsenop, pyrite, and chalc. 55.1-55.25: 15cm. wide qtz. greisen band with sulfides 55.6-55.73: 13cm. qtz. greisen with sulfides													
59.2	62.3	2.9	95	59.3-66.8 m: Coarse grained biotite tourmaline granite, felspars pink and sporadically pinitised.		61.2	61.52	1700	2150	110	10	1200	1900	210	21		
62.3	65.2	2.9	100.			61.5	64.5	Nil	200	34	<10	30	390	28	<1		
65.2	67.4	2.2	100.	61.2-61.55: 35cm. qtz. greisen zone carrying chalc, pyrite, arsenop. 64.5-64.85: 35cm. qtz. greisen band with pyrite. 66.4-66.7: 30cm. greisen band carrying arsenopyrite.	Sulfide filled fracture in this zone at 40 to C.A.	64.5	64.8	Tr.	620	32	15	70	480	320	3.		
						64.8	66.4	Nil	180	34	20	20	380	32	<1		
						66.4	66.7	1600	2150	36	10	40	400	290	4		
						66.7	67.1	Nil	120	90	15	30	370	35	<1		
						67.1	67.3	2700	3900	32	10	35	150	380	2		
						67.3	69.8		230	32	15	20	390	65	<1		

487037

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 6

Commenced	02 SEP. 66
Completed	12 DEC. 66
Logged by	G. Upphart
Drilled by	Mines Dept.

Purpose
To test the southern end of the main Royal George lode at shallow depth.

Comments on Completion
Hole abandoned at 94.5m. became stuck rods. Swarm of narrow veins 60-94 in both granite types. Thin veins carry 0.1-0.8% and inter vein material 0.02-0.05%. Veins = approx. 20% of rock from 78-94m.

Northing	Easting	Level	Dip	Bearing	Length
B173	3534	295.6	-60.5	50°	94.5

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
	Ex ?

Recovery	
Depth	%

Summary

Depth		Level		Recovery %	Description	Assays					
From	To	From	To			Length(m)	SA	Ug6	ZA	Cu	
80.2	84.5	225.8	222.1	96 Approx.		4.3	0.17 (1770)	23	0.74	0.05	A9 22.
40.1	42.2										
88.5	92.3	218.6	215.3	90-95.		3.8	0.21	23	0.12	0.01	1
44.2	46.1										
					Thin vein swarm from 60-94 in both coarse grained granite and porphyry.						

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487044
043

Project: ROYAL GEORGE
Recoveries.

Hole: CCC 7

Page: 1

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						C.R.A.						
						From	To	SO	SA	V	W	Pb	Zn	Cu	Ag			
0	2.7	0.18	7	0-9.3 m:														
2.7	6.4	3.5	94	Fine grained biotite and tourmaline bearing granite. Sporadic qty. phenos.	Fractured 35° to C.A. 6.4-6.9m.	0.0	6.4		24	40	110	15	110	65	1			
6.4	7.0	0.4	71															
7.0	8.2	0.6	53	up to 0.5cm. in size. Yellowish - green oxidation on some fractures		6.4	10.0		36	32	180	10	140	120	1			
8.2	9.3	1.1	100.															
9.3	10.2	0.8	89.	2.7-6.4m. Some feldspars incipiently altered to pinitite 8.2-9.3m														
10.2	12.5	1.7	73.	9.3-14.9m:														
12.5	14.9	1.9	79	Fine grained biotite-tourmaline granite. 15cm. pegmatite with tourmaline at 10.2-10.4m. Tour. rich 14.3-14.6m. Phenocrysts mainly of square or rectangular shaped quartz.	Fractured 35° to C.A. at 12.8	10.0	14.9		24	40	150	5	130	100	1			
1																		
14.9	18.0	2.2	70.	14.9-38.7m:														
18.0	20.1	1.8	88	Fine grained biotite-tourm. granite. Tourmaline concentration at 18.5m, enveloped by aureole of silicified altered rock. Feldspars incipiently pinitized 24.7-30.8m.	Fractured 30° to core axis at 14.9-17.9.	14.9	20.1		26	38	170	10	140	170	1			
20.1	21.5	0.8	58															
21.5	25.9	4.3	98.			20.1	25.9		28	26	100	10	160	220	1			
25.9	27.4	0.9	65.															
27.4	30.7	0.9	27.															
30.7	34.4	3.7	100.	38.7-53.7m:		25.9	34.4		60	26	130	45	160	330	1			
34.4	35.6	1.2	100.	Fine grained biotite-tourm. granite. Pegmatite at 39.6m. Qty. phenos. in granite 3-12mm. across at 42-53m. Sporadic large 25mm. felp. phenos.	Fractured rock. Fractures 26° to C.A. at 45.7 and 30° to C.A. at 52.1													
35.6	36.8	0.7	62.															
36.8	38.7	1.7	91			34.4	38.7		20	4	170	15	180	140	<1			
38.7	39.6	0.8	93															
39.6	42.2	1.4	54.6															
42.2	43.9	1.4	82.	53.7-55.2m:		38.7	43.9		65	44	90	20	210	110	<1			
43.9	46.0	2.3	100.	Coarse grained biotite-tourm. granite. Feldspars incipiently pinitized	Closely fractured 40° to C.A.													
46.0	48.7	2.6	95			43.9	48.7		50	16	80	10	290	175	<1			

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487045
04A

Project: ROYAL GEORGE

Hole: CCC7

Page: 2

Recoveries.

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						C.R.A.						
						From	To	Sn	Sr	U	W	Pb	Zn	Cu	As			
48.7	49.6	0.8	88	55.2-60.0m:														
49.6	50.6	1.0	100.	Abrupt change to fine grained granite.														
50.6	52.0	1.3	90.	60.0-67.3m.		48.7	51.8	45	32	90	10	390	105	1				
52.0	54.8	2.5	91.	Coarse grained biotite-tourm. granite. Zonal yellow alteration of sporadic sodic feldspars.		51.8	57.3	90	32	90	10	270	75	<1				
54.8	58.2	2.0	59.			57.3	60.0	65	100	110	10	580	220	<1				
58.2	59.4	1.0	83.			60.0	66.4	45	24	120	10	210	230	<1				
59.2	60.2	0.7	70.	67.3-69.0:		66.4	71.9	190	38	110	80	470	200	2				
60.2	63.1	2.0	68	Alternating coarse and finer grained granites, which is porphyritic with qtz. phenos. and white feldspars.														
63.1	64.1	1.0	100.	Porphyritic granite in bands up to 10cm wide. No chilled margins in either granite at contacts which are sharp but intergrown. Porph. granite apparently assimilated crs. grained granite. A 3m greisen band at 68.3, 38° to core axis.														
64.1	66.6	2.3	89	69.0-77.5m:														
66.6	79.2	12.6	100.	Finer grained porphyritic biotite granite. Sporadic pyramitic (qtz.-tourmaline) pockets. Greisen blebs and patches from 69.3-71.2m but very minor. Phenos of qtz. and feldspar 1-3cm. in size.		71.9	76.2	80	44	100	20	175	240	1				
				77.5-79.2m.		76.2	77.7	28	40	20	10	130	10	<1				
				Fine grained porphyritic biotite granite. 12mm wide qtz-nica greisen band at 78.8, 48° to C.A.		77.7	79.2	40	44	25	10	240	30	<1				

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC 7

Page: 4

046

487047

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						ppm					
						From	To	P _{5m}	Sn	U	W	Pb	Zn	Cu			
				86.1-86.5: Quartz greisen 0.5m. carrying chalcocite, arsenopyrite, and sphalerite.													
				86.6-87.4: Coarse grained pinitised granite		86.1	86.56	2000	2350	34	35	730	4500	520			
				87.4-88.0: Quartz - and qtz - minor greisen. Pyrite and sphalerite most common sulfides, perhaps 4-5%. Pyrite esp. fills fractures. Sulfides generally restricted to silicified areas.	Closely fractured 5-10mm apart, 43° to C.A.	86.56	87.4		320	22	15	25	480	35			
				88.0-89.0: Quartz and qtz - mica greisen. Sulfides mostly pyr. Also arsenopyr. and sph. filling both fracture patterns.	Fractured 40° to C.A. and 43° C.A. in opposite angle [conj joints].	87.4	88.69	1800	2150	20	25	190	2800	460			
89.0	89.9	0.87	97	89-89.9: Qtz greisen changing to mica - qtz greisen, and less silicified at lower depth. Pyr, sph, Arsenopyr, and tourmaline present.	Fine fractures 35° C.A.	88.69	89.61	4800	6100	22	20	210	5000	640			
89.9	90.8	0.85	94	Quartz - and qtz - mica greisen; pyr, sph, cop, and minor fluorite. No arsenopyr. Blue mineral assoc. with minor tourmaline, sparsely dissem.		* 89.61	90.52	Tr.	3800	22	20	150	2100	510			
90.8	91.4	0.6	100	Qtz - greisen; Chalc. assoc. with arsenopyr. and copper glance. Lesser pyr. and sphal.	Less fractured and cleaned.	90.52	91.64	2200	3050	24	25	180	2000	1100			
91.4	92.5	1.1	100	Greisen and greisenised coarse grained granite. Feldspars highly altered. Pyr, chalc, arsenopyr, present	Not highly fractured.	91.64	92.35	4100	4600	22	35	220	4000	950			
						92.35	93.2	3100	3650	24	20	190	8900	650			

CCC Composite Sample { 87.4-93.2: 5.8m. 0.35 Sn.

487048
047

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC 7

Page: 5

From	To	Rec (m)	Rec (%)	Description	Structural	Assays CRA - ppm.													
						From	To	PPM Sn	Sn	U	W	Pb	Zn	Ca	A.				
92.5	93.1	0.6	100	Unitized, greisenized coarse grained granite containing Qtz - greisen bands. Pyrr, arsenopy, in greisen bands, sparser in greisenized granite.	Not highly fractured.														
93.1	96.2	3.05	98	93.1 - 93.25: Qtz - greisen with sulfides, mainly pyrr. 93.25 - 93.8: Altered granite, no sulfides 93.8 - 94.1: Unitized granite; sulfides scarce. 94.1 - 94.9: Qtz greisen containing pyrr, sph., arsenopy, chalc., fluorite and tourmaline. Visible tin. 94.9 - 96.2: Alternating bands of coarse grained granite and sulfidic Qtz greisen.		93.2	94.1	1300	1400	24	10	270	760	120	2				
							94.1	94.79	4200	6300	26	20	160	2600	480	9			
							94.79	95.71	2800	3100	20	10	150	2000	270	3			
							95.71	96.62	10,800 (6.08)	11,900 (1.19)	26	45	190	1700	1500	21	0.01Au	408i	
96.2	97.9	1.7	100	96.2 - 97.6: Qtz greisen bearing pyrr, sphal, chalc, arsenopy, including 18cm. band coarse grained granite	CaF ₂ 0.30	96.62	97.58	1200	1850	26	20	70	1300	210	4				
				97.6 - 98.1: Coarse grained granite.		97.58	98.10		2600	28	10	170	1050	45	3				
97.9	99.1	1.15	98	98.1 - 98.4: Qtz - greisen. 98.4 - 98.9: Barren coarse grained granite	CaF ₂ 0.54	98.35	98.96												
				98.9 - 99.1: Qtz greisen with pyrr, sph, arsenop, and tin.		98.10	98.35	9800	14,400	24	25	480	4900	160	1.	0.01Au	168i		
				99.1 - 99.4: Qtz greisen bearing chalc, arsenop, pyrr, and sphal.		98.96	99.41	4200	4,600	20	2.5	150	840	1400	20				
99.1	102.1	2.95	99	99.4 - 101.5: Coarse grained biotite tourmaline granite.		99.41	101.77		140	24	10	15	180	15	<				

c.e.c. Composite Sample: 94.1 - 97.58: 3.5m 0.53 Sn.

487050
049

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 8

Commenced	14 DEC 66
Completed	20 MAR 67
Logged by	A.J. NOLDART
Drilled by	MINES DEPT.

Purpose
To test the central section of the main Royal George lode.

Comments on Completion
20m. wide zone of stanniferous - sulfidic greisen zones interbedded with tin poor c.g.g. units. Some significant core loss of greisen units; hence widths and grades of main greisen units probably more than calculated below.

Northing	Easting	Level	Dip	Bearing	Length
8,276	3,472	299.9	-60	059	110.3

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
0-110	EX (20mm.)

Recovery	
Depth	%

Summary

Depth From	Depth To	Level		Recovery %	Description	Assays					Zn	Cu	Ag etc.
		From	To			Length(m)	Sn	U	W	Pb			
83.06 41.5 Incl.	88.77 42.38			85 (Approx)	Banded greisen - c.g.g. unit. One zone of sig. core loss	5.71	0.23	21	10		0.5	420	13
86.87 43.4	88.77 42.6	224.7	223.0	95?		1.9m	0.45	25	<10	220	0.29	0.05	17.
93.80 46.4	106.30 55.2			90-95.	Banded greisen - c.g.g. unit.	12.5	0.38	26			0.15	0.09	13
Incl. 93.80 46.4	99.52 55.2	218.7	213.7	90-95?		5.7	0.58 (ex) 0.58 (CAL)	28	55	85	0.22	0.17	23

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 9

Commenced	14 NOV 66
Completed	23 JAN 67
Logged by	G. Urquhart
Drilled by	Mines Dept.

Purpose
To test northern section of Main Royal George lode at moderate depth.

Comments on Completion
Wide unit of parallel sulfidic, stanniferous greisen veins or bands in a non-stanniferous coarse grained granite.

Northing	Easting	Level	Dip	Bearing	Length
8,328	3,441	295.2	-60	60	109.4

Mines Dept. log only to 101.04
but CRA assayed to 109.4.

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
	EX CORE
	(20mm diam)

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Sn	V	W	Pb
79.96	104.34				c.g.g. with numerous stanniferous gtz - greisen (sulfidic) parallel bands or "veins"	24.4	0.41	30	<10	<200
Incl.						(2.T.)		Approx.		
81.99	97.56	224.2	210.7		V. Poor in places.	15.6	0.48	25	<10	<200
48.90	48.9					(12.0 m. E.T.T.)				

Zn Cu Ag
0.3 0.08 17.

0.3 0.1 24.

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC 9

Page: 1

487056
055

From	To	Rec (m)	Rec (%)	Description	Structural	Assays							C.R.A.					
						From	To	Sn	Sr	U	W	Pb	Zn	Cu	Ag			
0.0	2.1	0.7	33	Coarse grained tourmaline biotite granite														
2.1	3.4	1.3	100			0	4.8		36	26	150	10	200	210				
3.4	7.62	3.5	83	Fresh, white biotite - tourmaline coarse grained granite. Faint alteration of some feldspars.		4.8	7.62		44	32	150	10	220	170				
7.62	11.28	2.97	81	Pale coarse grained biotite - tourmaline granite.		7.62	10.36		34	36	75	5	190	100				
11.28	22.2	4.0	37	As above. Sporadic incipient alteration of feldspars. Poor core recovery 19.5 - 22.2 m.		10.36	19.51		30	34	140	10	210	80				
22.2	25.3	1.57	50	Pale, coarse grained biotite - tour. granite		19.51	28.35		24	28	160	15	210	70				
25.3	28.3	0.75	25	25.3 - 36.9:														
28.3	30.8	2.1	82	Coarse grained, white, biotite - tourmaline granite. Sporadic feldspars pitted.		28.35	33.22		26	28	110	5	160	48				
30.8	34.4	3.4	94															
34.4	36.9	0.8	32															
36.9	39.9	2.9	95	36.9 - 65.8:		33.22	39.93		14	26	110	5	150	60				
39.9	43.0	0.3	10	Coarse grained biotite - tourmaline granite.														
43.0	46.0	3.0	100	[Overall recovery of this unit very poor: 63%. Recovery from 53.6 - 65.8 only 43%. Possibly some green veins lost in here].		39.93	46.02		28	30	120	5	230	70				
46.0	48.5	22.	88			46.02	49.07		26	34	150	35	340	75				
48.5	51.5	3.0	100			49.07	53.64		28	32	300	10	400	250				
51.5	53.6	1.6	75															
53.6	56.7	1.4	47															
56.7	59.7	0.1	3															
59.6	62.7	1.5	48			53.64	60.96		38	36	150	10	300	70				
62.7	65.8	2.3	75			60.96	63.70		28	28	25	60	230	5				
65.8	68.9	1.2	40	65.8 - 68.9: Core Recovery 40%. First 2.5cm. coarse grained granite.		63.70	66.45		26	26	10	20	170	5				
						66.45	67.28	1700	1700	30	10	520	7400	160				
						67.28	70.41		55	26	10	20	260	10				

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC 9

Page: 2

487057
056

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						CRA.						
						From	To	SA	SA	V	W	Pb	Zn	Cu	As			
				65.8-68.9 (Cont.) Then 40cms. tourmalinized qtz - mica greisen. Last 53cms. Coarse qtz. granite.														
68.9	70.4	1.3	88	68.9-74.0: Coarse grained biotite - tourmaline granite.		70.41	73.97		34	28	15	10	150	2				
70.4	73.5	1.9	63			73.97	74.17	8800	8700	24	15	350	1600	760	2			
73.5	79.6	6.1	100			74.17	75.16		42	22	410	20	360	2				
				74.0-74.2: 20cm. band of qtz - greisen with pyrr., asp., fluosite and tourm.	Fractured 52° to C.A.	75.16	75.36	8800	9100	28	15	140	1600	1600	4			
				74.2-75.2m: Coarse grained granite														
				75.20-75.38m: 18cm. wide greisen band bearing asp., chalco., Pyrr., and tourmaline	Fractured 40° to C.A.													
				75.38-77.82m: Coarse grained biotite - tourmaline granite.		75.36	77.82		40			10	330	5				
				77.82-78.05: 23cm. wide qtz - mica greisen, slightly sulfidic.		77.82	78.05	5000	5100	50	15	90	5100	190	6			
				78.05-79.55m: Coarse grained tourmaline - biotite granite.		78.05	79.55		40	26	410	10	550	8				
79.6	80.2	0.56	93	79.55-80.16: 23.0cms. sulfidic qtz - mica greisen then 15cms. coarse grained granite.	fractured	79.55	79.81	1600	1350	26	15	380	2500	250	4			
				18cms. sulfidic qtz - greisen		79.81	79.97											
80.2	81.7	0.51	34	80.16-81.7: Poor core recovery. Mostly fragments of coarse grained granite 12cms of qtz - mica greisen in last 30cms.		80.16	80.77		680	28	15	70	2100	110	2			
						81.15	81.99											
						79.97	80.16	2900	3400	28	15	50	1.1%	680				
						80.77	81.15	3500	4000	24	10	40	3000	470				
						81.99	83.51	7900	7500	30	410	360	2900	4100	8			
													14 2000	190				

c.g.g.
intervein
material

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC 9

Page: 3

487058
057

From	To	Rec (m)	Rec (#)	Description	Structural	Assays							CRA					
						From	To	Sn	Sr	U	W	Pb	Zn	Cu	As			
81.7	83.5	1.42	79	81.7-83.5: First 30cms. coarse grained altered granite followed by 1.10m. of qtz-graism with chalc., asp., pyr., fluorite, sph.	Fractured 50° to C.A.													
83.5	86.3	2.26	80	83.5-86.3: First 1.60m. coarse grained biotite granite, followed by 50cms. sulfidic qtz-graism. Last 15cms. fragments of coarse grained granite.	Fractured 40° to C.A.	83.51	85.47		195			12	400	12				
						85.47	86.08	1.02%	9400	24	<10	180	2700	1400	30			
						86.08	86.25						20.005	60.				
						86.38	86.79		2000	30	<10	80	2400	340	8			
						87.78	88.95											
						89.31	89.61											
						86.25	86.38	1200	1500	26	<10	45	1900	200	2			
86.3	89.3	1.95	65	86.3-89.3: First 8 cms. qtz-mica graism followed by 25cms. coarse grained granite followed by 63 cms of qtz-graism bearing Chalc., sphal., pyr. and tourm. Then 0.80cms coarse grained granite, then 23 cms qtz-mica graism.														
						86.79	87.78	4200	5200	24	15	130	4800	380	20			
						88.95	89.31	3200	2950	34	<10	50	2700	140	30			
89.3	92.4	3.0	97	89.3-89.6: Coarse grained granite														
92.4				89.6-90.30: 70 cms. chalc., pyr., sph. qtz-graism														
				90.30-91.77: Coarse grained granite														
				91.77-92.40: 58cms. qtz-mica graism with Chalc., pyr., sph., fluorite, tourmaline														
						89.61	90.30	7100	6700	32	10	100	3200	590	10			
							91.7						20.005	38.				
						90.30	91.77		150	34	10	35	1400	25	40			
						91.77	92.35	8800	9000	130	25	150	5300	1800	20			
							93.57						0.005	50.				

Inter-vein c.g.g.

487061
060

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 10

Commenced	21 JAN 67
Completed	10 MAR 67
Logged by	A.J. NOLDART
Drilled by	Mines Dept.

Purpose
To test Northern section of Main lode at relatively shallow depth.

Comments on Completion
Banded in anomalous zone: 76-101: 25m. Core recoveries in greisen zones again poor. Sig. U. Assay towards bottom of hole.

Hole logged by J. Noldart who calls dark gray greisen (thrombant) a fine grained porphyritic granite.

Northing	Easting	Level	Dip	Bearing	Length
8,354	3,426	291	-60	059	106.7

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
All	EX
(20mm	
core size)	

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays					Zn	Cu	Ag. etc.
From	To	From	To	%		Length(m)	Sn%	U	W	Pb			
75.99	88.42	225.2	214.4	Very poor (40-60) in places.	Banded greisen & C.g.g.	13m.	0.40	32	<40	<100	0.21	0.05	12
38.00	44.2					(ETT 9-10m.)							
98.19	101.24			96%	Banded greisen & C.g.g.	3.05	0.19	34	<20	<100	0.18	0.09	15
						(ETT 2.5m.)							

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487063
061

Project: *ROYAL GEORGE*

Hole: *CCC 10*

Page: *1.*

From	To	Rec (m)	Rec (%)	Description	Structural	Assays											
						From	To	Sn	Sn	U	W	Pb	Zn	Cu	Ag		
0	6.7	1.27	19	<i>0-60.35m:</i>													
6.7	8.2	0.86	58	<i>Coarse grained, white felspar, quartz</i>	<i>Oxidised zones at 6.7m, 7.6-7.9,</i>												
8.2	9.7	0.51	34	<i>biotite granite. Some tourmaline</i>	<i>10.8, 15.4, 39.9, 53.6m.</i>												
9.7	11.2	1.42	95														
11.2	12.2	0.66	66														
12.2	13.87	1.45	86														
13.87	15.39	0.81	53														
15.39	16.61	0.73	60														
16.61	17.37	0.56	74														
17.37	18.59	1.01	83														
18.59	20.11	0.56	37														
20.11	21.33	1.17	96														
21.33	22.86	1.53	100														
22.86	23.77	0.86	95														
23.77	25.29	1.37	90														
25.29	26.51	1.19	97														
26.51	34.40	7.89	100														
34.40	36.58	1.83	84														
36.58	38.40	1.72	95														
38.4	42.5	1.14	37														
41.5	46.3	4.6	96														
46.3	47.8	1.47	98														
47.8	50.9	2.74	89														
50.9	53.9	1.68	56														
53.9	58.5	3.66	80														
58.5	60.35	1.85	100														
60.35	61.70	1.24	92	<i>61.36-61.46:</i> <i>10cm. fine grained greisen zone with</i> <i>sulphide</i>		60.96	64.31	90	12	110	240	340	60	<1			
						64.31	67.66	45	32	120	20	380	70	<1			
61.70	66.75	5.05	100	<i>Coarse grained granite as above.</i>	<i>Oxidised fault zone 64-65m.</i> <i>Oxidised and sheared 66.4-67.0m. and</i> <i>68-68.8m.</i>												
66.75	69.8	2.84	93	<i>68.8-68.9:</i> <i>Fine grained greisen vein.</i>													
69.8	70.7	0.53	59	<i>Coarse grained granite</i>	<i>Sheared and oxidised.</i>	67.66	71.63	165	20	140	30	560	80	<1			

Note: This hole logged by J. Noldant. The fine grained granite of Noldant probably = greisen of Urquhart

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487063
062

Project: ROYAL GEORGE

Hole: CCC 10

Page: 2.

From	To	Rec (m)	Rec (%)	Description	Structural	Assays							C.R.A.						
						From	To	Sn	Sr	U	W	Pb	Zn	Cu	A.				
70.7	72.2	0.79	53.	C.9.9.	Sheared and oxidised.														
72.2	73.76	1.22	78	72.20-72.25: 5cm. fine grained granite - greisen			71.63	73.76		250	16	10	40	240.	20				
				72.25-76.05: Coarse grained granite.			73.76	75.99		120	16	20	20	270	10				
73.76	75.29	1.53	100.	76.05-76.35 Fine grained greisenised mica - tourmaline granite with sulfides.		(a.F. 0.88	75.99	76.35	3900	4100	28	25	170	3700	1000	25			
75.29	76.35	1.01	95.	1.15m. coarse grained granite as above.															
76.35	77.8	1.45	100.	30cms. fine grained granite as above.		0.78	76.35	77.50		60	16	20	20	310	5				
				77.8-81.69: Generally coarse grained granite with some greisenisation at 78.0m, 79.2m, 79.6m, 80.1m, 80.9m. May be transition zone - mixed fine and coarse grained granites.		0.46	77.50	77.82	0.97	1087	26	25	50	1000	1400	30			
77.8	79.40	1.60	100.				77.82	80.92	T	370	26	10	15	500	42				
79.40	80.92	1.45	95.																
80.92	81.69	0.41	53				80.92	81.69		5800	5600	50	45	80	510	280	7		
81.69	83.21	0.66	43.	Coarse grained granite as above	Sheared and oxidised.														
83.21	84.12	0.91	100.			81.69	84.12		340	32	20	30	580	25					
84.12	85.04	0.71	77	Fine grained, rarely porphyritic, dark gray granite with tourmaline and sulfide.		84.12	85.65	6300	4700	32			1100	600					
85.04	85.65	0.38	62.	18cms. fine grained granite as above. 20cms. coarse grained granite.															
85.65	86.87	0.58	48	Fine grained porphyritic dark gray granite with sulfides.		85.65	87.32	3600	3800	36			1800	480					
86.87	87.33	0.35	77	Fine grained porphyritic granite as above.															
87.33	87.93	0.43	71	12cms. fine grained porphyritic granite. 31cms. coarse grained granite.		87.33	88.42	3200	3150	26	10	210	3900	590					

C.R.A
sample
grained
EXC.

487066
065

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 11

Commenced	31 OCT 67
Completed	19 DEC 67
Logged by	A.J. NOLDART
Drilled by	MINES DEPT

Purpose
To test the Royal George lode at moderate depth North of main open cut.

Comments on Completion
A significant greisen zone still exists 50m. of main open-cut, 100m. beneath surface. Some intervals in main greisen zone still had poor core recoveries.

Hole logged by J. NOLDART whose gray porphyritic granite = greisen zones in Wapahart logs.

Northing	Easting	Level	Dip	Bearing	Length
8,402	3,365	278.4	-60	58.5	135m.

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
All	EX (20mm core)

Recovery	
Depth	%

Summary

Depth From	Depth To	Level		Recovery %	Description	Assays					Zn%	Cu%	Ag. etc.		
		From	To			Length(m)	Sn	Ppm	Wppm	Pb%					
100	130				Tin anomalous zones. Banded greisen and coarse grained granite.	30m.									
						(22m ET)									
111.94	117.27	181.5	176.8	Sig. losses 116-117.	Alternating bands. gray greisen - c.g.g.	5.33									
58.9	58.6					E.T.T. 4.0m. Q: 33	27	<30	<0.01	0.09	0.04	3.			

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC11

Page: 1

487067
06b

From	To	Rec (m)	Rec (%)	Description	Structural	Assays														
						From	To	Sn	Sr	U	W	Pb	Zn	Cu	Ag					
0	9.75	2.47	25	Coarse grained granite (c.g.g.)	Weathered and Oxidised.															
9.75	10.13	0.38	100.	Pale gray porphyritic granite.																
10.13	17.37	5.36	74	c.g.g.	Weathered and oxidised.															
17.37	32.00	14.33	98.	c.g.g.	oxidised and weathered.															
32.00	43.28	10.74	95	c.g.g.	oxidised on shears and joint zones.															
43.28	49.07	0	0	No core for 5.8m.																
49.07	83.36	33.83	99	c.g.g.	Oxidised 49.07-49.68, 62.9-63.86	76.2	79.2	35	16	120	80	200	70	<						
83.36	83.52	0.16	100	Gray porphyritic granite.		79.2	81.99	20	12	10	15	60	5	<						
83.52	85.42	1.75	92	c.g.g.																
85.42	95.55	5.79	57	c.g.g.	Sheared and oxidised; core mostly very broken.	81.99	85.04	175	20	20	65	360	15	<						
95.55	100.89	4.72	88	c.g.g.		85.04	88.03	55	12	20	60	290	10	<						
100.89	101.04	0.15	100.	Gray porphyritic granite.		88.09	90.22	30	8	20	55	100	5	<						
101.04	102.33	1.22	94	c.g.g.		90.22	93.27	640	112	40	30	210	40	1						
102.33	102.51	0.18	100	Gray porphyritic granite.		93.27	96.62	250	136	20	20	660	25	1						
102.51	103.51	0.68	68.	c.g.g.		96.62	98.75	360	64	20	115	660	25	1						
103.51	103.63	0.12	100	Gray porphyritic granite with sulfides		98.76	100.74	190	84	20	115	440	15	<						
103.63	106.98	3.35	100	c.g.g.		100.74	101.04	1100	1350	36	20	50	2400	200	2					
106.98	107.29	0.31	100	Gray porphyritic granite with sulfides		101.04	103.17	170	24	10	20	500	35	<						
107.29	111.25	3.42	87	c.g.g.	Partly broken and oxidised.	103.17	104.85	435	36	10	20	400	35	<						
111.25	111.94	0.69	100	Gray porphyritic granite with sulfides		104.85	106.98	85	16	20	15	150	15	<						
111.94	113.39	1.45	100.	c.g.g.																
113.39	114.45	?	?	Gray porphyritic granite.		106.98	107.29	3300	4050	18	30	90	530	260	18					
114.45						107.29	109.42	35	12	10	20	160	10	<						
						109.42	111.25	155	12	20	15	500	20	<						
						111.25	111.94	1500	1950	18	10	20	1100	260	3					
						111.94	113.38	5300	40	30	15	240	135	<						
						113.38	114.22	2600	3300	22	20	15	590	210	2					
						114.22	114.60	1000	1250	24	20	30	1300	960	10					

Logged as c.g.g.!

[* Rec. uncertain, logged as 0.30 cms = 100% which is obviously wrong]

487069
068

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 12

Commenced	19 JUN 67
Completed	26 JUL 67
Logged by	A.J. HILDART
Drilled by	MINES DEPT.

Purpose
To test the main Royal George lode at moderate depth beneath Northern limit of open-cut.

Comments on Completion
Recoveries through the main mineralised zone were 100%. Precipitation generally not as strong as in adjacent holes.

Northing	Easting	Level	Dip	Bearing	Length
8,361.5	3,387.0	284.8	-60°	59	155.5

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
All	EX
	[20mm core]

Recovery	
Depth	%

Summary

Depth		Level		Recovery %	Description	Assays				
From	To	From	To			Length(m)	Sr %	Uppm	Wppm	Pb %
121.62 60.8	126.80 62.6	179.5	175.0	100%	Higher grade section; banded c.g.g. - greisen	5.18m	0.30	30	<30	<0.01
132.74 66.4	135.33 67.7	169.8	166.6	100%	Higher grade section	E.T.T. 4.00 2.60				
						[E.T.T. 2.00]	0.23	27	19	0.01
121.0	135.0	180.0	167.9	100.	Broad Tin Anomalous zone.	14.m				
						[E.T.T. 10.5m]				

Zn Cu Ag
0.14 0.07 6.
0.14 0.04 12

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: *ROYAL GEORGE*

Hole: *CCC 12*

Page: *1*

487070
069

From	To	Rec (m)	Rec (g)	Description	Structural	Assays											
						From	To	Sn	Sr	U	W	Pb	Zn	Cu	Ag		
0	17.07	13.94	82	<i>Coarse grained biotite granite - minor tourmaline.</i>				CCC									
17.07	18.59	0.76	50	<i>Partly gneissed coarse grained granite (c.g.g.)</i>		0	17.07		Not Sampled								
						17.07	18.59		395	12	40	300	2000	85	5		
18.59	50.60	17.07	53	<i>c.g.g.</i>	<i>Oxidised in places.</i>												
						18.59	100.58		NOT SAMPLED								
50.60	62.79	11.59	95	<i>c.g.g.</i>	<i>oxidised in places.</i>												
62.79	64.31	0.53	35	<i>c.g.g.</i>	<i>oxidised in places.</i>												
64.31	101.35	37.04	100	<i>c.g.g.</i>													
101.35	101.80	0.45	100	<i>Fine grained gray granite.</i>		100.58	104.85		275	28	120	30	520	110	2		
101.80	105.99	2.44	58	<i>C.g.g.</i>	<i>Generally oxidised and broken.</i>	104.85	106.38	Tr.	150	26	30	110	380	22	1		
105.99	106.76	0.77	100	<i>c.g.g. - fresh.</i>		106.38	107.90	Tr.	200	46	<10	120	580	35	1		
106.76	107.59	0.76	92	<i>c.g.g.</i>	<i>Oxidised and broken.</i>	107.90	109.42	Tr.	350	32	10	240	930	38	1		
107.59	109.42	1.83	100	<i>c.g.g. - fresh.</i>		109.42											
109.42	110.49	1.07	100	<i>Mixed dark gray granite with coarse grained zones.</i>		109.42	110.49	1000	1500	60	15	150	2900	90	3		
110.49	111.40	0.76	84	<i>c.g.g.</i>	<i>Oxidised and broken.</i>	110.49	112.01	Tr.	680	70	<10	100	1200	55	1		
111.40	112.01	0.61	100	<i>Dark gray, c.g.g.</i>													
112.01	115.90	3.73	96	<i>Coarse grained granite.</i>		112.01	113.23	Tr.	560	32	<10	95	1600	40	-		
115.90	117.27	1.37	100	<i>Fine grained gray granite.</i>		113.23	114.45	Tr.	110	40	<10	75	710	15	-		
117.27	118.11	0.76	91	<i>Medium grained granite</i>		114.45	115.90	Tr.	770	70	<10	170	500	65	-		
118.11	118.57	0.46	100	<i>Mixture medium and fine grained granite with sulfides.</i>		115.90	117.20	Tr.	350	55	10	120	960	50	-		
118.57	119.18	0.61	100	<i>Medium grained granite.</i>		117.20	118.4	1800	2350	28	20	140	410	30	-		
119.18	119.63	0.48	100	<i>Fine grained gray granite with sulfides.</i>		118.4	119.63	Tr.	560	34	<10	100	780	70	-		

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: CCC 13

Commenced	11 SEP 67
Completed	24 OCT 67
Logged by	A.J. NOLDART
Drilled by	MINES DEPT.

Purpose
To test central portion of main Royal George lode at moderate depth.

Comments on Completion
Recoveries in deeper holes beneath weathered zone generally good. Unfortunately 1.2m. lost in critical ore zone area.

Northing	Easting	Level	Dip	Bearing	Length
8,265	3,444	294.1	-60	060	153.9

Surveys		
Depth	Dip	Bearing

Size	
Depth	Size
EX (20mm. core)	

Recovery	
Depth	%
133.88-	21
135.33	

Summary

Depth		Level		Recovery	Description	Assays					Ag(alt)	
From	To	From	To	%		Length(m)	Sn%	Uppm	Zn	Cu		
119	138.			100%	100% except 133-135. Tin anomalous zone > 0.1 generally.	19m [ETT 14.5m.]						
Incl.					Alternating bands c.g.g. & greisen.							
119.79	126.72			100%		6.93 [ETT 5.3m.]	0.22	22	0.09	0.04	5.	
Incl.	63.4											
124.66	126.72	186.1	184.4	100%		2.06 [ETT 1.6m.]	0.49	23	0.12	0.07	8	
12.3	62.5											
132.89	138.23	179.0	174.4		1.2m. core loss in critical zone.	5.34 [ETT 4.1m.]	0.52	24	0.16	0.12	22.	
66.4	69.1											

59.9

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: CCC 13

Page: 2

487074
073

From	To	Rec (m)	Rec (%)	Description	Structural	Assays							CRA.					
						From	To	Fe	Sn	V	W	Pb	Zn	Cu	Ag			
119.79	120.40	0.61	100	Dark gray porphyritic granite - minor sulfides.														
						119.79	120.40	3500	3150	24	15	360	1200	210	10			
						120.40	121.92	1200	1150	20	30	110	710	540	7			
120.40	120.85	0.45	100	c.g.g.														
120.85	121.38	0.53	100	Dark gray porphyritic granite														
121.38	121.69	0.31	100	c.g.g.														
121.69	122.61	0.92	100	Dark gray porphyritic granite mixed with c.g.g., some sulfides														
						121.92	123.29	700	640	24	15	35	830	80	1			
122.61	124.59	1.98	100	Coarse grained porphyritic granite - some sulfides.														
						123.29	124.66	900	430	20	15	45	560	42	1			
124.59	124.89	0.30	100	Dark gray porphyritic granite.														
						124.66	125.96	3000	3450	22	20	160	1200	410	4			
124.89	125.04	0.15	100	c.g.g.														
125.04	125.42	0.38	100	Dark gray porphyritic granite.														
125.42	125.96	0.54	100	c.g.g.														
125.96	126.72	0.76	100	Dark gray porphyritic granite.														
						125.96	126.72	6900	7400	24	50	200	1400	1300	10			
126.72	127.33	0.61	100	c.g.g.														
						126.72	127.40	<500	680	32	25	90	720	80	2			
127.33	128.32	0.99	100	Coarse grained porphyritic granite - some sulfides.														
						127.40	128.32	<500	700	24	15	470	1300	80	4			
128.32	130.23	1.91	100	Dark gray porphyritic granite - heavy sulfides.														
						128.32	130.23	1200	1150	24	35	110	750	1200	1			
130.23	132.44	2.21	100	c.g.g.														
						130.23	132.44	<500	330	24	20	20	330	50	4			
132.44	132.89	0.45	100	Mixed coarse grained and gray porphyritic granite.														
						132.44	132.89	500	900	24	15	45	890	160	2			
132.89	133.88	0.99	100	Dark gray porphyritic granite - heavy sulfides.														
						132.89	133.88	3400	3850	20	20	180	1800	840	2			
133.88	135.33	0.30	21	CORE LOSS - recovered 30 cms. only of dark gray porphyritic granite with heavy sulfides.														
						133.88	135.33		1.68%	4	90	170	540	880	10			
						133.88	135.33		8270	25			860	900	1			

CORE →
CORE + SAMPLE →
AVERAGED

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: RGC 1

Page: 2

487078

077

From	To	Rec (m)	Rec (#)	Description	Structural	Assays									
						From	To	Sn	U	W	Pb	Zn	Cu	Ag	
91.0	104.55	13.55	100	<u>Siliceous Coarse Porphyritic Granite:</u> As before except more siliceous, harder and essentially unoxidised. Abundant large feldspars up to 50mm. average 20mm. Qtz. average 10mm. Much biotite and tourmaline. Basal contact 45°C.A.	Weak, moderate alteration - minor yellow-green sericite, pink feldspars, and minor muscovite. Few fractures - one at 95.25m at 40°C.A., faced with gal. > py. > ccp. 93.5-100m: Rare py > ccp. Below 100m - some oxidation, increasing. Minor clayey fractures.										
104.55	114.15	9.60	100.	<u>Fine grained granite:</u> Extremely hard, greenish-gray. Most Qtz. - feldsp - biotite grains 2-3mm. Some coarser grained patches often associated with clots of tourmaline. Some intermixed coarse grained granite. Gradual contact at base.	Weakly altered pale green sericite and minor muscovite. Oxidised in places, especially along fractures. Very minor py > ccp. Trace galena. 106.6: 100mm. oxidised muscovite - rich zone 45°C.A. 106.9: Ditto: 40°C.A.										
114.15	219.45	105.30	100	<u>Coarse grained Porphyritic Granite as before.</u> Grain size decreases slightly with depth. Rock becoming very hard and increasing siliceous with depth. Alteration (pink feldspars, sericite, minor muscovite, rare chlorite) increasing with depth, especially below 182m. Increasing amount of purple fluorite with depth. Minor tourmaline. Minor bands and patches of hard, fine grained granite: 121.75-123.3m: 55°C.A. 132.8-134.7m: 35°C.A. 194.2-195.5m: 35°C.A.	Patchy oxidation, mainly around fractures above 150m. Most fractures below 120m. have sulfides, chlorite and fluorite on them, and often have "greisen" selvages up to 30mm. wide (greisen = Qtz. - sericite - muscovite) Minor disseminated fine py > sp. with trace ccp, asp, gal. increasing with depth to 1-2% between 170-200m, and 3-5% below 200m. 127.2-128.3: "Greisen" zone 45°C.A. Qtz. - ser - musc. - chlor - fluor. 3% py > sp. > ccp.	115	120	60	36	100	40	160	80	1	
						120	125	100	40	80	30	250	55	1	
						125.0	127.20	70	340	50	60	330	50	1	
						127.20	128.30	310	44	<10	600	2000	230	11	
						128.30	130.0	50	40	<10	20	140	20	1	
						130.0	135.0	60	40	<10	20	320	25	1	

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487079
070

Project: ROYAL GEORGE

Hole: RGC 1

Page: 3

From	To	Rec (m)	Rec (%)	Description	Structural	Assays							Cu	Ag
						From	To	Sn	U	W	Pb	Zn		
114.15	219.45			(Cont.) Felspar lincation 155m: 45°/c.A. Numerous "greisen" bands - increasing with depth. "Greisen" = altered zones composed of qtz - sericite - muscovite - fluorite - tourmaline - chlorite - sulfides.	136.05: 8mm py>sp - qtz - chlorite vein. 45°/c.A. with 3% py>sp. in 15 cm. salvage.	135.0	140.0	55	24	10	90	1300	20	1
					137.4 - 137.65: 12 cm. true width sulfide - chlorite qtz. band. 5-7% py>sp>aop.									
					142.15: 15mm. qtz - py - chlor vein 35°/c.A.	140.0	143.0	70	224	30	30	370	30	4
					146.45 - 146.7m: 5-7% py - sp - cep. associated with fractures 40°/c.A.	143.0	146.0	80	36	50	35	200	35	3
					148.7m: 50mm siliceous greisen 30°/c.A. with 4% py>sp.	146.0	149.0	75	32	40	25	500	30	1
					173.3 - 174.6: Clayey broken zone fractures // c.A.	149.0	152.0	45	24	20	10	240	20	1
					182.9m: 80mm. greisen band 35°/c.A. 5% py>sp>cep.	152.0	155.0	35	20	20	15	105	15	1
					185.5m: 50mm. greisen band, 45°/c.A.; 3% py - sp. Trace cep.	155.0	158.0	75	24	20	10	150	20	<1
					187.9: 50mm. greisen band 40°/c.A. 3% sp - py > cep.	158.0	161.0	40	20	20	10	100	15	1
					190.9 - 191.15: Sulfidic zone 40°/c.A. 5% py > sp. Trace cep.	161.0	164.0	50	32	10	15	90	20	<1
					191.15 - 191.7: 40°/c.A. Sulfidic zone 3-5% py - sp > cep > aop.	164.0	167.0	35	24	10	10	100	15	<1
					192.5 - 192.75: 40°/c.A. Strong greisen band. 5% py > sp > cep.	167.0	170.0	55	36	20	10	80	15	<1
						170.0	172.0	40	24	20	10	145	20	<1
						172.0	176.0	80	28	20	15	270	30	1
						176.0	179.0	105	24	30	20	290	20	<1
						179.0	182.0	65	32	20	10	140	15	<1
						182.0	185.0	175	24	30	20	880	60	1
						185.0	188.0	220	16	20	20	580	30	1
						188.0	191.0	130	36	20	15	260	35	1
						191.0	194.0	475	32	30	25	1300	55	1

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: RGC 1

Page: 5

487081
030

From	To	Rec (m)	Rec (%)	Description	Structural & Mineralization	Assays						Ag	
						From	To	SA	U	W	Zn		Cu
219.45	229.45	10.00	100	<u>Mineralized Zone:</u> Gray, hard, highly altered siliceous zone comprising quartz - muscovite - sericite with minor tourmaline, chlorite and fluorite. Remnant qtz. and feldspars show host rock is coarse grained granite, except between 224.15 and 225.15 m.	219.45-226.50: 5-20%, as. 10-12% disseminated sulfides py > sp - chalc > asp. Rare gal. and pyrr. 226.50-229.45: As. 8-10% py > sp > asp > csp. Rare magnetite associated with chlorite and galena.	220	221	530	26	20	840	580	8
						221	222	1150	26	40	980	440	9
						222	223	1050	24	35	1400	480	5
						223	224	450	28	65	560	640	11
						224	225	100	26	50	400	2500	80
						225	226	120	28	30	290	2500	41
						226	227	750	24	55	2800	1100	15
						227	228	540	22	20	2100	280	9
						228	229	1000	22	20	2100	360	9
						229	230	250	30	<10	530	290	6
229.45	231.70	2.25	100	<u>Coarse grained porphyritic granite.</u> As before; Large porphyritic subhedral feldspars up to 40mm. Altered with minor sericite and muscovite.	3% py >> sph. - csp. 229.85: 70mm. greisen band 40% C.A., 5% py >> sp. - csp. Several greisen bands < 20mm.	230	231	150	28	20	170	65	<1
						231	232	320	32	20	220	38	<1
231.70	233.80	2.10	100	<u>Fine Grained granite:</u> Extremely hard, yellowish gray. Little biotite. Much tourmaline, some fluorite. Crystal lineation 45% C.A. Altered - minor sericite and muscovite. Upper and lower hazy contacts.	3% pyrite. Trace sp - asp. Much in fractures 45% C.A. with tourmaline and thin greisen selvages.	232	233	120	30	20	230	35	<1
						233	234	150	26	20	85	55	<1
233.80	247.95	13.90	98	<u>Altered Coarse Grained Granite:</u> As before, hard and siliceous. Altered with sericitic feldspars and much patchy qtz - sericite - muscovite greisen, esp. near fractures. Biotite, tourmaline, fluorite, chlorite common accessories. Basal Contact 80% C.A.	Numerous 'greisen' bands < 50mm decreasing below 243.50m. 2338 - 243.5: 3-5% py > sph. Tr. csp - asp. Trace Caustite? below 238. 2435-247.95: 2% py > sph > csp. asp.	234.0	234.75	820	24		670	990	20
						234.75	236.0	270	28		140	90	1
						236.0	237.0	180	28		170	65	<1
						237.0	238.5	980	20		420	100	1
						238.5	240.0	800	22		210	65	<1
						240.0	241.5	640	26		150	55	<1

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: RGC 1

Page: 6

487082
081

From	To	Rec (m)	Rec (%)	Description	Structural & Mineralisation	Assays					Cu	Ag			
						From	To	Sr	U	W			Pb	Zn	
233.80	247.95			(Cont.)	234.3-234.65: 'Greisen' band 55°/cA 7% py > sph. - asp. > ccp. 234.60-234.95: Fault 60°/cA (10mm core loss + water return lost) Brecciated Qtz + fclsp. in matrix of massive py - sericite + fluorite. Shearing extends to 236.5. Rock soft, clayey and sericitic. Badly broken 236-236.50 (15cm core lost) Some greisen in patches and along fractures. 241.95-242.25: 'Greisen' band with 5-7% py > sph. > ccp. 242.90-243.20: Diffuse greisen bands + sulfidic fractures 40°/cA 5-7% py > sph. 243.45 : 50mm. greisen bands 45°/cA; 7% py > sph. > asp.	241.5	242.5	520	14			680	100	2	
						242.50	243.5	200	20			190	75	1	
						243.5	245.0	140	24			100	42	<1	
						245.0	246.5	380	22			160	45	<1	
						246.5	247.75	240	30			110	35	<1	
247.95	253.75	5.80	100.	<u>Fine Grained Granite:</u> Gray, extremely hard; Most Qtz and fclsp < 2mm. Biotite and tourmaline. Crystal lincation 50°/c.A. Minor sericitisation of fclspars and very minor muscovite. Minor intercalations of coarser grained granite at top and bottom of interval. Basal contact 60°/c.A.	1-2% pyrite. Tr. ccp - sph. Except 252.2-252.75: 3-5% py > sph. - ccp, mostly in fractures 45°/c.A. 252.7: 13mm pyrite shear zone 50°/c.A.	247.75	249.0	150	32			130	50	<1	
						249.0	250.0	150	38			48	32	<1	
						250.0	253.0	190	24	<10	20	130	35	1	
253.75	266.40	12.65	100	<u>Coarse grained Granite:</u> As before. Gray, hard. Qtz - fclsp - biotite c	1-2% py. Trace ccp - sph. Decreasing with depth.	253.0	256.0	130	28	10	20	240	65	1	
						256.0	259.0	155	32	20	15	190	50	<1	
						259.0	262.0	175	24	<10	15	270	90	1	

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S1

Page: 2

085
48/086

From	To	Rec	RQD	Description	Structural	Assays					
						From	To				
				45.30 - 46.70 COMPLETELY UNCONSOLIDATED GRANITE as between 0.00 and 45.30 but completely unconsolidated due to the conversion of feldspar to clay and pyrite	The rock is completely unconsolidated: R.Q.D. = ϕ .						
46.4	49.4	3.00	100	2.10	70						
49.4	52.4	3.00	100	2.97	99						
52.4	55.4	3.00	100	2.96	99						
55.4	58.4	3.00	100	2.90	97						
58.4	61.4	3.00	100	3.00	100						
61.4	64.4	3.00	100	3.00	100						
64.4	67.4	3.00	100	2.90	97						
				46.70 - 65.12 GENERALLY FRESH, CREAM AND GREY COARSE GRAINED GRANITE WITH MINOR GREY GREISEN VEINS. Cream sub to subhedral feldspar, dark, glassy, subhedral quartz, accessory biotite and black tourmaline, sparse pyrite (after feldspar), sparse brown- orange clay? alteration of feldspar, occasional iron staining adjacent to joints	The rock is generally intact. A small zone of broken/unconsolidated core occurs from 57.40 to 57.50. Joint frequency is 1-2/m. Most common orientation is at 40°-65° to c.a. i.e. subparallel to greisen veining. Low angle joints are infrequent.						
				49.23 - 49.37 45° 0.10 GREISENIZED GRANITE quartz, green mica, accessory biotite, feldspar near contacts, gradational contacts, slightly veigy, traces of arsenopyrite and sphalerite?							
				51.00 - 51.05 45° 0.04 GREISENIZED GRANITE as between 49.23 & 49.37, sparse sphalerite in veinlet, traces of arsenopyrite dissems.							

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S1

Page: 3

487087
50

From	To	Rec	RQD	Description	Structural	Assays			
						From	To	Sn%	
				56.00 - 56.10 GREISENIZED GRANITE as between 49.23 & 49.37, slightly vuggy.					
				56.90 - 57.05 GREISENIZED GRANITE as between 49.23 & 49.37, slightly vuggy.					
				61.45 - 61.60 GREISENIZED GRANITE 45° 0.07 as between 49.23 & 49.37 slightly vuggy, sparse pyrite, traces of arsenopyrite, sparse ironstaining.		61.40	61.75	0.15	
				61.80 - 61.90 GREISENIZED GRANITE 45° 0.07 as between 61.45 & 61.60, slightly vuggy, sparse pyrite, traces of arsenopyrite.					
				63.22 - 63.30 GREISENIZED GRANITE 45° 0.05 as between 49.23 & 49.37					
				<p>Thin veinlets with green and brown-green (ironstained?) mica veinlets (<math>\le 2\text{mm}</math> true thickness) occur occasionally throughout the interval e.g. at 57.60m and 64.45 m. Average orientation of these veinlets is 40°-50°. A few contain traces of sulphides</p> <p>The contact with the next interval is "planar diffuse".</p>					

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S1

Page: 6

487090
083

From	To	Rec (m)	Rec (%)	Description	Structural	Assays						S %	
						From	To	K ₂ O	Cu	Pb	Zn		As
				69.15 - 69.30 50° 0.10 GREY GREISEN as between 65.00 & 65.95 slightly vuggy sparse pyrite, common in "central" veinlet, trace cassiterite.	Outside the decomposed area only one joint occurs: it is subparallel to the c.a. from 71.4 to 71.7.	68.65	69.35	0.27	0.01	0.01	0.17	<0.01	0.90.
						69.35	70.40	<0.01	<0.01	<0.01	0.03	<0.01	0.06.
						70.40	71.65	0.01	<0.01	<0.01	0.04	<0.01	0.14
				71.10 - 71.14 45° 0.03 GREY GREISEN as between 65.00 & 65.95, ionstonised mica in "central" veinlet.				Ag	Sb	Bi	Cd	U	g/t.
						68.65	69.35	<12	<10	5	21	53	
						69.35	70.40	<12	<10	<5	<15	23	
						70.40	71.65	<12	<10	<5	<15	21	
				71.69 - 71.85 45° 0.10 GREY GREISEN as between 65.00 & 65.95, minor arsenopyrite, common in "central" vein, very slightly vuggy.				Sn	Cu	Pb	Zn	As	S %
						71.65	72.55	0.20	0.01	<0.01	0.13	0.35	1.10
				72.28 - 72.53 GREY GREISEN As between 65.00 & 65.95, slightly vuggy, sparse pyrite, trace arsenopyrite, trace cassiterite around "central" vein. The greisen is at 45° to c.a. True thickness is 0.18 m.	The greisen is intact; a parting occurs along/ near the contact at 72.53.			Ag	Sb	Bi	Cd	U	g/t.
								13	<10	30	17	27	
								Sn	Cu	Pb	Zn	As	S %
				72.53 - 73.25 CREAM AND GREY VERY COARSE GRAINED GRANITE As between 14.20 & 45.30 except that the feldspars are up to 8cm long.	The granite is intact; one joint subparallel to the c.a. occurs.	72.55	73.40	0.02	<0.01	<0.01	0.07	<0.01	0.26
								Ag	Sb	Bi	Cd	U	g/t.
								<12	<10	5	<15	25	

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S1

Page: 7

487091

From	To	Rec	100	RQD	Description	Structural	Assays								
							From	To	%Sn	Cu	Pb	Zn	As	S %	
73.4	76.4	3.0	100	2.55	85	<p><u>73.25 - 74.16</u> CREAM AND GREY COARSE GRAINED GRANITE WITH MINOR GREY GREISEN VEINS. Qs between 65.42 & 68.28.</p> <p>73.32 - 73.36 GREY GREISEN 50° 0.03 as between 65.80 & 65.75, trace pyrite.</p> <p>73.43 - 73.64 GREY GREISEN 45° 0.17 as between 65.80 & 65.95, sparse pyrite in "central vein and as disseminations, trace sphalerite</p> <p>74.00 - 74.11 GREY GREISEN 60° 0.10 as between 65.80 & 65.95, trace pyrite as disseminations, trace cassiterite?</p>	<p>The rock from 73.25 to 73.40 is unconsolidated/ decomposed. Elsewhere the rock is reasonably intact.</p> <p>One joint occurs at a low angle to the c.a.</p>								
					<p><u>74.16 - 74.50</u> GREY GREISEN Qs between 65.80 & 65.95, minor pyrite, trace arsenopyrite, trace cassiterite?, slightly suggy.</p>	<p>The greisen is intact; parting occurs along the contact at 74.16</p>	73.40	74.50	0.46	0.05	0.02	0.24	0.10	1.60	
									Ag	Sb	Bi	Cd	U	g/t.	
									17	10	17	46	38		
									Sn	Cu	Pb	Zn	As	S %	
					<p><u>74.50 - 74.91</u> CREAM AND GREY COARSE GRAINED GRANITE Qs between 44.20 & 45.30, slightly weathered.</p>	<p>The rock is generally intact; some alteration of feldspar to clay. Jointing absent.</p>	74.50	75.80	0.47	0.13	0.02	0.37	0.27	3.20	
									Ag	Sb	Bi	Cd	U	g/t.	
									28	17	53	94	43		

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S1

Page: 9

487093
092

From	To	Rec	RQD	Description	Structural	Assays							
						From	To	%Sn	Cu	Pb	Zn	As	
				78.40 - 78.72 RED-BROWN AND GREY GREISEN As between 65.80 & 65.95, moderately intense ironstaining, trace arsenopyrite.	Rock is intact; joint is 4/m at 60° to c.a.	78.40	79.40	0.25	0.07	<0.01	0.09	0.03	5% 0.19
				78.72 - 79.50 CREAM AND GREY, COARSE GRAINED GRANITE As between 44.20 & 45.30, ironstained in part.	Rock is intact; one joint occurs at low angle to c.a.								g/t.
				79.50 - 80.00 GREY GREISEN As between 65.80 & 65.95, trace sphalerite, trace arsenopyrite, trace pyrite, trace cassiterite? The greisen is at 55° to c.a. True thickness is 0.40 m.	Rock is intact (very slightly friable in part). Joint frequency is 2/m at 55° to c.a.	79.40	80.10	0.43	0.06	0.02	0.16	0.14	5% 1.7
				80.00 - 82.35 WEATHERED, CREAM AND GREY COARSE GRAINED GRANITE As between 44.20 & 45.30, ironstained with alteration of feldspar to clay, slightly greisenized?	Rock is weathered / friable. Joints occur subparallel to c.a. and at 60° to c.a.; joint frequency is 5/m	80.10	81.10	0.01					
				82.35 - 82.65 GREY GREISEN As between 65.80 & 65.95, vuggy, with sparse ironstained, red- brown mica, trace sphalerite and arsenopyrite	Rock is broken / friable.	81.10	82.30	0.01					
79.4	82.4	3.00	100	1.55	S2								
82.4	85.4	3.00	100	2.15	72								

OVER

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S1

Page: 10

487094
093

From	To	Rec	RQD	Description	Structural	Assays								
						From	To	%Sn						
				<u>82.65 - 83.23</u> SLIGHTLY WEATHERED, CREAM - GREY COARSE GRAINED GRANITE As between 14.20 & 45.30 but feldspars slightly decomposed.	Rock is intact; joint frequency is 1/m at low angle to c.a.	82.70	83.20	0.02						
				<u>83.23 - 83.48</u> GREY AND BROWN GREISEN As between 65.80 & 65.95, but slightly decomposed, ironstained, no visible sulphides.	Rock is intact; joint frequency is 2/m at low angle to c.a.	83.20	84.20	0.12						
				<u>83.48 - 84.83</u> SLIGHTLY WEATHERED, CREAM - GREY COARSE GRAINED GRANITE As between 82.65 & 83.23	Rock is intact; joint frequency is 2/m at 60° to c.a.									
				<u>84.83 - 85.10</u> GREY GREISEN As between 65.80 & 65.95 with minor sphalerite and pyrite mostly in 2cm true thickness vugly central veinlet The greisen is at 55° to c.a. True thickness is	Rock is broken; joint frequency is 15/m at 55° to c.a.	84.20	85.15	0.06						
85.4	88.4	3.00	100	2.95	98	<u>85.10 - 85.70</u> CREAM AND GREY COARSE GRAINED GRANITE As between 82.65 & 83.23 with slight alteration of feldspar to clay, slightly greisenized in part OVER	Rock is intact; joint frequency is 2/m at 55° to c.a.	85.15	85.90	0.01				

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: 51

Page: 12

487096
095

From	To	Rec	RQD	Description	Structural	Assays								
						From	To	%Sn						
				89.3 MICROGRANITE PATCH Some constituents as coarse grained granite; a 5cm patch.										
				90.78-90.86 GREY GREISEN 60° 0.07 As between 65.80 & 65.95, sparse pyrite.										
				93.35-93.65 GREY GREISEN As between 65.80 & 65.95 with sparse pyrite and sphalerite. The greisen is at 50° to c.A. True thickness is 0.23m	as for previous interval; contact at 93.65 is a joint.	93.30	94.10	0.07						
94.4	97.4	3.00	100	2.95 98 93.65-94.90 PINKISH-CREAM AND GREY COARSE GRAINED GRANITE AND MINOR GREY GREISEN. As between 85.70 & 93.35, including 94.05-94.08 GREY GREISEN 50° 0.02 As between 65.80 & 65.95, sparse pyrite.		94.10	94.90	0.01						
				94.90-95.78 CREAM AND GREY MICROGRANITE AND MINOR PEGMATITE. As between 87.70 & 93.35 but finer grained; a zone of	Very slightly broken; joint frequency is 4/m at 55° to c.A.	94.90	95.80	0.01						

487100
099

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT ROYAL GEORGE

HOLE: 32

Commenced	21 AUG 89
Completed	4 SEP 89
Logged by	M.V. MCKEOWN
Drilled by	WAYNE HOW

Purpose
<i>To test the main Royal George lode beneath the old workings and towards the northern end</i>

Comments on Completion
<i>Wide, dark gray greisen zone in coarse grained granite. Significant Zn as sphalerite and assoc. Cd. Also sig. arsenopyrite.</i>

Northing	Easting	Level	Dip	Bearing	Length
5 368 299	573 460	296.8	-52°	056°	127.4

127.4

Surveys		
Depth	Dip	Bearing
30m	-51 1/2°	059°
60m	-51 1/2°	060°
90m	-52°	060°
120m	-52°	060 1/2°

Size	
Depth	Size
127.4	HQ

Recovery	
Depth	%

Summary

Depth		Level		Recovery %	Description	Assays				
From	To	From	To			Length(m)	Sn	Cu	Pb	Zn
78.4	89.9			100	<i>Gray greisen and very minor cream and gray coarse grained granite.</i>	11.5	0.46	0.07	0.03	0.42
						E.T.T.10m.				
							Ag	Sb	Bi	Cd
							19	15	40	71

As 5%
0.24 2.6

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26.

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: 52

Page: 1

487101
100

From	To	Rec	RQD	Description	Structural	Assays									
						From	To								
0.0	2.9	1.20	41	0.75	26	0.0-12.45									
2.9	4.3	1.40	100	0.85	61	GREY AND WHITE PORPHYRY									
4.3	7.2	2.85	98	1.30	45	Sub to euhedral, white feldspar,	The rock is generally consolidated although broken except from the start for 20 cm and also between 7.00 and 7.20. See RQDs.								
7.2	10.3	3.10	100	2.90	94	an to subhedral, dark, glassy quartz, sparse pinites (after feldspar), accessory biotite and lesser black tourmaline;									
10.3	13.3	3.00	100	2.65	88	medium to coarse grained;									
13.3	16.3	3.00	100	3.00	100	ironstained adjacent to and on joints and adjacent to quartz veinlets; chlorite? occurs on joints e.g. at 3.1m.									
16.3	19.3	3.00	100	2.60	87	Rare, slightly waxy, partly crystalline, milky quartz veinlets with minor iron oxides are present.									
19.3	22.3	3.00	100	2.90	97	Occasional networks of microfractures occur. The networks have a general orientation e.g. at 4.60 the network is at 40° to c.A. The networks are ironstained.									
22.3	25.3	3.00	100	2.95	98										
25.3	28.3	3.00	100	3.00	100										
28.3	31.3	3.00	100	2.95	98										
						12.45-31.70									
						FRESH WHITE AND GREY COARSE GRAINED GRANITE	The rock is generally fresh and becomes less broken towards 31.70.								
						Sub to euhedral, white feldspar, an to euhedral, dark, glassy quartz, accessory biotite and black tourmaline; ironstained throughout; occasional pinitized feldspars occur; rare ironstained		Joint frequency is 2-4/m at 60°-80° to c.A.							

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S2

Page: 2

487102
101

From	To	Rec	RQD	Description	Structural	Assays				
						From	To			
				<p>microfracture networks are present.</p> <p>29.50 - 29.55 GREY MICROGRANITE 50° 0.04</p>						
				<p>31.70 - 33.40 WEATHERED WHITE AND GREY COARSE GRAINED GRANITE As between 12.45 and 31.70 but decomposed i.e. clay alteration of feldspar; ironstained; occasional ironstained microfracture networks.</p>	<p>Extremely broken, clayey rock.</p> <p>Joint frequency is 0/m at 60°-80° to c.A.</p>					
31.3	33.4	2.10	100	0.75	36	33.40 - 45.75				
33.4	34.3	0.90	100	0.90	100	FRESH WHITE AND GREY COARSE GRAINED GRANITE				
34.3	37.3	3.00	100	3.00	100	As between 12.45 & 31.70; ironstained microfracture networks are present:	<p>Rock is fresh and intact.</p> <p>Joint frequency is 2-4/m at 60°-80° to c.A.</p>			
37.3	40.3	3.00	100	2.91	97	33.40 - 35.20 WHITE AND GREY COARSE ~ 0° ? GRAINED GRANITE WITH IRONSTAINED MICROFRACTURE NETWORKS.				
40.3	43.3	3.00	100	2.95	98	44.30 - 45.75 WHITE AND GREY COARSE ~ 0° ? GRAINED GRANITE WITH IRONSTAINED MICROFRACTURE NETWORKS.				
43.3	46.3	3.00	100	2.02	67					
OVER										

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S2

Page: 3

487103
102

From	To	Rec	100	RQD		Description	Structural	Assays					
				2.60	100			From	To				
46.3	48.9	2.60	100	2.60	100	<p><u>45.75 - 49.75</u> PINK AND GREY COARSE GRAINED GRANITE As between 42.45 & 31.70 but feldspar is cream-pink in colour; occasional ironstained / pinitized feldspars occur.</p>	<p>Rock is fresh and intact. Joint frequency is 1/m at 60°-70° to c.a.</p>						
48.9	52.0	3.10	100	2.00	65	<p><u>49.75 - 50.75</u> WHITE AND GREY MICROGRANITE White feldspar, dark, glassy quartz, accessory biotite; slightly ironstained on fractures and joints. The contact at 49.75 is sharp at a low angle to the c.a. The contact at 50.75 is gradational.</p>	<p>Very broken rock. Joint frequency is 10/m at 25°-30° to c.a., 6/m at 60° to c.a.</p>						
52.0	55.3	3.30	100	1.56	47	<p><u>50.75 - 54.50</u> PINK AND GREY COARSE GRAINED GRANITE As between 45.75 & 49.75; ironstained on fractures and joints; occasional microfracture networks are present.</p>	<p>Broken rock due to joint subparallel to c.a. from 51.4 to 52.9. Clay/mudstone zone from 53.70 to 53.85. Joint frequency is 3/m at 60°-60° to c.a.</p>						

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S2

Page: 4

487104
103

From	To	Rec	RQD	Description	Structural	Assays							
						From	To						
55.3	58.3	3.0	100	2.95	98	<p><u>54.50 - 58.21</u> CREAM AND GREY COARSE GRAINED GRANITE As between 12.45 & 31.70</p> <p>56.20 - 56.45 CREAM AND GREY 60° MICROGRANITE</p>	<p>The rock is generally intact. Rare patches of decomposed - clayey feldspar are present.</p> <p>Jointing at 40° - 75° to c.a. occurs at a frequency of 5/m.</p>						
				<p><u>58.21 - 58.47</u> GREY GREISEN (WITH MINOR CREAM PINK AND GREY COARSE GRAINED GRANITE) Grey and white quartz, sericite (after feldspar), accessory biotite (and black tourmaline?); at greisen-granite contacts some "feldspar" crystals are feldspar at one end grading into sericite at the other; within the greisen, sericite patches pseudomorph feldspar crystals; sparse pyrite, trace arsenopyrite, trace pink cassiterite; slightly vuggy in quartz veinlets.</p> <p>The greisen is at 60° to the c.a.</p> <p>Contacts with the enclosing granite are gradational</p>	<p>Rock is intact.</p>								

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S2

Page: 6

487106
105

From	To	Rec		RQD		Description	Structural	Assays					
								From	To	S _n %			
						70.44-70.90 GREY GREISEN As between 58.21 & 58.47; sparse pyrite and trace chalcopyrite, trace arsenopyrite The greisen is at 60° to c.A. True thickness is 0.40m	Rock is intact.	70.40	70.94	0.21			
70.3	73.3	3.00	100	2.44	81	70.90-75.65 INTERMIXED CREAM AND GREY COARSE GRAINED GRANITE, MICROGRANITE AND PEGMATITE. The rock is constituted of the same minerals as between 12.45 & 31.70, however, grain size varies from fine to very coarse. Fine arsenic? -quartz veinlets cut the core at 60°-70° to c.A. occasionally throughout. The pegmatite between 72.20 & 72.65 is slightly greisenized.	Rock is slightly broken. Joint frequency is 4-7/m at 60°-70° to c.A.: these joints are more common in finer rock. One low angle joint occurs.	72.10	72.50	0.01			
73.3	76.3	3.00	100	3.00	100								
76.3	79.3	3.00	100	2.20	73	75.65-78.40 CREAM AND GREY COARSE GRAINED GRANITE AND GREY GREISEN The granite is as between 12.45 & 31.70 with minor alteration of feldspar to clay and pyrite. 75.65-75.80 GREY GREISEN 50° 0.10 As between 58.21 & 58.47; sparse pyrite & sphalerite, trace arsenopyrite & chalcopyrite	Rock is slightly weathered to fresh; last 30cm are very broken and clayey. Joint frequency is 3-4/m at 60°-70° to c.A.	75.65	76.95	0.40			
								76.95	78.40	0.05			

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487110
109

Project: ROYAL GEORGE

Hole: S2

Page: 10

From	To	Rec	RQD	Description	Structural	Assays							
						From	To						
				partial alteration of clay to feldspar; sparse schist patches	70° - 80° to c.a. One joint subparallel to the c.a. is present.								
				106-68 VUGGY BLACK QUARTZ 30° 0.03 VEINLET									
				107-50 - 108-20 INTENSELY IRONSTAINED ZONE									
				112-30 - 112-80 COARSE GRAINED GRANITE WITH MINOR PATCHES OF MICROGRANITE									
114.4	115.3	0.90	100	0.60	67								
115.3	118.3	3.00	100	3.00	100								
118.3	121.3	3.00	100	2.95	98								
121.3	124.3	3.00	100	2.67	89								
124.3	127.3	3.00	100	1.80	60								
				115-80 - 123-20 PINKISH-CREAM AND GREY COARSE GRAINED GRANITE									
				As between 12.45 & 31.70; generally fresh, rare greisenized patches		Rock is intact. Joint frequency is 1-2 fm at 60° - 80° to c.a.							
				117-70 - 118-00 PINK-CREAM PORPHYRY									
				121-30 - 121-40 GREY GREISEN									
				123-20 - 127-40 CREAM AND GREY PORPHYRY AND MICROGRANITE									
				The porphyry is as between 0.00 & 12.45; the microgranite is a finer grained phase of the porphyry?		Rock is broken to very broken by joints subparallel to c.a.							

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S2

Page: 11

From	To	Rec (m)		Rec (%)		Description	Structural	Assays													
								From	To												
						124.28 - 124.60 GREY GREISEN 50° 0.25 As between SB-21 & SB-47; trace pyrite disseminations															
						124.90 - 125.00 GREY GREISEN 50° 0.08 As between SB-21 & SB-47															
						HOLE COMPLETED AT 127.4 m															

487111
110

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: S3

Commenced	7 AUG 89
Completed	15 AUG 89
Logged by	M. V. McKEOWN
Drilled by	WAYNE HON

Purpose
<i>To test the main Royal George lode beneath the former workings and towards the southern end.</i>

Comments on Completion
<i>Strong greisen zone developed within coarse grained granite. Assay data suggests Zn-Cd and As-Bi relationship.</i>

Northing	Easting	Level	Dip	Bearing	Length
5 368 227	573 500	297.9	-53°	060°	120.0

Surveys		
Depth	Dip	Bearing
30 m	-53°	059 1/2°
60 m	-54°	061°
90 m	-53 1/2°	060°
120 m	-54°	060 1/2°

Size	
Depth	Size
120.0	HQ

Recovery	
Depth	%

Summary

Depth		Level		Recovery %	Description	Assays				
From	To	From	To			Length(m)	Sn	Cu	Pb	Zn
77.5	85.7			100	<i>Green-gray coarse grained greisen</i>	8.2 m	0.59	0.11	0.03	0.37
						[E.T.T. 7.1m]				
							Ag	Sb	Bi	Cd
							27	19	69.	46
									[one high value]	

As 5%
3.7
[one high value]
U g/t.
65
[one high value]

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S3

Page: 6

487118
117

From	To	Rec	RQD	Description	Structural	Assays			
						From	To	Sn%	
				Replacement texture at 83.45 indicates sericite replaces feldspar.					
				85.66 - 85.90 CREAM AND GREY COARSE GRAINED GRANITE, PARTLY GAEISENIZED					
				86.03 - 86.27 CREAM AND GREY COARSE GRAINED GRANITE, PARTLY GAEISENIZED					
87.0	89.7	2.70	100	1.33	49	86.48 - 98.00	86.65	87.50	0.25
89.7	91.6	1.90	100	1.90	100	CREAM AND GREY COARSE GRAINED AND VERY COARSE GRAINED GRANITE AND MINOR GREY GAEISEN			
91.6	94.6	3.00	100	3.00	100	Granite as between 74.60 & 77.05; gneiss as between 77.05 & 86.48. In the granite, slight to moderate alteration of feldspar to pyrite occurs.			
94.6	97.6	3.00	100	2.43	81	87.24 - 87.42 GREY GAEISEN 50° 0.14 As above; slightly vuggy, sparse pyrite, trace arsenopyrite.			
						86.48 - 88.00 DECOMPOSED, CLAYEY, COARSE GRAINED GRANITE			
						89.60 - 90.00 GREY GAEISEN 45° 0.28 As above; sparse chalcopyrite, pyrite and arsenopyrite			
						Rock is fresh and intact. Joint frequency is 1-4/m at 50°-60° to c.a.			

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

PROJECT: ROYAL GEORGE

HOLE: S4

Commenced	19 SEP 89
Completed	6 OCT 89
Logged by	M. V. MCKEOWN
Drilled by	WAYNE HOW

Purpose
<i>To test for extensions of the Main Royal George Lode South of the open-cut.</i>

Comments on Completion
<i>Narrow greisen veins over a wide interval, but tin values very low. Strong greisen unit to the North has either thinned to the South or has widened and disseminated into a number of more narrow veins.</i>

Northing	Easting	Level	Dip	Bearing	Length
5 368 159	573 541	294.1	-56°	058°	148.5

Surveys		
Depth	Dip	Bearing
30m	-55 1/2°	057 1/2°
60m	-56°	058°
70m	-56°	058 1/2°
120m	-55 1/2°	059 1/2°

Size	
Depth	Size
148.5	HQ

Recovery	
Depth	%

Summary

Depth		Level		Recovery	Description	Assays				
From	To	From	To	%		Length(m)	Sn	Cu	Pb	Zn
85.3	94.0			100.		B.B.m	0.12	<0.01	<0.01	0.1
						E.T.T. 7.1				
							Ag	Sb	Bi	Cd
							<12	<10	<5	Approx. 16

As. 5. %
 <0.01 0.
 U g/t.
 28

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S4

Page: 2

122
487123

From	To	Rec	RQD	Description	Structural	Assays									
						From	To								
				41.44 - 41.59 40° IRONSTAINED MICRO-FRACTURE NETWORK											
				43.50 - 43.62 40°											
				44.40 - 44.74 40°											
				46.10 - 46.50 irregular											
				46.60 - 47.15 irregular											
				53.00 - 53.65 irregular											
54.2	55.5	1.30	100	0.88	68	53.65-57.51	Rock is very broken, decomposed in part. Joint frequency is 3-4/m at 50°-70° to c.A., 1/m at low angle to c.A.								
55.5	57.2	1.70	100	0.94	55	PARTLY DECOMPOSED WHITE AND GREY COARSE GRAINED GRANITE									
57.2	59.6	2.40	100	1.86	78	As between 36.55 & 53.65 but moderately extensive alteration of feldspar to clay, ironstained throughout									
59.6	62.1	2.50	100	2.22	89										
62.1	64.5	2.40	100	2.36	98										
64.5	67.5	3.00	100	2.41	80										
67.5	70.5	3.00	100	1.80	60										
				57.51-69.90		SLIGHTLY TO STRONGLY GREISENIZED CREAM AND GREY COARSE GRAINED GRANITE AND MINOR GREISEN	Reasonably fresh, intact rock. Joint frequency is 1-2/m at 50°-70° to c.A., 1/m at ~30° to c.A.								
						The granite is as between 36.55 & 53.65 with slightly pink, cream feldspar, occasional alteration of feldspar to pink and, where slightly greisenized, to sericite.									

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S4

Page: 4

487123
124

From	To	Rec	RQD	Description	Structural	Assays									
						From	To								
				64.70 - 65.10 LOW CONSTRAINED MICRO-FRACTURE NETWORK											
				66.40 - 66.54 35° 0.08 GREY GREISEN As above, common pyrite mainly in core veinlet, trace arsenopyrite, trace purple fluorite											
				68.54 - 68.70 MEDIUM GRAINED GRANITE											
				68.77 - 68.82 40° 0.04 GREY GREISEN As above, trace pyrite											
				69.17 - 69.23 50° 0.05 GREY GREISEN As above, sparse pyrite mainly in veinlet											
70.5	71.3	0.80	100	NIL	0	<u>69.90-75.15</u>									
71.3	72.7	1.40	100	NIL	0	PARTLY DECOMPOSED CREAM AND									
72.7	73.1	0.40	100	0.10	25	GREY COARSE GRAINED GRANITE									
73.1	73.5	0.40	100	0.40	100	As between 36.55 & 53.65									
73.5	76.5	3.00	100	1.40	47	with extensive alteration of feldspar to clay between 69.90 & 73.05, slightly to moderately intensely iron- stained, occasional iron- stained microfracture networks at 40°-50° to C.A.									
						Very broken to broken, weathered, extensive alteration of feldspar to clay between 69.90 & 73.05: core is expanding / decomposing in trays Jointing subparallel to C.A. and at 60°-80° to C.A. at 6/m Fresh, unbroken from 73.05-75.10									

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S4

Page: 5

487126
125

From	To	Rec	RQD	Description	Structural	Assays			
						From	To	Sn%	
				<p><u>75.15-75.60</u> GREY GREISEN AND MINOR PINKISH CREAM AND GREY COARSE GRAINED GRANITE Greisen as between 57.51 & 57.64, granite as between 36.55 & 53.65; sericite is replacing feldspar, minor pyrite as disseminations and veinlets; greisen is at 45° to c.a.</p>	<p>Rock is fresh but cut by a joint subparallel to c.a.</p>	75.15	75.60	0.20	
76.5	78.6	2.10	100	2.10	100				
78.6	79.5	0.90	100	0.90	100				
79.5	82.5	3.00	100	2.42	81				
82.5	83.3	0.80	100	0.75	94				
83.3	85.5	2.20	100	1.43	65				
85.5	88.5	3.00	100	0.85	28				
88.5	91.5	3.00	100	2.72	91				
91.5	94.5	3.00	100	2.43	81				
94.5	97.5	3.00	100	2.82	94				
				<p><u>75.60-96.00</u> SLIGHTLY TO MODERATELY GREISENIZED CREAM AND GREY QUARTZ-FELDSPAR PORPHYRY. Sub to subhedral cream feldspar, an to subhedral, dark, glassy quartz, accessory biotite in a cream-grey, quartz-feldspar groundmass; porphyroblasts constitute 60% to 70% of the rock; greisenized by veins and veinlets at 40°-50° to c.a.</p>	<p>Rock is generally fresh and intact except adjacent to joints subparallel to c.a. (see RQDs) Joint frequency is 1-4/m at 50°-60° to c.a., 1/m at 30° to c.a., joints subparallel to c.a. are present.</p>	75.60	77.05	0.09	
				<p><u>77.05-77.19</u> GREY GREISEN 50° 0.09 as between 57.51 & 57.64, minor disseminated pyrite, sparse sphalerite, trace cassiterite (≤1mm)</p>		77.05	77.70	0.16	
				<p><u>77.53-77.66</u> GREY GREISEN 40° 0.09 as between 57.51 & 57.64; sparse-minor pyrite, sparse arsenopyrite</p>		77.70	78.20	0.09	

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

487130
129

Project: ROYAL GEORGE

Hole: S4

Page: 9

From	To	Rec	RQD	Description	Structural	Assays				
						From	To	Sn%		
				96.00 - 96.78 PINKISH CREAM AND GREY MICROGRANITE A fine grained version of the granite between 36.55 & 53.66.	Rock is fresh. Joint frequency is 20/m at 60° to c.A., 1-2/m at 45° to c.A.	96.00	96.90	0.09		
97.5	100.5	3.00	100	3.00	100	96.90	97.80	6.01		
100.5	103.5	3.00	100	3.00	100	97.80	98.80	0.09		
103.5	106.3	2.80	100	1.40	50					
106.3	106.5	0.20	100	0.10	50					
106.5	109.5	3.00	100	2.60	87					
109.5	111.4	1.90	100	1.60	84					
111.4	112.5	1.10	100	0.90	82					
112.5	113.1	0.60	100	0.25	42					
113.1	115.5	2.40	100	2.03	85					
115.5	118.5	3.00	100	2.92	97					
				96.78 - 118.50 PINK-CREAM AND GREY COARSE GRAINED GRANITE AND MINOR GREY GREISEN Granite as between 36.55 & 53.65; greisen as between 57.51 & 57.64; slightly pinkish, khaki feldspar in part, clay on some joints	Rock is generally fresh except for broken zones: 104.60 - 106.50 broken zone adjacent to joint sub- parallel to c.A., partly decomposed to clay. 112.80 - 113.10 very broken zone adjacent to joint sub-parallel to c.A.	98.80	100.30	0.10		
				99.70 - 99.76 40° 0.05 GREY GREISEN As above, sparse pyrite disseminations, trace arsenopyrite						
				100.06 - 100.24 50° 0.15 GREY GREISEN As above, sparse pyrite disseminations, trace cassiterite	Joint frequency is 0-2/m at 55-65° to c.A., joints subparallel to c.A. are present.					
				101.94 - 102.04 40° 0.06 IRONSTAINED MICROFRACTURE NETWORK						

OVER

SPECTRUM RESOURCES AUSTRALIA PTY. LIMITED

Project: ROYAL GEORGE

Hole: S4

Page: 11

487132
131

From	To	Rec	100	RQD	Description	Structural	Assays							
							From	To	S _m %					
118.5	121.5	3.00	100	1.30	43	118.63-148.50								
121.5	124.5	3.00	100	2.10	70	PINK AND GREY COARSE GRAINED								
124.5	127.5	3.00	100	1.38	46	GRANITE WITH OCCASIONAL GREISEN								
127.5	130.5	3.00	100	2.37	79	ZONE								
130.5	133.5	3.00	100	2.47	82	As between 96.78 & 118.50.	Rock is generally fresh.							
133.5	136.5	3.00	100	2.15	72		The most broken zones							
136.5	139.3	2.80	100	2.10	75	118.62-119.24 DECOMPOSED / DECOMPOSING	are adjacent to joints							
139.3	142.4	3.10	100	1.44	46	COARSE GRAINED GRANITE	subparallel to c.a.							
142.4	145.5	3.10	100	2.83	94	Feldspar altered to								
145.5	148.5	3.00	100	3.00	100	clay	joint frequency is 0-2/m							
						127.14 - 127.34 GREY GREISEN	at 55-60° to c.a., joints							
						50° 0.14	subparallel to c.a. are	127.10	128.45	0.06				
						As between 57.51 & 57.64;	present.							
						minor sphalerite, sparse								
						arsenopyrite, sparse								
						bladed calc?, trace								
						cassiterite grains								
						(≤ 1/2 mm across)								
						128.30 - 128.43 GREY GREISEN								
						35° 0.08	As between 57.51 & 57.64;							
						trace pyrite								
						128.79 - 128.83 GREY GREISEN								
						55° 0.03	As between 57.51 & 57.64;	128.45	130.00	0.18				
						trace pyrite								
						129.78 - 130.00 GREY GREISEN								
						40° 0.15	As between 57.51 & 57.64;							
						trace pyrite, sparse								
						arsenopyrite and								
						sphalerite mainly in								
						core veinlet								

OVER

CORE GRIND SAMPLING - MACKINTOSH / HATFIELD

HOLE No. HL-80

487134

DATE

No.	SAMPLE NUMBER	INTERVAL	ELEMENTS REQUIRED	ST	SAMPLE NUMBER	INTERVAL	ELEMENTS REQUIRED	ST
1	333 177	0-6.5			333 209	303-305.7		
2	178	6.5-13.0			210	305.7-308.2		
3	179	13-20			211	308.3-310		
4	180	20-30			212	320-330		
5	181	30-40			213	330-340		
6	182	40-50			214	340-350		
7	183	50-60			215	350-360		
8	184	60-70			216	360-370		
9	185	70-80			217	370-380		
10	186	80-90			333 218	380-397.4		
11	187	90-100						
12	188	100-110						
13	189	110-120						
14	190	120-130						
15	191	130-140						
16	192	140-150						
17	193	150-160						
18	194	160-170						
19	195	170-180						
20	196	180-190						
21	197	190-200						
22	198	200-210						
23	199	210-220						
24	333 200	220-230						
25	201	230-240						
26	202	240-250						
27	203	250-260						
28	204	260-270						
29	205	270-280						
30	206	280-290						
31	207	290-301.2						
32	333 208	301.2-303						

CORE GRIND SAMPLING - MACKINTOSH / HATFIELD

HOLE No. MAZ-1

487135

DATE

No.	SAMPLE NUMBER	INTERVAL	ELEMENTS REQUIRED	ST	SAMPLE NUMBER	INTERVAL	ELEMENTS REQUIRED	ST
1	333138	0-9.8			333170	289-299		
2	139	9.8-17.7			171	299-309		
3	140	17.7-27.7			172	309-319		
4	141	27.7-37.7			173	319-329		
5	142	37.7-45.2			174	329-339		
6	143	45.2-50.2			175	339-349		
7	144	50.2-60.2			333 176	349-358		
8	145	60.2-70.2						
9	146	70.2-80.2						
10	147	80.2-90.2						
11	148	90.2-100.2						
12	149	100.2-110.2						
13	150	110.2-120.2						
14	151	120.2-130.2						
15	152	130.2-140.2						
16	153	140.2-150.2						
17	154	150.2-160.2						
18	155	160.2-170.2						
19	156	170.2-180.2						
20	157	180.2-190.2						
21	158	190.2-202.2						
22	159	{ 202.2-205.7 205.7-206.6 } *						
23	160	205.2-216.6						
24	161	206.0-216						
25	162	216-225.2						
26	163	203-205.7 *						
27	164	226.6-236.6						
28	165	236.6-249						
29	166	249-259						
30	167	259-269						
31	168	269-279						
32	333169	279-289						

QUE RIVER MINING PTY LTD

DATE SUBMITTED

DATE ASSAYED

71 ENTERS RENE 1/11/85

Page 1 of 3

D.O.H. No. **MAC 3**

SAMPLE ASSAY DATA

SAMPLE No.	FROM (m)	TO (m)	L (m)	LITH'Y	S.G.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	LOC'N	C ZONE				LENS
						Cu	Pb	Zn	Ag	Au	Ba	As	PPM	PPM	PPM	PPM		
333 703	29.5	32.5	3.0			155	30	200			1550	5	260	115	160	3750	136	
704	32.5	35.0	2.5			70	15	165			1650	22	140	75	95	3200		
SPLIT 705	35.0	38.0	3.0			15	15	125			1300	22	160	70	120	2700		
706	38.0	41.0	3.0			125	20	225			1300	22	190	90	150	3100		
SPLIT 707	41.0	44.0	3.0			35	20	180			1100	22	210	75	140	3050		
708	44.0	47.0	3.0			65	15	190			1250	22	210	80	140	2950		
709	47.0	49.5	2.5			60	20	135			1550	22	230	85	140	2900		
710	49.5	52.5	3.0			485	20	400			2100	22	85	90	85	2250		
711	52.5	54.6	2.1			120	20	160			1150	4	75	55	110	2300		
712	54.6	56.6	2.0			360	20	370			1300	2	100	75	260	2650		
713	56.6	59.6	3.0			305	15	340			1150	22	65	60	240	2150		
714	59.6	61.5	1.9			85	20	160			840	22	75	45	220	2200		
715	61.5	64.2	2.7			370	20	400			650	22	70	70	220	2100		
716	64.2	66.5	2.3			390	25	355			500	22	50	75	140	3200		
717	66.5	68.9	2.4			340	20	300			590	22	40	70	120	3100		
SPLIT 718	68.9	69.9	1.0			130	25	150			380	22	50	40	120	3150		
719	69.9	72.1	2.2			405	20	420			1200	22	25	70	140	3200		
SPLIT 720	72.1	72.5	0.4			60	40	155			690	6	30	30	110	2550		
SPLIT 721	72.5	73.1	0.6			15	15	85			590	7	40	45	140	3500		
SPLIT 722	73.1	73.4	0.3			185	15	80			420	22	70	30	110	2650		
723	73.4	74.1	0.7			780	20	700			470	4	7	120	170	3200		
724	74.1	74.7	0.6			760	15	700			390	9	100	170	130	2650		
725	74.7	76.3	3.6			880	20	885			470	22	25	230	170	3450		
726	76.3	81.3	3.0			400	25	375			650	16	30	115	140	3300		
727	81.3	83.5	2.2			310	30	300			1100	14	25	90	120	3050		
728	83.5	87.1	3.6			150	15	175			1050	4	35	55	140	3350		
729	87.1	90.7	3.6			165	20	190			610	22	25	50	150	3450		
730	90.7	94.7	4.0			765	35	270		<0.008	520	15	35	90	120	2950		
731	94.7	97.5	3.1			1000	25	60		<0.008	1100	7	25	35	120	2850		
SPLIT 732	97.5	98.4	0.6			110	20	95			770	22	30	40	120	3100		
SPLIT 733	98.4	99.1	0.7			90	10	55			560	3	20	30	100	2850		
SPLIT 734	99.1	102.2	3.1			285	15	70		<0.008	520	2	70	40	100	2850		
735	102.2	102.6	0.4			40	20	40			530	6	35	30	130	3200		
333 736	102.6	105.5	2.9			265	20	60		<0.008	490	4	70	35	160	3900		

487137

QUE RIVER MINING PTY LTD

DATE SUBMITTED

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Page 2 of 3

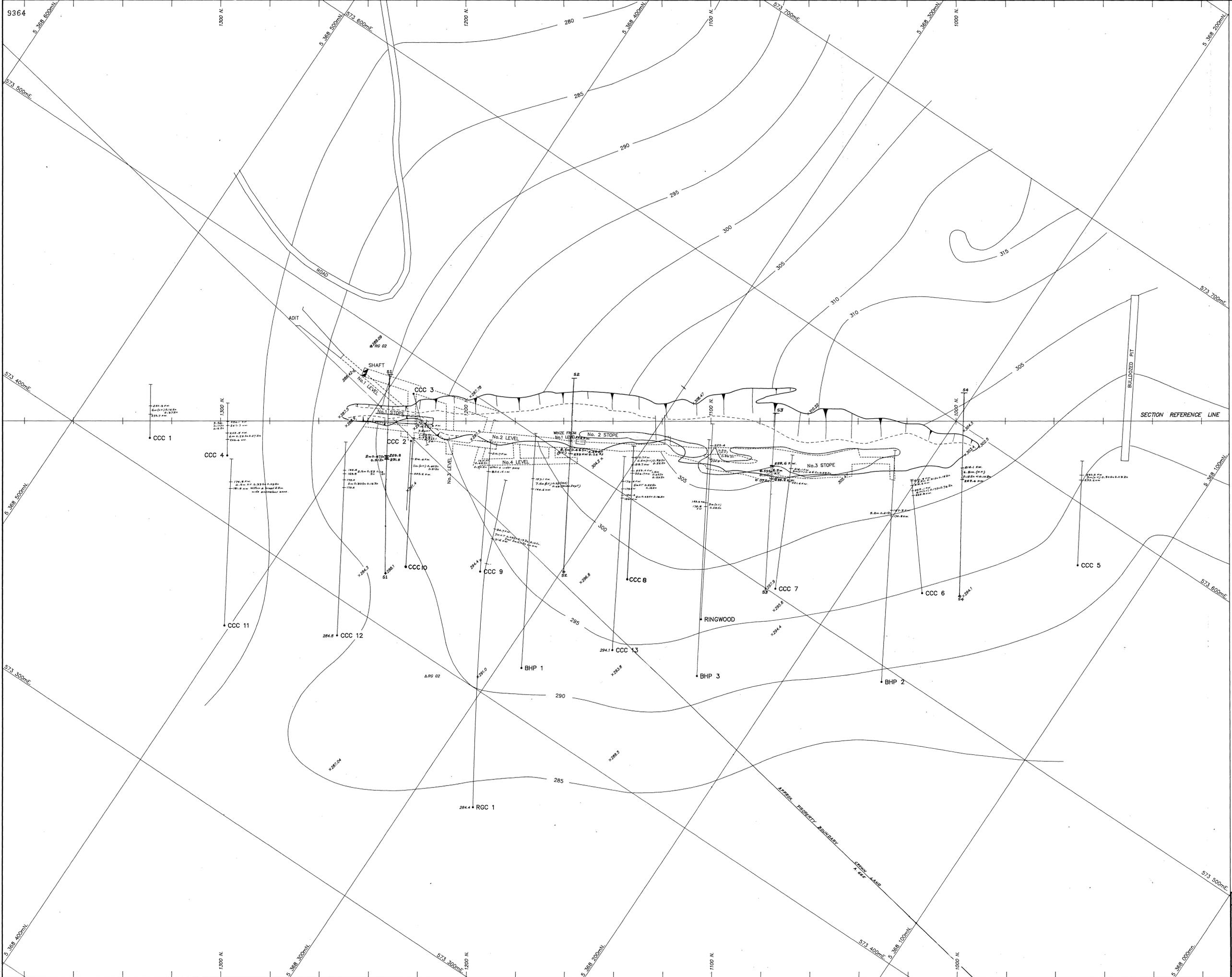
D.D.H. No.

MAC3

SAMPLE ASSAY DATA

SAMPLE No.	FROM (m)	TO (m)	L (m)	LITH'Y	S.G.	PPM	PPM	PPM	ppm	ppm	PPM	PPM	LOC'N	PPM	PPM	PPM	LENS
						Cu	Pb	Zn	Ag	Au	Ba	As	Cr	Ni	Zr	Ti	
333 737	105.5	108.4	2.9			405	20	55		<0.008	450	9	30	40	130	3050	137
738	108.4	111.4	3.0			600	15	55		<0.008	520	4	10	20	150	3200	
739	111.4	114.4	3.0			405	20	55		<0.008	560	4	<5	20	150	3150	
740	114.4	117.4	3.0			365	20	65		<0.008	640	<2	10	15	150	3200	
741	117.4	120.4	3.0			380	20	65		<0.008	600	3	8	25	130	3100	
742	120.4	123.4	3.0			335	20	45		<0.008	700	8	<5	15	170	3450	
743	123.4	126.4	3.0			310	5	50		<0.008	700	4	5	20	150	3200	
744	126.4	129.4	3.0			235	<5	55		<0.008	670	6	6	15	150	3150	
745	129.4	132.4	3.0			250	<5	50		<0.008	1000	<2	15	15	160	3350	
746	132.4	135.4	3.0			320	<5	50		<0.008	760	8	<5	20	150	3200	
747	135.4	138.4	3.0			245	5	55		<0.008	710	7	7	20	150	3200	
748	138.4	141.4	3.0			255	10	60		<0.008	690	5	10	20	140	3050	
749	141.4	144.4	3.0			400	30	410			680	9	9	135	140	3150	
750	144.4	147.4	3.0			410	10	50		<0.008	590	3	25	20	140	3200	
751	147.4	150.4	3.0			270	10	55		<0.008	590	4	25	25	130	3000	
752	150.4	153.4	3.0			210	5	50		<0.008	I/s	I/s	I/s	20	I/s	I/s	
753	153.4	156.4	3.0			285	10	60		<0.008	970	6	<5	20	150	3150	
754	156.4	159.4	3.0			195	10	45		<0.008	640	<2	<5	20	170	3500	
755	159.4	161.4	2.0			200	5	55		<0.008	610	<2	<5	20	160	3400	
756	161.4	164.4	3.0			65	5	60			370	4	30	30	110	2600	
757	164.4	167.4	3.0			145	5	55			770	<2	30	20	140	3150	
758	167.4	170.4	3.0			190	5	65		<0.008	1550	<2	30	25	120	2900	
759	170.4	173.4	3.0			260	5	70		<0.008	3900	<2	35	30	140	3000	
760	173.4	176.4	3.0			170	<5	85		<0.008	1050	<2	30	30	150	3500	
761	176.4	179.4	3.0			230	5	75		<0.008	720	<2	30	30	130	3200	
762	179.4	182.4	3.0			200	5	75		<0.008	1050	<2	15	30	130	3100	
763	182.4	185.4	3.0			260	<5	60		<0.008	1250	<2	30	30	180	4050	
764	185.4	188.4	3.0			150	<5	60			1550	5	25	25	160	3650	
765	188.4	191.4	3.0			145	5	80			2200	<2	20	35	130	2900	
766	191.4	195.5	4.1			65	5	60			910	<2	15	35	120	2800	
767	195.5	197.0	1.5			30	<5	60			630	<2	100	25	100	2400	
768	197.0	199.3	2.3			310	<5	60		<0.008	1850	<2	15	30	120	2700	
769	199.3	201.6	2.3			170	<5	50		<0.008	1450	<2	20	30	150	3300	
333 770	201.6	204.1	3.0			230	<5	60		<0.008	2050	<2	<5	20	150	3300	

487138

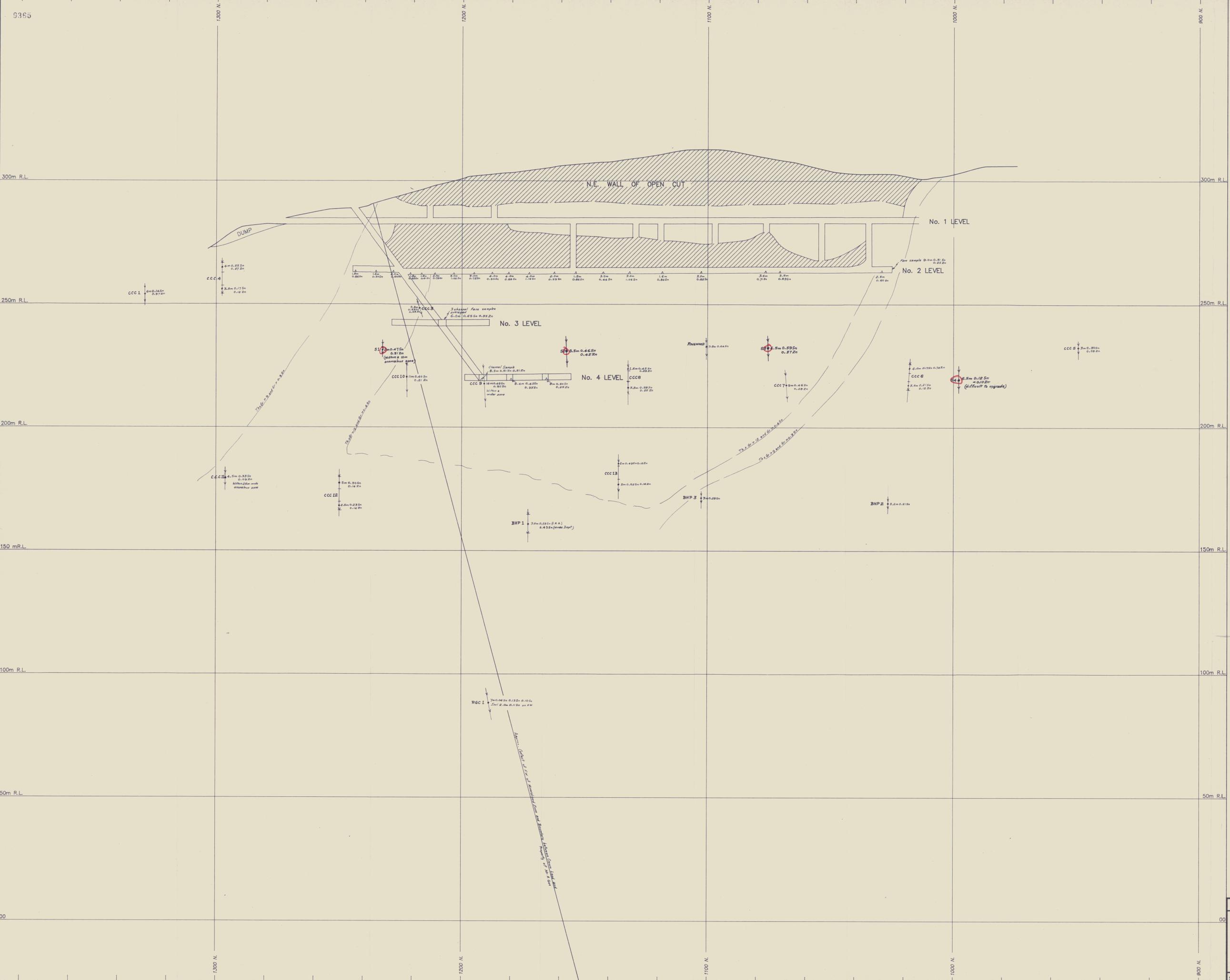


487140
 6cm

9364

90-3129.

SPECTRUM RESOURCES AUSTRALIA PTY. LTD.	
ROYAL GEORGE MINE	
SURFACE PLAN SHOWING WORKINGS AND DRILL HOLES	
SCALE 1:500	FIG. 2
DRAWN BY: L.A.N.	FILE NO.
DRAFTSMAN: T.O.S.	
DATE: Aug. '89	
REVISIONS: Apr. '90	



- Notes:
1. Intersection widths are estimated horizontal widths (m)
 2. Underground channel samples (n) were generally taken in the floor or along walls in the case of cross-cuts. Sampling by Cornwall Coal Co.
 3. ∇ Drill hole entry point (m)
 ∇ Intersection made point
 ∇ Drill hole exit point (m)
 4. CCC - Cornwall Coal Company
 BHP - BHP
 RGC - CRA
 Ringwood Ringwood Syncline
 S - Spectrum Resources } Drill Hole Profiles
 5. Property boundary is non-vertical because mineralised zone dips West
 6. Base drafted by CAD by The Geol. Drafting Services
 Drilling results hand plotted by J.A. Newham
 7. Grid is A.M.G. (m.s.l.)
 Projection parallel Section Reference Line as shown on accompanying plans

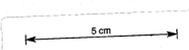
487141 9365
 50m
90-3129.

SPECTRUM RESOURCES AUSTRALIA PTY. LTD.
 ROYAL GEORGE MINE
 LONGITUDINAL PROJECTION
 (LOOKING NORTH-EAST)
 SCALE 1:500
 METRES
 DRAWN BY: L.A.N.
 DRAFTSMAN: T.O.D.S.
 DATE: Apr 00
 REVISIONS:
 FILE No.
 FIG. 3

SECTION REFERENCE LINE



9366



90-3129.

SPECTRUM RESOURCES AUSTRALIA PTY. LTD.

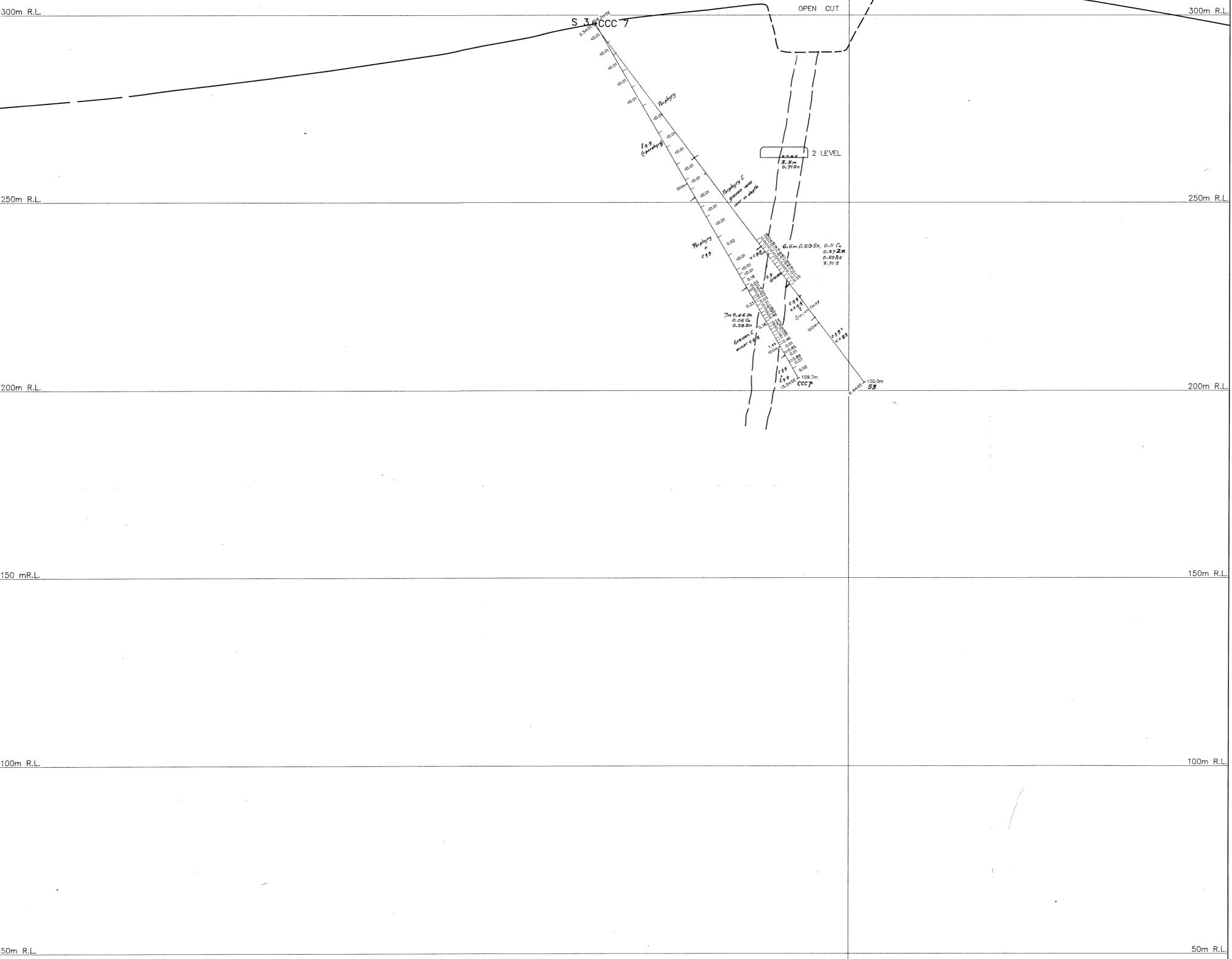
ROYAL GEORGE MINE	DRAWN BY : M.V.M.K.
CROSS - SECTION	DRAFTSMAN : T.G.D.S.
1000m N.	DATE : Nov.'89
(LOOKING NORTH - WEST)	REVISIONS
	FILE No. RGX5000

487142

SOUTH - WEST

NORTH - EAST

SECTION REFERENCE LINE



9367

487143

90-3129.

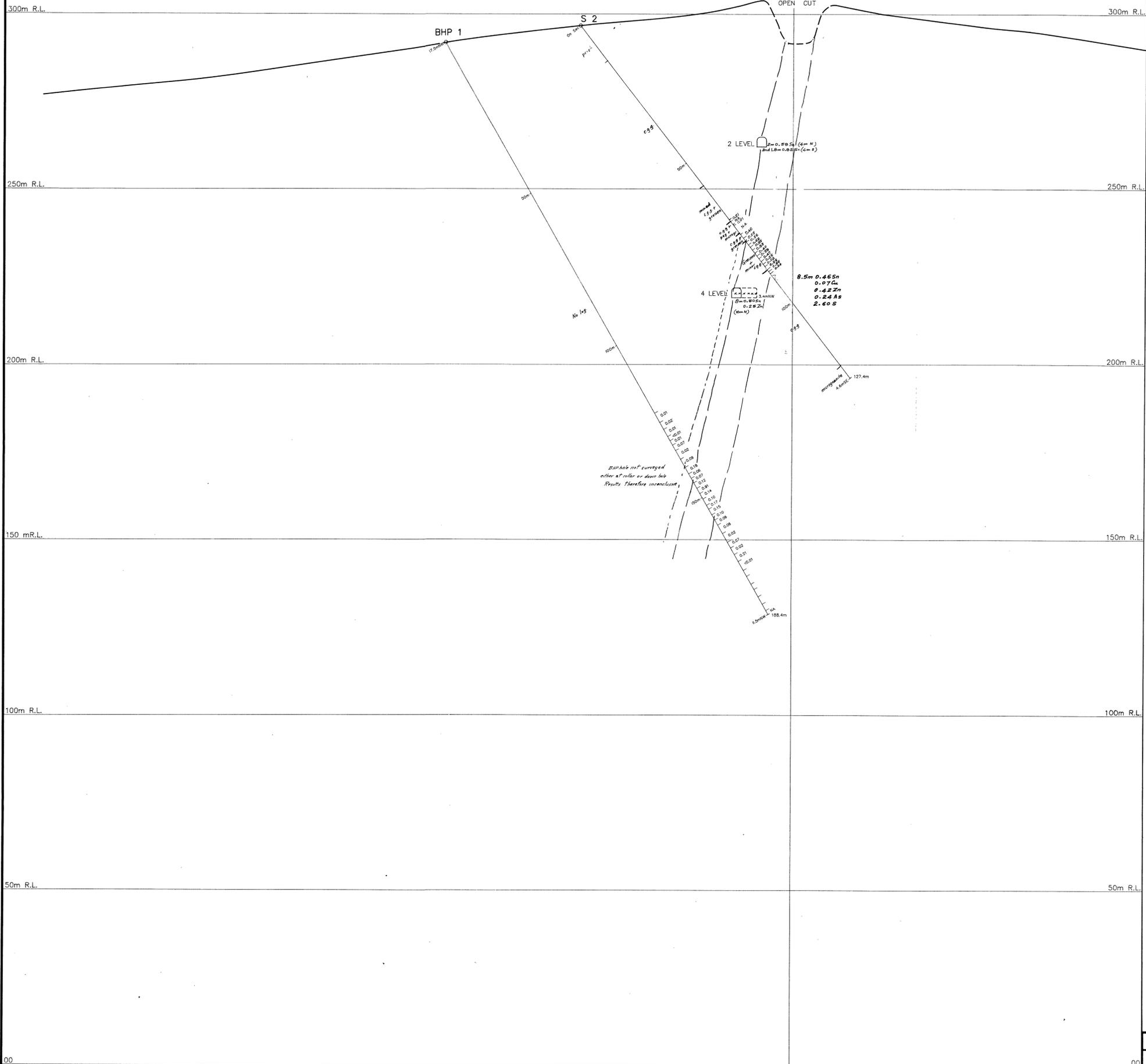
SPECTRUM RESOURCES AUSTRALIA PTY. LTD.

ROYAL GEORGE MINE

CROSS - SECTION
1080m N.
(LOOKING NORTH - WEST)

DRAWN BY :	M.V.MCK.
DRAFTSMAN :	T.G.D.S.
DATE :	Nov. '89
REVISIONS :	
FILE No. :	RGXSI080

SECTION REFERENCE LINE



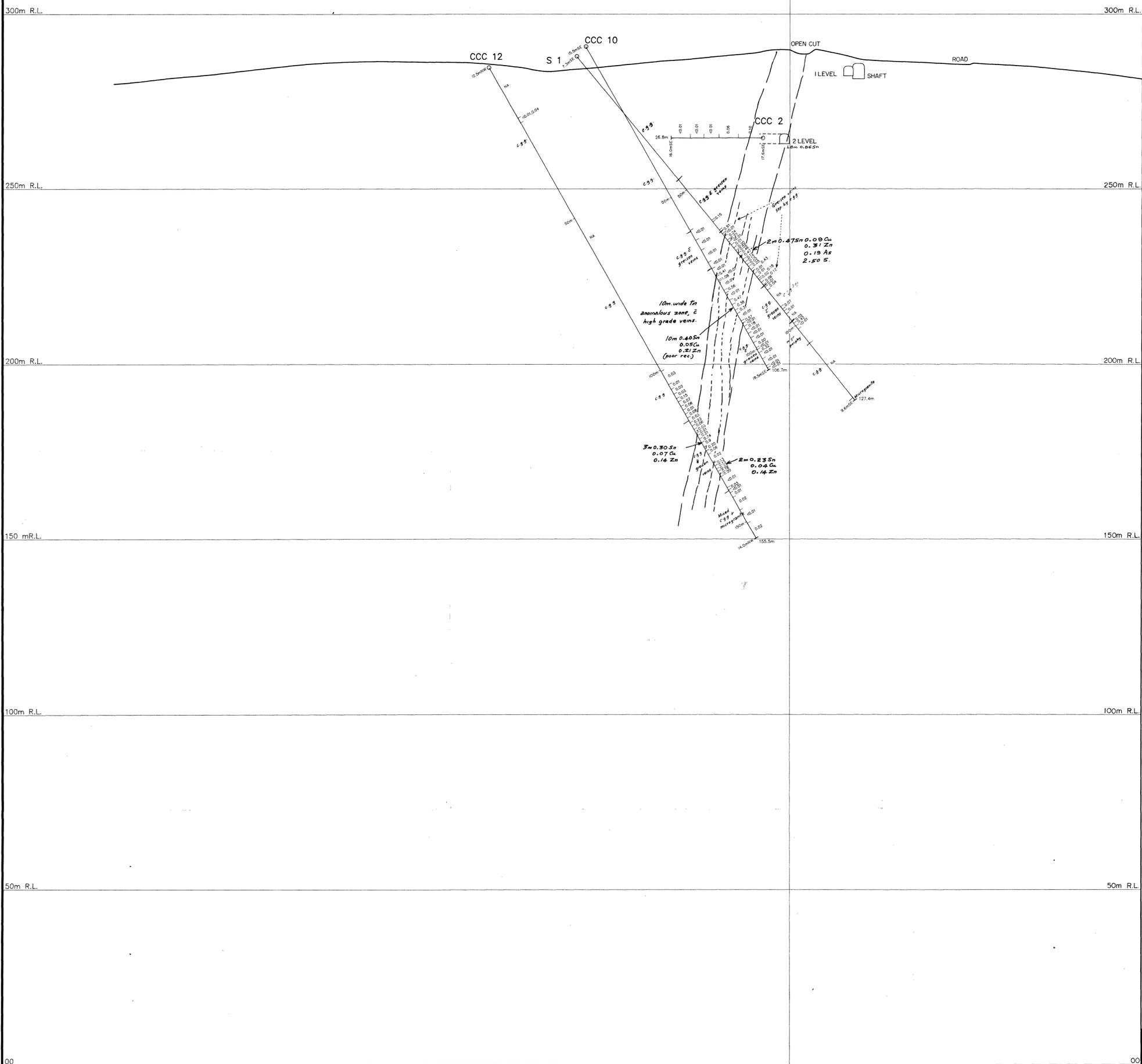
5m 9368

90-3129.

437144

SPECTRUM RESOURCES AUSTRALIA PTY. LTD.	
ROYAL GEORGE MINE	DRAWN BY : M.V.Mek.
CROSS - SECTION	DRAFTSMAN T.G.D.S.
1160m N.	DATE Nov.'89
(LOOKING NORTH - WEST)	REVISIONS
	FILE No. R6XSI60
SCALE 1:500	FIG. 6

SECTION REFERENCE LINE



9369

5m

90-3129.

487145

SPECTRUM RESOURCES AUSTRALIA PTY. LTD.	
ROYAL GEORGE MINE	
CROSS - SECTION	
1240m N.	
(LOOKING NORTH - WEST)	
DRAWN BY : M.V.MCK.	DRAFTSMAN T.G.D.S.
DATE Nov. 89	REVISIONS
FILE No. REX5040	