A 04457 (a)

Logged SGF.

QUE RIVER MINING PTY. LTD. — DRILL HOLE RECORD

Location 9300 Costean — Co ordinates N 9281·77 E 5536·37 — R.L. 669·27

Commenced 9/2/83 — Completed 20/2/83 — % Recovery — Bearing 273° 57' 54"

Objective D1 UTEM Anomaly — Core size 0-6·0 Tricone, 6·0-49·6 HQ, 49·6-271·7 NQ — Dip -43° 46' 23" — HOLE No. DA-3

SURVEY DATA				GRAPH DERIVED DATA			CALCULATED CO ORDINATES			REMARKS
DEPTH	DIP	BEARING (G)	INSTRUMENT TYPE	DEPTH	DIP	BEARING (G)	NORTHING	EASTING	R.L.	
0	-43 8	273 9	THEODOLITE	0	-45	268·6	9281·77	5536·37	669·27	
40	-45°	268·5	EASTMAN	25	-45	268·5	9281·32	5518·70	651·59	
67	-45°	266·3	"	50	-45	268·4	9280·84	5501·03	633·91	
104	-43·7	268·3	"	75	-44·8	268·3	9280·33	5483·33	616·27	
130	-423	268·3	"	100	-43·9	268·4	9279·82	5465·46	598·79	
161	-42·8	268·5	"	125	-42·5	268·4	9279·31	5447·24	581·48	
195	-43	268·5	"	150	-42·4	268·6	9278·33	5428·8	564·81	
230	-41·8	270	"	175	-43·1	268·6	9278·38	5410·45	547·84	
263	-41·8	270	"	200	-42·9	269	9278·0	5392·17	530·79	
				225	-42·1	269	9277·67	5373·74	513·9	
				250 D	-41·8	269	9277·35	5355·15	497·19	
				271·7	-41·8	269	9277·07	5338·97	482·72	

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA 3 Page No. 1 of 11

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DATE .....

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE > 60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
		TRICONED							
	6.0								
1.5		Light brown - Buff carbonate altered flow banded Dacite breccia fragments are up to 50cm and angular carbonate has probably picked out original flow banding.							Py ~5%
94	7.5								
1.0									
32	8.5								
1.5		grey strongly sericite/carbonate altered Dacite breccia, matrix is infilled with carbonate and sericite						8.75	Py 5%
64		Buff - light brown strongly carbonate altered Dacite lava, chlorite occurs in fractures						9.5	Py 2-3%
1.3	10.0							10.6	
50	11.3	Pale grey strongly sericite/carbonate altered Dacite breccia, many fragments have lost their dacitic appearance through the alteration.							
16									
77	12.9								
1.6									Py 4-5%
99	14.5								
15									
57									
1.5	16.0								
58	17.5								
15									
103	19.0								
1.1									
12	20.1	cream-pale green sericite/carbonate altered rock, possibly DTZ - sericite altered pumiceous? fragments.						19.8	Py 2-3%
1.6		chlorite?/carbonate altered Dacite breccia						20.5	Py 5%
		Sericite/carbonate altered rock						21.0	Py 5-7%
42	21.7							21.7	
1.6		grey sericite/carbonate altered lapilli Tuff, fragments are very strong sericite altered.						22.7	
84	23.3	grey-buff strongly sericite/carbonate altered Dacite						23.3	
1.6		Grey strongly sericite/carbonate altered lapilli Tuff, fragments are strongly altered and appear largely Dacitic							
150	24.9								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA 3 Page No. 2 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE > 60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
1.6		Galena, sph, clay noted in small q vein @ 26.3m.							
103	26.5								
1.6									
78	28.1							28.1	
16		Pale grey Sericite/Carbonate altered Dacite Breccia unit, strongly sericite altered elongate fragments may be pinniceous, rare Illite/Hydromuscovite. Fragment boundaries are stomp.							
130	29.5								
3.0									
	32.5							32.6	
1.6		Pale grey sericite/Carbonate altered polymictic coarse epiclastic, fragments are subangular and strongly sericite altered.							
55	34.1								
28 1.6	34.7								
	34.8								
31 .7	35.5								
1.5								36.1	
110	37	Pale grey sericite/carbonate altered Dacite breccia, alteration pervades into fragment boundaries, minor Illite/Hydromuscovite.							
1.5									
103	38.5								
3.0									
		RSIP						39.3	
		Pale grey sericite/carbonate altered Dacite breccia						39.4	
		.5cm sheared Fault @ 40.9m						40.9	
		grey strongly sericite altered polymictic reworked pyroclastic fragments are subrounded to 10cm.							Py 5-10%
1.5	41.5							41.55	
		grey sericite/carbonate altered strongly brecciated Dacite, fragments are sericite altered and angular							
88	43.								Py 5%
1.5									
70								44.1	
		Grey polymictic sericite/Carbonate altered reworked pyroclast, fragments are rounded.							Py 5-10% Sphalerite crystal noted in unit
1.5	44.5								
68								45.5	
	46.0	Pale grey Carbonate/sericite altered Dacite breccia, fragments are strongly sericite altered							
1.5									Py 5%
126									
	47.5							47.5	
1.2		Grey strongly altered Sericite/Carbonate rock, primary textures are obscured by the alteration.							Py 5-10%
.9	48.7							49.8	
33		Pale grey strongly sericite/carbonate altered Dacite breccia, alteration pervades fragment boundaries							
2.4	49.6								

NQ

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-3 Page No. 3 of 11

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DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE > 60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
120	52							52	
28	52.7								
23		Grey sericite/Carbonate altered polymictic reworked pyroclastic, fragments are generally rounded to 2cm, large angular Dacitic fragments also occur with possible sericite altered pumice fragments							fg ~5%
30	55								
266	58								
30									
293	61								
30									
257	64								
30									
267	67								
30								67.7	
		blk green sericite/carb altered Dacite Lava						68.1	
		Grey sericite & Carb alt polymictic RUP.							
		broken ground. possible Fault 68.9-69.1						69.1	
185	70	light brown-buff-grey carbonate/sericite altered Massive Dacite lava, siliceous veins are common.							fg <1%
30									
273	73								

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DIAMOND DRILL LOG

HOLE No. DA 3 Page No. 4 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE >60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
287									
	76								
23									
150	78.3								
2.1									
165	80.4								
2.7									
205	83.1								
2.7									
71	85.8								
1.7									
89	87.5								
2.8									
137	90.3								
1.5									
141	91.8								
3.1									
								93.5	
187	94.9	Pale grey - grey-green Carbonate/sericite/ chlorite altered rock, possibly lapilli tuff, original texture is obscured by alteration							Pg 52
1.8									
41	96.7								
3.1									
170	99.8								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-3 Page No. 5 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE >60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY
~~85~~ 1.7		
85	101.5	
3.1		
222	104.6	
3.1		Occassional fragments appear to exhibit flow banding
205	107.7	
3.1		
222	110.8	Pale yellow - buff Carbonate altered Dacite, chlorite alteration occurs along joints.
2.3		
166	113.1	Grey-green sericite/carbonate altered rock.
3.0		Buff carb alt Dacite
		Pale - dark green Sericite/chlorite/silica altered rock, alteration has obscured the primary texture, alteration may have picked out fragments giving the unit a fragmental appearence
163	116.1	
2.1		
93	118.2	
2.8		
218	121	
2.8		
134	123.8	Light brown. Carbonate altered Dacite, chlorite alteration occurs along the fractures

VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
					109.8	Py 5%
					112.9	
					113.5	
					113.9	
					122.95	

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-3 Page No. 6 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE >60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
89	1256								
1.9									
28	1275								
2.5									
50	130								
1.6								130.6	
186	131.6	grey sericite/carbonate altered polymictic fine grained reworked pyroclastic grain size is generally <1cm, fragments are well rounded.							
3.0									
								134.3	
2.1	1346	Pale green sericite/carbonate/silica altered rock primary texture has been obscured by the alteration							
.5	1367	dark green chlorite/carbonate altered rock Primary texture has been obscured by alteration						136.7	
.8	1372	light brown chlorite/carbonate fractured Dacite Lava						137.5	
	138.4							138.3	
1.5		Pale green-grey sericite/carbonate altered rock Primary texture obscured by alteration.							
	139.9	Pale brown Carbonate altered Dacite Lava						139.1	
.9								139.9	
	1408	grey-green sericite/carbonate altered rock, possibly lapilli tuff, alteration has obscured most of the primary texture.							
2.6									
								142.3	
	143.4	brown-green carbonate/chlorite altered							
19		Dacite lava, ~~fracturing~~ chlorite occurs							
	144.5	along fractures, Unit is occassionally							
12		brecciated by carbonate.							
	145.7								
.7	1464								
1.6									
	148								
1.7									
	149.7								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA 3 Page No. 7 of 11

LOGGED BY SCF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE >60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
1.7	150.8								
1.6									
	152.4	green-grey sericite/silica/carbonate altered rock, primary texture is largely obscured by alteration						151.8	minor galena around margins of qtz veins Py 5-8%
.7									
1.4	153.1								
	154.5								
2.3									
	156.8								
1.3									
	158.1							158.1	
1.7		Pale grey sericite/carbonate altered Dacite breccia, fragments are close packed subrounded. ← Seam generally < 5cm							Py 5-10%
	159.8								
1.2									
	161								
1.3									
	162.3	broken Core 161 - 169.5							
1.5									
.2	163.8								
.6	164								
.8	164.6								
	165.4								
1.4									
0									
0.1	166.8								
11 .5									
.9	167.5							167.5	
10		Pale grey-buff chlorite/carbonate silica altered Dacite Lava, chlorite occurs as fine veinlets along joints, and associated with silica as major veins							Pyrr Py < 1%
20 .6	168.4								
	169								
2.1									
62									
0 .2	171.1								
	171.3								
0 .5		broken Core 170.4 - 173.9							
	171.8								
0 .3									
10 .5	172.1								
	172.6								
1.0									
0									
	173.6								
0 .3	173.9								
36 .7									
	174.6								

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DIAMOND DRILL LOG

HOLE No. DA 3 Page No. 8 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE >60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
29									
107	177.5	Silica/carbonate altered Dacite lava							
.9									
14	178.4	as above							
1.7									
76	180.1								
3.0									Py >1%
100	183.1								
1.5									
124	185.6								
2.3								186.5	
		Pale grey sericite altered lapilli tuff, occassional frags lithic Dacitic, others are strongly sericite altered							
114	187.9							188.45	
3.1		Pale grey sericite/carbonate altered Dacite lava, small crosscutting silica/carbonate veinlets.						189	
		grey Sericite/carbonate altered Dacite breccia, occassional fragments appear to have been totally replace by sericite.							Py 5%
220	191							190.85	
2.7		Pale grey sericite/carbonate altered Dacite lava, minor silica/carbonate veinlets							
185	193.7								Py <1%
2.3									
140	196								
3.0									
184	199								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. QA-3 Page No. 9 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE > 60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
2.0								200.3	
90	201	Pale grey sericite altered Dacite breccia, brecciation is strong with fragments sericite altered							
1.6								201.75	
34	202.6	Pale grey - buff carbonate / chlorite altered Dacite lava							
.9								203.05	
10	203.5	Grey sericite altered polymictic reworked pyroclastic, frags are less than 2cm							
.9									
0	204.4	Sheared puggy broken ground 203-205.4							
1.0									
0	205.4								
2.3		fragment are close packed within a silica altered matrix, Dacite fragments occassionally show reaction boundaries							Py <5%
60	207.7								
2.9									
174									
	210.6								
3.1									
238	213.7							213.5	
3.1		Pale grey sericite / carbonate altered. Reworked pyroclastic, fragment less than 5cm							
262	216.8								
3.0		graded bedding @ 217.2, coarsening in grain size down Hole							
								218.7	
185	219.8	grey sericite / carbonate altered Dacite breccia, alteration has pervaded most of the fragment boundaries							
3.1									
								221.85	
180	222.9	grey polymict sericite altered reworked pyroclastic, unit is very fine grained to 222.7 grain size less than .5cm							
								223.8	

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DIAMOND DRILL LOG

HOLE No. DA-3 Page No. 10 of 11

LOGGED BY .....

DATE .....

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE > 60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
3.1									
166	226	Grey sericite/carbonate altered ?? Dacite, breccia, brecciation is intense, with most fragments showing alteration, and alteration zoning by sericite. fragments are widely spaced.							
3.0									
196	229								Py 5-10% rare sph?? Ba ~1%
3.0									
275	232								
3.0									
280	235								Minor Barite associated Py and intergrown c quartz @ 234m.
3.0								235.65	
		Buff - pale green-grey sericite/carbonate altered massive Dacite lava. chlorite occurs along fine fractures.							
278	238								
3.0									
263	241								Py <1%
3.0									
249	244								
3.0									
250	247								
1.7		Z minor silica brecciation broken ground 247.4 - 248.							
27	248.4								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-3 Page No. 11 of 11

LOGGED BY SGF

DATE

MINERALIZATION

TRACE 1-5%
COMMON 5-15%
ABUNDANT 15-60%
MASSIVE >60%

A 04457 (b)

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
3.1									
173	251.5								
1.0									
11	252.5								
1.0									
20	253.5							254.8	
3.1		green - grey strong sericite altered Dacite Breccia brecciation is strong with fragments being sericite altered.							
86	256.2								Py 5-10%
1.8		broken ground throughout unit.							
58	258								
1.0									
17	259	Broken Ground. No Pug.							
0.4	259.4								
1.1									
0	260.5								
.8		Unit becomes less brecciated with pyrite infilling most of the fractures.							
0	261.3								
.8									
27	262.1								
.7									
0	262.8								
.6									
0	263.4								
.6									
0	264								
1.6								264.5	
0		Strong Illite Hydromuscovite Carbonate altered Dacite, chlorite occurs along fractures. with silica and Carbonate veins stained F2							
0	265.6								
.4									
0	266							266.5	
.7								266.7	Py <1%
0	266.7								
1.2								267.2	
0		Pale brown - buff Carbonate altered Dacite lava. chlorite occurs along fractures, and minor brecciation by Silica occurs.							
.9	267.9								
21									
1.4	268.8								
0									
1.4	270.2								
14									
	271.6	EOH						271.7	