A 04457 (a)

Logged SGF.

QUE RIVER MINING PTY. LTD. — DRILL HOLE RECORD

Location 8900N Costean Co ordinates N 8894.86 E 5117.80 R.L. 657.86

Commenced 25/1/84 Completed 1/2/84 % Recovery Bearing 89.8

Objective D Anomaly Ultem Response Core size HQ/NQ Dip -045° HOLE No. DA-1

0-6.5 Tricone
6.5-135m HQ
135-300.4 NQ

SURVEY DATA				GRAPH DERIVED DATA			CALCULATED CO ORDINATES			REMARKS
DEPTH	DIP	BEARING (G)	INSTRUMENT TYPE	DEPTH	DIP	BEARING (G)	NORTHING	EASTING	R.L.	
0	-45	89.8	THEODOLITE	0	-45	89.8	8894.86	5117.8	657.86	
20	-46	91.0	Eastman	25	-46.2	89.8	8894.92	5135.29	640.0	
46	-47	91.0	"	50	-47.1	89.8	8894.98	5152.45	621.82	
80	-48°	92.5	"	75	-47.8	91.0	8894.86	5169.36	603.4	
104	-48.3	91.5	"	100	-48.3	90.4	8894.66	5186.07	584.81	
132	-49	92.0	"	125	-48.8	90.4	8894.54	5202.61	566.07	
170	-49	94.5	"	150	-49.0	92.0	8894.2	5219.04	547.23	
199	-49.6	92.3	"	175	-49.1	93.3	8893.44	5235.41	528.35	
235.2	-49	93.0	"	200	-49.6	91	8892.83	5251.68	509.38	
273	-48°	95.0	"	225	-49.2	91.4	8892.49	5267.95	490.4	
300	-47°	96.0	"	250	-48.8	92.5	8891.93	5284.34	471.53	
				275	-47.9	94.0	8890.99	5300.92	452.85	
				300	-47	94.0	8889.81	5317.79	434.44	
				300.4	-47	94.0	8889.8	5318.1	434.1	

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1 Page No. 1 of 13

LOGGED BY .....

DATE 23-1-84

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							
	6.5							6.5	
1.4		green - pale yellow strongly weathered possibly carbonate altered very coarse polymictic epiclastic, fragments size ranges from 10cm to ~ 1cm, with shape varying from subangular to subrounded. The core is very broken							Py < 1%
28	7.9								
1.1									
11	9.0								
1.6									
103	10.6								
.9									
68	11.5								
1.5									
84	13.0								
1.5									
90	14.5								
1.6									
106	16.1								
1.4									
87	17.5								
1.5									
50									
.9	19.0								
12	19.9								
.6									
33	20.50								
1.6									
97									
1.4	22.1								
58									
1.2	23.6							23.6	
26		Relatively unweathered grey - pale grey felsic Carbonate altered vesicular Andesite lava; single fragment of Illite Hydromuscovite observed							Py < 1%
	24.7								

HQ core.

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA 1

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		very fine grey pyrite? veinlets occur throughout increasing with depth							
2.32	27.8								
1.5									
84									
.7	29.3								
15									
1.2	30.2	minor occassionally vuggy quartz veins and veinlets							
15									
1.1	31.2								
08									
.6	32.3								
0	32.9								
.9									
28	33.8								
1.6									
77									
	35.4								
1.6									
14									
	37.0								
1.4		andesite becomes more of a pale brown - buff colour possible reflecting an increase in carbonate, with fine green chlorite fractures and dark grey alteration veins							
24	38.4								
.7									
0	39.1								
1.1									
20									
11	40.2								
10									
	41.3								
1.3									
	42.6								
1.3									
59									
	43.9								
c/l .5 .3									
.0	44.7								
1m c/l .5									
16									
.5	46.2								
0	46.7								
.8									
0	47.5								
1.2m c/l .3									
19									
	49								
1.3		Ground is extremely broken Position of contact uncertain ---?---							

Py < 1%

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1

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
1.0	50.3	broken ground							
.7		Green sericite/chlorite altered coarse polymictic							
2.9	51.0	reworked pyroclastic fragments are							
.7									
0	51.5								
.5									
0	52.0	Subrounded - rounded, minor reworked							
.9									
0	52.9	pyrite,							
.8									
1.8	53.7	fragment are up to 5cm and							
2.2									
		oriented ~40° to the CA, c							
1									
		a 10cm nodular carbonate alteration							
1.34	55.9	zone occurs at 54.3 m							
.6									
1.0	56.5								
1.0									
3.4	57.5								
1.2									
4.2	58.7								
1.4									
1.0									
.9	60.1								
1.2	61								
1.0									
0	62								
.8									
1.2	62.8								
.9									
0	63.7	Ground extremely							
.9									
0	64.6	broken.							
1.4									
0									
.8	66								
0									
.9	66.8								
0									
.7	67.7								
0									
1.3	68.4								
0									
.9	69.7	Wisp Hydromuscovite appear within a fracture							
2.0		with Carbonate alteration							
.7	70.6								
0									
.6	71.3								
0									
.6	71.9								
0									
.9	72.8								
2.3									
.6	73.4								
0									
.6	74								
0									
.6	74.6								

Py <1%

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1

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
0 .5	75.2								
10 .6	75.7								
0 .7	76.3								
0 .9	77								
0 .4	77.9								
.7	78.3								
0 .5	79								
0 .7	79.5								
20 .6	80.20								
0 .7	80.8								
0 .7	81.50								
0 .6	82.2								
15 .7	82.8								
20 .8	83.50								
0	84.3								
70									
0 .5	85.5								
0	86								
10 7									
10 1.0	86.7								
0	87.7								
0 .4	87.8								
0 .6	88.2								
0 .2	88.8								
0 .9	89.10								
0 .8	90								
0 .5	90.8								
0 .8	91.3								
0 .6	92.10								
0 .8	92.7								
0 .8	94.2								
10 .7	95								
0 .8	95.7								
0 .2	96.5								
0 .7	97.2								
1.0	97.3								
18	98.3								
1.5									
113	99.8								

cl .5m

cl .7m

.1

.6

Fragments have become more rounded and smaller to 2cm and more even grained, also an increase porous, pumiceous rock and Dacite fragments

Ag <1g

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA1

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
1.6									
1.12	101.4	q vein parallel to c/a	q						
8.6									
1.13	103								
1.5			q						
1.70	104.5								
1.4									
1.35	105.9	White subrounded large Dacitic fragments are common occasionally porous; largely massive with quartz inclusions							
1.5									
0	107.4								
0.6	108								
21.4	108.4								
1.3									
1.78	109.7	Size of Dacitic fragments increases to <7cm, uneven grained fragment texture							
3.1									
1.94	112.8							112.8	
1.6		Green Chlorite/(silica) altered massive Andesite Lava, Lava appears initially vesicular, with Carbonate and occassionally quartz filled vesicles, vesicular nature become absent with increasing depth							
1.55	114.4								
1.4									
1.00	116								
.7									
1.52	116.7								
1.6									
88	118.3								
0.5	118.8								
20.5	119.3	Vuggy quartz veins appear along joints in the rock.	q						
.9									
0	120.2								
1.1									
1.32	121.3								
.7									
1.20	122		q						
1.1									
0	123.1								
.8									
0	123.9								
.9									
0	124.8								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1 Page No. 6 of 13

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									
1.45	126.4		c						
1.5			c						
1.36	127.9							128	
1.6		green silica/carbonate altered polymictic epiclastic, large rounded dacitic fragments, small silica veinlets.							fg 1.8
1.48	129.5								
1.6									
.82	131.1	Dacite fragments are up to 4cm, matrix is strongly chlorite altered however fragment textures can							
1.5									
.86	132.6	be seen. rare reworked pyrite.							
1.6									
1.17									
.8	134.2								
.72	135								
CASING NQ ↓									
3.1		Dacitic fragments increase in size and abundance, and commonly contain amygdaloidal quartz							
2.60	138.1								
3.1									
2.62									
1.2 .6	141.2								
1.2 .9	141.8								
1.40	142.7								
2.2		Sericite alteration becomes common, Dacite fragments are							
2.13	144.9	more angular							
3.0									
		147.4 - 147.55 - large Dacite fragment							
1.80	147.9								
1.4									
1.75	149.3								
1.1									

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1

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
43	150.4								
10·4	150.8								
02·4									
0									
1·6	151.5								
65									
0·4	153.1								
37·5	153.5								
1·2	154								
34									
14·4	155.2								
1·2	155.6								
114									
·6	157.8								
11									
0·3	158.4								
3·8	158.7	Dacite fragments are very large up to 30 cm and make up < 50% of unit.							
290	162.5								
3·1									
287	165.6								
1·1									
46	166.7								
1·1									
37	167.8								
1·0									
76	168.8								
1·2									
39	170								
1·6									
135	171.6								
2·1									
150	173.7								
1·1									
28									
·4	174.8								

CL 1.3m

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA1 Page No. 8 of 13

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
0	175.2								
0.4	175.6								
0.6									
0.4	176.2								
0	176.6								
0.6									
0									
0.5	177.6								
0	178.1							178.1	
0.3	178.4	Pale grey - buff chlorite/carbonate/silica altered Dacite lava, unit is massive & qtz amygdales and pyrite veinlets							Py 2-3%
0.2	178.6								
0.3	178.9								
0.4	179.3								
0.6									
0	179.9								
0.5	180.4								
0.3	180.7								
0.5	181.2								
0.7									
0	181.9							181.8	
2.5		Pale grey carbonate/silica/sericite altered DBx grey polymictic RwP - fragments are subangular-angular						182.8	
		green - pale grey chlorite/carbonate altered Dacite breccia breccia texture is marginly visible beneath the chlorite alteration						183.4	
96									
0.7	184.4								
28									
18	185.1								
0.5	185.6								
0.9									
36									
1.6	186.5								
		Pale grey polymictic RwP, fragments are largely Dacitic, within a polymictic matrix						186.85	
65									
0.4	188.1								
0.4	188.5								
1.0	188.9								
								189.2	
45	189.9	Pale grey - Buff pyrite Brecciated Carbonate/silica/chlorite altered Dacite, Dacite is strongly fragmented.							Py 5-10%
1.1									
60									
21	191								
0.5	191.6								
0.9									
0									
0.4	192.5								
1.0	192.9								
44									
1.1	193.9								
26									
								194.55	
0.4	195								
0.4	195.4	Pale grey massive carbonate/silica/chlorite altered Dacite breccia - less brecciated than above, beginning more brecciated with depth. Silica/chlorite filled amygdales are common.							Py 5%
0.3	195.8								
20 0.6	196.1								
	196.7								
0.4	197.3								
0.3	197.4								
10 0.5	197.7								
	198.2								
0.9									
37									
0.4	199.1								
0.6	199.5								
14									

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1 Page No. 9 of 13

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
.6	200.1								
27 .5	200.7								
.7	201.2								
44	201.9	pale grey Illite/Hydromuscovite/silica altered Dacite; occassionally sericite altered, brecciation of the Dacite						201.75	py ~ 7%
1.2									
74									
.9	203.1								
29	203.4							204.15	
2.7		Strong Illite/Hydromuscovite/carbonate alteration with silica veins, original texture is obscured by the alteration							py ~ 5%
216	206.7								
3.1			q						
278	209.8		q						
3.1									
								211.75	
267	212.9	Pale grey-greenish grey Carbonate/silica altered LTP/SP; fragments are angular and commonly flattened							
3.1								213.9	
		Grey polymictic sericite altered RWP with fragments of Illite Hydromuscovite large Dacitic fragments are angular to 10cm, unit become coarser with depth							
274	216								
2.7		Pale grey sericite/Illite/Hydromusc. alt fine py brecciated Dacite						218.35	
220	218.7							218.65	
1.6		grey sericite/silica alt polymictic coarse fragmental, possibly epiclastic, fragments are angular, with minor chert, and Illite Hydromuscovite							
69	220.3								
2.2		chert						221.2	py 3-4%
		Pale grey pchlor alt O breccia py occurs within fractures						221.6	
		Grey fine g polymictic RWP						222.2	
167	222.5								
2.4		Pale grey silica/ser/Illite Hydromuscovite altered rock, primary texture is obscured by the alteration							
190	224.9	FAULTED CONTACT 1cm Rec.						224.9	

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. OA-1 Page No. 10 of 13

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
16 .7	225.6	Dark grey Illite/Hydromuscovite/carbonate altered rock (ghost outlines of Dacite fragments are visible), quartz filled amygdules and carbonate veining							Py 5-10
13 .5	226.1								
2.3									
170	228.4							228.5	
2.5		Pale-dark grey carbonate altered finely brecciated Dacite, c Illite/Hydromuscovite, breccia texture become stronger with depth, amygdaloidal quartz is common F							Py 5-10%
183 .8	230.9								
28	231.7								
1.7									
120	233.4	dark grey silica/carbonate altered polymictic reworked pyroclastic, fragments are rounded, up to 5cm, finer grained nature suggest water lain epiclastic	silica/carb. vein					232.85	Py 10-15%
1.6									
55 .6	235								
20 .4	235.6								
0	236							236	
3.5		grey strongly sericite/silica altered reworked pyroclastic, c large silica veins	HAT/Ksil qtz						Py 20-25% 3 crystal Sphalerite
								237.75	
168	239.5	grey green sericite/silica/carbonate altered fragmented Volcaniclastic possibly brecciated Dacite fragments are close spaced and angular, c silica/carbonate veins and rare Illite/Hydromuscovite qtc							Py 5%
3.1									
									266.6
290	242.6								
2.4									
204	245								
3.1									
238	248.1								
1.8									
164	249.9								

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. D41 Page No. 11 of 13

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
3.0									
242	252.9								Py 5%
3.0									
201	255.9								
3.0								257.3	
272	258.9								Veins of semi-massive py 35-40%
2.4								259.9	
150	261.3	Grey sericite/silica/carbonate altered Polymictic reworked pyroclastic healed F minor pyg f 261.25						261.3	Py 5-10%
2.2		Pale green carbonate/sericite altered Pumiceous pyroclastic/Lapilli tuff, Py stringer veins occur throughout the unit along with quartz vein, Unit appear porphyritic							Veins of pyrite + chert Py 10-15%
85	263.5								
3.1									
283	266.6							266.6	Py 60-70%
3.1								266.8	
								267.4	Py 40-50%
								267.9	
286	269.7								
3.1									
								270.8	
238	272.8	Initially buff-grey green sericite/carbonate/silica altered tuff. Large Dacite fragments are initially unaltered, but become increasingly altered with depth, Sericite veins are common, silica veins are Common							Py 10-15
.9									
20	273.7								
1.4									
.7									

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. DA-1 Page No. 12 of 13

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
0.3	275.1	badly broken ground 273.7-276.0, pug @ 275 m							
0.3	275.4	possible small reworked unit							
0.3	275.7							276	
3.0		grey sericite/carbonate altered Dacite breccia, fine 'pull apart' textures are filled with pyrite, numerous fine fracture faults							Py 5%
151	278.7								
1.2									
56	279.8								
2.4								280.3	
		grey strongly sericite/carbonate/(silica) altered Lapilli tuff, numerous sericite veins and veinlets @ 45° to CA. occassionally appear pumiceous with rare Illite Hydromuscovite fragments are angular, occassionaly up to 7cm							
123	282.3								
2.3									Py 5%
111	284.6								
3.0									
268	287.6								
3.2									
287	290.8								
3.1									
296	293.9								
2.0									
170	295.9		Sericite						
3.1									
231								297.85	
1.4	299	grey-brown Carbonate altered porphyritic Dacite c Illite Hydromuscovite							Py 5-10%

QUE RIVER MINING PTY. LTD.

DIAMOND DRILL LOG

HOLE No. 04-1 Page No. 13 of 13

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
130		EOH						300.4	