

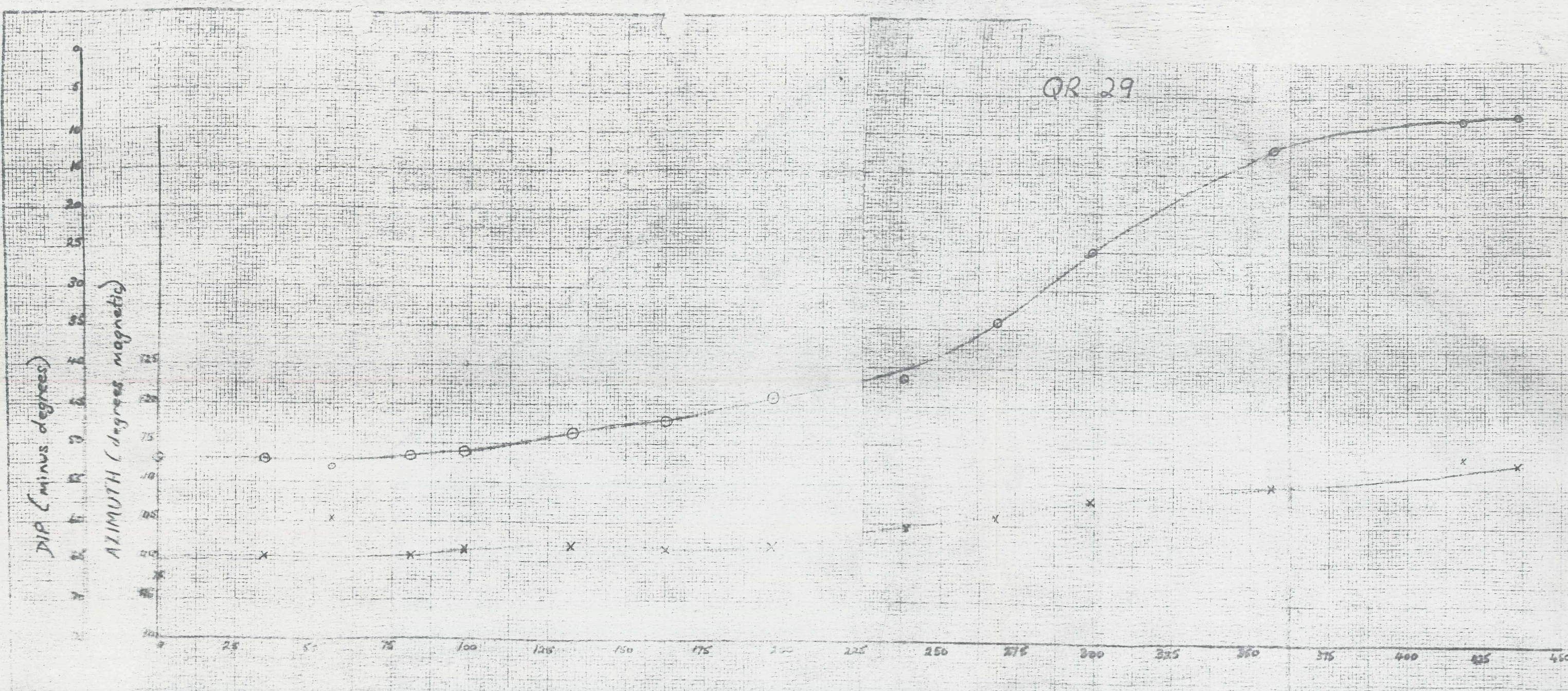


DRILL HOLE RECORD

RECEIVED
- 5 JUN 1975
ANSWERED
DEPT OF MINES
REGISTRAR
E & IL

Location Que River Area Property Mackintosh BL2/70 District Tasmania, Australia Co-ordinate 6699.7N, 4653.6E Hole No QR29
 Commenced 18/3/75 Completed 8/4/75 Core size NQ to 199m, 80 to 436m Bearing (M) 100.5 Date 10/4/75
 Objective To test depth extent of mineralisation in QR28. % Recovery 94 Grid bearing (M) 8.75 Logged RDB
 Dip 52

SURVEY DATA				GRAPH DERIVED DATA						REMARKS
DEPTH	DIP	BEARING(M)	INSTRUMENT TYPE	DEPTH	DIP	BEARING(M)	NORTHING	EASTING	ALTITUDE	
0	52	98.5	Compass/Climo	0	52	100.5	6699.70	4653.60	694.10	
34	52	100.5	Eastman Single Shot Camera	25	52	100.5	6699.21	4668.98	674.40	
56	53	105.5	Error	50	52	100.5	6698.72	4684.37	654.70	
81	51.5	100.5	Eastman	75	51.5	100.5	6698.23	4699.84	635.07	
98	51	101.5	single	100	51	101.5	6697.60	4715.47	615.57	
133	48.5	102	shot	125	49	102	6696.73	4731.52	596.42	
163	47	101.5	camera.	150	47.5	102	6695.77	4748.14	577.77	145m - 40cm Py 40%, Sph 10%, Gn 1%, trace Cpy.
197	44	102	"	175	46	101.5	6694.85	4765.24	559.56	
239	41.5	104.5	"	200	44	102	6693.90	4782.89	541.89	210m - 60cm Py 15%, Sph 5%, Gn 3%, trace Cpy.
269	33.75	106	"	225	41.75	104	6692.51	4801.15	524.88	
299	25	108	"	250	38.5	105	6690.57	4820.16	508.78	
358	11	110	"	275	32.5	106.5	6688.06	4840.33	494.28	
418	8	114	"	300	25	108	6684.79	4861.95	482.28	
436	7.5	113	"EOH	325	18.5	109	6680.83	4884.79	473.03	
				350	13	109.5	6676.42	4908.42	466.26	
				375	9.5	110.5	6671.61	4932.45	461.38	
				400	8.5	111.5	6666.34	4936.57	457.47	396m-403m - Occasional bands Py 30% Sph 5%, Gn 3%, trace Cpy.
				425	8.0	112.5	6660.64	4980.64	453.88	
				436	7.5	113	6657.99	4991.21	452.40	



DOWN HOLE DISTANCE (meters)

KASTMAN Single Slot Camera.

○ DIP

× AZIMUTH



DIAMOND DRILL LOG

Feature : Bedding Shearing
 Foliation Fault
 Fragment - size & shape Vein carbonate
 quartz

Mineralization : Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive <60%




CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	5	No Core.							
0.85	10.25	<u>Fault zone</u> Fault pug, sheared and broken core.						10.25	Pyrite <1% as fine disseminations and aggregates of euhedral to subhedral crystals. Some minor veins have been noted.
1.1	11.1	<u>Green-grey lithic feldspar hornblende crystal tuff.</u>							
1.0	12.1	<u>Fault zone</u> Fault pug. Sheared and broken core. 2.45 m of core loss.							
0.75	15								
1.0	16.3	In the weathered zone, subhedral aggregates of carbonate represent altered feldspar crystals while dark green laths of chlorite are possibly relic hornblende.							
0.6	20	16.9 - 20 m Iron staining along fractures between 20° and 60° to the core axis is common.							
1.6									
1.0									
1.5									
	25								




BRICKY CORE


















DIAMOND DRILL LOG

Hole No **QR 29** Page No 2.

Feature : Bedding 
 Foliation 
 Fragment size & shape 

Shearing 
 Fault 
 Vein  c carbonate
 q quartz

Mineralization : Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive <60%




CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
1.3		As above.							Pyrite as above.
1.2	26.9	<u>Fault zone</u> Fault pug, broken and sheared core. 2.1 m core loss.							
0.5	30								
1.2	31	Fragment outlines are diffuse and generally obscure.							
1.0	32.6	<u>Fault zone</u> Fault pug, sheared and broken core. 1.4 m core loss.							
1.0	35								
1.4	36.6	The unit down to 70 m is badly broken with fractures between 80° and parallel to the core axis.							
1.0									
2.0	40								
1.9									
0.9									
1.5	45	Some carbonate aggregates have a yellow brown colour, possibly due to iron staining.							
1.5									
2.2									
1.0	50								



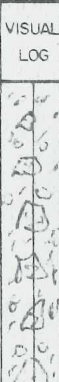




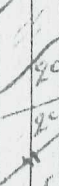

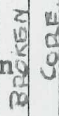
DIAMOND DRILL LOG

Hole No **QR 29**Page No **6.**

Feature : Bedding 
 Foliation 
 Fragment - size & shape 

Shearing 
 Fault 
 Vein  c carbonate
 q quartz




Mineralization : Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive <60%




CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	3.0	Grey fragments (to 3 cm) are angular to sub-angular, sericitised and have carbonate "spots" (to .5 cm) that are possibly relic feldspars of a feldspar crystal tuff. Some chert nodules (to 1 cm) occur along with irregular carbonate veins. Fine dusty pyrite is often found throughout the fragments and carbonate veins.							
	2.9	129.6							
		130							
		130.6							
	1.5	Grey locally sericitised <u>feldspar crystal tuff</u> . Abundant euhedral to subhedral aggregates of carbonate are possibly relic feldspars. The matrix is fine grained, grey carbonated and often sericitised.							
		132.4							
	1.9	Fractures are irregular, but usually 40° to the core axis. Foliation is weak but usually 30° to the core axis.							
		<u>Fault zone</u> . Fault pug, sheared and broken core.							
	1.0								
		135							135 Pyrite 1% as above.
	2.2	Grey <u>feldspar crystal tuff</u> . Relic feldspar is represented by lenticular sericite aggregates (to .3 mm) alligned in the direction of foliation at 30° to the core axis.							
	0.8	Irregular quartz carbonate veins are common. The unit becomes increasingly chloritised below 140 m.							
	2.2								
		140							
	0.9								
		141.2							
	2.1	Below 141.2 the unit becomes extremely chloritised almost completely obliterating any textural features previously seen. The lens shaped sericitised feldspars have been altered to carbonate and occur as "spots" to .5 cm.							141.35 141.35 - 145.1 m. Pyrite 7%. Trace sphalerite, galena and chalcopyrite occurs as aggregates and veins associated with chloritisation.
	1.2	The unit is badly broken in parts and acts as a host to the mineralisation indicated.							145.1 - 149.6 m Pyrite 2% locally, where indicated.
	0.7								145.1 Pyrite 40% sphalerite 15%
	0.6								145.5 galena 7% chalcopyrite 1% as bands and irregular veins throughout.
	1.4								
	1.2								
	0.7								
	0.6								
		150							149.6 Pyrite 5% occurs as above.



DIAMOND DRILL LOG

Hole No **QR 29**Page No **7.****Feature :**

Bedding 
 Foliation 
 Fragment - size & shape 

Shearing 
 Fault 
 Vein  c carbonate
 q quartz

Mineralization :

Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive <60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE COMMON ABUNDANT MASSIVE	DEPTH m	MINERALIZATION
1.5		As above.				Pyrite 5% as above.
0.5						
0.4	152				152	
1.4	152.4	<u>Fault Contact.</u>				
	153.4	<u>Fault zone. Fault pug, sheared and broken core.</u>				Pyrite 5% as aggregates veins and bands of euhedral to subhedral crystals, it is common as fine dust in areas of sericitisation.
1.6		Light grey sericitised, locally carbonated <u>feldspar crystal tuff.</u> The unit appears fairly homogenous with lens shaped aggregates of pale green sericite, often with fine dusty pyrite disseminated throughout, represent relic feldspars.				
1.2	155					
0.9		The matrix is light grey, fine grained and appears to be altered, to white sericite and/or carbonate.				
1.0						
0.5						
1.6	159.6					
	160	<u>Fault zone. Sheared and broken core, some pug.</u>				Secondary galena and sphalerite are associated with carbonate veins.
	160.2					
1.0		Disrupted bands (to 7 cm) of fine charcoal grey tuff also occur.				
1.4		The unit is badly sheared and broken overall, affording no decisive fracture direction.				
1.6		The foliation, at 20° to the core axis is distinct because of the orientation of sericite aggregates mentioned above.				
1.5	165					
3.2	167.8				167.8	Pyrite 1% occurs as above.
	169.1	Grey coarse lithic tuff. Pale angular fragments are sericitised and carbonated while pyrite fragments are common.			169.1	Pyrite 5%.
	170	Below 169.1m the unit becomes disrupted and sericitised.				
3.1						
	171.4					
	171.65	<u>Fault zone, Pug and broken core.</u>				
1.2	172.8					
	173.2	<u>Fault zone. Pug and broken core.</u>				Pyrite 3%, 10% where indicated as veins and bands of euhedral to subhedral crystals.
	173.5	<u>Gradational Contact.</u>			173.5	
2.7		Grey locally sericitised, carbonated lithic tuff agglomerate.				
	175					



DIAMOND DRILL LOG

Feature : Bedding Shearing
 Foliation Fault
 Fragment-size & shape Vein carbonate
 quartz

Mineralization : Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE COMMON ABUNDANT MASSIVE	DEPTH m	MINERALIZATION
	2.85	As above.				Pyrite as above.
	1.2	<u>Note:</u> From block 245.8m on, one metre should be added to all other blocks to obtain true depth.				
	2.55					
	3.0					
	2.57	Below 257m, the unit is a grey, disrupted and brecciated tuff with lithic bands? to 50cm.			2.57	Pyrite 1% as veins and aggregates of euhedral to subhedral crystals.
	3.0	It is locally carbonated and chloritised and has abundant irregular carbonate veins and aggregates to 1cm.				
	2.60	Minor chloritisation occurs along small fractures and fault breccias.				
	3.0					
	2.65					
	3.0					
	3.0					
	2.70	Below 269m, the unit is thoroughly carbonated and sericitised.				
	3.0					
	2.71	Gradational Contact			2.71	Py 10%, 60% where indicated as aggregates and vein of euhedral to subhedral crystals.
	3.0	Grey carbonated, sericitised, locally chloritised <u>lithic feldspar crystal tuff.</u> A varied and disrupted unit, with carbonate aggregates, veins and yellow-brown spotting abundant.				
	2.75					



DIAMOND DRILL LOG

Feature : Bedding Shearing
 Foliation Fault
 Fragment-size & shape Vein carbonate quartz

Mineralization : Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive <60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
		above between 328m - 335m.							
3.1		Initially very disrupted, the unit has a pseudo-agglomeritic appearance because of dark grey alteration zones along an irregular fracture pattern.							
	2.9	Carbonate alteration is dominant with local sericitisation along fractures.							
	1.8								
2.2	359.5 - 360	Grey, disrupted and broken, locally sericitised and carbonated crystal tuff, possibly feldspathic.						359.5	Pyrite 1% as aggregates and veins of fine euhedral to subhedral crystals.
	1.6	Lithic bands to 20cm also occur, possibly brecciation zones. Feldspar crystals? have altered to sericite, while below 370m, the unit has an overall pale yellow brown colour that can be attributed to thorough carbonate alteration.							
	2.4								
	0.6	FAULT ZONE. Pug, sheared and broken core.							Minor secondary Sph and Gm is associated with irregular carbonate veins.
	2.2	Initially, yellow brown carbonate veins (to 0.5cm) along irregular fractures abound but become less common below 367m.							
	1.3								
	3.1	Fractures are ragged, usually 60° to the core axis but can be 30-40° on occasion. Weak foliation is 40° to the core axis.							
		In disrupted zones, the matrix is fine, grey and carbonated.							
	3.1								
	375	Gradational Contact							



DIAMOND DRILL LOG

Hole No **QR29**

Page No 16

Feature :

Bedding 
 Foliation 
 Fragment - size & shape 

Shearing 
 Fault 
 Vein 

c carbonate
 q quartz

Mineralization :

Trace 1-5%
 Common 5-15%
 Abundant 15-60%
 Massive <60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE COMMON ABUNDANT MASSIVE	DEPTH m	MINERALIZATION
		Grey, carbonated, locally chloritised and sericitised coarse lithic tuff.				Pyrite 3% except where indicated, occurs as fine disseminations, veins and aggregates of euhedral to subhedral crystals.
3.1		A somewhat varied and locally disrupted unit, it has random bands to 2m, usually 0.5m - 1m of fine grey tuff, with feldspar? crystals altered to pale green sericite and/or carbonate. In these bands, foliation, and often bedding, is at 60° to the c.a.				377.5m - Py 20%, Sph 5%, Gn 2%.
3.1	280	A general impression is that the bands are fine tuffaceous waterlain sediment, with rare graded bedding and more common slump structures including "breccia bombs" that suggest that facing is possibly up hole, to the west.			282.3	15cm Py 10%, secondary Sph 3%, Gn 3%.
0.6						
1.3		The major proportion of the unit has lithic fragments (to 3cm) angular to subrounded, that are carbonated, chloritised and/or sericitised.				
3.0	285	Fragment composition appears generally feldspathic with sericite, and particularly carbonate in chloritic zones, alteration of feldspar crystals.				
3.1		Other lithic fragments appear to be a fine dark grey quartz crystal tuff and usually have fine dusty pyrite disseminated throughout.				
3.1	290					
3.1						
3.1	295					
3.1						
3.1	296				403m	Py 5% where indicated bands of pyrite 30%, Sph 5%, Gn 3%, trace Cpy.
3.1						
3.1	400					

