342055

CRA EXPLORATION PTY. LIMITED

DRILL-HOLE SUMMARY LOG

HOLE NAME: DD95ZM189 AMG EAST 364288 NORTH 5350999

PROSPECT: MYRTLE GRID EAST 60356 NORTH 49200

EL: ZEEHAN 1 EL 28/88 RL DEPTH 702.4m

DATE DRILLED: 5/6/95

LOGGED BY: S. MENPES; S.J. TEAR

DRILLING CO.: ALMAC

DRILL TYPE: DIAMOND

DRILL RIG: LY44

LOC DRILL CORE: ZEEHAN

SURVEYS:

DEPTH	AZIM (AMG)	DIP	DEPTH	AZIM (AMG)	DIP
0	–	90°	350	018°	81°
50	304°	88°	400	021°	80°
100	293°	89°	450	020°	79.5°
150	300°	88°	500	017°	80°
200	342°	86.5°	550	014°	80.5°
250	282°	85°	600	012°	81°
300	015°	81.5°			

OBJECTIVES OF HOLE:

DIAMOND DRILL TEST THE SOUTHERN (SHALLOWER) END OF THE MYRTLE GRAVITY ANOMALY – TESTING THE LOWER SANDSTONE/LIMESTONE CONTACT. ALSO A STRATIGRAPHIC HOLE

LITHOGICAL SUMMARY:

FROM	TO	FORM CODE	COMMENTS
0	3.8	Qha	Overburden: no recovery
3.8	38.4	Ogul.	Massive argillaceous fine grained calcarenites
38.4	42.6	Ogmu	Laminated micrite Unit
42.6	201.1	Ogul	Massive argillaceous fine grained calcarenites
201.1	247.0	Ogul	Bedded variably argillaceous fine grained calcarenite
247.0	252.9	Ogmu	Laminated Micrite Unit.
252.9	288.3	Ogul.	Mixed limestone sequence including ?cherty zones.
288.3	345.6	Ogul	Burrowed argillaceous calcarenites with fine calcarenites
345.6	376.1	Ogul.	Intermixed clean calcarenites, micrites with occ argillaceous calcsiltites
376.1	410.0	ogul.	Equigranular Calcarenites
410.0	532.1	Ogul	Intermixed fine calcarenites, micrites and argillaceous calcsiltites occ clean equigranular calcarenite. Repeated cycles
532.1	570.1	Ogul	Equigranular Calcarenite
570.1	611.7	Ogul	Argillaceous bioclastic calcarenites
611.7	664.6	Ogul	Mixed argillaceous calcarenites and micrites
664.6	670.0	Ogul	Bioclastic equigranular calcarenite
670.0	689.0	Ogst	Silty Transition Unit
689.0	702.4	Om	Moina Sandstone

MINERALISATION SUMMARY:

FROM	TO	COMMENTS
		Slight zinc elevation with 655.4 – 690m – Argillaceous calcarenites and the Silty Transition Unit

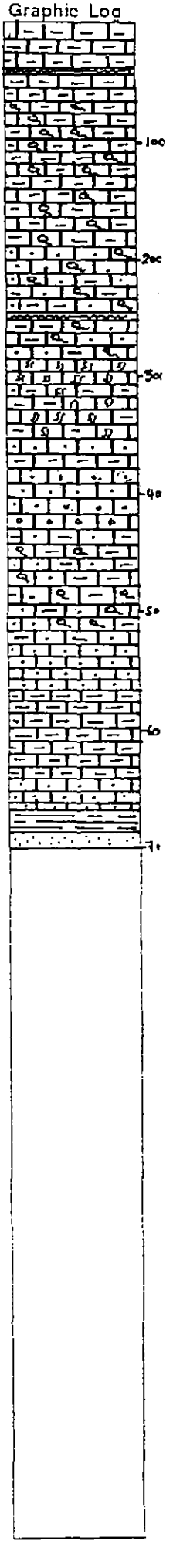
CONCLUSIONS:

Bedding @ 35m 023° to c/A @ 235m 36° to c/A @ 380m 45° to c/A @ 431m 50° to c/A @ 595m 60° to c/A @ 695m 45° to c/A.

Gravity anomaly possibly due to i) thicker clean calcarenites from 376m onwards ii) thicker than normal limestone sequence.

Good stratigraphic hole, virtually unfaulted.

Graphic Log



C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 1 of 15

TENEMENT NAME MYRTLE No.

PLAN – MAP REFERENCE

CO-ORDINATES 364288E 5350999N AZIMUTH N/A. DRILLERS D.Lmas COMMENCED 5/6/95 DEPTH 702.4m HOLE No. ZM139

RL COLLAR INCLINATION 90° DRILL TYPE LY44 COMPLETED 20/6/95 CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)				From (m)	To (m)	Cut (m)	Rec (m)	Rec %
3.8	16.4	12.6	1-2	Ogwl	Massive, Argillaceous, Variably Carbonaceous Micritic Limestone								HQ3		3.8	4.4	0.6	0.6	100
					Dark grey. Some bioturbated zones. Some zones of										4.4	7.4	3.0	3.0	100
					tubular fenestrae, probably after worm burrows.										7.4	10.4	3.0	3.0	100
					Some isolated coral clasts and thin fossil lenses										10.4	13.4	3.0	2.9	97
					horizons		5465794	8.0	12.0	4.0					13.4	16.4	3.0	3.1	103
															16.4	19.4	3.0	3.0	100
16.4	20.8	4.4	1	Ogwl	Fenestral Limestone										19.4	21.0	2.6	2.9	96
					Cleaner grey micritic limestone with common		5465795	16.4	20.8	4.4			NQ3T		21.0	22.4	1.4	1.2	86
					tubular fenestrae after worm burrows										22.4	25.4	3.0	3.0	100
					Large isolated coral clast @ 18.1m										25.4	28.4	3.0	3.0	100
															28.4	31.4	3.0	3.0	100
20.8	38.4		1-2	Ogwl	Massive Argillaceous, Variably Carbonaceous Micritic Limestone										31.4	34.4	3.0	3.0	100
					Dark grey. Common large, isolated corals (? clasts)										34.4	37.4	3.0	3.0	100
					Base clearer micritic horizons										37.4	40.4	3.0	3.0	100
					Very organic rich horizons approaching graphite										40.4	43.4	3.0	3.0	100
					grade										43.4	46.4	3.0	3.0	100
															46.4	49.4	3.0	3.0	100
					Bedding to core intersection angle										49.4	52.4	3.0	3.0	100
					= 73°										52.4	55.4	3.0	3.0	100
															55.4	58.4	3.0	3.0	100
38.4	42.6	4.2	1-2	Ogmw	Massive to Algal Laminated Fenestral Limestone										58.4	61.4	3.0	3.0	100
					Cleaner grey micritic limestone. Basal 1.1m										61.4	64.4	3.0	3.0	100
					clean grey micritic limestone with tubular										64.4	67.4	3.0	3.0	100
					fenestrae after worm burrows Overlying		5465796	39.0	40.4	1.4					67.4	70.4	3.0	3.0	100
					3.1m predominantly grey with dark grey										70.4	73.1	2.7	2.7	100
					cryptalgal laminae. Fenestral texture, probably										73.1	76.4	3.3	3.3	100
					after intense burrowing										76.4	79.4	3.0	3.0	100
															79.4	82.4	3.0	2.9	97
					Bedding to core angle 28-30°										82.4	85.4	3.0	3.1	103
															85.4	88.4	3.0	3.0	100

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 2 of 15

TENEMENT NAME MYRTLE No.

PLAN – MAP REFERENCE

CO-ORDINATES 364288E 5350999N AZIMUTH [illegible] DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZM189

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

Depth From (M)	Depth To (M)	Core Rec. %	RQ DATA	Graphic Log	Core Description / Special Features (Weath, Alteration, Fracturing, Veining, Mineralization)	Sample No.	From (M)	To (M)	Rec (M)	From (m)	To (m)	Cut (m)	Rec (m)	Rec (%)
2.6	201.1	100%	↗	Ogw	Massive, Argillaceous, Variably Carbonaceous Micritic Limestone.					88.4	91.4	3.0	3.0	100
					Dark grey to black, lesser cleaner grey micritic					91.4	94.4	3.0	3.0	100
					limestone. Very carbonaceous zones incipiently					94.4	97.4	3.0	3.0	100
					graphitic. Argillaceous horizons grade to calcareous claystone in places					97.4	100.4	3.0	3.0	100
Predom. 1					Whole fossils include bryozoa, brachiopods,					100.4	101.6	1.2	1.2	100
however core very					nautiloids, corals, stromatoporoids					101.6	102.6	1.0	1.0	100
broken 72.2-74.0 m					Some bioturbation in places	5465797	60.0	62.0	2.0	102.6	103.4	0.8	0.9	113
101.5-108.4 m					Occasional matrix supported, bioclastic horizons	5465798	71.0	74.0	2.0	103.4	104.0	0.6	0.4	67
172.4-175.4				Ogw	- Small sphalerite blob at 116.2 m	5465799	92.0	95.0	3.0	104.0	106.4	2.4	2.3	96
						5465800	115.0	117.0	2.0	106.4	107	0.6	0.7	117
					- Thick calcite vein and very fine pyrite	5465656	127.0	129.0	2.0	107	108.4	1.4	0.8	57
					along fracture faces 101.5-102.5 m	5465657	142.0	144.0	2.0	108.4	109.4	1.0	1.2	120
						5465658	151.0	153.0	2.0	109.4	112.4	3.0	3.0	100
					- 60.1-61.1 Two large calcite filled vugs	5465659	162.0	164.0	2.0	112.4	115.4	3.0	3.0	100
					(multi-stage [illegible] cementation) with sulphide					115.4	118.4	3.0	2.0	100
					blebs (possibly arsenopyrite?)					118.4	121.4	3.0	2.0	100
										121.4	124.4	3.0	3.0	100
					- 74-74.4 m: Thick white calcite vein					124.4	127.4	3.0	3.0	100
										127.4	130.4	3.0	3.0	100
					- 173.2-174.7 m: Calcite vein breccia with large					130.4	133.0	2.6	2.6	100
					limestone clasts. Trace pyrite					133	136.1	3.1	3.1	100
					- 191.6 m: Fine, disseminated pyrite along fractures					136.1	139.2	3.1	3.1	100
					- Very hard, siliceous? bands become					139.2	142.3	3.1	3.1	100
					evident below approx 150m Generally associated					142.3	144.3	2.0	2.0	100
					with massive, black, argillaceous,					144.3	145.4	1.1	1.1	100
					carbonaceous zones					145.4	148.4	3.0	3.0	100
										148.4	151.4	3.0	3.0	100
										151.4	154.4	3.0	3.0	100
										154.4	157.4	3.0	3.0	100
										157.4	160.4	3.0	3.0	100
										160.4	163.4	3.0	3.0	100

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DRILL CORE LOG

SHEET No. 3 of 15

TENEMENT NAME MYRTLE No.

PLAN – MAP REFERENCE

CO-ORDINATES 364288E 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZMD69

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To (M)	Core Rec %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)
201.1	204.7	100	1	Dgw	CARBONATE BRECCIA		546560	202.0	204.7m	100%
					Long clasts light grey, finely crystalline limestone / fine grained calcareanite, and coral in a dark grey to black, argillaceous micrite matrix. Sedimentary slump breccia?					
204.7	247.0	100	1	Dgw	BEDDED, VARIABLY ARGILLACEOUS MICRITIC LIMESTONE					
					Grey, micritic limestone with tubular feastrae (after worm burrows?) in places and dark grey to black, very argillaceous, carbonaceous (graphitic grade), variably ?siliceous micrite.		546561	229	232.1	100%
					Bioturbated zones in places (feeding trails)					
					Rare fossiliferous horizons (echinoids, bryozoa etc)					
					242.3-242.7m: white, banded, calcite vein					
					Bedding to core angles:					
					234.6-235.7m: 34-38°					

ASSAY VALUES (Analysed by.....) From (m)	To (m)	Cut (m)	Rec (m)	Rec (%)
163.4	166.4	3.0	3.0	100
166.4	169.3	2.9	2.9	100
169.3	172.4	3.1	3.0	97
172.4	175.4	3.0	2.8	93
175.4	178.4	3.0	3.0	100
178.4	181.4	3.0	3.0	100
181.4	184.4	3.0	3.0	100
184.4	187.4	3.0	3.0	100
187.4	190.4	3.0	3.0	100
190.4	193.4	3.0	2.6	87
193.4	196.0	2.6	3.0	115
196.0	199.0	3.0	2.9	97
199.0	202.0	3.0	3.1	103
202.0	205.0	3.0	3.0	100
205	208	3.0	2.9	97
208	211.4	3.4	3.6	106
211.4	214.4	3.0	2.9	97
214.4	217.4	3.0	2.9	97
217.4	220.4	3.0	3.0	100
220.4	223.4	3.0	2.9	97
223.4	226.0	2.6	2.7	104
226	229	3.0	3.0	100
229	232.1	3.1	3.1	100
232.1	235.2	3.1	3.1	100
235.2	238.3	3.1	3.1	100
238.3	241.4	3.1	3.1	100
241.4	244.4	3.0	3.0	100
244.4	247.4	3.0	3.0	100
247.4	250.4	3.0	3.0	100
250.4	253.4	3.0	3.0	100
253.4	256.4	3.0	3.0	100

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C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 4
TENEMENT NAME MYRTLE No. E15
PLAN – MAP REFERENCE
364288E
CO-ORDINATES 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No.
RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec. %	RQD	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)
247.0	252.7	100%	1	Ogwu	CALCARENITES AND CRYPTALGAL LAMINATED MICRITES					
					Fining upward beds of rounded, granular intraformational limestone conglomerate grading to fine to medium grained calcarenite dominate sequence above 249.1m. Minor calcite / trace ? sphalerite filled fenestral porosity in places (?sphalerite @ 247.3m)		546667	247.4	250.4	100%
					@ Grey micritic limestone with dark grey to black beds and cryptalgal laminae. Minor bioturbation in places. Also minor tubular fenestrae in places.					
					Some partially silicified beds					
					Bedding to core angle = 39-40° @ 247.9-248.4m					
252.7	269.2	100%	1	Ogwl	INTERBEDDED GREY AND LESSER DARK GREY MICRITE					
					Grey micrite with beds, lenses and laminae of dark grey to black, argillaceous, carbonaceous micrite. Variably bioturbated. Beds of very fine to medium grained calc-arenite occur towards the base of the unit. Rare fossiliferous horizons. Rare calcite filled fenestrae		546668	262.4	265.4	100%

ASSAY VALUES (Analysed by.....) From (m)	To (m)	Cut (m)	Rec (m)	Rec (%)
256.4	258.0	1.6	1.4	88
258.0	259.4	1.4	1.6	114
259.4	262.4	3.0	3.0	100
262.4	265.4	3.0	3.0	100
265.4	268.4	3.0	3.0	100
268.4	271.4	3.0	3.0	100
271.4	274.4	3.0	3.0	100
274.4	277.4	3.0	3.0	100
277.4	280.4	3.0	3.0	100
280.4	283.4	3.0	3.0	100
283.4	286.4		3.0	100
286.4	289.4		3.0	100
289.4	292.4		3.0	100
292.4	295.4		3.0	100
295.4	298.4		3.0	100
298.4	301.4		3.0	100
301.4	304.4		3.0	100
304.4	307.4		3.0	100
307.4	310.4		3.0	100
310.4	313.4		3.0	100
313.4	316.4		3.0	100
316.4	319.4		3.0	100
319.4	322.4		3.0	100
322.4	325.4		3.0	100
325.4	328.5		3.1	100
328.5	331.4		2.9	100
334.4	334.4		3.0	100

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 5 of 15

TENEMENT NAME MYRTLE No.

PLAN – MAP REFERENCE

CO-ORDINATES 364288E 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZMR89

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD DARR	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
269.7	283.3		CHERTY	Dol	DOLOMITE AND BEDDED, BANDED, LAMINATED MICRITE						
					① Fining upward beds of granular grading to fine grained calcarenite. Chetty clasts in calcite matrix. Minor bands and beds of grey to black micrite. REWORKED, CHERTY LIMESTONE ⇒ VERY EARLY SILICIFICATION						
					② Grey, granular calcarenite composed of rounded micrite clasts in white calcite matrix						
					③ Grey micrite with dark grey to black cryptalgal laminae. Calcite filled tubular feneatrae after vertical worm burrows (sparse to intense)		5463464	274.4	277.4	100%	
					Intertidal to Supratidal Deposition? Tidal channels and mud flats						
					Minor x fg disseminated pyrite replacing bands and laminae 283.6-288.7m						
					④ Grey micrite with darker grey bands and laminae. Minor bioturbation (horizontal feeding trails) in places						
					Bedding to core intersection angle 38° @ 270.6-270.8m						

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C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 6 of 15
TENEMENT NAME MYRTLE No.
PLAN – MAP REFERENCE

CO-ORDINATES 264288E 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZMI89

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	To (M)	Core Rec. %	RQ DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)
288.3	291.8	100%	1	ogw	BIOTURBATED GREY AND MICRITIC LIMESTONE Originally banded grey and dark grey (more argillaceous, carbonaceous) micritic limestone; Bedding now predominantly disturbed by bioturbation		5465665	289.4	291.8	100	
291.8	299.9	100%	1	ogw	FINING UPWARD CALCARENITE UNITS WITH ARGILLACEOUS LIMESTONE BANDS AND LAMINAE IN PLACES Minor sphalerite blebs in a medium grained calcarenite 299.7-299.9m		5465666	299.09	299.95		
299.9	310.0	100%	1-2	ogw	VARIABLY BIOTURBATED MICRITIC LIMESTONE AND CALCARENITE Light grey fine to medium grained calcarenite, and grey to minor dark grey micritic limestone. Variably bioturbated		5465667	304.4	307.4		
310.0	312.7	100%	1-2	ogw	INTERBEDDED FINE GRAINED CALCARENITE AND MICRITE Grey, sucrosic textured, fine grained calcarenite, and dark grey, argillaceous micritic limestone						
312.7	323.9	100	1	ogw	FINE GRAINED HEAVILY BURROWED GREY CALCARENITE Becoming more argillaceous downhole, with occ. bioclasts in argillaceous layers/zones; Towards basal 2m more bioturbated than burrowed. Major calcite veining 318.6-319.5 [illegible] sub-parallel to c/A cut by vein 45° to c/A + 90° to c/A. [illegible] bioclastic micrite/fine calcarenite - shallow water. [illegible] 45° to c/A [illegible]		5465668	317.7	319.5		

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 7 of 15

TENEMENT NAME MYRTLE

PLAN – MAP REFERENCE

364288E

CO-ORDINATES 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZM189

RL COLLAR -5 INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
323.9	335.8	100	1	Ogul	INTERMIXED FINE GRAINED CALCARENITE AND MICRITE						
					Mixed facies unit locally argillaceous laminae @ 327.2-327						
					with bedding 55° to c/A						
					323.9-324.62 - Grey micrite with minor coarser dk grey interstitial calcarenite.						
					324.62-326.4 Mixed micrite + argillaceous calcarenite arr micrite bed.						
					326.4-329.5 micrite dominant unit with argillaceous calcarenite						
					329.5-330.72 Heavily bioturbated grey micrite + dark grey calcarenite						
					330.72-331.96 Grey clean micrite. calcite vein @ 331.65-331.72						
					with reddened micrite 6cm						
					veining 55° to c/A.						
					Fabric/cleavage in micrite 37° to c/A						
					? Parallel to bedding						
					331.96-335.8 Mixed fine grained grey calcarenite/micrite and	5465669	333.7	335.2			
					dark grey argillaceous calcarenite. abundant						
					micro veining (calcite) cleavage 41° to c/A.						
					well cleaved						
335.8	345.6	100	1	Ogul	BURROWED FINE GRAINED CALCARENITE WITH MICRITIC	5465670	338.3	340.4			
					cleavage sub parallel to c/A						
					Minor blebs of pyrite @ 341.6m						
					associated with a large burrow infill						
345.6	349.4	100	1	Ogul	FINE GRAINED CLEAN CALCARENITES AND MICRITES.						
					Localised zones of laich eye micrites, minor calcite veining.						
					Also zones of argillaceous material interstitial fill - almost						
					fenestrate.						
349.4	358.25	100	1	Ogul	INTERMIXED FACIES OF CALCARENITES AND ARGILLACEOUS CALSILTITES / CALCARENITES						
					Argillaceous calcilutite units up to 20cm thick	5465671	351.0	355.4			
					Interlaminated unit 353.0-355 Bedding 45° to c/A						
					Coarse bioclastic unit 356.7-357.35						

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. (8) of 15

TENEMENT NAME MYRTLE No.

PLAN – MAP REFERENCE

CO-ORDINATES 364288E 5350991N AZIMUTH -90 DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZM189

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec %	RQD	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)	REC (From)	REC (To)	REC (M)	REC (%)
338.25	359.70	100	1	Ogul.	WELL CLEANED BIRDS EYE MICRITE.							340.4	343.4	3.0	100
					Lt grey fine grained calcarenite / micrite with 2 lam calcite							343.4	346.4	3.0	100
					veins 55° to c/A @ 359m.	Cleavage 35° to c/A.						346.4	349.4	3.0	100
					Minor cleavage parallel argillite zones – locally graphitic							349.4	352.4	3.0	100
												352.4	355.4	3.0	100
359.70	363.6	100	1	Ogul.	INTERMIXED FINE CALCARENITE AND ARGILLACEOUS CALCISILTITE.							355.4	358.4	3.0	100
					Locally interbedded / interlaminated – bedding 45° to c/A.							358.4	361.4	3.0	100
					Some calcisiltite grades into argillaceous calcarenite – locally burrowed							361.4	364.4	3.0	100
					non-bioclastic – slight nodular effect.							364.4	367.4	3.0	100
												367.4	370.4	3.0	100
363.6	376.1	100	1	Ogul.	CLEAN CALCARENITES AND MICRITES.		5465672	365.4	367.2			370.4	373.4	3.0	100
					Lt grey fine grained calcarenite and light grey micrites							373.4	376.4	3.0	100
					– locally fine grained bioclastic ; minor laminated limestones							376.4	379.4	3.0	100
					– From 367.2 interlaminated with argillite v. thin laminae (?stylolitic)							379.4	382.4	3.0	100
					cleavage 20° to c/A.		5461673	372.9	374.0			382.4	385.4	3.0	100
					Bedding 45° to c/A							385.4	388.4	3.0	100
					Calcite veining prevalent. varying angle to c/A. 45°, 60° mostly							388.4	391.4	3.0	100
					From 372.5 increase in argillite parting thickness (<0.5cm)							391.4	394.4	3.0	100
					? stylocumulates, with marked increase in calcite veining							394	397.4	3.0	100
					45° to c/A – Pink calcite veining locally eg 373m.							397.4	400.4	3.0	100
												400.4	403.4	3.0	100
376.1	410.0	100	1	Ogul.	EQUIGRANULAR CLEAN CALCARENITES		5465674	378.9	380.7			403.4	406.4	3.0	100
					Lt grey med/coarse grained bioclastic calcarenites with							406.4	409.4	3.0	100
					micrite nodules (<1cm) ; minor amount of argillite usually							409.4	412.4	3.0	100
					with associated diagenetic pyrite blebs. Persistent calcite							412.4	415.4	3.0	100
					veining		5461675	388.4	390.5			415.4	418.4	3.0	100
					377.4-379.1 Thin (<0.5cm) argillite bands – stylocumulates?							418.4	421.4	3.0	100
					380.6-384.4 " " " " "		5465681	399.2	401.4			421.4	424.4	3.0	100
					above units tend to be more micritic							424.4	427.4	3.0	100
					After 384.4 calcarenite med/fine grained,							427.4	430.4	3.0	100
					Bedding 45° to c/A.							430.4	433.4	3.0	100
					localised nodular effect										

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DRILL CORE LOG

TENEMENT NAME [redacted] No. [redacted]

3642886

PLAN – MAP REFERENCE

CO-ORDINATES 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZM189

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
						Calcite veining upto 4cm thick 30°, 45°, 0°, 60° t c/A. Minor pyrite between 399.2-401.4					
410.0	416.7	100	1	Ogul	FINE GRAINED MICRITIC CALCARENITES WITH INTERSTIAL ARGILLACEOUS CALCARENITE Mixed units including almost fenestral-like calcarenite nodular zones; Upper contact vein bounded – Sem 45° t c/A Some graphitic, sutures; clean micrite 413.1-414.55 cleavage 30° to c/A.						
416.7	420.4	100	1	Ogul	FENESTRAL FINE GRAINED CALCARENITE/MICRITE Grey fine grained micrite with dark grey interstitial med grained calcarenite; with calcite veining		C465676	416.7	418.7		
420.4	433.3	100	1	Ogul	CLEAN FINE GRAINED INTERLAMINATED CALCARENITES Grey/lt grey fine calcarenites locally laminated bedding 55° t c/A. locally micritic; at 426.4 veining int a more brecciated unit Rem of 427.7 fenestrate calcarenite; back in laminated calcarenite @ 427.3 Zones of more intense calcite veining - with almost replacement-like textures @ 424.4-424.6m cleavage 30° t c/A locally bearing med grained calcarenite. Rare fractures + rare bivalve axes. Bedding @ 413.1 - 50° t c/A Major Calcite vein @ 432.7-433.2m. lower contact 35° t c/A Upper Contact 60° t c/A	546567	427.5	424.9		
433.3	436.3	100	1	Ogul	FENESTRATE FINE GRAINED CALCARENITE/MICRITES lt grey micrites with interstitial dark grey calcarenite. Minor calcite veining						

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DRILL CORE LOG

TENEMENT NAME MYRTLE No. 10 of 15

PLAN – MAP REFERENCE

CO-ORDINATES 364288E 535 0997N AZIMUTH DRILLERS ALMAC COMMENCED 5·6·95 DEPTH 702·4m HOLE No. ZM189

RL COLLAR INCLINATION DRILL TYPE LY 44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)					REC (From)	REC (To)	REC (m)	REC (%)
436.3	440.5	100	1	Ogal.	INTERMIXED CALCARENITES		5465678	435.9	437.4							433.4	436.4	3.0	100
					Med to Fine grained dk grey + grey calcarenites – disrupted		79	437.4	439.4							436.4	439.4	3.0	100
					look due to possible faulting. – major zone of											439.4	442.4	3.0	100
					calcite veining 436.3–439.25; veins up to 40cm thick											442.4	445.4	3.0	100
440.5	444.2	100	1	Ogal.	CLEAN MED-FINE GRAINED CALCARENITE		4 80	441.0	443.0										
					Clean, light grey to grey calcarenites – locally med grained														
					and possibly bioclastic; stylolitic with minimal argillite														
					material and occ calcite veinlets only; almost														
					oolitic in places.														
444.2																			

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DRILL CORE LOG

TENEMENT NAME [redacted] No. [redacted]15

364288E

PLAN – MAP REFERENCE

CO-ORDINATES 5350997N AZIMUTH DRILLERS Acmac COMMENCED 5.6.95 DEPTH 702.4m HOLE No. ZM189

RL COLLAR INCLINATION DRILL TYPE LY44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
463.5	464.5	100	1	Ogul	ARGILLACEOUS BIOCLASTIC CALCARENITE Grey, fine grained, nodular bioclastic calcarenite within fine grained bioclastic, argillaceous calcarenite; nodules have irregular margins; possible bioturbation Minor calcite veining (mostly 30° to c/a. Gradationally lower contact.		546582	449.6	451.4		
453.5	461.5	100	1	Ogul	CLEAN EQUIGRANULAR CALCARENITE Fine grained grey calcarenite with stylolites and fine grained bioclasts; almost micritic texture locally on nodules; increasing amounts of interstitial dark grey med grained calcarenite fill. Almost becoming an argillaceous bioclastic calcarenite unit 460.4 to 462.4m Minor calcite veining in more argillaceous zone						
464.5	467.9	100	1	Ogul	ARGILLACEOUS BIOCLASTIC CALCARENITE As above						
467.9	473.3	100	1	Ogul	CLEAN EQUIGRANULAR BIOCLASTIC CALCARENITE. Med/coarse grained bioclasts, gradational upper contact; irregular lower contact.		83	469.4	471.4		
473.3	486.5	100	1	Ogul	MIXED ARGILLACEOUS BIOCLASTIC CALCARENITES, EQUIGRANULAR CALCARENITES AND MICRITES Much disturbed unit ? bioturbation, bedding 60° to c/a. ? stromatoporoids.						
486.5	498.2	100	1	Ogul	CLEAN EQUIGRANULAR CALCARENITES AND MICRITES Bioclastic grey, med/fine grained calcarenites with fine grained calcarenite (micritic) zones. Argillite or stylolites only. Increase in calcite veining - Sty parallel to c/a.		84	493.4	495.8		

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DRILL CORE LOG

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364 288E
CO-ORDINATES 5350 979 N AZIMUTH ..... DRILLERS ALMAC ..... COMMENCED 5.6.95 ..... PLAN – MAP REFERENCE .....
RL COLLAR ..... INCLINATION ..... DRILL TYPE LY44 ..... COMPLETED ..... DEPTH 702.4m HOLE No. ZM189
CASING LEFT ..... DPO No(s) .....

DEPTH From (M)	DEPTH To(M)	Core Rec. %	RQD DPTH	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by .....)
498.2	508.6	100	1	Ogul	CLEAN EQUIGRANULAR BIOCLASTIC CALCARENITE. As before; slightly more argillaceous unit 502.65–503.05 and 503.9–504.3m. 0.5cm calcite veins 75° to c/A; other calcite veining sub-parallel to c/A Bioclastic calcarenite med/coarse grained.						
508.6	514.4	100	1	Ogul	MIXED EQUIGRANULAR CALCARENITES, CALCARENITE AND ARGILLACEOUS BIOCLASTIC CALCARENITES. Disturbed calcarenite units; equigranular unit is med/coarsely bioclastic; nodular effect with fine grained calcarenite (micrite) Bioclastic(fine) argillite zones ?stylolitic bedding @ 512.4m. Minor calcite veins.		546585	511.4	514.0		
514.4	517.9	100	1	Ogul	CLEAN EQUIGRANULAR CALCARENITE Increase in calcite veining; 1 cm vein 45° to c/A. 0.5cm veins 85° to c/A. Also zones of calcite vug infill		86	514.4	517.4		
517.9	527.4	100	1	Ogul	MIXED EQUIGRANULAR CALCARENITES, CALCARENITES (MICRITE) AND ARGILLACEOUS BIOCLASTIC CALCARENITES. Calcite veining is persistent; bedding highly disrupted; nodular effect with fine calcarenite/micrite; ?bioturbation and syn-sedimentary brecciation, veining generally more intense		87	523.4	525.3		
527.4	527.7	100	1	Ogul	FAULT BRECCIA Upper and lower contacts parallel 50° to c/A.						
527.7	532.1	100	1	Ogul	MIXED EQUIGRANULAR CALCARENITES, CALCARENITES (MICRITE) AND ARGILLACEOUS BIOCLASTIC CALCARENITE Possibly bedding @ 531.4 45° to c/A Disrupted bedding – ? Syn-sedimentary brecciation +/- bioturbation						

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DRILL CORE LOG

364288E

CO-ORDINATES 5350999N AZIMUTH ..... DRILLERS ALMAC COMMENCED 5.6.95 PLAN – MAP REFERENCE .....

RL COLLAR ..... INCLINATION ..... DRILL TYPE LY44 COMPLETED ..... DEPTH 702.4m HOLE No. ZM189

CASING LEFT ..... DPO No(s) .....

DEPTH From (M)	DEPTH To(M)	Core Rec %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by .....)							
															Rec (cm)	Rec (cm)	Rec (m)	Rec (%)
532.1	570.1	100	1	Ogul	EQUIGRANULAR BIOCLASTIC CALCARENITE.		3465688	533.1	535.4						529.4	532.4	3.0	100
					med/coarse grained; localised	calcite cavity + vug infill in									532.4	535.4	3.0	100
					more porous looking calcarenite;	Calcite veining, generally in									535.4	538.4	3.0	100
					less veining occurs @ base	60° to c/A. at 45° to c/A									538.4	541.4	3.0	100
															541.4	544.4	3.0	100
					mixed equigranular bioclastic calcarenite + argillaceous bioclastic calcarenite		89	556.4	558.4						544.4	547.4	3.0	100
					and fine grained micritic calcarenite.	@ 541.3 – 545.6.									547.4	550.4	3.0	100
						@ 559.7 – 561.4.									550.4	553.4	3.0	100
					argillaceous bioclastic calcarenites	@ 550.9 – 551.8.									553.4	556.4	3.0	100
															556.4	559.4	3.0	100
					Bedding at 552.4 60° to c/A –	?apparent bedding.									559.4	562.4	3.0	100
					Weaker amounts of calcite veining after 548m										562.4	565.4	3.0	100
						Poss bedding ?apparent @ 568.1 35° to c/A.									565.4	568.4	3.0	100
															568.4	571.4	3.0	100
570.1	585.2	100	1	Ogul	ARGILLACEOUS BIOCLASTIC CALCARENITE										571.4	574.4	3.0	100
					Grey fine grained calcarenite with mod/fine grained bioclasts.		90	581.4	583.3						574.4	577.4	3.0	100
					Argillaceous material as interstitial material mod/fine grained dk grey										577.4	580.4	3.0	100
					calcarenite patches locally is bioclastic										580.4	583.4	3.0	100
					cleavage fabric. 15-20° to c/A										583.4	586.4	3.0	100
					minimal calcite veining										586.4	589.4	3.0	100
					578.5 – 580m. Coarser bioclastic + cleaner calcarenite unit possibly oncolitic										589.4	592.4	3.0	100
					581.4 – 583.4 lt grey stromat ?stromatoporoid features Poss bedding 30° to c/A										592.4	595.4	3.0	100
					2% loss of bioclasts after 584m.										595.4	598.4	3.0	100
															598.4	601.4	3.0	100
585.2	595.8	100	1	Ogul	MIXED SEQUENCE OF BIOCLASTIC CALCARENITES		91	587.4	589.4						601.4	604.4	3.0	100
					593.4 Bedding (?apparent) 60° to c/A										604.4	607.4	3.0	100
					light grey to dark grey bioclastic calcarenite with fine-coarse grained										607.4	610.4	3.0	100
					bioclasts; minor mod grained dark grey argillaceous calcarenite; localised										610.4	613.4	3.0	100
					v.fine grained calcarenite pore infills.										613.4	616.4	3.0	100
					595.4-595.8 – calcite vein.	Irregular contacts.									616.4	619.4	3.0	100
															619.4	622.4	3.0	100

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DRILL CORE LOG

TENEMENT NAME [redacted] No. 9/15

PLAN — MAP REFERENCE

364288E

CO-ORDINATES 5350999N AZIMUTH DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4 m HOLE No. ZM189

RL COLLAR INCLINATION DRILL TYPE LY 44 COMPLETED CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To (M)	Core Rec %	RQD	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ......)
595.8	611.7	100	1	Ogul	ARGILLACEOUS BIOCLASTIC CALCARENITE		545692	604.4	606.4		
					Uniform looking appearance. Fine grained grey calcarenite with						
					med/coarse grained bioclasts, locally micritic; argillaceous material						
					as minor dark grey calcarenite infill (med/fine grained)						
					Unit becoming more argillaceous downhole, finer grained.						
					minor calcite veins 55° to c/A.						
					Max cleavage refraction @ 607m						
611.7	651.2	100	1	Ogul	MIXED MICRITES AND ARGILLACEOUS CALCARENITES.						
					Grey med/fine grained grey calcarenites; only occ coarse bioclast.						
					with zones of burrowed argillaceous calcarenite.						
					615.5 - 619.0m Lt grey v.fine calcarenite bedding 40° to c/A locally diffuse		93	615.5	619.0		
					laminations progressing d/hole to birds eye micrites						
					622.5 - 626.2 Ditto bedding 45° to c/A		94	627.7	630.0		
					622.6 - 612.2 Fine grained grey calcarenite with birds eye micrites.		95	630.0	631.9		
					626.7 - 630.2 Stylocumulate zone - almost flaserlike in places.						
					underlain by small brecciated unit 630.2 - 630.8		96	640.4	642.7		
					Zone of calcite veining 630.8 - 631.8m						
					cleavage generally 20° to c/A.						
651.2	664.6	100	1	Ogul	ARGILLACEOUS CALCARENITES AND MICRITES						
					Dark grey fine grained calcarenites (almost micritic) with major		97	655.4	657.4		
					zones of argillaceous material / calcargillite						
					Bedding seen in an argillaceous banded unit 661-661.5 - is 65° to c/A						
					underlain by a small channel breccia unit with minor pyrite		98	661.0	662.8		
					other breccia units occur below < 30cm with minor						
					blebs of pyrite						
664.6	670.0	100	1	Ogul	BIOCLASTIC EQUIGRANULAR CALCARENITE		99	664.6	666.6		
					Grey locally coarsely bioclastic calcarenite, possibly oncolitic		5466062	666.6	669.2		
					Passes into a Dk grey fine grained argillaceous calcarenite with		063	669.2	670.0		

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DRILL CORE LOG

TENEMENT NAME [redacted] No. [redacted]

PLAN – MAP REFERENCE ....

CO-ORDINATES 364288E 5350999N AZIMUTH .... DRILLERS ALMAC COMMENCED 5.6.95 DEPTH 702.4 m HOLE No. ZM181

RL COLLAR .... INCLINATION .... DRILL TYPE LY44 COMPLETED .... CASING LEFT .... DPO No(s) ....

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ....) Rec (from)	Rec (to)	Rec m	Rec %
					Abundant brecciated shells up to 1cm long						622.4	625.4	3.0	100
					pyrite at base of calcarenite (equigranular)						625.4	628.4	3.0	100
					Zone of synsedimentary brecciation with ?dolerite in argillite						628.4	631.4	3.0	100
					664.7 - 665.5 m.						631.4	634.4	3.0	100
											634.4	637.4	3.0	100
670.0	671.1	100	4f	Dgft	FAULT ZONE						637.4	640.4	3.0	100
					Broken and sheared core 45° to c/A shear plane; rock dolomitised		5466?00	670.0	671.1		640.4	643.4	3.0	100
					or part of the silty Transition unit; small clay						643.4	646.4	3.0	100
					gouge at base; Possibly bedding parallel shear						646.4	649.4	3.0	100
											649.4	[illegible]	3.0	100
671.1	689.0	100	1	Dgst	~~Ca~~ TRANSITIONAL SANDSTONE	AND DOLOMITISED CALCARENITE UNIT.	5466063	671.1	673.4		652.4	[illegible]	3.0	100
					Mixed series of clastics and carbonates with [illegible]		5466064	673.4	677.5		655.4	[illegible]	3.0	100
							~~065~~	~~677.5~~	~~681.6~~					
					of a shallow water; fine grained sandstones; commonly		54	681.6	683.4		658.4	[illegible]	3.0	100
					bioclastic ?dolomitised calcarenites (with qtz clasts); bioturbated		065	683.4	687.4		661.4	664.4	3.0	100
					look; NON CALCAREOUS; minor	amounts of scattered pyrite.	55	687.4	689.0		664.4	667.4	3.0	100
	702.4						066	689.0	691.4		667.4	[illegible]	3.0	100
689.0	~~694.1~~			Om.	~~Light~~ MOINA SILICIC QUARTZITE.		56	691.4	693.3		670.4	671.4	1.0	100
					Lt grey highly silicic quartzite with minor						671.4	673.4	2.0	100
					scattered smectite material		57	700.4	702.4		673.4	676.4	3.0	100
											676.4	679.4	[illegible]	100
					~~Ca~~ Conglomeratic unit 694.1 – 695.05		ADDITIONAL SAMPLES				679.4	681.6	[illegible]	100
					Light grey purer silicic quartzite with chloritised						681.6	682.4	0.8	100
					shale bands < 1cm Bedding 45° to c/A.		5466234	677.5	679.85		682.4	685.4	3.0	100
					Chlorite becoming more prevalent + less well bedded		5466235	679.85	681.6		685.4	688.4	3.0	100
					d/hole to 698.2.						688.4	691.4	3.0	100
					698.2 – 702.4 Chloritised conglomerate with						691.4	694.4	3.0	100
					red/brown ?hematitic zones; silicified quartzite.						694.4	697.4	3.0	100
					bedding 50° to c/A.						697.4	700.4	3.0	100
											700.4	702.4	3.0	100
					EOH	702.4m.								

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