DD84AP2

BOREHOLE SURVEY LOG

DRILL HOLE N°: DD84AP2 LOCALITY: ATLAS PROSPECT N.W. TAS. DATE COMMENCED: 17·8·84 DATE COMPLETED: 30·8·84

Survey Depth	Interval	Magnetic Azimuth	Chord Length	Dip	Grid Azimuth	Northing	Easting	Reduced Level	Camera	Core Size	Comments
COLLAR											
SETUP 0m		283·5°		-60°	248·5						
190·0m		297°		-44°	262°						

ATLAS DRILLHOLES

DD84 AP2 DD84 AP1

General description of lithology

The dominant rock type throughout the hole is a grey argillite with varying components of dolomite and black slate. Much of the phyllosilicate present is dark coloured talc. Rare laminae of carbonaceous material also occur as listed in the log.

The grey argillite is strongly deformed everywhere it occurs, it has a very strong domainal cleavage fabric consisting of discrete talcose phyllosilicate domains which anastomose through silty dolomitic domains. The cleavage is kinked in many places and locally intense crenulation cleavages occur. In rare cases the cleavage is folded into intrafolial isoclinal folds which are in turn refolded. Discontinuous segregations of coarsely crystalline dolomite are common and probably represent relic carbonate veins. Coarse pyrite is a common constituent of these segregations (up to 50% py).

Sedimentary layering is rare as it is mostly completely transposed at the drill core scale of observation, into the foliation.

Bedding attitudes with respect to the core axis can be seen in dolomite horizons throughout the hole. These are finely crystalline with varying silica contents. They are characterized by coarse dolomite veins normal to their contacts and have apparently responded to deformation in a more competent manner than that of the grey argillite.

DD84AP2

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

SHEET No. 1 of 2

TENEMENT NAME ATLAS EL No. 1/77

PLAN – MAP REFERENCE BURNIE SK55-3

CO-ORDINATES ..... AZIMUTH 283.5° magnetic DRILLERS OVERLAND COMMENCED 17.8.84 DEPTH 190.0m HOLE No. DD84AP2

RL COLLAR ..... INCLINATION -60° DRILL TYPE INVESTIGATOR MK V. COMPLETED 30.8.84 CASING LEFT 12m PVC DPO No(s) 30385

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ALS)
0	58.0				0 – 58.0m						
58.00	60.00		NQ		PERCUSSION PRE-COLLAR						
0.00	63.00				58.0m – 63.95m						
3.00	66.00				Grey argillite						
6.00	66.70				63.95m – 64.02m						
6.70	67.10				Competent dolomite horizon. Contact						
7.10	69.00				~115° to core axis.						
9.00	72.00				64.02m – 65.12m						
2.00	75.00				Grey argillite						
15.00	75.50				65.12m – 65.17m						
15.50	78.00		NQ		Thin bedded competent dolomite horizon. Contact normal to core axis						
					65.17m – 65.93m						
					Grey argillite						
					65.93m – 65.95m						
					Competent dolomite horizon.						
					Contact ~115° to core axis.						
					65.95m – 66.13m						
					Grey argillite						
					66.13m – 66.35m						
					Competent dolomite horizon. 120°						
					66.35m – 67.34m						
					Grey argillite.						
					67.34m – 67.61m						
					Competent dolomite horizon. Contact						
					~135° to core axis.						
					67.61m – 77.60m						
					Grey argillite.						
					77.60m – 77.70m						
					Competent dolomite horizon. Contacts obscured						

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 2 of 2

TENEMENT NAME ..... No. .....

PLAN – MAP REFERENCE .....

CO-ORDINATES ..... AZIMUTH ..... DRILLERS ..... COMMENCED ..... DEPTH ..... HOLE No. DD84AP2

RL COLLAR ..... INCLINATION ..... DRILL TYPE ..... COMPLETED ..... CASING LEFT ..... DPO No(s) 30385

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ALS) Cu	Pb	Zn	Ag	Au
					77.70m – 79.91m										
					Grey argillite.										
					79.91m – 85.03m										
					Competent dolomite horizon.										
78.00	79.00				85.03m – 85.70m										
79.00	81.80				Grey argillite.										
81.80	84.90				85.70m – 86.40m										
84.90	87.00				Laminated competent dolomite										
87.0	87.6				unit. Minor black shale										
87.6	90.7				laminae. Contact ~ normal to										
90.7	91.2				core axis.										
91.2	94.3				86.40m – 86.60m	86.0m – 86.05m									
94.3	94.9				Grey argillite	Carbonaceous laminae									
94.9	96.3				86.60m – 87.4m										
96.3	97.3				Competent dolomite horizon.										
97.3	100.1				Contacts ~ normal to core axis.										
100.1	102.3				87.4m – 90.7m										
					Grey argillite.										
					90.7m – 99.8m										*
					Fine sandy dolomite. Minor										
					shale laminae are ~ normal to										
					core axis. Numerous cavities										
					throughout this unit.										
					99.8m – 102.3m	99.8m – 102.3m	1056965	99.8	102.3	SPLIT	195	4000	280	2	40.01
					Mineralized zone.	Trace to 0.5% galena									
					Massive dolomite with ~10%	" " " pyrite									
					gossan patches. Trace coarse	in irregular gossan									
					galena and pyrite.	patches occupying ~10% of									
						host dolomite.									

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 3 of 3

TENEMENT NAME ..... No. .....

PLAN – MAP REFERENCE .....

CO-ORDINATES ..... AZIMUTH ..... DRILLERS ..... COMMENCED ..... DEPTH ..... HOLE No. DD84AP2

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

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ..... Cu	Pb	Zn	Ag	Au
02·3	102·8		NQ		102·3m – 102·8m										
02·8	105·0		BQ		Laminated sandy dolomite.										
05·0	106·8				Microfaulted and convolute										
06·8	108·3				laminations are present.										
08·3	109·3				Lamination is sub normal										
09·3	110·7				to core axis.										
10·7	112·0				102·8m – 106·8m	105·4m – 107·0m	1056966	105·4	107·0	SALT	20	130	55	1	<0·01
112·0	112·9		BQ		Competent dolomite unit.	Specular hematite on joint									
					106·8m – 110·4m	coatings in dolomite. ⇒ Siderite									
					Sandy dolomite. Massive	content?									
					110·4m – 111·6m										
					Weakly dolomitic sandstone.										
					Laminated to thin bedded										
					with coarse sandstone interbeds.										
					Coarse sandstone is sub-angular										
					poorly sorted & chemically										
					immature. Micro faulting,										
					convolute bedding and										
					cross lamination (facing up hole)										
					occur in this interval. ~120° to core axis.										
					111·6m – 111·75m										
					Competent dolomite horizon.										
					Contact ~110° to core axis.										
					111·75m – 112·6m										
					Weakly dolomitic sandstone.										
					112·6m – 112·65m										
					Competent dolomite horizon.										
					112·65m – 112·75m										
					Weakly dolomitic sandstone										
					112·75m – 112·80m										
					Competent dolomite horizon										

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 4

TENEMENT NAME..... No. .....

PLAN – MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD84AP2

RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s). 8

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....
12·9	113·5		BQ		112·8 m – 120·3 m						
13·5	114·5				Weakly dolomitic sandstone						
14·5	115·0				as for the above interval 110·4 m						
15·0	117·0				– 111·6 m.						
17·0	118·2										
18·2	119·8				120·3 m – 120·8 m						
19·8	120·2				Competent dolomite horizon.						
20·2	121·5				120·8 m – 121·3 m						
121·5	122·6				Grey argillite.						
122·6	125·4				121·3 m – 121·42 m						
25·4	126·0				Competent dolomite horizon						
1260	127·0				121·42 m – 128·90 m						
27·0	127·5				Grey argillite						
127·5	128·9				128·90 m – 130·6 m						
128·9	131·6				Competent dolomite, horizon.						
131·6	133·5				Contact ~115° to core axis.						
133·5	134·8				130·6 m – 133·1 m						
134·8	137·0				Dolomitic sandstone and interbedded						
137·0	138·0				sandy dolomite. Convolute						
138·0	139·4		BQ		bedding. Pyrite occurs on						
					stylolite surfaces and as						
					laminae. Bedding 30°						
					enveloping surface ~ [illegible] to						
					core axis.						
					133·1 m – 138·8 m						
					Sandy dolomite with						
					coarse sandstone, black shale						
					and fine dolomite interbeds						
					Contacts ~105° to core axis.						

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 5

TENEMENT NAME..... No. .....

PLAN – MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD84AP2

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

DEPTH From (M)	DEPTH To (M)	Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weeth, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by..... Cu	Pb	Zn	Ag	Au
39.4	140.2		BQ		138.8m – 190.0m	139.0m – 146.9m									
40.2	143.3				Grey argillite with variable carbonate content but no prominent carbonate beds.	Trace – 0.5% dissem. pyrite up to 3mm across in siltstone – dolomite domains of grey argillite									
43.3	146.4														
46.4	149.5														
149.5	152.2														
152.2	154.3														
154.3	155.0					146.9m – 146.95m	1056967	146.6	146.95	SPLIT	30	30	50	1	<0.01
155.0	156.0					Pyrite laminae up to 3mm thick.									
156.0	158.0														
158.0	160.9					146.95m – 190.0m									
160.9	163.9					Trace dissem. pyrite to end of hole.									
163.9	166.2														
166.2	168.0														
168.0	171.0														
171.0	172.5														
172.5	175.0														
175.0	177.0														
177.0	180.0														
180.0	183.0														
183.0	186.0														
186.0	188.0														
188.0	188.7														
188.7	190.0		BQ												
	E.O.H.														

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