DD84AP1

BOREHOLE SURVEY LOG

DRILL HOLE N°: DD84AP1 LOCALITY: ATLAS PROSPECT N.W. TAS. DATE COMMENCED: 14·8·84 DATE COMPLETED: 31·8·84

Survey Depth	Interval	Magnetic Azimuth	Chord Length	Dip	Grid Azimuth	Northing	Easting	Reduced Level	Camera	Core Size	Comments
COLLAR											
SETUP 0m		305°		-60°	270°						
178·3m		302°		-52°	267°						

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.

DD84AP1

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

SHEET No. 1 of 8

TENEMENT NAME ATLAS EL No. 1177

PLAN – MAP REFERENCE BURNIE SK55-3

CO-ORDINATES ..... AZIMUTH 305° magnetic DRILLERS OVERLAND COMMENCED 14·8·84 DEPTH 178·3m HOLE No. DD84AP1

RL COLLAR ..... INCLINATION -60° DRILL TYPE MINDRILL F-30 COMPLETED 31·8·84 CASING LEFT 3m HQ 175m 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	24·0	–	–	–	0m – 24·0m TRICONE						
24·0	25·2		NQ		24·0m – 82·7m						
25·2	26·7				Highly deformed grey argillite						
26·7	29·4				Includes the following:	29·8m – 30·3m Synclinal fold nose.					
29·4	32·2				59·6m – 59·85m Pale green						
32·2	33·4				foliated rock with dark blue green						
33·4	35·5				Mineralite. THIN SECTION	NUMBER:					
35·5	38·5				: Discrete competent dolomite	Bedding to core axis angles					
38·5	41·1				horizons at; 41·42m – 41·55m						
41·1	44·2				41·91m – 42·00m	45°					
44·2	47·3				62·80m – 62·86m						
47·3	50·5				66·76m – 66·77m						
50·5	52·3				67·7m – 67·73m						
52·3	53·1				67·3m – 67·4m						
53·1	54·0				68·7m – 68·73m	130°					
54·0	55·2				69·7m – 69·72m	120°					
55·2	57·5				70·36m – 70·44m						
57·5	60·6				70·5m – 70·62m	69·80m – 69·83m Coarse py					
60·6	61·0				70·99m – 71·00m	in dolomite vein. ~50% pyrite.					
61·0	62·7				71·05m – 71·10m	Up to 10% coarse py in most					
62·7	64·0				71·20m – 71·30m	dolomite units between 69m and 73m					
64·0	65·2				71·4m – 71·5m						
65·2	67·2				71·9m – 72·0m						
67·2	68·2				72·27m – 72·35m	115°					
68·2	69·1				74·5m – 74·56m	130°					
69·1	70·0				74·8m – 74·9m						
70·0	71·4				75·05m – 75·3m						
71·4	72·0				76·65m – 76·69m						
72·0	74·4				76·84m – 77·26m	130°					
74·4	75·0				78·85m – 79·12m						
75·0	77·8		NQ		79·34m – 79·45m	130°					

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

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

PLAN – MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD84API

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

DEPTH 'om (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
77.8	78.2		NQ		Competent dolomite horizons cont'd:										
78.2	80.1				79.59m - 79.65m										
80.1	81.4				79.70m - 79.72m										
81.4	82.9				79.9m - 79.92m										
82.9	84.2				80.0m - 80.06m	130° core axis to bedding angle.									
84.2	85.4				80.49m - 80.96m	110° " " " " "									
85.4	86.1														
86.1	87.8				82.75m - 93.8m										
87.8	88.1				Sandy dolomite	86.5m - 87.4m carbonaceous(?) material on joint faces and as massive segregations within the rock. ~5% of interval.	1056961	86.5m	87.4m	SPLIT	210	95	70	1	<0.01
88.1	89.0														
89.0	90.4														
90.4	90.5														
90.5	90.9														
90.9	91.5														
91.5	92.1														
92.1	92.5					92.5m - 94.0m Scattered carbonaceous patches within the dolomite	1056962	92.5m	95.0m	SPLIT	15	480	235	1	<0.01
92.5	93.6														
93.6	94.0				93.8m - 134.1m										
94.0	95.5				Black shaley dolomite.										
95.5	98.0		NQ			Potable carbonaceous material throughout. Best displayed around 116m and 133m - 134m									
98.0	99.0		BQ												
99.0	99.3														
99.3	101.4														
101.4	104.2														
104.2	104.2														
105.2	107.1														
07.1	107.8														
107.8	108.0														
108.0	108.6				45° core axis to bedding angle at 116m										
086	109.0														
09.0	110.3		BQ												

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 3 of 16

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

PLAN – MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD84AP1

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
110·3	112·1		BQ												
112·1	112·6					115·5m - 116·5m Carbonaceous zone.	1056963	115·5	116·5	SPLIT	15	320	65	1	<0·01
112·6	114·6														
114·6	116·3														
116·3	118·9				115° core axis to bedding angle at 118m										
118·9	120·4														
120·4	121·4														
121·4	122·0														
122·0	122·9														
122·9	124·9														
124·9	125·5														
125·5	126·7														
126·7	127·1														
127·1	130·0														
130·0	131·3														
131·3	131·8					133·0m - 134·0m Carbonaceous	1056964	133·0	134·0	SPLIT	30	60	45	1	0·01
131·8	133·0				134·1m - 134·4m	zone.									
133·0	134·7				Dolomitic sandstone.										
134·7	137·8														
137·8	140·0				134·4m - 138·4m										
140·0	141·3				Sandy dolomite. Thin bedded										
141·3	143·5				to laminated.										
143·5	144·7				110° core axis to bedding angle										
144·7	145·9				at 135m										
145·9	147·3														
147·3	149·3				138·4m - 178·3m										
149·3	150·6				Highly deformed grey argillite	Trace dissem. pyrite in the									
150·6	152·3				without any discrete	more dolomitic sandy									
152·3	155·3				competent dolomite horizons.	segregations throughout the									
155·3	158·0				E.O.H.	interval 138·4m - 178·3m									
158·0	161·1		BQ												

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DRILL CORE LOG

SHEET No. 4 of 5

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

PLAN – MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD84 API

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.....
161·1	164·2		BQ								
164·2	167·3										
167·3	169·1										
169·1	171·7										
171·7	173·2										
173·2	176·3										
176·3	178·3		BQ								
	E.O.H.										