031

615032

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

SHEET No. 1 of 5

TENEMENT NAME ROCKY CAPE No. 1/77

PLAN – MAP REFERENCE BALFOUR GRID

CO-ORDINATES 10800N 9960E AZIMUTH 47°m (GRID EAST) DRILLERS PARRY COMMENCED 09:08:82 DEPTH 179·1 metres HOLE No. DD82RC7

RL COLLAR ..... INCLINATION -46° DRILL TYPE BOYLES COMPLETED 15·08·82 CASING LEFT NIL DPO No(s) 30207

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 ANALABS) Cu	Pb	Zn	As	B:	Mo	W	Sn
0·0	0·3				TRICONED – NO CORE													
0·3	38·0m	21·1	NQ		SILTSTONES													
					Grey to black laminated siltstones	Some lt gy bands more weathered	92872*	0·3	3·0	2·6	55	20	90	x	x	x	–	x
					laminae often ≤0·5mm upto 2mm	Py. min² upto 5% between 8+8·5m.	873*	3·0	4·0	3·8	30	10	70	x	x	x	–	10
					with thicker beds to 20cm. Thin	Occ. ss dykelets – flame structures	874*	14·0	20·0	3·85	20	10	85	x	x	x	–	x
					beds carbonaceous gy bands more	from more sandy layers into more	875*	20·0	26·0	3·2	20	10	80	x	x	x	–	x
					sandy ↓	Fg layers. py min² 5% at 10m	876*	26·0	30·5	3·5	20	20	65	x	x	x	–	x
						often 1-2% py @ 12m.	877	30·5	32·0	0·95	100	1450	140	x	10	x	–	x
						10·8m int. L 65°.	878*	32·0	38·0	3·2	30	15	50	x	x	x	–	8
					13-38m Banded carbonaceous siltstones	Fault at 13m – broken altered/oxidised												
					and occ. med. gy sandstones, laminations	core. – White – lt gy chloritic ss veinlets												
					in parts of core 1-2m but generally	often py.												
					5-15cm wide. More sandy lt gy													
					bands 13-15·5m show flame	V low int L of 20° at 21m												
					structures. much core loss 17·5-20m.	int L 40° at 22m } indicate X-bedding												
					py-sandy-py – Fault?	int L 4° at 26m } slump structures.												
					Sandstone bands micaceous													
					25·8-26·3 dendritic py.	Core loss 29·5-30m – Fault?												
					Med gy qtzite band 30·5-32·0m.													
					py upto 10% very fractured. At 35m													
					first fractured bands of dk. chloritic													
					pyritic sandstones (pale gn-gy).	Fault at 37·8m.												
					bands upto 10cm interbedded with													
					dk gy carbonaceous siltstones													

* GROUND CAF

032

615033

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

SHEET No. 2 of 5

TENEMENT NAME ROCKY CAPE No. 177

PLAN – MAP REFERENCE BALFOUR GRID

CO-ORDINATES 10800N 9360E AZIMUTH 47°m (GRID EAST) DRILLERS PARRY COMMENCED 09·08·82 DEPTH 179·1 metre HOLE No. DD82 B17

RL COLLAR ... INCLINATION −46° DRILL TYPE BOYLES COMPLETED 15·08·82 CASING LEFT NIL DPO No(s) 30207

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 ANALABS) Cu	Pb	Zn	As	Bi	Mo	W	Sn
0	57·6	17·08	NQ		QUARTZITE													
					Med - lt gn-gy banded (upto 80cm). Fairly massive m-f.g. qtzite. Sl. mm giving speckled nature. Some siltstone intercalations. Some pale pale green - chlorite? Intersection angles 65° @ 40·5m 5° @ 41·3m 50° @ 43·5m 14° @ 48m 15° @ 50·5m 35° @ 56m.	Py upto 10% diss. through core. Fault at 42m in a very large joint - core fractured yellow clay on joint/fault? fracture. Core V. pyritic at 50m – 10-15%. Core mod fractured throughout. Thin 2cm qtz-chlorite vein at 53·6m.	972879	38·0	40·7	2·64	35	25	60	x	x	x	–	x
							880	40·7	47·0	4·85	15	15	45	x	x	x	–	4
							881	47·0	48·8	1·64	20	85	155	x	x	x	–	x
							882	48·8	50·8	1·70	5	15	40	x	x	x	–	x
							883	50·8	51·4	0·6	10	30	35	x	x	x	–	x
							884	51·4	53·0	1·25	5	20	100	x	x	x	–	x
							885*	53·0	57·6	4·4	10	5	55	x	x	x	–	x
57·6	80·0	22·08	NQ		QUARTZITE – GREYWACKE													
					Quartzite - dk - v. dk gy carbonaceous - some bedding feature often graded with SS veinlets (flame? structures) - often more mineralised. S At 74·6m thin dk gy bed int. L. = 30° more argillaceous zone Last 0·5m central zone porous veggy – po + py + Sn? sampled.	SS veinlets – often py & po Slump and ocean structures esp. 63m. Core py + po Po increasing with depth Intersection angles 23° at 58·4m. 41° @ 62·3m 26° @ 63·5m 18° @ 72·3m 26° @ 74m 30° @ 78m	886*	57·6	61·3	3·56	40	10	70	x	x	x	–	x
							887	61·3	62·1	0·80	15	10	55	x	x	x	–	x
							888*	62·1	66·7	4·60	20	20	115	x	x	x	–	x
							889*	66·7	71·0	4·15	20	x	105	x	x	x	–	x
							890*	71·0	74·53	3·53	25	x	85	x	x	x	–	x
							891	74·53	74·65	0·12	35	40	75	x	x	x	–	x
							892	74·65	76·46	1·73	10	10	50	x	x	x	–	x
							893*	76·46	80·0	3·53	20	x	55	x	x	x	–	x

033

615034

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

SHEET No. 3 of 5

TENEMENT NAME: ROCKY CAPE No. 1/77

PLAN – MAP REFERENCE: BALFOUR GRID

CO-ORDINATES: 10800N 9960E — AZIMUTH: 47° m (GRID EAST) — DRILLERS: PARRY — COMMENCED: 09.08.82 — DEPTH: 179.1 metre — HOLE No. DD82 RC1

RL COLLAR: — INCLINATION: -46° — DRILL TYPE: BOYLES — COMPLETED: 15.08.82 — CASING LEFT: Nil — DPO No(s) 30207

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)	Cu	Pb	Zn	As	Bi	Mo	W	Sn
80.0	98.3	18.0	NQ		QUARTZITE													
					Med gy – m-c.g. some bedding	Min^n mainly po > py. py restricted	972894	80.0	83.0	2.97	10	x	40	x	x	x	–	x
					evident at 81m. At 83.2–83.7m	to joints. Po seems aligned to	895	83.0	83.4	0.40	15	25	70	x	x	x	–	x
					v. black c.g. carbonaceous?	cleavage direction.	896	83.4	85.1	1.7	x	x	25	x	x	x	–	5
					leached zone v. unusual.	Intersection angles	897	85.1	87.0	1.90	5	x	25	x	x	x	–	x
					Unit becomes sl. finer grained	62° @ 81m 22° @ 84m	898	87.0	89.0	2.0	5	x	20	x	x	x	–	4
					at 86m – X-bedded, slump features	20° @ 88m 25° @ 94m.	899	89.0	92.0	2.8	x	5	25	x	x	x	–	6
					more prominent. At 96m coarser		900	92.0	94.7	2.7	15	10	35	x	x	x	–	x
					grained bands also chloritic	chloritic alt^n and po min^n more	901	94.7	95.43	0.73	15	x	30	x	x	x	–	x
					alt^n – transition zone – some beds	prevalent in c.g. beds	902	95.43	98.3	2.80	10	10	25	x	x	x	–	x
					more carbonaceous – greywacke.													
98.3	111.4	12.23	NQ		QUARTZITE – GREYWACKE	INT L 18°												
					Med – lt gn gy m-c.g. X-bedded	100m QTZITE / GREYWACKE 55°	903	98.3	99.4	0.85	20	20	50	x	x	x	–	x
					slump structures – loading features		904	99.4	101.0	1.6	30	40	50	x	x	x	–	x
					ss – dykes occ qtzite bands which	Int. angles 104m – 50°	905	101.0	104.0	2.86	15	x	40	x	x	x	–	x
					seem to contain more po min^n	5–10° @ 106m – also cast features.	906	104.0	106.45	2.2	35	20	40	x	x	x	–	x
					Greywacke beds poorly sorted but	po min^n 57° (cleavage)	907	106.45	107.35	0.9	15	6	40	x	x	x	–	4
					sl graded wacke beds int L^s	108.5 –	908	107.35	108.55	1.20	40	20	35	x	x	x	–	x
					often very low. (eg) 109m // to core.	int L14°	909	108.55	110.15	1.47	25	15	45	x	x	x	–	x
						(There is about 20° of rotation	910	110.15	111.4	1.15	20	5	45	x	x	x	–	x
						between maximum readings)												
111.4	155.0	42.64	BQ		GREYWACKE													
					Med – v. dk gy fairly massive unit.	po. min^n strong until 113.6m then	911	111.4	113.4	1.58	30	25	45	x	x	x	–	x
					(first 2m fine banding).	po blebs and py on joints not	912	113.4	114.03	0.63	30	45	60	x	x	x	–	x
					At 134.2m (20cm) tuff band	as min^n. Core densely broken	913*	114.03	116.23	2.2	30	10	70	x	x	x	–	x
					At 141.0m (10cm) tuff band	at 120m – fractured.	914*	116.23	119.0	2.7	55	10	105	x	x	x	–	x

034

615035

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

SHEET No. 4 of 5

TENEMENT NAME ROCKY CAPE No. 1/77

PLAN – MAP REFERENCE RALFOUR GRID

CO-ORDINATES 9360 E (ICBOON) AZIMUTH 47°m (GRID EAST) DRILLERS PARRY COMMENCED 09:08:82 DEPTH 179·1 m HOLE No. DD 82 BC7

RL COLLAR ____ INCLINATION −46° DRILL TYPE BOYLES COMPLETED 15:08:82 CASING LEFT Nil DPO No(s) 30207

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 ANALABS) Cu	Pb	Zn	As	Bi	Mo	W	Sn
					Greywacke – qtzite 140–144m	Intersection angles:-	972916*	122·0	125·0	3·0	30	x	60	x	x	x	–	x
					less argillaceous but still dk	15° @ 115m 5° @ 121m	917*	125·0	128·0	3·0	45	x	80	x	x	x	–	x
					gy, occ fine lt gy–white	35° @ 127m 43° @ 130m	918*	128·0	131·0	3·0	20	x	65	x	x	x	–	x
					fracture – joint infillings –	50° @ 134·2m (tuff bed U. contact)	919*	131·0	137·0	5·53	30	x	90	x	x	x	–	x
					2nd qtz – carb?	25° @ 140m	920*	137·0	143·0	6·0	25	5	75	x	x	x	–	x
						60° @ 141m (tuff bed)	921	143·0	146·0	3·0	25	15	50	x	x	x	–	x
						15° @ 148m 42° @ 152m.	922*	146·0	152·0	6·0	25	5	55	x	x	x	–	x
							923	152·0	155·0	3·0	5	x	25	x	x	x	–	x
155·0	158·0	3·0	BQ		GREYWACKE AND QUARTZITES.													
					V. dk gy argillaceous qtzite and med	Mod. fractured becomes V. fractured	924	155·0	158·0	3·0	x	x	35	x	x	x	–	x
					gy qtzite bands – often sweat? qtz	chlorite alt^{N}												
					veins upto 10mm with creamy	156·8m – fault slickensided												
					clay infilling – often carbonate? – py	core over 10cm.												
					upto 5% – banded.	Int. b's 45° @ 156m												
						63° @ 157·7m.												
158·0	160·5	2·38	BQ		FAULT ZONE													
					leached for first 0·5m – fractured	Chlorite alt^{N} – qtz veining py	925	158·0	159·0	0·9	x	x	40	x	x	x	x	x
					core several py zones – pale yellow	min^{2} associated – fractured	926	159·0	160·5	1·48	5	x	60	x	x	x	x	x
					clayey – pyritic.													
160·5	170·0	9·3	BQ		BANDED MUDSTONES AND QUARTZITES													
					Med – dk gy chloritic mudstones	Chloritic mudstones, mit very	927	160·5	162·5	1·9	x	x	55	x	x	x	6	x
					rythmically banded with quartzites	fractured, sweat? qtz veining	928	162·5	164·0	1·47	x	x	35	x	x	x	x	x
					Banding 0·5mm to 30mm. Heavily	developed – close to major	929	164·0	165·27	1·2	5	x	45	x	x	x	5	x
					fractured with many thin	fault zone.	930	165·27	167·12	1·85	x	x	30	x	x	x	x	x
					sweat? qtz veins with occ py.		931	167·12	170·0	2·88	x	x	35	x	x	x	17	x
					min^{2}. Fault py 169m													
					Sl[illegible]													

035

615036

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

SHEET No: 5 of 5

TENEMENT NAME ROCKY CAPE No. 177

PLAN – MAP REFERENCE BALFOUR GRID

CO-ORDINATES 10800N 9360E AZIMUTH 47°m (GRID EAST) DRILLERS PARRY COMMENCED 09.08.82 DEPTH 179.1 m HOLE No. DD82 BC7

RL COLLAR ..... INCLINATION -46° DRILL TYPE BOYLES COMPLETED 15.08.82 CASING LEFT Nil. DPO No(s) 30207

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 ANALABS) Cu	Pb	Zn	As	Bi	Mo	W	Sn
170.0	179.0	9.1	BQ		SHALES AND QUARTZITES.													
					Rhythmically bedded green chloritic shales and f.g. qtzites and occ dkr shale units with many thin (upto 1cm) sweat? qtz veins cont. yellow clay often carbonate? py min² with veins	fg min upto 5% often associated with qtz veins	972932	170.0	173.0	3.0	x	x	45	x	x	x	13	x
							933	173.0	176.0	3.0	x	x	40	x	x	x	8	x
							934*	176.0	179.1	3.1	15	x	95	x	x	x	7	x
						BOREHOLE CAMERA SURVEY												
						DISTANCE AZIMUTH DECLINATION												
						0m 47°m -46°												