017

C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 176

LOGGED BY: J. WEIR to 46m; G. PURVIS to 91.6m. TENEMENT NAME Rocky Cape E.L. 1/77 No.

PLAN – MAP REFERENCE RED ANOMALY

CO-ORDINATES 500mN 5500E AZIMUTH 210° magnetic DRILLERS Overland Drilling COMMENCED 5/2/85 DEPTH 91.60m HOLE No. PD 85 RP1

RL COLLAR INCLINATION −61° DRILL TYPE Warman 500 COMPLETED 12.2.85 CASING LEFT PVC to 45m DPO No(s) 31927

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	Ag	Fe
0	2				Grey shale possibly slightly dolomitic but doesn't fizz ? acid.	Weathered l. brown shale fragments.	1154901	0	2		45	5	30	<.5	4.15%
2	4					As above + soft, weathered slightly talcose grey shale, minor ferruginous bands.	1154902	2	4		60	15	20	<.5	2.25%
4	6					Weathered grey shale in light brown loam.	1154903.	4	6		70	5	10	<.5	2.30%
6	8					Weathered grey shale in light brown – Or-brown clays. – water table.	1154904	6	8		95	20	150	<.5	1.55%
8	9				Light grey shale – dolomitic? doesn't fizz ? acid.	Light grey f.g. Carbonaceous shale? – dolomitic? slightly silicified. Trace pyrite along bedding. minor Carbonaceous ? bands.	1154905.	8	9		60	45	155	<.5	1.75%
					6" PVC Casing to 9m.										
9	11					60% Light grey, f.g. shale 1-2% f. disem Py. with black shale.	1154906	9	11		60	20	150	<.5	1.60%
11	13				12-13? Black shale.	60% light grey f.g. shale sl. Siliceous 1-2% finely disem pyrite. 40% Black carbonaceous shale.	1154907	11	13		55	20	225	<.5	1.45%
13	15				L. Grey Shale.	L. grey f.g. shale ± 1% f.g disem pyrite	1154908	13	15		70	20	190	<.5	1.60%
15	17				Mon/interbedded grey shale and black silicified carbonaceous shale.	L. grey f.g. shale 1-2% pyrite. 20% fragments black shale.	1154909	15	17		60	25	320	<.5	1.40%

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

SHEET No. 2

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

PLAN – MAP REFERENCE .....

CO-ORDINATES ..... AZIMUTH ..... DRILLERS ..... COMMENCED ..... DEPTH ..... HOLE No. PD85RP1

RL COLLAR ..... INCLINATION ..... DRILL TYPE ..... COMPLETED ..... CASING LEFT ..... DPO No(s). 31927

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	Ag	Fe
17	19				Interbedded grey shale and black silicified? Carbonaceous shale.	50% fragments grey shale 1-2% py. 50% fragments black shale.	1154910	17	19		80	20	370	<·5	1·35%
19	21				Grey Shale.	70% grey shale ± 1-2% f. disem py. 10% black silicified? Carbonaceous shale. 20% fragments massive pyrite. – bedding plane? 2-5 mm.	1154911	19	21		110	40	365	<·5	4780
21	23				Black Silicified Carbonaceous shale. ± ? minor grey shale interbeds? Cave in?	80% fragments black shale 20% fragments massive py 2-5mm.	1154912	21	23		~~105~~ 105	~~35~~ 30	~~130~~ 135	<·5	~~5650~~ 6250
23	25					Dominantly black shale 20% fragments massive py 2-5mm minor grey shale. – Cave in.? Some py in bedding planes.	1154913	23	25		105	45	195	<·5	5980
25	27					72% black shale, 23% grey shale ± 1-2% f. disseminated py. 5% coarse massive py.	1154914	25	27		95	20	155	<·5	6550
7	29					80% black f.g. Carbonaceous shale. 1-3% finely disseminated py. 2-5% massive py. 15% grey shale. ± 1-2% f. disem py.	1154915	27	29		90	20	120	<·5	6200
29	31					70% black shale ± 1-2% finely disem py. 2-5% massive py. 30% Grey shale ± 1% f. disem py.	1154916	29	31		95	15	135	<·5	6450

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

SHEET No. 3

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

PLAN – MAP REFERENCE .....

CO-ORDINATES ..... AZIMUTH ..... DRILLERS ..... COMMENCED ..... DEPTH ..... HOLE No. PD85RP1

RL COLLAR ..... INCLINATION ..... DRILL TYPE ..... COMPLETED ..... CASING LEFT ..... DPO No(s) 31927

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	Ag	Au	Fe
						minor quartz veining. – fault?										
31	32.6					Black sl. silicified black shale. Tr. v. finely disem pyrite 20-30% py. Quartz veining abundant. – FAULT. NQ CORE FROM 32.6m.	1154917	31	32.6		85	20	120	<.5		7800
32.6	34.1	0.6			Black Shale	Black Shale bedding ∂ 33m 70°	1154701	32.6	35		90	25	105	<.5		5100
34.1	34.6	0.5				bedding ∂ 34.4 67° 10-15% v. finely disseminated pyrite in bedding planes. Coarse 3mm Qtz vein with py pyrite ∂ 33, 34.2, 34.7. Occasional py. aggregates.										
34.6	35.4	0.6				black carbonaceous shale ± 1% py 34.7 – coarse 3mm quartz-py vein.										
35.4	37.0	1.3				Black Shale 2-3% py. bedding ∂ 36.8 = 65° Disem py in bedding planes. Joint 70° ∂ 37.0m.	1154702	35	37		70	15	65	<.5	*	8000
37.0	37.9	0.7				Black chert, highly broken, Tr. v. fine pyrite. minor calcite filled joints.	1154703	37	39		65	15	65	<.5		8150

* Below D.L. of 0.008

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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. PD85RP1
RL COLLAR ..... INCLINATION ..... DRILL TYPE ..... COMPLETED ..... CASING LEFT ..... DPO No(s). 31927

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	Ag	Au	Fe
37.9	38.5	0.4	NQ		Black Shale	Highly broken black Shale. muddy, clay infil @ 38.5m.										
38.5	39.1	0.5				Highly broken black Shale.										
39.1	39.9	0.6				Fractured, Silicified black shale	115470A	39	41		25	20	45	<.5	x*	1.65%
					39.7m. Dolomite.	Black – v. dk. grey v. fine grained dolomite. – Carbonaceous. 39.8m. common <1mm qtz veins net 35°.										
39.9	40.6	0.6				Black, fractured dolomite, numerous <1mm quartz veins @ 38° & 69°										
40.6	41.4	0.7				Fractured black f.g. dolomite.										
41.4	42.1	0.5				Fractured black f.g. dolomite minor qtz vein 75° along bedding?? not continuous.	115405	41	43		10	15	40	<.5		8050
42.1	42.6	0.5				Black massive f.g. fractured dolomite. Numerous 1mm quartz veins.										
42.6	43.4	0.7			Fault zone 42.6 –	Highly fractured dolomite. Intense quartz veins from 42.6–43.0 Minor pyrite, cpy? in veins. – 34° dominant. Graphitic? slickensides/gouge on shear planes.										

*Below D.L. of 0.008

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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. DD85RP1

RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s). 31927

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	Ag	Au	Fe
43.4	44.3	0.8			Dolomite.	black massive dolomite f.g. ± graphitic mylonite on fracture planes Intense quartz veining @ 44.2m 67° (dominant) and 20°	1154706	43	45		10	15	25	<.5	x*	6000
															* Below D.L. of 0.008	
44.3	44.7	0.3				- mylonitic fracture planes. Pyrite in quartz vein @ 44.35 Intense quartz veining @ 44.6 minor brecciation ± quartz infill.										
44.7	45.5	0.7				black massive f.g. dolomite, minor <1mm quartz veins fractured @ 45.4										
45.5	46.0	0.3				black dolomite ± mylonite on fracture planes. – well fractured.	1154707	45	47		10	15	25	<.5		7450
							708	47	49		15	10	45	<.5	x	9150
							709	49	51		10	10	15	<.5		6650
46.00	82.00	28.0			SHATTERED CARBONACEOUS DOLOMITE	Extremely badly broken – fa major fault	1154710	51	53		10	15	25	<.5	x	8650
					Black to dark grey. Fi gr.	zone) esp below 78.75m. In places	711	53	55		10	5	20	<.5		1.05%
					Massive – bedding rare (35°/LCA @	brecciated rock frags occur in rock	712	55	57		10	15	20	<.5	x	6600
					71m; 35°/LCA @ 76.75m; 60°/LCA @ 82m)	flour and carbonate matrix.	713	57	59		15	10	20	<.5		1.2%
					Highly carbonaceous ± graphite on fractures	46–59m: Minor py, 1-2% 54-55m.	714	59	61		30	20	35	<.5	x	1.65%
					Numerous zones of intraformational	59–71.8m: 1–5% py. Patchy. Dissem	715	61	63		25	5	30	<.5		1.9%
					breccia ± irreg angular dolomite clasts	Fine to ultra fine py in matrix of intraformational	716	63	65		10	10	15	<.5	x	7750
					in carbonaceous-rich matrix	breccia zones and as massive clasts to	717	65	67		15	10	30	<.5		1.25%
					Irreg qtz veins (av <1mm) throughout.	25mm (rarely bedded) in such zones, esp	718	67	69		25	10	30	<.5	x	1.8%
					Rare carbonate ± serpentine assoc ±	59.9–60.3m = 10% py; 61.7–62.2m = 10–20% py	719	69	71		10	5	20	<.5		7850
					qtz veins or on fractures.	71.8–78.75m: 3–5% py Patchy As above	1154720	71	73		10	35	35	<.5	x	1.5%
						78.75–82m: 5–10% py. As above.	721	73	75		15	35	25	<.5		1.75%
							722	75	77		5	15	15	<.5	x	9450
							723	77	79		10	20	25	<.5		1.95%

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

SHEET No. 6

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

PLAN – MAP REFERENCE .....

CO-ORDINATES ..... AZIMUTH ..... DRILLERS ..... COMMENCED ..... DEPTH ..... HOLE No. PD85RP1

RL COLLAR ..... INCLINATION ..... DRILL TYPE ..... COMPLETED ..... CASING LEFT ..... DPO No(s) 31927

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	Ag	Au	Fe
82	91·60	2·10	NQ		MUDSTONE	Badly broken up by faulting - over 75%	1154724	79	82		10	15	35	<·5	X*	1·6%
					Dark grey.	of core lost.	725	82	84		20	20	55	<·5	X	1·35%
					fi gr: Generally massive, bedded in	82-86m : 3-5% fi gr dissem py	726	84	86		40	15	45	<·5	X	7600
					places.	86-86·9m : 10-15% py, mostly in massive	727	86	86·9		80	45	50	<·5	X	4350
					Variably carbonaceous, only minor	beds up to 15mm.	728	86·9	91·2		55	20	75	<·5	X	7650
					carbonate	86·9-91·6m : 5-10% dissem and										
					Beds of massive pyrite up to 15mm	bedded py.	1154729 (sludge)	87·2	90·8		70	20	135	<·5	X	9750
					below 86m. Minor beds of lithic											
					breccia ē clasts to 8mm, some of											
					bedded massive pyrite											
					Bedding 45°/LCA @ 86·5m; 33°/LCA @ 89·1m.											
					END OF HOLE											

* Below D.L. of 0·008

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