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

SHEET No 1

TENEMENT NAME BALFOUR SPECIMEN HILL No.

PLAN – MAP REFERENCE

CO-ORDINATES 7430N 11075E AZIMUTH 227° MAG DRILLERS K. PARRY COMMENCED DEPTH 116m HOLE No. DD91 BC 1

RL COLLAR INCLINATION -65° DRILL TYPE COMPLETED CASING LEFT DPO No(s) 2657P-1

DEPTH From (M)	DEPTH To (M)	Tourm low high	So	S1	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by AMDEL) Sn	W	Cu	Pb	Zn	Ag	Bi	Mo
0	2.5					Casing		877401	2.5	3		10	-	15	-	10	-	-	9.0
2.5	4		Var.			White bleached quartzite	Thin contorted laminae containing tourmaline	402	3	4		15	-	10	-	T	-	1	6.0
4	5					Brown tourmalinized quartzite		403	4	5		40	35	40	-	5	-	10	5.5
5	6		68°			Brown to white f.g. quartzite	Thin tourmalinized silty laminae	404	5	6		25	25	110	-	55	-	3	4.5
6	8.5					Brecciated quartzite	Tourmaline fills cavities and forms	405	6	7		45	55	225	T	175	-	4	4.0
							anastomosing veinlets. Disseminated pyrite	406	7	8		25	25	170	T	170	-	3	6.0
8.5	13.5		45°			Banded silicified siltstone	1st 11.8-12m Quartz vein with muscovite	407	8	9		35	15	100	-	270	-	1	3.0
				45°		Bending laminae disrupted. Portions	and pyrite. Disseminated dendritic	408	9	10		55	20	190	-	110	-	3	2.5
			40°			of the banding are rotated. Crenulated	pyrite	409	10	11		60	30	150	-	145	-	5	3.0
						laminae are evident		410	11	12		50	260	230	T	105	-	14	4.0
13.5	17							411	12	13		45	120	215	25	85	-	9	2.0
						Grey white finely laminated silicified siltstone	Blebs of pyrite (1-2%) throughout	412	13	14		55	30	130	-	310	-	3	2.5
								413	14	15		70	25	85	10	485	-	1	2.0
						Broken core		414	15	16		110	45	105	5	110	-	1	2.5
								415	16	17		55	55	25	T	15	-	14	3.0
17	19		30°			White finely laminated quartzite. Thin		416	17	18		40	45	15	T	10	-	12	4.5
						silty laminae		417	18	19		30	40	315	T	55	-	3	4.0
19	21.63		50°			Dark grey finely bedded silicified siltstone	(20.9m) Quartz, pyrite, arsenopyrite vein	418	19	20		30	20	570	-	85	-	5	3.0
						Distorted convolute laminae. Frequent cleavage	30° to b.c.a. 5mm thick	419	20	21		45	-	280	5	150	-	-	2.0
						offsets bedding. Small siltstone	Fine disseminated pyrite	420	21	22		45	15	80	-	145	-	3	1.5
			60°			"cup up" clasts		421	22	23		65	15	155	T	70	-	5	2.5
								422	23	24		50	60	135	T	110	-	3	3.5
								423	24	24.8		30	45	80	-	55	-	2	3.5
25	31					White mg-f.g. well sorted silicified	(25.8m) 3 quartz, pyrite, arsenopyrite veins	424	24.8	26		10	-	70	-	10	-	3	5.5
			60°			sandstone. Becomes more chloritic	25° to b.c.a. 3mm thick. "Stylolithe"	425	26	26.8		10	55	75	T	20	-	-	9.0
						towards the base	Fractures contain sulphides	426	26.8	28		20	-	55	-	40		5	5.5
			60°					427	28	29		60	610	175	5	75	-	8	4.0
								428	29	30		45	1500	155	20	95	-	53	5.5
								429	30	31		40	30	315	T	105	-	3	4.0
31	33.7					Finely laminated banded siltstone. Grain size		430	31	32		25	10	85	T	65	-	-	5.0
						overall fining down words. Chloritic		431	32	33		100	55	70	T	145	-	7	3.5

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

TENEMENT NAME BALFOUR SPECIMEN HILL No. ..... SHEET No. 4

PLAN – MAP REFERENCE .....

CO-ORDINATES 9630N 10075E AZIMUTH 227°M DRILLERS K. PARRY COMMENCED ..... DEPTH 116m HOLE No DPSH-BC

RL COLLAR ..... INCLINATION -45° DRILL TYPE ..... COMPLETED ..... CASING LEFT ..... DPO No(s) .....

DEPTH From (M)	DEPTH To (M)	Texture	So	S.	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by .....) Sn	W	Cu	Pb	Zn	Ag	Bi	Mo
37	42·8					F-g siltstone/mudstone. Massive	(38·7m) Quartz, pyrite, arsenopyrite 30° to C.A.	877432	33	34		250	85	75	-	800	-	6	20
						to finely laminated. Bedding	6mm thick.	433	34	35		390	100	210	T	325	-	41	3·0
						evident with beds 10-30 cm in thickness	(38·15m) Quartz, pyrite, wolframite 30° to C.A.	434	35	36		250	260	365	-	310	-	32	4·5
						with a sandy base	8mm thick	435	36	37		120	790	1000	5	275	-	150	3·5
							(39·2m) Quartz, pyrite, arsenopyrite, wolframite	436	37	38		90	15	105	-	160	-	8	2·0
							25° to C.A. 10mm thick	437	38	39		85	45	135	T	150	-	25	1·5
							(39·7m) Quartz, pyrite, arsenopyrite	439	39	40		140	140	340	T	115	-	83	1·0
						Limonite staining	20° to C.A. 10mm thick	439	40	41		95	40	170	T	140	-	31	1·5
							(41·8m) Quartz, pyrite, arsenopyrite, chalcopyrite	440	41	42		110	90	400	T	175	-	60	2·5
38	57					Graded white sandy siltstone	wolframite (minor) siderite 30° to C.A. 10mm thick	441	42	43		85	55	325	T	350	-	56	3·5
						to grey black argillaceous siltstone	(43·15m) Quartz, pyrite, arsenopyrite, chalcopyrite	442	43	44		95	190	155	T	160	-	33	1·5
			80°			Beds range from 1 to 20cm. Occurring	wolframite 30° to C.A. 15mm.	443	44	45		90	15	175	T	180	-	27	1·0
						oversteepened cross lamination. Sandstone	(48m) Quartz, pyrite, arsenopyrite	444	45	46		110	30	330	T	195	-	40	1·0
						dikelets. Numerous microfractures	wolframite 30° to C.A. 4mm thick	445	46	47		120	250	390	5	130	-	120	1·0
						Rounded "rip up" shale clasts	(51·2) Quartz, pyrite, arsenopyrite	446	47	48		150	170	380	T	120	-	58	1·5
						Pyrite cubes and dendrites in white	wolframite 20mm thick.	447	48	49		140	30	350	T	75	-	55	1·5
						sandier layers	(56·5) Quartz, pyrite, arsenopyrite	448	49	50		130	25	190	T	95	-	29	1·0
			60°	25°			wolframite 30° to C.A. 10mm thick	449	50	51		240	180	235	-	145	-	42	6·0
								450	51	52		100	160	575	T	175	-	128	1·5
								451	52	53		120	250	405	T	195	-	66	1·5
								452	53	54		90	40	180	5	150	-	41	0·5
								453	54	55		130	100	350	10	120	-	39	2·5
								454	55	56		120	75	380	10	50	-	53	1·0
								455	56	57		230	170	560	15	70	-	83	0·5
57	60					Dark grey massive to finely laminated	Blebs of pyrrhotite rimming a	456	57	58		85	15	145	5	110	-	30	-
						siltstone.	pyrite core	457	58	59		250	190	235	5	125	-	39	-
								458	59	60		90	130	180	5	55	-	4·9	0·5
60	73·2					Graded white sandy siltstone to	(62·5) Quartz, pyrite, arsenopyrite	459	60	61		95	25	295	10	85	-	41	1·0
			45°			grey black argillaceous siltstone	1cm thick 30° to C.A.	460	61	62		70	50	150	5	60	-	40	1·5
						Well developed cross lamination	Pyrrhotite/Pyrite blebs and euhedra	461	62	63		100	75	280	30	125	-	67	3·0
						"dikelets" and scour and fill structures		462	63	64		60	-	50	5	135	-	27	1·0

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

SHEET No. 3

TENEMENT NAME BALFOUR SPECIMEN HILL No.

PLAN – MAP REFERENCE

CO-ORDINATES 9650N 10075E AZIMUTH 227°M DRILLERS K. Fanny COMMENCED DEPTH 116m HOLE No. DDH DC 1

RL COLLAR INCLINATION -45° DRILL TYPE COMPLETED CASING LEFT DPO No(s)

DEPTH To(M)	Form	S.	S.	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ..... Sn	W	Cu	Pb	Zn	Ag	Bi	Mo	As
						63.5 - 64.5 Reddish alteration	977463	64	65		120	-	75	5	155	-	29	1.5	1A
						due to v.f.g. pink red mineral	464	65	66		65	10	95	T	270	-	26	2.0	-
							465	66	67		55	-	75	5	165	-	29	1.5	1A
							466	67	68		25	10	105	5	120	-	53	0.5	13
							467	68	69		40	15	75	5	640	-	29	1.0	30
							469	69	70		50	-	65	10	145	-	26	1.0	-
							469	70	71		60	20	85	15	160	-	34	1.0	14
							470	71	72		50	-	60	5	120	-	23	1.5	-
							471	72	73		55	-	60	65	40	-	26	2.0	9A
79		55°			Grey to black vf g siltstone/mudstone	Reddy white alteration follows bedding	472	73	74		85	-	70	T	265	-	18	1.0	50
						laminae. White blotches also evident	473	74	75		100	15	30	T	510	-	17	1.5	-
		10°	30°				474	75	76		120	85	105	T	120	-	22	1.5	2A
							475	76	77		140	30	215	T	80	-	36	1.0	17
							476	77	78		130	15	85	5	70	-	21	1.0	-
85					Graded grey white to dark grey siltstone	(78.3) Quartz, pyrite, arsenopyrite	477	78	79		550	240	435	25	120	-	37	1.5	76
					Beds are 1cm to 10cm thickness	chalcopyrite vein 6mm thick Parallel	478	79	80		190	160	745	70	55	-	93	3.0	11
					Current and parasedimentary features	to CA	479	80	81		60	50	340	15	90	-	76	3.0	16
							480	81	82		220	30	140	5	125	-	25	2.5	27
							481	82	83		75	250	230	10	75	-	41	2.0	11A
		40°					482	83	84		110	60	235	15	70	-	50	2.5	12
							493	84	85		170	70	285	40	70	-	51	2.5	25
86.5					Brecciated finely laminated siltstone		484	85	86		110	230	750	50	130	-	90	3.0	26
						(87.3) Quartz, pyrite, arsenopyrite	485	86	87		160	65	480	10	145	-	72	2.0	28
91					Finely laminated dark grey siltstone	1cm thick	486	87	88		260	100	340	50	100	-	86	2.0	43
					Minor "gleidels" Bedding laminae		487	88	89		170	100	320	25	70	-	51	2.0	31
					disrupted	(92) Pyrite, arsenopyrite, quartz, calcite vein 2cm thick 30° CA.	488	89	90		470	160	425	45	65	-	54	2.0	17
							489	90	91		110	360	830	65	155	T	38	6.0	54
93					Altered Zone - White bleaching alteration overprints the grey siltstone		490	91	92		440	260	410	40	160	-	40	2.5	100
					Remnant unaltered beds are evident - Brecciated silicified pyrite and pyrrhotite		491	92	93		290	60	125	20	145	-	17	1.0	30
					Finely laminated grey to black siltstone		492	93	94		220	85	390	-	115	-	11	..	36

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

TENEMENT NAME BALFOUR SPECIMEN HILL No. SHEET No. 4

PLAN – MAP REFERENCE

CO-ORDINATES 9630N 10025E AZIMUTH 227° M DRILLERS K. Parry COMMENCED DEPTH 116.m HOLE No. 22.81.35.1

RL COLLAR INCLINATION -45° DRILL TYPE COMPLETED CASING LEFT DPO No(s)

DEPTH To(M)	Texture	Sb	S.	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by ..... Sn	W	Cu	Pb	Zn	Ag	Bi	Flo	
					indicated by white sandier beds.	White alteration mineral associated	877494	95	96		270	410	710	50	115	-	195	2.0	8
					Bedding laminae disrupted in part	with fg. pyrite is disseminated	495	96	97		110	25	105	25	100	-	6	2.0	4
					indicating pre consolidation slumping	throughout	496	97	98		150	20	85	25	290	-	4	0.5	
					At 101m bedding is rotated 90°	(95:1) Quartz, arsenopyrite, pyrite, chalcopyrite	497	98	99		90	15	55	T	365	-	-	1.5	
					between 2 sandy layers	vein 2cm thick	498	99	100		60	10	70	20	150	-	1	0.5	
		56°				(95:6) Quartz, pyrite, arsenopyrite vein	499	100	101		90	10	25	20	295	-	-	1.5	
						1cm thick 25° to CA	500	101	102		95	-	75	25	370	-	4	2.5	16
							501	102	103		55	-	15	10	190	-	-	1.0	
					105:1 RR1454		502	103	104		75	25	75	20	95	-	4	1.5	
							503	104	105		140	45	125	15	65	-	-	2.0	16
						105.8 - 106.6 Disseminated pyrite	504	105	106		320	35	175	-	75	-	-	2.0	3
114.5					Grey to black finely laminated	approaches 30%	505	106	107		420	200	1500	25	345	-	41	1.5	17
					siltstone. Sandier component	At 106.6. sulfur sulphide vein containing	506	107	108		85	-	85	10	90	-	-	0.5	16
					present giving graded bedding.	pyrite, arsenopyrite, quartz, siderite	507	108	109		150	130	150	15	50	-	4	1.0	24
						wolframite	508	109	110		110	30	230	-	25	-	4	-	-
						110:2 Quartz, pyrite 6cm thick	509	110	111		140	180	565	5	170	-	53	4.5	36
						Sediment hornfelsised	510	111	112		55	20	60	10	70	-	-	2.0	-
116.		48				113.8. Pyrite vein filling fracture	511	112	113		100	60	245	T	105	-	9	3.0	12
							512	113	114		120	80	400	15	55	-	19	3.0	5
							513	114	115		70	15	100	5	70	-	-	1.5	2
							514	115	116		60	10	40	5	100	-	-	1.5	-
					End of Hole: 116m				EOH										