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

SHEET No. 1 of 4

TENEMENT NAME RAZORBACK No.

LOGGED BY : V. ROBERTS + A. McKAY

CO-ORDINATES 4499.5N/2949E AZIMUTH 270° GRID DRILLERS DC DRILLING COMMENCED 6·2·80 DEPTH 347·50m HOLE No. RC 1

RL COLLAR 240·75m INCLINATION 65° DRILL TYPE LONGYEAR 38 COMPLETED 26·2·80 CASING LEFT 9m DPO No(s) 25850

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 AMDEL) PPM Sn	W	Pb	Zn	Cu	Ag	Co	Ni	Cr
DO	206·80	181	Triomed		MASSIVE SERPENTINITE														
			to		Fi gr., magnetic, vitreous green.														
			9m.		Minor irregular fracturing. Minor														
			NQ		slip fibre along some joints/fractures.														
			to		Fi gr magnetite disseminated in														
			NQ·18		clumps, blebs and along fractures.														
			Mon		Occassionally some remnant texture														
			BQ		visible - not identifiable eg: 13·55m,														
					33·1 - 39·4m, well developed														
					small scale joint pattern. Similar														
					texture apparent in clasts in weakly														
					foliated brecciated sections at														
					112·5 - 121·3 + 187·6 - 188·75														
					Serpentinite probably originated														
					as an "alpine type" intrusive														
					with little or no differentiation.														
					Strongly brecciated + sheared sections		Note:												
					at 34·4 - 35·5; 57·6 - 58·5;		+ - denotes sample taken												
					67·7 - 72; 90·65 - 91·5; 96·6 - 97·4.		with core grinder.												
					121·3 - 130·4; 135·3 - 136·5														
					From 154·7 - 175 darker, denser														
					massive rock + higher magnetite														
					content.														
					198·5 - 206·8: 1% rounded spots														
					of carbonate 3-4mm in diameter														
					Sharp basal contact 30°/LCA.		795369+	204	206·80	2·80	4	<10	<5	75	2	<1	40	1100	130
206·80	320	113·20	BQ		TALC - CARBONATE	Disseminated magnetite with small	795370+	206·80	210	3·20	4	<10	<5	18	<2	<1	50	630	210
					Grey, massive.	alteration halos around magnetite													
					Disseminated po in localised	grains	71+	213	216	3·00	8	<10	<5	6	<2	<1	35	470	160
					areas.	Very minor disseminated po.													

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SHEET No. 2 of 4

TENEMENT NAME RAZORBACK No.

PLAN – MAP REFERENCE

CO-ORDINATES AZIMUTH DRILLERS COMMENCED DEPTH HOLE No. RC1 25828

RL COLLAR INCLINATION DRILL TYPE COMPLETED CASING LEFT DPO No(s) 25845, 25850

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 AMDEL) PPM Sn	W	Pb	Zn	Cu	Ag	Co	Ni	Cr	Ta
						Weak sedimentary banding @ 238m - 70°/LCA.	795372+	220	223	3.00	<4	<10	<5	12	<2	<1	30	470	120	
						20mm band po + magnetite @ 272.5m	73+	237	240	3.00	32	<10	<5	28	<2	<1	35	450	200	
							74+	250	253	3.00	4	<10	<5	26	<2	<1	35	440	190	
						Disseminated po 276 - 286m														
							795375+	269	272	3.00	55	15	5	18	<2	<1	70	760	320	
						Minor po, magnetite, + sphalerite @ 291.8m	795336	272	273	1.00	48	<10	<5	12	46		70	1050	370	
							37	273	276	3.0	65	<10	10	20	20		55	960	270	
							38	276	278	2.0	12	<10	15	8	5		40	900	240	
						Disseminated po 297 - 300m	39	278	280	2.0	240	10	10	25	42		50	1100	280	
							795340	280	283	3.0	460	<10	25	450	70		60	1300	270	
						Disseminated pyrite + po 303 - 308m.	41	283	286	3.0	740	<10	65	180	38		50	1150	320	
							795376+	286	290	4.0	70	10	140	540	16	<1	50	1000	380	
							795342	290	293	3.0	28	<10	30	160	15		55	980	260	
							43	293	295	2.0	28	<10	15	770	10		35	760	260	
							795377+	295	298	3.0	36	<10	5	20	<2	<1	45	770	250	
							795344	298	300	2.0	14	<10	5	15	5		40	710	240	
							795378+	300	303	3.0	14	<10	<5	20	2	<1	45	800	320	
							795345	303	306	3.0	70	<10	5	10	10		60	1050	140	
							46	306	308	2.0	18	<10	<5	12	28		45	730	210	
							795379+	308	314	6.0	6	<10	<5	16	2	<1	55	660	280	
							795347	314	316	2.0	24	<10	5	5	2		55	640	140	
							48	316	318	2.0	22	<10	5	5	18		60	940	150	
							49	318	320	2.0	6	<10	<5	5	130		50	740	140	
320	322.2	2.2	BQ		TALC CARBONATE WITH STRINGERS AND VEINLETS OF PYRRHOTITE. Also chalcopyrite, magnetite and minor sphalerite.	Talc and quartz adjacent to mineralisation.	795350	320	322.2	2.2	95	<10	20	18	260		45	810	280	
							51	322.2	322.5	0.3	480	<10	840	740	5300	48	180	1500	400	ppm
							52	322.5	322.8	0.3	26	<10	20	580	45	<1	65	1300	280	ppm
							53	322.8	324.0	1.2	83%	70	530	810	1.62%	75	70	1200	500	ppm
							54	324	325.4	1.4	170	<10	20	38	250	1	60	1600	640	ppm

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DRILL CORE LOG

SHEET No. 3 of 4

TENEMENT NAME RAZORBACK No.

PLAN – MAP REFERENCE

CO-ORDINATES AZIMUTH DRILLERS COMMENCED DEPTH HOLE No. RC 1

RL COLLAR INCLINATION DRILL TYPE COMPLETED CASING LEFT DPO No(s) 25845, 25850, 25848

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 AMDEL) ppm Sn	W	Pb	Zn	Cu	Ag	Co	Ni	Cr	Ta
322·2	322·5	0·3	BQ		MASSIVE PYRRHOTITE. Also arsenopyrite, chalcopyrite, magnetite and cassiterite. Quartz and talc-carbonate gangue. Upper contact 50°/LCA, lower contact 60°/LCA (irregular).	Core very magnetic. Minor alteration of talc-carbonate near contact with mineralisation.	795355	325·4	325·7	0·3	500	65	150	520	1000	3	50	1800	620	<10
							56	325·7	326·6	0·9	150	15	110	210	230	2	50	1050	390	<10
							57	326·6	330·2	3·6	34	<10	5	22	45	<1	55	1400	310	<10
							58	330·2	331	0·8	440	15	80	140	630		30	1200	410	
							795380	331	331·3	0·3	1200	<10	1200	4100	1500	28	65	1100	780	
							795359	331·3	334	2·7	44	<10	10	45	15		35	1000	340	
							60	334	336	2	6	<10	<5	10	5		30	770	240	
322·5	322·8	0·3	BQ		TALC CARBONATE.	Minor disseminated po + magnetite.	61	336	338	2	14	<10	<5	30	<2		35	680	610	
							62	338	340	2	<4	<10	<5	15	<2		40	700	420	
322·8	324	1·2	BQ		PYRRHOTITE-CHALCOPYRITE-ARSENOPYRITE CASSITERITE LODE ZONE. Upper contact 65°/LCA. Lower contact 85°/LCA.	Sulphides approx 50%. Quartz gangue. Minor band of dolomite. Abundant wollastonite near contact with dolomite.	63	340	342	2	4	<10	<5	15	<2		40	710	430	
							64	342	345	3	4	<10	<5	15	<2		40	1000	290	
							65	345	345·9	0·9	2950	160	370	480	6000	55	130	1500	390	<10
							66	345·9	346·6	0·7	110	<10	40	70	8		50	220	50	
							67	346·6	348·35	1·75	22	15	30	90	12	1	45	90	70	<4
324	325·4	1·4	BQ		TALC-CARBONATE. Small veinlets and patches of po, cp, mineralisation.	Quartz gangue associated with po + cp. Wollastonite along contact zones.	795368	348·35	352	3·65	12	<10	20	130	170	<1	35	140	90	
							Best intersections:													
										Est.										
325·4	325·7	0·3	BQ		PYRRHOTITE-CHALCOPYRITE LODE WITH TALC-CARBONATE 55°/LCA.	Abundant quartz and wollastonite and magnetite.		322·80	324	1·20	1300	70	530	810	1·6%	75	70	1200	500	
								345	345·90	0·90	2950	160	370	480	6000	55	130	1500	390	
325·7	326·6	0·9	BQ		TALC-CARBONATE WITH PYRRHOTITE-CHALCOPYRITE LODE 326·4-326·6 Mineralisation 55°/LCA.	Abundant quartz, wollastonite and magnetite.														
326·6	330·2	3·6	BQ		TALC-CARBONATE	Bands of magnetite 30°/LCA.														
330·2	331	0·8	BQ		TALC-CARBONATE WITH PO+CP VEINLETS	Abundant wollastonite.														
331	331·3	0·3	BQ		MASSIVE PO+CP. With magnetite + cassiterite	Abundant quartz + wollastonite. 45°/LCA														
331·3	345	13·7	BQ		TALC-CARBONATE. Limestone 45°/LCA.	Disseminated magnetite throughout.														

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

SHEET No. 4.14

TENEMENT NAME RAZORBACK No.

PLAN – MAP REFERENCE

CO-ORDINATES AZIMUTH DRILLERS COMMENCED DEPTH HOLE No. RC 1

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) PPM Sn	W	Pb	Zn	Cu	Ag
345	345·9	0·9	BQ		MASSIVE PYRRHOTITE. Min chalcopyrite and magnetite. Sulphides banded in places.	Minor quartz + willemite gangue. Basal contact 25°/LCA. Upper contact 35°/LCA. Lineation in sulphides 25°/LCA.										
345·9	346·6	0·7	BQ		CONGLOMERATE Subangular to rounded clasts of mudstone and basic volcanics.											
346·6	348·2	1·6	BQ		BASIC VOLCANIC – Tuffaceous (?) in places.	Lower contact 25°/LCA. Core badly sheared and broken 347·9–348·2 sheared 15-30°/LCA.										
348·2	367·5	19·3	BQ		CONGLOMERATE Polymictic – fragments of basic volcanics, mudstone, quartzite, chert, talc-carbonate and minor limestone. Matrix chloritic ± minor calcite. Clasts up to 50mm, subangular to rounded. Some pebbles coated with calcite. Some soft pebble structures with pebbles compacted and deformed.	Minor calcite veins. Bedding: 348·35m – 30°/LCA. 350m – 30°/LCA. 359·5m – 50°/LCA.										
					END OF HOLE											

Downhole camera surveys:

	Azimuth	Dip
30m	267°30'	65°
60m	238°	65°40'
90m	258°	66°
125m	246°	66°
160m	250°45'	66°15'

	Azimuth	Dip
90m	269°	64°30'
220m	249°30'	66°30'
250m	245°45'	69°
280m	252°30'	70°30'
310m	248°30'	71°45'
334m		
364m	254°30'	71°

Note: Azimuth readings above 200m affected by magnetite in serpentinite.