

A. D. MCKAY

831023

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

NOTE - ALL SAMPLES ARE HALF DRILL CORE SAMPLES EXCEPT FOR THOSE DENOTED "G" WHICH ARE GRIND SAMPLES SEIVED TO -80 MESH
TENEMENT NAME OONAH SHEET No. 10 No. 2

CO-ORDINATES $4980.9E$ } Approx $5160.0E$ } AZIMUTH 255° MAG. (GRID WEST) DRILLERS D.K. PARRY COMMENCED 21-11-80 DEPTH 151.0m HOLE No. DD80 OC 4
RL COLLAR INCLINATION -50° DRILL TYPE BOYLES 37 COMPLETED 2-12-80 CASING LEFT - DPO No(s) 26513, 26514, 26515

PLAN - MAP REFERENCE

DEPTH		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 26515)								
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W			
0.0	8.2	-			No CORE														
8.2	18.5	6.8	1/8"		BASIC PYROCLASTICS - vesicular - chlorite and quartz in vesicles	COMPLETELY WEATHERED DOWN TO 16m - ORANGE CLAY Minor quartz pyrite veins	869101	17.0	18.5	0.6	110	60	4	2500	1100	15			
8.5	19.5	1.0	8.2m		MINERALISATION IN BASIC PYROCLASTICS	PYRITE GALENA QUARTZ VEINS	102	18.5	19.5	1.0	2350	300	19	4800	540	10			
9.5	31.8	12.3	100.0m		BASIC PYROCLASTICS - vesicular pyroclastics -green in colour with chlorite and quartz in vesicles	QTZ AND CHLORITE IN VESICLES PYRITE AND GALENA MIN. IN QTZ VEINS FROM 22.4 - 22.8m MINOR G ₂ VEINLET @ 30.1m	103	19.5	21.8	2.3	210	120	6	3200	2700	25			G
							104	21.8	22.4	0.4	110	36	2	1000	1100	<10			
							105	22.4	22.8	0.4	250	220	15	800	600	<10			
							106	22.8	23.8	1.0	150	42	8	6500	2100	20			
							107	23.8	24.8	6.0	260	50	1	500	660	25			G
							108	24.8	30.8	1.0	130	32	3	2000	380	25			
							109	30.8	31.8	1.0	220	26	4	1700	600	15			
31.8	32.0	0.2	BR		MASSIVE PYRITE WITH QUARTZ AND CARBONATE GANGUE	CONTACT ANGLE 70° @ 32.0m	869110	31.8	32.0	0.2	860	460	17	1600	260	25			
32.0	65.1	33.1	100.0m		BASIC PYROCLASTICS vesicular - qtz chlorite py, gn, in vesicles	34.9 - 35.6m QTZ-DOLOMITE VEINS with galena - pyrite mineralisation Vesicles are filled with pyrite and galena in places 70° @ 37.2m	111	32.0	33.0	1.0	440	60	2	580	230	<10			
							112	33.0	34.0	1.0	310	48	55	1.60	160	20			
							113	34.0	34.9	0.9	360	110	55	2.20	340	<10			
							114	34.9	35.6	0.7	1500	550	300	9.50	820	40			
							115	35.6	36.6	1.0	1250	85	16	3900	160	20			
							116	36.6	37.6	1.0	140	24	8	2700	240	<10			
							117	37.6	38.6	1.0	100	22	3	1200	200	<10			
							869118	38.6	39.6	1.0	170	75	18	8400	620	35			

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C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOGSHEET No. 20
No. 29
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TENEMENT NAME DONAH

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 80 DC 4

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

DEPTH		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.....)									
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W				
						NARROW VEINLETS OF	869119	39.6	40.6	1.0	95	48	12	3500	180	110				
						QTZ DOLOMITE PYRITE	120	40.6	41.6	1.0	1500	110	12	1200	120	15				
						GALENA THROUGHOUT	121	41.6	42.6	1.0	85	40	3	520	130	10				
							122	42.6	43.6	1.0	170	20	1	320	140	<10				
						MINERALISATION @ 42.4m	123	43.6	45.6	2.0	200	48	1	720	780	30				G
						IS PARALLEL WITH LAYERING	124	45.6	47.6	2.0	80	36	1	500	480	15				G
						- POSSIBLY SYNGENETIC	125	47.6	48.6	1.0	75	20	1	540	150	<10				
						SULPHIDES	126	48.6	49.6	1.0	230	20	1	300	220	10				
						- ANGLE 60° @ 42.4m	127	49.6	50.6	1.0	60	26	<1	210	130	<10				
							128	50.6	51.6	1.0	210	20	<1	160	110	<10				
							129	51.6	52.6	1.0	1750	26	<1	85	95	10				
							130	52.6	53.6	1.0	760	26	1	55	80	15				
						PY IN VESICLES @ 53.6-55.6	131	53.6	54.6	1.0	3350	26	1	60	95	10				
							132	54.6	55.6	1.0	3400	32	1	90	100	20				
						57.6m ONWARDS	133	55.6	56.6	1.0	780	48	2	220	140	10				
						PYROCLASTICS ARE ALTERED	134	56.6	57.6	1.0	260	30	1	110	170	15				
						TO PALE GREEN CHLORITE	135	57.6	58.6	1.0	1000	140	4	780	100	15				
						RICH ROCK - BEST	136	58.6	59.6	1.0	2050	1700	80	7400	100	60				
						MINERALISATION IS IN	137	59.6	60.6	1.0	3350	50	5	250	40	15				
						ALTERED PYROCLASTICS	138	60.6	61.6	1.0	1500	34	2	280	300	10				
						? CASSITERITE	139	61.6	62.6	1.0	2000	570	14	350	130	25				
							140	62.6	63.6	1.0	800	40	2	670	70	20				
							141	63.6	64.4	0.8	5500	240	5	180	32	45				
							142	64.4	65.1	0.7	5400	75	2	70	24	50				

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

SHEET No. 3

024

TENEMENT NAME OONAH No.

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 80 0C 4

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

DEPTH		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.....)					
From (M)	To (M)										Sr	Cu	Ag	Pb	Zn	W
5.1	74.5	9.4	NQ		GREY SHALES	Small qtz - dolomite	869 143	65.1	66.1	1.0	4050	1100	35	170	48	20
					Finely laminated grey	veinlets carrying py, po	144	66.1	67.1	1.0	180	160	4	75	10	15
					shales with thin	epy and galena	145	67.1	68.1	1.0	320	85	1	25	8	10
					interbeds of carbonaceous	and ? stannite	146	68.1	69.1	1.0	920	1200	80	310	36	15
					black shale	occur throughout	147	69.1	70.1	1.0	700	36	1	45	8	<10
							148	70.1	71.1	1.0	390	16	1	25	8	10
						Pyrite occurs as both	149	71.1	72.1	1.0	2150	16	<1	25	4	10
						syngenetic bands and	150	72.1	73.1	1.0	130	14	<1	20	8	<10
						epigenetic veins	869 801	73.1	74.5	1.4	200	55	3	90	34	20
						and gashes										
						Bedding 70°-80°										
						Soft sediment micro-										
						faults occur										
						Veining most abundant										
						73.1 - 74.5m - sulphides										
						10% of core										
14.5	76.4	1.9	NQ		MASSIVE PYRITE WITH	Vein mineralisation	869 802	74.5	75.4	0.9	2800	3700	35	660	930	<10
					qtz carbonate		803	75.4	76.4	1.0	1800	2400	28	610	400	100
					Minor po epy											
76.4	80.3	3.9	NQ		THINLY LAMINATED GREY	Qtz carbonate veinlets	804	76.4	77.4	1.0	55	440	5	820	3200	25
					SHALES MINOR BANDS OF	throughout containing	805	77.4	78.4	1.0	70	44	1	55	70	10
					BLACK SHALE AND QUARTZITE	py epy and Ag -	806	78.4	79.4	1.0	1900	3700	70	80	2900	35
					Bedding - 90°	minerals	807	79.4	80.3	0.9	1200	1500	13	230	100	20

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

SHEET No. 420

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

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. P.P. 80. 02. 4

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

DEPTH		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.....)								
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W			
30.3	81.2	0.9	NQ		MASSIVE PYRITE with qtz - carbonate and minor shale bands Minor cpy and Sulphides - 90%		869 808	80.3	81.2	0.9	330	450	21	510	190	210			
81.2	82.2	1.0	NQ		Grey + BLACK SHALES - finely laminated - bedding 90°	Narrow veinlets and syngenetic bands of fine grained pyrite	809	81.2	82.2	1.0	390	18	<1	60	34	<10			
82.2	84.2	2.0	NQ		MICACEOUS QUARTZITE	QTZ CARBONATE veinlets with pyrite mineralisation - sulphides 2%	810	82.2	83.2	1.0	110	380	<1	15	18	<10			
							811	83.2	84.2	1.0	75	160	<1	20	36	25			
84.2	85.1	0.9	NQ		MINERALISATION	VEINS OF MASSIVE PYRITE in white qtz and quartzite - sulphides 20%	812	84.2	85.1	0.9	50	28	<1	10	16	10			
85.1	88.1	3.0	NQ		FINELY LAMINATED GREY AND BLACK SHALES bedding variable av. 70°	Narrow veinlets of pyrite - sulphides <5%	813	85.1	86.1	1.0	75	26	1	35	12	<10			
							814	86.1	87.1	1.0	1400	34	1	45	22	15			
							815	87.1	88.1	1.0	320	26	<1	30	34	20			
88.1	89.4	1.3	NQ		MICACEOUS QUARTZITE bedding - 80°	Abundant fine pyrite	816	88.1	89.4	1.3	1000	680	11	2200	17%	10			

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

SHEET No. 5

026

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

CO-ORDINATES AZIMUTH DRILLERS COMMENCED DEPTH HOLE No. DD 80 OC 4

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

DEPTH		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.....)								
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W			
89.4	91.5	2.1	NQ		BLACK SHALES Finely banded with grey shale bands bedding 80°	Pyrite in fine layers and veins	869 817 818	89.4 90.2	90.2 91.5	0.8 1.2	860 400	85 450	1 5	100 150	120 600	25 110			
						Core badly broken - possible shearing * SLIDE FAULT ZONE													
91.5	93.8	1.0			BRECCIATED WHITE QTZ WITH ABUNDANT PYRITE	Abundant pyrite and Cpy - sulphide 50% Bad core loss - 1.6m lost between 91.5 - 93.5m. Rock has appearance of stope fill material - possible old stope?	819	91.5	93.8	1.0	3.7%	4.1%	210	730	2000	75			
93.8	94.2	0.4			MICACEOUS QUARTZITE	Abundant pyrite veinlets	820	93.8	94.2	0.4	330	480	3	140	46	15			
94.2	97.4	2.0			Massive pyritite mineralisation with qtz carbonate gangue. Patches of stannite in places Sulphides - 90% core	Core loss 1.2m 94.2 - 97.4m	821 822	94.2 95.8	95.8 97.4	1.0 1.0	560 1.0%	8000 21.5%	120 290	610 1200	110 250	110 10			

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C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOGSHEET No. 6 027
No.

TENEMENT NAME OONAH No.

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD80 OC4

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

DEPTH		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.....)									
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W				
97.4	100.0	2.6	NQ		INTERBEDDED BLACK SHALE AND QUARTZITE - brecciated with white quartz veining - angles variable	Veins of pyrite throughout	869 823 824	97.4 98.4	98.4 100.0	1.0 1.6	210 110	270 90	17 3	140 90	18 10	10 10				
100.0	109.8	9.8	BQ ↓		FAULT ZONE Brecciated micaceous qtzite and black shales	Abundant white quartz and carbonate veining with zones of pyrite mineralisation throughout Sulphides 5% overall	825 826 827 828 829 830	100.0 102.0 104.0 106.0 108.1 109.0 109.0	102.0 104.0 106.0 108.1 109.0 109.8	1.0 2.0 2.0 0.8 0.9 0.8	1500 580 680 460 540 430	130 180 220 270 2400 310	4 8 3 4 7 3	150 510 75 50 180 110	40 50 30 70 160 55	15 20 10 10 110 10				
						Core loss 1.0m 100.0-102.0m loss 1.5m 105.6-108.1m														
109.8	110.8	1.0			MINERALISATION	Massive pyrite with abundant white quartz. veining - angular fragments of black shale - brecciated	831	109.8	110.8	1.0	3050	3400	41	670	160	25				
110.8	117.0	6.2			BRECCIATED QUARTZITE with minor black shale interband	Abundant white quartz carbonate veining - minor pyrite veinlets Core broken throughout - brecciated and contorted bedding	832 833 834	110.8 112.8 114.8 117.0	112.8 114.8 117.0	2.0 2.0 2.2	500 160 130	240 44 700	3 1 6	85 30 420	24 36 34	110 110 110				

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C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOGSHEET No. 7
No. 020

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD.80 0C4

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

DEPTH		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.....)							
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W		
117.0	121.6	4.6			INTERBEDDED QUARTZITE AND BLACK SHALE BEDDING - 60° BRECCIATION AND QUARTZ VEINING 118.4 - 119.0m	Minor quartz carbonate veinlets throughout 2cm band pyrite @ 118.4m Core loss 0.6m 118.2 - 120.6m	869835 836 837	117.0 119.0 120.6	119.0 120.6 121.6	2.0 1.0 1.0	600 20 14	140 48 36	1 1 1	55 25 45	16 28 60	10 15 10		
121.6	128.7	7.1			MICACEOUS QUARTZITE Narrow bands (1cm) of possible tuffaceous material bedding 40°	Minor disseminated pyrite throughout	838 839 840 841	121.6 123.6 125.6 127.6	123.6 125.6 127.6 128.7	2.0 2.0 2.0 1.1	24 1300 920 22	22 20 55 60	<1 <1 <1 <1	50 35 60 200	95 60 130 70	110 110 60 60		G G
128.7	133.0	4.3			INTERBEDDED QUARTZITE AND BLACK SHALE Bedding var. 30°-60°	Minor quartz veinlets												
133.0	145.2	12.2			QUARTZITE with minor black shale. Lode cast and flame structure Bedding 80°	Minor quartz. Abundant veinlets Fine grained black mineral @ 137.3m Very minor pyrite (<1%) Small 10cm band pyrite mineralisation 142.6-142.7m	842	136.1	138.1	2.0	50	140	<1	50	200	110		G
							843	141.6	142.6	1.0	20	12	<1	25	55	110		
							844	142.6	142.9	0.3	34	210	5	200	55	10		
							845	142.9	143.9	1.0	22	30	<1	90	75	<10		

