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Received Answered				16 FEB 1982
DEPT. OF MINES				REG. No. 1248/82
				Registra: E & IL

CRA EXPLORATION PTY.LTD.

OONAH PROSPECT - TASMANIA

INTERIM REPORT ON EXPLORATION UNDER THE

CRAE - MINOPS J.V. AGREEMENT

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Date: January, 1982.

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1. SUMMARY

Mineralisation at Onah is divided into the Galena Lode (Lead-Silver) in the south-central part of the ML associated with a breccia zone, and the Stannite Lode (Tin-Copper-Silver) in the centre associated with brecciated black shales and vesicular pyroclastics. There are extensions of these mineralised lithologies to the southwest and northeast.

Reasonable tin values were obtained only from the Stannite Lode itself e.g. 5.9 metres @ 1.75 percent Tin, 200 ppm silver, 2.4 percent copper in DD80 OC4, the weighted average being 10.3 metres @ 0.57 percent tin.

There are no significant intersections to the southwest while holes to the northeast either passed through old workings or intersected only minor mineralisation.

Except for the Stannite Lode, elevated lead and silver values are generally restricted to narrow quartz-siderite veins.

The Galena Lode was not tested in this programme.

2. INTRODUCTION

The 1980-1981 drilling programme was designed to obtain further intersections of the tin-copper-lead mineralisation in the Stannite Lode in the centre of the ML, previously drilled by CRA Exploration in 1979-1980 (Report No. 10221), and to test for extensions to the southwest and northeast associated with black shales and known minor mineralisation.

3. CONCLUSIONS

1. Significant tin mineralisation is restricted to the vicinity of the Stannite Lode.

Dimensions of the zone of interest are up to 200 metres along strike (roughly between DD81 OC10 and DD81 OC12), 60 metres thick and at least 300 metres down dip, being open in depth. This volume would contain some 19 million tonnes of material.

Dimensions of the Stannite Lode itself are of the order of 150 metres along strike and 10 metres thick, representing some 1.3 million tonnes (at 3 tonnes per cubic metre) to a depth of 300 metres. Average grade of this block of ore is 0.57 percent tin, possibly decreasing down dip. Minor silver is present.

2. The pyritic black shales between the Stannite Lode and Bradshaw's open cut are essentially unmineralised

3. Mineralisation in the Junction Workings area is restricted to narrow quartz-siderite veins.

4. RECOMMENDATIONS

1. DD81 OC12 (in the northern part of the Stannite Lode) should be deepened as good tin values were obtained down to the present depth of 208.5 metres.

2. After mapping and IP traverses in the area, a hole should be planned to locate any northward extensions of the Stannite Lode. (Minops holes M2, M5 and M7 failed to locate any such extensions but may have been stopped too short in this structurally complex zone.)

3. A 400 metre hole collared near the "Cassiterite Lode" adit and inclined -80 degree west should be drilled to test for Stannite Lode mineralisation at depth (i.e. about 500 metres down the dip of the lode).

4. Mapping and geophysics should be undertaken in the south east portion of the lease to determine any connection with the Queen Hill prospect to the south.

5. A shallow hole may be planned to test for mineralisation below the "Cassiterite Lode".

5. GEOLOGY

The general succession in the Zeehan area is subdivided into:

Cambrian	Crimson Creek Formation	Greywackes, grey shales, quartzites
Lower Cambrian (?)	Success Creek Group	Greywackes, carbonaceous black shales, altered basic pyroclastics
Upper Proterozoic	Oonah Quartzite Formation	Quartzites, grey slate

The northwest part of the Oonah prospect is underlain by Oonah quartzite with subordinate grey slate, while rocks of the Success Creek group outcrop over the remainder.

Of the Success Creek rocks, grey shales and interbedded quartzites cover the largest area while there are extensive pyroclastics particularly in the centre of the ML with smaller outcrops in the north-east and south-west. Black shales occur mainly around the Minops shaft with discontinuous extensions towards the south-west to Bradshaw's open cut and towards the north-east to the Junction Workings.

6. MINERALISATION

Regionally tin-copper-lead-silver fissure-vein mineralisation is best developed in rocks of the Success Creek group, particularly the black shales.

The Oonah mineralisation has been divided into the "Galena Lode" and the "Stannite Lode" south and north respectively of the "Slide" shear, which may either be a thrust zone or an early feature which deviated but did not fault the lodes, becoming itself a definite ore channel.

The Galena Lode consists of irregular veins and masses of pyrite with argentiferous galena and sphalerite in quartz and siderite occurring in a breccia zone.

The complex tin-copper-silver mineralisation of the Stannite Lode comprises sulphides (pyrite, stannite, chalcopyrite, lead-silver sulphides and galena) in brecciated black shales with quartz-siderite veining, and as vesicle fillings and veins in basic pyroclastics.

The Junction Workings are on the southern continuation of the Zeehan Western mine where galena and pyrite with argentite and pyrargyrite occur as impersistent patches in siderite.

Bradshaw's opencut west of the lease consists of overlapping lenses of pyrite formerly exploited for the production of sulphuric acid, and is reputed to contain minor chalcopyrite and cassiterite.

The "Cassiterite Lode" near the eastern boundary of the lease consists of a vein "a few inches thick" of grey cassiterite and pyrite in black shale which runs west into the hill and dips north. An adit was driven on the lode for 117 feet (42.5 metres) revealing up to 2 feet (0.7 metres) of siliceous gossan and pyrite. A bulk sample of 15 tons assayed 0.25 percent tin (1913).

Bell's adit in the south-east corner of the lease was driven along a lead-silver vein, but the workings were flooded when a major shear was intersected.

The Queen Hill tin prospect (Aberfoyle) situated south of the lease, comprises orebodies similar to the Stannite Lode in a tightly folded sequence of Success Creek rocks.

7. GEOPHYSICS

SP and EM anomalies from the 1964-65 BMR survey extend from just north of the Minops shaft south-westwards to Bradshaw's open cut, being generally coincident with outcrops of black shale.

8. GEOCHEMISTRY AND MAPPING

Several tracks were cleared and mapped in the south-west part of the lease, revealing numerous outcrops of pyritic black shales.

Soil auger traverses and rock-chip sampling of the black shales in this area produced no anomalous results.

9. DIAMOND DRILLING

Holes DD80 OC 1/2 and DD80 OC3, completed in early 1980, were described in report No. 10221.

Holes DD80 OC4 and DD80 OC5 were drilled in late 1980 with holes DD81 OC6-13 being completed in 1981.

A total of 2370 metres has been drilled (1443.9 metres in 1981, DD81 OC6-13).

Holes DD81 OC6-9 were designed to test for mineralisation in the black shales extending south-west to Bradshaw's open cut.

Holes DD80 OC4, DD81 OC10 and 12 were designed to test the Stannite Lode and its immediate extensions.

Holes DD80 OC5, DD81 OC11 and 13 were designed to test below the Junction Workings and between there and the Stannite Lode.

Core with obvious or suspected mineralisation was split for assay. Grid samples were taken of the remainder with positive sections being resampled by splitting.

Significant results are tabulated in Appendix I.

10. DRILLING RESULTS

10.1 Tin

The best tin intersections were from holes DD81 OC4 and DD81 OC12 in the Stannite Lode as follows:

OC4	31.8 - 32.0	0.2 metres @	0.86 percent Tin
	58.6 - 66.1	7.5 metres @	0.3 percent Tin
	91.5 - 97.4	5.9 metres @	1.75 percent Tin
OC12	30.1 - 36.0	5.9 metres @	0.25 percent Tin
	66.8 - 71.0	4.2 metres @	0.62 percent Tin
	75.0 - 78.5	3.5 metres @	0.19 percent Tin
	179.8 - 208.5	28.7 metres @	0.29 percent Tin

These results augment these from DD80 OC 1/2 and OC3 (See Report No. 10221, Appendix II this report).

The southwest extension of the Stannite Lode was intersected in DD81 OC10 as follows:

93.7 - 94.7	1.0 metres @	0.35 percent Tin
114.0 - 118.0	4.0 metres @	0.5 percent Tin
121.5 - 122.5	1.0 metres @	0.15 percent Tin
125.0 - 128.0	3.0 metres @	0.1 percent Tin

No tin mineralisation was encountered in holes DD81 OC6 - 9 in the black shales between the Stannite Lode and Bradshaw's open cut.

Hole DD80 OC5 passed through old stopes of the Junction Workings from 34.0 to 39.0 metres and from 47.0 to 67.0 metres. Only a minor intersection of 0.6 metres @ 0.65 percent Tin at 118.0 to 118.6 metres was recorded.

Hole DD81 OC11, 50 metres to the west of DD81 OC5, intersected 1.5 metres @ 0.32 percent tin from 14.5 to 16.0 metres.

Hole DD81 OC13, some 100 metres to the east of DD81 OC5, encountered only lead-zinc mineralisation in narrow siderite veins with tin values up to 680 ppm.

007 10.2 Silver

Elevated values for Silver generally coincide with galena-siderite vein mineralisation, the best results being as follows:

DD80 OC4	34.9 - 35.6 91.5 - 97.4	0.7 metres @ 200 ppm Silver with tin, lead 5.9 metres @ 200 ppm Silver with tin, copper
DD81 OC5	102.2 - 102.5	0.3 metres @ 160 ppm Silver
DD81 OC 10	114.0 - 116.0	2.0 metres @ 107 ppm Silver with tin, copper, lead
DD81 OC 12	24.0 - 24.6 46.5 - 46.7 67.8 - 71.0	0.6 metres @ 235 ppm Silver with copper, lead 0.2 metres @ 205 ppm Silver with copper, lead, zinc 3.2 metres @ 110 ppm Silver with tin, copper
DD81 OC 13	64.5 - 65.3 94.3 - 94.5	0.8 metres @ 520 ppm Silver with lead 0.2 metres @ 295 ppm Silver with lead

10.3 Lead

The best lead intersections was in DD80 OC 4 where 4.4% lead over 2.6metres occurs from 33.0 to 35.6 metres.

High values were recorded for individual siderite vein zones as follows:

DD81 OC 9	173.0 - 173.7	0.7 metres @ 3.4 percent lead
DD81 OC 10	85.5 - 86.5 114.0 - 115.0	1.0 metres @ 1.45 " " 1.0 metres @ 1.45 " "
DD81 OC 12	12.0 - 24.0 24.0 - 24.6 46.5 - 46.7	12.0 metres @ 1.25 " " (grind samples) 0.6 metres @ 8.2 " " 0.2 metres @ 7.35 " "
DD81 OC 13	64.5 - 65.3 94.3 - 94.5 207.7 - 208.0 219.3 - 219.5	0.8 metres @ 15 " " 0.2 metres @ 7.65 " " 0.3 metres @ 2.95 " " 0.2 metres @ 0.98 " "

Numerous lead values up to 1 percent were also recorded.

10.4 Zinc

High zinc values occur with the galena-siderite vein mineralisation as follows:

DD80	OC 4	88.1 - 89.4	1.3 metres @ 1.7 percent zinc		
DD81	OC 9	173.0 - 173.7	0.7 metres @ 1.45	"	"
DD81	OC 10	85.5 - 86.5	1.0 metres @ 1.05	"	"
DD81	OC 12	46.5 - 46.7	0.2 metres @ 1.8	"	"
DD81	OC 13	219.3 - 219.5	0.2 metres @ 4.03	"	"

10.5 Copper

2.4 percent copper over 5.9 metres associated with pyrite and quartz-siderite veins was intersected in DD80 OC 4 from 91.5 - 97.4 metres, coinciding with 1.75 percent tin and 200 ppm silver over the same distance. Values up to 0.5% copper in narrow mineralised siderite veins were recorded in DD80 OC 4, DD81 OC 9, 10, 12 and 13.

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11. REFERENCE

McKay, A.D. 1980 Oonah Propsect - Tasmania.
Report on first stage of exploration under the
CRAE - MINOPS J.V. agreement.
CRAE Report No. 10221.

12 KEYWORDS

Tin, silver, veins, black shale, pyritic volcanics, drill-diamond.
Queenstown SK 55-5.

13. LIST OF PLANS

<u>Plan No.</u>	<u>Title</u>	<u>Scale</u>
TASH 566	Oonah Propsect, Outcrop geology	1:1000
TASH 567	Section DD80 OC 1-2	approx. 1:1600
TASH 568	DD80 OC 3	approx. 1:1800
TASH 569	DD80 OC 4	approx. 1:1000
TASH 570	DD80 OC 5	approx. 1:1000
TASH 571	DD81 OC 6,7	1:1000
TASH 572	DD81 OC 8	1:1000
TASH 573	DD81 OC 9	1:1000
TASH 574	DD81 OC 10	1:1000
TASH 575	DD81 OC 11	1:1000
TASH 576	DD81 OC 12	1:1000
TASH 577	DD81 OC 13	1:1000

Appendices

- I Summary of Assay Results
- II Stanthite node intersections
- III Drill hole sheets OC 4 to OC 13

APPENDIX I

SUMMARY OF ASSAY RESULTS

SUMMARY OF ASSAY RESULTS.

831014

Ground Core										Split Core										CORE DESCRIPTION				
Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES						Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES										
				Sn	W	Cu	Pb	Zn	Ag					Sn	W	Cu	Pb	Zn	Ag					
<u>DD 81 OC 6</u>																								
										931616	20.0	21.0		230					1350					Volcanics
										931642	45.7	46.5							1025					Black shale
										931694	97.5	98.5							2150					" "
										931698	101.5	102.5							2400					" "
<u>DD 81 OC 7</u>																								
										931817	37.5	39.0							1850	1500				Volcanics Quartzite
931848	74.0	78.0				260																		
<u>DD 81 OC 8</u>																								
931929	129.0	131.5				170																		
931930	131.5	135.4				290																		
<u>DD 81 OC 9</u>																								
931943	75.0	85.0						1000																
										931957	115.3	117.0							1600					Volcanics Quartzite
										931962	121.0	122.0							2450					Grey shale
										931972	131.0	132.0							2050	1900	8950	21.5		" "
931981	153.3	157.0						1200																
										931987	173.0	173.7							1650	3.4%	1.45%	48		" " Galena-py in g-z-sic

SUMMARY OF ASSAY RESULTS.

831015

014

Ground Core										Split Core										CORE DESCRIPTION
Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES						Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES						
				Sn	W	Cu	Pb	Zn	Ag					Sn	W	Cu	Pb	Zn	Ag	
DD 81	0C	10																		
74001	9.0	17.3					2350													Volcanics
74002	17.3	23.1						1700												Quartzite
974026	93.7	97.5	2480							974023	85.5	86.5	683			1.45%	1.05%	39		" Pygalena in qz veins
										974381	93.7	94.7	3500							Black shale. Pyritic
										974382	94.7	95.7								Quartzite
										974383	95.7	96.7								"
										974384	96.7	97.5								Grey shale. Qz veins
										974031	108.5	109.1			4700	1450	3825	32		Pygalena in quartzite
974033	113.0	117.0	2780				2950	44		974385	113.0	114.0								Quartzite
										974386	114.0	115.0	6800		1350	1.45%		105		"
										974387	115.0	116.0	1.2%					110		Quartzite/grey shale. Qz Pyrites
										974388	116.0	117.0	250							Grey shale
974034	117.0	119.0	374							974389	117.0	118.0	1650							Quartzite
										974464	118.0	118.5								"
										974465	118.5	119.5								"
74035	119.0	121.5	626							974466	119.5	120.5								"
										974467	120.5	121.5								"
974036	121.5	125.0	720							974468	121.5	122.5	1450							Grey shale. Most py.
										974469	122.5	123.8								"
										974470	123.8	125.0								"
74037	125.0	128.3	1010							974390	125.0	126.0	1650							"
										974391	126.0	127.0	330							"
										974392	127.0	128.0	930							"
										974057	190.8	191.7			1450					Quartzite
										974058	191.7	192.3			1800					" Pyritic
DD 81	0C	11.5																		
										974064	14.5	16.0	3180							Black shale. Pyritic
										974067	19.5	21.5			1500					"

SUMMARY OF ASSAY RESULTS.

831018

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Ground Core				Split Core													CORE DESCRIPTION								
Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES								Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES									
				Sn	W	Cu	Pb	Zn	Ag	Sn	W					Cu		Pb	Zn	Ag					
974173	166.5	169.5			150																				Grey shale. Pg. Qz-sid var.
974175	172.5	176.0		6150	160									974482	172.5	173.7									"
														974483	173.7	174.9									"
														974484	174.9	176.0									"
974176	176.0	179.8		880										974485	176.0	176.9		1050							"
														974486	176.9	177.8									"
														974487	177.8	178.7									"
														974488	178.7	179.8									"
974177	179.8	181.0		1850	260									974489	179.8	181.0		1950							Quartzite
974178	181.0	185.3		1700										974490	181.0	182.1		800							Grey shale
														974491	182.1	183.2		1250							"
														974492	183.2	184.3		200							"
														974493	184.3	185.3		460							"
974179	185.3	186.2		1400	260									974494	185.3	186.2		1250							Quartzite
974180	186.2	189.7		4650										974495	186.2	187.4		1.0%							Grey shale
														974496	187.4	188.5		3300							"
														974497	188.5	189.7		2250							"
974181	189.7	192.2		1250										974498	189.7	191.0		1400							"
														974499	191.0	192.2		280							"
974182	192.2	193.8		3150	240									974500	192.2	193.0		1950							Quartzite
														974501	193.0	193.8		8450							"
974183	193.8	195.1		8750	140									974502	193.8	195.1		4800							Grey shale
974184	195.1	197.5		2500										974503	195.1	196.3		470							Quartzite
														974504	196.3	197.5		2200							"
														974185	197.5	198.5		1800							Black shale Pg. Brecciat
														974186	198.5	199.5		3650							"
														974187	199.5	200.5		2450							"
														974188	200.5	202.1		1.2%							Qtz/Black shale
														974189	202.1	204.5		6000							"
974190	204.5	208.5		660										974595	204.5	205.6		370							Grey shale
														974596	205.6	208.5	0.3	1900							Quartzite. Pb-Gz using

APPENDIX II

STANNITE LODE INTERSECTIONS

APPENDIX IISTANNITE LODE INTERSECTIONS

<u>Hole No.</u>	<u>Intersection Width (metres)</u>	<u>Percent Tin</u>	<u>Metre Percent</u>
OC 1/2	4.45	0.59	2.6
OC 3	12.1	0.23	2.8
OC 4	5.9	1.76	10.4
OC 10	4.0	0.5	2.0
OC 12	28.7	0.29	8.3
M 1	9.5	1.66	15.8
M 3	5.5	0.4	2.2
M 8	10.8	0.38	4.1
M 10	11.8	0.4	4.7
Average	10.3	0.69	

Weighted Average 10.3 metres @ 0.57 percent Tin.

APPENDIX III

DRILL LOG SHEETS OC 4 TO OC 13

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 151.0m HOLE No. DD80 OC 4
DPO No(s) 26513 26514 26515

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			
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 _o VEINLET @ 30.1m	103 104 105 106 107 108 109	19.5 21.8 22.4 22.8 23.8 24.8 30.8	21.8 22.4 22.8 23.8 24.8 30.8	2.3 0.4 0.4 1.0 6.0 1.0 1.0	210 110 250 150 260 130 220	120 36 220 42 50 32 26	6 2 15 8 1 3 4	3200 1000 800 6500 500 2000 1700	2700 1100 600 2100 660 380 600	25 L10 L10 20 25 25 15			G
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	111 112 113 114 115 116 117	32.0 33.0 34.0 34.9 35.6 36.6 37.6	33.0 34.0 34.9 35.6 36.6 37.6	1.0 1.0 0.9 0.7 1.0 1.0 1.0	440 310 360 1500 1250 140 100	60 48 110 550 85 24 22	2 55 55 300 16 8 3	580 1600 2200 9500 3900 2700 1200	230 160 340 820 160 240 200	L10 20 L10 40 20 L10 L10			
							869118	38.6	39.6	1.0	170	75	18	8400	620	35			

831024

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOGSHEET No. 20
No. 29
63TENEMENT NAME DONAH
No.

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				
						TALC PYRITE PO AND	139	61.6	62.6	1.0	2000	570	14	350	130	25				
						? CASSITERITE	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				

831025

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. DD800C4

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

831026

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	140	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	100	680	11	2200	17%	10		

831027

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				

831028

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 9 3 4 7 3	150 510 75 50 180 110	40 50 30 70 160 55	15 20 10 110 110 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				

831029

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°	Minor quartz carbonate veinlets throughout	869835	117.0	119.0	2.0	600	140	1	55	16	10		
					BRECCIATION AND QUARTZ VEINING 118.4 - 119.0m	2cm band pyrite @ 118.4m	836	119.0	120.6	1.0	20	48	<1	25	28	15		
						Core loss 0.6m 118.2 - 120.6m	837	120.6	121.6	1.0	14	36	<1	45	60	10		
121.6	128.7	7.1			MICACEOUS QUARTZITE Narrow bands (1cm) of possible tuffaceous material bedding 40°	Minor disseminated pyrite throughout	838	121.6	123.6	2.0	24	22	<1	50	95	410		
							839	123.6	125.6	2.0	1300	20	<1	35	60	410		
							840	125.6	127.6	2.0	920	55	<1	60	130	60		G
							841	127.6	128.7	1.1	22	60	<1	200	70	60		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	410		
							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		

831032

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

SHEET No. 2

131

TENEMENT NAME ONAH No.

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD800C5

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		
61.0	67.0	0.6			RUBBLE - MAINLY TUFFACEOUS SANDSTONE - SUSPECT STOPE FILL MATERIAL	Core loss 5.4m 61.0 - 67.0												
67.0	87.0	17.5	BQ		BLACK SHALE	Minor bands of syngenetic pyrite Qtz veining throughout Bedding variable - av 0° Core loss 0.5m 78.0 - 79.6m loss 0.2m 79.6m - 81.4m loss 1.8m 81.4m - 84.6m	869847 848 849 850 851	67.0 69.1 71.1 73.1 75.1 77.1	69.1 71.1 73.1 75.1 77.1	2.5 2.0 2.0 2.0 2.0	4 8 4 6 4	36 34 40 36 38	1 1 1 1 1	50 75 75 55 30	440 310 570 150 120	110 20 35 25 20	G G G G G	
87.0	91.6	4.6	BQ		INTERBEDDED BLACK AND GREY SHALES Thin quartz - rich layers	Minor syngenetic py Bedding variable 10° - 80° Minor soft sediment brecciation	869852	87.0	90.2	3.2	<4	38	<1	40	160	25		G

831033

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

SHEET No. 32

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 80 OC 5

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			
91.6	91.9	0.3			TUFF BRECCIA Angular fragments of basal pyroclastics - vesicular fragments	Minor grains of pyrite													
91.9	99.7	7.8			INTERBEDDED GREY AND BLACK SHALES - POSSIBLY MINOR DOLOMITE LAYERS	Bedding averages 5mm in thickness Bedding var. - av. 20°													
99.7	100.0	0.3			TUFF BRECCIA	Veins of siderite	869853	99.7	100.0	0.3	12	60	3	490	650	10			
100.0	102.2	2.2			BLACK SHALE	Minor siderite and pyrite veinlets	854	100.0	102.2	2.2	8	26	4	240	170	<10			
102.2	102.5	0.3			SIDERITE VEIN	Pyrite + (?) Ag minerals in vein	855	102.2	102.5	0.3	520	250	160	750	910	10			
102.5	103.5	1.0			BLACK SHALES	Siderite quartz veins bedding 45°	856	102.5	103.5	1.0	240	65	15	300	240	10			
103.5	106.4	2.9			QUARTZITE Micaceous	Siderite quartz veinlets throughout Bedding 80°	857	103.5	105.0	1.5	80	14	6	55	38	<10			
							858	105.0	106.4	1.4	22	24	5	110	24	10			
106.4	108.4	2.0			BLACK SHALE	Siderite veinlets throughout Bedding 70°	859	106.4	108.4	2.0	55	85	36	170	80	<10			

831034

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOGSHEET No. 4
No. 033

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 80 OC 5
 RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s).....

TENEMENT NAME.....
 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.....)											
From (M)	To (M)										Sn	Cu	Ag	Pb	Zn	W						
108.4	116.0	4.1			QUARTZITE Minor black shale bands	Quartz siderite veining Bedding 45° Core loss 2.5m 111.4m - 114.4m Core loss 1.0m 108.4m - 111.4m	869 860 861 862 863	108.4 110.3 111.4 114.4 116.0	110.3 111.4 114.4 116.0	0.9 1.0 0.6 1.6	10 20 310 14	18 16 10 12	1 3 1 1	25 35 90 130	20 26 60 80	10 10 110 110						
116.0	118.0	2.0			BLACK SHALE	Siderite quartz veins up to 10 cm wide Bedding variable	864 865	116.0 117.6 118.0	117.6 118.0	1.6 0.4	12 26	18 28	1 1	50 35	46 150	<10 <10						
118.0	118.6	0.6			SIDERITE QUARTZ VEIN WITH PYRITE AND CASSITERITE MIN.	Visible cassiterite mineralisation	866	118.0	118.6	0.6	690	1600	55	680	1400	45						
118.6	129.0	10.4			QUARTZITE Minor grey shale bands	Quartz siderite pyrite veining throughout veins average 1cm thick Minor galena in siderite veins - rock has appearance of <u>fault zone</u> Minor angular fragments of black shale in quartzite Bedding av. 0°	867 868	118.6 120.6 122.6	120.6 122.6	2.0 2.0	36 60	30 36	4 14	1000 550	75 140	10 10						

831035

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

SHEET No. 54

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 80 QC 5

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																		
						Minor pyrite and disseminated black mineral 128.0 - 129.0m	869 869	128.0	129.0	1.0	6	12	<1	40	38	<10																		
129.0	148.0	19.0			INTERBEDDED BLACK SHALES AND QUARTZITES Minor grey shale interbeds	Thinly laminated - cross bedding + ripple marks common Qtz siderite veinlets throughout Bedding parallel to core axis																												
						Pyrite + cpy in qtz siderite vein @ 135.5m	870	135.0	136.0	1.0	290	300	9	1100	70	25																		
148.0	151.0	3.0			MICACEOUS QUARTZITE	Quartz siderite veinlets throughout Bedding 10°																												
E.O.H.																																		
<u>SURVEYS</u>																																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">DEPTH</th> <th style="width: 40%;">AZIMUTH</th> <th style="width: 30%;">DIP</th> </tr> </thead> <tbody> <tr> <td>0.0m</td> <td>315°</td> <td>-45°</td> </tr> <tr> <td>50.0m</td> <td>-</td> <td>-46½°</td> </tr> <tr> <td>90.0m</td> <td>313°</td> <td>-46½°</td> </tr> <tr> <td>120.0m</td> <td>312°</td> <td>-46°</td> </tr> </tbody> </table>																				DEPTH	AZIMUTH	DIP	0.0m	315°	-45°	50.0m	-	-46½°	90.0m	313°	-46½°	120.0m	312°	-46°
DEPTH	AZIMUTH	DIP																																
0.0m	315°	-45°																																
50.0m	-	-46½°																																
90.0m	313°	-46½°																																
120.0m	312°	-46°																																

831036

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

SHEET No. 1

TENEMENT NAME ORNAH No.

PLAN - MAP REFERENCE.....

CO-ORDINATES 5362330N 359920E AZIMUTH 348.7146 (True N) DRILLERS DK PARRY COMMENCED 26.5.81 DEPTH 126 HOLE No. DD810C6RL COLLAR..... INCLINATION -50° DRILL TYPE BOYLES 37 COMPLETED 5.6.81 CASING LEFT..... DPO No(s) 30154
30155

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 <u>Andra.d.S.S.</u>)								
From (M)	To (M)										Sn	W	Ca	Pb	Zn	Ag	Mn		
3	42	28.7	NQ	V	BASIC - INTERMEDIATE VOLCANICS		931601	3	6	1	15	-	50	825	275	5.0	-		
				V	VESICULAR TEXTURE		602	6	7	.8	5	-	75	675	500	2.5	-		
				V			603	7	8	.9	6	-	75	175	275	-	-		
				V			604	8	9	.8	3	-	75	25	200	-	-		
				V			605	9	10	.7	8	-	75	375	525	-	-		
				V			606	10	11	.7	6	-	75	200	300	2.5	-		
				V			607	11	12	.7	6	10	75	-	275	-	-		
				V			608	12	13	.6	-	10	75	75	325	2.5	-		
				V			609	13	14	.6	6	10	50	50	325	-	-		
				V			610	14	15	.6	5	15	75	25	250	2.5	-		
				V			611	15	16	.7	6	10	50	-	200	-	-		
				V			612	16	17	.7	3	-	75	50	250	2.5	-		
				V			613	17	18	.7	6	-	75	50	425	-	-		
				V			614	18	19	.5	-	-	50	-	300	-	-		
				V			615	19	20	.5	6	-	50	25	225	-	-		
				V			616	20	21	.5	230	15	50	950	1350	5.0	-		
				V			617	21	22	.9	5	-	50	-	175	2.5	-		
				V			618	22	23	.9	-	-	50	-	175	2.5	-		
				V			619	23	24	.9	25	-	50	325	650	2.5	-		
				V			620	24	25	.8	5	15	50	-	150	-	-		
				V			621	25	26	.8	7	15	50	-	200	2.5	-		
				V			622	26	27	.8	-	-	50	25	150	2.5	-		
				V			623	27	28	.9	5	15	50	-	150	2.5	-		
				V			624	28	29	.9	8	15	50	50	125	-	-		
				V			625	29	30	.9	7	-	50	25	175	-	-		
				V			626	30	31	.9	35	10	50	300	425	5.0	-		
				V			627	31	32	.9	6	-	50	25	150	2.5	-		
				V			628	32	33	.9	4	-	50	-	125	2.5	-		
				V			629	33	34	1	8	-	75	-	150	-	-		
				V			630	34	35	1	-	10	50	-	150	2.5	-		
				V			631	35	36	1	7	15	25	25	125	2.5	-		

831037

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

SHEET No. 2

136

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

5362330 N
CO-ORDINATES 352920 E AZIMUTH 348° MAG (True N) DRILLERS D.K. PERRY COMMENCED 26.5.81 DEPTH 126 HOLE No. DP810C6
RL COLLAR INCLINATION 50° DRILL TYPE Berles 37 COMPLETED 5.6.81 CASING LEFT DPO No(s) 30154, 30155

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)								
											Sn	W	Cu	Pb	Zn	Ag	Mo		
			NQ	v			931632	36	37	.9	7	10	50	25	225	25	-		
				v			633	37	38	.9	-	10	50	-	225	25	-		
				v			634	38	39	.9	6	-	50	25	250	25	-		
				v			635	39	40	.6	-	-	50	-	225	25	-		
				v			636	40	41	.6	-	15	50	50	300	25	-		
				v			637	41	42	.6	4	20	50	-	125	25	-		
42	45.7	3.1		o	VOLCANIC BRECCIA		638	42	43	.8	8	15	50	25	125	50	-		
				o			639	43	44	.8	7	-	50	-	100	25	-		
				o			640	44	45	.8	6	10	50	-	100	25	-		
				o			641	45	45.7	.7	6	-	75	50	175	-	-		
57	46.5	1.3		hatched	BLACK SHALE		642	45.7	46.5	.8	7	-	75	1025	75	25	-		
				hatched			643	46.5	47.3	.5	4	-	50	75	25	25	-		
6.5	56.5	10		hatched	GREY SHALE	Brecciated in part Minor quartz veins and oozes	644	47.3	48.8	1.4	8	-	75	775	50	25	-		
				hatched		Narrow blue shale 47.2-47.3	645	48.8	49.2	.4	5	-	50	100	100	25	-		
				hatched		47.3-56.5 well bedded, brecciated	646	49.2	49.2	.7	4	-	50	125	75	25	-		
				hatched		Pyrite 48.8-49.2, 49.9-50.7	647	49.9	50.7	.9	3	-	75	150	75	50	-		
				hatched		at 57m bedding 70° to axis	648	50.7	51.5	.9	7	-	25	300	175	25	-		
				hatched		59-60m " 70° " "	649	51.5	52.5	1	4	-	50	350	350	25	-		
				hatched			650	52.5	53.5	1.1	7	-	50	475	725	50	-		
				hatched			651	53.5	54.5	1.1	10	-	50	-	100	50	-		
				hatched			652	54.5	55.5	1.1	7	-	75	100	150	50	-		
				hatched			653	55.5	56.5	.9	6	-	75	75	125	25	-		
56.5	78.5	20.9		hatched	BLACK SHALE	56.5-57.6 Pyrite, carbonaceous	654	56.5	57.6	1.5	3	-	50	200	100	50	-		
				hatched		57.6-78.5 Well bedded.	655	57.6	58.5	.8	6	-	25	75	50	50	-		
				hatched		Pyrite in bedding with some cross-cutting veins	656	58.5	59.5	1	3	-	50	100	75	75	-		
				hatched		Thin quartz in veins, oozes	657	59.5	60.5	.9	7	-	50	250	200	50	-		
				hatched		at 61.3-62.2 bedding parallel to axis	658	60.5	61.5	1	7	-	50	275	325	50	-		
				hatched		63-66 folding variable	659	61.5	62.5	1	4	-	50	425	775	50	-		
				hatched		" 67-74 bedding 90° to axis	660	62.5	63.5	1.2	5	-	50	175	650	25	-		
				hatched		" 78m " 70° " "	661	63.5	64.5	1	-	-	25	25	150	25	-		
				hatched			662	64.5	65.5	1	4	-	50	100	100	25	-		

831038

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

SHEET No. 337
No.

TENEMENT NAME DOONAH No.

PLAN - MAP REFERENCE.....

CO-ORDINATES 5362330 N 359920 E AZIMUTH 348° (True N) DRILLERS D.K. PARRY COMMENCED 26-5-81 DEPTH 126m HOLE No. DD9106

RL COLLAR..... INCLINATION 50° DRILL TYPE Bores 37 COMPLETED 5-6-81 CASING LEFT..... DPO No(s) 30154
30155

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 <u>Amalab</u>)								
From (M)	To (M)										Sn	W	Cu	Pb	Zn	Ag	Mo		
			4R				931663	65.5	66.5	1	-	-	25	100	75	-	-		
							664	66.5	67.5	1	3	-	50	100	50	-	-		
							665	67.5	68.5	1	5	-	50	100	75	-	-		
							666	68.5	69.5	1	5	-	50	100	100	-	-		
							667	69.5	70.5	6	60	-	50	100	100	-	-		
							668	70.5	71.5	7	4	-	50	125	75	-	-		
							669	71.5	72.5	9	6	-	75	-	50	25	-		
							670	72.5	73.5	11	-	-	75	50	75	-	-		
							671	73.5	74.5	11	-	-	50	-	75	-	-		
							672	74.5	75.5	1	6	10	50	50	75	-	-		
							673	75.5	76.5	14	5	-	50	25	50	-	-		
						At 78m bedding 70° to a min	674	76.5	77.5	8	7	-	50	50	75	-	-		
							675	77.5	78.5	9	-	10	50	-	75	-	-		
78.5	84.9	6.1			QUARTZITE	Brecciated, silicified Abundant vein quartz Some pyrite	676	78.5	79.5	1	4	-	50	50	75	-	-		
							677	79.5	80.5	11	6	-	25	-	50	-	-		
							678	80.5	81.5	1	9	-	25	-	50	-	-		
							679	81.5	82.5	8	8	-	25	25	50	-	-		
							680	82.5	83.5	9	7	-	25	25	350	-	-		
							681	83.5	84.9	13	6	-	50	25	125	-	-		
94.9	93.1	8.1			BLACK SHALE	Abundant quartz veins to 87 Pyrite	682	84.9	86	11	5	-	50	50	75	-	-		
							683	86	87	1	4	-	50	50	100	-	-		
						At 86.5m bedding 70° to a min	684	87	88	1	3	-	50	-	200	-	-		
						88-88.5 " 10° " "	685	88	89	1	8	-	50	50	200	-	-		
						91 " 50° " "	686	89	90	11	8	10	50	25	350	-	-		
						92 " 60° " "	687	90	91	9	9	-	50	75	50	-	-		
							688	91	92	9	5	-	50	25	25	-	-		
							689	92	93.1	11	8	-	50	75	50	-	-		
93.1	97.5	3.6			QUARTZITE	Some quartz veining	690	93.1	94	7	9	-	25	-	25	25	-		
							691	94	95	9	4	-	25	50	50	25	-		
							692	95	96	9	5	10	25	150	25	-	-		
							693	96	97.5	11	4	-	25	-	25	-	-		

831039

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

SHEET No. 4

038

TENEMENT NAME ODNAN No.

PLAN - MAP REFERENCE

CO-ORDINATES 5362330N 152920E AZIMUTH 348° MAG (True N) DRILLERS D.K. HARRY COMMENCED 26-5-81 DEPTH 126m HOLE No. DD810C 6

RL COLLAR INCLINATION -50° DRILL TYPE BOYLE 37 COMPLETED 5-6-81 CASING LEFT DPO No(s) 30154 32155

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 <u>ANALABS</u>)								
From (M)	To (M)										Sn	W	Cu	Pb	Zn	Ag	Mo		
17.5	104.8	7.0	NQ		BLACK SHALE	Quartz veins to 99 Pyrite and brecciated 99-100 At 99m bedding 35° to axis " 102m " 40° " " " 103-104 variable folding	931694 695 696 697 698 699 700	97.5 98.5 99.5 100.5 101.5 102.5 103.5 104.8	98.5 99.5 100.5 101.5 102.5 103.5 104.8	.9 .9 1 .9 .9 .9 1.5	10 - 3 3 10 - 6	- - - - - - -	75 50 50 50 75 50 50	250 100 700 125 2400 125 50	150 150 75 150 125 100 50	7.5 2.5 5.0 2.5 7.5 2.5 2.5	- - - - - - -		
104.8	111.5	6.5		..	QUARTZITE	Massive, micaceous shale partings. Fine quartz veins	G 701	104.8	108	3.4	-	35	100	25	100	-	-		
111.5	115.5	4.0			BLACK SHALE	Pyrite. Brecciated in part	G 702 703 704 705 706 707	108 111.4 111.8 112.2 113.3 114.5	111.4 111.8 112.2 113.3 114.5	3.1 4 4 1.1 1.1 1	- - - - - 3	20 - - - - - 50	50 125 125 375 25 25	100 125 25 50 25 25	- 2.5 - 2.5 2.5 2.5	- - - - - -			
115.5	123.3	7.8		..	QUARTZITE		G 708 709	115.5 119	119 123.3	3.6 4.4	- 8	35 20	100 50	- 50	50 50	2.5 2.5	- -		
123.3	123.5	0.2			BLACK SHALE		710	123.3	124	.6	5	15	50	200	150	2.5	-		
123.5	123.8	0.2		..	QUARTZITE	At 124m bedding 65° to axis	711	124	125	.8	5	-	50	-	25	2.5	-		
123.8	125.5	1.8			GREY SHALE	" 125 " 80°	712	125	126	.8	3	-	25	25	75	-	-		
125.5	126	0.2		..	QUARTZITE	Brecciated													
					126.0m	END OF HOLE													
					87% CORE RECOVERY	G = GRIND CORE													

831040

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

SHEET No. 1

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

5362330N
CO-ORDINATES 359920E AZIMUTH 348° MAG (TRUE) DRILLERS D.K. PARRY COMMENCED 11-6-81 DEPTH 106m HOLE No. J.D.81.0C.7

RL COLLAR INCLINATION - 2.0° DRILL TYPE BOYLES 37 COMPLETED 19-6-81 CASING LEFT DPO No(s) 30156 20157

139

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	W	Cu	Pb	Zn	Ag	Pb		
1.5	14.5				VOLCANIC FLOW BRECCIA(?)	Fragments of vesicular pumice	931801	10.5	12.5	2.5	15	-	80	50	265	0.5	-		
							802	12.5	14.0	1.5	30	-	55	600	825	2.0	-		
4.5	15.0				VEVICULAR PUTICE		803	14.0	15.5	1.5	9	-	60	270	405	1.5	-		
5.0	38.0				VOLCANIC FLOW BRECCIA(?)		804	15.5	17.0	1.5	8	-	50	60	255	0.5	-		
							805	17.0	18.5	1.5	10	-	45	35	190	0.5	-		
							806	18.5	20.0	1.5	5	-	40	25	210	-	-		
							807	20.0	21.5	1.5	7	-	65	35	295	-	2.5		
							808	21.5	23.0	1.5	6	-	50	25	200	-	-		
							809	23.0	24.5	1.5	9	-	40	85	240	0.5	-		
							810	24.5	26.5	1.5	15	-	45	135	320	-	-		
							811	26.5	28.0	1.5	9	-	40	20	205	0.5	-		
							812	28.0	30.5	1.5	10	-	45	15	175	0.5	-		
							813	30.5	32.0	1.5	10	-	40	65	200	-	-		
							814	32.0	33.5	1.5	-	-	45	15	185	0.5	-		
							815	33.5	35.0	1.5	7	-	45	35	375	-	-		
							816	35.0	37.5	1.5	7	-	50	115	365	0.5	-		
							817	37.5	39.0	1.5	20	-	50	1850	1500	1.0	-		
39.0	48.0				QUARTZITE	Dark green Micaceous Quartz and carbonate veins	818	39.0	41.0	2.0	30	-	20	90	150	1.0	5.0		
							819	41.0	43.0	2.0	75	-	15	85	125	1.0	2.5		
							820	43.0	45.0	2.0	10	-	20	165	215	0.5	5.0		
							821	45.0	47.0	2.0	7	-	15	35	400	0.5	2.5		
							822	47.0	48.0	1.0	6	-	50	135	185	0.5	2.5		
8.0	49.5				BLACK SLATE	Pyritic	823	48.0	49.0	1.0	-	-	30	70	30	0.5	5.0		
9.5	56.8				GREY SLATE	Rich quartz + carbonate veining	824	49.0	50.0	1.0	-	-	30	55	45	-	-		
							825	50.0	51.0	1.0	3	-	30	45	45	-	2.5		
							826	51.0	52.0	1.0	3	-	40	70	105	-	5.0		
							827	52.0	53.0	1.0	15	-	30	55	35	-	-		
							828	53.0	54.0	1.0	-	-	25	40	60	-	2.5		
							829	54.0	55.0	1.0	-	-	30	30	210	-	-		
							830	55.0	56.0	1.0	-	-	25	15	245	0.5	-		
6.8	60.0				QUARTZITE	Brecciated Veined	831	56.0	57.0	1.0	3	-	25	15	110	-	-		

831042

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

SHEET No. 1

041

CO-ORDINATES ^{5362317N} 359975 E AZIMUTH 348 MAG (TAKEN) DRILLERS D.K. PARRY COMMENCED 23-6-81 DEPTH 135.4 m HOLE No. DD91018
 RL COLLAR INCLINATION - 30° DRILL TYPE BOYALS 37 COMPLETED 6-7-81 CASING LEFT DPO No(s) 30157-59

TENEMENT NAME DOHAN No.

PLAN - MAP REFERENCE

DEPTH 135.4 m HOLE No. DD91018

CASING LEFT DPO No(s) 30157-59

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	W	Cu	Pb	Zn	Ag	Mo
3	8.0		44		GREY SHALE	Fine carbonate veining with Fe staining	931856	0.3	6.0	1.4	7	-	30	65	5	-	-
							857	6.0	8.5	0.9	4	-	25	65	5	-	-
10	10.0				BLACK SHALE Broken core	Fine disseminated pyrite	858	8.5	9.5	1.1	3	-	40	45	5	-	2.5
						Quartz veining	859	9.5	13.0	1.2	3	-	60	55	15	-	2.5
10	11.6				QUARTZITE	Quartz veining	860	13.0	14.0	0.5	-	-	55	55	10	-	-
16	13.0				BLACK SHALE	Pyritic Brecciated Op veins	861	14.0	15.0	0.6	5	-	50	70	10	-	-
30	19.0				GREY SHALE	Minor brecciation	862	15.0	16.0	0.6	5	-	50	65	15	-	-
							863	16.0	17.0	0.4	3	-	30	60	35	0.5	-
							864	17.0	18.0	0.5	3	-	50	70	20	0.5	-
90	18.8				BLACK SHALE	Non-pyritic	865	18.0	19.0	0.6	5	-	30	55	15	0.5	-
99	20.5				QUARTZITE	Trace veins some pyrite	866	19.0	20.0	0.5	4	-	30	95	15	0.5	-
						Minor grey shales	867	20.0	21.0	0.5	5	-	30	55	30	0.5	2.5
105	21.5				GREY SHALE		868	21.0	22.0	0.5	6	-	30	80	120	1.5	2.5
15	21.8				BLACK SHALE		869	22.0	23.0	0.5	4	-	30	50	185	0.5	-
18	22.9				GREY SHALE	Pyritic	870	23.0	24.0	0.7	3	-	25	75	85	-	-
28	23.2				BLACK SHALE	Pyritic	871	24.0	25.0	0.6	5	-	40	80	90	-	-
32	23.6				GREY SHALE		872	25.0	26.0	0.5	5	-	30	70	95	-	-
36	24.5				BLACK SHALE		873	26.0	27.0	0.4	9	-	30	65	145	-	-
45	25.0				GREY SHALE		874	27.0	28.0	0.6	3	-	35	85	135	-	-
50	27.3				BLACK SHALE		875	28.0	29.5	0.9	6	-	30	85	130	-	5.0
93	29.5				GREY SHALE		876	29.5	32.0	0.8	-	7	20	45	155	-	2.5
95	33.0				BLACK SHALE	Minor quartzite. Strong quartz veining. Pyrite in contorted bedding	877	32.0	33.0	0.8	6	-	25	75	210	-	2.5
							878	33.0	34.0	0.6	6	-	35	80	140	-	2.5
							879	34.0	35.0	0.6	-	-	25	80	135	-	2.5
30	54.0				DARK GREY SHALE	Fine carbonate veining	880	35.0	36.0	0.5	-	-	15	55	255	-	2.5
						Abundant bedded pyrite at 35m.	881	36.0	37.0	0.5	-	-	35	80	75	-	2.5
							882	37.0	38.0	0.7	6	-	30	100	115	-	2.5
							883	38.0	39.0	0.5	-	-	25	60	100	-	-
							884	39.0	40.0	0.7	-	-	25	45	130	-	-
							885	40.0	41.0	0.8	-	-	55	75	140	-	2.5
							886	41.0	42.0	0.7	9	-	35	60	100	-	2.5

831046

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

SHEET No. 1457

TENEMENT NAME.....ODN.A.M..... No.....

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 91 OC

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	W	Cu	Pb	Zn	Ag			
59.5	60.5	0.9	NQ		QUARTZITE	Interbedded with grey shale													
60.5	75.0	11.4			GREY SHALE	Thin interbedded quartzite At 61m bedding 25° to axis	G 940	63.0	66.0	3.5	4	30	30	25	50	-			
						" 62 " 30 " "	G 941	66.0	69.0	2.7	8	50	30	30	50	-			
						" 63 " 65 " "	G 942	69.0	75.0	2.7	4	-	35	45	35	0.5			
						" 64 " 20 " "													
						" 65 " 25 " "													
						" 66 " 15 " "													
						" 67 " 45 " "													
						" 69 " 45 " "													
						" 71 " 80 " "													
75.0	85.0	3.2			VOLCANICS	Mostly soft broken core Some vesicular pumice Carbonate, minor qtz veins	G 943	75.0	85.0	3.2	6	10	35	630	1000	0.5			
85.0	88.0	1.8	BQ from 87.0m		BLACK SHALE	Contacted Abundant qtz Thin carbonate veins Some pyrite at 87.0m	944	85.0	88.0	1.8	20	-	30	215	145	4.0			
88.0	95.3	9.2			GREY SHALE	At 88.5m bedding 45° to axis Well bedded "pyrite rock" Abundant bedded pyrite At 87.6m bedding 60° to core	G 945	88.0	90.0	3.1	8	30	30	135	300	1.5			
						" 89.5 " 55 " "	G 946	90.0	92.0	2.1	9	30	30	120	145	1.0			
						" 91.5 " 70 " "	G 947	92.0	95.3	3.2	8	10	30	50	65	-			
						" 94 " 70 " "													
						" 97 " 80 " "													
95.3	95.9	0.6			BLACK SHALE	Pyritic Abundant quartz carbonate veining	948	95.3	95.9	0.6	10	-	25	110	70	1.5			
95.9	101.7	5.6			GREY SHALE	Well bedded Some pyritic sections occasional quartz veins At 100m bedding 40° to core	G 949	95.9	98.4	3.4	20	30	50	175	120	3.0			
							G 950	98.4	101.7	3.5	6	70	50	50	65	0.5			

831047

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

SHEET No. 3

TENEMENT NAME ORHAN No.

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. D.D. 81.00.9

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)										31	41	Ca	Pb	Zn	Ag		
101.7	103.0	1.3	BG		BLACK SHALE	Abundant quartz + carbonate	94951	101.7	103.0		120	-	30	45	240	1.0		
103.0	111.5	8.5			GREY SHALE	Some pyrite. Sections with collapse/breccia structure and abundant replacement quartz. Other parts well bedded. At 103.5m bedding 70° to core	G 952	103.0	106.5	3.4	45	25	60	35	225	-		
							G 953	106.5	109.0	2.6	16	23	50	30	100	-		
							G 954	109.0	111.5	2.5	13	21	50	45	90	-		
						" 111.0 " 55 "												
						" 113 " 90 "												
111.5	113.3				QUARTZITE	Quartz-pyrite veins	G 955	111.5	115.0	3.5	95	50	90	35	80	-		
113.3	113.7	0.4			GREY SHALE	Well bedded (55° to core)												
113.7	115.0	1.3			QUARTZITE													
115.0	115.3	0.2			GREY SHALE		956	115.0	115.3		372	-	95	55	30	2.0		
115.3	117.1	1.8			QUARTZITE	Minor grey shale	957	115.3	117.0	0.7	393	5	40	660	265	12.0		
117.1	124.0				GREY SHALE	Abundant vein pyrite with quartz. Fine quartz + carbonate veins. At 120m bedding 40° to core	958	117.0	118.0	0.9	101	4	30	395	15	2.0		
							959	118.0	119.0	1.0	69	5	35	90	40	1.0		
							960	119.0	120.0	0.8	140	5	45	105	30	1.5		
						" 120m bedding 40° to core	961	120.0	121.0	0.8	94	-	40	145	120	2.0		
						" 122.5 " 50 "	962	121.0	122.0	0.7	60	-	120	150	2450	2.5		
						" 123.5 " 50 "	963	122.0	123.0	0.9	46	7	55	105	50	3.5		
						" 125.5 " 40 "	964	123.0	124.0	0.7	83	4	45	340	40	2.0		
						" 129.5 " 40 "	965	124.0	125.0	0.6	26	-	45	55	25	2.0		
						" 130.5 " 50 "	966	125.0	126.0	0.7	57	6	25	55	10	1.5		
						" 133.5 " 70 "	967	126.0	127.0	0.6	87	-	25	35	15	0.5		
134.0	136.0	0.8			BLACK SHALE	Inwarded by quartz. Abundant pyrite	968	127.0	128.0	0.7	29	-	30	40	15	0.5		
136.0	140.0				QUARTZITE	Pyrite quartz veins	969	128.0	129.0	1.0	35	4	35	50	35	1.5		
							970	129.0	130.0	1.0	73	-	35	65	25	1.5		
							971	130.0	131.0	0.8	47	-	60	115	65	3.5		
							972	131.0	132.0	0.8	5	-	2050	1900	8950	215		
							973	132.0	134.0	1.2	61	-	25	75	35	1.0		
							974	134.0	136.0	0.8	315	-	25	85	15	1.5		
							975	136.0	138.0	1.1	25	-	15	45	15	-		

831048

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

SHEET No. 4

047

TENEMENT NAME..... No.

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 81 02 7

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 A.M.A.A.S.S...)								
From (M)	To (M)										Sn	W	Ca	Pb	Zn	Ag			
140.0	149.0		BQ		BLACK Siltstone	Minor bedded pyrite Intersecting variable oblique to core.	G 973/976 G 977 G 978	138.0 140.0 146.5	140.0 146.5 149.0	1.3 2.2 2.5	16 - -	- 25 24	15 55 45	90 140 95	35 40 30	- 1.5 1.0			
149.0	152.5				GREY Siltstone	142.5-145.5 only 10cm core Well bedded. Abundant bedded pyrite on part Quartz-pyrite rock at 156m At 150.5 m bedding 50° to core " 151.5 " " 30° " "	979	149.0	149.7	0.4	205	-	340	590	325	8.5			
152.5	153.3				QUARTZITE	Minor interbedded shale	G 980	149.7	153.3	3.1	20	28	55	90	40	1.5			
153.3	170.2				GREY Siltstone	Abundant quartz veining to 157m. Minor bedded pyrite. Some interbedded quartzite bedding variable with breccia/ collapse sections At 156m bedding 50° to core " 157 " " 55° " " " 161.5 " " parallel " " " 163 " " 40° " " " 167 " " 10° " " " 170 " " 45 " "	G 981 G 982 G 983 G 984 G 985	153.3 157.0 160.5 160.5 163.0 166.0	157.0 160.5 163.0 166.0 170.0	4.0 3.6 3.4 3.0 4.5	5 - - - 6	36 17 14 9 19	70 40 40 45 40	175 135 105 85 80	120 90 180 65 55	0.5 1.0 0.5 0.5 1.0			
170.2	173.0				QUARTZITE	Minor quartz, carbonate, pyrite veining	G 986	170.0	173.0	2.8	8	66	45	50	150	1.0			
173.0	173.7				GREY Siltstone	Brecciated, pyritic. Kobara-pyrite-quartz- carbonate mineralization 173.5-173.7m	987	173.0	173.7	0.8	155	-	1650	3.4	21	452	48.0		
173.7	176.1				QUARTZITE	Minor grey shale, pyrite	G 988	173.7	176.1	2.7	34	64	80	50	110	0.5			
176.1	181.6				GREY Siltstone	Minor pyrite, quartz. Bedding 40° to core	G 989 G 990	176.1 179.0	179.0 181.6	3.0 3.0	27 6	22 38	50 55	195 95	170 40	1.5 2.0			

831049

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

SHEET No. 50

048

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

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD81.00.9

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	W	Ca	Pb	Zn	Ag																					
181.6	184.0		BQ		QUARTZITE	Thin quartz, carbonate veins	931991	181.6	184.0	2.3	4	96	55	100	190	-																					
184.0	187.4				GREY SHALE	184.5 bedded parallel to core	992	184.0	187.4	3.6	13	60	60	70	55	1.5																					
						186.3-187 massive quartz veins, minor pyrite & carbonate																															
187.4	190.5				QUARTZITE	Thin grey shale. Quartz, carbonate veins	993	187.4	190.5	2.7	13	87	70	215	950	1.5																					
190.5	191.5				GREY SHALE		994	190.5	193.5	3.0	6	59	60	55	45	0.5																					
191.5	192.5				QUARTZITE																																
192.5	193.4				GREY SHALE		995	193.5	196.5	3.2	18	63	40	20	65	0.5																					
193.4	200.0				QUARTZITE	Thin shale bands	996	196.5	200.0	2.8	-	59	35	30	75	-																					
E.O.H. 200.0 M.																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Survey</th> <th>Depth</th> <th>Azimuth</th> <th>Inclination</th> </tr> </thead> <tbody> <tr> <td></td> <td>50 m</td> <td>-</td> <td>56°</td> </tr> <tr> <td></td> <td>100</td> <td>309° MAG.</td> <td>53°</td> </tr> <tr> <td></td> <td>150</td> <td>308°</td> <td>50°</td> </tr> <tr> <td></td> <td>200</td> <td>310°</td> <td>47°</td> </tr> </tbody> </table>																		Survey	Depth	Azimuth	Inclination		50 m	-	56°		100	309° MAG.	53°		150	308°	50°		200	310°	47°
Survey	Depth	Azimuth	Inclination																																		
	50 m	-	56°																																		
	100	309° MAG.	53°																																		
	150	308°	50°																																		
	200	310°	47°																																		
REPEAT ASSAYS BY A6/3 METHOD							931957						50	6650	250	18																					
							931972						1800	1950	9750	24																					
							931987						1550	3.25	1.28	54																					

831050

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

SHEET No. 1

149

5362355N

CO-ORDINATES 360160E AZIMUTH 320° true (30R) DRILLERS D.K. PARRY COMMENCED 30-7-81 DEPTH 200.0M HOLE No. P2810C10
 RL COLLAR 243.7 INCLINATION -45° DRILL TYPE BOYLES 37 COMPLETED 12-8-81 CASING LEFT DPO No(s) 30162-163

TENEMENT NAME O.R.N.A.H. No. 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 P.N.A.L.D.S.)							
From (M)	To (M)										Si	W	Cu	Pb	Zn	As		
0	9.0				TRILITE		G 001	9.0	17.3	4.8	60	7	60	1350	740	6.0		
9.0	17.3		NQ		VOLCANICS	Vesicular, fragmental Occasional pyrite	G 002 G 003	17.3 23.1	23.1 27.0	4.6 3.9	76 -	44 81	50 45	710 85	1700 180	5.5 0.5		
17.3	19.0				QUARTZITE	Abundant pyrite + quartz veining	G 004 G 005	27.0 30.0	30.0 33.0	3.0 3.0	- 4	56 68	45 55	120 210	560 305	- 0.5		
19.0	21.7				GREY SHALE	Minor pyrite	G 006	33.0	36.0	3.0	-	31	40	45	140	0.5		
21.7	22.6				QUARTZITE		G 007	36.0	39.0	3.0	58	80	60	200	940	1.5		
22.6	23.1				GREY SHALE	Minor pyrite	G 008	39.0	42.0	3.0	6	83	60	195	220	1.0		
23.1	51.4				QUARTZITE	Some sections have abundant pyrite + quartz veining	G 009 G 010	42.0 45.0	45.0 48.0	3.0 3.0	56 76	81 52	50 70	250 100	275 105	1.0 2.0		
51.4	65.4		BQ	57.0	GREY SHALE	Some pyritic sections Quartz veins AA 64m bedding 75° to axis	G 011 G 012 G 013	48.0 51.4 57.0	51.4 57.0 59.5	3.3 4.8 2.4	111 8	76 26	60 60	140 275	70 320	1.5 1.0		
65.4	67.3				BLACK SHALE	Pyrite with quartz veins Bedding 70° to core axis	G 014 G 015	59.5 62.5	62.5 65.4	3.0 2.8	- 10	14 22	65 45	180 125	200 85	1.0 2.0		
67.3	68.3				QUARTZITE	Minor pyrite + quartz veins	G 016	65.4	67.3	1.9	270	9	50	90	50	5.0		
68.3	69.2				GREY SHALE		G 017	67.3	70.5	3.2	76	53	50	50	45	1.5		
69.2	70.5				QUARTZITE													
70.5	75.5				GREY SHALE	Well bedded (60°-70° to core) Quartz + carbonate veining Some pyrite	G 018 G 019	70.5 73.5	73.5 77.5	3.0 4.0	43 34	30 44	55 65	60 100	65 115	3.0 2.5		
75.5	76.3				QUARTZITE	Quartz carbonate, pyrite												
76.3	81.5				GREY SHALE	Well bedded. (70° to core) Minor quartz carbonate pyrite	G 020 G 021	77.5 80.5	80.5 84.0	3.0 3.0	10 19	24 37	50 60	70 60	55 60	1.0 1.0		
81.5	83.6				BRECCIA	Grey shale + quartz fragments												
83.6	84.0				GREY SHALE													
84.0	93.7				QUARTZITE	Abundant quartz-pyrite veins Pyrite-galena rich 85.5-86.5	G 022 G 023	84.0 85.5	85.5 86.5	1.5 1.0	123 683	56 -	55 700	180 1450	85 1050	0.5 21.5		
93.7	95.0				BLACK SHALE	Pyrite Quartz veining	G 024	86.5	90.0	2.5	31	58	65	220	180	1.0		
95.0	96.8				QUARTZITE	Minor pyrite quartz veins Subordinate grey shale	G 025 G 026	90.0 93.7	93.7 97.5	3.7 3.6	26 2480	73 53	60 60	80 60	100 155	1.0 1.0		

831051

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

SHEET No. 2 No.

TENEMENT NAME..... No.

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. 2221.02.10

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	W	Ca	Pb	Zn	Ag		
96.8	102.8				GREY SHALE (Subordinate quartz)	Some quartz veins, minor pyrite Well bedded. Minor folds Bedding 60-80° to core axis	G 027	97.5	100.5	3.0	16	41	175	25	210	-		
							G 028	100.5	102.8	2.3	14	21	85	35	155	-		
102.8	106.0				QUARTZITE (Subordinate grey shale)	Quartz, carbonate veins Minor pyrite	G 029	102.8	106.0	2.3	407	32	65	60	100	-		
106.0	106.5				GREY SHALE		G 030	106.0	108.5	2.5	117	100	170	30	140	-		
106.5	107.3				QUARTZITE	Abundant pyrite Narrow pyrite - galena 108.5-109												
109.3	109.7				BLACK SHALE	Qz-carbonate pyrite veins	G 031	108.5	109.1	0.6	2260	31	4700	1400	3800	28.0		
109.7	115.7				QUARTZITE	Qz, pyrite veins	G 032	109.1	113.0	2.7	307	86	295	130	125	1.5		
115.7	117.0				GREY SHALE	Well bedded, 60-70° to core	G 033	113.0	117.0	4.0	2760	33	400	2900	60	42.5		
117.0	121.3				QUARTZITE (Subordinate grey shale)	Minor pyrite, quartz veins	G 034	117.0	119.0	2.0	374	14	40	330	25	2.0		
121.3	128.3				GREY SHALE	Minor pyrite. Well bedded, parallel to core. Minor folds N.W. 126m bedding 60° to core	G 035	119.0	121.5	2.5	626	15	25	65	40	-		
							G 036	121.5	125.0	2.8	720	-	30	40	30	-		
							G 037	125.0	128.3	4.3	1010	-	25	10	25	-		
128.3	130.5				QUARTZITE		G 038	128.3	130.5	2.2	458	7	20	20	30	1.5		
130.5	133.0				GREY SHALE (Subordinate black shale)	Well bedded. Minor folds	G 039	130.5	133.0	2.4	439	12	40	15	30	-		
133.0	137.7				QUARTZITE (Subordinate grey shale)	Quartz, carbonate veins	G 040	133.0	136.5	3.5	91	19	40	300	85	1.0		
137.7	139.5				GREY SHALE	Bedding 50°-60° to core	G 041	136.5	139.5	3.0	53	6	45	45	40	-		
139.5	145.7				QUARTZITE (Minor grey shale)	Quartz veins	G 042	139.5	142.5	3.0	123	-	25	30	120	-		
145.7	149.5				GREY SHALE (Subordinate quartzite)		G 043	142.5	145.5	3.0	91	-	30	60	100	-		
149.5	152.8				QUARTZITE (Subordinate grey shale)	Quartz veins. Minor pyrite	G 044	145.5	148.5	3.0	10	-	35	30	30	-		
152.8	155.5				GREY SHALE	Carbonate veins	G 045	148.5	151.5	3.0	9	17	75	160	695	-		
155.5	156.5				QUARTZITE		G 046	151.5	154.5	3.0	5	13	75	60	115	0.5		
156.5	161.2				GREY SHALE		G 047	154.5	160.5	4.1	34	10	60	50	75	-		
161.2	163.5				QUARTZITE	Quartz, carbonate veins.	G 048	160.5	163.5	3.0	-	15	60	50	60	-		
163.5	164.8				GREY SHALES	Bedding 80°-90° to core	G 049	163.5	164.8	4.3	71	14	50	50	35	-		
164.8	167.0				QUARTZITE		G 050	164.8	172.5	3.0	5	4	65	45	75	-		
167.0	171.0				GREY SHALE		G 051	172.5	175.5	3.0	9	8	40	35	30	1.0		
171.0	173.5				QUARTZITE (Subordinate grey shale)	Quartz, carbonate veins												
173.5	175.8				GREY SHALE	Well bedded, 90° to core												

050

831052

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

SHEET No. 3

101

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

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. *DD81/0010*

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	W	Cu	Pb	Zn	Ag		
175.8	185.3				QUARTZITE	Quartz, carbonate veins	G 974052	175.5	178.5	2.4	-	26	70	65	255	1.0		
						Subordinate grey shale off. 184.5	AG 053	178.5	181.5	2.9	-	20	55	30	65	-		
185.3	186.5				GREY SHALE	Bedding 60°-65° to core	G 054	181.5	184.5	2.9	4	13	55	10	80	-		
						Mineral folds. Mineral pyrite												
186.8	187.0				QUARTZITE (Subordinate grey shale)		G 055	184.5	187.5	2.7	85	22	65	35	50	1.5		
187.0	190.8				GREY SHALE		G 056	187.5	190.8	3.1	13	35	85	60	305	1.5		
190.8	194.4				QUARTZITE	Pyrite-rich section 191-193 m	CV 057	190.8	191.7	0.8	163	-	1450	375	255	6.5		
194.4	200.0				GREY SHALE (Subordinate quartzite)	Bedding 20°-60° to core	CV 058	191.7	192.3	1.0	262	6	1800	570	155	8.5		
						Quartz veins & mineral pyrite	CV 059	192.3	193.3	1.1	26	-	45	40	25	-		
							G 060	193.3	197.0	2.5	47	16	30	25	55	-		
					200.0M E.O.H.		G 061	197.0	200.0	2.9	22	-	40	10	55	-		
Survey:					Depth	Azimuth	Inclination											
					50	275° MAG	-45°											
					100	290°	-45°											
					150	302°	-45°											
					200	301°	-45°											
REPEAT ASSAYS BY A6/3 METROP							974023	85.5	86.5				750	1468	1118	39		
							974031	108.5	109.1				4700	1450	3625	32		
							974033	113.0	117.0				375	2950	50	44		
							386						1428	150	108			
							387						775	150	169			

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization GRIND NO.	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)							
From (M)	To (M)										Sn	W	Cu	Pb	Zn	Ag		
						974026	974381	93.7	94.7		3500	-	30	145	55	3.5		
						026	382	94.7	95.7		20	-	5	15	90	0.5		
						026	383	95.7	96.7		130	-	5	5	40	1.0		
						026	384	96.7	97.5		30	-	25	55	80	2.0		
						033	385	113.0	114.0		140	-	30	60	20	1.0		
					Disseminated galena. Pyritic. Silicified, quartz vugs	033	386	114.0	115.0		6800	-	1350	1450	70	105.0		
					Silicified pyritic section in grey slate (poor recovery)	033	387	115.0	116.0		128	-	640	645	70	110.0		
						033	388	116.0	117.0		250	-	30	215	20	4.0		
						034	389	117.0	118.0		1650	-	40	365	15	3.5		
						037	390	125.0	126.0		1650	-	20	-	25	1.0		
						037	391	126.0	127.0		330	-	10	-	25	1.0		
						037	392	127.0	128.3		930	-	10	-	40	1.5		
						034	974464	118.0	118.5		380	25	45	590	25	3.0		
						034/5	465	118.5	119.5		160	15	5	50	15	1.0		
						035	466	119.5	120.5		430	15	20	95	30	1.0		
						035	467	120.5	121.5		880	-	15	10	10	1.0		
						036	468	121.5	122.5		1450	20	25	15	15	0.5		
						036	469	122.5	123.8		740	15	15	10	20	0.5		
						036	470	123.8	125.0				5	30	25	1.0		

831054

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

SHEET No.

053

TENEMENT NAME... CONAH No.

PLAN - MAP REFERENCE.....

CO-ORDINATES 5362560 N AZIMUTH 327° TAVE (315° TAVE) DRILLERS D.K. PARRY COMMENCED 13 - 8 - 91 DEPTH 200.0 m HOLE No. P.D. 91.02.11RL COLLAR..... INCLINATION - 45° DRILL TYPE BOYLES 37 COMPLETED 27 - 8 - 91 CASING LEFT..... DPO No(s) 20163 - 165

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 <u>ANALABS</u> ...)								
From (M)	To (M)										Sn	W	Cu	Pb	Zn	Ag			
0	9.0				TRICONE														
9.0	10.0		NQ		QUARTZITE		974062	9.0	12.5	1.2	28		190	375	10	12.0			
10.0	12.5				GREY SHALE		063	12.5	14.5	1.0	23		220	465	10	8.5			
12.5	21.5				BLACK SHALE (Sub-schistose grey shale)	Moderate amount of fine bedded or disseminated pyrite	064	14.5	16.0	0.8	380		495	525	10	6.5			
21.5	30.8				GREY SHALE	Fluorite pyrite. Quartz pyrite veins below 27m.	065	16.0	18.0	0.8	32		45	760	15	6.5			
30.8	32.3				QUARTZITE (Sub-schistose grey shale)	Quartz veins	G 066	18.0	19.5	0.8	20		25	415	35	7.0			
32.3	60.1				GREY SHALE		G 067	19.5	21.5	1.3	104		20	1500	30	10.0			
60.1	75.5				VOLCANICS	Coarse pyroclastics	G 068	21.5	25.5	2.9	13		25	830	135	5.0			
							G 069	25.5	32.3	3.8	13	21	50	180	115	2.0			
							G 070	32.3	39.0	3.1	4	22	50	35	170	0.5			
							G 071	37.0	42.0	3.0	-	10	35	5	105	1.0			
							G 072	42.0	45.0	3.0	-	-	35	5	100	-			
							G 073	45.0	48.0	3.0	-	-	35	15	115	0.5			
							G 074	48.0	51.0	2.5	-	-	25	15	105	0.5			
							G 075	51.0	54.0	2.9	5	20	55	15	90	-			
							G 076	54.0	60.1	3.8	-	-	30	15	80	-			
							G 077	60.1	69.0	3.9	-	13	70	5	145	0.5			
							G 078	69.0	72.0	3.0	-	-	60	50	110	0.5			
							G 079	72.0	75.5	2.8	-	14	65	25	185	0.5			
75.5	87.3				GREY SHALES	Abundant vein quartz 82-85m	G 080	75.5	82.0	2.0	-	8	40	35	90	-			
							G 081	82.0	87.3	4.0	-	12	80	40	110	-			
87.3	93.7				QUARTZITE	Abundant quartz + siderite veining	G 082	87.3	93.7	5.3	5	6	30	105	125	0.5			
							G 083	93.7	97.4	3.7	8	9	30	220	180	0.5			
93.7	108.0				GREY SHALE	Thin quartz, siderite veins	G 084	97.4	100.5	3.1	-	4	35	85	140	0.5			
							G 085	100.5	103.5	3.0	-	6	25	90	105	0.5			
							G 086	103.5	106.5	2.4	6	5	30	95	75	2.5			
							G 087	106.5	108.0	1.5	198	12	30	45	50	4.0			
108.0	109.0				BLACK SHALE	Quartz veins	G 088	108.0	109.0	1.0	16	-	30	255	65	4.0			
109.0	112.5				GREY SHALE	Quartz, subordinate veins. Some pyrite	G 089	109.0	112.5	3.5	12	9	35	65	60	4.0			
							G 090	112.5	113.5	1.0	31	-	25	100	35	7.5			

831055

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

SHEET No. 2
No. 054

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. D.D.S.I. 02.11.
RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s).....

TENEMENT NAME.....
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.....)								
From (M)	To (M)										Sn	W	Ca	Pb	Zn	Ag			
112.5	113.5				BLACK SHALE (Subordinate of ft)	Some pyrite	G 974091	113.5	118.5	4.2	18	8	40	25	70	2.0			
113.5	128.8				GREY SHALE	Abundant siderite veins material, esp. 113.5-116.5m	G 092	118.5	121.5	3.0	23	5	95	30	110	2.0			
						Some quartz.	G 093	121.5	124.5	3.0	15	4	25	65	65	1.0			
							G 094	124.5	127.5	3.0	8	7	45	185	90	1.5			
							G 095	127.5	128.9	1.4	14	-	35	115	60	2.0			
							G 096	128.9	130.5	1.6	26	-	30	265	40	2.0			
128.8	131.5				BLACK SHALE (Subordinate of ft)	Abundant quartz, minor siderite veins. Some pyrite	G 097	130.5	131.5	1.0	49	-	35	215	115	2.5			
131.5	200.0				GREY SHALE	Quartz, minor siderite veins	G 098	131.5	133.5	1.8	6	10	35	80	35	2.5			
							G 099	133.5	136.5	3.0	10	11	50	75	85	2.5			
							G 100	136.5	139.5	3.0	-	23	75	40	85	-			
							G 101	139.5	142.5	3.0	31	16	55	55	75	0.5			
						NOTE Core intersection angle very variable down to approx 150°. Hereafter bedding approx 70° to core axis.	G 102	142.5	145.5	3.0	17	9	40	85	65	-			
							G 103	145.5	148.5	3.0	-	11	45	60	95	-			
							G 104	148.5	151.5	3.0	18	14	75	55	70	1.0			
							G 105	151.5	154.5	3.0	14	-	50	95	55	0.5			
						Survey:	G 106	154.5	157.5	3.0	-	9	45	85	90	-			
						Dipth Azimuth Inclination	G 107	157.5	160.5	3.0	-	-	50	190	620	0.5			
						50	G 108	160.5	163.5	3.0	5	1	55	85	180	-			
						100	G 109	163.5	166.5	3.0	6	9	50	50	85	-			
						150 320° N46 40°	G 110	166.5	169.5	3.0	21	8	45	40	145	-			
						200 324° N46 34°	G 111	169.5	172.5	3.0	26	-	40	40	55	0.5			
							G 112	172.5	175.5	3.0	225	9	85	45	90	0.5			
							G 113	175.5	178.5	3.0	10	-	35	30	60	0.5			
							G 114	178.5	181.5	3.0	10	10	50	35	65	0.5			
							G 115	181.5	184.5	3.0	-	-	55	110	520	0.5			
							G 116	184.5	187.5	3.0	6	4	85	45	175	-			
							G 117	187.5	190.5	3.0	-	12	35	60	70	-			
							G 118	190.5	193.5	3.0	8	11	75	100	130	0.5			
							G 119	193.5	196.5	3.0	-	11	50	50	90	-			
							G 120	196.5	200.0	3.0	-	11	45	20	60	-			

831056

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

SHEET No. 1

TENEMENT NAME DOONAH No.

PLAN - MAP REFERENCE.....

CO-ORDINATES 5362522N 360213E AZIMUTH 327° TRUE (315° MAG) DRILLERS DK PARRY COMMENCED 29-8-81 DEPTH 208.5 HOLE No. DD81.0C.12

RL COLLAR 241.9m INCLINATION -55° DRILL TYPE BRYLE 37 COMPLETED 9-9-81 CASING LEFT..... DPO No(s) 30165-

355

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 <u>Adelaide</u>)									
From (M)	To (M)										Sn	W	Cu	Pb	Zn	Ag				
0	12.0		NQ		TRICKNE															
12.0	62.3				VOLCANICS - mainly pyroclastics, vesicular lava + volcanic breccia	Weathered brown clay to 24.0 24-24.6 Sphoidal mineralized zone - galena + pyrite 30.1-32.8 Sphoidal pyrite zone 46.5-46.7 Quartz - carbonate pyrite - galena mineralization	974121 122 123 124 125 126 127 128	12.0 18.0 24.0 24.6 30.1 32.8 36.0 42.0	18.0 24.0 24.6 30.1 32.8 36.0 42.0 46.5	3.8 3.2 0.5 3.2 1.3 3.2 3.3 3.4	34 35 484 309 4200 1320 54 1090	- - - 15 10 15 15 -	90 70 1950 8300 80 35 50 60	980 158 828 8300 980 475 840 1000	205 140 2650 680 185 340 420 275	12.5 130 235 40 3.0 1.5 2.0 3.5				
2.3	66.6		570 Bq		GREY SHALE	Abundant carbonate, some quartz veining. Some pyrite Quartz pyrite section 64.4-64.5	129 130 131	46.5 46.7 51.0	46.7 51.0 54.0	0.2 4.3 3.0	32 161 15	- - -	1650 50 40	7350 540 70	1.88 395 180	205 1.5 -				
46.8	67.6				QUARTZITE	Brecciated. Abundant pyrite + quartz	132 133 134 135 136 137	54.0 57.0 60.0 62.3 64.5 66.8	57.0 60.0 62.3 64.5 66.8 67.8	2.8 2.8 2.7 2.2 2.7 1.0	20 10 10 2850 560 6750	- - - - - -	50 75 50 115 380 15	100 485 40 132 115 10	215 715 200 300 266 20	- 1.0 -				
72.6	70.2				VOLCANICS	Minor grey shale Quartz - carbonate - pyrite mineralization	138 139	67.8 69.0	69.0 70.2	1.2 1.2	4300 1020	15 30	1550 4750	890 1600	70 105	75.0 155				
70.2	73.4				QUARTZITE	Minor grey shale Strong quartz - pyrite mineralization to 71.3	140 141 142	70.2 71.0 73.4	71.0 73.4 76.5	1.0 1.3 3.1	3850 450 290	- 15 -	2150 55 60	620 60 90	90 30 20	100 4.0 3.5				
73.4	104.6				QUARTZITE / GREY SHALE	Quartz - carbonate - pyrite veining.	143 144	76.5 79.5	79.5 82.5	3.3 2.8	870 1350	10 45	55 70	185 50	25 40	4.5 3.0				
104.6	105.3				QUARTZITE		145 146 147 148 149 150	82.5 85.5 88.5 91.5 94.5 97.5	85.5 88.5 91.5 94.5 97.5 100.5	3.3 3.0 2.7 2.9 2.2 3.0	600 200 150 430 140 35	50 35 30 20 -	95 95 85 90 50 55	70 60 75 50 30 60	85 65 25 30 2.0 4.0					

831058

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

SHEET No. 37

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

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. D.P. 91 OC 12

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)										S _n	W	Cu	Pb	Zn	Ag		
179.8	181.0				QUARTZITE	Abundant quartz veins some pyrite	974177	179.8	181.0	1.2	1850	260	430	-	365	1.0		
							178	181.0	185.3	4.3	1700	60	160	-	160	1.0		
181.0	185.3				GREY SHALE (Minor quartzite)	Quartz veining. Some pyrite	179	185.3	186.2	1.0	1600	260	400	-	360	-		
185.3	186.2				QUARTZITE	Some pyrite. Quartz veins	180	186.2	189.7	3.2	1650	65	180	20	160	0.5		
186.2	189.4				GREY SHALE	Abundant pyrite, quartz veins	181	189.7	192.2	2.5	1250	45	105	-	105	0.5		
							182	192.2	193.8	1.7	3150	240	410	130	390	2.0		
189.4	189.7				QUARTZITE	Abundant pyrite, quartz veins	183	193.8	195.1	1.2	8750	140	240	5	220	1.0		
							184	195.1	197.5	2.6	2500	70	150	45	180	0.5		
189.7	192.2				GREY SHALE (Minor volcanics)	Pyrite. Quartz veins												
192.2	193.8				QUARTZITE	Pyrite. Quartz veins												
193.8	195.1				GREY SHALE	Pyrite. Quartz veins												
195.1	197.5				QUARTZITE (Minor black shale)	Pyrite. Quartz, carbonate veins												
197.5	200.4				BLACK SHALE	Brecciated with abundant pyrite quartzite fragments	cut 185	197.5	198.5	0.9	1800	-	30	35	20	2.0		
							cut 186	198.5	199.5	0.9	3650	-	35	65	25	2.5		
							cut 187	199.5	200.5	0.9	2450	-	40	50	20	2.0		
							cut 188	200.5	202.1	1.5	1200	60	35	60	25	2.5		
200.4	200.6				QUARTZITE	Pyrite-carbonate vein	cut 189	202.1	204.5	1.4	4000	10	35	95	40	2.0		
200.6	204.5				BLACK SHALE	Brecciated, pyritic quartzite fragments to 200.9, and from 202.1 to 204.5	cut 190	204.5	208.5	1.6	660	80	140	125	150	3.5		
204.5	205.6				GREY SHALE	Minor quartz veins, pyrite												
205.6	208.5	0.2			QUARTZITE	Minor quartz veins, pyrite Core loss.												
						End of Hole 208.5 m. REPEAT ASSAYS BY AB/3	974121						50	1010	200	17		
							122						50	1400	125	14		
							123						1825	8760	1475	335		
							124						25	8850	700	6		
							129						1575	7660	1750	245		

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

TENEMENT NAME DOONAH No.
PLAN - MAP REFERENCE.....

CO-ORDINATES 5362635 N 830435 E AZIMUTH 310 TRUE (298°M) DRILLERS D.K. PARRY COMMENCED 10-9-91 DEPTH 268.01 HOLE No. RR 81 DC 13
RL COLLAR 2/4 m INCLINATION -45° DRILL TYPE BOYLES 37 COMPLETED 27-9-91 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	W	Cu	Pb	Zn	Ag		
0	15.0		N9		TRICONE (Collo in volcanics)		974301	12.0	21.0		55	-	55	65	405	-		
12.0	32.5				VOLCANICS	Vesicular porcelanites	302	21.0	27.0		15	-	75	30	360	-		
32.5	43.6				GREY SHALE	Well bedded. Thin pyrite, quartz veins. Dark grey	303	27.0	32.5		10	-	110	45	465	-		
						43.0-43.6	304	32.5	36.0		10	25	95	90	765	-		
43.6	44.5				QUARTZITE	Microcon. Shale partings	305	36.0	40.0		10	15	35	55	160	-		
44.5	44.9				GREY SHALE		306	40.0	43.6		6	-	30	50	130	-		
44.9	45.2				QUARTZITE		307	43.6	45.2		-	190	460	85	580	-		
45.2	47.4				GREY SHALE	Thin fold closure	308	45.2	50.0		7	45	145	160	270	-		
47.4	47.9				QUARTZITE	Quartz, carbonate veins	309	50.0	52.7		15	55	105	115	205	0.5		
47.9	50.0				BLACK SHALE	Thin quartz veins	310	52.7	56.4		25	80	175	60	250	1.0		
50.0	50.7				QUARTZITE	Thin grey shale Quartz veins	311	56.4	59.9		50	45	170	685	305	17.0		
							312	59.9	64.5		35	80	250	120	270	1.5		
50.7	51.4				GREY SHALE		CUT 313	64.5	65.3		680	-	510	15%	2650	295		
51.4	52.7				QUARTZITE		CUT 314	65.3	66.1		150	-	135	230	435	275		
52.7	53.8				GREY SHALE		315	66.1	69.5		2.0	120	190	120	180	1.0		
53.8	54.8				QUARTZITE		316	69.5	73.5		15	35	85	110	160	0.5		
54.8	55.6				GREY SHALE	Carbonate veins	317	73.5	76.5		10	40	45	80	205	0.5		
55.6	56.4				QUARTZITE		318	76.5	79.5		10	85	265	130	535	0.5		
56.4	57.3				GREY SHALE	Quartz & carbonate veins	319	79.5	82.5		15	70	150	75	280	-		
57.3	58.5				QUARTZITE	" "	320	82.5	85.5		6	20	45	45	80	-		
58.5	59.9				GREY SHALE		321	85.5	88.5		15	-	25	110	205	-		
59.9	82.9				QUARTZITE/ MINOR GREY SHALE	64.5-66.0 Galena conc. with carbonate veins	322	88.5	91.5		15	-	35	110	145	-		
82.9	97.5				GREY SHALE/ MINOR QUARTZITE	94.3-94.5 Galena + pyrite conc with carbonate veins	CUT 323	91.5	94.3		10	-	30	85	115	-		
							CUT 324	94.3	94.5		600	-	960	7.65%	4650	295		
97.5	98.5				QUARTZITE		325	94.5	97.5		-	-	35	80	120	-		
98.5	119.8				GREY SHALE/ MINOR QUARTZITE	Some slumping Occasional quartz, sulfide veining	326	97.5	100.5		15	30	85	40	160	-		
							327	100.5	103.5		6	40	120	45	165	-		
							328	103.5	106.5		6	60	75	160	180	-		
							329	106.5	109.5		8	45	130	370	275	2.0		
							330	109.5	112.5		9	60	90	50	140	-		
119.8	123.3				QUARTZITE		331	112.5	115.5		15	-	30	155	435	-		

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

SHEET No. 2

TENEMENT NAME DONAH No.

PLAN - MAP REFERENCE

CO-ORDINATES AZIMUTH DRILLERS COMMENCED DEPTH HOLE No. DP 81 OC 13

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	W	Cu	Pb	Zn	Ag		
123.3	142.5				GREY SHALE / MINOR QUARTZITE		974332	115.5	118.5		5	-	25	20	205	-		
142.5	146.7				BRECCIA	Fragments of vesicular volcanics in grey shale	333	118.5	121.5		10	-	40	95	195	1.0		
							334	121.5	124.5		7	10	50	15	130	-		
146.7	150.3				GREY SHALE	Minor siderite veins	335	124.5	127.5		6	20	60	55	120	-		
150.3	159.9				BLACK SHALE / MINOR GREY SHALE	Abundant siderite, quartz veins, often pyritic.	336	127.5	130.5		3	-	50	10	95	-		
						Some bedded pyrite	337	130.5	133.5		10	30	70	230	1150	0.5		
						Brecciated in part.	338	133.5	136.5		8	35	100	40	170	-		
159.9	190.0				VOLCANICS	Vesicular generally (Some sections non-vesicular)	339	136.5	139.5		5	-	40	40	205	-		
							340	139.5	142.5		10	25	70	55	130	-		
							341	142.5	146.7		4	-	70	75	160	-		
							342	146.7	150.5		35	15	50	200	135	3.0		
190.0	191.7				GREY SHALE		343	150.5	153.5		100	15	75	170	355	4.0		
191.7	192.3				VOLCANICS		344	153.5	156.5		8	30	130	125	230	2.5		
192.3	215.3				GREY SHALE	Well bedded. Variable intersection angle	345	156.5	160.5		-	10	100	125	355	1.5		
						207.7 - 208.0 Galena in siderite veins	346	160.5	163.5		8	-	85	105	260	1.0		
							347	163.5	166.5		5	-	60	-	105	-		
							348	166.5	169.5		10	-	75	-	115	-		
15.3	217.0				VOLCANICS	Vesicular	349	169.5	172.5		-	-	85	-	115	-		
217.0	217.7				GREY SHALE	Quartz, siderite veins	350	172.5	175.5		5	-	55	-	140	-		
217.7	218.5				GREY SHALE / VOLCANICS	Brecciated	351	175.5	178.5		8	-	55	15	445	-		
218.5	219.8				GREY SHALE	219.3 - 219.5 Galena in siderite veins	352	178.5	181.5		10	-	60	60	210	-		
							353	181.5	184.5		7	-	60	60	130	-		
219.8	240.5				VOLCANICS / GREY SHALE	Brecciated. Minor quartz veins	354	184.5	187.5		10	-	60	35	145	-		
							355	187.5	190.5		7	10	75	160	125	-		
240.5	248.9				GREY SHALE	Minor pyrite, quartz veins	356	190.5	193.5		8	20	70	25	310	-		
							357	193.5	196.5		10	10	35	230	265	1.0		
248.9	249.7				GREY SHALE / VOLCANICS	Brecciated	358	196.5	199.5		6	-	40	15	145	-		
249.7	252.4				GREY SHALE	Minor pyrite, quartz, siderite	357	199.5	202.5		-	100	230	45	310	-		
							360	202.5	205.5		-	130	230	65	330	-		
							361	205.5	207.7		10	140	200	160	455	1.0		
							CUT 362	207.7	208.0		160	-	1250	295	1750	95.0		

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

SHEET No. 3

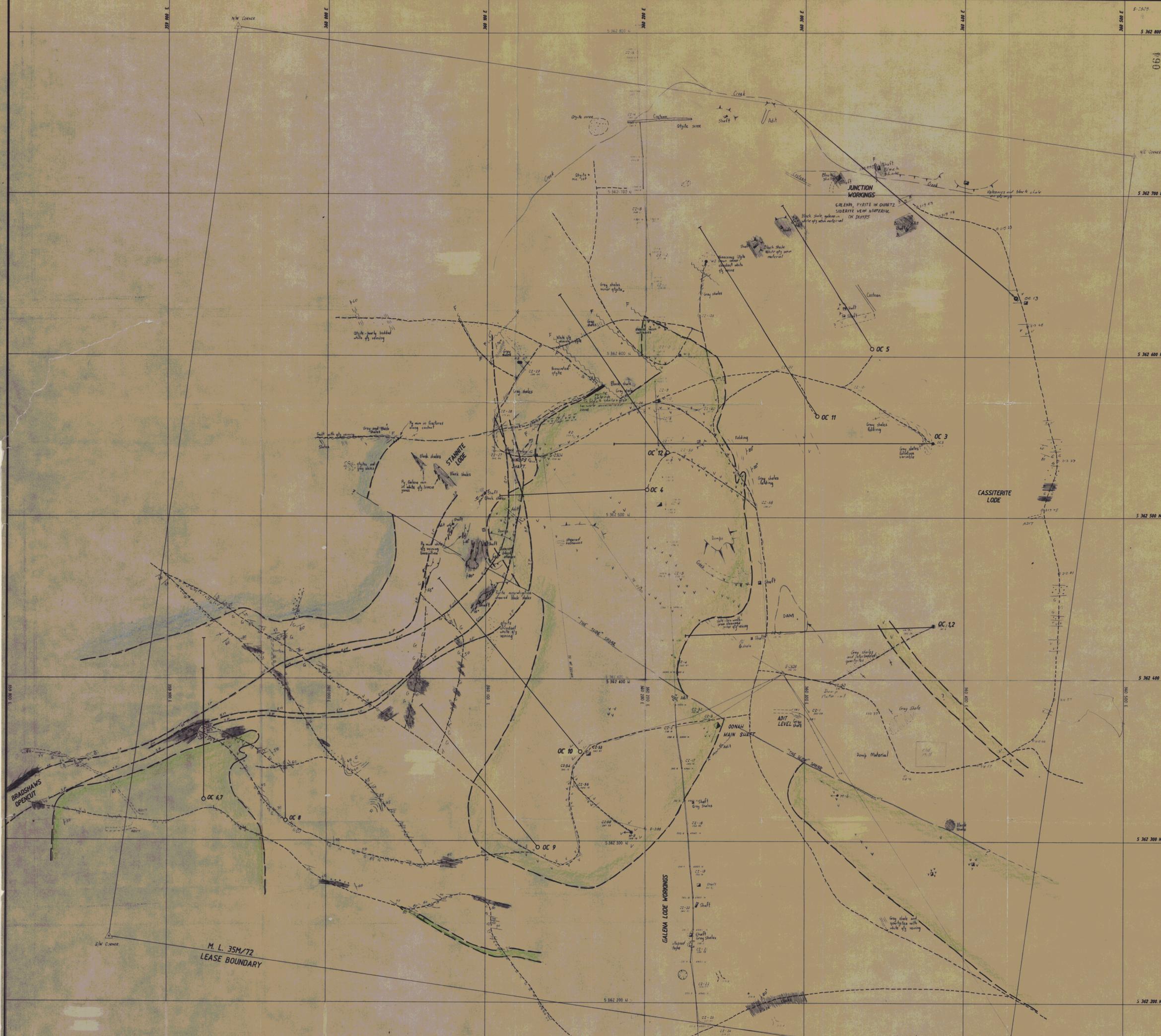
TENEMENT NAME ORNAH No.

PLAN - MAP REFERENCE

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. DD 910C13

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

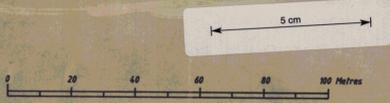
DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)									
From (M)	To (M)										Sn	W	Ca	Pb	Zn	Ag				
152.4	256.2				GREY-BLACK SHALE/VOLCANICS	Brecciated. Quartz - siderite veins. Thin pyrite	974363	208.0	211.5		6	95	155	150	300	1.0				
							364	211.5	214.5		7	80	125	55	195	-				
							365	214.5	217.5		10	70	160	165	370	2.5				
256.2	268.0				QUARTZITE	Minor pyrite. Quartz - siderite veins. Core loss.	366	217.5	219.3		20	70	185	1350	2000	6.0				
							367	219.3	219.5		170	-	365	8400	378	44.5				
							368	219.5	223.5		10	40	165	275	835	2.0				
							369	223.5	226.5		5	55	145	85	265	-				
					268.0m END OF HOLE		370	226.5	229.5		3	20	130	65	190	-				
							371	229.5	232.5		30	55	120	130	1300	1.5				
							372	232.5	235.5		6	50	185	120	280	1.0				
							373	235.5	238.5		10	15	115	75	420	1.0				
							374	238.5	241.5		5	20	80	85	150	1.0				
							375	241.5	244.5		9	80	170	150	295	2.0				
							376	244.5	247.5		8	110	225	70	340	1.0				
							377	247.5	250.5		10	65	140	85	235	1.0				
							378	250.5	253.5		15	55	95	115	95	3.0				
							379	253.5	256.2		20	75	145	440	205	3.5				
							380	256.2	268.0		15	360	470	115	480	1.0				
						Repeat assays of 16/3	313								14.3%	520				
							362								2.74%	1925	111			
							367								9800	403%	44			



LEGEND

- QUARTZITE, SILTSTONE**
- VOLCANICS**
Spillies, mainly altered scoriaceous breccia with pumice fragments
vesicles filled with pale green Mg - chlorite and dolomite.
- GREY SHALES**
Pyritic, carbonaceous in places, dolomite with minor
veinlets and as bedding plane films, minor tourmaline.
- BLACK SHALES**
Carbonaceous, pyritic, fine grained tourmaline.
- QUARTZITE**
Micaceous, minor tourmaline
- MINERALISATION**
Argentiferous galena, stannite in zones of
brecciation with white quartz veining.
- Fault Zone
- Inferred geological boundaries.

- E.M.** Geophysical anomalies
- Diamond drill collar - MINOPS
- Diamond drill collar - CRAE
- 255-6 Elevations (RSL) metres
- Roads, tracks

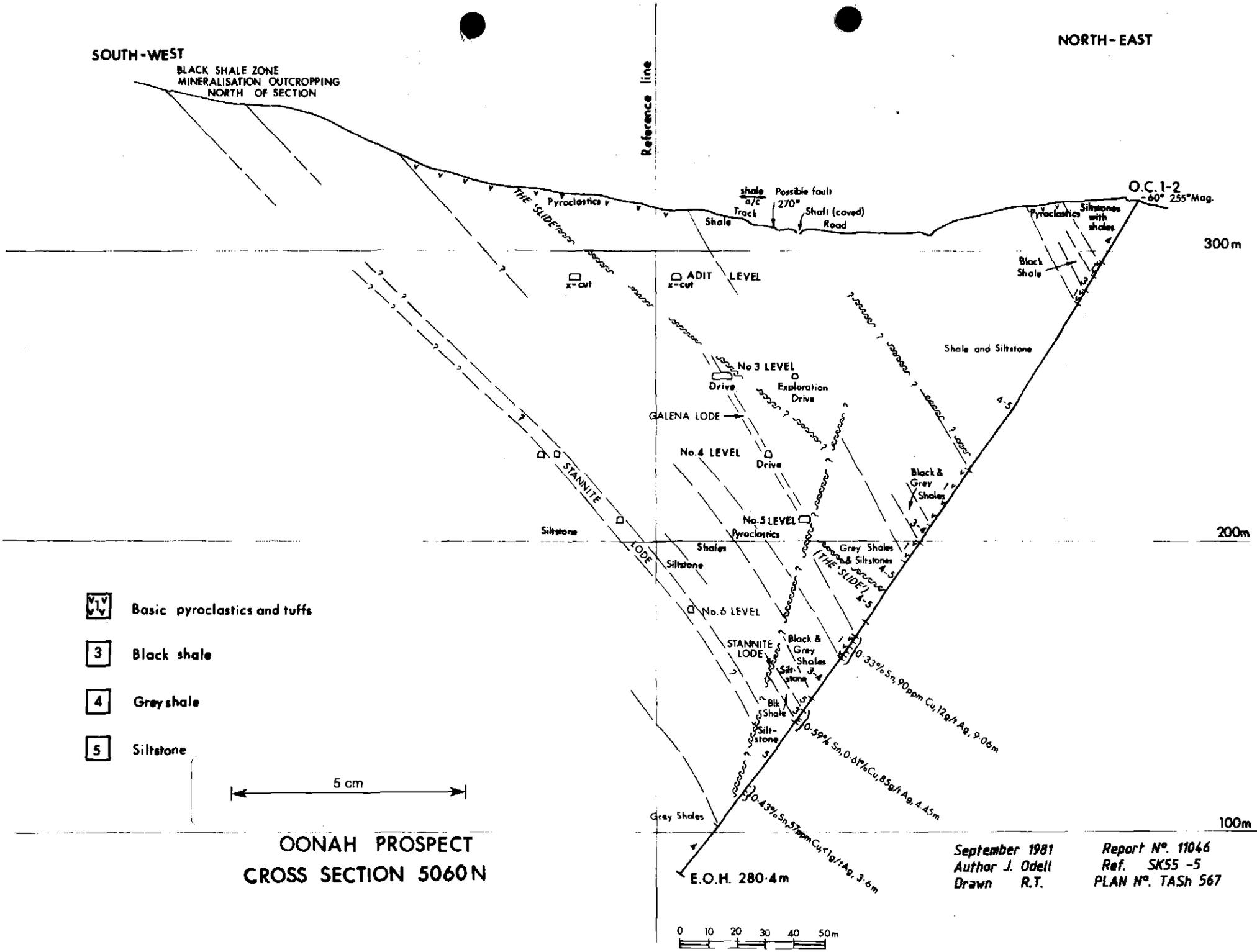


831065
CRA EXPLORATION PTY. LIMITED
OONAH TIN PROSPECT
M. L. 35M/72
ZEEHAN - TASMANIA
OUTCROP GEOLOGY
 September 1981
 Ref. SSK55 - 5 Report No. 11046
 Author. A. McKay J. Odell Scale. 1: 1000
 Drawn. J. Odell R. T. Plan No. TASH 566

SOUTH-WEST

NORTH-EAST

BLACK SHALE ZONE
MINERALISATION OUTCROPPING
NORTH OF SECTION



- VV Basic pyroclastics and tuffs
- 3 Black shale
- 4 Grey shale
- 5 Siltstone

5 cm

OONAH PROSPECT
CROSS SECTION 5060N

September 1981
Author J. Odell
Drawn R.T.
Report No. 11046
Ref. SK55 -5
PLAN No. TASH 567

0 10 20 30 40 50m

SOUTH - WEST

NORTH - EAST

060

BLACK SHALE ZONE WITH VEIN MINERALISATION

MINORS SHAFT

Ref. Line 360 200E

BASE LINE

M8

Road

Grey shales

Grey shales

DD800C3

-64°

7ms

ADIT LEVEL

No 3 LEVEL

STANNITE LODE 3

THE SLIDE

7.25mS

0.71% Sn, 390ppm Cu, 10g/t Ag, 2.67m

0.23% Sn, 0.22% Cu, 15g/t Ag, 19.6m

0.39% Sn, 900ppm Cu, 5g/t Ag, 2.21m

0.38% Sn, 0.13% Cu, 33g/t Ag, 10.81m

4-6
1-2
4-3
3-6
3
2

200m

100m

-  Basic pyroclastics and tuffs
-  Tuffaceous sandstone
-  Black shale
-  Grey shale
-  Quartzite (micaceous)
-  Breccia zone
-  Fault

OONAH PROSPECT
CROSS SECTION 5180N

September 1981
Author J. Odell
Drawn R.T.

Report No. 11046
Ref. SK55 -5
PLAN No. TASH 568

00

5 cm



E.O.H.
343 7m

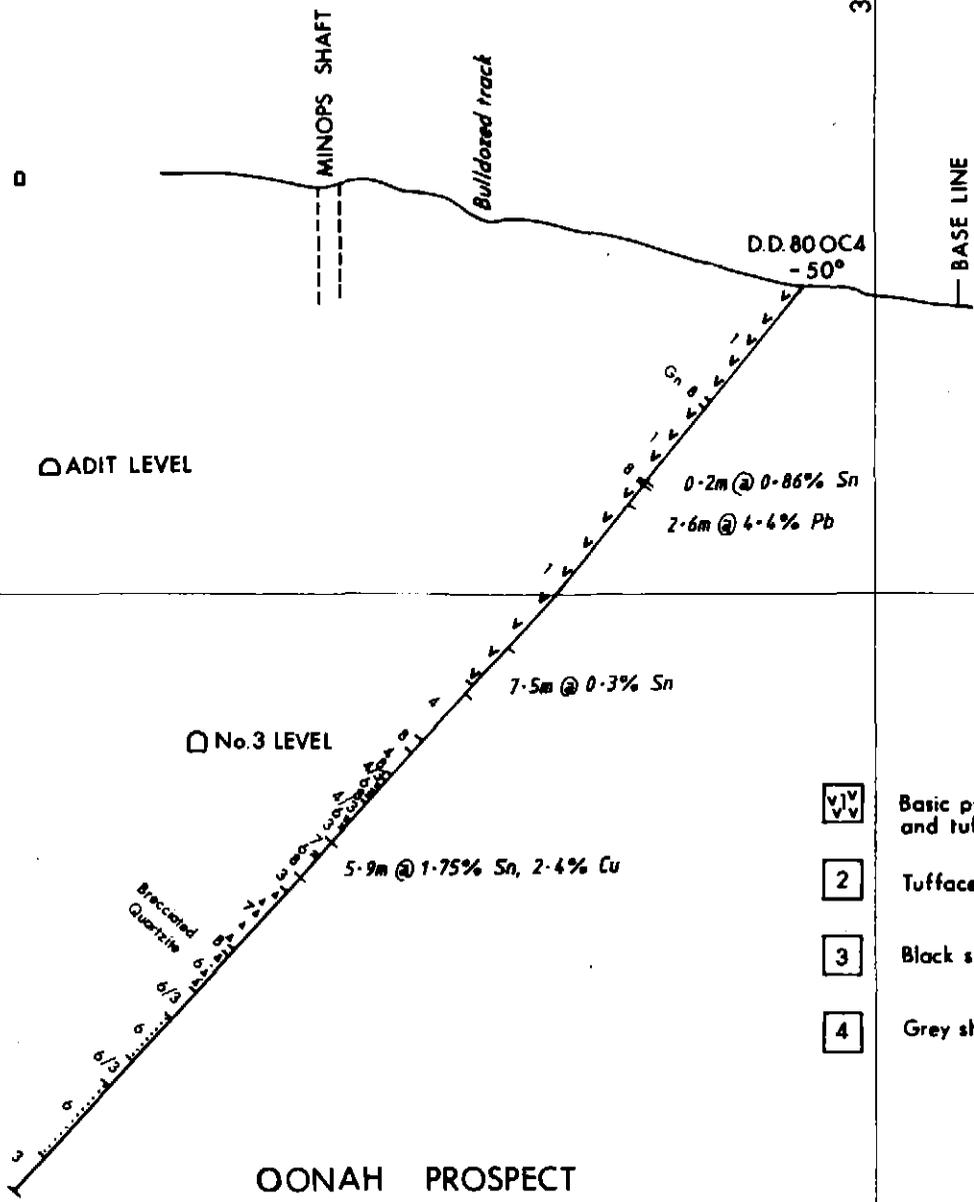
0.23% Sn, 217ppm Cu, 2g/t Ag, 12.1m

831067

SOUTH - WEST

NORTH - EAST

360 200E



September 1981
 Author J. Odell
 Drawn R.T.

Report N° 11046
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 PLAN N° TASH 569

- | | | | |
|--|------------------------------|--|--|
| | Basic pyroclastics and tuffs | | Siltstone |
| | Tuffaceous sandstone | | Quartzite (micaceous) |
| | Black shale | | Breccia zone |
| | Grey shale | | Mineralised zone - sulphide mineralisation associated with quartz siderite veining |

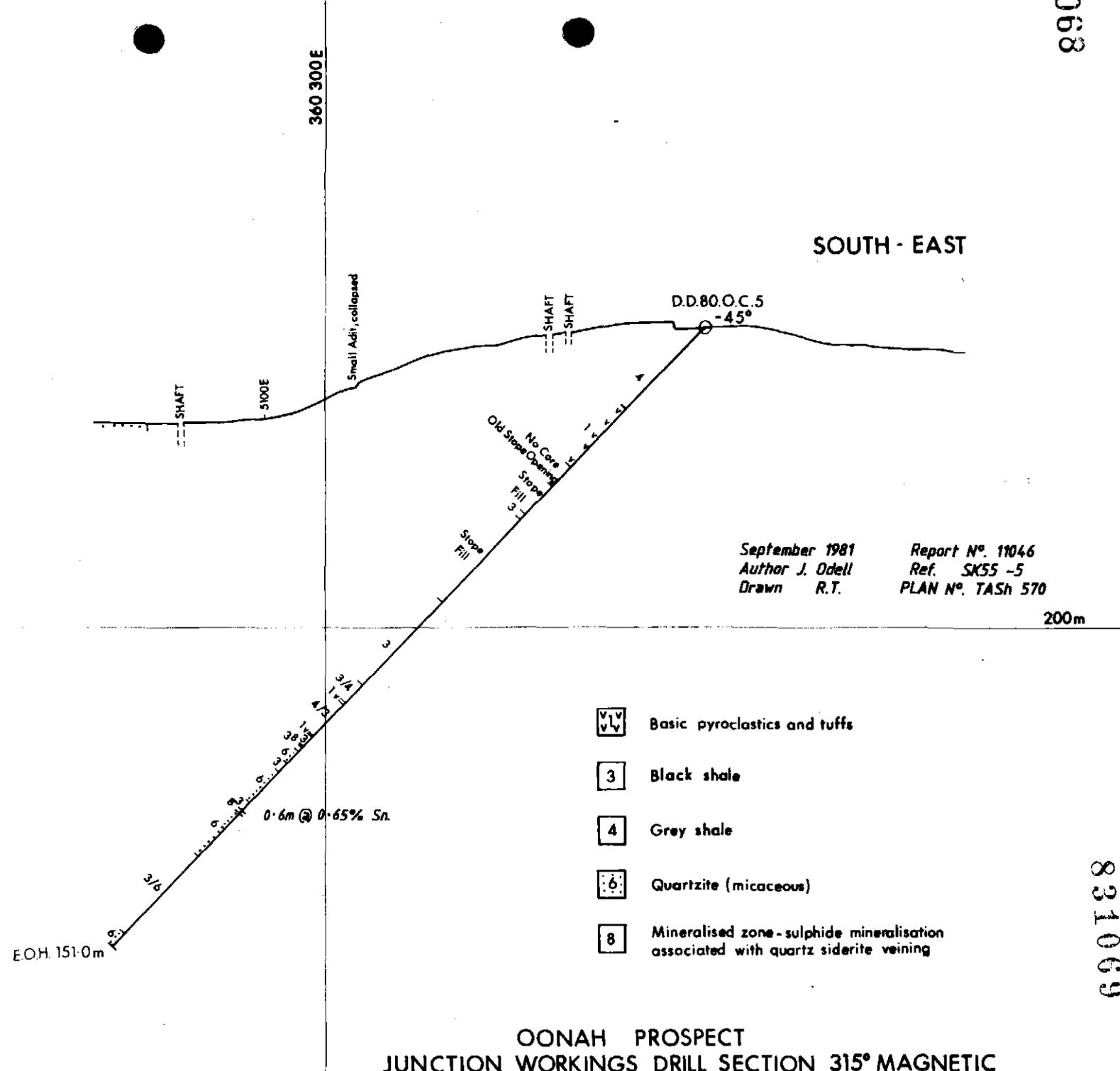
OONAH PROSPECT
 CROSS SECTION 5160N



NORTH - WEST

SOUTH - EAST

360 300E

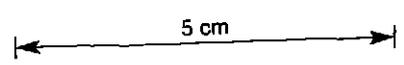


September 1981
 Author J. Odell
 Drawn R.T.

Report No. 11046
 Ref. SK55 -5
 PLAN No. TASH 570

200m

-  Basic pyroclastics and tuffs
-  Black shale
-  Grey shale
-  Quartzite (micaceous)
-  Mineralised zone - sulphide mineralisation associated with quartz siderite veining



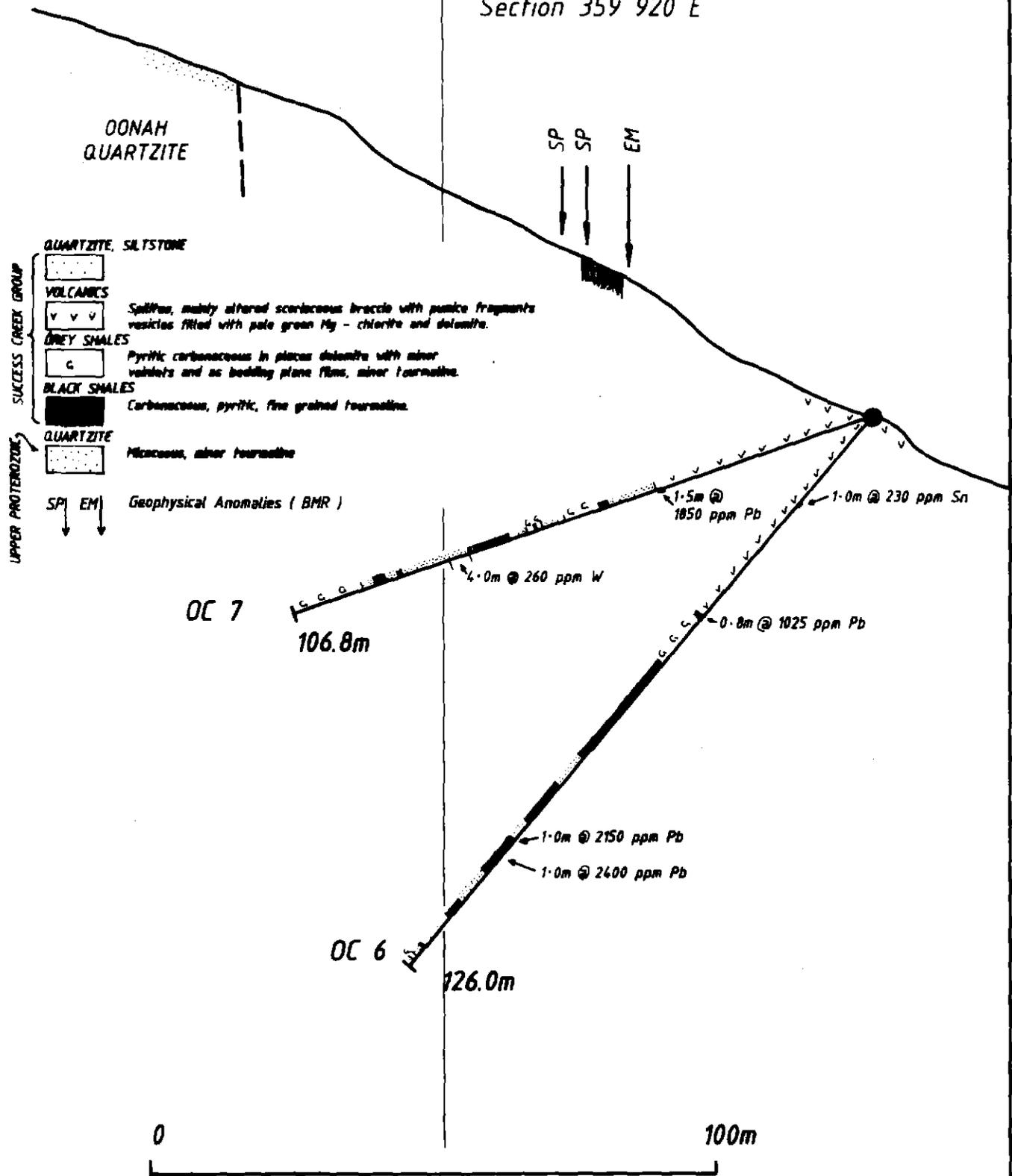
OONAH PROSPECT
 JUNCTION WORKINGS DRILL SECTION 315° MAGNETIC

NORTH

SOUTH

OONAH PROSPECT WESTERN TASMANIA DD 81 OC 6 & OC 7

Section 359 920 E



- QUARTZITE, SILTSTONE
- SUCCESS CREEK GROUP
 - VOLCANICS
Spillies, mainly altered scoriaceous breccia with pumice fragments vesicles filled with pale green Mg - chlorite and dolomite.
 - GREY SHALES
Pyritic carbonaceous in places dolomite with minor voidlets and as bedding plane films, minor tourmaline.
 - BLACK SHALES
Carbonaceous, pyritic, fine grained tourmaline.
- UPPER PROTEROZOIC
 - QUARTZITE
Micaceous, minor tourmaline
 - Geophysical Anomalies (BMR)
SP EM

OC 7

106.8m

OC 6

126.0m

0 100m

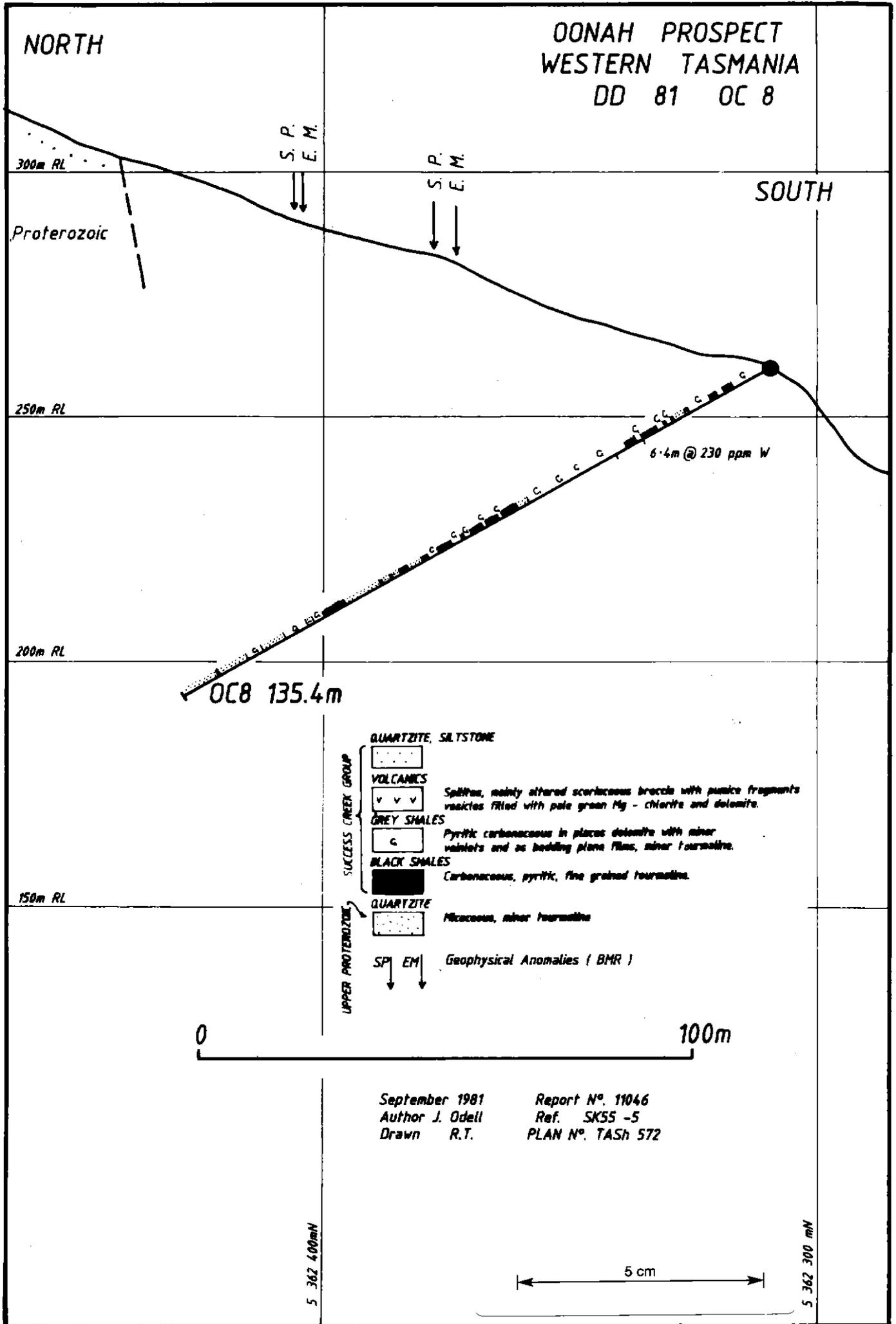
5 cm

September 1981
Author J. Odell
Drawn R.T.

Report N° 11046
Ref. SK55 -5
PLAN N° TASH 571

NW 362 400 mN

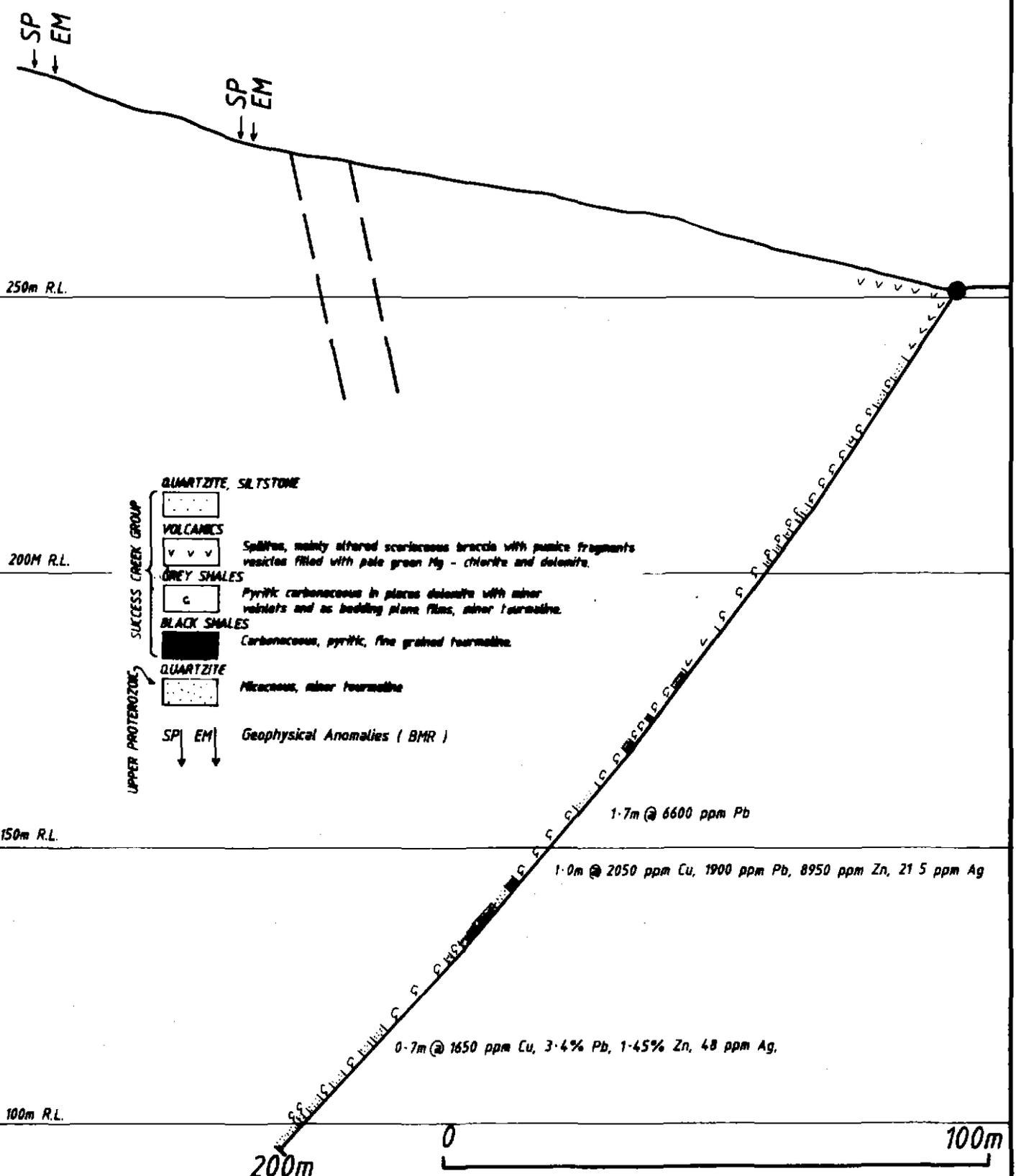
NW 006 291 5



OONAH PROSPECT WESTERN TASMANIA DD 81 OC 9

Northwest

Southeast



- QUARTZITE, SILTSTONE
- VOLCANICS
Spillies, mainly altered scoriaceous breccia with pumice fragments vesicles filled with pale green Mg - chlorite and dolomite.
- GREY SHALES
Pyritic carbonaceous in places dolomite with minor veinlets and as bedding plane films, minor tourmaline.
- BLACK SHALES
Carbonaceous, pyritic, fine grained tourmaline.
- QUARTZITE
Micaceous, minor tourmaline
- UPPER PROTEROZOIC
SP | EM
Geophysical Anomalies (BMR)

1-7m @ 6600 ppm Pb

1-0m @ 2050 ppm Cu, 1900 ppm Pb, 8950 ppm Zn, 21.5 ppm Ag

0-7m @ 1650 ppm Cu, 3-4% Pb, 1-45% Zn, 48 ppm Ag.

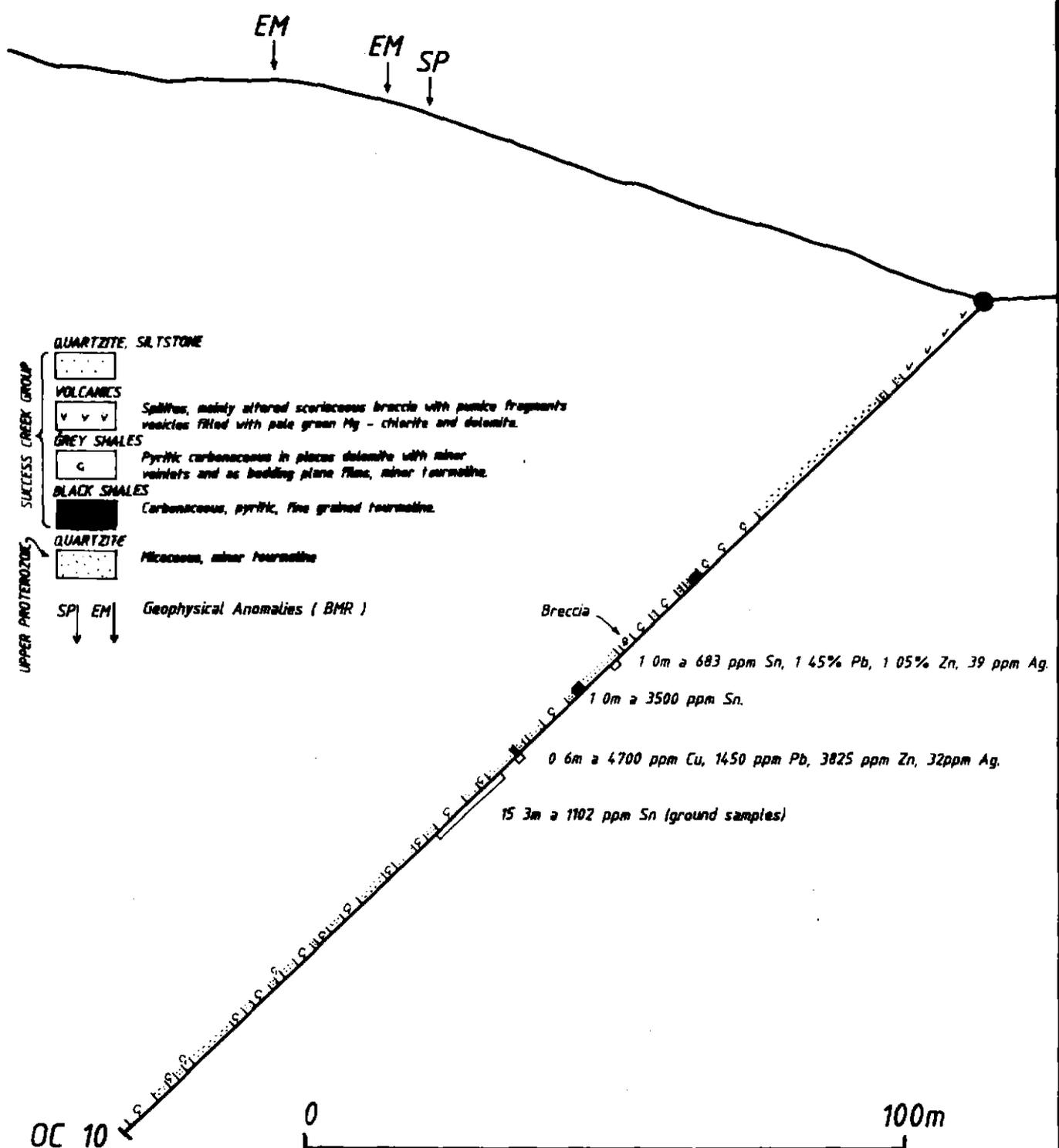
September 1981 Report N^o. 11046
 Author J. Odell Ref. SK55 -5
 Drawn R.T. PLAN N^o. TASH 573

5 cm

OONAH PROSPECT WESTERN TASMANIA DD 81 OC10

Northwest

Southeast



- QUARTZITE, SALTSTONE
- VOLCANICS
Spilitus, mainly altered scoriaceous breccia with pumice fragments, vesicles filled with pale green Mg - chlorite and dolomite.
- GREY SHALES
Pyritic carbonaceous in places dolomite with minor veinlets and as bedding plane films, minor tourmaline.
- BLACK SHALES
Carbonaceous, pyritic, fine grained tourmaline.
- UPPER PROTEROZOIC QUARTZITE
Micaceous, minor tourmaline
- SP | EM
Geophysical Anomalies (BMR)

Breccia

1.0m @ 683 ppm Sn, 1.45% Pb, 1.05% Zn, 39 ppm Ag.

1.0m @ 3500 ppm Sn.

0.6m @ 4700 ppm Cu, 1450 ppm Pb, 3825 ppm Zn, 32 ppm Ag.

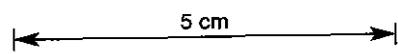
15.3m @ 1102 ppm Sn (ground samples)

OC 10
200 m



September 1981
Author J. Odell
Drawn R.T.

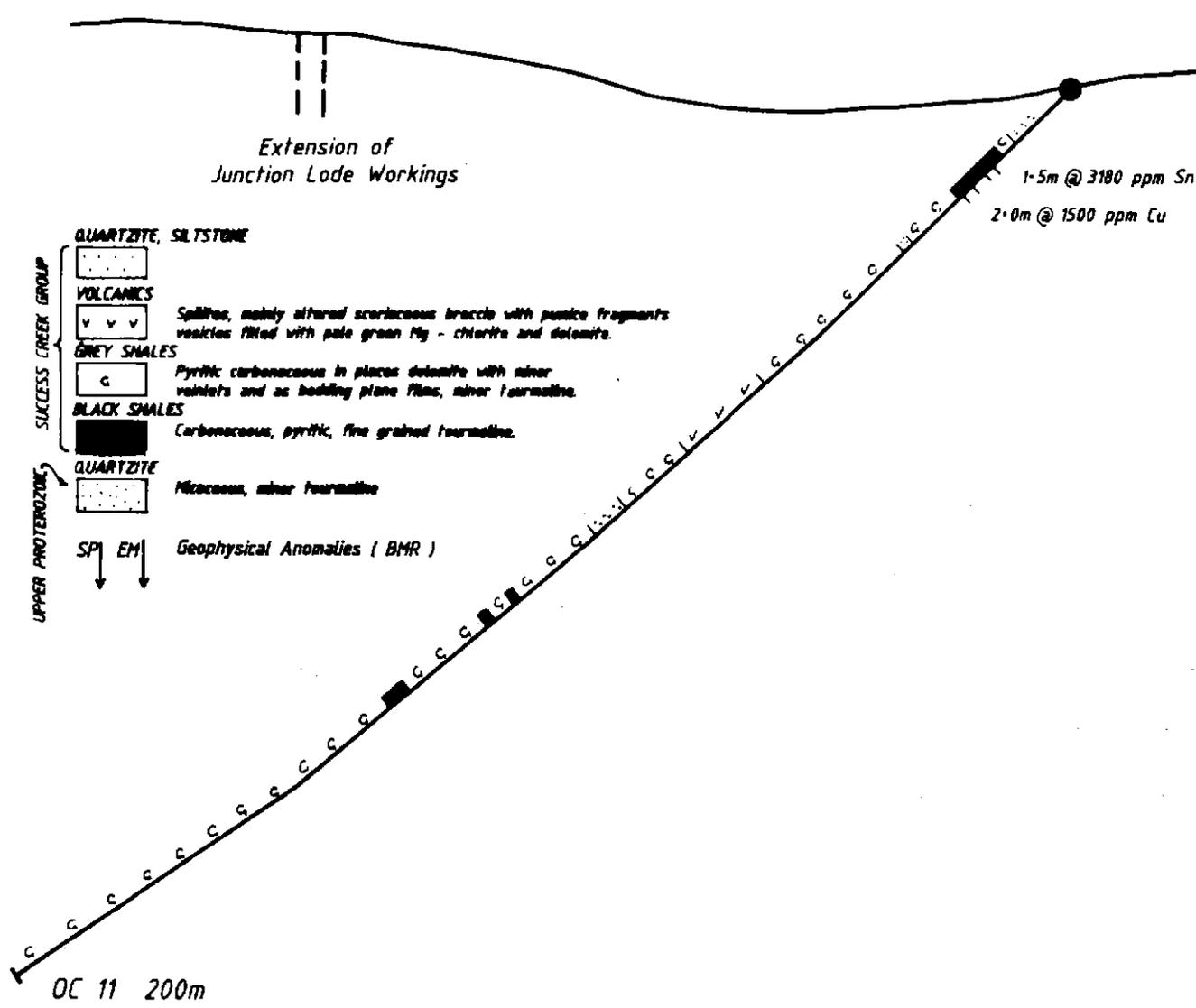
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Ref. SK55 -5
PLAN No. TASH 574



OONAH PROSPECT WESTERN TASMANIA DD 81 OC 11

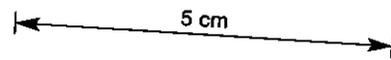
Northwest

Southeast



September 1981
Author J. Odell
Drawn R.T.

Report N°. 11046
Ref. SK55 -5
PLAN N°. TASH 575



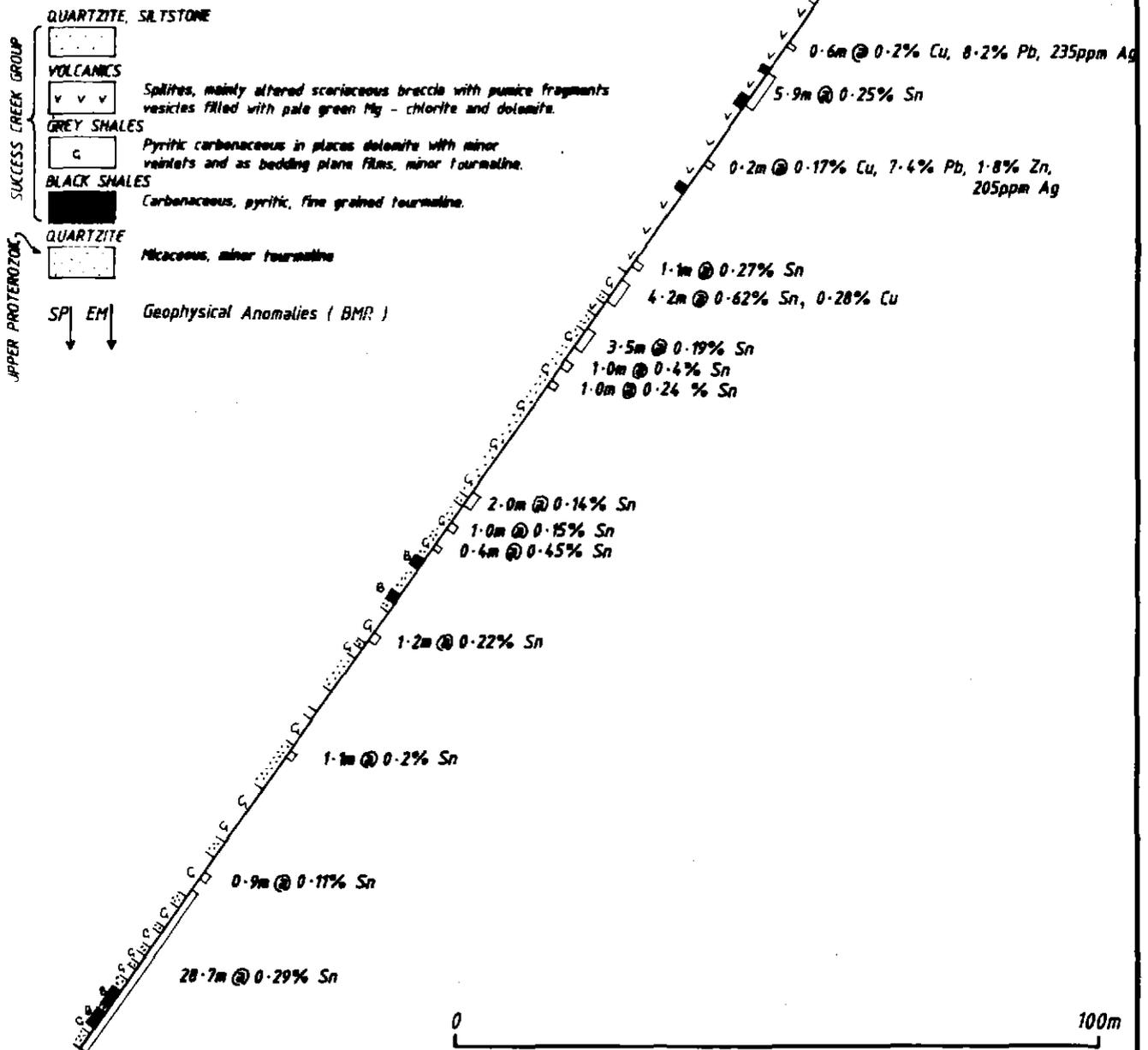
OONAH PROSPECT
WESTERN TASMANIA
DD 81 OC 12

Northwest

Southeast

Grey Shale

Mineralised Black Shale



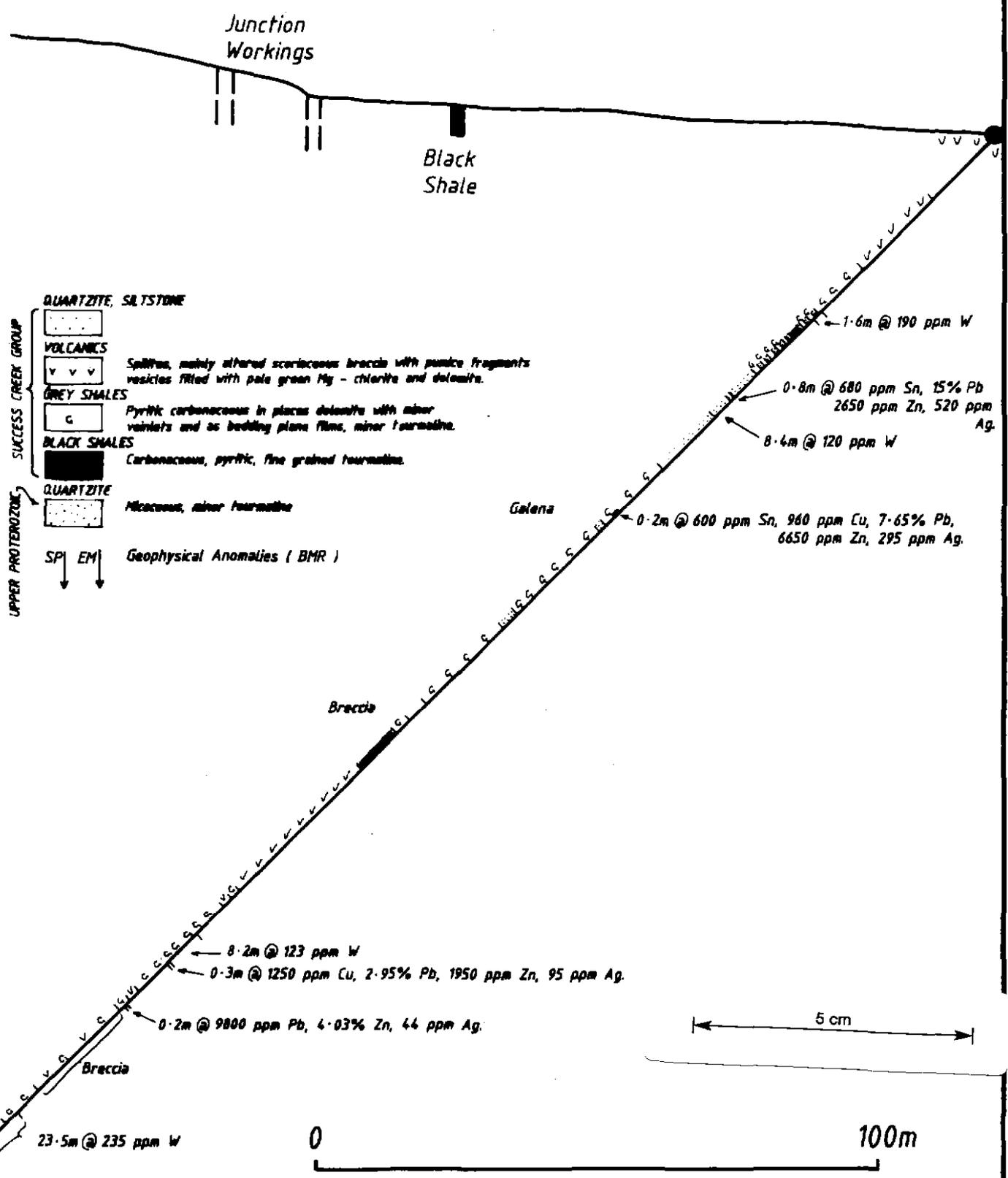
OC 12 208.5m

September 1981 Report No. 11046
 Author. J. Odell Ref. SK55 - 5
 Drawn. R.T. PLAN No. TASH 576

OONAH PROSPECT WESTERN TASMANIA DD 81 OC 13.

Southwest
Southeast

Northwest



OC 13 268m

September 1981 Report N° 11046
 Author J. Odell Ref. SK55 -5
 Drawn R.T. PLAN N° TASH 577