

CRA EXPLORATION PTY. LIMITED
DRILL-HOLE SUMMARY LOG

EL NAME: ZEEHAN 1 HOLE NAME: DD92ZS2
 EL NUMBER: EL 28/88 PROSPECT: STONEHENGE
 DATE DRILLED: NOV 1992
 LOGGED BY: RGP

AMG EAST: 359800 E GRID EAST: 12100 E
 AMG NORTH: 5359385 N GRID NORTH: 5200 N
 RL: ~ 257.5m ASL TOTAL DEPTH: 250.0m

DEPTH	AZIM. (MAG)	INCLIN.
0	048°	-45°
83	052°	-47°
166	052.5°	-50°
249	054.5°	-52°

OBJECTIVES OF HOLE:

To test Grubb's Shear Zone where it is interpreted to intersect Oonah Fm black shales. Potential focus or zone of enrichment of Zn minerals, ~100m along shear from hole ZS1.

LITHOLOGICAL SUMMARY:

DFROM	DTO	COMMENTS
0	30.0	SILTstone + dolomite
30.0	93.0	Banded Grey-schale
93.0	100.5	Siderite alteration zone.
100.5	101.85	MASSIVE SP-PY-GA MINERALISATION
101.85	133.0	Siderite alteration zone.
123.0	151.0	Carbonaceous shale
151.0	190.25	Dolomite
190.25	190.5	MASSIVE PY-SP-GA MINERALISATION
190.5	191.0	Siderite alteration zone.
191.0	202.0	Dolomite
202.0	208.0	Siderite alteration zone.
208.0	221.9	Dolomite
221.9	250.0	Banded Grey-schale with siderite alteration between 227-231, 235-237.8 and 243-244m.

MINERALISATION SUMMARY:

DFFROM	DTO	COMMENTS	(0.5% Zn cut-off)
100.5	136.0	35.5m @ 2.13% Zn	0.56% Pb 10.4 ppm Ag
190.25	191.0	0.75m @ 7.12% Zn	0.77% Pb 138.3 Ag 0.98% Cu 4.48

CONCLUSIONS:

Wide zones of low-grade sphalerite mineralisation within structurally controlled NW-trending siderite alteration envelopes. Massive sulphide zone containing Cu may be significant.

957105

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DRILL CORE LOG

SHEET No. 1 of 7
No. EL-28/88

TENEMENT NAME ZEEHAN 1

PLAN - MAP REFERENCE.....

CO-ORDINATES 12100E 5000N AZIMUTH 048° MAG DRILLERS TD TAS COMMENCED 23/11/92 DEPTH 250.0m HOLE No. DD92 ZS2
RL COLLAR ~257.5m ASL INCLINATION -45° DRILL TYPE LY 38 COMPLETED 1/12/92 CASING LEFT HW DPO No(s) 71524

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)										DRILL RUNS				
											From	To	REL	RR	
0	0.2	-	ROLLER		IRONSTONE Yellow-brown wuggy surface ironstone						0	10	-	-	
											10	13	0.15	5	
											13	16	0.35	5	
0.2	~2.0	-	ROLLER		WEATHERED SHALE. White to light grey. After black shale/siltstone.							19	0.7	5	
												19.8	0.45	5	
												22	0.7	5	
~2	10	-	ROLLER		SILTSTONE Black siltstone with disseminated pyrite.							25	0	5	
												28	0.3	5	
												31	1.05	4	
10.0	27.8	2.5	HQ		LAMINATED SILTSTONE Dark grey laminated siltstone with minor black shale and dolomite beds. Bedding strongly disrupted and brecciated. 5-10% dolomite veins 0.5-3mm wide, ave 1mm. 1% siderite veins 5mm wide 2-5% dissem py preferentially in silty beds.		3314081	10.0	16.0	0.5		32.4	0.3	5	
							4082	16.0	22.0	1.85		33.8	0.9	4	
							4083	25.0	30.0	0.8		34.8	0.95	4	
												36.2	1.2	4	
												38.2	1.8	2	
												39.8	1.2	4	
												41.7	1.7	3	
												43	0.75	3	
27.8	30.0	0.65	HQ		DOLOMITE light grey clay altered and locally brecciated dolomite. Convoluted black stylolites common. 10% dolomite veins 0.5-5mm wide, ave 2mm.							45.4	2.3	2	
												45.4	47.5	1.55	2
												48.4	1.3	2	
							3313781	PET	58.0			51.5	2.4	3	
30.0	38.9	38.9	HQ/HQ		BANDED GREYWACKE. Grey banded rock composed of white quartz, dark grey siltstone and probable dolomite. Bands appear to be tectonic, not sedimentary - ie wispy shaly fine grained sediment wrapping around quartz schlieren. Traces of very fine gls dissem py <0.5%. Between 33.8-37m is siderite altered and veined ore make. 20-40% siderite.		3314084	30.0	35.0	2.9		53	1.3	2	
							4085	35.0	40.0	4.2		55	1.8	3	
							4086	40.0	45.4	4.55		58	2.85	2	
							4087	45.4	50.0	3.05		60.7	2.65	2	
							4088	50.0	55.0	4.3		63.8	2.8	3	
							4089	55.0	60.0	4.8		66.9	1.2	4	
							4090	60.0	65.0	3.5		67.3	0.4	2	
							4091	65.0	70.0	3.9		70	2.3	3	
							4092	70.0	76.0	2.6		73	2.3	3	

Carbonaceous, Chert
Ankerite Rock.
REDUCE HQ-NQ

incl. 1.6m cavity

957107

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DRILL CORE LOG

SHEET No. 3 of 7

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

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. ZS2

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)										DRILL RUNS									
											From	To	REL	RO						
101.85	133.0		NQ		Between approx 130.5-131 is massive siderite with 30% py 10% sp. 5% ga.		3314110	124.0	127.0	0.7					123.2	124	0.25	5		
	CTD				102.8m Sp band - C.A. $\approx 30^\circ$		4111	127.0	130.0	0.8						125	0.3	\uparrow		
					107.2 sid brecc		4112	130.0	131.5	0.8						127	0.4	\uparrow		
					107.3 Vsid-sp $\approx 15^\circ$		4113	131.5	133.0	0.2						128	0.15	\uparrow		
																129	0.5	\uparrow		
																130	0.15	\uparrow		
133.0	151.0	5.15	NQ		CARBONACEOUS SHALE (SHEAR?) Shiny black sheared carbonaceous rock. Unable to determine whether unit is a sheared shale, or totally remobilised carbonaceous shear. Strongly sheared, broken and puggy. 5-10% very fine disseminated py.		3814114	133.0	136.0	0.6						131.5	0.8	\uparrow		
							4115	136.0	139.3	1.55						133	0.2	\uparrow		
							4116	140.5	143.5	1.2						134.5	0.45	\uparrow		
							4117	143.5	147.8	1.15						136	0.15	\uparrow		
							4118	147.8	151.0	0.65						136.6	0.4	\uparrow		
																137.5	0.4	\uparrow		
																139	0.5	\uparrow		
51.0	190.25	22.65	NQ		DOLOMITE Light grey. Strongly deformed, clay altered, brecciated and dolomite veined. Only rare sedimentary structures preserved - minor distorted bedding and sedimentary breccia beds. 10% fine dolomite stockwork 0.1-1mm wide, ave 0.2mm. Locally some 5mm dolomite veins with minor py at low \approx to C.A. ie 153m Vdol - C.A. $\approx 20^\circ$ 165.4 " " 25° 173 " " 45° Between 154m - 158.5m is a dark grey broken wuggy silicified zone with 5% disseminated py + fr sp+ga. Between 162.7 - 164.7m is silicified limestone. Core is massive and competent. Between 165.6 - 170.5 is totally clay altered + brecciated dolomite in fault zone.		3314119	151.0	154.0	1.15								139.3	0.25	\uparrow
							4120	154.0	158.5	0.45						140.5	0	\uparrow		
							4121	158.5	162.7	2.2						142	0.35	\uparrow		
							4122	162.7	164.7	1.95						143.5	0.85	\uparrow		
							4123	164.7	167.6	2.3						143.7	0.2	\uparrow		
							4124	167.6	170.5	1.4						145	0.8	\uparrow		
							4125	170.5	173.5	1.55						145.6	0.1	\uparrow		
							4126	173.5	176.5	1.95						147.8	0.05	\uparrow		
							4127	176.5	181.0	3.3						148	0.3	\downarrow		
							4128	181.0	187.0	3.7						151	0.35	5		
							4129	187.0	190.25	2.7						154	1.15	3		
																157	0.2	5		
																160	0.5	5		
																161.1	0.5	5		
																163	1.7	1		
																165.2	2.2	1		
																167.6	1.8	5		
																169	0.6	5		

