346105

CRA EXPLORATION PTY. LIMITED

DRILL-HOLE SUMMARY LOG

HOLE NAME: DD95 ZG415 AMG EAST 364844 NORTH 5349904

PROSPECT GRIEVES GRID EAST 61000 NORTH 48455

EL: ZEEHAN 4 EL38/89 RL ~152 DEPTH 136.6 m

DATE DRILLED: JULY 1995

LOGGED BY: RGP

DRILLING CO.: DD TAS

DRILL TYPE: ~~XXXXX~~ DD

DRILL RIG: W 250

LOC DRILL CORE: ZEEHAN

SURVEYS: DEPTH	AZIM (AMG)	DIP	DEPTH	AZIM (AMG)	DIP
0	143°	-60°			
52	142°	-60			
100	143°	-62			
136.6	141°	-63			

OBJECTIVES OF HOLE:

To test for shallow mineralisation at 'Lower Zone' where thought to be offset by Devonian fault, above - N of ZG403.

LITHOGICAL SUMMARY:

FROM	TO	FORM CODE	COMMENTS
0	3.65	Qha	GRAVELS
	3.90	Ogw	SURFICIAL CLAYS
	15.00	Og	SHALE
	53.80	Ogmu	MICRITE
	81.10	Ogmu	MICRITE, DECOMPOSED + ALTERED
	85.55	Ogsd	SIDERITE ZONE
	90.95	Ogdc	CARBONACEOUS CLAY
	112.2	Ogfc	COLOURED CLAYS
	130.6	Ogst	SANDY TRANSITION
	136.6	Om	MOINA SANDSTONE

FROM 22.80 - 81.10 IS FAULT ZONE

MINERALISATION SUMMARY:

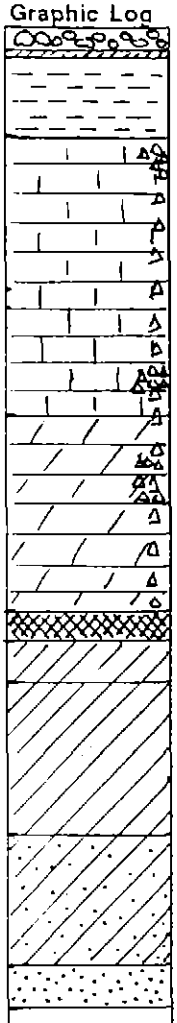
FROM	TO	COMMENTS
84.6	85.55	0.95 m @ 1.92% Zn
103.6	112.2	8.6 m @ 1.2% Pb

CONCLUSIONS:

Intersected weakly Zn-Pb anomalous siderite - clays. Hole is faulted, suggesting structural complications in this area.

Inconclusive as to where mineralisation may lie in this area. Further drilling to N is required.

Graphic Log



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

SHEET No. 1 of 5

364844E
5349904N
(61000E
48455N)

TENEMENT NAME GRIEVES No.

PLAN – MAP REFERENCE

CO-ORDINATES ... AZIMUTH 143 AMG DRILLERS DD TAS COMMENCED 30/6/95 DEPTH 136.6 m HOLE No. DD95ZG415

RL COLLAR ... INCLINATION -60° DRILL TYPE W250 COMPLETED 7/7/95 CASING LEFT ... DPO No(s) ...

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)
0	3.65			Qha	GRAVELS					
3.65	3.9		5	Qgu	SURFICIAL CLAYS. Grey clay after decomposed CO_3.					
3.9	9.2		4B	Og	SHALE		546067	3.9	6.2	
					Black shale, oxidised to red-grey. Very uniform planar laminations.		068	6.2	9.2	
					4.8 m S_o ^ C.A @ 65°					
					5.8 m S_o @ 50°					
9.2	12.4		2V	Qgul	CALCARENITE					
					Light grey calcarenite with 10% irregular calcite veins.					
12.4	14.0		4B	Og	SHALE		069	12.4	14.0	
					Dark olive-grey shale. Planar laminations. Unoxidised equivalent of 3.9-9.2 m.					
					13.3 S_o @ 49°					
14.0	15.0		4X	Og	BRECCIA		070	14.0	15.0	
					Angular carbonate clasts in matrix of dark grey shale.					
15.0	24.6		2F/4F	Qgmu	BIRD'S EYE MICRITE		071	18.6	21.9	
					Light grey massive micrite with common white bird's eye spotting.					
					Cut by numerous irregular stylolites.					
					Start of FAULT ZONE @ 22.8 m – broken rubbly limestone with clay + rock flour matrix.					

ASSAY VALUES (Analysed by ...) DRILL RUNS

To	RQD	REC
4.3	5	0.8
5.3	2B	1.0
6.2	1B	0.7
7.6	4B	1.2
8.5	4B	0.5
9.1	5	0.1
9.6	4F	0.6
10.4	4F	0.5
10.9	4X	0.2
12.3	2X	1.5
13.2	2X	0.5
14.1	4B	0.8
15.0	4X	0.9
17.2	2X	2.0
18.6	4F	1.4
20.3	2F	1.5
21.9	4F	1.5
23.3	4X	1.2
24.6		0.9
25.6		0.7
26.4		0.4
28.0	4X	1.2
29.7	4F	1.6
30.6		0.7
31.4		0.75
32.1		0.7
33.2		0.8
24.6		1.4
36.0		0.85
37.2		0.9
38.9		1.2
40.6		1.35

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DRILL CORE LOG

TENEMENT NAME GREVES No. [redacted]

CO-ORDINATES 364844E 5349904N AZIMUTH 143 AMG DRILLERS DDTAS COMMENCED 30.6.95 DEPTH 136.6 HOLE No. ZG415

PLAN – MAP REFERENCE

RL COLLAR INCLINATION -60° DRILL TYPE U250 COMPLETED 7.7.95 CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by)
24.6	35.2		4F	Ogul	WISPY BANDED LIME MUDSTONE Grey to dark grey fine grained lime mud with irregular bands of more crystalline ca carbonate. Sections of core are faulted, reduced to rubble. Between 27.0 – 31.4 is a strongly developed cleavage, which partly transposes bedding 28.4 cleavage ∡ 25° 29.0 cleavage ∡ +14° bedding ∡ -14° S$_0$-S$_1$ ∡ ≈180°	5466072	33.2	35.2		
35.2	53.8		4X	Ogmv	MICRITE Light grey massive micrite, no bird's eyes in this unit. Unit is strongly broken up by later faulting. Main fault zone is 46.6 – 49.2 – angular limestone fragments in matrix of rock flour, clay and calcite vein fragments. Dolomitisation around fault zone.	073 074	35.2 52.3	37.2 53.8		
53.8	64.0		4F	Ogmv	DECOMPOSED MICRITE As above, but unit is partly decomposed to a light grey carbonate clay. May be partly dolomitised. Clay + core-loss zones may be due to later faulting.	075 076 077	56.7 59.1 61.6	59.1 61.6 64.0		

DRILL RUNS

To	RQD	REC	
42.2	4F	1.1	
43.1	4F	0.5	
44.0	3F	0.8	
44.6	4X	0.2	
46.6	4F	1.25	
48.0	4X	0.9	
49.2	4X	0.5	
50.7	4F	1.2	
52.3	3F	1.5	
53.8	4F	1.3	
58.6		1.0	2.9m CAVITY
60.1		0.9	
61.6		0.7	
63.1	4F	1.4	
64.6	4X	0.7	
65.9	4F	0.7	
67.6	4F	1.3	
69.0	4X	1.45	
70.6		1.4	
73.6		1.2	
74.8		0.9	
76.6	5	1.5	
78.1	5	0.8	
79.6	5	1.5	
81.1	4X	1.0	
82.6	4F	0.4	
84.1	5	0.8	
84.6		0.4	
85.6		0.5	
87.1		1.6	
88.6		1.1	

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C.R.A. EXPLORATION PTY. LIMITED

DRILL CORE LOG

TENEMENT NAME GRIEVES No. .....

364844E

CO-ORDINATES 5349904 N AZIMUTH 143 AMG DRILLERS DDTAS COMMENCED 30.6.95

PLAN – MAP REFERENCE .....

DEPTH 136.6 HOLE No. ZG415

RL COLLAR ..... INCLINATION -60° DRILL TYPE U250 COMPLETED 7.7.95

CASING LEFT ..... DPO No(s) .....

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD DATA	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by DRILL RUNS) To	RQD	REC
					Patchy siderite alteration between 61.6 – 64.0.						90.0	5	1.6
											91.6		1.6
64.0	66.3		4F	Ogsd	SIDERITE ALTERED MICRITE						93.1		1.5
					Yellow grey micrite as above, but with moderate to strong pervasive siderite alteration.		946078	64.0	66.3		94.6		1.5
											96.1		1.0
											97.6		1.6
66.3	75.1		4X	Ogsd Ogmo	DOLOMITISED MICRITE		079	66.3	70.6		99.1		1.5
					Light grey micrite as for 35.2 – 53.8, but is pervasively massively dolomitised.		080	70.6	73.6		100.6		1.5
							081	73.6	75.1		102.1		1.6
					Cut by rubbly clay zones with coarse calcite crystals ⇒ FAULT ZONE.						103.6		1.4
											105.1		1.5
											106.6		1.55
75.1	78.1		5	Ogmo?	CLAY BRECCIA		082	75.1	78.1		108.1		1.5
					Light grey, probable decomposed micrite as above, but strongly to totally decomposed.						109.6		1.5
											111.1		1.5
					Shows breccia texture, but unclear if this is due to faulting or just insitu decomposition.						112.6		1.3
											114.1		1.4
											115.6		1.5
78.1	79.6		5	Ogsd?	CLAY BRECCIA (SIDERITIC?)		083	78.1	79.6		117.1		1.5
					Very similar to 75.1 – 78.1, but yellow-brown, possibly sideritic.						118.6		1.5
											120.1		0.55
					Breccia due to insitu decomposition?						121.6		1.5
											123.1		
79.6	81.1		4X	Ogsd?	CARBONATE BRECCIA		084	79.6	81.1		124.6		
					Mixed zone of decomposed lime mudstone, clays + angular carbonate fragments in dolomite matrix.						126.1		
											127.6	5	
											129.1	5x	0.75
81.1	84.6		4X	Ogsd	SIDERITE ZONE		085	81.1	82.6		130.6	5x	1.2
					Yellow-grey ~~massive~~ siderite. Irregular fine laminations.		086	82.6	84.6		132.2	5x	1.1
					Locally vuggy. Minor clays.						~~136.6~~		

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DRILL CORE LOG

TENEMENT NAME GRIEVES ? No. .....

364844E
CO-ORDINATES 5349904N AZIMUTH 143 AMG DRILLERS DDTAS COMMENCED 30·6·95 DEPTH 136·6 HOLE No. ZG415

PLAN – MAP REFERENCE .....

RL COLLAR ..... INCLINATION -60° DRILL TYPE 4250 COMPLETED 7·7·95 CASING LEFT ..... DPO No(s) .....

DEPTH From (M)	DEPTH To (M)	Core Rec. %	RQD mm	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by .....) DRILL RUNS To	RQ	REC
84·6	85·55		5	Qsed	SIDERITE? BRECCIA		5466087	84·6	85·55		133·6	5x	1·35
					Dark grey to black. Very dense unit. Rounded to angular breccia fragments of siderite + dolomite in dark grey to black siderite? cement.						135·1	5x	0
					Also 2% fine pyrite filling voids in breccia.						136·6	5x	0·3
					Gradational contact with clays at 85·6m.								
85·55	90·95		5	Qgfc	CARBONACEOUS CLAY		088	85·55	87·1				
					Black massive carbonaceous clay. Minor bands + ?breccia fragments of siderite in clay.		089	87·1	88·6				
					5% dissem py between 88·6 – 90·95.		090	88·6	90·95				
90·95	92·7		5	Qgfc	COLOURED CLAY		091	90·95	92·7				
					Yellow-red clay containing beccciated siderite fragments.								
92·7	107·1		5	Qgfc	COLOURED CLAY		092	92·7	94·6				
					Yellow-brown clay. Several 100–200mm dark		093	94·6	97·6				
					brown gossanous ironstone bands, possibly		094	97·6	100·6				
					after siderite? e.g. 97·6–97·7, 103·3–103·6m.		095	100·6	103·6				
							096	103·6	107·1				
107·1	110·6		5	Qgfc	COLOURED CLAY:		097	107·1	108·9				
					Banded grey-purple haematitic clays.		098	108·9	110·6				
					109·8 S_0? (Hc band) – C.A ≯ 45°								
110·6	112·2		5	Qgfc	COLOURED CLAYS		099	110·6	112·2				
					As for 92·7 – 107·1m.								

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DRILL CORE LOG

TENEMENT NAME GRIEVES No. [redacted] SHEET [redacted] 2

364844E

CO-ORDINATES 5349904N AZIMUTH 143 AMG DRILLERS DOTAS COMMENCED 30.6.95 PLAN – MAP REFERENCE

RL COLLAR INCLINATION -60° DRILL TYPE U250 COMPLETED 7.7.95 DEPTH 136.6 HOLE No. ZG415 CASING LEFT DPO No(s)

DEPTH From (M)	DEPTH To(M)	Core Rec. %	RQD DMH	Graphic Log	CORE DESCRIPTION	SPECIAL FEATURES Weath, Alteration, Fracturing, Veining, Mineralization	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)
112.2	127.6		5	Qgst	TRANSITION ZONE TO MOINA SST. Light yellow-grey clays with minor light grey-white bands of sand or quartzite.		5466100	112.2	115.6		
127.6	129.15		5x	Qgst	TRANSITION Brown sandy clay + dark brown sandstone bands.						
129.15	130.6		5x	Qgst	TRANSITION Purple haematitic clays + light grey-white sandstone as fragments + bands.						
130.6	136.6		5x	Om	MOINA SANDSTONE Light grey-white unconsolidated sand and minor sandstone fragments.						

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