

HARD ROCK COAL MINING

DRILL HOLE No VR 001

Survey Depth	Azimuth	Dip	Hole Co-ordinates <u>GDA94 - GPS</u>	
<u>SURFACE</u>	<u>-</u>	<u>-90</u>	Easting_	<u>589433</u>
			Northing_	<u>5388421</u>
			Elevation (m)	<u>827M SCALED</u>
			Azimuth_Mag	
			Dip	

SHEET 1 OF 15

PROJECT: <u>VALLEY ROAD FINGAL</u>
PROSPECT: <u>EL 16/2010</u>
DATE: <u>3 NOV 2011</u>
LOGGED BY: <u>KM</u>

STACPOOLE ENTERPRISES MOBILE B90 TRUCK MOUNTED UNIVERSAL RIG.
DRILLER: T. LODGE

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG		
				PREFIX	%					STRUCT	ALT	mm							
					.1	.3	1	3	5			0.06	0.5	2	8			32	64
2																			
4																			
6																			
8																			
10																			
12																			
14																			
16																			
18																			
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28																			
30																			
32																			
34																			
36																			
38																			
40																			
REMARKS																			

REG-VAITH

ORANGE BROWN DOLOMITE SOIL, OXIDISED DOLOMITE
ROCK FRAGS. 3m HWT STEEL COLLAR.

DOLOMITE

GREEN GREY FRESH UNIFORM MEDIUM GRAINED
DOLOMITE CHIPS. DUST. NO EVIDENCE OF
WEATHERED FRACTURE FILL MIN.
100mm OPEN HOLE HAMMER DRILLING TO 203.3m
MINOR WATER AT 6m.

DRILL HOLE No VR001

SHEET 3 OF 15

PROJECT:
PROSPECT:
DATE:
LOGGED BY: <i>KM</i>

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_ Mag	
			Dip	

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG						GEOLOGY NOTES	SUMMARY LOG		
					%					STRUCT	ALT	mm									
					.1	.3	1	3	5			0.06	0.5	2	8	32	64				
82																					
84																					
86																					
88																					
90																					
92																					
94																					
96																					
98																					
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102																					
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116																					
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120																					
REMARKS																					

HARD ROCK COAL MINING

DRILL HOLE No VR001

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

SHEET 4 OF 15

PROJECT:

PROSPECT:

DATE:

LOGGED BY: KM

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG
				%					STRUCT	ALT	mm						
				.1	.3	1	3	5			0.06	0.5	2	8	32		
122																	
124																	
126																	
128																	
130																	
132																	
134																	
136																	
138																	
140																	
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146																	
148																	
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160																	
REMARKS																	

WATER INTO HOLE AT 141M

SHEET 5 OF 15

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_ Mag	
			Dip	

PROJECT:

PROSPECT:

DATE:

LOGGED BY: KM

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG						GEOLOGY NOTES	SUMMARY LOG	
				PREFIX	%					STRUCT	ALT	mm							
					.1	.3	1	3	5			0.06	0.5	2	8	32			64
162																			
164																			
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200																			
REMARKS																			

HARD ROCK COAL MINING

DRILL HOLE No VR001

Survey Depth	Azimuth	Dip	Hole Co-ordinates
			Easting_
			Northing_
			Elevation (m)
			Azimuth_ Mag
			Dip

SHEET 6 OF 15

PROJECT:

PROSPECT:

DATE: 18 NOV 2011

LOGGED BY: KM

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG	
					%					STRUCT	ALT	mm							
					.1	.3	1	3	5			0.06	0.5	2	8	32	64		
202																			
204	100	100																203.3	END DOWN HOLE HAMMER 4 INCH (100mm)
206	100	100																	START HQ3 - SERIES 10 BIT
208	100	100																	
210	100	100																	
212	100	100																	
214	100	100																	
216	100	100																	
218	100	100																	
220	100	100																	
222	100	100																	
224	100	100																	
226	100	100																	
228	100	100																	
230	100	100																	
232	100	100																	
234	100	100																	
236	100	100																	
238	100	100																	
240	100	100																	

203.3 END DOWN HOLE HAMMER 4 INCH (100mm)

START HQ3 - SERIES 10 BIT

DOLERITE

FRESH GRAY UNIFORM COARSE-MEDIUM OPTIC TEXTURED DOLERITE, SLIGHT CRYSTAL SIZE DECREASE DOWN HOLE, NO VIS SULPHIDE, NO PERVIOUS ALTERATION OR WEATHERING, MINOR WHITE CALCITE, ZEBLITE, QUARTZ VEINLETS AS INDICATED.

VERY GOOD DRILLING DUE TO LACK OF STRUCTURE, UNIFORM TEXTURE.

210-212 0.5-2 mm CALCITE, ZEBLITE VEINLETS MAINLY SEALED, MINOR FRACTURING (PROBABLY DUE TO CORING). NO OXIDE COATINGS

VEINLETS A/A

DOLERITE IS MODERATELY MAGNETIC TO HARD MAGNET (WHITE MAGNETIC FOR JURASSIC DOLERITE)

CRYSTAL GRAIN SIZE VARIES IN BANDS FROM COARSE-MEDIUM TO MEDIUM BUT NO SYSTEMATIC SHIFT DOWN HOLE IN PLACES TEXTURE IS MODERATELY PYROXENE PERIDOTIC

A/A

232.6 2 mm ? ZEBLITE MINOR QUARTZ VEINLET WITH WAVY LAMINATED (TRAVERTINE-LIKE) TEXTURE. FRESH OPEN FRACTURE (PROBABLY DUE TO CORING)

235.3 TRACE SEALED VEINLET < 1 mm.

238.6

237.6 CHANGE BIT SERIES 10 → 8

REMARKS V=VEIN V=VEINLET, F=FAULT, f= FRACTURE, J= MAJOR JOINT, j= MINOR JOINT

α = CORE AXIS / STRUCTURAL PLANE ANGLE B= bedding.

REMARKS V=VEIN V=VEINLET F=FAULT f=FRACTURE J=MAJOR JOINT j=MINOR JOINT

α = CORE AXIS / STRUCTURAL PLANE ANGLE B = bedding.

HARD ROCK COAL MINING

DRILL HOLE No VR001

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting	
			Northing	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

SHEET 8 OF 15

PROJECT:

PROSPECT:

DATE:

LOGGED BY: KM

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG
				%					STRUCT	ALT	mm						
				.1	.3	1	3	5			0.06	0.5	2	8	32		
	100	100															
282	100	100															
	100	100															
284	100	100							Vx30						284 1mm		
	100	100															
286	100	100							Vx20							286.5 1mm	
	100	100															
288	100	100														288.6 NEWBIT SERIES B → SERIES 6	
	100	100															
290	100	100															
	100	100															
292	100	100							Vx40							291.6 1mm PLANAR - NATURAL BREAK IN CORE	
	100	100															
294	100	100							Vx40							293.2 1mm PLANAR BREAKS A/A	
	100	100														293.3	
296	100	100							Vx30 Vx30 Vx10.4							294.3 1mm PLANAR PARTLY OXIDIZED VEINLET A/A.	
	100	100														294.7 1mm	
298	100	100														295 2mm SLIGHTLY UNDOUBT CALSITE ZEPHYRUS VEINETS A/A, CLOSED, TIGHT VEINLETS.	
	100	100															
299	100	100							Vx30							297.6 1mm	
	100	100															
	100	100							Vx20							298.5 1mm	
300	100	100															
	100	100							Vx50 Vx45 Vx40							299.5-300.5 CORE BREAKS ON PLANAR WEAKLY MINERALIZED CALSITE ZEPHYRUS VEINLETS 2mm, GRADING TO FINE FRACTURES.	
302	100	100															
	100	100							Vx40 Vx45 Vx30 Vx30 Vx30							300.2 1mm 302.2 1mm 302.5 1mm 303 1mm 303.7 1mm 304.3 1mm	
304	100	100															
	100	100							Vx10 Vx30 Vx20							305.6mm 305.8 1mm 306.5 1mm	
306	100	100															
	100	100															
308	100	100							Vx30 Vx50 Vx60 Vx20							307.5 1m x 2 307.9 1mm 308.1 1mm 309 1mm	
	100	100															
310	100	100															
	100	100							Vx30							310.1 1mm	
312	100	100															
	100	100							Vx40 Vx30							311.6 2mm 312.1 1mm	
314	100	100															
	100	100							Vx30							313.8 1mm	
316	100	100															
	100	100															
	100	100							Vx10 Vx20 Vx20							315.6 1mm 316.4 1mm 316.7 1mm	
318	100	100														316.4 1mm PLANAR SMOOTH, PARTLY OPEN, PATCHY OXIDIZED 1-2mm ZEPHYRUS, CHLORITE, CLAY FRACTURES ON VEINLETS.	
	100	100							Vx30							318.4 1mm	
320	100	100															

REMARKS

REMARKS

DRILL HOLE No VR 001

SHEET 10 OF 15

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_ Mag	
			Dip	

PROJECT:

PROSPECT:

DATE: 29 Nov 2011

LOGGED BY: JPEMBERTON

[illegible]

HARD ROCK COAL MINING

DRILL HOLE No VR001

SHEET 11 OF 15

Survey Depth	Azimuth	Dip	Hole Co-ordinates
			Easting_
			Northing_
			Elevation (m)
			Azimuth_Mag
			Dip

PROJECT:

PROSPECT:

DATE: 2/12/2011

LOGGED BY: J PEMBERTON

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES	PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
					STRUCT	ALT			
				%			mm		
				.1 .3 1 3 5			0.06 0.5 2 8 32 64		
400	100	60						400-15 DELIMITATED COAL SEAM IN LITHIC SANDSTONE	
402	100	50			487			400.52-401.79 DULL MINOR BRIGHT COAL WITH 1-2cm VITRINITE FRAMES WITH CALCITE CEMENTATION	
404	100	50						401.79-403.60 CARBONACEOUS MUDSTONE TOP (10cm)	
406	100	40						403.60-404.71 DULL MINOR BRIGHT WITH 1-2cm GREY CLAYSTONE	
408	100	100						404.71-406.75 GREY LAMINATED MUDSTONE	
410	100	100						406.75 FAULTED CONTACT? FINE GRAINED LITHIC SANDSTONE	
412	100	100						-409.75 SLIGHTLY COARSER FROM 409.1 TO 409.50.	
414	100	100						409.75-410.39 COARSE TOP TOP LITHIC SANDSTONE	
416	100	100						410.39-410.93 LITHIC SANDSTONE - FINE SST	
418	100	100						410.93-420.43 THICK UNIT MEDIUM TO COARSE LITHIC SANDSTONE	
420	100	100						420.43-424.38 COARSE LITHIC SST	
422	100	100						422.64 7.5cm Calcite / 100% VERN	
424	100	70						424.38-425.59 MUDSTONE - 20cm BASE	
426	100	100						425.59-426.55 DARK CARBONACEOUS WITH 0.5cm COAL FRAMES	
428	100	100						426.55-429.48 CARBONACEOUS MUDSTONE BASE TO GREY MUDSTONE	
430	100	100						429.45-430.05 REPEAT FINING UP LITHIC SANDSTONE	
432	100	100						30cm CORE LOSS AT 432.5	
434	100	100						430.05-430.55 BASE LARGE (10cm) RIP UP CARBONACEOUS MUDSTONE FLAKES	
436	100	100						430.55-430.72 GREY MUDSTONE	
438	100	90						430.72-430.97 LITHIC SANDSTONE THIN CARB. RANGE	
440	95	10						430.97-432.42 RITTLE DMR COAL RLY GREY MUDSTONE + CARBONACEOUS MUDSTONE	

REMARKS

DRILL HOLE No VR001

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_ Mag	
			Dip	

SHEET 12 OF 15

PROJECT:

PROSPECT:

DATE: 7/12/2011

LOGGED BY: J. PEMBERTON / N Rutherford

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HARD ROCK COAL MINING

DRILL HOLE No VR001

SHEET 13 OF 15

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_ Mag	
			Dip	

PROJECT:

PROSPECT:

DATE: 12/12/2011

LOGGED BY: N Rutherford

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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REMARKS

DRILL HOLE No VRO01

SHEET 15 OF 15

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_	
			Northing_	
			Elevation (m)	
			Azimuth_ Mag	
			Dip	

PROJECT:

PROSPECT:

DATE: 22/12/2011

LOGGED BY: J. REMBERTON

[illegible]