

HARD ROCK COAL MINING

DRILL HOLE No VR002

SHEET 1 OF 6

Survey Depth	Azimuth	Dip	Hole Co-ordinates
SURFACE	—	-90	GPS- DATA 588329 E
			5390044 N
			Elevation (m) 582M SEALED
			Azimuth_Mag
			Dip

PROJECT: VALLEY ROAD FINGAL

PROSPECT: EL 16/2010

DATE: 12/1/12

LOGGED BY: KM + WH

STACPOLE ENTERPRISES
DRILLER: T. LODGE

MOBILE B-90 TRUCK MOUNTED UNIVERSAL RIG.

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		
0	0	N/A																HQ3 CORE FROM SURFACE	
2	100	100																00-1.0 SOIL - RED BROWN DOLOMITE CLAY	
4	100	100																1.0-39.9	
6	100	100																DOLOMITE TALUS.	
8	100	100																INTERMIXED RED BROWN - YELLOW BROWN HEMATITE -	
10	100	90																ANTONITIC (DOWN HOLE TEND) DOLOMITE CLAY	
12	100	100																AND DEEPLY WEATHERED DOLOMITE, WITH FREELY	
14	100	30																KERNALS. BOULDERS OF GREY MEDIUM	
16	0	35																GRAINED OPHITIC DOLOMITE.	
18	100	80																COMMON CORE LOSS AND WATER LOSS IN THE	
20	80	70																CLAY INTERVALS.	
22	100	100																	
24	100	70																	
26	20	30																	
28	60	45																	
30	100	80																	
32	60	25																	
34	50	37																	
36	20	20																	
38	17	75																	
40	61																		

REMARKS

HQ3 CORE FROM SURFACE

00-1.0 SOIL - RED BROWN DOLOMITE CLAY
1.0-39.9
DOLOMITE TALUS.
INTERMIXED RED BROWN - YELLOW BROWN HEMATITE -
KIMONITIC (DOWN HOLE TREND) DOLOMITE CLAY
AND DEEPLY WEATHERED DOLOMITE, WITH FREELY
KERNALS. BORDERS OF GREY MEDIUM
GRAINED OPHITIC DOLOMITE.
COMMON CORE LOSS AND WATER LOSS IN THE
CLAY INTERVALS.

14.3

CORE LOSS.

16.65

SMALL CORE LOSS

19.8

20.3

24.3

CORE LOSS

25.8 - CEMENT GROUT AT 26m

26.3

CORE LOSS

27.4 - CEMENT GROUT AT 27.5m

28.6 CASE OFF HQ3 DRILL ON WITH NQ3 (TRAY #10)

29.0

SMALL CORE LOSS

31.4

CORE LOSS

32.25

33.50

CORE LOSS

34.37

CORE LOSS

36.20

CORE LOSS

39.25

39.9 CEMENT GROUT AT 40.0m
HQ CASING REAMED DOWN TO 40.0M

REMARKS

HARD ROCK COAL MINING

DRILL HOLE No VR002

SHEET 2 OF 6

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

PROJECT: VALLEY ROAD FINAL

PROSPECT: EL 16/2010

DATE: 19/1/12

LOGGED BY: W. HAGELL

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
42	100	26																
	100	43																
	100	44																
44	105	20																
	95	20																
46	95	81																
	100	100																
48	100	82																
	100	91																
50	100	95																
	100	89																
52	100	100																
	100	100																
54	100	100																
	100	69																
56	100	86																
	100	93																
58	100	42																
	100	84																
60	100	100																
	100	92																
62	100	82																
	100	100																
64	100	100																
	100	100																
66	100	100																
	100	32																
68	100	48																
	100	72																
70	100	0																
	100	44																
72	100	65																
	100	54																
74	100	84																
	100	100																
76	100	100																
	100	87																
78	100	75																
	100	75																
80	100	85																

REMARKS

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

α = CORE AXIS / STRUCTURAL PLANE ANGLE, β = 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 VR002

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

SHEET 3 OF 6

PROJECT: <u>VALLEY ROAD FINGAL</u>
PROSPECT: <u>EL 16/2010</u>
DATE: <u>19/1/12</u>
LOGGED BY: <u>W. HAGELL</u>

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
	100	100																	
82	100	98																	
	100	100																	
84	78	70																	
	20	0																	
86	100	86																	
	100	38																	
88	100	80																	
	89	48																	
90	91	10																	
	78	0																	
92	100	63																	
	100	31																	
94	100	24																	
	100	27																	
96	100	94																	
	100	100																	
98	100	100																	
	100	100																	
100	100	100																	
	100	86																	
102	100	96																	
	100	100																	
104	100	100																	
	100	96																	
106	100	100																	
	100	100																	
108	100	100																	
	100	100																	
110	100	100																	
	100	100																	
112	100	83																	
	100	100																	
114	100	100																	
	100	100																	
116	100	23																	
	100	75																	
118	100	13																	
	100	53																	
120	100	95																	
REMARKS																			

REMARKS

HARD ROCK COAL MINING

DRILL HOLE No VR002

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

SHEET 4 OF 6

PROJECT:	VALLEY ROAD FINCAL
PROSPECT:	EL 16/2010
DATE:	1/2/12
LOGGED BY:	W. HAGELL

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		
100	100	100																119.3-142.58 LITHIC SANDSTONE THICKLY BEDDED, MASSIVE, MEDIUM TO COARSE GRAINED WITH MINOR COAL FLASORS AND THIN MUDSTONE AND CONGLOMERATE BEDS	
122	100	100																122.05 MINOR COAL FLASORS	
124	100	100																125.76 & 125.92 MINOR COAL VEINS	
126	100	100																	
128	100	100																128.71-128.86 POLYMIC TIC CONGLOMERATE GREY AND DARK GREY MUDSTONE CLASTS	
130	100	100																	
132	100	100																130.02-130.17 INTERLAMINATED MUDSTONE AND CARBONACEOUS MUDSTONE	
134	100	84																130.68 INTERBEDDED MUDSTONE AND SANDSTONE	
136	100	100																131.70 MEDIUM GRAINED CONGLOMERATE CLASTS AS ABOVE	
138	100	100																131.86 VERY THIN COAL FLASORS	
140	100	100																132.9 COAL VEINS WITH FLATTENED MUDSTONE CLASTS	
142	100	100																133.26 ANGULAR MUDSTONE CLAST BAND	
144	100	32																	
146	100	82																137.8 COAL VEIN ~5cm	
148	100	96																	
150	100	92																	
152	100	100																	
154	100	100																142.58 SHARP BOUNDARY BETWEEN LITHIC SANDSTONE AND COAL	
156	100	92																142.76 (REFER 20 SCALE LOG)	
158	100	100																144.74	
160	100	0																145.74 TOP COAL	
																		146.33 BASE COAL	
																		147-148.73 INTERBEDDED GREY MUDSTONE AND SANDSTONE STRONG CROSS BEDDING, YOUNGING INDICATORS AND LOAD STRUCTURES	
																		148.73 SHARP CONTACT BETWEEN MUDSTONE AND SANDSTONE	
																		150.34 SHARP CONTACT BETWEEN SANDSTONE AND MUDSTONE	
																		151.1 SHARP CONTACT BETWEEN MUDSTONE AND SANDSTONE	
																		153.43-153.63 BROKEN AND PATCHY COAL BANDS	
																		155.83 3cm COAL VEIN	
																		157.03-157.33 COAL VEINS WITH BOULDERS OF MUDSTONE AND CARBONACEOUS MUDSTONE WITHIN A COARSE SANDSTONE.	
																		157.95 SHARP CONTACT BETWEEN SANDSTONE AND CARBONACEOUS MUDSTONE INTERBEDDED WITH BULK HEAVY COAL	
																		158.2-160.29 MUDSTONE DOWN GRADING TO A FINE, FOGGY SILTSTONE.	
REMARKS																			

REMARKS

HARD ROCK COAL MINING

DRILL HOLE No VR002

SHEET 5 OF 6

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

PROJECT: VALLEY ROAD FINAL

PROSPECT: EL 16/2010

DATE: 6/2/12

LOGGED BY: W. HAGELL

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		
	100	30															160.29 - 167.09 GREY MUDSTONE, FINE GRAINED WITH CARBONACEOUS ROOF (10cm) AND NUMEROUS SLIKEN SIDES.	
162	100	0															SLIKEN SIDE	
	100	31																
164	100	53															163.06 COAL VEIN (1.5cm)	
	100	56															164.5 SLIKEN SIDE	
166	100	29																
	100	0															166.12 SLIKEN SIDE WITH CALCITE INFILL	
168	100	32															167.09 TOP COAL	
	100	27															REFER 20 SCALE 2.0G.	
170	100	11															169.04 GREY MUDSTONE INTERBEDDED WITH CARBONACEOUS MUDSTONE. NUMEROUS SLIKEN SIDES.	
	100	13																
172	100	0															170.32 - 172.78 GREY MUDSTONE WITH A CARBONACEOUS ROOF AND OCCASIONAL SLIKEN SIDES.	
	100	19															171.15 - 171.21 VERY FINE WHITE SILTY MUD. PYRITE GLAST.	
174	100	78															172.45 BRIGHT BRITTLE VITRONITE COAL VEIN (3cm)	
	100	43															172.78 - 173.29 DULL AND BRIGHT COAL GRADING TO A CARBONACEOUS BASE	
176	100	39															173.29 - 174.73 GREY MUDSTONE, STRONG CROSS BEDDING.	
	100	100															174.73 - 174.94 INTERBEDDED GREY MUDSTONE AND CARBONACEOUS MUDSTONE WITH SMALL BRIGHT COAL BANDS	
178	100	100															174.94 - 175.25 FINING UP FROM MUDSTONE TO SANDSTONE	
	100	100															175.25 - 185.64 MEDIUM TO COARSE GRAINED MASSIVE LITHIC SANDSTONE WITH OCCASIONAL COAL FLASORS.	
180	100	100																
	100	100																
182	100	100																
	100	93																
184	100	100																
	100	100																
186	100	68															185.64 - 186.41 SHARP CONTACT FROM SANDSTONE TO GREY MUDSTONE WITH STRONG BEDDING.	
	100	44															186.41 - 186.70 CARBONACEOUS MUDSTONE GRADING INTO COAL	
188	100	100															186.70 - 193.66 INTERLAMINATED TURBIDITIC MUDSTONE, SANDSTONE AND CARBONACEOUS MUDSTONE. OCCASIONAL COAL BANDS, LOAD STRUCTURES PRESENT. OCCASIONAL SLIKEN SIDES.	
	100	23																
190	100	100																
	100	81																
192	100	88																
	100	83																
194	100	85															193.66 - 206.27 BRADUAL CONTACT MEDIUM TO COARSE GRAINED MASSIVE LITHIC SANDSTONE. OCCASIONAL COAL FLASORS	
	100	89																
196	100	100																
	100	100																
198	100	100																
	100	100																
200	100	100																

REMARKS

REMARKS

DRILL HOLE No VR002

SHEET 6 OF 6

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

PROJECT:	VALLEY ROAD FINGAL
PROSPECT:	EL 16/2010
DATE:	7/2/12
LOGGED BY:	W. HAGELL

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			
	100	100																	
202	100	100																	
	100	100																	
204	100	77																	
	100	100																	
206	100	100																	
	100	39																	
208	100	11																	
	100	21																	
210	100	23																	
	100	0																	
212	100	11																	
	100	52																	
214	100	26																	
	100	0																	
216	100	31																	
	100	100																	
218	100	100																	
	100	100																	
220	100	62																	
	100	58																	
222	100	83																	
	100	100																	
224	100	46																	
	45	24																	
226	0	0																	
REMARKS																			