

Appendix 3 - Mt Vernon DDH 002 (MTV 002)

Drill hole details:

Collar Co ordinates	E 55 513 651 N 5 295 675
RL	202m
Dip	-90 ⁰
Drill type	HQ and NQ Diamond
Depth	279m

Graphic log	2
Core photographs	16
Recovery and RQD	35
Detailed seam logs	41

DRILL HOLE No MTV002

SHEET 1 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
0m	-	-90°	Easting_	55 513651
			Northing_	5 295675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

PROJECT: EL25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-12 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	RHD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				1	3	1	3	5	STRUCT	ALT				
1	-	-	-									0-90-8.60: DOLOMITE TALUS		
2	-	-	-											
3	-	-	-											
4	-	-	-											
5	-	-	-									0-9.6m: NO CORE (CUTTING BIT)	DL	
6	-	-	-											
7	-	-	-											
8	-	-	-											
9	-	-	-									8.60-9.60: SANDSTONE	SS	
10	87.5	100	-								9.60-17.47: DARK GREY TO BLACK CARBONACEOUS MUDSTONE WITH MEDIUM-GRAINED SANDSTONE INCREASING DOWNHOLE AND CONTAINING FOSILISED PLANTS.			
11	100	100	-											
12	100	100	-											
13	100	95	-							Bd 80°				
14	100	100	-							Tr (rs) 45°				
15	100	100	-							Tr (rs) 20°				
16	100	100	-											
17	100	100	-											
18	66	100	-										17.47-17.91: CORE LOSS (GROUND AWAY)	CL
19	98	100	-										17.91-20.20: BLACK CARBONACEOUS MUDSTONE AND PALE GREY LITHIC SANDSTONE INCREASING DOWN HOLE WITH STRONG CROSS BEDDING @ 18-19.3m, 19m AND 20.2m	CS
20	100	100	-											CS
REMARKS														

WINDLANDS ENERGY

DRILL HOLE No MTV002

SHEET 2 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	- 90°

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	RCD	SAMPLE NO	SULPHIDES				PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				1	2	3	4	STRUCT	ALT			
21	100	100	-							20.20-21.92: PALE GREY, MEDIUM-COARSE GRAINED LITHIC SANDSTONE WITH MINOR CARBONACEOUS MUDSTONE FLACR BANDING AND CROSS-BEDDING AT 20.5m. PLANT FOSSILS (<i>Dicroidium?</i>) PRESENT THROUGHOUT AND DARKER, CARBONACEOUS MUDSTONE ZONE FROM 21.55-22.1m.		
22	100	100	-					Bd 75-80°				
23	100	100	-									
24	100	100	-					J1(rs) 10° Bn 10°			SS	
25	100	100	-					J1(rs) 60°				
26	100	95	-									
27	100	100	-									
28	100	90	-					Jn(rs) 50°		27.92-28.50: COAL AND CARBONACEOUS MUDSTONE WITH MINOR CALCITE VEINING AND APPROXIMATELY 1% VITRINITE		
29	100	70	-					Bd 80°		28.50-28.61: GREY MUDSTONE	MS	
30	100	100	-							28.61-35.50: GREY TO PALE GREY, MEDIUM GRAINED LITHIC SANDSTONE AND CARBONACEOUS MUDSTONE WITH MINOR MUDSTONE THAT IS ZONALLY PROMINANT AND INCREASING DOWNHOLE. FLACR STRUCTURES AND FREQUENT CROSS-BEDDING PRESENT.		
31	100	100	-					Bd 80°				
32	100	100	-					Bd 80°			SS	
33	100	100	-									
34	100	100	-					J1(rs) 80°				
35	100	100	-							35.50-36.86: GREY, SOFT MUDSTONE WITH MINOR CARBONACEOUS MUDSTONE	MS	
36	100	80	-									
37	100	65	-					FtZ		36.86-37.25: FAULT ZONE IN GREY MUDSTONE AND MINOR CARBONACEOUS MUDSTONE	MS	
38	100	70	-					J1(rs) 70° Bd 85° 70°		37.25-37.93: GREY MUDSTONE WITH DOWNHOLE CONTACT AT 70°	MS	
39	100	70	-					F4(C1)		37.93-38.23: BLACK, DULL, HEAVY COAL WITH MINOR CALCITE CLEFTS PLUS CARBONACEOUS MUDSTONE		
40	100	100	-							38.23-38.44: DEGRADED MUDSTONE AND CARBONACEOUS MUDSTONE		
										38.44-38.57: CARBONACEOUS MUDSTONE GRADING TO GREY MUDSTONE		
										38.57-40.09: GREY MUDSTONE WITH MINOR PALE GREY SANDSTONE INCREASING DOWNHOLE	MS	

REMARKS

DRILL HOLE No MTV002

SHEET 3 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)
			Easting_ 55 513 651
			Northing_ 5 295 675
			Elevation (m) 202
			Azimuth_Mag -
			Dip -90°

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 to 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	TRUD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG				GEOLOGY NOTES	SUMMARY LOG	
					1	3	1	3	8	STRUCT	ALT	0.05	0.25	1	2			3
41	100	100	-								En	75°					40.09-45.49: PALE GREY TO WHITE, QUARTZ-RICH, SUB-LITHIC SANDSTONE WITH ZONAL CARBONACEOUS MUDSTONE FLACER BANDING DECREASING DOWNHOLE. RIP-UP CLASTS AT 41.5m	
42	100	100	-															
43	100	95	-															SS
44	100	100	-															
45	100	95	-															
46	100	100	-								En	70-80°					45.49-45.61: CARBONACEOUS MUDSTONE (1% COAL) AND MINOR SANDSTONE	MS
47	100	100	-								Ed	80°					45.61-46.20: PALE GREY TO WHITE, QUARTZ-RICH, SUB-LITHIC SANDSTONE WITH ZONAL CARBONACEOUS MUDSTONE AND COAL AT 46.5 AND 46.8-47m. GRADATIONAL DOWN-HOLE CONTACT (GRADING TO GREY MUDSTONE)	SS
48	100	92	-								En	70°						
49	100	100	-														46.20-49.29: GREY TO DARK GREY MUDSTONE AND CARBONACEOUS MUDSTONE	MS MS
50	100	90	-														49.29-49.66: DULL, HEAVY COAL AND CARBONACEOUS MUDSTONE	
51	100	100	-														49.66-51.96: GRADING FROM SOFT BROWN MUDSTONE WITH MINOR SANDSTONE, TO GREY INTERBEDDED MUDSTONE AND SANDSTONE	MS (SS)
52	100	100	-														51.96-54.09: PALE GREY, MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH CONGLOMERATIC ZONES CONTAINING POINTED TO WELL-ROUNDED MUDSTONE CLASTS IN BANDS AT 52-52.5m, 52.75m AND 52.95m	SS
53	100	100	-															
54	100	100	-								Ed	75°					54.09-54.38: GREY MUDSTONE WITH SOME FINE-GRAINED SANDSTONE	MS
55	100	100	-								Ed	80°					54.38-54.54: CARBONACEOUS MUDSTONE, GREY MUDSTONE AND MINOR, MEDIUM-GRAINED SANDSTONE	MS
56	100	100	-														54.54-63.70: GREY, MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE BANDING UPHOLE	MS
57	100	100	-															SS
58	100	100	-															
59	100	100	-															
60	100	100	-															
REMARKS																		

WINDLANDS IN CROSS

DRILL HOLE No MTV002

SHEET 4 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

PROJECT: EL25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	HOU	SAMPLE ID	SULPHIDES	PICTORIAL LOG		GRAPHIC LOG	GEOLOGICAL NOTES	SUMMARY LOG
					STRUCT	ALT			
61	100	100	-						
62	100	100	-						103
63	100	100	-						
64	100	100	-					63.70-64.67: GREY, COARSE TO VERY COARSE-GRAINED LITHIC SANDSTONE WITH CONGLOMERATIC ZONES CONTAINING MATRIX-SUPPORTED, ROUNDED MUDSTONE AND CARBONACEOUS MUDSTONE CLASTS AT 63.9-63.95, 64-64.05, 64.15-64.24, 64.35-64.55 AND 64.42-64.67m THIN, 2mm. VITRINITE BAND WITH CALCITE CLEATS AND PROXIMAL VITRINITE CLAST AT 63.7m AND DISPERSED 2mm VITRINITE SAND WITH CALCITE CLEATS AT 64.45m	
65	100	100	-					64.67-75.60: MASSIVE GREY, MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH CARBONACEOUS MUDSTONE AND MUDSTONE CLASTS AND PLANT POSSIBLE FROM 67.2m. CLASTS UP TO 7cm. OCCUR BOTH ZONALLY AND SPARSELY DOTTED THROUGHOUT (67.62, 68.7-69.45, 73.74-75.4m). MUDSTONE BANDING PROMINANT FROM 74.70-75.1m.	
66	100	100	-						
67	100	100	-						
68	100	100	-						
69	100	100	-						88
70	100	100	-						
71	100	100	-						
72	100	100	-						
73	100	100	-						
74	100	100	-						
75	100	100	-						
76	100	100	-					75.60-76.27: DARK GREY FINE-GRAINED SANDSTONE AND MUDSTONE	105
77	100	100	-					76.27-77.47: PALE GREY, MEDIUM-GRAINED SANDSTONE WITH MINOR FLACER BANDING DOWN HOLE	89
78	100	100	-					77.47-79.10: GREY TO PALE GREY, MEDIUM-GRAINED LITHIC SANDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE	88
79	100	100	-					79.10-79.96: GREY, FINE TO MEDIUM-GRAINED LITHIC SANDSTONE WITH MINOR CARBONACEOUS MUDSTONE.	88
80	100	100	-						88
REMARKS									



DRILL HOLE No MTV002.

SHEET 5 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	PREFIX	SULPHIDES				PICTORIAL LOG		GRAPHIC LOG				GEOLOGY NOTES	SUMMARY LOGS	
					1	3	1	3	5	STRUCT	ALT	0.0	0.5	1			2
81	100	97	-							8d	75-80°					74.96-80.72: PALE GREY TO GREY, FINE TO MEDIUM-GRAINED LITHIC SANDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE	CG
82	100	100	-													80.72-81.20: GREY, MEDIUM-GRAINED SANDSTONE WITH MINOR CARBONACEOUS MUDSTONE AND MUDSTONE BANDS	MS
83	100	90	-							8d	75-80°					81.20-81.92: GREY MUDSTONE, INTERBEDDED WITH FINE-GRAINED SANDSTONE	MS
84	100	100	-													81.92-82.55: COAL AND CARBONACEOUS MUDSTONE	CG
85	100	87	-													82.55-82.72: INTERBEDDED PALE GREY, FINE TO MEDIUM-GRAINED SANDSTONE AND CARBONACEOUS MUDSTONE WITH MINOR MUDSTONE	CG
86	100	100	-													82.72-83.66: PALE GREY TO GREY, MEDIUM-GRAINED LITHIC SANDSTONE WITH CARBONACEOUS MUDSTONE AND MUDSTONE BANDING	CG
87	100	100	-													83.66-84.45: PALE GREY, MEDIUM-GRAINED LITHIC SANDSTONE AND CARBONACEOUS MUDSTONE	CG
88	100	100	-													84.45-84.58: PALE GREY LITHIC SANDSTONE AND SOME CARBONACEOUS MUDSTONE	CG
89	100	100	-													84.58-84.70: CARBONACEOUS MUDSTONE	CG
90	100	93	-													84.70-94.32: INTERBEDDED CARBONACEOUS MUDSTONE AND PALE GREY, MEDIUM-GRAINED, LITHIC TO SUB-LITHIC SANDSTONE (FROM AROUND 90m -GRADATIONAL)	CG
91	100	100	-														
92	100	100	-														
93	100	60	-														
94	100	100	-														
95	100	45	-							8d	80°					94.32-97.43: GREY MUDSTONE INTERBEDDED WITH CARBONACEOUS MUDSTONE AND PALE GREY, SUB-LITHIC SANDSTONE INCREASING DOWNHOLE	MS
96	100	50	-														
97	100	100	-														
98	100	100	-							8d	75°					97.43-100.53: PALE GREY, MEDIUM-GRAINED, LITHIC TO SUB-LITHIC SANDSTONE WITH CONGLOMERATIC ZONES CONTAINING MUDSTONE AND CARBONACEOUS MUDSTONE CLASTS UP TO 3cm LONG, MOST PROMINANT AT 97.7-97.76 AND 98.46-98.53m	MS
99	100	100	-														
100	100	100	-							8d	90°						

REMARKS

DRILL LOG

DRILL HOLE No MTV002

SHEET 6 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)
			Easting <u>55 513 651</u>
			Northing <u>5 295 675</u>
			Elevation (m) <u>202</u>
			Azimuth_Mag <u>-</u>
			Dip <u>-90°</u>

PROJECT: <u>EL 25/2008</u>
PROSPECT: <u>MOUNT VERNON</u>
DATE: <u>29-6-2012 TO 7-8-2012</u>
LOGGED BY: <u>KAREN ADAMS</u>

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO. PREFIX	SULPHIDES	PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOGS
					STRUCT	ALT			
101	100	80	-		H (vs) 85°			100.55-102.12: GREY MUDSTONE AND SOME ZONALLY DOMINANT CARBONACEOUS MUDSTONE WITH MINOR PALE GREY SANDSTONE INCREASING DOWNHOLE.	SS MS
102	100	100	-					102.12-103.30: INTERBEDDED GREY MUDSTONE AND PALE GREY LITHIC SANDSTONE WITH MINOR CARBONACEOUS MUDSTONE	MS SS
103	100	100	-					103.30-103.44: CARBONACEOUS MUDSTONE +/- DULL COAL	MS
104	100	75	-					103.44-104.27: GREY MUDSTONE AND PALE GREY, MEDIUM-GRAINED SANDSTONE WITH MINOR CARBONACEOUS MUDSTONE	MS SS
105	100	65	-		H 110°			104.27-104.60: DULL COAL AND CARBONACEOUS MUDSTONE WITH SANDSTONE BANDING	MS SS
106	100	57	-					104.60-105.06: GREY MUDSTONE AND FINE-GRAINED GREY SANDSTONE	MS SS
107	100	82	-					105.06-105.50: INTERBEDDED PALE GREY SANDSTONE AND GREY MUDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE WITH RIP-UP CLASTS PRESENT.	MS SS
108	100	100	-					105.50-112.46: MEDIUM-GRAINED, PALE GREY LITHIC TO SUB-LITHIC SANDSTONE AND SOME CARBONACEOUS MUDSTONE. PLANT FOSSILS (Aldrovandium?), APPEARING AS LAMINAE FROM 110.7-111.55m.	
109	100	100	-						SS
110	100	71	-		Lm 85°				
111	100	100	-		Lm 80°				
112	100	80	-		H (vs) 10°				
113	100	57	-					112.46-113.25: MEDIUM-GRAINED, PALE GREY LITHIC SANDSTONE WITH CONGLOMERATIC ZONES, COMPOSED OF CARBONACEOUS MUDSTONE AND MUDSTONE CLASTS OF UP TO 2cm FROM 112.46-112.6m	SS
114	100	100	-					113.25-116.30: GREEN-GRAY, FINE-GRAINED SANDSTONE AND MUDSTONE (POSSIBLY CONTACT METAMORPHISM RELATED; FINE-GRAINED SILICA-SARICITE ALTERATION), GRABATIONAL DOWNHOLE CONTACT.	SS MS
115	100	100	-						SS MS
116	100	100	-		H (vs) 30°			115.30-115.79: DOMINANTLY GREY, FINE-GRAINED SANDSTONE AND MINOR MUDSTONE. 1mm DISCONTINUOUS VITRINITE BAND/CLAST WITH CALCITE CLEATING PRESENT.	SS
117	100	100	-		Vn 60°			115.79-116.85: GREEN-GRAY, SERICITE-SILICA (?) ALTERED, FINE-GRAINED SANDSTONE AND MUDSTONE WITH VEIN BRECCIA AT APPROXIMATELY 116.6m (ALTERATION BRECCIA RELATED? OR CONTACT METAMORPHISM RELATED?)	SS MS
118	100	100	-					116.85-117.62: GREY SANDSTONE AND MUDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE. THIN DISPERSED VITRINITE SANDS CONTAINING CALCITE CLEATING, PRESENT AROUND 117.5m	SS MS
119	100	80	-		H (vs) 85°			117.62-119.03: GRADING FROM GREY TO DARK GREY AND BLACK MUDSTONE AND CARBONACEOUS MUDSTONE	MS MS
120	100	57	-		H (vs) 85°			119.03-121.90: INTERBEDDED FINE-GRAINED LITHIC SANDSTONE AND MUDSTONE WITH MINOR CARBONACEOUS MUDSTONE, DISPLACED BEDDING DOWNHOLE AND SOME LARGE CLASTS.	SS MS
REMARKS									

MIDLANDS KN CROY

DRILL HOLE No MTV002

SHEET 7 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting_	55 513 651
			Northing_	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES	PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
					STRUCT	ALT			
			PREFIX	1	2	3	4	5	
121	100	97	-						SS MS
122	100	100	-						SS MS
123	100	100	-						SS MS
124	100	90	-						SS MS
125	100	97	-						SS MS
126	100	95	-						SS MS
127	100	86	-						SS MS
128	100	74	-						SS MS
129	100	100	-						SS MS
130	100	75	-						SS MS
131	100	87	-						SS MS
132	100	100	-						SS MS
133	100	100	-						SS MS
134	100	100	-						SS MS
135	100	100	-						SS MS
136	100	100	-						SS MS
137	100	100	-						SS MS
138	100	100	-						SS MS
139	100	100	-						SS MS
140	100	100	-						SS MS
REMARKS									

MIDLANDS ENERGY

DRILL HOLE No MTV002

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

SHEET 8 OF 14

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
					%	1	3	1	3	5	STRUCT				ALT
141	100	100	-												SS
142	100	100	-										141.92-142.66: GREY TO PALE GREY CONGLOMERATIC, COARSE-GRAINED LITHIC SANDSTONE SUPPORTED WITH BOUNDED MUDSTONE AND CARBONACEOUS MUDSTONE CLASTS, COMMONLY 20mm IN SIZE. BANDS OF LARGER CLASTS DOWNHOLE AT 142.42-142.44m AND 142.6-142.66m		SS
143	100	100	-										142.66-143.20: GREY, DOMINANTLY MEDIUM-GRAINED LITHIC SANDSTONE		SS
144	91	-	-										143.20-143.85: GRADING FROM DARK GREY TO GREEN-GREY MUDSTONE AND CARBONACEOUS MUDSTONE WITH SOME FINE-GRAINED SANDSTONE TOWARDS GRADATIONAL DOWNHOLE CONTACT		MS MS
145	100	100	-										143.85-144.85: GREEN-GREY MEDIUM-GRAINED LITHIC SANDSTONE 144.85-144.89: GREEN-GREY TO DARK GREY, SILICA ALTERED MUDSTONE AND CARBONACEOUS MUDSTONE 144.89-146.70: GREEN-GREY FINE-GRAINED SANDSTONE AND MUDSTONE WITH GRADATIONAL DOWNHOLE CONTACT		MS MS
146	95	-	-												MS
147	100	100	-										146.70-148.15: GREY, MEDIUM-GRAINED LITHIC SANDSTONE WITH SOME MUDSTONE AND CARBONACEOUS MUDSTONE		MS
148	100	100	-										INTERBEDDED, CONGLOMERATIC ZONE FROM AROUND 148m WITH CLASTS OF UP TO 10cm IN SIZE AND IRREGULAR, 2mm VITRINITE BANDS WITH CALCITE CLEAVING AT 147.75m AND ANOTHER VITRINITE BAND WITH CALCITE CLEAVING AT 148m		MS
149	100	100	-										148.15-148.94: INTERBEDDED FINE TO MEDIUM-GRAINED, GREY LITHIC SANDSTONE, MUDSTONE AND CARBONACEOUS MUDSTONE		SS + SS
150	100	100	-										148.94-151.12: GREY, MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE AND 2cm CLASTS NEAR BASE OF UNIT		SS
151	100	100	-												SS
152	97	-	-										151.12-151.39: CARBONACEOUS MUDSTONE (WITH MINOR DULL COAL?) GRADING TO DARK GREEN (POSSIBLY HORNFELSED?) PROXIMAL TO BROWN ZONE DOWNHOLE		MS
153	81	-	-										151.39-153.30: DOMINANTLY GREEN-GREY, SILICA-SERICITE ALTERED MUDSTONE AND CARBONACEOUS MUDSTONE WITH MINOR FINE-GRAINED SANDSTONE		MS MS
154	100	100	-										153.30-154.74: GREY, MEDIUM-GRAINED SANDSTONE WITH MINOR MUDSTONE PROXIMAL TO GRADATIONAL UPHOLE CONTACT		SS
155	100	100	-										154.74-154.82: SILICA-SERICITE ALTERED MUDSTONE 154.82-154.93: CARBONACEOUS MUDSTONE		MS MS
156	100	100	-										154.93-155.19: PALE GREY, MEDIUM-GRAINED LITHIC SANDSTONE WITH 1-2mm MUDSTONE AND CARBONACEOUS CLASTS AT BASE 155.19-156.15: GREEN-GREY, SILICA-SERICITE ALTERED MUDSTONE AND MINOR SANDSTONE		MS
157	100	100	-										156.15-156.25: GREY-GREEN, MEDIUM-GRAINED LITHIC SANDSTONE WITH SOME CARBONACEOUS MUDSTONE BANDS 156.25-156.43: CARBONACEOUS MUDSTONE AND MUDSTONE 156.43-157.31: GREEN, SILICA-SERICITE ALTERED MUDSTONE		MS MS
158	93	-	-										157.31-157.39: CARBONACEOUS MUDSTONE 157.39-157.44: GREEN, SILICA-SERICITE ALTERED MUDSTONE 157.44-157.49: CARBONACEOUS MUDSTONE 157.49-159.24: GREEN, SILICA-SERICITE ALTERED CARBONACEOUS MUDSTONE WITH VERY MINOR SANDSTONE		MS MS
159	100	100	-												MS
160	96	-	-										159.24-159.37: CARBONACEOUS MUDSTONE 159.37-160.10: GREEN MUDSTONE WITH GRADATIONAL UP AND DOWNHOLE CONTACTS AND SANDSTONE INCREASING DOWNHOLE		MS
REMARKS															

MIDLANDS ENERGY

DRILL HOLE No MTV002

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

SHEET 9 OF 14

PROJECT:	EL 25/2008
PROSPECT:	MOUNT VERNON
DATE:	29-6-2012 TO 7-8-2012
LOGGED BY:	KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO.	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG				GEOLOGY NOTES	SUMMARY LOG	
				1	3	1	3	5	STRUCT	ALT	0.06	0.5	2	8			32
161	100	100	-						Bd	85°						160.70-160.94: GREY WITH MINOR GREEN, MEDIUM-GRAINED LITHIC SANDSTONE	MS
																160.94-161.74: GREY TO DARK GREY MUDSTONE WITH MINOR SANDSTONE AND CARBONACEOUS MUDSTONE	MS
162	100	71	-						J1 (US) 40°							161.74-162.44: CARBONACEOUS MUDSTONE WITH GRADATIONAL DOWNHOLE CONTACT	MS
									J1 (US) 70°								
									J1 (US) 40°								
163	100	90	-													162.44-162.57: MUDSTONE AND CARBONACEOUS MUDSTONE WITH THIN (DOMINANTLY mm SIZED) IRREGULAR VITRINITE BANDS, CONTAINING CALCITE CLEATS AT 162.5m AND ROUND-TO-ROCK MUDSTONE CLASTS OF UP TO 5mm AT 162.54m	MS
																162.57-165.30: GRADING FROM GREY-GREEN MUDSTONE TO GREEN-GREY MUDSTONE WITH MINOR DARK GREY CARBONACEOUS MUDSTONE	MS
164	100	92	-						J1 (US) 40°								
									J1 (US) 60°								
165	100	100	-														
																165.30-165.60: GREY SANDSTONE AND MUDSTONE	
																165.60-166.17: GREY AND BLACK MUDSTONE AND CARBONACEOUS MUDSTONE WITH mm THICK, IRREGULAR AND DISCONTINUOUS VITRINITE BANDS FROM 165.75m	MS
166	100	100	-														
																166.17-167.88: GREEN TO GREEN-GREY, SILICA-SERICITE ALTERED MUDSTONE	MS
167	100	72	-						J1 (US) 30°								
									J1 (US) 60°								
									J1 (US) 60°								
168	100	96	-													167.88-168.95: GREY TO DARK GREY MUDSTONE AND CARBONACEOUS MUDSTONE AND MINOR SANDSTONE	MS
169	100	100	-													168.95-170.79: DOMINANTLY GREEN SERICITE-SILICA ALTERED MUDSTONE WITH MINOR SANDSTONE (INCREASING DOWNHOLE) WITH ZONAL GREY AREAS AND GRADING TO GREY-GREEN DOWNHOLE	MS
170	100	96	-														
171	100	100	-													170.79-171.80: GREY (WITH MINOR GREEN), MEDIUM-GRAINED LITHIC SANDSTONE WITH MINOR MUDSTONE AND VERY MINOR CARBONACEOUS MUDSTONE. FLACER BANDING INCREASING DOWNHOLE AND 2-3mm ROUNDED CLASTS DOWNHOLE	MS
172	100	92	-													171.80-171.85: GREY MUDSTONE	MS
																171.85-171.97: CARBONACEOUS MUDSTONE WITH VERY MINOR DULL COAL	MS
																171.97-172.48: GREY-GREEN MUDSTONE AND SANDSTONE	MS
																172.48-172.79: CARBONACEOUS MUDSTONE (✓ DULL COAL) WITH IRREGULAR BASE AND SUB-ROUNDED RIP-UP CLASTS	MS
173	100	100	-						J1 (US) 30°							172.79-175.97: DARK GREY-GREEN MUDSTONE GRADING INTO CARBONACEOUS MUDSTONE DOWNHOLE AND DARK ACICULAR CLASTS THROUGHOUT	MS
									J1 (US) 60°							175.97-175.22: CARBONACEOUS MUDSTONE (✓ DULL COAL) WITH IRREGULAR DOWNHOLE CONTACT	MS
174	100	98	-													175.22-175.40: GRADING FROM BROWN-GREY TO GREEN-GREY MUDSTONE AND SANDSTONE	MS
175	100	100	-														
																175.40-175.71: CARBONACEOUS MUDSTONE WITH GRADATIONAL UP AND DOWN HOLE CONTACT	MS
176	100	100	-													175.71-176.05: GREEN SILICA-SERICITE ALTERED, FINE-GRAINED SANDSTONE WITH GRADATIONAL DOWNHOLE CONTACT	MS
																176.05-176.24: CARBONACEOUS MUDSTONE AND GREY-GREEN MUDSTONE	MS
																176.24-176.91: UPWARDLY FINING, GREEN-GREY MUDSTONE AND FINE TO MEDIUM-GRAINED LITHIC SANDSTONE	MS
177	100	100	-													176.91-177.86: GREEN-GREY MUDSTONE WITH ZONAL CARBONACEOUS MUDSTONE	MS
178	100	100	-													177.86-178.27: GREY-GREEN MUDSTONE INTERBEDDED WITH MEDIUM TO FINE-GRAINED SANDSTONE	MS
																178.27-178.94: GREY, MEDIUM TO FINE-GRAINED LITHIC SANDSTONE WITH VERY MINOR FLACER BANDING	MS
179	100	100	-													178.94-179.44: GREY TO DARK GREY MUDSTONE AND CARBONACEOUS MUDSTONE. CROSS-BEDDING COMMON.	MS
180	100	100	-													179.44-182.38: PALE GREY TO GREY, MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH MINOR MUDSTONE AND CARBONACEOUS MUDSTONE	MS
REMARKS																	

DRILL HOLE No MTV002

SHEET 10 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)
			Easting <u>55 513 651</u>
			Northing <u>5 295 675</u>
			Elevation (m) <u>202</u>
			Azimuth_Mag <u>-</u>
			Dip <u>-90°</u>

PROJECT: <u>EL 25/2008</u>
PROSPECT: <u>MOUNT VERNON</u>
DATE: <u>29-6-2012 TO 7-8-2012</u>
LOGGED BY: <u>KAREN ADAMS</u>

HOLE DEPTH	CORE RECOVERY	HID	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				1	2	3	4	5	STRUCT	ALT				
100	100	-	-											
181	100	-	-											SS
182	100	-	-											SS
183	100	-	-											SS
184	100	-	-						Bd 90°					MS
185	100	-	-											MS
186	100	-	-											MS
187	100	-	-											MS
188	100	-	-						Bd 90° Jt (ps) 20°					SS
189	100	-	-											SS
190	100	-	-											SS
191	100	-	-											SS
192	100	-	-											SS
193	100	-	-											SS
194	100	-	-											MS
195	100	-	-						Bd 70°					MS
196	100	-	-											MS
197	100	-	-						Vn (c) 30°					MS
198	100	-	-						Jt (ps) 40°					MS
199	100	-	-											MS
200	100	-	-						Bd 80°					MS

REMARKS

DRILL HOLE No MTV002

SHEET 11 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA - GPS)	
			Easting_	55 513 651
			Northing_	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	RCD	SAMPLE NO	SULPHIDES	PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
					STRUCT	ALT			
201	100	40	1					199.80-200.50: DOMINANTLY MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH CARBONACEOUS MUDSTONE BEDS AND CARBONACEOUS MUDSTONE CLASTS	SS
202	100	100	-					200.50-200.92: GREY, MEDIUM-GRAINED LITHIC SANDSTONE WITH MINOR FLACER BANDS	MS
203	100	42	-					200.92-201.25: INTERBEDDED GREY MUDSTONE, LITHIC SANDSTONE AND CARBONACEOUS MUDSTONE	MS
204	100	91	-					201.25-201.59: CARBONACEOUS MUDSTONE 1/4 DULL COAL	MS
205	100	100	-					201.59-205.75: GRADING FROM CARBONACEOUS MUDSTONE TO MUDSTONE	MS
206	100	71	-		40-50°	0.5m		205.75-206.07: INTERBEDDED GREY MUDSTONE AND FINE-GRAINED SANDSTONE	MS
207	100	96	-					206.07-205.09: PALE GREY, SUB-LITHIC MEDIUM TO FINE-GRAINED SANDSTONE AND SOME MUDSTONE WITH GRADATIONAL DOWNHOLE CONTACT	SS
208	100	100	-					205.09-206.18: GREEN-GREY SERICITE-SILICA ALTERED MUDSTONE AND SANDSTONE WITH FRACTURE ZONE AT 205.82m AND CLASTS OF CARBONACEOUS MUDSTONE AT THE BASE	MS
209	100	100	-					206.18-206.60: GREY (GREEN DECREASING DOWNHOLE) MUDSTONE AND MINOR SANDSTONE	MS
210	100	100	-					206.60-206.77: CARBONACEOUS MUDSTONE	MS
211	100	100	-					206.77-207.76: GREY TO DARK GREY CARBONACEOUS MUDSTONE, MUDSTONE AND SANDSTONE	MS
212	100	100	-					207.76-210.62: GRADING FROM PALE GREY TO CREAM, QUARTZ-RICH, SUB-LITHIC SANDSTONE WITH MINOR DARKER, BLUE-GRAY BANDS AND SOME SPOTS OF GREEN-BLUE ALTERATION	SS
213	100	100	-						SS
214	100	100	-					210.62-213.63: GREY TO PALE GREY, MEDIUM TO COARSE-GRAINED LITHIC SANDSTONE WITH MINOR MUDSTONE AT 211.74-211.82m AND 212.45-212.49m. CONGLOMERATE ZONES COMPOSED OF 2-5mm MUDSTONE AND CARBONACEOUS MUDSTONE CLASTS FROM 212.72-213.05m. GRADING TO SUB-LITHIC, QUARTZ-RICH SANDSTONE WITH SPOTTED BLUE-GREEN ALTERATION DOWNHOLE	SS
215	100	100	-					213.63-217.05: PALE GREY, QUARTZ-RICH, SUB-LITHIC, MEDIUM TO VERY COARSE-GRAINED SANDSTONE, IN A SERIES OF UPWARDLY FINING CYCLES. VERY MINOR CARBONACEOUS MUDSTONE BANDING UPHOLE. OCCASIONAL MUDSTONE CLASTS UP TO 4mm ACROSS. BASES OF SEVERAL CYCLES INCLUDE 214.26m, 215.46m, 216.81-216.9m, 217-217.05m	SS
216	100	100	-						SS
217	100	100	-					217.05-217.31: GREY TO DARK GREY, MEDIUM-GRAINED SANDSTONE WITH SOME CARBONACEOUS MUDSTONE	SS
218	100	100	-					217.31-217.36: DARK GRAY TO BLACK, CARBONACEOUS MUDSTONE/SANDSTONE	MS
219	100	100	-					217.36-218.15: GRADING FROM GREY TO GREY-GREEN (AT 217.85m) THEN BACK TO GREY (AT 218.07m), SILICA SERICITE ALTERED MUDSTONE PLUS OR MINUS CARBONACEOUS MUDSTONE	MS
220	100	100	-					218.15-221.46: DARK GREY TO BLACK, CARBONACEOUS MUDSTONE WITH PALE GREY, MEDIUM TO FINE-GRAINED SANDSTONE BANDING. CARBONACEOUS MUDSTONE CLASTS IN SANDSTONE AT 220.58-220.69m	MS
221	100	100	-						MS
222	100	100	-						MS
223	100	100	-						MS
224	100	100	-						MS
225	100	100	-						MS
226	100	100	-						MS
227	100	100	-						MS
228	100	100	-						MS
229	100	100	-						MS
230	100	100	-						MS
231	100	100	-						MS
232	100	100	-						MS
233	100	100	-						MS
234	100	100	-						MS
235	100	100	-						MS
236	100	100	-						MS
237	100	100	-						MS
238	100	100	-						MS
239	100	100	-						MS
240	100	100	-						MS
241	100	100	-						MS
242	100	100	-						MS
243	100	100	-						MS
244	100	100	-						MS
245	100	100	-						MS
246	100	100	-						MS
247	100	100	-						MS
248	100	100	-						MS
249	100	100	-						MS
250	100	100	-						MS
251	100	100	-						MS
252	100	100	-						MS
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260	100	100	-						MS
261	100	100	-						MS
262	100	100	-						MS
263	100	100	-						MS
264	100	100	-						MS
265	100	100	-						MS
266	100	100	-						MS
267	100	100	-						MS
268	100	100	-						MS
269	100	100	-						MS
270	100	100	-						MS

REMARKS

3 2 1 0 9 8 7 6 5 4 3 2 1 0

DRILL HOLE No MTV002

SHEET 12 OF 14

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 to 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	RCD	SAMPLE NO	SULPHIDES	PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOGS												
					STRUCT	ALT.															
					1	3	1	3	5												
221	100	100	1																	MS SS	
222	100	100	1																		SS
223	100	100	1																		MS SS
224	100	100	1																		MS SS
225	100	100	1																		MS SS
226	100	100	1																		MS
227	100	100	1																		SS
228	100	100	1																		MS SS
229	100	100	1																		MS SS
230	100	100	1																		MS SS
231	100	100	1																		MS SS
232	100	100	1																		MS SS
233	100	100	1																		MS SS
234	100	81	1																		SS
235	100	90	1																		SS
236	100	85	1																		SS
237	100	100	1																		MS
238	100	100	1																		MS
239	100	70	1																		MS
240	100	100	1																		MS SS

REMARKS

MIDLANDS ENERGY

DRILL HOLE No MTV002

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
			Easting	55 513 651
			Northing	5 295 675
			Elevation (m)	202
			Azimuth_Mag	—
			Dip	-90°

SHEET 13 OF 14

PROJECT: EL 25/2008
PROSPECT: MOUNT VERNON
DATE: 29-6-2012 TO 7-8-2012
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG			
				%	STRUCT	ALT	mm									
PREFIX	.1	.3	1	3	5			0.05	0.5	2	8	32	64			
241	100	100	—											239.95-240.15: GREY, SPECKLED SILICA ALTERED SANDSTONE 240.15-240.60: DARK GREY TO BLACK, SILICA AND JASPER(?) ALTERED COAL(?) AND/OR CARBONACEOUS MUDSTONE 240.60-240.91: DARK GREY-GREEN, SERICITE-SILICA ALTERED MUDSTONE	MS MS	
242	100	100	—											240.91-241.60: GREY, WEAKLY SERICITE-SILICA ALTERED MUDSTONE AND MINOR SANDSTONE. 241.60-242.00: PALE GREY, FINE-GRAINED SANDSTONE WITH MINOR FLAKER BEDDING AND CROSS-BEDDING 242.00-242.44: PALE GREY, MEDIUM TO FINE-GRAINED SANDSTONE WITH CARBONACEOUS MUDSTONE INTERBEDS THROUGHOUT 242.44-242.82: PALE GREY TO GREY, MUDSTONE AND SANDSTONE INTER BEDS. GRADATIONAL DOWNHOLE CONTACT 242.82-244.12: GREEN-GREY, SERICITE-SILICA ALTERED MUDSTONE AND SANDSTONE WITH GRADATIONAL DOWNHOLE CONTACT.	MS MS MS MS	
243	100	93	—													
244	100	100	—													
245	100	100	—											244.12-244.77: GREY MUDSTONE AND SOME SANDSTONE INCREASING DOWNHOLE 244.77-246.60: INTERBEDDED PALE GREY SANDSTONE AND CARBONACEOUS MUDSTONE	MS MS	
246	100	100	—													
247	100	81	—													
248	100	74	—													
249	100	84	—											248.60-249.75: GREY, WEAKLY SILICA ALTERED SANDSTONE AND MUDSTONE 249.75-255.90: PALE GREY, MEDIUM TO FINE-GRAINED QUARTZ-RICH SANDSTONE WITH SOME FLAKER SANDSTONE AND ZONALLY STRENGTH CROSS-BEDDING, OCCASIONAL CARBONACEOUS MUDSTONE AND MUDSTONE CLASTS FROM APPROXIMATELY 252m ONWARDS. PYRITE ON FRACTURE SURFACE AT 255.60m.	MS MS	
250	100	100	—													
251	100	100	—													
252	100	92	—													
253	100	100	—													
254	100	100	—													
255	100	100	—													
256	100	100	—													
257	100	88	—											256.70-257.00: BLACK CARBONACEOUS MUDSTONE (1% DULL COAL?) WITH ZONALLY PROMINANT, FINE-GRAINED, PALE GREY SANDSTONE.	MS	
258	100	90	—											257.00-257.72: GREY TO DARK GREY, FINE TO MEDIUM-GRAINED, QUARTZ-RICH SANDSTONE WITH FLAKER BEDDING THROUGHOUT 257.72-258.12: PALE GREY, QUARTZ-RICH SANDSTONE WITH CARBONACEOUS MUDSTONE BEDS PRESENT 258.12-258.59: CARBONACEOUS MUDSTONE (1% DULL COAL?) WITH BROKEN ZONE FROM 258.28-258.35m AND SOME THIN SANDSTONE BANDS 258.59-258.81: PALE GREY, MEDIUM-GRAINED, SOME LITHE SANDSTONE 258.81-258.93: CARBONACEOUS MUDSTONE WITH SOME SANDSTONE BANDS 258.93-259.29: SANDSTONE WITH SOME CARBONACEOUS MUDSTONE 259.29-259.50: CARBONACEOUS MUDSTONE WITH SOME SANDSTONE BANDS	MS MS MS MS MS	
259	100	0	—													
260	100	67	—											259.50-260.16: GREY, MEDIUM TO COARSE-GRAINED, QUARTZ-RICH SANDSTONE INTERBEDDED WITH CARBONACEOUS MUDSTONE (ESP. PROMINANT: 259.71-259.78 AND 260.05-260.16)	MS MS	

REMARKS

MIDLANDS ENERGY

DRILL HOLE No MTV002

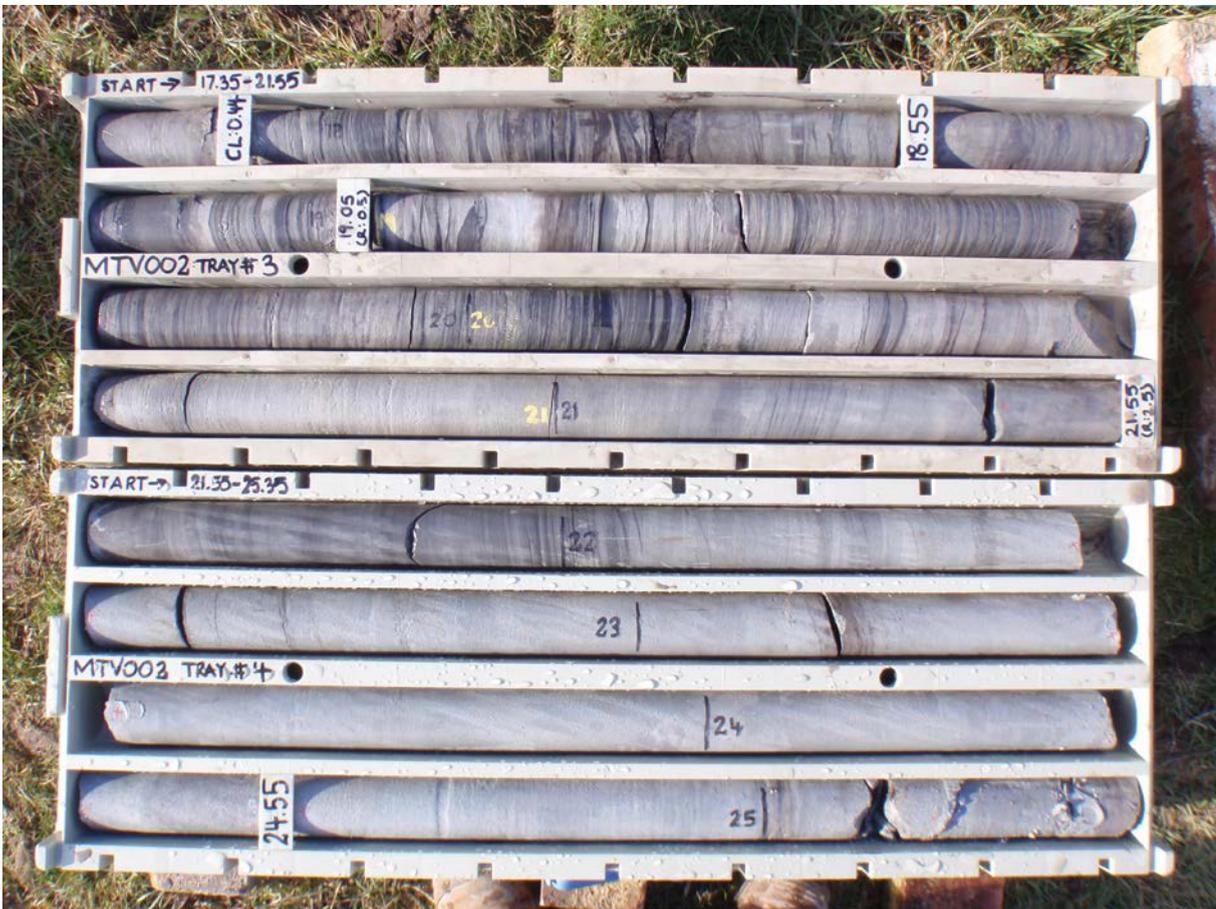
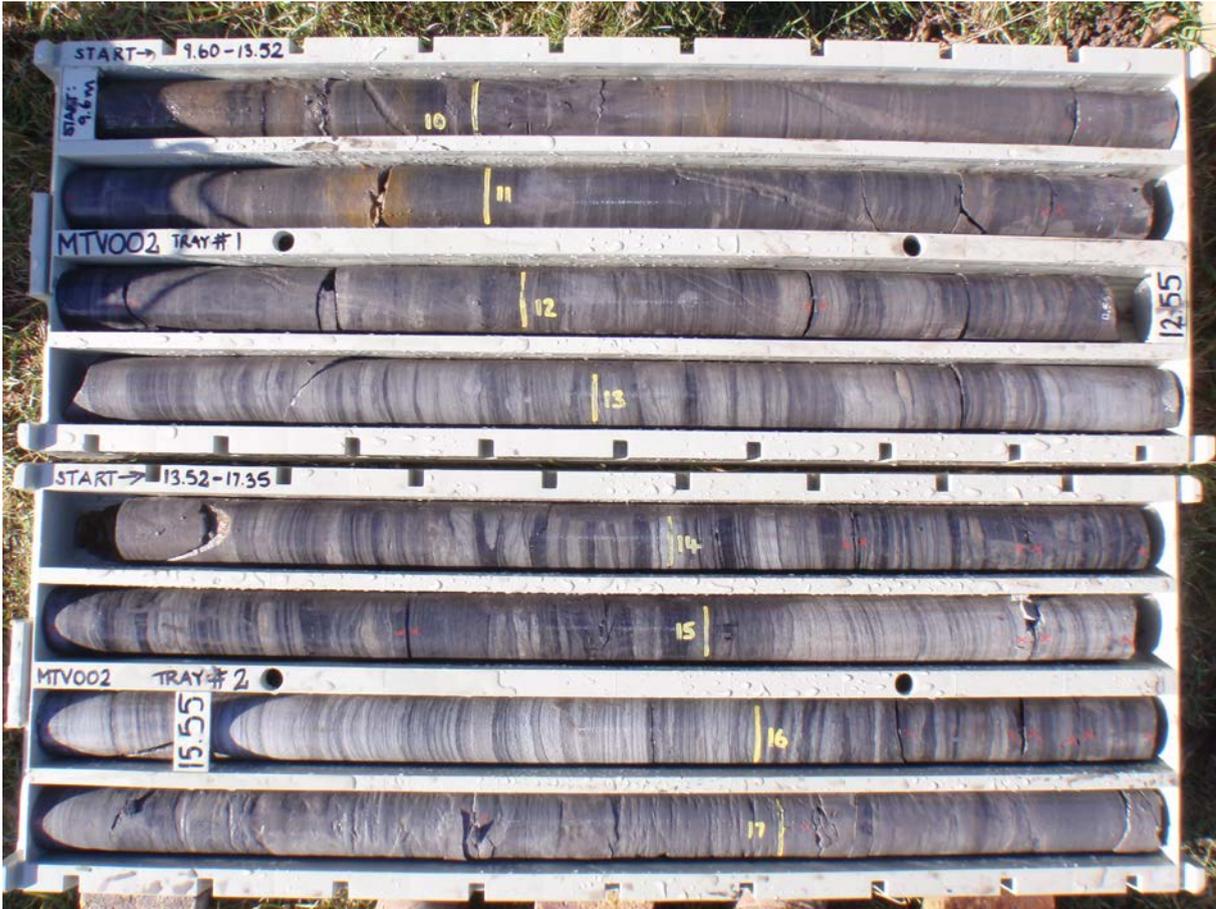
Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA - GPS)	
			Easting_	55 513 651
			Northing_	5 295 675
			Elevation (m)	202
			Azimuth_Mag	-
			Dip	-90°

SHEET 14 OF 14

PROJECT:	EL 25/2008
PROSPECT:	MOUNT VERNON
DATE:	29-6-2012 TO 7-8-2012
LOGGED BY:	KAREN ADAMS

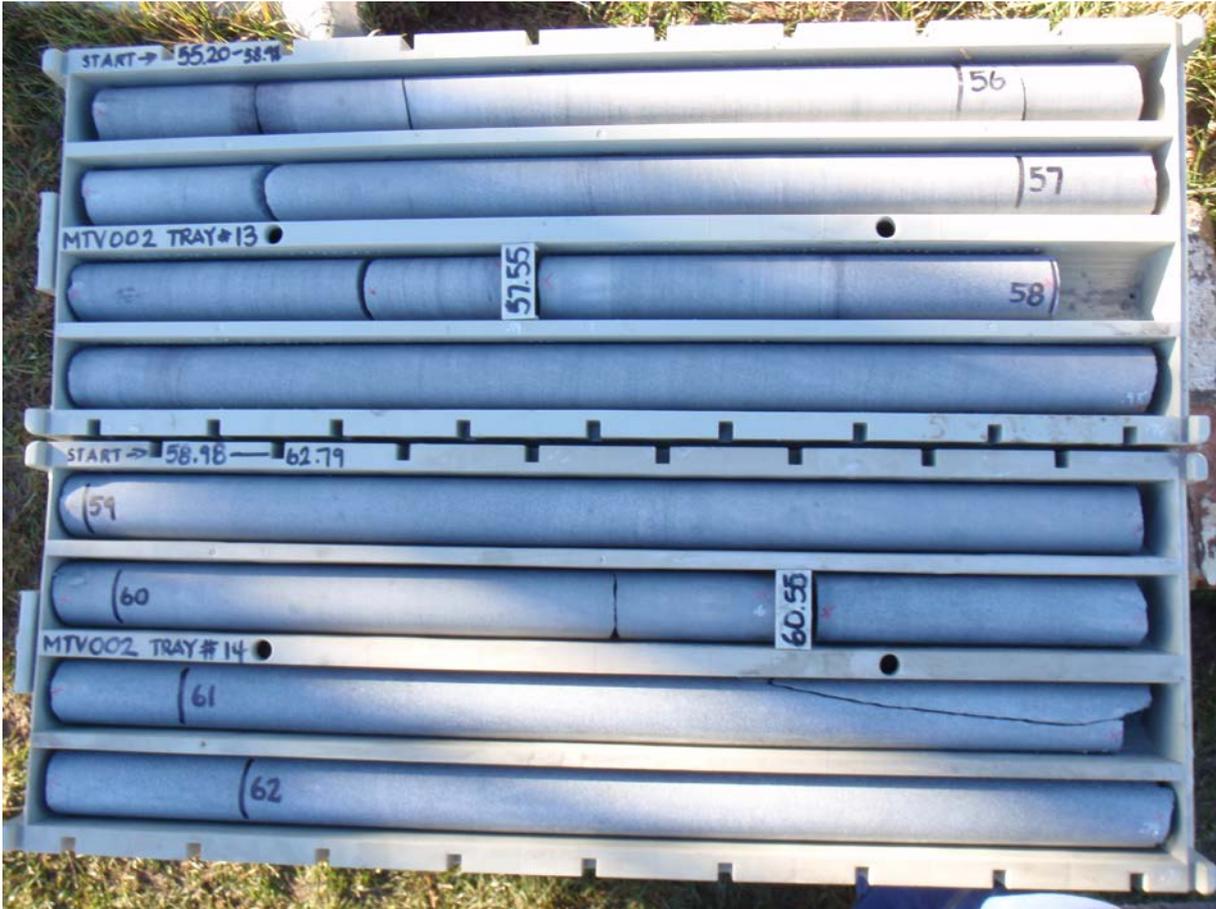
HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG				GEOLOGY NOTES	SUMMARY LOG
				1	3	1	3	5	STRUCT	ALT	0.06	0.3	8	32		
261	100	90	-												260.16-260.99: GREY MUDSTONE AND MINOR FINE-GRAINED SANDSTONE	MS
262	100	100	-												260.79-261.00: GREY TO PALE GREY MUDSTONE AND FINE-GRAINED SANDSTONE FINELY INTERBEDDED 261.00-261.30: GREY TO PALE GREY MUDSTONE AND FINE SILTSTONE 261.30-263.48: GREY MUDSTONE (WITH MINOR SERICITE-SILICA ALTERATION) WITH SOME FINE-GRAINED SANDSTONE INTERBEDDED AND INCREASING IN ABUNDANCE DOWNHOLE	MS
263	100	100	-													MS
264	100	100	-						Bd	70-80					263.48-264.79: PALE GRN, FINE-GRAINED SANDSTONE INTERBEDDED WITH GREY MUDSTONE. CROSS-BEDDING PRESENT	MS
265	100	100	-						Bd	80°					264.79-265.25: CARBONACEOUS MUDSTONE AND MUDSTONE WITH SOME SANDSTONE BEDS	MS
266	100	100	-												265.25-265.58: PALE GREY SANDSTONE WITH SOME CARBONACEOUS MUDSTONE BANDING, DECREASING IN ABUNDANCE DOWNHOLE 265.58-270.51: GREY FINE-GRAINED, LITHIC TO SUB-LITHIC SANDSTONE WITH VERY MINOR CARBONACEOUS MUDSTONE ZONE OF ANGULAR, CARBONACEOUS MUDSTONE RIP-UP CLASTS FROM 265.70-266.00m AND CROSS-BEDDING FROM 266.00-266.20m OTHER ZONES OF CARBONACEOUS MUDSTONE CLASTS AT 267.70 AND 269.05-270.51m. CLASTS INCREASING IN SIZE AND FREQUENCY DOWNHOLE. ZONES OF CARBONACEOUS MUDSTONE AND MUDSTONE BANDING INCLUDE 268.11-268.48m AND 269.14-269.19m	MS
267	100	100	-													MS
268	100	100	-													MS
269	100	100	-													MS
270	100	100	-													MS
271	100	100	-												270.51-271.74: GREY TO DARK GREY, SERICITE-SILICA ALTERED MUDSTONE AND CARBONACEOUS MUDSTONE (?). LOCALISED GREEN COLOUR FROM GRAVITATIONAL DOWNHOLE CONTACT AND SERICITE ALTERATION. INTENSITY INCREASING DOWNHOLE AND OCCURRENCE OF PATCHY CHLORITE ALTERATION APPEARING DOWNHOLE.	MS
272	100	100	-												271.74-272.91: GREY, FINE TO MEDIUM-GRAINED SANDSTONE WITH COARSE BORME(?) THROUGHOUT AND TRACE AMOUNTS OF IRON	SS
273	100	100	-													SS
274	100	100	-												272.91-273.30: DARK GREY TO GREY SANDSTONE AND MUDSTONE WITH CARBONACEOUS MUDSTONE BEGINNING AND INCREASING IN ABUNDANCE FROM 273.07m 273.30-273.75: MEDIUM TO FINE-GRAINED, PALE GREY SANDSTONE WITH SOME CARBONACEOUS MUDSTONE BANDING AND GRAVITATIONAL DOWNHOLE CONTACT	MS
275	100	100	-												273.75-274.15: DARK GREY TO GREY CARBONACEOUS MUDSTONE AND MUDSTONE WITH SOME FINE-GRAINED SANDSTONE 274.15-274.52: GREY, MEDIUM-GRAINED SANDSTONE WITH CARBONACEOUS MUDSTONE BANDING AND BORME(?) 274.52-274.69: DARK GREY TO BLACK CARBONACEOUS MUDSTONE WITH VERY MINOR SANDSTONE	MS
276	100	100	-												274.69-274.92: DARK GREY, SILICA-SERICITE ALTERED MUDSTONE 274.92-275.79: GREY-GREEN TO GREEN-GREY SERICITE-SILICA ALTERED MUDSTONE AND SANDSTONE 275.79-276.52: PERMANENT RED-BROWN, PILLOLOGITE ALTERATION WITH IRON-ORE GREEN-GREY PATCHES OF SILICA-SERICITE ALTERATION OR FERROUS MUDSTONE (PERMIAN BASEMENT?) WITH PATCHY SILICA-SERICITE ALTERATION	MS
277	100	86	-												276.52-276.62: PALE CREAM AND GREEN-GREY ALTERED SANDSTONE AND MUDSTONE 276.62-276.80: GREEN-GREY SERICITE-SILICA ALTERED SANDSTONE AND MUDSTONE WITH GRAVITATIONAL DOWNHOLE CONTACT	MS
278	100	100	-												276.80-277.40: PALE GREY, FINE-GRAINED, LITHIC TO SUB-LITHIC SANDSTONE WITH SOME CARBONACEOUS MUDSTONE BANDING 277.40-278.00: GRADING FROM BLACK TO GREEN-GREY SILICA-SERICITE ALTERED MUDSTONE AND SANDSTONE	MS
279	100	80	-												278.00-279.00: GRADING FROM GREEN-GREY WITH RED-BROWN PATCHES, TO RED-BROWN WITH GREEN-GREY PATCHES, AND BLACK. ZONALLY PERVASIVE PILLOLOGITE ALTERATION AND SILICA-SERICITE ALTERATION (OF PERMIAN BASEMENT???)	MS
280	100	70	-												279.00-279.61 (END): GRADING FROM GREY TO DARK GREY AND BLACK MUDSTONE AND CARBONACEOUS MUDSTONE WITH SOME SANDSTONE BANDING INCREASING DOWNHOLE.	MS

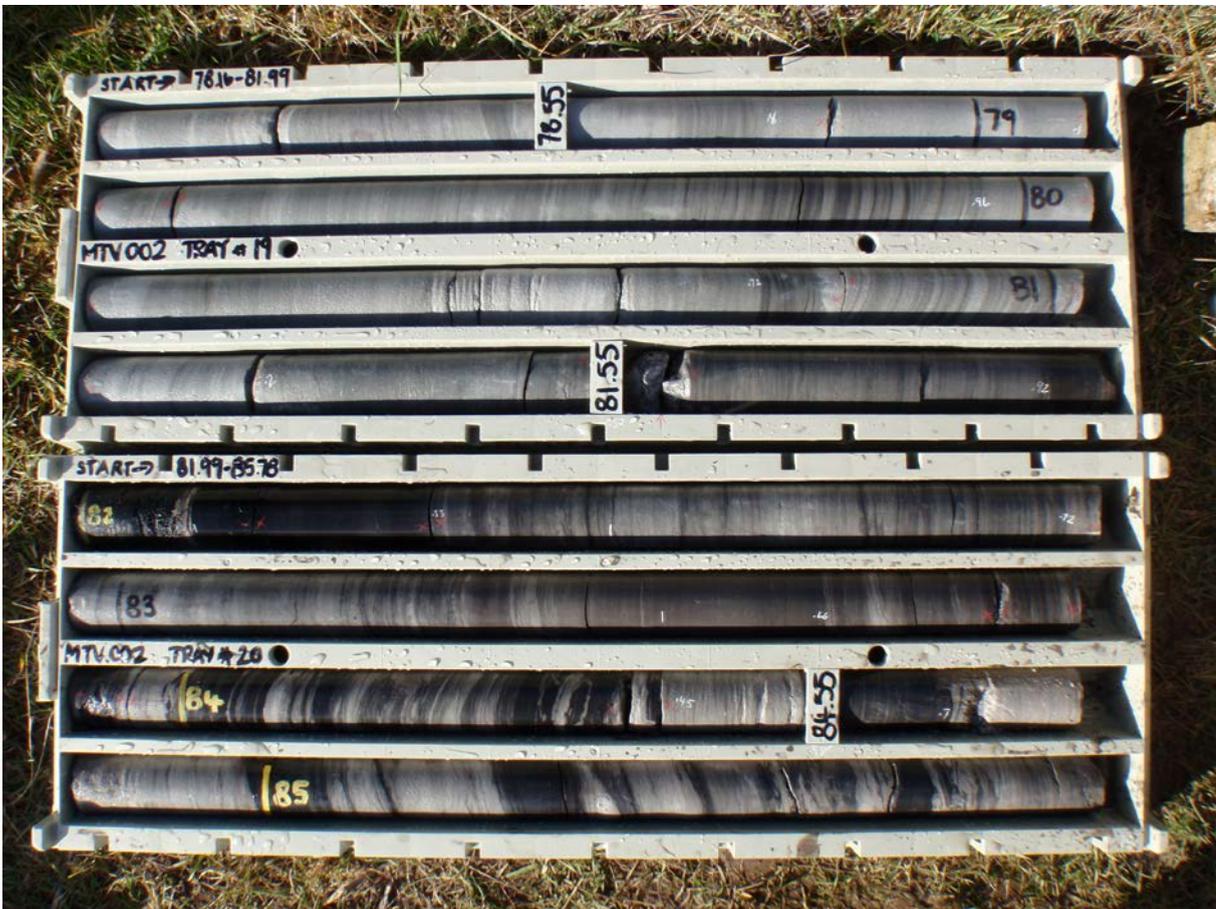
REMARKS



















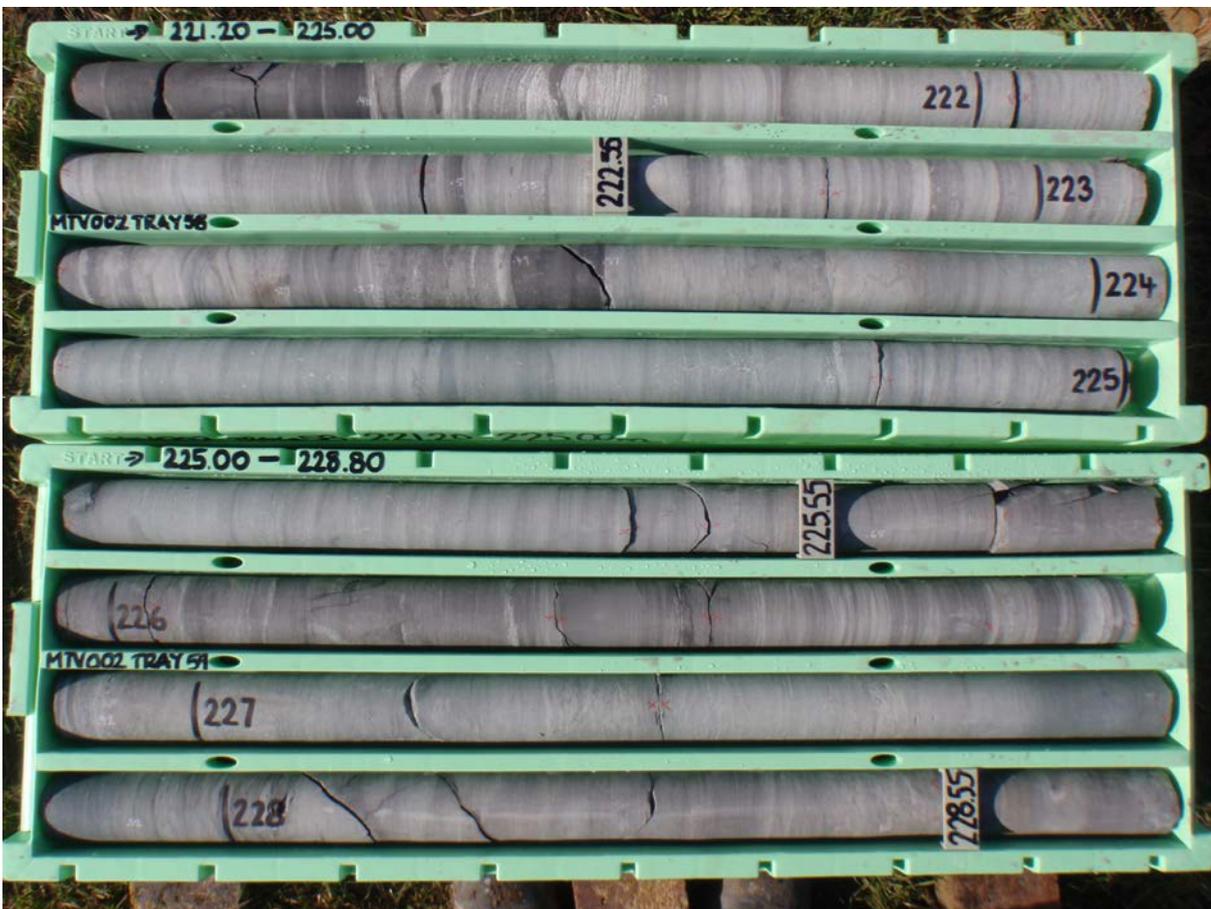
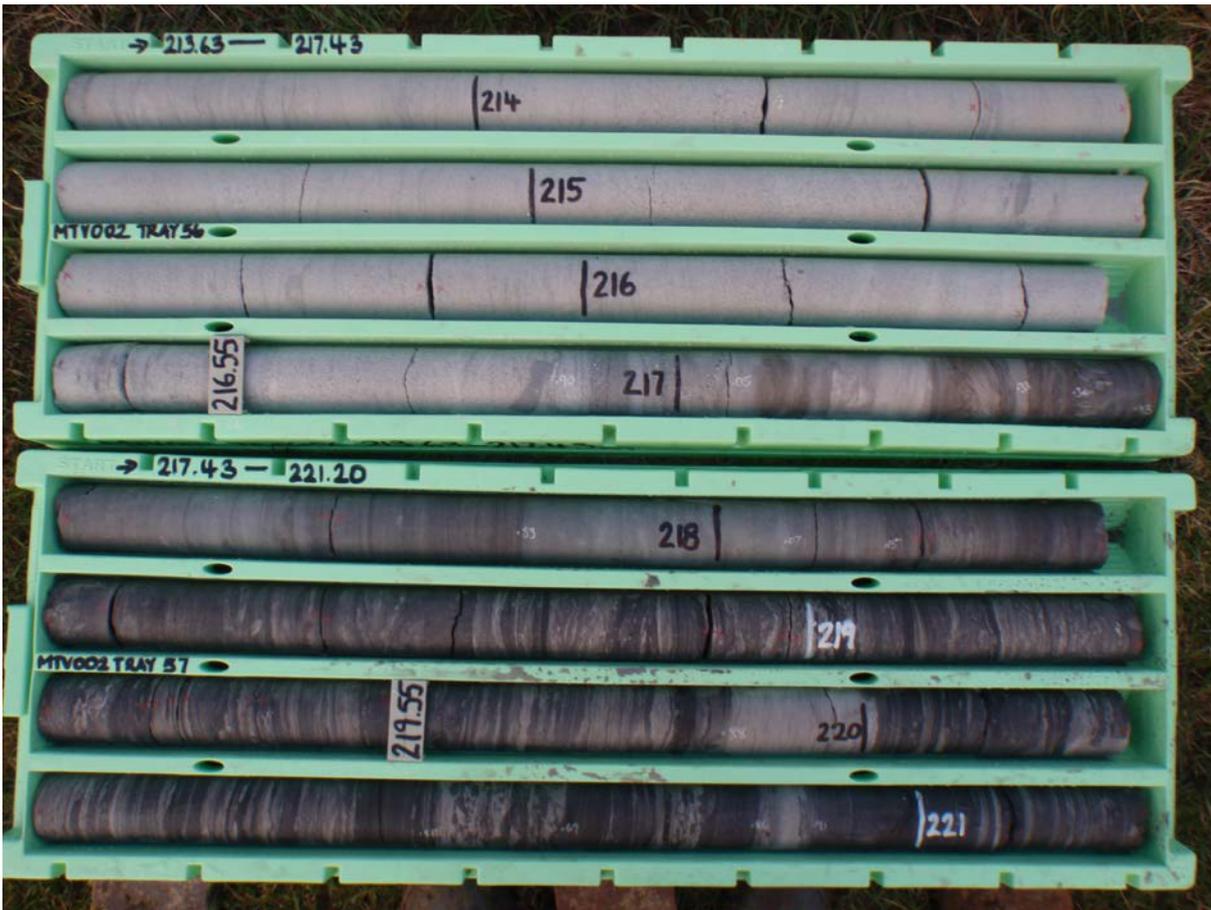


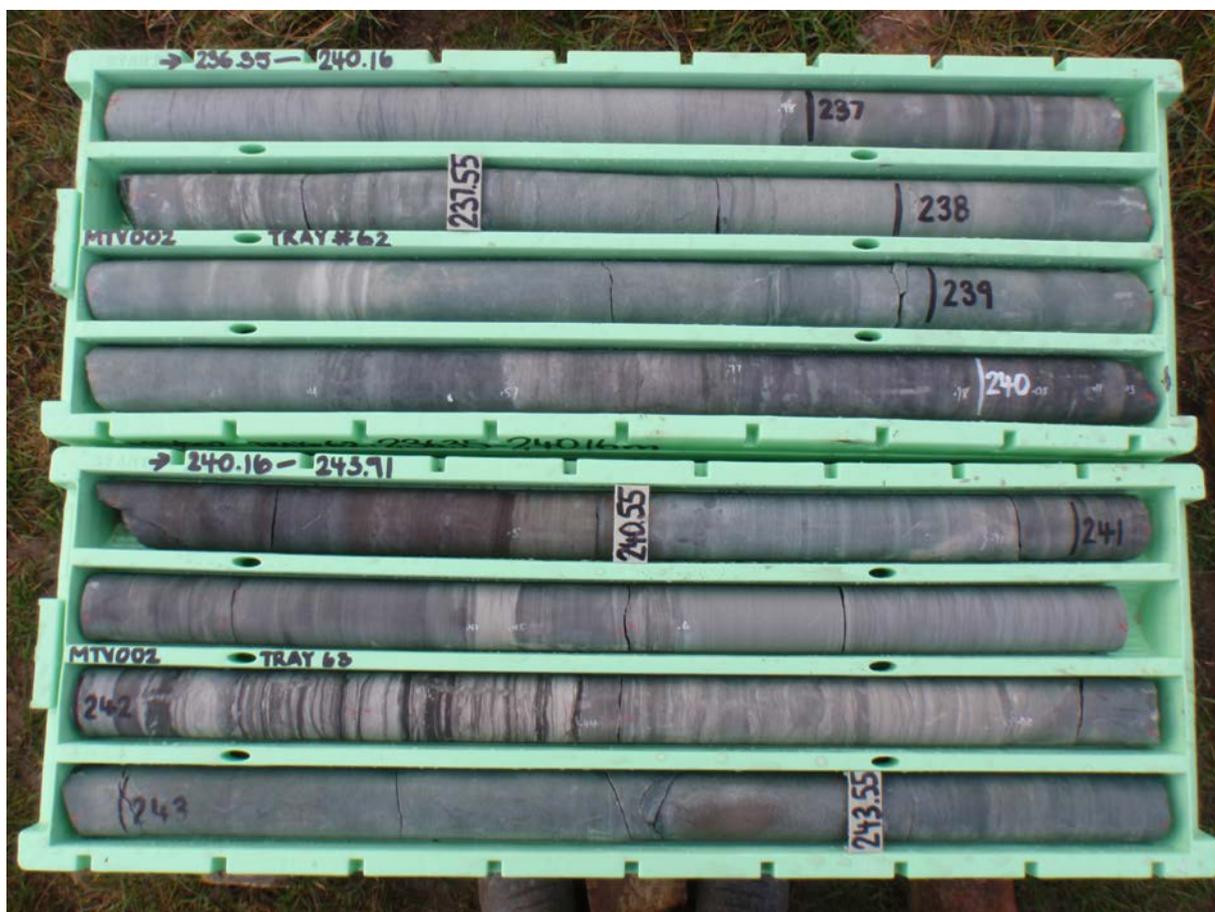


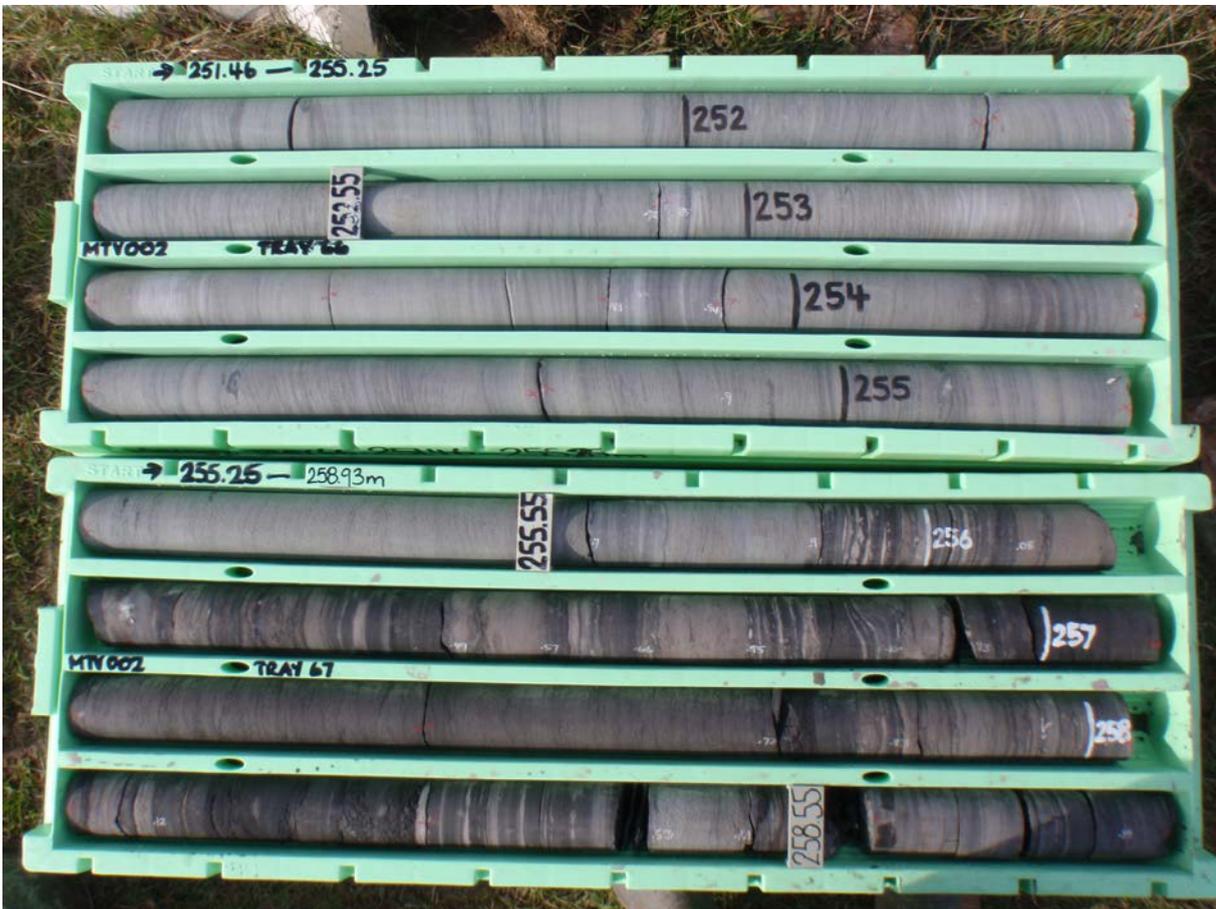
















Hole ID	mFrom	mTo	Rcovery	RQD
MTV002	0	1	0	0
MTV002	1	2	0	0
MTV002	2	3	0	0
MTV002	3	4	0	0
MTV002	4	5	0	0
MTV002	5	6	0	0
MTV002	6	7	0	0
MTV002	7	8	0	0
MTV002	8	9	0	0
MTV002	9	9.6	0	0
MTV002	9.6	10	87.5	100
MTV002	10	11	100	100
MTV002	11	12	100	100
MTV002	12	13	100	95
MTV002	13	14	100	100
MTV002	14	15	100	100
MTV002	15	16	100	90
MTV002	16	17	100	100
MTV002	17	18	66	100
MTV002	18	19	98	100
MTV002	19	20	100	100
MTV002	20	21	100	100
MTV002	21	22	100	100
MTV002	22	23	100	100
MTV002	23	24	100	100
MTV002	24	25	100	100
MTV002	25	26	100	95
MTV002	26	27	100	100
MTV002	27	28	100	90
MTV002	28	29	100	70
MTV002	29	30	100	100
MTV002	30	31	100	100
MTV002	31	32	100	100
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MTV002	41	42	100	100
MTV002	42	43	100	95
MTV002	43	44	100	100
MTV002	44	45	100	95
MTV002	45	46	100	100
MTV002	46	47	100	100
MTV002	47	48	100	92

Very soft

MTV002	48	49	100	100
MTV002	49	50	100	90
MTV002	50	51	100	100
MTV002	51	52	100	100
MTV002	52	53	100	100
MTV002	53	54	100	100
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MTV002	62	63	100	100
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MTV002	64	65	100	100
MTV002	65	66	100	100
MTV002	66	67	100	100
MTV002	67	68	100	100
MTV002	68	69	100	100
MTV002	69	70	100	100
MTV002	70	71	100	100
MTV002	71	72	100	100
MTV002	72	73	100	100
MTV002	73	74	100	100
MTV002	74	75	100	100
MTV002	75	76	100	100
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MTV002	79	80	100	100
MTV002	80	81	100	97
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MTV002	89	90	100	93
MTV002	90	91	100	30
MTV002	91	92	100	70
MTV002	92	93	100	60
MTV002	93	94	100	100
MTV002	94	95	100	45
MTV002	95	96	100	50
MTV002	96	97	100	100
MTV002	97	98	100	100

Very soft smelly water/core
 Very soft smelly water/core
 smelly water/core
 smelly water/core
 smelly water/core
 smelly water/core
 smelly water/core

MTV002	98	99	100	100
MTV002	99	100	100	100
MTV002	100	101	100	80
MTV002	101	102	100	100
MTV002	102	103	100	100
MTV002	103	104	100	95
MTV002	104	105	100	65
MTV002	105	106	100	87
MTV002	106	107	100	82
MTV002	107	108	100	100
MTV002	108	109	100	100
MTV002	109	110	100	71
MTV002	110	111	100	100
MTV002	111	112	100	80
MTV002	112	113	100	57
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MTV002	117	118	100	100
MTV002	118	119	100	80
MTV002	119	120	100	57
MTV002	120	121	100	97
MTV002	121	122	100	100
MTV002	122	123	100	100
MTV002	123	124	100	90
MTV002	124	125	100	97
MTV002	125	126	100	95
MTV002	126	127	100	86
MTV002	127	128	100	74
MTV002	128	129	100	100
MTV002	129	130	100	75
MTV002	130	131	100	87
MTV002	131	132	100	100
MTV002	132	133	100	100
MTV002	133	134	100	100
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MTV002	140	141	100	100
MTV002	141	142	100	100
MTV002	142	143	100	100
MTV002	143	144	100	91
MTV002	144	145	100	100
MTV002	145	146	100	95
MTV002	146	147	100	100
MTV002	147	148	100	100

fractures prominent
weak core
weak core

MTV002	148	149	100	100
MTV002	149	150	100	100
MTV002	150	151	100	100
MTV002	151	152	100	97
MTV002	152	153	100	81
MTV002	153	154	100	100
MTV002	154	155	100	100
MTV002	155	156	100	100
MTV002	156	157	100	100
MTV002	157	158	100	93
MTV002	158	159	100	100
MTV002	159	160	100	96
MTV002	160	161	100	100
MTV002	161	162	100	71
MTV002	162	163	100	90
MTV002	163	164	100	92
MTV002	164	165	100	100
MTV002	165	166	100	100
MTV002	166	167	100	72
MTV002	167	168	100	96
MTV002	168	169	100	100
MTV002	169	170	100	96
MTV002	170	171	100	100
MTV002	171	172	100	92
MTV002	172	173	100	100
MTV002	173	174	100	98
MTV002	174	175	100	100
MTV002	175	176	100	100
MTV002	176	177	100	100
MTV002	177	178	100	100
MTV002	178	179	100	100
MTV002	179	180	100	100
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MTV002	190	191	100	100
MTV002	191	192	100	100
MTV002	192	193	100	100
MTV002	193	194	100	100
MTV002	194	195	100	100
MTV002	195	196	100	100
MTV002	196	197	100	100
MTV002	197	198	100	100

weak, broken zone at 151.3m

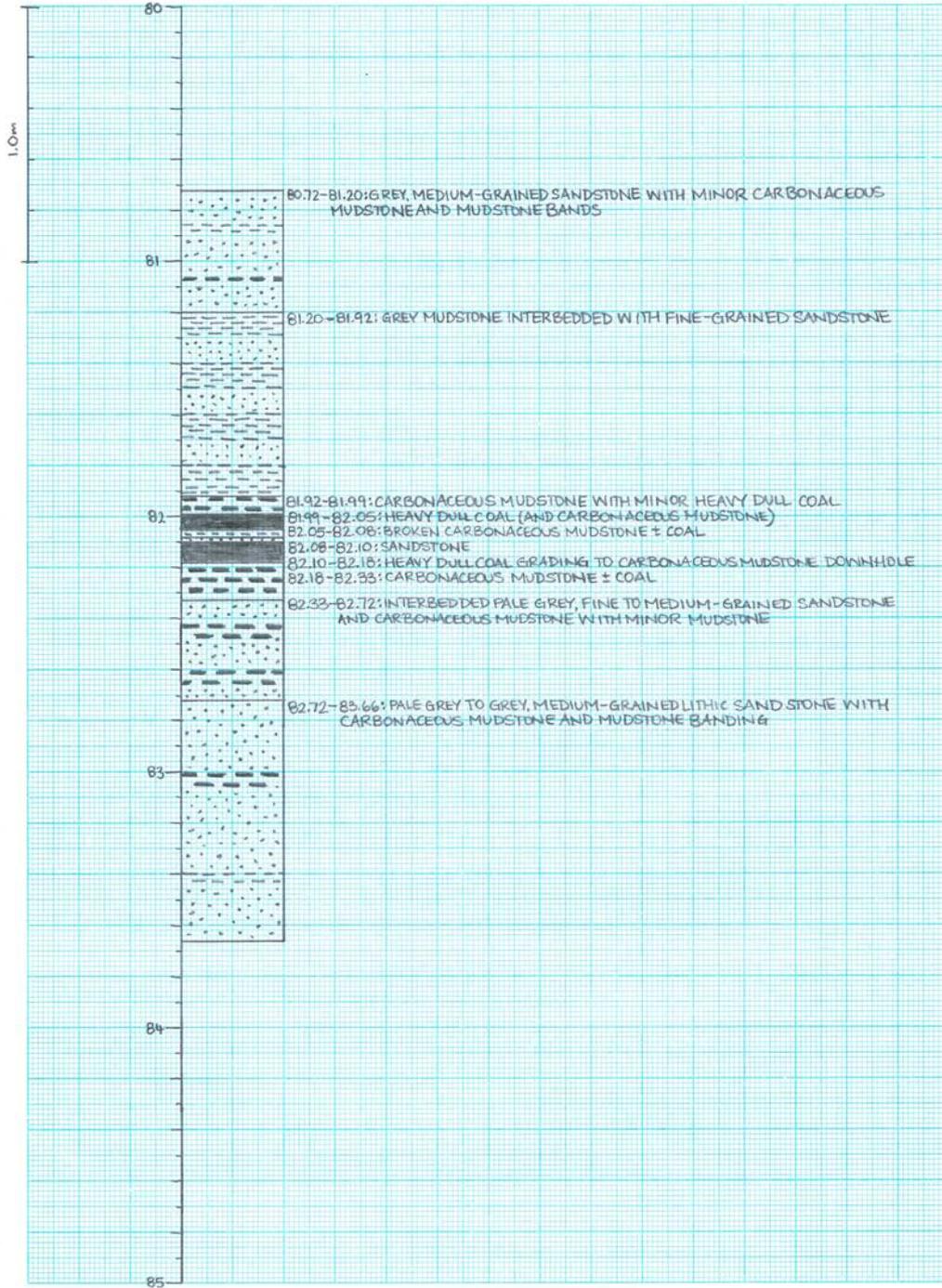
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MTV002	200	201	100	40
MTV002	201	202	100	100
MTV002	202	203	100	42
MTV002	203	204	100	91
MTV002	204	205	100	100
MTV002	205	206	100	71
MTV002	206	207	100	96
MTV002	207	208	100	100
MTV002	208	209	100	100
MTV002	209	210	100	100
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MTV002	222	223	100	100
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MTV002	231	232	100	100
MTV002	232	233	100	100
MTV002	233	234	100	81
MTV002	234	235	100	90
MTV002	235	236	100	85
MTV002	236	237	100	100
MTV002	237	238	100	100
MTV002	238	239	100	70
MTV002	239	240	100	100
MTV002	240	241	100	100
MTV002	241	242	100	100
MTV002	242	243	100	93
MTV002	243	244	100	100
MTV002	244	245	100	100
MTV002	245	246	100	100
MTV002	246	247	100	81
MTV002	247	248	100	74

MTV002	248	249	100	84
MTV002	249	250	100	100
MTV002	250	251	100	100
MTV002	251	252	100	92
MTV002	252	253	100	100
MTV002	253	254	100	100
MTV002	254	255	100	100
MTV002	255	256	100	100
MTV002	256	257	100	88
MTV002	257	258	100	90
MTV002	258	259	100	0
MTV002	259	260	100	67
MTV002	260	261	100	90
MTV002	261	262	100	100
MTV002	262	263	100	100
MTV002	263	264	100	100
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MTV002	273	274	100	100
MTV002	274	275	100	100
MTV002	275	276	100	100
MTV002	276	277	100	86
MTV002	277	278	100	100
MTV002	278	279	100	80
MTV002	279	279.55	100	78

Detailed seam logs

MTV002 - DETAILED LOG 4

1mm Squares



MTV002 - DETAILED LOG 5

1mm Squares

