

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 176AL

HOLE TYPE
EASTING 590,313 M AM GRID
NORTHING 5,401,344 M AM GRID
ELEVATION 486.23 M
TOTAL DEPTH DRILLED 108.00 M
DRILLING STARTED 29/10/82
DRILLING TIME
CORE SIZE 100.0 MM
HOLE SIZE 190.0 MM
LENGTH CASED 9.00 M
INITIAL WATER LEVEL
WATER LEVEL AT
GEOPHYSICAL LOGGING
DRILLING FLUID
DRILLING CONTRACTOR ASSOCIATED DIAMOND DRILLERS
GEOPHYSICAL LOGGING
CONTRACTOR
LITHOLOGICAL DESCRIPTION BY P. SANSOM
INFORMATION AVAILABLE : SAMPLES TAKEN
ANALYTICAL DATA
LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN : NIL

*** FRAME H03***

BOREHOLE : GY 176AL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
11.50	11.50			100% DOLERITE	SCREE.
23.30	11.80			100% SEDIMENTARY ROCK	MODERATELY WEAK ROCK.
*** CHIP DESCRIPTION ***					
24.39	1.09	100		55% SANDSTONE, FINE GRAINED 25% CARBONACEOUS MUDSTONE 20% SILTSTONE	LIGHT GREY. LAMINAE, BLACK. LAMINAE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
24.72	0.33	100		100% SANDSTONE, MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
24.84	0.12	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.10	0.26	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.20	0.10	100		100% MUDSTONE	SILTY, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.30	0.10	0		CORE LOSS	
25.40	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.45	0.05	0		CORE LOSS	
25.75	0.30	100		75% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
25.76	0.01	100		100% CARBONACEOUS MUDSTONE	BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
25.86	0.10	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.30	0.44	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
26.41	0.11	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY WIDE JOINT SPACING, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
26.78	0.37	100	T1	100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
26.86	0.08	100	T1	75% MUDSTONE 25% MUDSTONE	BADLY BROKEN, GREY. CARBONACEOUS, BADLY BROKEN, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
TOP OF MT. NICHOLAS MIDDLE 2 : 459.37 M R.L.					
26.92	0.06	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.93	0.01	100	A1	55% COAL, BRIGHT 45% COAL, DULL	BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
*** CORE DESCRIPTION ***					
26.94	0.01	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.96	0.02	100	A1	100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
26.98	0.02	100	A1	90% TONSTEIN 10% COAL, HEAVY DULL	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.36	0.38	100	A1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.51	0.15	100	A1	100% COAL, DULL	BADLY BROKEN, FAULT GOUGE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.60	0.09	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.69	0.09	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.73	0.04	0	A1	CORE LOSS	
27.75	0.02	100	A1	90% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.76	0.01	100	A1	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
28.05	0.29	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.19 M; SAMPLED THICKNESS= 1.19 M

28.10	0.05	100	T2	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
28.38	0.28	100	T2	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
28.56	0.18	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
29.30	0.74	100		65% SANDSTONE, FINE GRAINED 30% SILTSTONE 5% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. BANDS, LENSES, GREY. LAMINAE, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.

*** CHIP DESCRIPTION ***

102.00	72.70			100% SEDIMENTARY ROCK	UNWEATHERED, MODERATELY WEAK ROCK.
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*** CORE DESCRIPTION ***

102.70	0.70	20		100% SANDSTONE, MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.31	2.61	100		100% SANDSTONE, MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.69	0.38	100	T3	100% SANDSTONE, MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
*** CORE DESCRIPTION ***					
TOP OF MT. NICHOLAS LOWER 2 : 380.54 M R.L.					
105.76	0.07	100	A2	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
105.87	0.11	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
105.91	0.04	100	A2	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
106.37	0.46	100	A2	70% COAL, DULL 30% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
106.52	0.15	0	A2	CORE LOSS	
106.53	0.01	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.58	0.05	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.66	0.08	100	A2	75% COAL, DULL 20% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
106.68	0.02	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.72	0.04	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.73	0.01	100	A2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.88	0.15	0		CORE LOSS	
106.90	0.02	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.21 M; SAMPLED THICKNESS= 1.06 M					
106.93	0.03	100	T4	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.41	0.48	100	T4	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.00	0.59	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.