

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 175BL

HOLE TYPE	CORE
EASTING	590,414 M AM GRID
NORTHING	5,398,686 M AM GRID
ELEVATION	466.70 M
TOTAL DEPTH DRILLED	122.66 M
DRILLING STARTED	20/10/82
DRILLING TIME	10 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	190.0 MM
LENGTH CASED	6.00 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 A03***

BOREHOLE : GY 175BL

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
4.50	4.50			100X DOLERITE	SCREE.
113.60	109.10			100X SEDIMENTARY ROCK	MODERATELY WEAK ROCK.
*** CORE DESCRIPTION ***					
114.41	0.81	100		100X SANDSTONE, MEDIUM GRAINED	MASSIVE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
115.21	0.80	0		CORE LOSS	
115.24	0.03	100		100X CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
115.36	0.12	100		98X SANDSTONE, FINE GRAINED 2X COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
115.77	0.41	100		90X CARBONACEOUS MUDSTONE 10X SANDSTONE, FINE GRAINED	DARK GREY. LAMINAE, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
115.95	0.18	100		80X SANDSTONE, FINE GRAINED 20X CARBONACEOUS MUDSTONE	COALY, STREAKS, LIGHT GREY. LAMINAE, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
116.56	0.61	100		95X CARBONACEOUS MUDSTONE 5X SANDSTONE, FINE GRAINED	BLACK. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
116.71	0.15	100		100X SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.76	0.05	100		100X CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
116.77	0.01	100		100X SANDSTONE, FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.80	0.03	100		100X CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.00	0.20	100		95X SANDSTONE, FINE GRAINED 5X COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.17	0.17	100		75X CARBONACEOUS MUDSTONE 15X SANDSTONE, FINE GRAINED 10X COAL	BLACK. BANDS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.34	0.17	100	T1	90X SANDSTONE, FINE GRAINED 10X COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EROSIONAL BASAL CONTACT.

TOP OF MT. NICHOLAS LOWER 1 : 349.36 M R.L.

117.37	0.03	100	A1	80X COAL, BRIGHT WITH FEW DULL BANDS 20X COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.44	0.07	100	A1	100X COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
*** CORE DESCRIPTION ***					
117.51	0.07	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.71	0.20	0	A1	CORE LOSS	
117.77	0.06	100	A1	70% COAL, DULL 30% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.79	0.02	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
117.89	0.10	0	A1	CORE LOSS	
117.93	0.04	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.94	0.01	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
117.96	0.02	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.97	0.01	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
118.07	0.10	0	A1	CORE LOSS	
118.23	0.16	100	A1	80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.24	0.01	100	A1	100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
118.34	0.10	0	A1	CORE LOSS	
118.43	0.09	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.46	0.03	100	A1	70% CARBONACEOUS MUDSTONE 20% COAL, HEAVY DULL 10% COAL, DULL	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.56	0.10	0	A1	CORE LOSS	
118.59	0.03	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.60	0.01	100	A1	60% TONSTEIN 40% COAL, DULL	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.61	0.01	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.62	0.01	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
118.65	0.03	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.75	0.10	0	A1	CORE LOSS	
118.76	0.01	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
*** CORE DESCRIPTION ***					
118.78	0.02	100	A1	100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
118.81	0.03	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.88	0.07	100	A1	80% MUDSTONE 20% CARBONACEOUS MUDSTONE	BANDS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.90	0.02	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.94	0.04	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.01	0.07	0	A1	CORE LOSS	
119.44	0.43	100	A1	100% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.10 M; SAMPLED THICKNESS= 2.10 M					
119.74	0.30	100	T2	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.23	0.49	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.65	0.42	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
121.00	0.35	100		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.17	0.17	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, GREY. BADLY BROKEN, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
TOP OF MT. NICHOLAS LOWER 2 : 345.53 M R.L.					
121.74	0.57	100	A2	75% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
121.76	0.02	100	A2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.98	0.22	100	A2	100% COAL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.00	0.02	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.03	0.03	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.06	0.03	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.13	0.07	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.16	0.03	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.24	0.08	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
*** CORE DESCRIPTION ***					
122.32	0.08	100	A2	100X COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.41	0.09	100	A2	100X COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.43	0.02	100	A2	100X COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.54	0.11	100	A2	100X COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.55	0.01	100	A2	100X COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.59	0.04	100	A2	60X CARBONACEOUS MUDSTONE 40X COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
122.62	0.03	100	A2	100X CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.45 M; SAMPLED THICKNESS= 1.45 M					
122.66	0.04	100		100X SANDSTONE, FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.