

Longtom-4



Date:	03-07-2008	Last Casing:	406.4 mm (16") @ 750 mMDRT
Report Number:	7	Leak Off Test:	1.64 ppg EMW
Report Period:	24hrs to 24:00	Current hole size:	343 mm (13 1/2")
Depth @ 2400 Hrs:	2049 mMDRT	Mud Weight:	1.43 SG
Last Depth:	2031 mMDRT	ECD:	1.46 SG
Progress:	18 m	Mud Type:	SOBM
TD Lithology:	Silty Claystone	Vis:	76
Water Depth:	56.0 m (below LAT)	Mud Fluid Loss:	3 HTHP
RT Elevation:	41.1 m (above LAT)	Bit Type:	SMITH MS16LSPX

OPERATIONS SUMMARY

24 HOUR SUMMARY
00:00 - 24:00:

POOH, Laid out BHA, picked up and made BHA#5, RIH to 1960m. Logged down from 1960m -1989m, washed down to bottom. No Fill. Drilled 13 1/2" hole from 2031m - 2049m.

06:00 Update

Drilled 13 1/2" hole from 2049m - 2270m.

NEXT 24 HOURS:

Drill 13 1/2" hole to sectional TD at +/-2600m.

GEOLOGICAL SUMMARY

LITHOLOGIC DESCRIPTION:

Interval mMDRT (mTVDSS)	Description
2031-2049 (1858.5-1875.2) ROP: 9-75 m/hr Avg: 48 m/hr	<p>SILTY CLAYSTONE with minor SANDSTONE</p> <p>SILTY CLAYSTONE (90-95%): medium to dark grey to olive black, soft to firm, amorphous to subblocky, minor flakey, silty, grading in parts to argillaceous siltstone, trace to common carbonaceous fragments, non calcareous. At 2045-2049m, grading to claystone with minor silt fraction.</p> <p>SANDSTONE (5-10%): light grey to medium light grey, loose, medium to very coarse, dominantly coarse, moderately sorted, subrounded quartz, with minor friable to firm aggregates, very fine to fine grained, sub angular to sub rounded, moderate to high sphericity, well sorted, rare light grey to light brownish grey argillaceous matrix, trace coaly fragments, poor visible porosity. No Shows</p> <p>COAL (tr): brownish black to black, firm, brittle.</p>
2049-2065 (1875.2-1887.9) ROP: 54-99 m/hr Avg: 79 m/hr	<p>SILTY CLAYSTONE and CLAYSTONE with minor SANDSTONE</p> <p>SILTY CLAYSTONE (85-95%): medium to dark grey to olive black, soft to firm, amorphous to subblocky, minor flakey, silty, grading in parts to argillaceous siltstone, trace to common carbonaceous fragments, non calcareous. In parts grading to CLAYSTONE: medium to dark grey to olive black, dominantly soft to minor firm, amorphous to subblocky, minor flakey, trace to common carbonaceous fragments, non calcareous.</p> <p>SANDSTONE (5-15%): light grey to medium light grey, loose, medium to very coarse, dominantly coarse, moderately sorted, subrounded quartz, with minor friable to firm aggregates, very fine to fine grained, sub angular to sub rounded, moderate to high sphericity, well sorted, rare light grey to light brownish grey</p>

	argillaceous matrix, trace coaly fragments, poor visible porosity. No shows. COAL (tr): brownish black to black, firm, brittle.
2065-2190 (1887.9-1995.7) ROP: 17-103 m/hr Avg: 72 m/hr	CLAYSTONE, SILTY CLAYSTONE and SANDSTONE CLAYSTONE (50-95%): medium to dark grey to olive black, dominantly soft to minor firm, amorphous to subblocky, minor flakey, trace to common carbonaceous fragments, non calcareous. Grading to SILTY CLAYSTONE medium to dark grey to olive black, soft to firm, amorphous to subblocky, minor flakey, silty, grading in parts to argillaceous siltstone, trace to common carbonaceous fragments, non calcareous. From 2135m, claystone becoming pale to medium brownish grey, soft, amorphous, sticky, trace carbonaceous material. SANDSTONE (5-50%): light grey to medium yellow grey, friable to soft, very fine to fine, minor medium, well sorted, sub angular to sub rounded, minor rounded quartz, trace lithics, in abundant soft white to light brownish grey argillaceous matrix, slightly calcareous in parts, trace coaly fragments, poor visible porosity. No shows. COAL (nil-tr): as above.
2190-2215 (1995.7-2017.0) ROP: 21-88 m/hr Avg: 59 m/hr	SILTY CLAYSTONE with CLAYSTONE and SANDSTONE SILTY CLAYSTONE (60-80%): medium to dark grey, firm to moderately hard, argillaceous, trace carbonaceous material, in parts grading to pale to medium grey siltstone. CLAYSTONE (10-20%): pale to medium grey to brownish grey, soft, amorphous, sticky, trace carbonaceous material. SANDSTONE (10-30%): white to light grey, soft, very fine to fine well sorted subrounded quartz, abundant soft white silty argillaceous matrix, trace lithic grains, trace carbonaceous fragments, poor visible porosity. No show. Trace loose coarse quartz, trace pyrite clusters.

HYDROCARBON FLUORESCENCE:

INTERVAL (mMDRT)	FLUORESCENCE
2031-2215	Nil

GAS SUMMARY:

INTERVAL (mMDKB)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
2031-2049	0-0.22	26-2180	1-23	1-5	Tr	Tr	Tr	Tr
2049-2065	0.02-0.15	582-2836	12-25	3-6	Tr	Tr	-	Tr
2065-2190	0.03-0.44	802-5127	10-54	3-12	Tr-1	Tr	Tr	Tr
2190-2215	0.05-0.55	209-3420	6-56	2-20	Tr-2	Tr-2	Tr	Tr

SURVEYS

MD	ANGLE	Azi	TVD					
2176.36	31.76	185.57	2023.9					
2206.21	31.48	183.82	2049.3					
2235.88	31.35	183.41	2074.6					

FORMATION TOPS

WD = 57.1 m RTE = 39.9 m								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDKB	TVDSS	THICK	MDKB	TVDSS	HI/LO	THICK	DIFF
Sea Floor/ Gippsland Limestone	78.5	-57	n/a	97.0	-57.1	0.1 Lo		
Lakes Entrance	-	-						
Latrobe	1299.2	-1223.8		1291	-1215.7	8.1 Hi		
K/T Boundary	-	-						
Un-named Volcanics	1690.5	-1561.7		1695	1563.9	2.2 Lo		
Chimaera	1724.1	-1590.7		1710	1576.9	13.8 Hi		
Kipper Shale	1757.4	-1619.5		1755	1615.7	3.8 Hi		
Admiral Formation	2179	-1983.9		2186	1992.3	8.4 Lo		
500 Sands	2287.8	-2077.7						
400 Sands	2418.8	-2187.3						
300 Sands	2544.2	-2278.6						
200 Sands	2595.3	-2310.9						
100 Sands	2682.0	-2361.9						
50 Sands	2789.9	-2425.0						
Emperor Volcanics	2849.4	-2459.7						
TD								

COMMENTS:

Washed from 1960-1988m at 60m/hr to verify LWD data acquisition.

No trip gas detected.

5m sample interval from 1600m.

MWD Sensor offsets;
Resistivity: 12.31m
GR: 12.36m
Directional: 19.84m
Density: 27.58m
Neutron: 28.40m

WELLSITE GEOLOGISTS: Cliff Menhennitt Simon Ward