

Longtom-3



Date:	22-07-2006	Last Casing:	406 mm (16") @ 995.3 mMDRT
Report Number:	5	Leak Off Test:	1.62 sg EMW @ 1008.0 mMDRT
Report Period:	24hrs to 24:00	Current hole size:	241 mm (9 1/2")
Depth @ 2400 Hrs:	1870.0 mMDRT	Mud Weight:	1.45 sg
Last Depth:	1545.0.0 mMDRT	ECD:	1.62 sg
Progress:	325 m	Mud Type:	SBM Petrofree
TD Lithology:	Silty Claystone, Claystone, Sandstone Volcanics, Coal	V: 6 / 3	13 / 12
Water Depth:	56.7 m	Mud Fluid Loss:	3.0 cc
RT Elevation:	21.5 m	Bit Type:	Reed RSX616M 6x18jets

OPERATIONS SUMMARY

24 HOUR SUMMARY	Made up RST BHA and ran in hole to 1420m MDRT, log section to 1545m MDRT. Commenced drilling 9 1/2" hole with rotary steerable from 1545m MDRT to 1870m MDRT.
00:00 - 24:00:	
06:00 Update	Pulling out of the hole after the MWD failed at 1930m.
NEXT 24 HOURS:	Drilled ahead 9 1/2" hole through Kipper Shale and Admiral Formation.

GEOLOGICAL SUMMARY

LITHOLOGIC DESCRIPTION:

Interval mMDRT	Description
1545 - 1569 ROP 1 -124 m/hr Av 30 m/hr	<p>Silty Claystone with interbedded with Argillaceous Sandstone</p> <p>SILTY CLAYSTONE (25-70%): brownish grey, very soft – soft, arenaceous to argillaceous, common carbonaceous specks and laminae, trace very fine pyrite, gradational to SILTSTONE.</p> <p>ARGILLACEOUS SANDSTONE (30-70%): off white, very light brownish grey, very soft aggregates, occasional loose grains, very fine to fine, fine to medium in loose component, common carbonaceous specks, 40 – 80% argillaceous matrix, dominantly matrix supported, poor to fair visual porosity.</p>
1569 – 1590 ROP 13.5-117 m/hr Av 46 m/hr	<p>Volcanic</p> <p>Top Volcanic: 1569.0 mMD (1536.4 mTVDRT/1514.9 mTVDSS)</p> <p>VOLCANIC (100%): off white, light greenish white, occasionally mottled, very light yellowish brown / off white / light green, commonly weathered to Claystone, common fine to rare medium quartz, trace weathered feldspar and weathered green pyroxene, pyritic in part, trace chlorite, vague remnant crystalline structure in part.</p>

<p>1590 – 1651 ROP 13 -157 m/hr Av 54 m/hr</p>	<p>Sandstone with thin beds of Silty Claystone that becomes more common with depth. Volcanic cavings present.</p> <p>SANDSTONE (30-60%): clear – translucent, loose, medium to very coarse, sub rounded to very angular, poorly sorted, poor inferred porosity.</p> <p>SILTY CLAYSTONE (10-20%): brownish grey, very soft – soft, arenaceous to argillaceous, common carbonaceous specks and laminae, trace very fine pyrite, gradational to SILTSTONE.</p> <p>VOLCANIC (Cavings) (Tr-70%): off white, light greenish white, occasionally mottled, very light yellowish brown / off white / light green, commonly weathered to claystone, common fine to rare medium quartz, trace weathered feldspar and weathered green pyroxene, pyritic in part, trace chlorite, vague remnant crystalline structure in part.</p>
<p>1651-1720 ROP 15 -70 m/hr Av 28 m/hr</p>	<p>Top Kipper Shale: 1651 mMDRT (1587.9 mTVDRT/1566.4 TVDSS)</p> <p>Massive Claystone and Silty Claystone section with occasional Sandstone and trace coal</p> <p>CLAYSTONE (20-90%): light grey to light brown, occasionally white to light grey, firm, blocky, lithics, rare carbonaceous laminae, common micromica, rare pyrite, rare fine quartz in part.</p> <p>SILTY CLAYSTONE (5-25%): dark brownish grey, firm, blocky, arenaceous, rare lithics, carbonaceous specks and laminae, rare very fine pyrite.</p> <p>SANDSTONE (5-80%): clear – translucent, aggregate, rare loose, white to light grey, medium to coarse, dominantly coarse, rare very coarse, sub rounded, dominantly sub rounded, poor sorted, argillaceous matrix, weak siliceous cement, trace pyrite cement, fair inferred porosity, no show.</p> <p>COAL (Tr): black, sub vitreous to dull, brittle, hackly fracture, silty and argillaceous in part.</p>
<p>1720- 1870 ROP 10 -85 m/hr Av 30 m/hr</p>	<p>Massive Silty Claystone and Claystone section, with minor thin fine Sandstones</p> <p>CLAYSTONE (0-100%): dark grey, brownish grey, dominantly brownish grey, blocky, firm, rare carbonaceous specks, silty in part.</p> <p>SILTY CLAYSTONE (40-100%): SILTY CLAYSTONE: very dark grey to medium grey, rare brownish grey, firm, blocky, arenaceous, common carbonaceous specks, lithics, trace very fine pyrite, gradational to SILTSTONE.</p> <p>SANDSTONE (trace): white to light grey, dominantly loose, white to light grey, very fine to fine, trace coarse, well rounded to sub angular, dominantly sub rounded, moderate sorted to well sorted, argillaceous matrix, weak siliceous cement, poor inferred porosity, no show.</p>

HYDROCARBON FLUORESCENCE:

INTERVAL (mMDRT)	FLUORESCENCE
	No fluorescence observed

GAS SUMMARY:

INTERVAL (mMDKB)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
1545 - 1569	0.15	1000	43	11	2	3	2	0
1569 - 1590	0.2	1501	55	7	1	1	2	0
1590 - 1651	0.26	1455	105	16	3	4	3	2
1651 - 1720	0.25	1371	76	12	2	3	0	0
1720 - 1870	0.2	1425	28	4	2	0	0	0

Connection gas: 0.11% @ 1584.5 mMDRT, 2.29% @ 1613.0 MDRT.

SURVEYS

MD	ANGLE	Azi	TVD	MD	ANGLE	Azi	TVD
1449.9	23.6	192.64	1437.72	1735.69	57.57	191.17	1633.2
1476.93	30.14	190.26	1461.81	1765.00	57.99	190.00	1648.8
1507.95	32.61	185.04	1488.3	1791.87	57.90	188.89	1663.1
1535.36	36.53	180.20	1510.87	1821.27	57.88	186.25	1678.7
1564.48	43.00	182.29	1533.2	1849.18	57.85	182.84	193.6
1592.94	47.93	185.98	1553.2				
1621.42	53.50	189.79	1571.2				
1649.14	57.52	191.89	1586.9				
1676.22	57.60	191.24	1601.5				
1705.31	57.87	191.14	1617.0				

FORMATION TOPS

WD = 56.7 m RTE = 21.5 m								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDKB	TVDSS	THICK	MDKB	TVDSS	HI/LO	THICK	DIFF
Sea Floor/ Gippsland Limestone	56	78	n/a	78.2	56	No depth	1077.5	
Lakes Entrance	1172	1150	64	1156.0	1133.5	16.5 HI	64.3	-0.3
Latrobe	1237	1214	241	1221.0	1197.8	16.2 HI	262	+21.0
K/T Boundary	1505	1455	30	1500.5	1460.44	5.4 LO		
Un-named Volcanics	1544	1485	37	1569.0	1514.9	30.0 LO	21	n/a
Kipper Shale	1595	1522	508	1651	1566.4	44.4 LO		
Admiral Formation	2474	2030	124					
%500 Sands	2692	2154	59					
400 Sands	2794	2213	134					
300 Sands	3028	2347	41					
200 Sands	3100	2388	59					
100 Sands	3203	2447	53					
Emperor Volcanics	3296	2500	18+					

TD	3327	2518						
----	------	------	--	--	--	--	--	--

COMMENTS:

MWD failed at 1930m, current operation pulling out of the hole.

Sperry-Sun LWD sensor to bit distances:

Gamma = 9.7m

Porosity = 13.0m

Density = 10.9m

Spectro = 13.3m

Sonic Caliper = 11.3m

Mud pressure = 9.9m

Vibration = 19.4m

Directional = 20.1m

WELLSITE GEOLOGISTS:

Mike Woodmansee

Achintya Basu