



# Mud Records for Culverin 1

Rig : OCEAN PATRIOT

Spud : 16 Dec 2005 / 13:30

Rig Release : 15 Jan 2006 / 15:00

## Water Based Mud

Day	Chk	Date - Time	Type	Depth (m)	Oil Type	TMP (C°)	MW (ppg)	VIS (sec/qt)	PV (cp)	YP (lb/100ft²)	Gel10s / 10m (lb/100ft²)	ECD (ppg)	Cake (/32nd")	Sol (%)	Wtr (%)	LGS (%)	Sand	Oil (%)	Oil on Cut (%)	PV Temp (C°)	Loss HTHP (cc/30min)	Cl (mg/l)	Hard Cal (mg/l)	Excs Lime (ppb)	Elec Stab (mV)	Daily Cost (\$)
	15	2100	KCL-NaCl-Polymer	3402.0		32	10.20	60	16	28	7 / 9		1	10	90		1	0			11.8	82500	260			21860
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%.																				
5	1	1600	PHB spud	650.0			8.80	120			/															7964
		Mud Description: PHB spud				Comment:																				
6	2	2300	PHG Hi-Vis				8.70	120			/															3057
		Mud Description: PHG Hi-Vis				Comment:																				
7	3	1920	PHG Hi-Vis	840.0		20	8.60	100	9	22	18 / 18											2200	80			6209
		Mud Description: PHG Hi-Vis				Comment:																				
8	4	1945	PHG Hi-Vis	1390.0		20	8.70	110	14	26	22 / 28											2200	20			5570
		Mud Description: PHG Hi-Vis				Comment: 1318bbbls of Hi vis pumped during 24hr drilling period																				
9	5	2200	PHG Hi-Vis	1525.0		20	8.70	105	14	30	22 / 27			2								600	40			1529
		Mud Description: PHG Hi-Vis				Comment: Completed drilling pumping 80bbbls of Hi-vis per stand drilled. At TD sweep hole with 150bbbls of guar gum and displaced with 840bbbls of PHG(un-weighted)																				
12	8	2310	KCL-NaCl-Polymer	1525.0			9.50	50	9	12	3 / 3		1	6	94		0	0				35500	80			20167
		Mud Description: KCL-NaCl-Polymer				Comment: Started mixing mud after Bops landed. Mixed 1000bbbls of 3% KCL/NaCl/Polymer mud weighted to 9.5ppg and filled sandtraps, further mixing is in progress																				
13	9	2100	KCL-NaCl-Polymer	1527.0		20	9.50	48	10	13	4 / 6		1	5	95		0	0				36000	240			27976
		Mud Description: KCL-NaCl-Polymer				Comment: Ditch magnet metal recovery 150 grams.																				
14	10	2100	KCL-NaCl-Polymer	2070.0		20	9.60	56	15	20	4 / 5		1	6	94		1	0				36500	200			23715
		Mud Description: KCL-NaCl-Polymer				Comment: Ditch magnet metal recovery 70 grams																				
15	11	2300	KCL-NaCl-Polymer	2600.0		22	10.00	55	16	25	6 / 9		1	10	90		0.8	0			13.6	65000	240			57591
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 6%. Ditch magnet metal recovery 60 grams																				
16	12	2100	KCL-NaCl-Polymer	3052.0		25	10.20	57	17	26	7 / 9		1	10	90		1.25	0			12.8	75000	260			20507
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%. Ditch magnet metal recovery 50 grams																				
17	13	2100	KCL-NaCl-Polymer	3260.0		32	10.30	57	17	26	6 / 9		1	10	90		1.25	0			12.0	81500	260			49325
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%. Ditch magnet metal recovery 60 grams																				
18	14	2100	KCL-NaCl-Polymer	3380.0		33	10.20	57	17	30	7 / 9		1	10	90		1.25	0			12.0	82000	320			2468
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%. Ditch magnet metal recovery 52grams																				
19	15	2100	KCL-NaCl-Polymer	3402.0		32	10.20	60	16	28	7 / 9		1	10	90		1	0			11.8	82500	260			21860
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%.																				
20	16	20:30	KCL-NaCl-Polymer	3448.0		29	10.20	62	17	33	8 / 11		1	10	90		1.5	0			12.0	84000	200			302
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%. Ditch magnet recovery = 142 grams																				
21	17	19:00	KCL-NaCl-Polymer	3571.0		33	10.20	62	18	27	7 / 9		1	10	90		1.25	0			12.0	82000	260			20199
		Mud Description: KCL-NaCl-Polymer				Comment: NaCl 8%. Ditch magnet recovery = 220 grams																				



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22	15	2100	KCL-NaCl-Polymer	3402.0		32	10.20	60	16	28	7 / 9		1	10	90		1	0			11.8	82500	260			21860
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%.																			
23	19	21:50	KCL-NaCl-Polymer	3571.0			10.20	57	16	27	6 / 8		1	10	90		1	0			11.6	78000	200			0
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%.																			
24	20	21:20	KCL-NaCl-Polymer	3576.0		49	10.20	64	17	33	8 / 11		1	10	90		1	0			11.0	79000	200			5830
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%. Ditch Magent recovery = 140 grams																			
25	21	22:30	KCL-NaCl-Polymer	3661.0		49	10.20	61	16	30	8 / 12		1	10	90		.8	0			11.0	79000	200			0
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%. Ditch Magent recovery = 186 grams																			
26	22	21:30	KCL-NaCl-Polymer	3752.0		49	10.20	59	15	30	7 / 11		1	10	90		.7	0			11.0	79000	240			302
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%. Ditch Magent recovery = 92 grams																			
27	23	20:00	KCL-NaCl-Polymer	3758.0		49	10.20	59	16	28	7 / 10		1	10	90		.7	0			11.0	79000	240			0
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%. Ditch Magent recovery = N/A																			
28	23	20:00	KCL-NaCl-Polymer	3758.0		49	10.20	59	16	28	7 / 10		1	10	90		.7	0			11.0	79000	240			0
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%. Ditch Magent recovery = N/A																			
29	23	20:00	KCL-NaCl-Polymer	3758.0		49	10.20	59	16	28	7 / 10		1	10	90		.7	0			11.0	79000	240			0
		Mud Description: KCL-NaCl-Polymer					Comment: NaCl 8%. Ditch Magent recovery = N/A																			
30	26		Seawater								/		1													0
		Mud Description: Seawater					Comment: Final mud cost from report # 26 = \$277 778																			
31	27		Seawater								/		1													17078
		Mud Description: Seawater					Comment: Final mud cost from report # 27 = \$294, 885.24																			
32	27		Seawater								/		1													0
		Mud Description: Seawater					Comment: Final mud cost from report # 28 =A\$294,855																			

## Oil Based Mud

Day	Chk	Date - Time	Type	Depth (m)	Oil Type	TMP (C°)	MW (ppg)	VIS (sec/qt)	PV (cp)	YP (lb/100ft²)	Gel10s (lb/100ft²) / 10m (lb/100ft²)	ECD (ppg)	Cake (/32nd")	Sol (%)	Wtr (%)	LGS (%)	Sand	Oil (%)	Oil on Cut (%)	PV Temp (C°)	Loss HTHP (cc/30min)	Cl (mg/l)	Hard Cal (mg/l)	Excs Lime (ppb)	Elec Stab (mV)	Daily Cost (\$)
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## Mud Records for Culverin 1

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### Synthetic Based Mud

Day	Chk	Date - Time	Type	Depth (m)	Oil Type	TMP (C°)	MW (ppg)	VIS (sec/qt)	PV (cp)	YP (lb/100ft²)	Gel10s (lb/100ft²) / 10m (lb/100ft²)	ECD (ppg)	Cake (/32nd")	Sol (%)	Wtr (%)	LGS (%)	Sand	Oil (%)	Oil on Cut (%)	PV Temp (C°)	Loss HTHP (cc/30min)	Cl (mg/l)	Hard Cal (mg/l)	Excs Lime (ppb)	Elec Stab (mV)	Daily Cost (\$)
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