Summary report

Wellbore: 15/9-F-10 **Period: 2009-04-22 00:00 - 2009-04-23 00:00**

Status:	normal
Report creation time:	2018-05-03 13:51
Report number:	17
Days Ahead/Behind (+/-):	8.6
Operator:	StatoilHydro
Rig Name:	MÆRSK INSPIRER
Drilling contractor:	Maersk Drilling
Spud Date:	2009-04-06 06:00
Wellbore type:	
Elevation RKB-MSL (m):	54.9
Water depth MSL (m):	91
Tight well:	Y
HPHT:	Y
Temperature ():	
Pressure ():	
Date Well Complete:	2009-06-03

Dist Drilled (m):	60
Penetration rate (m/h):	-999.99
Hole Dia (in):	17.5
Pressure Test Type:	formation integrity test
Formation strength (g/cm3):	1.6
Dia Last Casing ():	

Depth at Kick Off mMD:	
Depth at Kick Off mTVD:	
Depth mMd:	1463
Depth mTVD:	1396.8
Plug Back Depth mMD:	
Depth at formation strength mMD:	1389
Depth At Formation Strength mTVD:	1331.7
Depth At Last Casing mMD:	1388.9
Depth At Last Casing mTVD:	1331.7

Summary of activities (24 Hours)

Clenad out rathole down to 1400 m MD. Drilled 3 m new formation to 1403 m MD. Circulated to even mudweight in/out 1,39 sg. Performed FIT to 1,60 EMW. Drilled 17 1/2" hole from 1403 m MD to 1463 m MD. Malfunction on powerdrive, not able to steer/build. POOH with 17 1/2" BHA for powerdrive changeout.

Summary of planned activities (24 Hours)

Change to b/u powerdrive X5. RIH with 17 1/2" BHA to 1463 m MD. Resume drilling and drill to 1640 m MD.

Operations

Start time	End time	End Depth mMD	Main - Sub Activity	State	Remark
00:00	01:45	1360	drilling -- casing	ok	Drilled on cement plugs at 1359 m MD. Increased WOB to 15 MT. Drilling parameters : Flow 3200 lpm / SPP 115 bar / 40-70 RPM / WOB 6-15 MT / Torque 9-20 kNm. Meanwhile added barite to active to raise mudweight.
01:45	02:15	1360	drilling -- casing	ok	Bit stalled out at 35 kNm at 1360,6 m MD. Released torque in string. Worked string free with 20 MT overpull - string free with no excessive drag. Reamed tight area.
02:15	05:30	1389	drilling -- casing	ok	Drilled shoetrack from 1360 m to 1389,5 m MD. Drilling parameters : Flow 3200 lpm / SPP ~115 bar / 60 RPM / WOB ~5 MT / Torque 12-15 kNm / ECD 1,39 sg / ROP 12 m/hrs. Broke through shoe at 1389,7 m MD. Meanwhile rigged up Weatherford casing tong on drillfloor fore.
05:30	06:00	1395	drilling -- casing	ok	Cleaned out rathole down to 1393 m MD in increments of 2 m pulling back into shoe. Flow 3200 lpm / SPP ~115 bar / 60 RPM / WOB < 1 MT / Torque 6-10 kNm / ECD 1,39 sg.
06:00	06:45	1400	drilling -- casing	ok	Cleaned out 26" rathole from 1393 m to 1400 m MD. Parameters : Flow 3200 lpm / SPP ~115 bar / 60 RPM / WOB < 1 MT / Torque 6-10 kNm / ECD 1,39 sg.
06:45	07:15	1403	drilling -- drill	ok	Drilled 17 1/2" hole from 1400 m to 1403 m MD prior to FIT. Drilling paramaters : Flow 3200 lpm / SPP ~115 bar / 60 RPM / WOB 3 MT / Torque 11 kNm / ECD 1,39 sg.
07:15	10:15	1403	formation evaluation -- circulating conditioning	ok	Ciruclated 3 x bottoms up to get even mudweight 1,39 in/out prior to FIT. Reciprocated stand. Flow 4000 lpm / SPP 170 bar / 30 RPM.
10:15	10:45	1403	formation evaluation -- circulating conditioning	ok	Pumped and spotted LCM pill across open hole at 2200 lpm / SPP 46 bar.
10:45	12:00	1363	formation evaluation -- rft/fit	ok	POOH from 1403 m to 1363 m MD. Racked back stand. Made up kelly cock/side entry sub and flushed line. Tested line to 50 bar / 5 min - ok. Closed UPR.
12:00	12:45	1363	formation evaluation -- rft/fit	ok	Lined up to cement unit. Performed FIT to 1,60 EMW. Pumped 420 liter / CUP 29,6 bar. Bled back 460 liter.
12:45	13:30	1363	drilling -- drill	ok	Broke out and laid down kelly cock/side entry sub. Lined up to standpipe. Took SCRs. Filled sandtraps.
13:30	14:15	1403	drilling -- drill	ok	RIH to TD at 1403 m MD. Downlinked powerdrive prior to drilling ahead.
14:15	14:45	1405	drilling -- drill	ok	Drilled 17 1/2" section from 1403 m to 1405 m MD. Drilling parameters : Flow 4000 lpm / SPP ~180 bar / 60 RPM / WOB 5 MT / Torque 8-10 kNm / ECD 1,39 sg.
14:45	15:15	1405	drilling -- drill	ok	Cleared augers in shaker room due to stop/blockage. Auger stop caused by rubber.
15:15	17:15	1443	drilling -- drill	ok	Drilled 17 1/2" hole from 1405 m to 1443 m MD. Drilling parameters : Flow 4000-4300 lpm / SPP 180-197 bar / 60-150 RPM / WOB 4-10 MT / Torque 6-16 kNm / ECD 1,39-1,40 sg. Set powerdrive to 342 deg / 100%. Observed no reposonse from powerdrive - hold and slight drop, no steering.
17:15	19:15	1443	drilling -- drill	ok	Discussed situation. Produced alternative well projections for drilling ahead one more stand. Set powerdrive to 270 deg / 100%. Meanwhile pulled off bottom and reciprocated stand. Paramaters : Flow 2500-3000 lpm / SPP 73-105 bar / 30 RPM / Torque 7 kNm / ECD 1,40-1,45 as determined by weighing up mud.
19:15	20:30	1463	drilling -- drill	ok	Drilled 17 1/2" hole from 1443 m to 1463 m MD. Drilling parameters : Flow 4100 lpm / SPP ~195 bar / 120 RPM / WOB 2-7 MT / Torque 6-8 kNm / ECD 1,45-1,46 sg. Observed no left reposonse from powerdrive - hold and slight drop, no steering. Recessed drilling. Decided to POOH to change to back-up powerdrive.
20:30	23:15	1453	drilling -- circulating conditioning	ok	Circulated hole clean and obtained even mudweight in/out. Parameters : Flow 4500 lpm / SPP~245 bar / Torque 6 kNm / ECD 1,47.
23:15	00:00	1453	drilling -- trip	ok	Flowchecked - well static. Pumped slug for POOH.

Equipment Failure Information

Start time	Depth mMD	Depth mTVD	Sub Equip - Syst Class	Operation Downtime (min)	Equipment Repaired	Remark
00:00	115		pipe handling equ syst -- other	0	00:00	Broken bolt on PS-21 slips actuator.

Drilling Fluid

Sample Time	04:00	16:00	20:00
Sample Point	Flowline	Flowline	Flowline
Sample Depth mMD	1359	1403	1450
Fluid Type	OBM-Standard	OBM-Standard	OBM-Standard
Fluid Density (g/cm3)	1.39	1.4	1.46
Funnel Visc (s)	-999.99	-999.99	-999.99
Mf ()			
Pm ()			
Pm filtrate ()			
Chloride ()			
Calcium ()			

Magnesium ()			
Ph			
Excess Lime ()			
Solids			
Sand ()			
Water ()			
Oil ()			
Solids ()			
Corrected solids ()			
High gravity solids ()			
Low gravity solids ()			
Viscometer tests			
Plastic visc. (mPa.s)	22	26	29
Yield point (Pa)	7	9	11.5
Filtration tests			
Pm filtrate ()			
Filtrate Lthp ()			
Filtrate Hthp ()			
Cake thickn API ()			
Cake thickn HPHT ()			
Test Temp HPHT (degC)	120	120	120
Comment			

Pore Pressure

Time	Depth mMD	Depth TVD	Equ Mud Weight (g/cm3)	Reading
00:00	1463		1	estimated

Survey Station

Depth mMD	Depth mTVD	Inclination (dega)	Azimuth (dega)	Comment
1430.6	1367.9	27.95	118.95	

Log Information

Run No	Service Company	Depth Top mMD	Depth Bottom mTVD	Tool	BHST (degC)
100	Schlumberger	1400	1463	ARCVRES9	-999.99

Lithology Information

Start Depth mMD	End Depth mMD	Start Depth mTVD	End Depth mTVD	Shows Description	Lithology Description
1400	1463	1343.6	1396.8		Claystone with minor limestone (Hordaland Gp)

Gas Reading Information

Time	Class	Depth to Top mMD	Depth to Bottom MD	Depth to Top TVD	Depth to Bottom TVD	Highest Gas (%)	Lowest Gas ()	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	IC5 (ppm)
00:00	drilling gas pea k	1455				1.1		9912	0	2	1	2