

## Summary report

Wellbore: 15/9-F-14

Status:	normal
Report creation time:	2018-05-03 13:52
Report number:	33
Days Ahead/Behind (+/-):	
Operator:	StatoilHydro
Rig Name:	MÆRSK INSPIRER
Drilling contractor:	Mærsk Contractors
Spud Date:	2007-11-04 00:00
Wellbore type:	
Elevation RKB-MSL (m):	54.9
Water depth MSL (m):	91
Tight well:	Y
HPHT:	Y
Temperature ():	
Pressure ():	
Date Well Complete:	2008-06-15

Dist Drilled (m):	-999.99
Penetration rate (m/h):	-999.99
Hole Dia (in):	17.5
Pressure Test Type:	formation integrity test
Formation strength (g/cm3):	1.38
Dia Last Casing ():	

Period: 2008-05-18 00:00 - 2008-05-19 00:00

Depth at Kick Off mMD:	
Depth at Kick Off mTVD:	
Depth mMd:	2281
Depth mTVD:	2279.5
Plug Back Depth mMD:	2245
Depth at formation strength mMD:	1186
Depth At Formation Strength mTVD:	1186
Depth At Last Casing mMD:	2275.4
Depth At Last Casing mTVD:	2274.1

## Summary of activities (24 Hours)

Rigged down casing running equipment. RIH with 14" casing/PADPRT on 5 1/2" HWDP. Washed down casing. Picked up cement head and landed casing at 2276 m MD. Circulated hole clean . Pumped 1,60 sg tuned spacer. Mixed and pumped 34,5 m3 1,90 sg cement. Bumped plug and tested casing to 345 bar. Set seal assembly. Not able to obtain test on MS seal. Troubleshoot situation. Re-energized MS-seal. Tested MS-seal to 345 bar-ok. Not able to release PADPRT.

## Summary of planned activities (24 Hours)

Release PADPRT and POOH with same. Installed alignment cylinder on TDS. Install wearbushing and wash wellhead. Pick up 8 1/2" drilling BHA and RIH with same to 2245 m MD.

## Operations

Start time	End time	End Depth mMD	Main - Sub Activity	State	Remark
00:00	02:30	2126	drilling -- casing	ok	Ran 14 96.6# casing from 1874 m to 2126 m MD. Filled every casing joint with 1,30 WBM. Laid out joint #48 due to jammed protector on box end. Joint #14 & #13 added to tally due to lay outs. Meanwhile tested CRI hose to 200 bar. Leakage 3% / 10 min.
02:30	03:00	2131	drilling -- casing	ok	Picked up and made up 14" casing pup joint D (4,92 m MD). Took up/down weight 320/276 MT.
03:00	05:00	2131	drilling -- casing	ok	Rigged down BX elevator. Broke out and laid down LaFleur tool. Removed casing bails. Installed drilling bails and drilling elevator.
05:00	05:15	2131	drilling -- casing	ok	Performed toolbox talk prior to picking up 14" casing hanger / PADPRT.
05:15	05:45	2131	drilling -- casing	ok	Picked up and made up 14" casing hanger / PADPRT. Removed rubber protection on PADPRT. Took up/down weight 360/278 MT.
05:45	06:00	2131	drilling -- casing	ok	Removed FMS from rotary.
06:00	07:00	2134	drilling -- casing	ok	Installed master bushing. Checked casing hanger and PADPRT.
07:00	07:15	2134	drilling -- casing	ok	Held toolbox talk prior to removing casing tong.
07:15	07:45	2134	drilling -- casing	ok	Rigged down Odfjell casing tong.
07:45	08:30	2233	drilling -- casing	ok	RIH with 14" casing / PADPRT on 5 1/2" HWDP from 2134 m to 2233 m MD.
08:30	10:00	2273	drilling -- casing	ok	On last stand prior to landing casing hanger, broke circulation and staged up pumps : 220 lpm/13 bar, 220 lpm/15 bar, 490 lpm/16 bar. Took 10-12 MT weight at 2243 m MD. Increased flowrate to 1500 lpm / 28 bar. Washed down to 2273 m MD.
10:00	10:15	2273	drilling -- casing	ok	Picked up and made up cement head. Hooked up cement hose and controls.
10:15	11:15	2276	drilling -- casing	ok	Washed down 14" casing with 550 lpm/18 bar down to 2276 m MD. Landed hanger at 140,84 m MD and set down 7 MT.
11:15	13:00	2276	drilling -- casing	ok	Staged up pumps to 2300 lpm / 42 bar. Circulated hole clean prior to cementing. Got a lot of cuttings and cavings over the shakers.
13:00	15:00	2276	drilling -- casing	ok	Pumped 20 m3 1,60 sg tuned spacer at 2300 lpm. Lined up cement pump. Dropped 1 3/4" ball for 1st wiper plug. Mixed and pumped 34,5 m3 1,9 sg cement. Pump rate 500-600 lpm / CU P 15-22 bar. Released dart for 2nd wiper plug and displaced with 2,5 m3 WBM from cement unit. Lined up mud pumps for displacing cement with WBM.
15:00	16:15	2276	drilling -- casing	ok	Zeroed stroke counter. Displaced cement with 1,30 sg WBM at 3000 lpm. Bumped wiper plug after 7780 strokes (~97% pump efficiency) by observing 70 bar pressure increase.
16:15	17:45	2276	drilling -- casing	ok	Lined over to cement pump and tested 14" casing against float collar / wiper plug to 345 bar / 15 min - ok. Pumped and bled back 2000 litres. No additional flowback observed - floats holding pressure.
17:45	18:15	2276	drilling -- casing	ok	Set PADPRT in position to set MS seal by applying 30 MT overpull and setting down while rotating 4 times clockwise.
18:15	18:30	2276	drilling -- casing	ok	Pressure tested surface lines agains kil HCR to 207 bar - ok.
18:30	19:30	2276	drilling -- casing	ok	Closed upper pipe rams. Pressurized bulk seal in PADPRT to 207 bar to set MS-seal. Vented DP to atmosphere.
19:30	20:45	2276	drilling -- casing	ok	Tested seal assembly to 35 bar / 5 min - ok. Increased pressure to 345 bar - pressure leaked off at approx 3-4 bar / 10 min - trend not improving. Took additional 10 MT overpull (block 118 MT). Repeated 345 bar test on MS seal with same result. Pumped and bled back approx 400 liter.
20:45	22:00	2276	drilling -- casing	ok	Not able to obtain 345 bar test on MS-seal - steady leak off 3-4 bar / 10 min (>1%). Bled off pressure and closed additional valves in kill manifold. Greased valves on cement unit.
22:00	22:30	2276	drilling -- casing	ok	Perfomed line test against HCR, 345 bar / 4 bar drop in 10 min. Attempted to re-test MS-seal. Observed volume mismatch and wrong line-up - bled off pressure.
22:30	00:00	2276	drilling -- casing	ok	Attempted to re-test MS-seal. Pressurized MS seal to 345 bar / 3 bar drop in 10 min but trend not improving. Closed isolation valve on cement unit and monitored pressure on kill manifold from Gesoservice. Pressure Dropped from 329 to 320 bar in 30 min but no improvement observed. Discussed situation. Decided to work on valves and lines to obtain better line test before reverting to testing MS-seal.

## Drilling Fluid

Sample Time	12:00	22:00
Sample Point	Active pit	Active pit
Sample Depth mMD	2281	2281
Fluid Type	HPWBM	HPWBM
Fluid Density (g/cm3)	1.3	1.3

<b>Funnel Visc (s)</b>	-999.99	-999.99
<b>Mf ()</b>		
<b>Pm ()</b>		
<b>Pm filtrate ()</b>		
<b>Chloride ()</b>		
<b>Calcium ()</b>		
<b>Magnesium ()</b>		
<b>Ph</b>		
<b>Excess Lime ()</b>		
<b>Solids</b>		
<b>Sand ()</b>		
<b>Water ()</b>		
<b>Oil ()</b>		
<b>Solids ()</b>		
<b>Corrected solids ()</b>		
<b>High gravity solids ()</b>		
<b>Low gravity solids ()</b>		
<b>Viscometer tests</b>		
<b>Plastic visc. (mPa.s)</b>	30	28
<b>Yield point (Pa)</b>	15	17
<b>Filtration tests</b>		
<b>Pn filtrate ()</b>		
<b>Filtrate Lthp ()</b>		
<b>Filtrate Hthp ()</b>		
<b>Cake thickn API ()</b>		
<b>Cake thickn HPHT ()</b>		
<b>Test Temp HPHT ()</b>		
<b>Comment</b>		

#### Pore Pressure

Time	Depth mMD	Depth TVD	Equ Mud Weight (g/cm3)	Reading
00:00	2281		1.03	estimated

#### Casing Liner Tubing

<b>Start Time</b>	04:30
<b>End Time</b>	08:45
<b>Type of Pipe</b>	Casing
<b>Casing Type</b>	Intermediate
<b>Outside diameter (in)</b>	14
<b>Inside diameter (in)</b>	12.66
<b>Weight (lbm/ft)</b>	96.9
<b>Grade</b>	P-110
<b>Connection</b>	Vam TOP
<b>Length (m)</b>	2134.9
<b>Top mMD</b>	140.5
<b>Bottom mMD</b>	2275.4
<b>Description</b>	17.5" Drilling BHA
<b>Comment</b>	