Summary report

Wellbore: 15/9-F-12 **Period: 2008-01-14 00:00 - 2008-01-15 00:00**

Status:	normal
Report creation time:	2018-05-03 13:51
Report number:	112
Days Ahead/Behind (+/-):	98.9
Operator:	StatoilHydro
Rig Name:	MÆRSK INSPIRER
Drilling contractor:	Mærsk Contractors
Spud Date:	2007-03-15 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:	2007-08-26

Dist Drilled (m):	-999.99
Penetration rate (m/h):	-999.99
Hole Dia ():	
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:	3520
Depth mTVD:	3107.4
Plug Back Depth mMD:	3480
Depth at formation strength mMD:	3116
Depth At Formation Strength mTVD:	2863
Depth At Last Casing mMD:	3519
Depth At Last Casing mTVD:	3107.8

Summary of activities (24 Hours)

Tested BOP. Pulled test plug. RIH with cup tester and tested upper tie-back string. Fingerprinted trip tanks. Leak tested tie-back and recorded leakage rates. Set nominal bowl protector. Waited on RTTS to arrive on supply boat.

Summary of planned activities (24 Hours)

Run RTTS packer and test above and below lower tie-back stinger.

Operations

Start time	End time	End Depth mMD	Main - Sub Activity	State	Remark
00:00	01:00	0	drilling -- casing	ok	Discussed situation. Decided to do pressure test in steps to identify the onset of the leakage. Fitted B-annulus with pressure gauge.
01:00	02:00	0	drilling -- casing	ok	Pressured up well in 50 bar increments: 50 bar / 415 liter - Presssure drop 0,97 bar / 5 min 100 bar / 775 liter - Pressure drop 0,8 bar / 5 min 150 bar / 1099 liter - Pressure drop 1,8 bar / 5 min 200 bar / 1451 liter - Pressure drop 5,3 bar / 5 min corresponding to a leakage rate of 7 l/min.
02:00	02:30	0	drilling -- casing	ok	Closed B-annulus valves. Observed wrong placement of pressure gauge and unsuited scale on same. Bled back pressure to 150 bar. Changed pressure gauge. Pressure dropped from 150 bar to 142 bar over 30 min (1,8 l/min) while working on annulus. When opening inner B-annulus valve a pressure of 12 bar could be observed on the pressure gauge immediately.
02:30	03:15	0	drilling -- casing	ok	Pressured up well to 200 bar and observed annulus pressure increase to 25 bar. Pressure fell on well and increased on annulus : 5 min : well; 2,4 bar drop / annulus; 3 bar cummulative increase 10 min : well; 4,6 bar drop / annulus; 6 bar cummulative increase 15 min : well; 6,4 bar drop / annulus; 9 bar cummulative increase 20 min : well; 7,5 bar drop / annulus; 11 bar cummulative increase Indication of leakage from tie-back casing to B-annulus confirmed. Leakage rate with closed annulus at approx 200 bar - 2,5 l/min.
03:15	03:30	0	drilling -- casing	ok	Bled back pressure on casing and B-annulus.
03:30	04:00	0	drilling -- bop/wellhead equipment	ok	Prepared for testing BOP. Picked up BOP test plug and RIH with same. Set test plug in surface wellhead.
04:00	06:00	0	drilling -- bop activities	ok	Tested 18 3/4" surface BOP according to Mærsk procedure.
06:00	10:30	20	drilling -- bop activities	ok	Tested 18 3/4" surface BOP.
10:30	10:45	0	drilling -- bop activities	ok	POOH with BOP test plug and laid down same.
10:45	12:30	0	drilling -- casing	ok	Discussed further actions with town. Meanwhile picked up and made up 10 3/4" cup tester.
12:30	13:00	0	drilling -- casing	ok	Held toolbox talk prior to RIH with 10 3/4" cup tester.
13:00	13:15	30.5	drilling -- casing	ok	RIH with 10 3/4" cup tester on 5 1/2" DP to 30,5 m MD. Closed UPR and verified lineup.
13:15	13:45	30.5	drilling -- casing	ok	Pressure tested ASH and casing hanger against 10 3/4" cup tester. Stepped up pressure in 50 bar increments from 100 bar and held each step for 5 min. Obtained good test at 345 bar. Pumped and bled back 79 l.
13:45	14:00	132	drilling -- casing	ok	RIH with 10 3/4" cup tester on 5 1/2" DP from 30,5 m to 132 m MD. Closed UPR.
14:00	14:45	132	drilling -- casing	ok	Pressure tested upper tie-back string against 10 3/4" cup tester. Stepped up pressure in 50 bar increments from 100 bar and held each step for 5 min. Obtained good test at to 345 bar. Pumped and bled back 172 liter.
14:45	15:00	150	drilling -- casing	ok	RIH with 10 3/4" cup tester on 5 1/2" DP from 132 m to 150 m MD. Closed UPR.
15:00	15:45	150	drilling -- casing	ok	Pressure tested tie-back adaptor against 10 3/4" cup tester. Stepped up pressure in 50 bar increments from 100 bar and held each step for 5 min. Obtained good tests at 345 bar. Entire upper tie-back string tested to 345 bar / 10 min - ok. Pumped and bled back 183 liter.
15:45	16:15	0	drilling -- casing	ok	POOH with 10 3/4" cup tester on 5 1/2" DP. Broke out and laid down cup tester.
16:15	16:45	0	drilling -- casing	ok	Closed shear rams and performed fingerprinting of trip tank : Added 20 l water above shear ram. Observed 20 l increase (driller/logger) Added 10 l water above shear ram. Observed 10 l increase (driller/logger)
16:45	17:00	0	drilling -- casing	ok	Lined up to pump down well and re-test the complete tie-back string.
17:00	18:15	0	drilling -- casing	ok	Pressured up well to 101 bar at 100 lpm. Pumped 712 liter. Dropped from 101,6 bar to 100,7 bar in 5 min - ok. Pressured further up to 200 bar at 100 lpm. Total pumped 1410 liter. Dropped from 200 bar to 195,6 bar in 5 min. Leaking at approx 6 l/min. Pressured further up to 250 bar. Total pumped 1806 liter. Pressure drop 4 bar/5min. Pressured further up to 300 bar. Total pumped 2184 liter. Pressure drop 4 bar/5 min. Measured leakage rate of 4 l/min on B-annulus. Pressured further up to 346 bar. Pressure drop 0,5 bar/min. Measured leakage rate of 4 l/min on B-annulus.
18:15	20:30	0	drilling -- casing	ok	Pressured up well to 345 bar every 15 min. Pressure dropped 0,5 bar/min. Measured a steady leakage rate of 4 l/min on B-annulus. Observed increase in leakage rate of approx 12 l/min each time the well was pressurised back to 345 bar. No significant change in leakage rates could be observed. Bled off pressure on well.
20:30	00:00	0	drilling -- casing	ok	Picked up and RIH with nominal bowl protector at 20,8 m MD. Set bowl protector and pulled stand.

Equipment Failure Information

Start time	Depth mMD	Depth mTVD	Sub Equip - Syst Class	Operation Downtime (min)	Equipment Repaired	Remark

00:00	2175		miscellaneous equ syst -- other	0	00:00	ESD/Siemens testing interrupting main power supply. Had to re-set and calibrate rig equipment after power shut down.
00:00	440		miscellaneous equ syst -- other	0	00:00	Derrick inspection due to falling object.

Drilling Fluid

Sample Time	00:00
Sample Point	Reserve pit
Sample Depth mMD	-999.99
Fluid Type	Packer fluid
Fluid Density (g/cm3)	1.03
Funnel Visc (s)	-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)	-999.99
Yield point (Pa)	-999.99
Filtration tests	
Pm filtrate ()	
Filtrate Lthp ()	
Filtrate Hthp ()	
Cake thickn API ()	
Cake thickn HPHT ()	
Test Temp HPHT ()	
Comment	