

Well no :	9/2-3	Operator :	STATOIL
Coordinates :	57° 45' 20.20" N 04° 22' 13.50" E	UTM coord. :	640247209 N 58155609 E
Licence no :	114	Permit no :	624
Rig :	VILDKAT EXPLORER	Rig type :	SEMI-SUB.
Contractor :	TRANSNOR RIG AS	Elev. KB :	25 M
Bottom hole temp:	84°C	Water depth :	79 M
Spud. date :	89.12.04	Total depth :	3424 M
Compl. date :	90.02.08	Form. at TD	JURASSIC
Spud. class :	WILDCAT	Prod.form. :	
Compl. class :	P&A. OIL DISCOVERY		
Seisloca :	ST 8626 - 410 SP 210		

LICENSEES

10,000000	PETROBRAS NORGE A/S
15,000000	SAGA PETROLEUM A.S.
15,000000	A/S NORSKE SHELL
50,000000	DEN NORSKE STATS OLJESELSKAP A.S
10,000000	DEMINEX (NORGE) A/S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	163,0	36	169,0	
INTERM.	20	350,0	26	375,0	1,39
INTERM.	13 3/8	1106,0	17 1/2	1121,0	2,04
INTERM.	9 5/8	3195,0	12 1/4	3210,0	1,87
LINER	7	3384,0	8 1/2	3422,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery	
		M	%
1	3264,0 - 3291,0	27,0	100,0

MUD

Depth	Mud weight	Visc.	Mud type
1121,000	1,10	20,0	WATER BASED
1121,000	1,14	17,0	WATER BASED
1272,000	1,15	27,0	WATER BASED
1481,000	1,16	17,0	WATER BASED
1618,000	1,13	16,0	WATER BASED
1792,000	1,13	20,0	WATER BASED
2720,000	1,14	14,0	WATER BASED
2753,000	1,20	17,0	WATER BASED
3145,000	1,35	28,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
3145,000	1,33	29,0	WATER BASED
3210,000	1,26	22,0	WATER BASED
3210,000	1,63	36,0	WATER BASED
3210,000	1,26	22,0	WATER BASED
3210,000	1,48	29,0	WATER BASED
3210,000	1,26	20,0	WATER BASED
3258,000	1,63	31,0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	Interval meter		Choke size	Pressure (PSI) WHP	BTHP	FFP
1,0	3258,000	-	3268,000	12,7		

Test temperature: N/A

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1,0	4,6		0,900		

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	380 - 3420	210
CUTTINGS	380 - 3420	210

SHALLOW GAS

Interval below KB	Remarks

AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
AC CBL VDL GR	275,0 - 1106,0	X		
AC CBL VDL GR	2550,0 - 3192,5	X		
AC CBL VDL GR	3030,9 - 3324,5	X		
CDL DNL	3192,5 - 3403,7	X	X	
DIFL BHC AC GR	1106,0 - 3181,8	X	X	
DIFL BHC AC GR	3192,5 - 3396,3	X	X	

Log type	Intervals		1/200	1/500	Div.
CDM	3192,500	- 3358,300	X		
CDM AP	3192,500	- 3358,300	X	X	*
FMT LOG	3260,0	- 3329,0	X	X	*
MWD	166,0	- 3422,0		X	
VELOCITY LOG	1110,0	- 3322,0		X	
SYNTHETIC SEISMOGRAM	10 cm/s				2
TWO WAY TRAVELL TIME	10 cm/s	20 cm/s			2
VSP	10 cm/s				10

*BOTH 1:200 AND 1:500 ON THE SAME LOG

Main operations for well: 9/2-3

Main operation: DRILLING

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	1410	23,5	2,82
BOP/WELLHEAD EQ	2295	38,3	4,58
CASING	12315	205,3	24,60
CIRC/COND	1380	23,0	2,76
DRILL	23010	383,5	45,96
HOLE OPEN	870	14,5	1,74
OTHER	480	8,0	0,96
REAM	780	13,0	1,56
SURVEY	120	2,0	0,24
TRIP	6210	103,5	12,40
WAIT	1200	20,0	2,40
Total	50070	834,5	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC/COND	1920	32,0	6,02
CORE	570	9,5	1,79
DST	17550	292,5	54,98
LOG	3270	54,5	10,24
OTHER	210	3,5	0,66
RFT/FIT	510	8,5	1,60
TRIP	6180	103,0	19,36
WAIT	1710	28,5	5,36
Total	31920	532,0	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	540	9,0	50,00
MAINTAIN/REP	540	9,0	50,00
Total	1080	18,0	100,00

Main operation: MOVING

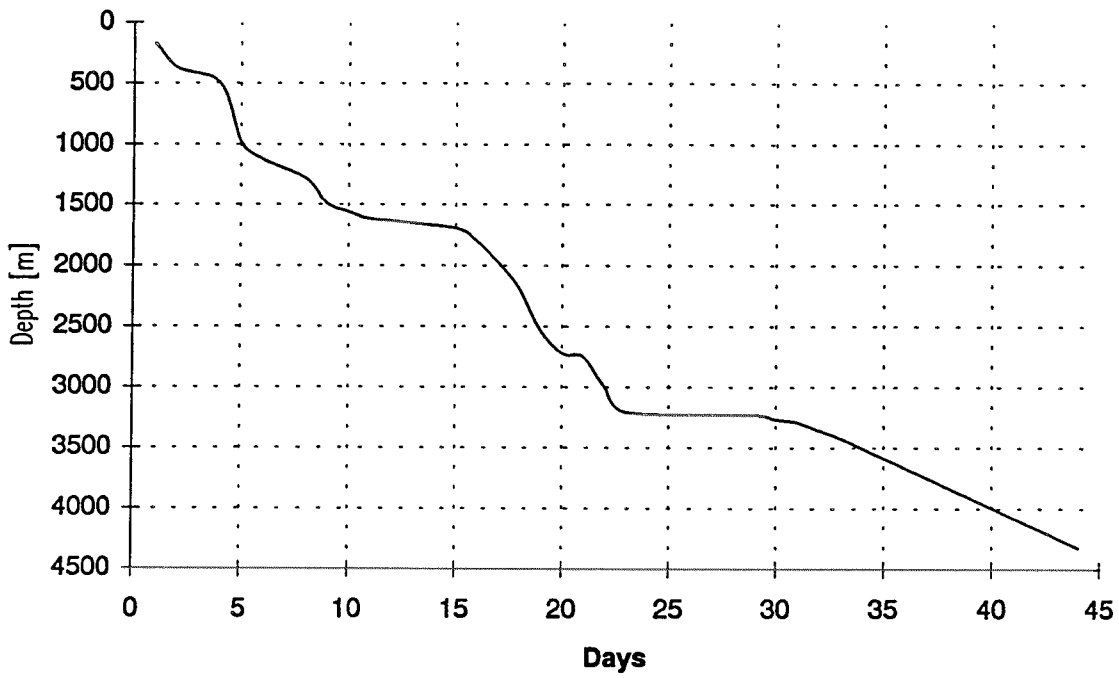
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	600	10,0	27,03
JACK	30	0,5	1,35
TRANSIT	1590	26,5	71,62
Total	2220	37,0	100,00

Main operation: PLUG & ABANDON

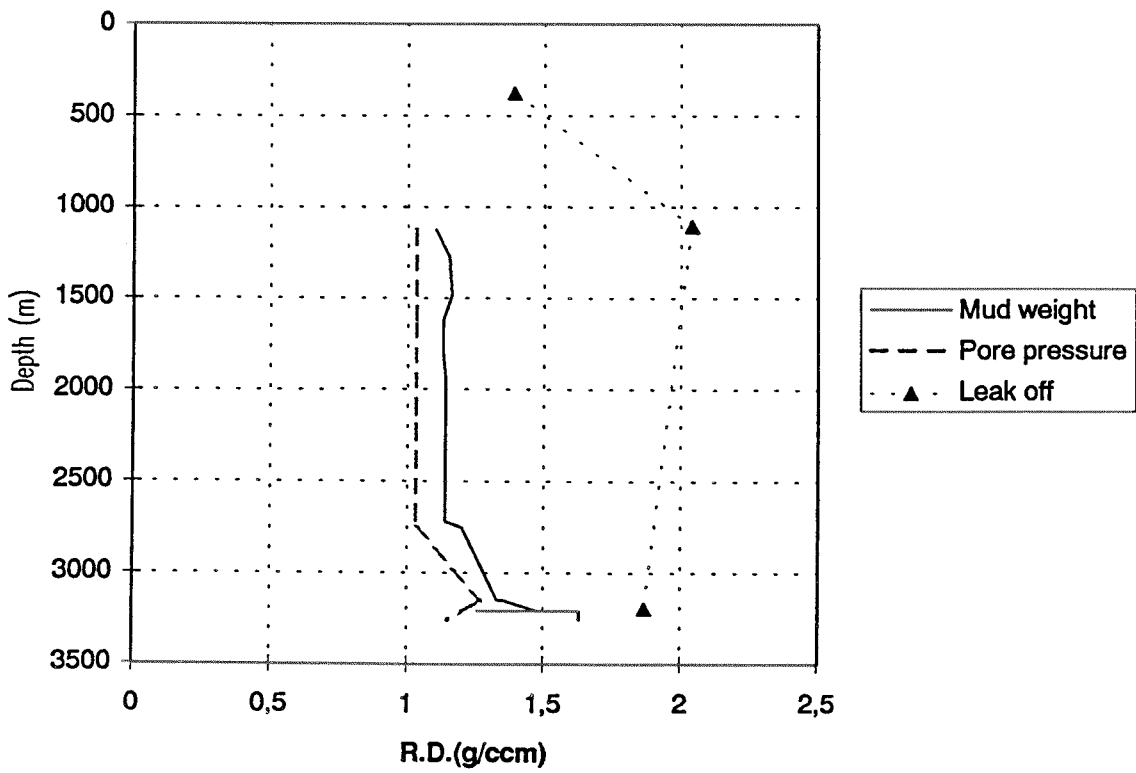
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	480	8,0	6,45
CIRC/COND	600	10,0	8,06
EQUIP RECOVERY	1470	24,5	19,76
MECHANICAL PLUG	330	5,5	4,44
OTHER	1830	30,5	24,60
SQUEEZE	60	1,0	0,81
TRIP	1710	28,5	22,98
WAIT	960	16,0	12,90
Total	7440	124,0	100,00

Total time used: Hours

Depth vs time for well: 9/2-3



Composite plot for well: 9/2-3



Well History 9/2-3.

General:

Well 9/2-3 was designed to drill the Beta East structure in the block. Block 9/2 is situated in the southern part of the Egersund Sub-basin where two main fault trends are observed. They have directions defined by the Tornquist fault zone (WNW-ESE) and by the Permian faults (N-S). The main objectives of the well was to test the sandstones of Late/ Middle Jurassic age, the Sandnes- and Bryne formations. Further more the 9/2-3 well will test the geophysical and structural interpretation of the area and improve the paleontological, geological and geochemical understanding of this area in the North Sea. A strong reflector was observed at 253 m RKB, but was expected to be a change in lithology rather than shallow gas.

Operations:

Wildcat well 9/2-3 was spudded 4 Desember 1989 by the semi-submersible rig Vildkat Explorer and completed 8 February 1990 at a depth of 3424 m RKB in rocks of Middle Jurassic age, the Bryne formation. No shallow gas was encountered in this well. Drilling went on without any significant difficulties. One conventional core was cut in the Sandnes formation in the interval 3264 to 3291 m RKB. Sidewall cores were shot in two rounds with a total of 45 shots whereof 30 wererecovered. The Bryne formation proved to be waterbearing, and no test was performed in this formation. The well was permanantly plugged and abandoned with oil shows.

Testing:

One DST test was performed in the interval 3258 to 3268 m RKB. The Sandnes formation was confirmed oil bearing. The production rate was very low due to low permeability. Gas was not produced during the test, and 4 Sm³/d oil was produced through a 12,7 mm choke.

Geological Tops.

Well:9/2-3

	Depth m (RKB).
Nordland Group	104,0
Hordaland Group	410,0
Rogaland Group	938,0
Balder Fm	938,0
Sele Fm	963,0
Lista Fm	986,0
Våle Fm	1025,0
Shetland Group	1031,0
Ekofisk Fm	1031,0
Tor Fm	1139,0
Hod Fm	1423,0
Blodøks Fm	1866,5
Cromer Knoll Group	1911,0
Rødby Fm	1911,0
Sola Fm	1932,0
Åsgard Fm	2027,0
Boknfjord Group	2701,0
Flekkefjord Fm	2701,0
Tau Fm	3098,0
Egersund Fm	3188,0
Vestland Group	3252,0
Sandnes Fm	3252,0
Bryne Fm	3373,0
T.D.	3422,0