

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	1620.5 - 1621.2	0.7	100.0	UPPER JURASSIC
2	1621.8 - 1623.3	1.5	100.0	UPPER JURASSIC
3	1624.7 - 1626.7	0.0	0.0	UPPER JURASSIC
4	1626.7 - 1627.5	0.0	0.0	UPPER JURASSIC
5	1627.5 - 1628.0	0.5	100.0	UPPER JURASSIC
6	1634.0 - 1650.9	16.9	93.9	UPPER JURASSIC
7	1652.0 - 1667.0	15.0	100.0	UPPER JURASSIC
8	1667.0 - 1672.0	5.0	100.0	UPPER JURASSIC
9	1673.0 - 1679.8	6.8	100.0	UPPER JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weigh g/cm3	Plastic viscosity mPa.s	Mud type
314.000	1.03		WATER BASED
760.000	1.08	6.0	WATER BASED
780.000	1.09	6.0	WATER BASED
970.000	1.30	25.0	WATER BASED
1274.000	1.32	23.0	WATER BASED
1512.000	1.34	23.0	WATER BASED
1617.000	1.38	25.0	WATER BASED
1620.000	1.24	13.0	WATER BASED
1627.000	1.22	19.0	WATER BASED
1633.000	1.21	19.0	WATER BASED
1667.000	1.23	20.0	WATER BASED
1857.000	1.21	18.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	1630.500 - 1642.500	50.8	242	2289	

RECOVERY

Test no.	Oil Sm3/d	Gas M Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	2500	48.5	0.825	0.810	21

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	390 - 1869	300
Wet Samples	390 - 1869	200

SHALLOW GAS

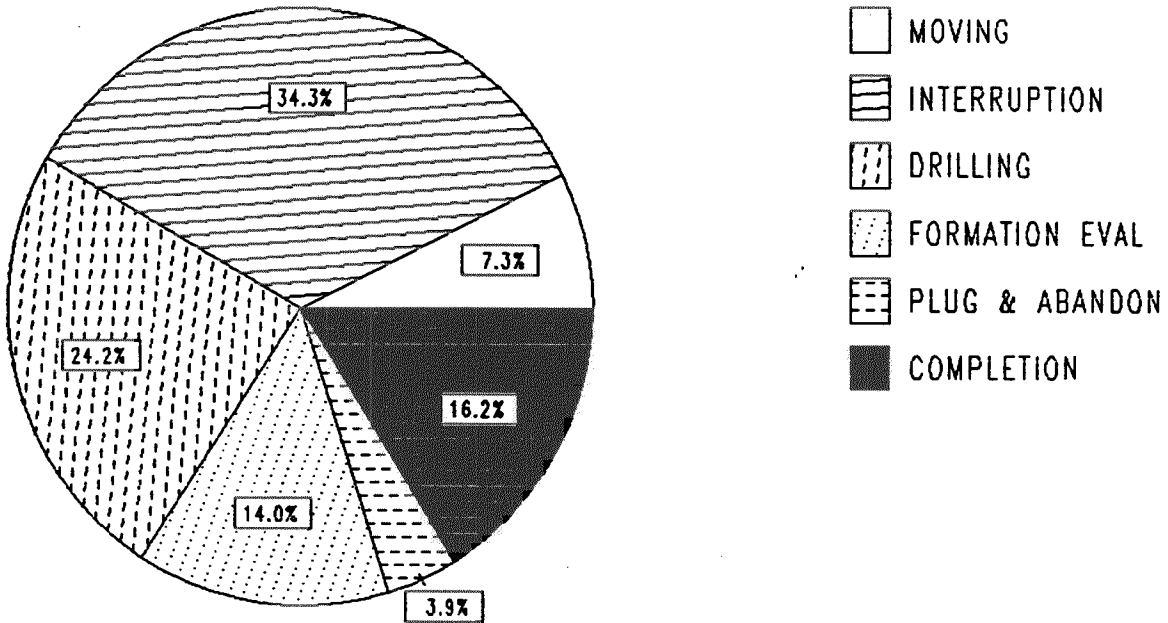
Interval below KB	REMARKS
320 M 370 M	POSSIBLE GAS CHARGED SAND LAYERS

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
DIFL BHC GR	266 - 778	X	X
DIFL LS BHC AC	702 - 1606	X	X
DIFL LS BHC AC	1504 - 1867	X	X
CDL CNL	350 - 778	X	X
CDL CNL	550 - 1596	X	X
CDL CNL	1450 - 1865	X	X
DLL MLL	1580 - 1863	X	X
CDM	1595 - 1862	X	
CDM AP	1595 - 1862	X	X
SPECTRALOG	1450 - 1858	X	X
FMT	1630 - 1877		X
FMT - H.P. CRYSTAL GAUGE	1630 - 1877		X
CBL VDL AC	380 - 1643	X	
CBL VDL AC	955 - 1803	X	
MUD	385 - 1868		X
VELOCITY	382 - 1859	1:1000	X
(+ Airgun Well Velocity Survey and Calibr. data,			1 stk)
(+ Synthetic Seismogram, 20 cm/s,			2 stk)
(+ Synthetic Seismogram, Marine, 20 cm/s,			1 stk)
(+ V.S.P., 20 cm/s,			7 stk)
(+ Two Way Travel Time, 10 cm/s,			1 stk)
(+ Two Way Travel Time, 20 cm/s,			1 stk)

DAILY DRILLING REPORT SYSTEM

Main operation : 6407/09-03



Total : 2256 HRS

Main operation	Minutes	Hours	% of total
MOVING	9930	165.50	7.34
INTERRUPTION	46410	773.50	34.29
DRILLING	32760	546.00	24.20
FORMATION EVAL	18930	315.50	13.98
PLUG & ABANDON	5340	89.00	3.95
COMPLETION	21990	366.50	16.25

MAIN OPERATIONS WELL : 6407/09-03

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
BOP/WELLHEAD EQ	3930	65.50	12.00
TRIP	6570	109.50	20.05
DRILL	6090	101.50	18.59
CIRC/COND	1500	25.00	4.58
SURVEY	1410	23.50	4.30
CASING	7230	120.50	22.07
HOLE OPEN	570	9.50	1.74
UNDERREAM	1740	29.00	5.31
OTHER	840	14.00	2.56
REAM	1800	30.00	5.49
BOP ACTIVITIES	750	12.50	2.29
PRESS DETECTION	330	5.50	1.01
TOTAL	32760	546.00	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
TRANSIT	6090	101.50	61.33
ANCHOR	3180	53.00	32.02
POSITION	660	11.00	6.65
TOTAL	9930	165.50	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	3930	65.50	20.76
CIRC SAMPLES	150	2.50	0.79
TRIP	4473	74.55	23.63
CORE	2400	40.00	12.68
CIRC/COND	957	15.95	5.06
OTHER	1200	20.00	6.34
PROD TEST	5820	97.00	30.74
TOTAL	18930	315.50	

MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
OTHER	27390	456.50	59.02
MAINTAIN/REP	15990	266.50	34.45
FISH	1260	21.00	2.71
WELL CONTROL	150	2.50	0.32
WAIT	1620	27.00	3.49
TOTAL	46410	773.50	

MAIN OPERATION: COMPLETION

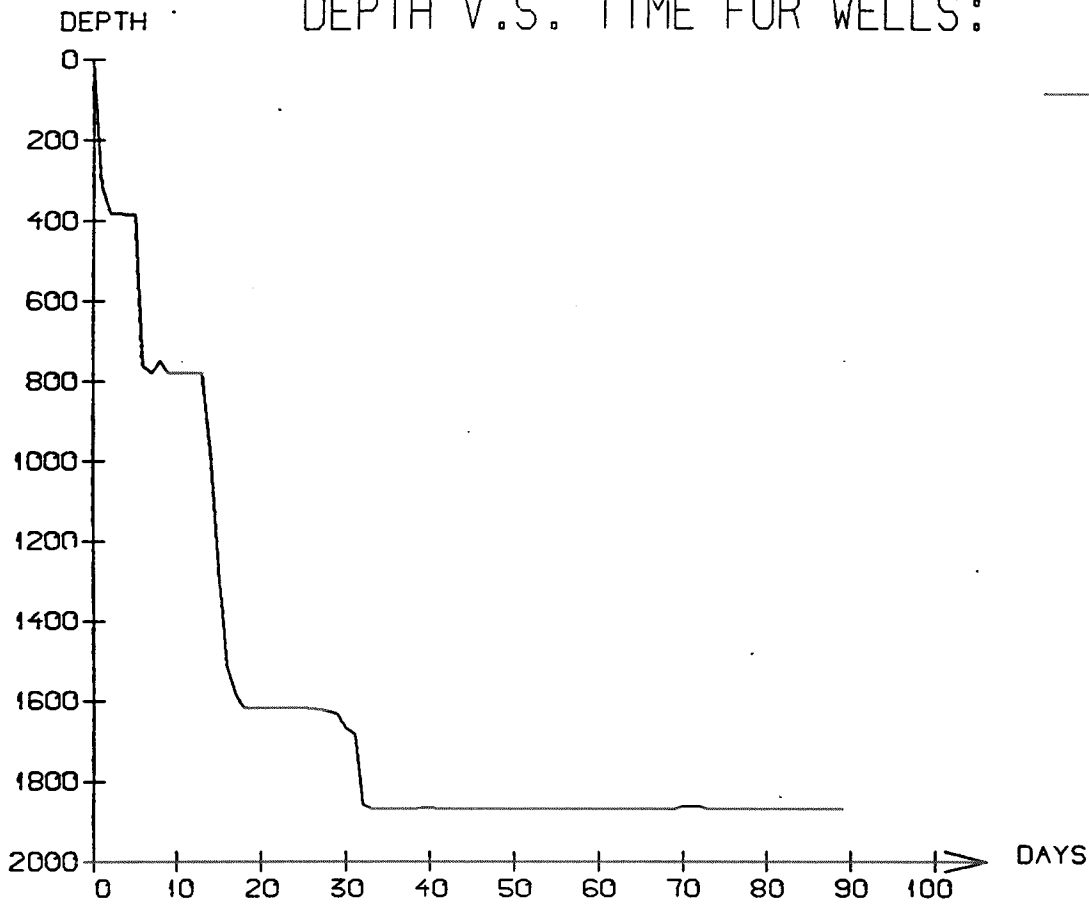
Sub operations	Min	Hrs	% of total
COMPL STRING	9000	150.00	40.93
OTHER	1200	20.00	5.46
CIRC/COND	3690	61.50	16.78
BOP/WELLHEAD EQ	1260	21.00	5.73
WIRE LINE	1830	30.50	8.32
PERFORATE	60	1.00	0.27
FLOW	3120	52.00	14.19
SAND CONTROL	1620	27.00	7.37
STIMULATE	210	3.50	0.95
TOTAL	21990	366.50	

MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
TRIP	2370	39.50	44.38
CEMENT PLUG	660	11.00	12.36
CIRC/COND	270	4.50	5.06
OTHER	210	3.50	3.93
MECHANICAL PLUG	1020	17.00	19.10
EQUIP RECOVERY	810	13.50	15.17
TOTAL	5340	89.00	

DEPTH V.S. TIME FOR WELLS:

— 6407/09- 03



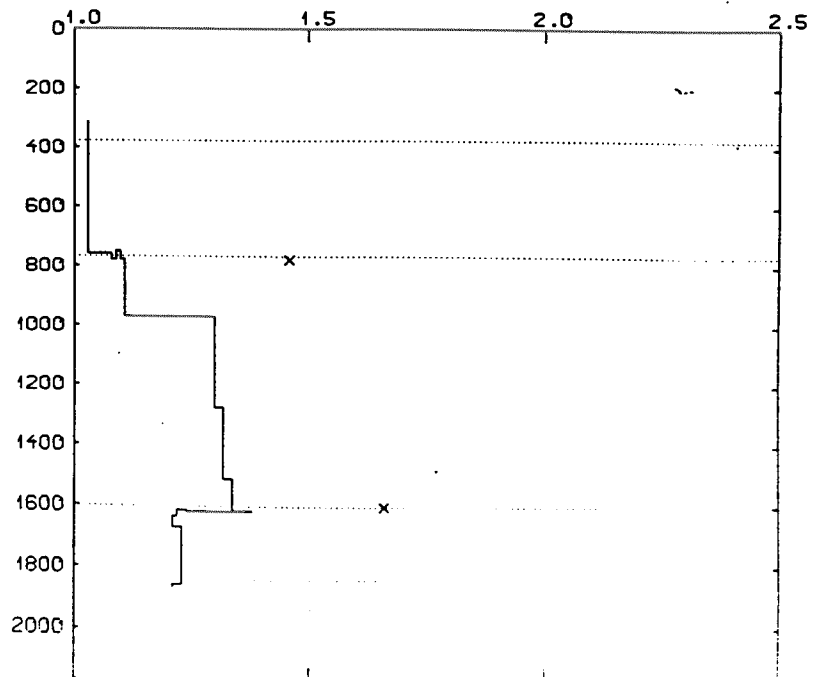
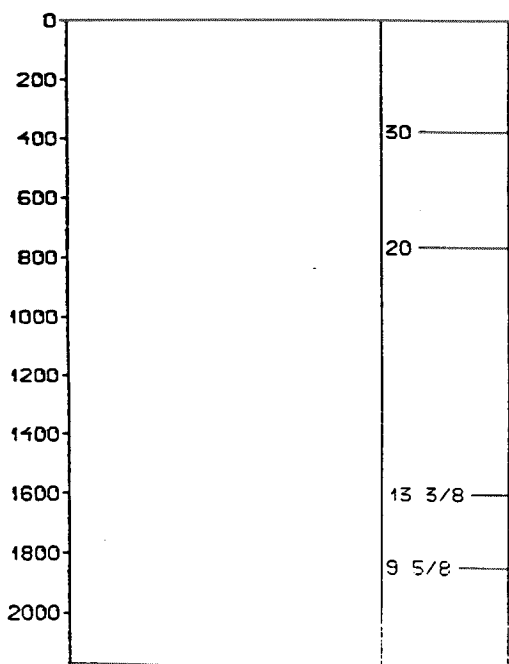
WELL: 640709 03 PRESSURE COMPOSITE PLOT

DEPTH
(RKB)
(METERS)

CASING

PRESSURE GRADIENTS
(g/ccm)

— MUDWEIGHT (REPORT)
- - - PORE PRESSURE (REPORT)
x LEAK-OFF (REPORT)



Well History 6407/9-3

General:

Appraisal well 6407/9-3 was drilled as the third well at the crestal part of the antiform structure of the Draugen Field, in the Haltenbanken area. The main objective of the well were:

- i) evaluate the lateral continuity and quality of the reservoir.
- ii) establish the velocity trend in a North-South direction.
- iii) improve the volumetric estimate.
- iv) evaluate the oil deliverability.

Prognosed depth was 1805 m.

Operations:

Appraisal well 6407/9-3 was spudded 3 May 1985 by Dolpin Services A/S semi-submersibel rig Borgny Dolphin and suspended 28 July 1985 as a possible producer at a T.D. of 1868 m RKB in Middle Drake Formation (ROR Fm ?) equivalent of Lower Jurassic age.

Drilling proceeded without serious problems, except for the sections through glacial deposits where huge boulders caused minor problems.

The reservoir rocks, Frøya Formation (Spekk Fm), came in two m above prognosed depth and displayed an oil column of 34 m. Although amplitude anomalies indicated gas charged sands, no shallow gas was encountered.

Oil/water contact came in as prognosed at 1664 m RKB. Coring commenced at 1620.5 m RKB and 9 cores were cut to 1684 m RKB.

Testing:

One DST test were performed in the interval between 1630.5- to 1642.5 m.

GEOLOGICAL TOPS

WELL: 6407/09-03

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	<i>304,0</i>
<i>Hordaland Group</i>	<i>804,0</i>
<i>Rogaland Group</i>	<i>1309,0</i>
<i>Tare Fm</i>	<i>1309,0</i>
<i>Tang Fm</i>	<i>1351,0</i>
<i>Shetland Group</i>	<i>1518,0</i>
<i>Cromer Knoll Group</i>	<i>1547,0</i>
<i>Viking Group</i>	<i>1593,0</i>
<i>Spekk Fm</i>	<i>1593,0</i>
<i>Rogn Fm</i>	<i>1630,0</i>
<i>Fangst Group</i>	<i>1685,0</i>
<i>Garn Fm</i>	<i>1685,0</i>
<i>Not Fm</i>	<i>1770,0</i>
<i>Ile Fm</i>	<i>1779,0</i>
<i>Båt Group</i>	<i>1797,0</i>
<i>Ror Fm</i>	<i>1797,0</i>
<i>Tilje Fm</i>	<i>1823,0</i>
<i>TD=</i>	<i>1868,0</i>