Well no : 6407/ 9-05 Operator : SHELL

Coordinates	: 64 16 42.35 N 07 44 14.66 E	UTM coord.	: 7128824 438858
Licence no	: 93	Permit no	: 482
Rig	: WEST VENTURE	Rig type	: SEMI-SUB.
Contractor	: A/S SMEDVIK DRILLING CO.		
Bottom hole temperature	: 48.9 deg.C	Elev. KB	: 33 M
Spud. date	: 85.09.12	Water depth	: 318 M
Compl. date	: 85.11.13	Total depth	: 1819 M
Spud. class	: APPRAISAL	Form. at TD	: JURASSIC
Compl. class	: SUSPENDED. OIL DISC.	Prod. form	: JURASSIC
Seisloca	: 84 - 127 SP. 563		

LICENSEES

20.000000	BP PETROLEUM DEVELOPMENT OF NORWAY A.S
30.000000	A/S NORSKE SHELL
50.000000	DEN NORSKE STATS OLJESELSKAP 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	396.0	36	408.0	
SURF.COND.	20	801.0	26	811.0	1.52
INTERM.	13 3/8	1617.0	17 1/2	1625.0	1.72
INTERM.	9 5/8	1800.0	12 1/4	1820.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	Recovery %	Series
1	1654.0 - 1668.7	14.7	100.0	UPPER JURASSIC
2	1671.0 - 1672.9	1.9	100.0	UPPER JURASSIC
3	1674.0 - 1683.6	9.6	100.0	UPPER JURASSIC
4	1685.0 - 1701.4	16.4	100.0	UPPER JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weigth g/cm3	Funnel viscosity s/qt	Mud type
408.000	1.04	120.0	WATER BASED
811.000	1.09	80.0	WATER BASED
908.000	1.35	47.0	WATER BASED
1220.000	1.40	50.0	WATER BASED
1654.000	1.20		WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI) WHP	BTHP	FFP
1.0	1654.000 - 1661.000	25.4	263	2345	

RECOVERY

Test no.	Oil Sm3/d	Gas M Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	1203	22.6	0.825	0.785	17

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	420 - 1820	150
Wet Samples	420 - 1820	150

SHALLOW GAS

Interval below KB	REMARKS
350 M 800 M	POSSIBLE GAS CHARGED SAND LAYERS

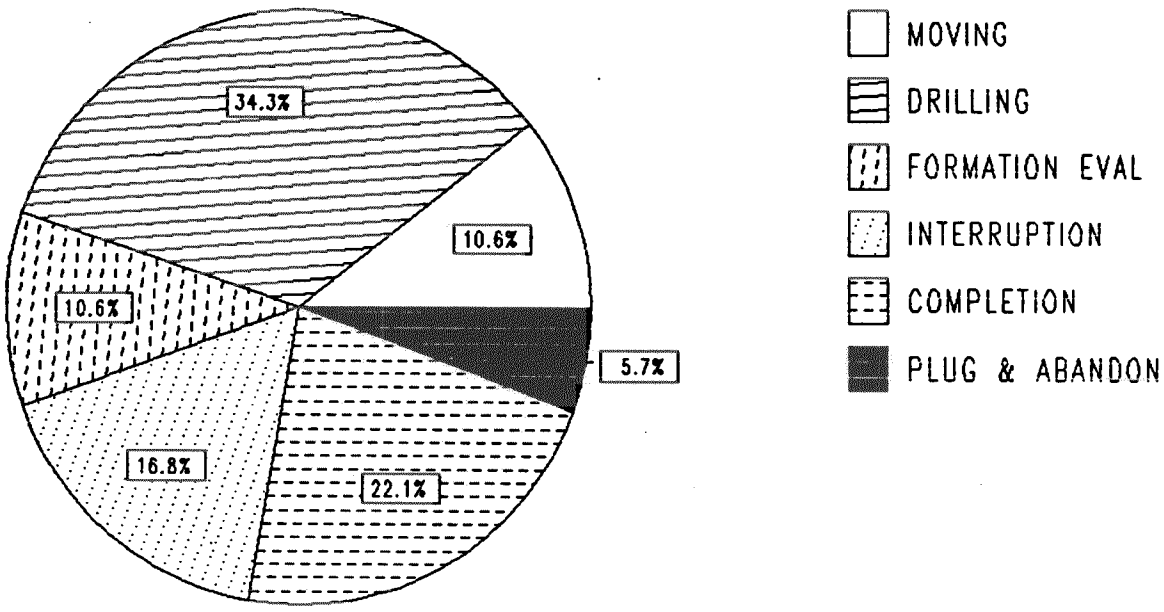
AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
ISF LSS GR	317 - 811	X	X
ISF LSS	803 - 1606	X	X
ISF LSS	1617 - 1815	X	X
LDL CNL	397 - 811	X	X
LDL CNL	803 - 1606	X	X
LDL CNL	1617 - 1816	X	X
DLL MSFL	1617 - 1811	X	X
CDM AP/SHDT	1617 - 1811	X	X
SHDT	1617 - 1810	X	
NGS	1610 - 1807	X	
WIRELINE DATA PRESSURE	318 - 1820	1:5000	
DRILLING DATA PRESSURE	318 - 1820	1:5000	
PRESSURE EVALUATION	318 - 1820	1:5000	
TEMPERATURE DATA	318 - 1820	1:5000	
RFT HP	1658 - 1760		
RFT STRAIN GAUGE	1658 - 1760		
CBL VDL	497 - 1617	X	
MUD	318 - 1820		X
VELOCITY	317 - 1815		X

(+ Synthetic Seismogram, Geogram, 20 cm/s, 4 stk)

DAILY DRILLING REPORT SYSTEM

Main operation : 6407/09-05



Total : 1680 HRS

Main operation	*Minutes*	*Hours*	*% of total*
MOVING	*10650*	*177.50*	*10.57*
DRILLING	*34560*	*576.00*	*34.29*
FORMATION EVAL	*10650*	*177.50*	*10.57*
INTERRUPTION	*16980*	*283.00*	*16.85*
COMPLETION	*22260*	*371.00*	*22.08*
PLUG & ABANDON	*5700*	*95.00*	*5.65*

MAIN OPERATIONS WELL : 6407/09-05

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
BOP/WELLHEAD EQ	3990	66.50	11.55
TRIP	6716	111.93	19.43
DRILL	5910	98.50	17.10
SURVEY	1410	23.50	4.08
CIRC/COND	1834	30.57	5.31
CASING	11820	197.00	34.20
HOLE OPEN	1890	31.50	5.47
OTHER	300	5.00	0.87
REAM	210	3.50	0.61
BOP ACTIVITIES	480	8.00	1.39
TOTAL	34560	576.00	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
TRANSIT	7050	117.50	66.20
ANCHOR	3210	53.50	30.14
POSITION	390	6.50	3.66
TOTAL	10650	177.50	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	4980	83.00	46.76
CIRC SAMPLES	510	8.50	4.79
TRIP	1830	30.50	17.18
CIRC/COND	1740	29.00	16.34
OTHER	150	2.50	1.41
CORE	1440	24.00	13.52
TOTAL	10650	177.50	

MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
MAINTAIN/REP	7110	118.50	41.87
FISH	870	14.50	5.12
OTHER	1650	27.50	9.72
WAIT	7350	122.50	43.29
TOTAL	16980	283.00	

MAIN OPERATION: COMPLETION

Sub operations	Min	Hrs	% of total
CIRC/COND	1050	17.50	4.72
OTHER	1710	28.50	7.68
WIRE LINE	3960	66.00	17.79
COMPL STRING	5580	93.00	25.07
PERFORATE	60	1.00	0.27
FLOW	5790	96.50	26.01
SAND CONTROL	3570	59.50	16.04
BOP/WELLHEAD EQ	540	9.00	2.43
TOTAL	22260	371.00	

MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
MECHANICAL PLUG	2640	44.00	46.32
TRIP	1230	20.50	21.58
CEMENT PLUG	450	7.50	7.89
CIRC/COND	60	1.00	1.05
EQUIP RECOVERY	1320	22.00	23.16
TOTAL	5700	95.00	

Well History 6407/9-5

General:

Appraisal well 6407/9-5 was drilled as the fifth well on the southern part of the Draugen Field, on the Haltenbanken area. The well was designed to firm up the structural interpretation and establish the seismic velocity trends towards the south. Evaluate the development, quality and lateral continuety of the reservoir sands, qualify the crestal oil production potential and aquire reservoir fluid samples.

One zone of interest was a shallow marine reservoir sequence between shale formations of Upper Jurassic (Kimmeridgian) age. Prognosed T.D. was 1805 m in rocks of Triassic age, or a maximum depth of 4000 m.

Operations:

Appraisal well 6407/9-5 was spudded 12 September 1985, by Smedvig's semi-submersibel rig West Venture and completed 13 November 1985 at a T.D. of 1820 m RKB in Ror Formation of Lower Jurassic age.

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

The Frøya Formation (Spekk Fm) was encountered at 1653 m RKB, 15 m deeper than prognosed. Oil/water contact was found at 1670 m RKB as expected, and corresponds with the contact on the rest of the Draugen Field. Ligth oil was discovered, as known from the other wells in the Draugen field. 4 cores were cut in the interval between 1654- to 1703 m RKB. The well was suspended as a possible production well.

Testing:

One DST test were performed.

GEOLOGICAL TOPS

WELL: 6407/09-05

	Depth m (RKB)
Nordland Group	*286,0*
Hordaland Group	*805,0*
Rogaland Group	*1305,0*
Tare Fm	*1305,0*
Tang Fm	*1348,0*
Shetland Group	*1530,0*
Cromer Knoll Group	*1579,0*
Viking Group	*1619,0*
Spekk Fm	*1619,0*
Rogn Fm	*1654,0*
Fangst Group	*1734,0*
Garn Fm	*1734,0*
Not Fm	*1776,0*
TD=	*1819,0*