Well no : 6506/12-06 Operator : STATOIL

Coordinates	: 65 09 57.60 N 06 46 43.19 E	UTM coord.	: 7228967 N 395911 E
Licence no	: 94	Permit no	: 509
Rig	: DYVI DELTA	Rig type	: SEMI-SUB.
Contractor	: DYVI OFFSHORE A/S		
Bottom hole temperature	: deg.C	Elev. KB	: 29 M
Spud. date	: 86.03.31	Water depth	: 276 M
Compl. date	: 86.08.02	Total depth	: 4741 M
Spud. class	: APPRAISAL	Form. at TD	: E.JURASSIC
Compl. class	: P&A. GAS/COND. DISC.	Prod. form	:
Seisloca	: ST 8403 - 860 SP. 390		

LICENSEES

10.000000	NORSK AGIP A/S
10.000000	ARCO NORGE A/S
5.000000	NORSK HYDRO PRODUKSJON A.S
15.000000	MOBIL EXPLORATION NORWAY INC.
50.000000	DEN NORSKE STATS OLJESELSKAP A.S
10.000000	TENNECO OIL NORWAY 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	412.0	36	949.0	.
SURF.COND.	20	1046.0	26	1078.0	1.62
INTERM.	13 3/8	2249.0	17 1/2	2408.0	1.87
INTERM.	9 5/8	4150.0	12 1/4	4161.0	2.07
LINER	7	4740.0	8 1/2	4741.0	.

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	Recovery %	Series
1	4184.0 - 4210.0	26.0	100.0	
2	4210.0 - 4230.0	20.0	100.0	MIDDLE JURASSIC
3	4230.0 - 4243.0	12.9	99.2	MIDDLE JURASSIC
4	4243.0 - 4266.5	23.5	100.0	MIDDLE JURASSIC
5	4312.0 - 4336.3	24.3	100.0	MIDDLE JURASSIC
6	4339.0 - 4366.5	28.1	102.2	MIDDLE JURASSIC
7	4435.0 - 4463.0	27.8	99.3	LOWER JURASSIC
8	4463.0 - 4488.2	25.3	100.0	LOWER JURASSIC
9	4490.0 - 4517.0	27.3	101.1	LOWER JURASSIC
10	4517.0 - 4544.0	27.5	101.9	LOWER JURASSIC
11	4552.0 - 4579.0	26.7	98.9	LOWER JURASSIC
12	4579.0 - 4607.0	27.9	99.6	LOWER JURASSIC
13	4607.0 - 4634.0	27.6	102.2	LOWER JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weigth g/cm3	Viscosity	Mud type
423.000	1.12	42.0	WATERBASED
530.000	1.14	50.0	WATERBASED
538.000	1.12	42.0	WATERBASED
901.000	1.55	68.0	WATERBASED
912.000	1.70	83.0	WATERBASED
949.000	1.14	41.0	WATERBASED
1065.000	1.16	42.0	WATERBASED
1078.000	1.30	40.0	WATERBASED
1095.000	1.13	14.0	WATERBASED
1292.000	1.14	11.0	WATERBASED
1534.000	1.20	12.0	WATERBASED
2081.000	1.35	12.0	WATERBASED
2103.000	1.70	25.0	WATERBASED
2147.000	1.45	22.0	WATERBASED
2265.000	1.55	21.0	WATERBASED
2396.000	1.65	22.0	WATERBASED
2876.000	1.70	24.0	WATERBASED
2935.000	1.50	21.0	WATERBASED
3724.000	1.70	20.0	WATERBASED
4001.000	1.22	80.0	WATERBASED
4060.000	1.70	24.0	WATERBASED
4181.000	1.43	14.0	WATERBASED
4187.000	1.30	12.0	WATERBASED
4202.000	1.20	62.0	WATERBASED
4266.000	1.30	15.0	WATERBASED
4287.000	1.20	51.0	WATERBASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI) WHP	BTHP	FFP
1.0	4514.000 - 4525.000	9.5	1363.3	7426.6	4915.2
	Test temperature: 158 °C				
1.1	4549.000 - 4592.000	9.5	1392.3	7791.6	4126.6
	Test temperature: 158 °C				
2.0	4464.000 - 4493.000	0.0	18.9	7424.1	5219.7
	Test temperature: 156 °C				
3.0	4312.000 - 4352.000	11.1	3625.8	7184.8	6255.3
	Test temperature: 154 °C				
4.0	4237.000 - 4245.000	9.5	168.2	7079.3	5846.3
	Test temperature: 151 °C				
4.1	4255.000 - 4277.000	12.7	179.8	7084.6	5770.9
	Test temperature: 151 °C				

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	129	45	0.820	0.765	350

1.1	142	58	0.820	0.765	410
2.0	0	0	0.000	0.000	0
3.0	210	350	0.783	0.703	1602
4.0	0	0	0.000	0.775	0
4.1	0	0	0.000	0.784	0

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	420-4741	800
Wet Samples	420-4741	550

SHALLOW GAS

Interval below KB	REMARKS

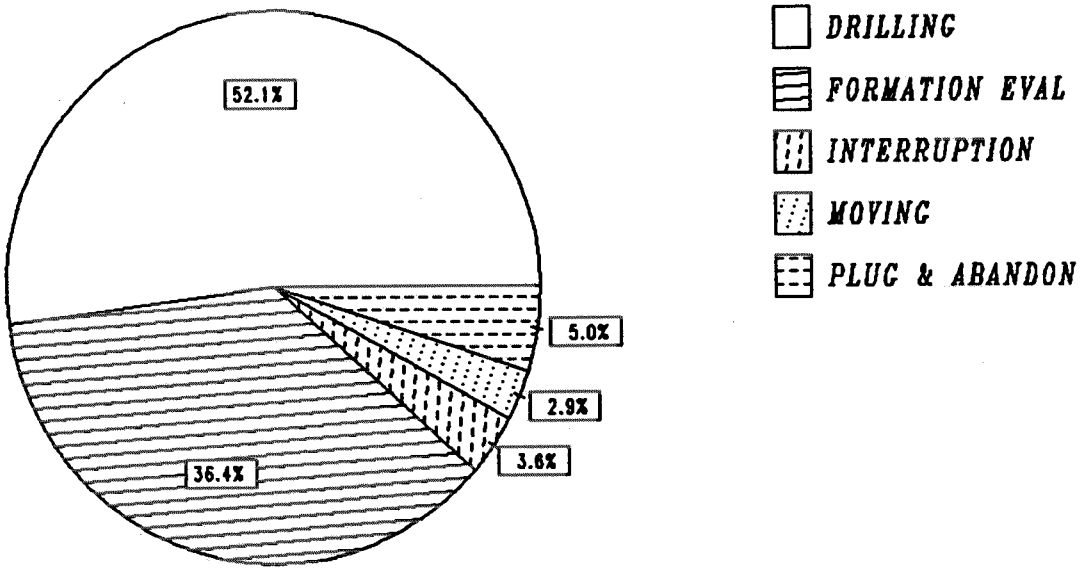
AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
DIL BHC SONIC GR	281.000 - 948.000	X	X	
DIL BHC SONIC	904.300 - 1064.500	X	X	
DIL BHC SONIC	4150.500 - 4744.000	X	X	
DIL BHC SONIC	2245.000 - 4152.000	X	X	
LDL CNL GR	4150.000 - 4744.000	X		
CDL CNL	412.500 - 948.500	X	X	
CDL CNL	2245.000 - 4134.500	X	X	
CDL CNL	4151.500 - 4744.000	X	X	
DLL MSFL	4156.000 - 4744.000	X	X	
CDM/SHDT DIPMETER	4154.000 - 4743.000		X	
RFT	4150.000 - 4741.000	X		
RFT STRAIN GAUGE	4260.000 - 4682.000	1:100		
RFT HP	4260.000 - 4682.000	X		
CBL VDL	924.000 - 2245.000	X		
CBL VDL	2097.000 - 4750.000	X		
CBL VDL	3961.000 - 4656.000	X		
DRILLING DATA	301.000 - 4741.000	1:5000		
MUD	414.000 - 4741.000			X
VELOCITY	1061.000 - 4745.000	1:1000		

(Synthetic seismogram , 10 cm/s, plot 8A-9B 4 stk.)
(VSP,zero offset, 10cm/s, plot 1-6 6 stk.)
(Two-way travel time, 10cm/s 1 stk.)

DAILY DRILLING REPORT SYSTEM

Main operations for well : 6506/12 -06



Total : 3120.00 hours

Main operation	*Minutes*	*Hours*	*% of total*
DRILLING	*97500*	*1625.00*	*52.08*
FORMATION EVAL	*68161*	*1136.02*	*36.41*
INTERRUPTION	*6659*	*110.98*	*3.56*
MOVING	*5490*	*91.50*	*2.93*
PLUG & ABANDON	*9390*	*156.50*	*5.02*

MAIN OPERATIONS FOR WELL : 6506 / 12 - 06

MAIN OPERATION : DRILLING

Sub operations	Minutes	Hrs	% of total
BOP ACTIVITIES	3660	61.00	3.75
BOP/WELLHEAD EQ	3509	58.48	3.60
CASING	13291	221.52	13.63
CIRC/COND	5910	98.50	6.06
DRILL	39090	651.50	40.09
HOLE OPEN	4230	70.50	4.34
OTHER	480	8.00	0.49
REAM	1290	21.50	1.32
SURVEY	1140	19.00	1.17
TRIP	20190	336.50	20.71
UNDERREAM	4710	78.50	4.83
Total	97500	1625.00	100.00

MAIN OPERATION : FORMATION EVAL

Sub operations	Minutes	Hrs	% of total
CIRC/COND	1740	29.00	2.55
CORE	7110	118.50	10.43
DST	32431	540.52	47.58
LOG	9480	158.00	13.91
TRIP	16920	282.00	24.82
WAIT	480	8.00	0.70
Total	68161	1136.02	100.00

MAIN OPERATION : INTERRUPTION

Sub operations	Minutes	Hrs	% of total
FISH	660	11.00	9.91
MAINTAIN/REP	5759	95.98	86.48
OTHER	240	4.00	3.60
Total	6659	110.98	100.00

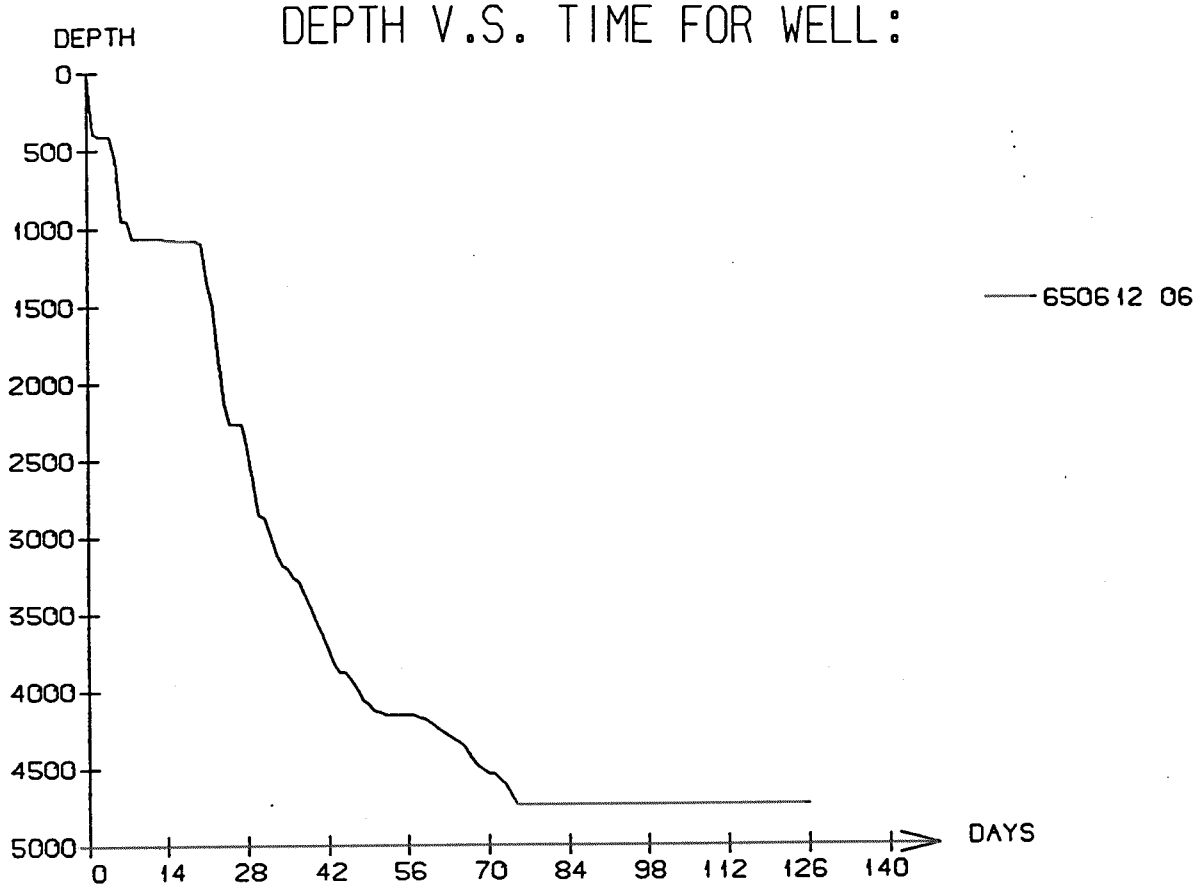
MAIN OPERATION : MOVING

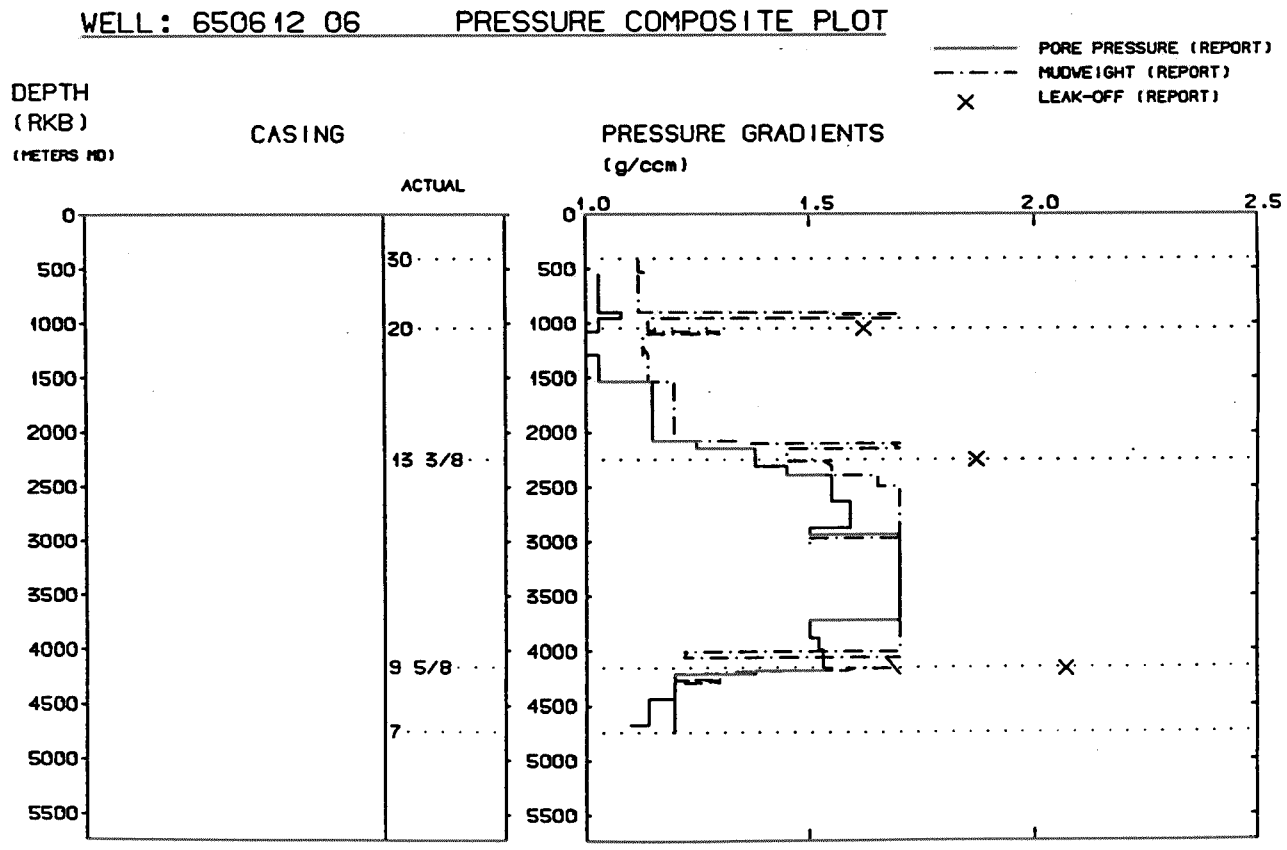
Sub operations	Minutes	Hrs	% of total
ANCHOR	3930	65.50	71.58
TRANSIT	1560	26.00	28.42
Total	5490	91.50	100.00

MAIN OPERATION : PLUG & ABANDON

Sub operations	Minutes	Hrs	% of total
CEMENT PLUG	811	13.52	8.64
CIRC/COND	1559	25.98	16.60
CUT	270	4.50	2.88
EQUIP RECOVERY	1470	24.50	15.65
MECHANICAL PLUG	360	6.00	3.83
OTHER	60	1.00	0.64
PERFORATE	270	4.50	2.88
TRIP	4590	76.50	48.88
Total	9390	156.50	100.00

Total time used 3120.00 hrs


DEPTH V.S. TIME FOR WELL:
DEPTH
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
0
14
28
42
56
70
84
98
112
126
140
DAYS
650612 06


WELL: 650612 06 PRESSURE COMPOSITE PLOT
PORE PRESSURE (REPORT)
MUDWEIGHT (REPORT)
LEAK-OFF (REPORT)
DEPTH
(RKB)
(METERS MD)
CASING
ACTUAL
30
20
13 3/8
9 5/8
7
PRESSURE GRADIENTS
(g/ccm)
1.0
1.5
2.0
2.5
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500

Well History 6506/12-6.

GENERAL:

Well 6506/12-6 was the third well in the Southern part of the Smørbukk area, on the Alpha structure, and the first appraisal well on this strcture. The well was designed to further examine the hydrocarbon potential of the Alpha South segment. Primary objectives of the well were to:

Verify the structural interpretations.
Verify the geological model.
Verify the extension of the reservoir zones.
Obtain information on reservoir characteristics and hydrocarbon fluids.
Ascertain maximum input of data for reservoir simulation studies.
Collect information on a possible common spill point in the north east.
Determine limitation of uncertainties in reserve calculations.
Define hydrocarbon/water contacts.

Primary targets were the Fangst- and Båt Group Sst and the upper Cromer Knoll Group Sst unit.
Prognosed depth was 4780 m.

OPERATIONS:

Appraisal well 6506/12-6 was spudded 31 March 1986 by Dyvi Offshore A/S semi-submersible rig Dyvi Delta, and completed 2 August 1986 at a depth of 4741 m in rocks of E. Jurassic age, the Åre Fm. Drilling proceeded without any significant problems.

A total of 13 cores were cut in four Sst-members within the interval 4184- 4634 m RKB. Top Spekk Fm. came in at 4020 m RKB, top Cromer Knoll Group at 3274 m RKB, and top Shetland Group at 2331 m RKB. Top reservoir was encountered at 4230 m RKB.

The whole section from top reservoir through Båt Group had hydrocarbon shows. Hydrocarbons were encountered in Middle Jurassic Sst, Ile Fm, and in Lower Jurassic Sst, Tilje Fm. The well was plugged and abandoned as a gas/ condensate discovery.

TESTING:

4 DST-tests were performed in the well.

GEOLOGICAL TOPS

WELL: 6506/12-6

	Depth m (RKB)
Nordland Group	*301,0*
Naust Fm	*301,0*
Kai Fm	*1463,0*
Hordaland Group	*1851,0*
Brygge Fm	*1880,0*
Rogaland Group	*2175,0*
Tare Fm	*2175,0*
Tang Fm	*2255,0*
Shetland Group	*2331,0*
Cromer Knoll Group	*3248,0*
Viking Group	*4021,0*
Spekk Fm	*4021,0*
Melke Fm	*4050,0*
Fangst Group	*4234,0*
Garn Fm	*4234,0*
Not Fm	*4279,0*
Ile Fm	*4311,0*
Båt Group	*4436,0*
Ror Fm	*4436,0*
Tilje Fm	*4514,5*
Åre Fm	*4735,0*
TD:	*4741,0*