

Well no : 7/12-08 Operator : BP

Coordinates : 57 05 01.24 N UTM coord. : 6326847 N  
 02 53 52.61 E 493814 E

Licence no : 19 Permit no : 590

Rig : VILDKAT EXPLORER Rig type : SEMI-SUB.

Contractor : DITLEV-SIMONSEN (SDS DRILLING)

Bottom hole temperature : 139 deg.C Elev. KB : 25 M

Spud. date : 88.10.03 Water depth : 70 M

Compl. date : 88.12.27 Total depth : 3900 M

Spud. class : APPRAISAL Form. at TD : TRIASSIC

Compl. class : P&A. OIL DISCOVERY Prod. form :

Seisloca : LINE 143 SP 470

### LICENSEES

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57.500000 BP PETROLEUM DEV. OF NORWAY A.S  
 10.000000 CONOCO NORWAY INC.  
 5.000000 KS PELICAN & CO A/S  
 12.500000 DEN NORSKE STATS OLJESELSKAP A.S  
 15.000000 SVENSKA PETROLEUM EXPLORATION 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	167.0		171.0	.
SURF.COND.	20	952.0	26	957.0	1.63
INTERM.	13 3/8	2338.0	17 1/2	2350.0	1.97
INTERM.	9 5/8	3712.0	12 1/4	.0	2.24
LINER	7	3788.0	8 1/2	.0	2.06

### CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	3724.0 - 3750.5	26.5	100.0	

### MUD PROPERTIES

Depth below KB meter	Mud weight g/cm3	Viscosity	Mud type
559.000	1.25	22.5	WATER BASED
957.000	1.30	24.0	WATER BASED
1026.000	1.42	32.0	OIL BASED
1945.000	1.52	59.5	OIL BASED
2145.000	1.54	59.0	OIL BASED
2316.000	1.55	63.0	OIL BASED
3567.000	1.56	44.5	WATER BASED
3721.000	1.58	22.0	WATER BASED
3723.000	.91	9.6	WATER BASED

3750.500	.92	9.6	OIL BASED
3765.000	.93	10.8	OIL BASED
3781.000	.94	16.0	WATER BASED
3781.000	.95	20.5	WATER BASED
3781.000	.94	20.0	WATER BASED
3781.000	.96	19.0	WATER BASED
3781.000	.95	22.0	WATER BASED
3781.000	.96	22.0	WATER BASED
3788.000	.94	10.8	OIL BASED
3788.000	.95	11.0	OIL BASED
3900.000	1.40	45.0	WATER BASED
3900.000	1.41	40.0	WATER BASED
3900.000	1.42	47.0	WATER BASED
3900.000	1.40	39.5	WATER BASED
3900.000	.94	18.5	WATER BASED
3900.000	.95	13.5	WATER BASED

### DRILL STEM TEST

#### INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	3719.000 - 3783.000	16.0	N/A	N/A	N/A

#### RECOVERY

Test no.	Oil Sm <sup>3</sup> /d	Gas MSm <sup>3</sup> /d	Oil grav. g/cm <sup>3</sup>	Gas grav. rel. air	GOR m <sup>3</sup> /m <sup>3</sup>
1.0	274	22	N/A	N/A	79

### DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	1500-3100	210
Wet Samples	1500-3897	240

### SHALLOW GAS

Interval below KB	REMARKS
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### AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
DIL LSS GR	167.000 - 350.000	X	X	
DIL LSS GR	952.000 - 2340.000	X	X	
DIL BHC GR	2340.000 - 3726.000	X	X	
DIL BHC GR	3716.000 - 3793.000	X	X	
DIL BHC GR	3794.000 - 3903.000	X	X	
LDL CNL NGL	3716.000 - 3794.000	X	X	

LDL CNL	3793.000 - 3903.000	X	X
GR BHC	3716.000 - 3771.000	X	X
MWD	3760.000 - 3788.000	X	X
CDM AP	3798.000 - 3900.000	X	X
NGT (PLAYBACK)	3716.000 - 3794.000	X	X
RFTB HP GR	3730.000 - 3781.000	X	
RFTB HP GR	3795.000 - 3888.000		X
CBL VDL GR	1500.000 - 3768.000	X	
BGL	952.000 - 2345.000	X	X
MUD	110.000 - 3900.000		X
VELOCITY LOG	145.000 - 3870.000		X
(Synthetic Seismogram , Geogram, 10 cm/s, 3 stk)			

## MAIN OPERATIONS FOR WELL: 000712 08

### Main operation: DRILLING

Sub operations	Minutes	Hrs	% of total
BOP ACTIVITIES	15	0,3	0,02
BOP/WELLHEAD EQ	4725	78,8	5,10
CASING	10920	182,0	11,79
CIRC/COND	6015	100,3	6,49
DRILL	37785	629,8	40,79
OTHER	7845	130,8	8,47
REAM	6315	105,3	6,82
SURVEY	1140	19,0	1,23
TRIP	17640	294,0	19,04
WAIT	225	3,8	0,24
Total	92625	1543,8	100,00

### Main operation: FORMATION EVAL

Sub operations	Minutes	Hrs	% of total
CIRC/COND	60	1,0	0,37
CORE	360	6,0	2,19
DST	8880	148,0	54,11
LOG	4845	80,8	29,52
OTHER	60	1,0	0,37
TRIP	1005	16,8	6,12
WAIT	1200	20,0	7,31
Total	16410	273,5	100,00

### Main operation: INTERRUPTION

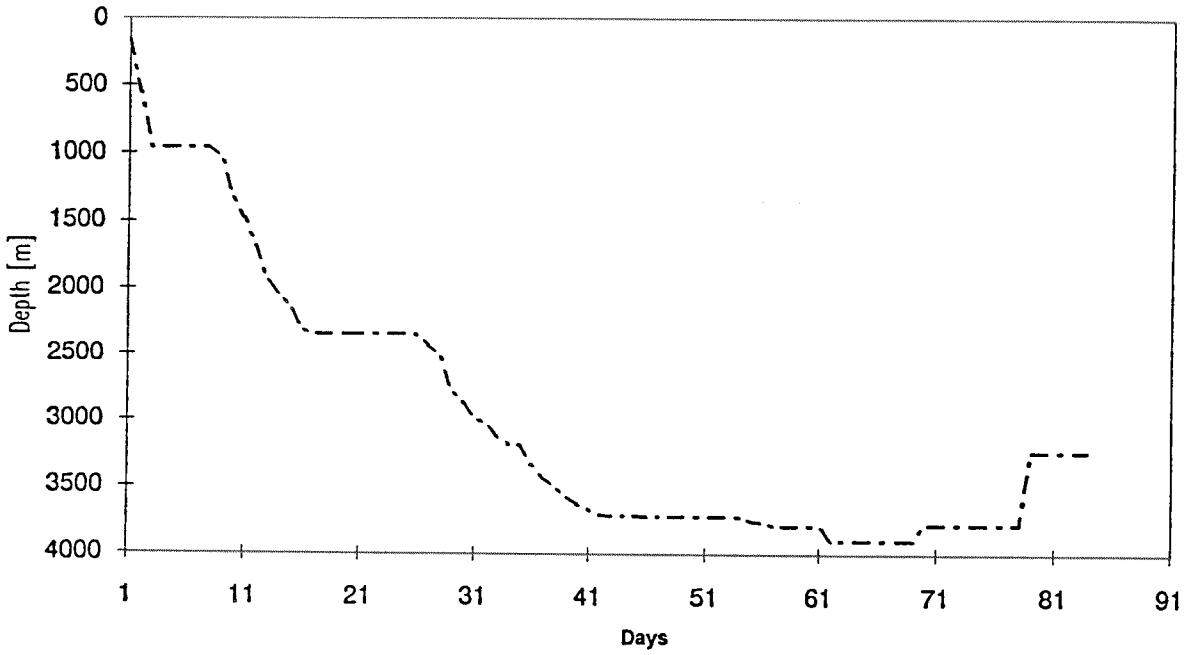
Sub operations	Minutes	Hrs	% of total
FISH	4320	72,0	43,77
MAINTAIN/REP	2865	47,8	29,03
WAIT	2685	44,8	27,20
Total	9870	164,5	100,00

### Main operation: MOVING

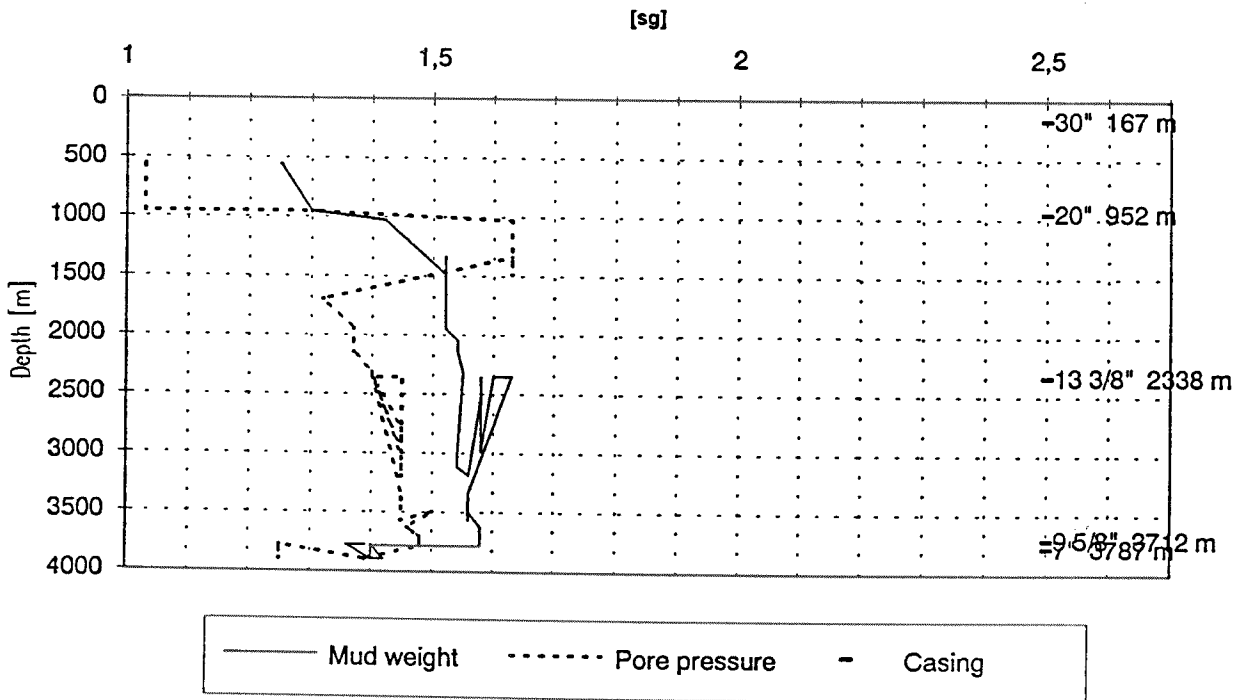
Sub operations	Minutes	Hrs	% of total
ANCHOR	1785	29,8	86,86
SKID	270	4,5	13,14
Total	2055	34,3	100,00

Total time used 2016 hrs ( 84 days)

Depth v.s. time plot for well: 000712 08



Composite plot for well: 000712 08



## Well History 7/12-8

### GENERAL:

Well 7/12-8 was located on the south-eastern flank of the Ula Field. The well was drilled to evaluate the reservoir potential of the south-eastern sector of the Field and to assist target future water injection wells. To enable a full evaluation of the reservoir the lower Ula Fm. and the underlying Triassic section were penetrated.

### OPERATIONS:

Appraisal well 7/12-8 was spudded 3 October 1988 by S.D. Simonsen semi-submersible rig Vildkat Explorer and completed 27 December 1988 at a depth of 3900 m in Triassic rocks. The drilling down to top reservoir proceeded without any significant problems.

Top Ula Fm. was encountered at 3718 m, 77 m higher than prognosed. One core was cut between 3724.0 - 3750.5 m. RFT measurements showed a pressure barrier at approx. 3770 m. There was oil down to the barrier and water below. The reservoir quality seemed to be the same as for 7/12-7.

The oil/water contact came in higher than expected from 7/12-7. Bottom reservoir was at 3795 m, while top Triassic came in at 3804 m. There were no signs of hydrocarbons in Triassic

The well was suspended as an oil discovery.

### TESTING:

One DST test was performed in the Ula Formation in the interval 3719 - 3783 m.

# GEOLOGICAL TOPS

WELL: 7/12-8

Depth m (RKB)

<i>Nordland - Hordaland Groups</i>	105.0
<i>Rogaland Group</i>	2757.0
<i>Balder Fm.</i>	2757.0
<i>Sele Fm.</i>	2789.0
<i>Lista Fm.</i>	2882.0
<i>Maureen Fm.</i>	2929.0
<i>Shetland Group</i>	2940.0
<i>Ekofisk Fm.</i>	2940.0
<i>Tor Fm.</i>	3075.0
<i>Hod Fm.</i>	3321.0
<i>Cromer Knoll Group</i>	3391.0
<i>Rødby Fm.</i>	3391.0
<i>Åsgard Fm.</i>	3465.0
<i>Tyne Group</i>	3645.0
<i>Mandal Fm.</i>	3645.0
<i>Farsund Fm.</i>	3663.0
<i>Vestland Group</i>	3719.0
<i>Ula Fm.</i>	3719.0
<i>Skagerak Fm.</i>	3814.0
<i>T.D.</i>	3900.0