

<b>Well no:</b>	<b>Operator:</b>
<b>2/07-25 S</b>	<b>PHILLIPS</b>

## Well

Coordinates :	56° 19' 59.69" N 03° 14' 53.90" E	UTM coord. :	6243336.31 N 515353.49 E
License no :	18	Permit no :	657
Rig :	WEST DELTA	Rig type :	SEMI-SUB.
Contractor :	A/S SMEDVIG DRILLING		
Bottom hole temp:	170 °C	Elev. KB :	29 M
Spud. date :	90.11.29	Water depth :	68 M
Compl. date :	91.03.31	Total depth :	5177 M
Spud. class :	APPRAISAL	Form. at TD :	JURASSIC
Compl. class :	SUSPENDED.	Prod.form. :	
Seisloca :	KRYSN. 3D LINJER 460 OG 1173		

## Licensees

7.594000 ELF PETROLEUM NORGE AS  
 .456000 ELF REP NORGE A/S  
 .399000 ELF REX NORGE AS  
 30.000000 FINA PRODUCTION LICENCES AS  
 6.700000 NORSK HYDRO PRODUKSJON AS  
 .304000 NORMINOL A/S  
 36.960000 PHILLIPS PETROLEUM COMPANY NORWAY  
 1.000000 DEN NORSKE STATS OLJESELSKAP A.S  
 3.547000 TOTAL NORGE AS  
 13.040000 NORSK AGIP AS

## Casing and Leak-off Tests

Type	Casing diam	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	207.0	36	210.0	
INTERM.	20	764.0	28	770.0	1.73
INTERM.	13 3/8	2356.0	17 1/2	2360.0	1.94

WDSS Report

Date: 13/09/96

PB/SKR

Page: 2 / 4

<b>Well no:</b>	<b>Operator:</b>
<b>2/07-25 S</b>	<b>PHILLIPS</b>

INTERM.	9 5/8	4549.0	12 1/4	4552.0	2.16
---------	-------	--------	--------	--------	------

**Conventional Cores**

Core no.	Intervals cored meters	Recovery m	%
1	4787.75 - 4801.70	14.0	100.0
2	4842.90 - 4853.33	10.4	100.0
3	5088.00 - 5100.40	12.4	100.0
4	5102.30 - 5115.88	13.6	100.0

**Mud**

Depth	Mud weight	Visc.	Mud type
99.7	1.05	13.0	WATER BASED
780.3	1.34	33.0	WATER BASED
1088.7	1.34	36.0	WATER BASED
1152.1	1.34	30.0	WATER BASED
1645.3	1.51	35.0	WATER BASED
2100.1	1.61	48.0	WATER BASED
2331.7	1.67	51.0	WATER BASED
2331.7	1.65	46.0	WATER BASED
2362.2	1.68	61.0	WATER BASED
3486.0	1.71	39.0	WATER BASED
3502.2	1.73	40.0	WATER BASED
3559.8	1.71	40.0	WATER BASED
3611.9	1.73	39.0	WATER BASED
3627.1	1.71	54.0	WATER BASED
3643.0	1.65	50.0	WATER BASED
4302.3	1.64	43.0	WATER BASED
4399.5	1.65	44.0	WATER BASED
4556.8	1.68	43.0	WATER BASED
4560.4	1.92	47.0	WATER BASED
4587.8	2.07	52.0	WATER BASED
4698.5	2.10	56.0	WATER BASED
4710.1	2.12	47.0	WATER BASED
4714.6	2.11	51.0	WATER BASED
4828.3	2.12	51.0	WATER BASED
4841.4	2.10	47.0	WATER BASED
4854.9	2.11	49.0	WATER BASED
4854.9	2.12	54.0	WATER BASED

**WDSS Report**

Date: 13/09/96

PB/SKR

Page: 3 / 4

<b>Well no:</b>	<b>Operator:</b>
2/07-25 S	PHILLIPS

5167.0	2.11	44.0	WATER BASED
5177.0	1.69	18.0	WATER BASED
5177.0	2.12	57.0	WATER BASED
5177.0	1.68	18.0	WATER BASED
5177.0	2.11	49.0	WATER BASED
5177.0	1.68	17.0	WATER BASED
5177.0	2.13	50.0	WATER BASED
5177.0	2.07	72.0	WATER BASED

**Drill Stem Test (intervals and pressures)**

Test no.	Test interval meter	Choke size	Pressure (psi) WHP	BTHP	FFP
----------	---------------------	------------	--------------------	------	-----

**Drill Stem Test (recovery)**

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
----------	-----------	-----------	-----------------	--------------------	-----------

**Drill Bit Cuttings and Wet Samples**

Sample type	Interval below KB	Number of samples
WET SAMPLES	780 - 5176.8	390

**Shallow Gas**

Interval below KB	Remarks

**Available Logs**

Log type	Intervals logged	1/200	1/500
CBL VDL CCL GR	10600.0 - 14573.0		

WDSS Report

Date: 13/09/96

PB/SKR

Page: 4 / 4

<b>Well no:</b>	<b>Operator:</b>
<b>2/07-25 S</b>	<b>PHILLIPS</b>

CDM AP	OBDDIP	11348.0 - 14968.0			
DIL BHC CALI GR		6784.0 - 14980.0			
DIL BHC GR		14765.0 - 17019.0			
DIL LSS CALI GR		2422.0 - 7467.0			
LDL CNL NGL		14765.0 - 17017.0			
MUD		780.0 - 16985.0			
MUD TEMPERATURE		324.0 - 16985.0			
MWD	MD+TVD	700.0 - 16928.0			
OBDT CALI AMS GR		7735.0 - 14966.0			
PRESSURE PARAMETER		780.0 - 5178.0			
RFT GR		15659.0 - 16414.0			
SHDT/OBDT GR		14939.0 - 17025.0			
SYNTHETIC SEISMOGRAM					
VELOCITY LOG	WSC	2430.0 - 17000.0			
VSP					
ZERO PHASE WAVES-					

**Main operations for well: 2/7-25 S****Main operation: COMPLETION**

Sub operation:	Minutes:	Hours:	% of total:
BOP/WELLHEAD EQ	600	10,0	100,00
<b>Total</b>	<b>600</b>	<b>10,0</b>	<b>100,00</b>

**Main operation: DRILLING**

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	5240	87,3	4,38
BOP/WELLHEAD EQ	250	4,2	0,21
CASING	14130	235,5	11,81
CIRC/COND	8160	136,0	6,82
DRILL	56745	945,8	47,43
OTHER	6150	102,5	5,14
PRESS DETECTION	605	10,1	0,51
REAM	1320	22,0	1,10
SURVEY	1140	19,0	0,95
TRIP	25785	429,8	21,55
UNDERREAM	120	2,0	0,10
<b>Total</b>	<b>119645</b>	<b>1994,1</b>	<b>100,00</b>

**Main operation: FORMATION EVAL**

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	550	9,2	4,29
CIRC/COND	230	3,8	1,80
CORE	2280	38,0	17,80
LOG	1980	33,0	15,46
OTHER	60	1,0	0,47
TRIP	7710	128,5	60,19
<b>Total</b>	<b>12810</b>	<b>213,5</b>	<b>100,00</b>

**Main operation: INTERRUPTION**

Sub operation:	Minutes:	Hours:	% of total:
FISH	7455	124,3	22,78
LOST CIRC	1360	22,7	4,16
MAINTAIN/REP	9920	165,3	30,31
OTHER	6840	114,0	20,90
WAIT	6100	101,7	18,64
WELL CONTROL	1050	17,5	3,21
<b>Total</b>	<b>32725</b>	<b>545,4</b>	<b>100,00</b>

**Main operation: MOVING**

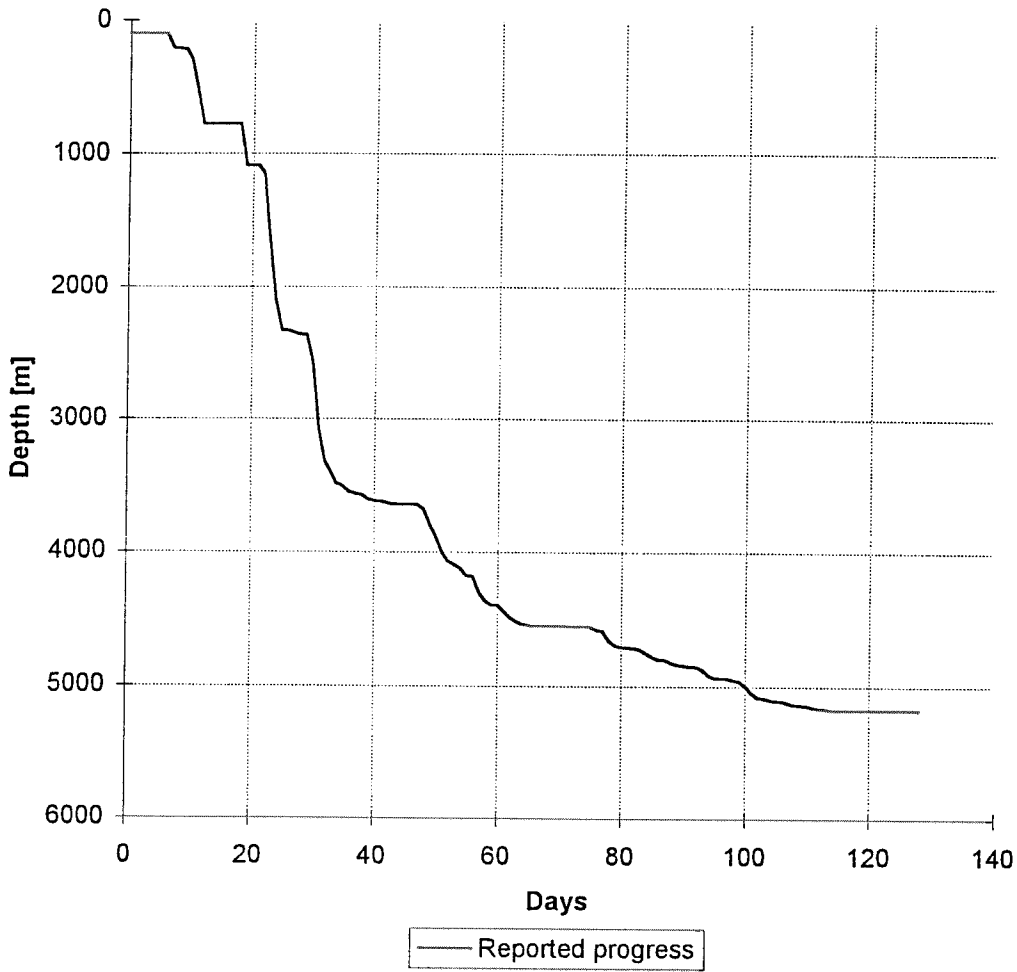
Sub operation:	Minutes:	Hours:	% of total:
POSITION	230	3,8	65,71
TRANSIT	120	2,0	34,29
<b>Total</b>	<b>350</b>	<b>5,8</b>	<b>100,00</b>

**Main operation: PLUG & ABANDON**

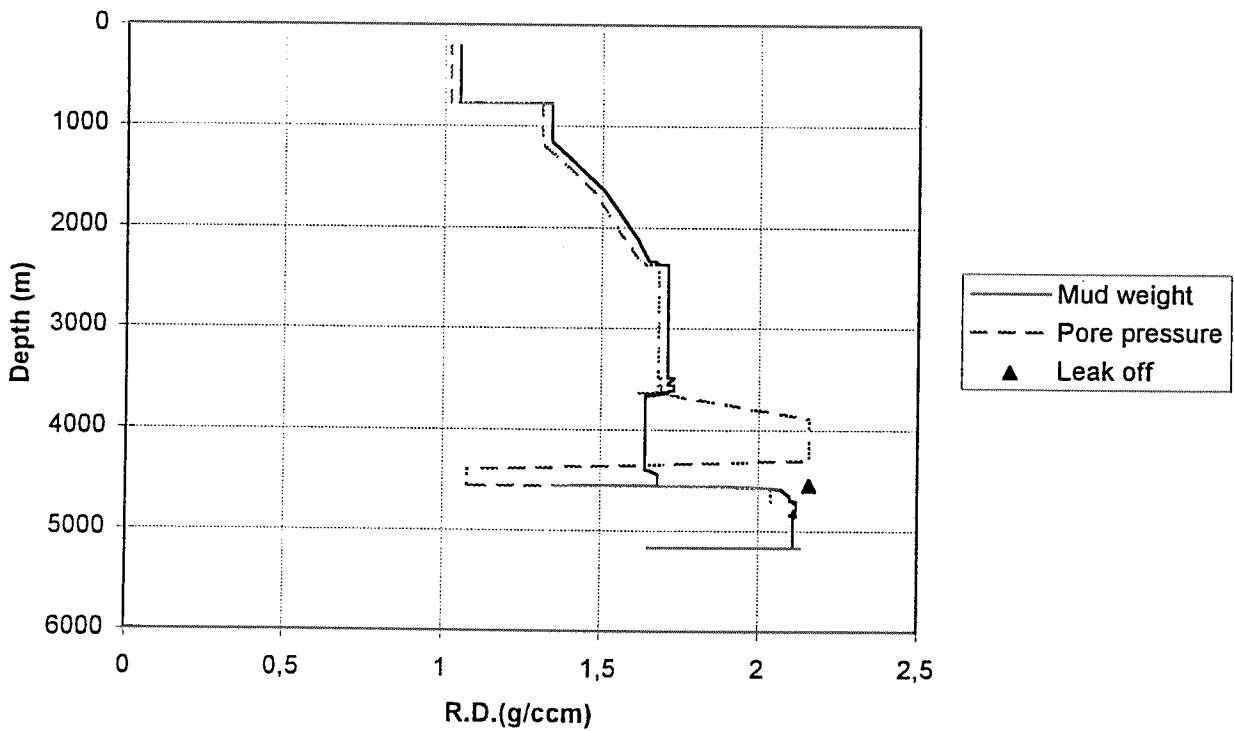
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	2210	36,8	18,59
CIRC/COND	730	12,2	6,14
CUT	4150	69,2	34,90
EQUIP RECOVERY	2480	41,3	20,86
MECHANICAL PLUG	1320	22,0	11,10
OTHER	1000	16,7	8,41
<b>Total</b>	<b>11890</b>	<b>198,2</b>	<b>100,00</b>

Total time used:  Hours

Depth vs time for well: 2/7-25 S



Composite plot for well: 2/7-25 S



# Well History 2/7-25 S

## General:

Well 2/7-25 S was designed to test the Permian/Devonian sandstones on the South Eldfisk prospect that tested oil in the first three wells and encountered the oil bearing reservoir with the fourth well on this structure. The South Eldfisk structure, at base Cretaceous, is an antiformal feature with well defined closure to the north, east and west. Closure to the south is apparent by a series of faults as well as the oil/water contact as defined by the 2/9-7 well. The structure has a vertical relief of approximately 323 m.

The whole South Eldfisk field is believed to be highly faulted. Core analysis indicates that normal or wrench faulting associated with extensional rift tectonics of the Late Jurassic dominate. Hydrocarbons within the gross reservoir interval are trapped by a combination of two sealing mechanisms. Overlying the reservoir are siltstones and shales of Late Jurassic or/and Early Cretaceous age, forming a vertical barrier to hydrocarbon migration. Lateral migration from the closure is restricted by both structural dip and faulting against the overlying seal.

The objectives of the 2/7-25 S well were:

- 1) confirm the southern continuation of the reservoir.
- 2) continued evaluation of the reservoir interval.
- 3) confirm or deny presence of basement within the reservoir interval.

The reservoir interval was defined by the top sand in the 2/7-20 well, and the oil/water contact as defined by the 2/7-9 well.

## Operations:

Appraisal well 2/7-25 S was spudded by the semi-submersible rig West Delta 29 November 1990, and completed 31 March 1991 at a depth of 5177 m RKB in rocks of Late Jurassic age, the Tyne Group. The well was drilled from a temporary subsea template over the 2/7-20 well, and deviated to a target 2072 m south-east of the wellhead. Shallow gas was encountered in four different sand intervals in the 26" hole section. A minor gas flow was controlled using kill mud with high viscosity pills. Drilling proceeded without any major problems to the 9 5/8" casing point, except for temporarily stuck pipe. A total of four cores were cut in the Late Jurassic sequence, and the only hydrocarbons encountered in the well was bitumen in the cores. The well was permanently plugged and abandoned as a dry well.

## Testing:

No DST tests was performed in this well.

# Geological Tops.

## Well:.2/7-25S

	Depth m (RKB).
Nordland Group	99.0
Hordaland Group	1697.5
Rogaland Group	3283.2
Balder Fm	3283.2
Sele Fm	3307.5
Lista Fm	3371.0
Vålc Fm	3432.0
Shetland Group	3461.5
Ekofisk Fm	3461.5
Tor Fm	3560.5
Hod Fm	3898.2
Blodoks Fm	4506.0
Hidra Fm	4512.0
Cromer Knoll Group	4538.3
Rodby Fm	4538.3
Sola Fm	4561.0
Tuxen Fm	4584.0
Åsgard Fm	4634.3
Tyne Group	4711.0
Mandal Fm	4711.0
Undefined Fm (Volcanoclastics)	4756.0
Farsund Fm	4828.0
Eldfisk Fm	4940.0
Undefined Fm	5156.5
T.D.	5189.0