Well no :	25/2-13	Operator :	ELF

Coordinates :	59° 47' 37.69" N 02° 27' 12.52" E	UTM coord. :	662872880 N 46932546 E
Licence no :	26	Permit no :	617
Rig :	WEST VANGUARD	Rig type :	SEMI-SUB.
Contractor :	A/S SMEDVIG DRILLING CO.		
Bottom hole temp:	136 °C	Elev. KB :	22 M
Spud. date :	89.09.06	Water depth :	116 M
Compl. date :	90.01.26	Total depth :	3909 M
Spud. class :	APPRAISAL	Form. at TD	TRIASSIC
Compl. class :	SUSPENDED	Prod.form. :	
Seisloca :	EL 8801 RAD 367, KOLONNE 483		

LICENSEES

32,870000	NORSK HYDRO PRODUKSJON A.S
5,000000	DEN NORSKE STATS OLJESELSKAP A.S
20,710000	TOTAL NORGE A.S
41,420000	ELF PETROLEUM NORGE 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	199,0	36	201,0	
INTERM.	20	700,0	26	714,0	1,20
INTERM.	13 3/8	2043,0	17 1/2	2057,0	1,72
INTERM.	9 5/8	3301,0	12 1/4	3315,0	1,90
LINER	7	3903,0	8 1/2	3908,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters			Recovery M	%
1	3340,0	-	3341,7	1,7	100,0
2	3367,0	-	3394,7	27,7	100,0
3	3387,0	-	3406,0	18,0	100,0
4	3405,0	-	3428,0	23,0	100,0
5	3429,0	-	3441,0	12,0	100,0
6	3441,0	-	3469,0	28,0	100,0
7	3459,0	-	3468,5	9,5	100,0
8	3649,0	-	3667,0	0,0	000,0
9	3667,0	-	3670,0	0,0	000,0
10	3691,0	-	3709,0	0,0	000,0
11	3709,0	-	3727,0	17,1	95,0
12	3727,0	-	3745,0	17,4	96,7
13	3745,0	-	3763,0	18,0	100,0
14	3763,0	-	3781,5	18,5	100,0
15	3781,5	-	3792,0	10,5	100,0
16	3792,0	-	3810,5	18,5	100,0
17	3810,5	-	3829,0	18,5	100,0
18	3829,0	-	3847,0	17,8	98,9
19	3847,0	-	3855,5	7,1	83,5

MUD

Depth	Mud weight	Visc.	Mud type
1314,000	1,16	20,0	WATER BASED
2036,000	1,17	20,0	WATER BASED
2057,000	1,18	24,0	WATER BASED
2188,000	1,20	26,0	WATER BASED
3009,000	1,27	33,0	WATER BASED
3159,000	1,20	37,0	WATER BASED
3394,500	1,27	30,0	WATER BASED
3847,000	1,20	38,0	WATER BASED
3855,500	1,21	38,0	WATER BASED
3908,000	1,20	36,0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	Interval meter			Choke size	Pressure (PSI) WHP	BTHP	FFP
1,0	3759,0	-	3785,0	4,7			
2A	3706,0	-	3713,0				
2B	3695,0	-	3698,0	6,3			
3A	3480,0	-	3491,0	9,2			
3B	3437,0	-	3491,0	12,5			
4,0	3441,5	-	3423,0				
5,0	3343,0	-	3382,0	15,7			

Test temperature: N/A

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3	
1,0						WATER
2A	1,8		,828			
2B	70		,821	,880	425	
3A	0,15					DRY
3B	214		,800	,800	1120	CODENST
4,0	2,9					DRY
5,0	682	21738	,829	,818	309	

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	205 - 3907,5	420

SHALLOW GAS

Interval below KB	Remarks

AVAILABLE LOGS

Log type	Intervals			1/200	1/500	Div.
CBL VDL GR CCL	1330,0	-	2044,5	X		
CBL VDL GR CCL	1575,0	-	3300,0	X		
CDM AP	3300,0	-	3785,0	X	X	
SHDT GR AMS	2045,0	-	3312,0	X		
DIL DDBHC AMS SP GR	700,0	-	2022,0	X	X	
DIL DDBHC GR SP AMS	1877,0	-	3319,0	X	X	
DIL GR DDBHC	3300,0	-	3900,0	X	X	
DLL MSFL GR AMS SP	3300,0	-	3525,2	X	X	
DLL MSFL GR SP	3675,0	-	3895,0	X	X	
FMS GR	3300,0	-	3703,0	X		
FMS GR AMS	3650,5	-	3812,0	X		
LDL AMS	700,0	-	2022,0	X	X	
LDL AMS	1877,0	-	3319,0	X	X	
LDL CNL NGL	3300,0	-	3529,0	X	X	
LDL CNL NGS	3476,0	-	3901,0	X	X	
MUD	199,0	-	3908,0		X	
MWD	202,0	-	3908,0		X	
NGL RATIOS	3299,8	-	3528,7	X	X	
NGS RATIOS	3476,0	-	3901,0	X	X	
RFT (HP) GR AMS	3354,000	-	3489,000		X	
RFT GR AMS	3346,500	-	3418,700		X	
RFT GR AMS	3354,000	-	3489,000			
RFT HP GR AMS	3346,500	-	3418,700			
RFT HP GR AMS	3487,800	-	3886,000			1:1000
VELOCITY TVD	700,0	-	3900,0		X	
SYNTHETIC SEISMOGRAM	10 cm/s	,	20 cm/s			16
VSP, PLOT 1-9	10 cm/s	,	20 cm/s			9

Main operations for well: 25/2-13

Main operation: COMPLETION

Sub operation:	Minutes:	Hours:	% of total:
BOP/WELLHEAD EQ	810	13,5	7,09
CIRC/COND	750	12,5	6,56
COMPL STRING	5190	86,5	45,41
FLOW	1980	33,0	17,32
PERFORATE	510	8,5	4,46
WIRE LINE	2190	36,5	19,16
Total	11430	190,5	100,00

Main operation: DRILLING

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	3306	55,1	4,46
BOP/WELLHEAD EQ	1830	30,5	2,47
CASING	15630	260,5	21,11
CIRC/COND	990	16,5	1,34
DRILL	37050	617,5	50,04
HOLE OPEN	840	14,0	1,13
OTHER	420	7,0	0,57
PRESS DETECTION	30	0,5	0,04
REAM	1050	17,5	1,42
SURVEY	990	16,5	1,34
TRIP	11880	198,0	16,04
WAIT	30	0,5	0,04
Total	74046	1234,1	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	120	2,0	0,16
CIRC/COND	2730	45,5	3,53
CORE	10800	180,0	13,97
DST	35430	590,5	45,83
LOG	7764	129,4	10,04
OTHER	570	9,5	0,74
PROD TEST	1140	19,0	1,47
TRIP	18750	312,5	24,25
Total	77304	1288,4	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	13080	218,0	36,21
MAINTAIN/REP	7350	122,5	20,35
OTHER	30	0,5	0,08
SIDETRACK	3840	64,0	10,63
WAIT	11820	197,0	32,72
Total	36120	602,0	100,00

Main operation: MOVING

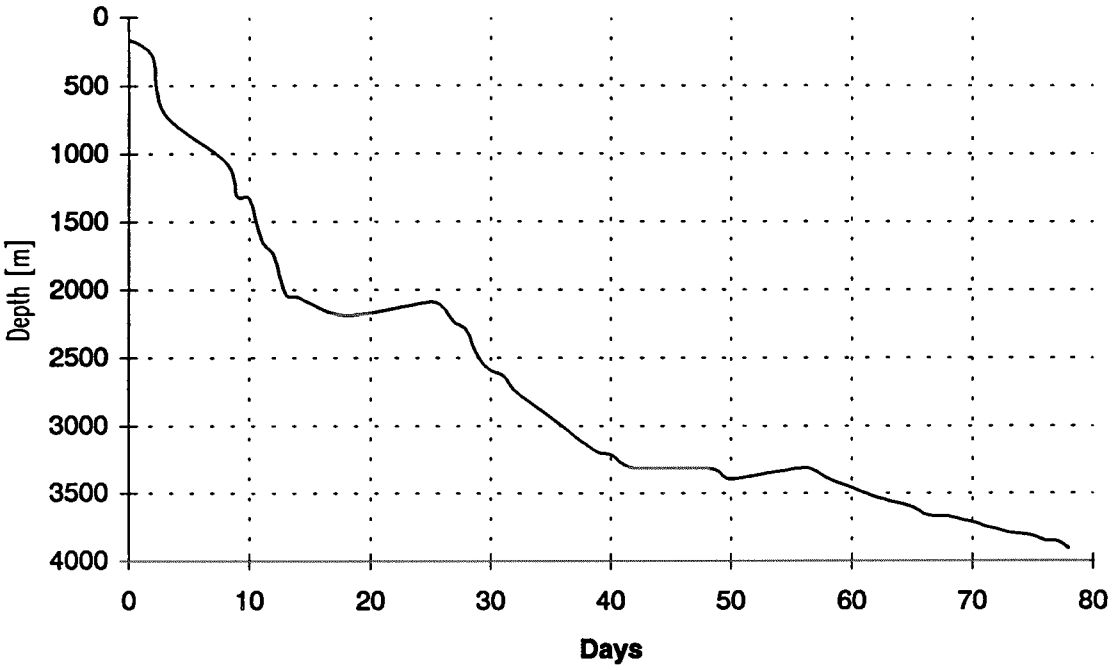
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	1170	19,5	39,39
POSITION	540	9,0	18,18
TRANSIT	1260	21,0	42,42
Total	2970	49,5	100,00

Main operation: PLUG & ABANDON

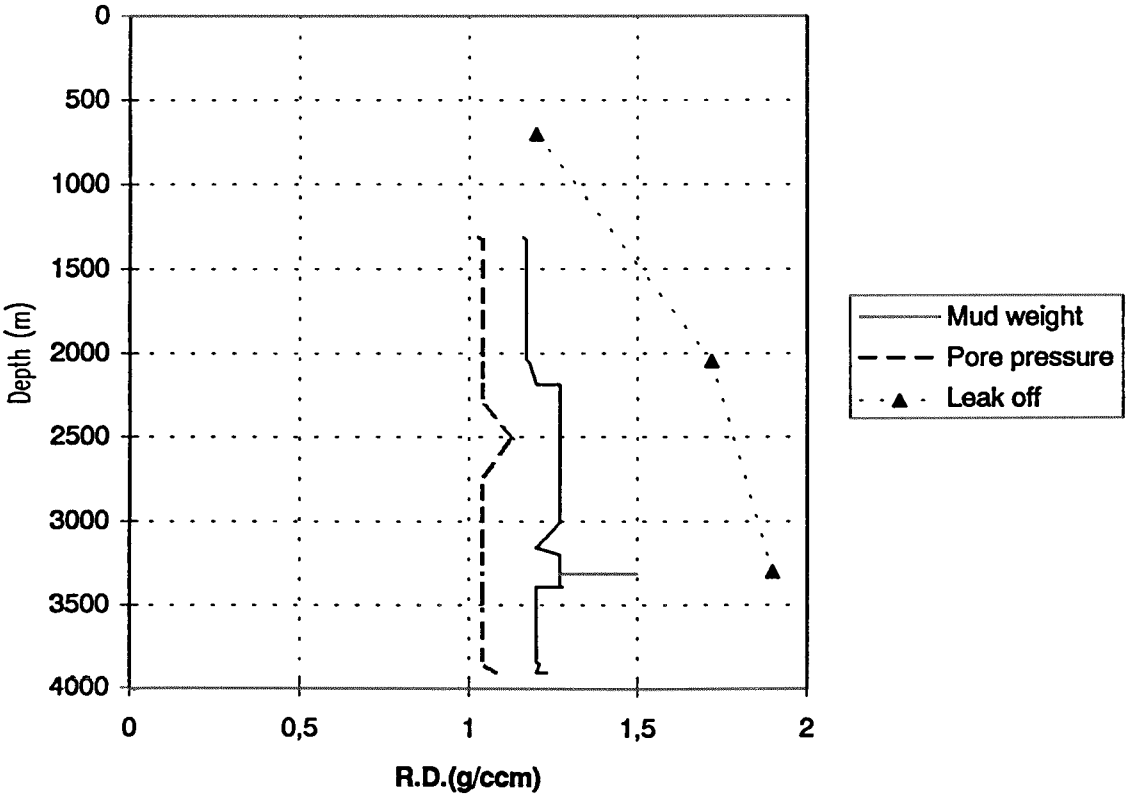
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	300	5,0	6,45
CIRC/COND	150	2,5	3,23
EQUIP RECOVERY	690	11,5	14,84
MECHANICAL PLUG	420	7,0	9,03
OTHER	240	4,0	5,16
TRIP	2400	40,0	51,61
WAIT	450	7,5	9,68
Total	4650	77,5	100,00

Total time used: 3442,0 Hours

Depth vs time for well: 25/2-13



Composite plot for well: 25/2-13



Well History 25/2-13.

General:

Well 25/2-13 was located in the central part of the Viking Graben, east of the Frigg area. The block straddles the eastern flank of the Graben and the north-western part of the termination of the Utsira High. This was the first appraisal well of the 25/2-5 discovery and was designed to drill close to a major normal fault bounding the structure. The structure is a north-south trending horst, which is located on a terrace in the southern part of the block. The 25/2-5 well discovered oil in different reservoirs of the Brent Group and the Statfjord Formation. The main objectives were to evaluate the western panel for:

verifying lateral extension of the discovery.
better definition of the fluid column both in Brent and Statfjord reservoirs.
obtain better data for fluid characteristics and productivity of these formations.
test the position of the water-oil contact in the Brent and Statfjord reservoir.
test the evolution of the reservoir in a western panel, not drilled by the 25/2-5 well.

A full Stafjord formation was expected in the 25/2-13 well. The formation consists of series of alternating sand, shale and coal beds, organized in fining upward sequences. The thickness of each sequence is about 10 m, and the reservoir layers are probably isolated from each other. No obvious precise correlation of the different sand layers was expected between well 25/2-13 and 25/2-5.

Operations:

Appraisal well 25/2-13 was spudded 6 June 1989 by the semi-submersible rig West Vanguard and completed 26 January 1990 at a depth of 3909 m RKB in rocks of Triassic age. A total of 19 cores were cut in this well. While drilling the 12 1/4" face, lots of problems occured. Backed off at 2126 m RKB and set cement plug. Attempted to sidetrack from 2070 m RKB, but came back into the origional hole. Set another cement plug from 2121 to 1960 m RKB, and Performed a new sidetrack from 2070 to 2123 m RKB. While coring the corebarrel got stuck, and after unsuccesful fishing, a sidetrack was performed from 3306 to 3387 m RKB. Cores 1 to 3 were cut in the origional hole from 3340 to 3394,5 m RKB, and cores 4 to 19 in the sidetracked hole from 3387 to 3468,5 m RKB. Top Brent came in at 3342 m RKB as prognosed, but with petrophysics less good than in 25/2-5. Mobile hydrocarbons were found i two layers. Top Statfjord came in at 3695,5 m RKB, 50 m deeper than prognosed with thickness as expected, but with mobil oil only in a thin zone at the very top. The well was temporary plugged andabandoned with oil / gas and condensate shows.

Testing:

Five DST tests were performed in this well.

Geological Tops.

Well:25/2-13

	Depth m (RKB).
Nordland Group	138,0
Hordaland Group	1064,0
Frigg Fm	2121,0
Rogaland Group	2170,0
Balder Fm	2170,0
Sele Fm	2400,0
Lista Fm/Heimdal Fm	2445,0
Maureen Fm	2586,0
Shetland Group	2706,0
Jorsalfare Fm	2706,0
Kyrre Fm	2954,0
Trygvason Fm	3187,0
Blodøks Fm	3278,0
Svarte Fm	3286,0
Viking Group	3317,5
Draupne Fm	3317,5
Heather Fm	3329,0
Brent Group	3342,0
Dunlin Group	3491,0
Statfjord Fm	3695,5
Triassic Group	3387,0
T.D.	3908,0