

Well no :	30/9-11 A	Operator :	HYDRO
Coordinates :	60° 19' 27.89" N 02° 55' 44.00" E	UTM coord. :	668770050 N 49607229 E
Licence no :	104	Permit no :	658
Rig :	VILDKAT EXPLORER	Rig type :	SEMI-SUB.
Contractor :	TRANSNOR RIG AS	Elev. KB :	25 M
Bottom hole temp:	0 °C	Water depth :	108 M
Spud. date :	90.11.20	Total depth :	3002 M
Compl. date :	90.12.29	Form. at TD	E.JURASIC
Spud. class :	APPRAISAL	Prod.form. :	
Compl. class :	P&A. DRY HOLE		
Seisloca :	NH 8502-187 CDP-LINJE 1508 - COL 745		

## LICENSEES

5,000000	CONOCO PETROLEUM NORGE A/S
5,000000	DNO OLJE A/S
30,000000	NORSK HYDRO PRODUKSJON A.S
5,000000	SAGA PETROLEUM A.S.
50,000000	DEN NORSKE STATS OLJESELSKAP A.S
5,000000	NORSK AGIP 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	243,0	36	245,0	
INTERM.	13 3/8	906,0	17 1/2	922,0	
INTERM.	9 5/8	2394,0	12 1/4	2425,0	1,63
LINER	7		8 1/2	3002,0	

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery	
		M	%
1	2545,0 - 2553,0	8,0	100
2	2553,0 - 2575,0	22,0	100
3	2576,0 - 2578,0	2,0	100
0	2652,0 - 2660,0	8,0	100

## MUD

Depth	Mud weight	Visc.	Mud type
170,000	1,27		WATER BASED
1037,000	1,42	20,0	WATER BASED
1341,000	1,43	21,0	WATER BASED
1705,000	1,46	22,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
2070,000	1,46	19,0	WATER BASED
2379,000	1,48	23,0	WATER BASED
2419,000	1,47	18,0	WATER BASED
2419,000	1,48	24,0	WATER BASED
2422,000	1,47	19,0	WATER BASED
2422,000	1,44	18,0	WATER BASED
2425,000	1,47	21,0	WATER BASED
3002,000	1,27	11,0	WATER BASED
3002,000	1,33	15,0	WATER BASED
3002,000	1,27	11,0	WATER BASED
3002,000	1,33	15,0	WATER BASED
3002,000	1,27	10,0	WATER BASED
3002,000	1,33	15,0	WATER BASED
3002,000	1,27	14,0	WATER BASED

## DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	930 - 3002	210
CUTTINGS	930 - 3002	330

## SHALLOW GAS

Interval below KB	Remarks
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## AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
AMS	905,0	-	2387,0	
AMS	2393,0	-	2985,0	
CDM AP	2395,0	-	2827,0	
DIL LSS GR SP	2393,0	-	2873,0	
DIL LSS SP GR	905,0	-	2407,0	
DIL LSS SP GR	9 05,0	-	2872,0	
DLL GR	2525,0	-	2700,0	
DLL MSFL GR SP	2393,0	-	3000,0	
DLL MSFL SP GR	2993,0	-	3000,0	
DRILLING DATA PRESS.	910,0	-	3002,0	10000
FMS GR	2393,0	-	2828,0	
LDL CNL GR	905,0	-	2406,0	
LDL CNL SGR	2393,0	-	2873,0	

Log type	Intervals		1/200	1/500	Div.
LDL CNL GR	905,0	- 2873,0			
MWD MD+TVD	134,0	- 3002,0			
NGS	2393,0	- 2873,0			
PRESSURE SUMMARY	910,0	- 3002,0			10000
RFT HP GR	2552,0	- 2661,0			
SYNTHETIC SEISMOGRAM					
TEMPERATURE DATA	910,0	- 3002,0			5000
VSP					

**Main operations for well: 30/9-11 A****Main operation: DRILLING**

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	840	14,0	3,07
BOP/WELLHEAD EQ	210	3,5	0,77
CASING	3120	52,0	11,39
CIRC/COND	480	8,0	1,75
DRILL	12660	211,0	46,22
REAM	270	4,5	0,99
SURVEY	480	8,0	1,75
TRIP	8610	143,5	31,43
WAIT	720	12,0	2,63
<b>Total</b>	<b>27390</b>	<b>456,5</b>	<b>100,00</b>

**Main operation: FORMATION EVAL**

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	180	3,0	1,75
CIRC/COND	570	9,5	5,56
CORE	1260	21,0	12,28
LOG	5520	92,0	53,80
OTHER	30	0,5	0,29
TRIP	2700	45,0	26,32
<b>Total</b>	<b>10260</b>	<b>171,0</b>	<b>100,00</b>

**Main operation: INTERRUPTION**

Sub operation:	Minutes:	Hours:	% of total:
FISH	2250	37,5	14,85
MAINTAIN/REP	2520	42,0	16,63
OTHER	600	10,0	3,96
WAIT	9780	163,0	64,55
<b>Total</b>	<b>15150</b>	<b>252,5</b>	<b>100,00</b>

**Main operation: MOVING**

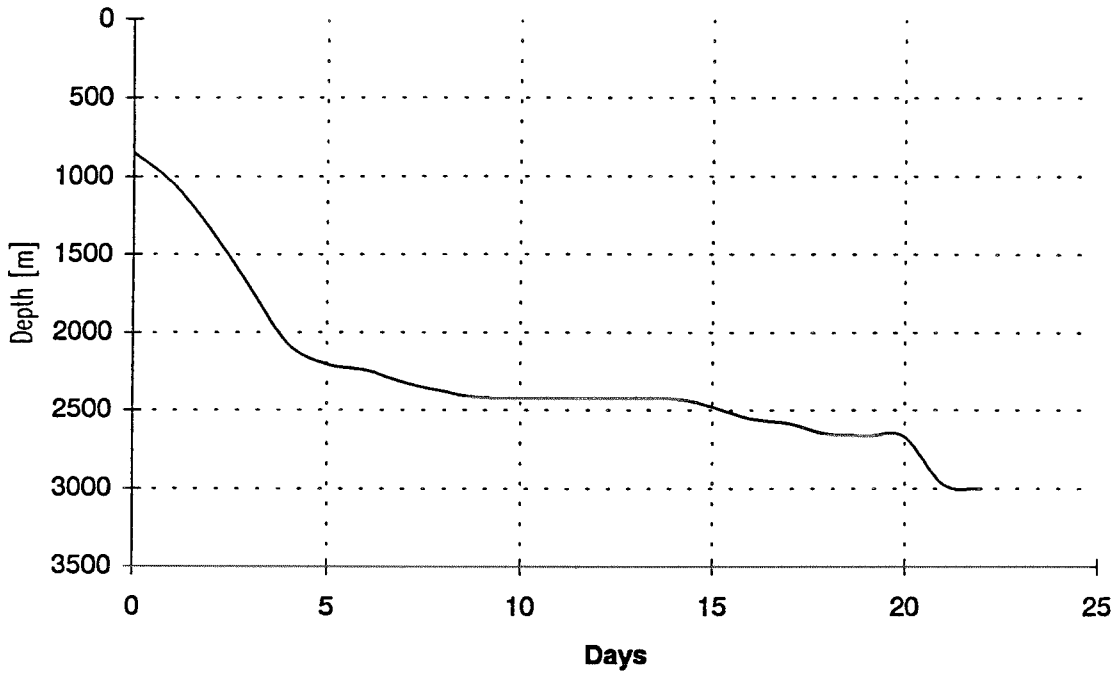
Sub operation:	Minutes:	Hours:	% of total:
TRANSIT	1230	20,5	100,00
<b>Total</b>	<b>1230</b>	<b>20,5</b>	<b>100,00</b>

**Main operation: PLUG & ABANDON**

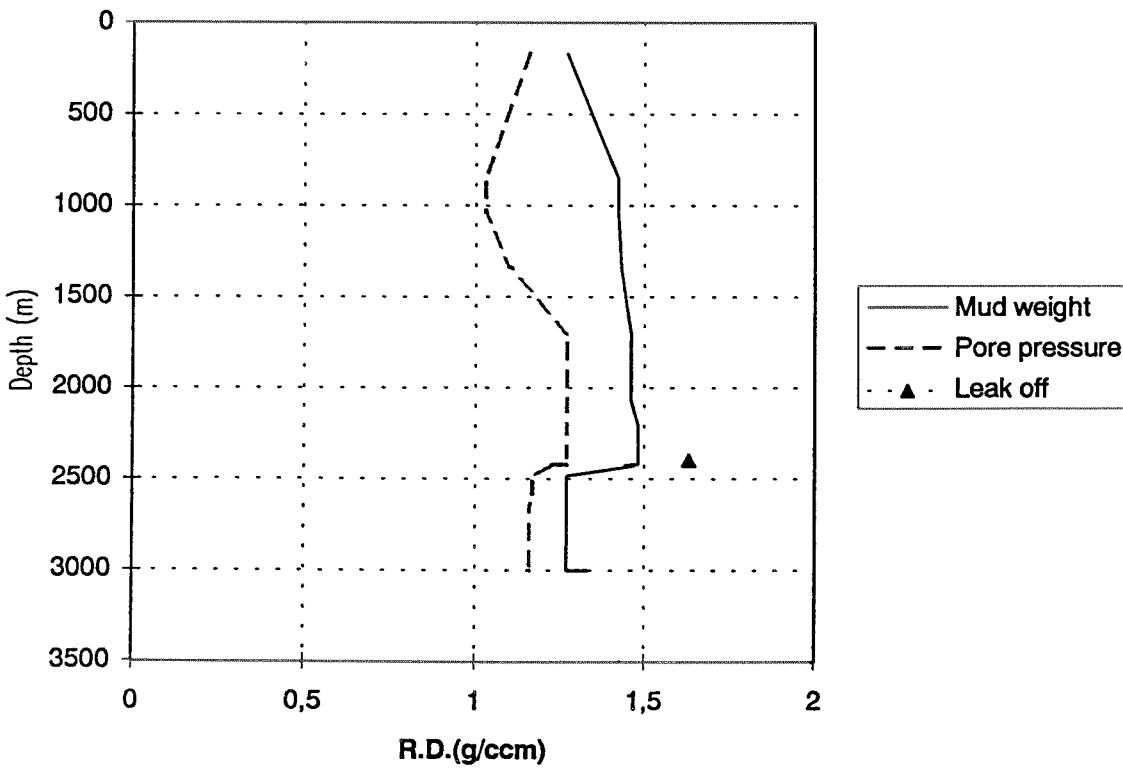
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	90	1,5	1,78
CIRC/COND	120	2,0	2,37
CUT	1110	18,5	21,89
EQUIP RECOVERY	1950	32,5	38,46
MECHANICAL PLUG	210	3,5	4,14
OTHER	870	14,5	17,16
TRIP	720	12,0	14,20
<b>Total</b>	<b>5070</b>	<b>84,5</b>	<b>100,00</b>

Total time used:  Hours

**Depth vs time for well: 30/9-11 A**



**Composite plot for well: 30/9-11 A**



# Well History 30/9-11 A.

## General:

Well 30/9-11 A was designed as a sidetrack of well 30/9-11 on the J-East structure with kickoff at 920 m RKB. The target location was chosen to penetrate the top of the Brent Group in a downflank position where the Brent reservoir was expected to be least eroded, and to confirm as deep oil filling of the J-Central compartment as possible. The sidetrack results would give the opportunity for a quick assessment of the overall remaining resource potential of the J-Area. The main objectives of the well were to:

- verify the seismic mapping of the J-Central area.
- verify the Brent reservoir model for the area.
- verify communication and pressure relationship with the J-West compartment.
- penetrate the Cook formation to verify structural mapping and hydrocarbon potential.
- early assessment of resource potential.

The chosen location also gave the best resolution and seismic tie for the Brent interval.

## Operations:

Appraisal well 30/9-11 A was spudded 20 November 1990 by the semi-submersible rig Vildkat Explorer, and completed 29 Desember 1990 at a depth of 3002 m RKB in rocks of Early Jurassic age. A total of four cores were cut in the well whereof cores 1 to 3 was cut in the interval 2545 to 2582 m RKB and core no 4 from 2652 to 2660 m RKB. 30 sidewall cores were attempted in one run, and resulted in a 100% recovery. The Brent Group was found water bearing, and came in 61 m deeper than prognosed. Statfjord formation came in at 2973 m RKB. Apart from some thigh hole experiences, drilling went without any significant problems to TD. The well was permanently plugged and abandoned as a dry hole, with negligible shows.

## Testing:

No DST tests were performed in this well.

# Geological Tops.

## Well:30/9-11 A

Depth m (RKB).

Nordland Group		
Hordaland Group	Kickoff point.	910,0
Rogaland Group		2092,0
Balder Fm		2092,0
Sele Fm		2113,0
Lista Fm		2195,0
Våle Fm		2360,0
Shetland Group		2365,0
Cromer Knoll Group		2498,0
Viking Group		2513,0
Heather Fm		2513,0
Brent Group		2551,0
Tarbert Fm		2551,0
Ness Fm		2553,0
Etive/Rannoch		2667,0
Oseberg Fm		2679,0
Dunlin Group		2680,0
Drake Fm		2680,0
Burton Fm		2836,0
Amundsen Fm		2874,0
Statfjord Fm		2973,0
T.D.		3002,0