

## WDSS Report

Date: 17/09/96

PB/SKR

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Well no:	Operator:
<b>7/12-11</b>	<b>BP</b>

### Well

Coordinates :	57° 07' 10.71" N 02° 58' 33.19" E	UTM coord. :	6330846.33 N 498539.76 E
License no :	164	Permit no :	696
Rig :	ROSS ISLE	Rig type :	SEMI-SUB.
Contractor :	TRANSNOR RIG AS		
Bottom hole temp:	126 °C	Elev. KB :	23 M
Spud. date :	91.08.31	Water depth :	67 M
Compl. date :	91.11.06	Total depth :	3868 M
Spud. class :	WILDCAT	Form. at TD :	TRIASSIC
Compl. class :	P&A. DRY HOLE	Prod.form. :	
Seisloca :	BPN 91 - 228 SP 196,5		

### Licenseses

10.000000 NORSKE CONOCO A/S  
 50.000000 DEN NORSKE STATS OLJESELSKAP A.S  
 10.000000 SVENSKA PETROLEUM EXPLORATION AS  
 30.000000 BP PETROLEUM DEV. OF NORWAY AS

### Casing and Leak-off Tests

Type	Casing diam	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm <sup>3</sup>
CONDUCTOR	30	163.0	36	165.0	
INTERM.	20	935.0	26	937.0	1.70
INTERM.	13 3/8	2735.0	17 1/2	2737.0	1.90

### Conventional Cores

Core no.	Intervals cored meters	Recovery m	%
1	3802.7 - 3812	9.3	100.0

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**Mud**

Depth	Mud weight	Visc.	Mud type
46.0	1.05	37.0	WATER BASED
206.0	1.03		WATER BASED
946.0	1.20	23.0	WATER BASED
950.0	1.05	36.0	WATER BASED
962.0	1.20	17.0	WATER BASED
1222.0	1.40	30.0	WATER BASED
1595.0	1.60	60.0	WATER BASED
1764.0	1.70	55.0	WATER BASED
2743.0	1.60	32.0	WATER BASED
2767.0	1.58	36.0	WATER BASED
3813.0	1.55	39.0	WATER BASED
3865.0	1.56	39.0	WATER BASED
3865.0	1.55	38.0	WATER BASED
3865.0	1.56		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	950 - 3865	300
CUTTINGS	950 - 3865	330

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**Shallow Gas**

Interval below KB	Remarks

**Available Logs**

Log type	Intervals logged	1/200	1/500	
DIL LSS SP GR CAL	75.0 - 2743.0			
DLL MSFL ASL GR	2738.0 - 3868.0			
DRILLING EVALUATION	90.0 - 3865.0			
LDL CNL NGL	2738.0 - 3871.0			
MUD	90.0 - 3865.0			
MWD	90.0 - 3865.0			
NGT RATIOS	2738.0 - 3862.0			
PRESURE EVALUATION	90.0 - 3865.0			
RFTB HP GR	3791.0 - 3833.0			
SDM AP/SHDT MSD	2742.0 - 3871.0			
SHDT GR	2738.0 - 3871.0			
SYNTHETIC SEISMOGRAM	500.0 - 3863.0			
WSC	950.0 - 3855.0			

## Main operations for well: 7/12-11

### Main operation: DRILLING

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	15	0,3	0,02
BOP/WELLHEAD EQ	7085	118,1	10,40
CASING	2685	44,8	3,94
CIRC/COND	5040	84,0	7,40
DRILL	35114	585,2	51,54
HOLE OPEN	309	5,2	0,45
OTHER	300	5,0	0,44
PRESS DETECTION	45	0,8	0,07
REAM	3225	53,8	4,73
SURVEY	45	0,8	0,07
TRIP	13735	228,9	20,16
WAIT	525	8,8	0,77
<b>Total</b>	<b>68123</b>	<b>1135,4</b>	<b>100,00</b>

### Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	180	3,0	3,41
CORE	276	4,6	5,22
LOG	3990	66,5	75,48
RFT/FIT	120	2,0	2,27
TRIP	720	12,0	13,62
<b>Total</b>	<b>5286</b>	<b>88,1</b>	<b>100,00</b>

### Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
MAINTAIN/REP	4321	72,0	47,45
OTHER	510	8,5	5,60
WAIT	4275	71,3	46,95
<b>Total</b>	<b>9106</b>	<b>151,8</b>	<b>100,00</b>

### Main operation: MOVING

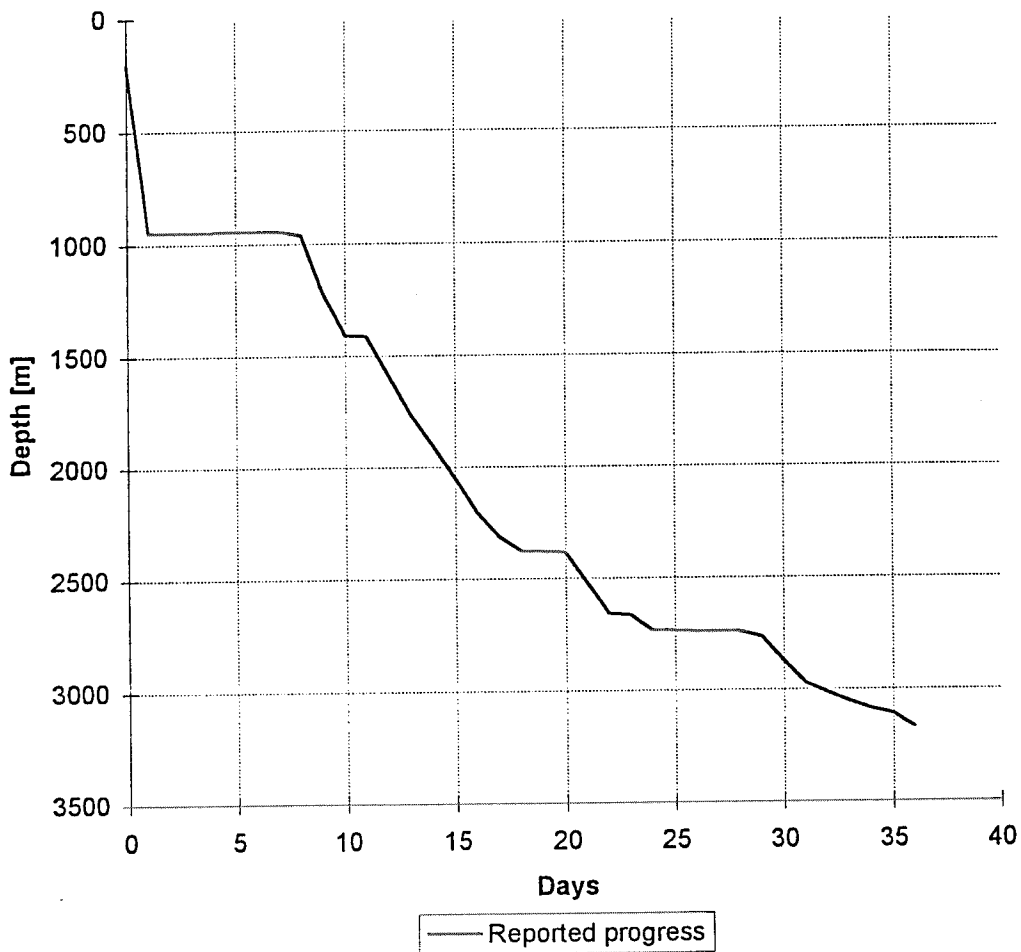
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	2895	48,3	83,91
SKID	450	7,5	13,04
TRANSIT	105	1,8	3,04
<b>Total</b>	<b>3450</b>	<b>57,5</b>	<b>100,00</b>

### Main operation: PLUG & ABANDON

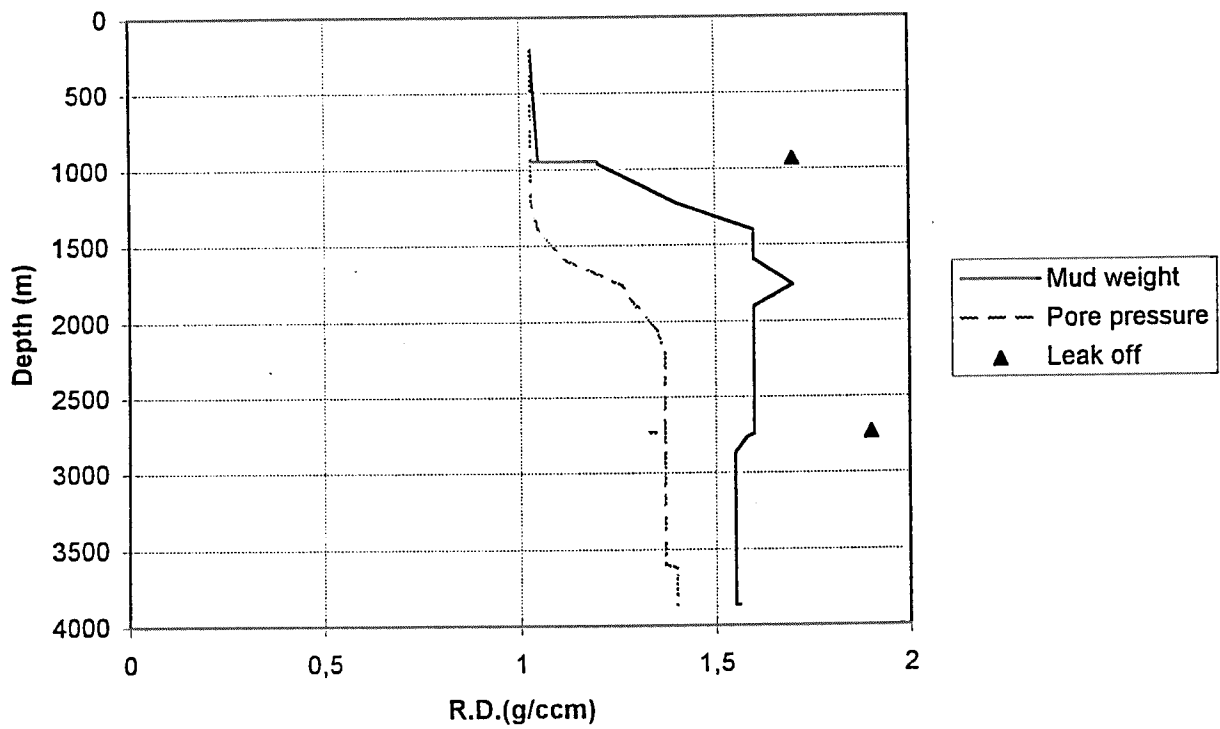
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	435	7,3	3,25
CIRC/COND	435	7,3	3,25
CUT	2010	33,5	15,01
EQUIP RECOVERY	870	14,5	6,49
OTHER	15	0,3	0,11
PERFORATE	465	7,8	3,47
SQUEEZE	15	0,3	0,11
TRIP	2145	35,8	16,01
WAIT	7005	116,8	52,30
<b>Total</b>	<b>13395</b>	<b>223,3</b>	<b>100,00</b>

Total time used: 1656,0 Hours

Depth vs time for well: 7/12-11



Composite plot for well: 7/12-11



# Well History 7/12-11.

## General:

Well 7/12-11 was designed to test 7/12-JU6 prospect, the Late Jurassic Ula Formation sands in a structural prospect some 7 km east of the Ula Field. Well 7/12-11 was located close to the edge of the perceived Late Jurassic Ula Trend fairway.

The prospect was defined as a structural trap with fault closure to the east and north, and dip closure to the southwest. Lateral seal to the east was envisaged to be provided by cross-fault seal of Late Jurassic reservoir against Triassic shales and siltstones. The key element of risk was trap effectiveness, as the prospect relied on a shattered sub-seismic fault zone in the north eastern corner. The results might have implications for further prospectivity in the license.

The primary objective for the 7/12-11 well was to prove a volume of oil that was commercial as a tieback development to the Ula Platform. A secondary objectives were the uppermost 50 m of the Triassic rocks, as well as the Middle Jurassic Bryne Formation.

## Operations:

Wildcat well 7/12-11 was spudded by the semi-submersible rig Ross Isle 31 August 1991, and completed 6 November 1991 at a depth of 3868 m RKB in rocks of Triassic age, the Skagerak Formation. A 9 7/8" pilot hole was drilled to 950 m RKB, and some shallow gas was detected by ROV sonar and observation of some surface bubbled at 518 m RKB.

One 10 m conventional core was cut in the Triassic Skagerak Formation. A total of 21 sidewall cores were attempted, and 14 samples were recovered. No shows were observed in the sidewall cores. The Ula sandstones came in at 3787.5 m RKB, 39.5 m deeper than prognosed and was only 12.5 m thick. This was 78 m thinner than expected. Drilling proceeded without any significant problems to TD.

Very weak hydrocarbon fluorescence was observed in sand stringers of the Lista Formation. Minor gas shows were observed in the Mandal Formation. Occasional oil stained grains with very weak cut fluorescence were seen in the cuttings of the Ula Formation. The well was permanently plugged and abandoned as a dry hole with weak hydrocarbon shows.

## Testing:

No DST tests were performed in this well.

# Geological Tops.

## Well:.7/12-11

	Depth m (RKB).
Nordland Group	90.0
Hordaland Group	1836.5
Rogaland Group	2708.0
Balder Fm	2708.0
Sele Fm	2741.0
Lista Fm	2822.0
Vidar Fm	2952.5
Lista Fm	2961.5
Shetland Group	2972.5
Ekofisk Fm	2972.5
Tor Fm	3123.5
Hod Fm	3387.0
Cromer Knoll Group	3485.5
Rodby Fm	3485.5
Sola Fm	3568.5
Tuxen Fm	3585.5
Åsgard Fm	3595.0
Tyne Group	3728.0
Mandal Fm	3728.0
Farsund Fm	3752.5
Vestland Group	3787.5
Ula Fm	3787.5
Triassic Group	3800.0
Skagerak.Fm	3800.0
T.D.	3872.5