

## WDSS Report

Date: 04/03/98

PB/SKR

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<b>Well no:</b>	<b>Operator:</b>
<b>31/02-18 A</b>	<b>HYDRO</b>

### Well

Coordinates :	60° 54' 10.49" N 03° 34' 41.79" E	UTM coord. :	6752271.73 N 531373.19 E
License no :	54	Permit no :	743
Rig :	TREASURE SAGA	Rig type :	SEMI-SUB.
Contractor :	WILRIG A/S		
Bottom hole temp:	70 °C	Elev. KB :	26 M
Spud. date :	92.10.07	Water depth :	364 M
Compl. date :	92.10.17	Total depth :	2005 M
Spud. class :	WILDCAT	Form. at TD :	JURASSIC
Compl. class :	SUSPENDED. SHOWS	Prod.form. :	E.JURASSIC
Seisloca :	NH 9101, REKKE 1146, KOLONNE 2042		

### Licensees

3.105000 ELF PETROLEUM NORGE AS  
4.900000 NORSK HYDRO PRODUKSJON AS  
25.900000 A/S NORSKE SHELL  
58.800000 DEN NORSKE STATS OLJESELSKAP A.S  
1.000000 TOTAL NORGE AS  
6.295000 NORSKE CONOCO A/S

### 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	452.5	36	454.0	
INTERM.	18 5/8	921.0	24	940.0	
INTERM.	9 5/8	1450.0	12 1/4	1465.0	
OPEN HOLE		2005.0	8 1/2	2005.0	

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### Conventional Cores

Core no.	Intervals cored meters	Recovery m	%
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### Mud

Depth	Mud weight	Visc.	Mud type
1344.0	1.18	51.0	WATER BASED
1516.0	1.18	41.0	WATER BASED
1620.0	1.18	37.0	WATER BASED
1769.0	1.18	39.0	WATER BASED
2005.0	1.18	38.0	WATER BASED

### Drill Stem Test (intervals and pressures)

Test no.	Test interval meter	Choke size	Pressure (psi) WHP	BTHP	FFP
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### Drill Stem Test (recovery)

Test no.	Oil Sm <sup>3</sup> /d	Gas Sm <sup>3</sup> /d	Oil grav. g/cm <sup>3</sup>	Gas grav. rel. air	GOR m <sup>3</sup> /m <sup>3</sup>
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### Drill Bit Cuttings and Wet Samples

Sample type	Interval below KB	Number of samples
WET SAMPLES	1480 - 2005	84

### Shallow Gas

Interval below KB	Remarks

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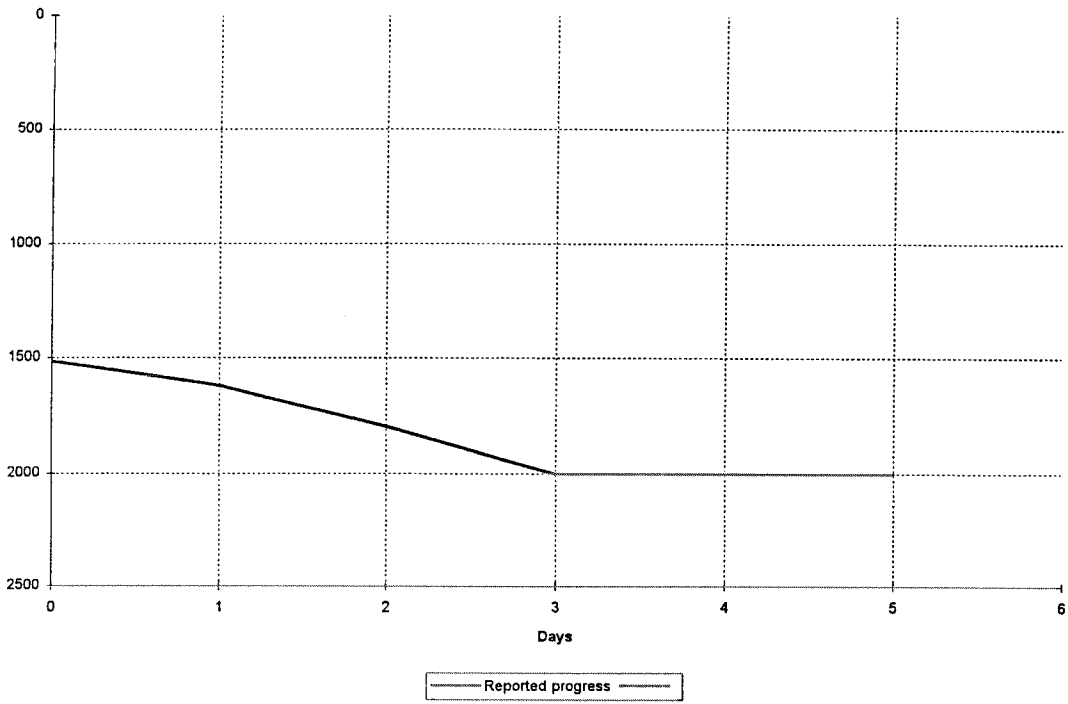
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<b>31/02-18 A</b>	<b>HYDRO</b>

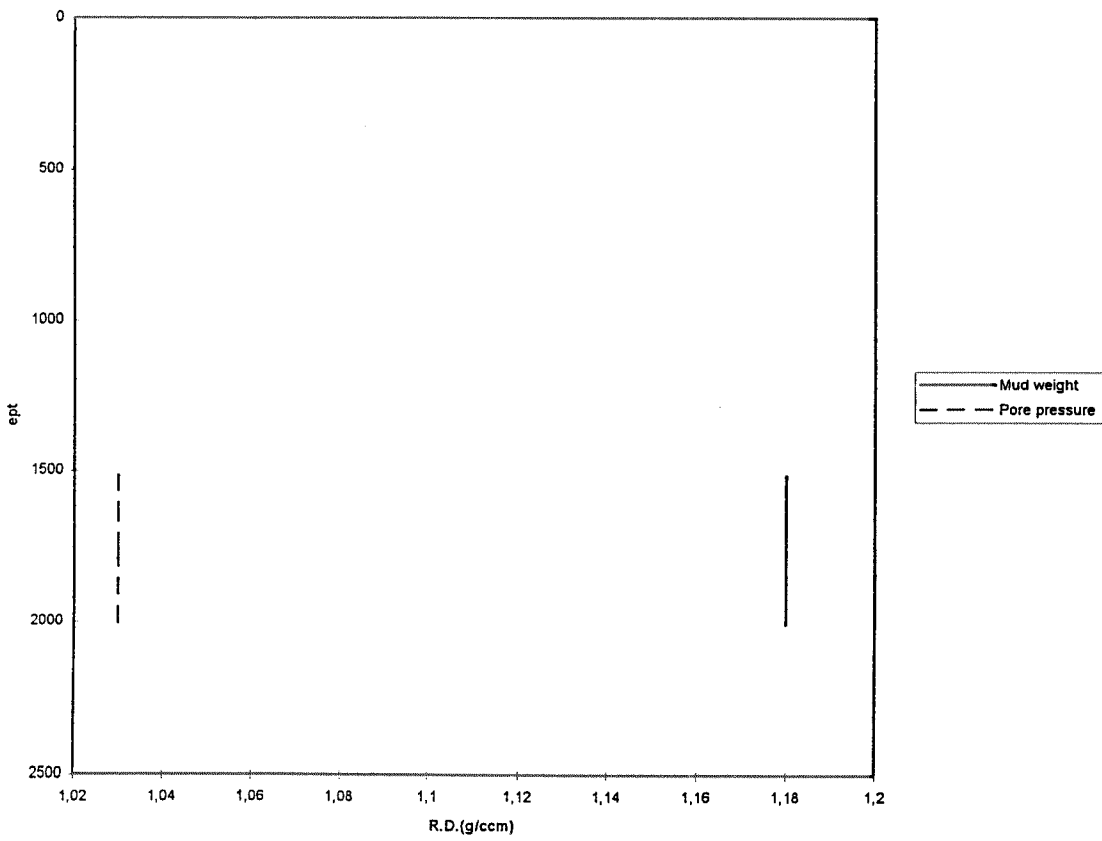
**Available Logs**

<b>Log type</b>	<b>Intervals logged</b>	<b>1/200</b>	<b>1/500</b>	
AIT NGS	1450.0 - 1998.0			
CALIBRATED SONIC	1430.0 - 1870.0			
DLL MSFL DSI GR AMS	1450.0 - 1993.0			
DSI GR ( P & S MODE)	1450.0 - 1977.0			
FMI GR AMS	1450.0 - 2003.0			
GASCHROMATOLOG	1460.0 - 2003.0			
LDL CNL NGS AMS	1450.0 - 1991.0			
MWD LOG	1450.0 - 1880.0			
NGT RATIOS	1450.0 - 1991.0			
RFT HP GR	1522.0 - 1982.0			
SYNTHETIC SEISMOGRAM				
TWO WAY TRAVEL TIME				
VSP				

Depth v.s. time plot for well: 31/2-18 A



Composite plot for well: 31/2-18 A



**Main operation: DRILLING**

Sub operation:	Minutes:	Hours:	% of total:
CIRC/COND	60	1,0	1,13
DRILL	4020	67,0	75,71
OTHER	60	1,0	1,13
TRIP	1170	19,5	22,03
<b>Total</b>	<b>5310</b>	<b>88,5</b>	<b>100,00</b>

**Main operation: FORMATION EVAL**

Sub operation:	Minutes:	Hours:	% of total:
LOG	1980	33,0	68,75
RFT/FIT	900	15,0	31,25
<b>Total</b>	<b>2880</b>	<b>48,0</b>	<b>100,00</b>

**Main operation: INTERRUPTION**

Sub operation:	Minutes:	Hours:	% of total:
MAINTAIN/REP	540	9,0	100,00
<b>Total</b>	<b>540</b>	<b>9,0</b>	<b>100,00</b>

**Main operation: PLUG & ABANDON**

Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	240	4,0	28,57
CIRC/COND	210	3,5	25,00
TRIP	390	6,5	46,43
<b>Total</b>	<b>840</b>	<b>14,0</b>	<b>100,00</b>

Total time used:  Hours

# WELL HISTORY 31/2-18 & A

## GENERAL:

The primary purpose of well 31/2-18 was to appraise the structure and oil bearing potential of a fault block in the northern part of the Troll West Gas province. In summary, the main objectives for drilling well 31/2-18 were:

- Evaluate the structure for future development of oil producing wells in the TWGP-North area.
- Determine the degree of development required to efficiently develop the oil reservoir in the TWGP-North area

## OPERATION:

Well 31/2-18 was spudded by the semi submersible rig "Treasure Saga" on 15<sup>th</sup> September 1992, and reached a total depth of 1711m on 4<sup>th</sup> October 1992 in the Fensfjord Formation.

The lower part of Våle Formation, from 1519.9m to the base of the unit at 1528.8m consist of sandstone which proved to be gas bearing, and continuation with the underlying Sognefjord Formation. The Sognefjord Formation was encountered over the interval 1528.8m – 1642.7m and was found gas bearing down to 1571.2 mMD. A thin oil leg was identified, with an oil-water contact at 1582.0 mMD. 16 good RFT pressure measurement, including one segregated sample were taken in one run over the interval 1522m – 1689.5m. After running wireline logs, the well was plugged back to the 9-5/8" casing shoe and side tracked as well 31/2-18 A. After well 31/2-18 A had been logged, it was subsequently plugged back to the 9-5/8" casing shoe, where upon the well status reverted to 31/2-18.

The well was temporary plugged and abandoned as an oil and gas well.

## TESTING:

No DST tests were performed in this well.

# Geological Tops.

## Well: 31/2-18 A.

Depth m (RKB).

Rogaland Group	1470.0
Lista Fm	1470.0
Våle Fm	1497.0
Viking Group	1529.6
Sognefjord Fm	1529.6
Heather Fm	1654.5
Fensfjord Fm	1706.3
Krossfjord Fm	1915.5
T.D.	2005.0