

Well no : 6407/10-2 Operator : HYDRO

Coordinates : 64° 13' 44.34" N UTM coord. : 712383287 N
07° 16' 54.02" E 41664487 E

Licence no : 132 Permit no : 633

Rig : VILDKAT EXPLORER Rig type : SEMI-SUB.

Contractor : TRANSNOR RIG AS

Bottom hole temp: 103 °C Elev. KB : 25 M

Spud. date : 90.05.03 Water depth : 334 M

Compl. date : 90.06.23 Total depth : 3825 M

Spud. class : WILDCAT Form. at TD E.JURASSIC

Compl. class : P&A. SHOWS Prod.form. :

Seisloca : NH 8604-808 LINE 270 COLUMN
8604-1420

LICENSEES

10,000000 DEMINEX NORGE AS
20,000000 NORSK HYDRO PRODUKSJON A.S
10,000000 A/S NORSKE SHELL
50,000000 DEN NORSKE STATS OLJESELSKAP A.S
10,000000 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	445,0	36	447,0	
INTERM.	20	1056,0	26	1070,0	1,95
INTERM.	13 3/8	2164,0	17 1/2	2188,0	1,70
OPEN HOLE		3825,0	12 1/4	3825,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery	
		M	%
1	3446,0 - 3457,2	11,2	100,0
2	3682,0 - 3694,0	12,0	100,0

MUD

Depth	Mud weight	Visc.	Mud type
448,000	1,07		WATER BASED
808,000	1,10		WATER BASED
1070,000	1,07		WATER BASED
1070,000	1,10		WATER BASED
1070,000	1,07		WATER BASED
1177,000	1,45	11,0	WATER BASED
1656,000	1,60	24,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
1969,000	1,59	26,0	WATER BASED
2040,000	1,32	17,0	WATER BASED
2168,000	1,60	25,0	WATER BASED
2188,000	1,59	32,0	WATER BASED
2590,000	1,38	23,0	WATER BASED
2656,000	1,39	18,0	WATER BASED
3357,000	1,38	24,0	WATER BASED
3370,000	1,32	17,0	WATER BASED
3806,000	1,38	19,0	WATER BASED
3825,000	1,32	17,0	WATER BASED
3825,000	1,38	19,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	1080 - 3825	360
CUTTINGS	1080 - 3825	390

SHALLOW GAS

Interval below KB	Remarks
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AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
FMS GR AMS	2163,0 - 3828,0	X		
AMS	2163,0 - 3806,0		X	
CBL VDL GR CCL	1680,0 - 2162,0	X		
DIS LSS GR SP	1054,0 - 2185,5	X	X	
LSS GR	2163,0 - 3250,0	X	X	
DIL SP SGR CALI	2163,0 - 3828,0	X	X	
LDL GR CALI	1054,0 - 2164,5	X	X	
LDL CNL SGR	2163,0 - 3818,0	X	X	
MUD	1000,0 - 3825,0		X	
MWD LOG	359,0 - 3825,0		X	
NGL RATIOS	2163,0 - 3809,0	X	X	
RFT HP	2383,0 - 3779,7		X	
SDT GR AMS	3030,0 - 3826,0	X	X	
CDM AP /SHDT	2170,0 - 3825,0	X	X	

Log type	Intervals	1/200	1/500	Div.
VELOCITY	1200,0 - 3810,0		X	1:1000
SYNTHETIC SEISMOGRAM	10 cm/s -			2
TWO WAY TRAVEL TIME	10 cm/s - 20 cm/s			9
V.S.P.	10 cm/s - 20 cm/s			2

Main operations for well: 6407/10-2**Main operation: DRILLING**

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	1590	26,5	2,98
BOP/WELLHEAD EQ	1350	22,5	2,53
CASING	4440	74,0	8,32
CIRC/COND	2910	48,5	5,46
DRILL	29670	494,5	55,62
HOLE OPEN	1620	27,0	3,04
OTHER	150	2,5	0,28
REAM	570	9,5	1,07
TRIP	10770	179,5	20,19
WAIT	270	4,5	0,51
Total	53340	889,0	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	570	9,5	4,71
CIRC/COND	780	13,0	6,45
CORE	1200	20,0	9,93
LOG	5490	91,5	45,41
TRIP	3420	57,0	28,29
WAIT	630	10,5	5,21
Total	12090	201,5	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	180	3,0	3,53
LOST CIRC	120	2,0	2,35
MAINTAIN/REP	4620	77,0	90,59
OTHER	150	2,5	2,94
WELL CONTROL	30	0,5	0,59
Total	5100	85,0	100,00

Main operation: MOVING

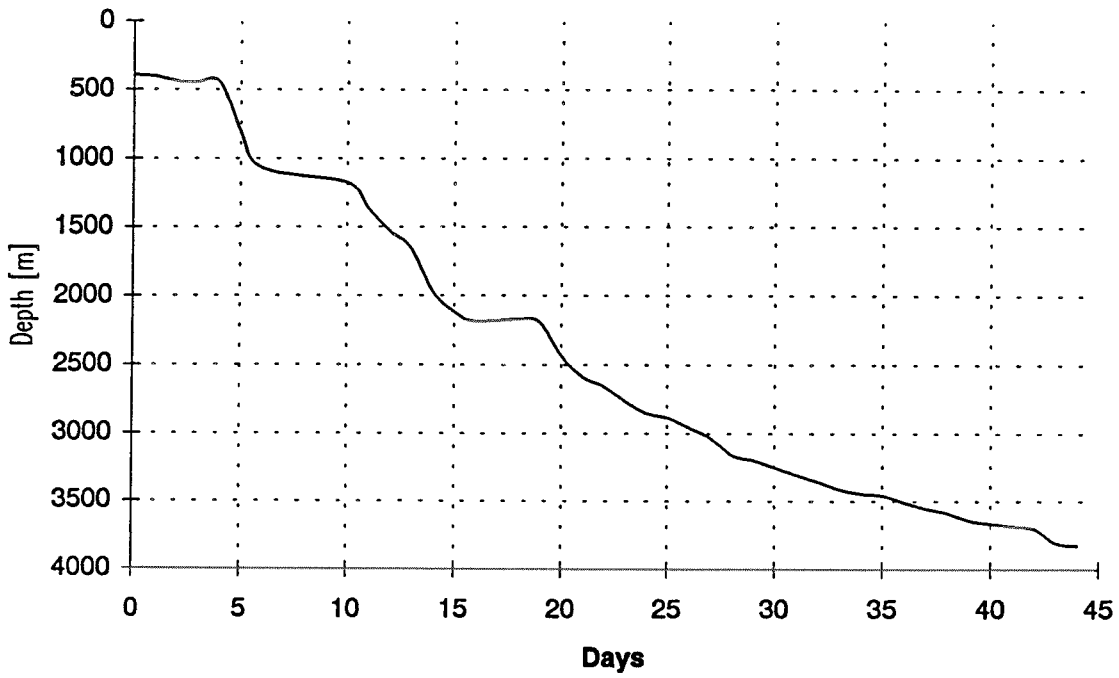
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	3360	56,0	35,44
TRANSIT	6120	102,0	64,56
Total	9480	158,0	100,00

Main operation: PLUG & ABANDON

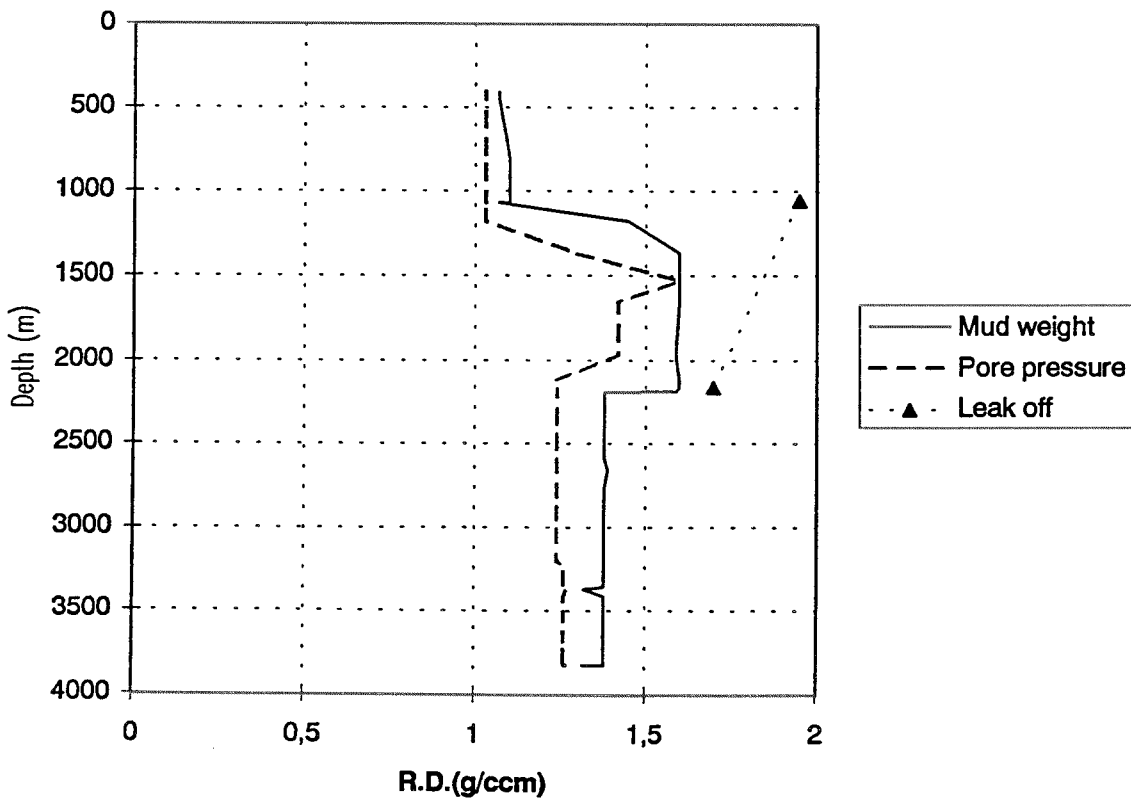
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	600	10,0	12,12
CIRC/COND	90	1,5	1,82
CUT	300	5,0	6,06
EQUIP RECOVERY	750	12,5	15,15
OTHER	270	4,5	5,45
PERFORATE	150	2,5	3,03
SQUEEZE	270	4,5	5,45
TRIP	2520	42,0	50,91
Total	4950	82,5	100,00

Total time used: Hours

Depth vs time for well: 6407/10-2



Composite plot for well: 6407/10-2



Well History 6407/10-2.

General:

Well 6407/10-2 was drilled on the B-II structure south-east of the Njord Field, and is characterized by a prominent hanging wall anticline and syncline off the Trondelag Platform and shows little tectonic disturbance as seen on seismic sections. From tectonic model inferred in the area, the tectonic damage to the reservoir rocks was expected to be less than previously encountered in the A-Central and the A-North areas. Movements along the main fault during the Late Jurassic caused sedimentation of Triassic and / or Middle and Early Jurassic clastics of delta fan type. Source rock for B-II area was the mature part of the Spekk Formation. Possible shallow gas might be present some 30 - 40 m below sea-level. One core would be taken in each of the Garn, Ile and Tilje formations. The main objectives for the well were to:

- assess the reservoir quality and hydrocarbon potential of the Garn formation.
- assess the prospectivity of the Ile- and Tilje formations and the Late Jurassic sequence.
- obtain reservoir pressure.
- confirm the seismic and geological model.
- assess the presence of sands in the Early Cretaceous sequence.

Prognosed TD was 3700 m RKB in the upper part of the Tilje formation, or alternatively 4040 m RKB in Triassic strata.

Operations:

Wildcat well 6407/10-2 was spudded 3 May 1990 by the semi-submersible rig Vildkat Explorer, and completed 23 June 1990 at a depth of 3825 m RKB in rocks of Early Jurassic age, of the Tilje formation sandstones. No shallow gas was encountered in this well. The Garn formation was not present at the well location. Hydrocarbons were absent in both the Ile- and Tilje formations. There was no significant sand body development in the Cretaceous succession. A total of 180 sidewall cores were attempted in three runs, and 104 cores were recovered. Two conventional cores were cut in the Ile- and Tilje formations. Apart from some difficulties during logging, drilling went on without any significant problems to TD. The well was permanently plugged and abandoned as a dry well.

Testing:

No DST tests were performed in this well.

Geological Tops.

Well:6407/10-2.

	Depth m (RKB).
Nordland Group	359,0
Naust Fm	359,0
Kai Fm	1009,0
Hordaland Group	1105,0
Brygge Fm	1105,0
Rogaland Group	1627,0
Tare Fm	1627,0
Tang Fm	1689,0
Shetland Group	1877,0
Springar Fm	1877,0
Nise Fm	2074,0
Kvitnos Fm	2099,0
Cromer Knoll Group	2377,5
Lysing Fm	2377,5
Lange Fm	2386,0
Lyr Fm	2770,0
Viking Group	2821,0
Spekk Fm	2821,0
Rogn Fm. Eqv.	2829,5
Melke Fm	2966,0
Fangst Group	3327,0
Not Fm	3327,0
Ile Fm	3436,0
Båt Group	3479,0
Ror Fm	3479,0
Tilje Fm	3678,5
T.D.	3825,0