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### **General information**

Wellbore name	6507/7-5 A			
Туре	EXPLORATION			
Purpose	APPRAISAL			
Status	P&A			
Factmaps in new window	link to map			
Main area	NORWEGIAN SEA			
Field	<u>HEIDRUN</u>			
Discovery	6507/7-2 Heidrun			
Well name	6507/7-5			
Seismic location	CN 8502 - 599 SP. 225			
Production licence	095			
Drilling operator	Conoco Norway Inc.			
Drill permit	505-L			
Drilling facility	NORTRYM			
Drilling days	31			
Entered date	06.03.1986			
Completed date	05.04.1986			
Release date	05.04.1988			
Publication date	17.09.2007			
Purpose - planned	APPRAISAL			
Reentry	NO			
Content	OIL/GAS			
Discovery wellbore	NO			
1st level with HC, age	MIDDLE JURASSIC			
1st level with HC, formation	FANGST GP			
2nd level with HC, age	EARLY JURASSIC			
2nd level with HC, formation	BÅT GP			
Kelly bushing elevation [m]	25.0			
Water depth [m]	331.0			
Total depth (MD) [m RKB]	2673.0			
Final vertical depth (TVD) [m RKB]	2525.0			
Maximum inclination [°]	30.9			
Bottom hole temperature [°C]	63			
Oldest penetrated age	EARLY JURASSIC			
Oldest penetrated formation	TILJE FM			
Geodetic datum	ED50			
NS degrees	65° 21' 30.27'' N			
EW degrees	7° 17' 35.08'' E			



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NS UTM [m]	7249656.78
EW UTM [m]	420590.94
UTM zone	32
NPDID wellbore	860

#### Wellbore history

#### General

Well 6507/7-5 A is located on the northern part of the Halten Terrace off shore Mid Norway and was drilled to appraise the northern extension of the 6507/7-2 Heidrun Discovery. Well 6507/7-5 A was drilled as a geological sidetrack from the 6507/7-5 well to further evaluate and appraise the Middle and Lower Jurassic sands in a downthrown fault block adjacent to, and NNW of the one tested by the 6507/7-5 well. Prognosed TD was at 2721 m MD RKB.

#### Operations and results

Appraisal well 6507/7-5 A was spudded the semi-submersible installation Nortrym on 6 March 1986. The well was drilled deviated from 6507/7-5 with kick-off point at 1100 m in the 6507/7-5 well and reached its TD at 2673 m in the Early Jurassic Tilje Formation. TD location was approximately 640 m NNW from the top hole location. No shallow gas was recorded during drilling. Due to technical problems, prognosed depth was not reached. The drill string became differentially stuck during a connection 9 m off bottom. After 7 days of fishing, the string was backed off, leaving a 387 m fish in the hole. Hence there were no final logs run on this well. Two days were spent waiting for weather. The well was drilled with KCl/polymer mud from kick-off to TD.

The well proved an even longer hiatus in this well than in well 6507/7-5: from the Late Cretaceous Turonian to the Middle Jurassic Aalenian/Bajocian. Hence, no Late Jurassic sediments were encountered. The Fangst Group, Garn Formation, came in at 2554.5 m (2420.6 m TVD RKB) and the Båt Group at 2582.5 m (2445.2 m TVD), with top Tilje Formation at 2598.0 m (2458.8 m TVD). Analysis of cores indicated good to excellent porosity and permeability with shows.

Poor to moderate shows occurred in siltstone and sandstone samples from the Cretaceous between 2300 and down to top Jurassic. In the Fangst Group oil shows appeared first at 2560 m, ca 3 m down from the top of core no 1 and 5 m below top Garn Formation. A transitional zone of increasingly strong oil shows followed down to 2563 m from where good shows persisted down to 2629 m ca 13 m TVD into the Tilje Formation. An oil-down-to contact was thus indicated at this level, supported by logs. However, since no RFT was run and occasional oil shows were observed in sandstone and siltstone fragments down to TD the hydrocarbon contact remained unclear.

Coring commenced at 2557 m, and 6 cores were cut in the interval 2557 - 2629.6 m. No fluid samples were taken on wire line.

The well was permanently abandoned on 5 April 1986 as a dry well. The well was plugged and abandoned as an oil and gas appraisal, with possible communication between the Fangst and Båt Groups.

#### **Testing**

No drill stem test was performed.



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### **Cuttings at the Norwegian Offshore Directorate**

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]	
1100.00	2668.00	

Cuttings available for sampling?	YES
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#### **Cores at the Norwegian Offshore Directorate**

Core sample number	Core sample - top depth	Core sample - bottom depth	
1	2557.0	2568.8	[m ]
2	2572.0	2572.9	[m ]
3	2573.0	2592.3	[m ]
4	2595.0	2610.1	[m ]
5	2611.7	2622.5	[m ]
6	2622.5	2629.6	[m ]

Total core sample length [m]	65.0
Cores available for sampling?	YES

### Lithostratigraphy

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Top depth [mMD RKB]	Lithostrat. unit
356	NORDLAND GP
1491	KAI FM
1966	HORDALAND GP
1966	BRYGGE FM
2083	ROGALAND GP
2083	TARE FM
2117	TANG FM
2188	SHETLAND GP
2555	FANGST GP
2583	<u>BÅT GP</u>
2598	TILJE FM

**Documents - older Norwegian Offshore Directorate WDSS reports and other related documents** 

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Document name	Document format	Document size [MB]
860 01 WDSS General Information	pdf	0.23
860 02 WDSS completion log	pdf	0.18

### Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
860 01 Completion Report	pdf	8.03
860 02 Completion log	pdf	1.42

#### Logs

Log type	Log top depth [m]	Log bottom depth [m]
HRT CCL	355	2160
ISF BHC GR SP	2186	2569
ISF SLS MSFL GR	1032	2432
ISF SLS MSFL GR	1032	2196
MWD - GR RES DIR	1434	2673

### Casing and leak-off tests

Casing type	Casing diam. [inch]	Casing depth [m]	Hole diam. [inch]	Hole depth [m]	LOT/FIT mud eqv. [g/cm3]	Formation test type
SURF.COND.	20	1033.0	26	1098.0	1.58	LOT
INTERM.	13 3/8	2189.0	17 1/2	2201.0	1.69	LOT

### **Drilling mud**

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Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1098	1.38	33.5	622.4	WATER BASED	07.03.1986
1110	1.38	33.5	622.4	WATER BASED	09.03.1986
1498	1.39	73.5	622.4	WATER BASED	11.03.1986
1916	1.42	73.5	622.4	WATER BASED	12.03.1986
2051	1.39	73.5	622.4	WATER BASED	17.03.1986
2198	1.40	73.5	622.4	WATER BASED	17.03.1986
2201	1.27	73.5	622.4	WATER BASED	15.03.1986

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2478	1.27	73.5	622.4	WATER BASED	19.03.1986
2572	1.30	26.0	21.0	WATER BASED	21.03.1986
2634	1.30	22.0	18.0	WATER BASED	24.03.1986
2673	1.33	18.0	22.0	WATER BASED	24.03.1986
2673	1.03	18.0	23.0	WATER BASED	08.04.1986