

**General information**

Wellbore name	7228/2-1 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	BARENTS SEA
Well name	7228/2-1
Seismic location	MN 89 - 603 SP 548
Production licence	160
Drilling operator	Mobil Development Norway AS
Drill permit	616-L
Drilling facility	ROSS RIG (2)
Drilling days	122
Entered date	21.08.1989
Completed date	20.12.1989
Release date	20.12.1991
Publication date	02.12.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	23.5
Water depth [m]	349.5
Total depth (MD) [m RKB]	4300.0
Final vertical depth (TVD) [m RKB]	4000.0
Maximum inclination [°]	38.6
Bottom hole temperature [°C]	130
Oldest penetrated age	EARLY TRIASSIC
Oldest penetrated formation	HAVERT FM
Geodetic datum	ED50
NS degrees	72° 51' 9.75" N
EW degrees	28° 26' 29.61" E
NS UTM [m]	8084841.65
EW UTM [m]	547436.90
UTM zone	35
NPDID wellbore	1460



Wellbore history

General

Well 7228/2-1 S is located on the western margin of the Nordkapp Basin close to the Nyslepp Fault Complex. It was designed to drill a large salt induced anticline that is bisected by a major north - south trending fault. Due to the large Triassic throw on the fault, the up-thrown and downthrown parts of the structure were thought to represent separate prospects. The downthrown prospect seemed to have the thickest accumulation of Triassic Anisian/Early Ladinian deposits, and was the primary objective of the well. Secondary objectives were other Middle/Upper Triassic and Jurassic sandstones. To be able to meet all obligations and at the same time test the primary objective without leaving significant potential up-dip, the well path was planned deviated at approximately 30 degrees in a northeasterly direction along seismic line MN89-603. Several reflectors in the interval 397 m to 593 m were thought to represent sand layers with possible shallow gas. The strongest amplitude anomaly was at 435 m.

Operations and results

Wildcat well 7228/2-1 S was spudded with the semi-submersible rig Ross Rig 21 August 1989 and drilled to TD at 4300 m in the Early Triassic Havert Formation. The well was deviated from 1475 m. At 2902 m the bottom hole assembly was lost in the hole, and the well had to be sidetracked from 2700 m. The well was drilled with seawater and hi-vis pills down to 1013 m, with KCl / polymer from 1013 m to 2206 m, with lignosulphonate from 2206 m to 3663 m, and with KCl / polymer from 3663 m to TD. No shallow gas was encountered in the well.

Reservoir quality sands were found in the Jurassic and uppermost Triassic Stø, Nordmela, Tubåen, Fruholmen, and Snadd formations. Of these the Nordmela and Tubåen sands had the best properties. The Nordmela has 32.6 m of net sand but it is silty in places. Average porosity is 17% but Vsh is relatively high at 27 %. Porosity in clean sand is greater than 20 %. The Tubåen Formation has 45 m of net sand, which varies in reservoir quality from fair to excellent. The top of the sand is silty or shaly but clean high porosity sands are found at the base. Core 3 from 1384 m to 1388 m (drillers depth) has an average measured porosity of 22 %. These sands have the best reservoir quality in the entire well. Average porosity for the Tubåen is 19 %. Klinkenberg corrected permeabilities from core data are mostly between 1.5 and 2.5 Darcies. With the good porosity and permeability the sand has excellent flow potential. The sandstones of the primary objective (Kobbe Formation) were poorly developed and of poor quality.

Hydrocarbon shows in the Stø and Nordmela formations are seen in both the Core 2 and petrophysical evaluation. The shows in the petrophysical evaluation decrease as the sand quality improves. As such, both the log and core analysis shows that the oil in core 2 is probably residual. Only occasional patchy traces of residual oil were recorded below 1342 m in the Tubåen, Fruholmen and Snadd formations. Gas levels never exceeded 6 % in this section and consisted predominantly of C1 with some C2 and C3. On penetrating a friable fine grained sandstone at 3401 m (drilled depth), in the Kobbe Formation total gas rose to a maximum of 24.1% at 3423 m. The gas was composed of 190159 ppm C1, 10364 ppm C2, 2200 ppm C3, 1192 ppm IC4 and 1040 ppm NC4. No shows were seen in these samples and gas levels decreased to an average of 4.5 % below 3430 m, composed mainly of C1 with subordinate amounts of C2 and C3.

From organic geochemical analyses there appears to be a mixture of condensate and residual oil present in the Stø, Nordmela and upper Tubåen Formations. These residual oils are severely biodegraded. The Hekkingen Formation is the most significant source rock interval with TOC in the range 1 % to 8 % and type II kerogen, however also Snadd and Kobbe formations contain significant source intervals with both gas- and oil-prone kerogen.



Five conventional cores were cut on the well with good recovery in each case. Cores number 1 and 4, cut in the Late Jurassic Hekkingen and Middle Triassic Snadd Formations respectively, consisted of claystones and were taken for source and cap rock studies. Core 1 was consumed in these analyses and is no longer available from the NPD. Core 2 was cut in sandstones of the Middle Jurassic Stø Formation. The third core was cut in sandstones of the Early Jurassic Tubåen Formation and the fifth core in siltstones of the Early Triassic Havert Formation. The core-to-log shifts were significant: +3.0 m for core 1, +3.4 m for core 2, +3.8 m for core 3, +6.0 m for core 4, and +9.8 m for core 5.

RFT measurements indicate moderate to good permeabilities in the Realgrunnen Group and the uppermost Snadd Formation. A segregated sample was taken from the Nordmela Formation at 1310 m but later analysis showed it to consist of mud filtrate. A total of 334 sidewall cores were attempted whereof 238 were recovered.

Well 7228/2-1 S was permanently abandoned on 20 December 1989 as dry with shows.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1080.00	4300.00

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	Core sample depth - uom
2	1286.3	1295.5	[m]
3	1384.0	1387.5	[m]
4	2315.0	2320.8	[m]
5	4189.0	4198.3	[m]

Total core sample length [m]	27.8
Cores available for sampling?	YES

Core photos



1286-1291m



1291-1295m



1384-1387m



4189-4194m



4194-4198m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
480.5	[m]	SWC	RRI
500.0	[m]	SWC	RRI
500.0	[m]	DC	MOBIL
540.0	[m]	SWC	RRI
560.0	[m]	SWC	RRI
580.0	[m]	SWC	RRI
600.0	[m]	SWC	RRI
608.5	[m]	SWC	RRI
620.5	[m]	SWC	RRI
630.0	[m]	SWC	RRI
640.0	[m]	SWC	RRI
660.0	[m]	SWC	RRI
680.0	[m]	SWC	RRI
700.0	[m]	SWC	RRI
707.0	[m]	SWC	RRI
720.0	[m]	SWC	RRI
740.0	[m]	SWC	RRI
760.0	[m]	SWC	RRI
780.0	[m]	SWC	RRI
800.0	[m]	SWC	RRI
820.0	[m]	SWC	RRI
820.0	[m]	DC	MOBIL
840.0	[m]	SWC	RRI
860.0	[m]	SWC	RRI
880.0	[m]	SWC	RRI
900.0	[m]	SWC	RRI
920.0	[m]	SWC	RRI
940.0	[m]	SWC	RRI
960.0	[m]	SWC	RRI



980.0 [m]	SWC	RRI
1000.0 [m]	SWC	RRI
1005.0 [m]	SWC	RRI
1018.0 [m]	DC	RRI
1025.0 [m]	SWC	RRI
1030.0 [m]	DC	RRI
1040.0 [m]	SWC	RRI
1050.0 [m]	SWC	RRI
1060.0 [m]	DC	RRI
1075.0 [m]	SWC	RRI
1095.0 [m]	SWC	RRI
1095.0 [m]	DC	MOBIL
1105.0 [m]	SWC	RRI
1115.0 [m]	SWC	RRI
1125.0 [m]	SWC	RRI
1135.0 [m]	DC	RRI
1145.0 [m]	SWC	RRI
1166.5 [m]	SWC	RRI
1166.5 [m]	DC	MOBIL
1171.0 [m]	DC	RRI
1172.2 [m]	DC	MOBIL
1174.2 [m]	DC	MOBIL
1180.0 [m]	DC	RRI
1182.5 [m]	SWC	RRI
1189.0 [m]	DC	RRI
1195.0 [m]	DC	RRI
1198.0 [m]	DC	RRI
1204.0 [m]	DC	RRI
1205.0 [m]	SWC	RRI
1210.0 [m]	SWC	RRI
1216.0 [m]	DC	RRI
1225.0 [m]	SWC	RRI
1225.0 [m]	DC	MOBIL
1240.0 [m]	DC	RRI
1248.5 [m]	SWC	RRI
1255.0 [m]	SWC	RRI
1264.0 [m]	DC	RRI
1275.0 [m]	SWC	RRI
1275.0 [m]	DC	MOBIL
1279.0 [m]	DC	RRI



1286.3 [m]	C	RRI
1287.7 [m]	C	RRI
1289.0 [m]	C	RRI
1289.0 [m]	C	ICHRON
1294.0 [m]	C	RRI
1295.5 [m]	C	RRI
1300.0 [m]	SWC	RRI
1316.5 [m]	SWC	RRI
1324.0 [m]	DC	RRI
1339.0 [m]	DC	RRI
1347.0 [m]	SWC	RRI
1367.0 [m]	SWC	RRI
1375.5 [m]	SWC	RRI
1378.0 [m]	SWC	RRI
1378.0 [m]	DC	MOBIL
1381.0 [m]	DC	RRI
1384.0 [m]	C	RRI
1384.5 [m]	C	OD
1385.0 [m]	C	RRI
1386.3 [m]	C	OD
1387.5 [m]	C	RRI
1396.0 [m]	DC	RRI
1405.0 [m]	SWC	RRI
1405.0 [m]	C	UIB
1411.0 [m]	DC	RRI
1419.0 [m]	SWC	RRI
1419.0 [m]	DC	MOBIL
1426.0 [m]	C	UIB
1436.5 [m]	C	RRI
1438.0 [m]	C	UIB
1459.0 [m]	C	UIB
1464.0 [m]	SWC	RRI
1477.0 [m]	DC	RRI
1489.5 [m]	C	OD
1491.5 [m]	C	OD
1493.5 [m]	C	OD
1494.0 [m]	SWC	RRI
1494.0 [m]	DC	MOBIL
1495.5 [m]	C	OD
1498.1 [m]	C	OD



1512.0 [m]	SWC	RRI
1522.0 [m]	C	UIB
1533.0 [m]	SWC	RRI
1543.0 [m]	C	UIB
1549.0 [m]	DC	RRI
1570.0 [m]	SWC	RRI
1592.0 [m]	SWC	RRI
1592.0 [m]	DC	MOBIL
1603.0 [m]	DC	RRI
1619.0 [m]	SWC	RRI
1640.0 [m]	SWC	RRI
1657.0 [m]	DC	RRI
1672.0 [m]	SWC	RRI
1672.0 [m]	DC	MOBIL
1693.0 [m]	DC	RRI
1704.0 [m]	SWC	RRI
1729.0 [m]	DC	RRI
1735.5 [m]	SWC	RRI
1735.5 [m]	DC	MOBIL
1753.0 [m]	DC	RRI
1766.5 [m]	SWC	RRI
1772.0 [m]	SWC	RRI
1790.0 [m]	SWC	RRI
1790.0 [m]	DC	MOBIL
1801.0 [m]	DC	RRI
1811.0 [m]	SWC	RRI
1832.5 [m]	SWC	RRI
1832.5 [m]	DC	MOBIL
1852.0 [m]	SWC	RRI
1873.0 [m]	DC	RRI
1883.0 [m]	SWC	RRI
1883.0 [m]	DC	MOBIL
1891.0 [m]	DC	RRI
1911.0 [m]	SWC	RRI
1921.0 [m]	SWC	RRI
1930.0 [m]	SWC	RRI
1945.0 [m]	DC	RRI
1963.0 [m]	SWC	RRI
1963.0 [m]	DC	MOBIL
1975.0 [m]	SWC	RRI



1981.0	[m]	DC	RRI
1999.0	[m]	DC	RRI
2003.0	[m]	SWC	RRI
2030.0	[m]	SWC	RRI
2030.0	[m]	DC	MOBIL
2042.0	[m]	SWC	RRI
2059.0	[m]	DC	RRI
2072.0	[m]	SWC	RRI
2093.0	[m]	SWC	RRI
2093.0	[m]	DC	MOBIL
2103.0	[m]	SWC	RRI
2122.0	[m]	DC	MOBIL
2125.0	[m]	DC	RRI
2138.0	[m]	SWC	RRI
2150.0	[m]	SWC	RRI
2161.5	[m]	SWC	RRI
2161.5	[m]	DC	MOBIL
2176.0	[m]	DC	RRI
2187.5	[m]	SWC	RRI
2194.0	[m]	DC	RRI
2195.0	[m]	SWC	RRI
2215.0	[m]	DC	RRI
2238.0	[m]	SWC	RRI
2238.0	[m]	DC	MOBIL
2245.1	[m]	SWC	RRI
2250.0	[m]	SWC	RRI
2276.0	[m]	SWC	RRI
2287.0	[m]	DC	RRI
2305.0	[m]	DC	RRI
2316.0	[m]	DC	MOBIL
2316.9	[m]	C	ICHRON
2325.0	[m]	SWC	RRI
2346.5	[m]	SWC	RRI
2362.0	[m]	DC	RRI
2387.7	[m]	SWC	RRI
2402.0	[m]	SWC	RRI
2416.0	[m]	DC	RRI
2434.0	[m]	DC	RRI
2443.7	[m]	SWC	RRI
2443.7	[m]	DC	MOBIL



2477.5 [m]	SWC	RRI
2488.0 [m]	DC	RRI
2498.0 [m]	SWC	RRI
2524.0 [m]	DC	RRI
2542.0 [m]	DC	RRI
2560.0 [m]	DC	RRI
2566.1 [m]	C	MOBIL
2572.0 [m]	SWC	RRI
2594.5 [m]	SWC	RRI
2622.1 [m]	SWC	RRI
2632.0 [m]	DC	RRI
2656.5 [m]	SWC	RRI
2668.0 [m]	DC	RRI
2686.0 [m]	DC	RRI
2688.1 [m]	C	MOBIL
2704.0 [m]	SWC	RRI
2717.5 [m]	SWC	RRI
2748.5 [m]	SWC	RRI
2758.0 [m]	DC	RRI
2774.0 [m]	SWC	RRI
2794.0 [m]	DC	RRI
2810.5 [m]	SWC	MOBIL
2810.5 [m]	SWC	RRI
2823.0 [m]	SWC	RRI
2848.0 [m]	DC	RRI
2861.5 [m]	SWC	RRI
2888.1 [m]	SWC	RRI
2888.1 [m]	C	MOBIL
2902.0 [m]	DC	RRI
2920.0 [m]	DC	RRI
2944.0 [m]	SWC	RRI
2956.0 [m]	DC	RRI
2971.0 [m]	SWC	RRI
2995.3 [m]	SWC	RRI
2995.3 [m]	C	MOBIL
3010.0 [m]	DC	RRI
3019.0 [m]	SWC	RRI
3028.0 [m]	DC	RRI
3038.5 [m]	SWC	RRI
3064.0 [m]	DC	RRI



3077.0	[m]	SWC	RRI
3082.0	[m]	DC	RRI
3100.0	[m]	DC	RRI
3121.0	[m]	DC	RRI
3121.0	[m]	DC	MOBIL
3130.0	[m]	SWC	RRI
3142.5	[m]	SWC	RRI
3164.5	[m]	SWC	RRI
3172.0	[m]	DC	RRI
3184.4	[m]	SWC	RRI
3205.0	[m]	DC	RRI
3226.0	[m]	DC	RRI
3232.0	[m]	DC	RRI
3234.0	[m]	SWC	RRI
3259.0	[m]	DC	RRI
3280.0	[m]	DC	RRI
3296.5	[m]	SWC	RRI
3296.5	[m]	SWC	MOBIL
3318.0	[m]	SWC	RRI
3334.0	[m]	DC	RRI
3349.0	[m]	DC	RRI
3370.0	[m]	DC	RRI
3388.0	[m]	DC	RRI
3397.0	[m]	SWC	RRI
3406.0	[m]	DC	RRI
3421.1	[m]	SWC	RRI
3442.0	[m]	DC	RRI
3460.0	[m]	DC	RRI
3473.0	[m]	SWC	RRI
3478.0	[m]	DC	RRI
3496.0	[m]	DC	RRI
3506.0	[m]	SWC	RRI
3506.0	[m]	DC	MOBIL
3514.0	[m]	DC	RRI
3523.5	[m]	SWC	RRI
3529.0	[m]	DC	RRI
3535.0	[m]	DC	RRI
3543.0	[m]	SWC	RRI
3563.0	[m]	SWC	RRI
3584.0	[m]	SWC	RRI



3591.5	[m]	SWC	RRI
3598.0	[m]	DC	RRI
3602.0	[m]	SWC	RRI
3625.1	[m]	SWC	RRI
3625.1	[m]	C	MOBIL
3684.0	[m]	SWC	RRI
3714.0	[m]	SWC	RRI
3725.0	[m]	SWC	RRI
3752.0	[m]	SWC	RRI
3766.5	[m]	SWC	RRI
3817.0	[m]	SWC	RRI
3828.0	[m]	SWC	RRI
3846.0	[m]	SWC	RRI
3865.0	[m]	SWC	RRI
3904.0	[m]	SWC	RRI
3919.0	[m]	DC	RRI
3928.0	[m]	SWC	RRI
3940.0	[m]	SWC	RRI
3952.0	[m]	DC	RRI
3965.0	[m]	SWC	RRI
3965.0	[m]	DC	MOBIL
3974.0	[m]	SWC	RRI
3997.0	[m]	DC	RRI
4007.5	[m]	SWC	RRI
4012.0	[m]	DC	RRI
4028.0	[m]	SWC	RRI
4033.0	[m]	DC	RRI
4043.0	[m]	SWC	RRI
4066.0	[m]	DC	RRI
4069.0	[m]	SWC	RRI
4080.0	[m]	SWC	RRI
4104.0	[m]	SWC	RRI
4129.0	[m]	SWC	RRI
4155.0	[m]	SWC	RRI
4171.0	[m]	SWC	RRI
4188.0	[m]	DC	RRI
4191.0	[m]	C	ICHRON
4194.0	[m]	SWC	RRI
4196.0	[m]	C	ICHRON
4215.0	[m]	SWC	RRI



4226.0	[m]	SWC	RRI
4242.0	[m]	SWC	RRI
4268.0	[m]	SWC	RRI
4300.0	[m]	SWC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
373	ADVENTDALEN GP
373	KOLMULE FM
1110	KNURR FM
1168	HEKKINGEN FM
1236	FUGLEN FM
1275	KAPP TOSCANA GP
1275	STØ FM
1300	NORDMELA FM
1345	TUBÅEN FM
1404	FRUHOLMEN FM
1523	SNADD FM
2438	SASSENDALEN GP
2438	KOBBE FM
3574	KLAPPMYSS FM
3984	HAVERT FM

Composite logs

Document name	Document format	Document size [MB]
1460	pdf	0.77

Geochemical information

Document name	Document format	Document size [MB]
1460_1	pdf	3.06



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

Document name	Document format	Document size [MB]
1460_01_WDSS_General_Information	pdf	0.25
1460_02_WDSS_completion_log	pdf	0.25

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

Document name	Document format	Document size [MB]
1460_7228_2_1_COMPLETION_REPORT_AND_LOG	pdf	48.46

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CST GR	480	1000
CST GR	1005	2187
CST GR	1005	2150
CST GR	2195	3625
CST GR	2250	3543
CST GR	3563	3602
CST GR	3679	4300
CST GR	3718	4300
DIL BHC GR SP	373	3632
DIL BHC GR SP	1750	4124
DIL BHC GR SP	3636	4310
FMS GR	3637	3670
FMS GR AMS	3636	4311
LDL CNL GR CAL AMS	997	4309
MWD - GR RES DIR	373	4300
RFT HP GR AMS	1290	1922
RFT HP GR AMS	1310	0
RFT HP GR AMS	3885	3892
SHDT GR AMS	997	3635
VSP	500	2510
VSP	1100	4310



**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
CONDUCTOR	30	473.0	36	476.0	0.00	LOT
SURF.COND.	20	997.0	26	1013.0	1.36	LOT
INTERM.	13 3/8	2186.0	17 1/2	2206.0	1.58	LOT
INTERM.	9 5/8	3633.0	12 1/4	3663.0	1.86	LOT
OPEN HOLE		4300.0	8 1/2	4300.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
659	1.38			WATER BASED	01.09.1989
1005	1.03			WATER BASED	01.09.1989
1172	1.20	16.0	18.0	WATER BASED	05.09.1989
1237	1.02	16.0	18.0	WATER BASED	05.09.1989
1296	1.20	13.0	18.0	WATER BASED	06.09.1989
1363	1.20	12.0	17.0	WATER BASED	07.09.1989
1363	1.20	12.0	16.0	WATER BASED	08.09.1989
1363	1.20	13.0	16.0	WATER BASED	11.09.1989
1363	1.20	13.0	15.0	WATER BASED	11.09.1989
1363	1.20	19.0	29.0	WATER BASED	11.09.1989
1384	1.22	19.0	25.0	WATER BASED	12.09.1989
1384	1.27	60.0	35.0	WATER BASED	13.09.1989
1538	1.27	22.0	40.0	WATER BASED	18.09.1989
1576	1.27	19.0	35.0	WATER BASED	18.09.1989
1667	1.27	20.0	34.0	WATER BASED	18.09.1989
1783	1.27	21.0	37.0	WATER BASED	20.09.1989
1847	1.27	17.0	33.0	WATER BASED	20.09.1989
1890	1.27	18.0	28.0	WATER BASED	21.09.1989
1935	1.27	18.0	29.0	WATER BASED	22.09.1989
1990	1.27	18.0	30.0	WATER BASED	25.09.1989
1999	1.26	17.0	28.0	WATER BASED	25.09.1989
2034	1.26	18.0	27.0	WATER BASED	25.09.1989
2059	1.25	18.0	31.0	WATER BASED	26.09.1989
2084	1.25	18.0	31.0	WATER BASED	27.09.1989
2114	1.25	17.0	31.0	WATER BASED	28.09.1989



2135	1.25	16.0	30.0	WATER BASED	29.09.1989
2206	1.26	16.0	28.0	WATER BASED	03.10.1989
2206	1.18	15.0	18.0	WATER BASED	04.10.1989
2206	1.18	16.0	14.0	WATER BASED	05.10.1989
2206	1.18	15.0	16.0	WATER BASED	06.10.1989
2237	1.15	18.0	25.0	WATER BASED	09.10.1989
2258	1.18	19.0	22.0	WATER BASED	09.10.1989
2312	1.18	21.0	26.0	WATER BASED	10.10.1989
2321	1.18	18.0	22.0	WATER BASED	11.10.1989
2439	1.19	17.0	21.0	WATER BASED	12.10.1989
2461	1.19	12.0	19.0	WATER BASED	13.10.1989
2461	1.19	12.0	19.0	WATER BASED	13.10.1989
2488	1.20	13.0	19.0	WATER BASED	16.10.1989
2536	1.20	13.0	19.0	WATER BASED	16.10.1989
2622	1.20	14.0	20.0	WATER BASED	16.10.1989
2701	1.20	15.0	15.0	WATER BASED	27.10.1989
2706	1.20	11.0	14.0	WATER BASED	17.10.1989
2717	1.20	17.0	15.0	WATER BASED	30.10.1989
2749	1.20	16.0	18.0	WATER BASED	30.10.1989
2800	1.20	17.0	19.0	WATER BASED	18.10.1989
2816	1.20	15.0	13.0	WATER BASED	19.10.1989
2845	1.20	16.0	18.0	WATER BASED	30.10.1989
2890	1.20	17.0	17.0	WATER BASED	31.10.1989
2902	1.20	14.0	15.0	WATER BASED	23.10.1989
2902	1.20	15.0	15.0	WATER BASED	23.10.1989
2902	1.20	14.0	15.0	WATER BASED	23.10.1989
2902	1.20	15.0	15.0	WATER BASED	23.10.1989
2902	1.20	16.0	15.0	WATER BASED	24.10.1989
2953	1.20	14.0	15.0	WATER BASED	01.11.1989
3026	1.20	12.0	16.0	WATER BASED	02.11.1989
3070	1.20	12.0	15.0	WATER BASED	03.11.1989
3100	1.20	15.0	17.0	WATER BASED	06.11.1989
3150	1.20	14.0	16.0	WATER BASED	06.11.1989
3165	1.20	14.0	16.0	WATER BASED	06.11.1989
3206	1.20	15.0	17.0	WATER BASED	07.11.1989
3277	1.20	15.0	15.0	WATER BASED	08.11.1989
3354	1.24	16.0	18.0	WATER BASED	09.11.1989
3359	1.24	19.0	19.0	WATER BASED	10.11.1989
3419	1.24	15.0	18.0	WATER BASED	13.11.1989
3474	1.32	16.0	18.0	WATER BASED	13.11.1989



3474	1.32	16.0	18.0	WATER BASED	13.11.1989
3515	1.32	15.0	17.0	WATER BASED	14.11.1989
3587	1.34	15.0	18.0	WATER BASED	15.11.1989
3602	1.33	15.0	16.0	WATER BASED	16.11.1989
3605	1.33	15.0	18.0	WATER BASED	17.11.1989
3605	1.33	14.0	17.0	WATER BASED	20.11.1989
3611	1.38	15.0	15.0	WATER BASED	20.11.1989
3617	1.38	13.0	17.0	WATER BASED	20.11.1989
3654	1.38	15.0	17.0	WATER BASED	21.11.1989
3663	1.39	16.0	19.0	WATER BASED	22.11.1989
3663	1.44	17.0	19.0	WATER BASED	23.11.1989
3663	1.44	18.0	22.0	WATER BASED	24.11.1989
3663	1.44	19.0	18.0	WATER BASED	27.11.1989
3663	1.44	18.0	19.0	WATER BASED	27.11.1989
3663	1.44	16.0	19.0	WATER BASED	28.11.1989
3663	1.44	16.0	18.0	WATER BASED	29.11.1989
3663	1.44	18.0	16.0	WATER BASED	30.11.1989
3663	1.44	16.0	18.0	WATER BASED	27.11.1989
3671	1.44	20.0	15.0	WATER BASED	01.12.1989
3697	1.44	15.0	20.0	WATER BASED	04.12.1989
3860	1.44	17.0	13.0	WATER BASED	04.12.1989
3964	1.44	16.0	13.0	WATER BASED	04.12.1989
4002	1.45	20.0	14.0	WATER BASED	05.12.1989
4131	1.44	22.0	13.0	WATER BASED	06.12.1989
4189	1.46	23.0	15.0	WATER BASED	08.12.1989
4199	1.46	23.1	14.0	WATER BASED	08.12.1989
4280	1.46	26.0	13.0	WATER BASED	11.12.1989
4300	1.46	25.0	14.0	WATER BASED	11.12.1989
4300	1.46	26.0	19.0	WATER BASED	15.12.1989

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
1286.75	[m]
1288.50	[m]
1292.50	[m]
1385.25	[m]
1387.00	[m]

**Pressure plots**

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
1460 Formation pressure (Formasjonstrykk)	pdf	0.22

