Generell informasjon

Brønnbane navn	15/12-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	15/12-1
Seismisk lokalisering	LINE 511 138- 1975 SP.100
Utvinningstillatelse	038
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	132-L
Boreinnretning	ROSS RIG (1)
Boredager	62
Borestart	07.07.1975
Boreslutt	06.09.1975
Frigitt dato	06.09.1977
Publiseringsdato	24.09.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	24.4
Vanndybde ved midlere havflate [m]	95.0
Totalt målt dybde (MD) [m RKB]	3269.0
Totalt vertikalt dybde (TVD) [m RKB]	3269.0
Temperatur ved bunn av brønnbanen [°C]	113
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50
NS grader	58° 10' 32.6'' N
ØV grader	1° 44' 23.1'' E
NS UTM [m]	6449113.79
ØV UTM [m]	425871.87
UTM sone	31
NPDID for brønnbanen	94

Brønnhistorie

General

Well 15/12-1 was drilled in order to evaluate the Paleocene and Jurassic formations on a closed structure 5 km northeast of the Maureen Field which is located just across the UK-Norwegian median line in UK territory. The principle objectives of the 15/12-1 test were the Paleocene and Dogger (Hugin Formation) sandstones where oil accumulations had been proven in the Maureen field 5 km to the southwest on British sector.

The well is Reference Well for the Sleipner Formation.

Operations and results

Wildcat well 15/12-1 was spudded with the semi-submersible installation Ross Rig on 7 July 1975 and drilled to a total depth of 3269 m in Triassic fine-grained sandstone with green and red-brown shale of the Skagerrak Formation. The well was drilled with a lignosulphonate type of mud.

The Paleocene sandstone at 2633 m to 2643 m in 15/12-1 was encountered 6 m lower than in the Maureen no. 2 well. The sandstone is medium to coarse grained with good porosity (26%), but water wet. The Hugin sandstone was encountered some 50 m higher than in the Maureen no. 2 well. Oil shows were encountered on the cores from the Hugin Formation, but log analysis and FIT proved the sandstone to be water bearing. The logs also indicated shows of hydrocarbon in the Late Cretaceous limestone at 2925 - 2955 m, but log porosity was calculated from 0 to 6%, too tight to obtain a sample. The Late Triassic has good sand development that could be adequate for accumulation of hydrocarbons. During the drilling of the Triassic section, the background gas in mud and cuttings was near zero.

Eight cores were cut in the well. Paleocene sands (Lista and Maureen Formations) were cored from 2612.1 m to 2651.1 m. One core was cut in the Heather Formation from 3067 m to 3073.3 m; one core was cut from the Hugin Formation into the Sleipner Formation from 3125.7 m to 3143.7 m. The Sleipner Formation was further cored in three cores down to 3183 m. On the basis of log analysis, two points for FIT tests were picked: one point at 3142.5 m (Ï = 23%, SW = 66%) and one point at 3126.5 m (Ï = 11.2%, SW = 31%). Test l at 3142.5 m produced 0.3 litres mud and 9.9 l water with a light skim of oil. The oil skim probably came from the FIT tools hydraulics. Based on the chloride content the water in the sample probably contained a large proportion of mud filtrate. The other sample was a failure due to tight formation. The well was permanently abandoned as a dry well with shows on 6 September 1975.

Testing

No drill stem test was performed

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
154.53	3267.46

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	8570.0	8578.0	[ft]
2	8579.0	8611.0	[ft]
3	8642.0	8698.0	[ft]
4	10063.0	10083.0	[ft]
5	10255.0	10314.0	[ft]
6	10314.0	10341.0	[ft]
7	10350.0	10409.0	[ft]
8	10409.0	10438.0	[ft]

Total kjerneprøve lengde [m]	88.4
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
2990.0	[ft]	DC	
3080.0	[ft]	DC	
3170.0	[ft]	DC	
3250.0	[ft]	DC	
3340.0	[ft]	DC	
3430.0	[ft]	DC	
3530.0	[ft]	DC	
3620.0	[ft]	DC	
3710.0	[ft]	DC	
3800.0	[ft]	DC	
3890.0	[ft]	DC	
3980.0	[ft]	DC	
4070.0	[ft]	DC	
4160.0	[ft]	DC	
4250.0	[ft]	DC	
4340.0	[ft]	DC	
4430.0	[ft]	DC	
4520.0	[ft]	DC	
4610.0	[ft]	DC	
4700.0	[ft]	DC	

4790.0	[ft]	DC	
4880.0	[ft]	DC	
4970.0	[ft]	DC	
5060.0	[ft]	DC	
5150.0	[ft]	DC	
5240.0	[ft]	DC	
5330.0	[ft]	DC	
5420.0	[ft]	DC	
5510.0	[ft]	DC	
5600.0	[ft]	DC	
5690.0	[ft]	DC	
5780.0	[ft]	DC	
5840.0	[ft]	DC	RRI
5870.0	[ft]	DC	
5900.0	[ft]	DC	RRI
5960.0	[ft]	DC	RRI
5960.0	[ft]	DC	
6020.0	[ft]	DC	RRI
6050.0	[ft]	DC	
6080.0	[ft]	DC	RRI
6140.0	[ft]	DC	RRI
6140.0	[ft]	DC	
6200.0	[ft]	DC	RRI
6230.0	[ft]	DC	
6260.0	[ft]	DC	RRI
6320.0	[ft]	DC	
6330.0	[ft]	DC	RRI
6380.0	[ft]	DC	RRI
6410.0	[ft]	DC	
6440.0	[ft]	DC	RRI
6500.0	[ft]	DC	RRI
6500.0	[ft]	DC	
6560.0	[ft]	DC	RRI
6590.0	[ft]	DC	
6620.0	[ft]	DC	RRI
6680.0	[ft]	DC	RRI
6680.0	[ft]	DC	
6740.0	[ft]	DC	RRI
6770.0	[ft]	DC	
6800.0	[ft]	DC	RRI

6860.0	[ft]	DC	RRI
6860.0	[ft]	DC	
6920.0	[ft]	DC	RRI
6950.0	[ft]	DC	
6980.0	[ft]	DC	RRI
7040.0	[ft]	DC	RRI
7040.0	[ft]	DC	
7070.0	[ft]	DC	RRI
7160.0	[ft]	DC	RRI
7160.0	[ft]	DC	
7220.0	[ft]	DC	RRI
7250.0	[ft]	DC	
7280.0	[ft]	DC	RRI
7340.0	[ft]	DC	RRI
7340.0	[ft]	DC	
7400.0	[ft]	DC	RRI
7430.0	[ft]	DC	
7460.0	[ft]	DC	RRI
7520.0	[ft]	DC	RRI
7530.0	[ft]	DC	
7580.0	[ft]	DC	RRI
7640.0	[ft]	DC	RRI
7640.0	[ft]	DC	
7670.0	[ft]	DC	
7700.0	[ft]	DC	RRI
7760.0	[ft]	DC	RRI
7760.0	[ft]	DC	
7790.0	[ft]	DC	
7820.0	[ft]	DC	RRI
7820.0	[ft]	DC	
7850.0	[ft]	DC	
7880.0	[ft]	DC	RRI
7880.0	[ft]	DC	
7910.0	[ft]	DC	
7940.0	[ft]	DC	RRI
7940.0	[ft]	DC	
8000.0	[ft]	DC	
8100.0	[ft]	DC	
8190.0	[ft]	DC	
8200.0	[ft]	DC	

8300.0	[ft]	DC	
8320.0	[ft]	DC	
8350.0	[ft]	DC	
8380.0	[ft]	DC	
8400.0	[ft]	DC	
8410.0	[ft]	DC	
8420.0	[ft]	DC	
8440.0	[ft]	DC	
8460.0	[ft]	DC	
8490.0	[ft]	DC	
8520.0	[ft]	DC	
8540.0	[ft]	DC	
8560.0	[ft]	DC	
8576.0	[ft]	DC	
8586.0	[ft]	DC	
8603.0	[ft]	DC	
8660.0	[ft]	DC	
8674.0	[ft]	DC	
8697.0	[ft]	DC	
8790.0	[ft]	DC	
8890.0	[ft]	DC	
9000.0	[ft]	DC	
9100.0	[ft]	DC	
9200.0	[ft]	DC	
9340.0	[ft]	DC	
9360.0	[ft]	DC	
9410.0	[ft]	DC	
9450.0	[ft]	DC	
9490.0	[ft]	DC	
9540.0	[ft]	DC	
9595.0	[ft]	SWC	
9700.0	[ft]	DC	
9706.0	[ft]	SWC	
9800.0	[ft]	DC	
9830.0	[ft]	DC	
9850.0	[ft]	DC	
9900.0	[ft]	DC	
9930.0	[ft]	DC	
9950.0	[ft]	DC	
9970.0	[ft]	DC	

10050.0	[ft]	DC	
10063.0	[ft]	DC	
10073.0	[ft]	DC	
10083.0	[ft]	DC	
10100.0	[ft]	DC	
10150.0	[ft]	DC	
10200.0	[ft]	DC	
10250.0	[ft]	DC	
10264.0	[ft]	DC	
10327.0	[ft]	DC	
10331.0	[ft]	DC	
10350.0	[ft]	C	
10359.0	[ft]	C	
10389.0	[ft]	C	
10398.0	[ft]	C	
10410.0	[ft]	DC	
10418.0	[ft]	DC	
10426.0	[ft]	C	
10437.0	[ft]	C	
10710.0	[ft]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
119	NORDLAND GP
955	UTSIRA FM
1061	UNDIFFERENTIATED
1277	HORDALAND GP
2256	GRID FM
2277	NO FORMAL NAME
2395	ROGALAND GP
2395	BALDER FM
2425	SELE FM
2490	LISTA FM
2634	MAUREEN FM
2643	SHETLAND GP
2643	EKOFISK FM
2738	TOR FM
2884	HOD FM

2954	BLODØKS FM
2961	SVARTE FM
2992	CROMER KNOLL GP
2992	RØDBY FM
3006	VIKING GP
3006	DRAUPNE FM
3027	HEATHER FM
3123	VESTLAND GP
3123	HUGIN FM
3152	SLEIPNER FM
3204	NO GROUP DEFINED
3204	SKAGERRAK FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
94	pdf	0.40

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
94_1	pdf	1.69

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
94_01_WDSS_General_Information	pdf	0.29

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
94_1_Completion_Report_and_Completion_log	pdf	22.22

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC GR C	117	3269
CNL FDC GR	2100	3269
DIPMETER	2150	3269
DLL	2871	3262
IES	399	3269
TEMP	1119	2845
VSP	548	3266

Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
CONDUCTOR	30	155.0	36	155.0	0.00	LOT
SURF.COND.	20	399.0	26	413.0	0.00	LOT
INTERM.	13 3/8	1533.0	17 1/2	1538.0	0.00	LOT
INTERM.	9 5/8	2872.0	12 1/4	2874.0	0.00	LOT
OPEN HOLE		3269.0	8 1/2	3269.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
399	1.02			seawater	
2499	1.23			seawater	
3018	1.37			seawater	
3048	1.43			seawater	
3142	1.36			seawater	

Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
94_Formation_pressure_(Formasjonstrykk)	pdf	0.22