



Generell informasjon

Brønnbane navn	25/5-3
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	SKIRNE
Funn	25/5-3 Skirne
Brønn navn	25/5-3
Seismisk lokalisering	EL 8902 - 111 SP 830
Utvinningstillatelse	102
Boreoperatør	Elf Petroleum Norge AS
Boretillatelse	627-L
Boreinnretning	WEST VANGUARD
Boredager	59
Borestart	27.01.1990
Boreslutt	26.03.1990
Frigitt dato	26.03.1992
Publiseringsdato	15.08.2008
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	HUGIN FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	118.0
Totalt målt dybde (MD) [m RKB]	2900.0
Totalt vertikalt dybde (TVD) [m RKB]	2900.0
Maks inklinasjon [°]	1.1
Temperatur ved bunn av brønnbanen [°C]	94
Eldste penetrerte alder	TRIASSIC
Eldste penetrerte formasjon	NO GROUP DEFINED
Geodetisk datum	ED50
NS grader	59° 35' 8.01" N



ØV grader	2° 37' 46.94" E
NS UTM [m]	6605469.05
ØV UTM [m]	479087.08
UTM sone	31
NPDID for brønnbanen	1488

Brønnhistorie

Wildcat well 25/5-3 is located on the Utsira High, ca 15 km south-south-east of the Frøy Field in the North Sea. The main target was a prospect at Middle Jurassic level. Early Palaeocene sandstones and Early Jurassic Statfjord sandstones were secondary targets. For all targets the expected fluid was oil.

Operations and results

Well 25/5-3 was spudded with the semi-submersible installation West Vanguard on 27 January 1990 and drilled to TD at 2900 m in the Triassic Group. No significant problems were encountered in the operations. The top hole down to 200 m was drilled with sea water. The reservoirs were drilled with sea water / KCl / polymers.

Two massive, clean, sandstone intervals (22 and 61 m) were found between 2211 and 2310 m in the basal Tertiary (Ty Formation). The sands were separated by a shaly layer and were water bearing (no shows at all). The Vestland Group reservoir was 69 m thick (2384-2453 m) and consisted of sandstones, generally fine grained, clean, occasionally micaceous/shaly and calcareous cemented. It was gas-bearing at top (gas column 42 m). The gas-water contact was found at 2426 m, based on logs and RFT pressures. Oil shows were observed on two sidewall cores at 2425 and 2428.7 m, but the amount of hydrocarbons (Iatroscan) obtained by geochemical studies were very low. No evidence of an oil zone could be seen on the RFT plot. The upper 21 m had very good reservoir qualities with porosities above 25%, and average horizontal and vertical permeabilities of $K_h = 363$ mD and $K_v = 236$ mD, respectively. The basal part had porosities around 20 %. For the total Brent the N/G was ca 77 %. The Statfjord Formation was 139 m thick (2613-2752 m) and consisted of alternating sandstones and shales. The N/G was around 63 % with an average porosity of 25 % for the reservoir levels. Some sandy levels had very good petrophysical characteristics (permeabilities above one Darcy). These reservoirs were water bearing. Apart from the two questionable oil shows at the base of the gas zone no oil shows were recorded in the well.

Two conventional cores were cut. One was cut from 2386 to 2404 m in the Hugin Formation, and the other from 2615 to 2628 m in the Statfjord Formation. No wire line fluid samples were taken.

The well was permanently abandoned on 26 March 1990 as a gas/condensate discovery.

Testing

The top Vestland Group reservoir was perforated and tested in the interval 2386 - 2405 m. Maximum flow was 585 000 m³ of gas with ca 120 Sm³ condensates /day through a 40/64" choke. The GOR was 5100 - 6200 m³/m³ depending on the separator temperature. The condensate density was 0.755 - 0.766 g/cm³ and the gas gravity (air = 1) was 0.678 - 0.692. The temperature at end of build-up was 85 deg C.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1040.00	1900.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerter i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2386.0	2403.8	[m]
2	2615.0	2638.4	[m]

Total kjerneprøve lengde [m]	41.2
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2391-2396m



2396-2410m



2401-2403m



2386-2391m



2615-2620m



2620-2625m



2625-2628m

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	DST1	2386.00	2405.00		08.03.1990 - 00:00	YES



Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
140	NORDLAND GP
495	UTSIRA FM
1012	HORDALAND GP
1048	SKADE FM
1068	NO FORMAL NAME
1357	GRID FM
1373	NO FORMAL NAME
1998	ROGALAND GP
1998	BALDER FM
2044	SELE FM
2095	LISTA FM
2162	VÅLE FM
2211	TY FM
2310	SHETLAND GP
2310	HARDRÅDE FM
2347	VIKING GP
2347	HEATHER FM
2384	VESTLAND GP
2384	HUGIN FM
2431	SLEIPNER FM
2453	DUNLIN GP
2453	DRAKE FM
2475	BURTON FM
2613	STATFJORD GP
2752	NO GROUP DEFINED

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1488_1	pdf	0.07
1488_2	pdf	1.18
1488_3	pdf	1.49





Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1488_01_WDSS_General_Information	pdf	0.21
1488_02_WDSS_completion_log	pdf	0.16

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1488_25_5_3_COMPLETION_REPORT_AND_LOG_III	PDF	8.40
1488_25_5_3_COMPLETION_REPORT_I	PDF	105.50
1488_25_5_3_COMPLETION_REPORT_II	PDF	11.36

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2405	2336	11.1

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0	15.000		23.000	

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	57	585000	0.800	0.750	5100

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL GR	148	1176
CST GR	1812	2296
CST GR	2353	2858
DIL DDBHC GR AMS SP	1154	2327
DIL DDBHC GR SP	2230	2884





DIL MSFL GR	2351	2481
FMS GR AMS	2351	2790
LDL CNL NGL AMS	2351	2882
LDL GR AMS	1154	2327
MWD - GR RES DIR	200	2900
RFT GR AMS	2386	2638
SHDT GR AMS	1170	2318
VSP	1100	2800

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	138.5	36	140.0	0.00	LOT
INTERM.	13 3/8	1176.0	17 1/2	1180.0	0.00	LOT
INTERM.	9 5/8	2350.0	12 1/4	2355.0	0.00	LOT
LINER	7	2615.0	8 1/2	2900.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
255	1.07			WATER BASED	30.01.1990
369	1.07			WATER BASED	31.01.1990
825	1.07			WATER BASED	01.02.1990
1008	1.07			WATER BASED	02.02.1990
1303	1.25	22.0	10.7	WATER BASED	09.02.1990
2349	1.30	27.0	19.6	WATER BASED	12.02.1990
2615	1.12	24.0	12.2	WATER BASED	19.02.1990
2827	1.15	26.0	11.2	WATER BASED	21.02.1990
2900	1.15	27.0	14.2	WATER BASED	23.02.1990

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]
1488 Formation pressure (Formasjonstrykk)	pdf	0.22

