



Generell informasjon

Brønnbane navn	30/9-19
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	OSEBERG
Funn	30/9-19
Brønn navn	30/9-19
Seismisk lokalisering	NH9201- INLINE 439 & X-LINE 1341
Utvinningstillatelse	079
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	937-L
Boreinnretning	WEST DELTA
Boredager	44
Borestart	09.09.1998
Boreslutt	22.10.1998
Frigitt dato	22.10.2000
Publiseringsdato	24.01.2014
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	TARBERT FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	NESS FM
Avstand, boredekk - midlere havflate [m]	29.0
Vanndybde ved midlere havflate [m]	105.0
Totalt målt dybde (MD) [m RKB]	3560.0
Totalt vertikalt dybde (TVD) [m RKB]	3559.0
Temperatur ved bunn av brønnbanen [°C]	126
Eldste penetrerte alder	EARLY JURASSIC



Eldste penetrerte formasjon	DRAKE FM
Geodetisk datum	ED50
NS grader	60° 27' 35.38" N
ØV grader	2° 41' 38.94" E
NS UTM [m]	6702819.74
ØV UTM [m]	483176.89
UTM sone	31
NPDID for brønnbanen	3561

Brønnhistorie

General

Well 30/9-19 was the first well to be drilled on the Delta structure west of the Oseberg Field in the North Sea. The primary objective was to prove hydrocarbons in the Middle Jurassic Tarbert Formation. The underlying Middle Jurassic Ness Formation was a secondary target.

Operations and results

Wildcat well 30/9-19 was spudded with the semi-submersible installation West Delta on 9 September 1998 and drilled to TD at 3560 m in the Early Jurassic Drake Formation. A 9 5/8" pilot hole was drilled prior to the 26" section to check for shallow gas. No gas was encountered. No significant problem was encountered in the operations although 25% of the rig time was counted as down time. This was a sum of various minor equipment failures, fishing for MDT tool and WOW. The well was drilled with sea water and hi-vis pills down to 1205 m and with ANCO 2000 mud from 1205 m to TD.

The Tarbert Formation was penetrated from 3092 m to 3264 m. The main Tarbert reservoir was encountered at 3138 m and it contained gas in the upper part down to 3216 m and oil from ca 3231 m down to 3247 m. The gas and the oil columns are separated by a shaley siltstone with a double coal layer. The oil column was over-pressured compared to the gas column.

An allochthonous Ness block (3062.5 - 3087 m) has been interpreted in the Early Cretaceous section, supposed to be a slide associated with degradation of the major fault zone to the east. This block contains a thin gas-filled sand layer at 3072 to 3075 m. Gas was also encountered in a channel sand within the lowermost Ness Formation from 3452 -3456.5 m.

Three cores were cut in the well. Core no 1 (3184 - 3240 m) and core no 2 (3240 -3247 m) were cut in the Tarbert Formation, while core no 3 (3494 - 3522 m) was cut in the Oseberg/Rannoch (OR) formations and into the underlying Dunlin Group. Wire line fluid samples were taken at 3153 m, 3233 m, 3234 m, 3244 m, and 3488.5 m. Pressure points were taken between 3196 and 3215 m.

The well was permanently abandoned on 22 October 1998 as a gas and oil discovery.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1210.00	3560.00

Borekaks tilgjengelig for prøvetaking?	YES
--	-----

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3184.0	3240.3	[m]
2	3240.3	3246.7	[m]
3	3494.0	3521.3	[m]

Total kjerneprøve lengde [m]	90.0
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



3184-3189m



3189-3194m



3194-3199m



3199-3204m



3204-3209m



3209-3214m



3214-3219m



3219-3224m



3224-3229m



3229-3234m



3234-3239m



3239-3243m



3243-3246m



3494-3499m



3499-3504m



3504-3509m



3509-3514m



3514-3519m



3519-3521m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
134	NORDLAND GP
645	UTSIRA FM
933	HORDALAND GP
1257	GRID FM
1380	NO FORMAL NAME
2119	ROGALAND GP
2119	BALDER FM
2172	SELE FM
2249	LISTA FM
2339	VÅLE FM
2409	HARDRÅDE FM
2418	TOR FM
2439	JORSALFARE FM
2652	KYRRE FM
2954	TRYGGVASON FM
3036	CROMER KNOLL GP
3036	RØDBY FM
3063	NO FORMAL NAME
3087	VIKING GP
3087	DRAUPNE FM
3093	BRENT GP
3093	TARBERT FM
3265	NESS FM
3485	ETIVE FM
3490	NO FORMAL NAME
3510	DUNLIN GP
3510	DRAKE FM



Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
3561_30_9_19_COMPLETION_REPORT	.pdf	32.94

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CMR GR	3065	3515
CST GR	2975	3136
FMI NGT DSI ACTS	2907	3556
MDT GR	3029	3497
MDT GR	3247	3247
PEX HALS TLD HGNS AMS	1341	3255
PEX HALS TLD HGNS AMS	3200	3556
VSP GR	2530	3198
VSP GR	3190	3520

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	231.0	36	231.0	0.00	LOT
SURF.COND.	20	1198.0	26	1205.0	0.00	LOT
PILOT HOLE		1202.0	9 7/8	1202.0	0.00	LOT
INTERM.	13 3/8	2318.5	17 1/2	2329.0	0.00	LOT
INTERM.	9 5/8	2907.0	12 1/4	2922.0	0.00	LOT
OPEN HOLE		3560.0	8 1/2	3560.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
231	1.05			water based	
1175	1.20			water based	
1205	1.20			water based	
1580	1.45	19.0		water based	
2750	1.35	21.0		water based	





3238	1.26	17.0		water based	
3560	1.31	17.0		water based	

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]
3561_Formalion_pressure_(Formasjonstrykk)	pdf	0.21

