Generell informasjon

Brønnbane navn	17/10-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	17/10-1
Seismisk lokalisering	LINE 310 S.P.1152.
Utvinningstillatelse	010
Boreoperatør	A/S Norske Shell
Boretillatelse	22-L
Boreinnretning	SEDNETH I
Boredager	85
Borestart	30.12.1968
Boreslutt	24.03.1969
Frigitt dato	24.03.1971
Publiseringsdato	25.04.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	88.0
Totalt målt dybde (MD) [m RKB]	3591.0
Temperatur ved bunn av brønnbanen [°C]	106
Eldste penetrerte alder	EARLY TRIASSIC
Eldste penetrerte formasjon	SMITH BANK FM
Geodetisk datum	ED50
NS grader	58° 1' 54'' N
ØV grader	3° 9' 58'' E
NS UTM [m]	6432394.04
ØV UTM [m]	509810.51
UTM sone	31
NPDID for brønnbanen	161

Brønnhistorie

General

Well 17/10-1 is situated in the Norwegian- Danish Basin near the western margin of the Sele High, which is a shallow basement feature. The structure on which the well was drilled is a very gentle anticline in an area with prominent salt walls. The objective of the 17/10-1 well was to test the Mesozoic section.

Operations and results

Well 17/10-1 was spudded with the semi-submersible installation Sedneth I and drilled to TD at 3590 m in the Triassic Smith Bank Formation. The hole was drilled with a 18 1/2" bit to 160 m, but during enlarging with a 36" hole opener the temporary guide base sank 2.5 m into the seabed and tilted, due to heavy washing out. This made it impossible to enter the hole and the rig was moved 30 m NNE of its original position where a new hole was spudded. An 18 1/2" hole was drilled to 430 m. Seawater was used as drilling fluid and the returns were to the sea floor. Thereafter the mud system was converted to a Spersene/XP-20 seawater mud. At 3367 m the mud was converted to a salt saturated system since this was below the prognosed depth for top Zechstein salt.

The chief reservoir zone of interest was the massive Jurassic/Triassic sandstone (Gassum and Skagerrak Formations) from 2682 m to 3405 m. This section had porosities mainly between 20 % and 25 % and was entirely water bearing. There is a major unconformity on top of these sands to the overlying Late Jurassic shales. The claystone section from about 2651 m to 2682 m (Tau and Egersund Formations) had an exceptionally high gamma ray with readings up to 300 API units. Resistivities varied between 2 and 7 ohm/m compared with 1 - 1.5 ohm/m for the overlying shales. Cuttings from this section were very carbonaceous and were bleeding gas when first examined. Chromatograph readings were up to 700 ppm C1 with small quantities of C2, C3, and C4. Above and below this section the C1 reading was about 300 ppm. Nearly 700 m of Lower Cretaceous shales were deposited in the area, and they are overlain by about 350 m of limestones. From the early Tertiary on wards clastic deposition prevailed, and fine grained sediments were deposited in a subsiding basin. Organic geochemical analyses showed oil-window maturity from a depth of ca 3000 m to TD.

The well was permanently abandoned on 24 March 1969 as dry hole.

Testing

No drill stem test was performed.

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
3000.0	[ft]	DC	
3320.0	[ft]	DC	
3560.0	[ft]	DC	
3880.0	[ft]	DC	
4200.0	[ft]	DC	
4440.0	[ft]	DC	
4740.0	[ft]	DC	

6360.0	[ft]	DC	
6570.0	[ft]	DC	
6850.0	[ft]	DC	
7130.0	[ft]	DC	
7410.0	[ft]	DC	
7690.0	[ft]	DC	
7970.0	[ft]	DC	
8200.0	[ft]	DC	
8250.0	[ft]	DC	
8300.0	[ft]	DC	
8400.0	[ft]	DC	
8450.0	[ft]	DC	
8500.0	[ft]	DC	
8530.0	[ft]	DC	
8600.0	[ft]	DC	
8700.0	[ft]	DC	
8720.0	[ft]	DC	
8730.0	[ft]	DC	
8740.0	[ft]	DC	
8740.0	[ft]	DC	
8760.0	[ft]	DC	
8770.0	[ft]	DC	
8780.0	[ft]	DC	
8790.0	[ft]	DC	
8800.0	[ft]	DC	
8900.0	[ft]	DC	
9000.0	[ft]	DC	
9100.0	[ft]	DC	
9200.0	[ft]	DC	
9310.0	[ft]	DC	
9350.0	[ft]	DC	
9400.0	[ft]	DC	
9500.0	[ft]	DC	
9600.0	[ft]	DC	
9700.0	[ft]	DC	
9800.0	[ft]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
114	NORDLAND GP
612	HORDALAND GP
1324	ROGALAND GP
1324	BALDER FM
1358	SELE FM
1403	LISTA FM
1500	VÅLE FM
1525	SHETLAND GP
1525	EKOFISK FM
1557	TOR FM
1805	HOD FM
1880	CROMER KNOLL GP
1880	RAN SANDSTONE UNITS
1902	RØDBY FM
1945	SOLA FM
1985	TUXEN FM
2005	ÅSGARD FM
2515	BOKNFJORD GP
2515	FLEKKEFJORD FM
2544	SAUDA FM
2640	TAU FM
2675	EGERSUND FM
2682	NO GROUP DEFINED
2682	GASSUM FM
2825	NO GROUP DEFINED
2825	SKAGERRAK FM
3398	SMITH BANK FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
161	pdf	0.65

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
161_1	pdf	1.11

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
161_01_WDSS_General_Information	pdf	0.20

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
161_01_Resume_of_exploration_well	pdf	5.65
161_02_Composite_well_log	pdf	1.45
161_02_Source_rock_and_carbonization_evaluation	pdf	1.09
161_03_Palenologi_biostrat	pdf	7.72
161_04_Drilling_programme_loc	pdf	0.41
161_05_Abandoning_programme	pdf	0.11

Dokumenter - Sokkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
161_01_NPD_Paper_No.21_Lithology__Well_17_10_1	pdf	11.65
161_02_NPD_Paper_No.21_Interpreted_Lithology_log__Well_17_10_1	pdf	54.74

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CDM	427	3518
FDC	426	3518
GR-C	110	426
IES	426	2405
LL-7	426	3567

MLL-C	426	3518
SGR	1558	2405
SGR-C	426	965
SGR-C	2360	3564
SL	915	1556
SNP	1558	3519
SRS	426	3564
TS	30	1528

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	161.0	36	162.0	0.00	LOT
SURF.COND.	13 3/8	426.0	17 1/2	430.0	0.00	LOT
INTERM.	9 5/8	1557.0	12 1/4	1560.0	0.00	LOT
OPEN HOLE		3591.0	8 1/2	3591.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
161	0.00			seawater	
1016	1.13	40.0		water based	
1689	1.31	53.0		water based	
2681	1.37	48.0		water based	
2948	1.39	50.0		water based	
3552	1.41	56.0		water based	