



Generell informasjon

Brønnbane navn	17/12-1 R
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	17/12-1 Vette
Brønn navn	17/12-1
Seismisk lokalisering	LINE 685 402 SP.160
Utvinningstillatelse	016
Boreoperatør	Phillips Petroleum Company Norway
Boretillatelse	64-L2
Boreinnretning	OCEAN VIKING
Boredager	100
Borestart	14.03.1972
Boreslutt	21.06.1972
Plugget og forlatt dato	21.06.1972
Frigitt dato	21.06.1974
Publiseringsdato	25.04.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	YES
Årsak til gjenåpning	DRILLING/PLUGGING
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	SANDNES FM
Avstand, boredekk - midlere havflate [m]	27.0
Vanndybde ved midlere havflate [m]	115.0
Totalt målt dybde (MD) [m RKB]	4298.0
Totalt vertikalt dybde (TVD) [m RKB]	4298.0
Maks inklinasjon [°]	1.75
Temperatur ved bunn av brønnbanen [°C]	101
Eldste penetrerte alder	LATE PERMIAN
Eldste penetrerte formasjon	ZECHSTEIN GP
Geodetisk datum	ED50



NS grader	58° 11' 17.3" N
ØV grader	3° 56' 22.2" E
NS UTM [m]	6450188.44
ØV UTM [m]	555243.17
UTM sone	31
NPDID for brønnbanen	514

Brønnhistorie



General

Exploration well 17/12-1R was drilled on the northern margin of the Egersund Basin in the North Sea, towards the Åsta Graben. Its primary target was Jurassic sands with estimated top at 2161 m (7090 feet) and with 61 m (200 feet) thickness. Sand developments within the Early Cretaceous and Triassic sections were regarded as secondary objectives. Planned TD was 8 m (25 feet) into the Zechstein salt.

The top hole down to TD in the 26" section at 458 m, well 17/12-1, had been spudded and drilled the year before by the jack-up installation Mærsk Explorer.

Well 17/12-1R is Reference Well for the Egersund Formation.

Operations and results

Well 17/12-1 was re-entered (17/12-1R) with the semi-submersible installation Ocean Viking on 14 March 1972 and drilled to TD at 4298 m, 165 m into the Late Permian Zechstein Formation. The well bore was drilled water based with a 3 % - 6 % diesel addition.

Top of the primary reservoir target was encountered in the Middle Jurassic at 2292 m. The reservoir section contained several sands separated by mudstone beds. The two uppermost sands in the Sandnes Formation were water wet. The next two sands below, in the Bryne Formation, yielded 162 Sm³/day on a six hours test. The tests indicated an OWC between DST 1 and DST 7, i.e between 2337.2 m and 2344 m. No sands were encountered in the Early Cretaceous and sand development within the Triassic was limited to thin, fine to coarse grained, continental-type clastic beds. No conventional cores were cut and no fluid samples were taken on wire line. Twenty-six sidewall cores were recovered in the interval 1371 m to 2382 m.

The well was permanently abandoned on 21 June 1972 as an oil discovery.

Testing

Three out of 7 DST's produced oil and gas to surface.

DST 1 perforated the interval 2337.2 m to 2341.4 m and produced 141 Sm³/day on a 12/64" choke. GOR was 20.5 Sm³/Sm³ and oil gravity was 29 deg API.

DST 2 perforated the interval 2316.4 m to 2325.0 m and produced 80 Sm³/day on a 1 1/2" choke. GOR was 48 Sm³/Sm³ and oil gravity was 34.1 deg API.

DST 5 and DST 6 perforated the intervals 2316.4m to 2325 m, 2331.7 m to 2332.9 m, and 2337.2 m to 2341.4 m. After acid treatment DST 5 was run with full water cushion. This test did not produce. DST 6 was run without water cushion, and after clean-up flow this test produced 162 Sm³/day through an 8/64" choke based on a 6 hrs flow. GOR was Sm³/Sm³ and oil gravity was 32.4 deg API.

DST 3 (2308.6 m to 2314.7 m) and DST 4 (2295.1 m to 2304.3) in the two uppermost sands did not produce hydrocarbons. DST 7 perforated the interval from 2344 m to 2347.9 m and did not produce hydrocarbons.

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Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
142	NORDLAND GP



450	HORDALAND GP
752	ROGALAND GP
752	BALDER FM
777	SELE FM
778	LISTA FM
781	VÅLE FM
785	SHETLAND GP
785	EKOFISK FM
807	TOR FM
1130	HOD FM
1206	BLODØKS FM
1210	CROMER KNOLL GP
1210	RØDBY FM
1339	SOLA FM
1482	ÅSGARD FM
1902	BOKNFJORD GP
1902	FLEKKEFJORD FM
1946	SAUDA FM
2167	TAU FM
2215	EGERSUND FM
2290	VESTLAND GP
2290	SANDNES FM
2306	BRYNE FM
2410	NO GROUP DEFINED
2410	GASSUM FM
2446	NO GROUP DEFINED
2446	SKAGERRAK FM
3965	SMITH BANK FM
4133	ZECHSTEIN GP

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
514	pdf	0.46

Geokjemisk informasjon





Dokument navn	Dokument format	Dokument størrelse [KB]
514_1	pdf	0.28
514_2	pdf	0.22
514_3	pdf	0.42
514_4	pdf	0.29
514_5	pdf	1.41
514_6	pdf	1.48

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
514_01_WDSS_General_Information	pdf	0.24

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2337	2341	4.7
2.0	2316	2325	4.7
3.0	2316	2342	3.2

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
2.0				
3.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	140	4813	0.880		34
2.0	80	4277	0.860		53
3.0	159	7000	0.860		44

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	178.0	36	178.0	0.00	LOT
SURF.COND.	20	445.0	26	458.0	0.00	LOT
INTERM.	13 3/8	1084.0	17 1/2	1098.0	0.00	LOT
INTERM.	9 5/8	2408.0	12 1/4	2420.0	0.00	LOT
OPEN HOLE		4298.0	8 1/2	4298.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
176	1.07			seawater	
457	1.13			seawater	
1097	1.20	45.0		seawater	
2407	1.31	50.0		seawater	
3962	1.61	55.0		seawater	