



Generell informasjon

Brønnbane navn	6507/11-4
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Brønn navn	6507/11-4
Seismisk lokalisering	713 469 SP. 415
Utvinningstillatelse	062
Boreoperatør	Saga Petroleum ASA
Boretillatelse	547-L
Boreinnretning	TREASURE SAGA
Boredager	38
Borestart	16.05.1987
Boreslutt	22.06.1987
Frigitt dato	22.06.1989
Publiseringsdato	18.12.2008
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	288.0
Totalt målt dybde (MD) [m RKB]	3045.0
Totalt vertikalt dybde (TVD) [m RKB]	3043.0
Maks inklinasjon [°]	4.7
Temperatur ved bunn av brønnbanen [°C]	106
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	TILJE FM
Geodetisk datum	ED50
NS grader	65° 8' 10.28" N
ØV grader	7° 26' 3.45" E
NS UTM [m]	7224724.36
ØV UTM [m]	426544.70
UTM sone	32
NPDID for brønnbanen	1055



Brønnhistorie

General

Well 6507/11-4 is located ca 3.5 km north-north west of the Midgard Field on the Halten Terrace. The objective was to test the hydrocarbon potential in Jurassic sandstones in a rotated north-south trending fault block. Shallow gas was warned at the following levels: 470-532/539- 601- and 671 m. TD was planned at 2950 m.

Operations and results

Wildcat well 6507/11-4 was spudded by the semi-submersible installation Treasure Saga on 16 May 1987, and drilled to TD at 3045 m in the Early Jurassic Aldra Formation (Tilje Formation). Due to excessive deviation during the first 13 m, the TGB was pulled and moved 10 m towards east where the well was re-spudded on May 17. Otherwise, drilling proceeded without significant problems. No shallow gas was encountered at the warned levels. The well was drilled with seawater and hi-vis mud down to 817 m, with gypsum / polymer mud from 817 m to 2655 m, and the remaining 8 1/2" section from 2655 m to TD with gel / polymer mud.

The argillaceous Grip Group (Viking Group) was encountered at 2530 m, and the sandy Tomma Formation (Fangst Group) at 2676.5 m RKB. The latter consisted of two sandstone units (Garn and Ile Formations) separated by a more argillaceous unit (Not Formation). The gross sand thickness in the two units was 174 m and the porosity was good. The calculated average values of log porosity and the net to gross ratio for the Garn Formation was 24.6% and 0.96 respectively. The corresponding figures for the Ile Formation were 22.1% and 0.74. The Leka Formation (Ror Formation) consisted mainly of claystone, while claystone and sandstone were alternating in the Aldra Formation (Tilje Formation). Sporadic oil fluorescence were observed in lamellas of silty sandstones in the Late Cretaceous at 2220 m, 2265 m, and 2315 m. No shows were observed in the Jurassic sandstone units. Post-well organic geochemical analysis did not confirm the shows in Late Cretaceous, but revealed a possible occurrence of trace migrated hydrocarbons in cuttings at the base of the Melke Formation at 2675 m.

Two cores were cut in the intervals 2564- 2593 m (Melke Formation) and 2685- 2713 m (Garn Formation). No wire line fluid samples were taken.

The well was permanently abandoned on 22 June 1987 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
450.00	3044.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2564.0	2591.8	[m]
2	2685.0	2713.2	[m]

Total kjerneprøve lengde [m]	56.0
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2564-2569m



2569-2574m



2574-2579m



2579-2584m



2584-2589m



2589-2591m



2685-2690m



2690-2695m



2695-2700m



2700-2705m



2705-2710m



2710-2713m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1690.0	[m]	DC	STRAT
1716.0	[m]	SWC	STRAT
1753.0	[m]	SWC	STRAT
1770.0	[m]	DC	STRAT



1803.0	[m]	SWC	STRAT
1823.0	[m]	SWC	STRAT
1828.0	[m]	SWC	STRAT
1857.0	[m]	SWC	STRAT
1862.0	[m]	SWC	STRAT
1863.5	[m]	SWC	STRAT
1910.0	[m]	DC	STRAT
1940.0	[m]	DC	STRAT
1990.0	[m]	DC	STRAT
2016.5	[m]	SWC	STRAT
2018.0	[m]	SWC	STRAT
2046.0	[m]	SWC	STRAT
2063.0	[m]	SWC	STRAT
2170.0	[m]	DC	STRAT
2180.0	[m]	DC	STRAT
2190.0	[m]	DC	STRAT
2200.0	[m]	DC	STRAT
2210.0	[m]	DC	STRAT
2221.0	[m]	SWC	STRAT
2230.0	[m]	DC	STRAT
2240.0	[m]	DC	STRAT
2255.0	[m]	SWC	STRAT
2270.0	[m]	DC	STRAT
2283.0	[m]	SWC	STRAT
2290.0	[m]	DC	STRAT
2300.0	[m]	DC	STRAT
2312.5	[m]	SWC	STRAT
2330.0	[m]	DC	STRAT
2348.0	[m]	SWC	STRAT
2360.0	[m]	DC	STRAT
2367.5	[m]	SWC	STRAT
2380.0	[m]	DC	STRAT
2390.0	[m]	DC	STRAT
2397.5	[m]	SWC	STRAT
2410.0	[m]	DC	STRAT
2425.0	[m]	SWC	STRAT
2440.0	[m]	DC	STRAT
2450.0	[m]	DC	STRAT
2460.0	[m]	DC	STRAT
2470.0	[m]	SWC	STRAT



2477.0	[m]	SWC	STRAT
2483.0	[m]	SWC	STRAT
2486.0	[m]	SWC	STRAT
2500.0	[m]	DC	STRAT
2512.5	[m]	SWC	STRAT
2521.0	[m]	SWC	STRAT
2530.0	[m]	SWC	STRAT
2541.0	[m]	SWC	STRAT
2549.0	[m]	DC	STRAT
2562.0	[m]	SWC	STRAT
2566.0	[m]	C	STRAT
2579.1	[m]	C	STRAT
2584.5	[m]	SWC	STRAT
2591.0	[m]	C	STRAT
2600.0	[m]	DC	STRAT
2610.0	[m]	SWC	STRAT
2630.0	[m]	DC	STRAT
2642.0	[m]	SWC	STRAT
2660.0	[m]	DC	STRAT
2675.0	[m]	SWC	STRAT
2685.1	[m]	C	STRAT
2687.2	[m]	C	STRAT
2733.0	[m]	SWC	STRAT
2745.0	[m]	SWC	STRAT
2751.3	[m]	SWC	STRAT
2759.0	[m]	DC	STRAT
2771.0	[m]	DC	STRAT
2783.0	[m]	DC	STRAT
2792.0	[m]	DC	STRAT
2801.0	[m]	DC	STRAT
2816.0	[m]	SWC	STRAT
2838.0	[m]	SWC	STRAT
2854.5	[m]	SWC	STRAT
2872.5	[m]	SWC	STRAT
2887.5	[m]	SWC	STRAT
2900.0	[m]	DC	STRAT
2909.0	[m]	DC	STRAT
2918.0	[m]	DC	STRAT
2930.0	[m]	DC	STRAT
2939.0	[m]	DC	STRAT



2949.0	[m]	SWC	STRAT
2966.5	[m]	SWC	STRAT
2984.0	[m]	DC	STRAT
2991.0	[m]	SWC	STRAT
2999.0	[m]	DC	STRAT
3008.0	[m]	DC	STRAT
3020.0	[m]	DC	STRAT
3028.0	[m]	SWC	STRAT
3041.0	[m]	DC	STRAT
3044.0	[m]	DC	STRAT

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
314	NORDLAND GP
314	NAUST FM
1380	KAI FM
2015	ROGALAND GP
2015	TARE FM
2066	TANG FM
2135	SHETLAND GP
2522	CROMER KNOLL GP
2530	VIKING GP
2530	SPEKK FM
2535	MELKE FM
2677	FANGST GP
2677	GARN FM
2732	NOT FM
2747	ILE FM
2866	BÅT GP
2866	ROR FM
2992	TILJE FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1055_1	pdf	0.09
1055_2	pdf	0.41





1055_3	pdf	6.34
1055_4	pdf	0.72

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1055_01_WDSS_General_Information	pdf	0.40
1055_02_WDSS_completion_log	pdf	0.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1055_01_6507_11_4_Completion_report	pdf	5.48
1055_02_6507_11_4_COMPLETION_LOG	pdf	4.08
1055_6507_11_4_COMPLETION_REPORT_AND_LOG	pdf	13.11

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
ACBL VDL GR	453	1488
ACBL VDL GR	1210	2500
CDL GR CAL	1488	2369
CNL CDL GR CAL	2500	3041
COREGUN	1525	2489
COREGUN	2805	3033
DENSITY	2500	3041
DIFL LSBHC GR CAL	1488	2389
DIFL LSBHC GR CAL	2335	2518
DIFL LSBHC GR CAL	2500	3041
FMT PRESSURE	2687	3025
MWD - GR RES DIR TEMP	444	3045
SHDT	2513	3039
SPECTRALOG	2500	3036
VSP	2501	3041





Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm ³]	Type formasjonstest
CONDUCTOR	30	436.0	36	444.0	0.00	LOT
SURF.COND.	20	802.0	26	817.0	1.49	LOT
INTERM.	13 3/8	1489.0	17 1/2	1506.0	1.70	LOT
INTERM.	9 5/8	2503.0	12 1/4	2518.0	1.80	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm ³]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
817	1.13	10.0	16.8	WATER BASED	25.05.1987
817	1.10	25.0	21.1	WATER BASED	29.05.1987
1063	1.10	19.0	9.6	WATER BASED	29.05.1987
1281	1.11	14.0	8.2	WATER BASED	01.06.1987
1506	1.14	15.0	5.8	WATER BASED	01.06.1987
1740	1.25	17.0	8.2	WATER BASED	01.06.1987
1929	1.35	23.0	9.1	WATER BASED	03.06.1987
2179	1.60	30.0	10.1	WATER BASED	04.06.1987
2399	1.64	27.0	9.6	WATER BASED	04.06.1987
2518	1.64	20.0	7.2	WATER BASED	09.06.1987
2518	1.64	25.0	12.5	WATER BASED	09.06.1987
2518	1.69	26.0	9.6	WATER BASED	09.06.1987
2518	1.64	20.0	7.2	WATER BASED	09.06.1987
2518	1.66	21.0	7.2	WATER BASED	11.06.1987
2518	1.66	22.0	7.2	WATER BASED	12.06.1987
2518	1.66	21.0	6.8	WATER BASED	09.06.1987
2550	1.30	13.0	6.8	WATER BASED	16.06.1987
2581	1.30	17.0	7.7	WATER BASED	15.06.1987
2655	1.30	16.0	6.8	WATER BASED	15.06.1987
2713	1.31	14.0	7.2	WATER BASED	16.06.1987
2883	1.30	15.0	6.3	WATER BASED	16.06.1987
2992	1.30	16.0	5.8	WATER BASED	18.06.1987
3045	1.30	17.0	7.7	WATER BASED	18.06.1987
3045	1.30	17.0	7.7	WATER BASED	24.06.1987

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]
1055 Formation pressure (Formasjonstrykk)	pdf	0.28

