



Generell informasjon

Brønnbane navn	6407/8-2
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Funn	6407/8-2 (Tau)
Brønn navn	6407/8-2
Seismisk lokalisering	BPN 89-113(2D) & CROSSLINE SP 510
Utvinningstillatelse	158
Boreoperatør	BP Norway Limited U.A.
Boretillatelse	796-L
Boreinnretning	DYVI STENA
Boredager	38
Borestart	19.10.1994
Boreslutt	25.11.1994
Frigitt dato	25.11.1996
Publiseringsdato	24.09.2003
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	EARLY JURASSIC
1. nivå med hydrokarboner, formasjon.	ÅRE FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	318.0
Totalt målt dybde (MD) [m RKB]	1950.0
Totalt vertikalt dybde (TVD) [m RKB]	1950.0
Maks inklinasjon [°]	1.1
Temperatur ved bunn av brønnbanen [°C]	76
Eldste penetrerte alder	TRIASSIC
Eldste penetrerte formasjon	GREY BEDS (INFORMAL)
Geodetisk datum	ED50
NS grader	64° 17' 0.63" N
ØV grader	7° 31' 25.28" E



NS UTM [m]	7129613.20
ØV UTM [m]	428524.24
UTM sone	32
NPDID for brønnbanen	2434

Brønnhistorie

General

The main objective of drilling well 6407/8-2 was to establish the presence, quality and fluid content of the Jurassic Åre Formation sandstones in the Tau prospect, about 9 km west of the Draugen Field. The underlying Triassic grey/red beds provided a secondary target.

Operations and results

Exploration well 6407/8-2 was spudded with the semi-submersible installation "Dyvi Stena" on 19 October 1994 and drilled to TD at 1950 m in the Triassic Grey Beds. The well was drilled with seawater and hi-vis pills down to 1140 m, with KCl polymer mud from 1140 m to 1733 m, and with a sized salt solids-free system from 1733 m to TD in the final 6" open hole.

The top of the Tau prospect reservoir section came in at 1733 m and the well confirmed oil and gas charge in the prospect. The reservoir quality in the Åre Formation was better than expected at this location. The hydrocarbon column encountered was close to the predicted minimum success case model. The drilling location was well chosen in revealing the extent of the different hydrocarbon phases in the structure. Further down-dip the gas cap could have been missed. The proportion of gas to oil, however, currently renders the discovery sub-commercial.

Discrepancies between actual and prognosed depths are interpreted as reflecting uncertainty in the velocity field. The failure of the larger success outcomes is attributed to trap failure, either through fault-seal failure or breaching by thief Ile sands in the hanging wall. It is clear that for this small-scale accumulation, distinguishing hydrocarbon phases is below seismic resolution. However, with wireline logs to calibrate seismic signature through gas, oil and water bearing reservoir sections the database for exploring adjacent prospects is excellent.

Three cores were cut in the 6" section from 1736 m to 1773 m in the Åre Formation. Core # 1 was cut from 1736 m -1744.8 m before jamming off on a coal stringer. At surface the core was found to contain a good reservoir sand with high oil content. Core # 2 was then cut from 1744.8 m to 1764 m and the assembly pulled at reduced tripping speeds to minimise the rate of gas expansion in the core. However the bottom 14m of core was not recovered and, as the sand was so un-consolidated as not to be able to support its own weight, the next coring assembly was limited to a 30ft barrel Core # 3 was cut from 1764 m -1774 m but only 1.95 m was recovered and, as this appeared water wet, it was decided to return to drilling. A wire line fluid sample was taken at 1738 m.

The well was permanently abandoned as an oil and gas discovery 25 November 1994.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1150.00	1950.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1736.0	1744.8	[m]
2	1744.8	1750.8	[m]
3	1764.0	1766.0	[m]

Total kjerneprøve lengde [m]	16.8
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
343	NORDLAND GP
343	NAUST FM
746	KAI FM
809	HORDALAND GP
809	BRYGGE FM
1374	ROGALAND GP
1374	TARE FM
1438	TANG FM
1587	SHETLAND GP
1587	SPRINGAR FM
1710	VIKING GP
1710	SPEKK FM
1728	BÅT GP
1728	ÅRE FM
1847	GREY BEDS (INFORMAL)
1847	HEGRE GP



Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
2434	pdf	0.21

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
2434_1	pdf	1.81
2434_2	pdf	1.60

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
2434_6407_8_2_COMPLETION_LOG	pdf	1.38
2434_6407_8_2_COMPLETION_REPORT	pdf	17.84

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
EZSV CCL	585	585
FMT GR	1741	1741
FMT VPC GR	0	0
FMT VPC GR	1733	1904
FMT VPC GR	1734	1734
FMT VPC GR	1738	1738
FMT VPC GR	1741	1741
FMT VPC GR	1772	1772
HDIP GR	1730	1940
MAC ZDL CN SL	1730	1938
MAC ZDL SL	1184	1595
MAC ZDL SL	1595	1714
MLL DLL	1730	1943
MWD DPR - GR	350	1731
SWC GR	0	0





SWC GR	1753	1834
SWC GR	1753	1834
VSP	500	1930
ZDL CN GR	1730	1846

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	443.0	36	446.0	0.00	LOT
SURF.COND.	9 5/8	1135.0	12 1/4	1140.0	0.00	LOT
LINER	7	1731.0	8 1/2	1733.0	1.75	LOT
OPEN HOLE		1950.0	6	1950.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1733	1.25	50.0		WATER BASED	
1950	1.25	48.0		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]
2434 Formation pressure (Formasjonstrykk)	pdf	0.19

