



## Generell informasjon

Brønnbane navn	25/10-2
Type	EXPLORATION
Formål	WILDCAT
Status	SUSPENDED
Faktakart i nytt vindu	<a href="#">lenke til kart</a>
Hovedområde	NORTH SEA
Brønn navn	25/10-2
Seismisk lokalisering	Line SC-68 & Shotpoint 7026
Utvinningstillatelse	<a href="#">028</a>
Boreoperatør	Esso Exploration and Production Norway A/S
Boretillatelse	43-L
Boreinnretning	<a href="#">GLOMAR GRAND ISLE</a>
Boredager	21
Borestart	05.08.1970
Boreslutt	25.08.1970
Frigitt dato	25.08.1972
Publiseringsdato	29.08.2003
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	9.0
Vanndybde ved midlere havflate [m]	121.0
Totalt målt dybde (MD) [m RKB]	2191.0
Temperatur ved bunn av brønnbanen [°C]	90
Eldste penetrerte alder	PALEOCENE
Eldste penetrerte formasjon	LISTA FM
Geodetisk datum	ED50
NS grader	59° 9' 39.27" N
ØV grader	2° 11' 35.88" E
NS UTM [m]	6558399.86
ØV UTM [m]	453868.07
UTM sone	31
NPID for brønnbanen	180



## Brønnhistorie

### General

Well 25/10-2 was drilled to test a structural closure on the down faulted west flank of the basement high on which Esso wells 25/11-1 (Balder Discovery well), 25/8-1 and 25/10-1 had been drilled. The original primary objective, as stated in the Operator's Final Well Report from 1972, was Early Paleocene to Late Eocene sands, which had a thin oil leg in the three wells drilled previously. It was anticipated that appreciably thicker Early Eocene sands would be encountered in the oil leg of 25/10-2. Additional prospects were in Middle - Late Eocene sands, Danian carbonates, and sands of Early Cretaceous, Jurassic or Triassic age.

The results of the well given below is reported with today's knowledge of the area (anno 2003) and cannot be compared directly with the original objectives.

### Operations and results

Wildcat well 25/10-2 was spudded with the drilling vessel "Glomar Grand Isle" on 5 August 1970 and drilled to TD at 2191 m (7187 feet) in the Paleocene Lista Formation. Drilling operations went without mechanical problems and there was no lost time waiting on weather. Well 25/10-2 was suspended 25 August 1970 as a well with oil shows. The well was re-entered (25/10-2 R) using "Glomar Grand Isle" on 2 May 1972 and drilled to a total depth of 3180.6 m (10435 feet) in basement rock.

After drilling out the plug in the bottom of the casing in the re-entry some difficulty was experienced in staying in the old hole. The well was drilled to a depth of 2369 m where lost circulation was encountered. Later the pipe became stuck, with the bottom of the fish at 2213 m, and it became necessary to sidetrack the hole. Six cones were lost in the hole while drilling at 2497 m in the sidetrack hole; otherwise no problems were experienced. Initial drilling from the sea floor to 396 m was with seawater and gel. From 396 m to 1036 m the hole was drilled with seawater / Spersene / XP 20 / Salinex system. From 1036 m to TD in the primary well entry fresh water / Spersene / XP 20 system was used. The re-entry hole was drilled with fresh water - Spersene - XP-20 system.

Top Rogaland Group is interpreted at 1935 m. The Balder, Sele and Lista Formations contained only thin, scattered sandstone layers, while water bearing sands were encountered in the Heimdal Formation (2085 m to 2146 m) and in the Ty Formation (2270 m - 2375 m). Two hundred and thirty eight m of Late Cretaceous chalk and limestones are developed beneath the Tertiary. Upper Jurassic Draupne shale is missing in the well, instead the Shetland Group is underlain by a heterogeneous sequence which has been dated to be of Late Jurassic (Volgian) age. Mainly greyish red shales and siltstones are found together with white limestones and loose sands and do not fit into the existing nomenclature system. The serrated log patterns indicate that these lithologies are finely interbedded. In the Triassic Hegre Group loose, poorly sorted quartz sands were encountered in the interval 2710 m to 2820 m while the interval from 2850 m to 2885 m consists of a well consolidated, poorly sorted, fine grained sandstone. This sandy section does not contain recognizable palynomorphs, but is believed to be of Triassic age due to its stratigraphic position and the continental character of the sediments. An unpredicted Permian conglomerate (Rotliegend), 135 m thick, consisting of pebbles of quartz, feldspar, gneiss and amphibolite in a well cemented or sandy matrix, was encountered beneath the Kupferschiefer highly radioactive shale and Zechstein evaporites and shales. The Basement rock (3152 m - 3181 m) is probably plutonic. It is composed mainly of alkali feldspar, and thus best classified as a syenite. It is medium grained and highly crushed. Its dark greyish red colour is partly due to heavy staining by hematite. Oil fluorescence and oil cut was obtained from Balder Formation



cuttings between 1937 m and 1973 m. Oil shows were encountered in a one-foot Sele Formation sand cored at 1981 m. A very weak fluorescence was recorded from the Sele Formation cores and cuttings between 1983 m and 2027 m. The triassic Group sands between 2682 m to 2688 m and 2689 m to 2707 m had very weak oil shows. The cuttings contained a black tar material in the intergranular porosity, which looked like dead oil. Sidewall cores indicated that the sand was fine grained, with streaks of black hydrocarbon specks, with yellow fluorescence and good yellow cut. The Permian dolomites (Zechstein), shales (Copper shale) and Conglomerate (Rotliegend), had a good fluorescence and cut and some live oil, however, they all had very poor permeability and porosity. No shows were observed in Basement.

A total of 14 cores were cut in the two wellbores. Eight were cut in the Paleocene Balder to Våle Formation sediments. Only one meter was recovered from the lowermost Ty Formation sand (111 m total recovery), five were cut in Zechstein and Rotliegend Groups (49 m total recovery), while core no14 recovered 3 m of the basement rock at TD. Formation Interval Testing (FIT) fluid samples were recovered from depths 2685 m (8810 feet), 2691 m (8829 feet), 2697 m (8850 feet), 2702 m (8865 feet), and 3016 m (9895 feet). Well 25/10-2 R was permanently abandoned 8 July 1972 as a well with oil shows.

#### Testing

No drill stem test was performed.

#### Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
396.58	3176.02
Borekaks tilgjengelig for prøvetaking?	YES

#### Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
625.0	[m]	DC	OD
634.0	[m]	DC	OD
643.0	[m]	DC	OD
652.0	[m]	DC	OD
661.0	[m]	DC	OD
780.0	[m]	DC	OD
872.0	[m]	DC	OD
982.0	[m]	DC	OD
1046.0	[m]	DC	OD
1055.0	[m]	DC	OD
1064.0	[m]	DC	OD
1073.0	[m]	DC	OD
1082.0	[m]	DC	OD



1091.0	[m]	DC	OD
1101.0	[m]	DC	OD
1110.0	[m]	DC	OD
1119.0	[m]	DC	OD
1128.0	[m]	DC	OD
1137.0	[m]	DC	OD
1146.0	[m]	DC	OD
1155.0	[m]	DC	OD
3400.0	[ft]	DC	
3430.0	[ft]	DC	
3490.0	[ft]	DC	
3550.0	[ft]	DC	
3580.0	[ft]	DC	
3640.0	[ft]	DC	
3700.0	[ft]	DC	
3730.0	[ft]	DC	
3790.0	[ft]	DC	
3880.0	[ft]	DC	
4000.0	[ft]	DC	
4090.0	[ft]	DC	
4200.0	[ft]	DC	
4300.0	[ft]	DC	
4400.0	[ft]	DC	
4500.0	[ft]	DC	
4540.0	[ft]	DC	
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4570.0	[ft]	DC	
4600.0	[ft]	DC	
4690.0	[ft]	DC	
4780.0	[ft]	DC	
4900.0	[ft]	DC	
4990.0	[ft]	DC	
5050.0	[ft]	DC	
5080.0	[ft]	DC	
5200.0	[ft]	DC	
5290.0	[ft]	DC	
5380.0	[ft]	DC	
5500.0	[ft]	DC	
5590.0	[ft]	DC	
5680.0	[ft]	DC	



5800.0	[ft]	DC	
5890.0	[ft]	DC	
5920.0	[ft]	DC	
5950.0	[ft]	DC	
5980.0	[ft]	DC	
6010.0	[ft]	DC	
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6100.0	[ft]	DC	
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6300.0	[ft]	DC	
6400.0	[ft]	DC	
6500.0	[ft]	DC	
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6590.0	[ft]	DC	
6633.0	[ft]	C	
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6664.0	[ft]	C	
6676.0	[ft]	C	
6682.0	[ft]	C	
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6740.0	[ft]	DC	
6770.0	[ft]	DC	
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6900.0	[ft]	DC	
7000.0	[ft]	DC	
7040.0	[ft]	DC	
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7140.0	[ft]	DC	
7140.0	[ft]	DC	
7168.0	[ft]	C	
7170.0	[ft]	DC	
7179.0	[ft]	C	
7200.0	[ft]	DC	



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7350.0	[ft]	DC	
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7440.0	[ft]	DC	
7470.0	[ft]	DC	
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7510.0	[ft]	DC	
7530.0	[ft]	DC	
7540.0	[ft]	DC	
7590.0	[ft]	DC	
7600.0	[ft]	DC	
7640.0	[ft]	DC	
7680.0	[ft]	DC	
7700.0	[ft]	DC	
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7840.0	[ft]	DC	
7870.0	[ft]	DC	
7940.0	[ft]	DC	
7990.0	[ft]	DC	
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8170.0	[ft]	DC	
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8330.0	[ft]	DC	
8350.0	[ft]	DC	



8380.0	[ft]	DC	
8410.0	[ft]	DC	
8420.0	[ft]	DC	
8440.0	[ft]	DC	
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8540.0	[ft]	DC	
8560.0	[ft]	DC	
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8600.0	[ft]	DC	
8600.0	[ft]	DC	APT
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8610.0	[ft]	DC	
8620.0	[ft]	DC	APT
8620.0	[ft]	DC	
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8650.0	[ft]	DC	
8650.0	[ft]	DC	APT
8650.0	[ft]	DC	
8660.0	[ft]	DC	
8680.0	[ft]	DC	APT
8680.0	[ft]	DC	
8690.0	[ft]	DC	
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8700.0	[ft]	DC	APT
8710.0	[ft]	DC	APT
8710.0	[ft]	DC	
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8730.0	[ft]	DC	APT
8730.0	[ft]	DC	
8740.0	[ft]	DC	
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8750.0	[ft]	DC	APT
8750.0	[ft]	DC	
8760.0	[ft]	DC	APT
8770.0	[ft]	DC	APT
8770.0	[ft]	SWC	
8770.0	[ft]	DC	
8790.0	[ft]	DC	



8800.0	[ft]	DC	
8802.0	[ft]	SWC	
8810.0	[ft]	DC	
8820.0	[ft]	SWC	
8830.0	[ft]	DC	
8840.0	[ft]	DC	
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8850.0	[ft]	DC	
8870.0	[ft]	DC	
8876.0	[ft]	SWC	
8880.0	[ft]	DC	
8885.0	[ft]	SWC	
8890.0	[ft]	DC	
8900.0	[ft]	DC	
8900.0	[ft]	DC	
8910.0	[ft]	DC	
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8950.0	[ft]	DC	
8960.0	[ft]	DC	
8967.0	[ft]	SWC	
8980.0	[ft]	DC	
8990.0	[ft]	DC	
9000.0	[ft]	DC	
9010.0	[ft]	DC	
9020.0	[ft]	DC	
9040.0	[ft]	DC	
9050.0	[ft]	DC	
9070.0	[ft]	DC	
9100.0	[ft]	DC	
9130.0	[ft]	DC	
9190.0	[ft]	DC	
9190.0	[ft]	DC	
9250.0	[ft]	SWC	
9250.0	[ft]	DC	
9280.0	[ft]	DC	
9300.0	[ft]	DC	
9310.0	[ft]	SWC	
9320.0	[ft]	DC	



9340.0	[ft]	DC	
9360.0	[ft]	SWC	
9380.0	[ft]	DC	
9430.0	[ft]	DC	
9430.0	[ft]	DC	
9460.0	[ft]	DC	
9482.0	[ft]	SWC	
9490.0	[ft]	DC	
9500.0	[ft]	DC	
9520.0	[ft]	DC	
9540.0	[ft]	DC	
9650.0	[ft]	DC	
9730.0	[ft]	DC	
9780.0	[ft]	DC	
9864.0	[ft]	DC	
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9876.0	[ft]	DC	
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10310.0	[ft]	DC	

### Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
130	<a href="#">NORDLAND GP</a>
505	<a href="#">UTSIRA FM</a>
725	<a href="#">NO FORMAL NAME</a>
755	<a href="#">HORDALAND GP</a>
755	<a href="#">SKADE FM</a>
1046	<a href="#">UNDIFFERENTIATED</a>
1935	<a href="#">ROGALAND GP</a>
1935	<a href="#">BALDER FM</a>
1975	<a href="#">SELE FM</a>
2050	<a href="#">LISTA FM</a>
2085	<a href="#">HEIMDAL FM</a>
2146	<a href="#">LISTA FM</a>



### Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
<a href="#">180</a>	pdf	0.31

### Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
<a href="#">180_1</a>	pdf	1.07
<a href="#">180_2</a>	pdf	0.09

### Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
<a href="#">180_01_WDSS_General_Information</a>	pdf	0.17

### Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
<a href="#">180_25_10_2_COMPLETION_REPORT_AND_LOG</a>	pdf	3.38

### Dokumenter - Sokkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
<a href="#">180_01_NPD_Paper_No.28_Lithology_Balder_area_Well_25_10_2</a>	pdf	18.56
<a href="#">180_02_NPD_Paper_No.28_Interpreted_Lithology_log_Well_25_10_2</a>	pdf	47.78
<a href="#">180_03_NPD_Paper_No.28_Log_Correlation_chart_Profile_NE-SW_Well_25_10_2</a>	pdf	0.41
<a href="#">180_04_NPD_Paper_No.28_Lithologic_Correlation_chart_Well_25_10_2</a>	pdf	0.48





## Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
3-ARM DIP	2257	3183
4-ARM CAL	1031	2173
BHC SON GR	396	1041
BHC SON GR	1032	2169
BHC SON GR	2258	3048
BHC SON GR	2987	3183
CAL	396	1043
CHECKSHOTS	0	0
DENS	1032	2172
DENS	2258	3048
DENS	2987	3184
GR	2190	2258
IES	396	1043
IES	1031	2172
IES	2258	3048
IES	2987	3184
SIDEWALL-NEU POR	2258	3184

## 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
SURF.COND.	30	164.0	36	164.0	0.00	LOT
INTERM.	20	397.0	26	398.0	0.00	LOT
INTERM.	13 3/8	1032.0	18	1044.0	0.00	LOT
INTERM.	9 5/8	2191.0	12 1/4	2191.0	0.00	LOT

## Trykkplot

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]
<a href="#"><u>180 Formation pressure (Formasjonstrykk)</u></a>	pdf	0.18

