

Dem: 489/84 12.1.81

FORTROLIG
i h.t. Beskyttelsesinstruksen,
jfr. offentlighedslovens
§..... nr.....

12 JAN. 1981

REGISTRERT
OLJEDIREKTORATET

STATOIL/NORSK HYDRO/SAGA PETROLEUM

COMPLETION REPORT

WELL 34/10-9

I GENERAL INFORMATION

II GEOLOGICAL REPORT

III DRILLING REPORT

IV MARINE REPORT

V SUMMARY OF PETROPHYSICAL PROPERTIES

VI TESTING OPERATIONS AND RESULTS

VII ENCLOSURES

1. Completion Log
2. Mud Logs
3. Well completion reports
4. ADT Log

I GENERAL INFORMATION

I GENERAL INFORMATION

1. Well data record

- a. Well designation: 34/10-9
- b. Well classification: Wildcat
- c. Well location:
 - i) Country: Norway, North Sea
 - ii) Licence: PL 050
 - iii) Latitude: $61^{\circ} 12' 55.34''$ N
Longitude: $02^{\circ} 15' 00.53''$ E
 - iv) Seismic location: Shotpoint.no. 275
Line No. 3D 163
 - v) Water depth: 202 m
- d. Rig data
 - i) Rig name: Phase I: Ross Rig
Phase II: Deepsea Saga
 - ii) Drilling draft: 21.3 m
 - iii) RKB-MSL: 25 m

2. Purpose of the well

Well 34/10-9 was drilled on the Delta structure situated in the north-eastern part of block 34/10. The objective of the well was to test the sandstone of Lower Jurassic age (Cook Formation).

3. Results of the well

The Brent Group and the Cook Formation were hydrocarbon-bearing. An oil/water contact was established at 2118 m KB in the Cook Formation. The total depth of the well was 2421 m KB in the Statfjord Formation.

4. Well history

a. General

- i) Spud date Phase I: March 24th, 1980
- ii) Reenter Phase II: May 29th, 1980
- iii) Status: Plugged and abandoned

b. Contractors

	PHASE I	PHASE II
i) Drilling platform:	Ross Rig	Deepsea Saga
ii) Drilling Contractor:	Ross Drilling Co.	Odfjell Drilling Co
iii) Cementing:	Dowell Schlumberger	B.J. Hughes
iv) Casing:	Stavanger Casing	Weatherford
v) Well testing:	Halliburton-Otis	Hall.-Flopetrol
vi) Electric logging:	Schlumberger	Schlumberger
vii) Mud logging:	Baroid	The Analysts
viii) Mud Contractor:	Baroid	Anchor Drilling Fluid
ix) Supply boats:	Sjarmør	Siddis Pilot
	Siddis Sailor	Stad Supplier
	Karmøy Boy	
x) Conventional Coring	Diamond Boart	Diamond Boart
xi) Diving	Sub Sea Dolphin	Sub Sea Dolphin
xii) Helicopters	Helikopter Service A/S	
xiii) Core analysis:	GECO	
xiv) Paleoanalysis:	Paleoservice Ltd.	
xv) Geochemistry:	IKU	

c. Casing

30" at 288 m
 20" at 830 m
 13 3/8" at 1441 m
 9 5/8" at 1718 m
 7" liner at 2199 m

d. Coring

1) Conventional coring (description attached)

CORE NO	INTERVAL	RECOVERED (m)	REC. (%)
1	1850 - 1868	13.5	75
2	2089 - 2094	4.2	84
3	2094 - 2112	15.45	86
4	2112 - 2130	18.3	100
5	2400 - 2400.5	0.37	74
6	2400.5 - 2405.5	3.7	74

2) Sidewall coring

46 samples of 54 shots were recovered (85%)
(description attached).

e. Logging

1) Mudlogging

Phase I : Baroid

Phase II: The Analysts

2) Electrical logging

The electrical logging was done by Schlumberger.

<u>TYPE OF LOGS</u>	<u>RUN NO</u>	<u>INTERVAL (m KB)</u>
ISF/SONIC-GR	1	218 - 841
	2	831 - 1456
	3	1442 - 1723
	4	1718 - 1850
	5	1718 - 2201
	6	2201 - 2417
FDC-GR-CAL	1	831 - 1456
	2	1442 - 1725
FDC-CNL-GR-CAL	3	1718 - 2202
	4	2202 - 2428
DLL-MSFL-GR	1	1800 - 2202
HDT	1	1718 - 2202
	2	2202 - 2428
CYBERDIP	1	1718 - 2202
	2	2202 - 2428
GEODIP	1	2350 - 2428
CBL-GR	1	712 - 1442
	2	878 - 1718
	3	1571 - 2206
	4	2070 - 2142
CBL-VDL-GR	5	2020 - 2124
CBL-GR	6	2074 - 2123
CBL-VDL-GR	7	1800 - 1896

f. Velocity survey

The velocity survey was conducted by SSL. 24 checkshots with levels from 700 - 2420 m.

II GEOLOGICAL REPORT

II GEOLOGICAL REPORT

1. Stratigraphy

a. Table of chronostratigraphy (all depths in m)

CHRONOSTRATIGRAPHIC TOPS	DEPTH (KB)	DEPTH (MSL)
Quaternary		
Top Pleistocene	227	202
Tertiary		
Top Pliocene	305	280
Top Miocene	440	415
Top Oligocene	955	930
Top Eocene	1110	1085
Top Early Eocene	1270	1245
Top Palaeocene	1510	1485
Cretaceous	1697	1672
Jurassic	1833	1808

b. Table of Lithostratigraphy (all depths in m)

LITHOSTRATIGRAPHIC TOPS	DEPTH (KB)	DEPTH (MSL)	THICKNESS
Nordland Group	227	202	728
Hordland Group	955	930	555
Rogaland Group	1510	1485	181
Balder Formation	1510	1485	65
Lista Formation	1575	1550	122
Shetland Group	1697	1672	136
Brent Group	1833	1808	124
Ness Formation	1833	1808	3
Etive Formation	1836	1811	32
Rannoch Formation	1868	1843	77
Broom Formation	1945	1920	12
Dunlin Group	1957	1932	418
Drake Formation	1957	1932	126
Cook Formation	2083	2078	120
Burton Formation	2203	2178	9
Amundsen Formation	2212	2187	163
Statfjord Formation	2375	2350	46+
Nansen Member	2375	2350	46+

2. Lithological description

a. Summary

The tops are mainly based on the paleontological report from Paleoservices Ltd. and on correlations with wells in block 34/10.

NORDLAND GROUP (227 - 955 m)

The Nordland Group consists of mostly clay with minor amounts of sand particularly in the upper and lower parts. The clay is light to medium grey occasionally light brown or blue, mostly slightly calcareous and becoming silty towards the bottom. The loose sands are comprised of clear, occasionally milky white or yellow to brown quartz. The grains size is very fine to fine, occasionally very coarse at the bottom. Foraminifera and shell fragments are often pyritised and mica, glauconite and lignite occur as traces.

HORDALAND GROUP (955 - 1510 m KB)

The claystone is brownish grey to light brown becoming greenish after 1200 m and passing into bluish green shale at 1270 m. It is firm, silty, micromicaceous and non calcareous. The sands are loose, very fine to medium, subangular to subrounded becoming coarser and more rounded downwards. The siltstone is light grey to light greyish brown, friable and non calcareous. The lower part consist of shale with thin limestone stringers. The shale is bluish green to bluish grey becoming greenish at the bottom. It is firm to moderately hard, micromicaceous, non calcareous and silty locally grading to siltstone. The limestones are white, cream or buff and moderately hard to hard. Lignite and mica occur in the upper part, glauconite in the lower and pyrite throughout the group.

ROGALAND GROUP (1510 - 1697 m KB)

Mainly claystone with thin limestones and sandstones. There are traces of volcanic material at the top of the group. The claystone is light to medium grey, soft, silty, sandy, very slightly calcareous and micromicaceous. It locally grades to medium grey, greygreen and light green shale. The limestones are white to buff, and firm, moderately hard. The sandstones contain clear quartz which is very fine to medium, occasionally coarse grained, angular to subangular becoming subrounded downwards. The sandstone is cemented with calcite. The tuff is light brown occasionally white to grey with black and brown spots. Pyrite, glauconite and occasionally lignite are seen in the group.

SHETLAND GROUP (1697 - 1833 m KB)

The Shetland Group consists of claystone with frequent thin limestone bands and occasional sand stringers. The claystone is light to medium grey, soft, locally silty, slightly to moderately calcareous occasionally marly and micromicaceous. The limestone is light grey, buff or tan, firm to moderately hard and slightly argillaceous. The sands are of loose, clear to milky quartz, very fine to medium, locally coarse, angular to subrounded and well sorted. Traces of glauconite and pyrite occur, and fossils are common, particularly foraminifera.

BRENT GROUP (1833 - 1957 m KB)

Ness Formation (1833 - 1836 m KB)

This formation is represented by sandstone, siltstone and claystone. The sandstone is of loose clear quartz, very fine to coarse, silty, grading locally to siltstone, angular to subangular, and calcareous. The claystone is light grey, firm, silty and calcareous. There is also a trace of limestone, light grey to tan, firm and slightly argillaceous.

Etive Formation (1836 - 1868 m KB)

Sandstone is the lithology in the Etive Formation, comprising loose to friable clear quartz grains, fine to medium occasionally coarse, subangular to subrounded, well sorted with dark grey shale fragments and occasional thin coals.

Rannoch Formation (1868 - 1945 m KB)

The lithology of the Rannoch Formation is composed of massive sandstone with minor amounts of siltstone and occasionally calcareous cemented sandstone bands. The sandstone contains clear quartz, fine to very fine, and the grains are subangular to subrounded and moderately to well sorted. There are included fragments of carbonaceous shale and coal and the sand has an argillaceous matrix. Traces of coal, pyrite and abundant mica occur in this formation.

Broom Formation (1945 - 1957 m KB)

The Broom Formation consists of sandstone with minor amounts of shale. The sandstone is formed of poorly cemented clear quartz grains, very fine to coarse, occasionally very coarse, subrounded, poorly sorted and calcareous. The shale is light to medium grey, soft and slightly calcareous. There are also traces of coal, pyrite and mica.

DUNLIN GROUP (1957 - 2375 m KB)

This formation is dominated by shale except for the sandstone of the Cook Formation.

Drake Formation (1957 - 2083 m KB)

The Drake Formation consists of shale with occasional thin limestones and sand stringers. The shale is light to medium grey becoming medium to dark grey, it is silty and generally non to slightly calcareous. The limestone is from white to buff coloured, firm to hard and argillaceous. The sandstone of clear quartz with a variable grain size ranging from fine to coarse occasionally very coarse. The grains are subangular to

subrounded and moderately to well sorted. Pyrite, mica, coal and glauconite occur as traces.

Cook Formation (2083 - 2203 m KB)

The upper part of the Cook Formation is sandstone and grading downwards into shale. The sandstone contains clear quartz, fine to coarse grains. The grains are angular to subrounded and moderately to well sorted. The rock is moderately hard and occasionally calcareous cemented. The shale of the Cook Formation is medium grey, silty, firm, non to slightly calcareous and micaceous.

Burton Formation (2203 - 2212 m KB)

The lithology of the Burton Formation is shale, medium occasionally dark grey, soft to firm, and occasionally very calcareous. There are traces of limestone, white to buff coloured, hard to very hard locally gradint to marl.

Amundsen Formation (2212 - 2375 m KB)

The lithology of the Burton Formation is shale in the upper part and sandstone/siltstone in the lower part. Thin limestones and marly beds occur throughout, the shale is medium to dark grey, firm to hard, subfissile, silty, micromicaceous, pyritic and slightly calcareous, occasionally it is very calcareous. The siltstone is white, friable and cemented with calcite. The sandstone contains clear quartz, which is very fine grained subangular to subrounded, poorly to moderately sorted and slightly calcareous. The limestone is white, buff or light grey and is hard and crystalline while the marl is light grey or buff and firm to hard.

Statfjord Formation (2375 - (TD) 2421 m KB)

Nansen Member (2375 - 2421 m KB)

The well was ended in the Nansen Member, a section of sandstone with thinly interbedded shales. The sandstone is composed of poorly cemented clear quartz, fine to very coarse, subangular



and poorly sorted. The shale is light to medium grey, soft to firm, non calcareous to calcareous. Traces of siltstone, mica and pyrite are present.

b) Wellsite sample description

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Page 1 of 1

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" Ø

K. B. E.: 25 meters COMPANY: STATOIL/HYDRO/SAGA

HOLE SIZE: 26" GEOLOGIST: H. Nygård DATE: 28.03.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
300	90	sd, clr qtz, occ mlky wh, occ yel-brn, f-vf, subrnd, occ subang, occ w rnded, v w srted	clay is very soluble in the mud.
	10	clyst, lt gy lt grn, sft, sl calc, occ blue,	
	tr	mica, microfoss (calc),	
		sltst, lt brn-brn, lse, micromic, calc-sl calc ls, wh, mod hd	
310	100	sd a/a	
	tr	clyst a/a, microfoss	
		mica a/a, lign	
		sltst a/a, ls a/a	
320		a/a	
330		a/a	
340	100	sd, occ med, rnded, else a/a	
	tr	a/a	
350		a/a	
360		a/a	
370		a/a	
380		a/a	
390	90	sd a/a	
	10	clyst, lt gy-gy, occ lt brn, occ lt grn, occ blue, else a/a	
	tr	a/a	
400		a/a	
410		a/a	
420	80	sd a/a	
	20	clyst a/a	
	tr	a/a	
430		a/a	
440	80	sd, occ pink, else a/a	
	20	clyst a/a	
	tr	a/a	
450	100	sd a/a	
	tr	pyritic microfoss, coal, mica	
		ls (shell frags), clyst a/a	

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Page 2 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" Ø		
K.B.E.: 25 meters	COMPANY: STATOIL/HYDRO/SAGA	
HOLE SIZE: 17 1/2"	GEOLOGIST: H.Nygård	DATE: 28.03.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
460	100	sd, clr qtz, occ mlky wh, occ lt brn-brn, occ pink, f-vf, subrnd, occ subang, occ w rnded, v w srted, occ clyst, lt gy-gy, occ lt brn, pyr cmtd	clay is very soluble in the mud.
	tr	sft, sl calc, sl micromic	
	tr	coal, blk, brittle-firm	
		mica, microfoss, ls (shell fragm)	
470		a/a	
480		a/a	
490	80	sd a/a	
	20	clyst a/a	
	tr	coal, mica, microfoss (calcitic and pyritic)	
500	60	sd a/a	
	40	clyst a/a	
	tr	a/a	
510	80	sd a/a	
	20	clyst a/a	
	tr	a/a	
520		a/a	
530		a/a	
540	70	sd a/a	
	30	clyst a/a	
	tr	a/a	
550	60	sd a/a	
	40	clyst a/a	
	tr	a/a	
560	80	sd a/a	
	20	clyst a/a	
	tr	a/a	
570	60	sd a/a	
	40	clyst a/a	
	tr	a/a	
580	80	sd a/a	
	20	clyst a/a	
	tr	a/a	

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COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
CO ORDINATES: <u>61° 12' 55.34" N</u> ; <u>02° 15' 00.53" Ø</u>		
K. B. E.: 25 meters	COMPANY: STATOIL/HYDRO/SAGA	
HOLE SIZE: 17 1/2"	GEOLOGIST: H. Nygård	DATE: 28.03.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
590	80	sd, clr qtz, occ mlky wh, occ yel-brn, f-vf, subrnd, occ subang, occ w rnded, v w srted, occ pyr cmted	clay is very soluble in the mud.
	20 tr	clyst, lt gy-gy, sft, sl calc, occ blue mica,	
		coal, blk, brittle; ls, wh (shell fragm?) microfoss (calcite)	
600		a/a	
610	70	sd a/a	
	30	clyst a/a	
	tr	a/a	
620		a/a	
630		a/a	
640		a/a	
650		a/a	
660		a/a	
670	60	sd a/a	
	40	clyst a/a	
	tr	a/a	
680		a/a	
690		a/a	
700	80	sd a/a	
	20	clyst a/a	
	tr	a/a	
710	60	sd a/a	
	40	clyst a/a	
	tr	a/a	
720		a/a	
730		a/a	
740		a/a	

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Page 5 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E

K. B. E.: 25 meters COMPANY: STATOIL/HYDRO/SAGA

HOLE SIZE: 17 1/2" GEOLOGIST: Østby DATE: 06.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
850	40	sd, clr qtz, occ buff-wh, f, occ v crs, subang-subrnd, lse occ hd when silica cmt	NO SHOWS
	20	clyst, lt-med gy, sft, stky, non-sl calc	
	40	rock frag (quartzite, amphibolite)	
	tr	foss frag (shell frag)	
860	80	clyst a/a	
	20	sd, clr qtz, vf-med, occ v crs, subang-subrnd, occ rnd, lse	NO SHOWS
	tr	rock frag a/a	
870	60	clyst, slty else a/a	NO SHOWS
	40	sd a/a	
	tr	rock frag a/a	
	tr	shell frag	
880	60	clyst a/a	
	40	sd a/a	
	tr	rock frag	
	tr	foss frag (forams & shell frag)	NO SHOWS
890	50	clyst a/a	
	50	sd a/a	
	tr	lign	NO SHOWS
900	80	sd a/a	
	20	clyst a/a	
	tr	lign	NO SHOWS
	tr	mica, muscovite	
910	60	sd a/a	
	40	clyst, med gy, sft, stky, non-sl calc, slty, micro-	NO SHOWS
	tr	lign mic	
	tr	mica, muscovite	
920	80	sd a/a	NO SHOWS
	20	clyst a/a	
	tr	lign	
	tr	mica, muscovite	
930	80	sd a/a	NO SHOWS
	20	clyst a/a	
	tr	lign	
	tr	mica, biotite, muscovite	
	tr	foss frag, shell frag	

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Page 6 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/HYDRO/SAGA	
HOLE SIZE: 17 1/2"	GEOLOGIST: Østby	DATE: 06.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
940	90	sd, clr qtz, vf-med, occ crs-v crs, subang-subrnd, occ rnd, lse	NO SHOWS
	10	clyst, lt-med gy, sft, stky, non-sl calc, slty, micromic	
	tr	lign	
	tr	mica (biotite, muscovite)	
	tr	foss frag (forams)	
950	60	clyst a/a	
	40	sd a/a	NO SHOWS
	tr	lign (rel. abandon)	
	tr	mica a/a	
960	50	clyst a/a	NO SHOWS
	50	sd a/a	
	tr	mica	lign make up to 40 % of the totale sample
	tr	pyr	
	rich	lign	
970	60	sd a/a	
	40	clyst a/a	
	rich	lign	"
	tr	mica a/a	
980	60	sd a/a	
	40	clyst, lt-med gy-brnsh gy, sft-firm, occ stky	"
	rich	non-sl calc, slty, micromic lign	
	tr	pyr	
	tr	mica a/a	
990	60	sd a/a	"
	40	clyst a/a	
	rich	lign	
	tr	pyr	
	tr	mica	
1000	60	sd a/a	"
	40	clyst a/a	
	rich	lign	
	tr	pyr	
	tr	mica	

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Postboks 300, 4001 Stavanger

Page 7 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E

K.B.E.: 25 meters COMPANY: STATOIL/HYDRO/SAGA

HOLE SIZE: 17 1/2" GEOLOGIST: Østby DATE: 06.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1010	80	clyst, brnsh gy-lt brn, sft-firm, stky, non calc, slty, micromic, blk	NO SHOWS
	20	sd, clr qtz, vf-med, occ crs-v crs, subang-subrnd, occ rnd, lse	
	tr	lign	
	tr	mica	
	tr	pyr	
1020	80	clyst a/a	
	20	sd a/a	NO SHOWS
	tr	lign	
	tr	mica	
	tr	pyr	
1030	80	clyst a/a	
	20	sd a/a	NO SHOWS
	tr	lign	
	tr	mica	
	tr	pyr	
1040	95	clyst a/a	
	5	sd a/a	NO SHOWS
	tr	lign	
	tr	pyr	
1050	95	clyst a/a	
	5	sd a/a, occ pyr cmtd	NO SHOWS
	tr	lign	
	tr	pyr	
1060	100	clyst a/a	
	tr	sd a/a	NO SHOWS
	tr	lign	
1070	100	clyst a/a	
	tr	sd a/a	NO SHOWS
	tr	lign	
	tr	mica	
1080	100	clyst a/a	
	tr	lign	NO SHOWS
	tr	mica	

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Postboks 300, 4001 Stavanger

Page 8 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/HYDRO/SAGA	
HOLE SIZE: 17 1/2"	GEOLOGIST: M. Østby	DATE: 06.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1090	100	clyst, brnsh gy-lt brn, firm, non calc, slty, micromic, blk	NO SHOWS
	tr	lign	
	tr	mica	
1100	100	clyst a/a	
	tr	sd, clr qtz, vf-med, subang-subrnd, lse	"
	tr	lign	
	tr	mica	
1110	95	clyst a/a	
	5	sd a/a	"
	tr	lign	
	tr	mica	
1120	90	clyst a/a	
	10	sd, occ crs, subrnd-rnd else a/a	"
	tr	lign	
	tr	mica	
	tr	glauc	
1130	90	clyst a/a	
	10	sd a/a	"
	tr	lign	
	tr	mica	
	tr	glauc	
1140	85	clyst a/a	"
	15	sd a/a	
	tr	lign	
	tr	mica	
	tr	glauc	
1150	85	clyst a/a	"
	15	sd a/a	
	tr	lign	
	tr	mica	
1160	70	sd a/a	"
	30	clyst a/a	
	tr	lign	
	tr	pyr	
	tr	glauc	

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Postboks 300, 4001 StavangerPage 9 of **WELLSITE SAMPLE DESCRIPTION**

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

COORDINATES: 61 ° 12 ' 55.34 " N ; 02 ° 15 ' 00.53 " E

K.B.E.: 25 meters COMPANY: STATOIL/HYDRO/SAGA

HOLE SIZE: 17 1/2" GEOLOGIST: Østby DATE: 06 - 07.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1170	80	sd, clr gtz, med-crs, subang-subrnd, occ rnd, lse	NO SHOWS
	20	clyst, brnish gy-lt brn, firm, non calc, slty,	
		micromic, blkylign	
	tr	pyr	
	tr	glauc	
1180	90	sd a/a	NO SHOWS
	10	clyst a/a	
	tr	lign	
	tr	pyr	
	tr	glauc	
	tr	mica	
1190	100	sd a/a	NO SHOWS
	tr	clyst a/a	
	tr	lign	
	tr	pyr	
	tr	glauc	
1200	100	sd a/a	NO SHOWS
	tr	lign	
	tr	pyr	
	tr	glauc	
1210	60	sd a/a	NO SHOWS
	25	sltst, lt gy, sft	
	15	clyst, brnish gy-lt grnish brn, else a/a	
	tr	pyr	
	tr	lign	
1220	60	sd a/a	dull yel fluor- escence in sltst v pr cloudy cut
	25	sltst a/a	
	15	clyst a/a	
	tr	pyr	
	tr	lign	
1230	50	sd a/a	"
	30	clyst a/a	
	20	sltst a/a	
	tr	pyr	
	tr	lign	
	tr	glauc	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 StavangerPage 10 of **WELLSITE SAMPLE DESCRIPTION**

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E

K.B.E.: 25 meters COMPANY: STATOIL/N.HYDRO/SAGA

HOLE SIZE: 17 1/2" GEOLOGIST: Østby DATE: 07.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1240	50	sd, clr qtz, med-crs, subang-subrnd, occ rnd, lse, occ silica cmt	dull yel fluor-escence in sltst
	30	sltst, lt gy-lt gyish brn, sft, non calc,	v pr cloudy cut.
	20	clyst, brnish gy-lt grnish brn, firm, non calc, micromic, blkly, fissil	
	tr	pyr	
	tr	lign	
1250	60	sd a/a	
	25	clyst a/a	"
	15	sltst a/a	
	tr	lign	
	tr	pyr	
1260	80	sd a/a	
	15	clyst a/a	diesel in mud
	5	sltst a/a	
	tr	mica	
	tr	lign	
	tr	pyr	
1270	80	sd a/a	
	15	clyst a/a	
	5	sh, bluish grn, sft-firm, non calc, micromic, fissil	"
	tr	sltst, lt gy-lt gyish brn, sft, non calc	
	tr	mica	
	tr	lign	
	tr	pyr	
	tr	glauc	
1280	70	sd a/a	
	20	clyst a/a	"
	10	sh a/a	
	tr	pyr	
	tr	mica	
	tr	ls, buff-crm, hd	
	tr	lign-glauc	
1290	40	sh, bluish grn-blusih gy, firm-hd, occ sft, non calc, micromic, foss, occ slty	"
	30	clyst a/a	
	30	sd a/a occ v crs	
	tr	ls a/a	
	tr	pyr	
	tr	glauc	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger**WELLSITE SAMPLE DESCRIPTION**

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		

COORDINATES:	61° 12' 55.34" N ; 02° 15' 00.53" E
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K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA
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HOLE SIZE: 17 1/2"	GEOLOGIST: Østby	DATE: 07.04.80
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DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1300	50	sd, clr qtz, med-crs, occ v crs, subrnd-rnd, lse	
	30	sh, bluish grn-blusih gy, firm-hd, occ sft	diesel in mud
		occ slty, micromic, fissil	
	20	clyst, brnish gy-lt grnish brn, firm-mod hd,	
		non calc, micromic, fissil	
	tr	ls, buff-crm, hd	
	tr	glauc	
	tr	lign	
	tr	pyr	
1310	50	sd a/a	
	30	sh a/a	
	20	clyst a/a	"
	tr	ls a/a	
	tr	glauc lign	
	tr	pyr	
	tr	foss frag	
1320	40	sd a/a	"
	30	sh a/a	
	30	clyst a/a	
	tr	ls a/a	
	tr	glauc lign	
	tr	pyr	
1330	50	sh a/a	
	30	clyst a/a	"
	20	sd a/a	
	tr	ls a/a	
	tr	pyr	
	tr	lign	
1340	50	sh a/a	"
	25	clyst a/a	
	20	sd, occ silica cmt, hd, else a/a	
	5	ls a/a	
	tr	pyr	
	tr	glauc + lign	
1350	50	sh a/a	
	30	sd a/a	"
	15	clyst a/a	
	5	ls a/a	
	tr	pyr and glauc	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 12 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

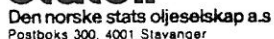
WELL NO.: 34/10-9

COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E

K.B.E.: 25 meters COMPANY: STATOIL/N.HYDRO/SAGA

HOLE SIZE: 17 1/2" GEOLOGIST: Østby DATE: 08.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1360	55	sh, bluish grn-bluish gy, firm-mod hd, occ sft and slty micromic, fissil, non calc	dull yel fluorec. in clyst
	15	clyst, brnish gy-lt grnish brn, firm-mod hd, non calc, micromic, fissil	pr cloudy cut.
	30	sd, clr qtz, med-crs occ crs, subrnd-rnd, lse	
	tr	sst, clr qtz, hd	
	tr	pyr-glauc	
	tr	ls buff-crm, mod hd-hd	
1370	50	sh a/a	
	15	sltst, lt bluish gy, sft, stky, non-sl calc	"
	10	clyst a/a	
	20	sd, occ granules, yel qtz else a/a	
	5	ls a/a	
	tr	sst a/a	
	tr	pyr-glauc	
1380	55	sh a/a	dull yel fluorec. in ls and clyst
	15	sltst a/a	pr cloudy cut.
	15	ls a/a	
	10	sd a/a	
	5	clyst a/a	
	tr	sst a/a	
	tr	forams	
	tr	pyr-glauc	
1390	70	sh a/a	
	15	ls a/a	"
	10	sltst a/a	
	5	clyst a/a	
	tr	sd a/a	
	tr	pyr-glauc	
1400	80	sh a/a	"
	10	ls a/a	
	5	sltst a/a	
	5	clyst a/a	
	tr	sd a/a	
	tr	pyr	
1410	75	sh a/a	
	15	ls a/a	"
	10	sltst a/a	
	tr	clyst a/a	
	tr	sd a/a / tr pyr	



**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 14 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY		AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9			
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E			
K.B.E.: 25 meters		COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 12 1/4"		GEOLOGIST: H.Nygård	DATE: 13.04.80
DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1460	40	clyst, lt grn, lt gy-grn, lt gy, occ bluish-grn, firm	CEMENT CONTAMINATION
		-sft, v sl calc, micromic	
	40	sh, lt grn, grn-gy, gy, blue-grn, mod-hd, v sl calc,	
		micromic, fissil, often inclus of pyr	
	10	sd, clr qtz, occ lt brn, f-vf, occ med, ang-subrnd	
	10	pyr, occ as pyr microfoss	
	tr	glauc	
		ls, wh, lt buff, mod hd, occ firm-sft	
1470	50	clyst a/a	
	50	sh a/a	
	tr	sd a/a, pyr	
	tr	glauc, ls a/a	
1480	40	clyst a/a	
	40	sh a/a	
	20	ls, wh, lt buff, mod hd, occ inclus of pyr	
	tr	pyr, glauc	
	tr	sd a/a	
	tr	sltst, lt brn, lt yel, lse-firm	
1490	70	clyst a/a	
	20	sh a/a	
	5	pyr	
	5	ls a/a	
	tr	a/a	
1500	70	sh a/a	dull yel fluor slow strmg yel cut.
	20	clyst a/a	
	10	ls a/a	
	tr	pyr, glauc, sd a/a	
1510	80	sh, occ shading into dk blue w/inclus of pyr, else a/a	dull yel fluor, fast strmg yel cut.
	20	clyst a/a	
	tr	tuff, lt brn, w/blk & brn spots, occ wh-gy	
	tr	pyr, glauc, ls a/a, sd a/a	
1520	90	sh, occ blk, v pyr, else a/a	dull yel fluor, fast strmg wh cut.
	10	clyst a/a	
	tr	ls a/a, glauc	
	tr	tuff a/a, pyr	
1530	100	sh, lt grn-blue, med gy, lt gy, grn-gy, mod hd, occ	"
		firm, else a/a	
	tr	ls a/a, tuff a/a, glauc, pyr	
	tr	sst, vf-f, ang-subang, occ v calc cmtd, wh, clr qtz	
1540	70	clyst, lt gy-med gy, sft, v sl calc,	
		slty & sdy, micromic	
	30	sh, occ stky, else a/a	weak yel fluor. no cut.
	tr	pyr, glauc, ls a/a	
	tr	sd, lt brn, occ clr qtz, vf-f, ang-subang, calc cmtd	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 15 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E

K. B. E.: 25 meters COMPANY: STATOIL/N. HYDRO/SAGA

HOLE SIZE: 12 1/4" GEOLOGIST: H. Nygård DATE: 14.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1550	80	clyst, lt gy-med qv, sft, v sl calc, slty & sdy, micromic	dull yel fluor slow strmy wh cut
	20	sh, lt grn, grn-gy, firm, v sl calc, micromic, subfiss, inclus of pyr, occ lam	
	tr	sd, lt brn, f-vf, ang-subang, calc cmtd	
	tr	pyr, glauc, microfoss (pyritic)	
	tr	ls, wh, occ lt yel-buff, firm-mod hd	
1560	70	clyst a/a	"
	10	sh a/a	
	10	sd, clr qtz, f-med, occ crs, subrnd-subang, w srted	
	10	ls a/a	
	tr	pyr, glauc	
	tr	microfoss; lign, blk, brittle	
1570	50	clyst a/a	dull yel fluor, fast strmy wh cut
	20	sd, subrnd-rnd, else a/a	
	20	ls a/a	
	10	sh a/a	
	tr	pyr, glauc, microfoss, lign	
1580		a/a	"
1590	70	clyst a/a	"
	10	sh a/a	
	10	sd a/a	
	10	ls a/a	
	tr	pyr, glauc, microfoss, lign	
1600		a/a	v weak yel fluor
1603	75	clyst a/a	NO SHOWS
	10	sh a/a	
	10	sd a/a	
	5	pyr	
	tr	glauc, microfoss, lign, ls a/a	
1606	70	clyst a/a	NO SHOWS
	10	sh a/a	
	10	sd a/a	
	10	pyr	
	tr	a/a	
1609	50	clyst a/a	NO SHOWS
	30	sh a/a	
	10	sd a/a	
	10	pyr a/a	
	tr	lign, else a/a	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 16 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9

COORDINATES: 61 ° 12 ' 55.34" N ; 02 ° 15 ' 00.53" E

K.B.E.: 25 meters COMPANY: STATOIL/N.HYDRO/SAGA

HOLE SIZE: 12 1/4" GEOLOGIST: H.Nygård DATE: 14.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
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1612	50	clyst, lt gy-med gy, sft, v sl calc, sl slty & sdy, micromic	silt on mud cleaners.
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	30	sh, lt grn, grn-gy, med gy, firm-mod hd, v sl calc, micromic, subfiss, inclus of pyr	
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	10	sd, clr qtz, f-vf, occ med, subrnd-rnd	
--	----	--	--

	5	ls, wh, occ lt buff, mod hd	
--	---	-----------------------------	--

	5	pyr	
--	---	-----	--

	tr	glauc, lign; sltst, lt gy, lse	
--	----	--------------------------------	--

1615	50	clyst a/a	
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	50	sh a/a	
--	----	--------	--

	tr	sd a/a, pyr	
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	tr	ls a/a, glauc, lign	
--	----	---------------------	--

1618	40	clyst a/a	
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	40	sh	
--	----	----	--

	20	sd	
--	----	----	--

	tr	ls a/a, pyr, glauc, lign	
--	----	--------------------------	--

1621		a/a	
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1624		a/a	
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1627	50	clyst a/a	
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	50	sh a/a	
--	----	--------	--

	tr	sd a/a, ls a/a, pyr, glauc, lign	
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1630		a/a	
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1633		a/a	
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1636		a/a	
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1639		a/a	
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1642		a/a	
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1645		a/a	
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1648		a/a	
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1651		a/a	
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1654		a/a	
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1657		a/a	
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1660		a/a	
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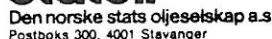
1663		a/a	
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**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 17 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY		AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9			
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E			
K.B.E.: 25	meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 12 1/4"		GEOLOGIST: H.Nygård	DATE: 15.04.80
DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1666	80	sh, med gy, lt gy, occ grn-gy, occ grn-blue, slty, firm-mod hd, occ mod hd, micromic, pyritic	much sd on cleaners, up to
	20	clyst, lt gy, gy, sft, occ v sl calc, micromic	crs sd.
	tr	sd, clr qtz, occ mlky wh, f-vf, occ med, subrnd, occ subang-ang, w srted, occ pyr cmtd	"
	tr	pyr, tuff, gy, lt gy, lse	
	tr	ls, mod hd, glauc	
1669	60	sh, occ fiss, else a/a	"
	40	clyst a/a	
	tr	a/a	
1672		a/a	"
1675	60	clyst a/a	"
	40	sh a/a	
	tr	a/a	
1678	50	clyst a/a	
	50	sh a/a, occ v pyritic	
	tr	sd, clr qtz, occ mlky, wh, f-med, occ vf, occ v crs, occ pyr cmtd,	
	tr	pyr, glauc, microfoss (pyritic) ls, wh, occ dk gy, mod hd-hd, occ sft	
1681	50	clyst a/a	weak yel fluor, v slow wh cut
	50	sh a/a	
	tr	sd, occ calc cmtd, else a/a	
	tr	pyr, microfoss, ls a/a	
1684		a/a	"
1687		a/a	"
1690	80	sh a/a	dull yel fluor, fast strmg yel cut
	20	clyst a/a, but more calc	
	tr	a/a	"oil streaks over sheaker"
1693	50	sh, occ dk gy-blue, else a/a	"
	50	clyst a/a, more calc	
	tr	a/a	
1696	80	clyst, lt gy, gy, sft, calc, micromic	"
	20	sh, med-dk gy, occ grn-gy, sl calc micromic	
	tr	a/a + marl	



WELLSITE	SAMPLE	DESCRIPTION
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
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98	98	98
99	99	99
100	100	100

COUNTRY: NORWAY

AREA: NORTH SEA

FIELD:	WILDCAT
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WELL NO.: 34/10-9

COORDINATES: 61 ° 12 ' 55.34" N ; 02 ° 15 ' 00.53" E

K. B. E.:	25	meters	COMPANY: STATOIL/N. HYDRO/SAGA
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HOLE SIZE: 12 1/4"

GEOLOGIST: H. Nygård

DATE: 16.04.80

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**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Sløvanger

Page 19 of 19

WELLSITE SAMPLE DESCRIPTION

COUNTRY:	NORWAY	AREA:	NORTH SEA	FIELD:	WILDCAT
WELL NO.:	34/10-9				
COORDINATES:	61° 12' 55.34" N ; 02° 15' 00.53" E				
K.B.E.:	25 meters	COMPANY:	STATOIL/N.HYDRO/SAGA		
HOLE SIZE:	8 1/2"	GEOLOGIST:	Hage/Veiberg	DATE:	21.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1731	95 5	clyst, lt gy-gy, sft, stky, slty, sl calc ls, wh-lt gy-buff, firm-mod hd, sl arg	
	tr tr	sd, f-med, clr, ang-subrnd pyr, fossils, glauc	
1744	80 15	clyst, a/a ls a/a	much cmt & LCM
	5 tr	sd, a/a pyr, fossils, glauc	
1747		a/a	
1750		a/a, incr in amount of fossils	
1753		a/a	
1757		a/a	
1760	60 20	clyst a/a ls a/a	
	10 10	fossils, mostly forams sd a/a	
	tr	a/a	
1765	70 20	clyst a/a ls a/a	
	5 5	fossils a/a sd a/a	
	tr	glauc, pyr	
1768		a/a	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 20 of 20

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
COORDINATES: 61 ° 12 ' 55.34" N ; 02 ° 15 ' 00.53 " E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Hage/Veiberg	DATE: 24.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1771	70 15	clyst, lt-med gy, sft, stky, slty sd, vf-f, ang-subrnd, qtz	
	10 5	ls, lt gy-tan, firm, sl arg foss frags, pyr, glauc	
1774		a/a decr sd	
1777	80 10 10	clyst, sft-firm, slty ls a/a sd a/a fossils, glauc, pyr	
1780		a/a	
1786		a/a clyst + ls, a/a	
1789	85 10 5 tr	clyst a/a ls a/a sd a/a a/a	
1791		a/a	
1792	90 5 5 tr	clyst, lt gy-med gy, sft, occ stky, slty, calc ls, a/a sd a/a fossils, pyr	most of the sample is LCM NO SHOWS (only min. fluor)
1795	90 10 tr	clyst a/a sd a/a ls, fossils, pyr	"
1798		a/a clyst sft-firm, else a/a	"
1801		a/a clyst becoming firmer	"
1804	90 10 tr	clyst, sft-firm, clac, slty, lt gy-med gy sd a/a a/a	wh-yel fluor mod-fast strmg wh -blue cut

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 21 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Jakobsson/Veiberg	DATE: 25.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1807	85	clyst, lt gy-gy, sft-firm, sl stky, occ slty, sl calc-calc	NO SHOWS
	15	sd, clr qtz, vf-f, ang-subang	
	tr	ls, fossils, glauc	
1810	a/a		weak fluor slow streaming
1813	50	sd, clr qtz, vf-f, lse, subrnd-subang, well strtd,	
	50	clyst, lt gy-gy, sft-firm, sltly stky, occ slty	wh cut
		sltly calc	
	tr	pyr	"
1816	60	sd a/a	
	40	clyst a/a	
1819	60	clyst a/a	
	10	ls a/a	
	30	sd a/a	
1822	50	clyst a/a	
	20	ls a/a	
	30	sd a/a	
	tr	pyr	
1825	60	sd a/a	
	20	ls a/a	
	20	clyst a/a	
1827	60	sd a/a	
	40	clyst a/a	bottoms up pr shows, no cut
	tr	pyr, ls	
1828	50	clyst a/a	
	30	sd a/a	weak shows in sltst, no cut
	20	sltst, wh qtz, friable, calc cmt	
	tr	ls, pyr, glauc	much mica and walnuts as LCM
1831	50	sd a/a	
	30	clyst a/a	
	20	sltst a/a	
	tr	pyr, v abd, glauc, ls	pr shows
1834	50	sd, clr qtz, vf-crs, ang-subang, v sltly calc, lse	
	30	sltst, clr qtz, in wh calc cmt, friable-hd,	
	20	clyst, lt gy, firm, calc, slty	
	tr	pyr, pyr coatings on qtz grains	

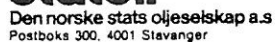
**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 23 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Jakobsson/Tan	DATE: 27.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1870	sh 20 sst 80	sst, f-slt, qtz, clr, subang-subrnd, frag (strg) of carb sh	mod shows
		pyr	
1873	100	sst, f, clr qtz, subang-subrnded, well srted, frag (strg?) of coal, frag (strg?) silt	mod shows mod-pr cut
1876	sst 70 silt 30	sst, f, silt, qtz, clr, subang, mod srted pyr, coal frag	mod shows mod cut
	tr	coal	
1879	80	sst, f, qtz, clr, subang-ang, well srted, pyr,	mod shows mod cut
	20	silt, qtz in calc cmt	
	tr	coal, pyr, mica	mica LCM ?
1882	70	sst, v lt gy, gr-cl, f-vf, well srted, subang-ang	mod shows mod to pr cut
	30	silt, qtz in calc cmt	
	tr	coal, pyr, mica	
1885	50	sst, qtz, clr, f-vf, well srted subang-subrnd	mod shows mod to weak cut
	50	silt, gy, qtz in calc cmt	
	tr	coal, ls ?, pyr, mica	mica mainly LCM ?
1888	60	sst, qtz, clr, f-vf, well srted subang-ang	pr shows weak cut
	40	silt, qtz in calc cmt	
	tr	coal, sh, pyr, calcite frag, mica	
1891	50	sst, qtz, clr, vf, well srted, ang-subang	pr shows no cut
	50	silt, qtz in calc cmt	
	tr	coal,	



**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 25 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
COORDINATES: 61 ° 12 ' 55.34 " N ; 02 ° 15 ' 00.53 " E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Jakobsson/Tan	DATE: 26.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1915	95	sst, f-med, qtz, clr, subang (w/calc cmt?)	gd shows gd cut
	5	silt, qtz w/calc cmt	
	tr	sh frag	caved ?
1918	90	sst, qtz, clr (w/calc cmt?) f, subang	weak shows mod-weak cut
	10	ls ? silty	
	tr	mica	mica lam
1921		sst, f-vf, qtz, clr, subang w/calc cmt	mod-weak shows mod-weak cut
		silt, qtz w/calc cmt	
	tr	pyr, sh frag	fr.caved shows
1924	100	sst, qtz, clr, subrnd, f, well srtd in calc-clayey matrix	gd-v gd shows mod cut
	tr	mica	mica lam
1927	100	sst, qtz, clr, f, subrnd, well srtd, w/calc/clayey matrix	gd shows (in cl) mod-gd cut (in cl)
			shows/cut weaker in sd fraction
	tr	mica	mica lam
1930	100	sst a/a	mod shows (cl) gd cut (cl)
	tr	a/a	mod-pr shows (sd) mod-pr cut (sd)
1933	100	sst a/a	gd-mod shows gd-mod cut
1936	100	sst, qtz, clr, f, subrnd	weak shows mod cut
		ls ? silty/sdy	
		pyr, mica	mica lam

**statoil**Den norske stats oljeselskap a.s
Postboks 300 4001 Stavanger

Page 26 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Jakobsson/Tan	DATE: 27.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1939	80	sst, qtz, clr, subang, f, calc	mod-weak shows mod cut
	20	calc cl	
	tr	pyr, mica	mainly mica lam
1942	60	sst, qtz, clr, subang, vf, calc	weak shows
	20	calc cl	mod-gd cut
	20	ls ? silty	
	tr	pyr, mica	mica lam
1945	100	sst, clr qtz, lse, vf-crs, occ v crs, subrnd, calc, pr srt'd	top Broom mod shows
	tr	mica	v weak cut
	tr	coaly sh, blk-hd	
1948	80	sst a/a	
	10	clyst, lt-med gy, sft-stky, sltly calc	"
	10	dol/ls, lt-med brn, buff, hd, arg	
	tr	coaly sh, pyr, mica	"
1951	80	sst a/a	
	10	clyst a/a	
	10	dol a/a	
	tr	coal, pyr, mica	
1954	100	sst a/a	
	tr	pyr, coal	
1957	100	sst a/a	
	tr	pyr, coal	
1960	40	sst a/a	
	20	dol/ls a/a	
	40	clyst a/a	
1963	60	clyst, lt-med gy, sft, stky, slty, calc	
	40	sst a/a	
1966	80	clyst a/a	
	20	sst a/a	
1969	100	clyst a/a	
	tr	ls/dol a/a	
	tr	sst a/a	
	tr	pyr, mica, coal frag a/a	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 27 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9		
COORDINATES: 61 ° 12 ' 55.34" N ; 02 ° 15 ' 00.53 " E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Jakobsson/Tan	DATE: 27.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
1972	80	clyst, lt-med gy, sft-stky, occ firm, non sltly calc, arg, slty	v pr shows
	20	sst, clr qtz, lse, f-crs, occ v crs, subang, occ srubrnd, calc	no cut
	tr	sltst, clr qtz in ls matrix, friable-hd,	
	tr	mica, pyr	
	tr	coal, shaly, blk, brittle, occ sft	
	tr	ls, buff, sft-firm, occ hd,	
1975	70	clyst a/a	
	30	sst a/a	
	tr	pyr, v abd, sltst, mica a/a	
1978	80	clyst a/a	NO SHOWS
	20	sst a/a	
	tr	a/a	
1981	70	clyst a/a	"
	30	sst a/a	
	tr	a/a	
1984	100	clyst a/a	NO SHOWS
	tr	sst, clr qtz, vf, lse, subrnd, well srted	
1987	100	clyst a/a	
	tr	sst a/a, pyr, coaly frag (poss cav)	
1990	100	clyst a/a	
	tr	sst, sltst a/a, ls a/a, blk, coal frag	NO SHOWS
1993	100	clyst a/a	
	tr	sltst, ls, a/a	
1996	100	clyst a/a	
	tr	sst, sltst, ls a/a	
1999	100	clyst a/a	
	tr	sst, sltst, ls a/a	
2002	100	clyst a/a	
	tr	a/a	
2005	100	clyst a/a	
	tr	a/a	
2008	100	clyst a/a	
	tr	a/a	
2011	100	clyst a/a	
	tr	a/a	
2014	100	clyst a/a	
	tr	sst, sltst, a/a, pyr a/a	
2017	100	clyst a/a	
	tr	a/a	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 28 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO: 34/10-9		
COORDINATES: 61 ° 12 ' 55.34" N ; 02 ° 15 ' 00.53 " E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"	GEOLOGIST: Jakobsson/Tan	DATE: 28.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2020	80	clyst, med-dk gy, firm, occ sft, stky, calc, micromic, sltly w/blk patches	NO SHOWS
	10	ls, buff, firm, occ hd, arg	
	10	sst, clr qtz, lse, vf-f, grdg to sltst,	
		calc	
	tr	pyr	
2023	70	clyst a/a	
	20	ls a/a	
	10	sst a/a	
	tr	pyr	
2026	90	clyst a/a	
	10	ls a/a	
	tr	sst, pyr	
2029	100	clyst a/a	
	tr	sst, ls, pyr a/a	
2032	100	clyst a/a	
	tr	a/a	
2035	100	clyst a/a	
	tr	a/a	
2038	80	clyst a/a	
	20	sst, f-med, occ crs a/a	
	tr	sltst, clr qtz, friable, lse, calc cmt	
	tr	ls a/a	NO SHOWS
	tr	pyr a/a	
	tr	mica	
2041	90	clyst a/a	
	10	sst a/a	
	tr	ls, sltst a/a	
	tr	pyr, mica, glauc a/a	
2044	100	clyst a/a	
	tr	a/a	
2047	90	clyst a/a	
	10	sst a/a	
	tr	a/a	
2050	80	clyst a/a	
	10	sst a/a	
	10	sltst a/a	
	tr	pyr	
2053	70	clyst a/a	
	20	sst a/a	
	10	sltst a/a	
	tr	pyr, glauc, mica a/a	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 29 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY		AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9			
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E			
K.B.E.: 25	meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 8 1/2"		GEOLOGIST: Jakobsson/Tan	DATE: 28.04.80
DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2056	70	clyst, med-dk gy-firm, calc, slty, occ micromic, blk coal frag	
	20	sst, clr-wh qtz, lse, f-crs, subrnd, calc	
	10	sltst, clr qtz, friable, calc cmt	
	tr	coal	
	tr	mica	
	tr	pyr	
2059	90	clyst a/a	
	10	sst a/a	
	tr	sltst, coal, mica, pyr	
2062	100	clyst a/a	
	tr	a/a	
2064	90	clyst a/a	NO SHOWS bottom up after circ
	10	sst a/a	
2068	60	clyst a/a	
	40	sst a/a	
2071	70	clyst a/a	
	30	sst a/a	
2074	60	clyst a/a	NO SHOWS
	20	sst a/a	
	10	sltst a/a	
	10	ls a/a	
	tr	pyr, blk, coaly sh frag	
2077	80	clyst a/a	
	20	sst a/a	
	tr	pyr, mica, ls a/a	
2080	60	clyst a/a	
	20	sst a/a	
	20	sltst a/a	NO SHOWS
	tr	pyr, v abd	
2083	70	sst, f-med, occ crs, subrnd, calc	pr shows no cut
	10	clyst a/a	
	20	sltst a/a	
	tr	abd pyr	
2086	100	sst a/a	mod-pr shows weak cut
	tr	sltst, pyr	
2089	100	sst a/a	"
	tr	sltst, pyr	
core	no.2	2089 - 2094	
core	no.3	2094 - 2112	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 30 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY:	NORWAY	AREA:	NORTH SEA	FIELD:	WILDCAT
WELL NO.:	34/10-9				
COORDINATES:	61° 12' 55.34" N ;	02° 15' 00.53" E			
K. B. E.:	25 meters	COMPANY:	STATOIL/N. HYDRO/SAGA		
HOLE SIZE:	8 1/2"	GEOLOGIST:	Jakobsson/Tan	DATE:	30.04.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2131	60	sst, clr qtz, lse-friable, vf, occ f, occ slty, subrnd, well srted, calc cmt	pr shows, v weak cut
	40	clyst/sh, med gy, firm, non-sltly calc, slty, mic	MW 1,80
	tr	mica, clacite, pyr	pp ca.1,58 ca.700 psi. over
2134	50	sst a/a	balanc
	50	clyst a/a	pr shows
2137	70	sst a/a	
	30	clyst a/a	"
2140	40	sst a/a	
	60	clyst a/a	"
2143	50	clyst a/a	
	50	sst a/a	
2146	80	sst a/a	
	20	clyst a/a	
2149	50	sst a/a	
	50	clyst a/a	
2152	60	clyst a/a	
	40	sst a/a	
2155	40	sst a/a	v pr shows
	60	clyst a/a	no cut
2158	80	clyst a/a	
	20	sst a/a	
2161	50	sst a/a	slow drill.rate
	50	clyst a/a	NO SHOWS
2164	90	clyst	
	10	sst a/a	"
2167	90	clyst	
	10	sst	"
2170	100	clyst a/a	
	tr	sst	"
2173	100	clyst aza	
	tr	sst	"
2176	100	clyst a/a	v little samples
	tr	sst a/a	
2179	100	clyst a/a	"
	tr	sst a/a	
2182	100	clyst a/a	
	tr	sst a/a	
2185	100	clyst a/a	
	tr	sst	"
2188	100	clyst	
	tr	sst	"

Page 31 of

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 1 of 1

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9 II		
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 7"	GEOLOGIST: Jakobsson/Nylend	DATE: 01.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2203	100 tr	sh, lt-med gy, sft-firm, sltly calc ls, wh-clr, xln	NO SHOWS sample cont. w/cmt
	tr	mica	
2206	90	sst, clr-wh qtz, lse, f-occ med, occ crs, ang-subang, occ subrnd, med srt'd, v calc	
	10	sh, lt-med gy, firm, occ hd, micromic,	NO SHOWS
	tr	abd ls, wh, buff, occ xln, hd-v hd, occ firm, marly	
	tr	pyr, mica	
2209	50	sst a/a	
	20	sh a/a	
	20	ls a/a	
	10	marl, buff, firm	
	tr	pyr, mica	
2212	60	sst a/a	
	20	sh a/a	
	20	ls/marl a/a	
	tr	a/a	
2215	70	sst a/a	
	20	sh a/a	
	10	ls a/a	
	tr	a/a	
2218	60	sst a/a	
	20	sh a/a	
	20	ls a/a	
	tr	a/a	
2221	40	sst a/a	
	20	sh a/a	
	20	ls/marl a/a	
	20	sltst, clr qtz, lse, well rnd, well srt	NO SHOWS
2224	70	sst a/a non calc	
	20	sh a/a non calc	v pr shows
	10	ls a/a	fast str. mlky wh
	tr	a/a	cut
2227	100 tr	sst a/a pyr	
2230	95	sst a/a	
	5	ls a/a	
	tr	pyr	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 2 of 2

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9 II		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K. B. E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 7"	GEOLOGIST: Jakobsson/Nylend	DATE: 01.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2233	80	sst, clr-wh gtz, f, occ med, occ crs ang-subang, occ subrnd, med srted	NO SHOWS
	15	sh, lt gy-med gy-grn gy, sft-firm, slty, calc	
	5	ls, wh-buff, xln	
	tr	forams	
2236	70	sst a/a	
	20	sh a/a	
	10	ls a/a	
	tr	pyr	
	tr	forams	
2239	70	sst a/a	
	10	ls a/a	
	10	sh a/a	
	10	pyr	
	tr	forams	
2242	50	sh a/a	
	35	sst a/a	
	10	ls a/a	
	5	pyr	
	tr	forams	
2245	60	sst a/a	
	20	sh a/a	
	15	ls a/a	
	5	pyr	
	tr	forams	
2248	35	sh a/a	
	30	sst a/a	
	30	ls a/a	
	5	pyr	
2251	40	sh a/a	
	40	ls a/a	
	15	sst a/a	
	5	pyr	
2254	40	sh a/a	
	40	ls a/a	
	20	sst a/a	
	tr	pyr	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 3 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO: 34/10-9 II		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K. B. E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 7"	GEOLOGIST: Jakobsson/Nylend	DATE: 02.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2257	45 30	sh, lt gy-med gy-buff, slty, calc ls, lt gy-buff, xln	
	20	sst, clr-wh qtz, f-occ med occ crs, ang-subang, occ subrnd, med srted	
	5 tr	pyr forams	
2260	50 30	sh a/a ls a/a	
	20 tr	sst a/a pyr	
2263	30 30	sh a/a sst a/a	
	20 15	ls a/a sltst, wh-clr qtz, friable-hd, calc cmt	
	5 tr	pyr foss frag	
2266	40 20	sh a/a sst a/a	
	20 20	marl a/a sltst a/a	
	tr	abd pyr	
2269	60 10	sh a/a sst a/a	
	20 10	sltst a/a marl a/a	
2272	70 20	sh a/a sltst a/a	
	10 tr	marl a/a pyr, sst	
2275	50 30	sh a/a marl a/a	
	10 10	sltst a/a sst a/a	
	tr	pyr	
2278	80 10	sh a/a marl a/a	
	10 tr	sltst a/a sst, pyr, abd	
	tr	forams, ls	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 Stavanger

Page 4 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9 II		
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K. B. E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 6"	GEOLOGIST: Jakobsson/Nylend	DATE: 02.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2281	70	sh, lt gy-med gy, slty	NO SHOWS
	10	marl, wh-lt gy, sft	
	10	slt, gy-buff, friable-hd, calc	occ v pr shows
	5	sst a/a	
	5	pyr	
2284	80	sh a/a	
	10	marl a/a	
	10	sst a/a	
	tr	pyr	
	tr	forams	
2287	75	sh a/a	
	5	marl a/a	
	10	sltst a/a	
	10	sst a/a	
	tr	pyr	
	tr	forams	
2290	70	sh a/a	
	10	sltst a/a	
	10	marl a/a	
	10	sst a/a	
	tr	pyr, ls, forams	
2293	60	sh	
	30	marl	
	10	sltst	
	tr	sst, pyr, forams	
2296	50	sh a/a	
	20	marl a/a	
	20	sltst a/a	
	10	sst a/a	
	tr	tuff ? brick red-red brn, w/blk patches silty capp non calc	
	tr	pyr	
	tr	mica, forams, shell frag	
2299	50	sh a/a	
	20	sst a/a	
	10	tuff ?, a/a	
	20	sltst, a/a	
	tr	pyr, forams	
2302	50	sh a/a	
	30	sltst a/a	
	20	sst a/a	
	tr	pyr, forams	

**statoil**Den norske stats oljeselskap a.s.
Postboks 300, 4001 StavangerPage 5 of **WELLSITE SAMPLE DESCRIPTION**

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9 II

COORDINATES: 61° 12' 55.34" N; 02° 15' 00.53" E

K.B.E.: 25 meters COMPANY: STATOIL/N.HYDRO/SAGA

HOLE SIZE: 6" GEOLOGIST: Jakobsson/Nylend DATE: 02.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2305	50	sh, med gy-firm, sltly calc, micromic	pr shows
	30	marl, buff, firm-hd	
	10	ls, wh, hd, xln	
	10	sltst, clr qtz, friable, calc cmt	
	tr	sst, clr qtz, vf-f, lse, sltly calc	
	tr	pyr, forams	
2308	60	sh a/a	
	30	marl a/a	
	10	ls a/a	
	tr	sst, pyr, forams	
2311	50	sh a/a	
	30	sst a/a	
	10	marl a/a	
	10	sltst a/a	
	tr	a/a	
2314	70	sh a/a	
	20	marl a/a	
	10	sltst a/a	
	tr	a/a	
2317	60	sh a/a	
	20	marl a/a	
	10	sltst a/a	
	10	sst a/a	
	tr	pyr	
2320	90	sst, clr qtz, vf-f, rnd, calc, well srt	
	10	sh, buff-lt brn	
	tr	pyr	
2323	100	sst, vf-f, clr qtz, a/a	NO SHOWS
	tr	sh a/a, marl a/a	
2326	80	sst a/a	
	20	sh a/a	
	tr	a/a	
2329	80	sh a/a	
	20	sst a/a	
	tr	a/a	
2332	50	sltst a/a	NO SHOWS
	20	marl a/a	
	20	sh a/a	
	10	sst a/a	
	tr	pyr	

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Postboks 300, 4001 Stavanger

Page 6 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO.: 34/10-9 II		
CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K. B. E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 6 "	GEOLOGIST: Jakobsson/Nylend	DATE: 02.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2335	50 30	sltst, clr qtz, friable, calc cmt marl, buff, wh-gy, firm-hd	NO SHOWS
	20 tr	sst, clr qtz, vf-f, rnd, well srted, calc pyr, foss frag	
2338	80 20	sltst a/a marl a/a	
	tr	a/a	
2341	100 tr	sltst sst, marl	
2344	90 10	sltst a/a sst, clr qtz, med-crs, subang-rnd,	
	tr	prly srted, sltly calc marl	
2347	100 tr	sltst a/a sst a/a	
2350	100 tr	sltst a/a sst a/a	
2353	50 50	sltst a/a sst, f-occ med, else a/a	
2356	90 10	sst, a/a sltst a/a	
	tr	pyr	
2359	80 20	sst a/a sltst a/a	
	tr	pyr, marl	
2362	50 40	sst a/a sltst a/a	
	10 tr	marl a/a a/a	
2365	50 30	sltst sst, vf-f, a/a	
	20 tr	marl a/a pyr	
2368	30 30 30 10	sh, lt-med gy, firm, sltly calc sst a/a occ med sltst a/a marl a/a	
	tr	pyr abd	
2371	100	sst, clr qtz, med grnd, occ f, prly srted, well rnd, sltly calc	

**statoil**Den norske stats oljeselskap a.s
Postboks 300, 4001 Stavanger

Page 7 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY	AREA: NORTH SEA	FIELD: WILDCAT
WELL NO: 34/10-9		
COORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E		
K.B.E.: 25 meters	COMPANY: STATOIL/N.HYDRO/SAGA	
HOLE SIZE: 7"	GEOLOGIST: Jakobsson/Nylend	DATE: 02.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
2374	100	sst, clr qtz, med, occ crs, occ v lse, subang, prly srted, sltly calc	NO SHOWS
	tr	pyr	
2377	100	sst, clr qtz, f-crs, occ med- lse, subang-subrnd, prly srted, sltly calc	
2380	100	sst, a/a med	
	tr	pyr	
2383	100	sst, clr qtz, med occ f-crs, subang-subrnd, med srted	
	tr	marl, wh, sft	
2386	90	sst a/a	
	10	sltst, clr qtz, buff, friable, calc cmt	
	tr	marl a/a	
2389	90	sst a/a	
	5	sltst a/a	
	5	sh, lt gy-med gy, sft-firm, calc	
	tr	marl a/a	
	tr	mica	
2392	95	sst a/a	
	5	sh a/a	
	tr	sltst a/a	
	tr	mica	
	tr	marl	
2395	100	sst a/a	
	tr	sltst a/a	
	tr	mica	
2398	100	sst a/a	
	tr	mica	
	tr	pyr	
2400 - 2405,5		core no.1 (5) & no.2 (6)	
2410	50	sh, med gy, sft-hd, non calc	
	40	sst, a/a	
	10	sltst a/a	
2413	80	sst a/a	
	10	sltst a/a	
	10	sh a/a	
	tr	pyr	

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Postboks 300, 4001 Stavanger

Page 8 of

WELLSITE SAMPLE DESCRIPTION

COUNTRY: NORWAY AREA: NORTH SEA FIELD: WILDCAT

WELL NO.: 34/10-9 II

CO ORDINATES: 61° 12' 55.34" N ; 02° 15' 00.53" E

K. B. E.: 25 meters COMPANY: STATOIL/N.HYDRO/SAGA

HOLE SIZE: 7" GEOLOGIST: Jakobsson/Nylend DATE: 05.06.80

DEPTH	LITH. %	LITHOLOGIC DESCRIPTION	Shows & Remarks
-------	---------	------------------------	-----------------

2416	100	sst, clr qtz, med, subang-subrnd, mod srtd	
	tr	sh, med gy, sft-hd, non calc	

2419	100	sst, clr qtz, f-crs, subang-subrnd, prly srtd	
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c) Convetional core description

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Den norske stats oljeselskap a.s.

PAGE 1 OF 4

CONVENTIONAL CORE DESCRIPTION

FIELD 34/10 WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 1 INTERVAL from 1850 to 1868 CORED 18 REC 13,5 75 %
FORM. BRENT GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 26/4-80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf l m c vc	DIP (apparent)	SHOWS									Φ P F G P F G	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
1850														sst: clr qtz, friable -loose, f, well srt, subrnd-subang, non calc, non mic, non pyr, brn oil stain	Massiv app. sst no struct
951	CCCCCC CCCCCC													coal: in fragm, blk, hd, brittle, with qtz grains sst: a/a	
1852															
1853															
1854															
1855															

mu si vf l m c vc
1 1 1 1 1 1 1

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Den norske stats oljeselskap a.s

PAGE 2 OF 4

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA _____
CORE NO. 1 INTERVAL from 1850 to 1868 CORED 18 REC 13,5 75 %
FORM. BRENT GEOLOGIST KHJ/T.H. TAN DATE 26/4-80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vl f m c vc	DIP (apparent)	SHOWS									Φ P F G P F G	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
1856	•••••													sst, clr qtz, friable- loose, f, occ med, subrnd-subang, non calc, non mic, non pyr, occ coal and sh fragm	
1857	•••••													sh: dk gy, frm-non calc coal: blk, brittle	
1858	•••••														
1859	•••••														
1860	•••••														
1861	•••••														

mu si vl f m c vc
1 1 1 1 1 1 1

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Den norske stats oljeselskap a.s

PAGE ___ OF ___

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 1 INTERVAL from 1850 to 1868 CORED 18 REC 13,5 75 %
FORM. _____ GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 26.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ P F G P F G	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
1861.														sst: clr qtz, f-m, loose-friable subrnd non calc, sltly mic, non pyr, brn oil coating, occ clasts of coal and sh a/a	
1862															
1863															
1863,5															
1864															
1865															
1866															

mu si vf f m c vc
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Den norske stats oljeselskap a.s

PAGE 4 OF 4.

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 1 INTERVAL from 1850 to 1868 CORED 18 REC 13,5 75 %
FORM. _____ GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 26.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ P F G P F G	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
1867															
1868															

mu si vf f m c vc
→



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Den norske stats oljeselskap a.s

PAGE 1 OF 1

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 2 INTERVAL from 2089 to 2094 CORED 5 m REC 4,20 m 84 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 28.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vl f m c vc	DIP (apparent)	SHOWS									Φ	LITHOLOGIC DESCRIPTION	MISC.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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PAGE 1 OF 3

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 3 INTERVAL from 2094 m to 2112 m CORED 18 m REC 15,45 m 86 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 29.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS												LITHOLOGIC DESCRIPTION	MISC.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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mu si vf f m c vc
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Den norske stats oljeselskap a.s.

PAGE 2 OF 3

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 3 INTERVAL from 2094 to 2112 CORED 18 m REC 15,45 86 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 29.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
2100														sst: clr qtz, v hd, f-med, subang-subrnd, well srt, calc cmt w/ sh, med gy	
2101														sst: clr qtz, firm-friable, vf-f, non calc, subang-subrnd, occ well srt, mic, pyr, sh, a/a	thinly laminated occ ripple lam bioturb
2102															
2103															
2104															
2105															



CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 3 INTERVAL from 2094 m to 2112 m CORED 18 m REC 15,45 86 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 29.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ P F G P F G	LITHOLOGIC DESCRIPTION	MISC.		
			STAIN			CUT			FLUOR							
			S	F	G	P	F	G	P	F	G					
2106																
2107																
2108																
2109																
2109,45																
to 2112																

Legend: mu si vf f m c vc

Annotations:

- 2106: sst: clr qtz, med gy, sh, frm-friable, sub-ang-subrnd, mod srt, non-sltly calc, pyr, mic
- 2108: sst: calc, v hd a/a
- 2108: sst: non calc, friable a/a
- 2108: sst: calc v hd a/a
- 2109,45: sst: non calc, friable a/a



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Den norske stats oljeselskap a.s

PAGE 1 OF 4.

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 4 INTERVAL from 2112 to 2130 CORED 18,30 REC 18,30 100 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 30.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
2112														sst: clr qtz, vf-sltty, firm-fri, mod-pr srt, ang. abund clyst, lam, gy, occ calc cmt tr: mic, pyr	
2113															
2114															
2115															
2116															
2117.5															

mu si vf f m c vc



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Den norske stats oljeselskap a.s.

PAGE 2 OF 4.

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 4 INTERVAL from 2112 to 2130 CORED 18,30 REC 18,30 100 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 30.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf l m c vc	DIP (apparent)	SHOWS									Φ	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
2117.5															
2118															
2119															
2120															
2121															
2122															
2123															

mu si vf l m c vc

mu si vf l m c vc

sst: calc cmt, vh
vh, a/a

sst: non-calc, a/a



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Den norske stats oljeselskap a.s.

PAGE 3 OF 4

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 4 INTERVAL from 2112 to 2130 CORED 18,30 REC 18,30 100 %
FORM. COOK GEOLOGIST K.H. JAKOBSSON/T.H. TAN DATE 30.4.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ P F G P F G	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
2123															
2124															
2125															
2126															
2127															
2128															
2128.5															

mu si vf f m c vc
→

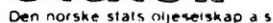
sst: calc, cmt, a/a

sst: non-calc a/a

sst: calc cmt, a/a

sst: non-calc a/a

locally high gas content in sst



mu si vf f m c vc
⊥ ⊥ ⊥ ⊥ ⊥ ⊥ ⊥
→

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Den norske stats oljeselskap a.s

PAGE 1 OF 1

CONVENTIONAL CORE DESCRIPTION

FIELD _____ WELL NO. 34/10-9 AREA NORTH SEA
CORE NO. 6 INTERVAL from 2400,5 to 2405,5 CORED 5,0 REC 3,70 74 %
FORM. STATFJORD GEOLOGIST K.H. JAKOBSSON/R. NYLEND DATE 05.06.80

DEPTH	LITHOLOGY/ GRAIN SIZE mu si vf f m c vc	DIP (apparent)	SHOWS									Φ	LITHOLOGIC DESCRIPTION	MISC.	
			STAIN			CUT			FLUOR						
			S	F	G	P	F	G	P	F	G				
2400,5														sst: clr qtz, friable crs-v crs, subang, mos-poor srt sst: clr qtz friable v crs - granul, ang mod srt, non calc sh: med gy, hd, micromic, non calc, lam, w/slt lam	
2401															
2402															
2403															
2404															
2405															
2405,5															

mu si vf f m c vc
→

d) Sidewall core description


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Den norske stats oljeselskap a.s

Page 1 of 2

SIDEWALL CORE DESCRIPTION

COUNTRY: Norway AREA: North Sea FIELD:

WELL NO.: 34/10-9 RUN NO.: 1 INTERVAL: 1735-2200

CO ORDINATES: ° ' " N ; ° ' "

K.B.E.: 25 meters COMPANY: Statoil/N. Hydro/Saga

HOLE SIZE: 8 1/2" GEOLOGIST: T. Kristensen DATE: 4/5-80

DEPTH	REC. cm	LITHOLOGIC DESCRIPTION	POROSITY	SHOWS
1735	5,1	Clst: lt gy, sft, sl slty, pyr, v calc sl micromic, sl glc	-	yel fluor no cut
1750	4,8	Clst: m - dk gy, sft, v pyr, v calc, abund microfos	-	no shows
1765	0,5	Clst: m - dk gy, sft - v sft, v calc		
185	4,7	Clst: dk gy - blk, firm, v pyr, calc, microfos, glc, micromic, streaks of f sand		
1815,5	5,0	Clst: grn gy, firm, sl pyr, non calc, blk in part		
1826	4,0	Clst: dk gy - blk, firm, pyr - v pyr, non calc		
1834	1,6	Is: wh - lt gy, hd, xln, qtz grains, pyr, in part firm - mod hd, clastic, sdy, pyr		
1837	3,8	Sst: lt brn. (stain), f, subang - subrnd, fair srt, coal frags, mic, trace glc, v lse	good	bright yel fluor fast stream mlk wh cut
1840	3,7	Sst: clr - mlky qtz brn (stain), f - m, subang - subrnd, coal frags, v lse	a/a	a/a
1842	3,7	Sst: m, else a/a, thin streaks of carb sft material occ crs grains	a/a	a/a
1844	2,5	Sst: f - m, occ crs - v crs, else a/a	a/a	a/a
1847	3,5	Sst: dk gy - blk, vf - f, occ m - crs, subrnd - subang v arg, carb, pyr, firm, slty	-	no shows
1882	5,0	Sst: lt gy brn. vf - f, subrnd, mic, tr glc, lse sl arg, non - sl calc	good	bright yel fluor mod fast cut
1918	4,9	Sst: a/a	a/a	a/a
1950	4,8	Sst laminated w/mica and coal frags Sst: lt - m gy, vf - f, subrnd - subang, v mic, arg, non - sl calc, lse - firm, tr glc	poor - fair	dull yel fluor in streaks slow cut
1960	5,0	Clst: blk - v dk gy, firm, occ sdy, sl slty v mic, pyr, non calc, trace coal frags	-	no shows
1975	4,4	Clst: micromic, non - sl calc, else a/a		
2000	4,2	Clst: dk gy, firm - mod hd, sl pyr, sl micromic, non calc, subfis		
	4,3	Clst: dk gy, firm - mod hd, sl - v pyr, micromic, occ streaks of calc material, subfis		
2050	4,4	Clst: a/a		
2076	4,1	Clst: m - dk gy, firm - mod hd, sl pyr, mic, non calc, sl slty		

**statoil**

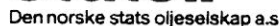
Den norske stats oljeselskap a.s

Page ____ of ____

SIDEWALL CORE DESCRIPTION

COUNTRY: NORWAY	AREA: North Sea	FIELD:
WELL NO.: 34/10-9	RUN NO.:	INTERVAL:
COORDINATES: ____° ____' ____" N ; ____° ____' ____"		
K. B. E.: 25 meters	COMPANY: Statoil	
HOLE SIZE: 16"	GEOLOGIST: K.H. Jakobsson	DATE: 19/6-80

DEPTH	REC.	LITHOLOGIC DESCRIPTION	POROSITY	SHOWS
2209		Sh: med-dk gy, frm - hd, subfiss occ slty, sltly calc		
2215		Sh a/a		
2224		Sh a/a		
2236		Sh a/a		
2263		Sh a/a		
2271		Sh a/a		
2283		Sh a/a		
2301		Sh a/a		
2310		Sh a/a		
2319		Sh a/a		
2337		Sh a/a		
2350		Sh a/a		
2360		Sst: clr qtz, brn oil stained vf-slt v.arg. non calc, micromic.	poor-fair	good
2370		Sh: Med. dk gy, frm hd, subfiss, slty		
2376		sst: clr qtz, brn oil stained, med, occ f-occ crs, subrnd, poorly srt, arg, non calc	poor-fair	good
2378		Sst a/a		
2412		Sh a/a		

[illegible]