SIMON PETROLEUM TECHNOLOGY

WELL: 34/8-2

Print: 6822-H	Units: [✓ M] F	Top	Bottom	Scale	TD
Length: 28 FT	Initials: TS	450	3237	1:500	3231

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1995
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SIMON PETROLEUM TECHNOLOGY
SPT

COMPLETION LOG

6822

COMPLETION-0

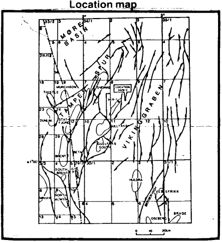
Norsk Hydro
Bergen – Norway

Completion log

Scale 1:500

Well: 34/8-2

Location map



Coordinates:	61°22'10.51"N 02°31'36.09"E
UTM:	6804208.4 m N 474697.5 m E
Elevation K B:	23 m
Water Depth:	353 m MSL
Total Depth (Driller):	3240 m RKB
Total Depth (Logger):	3231 m RKB
Formation at Total Depth:	Lunde Formation, Unit B

Country:	Norway
Licence:	120
Owners:	Norsk Hydro/Statoil/Saga/Elf/Conoco
Field:	Exploration
Date Spudded:	October 4th, 1986
Reached Total Depth:	November 11th, 1986
Completed:	November 17th, 1986
Well Status:	Plugged and abandoned Dry hole
Rig:	Polar Pioneer
Contractor:	Wilh. Wilhelmsen
Mudlogging Company:	Exploration Logging
Logging Company:	Schlumberger
Geologists:	Kalgraff, Eide, Day, Dons, Knudsen
Prepared by:	P. A. Midtkandal, K. Kjøsnes, B. Tollefsen
Date:	January 1987

Casing Records:

30"	at	462 m RKB
20"	at	1177 m RKB
13 3/8"	at	2680 m RKB

Comments:

Logs Run

MWD	DIL/LSS/GR/SP	LDL/CNL/CAL/GR	SHDT	RFT	VSP
462–1177 m	1A. 1177–2698 m 2B. 2680–3228 m	1A. 1177–2698 m 2B. 2680–3228 m	2A. 2680–3231 m	2A. 3003–3218 m	2a. 1600–3226 m (misrun) 2B. 1000–3235 m
		NGT		CBL/VDL	
(MWD was run on the drillstring from below the 30"csg to T.D.)		2A. 2680–3229 m		2A. in 13³/₂"csg.	

Legend

CONGLOMERATE	SHALE	CHALK	ANHYDRITE	SANDY VERY SANDY SANDY SLIGHTLY
SAND/SANDSTONE	LIMESTONE	MARL/MARLSTONE	SALT	SILTY VERY SILTY SILTY SLIGHTLY
SILT/SILTSTONE	DOLOMITE	COAL/LIGNITE	GYPSUM	ARGILLACEOUS
CLAY	DOLOMITIC LIMESTONE		TUFF	
CLAYSTONE	CALCAREOUS DOLOMITE		IGNEOUS EXTR/INTR	

C	Carbonaceous mat
△	Chert
✱	Glauconite
M	Mica
□	Pyrite
∼	Macrofossils
≈	Macrofossils frag
§	Microfossils

Hydrocarbon Shows

◔	Stain
◑	Fluorecence
◕	Visible Cut
◕	Fluorecence Cut
☼	Gas Shows

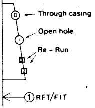
Casing Shoe	◢
Deviation	^ 2
Dipmeter results	↗ 3°
Two way time from velocity survey (depth m K.B.) e.g	3105 m 2,841 s

Core Interval	▮
(No recovery)	☒
Side Wall Core	→
(No recovery)	⇾

Perforated Interval

Cement Plug Interval

D S T



SYSTEM (Paleo datings performed by Paleoservices LTD)

SERIES from below 20" csg.

STAGE

GROUP

FORMATION

MEMBER

SPONTANEOUS POTENTIAL
millivolts
− ⟷ +
10

6" 12¼" 16"
CALIPER
(12¼" hole section)

50 (1177–2680 m) 150
0 (2680–T.D.) 100
GAMMA RAY
api units
MWD
0 200
COUNTS/UNIT TIME

CALCIMETRY
% Calc. ——
% Dol ---
from 1900 m
0 25 50 75 100

Depths

LITHOLOGY

RESISTIVITY
ohms − m
DEEP INDUCTION Rild
0.2 1.0 10 100 1000 2000
SPHERICALLY FOCUSED RESIVITY Rsfl
0.2 1.0 10 100 1000 2000

240 140 40
INTERVAL TRANSIT TIME △ t
microsecond per foot
MWD

SN RESISTIVITY
CORRECTED RESISTIVITY
0,2 Ω m 20
TTI
10 ms

DRILL RATE (ROP)
100 10 1
m/hr

Ditch gas

Lithological Description

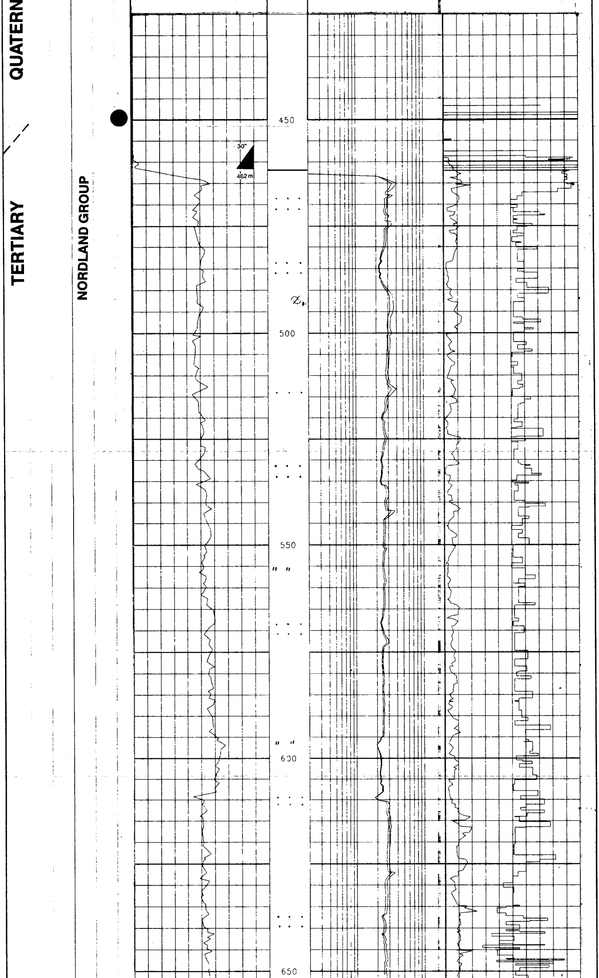
Sea bed 376 m RKB
(-353 m MSL)

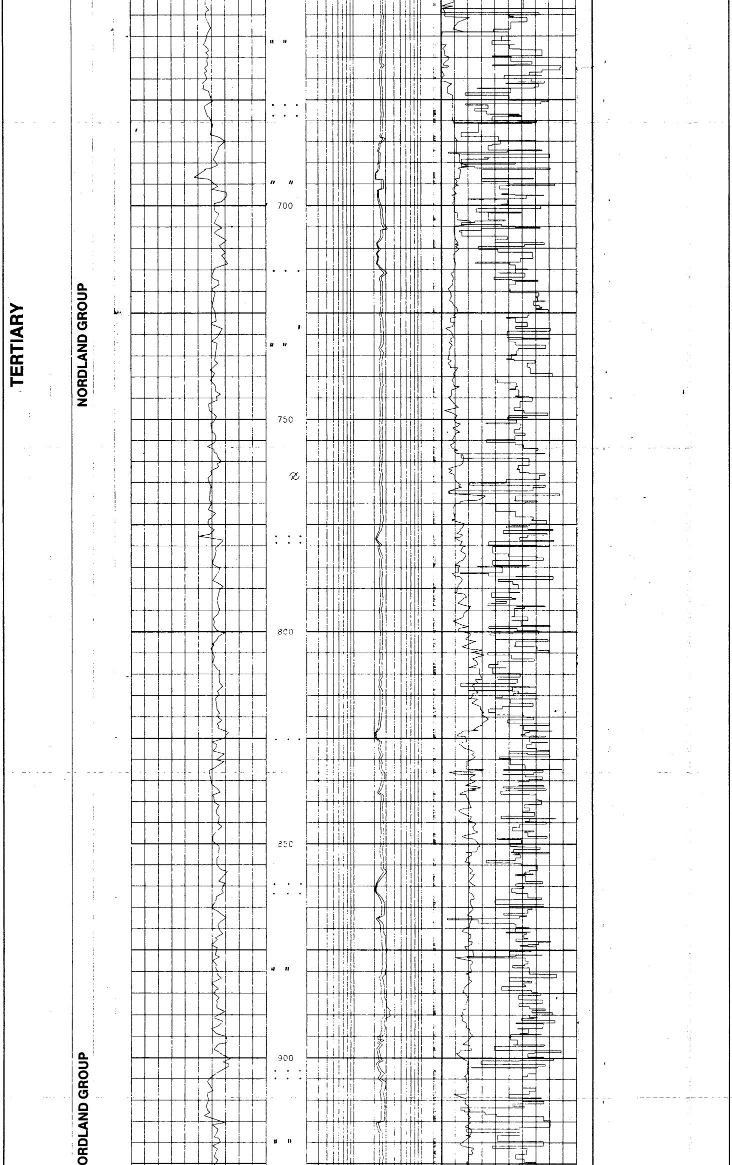
Drilled with returns to seabed down to 1200 m.

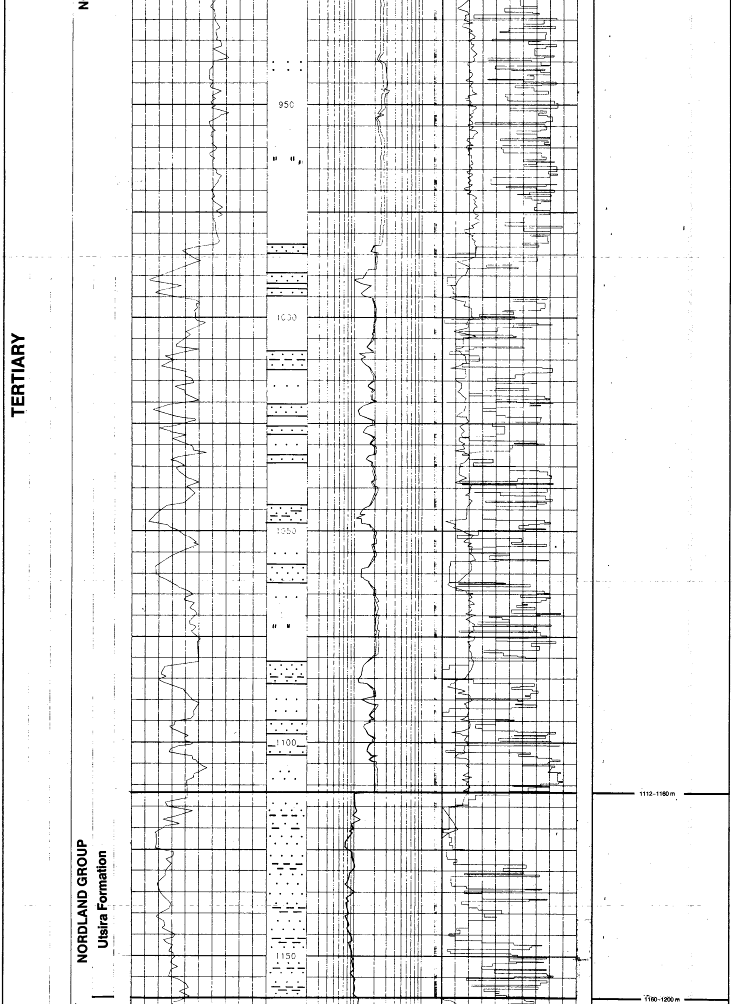
Lithology inferred from log

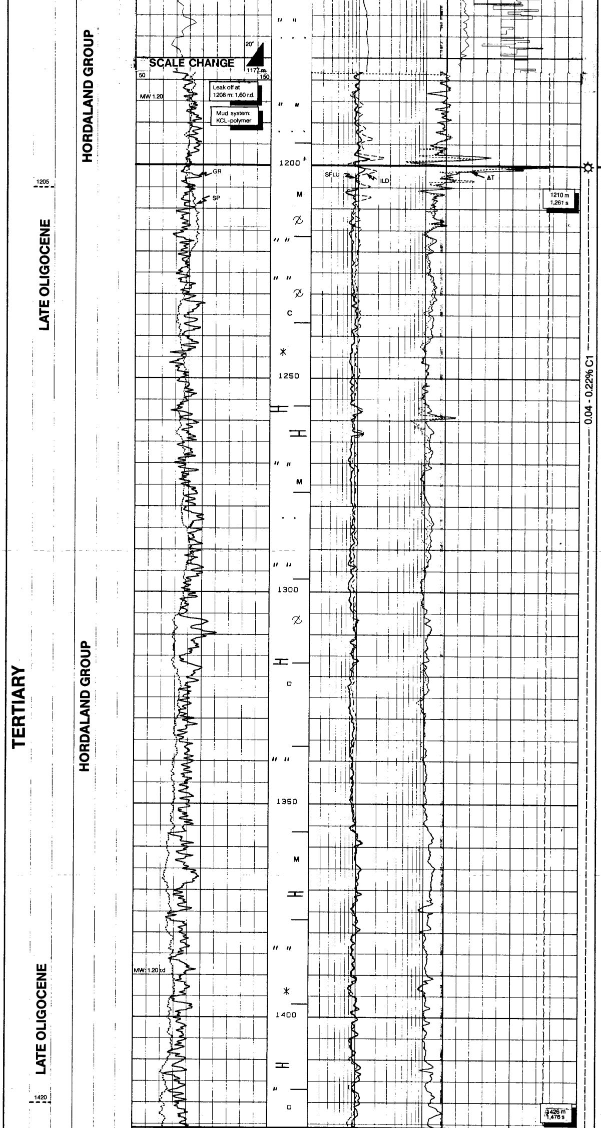
400

ARY









Drilled w/returns to seabed.

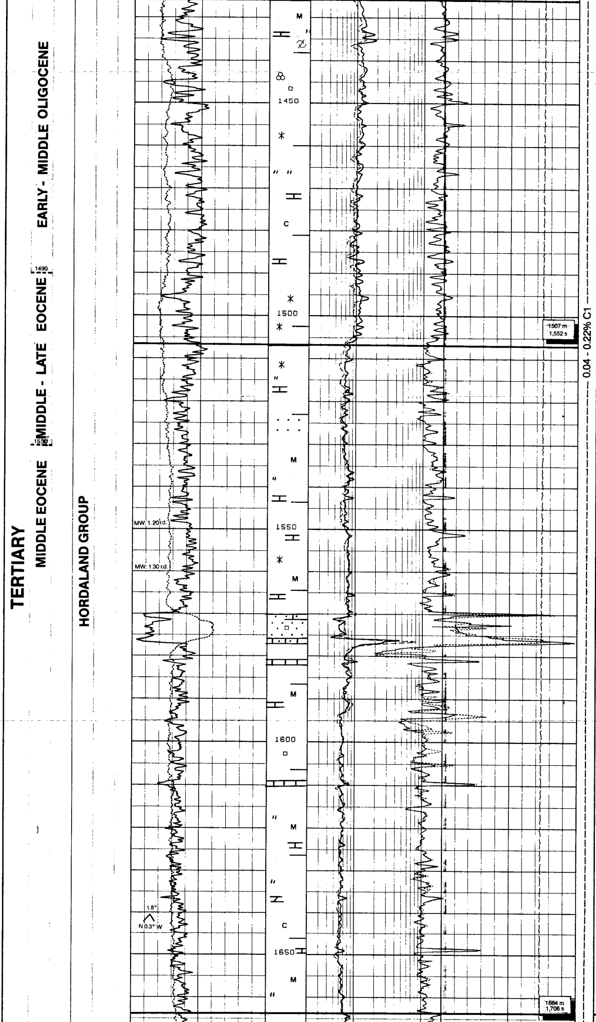
1200–1426 m

Clyst: olv gy, at base tr dk grn gy, frm, loc sft, blky, occ sl calc, loc micromic, in pt vf sdy and slty.

Tr **Shell frags, Glau, Pyr**

Strgs of
Lst: mod-dk yel brn, blky, arg, microxln.

Clyst a/a olv gy, minor grn gy - dk grn gy, dk yel brn.



1426–1507m

Clyst: olv gy-dk yel brn, bcm pred dk grn gy, mod hd, blky-subfis, non-sl calc, loc sl slty, glau, micromic, occ carb.

Strgs of **Lst** a/a

1507–1664m

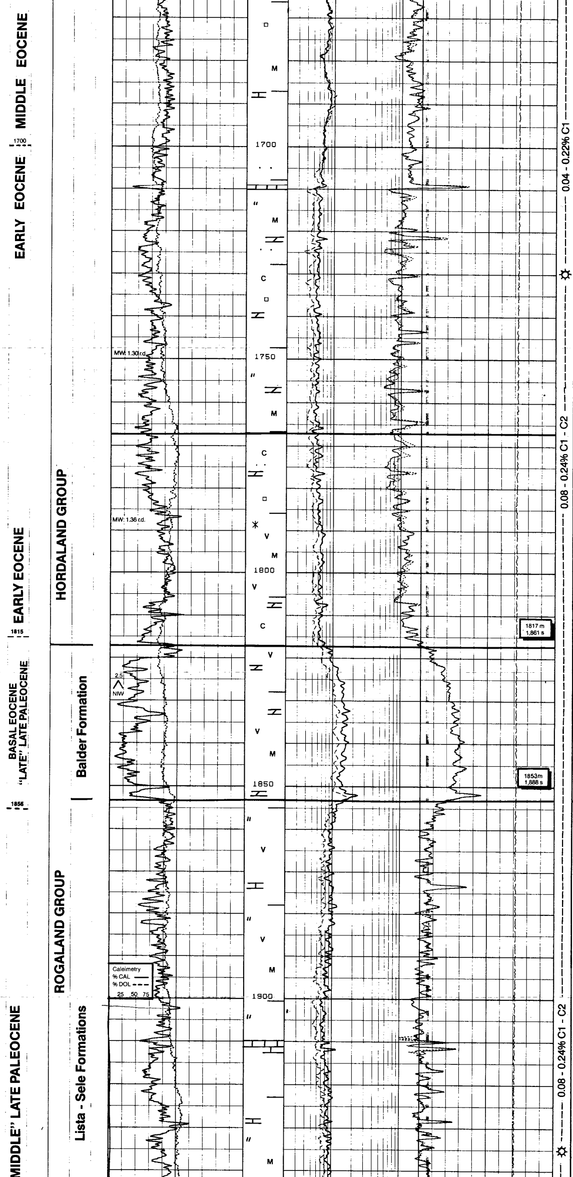
Clyst: dk grn gy, grn blk, mod hd - frm, blky-plty, non calc, micromic, in pt slty and vf sdy, loc abn glau.
between 1560–1600 m also olv gy - dk yel brn, else a/a.

Strgs of
Lst: wh - gy wh, sft-frm, in pt arg, loc micropyr and glau, micro xln.

Dol: vlt brn, hd, sl arg, micro - crpto xln.

Sst: clr Qtz, pred m, lse, ang-rnd, pred subrnd, tr pyr, mod srtd.

1664–1767m



Clyst: pred olv blk, subord grn blk - dk grn gy, bl blk, minor brn blk, mod hd, blky to loc plty, non calc, loc sl micromic, micropyr and carb.

Strgs of
Dol: dk yel brn, hd, bri, blky, sl arg, micro xln.

Lst: a/a

Rr **Sst:** Qtz, f-m, lse, subrnd - rnd, loc yel brn stn.

1767–1817 m

Clyst: pred mod brn, minor m bl gy - grn blk, olv blk - brn blk, frm-sft, loc mod hd, subfis - loc blky, carb, rr micromic, rr micropyr, non calc.

Rr **Clyst,** tuff, m dk gy - grn gy, frm, slty, blk - wh - red brn spres, non - sl calc.

Strgs of **Dol:** a/a.

1817–1853 m

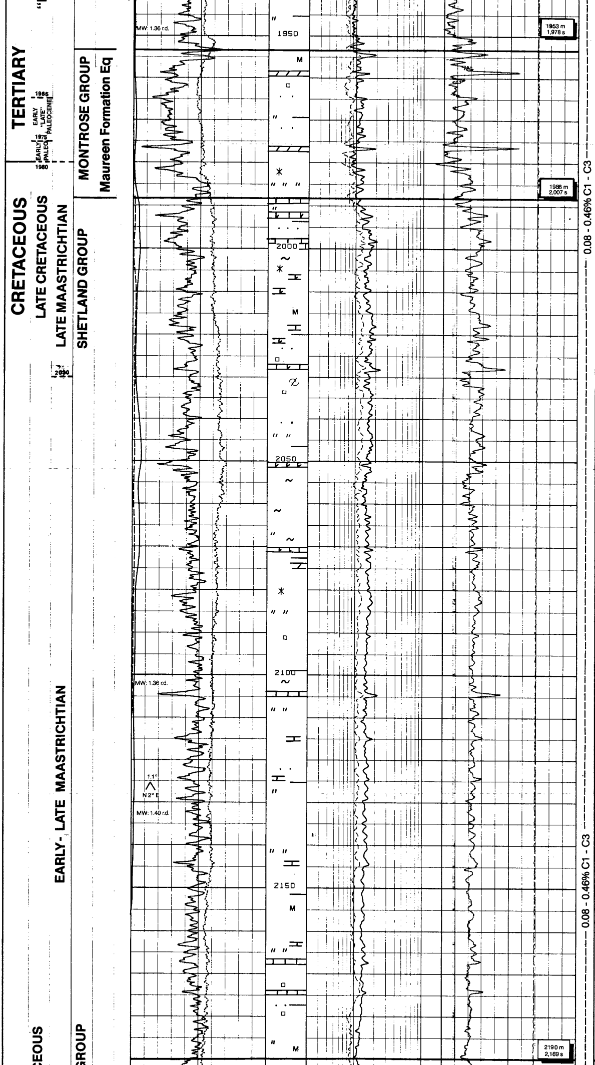
Clyst: tuff, lt gy, sft, amorp, loc blky, wh and blk specs, glassy shards, loc micromic.

Strgs of
Dol: pl - dk - mod yel brn, hd, blky, micro xln.

1853–1953 m

Clyst: m gy - mdk gy, incr from 1900 m also dk - lt grn gy, m bl gy, tr v dusky red, dusky yel brn, sft - mod hd, blky - subfis, sl slty, loc tuff.

Strgs of
Lst: gy wh, fir, arg, micro xln.



1953–1988 m

Clyst: gen a/a, loc glau, loc vslty.

Strgs of

Lst: a/a

Rr **Sst:** clr - fros Qtz, f - crs, pred m, lse, submd - occ rnd, pr srtd.

Vale

1988– 2190 m

Clyst: m - dk grn gy, grn gy, grn blk, occ tr mod brn, brn gy, m bl gy, frm - mod hd, calc, sl slty, occ vf scly, pyr, glau, micromic, in pt grdg **Mrl.**

Strgs of
Lst: wh, lt gy, yel gy, mod hd - hd, blky, sl arg, rr glau, in pt dol, loc slty, micro - crpto xln.

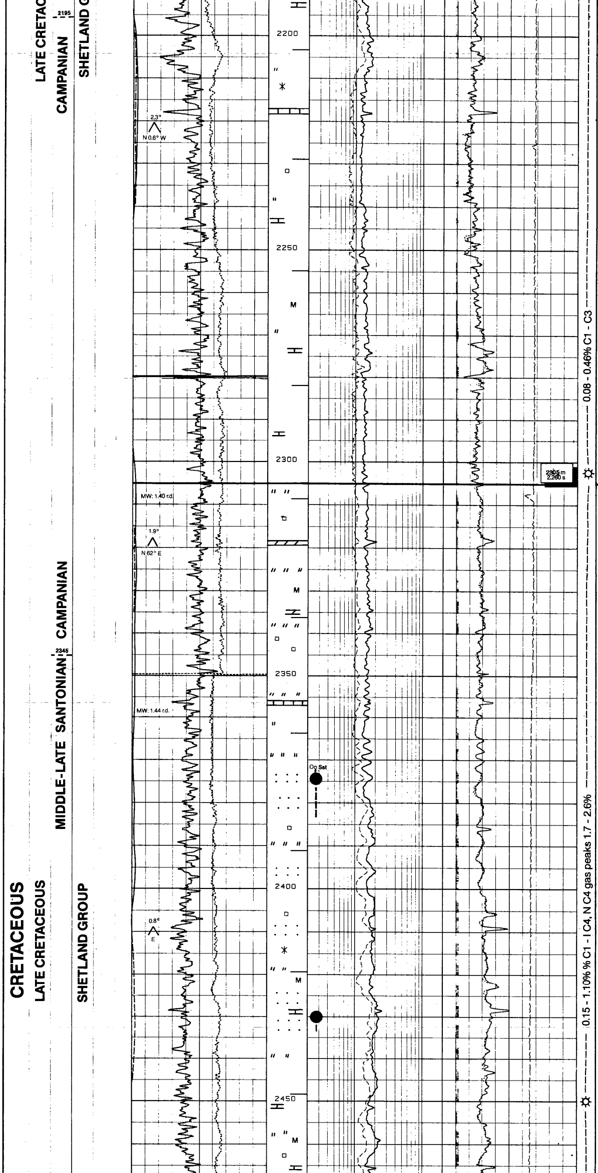
Dol: pl yel brn, hd - vhd, blky, sl arg, rrglau, xln.

Rr **Sst:** Qtz, gen f, occ vf - crs, rnd, loc mod hd, non calc, Cly mtx, micropyr, no vis por.

Hor linde

Clyst: bcm pred lt gy - mltgy.

2190–2305 m



Clyst: varicol mgy - m dk gy m red brn, grn gy - clk grn gy, sft - mod hd, blky - subfis, non calc - loc v calc, tr micromic, rr pyr.

Strgs of
Lst: gy wh, dk yel brn, sft - frm, loc hd brl, in pt dol, sl arg, micro - crpto xln.

2305-2585 m

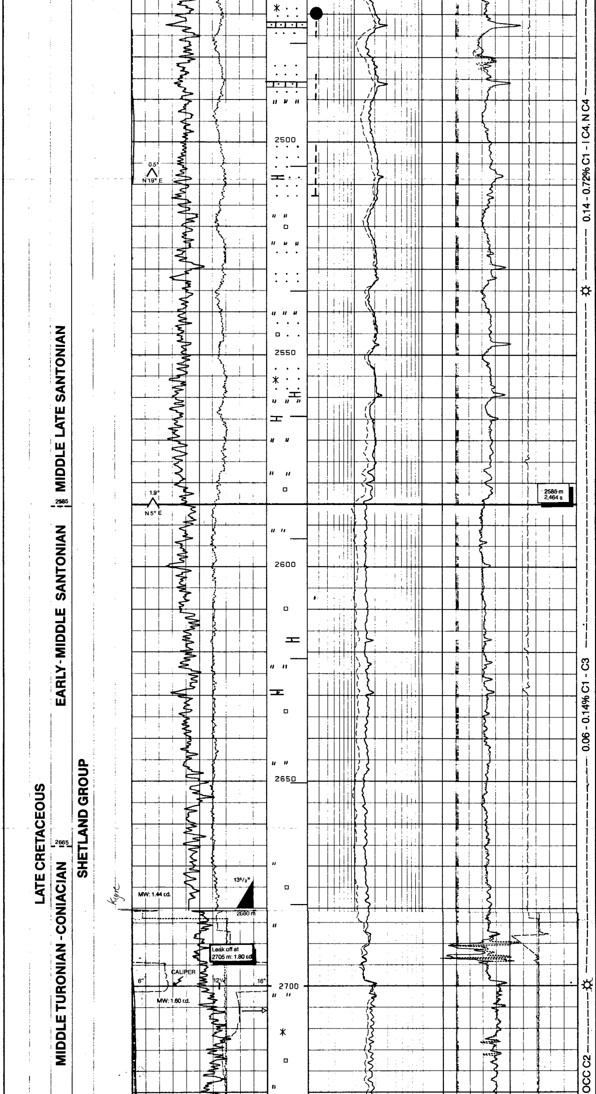
Jorsalf

Clyst: m dk gy, dk gy, olv gy, sft - frm, amor - blky, non - loc glau calc, in pt v slty, tr pyr, tr glou, tr micromic.

Bds of
Sst: lt gy - mgy Qtz, vf - f, mod hd, fri, mod - w c mt sl-calc, loc cly mtx, loc abn glau, loc tr mica no vis por.
Shows: gen brn oil stn, strng yel - pl yel dir flu, strng mod - fast strng yel - yel wh flu cut, straw vis cut, strong - mod pl yel - mlky flu resd, pl straw vis resd.

Strgs of
Lst: wh - gy wh, sft - frm, sl arg, micro - crpto xln.

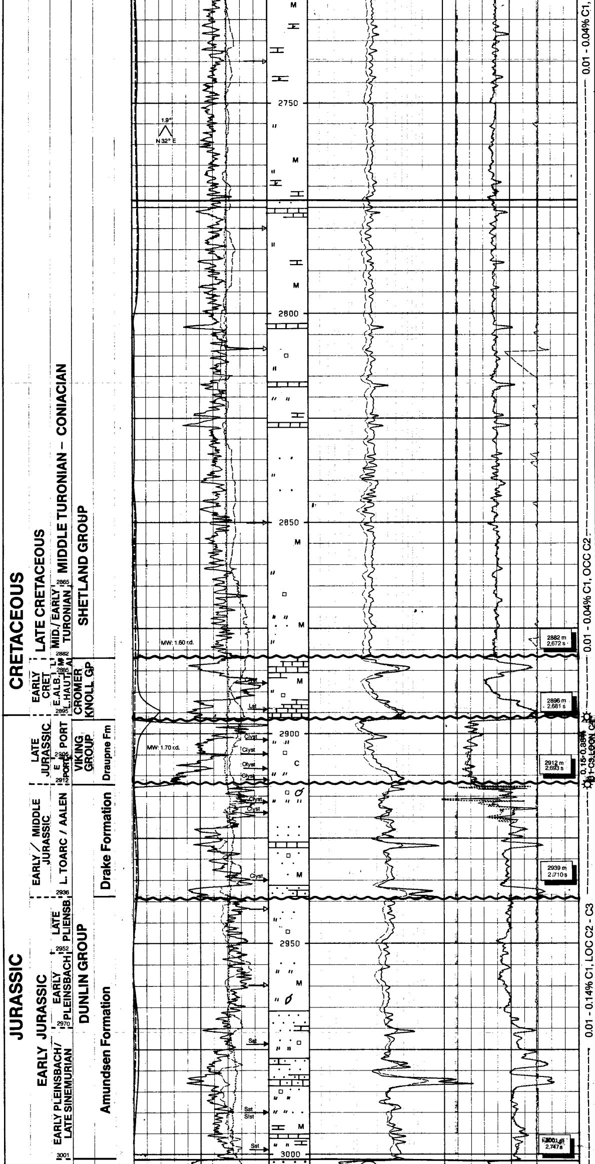
Dol: dk yel brn, hd, blky loc v arg, micro - crpto xln.



2585 - 2773 m

Clyst: mdk gy-dk gy, ol gy, sft - frm, occ mod hdl, blky - subfis, loc slty, glau, micro - pyr, in pt v calc, tr micromic.

Strgs of
Lst: gy wh - lt gy, occ lt brn - orng brn, sft - hd, arg - occ sl sdy, doc, micro - crpto xln.



2773–2882 m

Clyst: olv gy, brn gy, m gy, sft - frm, amor, loc blky, sl calc - loc v calc, loc slty, tr pyr and micromic, also **Clyst** gy blk, hd - v hd, blky, brit, mod calc, slty - v slty.

Strgs of
Lst: lt brn - pl yel brn, lt gy, sft - hd, in pt sdy arg, loc dol, crptoxln.

Rr **Sst:** brn - gy brn, mgy, vf - loc grdg **Slst**, fri - mod hd, mod calc cmt, tr mica.

2882–2896 m

Lst: wh - lt gy, lt brn gy, sft: frm, amor, arg, crptoxln.
Clyst: brn red, sft - frm, mod - v calc, loc micromic, pyr, slty.

2896–2912 m

Clyst: dk gy - gy blk, brn blk, sft, amcr, loc blky, non calc, v slty, carb, occ pyr, bcm dk gy - olv gy - brn gy - olv gy - olv blk, com plnt rmns, loc grdg **Slst.**

2912–2939 m

Clyst: dk gy - olv gy, grn gy, occ olv blk - brn gy, sft - mod hd, blky - subfis, loc micromic, sl - mod calc, slty - loc grdg **Slst.**

Tr **Pyr, Plnt rmns.**

Bds of
Sst: clr - mlky Qtz, f - m occ crs, subang - subrnd, occ rnd, pr - mod srtd, calc cmt, gd tr pyr, no - pr vis por.

2939–3001 m

Clyst: olv gy - mgy, occ dk gy, grn gy - gy brn, sft - mod hd, blky - subfis, micromic - micra, slty - loc grdg **Slst**, non calc.

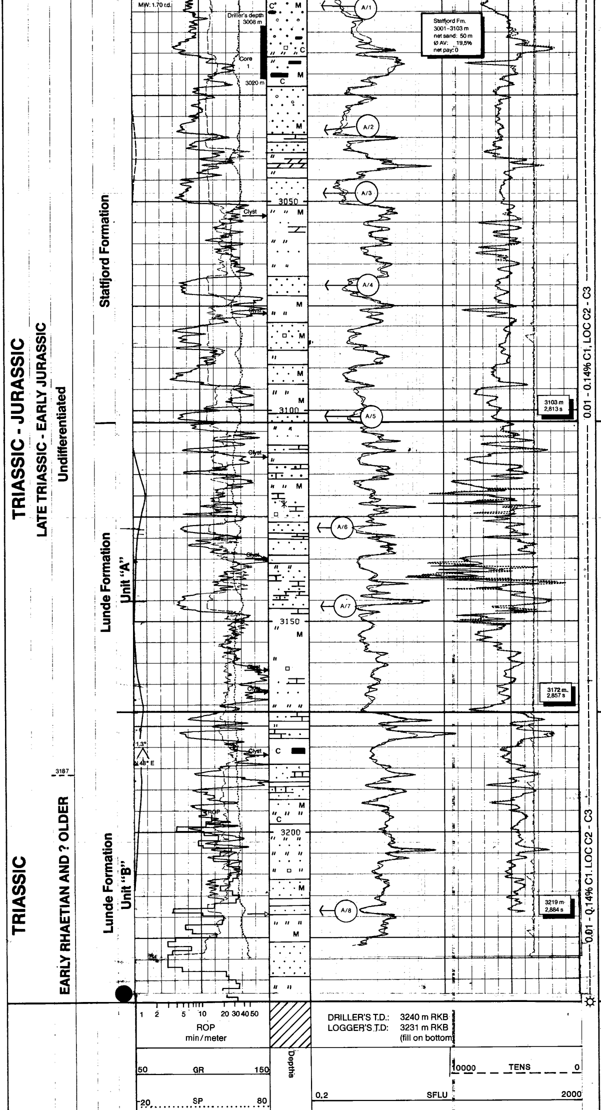
Tr **Pyr, Plnt rmns.**

Sst: clr - mlky Qtz, vf - m, occ crs, gen lse, subang - subrnd, bimodal, pr - mod srtd, loc calc cmt, gd tr pyr, loc pyr cmt, tr mica, no - pr vis por.

Lst: wh - lt gy, sft - frm, amor, arg, crpto - micro xln.

Slst / Clyst: a / a.

3001–3103 m



Sst: m dk gy - dk gy transp. transl Qtz, **vf** - m, tr crs, pred m, fri - lse, subang, subrnd, mod srtd tr calc cmt, mica, tr carb, loc slty, tr pyr.

Intbds of
Clyst: olv gy - brn gy, dusky yel brn, sft - sfty, loc hd, micromic, tr carb, in pt v slty grdg **Slst**, tr pyr.

Strgs of **Coal** (oncore): blk, vit in pt, mod hd - hd, bri, plty, slty - scly lam.

Strgs of
Lst: wh - v lt gy, mod hd - hd, occ sft, blky, loc arg, micro - crpto xln.
DOL: dk yel bru, hd - v hd, bri, arg, micro xln, in pt grdg **Lst**.

For details on core see core description below.

3103–3172 m

Clyst: mod brn, loc olv gy - mdk gy, sft - frm, occ mod hd, amor - blky - subfis, micromic, non - sl calc, in pt v slty, grdg **Slst**.

Intbds of
Sst: vlt gy, transp - trnsl Qtz, f, occ m - crs, mod hd, subang - subrnd, pred kao cmt, loc calc cmt, glau, tr mica, pyr, no - pr vis por.

3172–3240 m

Sst: vltgy, transp - transl Qtz, f - m, tr crs, gen f, fri - lse, subang - subrnd, mod srtd, loc calc cmt, loc silic cmt, tr pyr, tr mica, no vis por.

alt with
Clyst: gen a/a loc v slty and vf sdy.

Rr **Coal:** blk, hd, fri, fib, loc shiny, loc pyr.

Tr **Slst:** mgy, frm blky, micromic, arg, non calc.

Tr **Sh:** brn gy - brn blk, fis, abn plnt rmns, carb lam.

3240 m T.D.

DESCRIPTIONS

SYSTEM	SERIES	STAGE	GROUP	FORMATION	MEMBER	6" 12¼" 16" CALIPER (12¼ hole section)	0.2 ILD 2000 240 LSDL 40 240 LSDT 40	LITHOLOGICAL

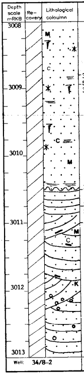
CORE REPORT

HYDRO

Core report

Well no. 34/8-2			Core no's 1
Interval 3008-3013m	Area Norwegian North Sea	Cut 3008-3020m	Date 6.11.86
Scale 1:25	Well R.K.B. 23m	Recovery 3008-3019.75m, 98%	Geologist Kalgraff/Eide

Depth scale mRKB | Re-covery | Lithological coloumn



Depths m	Description	Shows
	Sst: m dk gy, dk gy, transp-transl Qtz, f-crs, pred m, hd-fri, subang-subrnd, also ang, mod-pr srtd, silic & Kao cmt, arg, mica, tr carb, no-pr vis por. Com bur, glau, occ thin lam.	No show.
3008.84m Sealed s. 3009m		
3010.5m		
3010.75m Sealed s. 3011m	Sst: m gy, transp-transl Qtz, pred m-crs, also vf and pbly, loc grdg Cgl, hd-fri, subang-subrnd, mod-pr srtd, Kao cmt, silic cmt, mica, tr carb, occ tr arg, coal frags, large scaled X-strat (trough X-strat), pr vis por.	No show.

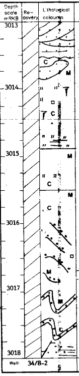
Well: 34/8-2 Core report: 1 of 3 Core no: 1

HYDRO

Core report

Well no. 34/8-2			Core no's 1
Interval 3013-3018m	Area Norwegian North Sea	Cut 3008-3020m	Date 6.11.86
Scale 1:25	Well R.K.B. 23m	Recovery 3008-3019.75m, 98%	Geologist Kalgraff/Eide

Depth scale mRKB | Re-covery | Lithological coloumn



Depths m	Description	Shows
	Sst: lt gy-gy wh, pred transl-mlky wh Qtz, m-crs, fri-hd, subang-subrnd, tr mica, tr glau, silic & Kao cmt, pr-mod vis por.	No show.
3013.5m	Slst: olv gy-m dk gy, mod hd-hd, blky-brit, non calc, carb, rr tr pyr, sdy-v sdy grdg vf Sst.	
3014.95m	Sh: shiny blk, gy blk-olv blk, mod hd-hd, blky, brit, subfis-fis, micromic-rr tr mica, carb, non calc, tr plant/coal frags, slty in pts.	
3015.5m		
3016.67m Sealed s. 3016.83m	Slst: olv gy-m dk gy, gy brn, mod hd-hd, blky, plty, non calc, carb, sdy-v sdy, grdg vf Sst. Contorted bdg. Microfaults.	

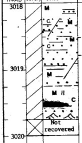
Well: 34/8-2 Core report: 2 of 3 Core no: 1

HYDRO

Core report

Well no. 34/8-2			Core no's 1
Interval 3018-3020m	Area Norwegian North Sea	Cut 3008-3020m	Date 6.11.86
Scale 1:25	Well R.K.B. 23m	Recovery 3008-3019.75m, 98%	Geologist Kalgraff/Eide

Depth scale mRKB | Re-covery | Lithological coloumn



Depths m	Description	Shows
3018,51 Sealed sample 3018,80	Sst: gy-lt gy-gy brn, pred mlky wh, clr/transl Qtz, m-pred vf, fri-hd, subang-subrnd, mod-w srtd, Kao cmt, gd tr mica-mica lams, tr coal frags, no-v pr vis por. Microfaults. Flazer bdg.	No shows.
	Slst - mica Sh: olv blk-m dk gy, brn gy, fri-hd, subfis, non calc, carb, sdy grdg vf Sst.	
3019.75m	Coal - coaly Sh: blk-shiny blk, vit in pt, mod hd-hd, brit, plty, slty/sdy lams, occ faint rpl lam.	
3020.00m		

Well: 34/8-2 Core report: 3 of 3 Core no: 1

RFT RESULTS

RFT RESULTS - PRESSURES

WELL 34/8-2

RUN NO/ TEST NO	DEPTH mRKB	IHP PSIA (BAR)	FP PSIA (BAR)	FHP PSIA (BAR)	REMARKS
STATFJORD FORMATION (3001–3103 m RKB):					
2A/1	3003.3	7378.0 (508.8)	6656.4 (459.1)	7375.0 (508.6)	V. good perm.
2A/2	3033.0	7450.3 (513.8)	6698.7 (462)	7447.3 (513.6)	V. good perm.
2A/3	3048.0	7484.6 (516.2)	6719.2 (463.4)	7483.2 (516.1)	V. good perm.
2A/4	3070.0	7542.0 (520.1)	6752 (465.7)	6737.0 (464.6)	V. good perm.
2A/5	3101.2	7613.6 (525.1)	6794.7 (468.6)	7605.8 (524.5)	V. good perm.
LUNDE-FORMATION (3103 m–T.D.):					
2A/6	3127.5	7671.7 (529.1)	6849.5 (472.4)	7666.2 (528.4)	Poss. slight superch.
2A/7	3146.2	7726.8 (532.9)	6911.1 (476.6)	7723.6 (532.6)	Poor perm.? superch.
2A/8	3218.0	7900.8 (544.9)	7124.8 (491.4)	7891.8 (544.3)	Poor perm.

Note: Pressures are recorded with HP-gauge.