SIMON PETROLEUM TECHNOLOGY

WELL: 34/7-8.

Print: 5697 BB	Units: [✓ M] F	Top	Bottom	Scale	TD
Length: 23 FT	Initials: Jul	310	2750	1:500	0.

DIGITAL WIRELINE LOGS PACKAGE
1994
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SIMON PETROLEUM TECHNOLOGY

COMPLETION LOG

Ph 101 1

ESSO / STATOIL / NORSK HYDRO /
ELF / DEMINEX / DNO

saga

Saga Petroleum a.s.

Composite Well Log

Well 34/7-8

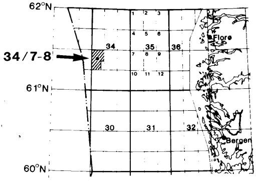
14 OKT. 1986
REGISTRERT
OLJEDIREKTORATET

SCALE	: 1:500	**RIG**	: TREASURE SAGA
COUNTRY	: NORWAY	**LOCATION COORDINATES**	
AREA	: TAMPEN SPUR	**LATITUDE**	: 61°-22'-25.93"N
OPERATOR	: SAGA PETROLEUM A.S	**LONGITUDE**	: 02°-08'-33.37"E
LICENCE	: 089	**ELEVATIONS**	
RIG TAKEN OVER BY THE LICENCE	: FEBRUARY, 3rd 1986	**RKB-MEAN SEA LEVEL**	: 26m
DATE SPUDDED	: FEBRUARY, 5th 1986	**RKB-SEA FLOOR**	: 312m
T.D. DATE	: MARCH, 1st 1986	**WATER DEPTH**	: 286m
RIG RELEASED	: APRIL, 12th 1986	**TOTAL DEPTH** driller's depth	: 2766m
COMPLETION STATUS	: P & A OIL WELL	logger's depth	: 2766.8m

DRILLING CONTRACTOR	MUDLOGGING SERVICE
WILH. WILHELMSEN	EXPLORATION LOGGING

CASING	SHOE(mRKB)	HOLE SIZE	INTERVALL(mRKB)
30"	434	36"	312-439
20"	848	26"(17 1/2")	439-870
13 3/8"	1859	17 1/2"	870-1875
9 5/8"	2525	12 1/4"	1875-2766

LOCATION MAP



LOGS

ANADRILL(MWD) / DRESSER ATLAS(WIRELINE LOGS)

Casing Record	Hole Size	Logged Interval (m RKB)	Type of Log	Run No.	Date
30" 434 m	36" to 439 m		GR to surface	1A	08.02.86
20" 848 m	26" (17 1/2") to 870 m	 310.0 - 870.1 310.0 - 850.2	MWD (GR, Res.) DIFL-LSBHC-GR-CAL CDL-GR	 1A 1A	 08.01.86 08.02.86
13 3/8" 1859 m	17 1/2" to 1875 m	 847.5 - 1873.9 847.5 - 1854.1 38 samples	MWD (GR, Res.) DIFL-LSBHC-GR-CAL CDL-GR COREGUN	 2B 2B 2A	 15.02.86 15.02.86 15.02.86
9 5/8" 2525 m	12 1/4" to 2766 m	 1856.0 - 2766.1 1856.0 - 2765.8 2197.0 - 2765.8 1856.0 - 2765.8 86 samples	MWD (GR, Res.) DIFL-LSBHC-GR-CAL CDL-CN-SL-CAL DLL-MLL-GR-CAL DIPLOG FMT VSP COREGUN	 3C 3C-A 3A 3A 3A-L 3A 3B-C	 02.03.86 02.03.86 02.03.86 03.03.86 03.03.86 04.03.86 06.03.86
T.D. 2766.8 m (logger's depth)					

AUTHOR: Ø. MJELDE APPR: B. GUSTAVSEN DRAFTED BY: R. KJØLSTAD DATE: SEPT. 1986

GEOLOGICAL SYMBOLS

- CLAY/ CLAYSTONE
- SHALE
- SILTSTONE
- SAND/ SANDSTONE
- CONGLOMERATE
- BRECCIA
- LIMESTONE
- CHALK
- DOLOMITE
- MARL
- SALT
- ANHYDRITE/ GYPSUM
- VOLCANICS
- COAL
- GNEISSEOUS/ BASEMENT

LITH.PREFIXES

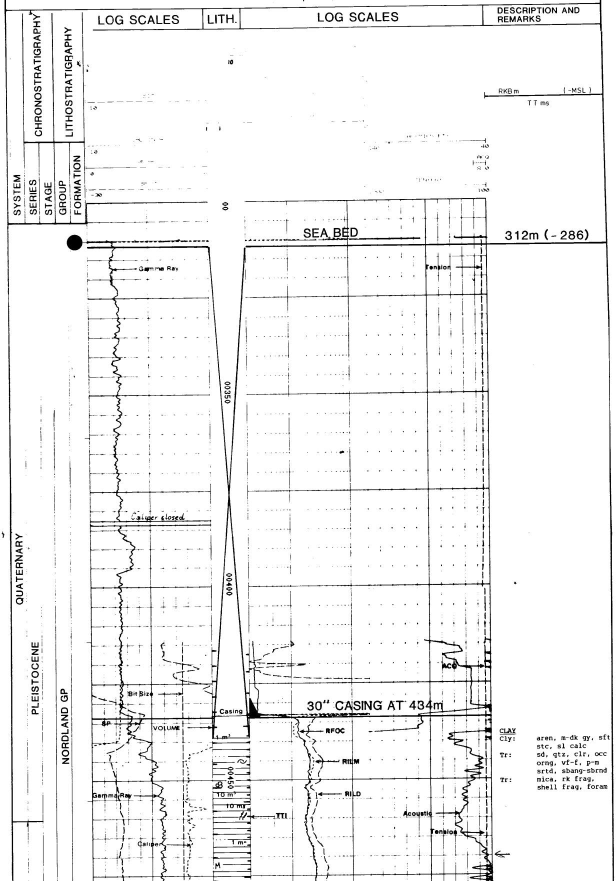
- ⊥ CALCAREOUS
- ∠ DOLOMITIC
- _ ARGILLACEOUS
- ▽ CHERTY
- ✳ GLAUCONITIC
- M MICACEOUS
- P PYRITIC
- V TUFFACEOUS
- ∬ METAMORPHICS
- ⊕ SIDERITE

FOSSILS

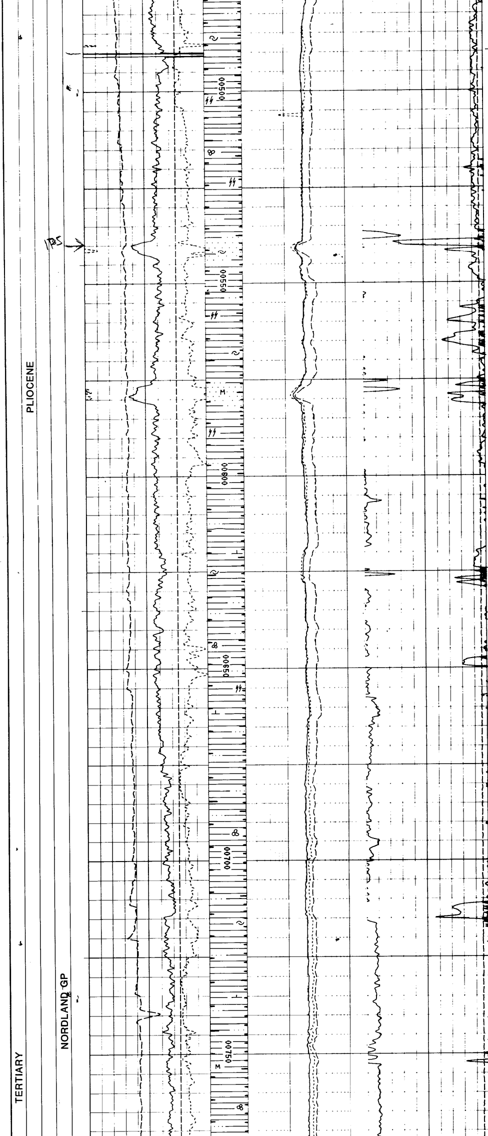
- ℘ FORAMINIFERA
- ~ SHELL DEBRIS
- ◠ MACROFOSSILS
- ♁ FOSSILS IN GENERAL

WELL LOG SYMBOLS

- ► SIDEWALL CORE
- ▷ SIDEWALL CORE, NO RECOVERY
- ▌ CORE
- ● RFT
- ◑ SHOWS, FLUORESCENCE AND CUT
- ● SHOWS STAIN FLUORESCENCE, AND CUT
- ☼ GAS, ON LOGS
- ◣ CASING SHOE
- ⬠ DRILL STEM TEST

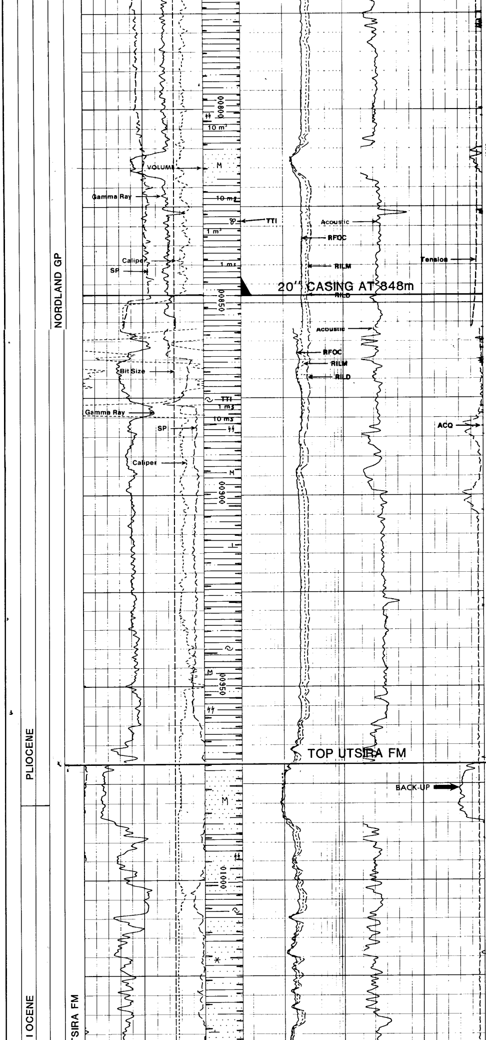


CLAY
Cly: aren, m-dk gy, sft stc, sl calc
Tr: sd, qtz, clr, occ orng, vf-f, p-m srtd, sbang-sbrnd
Tr: mica, rk frag, shell frag, foram



SAND
Sd: qtz, clr, vf-vc, p srtd, sbang-ang

SAND
Sd: qtz, clr, vf-m, p-m srtd, sbang-ang, occ sbrnd



SAND

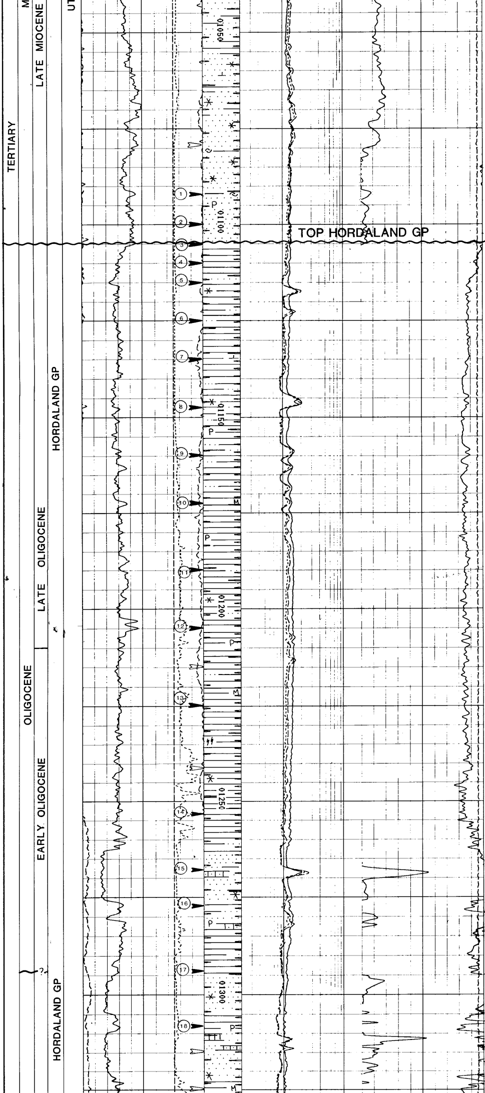
Sd: qtz, clr, vf-f, occ m, p-m srtd, sbang

CLAY INTERBEDDED WITH SAND

Cly: slty, m dk gy - dk gn gy, sft, stc, sl calc - calc

Sd: qtz, clr, dom m-c, occ vf-c, p-m srtd, sbrnd-rnd, occ w rnd, lse

Tr: rock frag, shell frag, mica, glauc, foram, ls



GLAUCONITIC SAND WITH MINOR CLAY
Sd: qtz, clr, f-m, occ c, p-m srtd, sbang-rnd, occ w rnd, v glauc
Cly: slty, olv gy - dsk gn, sft, stc, sl-v calc
Tr: shell frag, ls, pyr, foram, rock frag

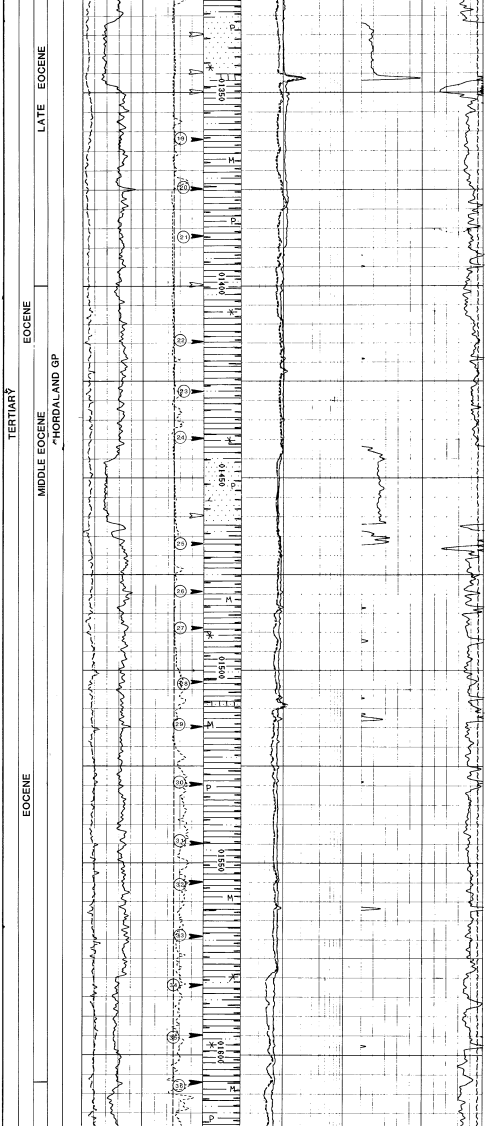
1105m (-1079)

1145ms

CLAYSTONE WITH MINOR SANDSTONE
Clyst: slty-aren, brn gy - olv gy, frm, occ sft, sl calc
Ss: qtz, clr, vf-f, m srtd, sbang-sbrnd, lse
Tr: glauc, pyr, ls, shell frag, mica

CLAYSTONE
Clyst: slty, occ aren, brn gy - olv gy, sft-frm, occ stc, non-sl calc
Tr: ss as above
Tr: mica, glauc, pyr, ls, shell frag, rock frag

SANDSTONE WITH MINOR CLAYSTONE
Ss: qtz, clr-trnsl, pred m, occ f-c, p-m srtd, sbang-rnd, pred lse, occ frm, glauc, pyr
Clyst: as above
Tr: ls/dol, pyr, mica, glauc

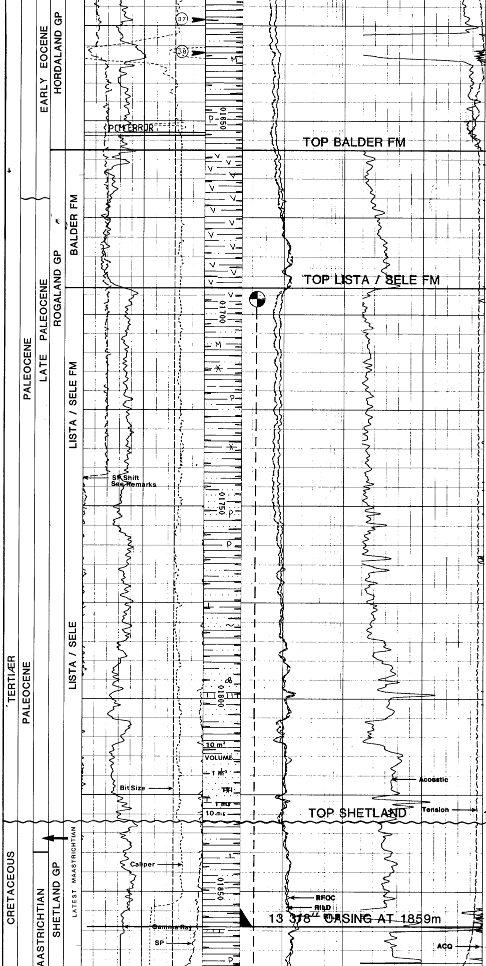


SANDSTONE

Ss: qtz, clr-trnsl, dom f-c, occ vf-vc, p srtd, sbang-sbrnd, lse, occ calc cmt
Tr: clyst as above
Tr: pyr, glauc, dol

CLAYSTONE

Clyst: slty, olv gy - gn gy, stc-frm, non calc
Tr: ss, qtz, clr-trnsl, occ yel orng, pred vf-f, mod srtd, sbang-sbrnd, occ ang, lse
Tr: glauc, mica, pyr



1658m (-1632)

1692ms

TUFFACEOUS CLAYSTONE

Clyst:	tuf, v col, lt gy - m gy - gn gy - drk rd brn, frm, occ sft, occ stc, sl calc, blk spec
Tr:	ss, qtz, clr-trnsl, pred f, occ m-c, m srtd, sbang-sbrnd, lse
Tr:	pyr, glauc, mica, ls

1693m (-1667)

1723ms

CLAYSTONE WITH MINOR SANDSTONE

Clyst:	sl slty, m gy - dk gy-gn gy, occ rd brn, occ gy wh, frm, mic-mica, sl calc
Ss:	qtz, clr-trnsl, vf-f, grdg to sltst, occ m-c, p srtd, sbang-sbrnd, lse, occ calc cmt
Tr:	tuf, glauc, pyr, mica, fos
Shows:	occ in ss, no stn, no od, tr mod yel flor, slow strmg lt yel cut, yel-wh res upon ev

CLAYSTONE INTERBEDDED WITH SANDSTONE

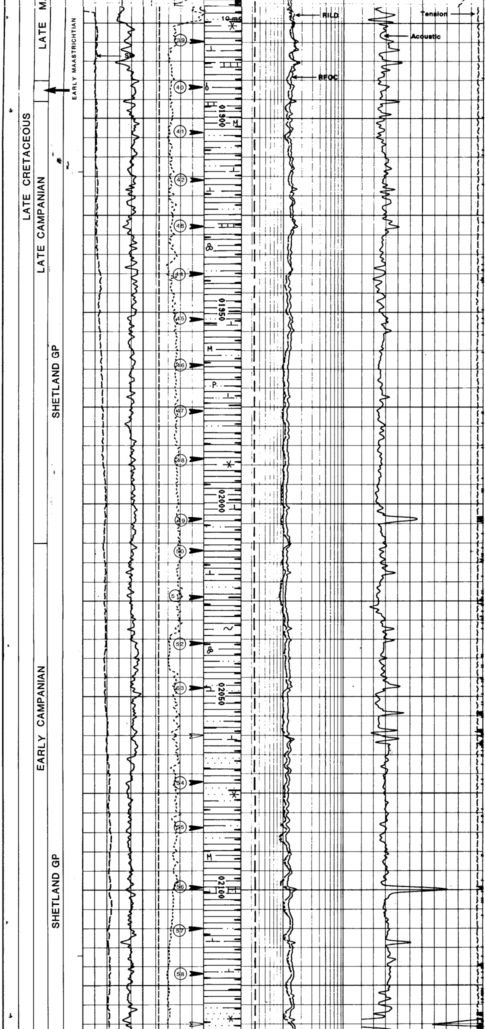
Clyst:	as above
Ss:	qtz, clr-trnsl, occ yel orng, vf-c, occ vc, p srtd, occ m srtd, sbang-sbrnd, lse, occ sl calc cmt
Tr:	mrl, v lt gy, sft-frm
Tr:	tuf, ls, pyr, mica, glauc, foram

1832.5m (-1806.5)

1849ms

CLAYSTONE WITH MINOR SANDSTONE

Clyst:	slty, dk gy - lt gy - gn gy, occ rd brn, sft-frm, occ stc, mic-mica, sl-v calc
Ss:	qtz, clr-trnsl, occ orng, f-m, p srtd, sbang-sbrnd, lse, occ calc cmt
Tr:	ls, pyr, mica, glauc, fos



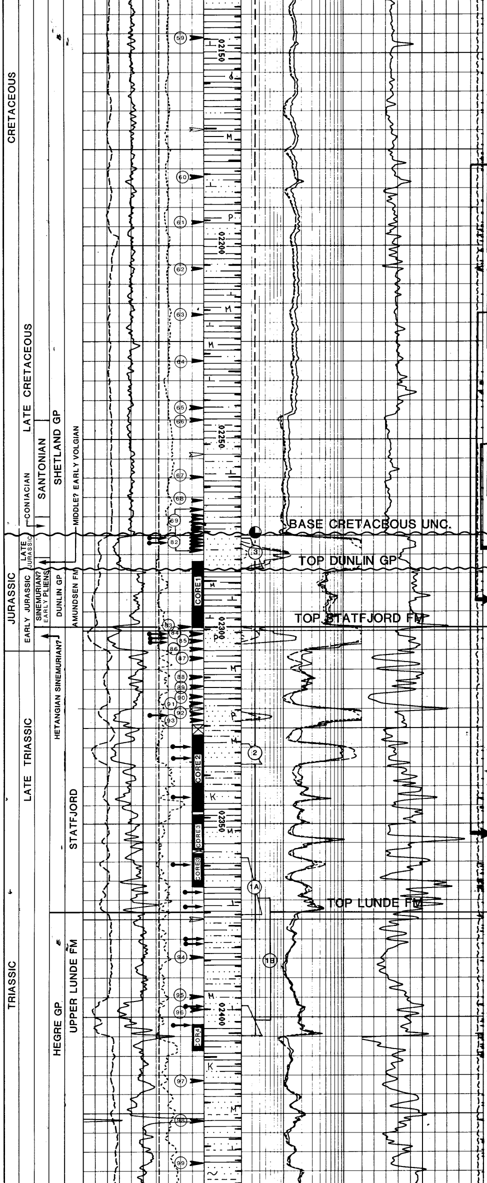
CLAYSTONE

Clyst:	as above
Tr:	sltst; pale yel brn - v lt gy, fri-frm, non-sl calc
Tr:	ss; qtz, clr-trnsl, pred vf-f, occ f-vc, pred m srtd, lse, occ sl calc cmt
Tr:	ls, occ arg, wh-var lt gy, frm-hd
Tr:	pyr, foram, mica, glauc

CLAYSTONE WITH MINOR TO TRACE OF SANDSTONE

Clyst:	as above
Ss:	qtz, grdg to sltst, clr-trnsl - var lt gy, occ orng, occ pink, f-slty, m srtd, ang-sbrnd, lse, occ sl calc cmt
Tr:	pyr, mica, glauc, foram, mrl

Shows in ss:
No stn, no od, tr-10% mod straw - yel flor, v sl clody strmg yel cut, lt yel mlky res upon ev



SILTSTONE/CLAYSTONE INTERBEDDED WITH SANDSTONE

Sltst/: Clyst:	aren, occ pbly, vgt col, m dk gy - grn gy, m gy - dk gn gy, occ yel gn spec, occ gsy surf, w sks, frm, mic-mica, non calc
Ss:	arg, yel brn, pred f-m, occ vf-c, p-mod srtd, sbang-sbrnd, pred fri, occ frm, sl mic-mica, non calc, occ calc, g vis por, from 2339 m p-fr vis por
Tr:	ls; arg, wh-lt gy, frm
Tr:	mica, pyr

CLAYSTONE

Clyst:	grdg to sltst, aren, olv gy - m gy, frac, sks, mica, sl calc
Shows:	no stn, no od, 40% streaky lt gold yel flor, sl strmg v weak mlky wh cut

From 2275 to 2284 m

SANDSTONE

Ss:	qtz, clr-lt brn, pred m, occ c - vc, mod srtd, sbrnd, fri-frm, occ sl calc cmt
Tr:	mica, glauc
Shows:	g-excl brn o stn, strng od, 100% yel-wh strmg flor, inst-strmg strng mlky wh cut, gold yel res upon ev

2275m (-2249)

2211ms

2284m (-2258)

2217ms

2299m (-2273)

2227ms

ALTERNATING SANDSTONE AND CLAYSTONE

Ss:	qtz, clr, lt brn, f-c, occ vf, m srtd, sbrnd-sbang, lse-frm, non calc
Clyst:	grdg to siltst, lt gy - m gy - lt brn gy - rd brn, wxy, frm, sbfis, non calc
Tr:	mica, pyr
Tr:	ls/dol; arg, wh, sft-frm

Shows in ss:
g yel brn o stn, fr-g od, 100% strong straw yel flor, fast strmg mlky wh cut, yel res flor upon ev

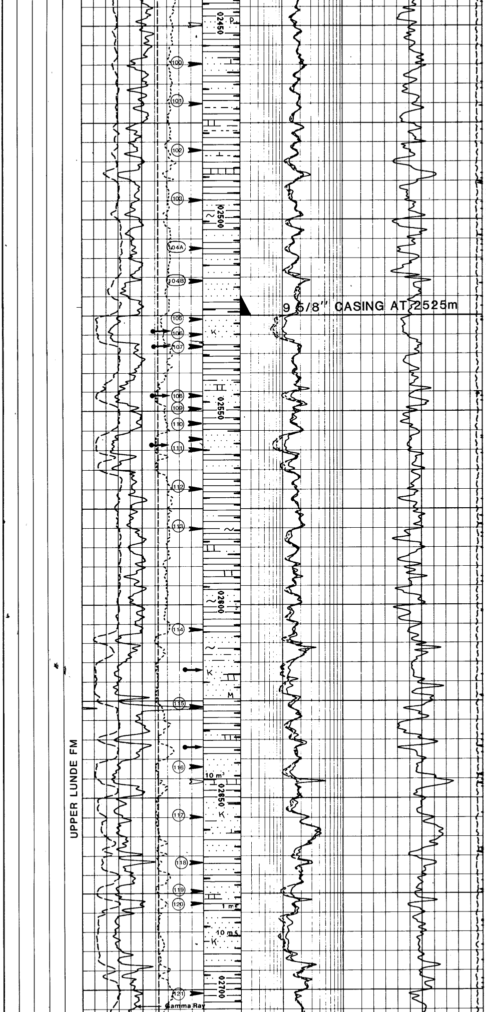
Shows in ss:
g yel brn o stn, fri-g od, 100% strong straw yel flor, fast strmg mlky wh cut, yel res upon ev

2373m (-2347)

2282ms

SANDSTONE ALTERNATING WITH CLAYSTONE AND MINOR SILTSTONE

Ss:	occ slty, clr-lt gy, vf-m, w-mod srtd, ang-sbang, frm-fri, occ lse, kao, occ sl mica, non--sl calc
Clyst:	occ sl aren, vgt dk rd brn - gn gy - m blk gy, occ m yel and olv gn spcs, frm, occ blky, occ sks, sl calc
Sltst:	aren, lt gy, fri-frm
Tr:	ls/mrl; wh-lt gy
Tr:	pyr

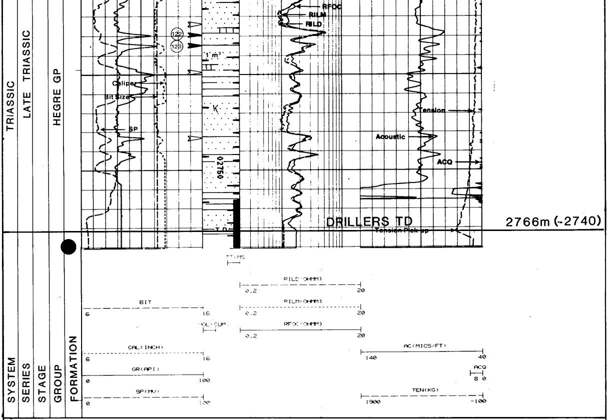


SANDSTONE ALTERNATING AND INTERBEDDED WITH CLAYSTONE AND TRACES OF LIMESTONE AND DOLOMITE

Ss:	clr-trnsl-lt gy, occ lt yel, vf-m, w-mod srtd, sbang-sbrnd, lse, kao, occ calc cmt
Clyst:	aren, occ v slty, pred dk rd brn - v dsky rd, occ m dk gy, occ gn gy, occ yel gn, sft-stc, occ frm, occ sbfis, occ mic-mica, non calc - calc
Ls/dol:	arg, occ grdg to mrl, wh-m lt gy, sft-hd
Tr:	mica, pyr

SANDSTONE WITH MINOR CLAYSTONE

Ss:	clr, occ clr-orng, f-m, occ vf-m, mod-w srtd, lse, kao, sl mica, sl calc
Clyst:	occ sl aren, pred dk rd brn, occ m bl gy - dk gy, frm, occ sft-stc, non-sl calc
Tr:	ls/dol; occ aren grdg to mrl, wh, dom hd, occ sft



WELL 34/7-8 - CORE SUMMARY

Core No.	Cut Interval m RKB	Cut m	Recovered Interval m RKB	Recovered m	Recovered %	Correction Factor m	Recovered interval log m RKB
1	2280.0 - 2297.5	17.5	2280.0 - 2297.2	17.2	98.3	2.0	2282.0 - 2299.2
2	2325.0 - 2346.0	21.0	2325.0 - 2345.0	20.0	95.2	2.0	2327.0 - 2346.7
3	2346.0 - 2366.0	20.0	2346.0 - 2365.6	19.6	98.0	1.0	2347.0 - 2356.8
						0	2357.8 - 2365.6
4	2401.0 - 2407.0	6.0	2401.0 - 2406.4	5.4	90.0	1.5	2402.5 - 2408.5

WELL 34/7-8 - FORMATION MULTI TESTER

Depth m RKB	Formation Pressure HP gauge temp. corr. psia	bar	Formation Pressure VPC strain gauge psia	bar	Remarks
3A					
2276.0	5124.1	353.29			
2283.0	5131.9	353.83			
2303.0	5159.3	355.72			
2322.0	5173.9	356.73			
2330.0	5182.3	357.31			
2333.0	5186.9	357.62			
2343.00					Tight
3B					
2283.0	5132.4	353.87			
2303.0	5158.7	355.68			
2322.0	5174.2	356.75			
2367.5					Tight
2372.5					Tight
2398.2	5265.8	360.06			

2528.0	5514.0	380.18			
2546.0	5538.0	381.89			
2559.0	5556.0	383.07			
2617.0	5644.9	389.20			
2398.2					Lost seal when opening sampling tank.
3C					
2402.2					Tight
2322.0	5174.1	356.74			Plugging when opening tank.
3D					
2322.0	5175.4	356.83			Plugging when opening tank.
3E					
2398.5	5260.3	362.68			Lost seal when opening sampling tank.
2360.9	5229.2	360.54			" " " " " "
2372.2					Tight
2354.2	5209.7	359.20			
3F					
2322.0	5186.1	357.57			Plugging when opening tank.
3G					
2381.0			5120.0	353.01	Lost seal when opening sampling tank.
3H					
2380.0			5112.0	352.46	Lost seal when opening sampling tank.
3I					
2398.2			5249.0	361.91	Plugging when sampling. Recovered a film of oil.
3J					
2302.0			5136.0	354.11	Plugging when sampling. Recovered 1.2 l oil and 2.8 l mudfiltrate.
3K					
2277.0	5129.5	353.67			
2301.0	5159.3	355.72			
3L					
2402.2	5277.3	363.86			
2546.0	5541.1	382.04			
2559.0	5538.7	383.11			
2529.0	5512.7	380.09			
2402.3	5269.1	363.29			

WELL 34/7-8 - DST SUMMARY

3 Drill Stem Tests were carried out in the Upper Lunde Formation, the Statfjord Formation and the Upper Jurassic Reworked Sand.

DST No.	Interval	BHP	BHT	WHP	WHT	Choke size	Flow rate
	m RKB (logged)	Bar (psia)	°C	Bar	°C	mm	Sm^3/day
1A	2359.0 - 2374.0	341.7 (4954.4) (at 2332.8 m)	86.5	18	7	6.4	46 oil
1B	2359.0 - 2374.0 2397.0 - 2405.0	304.1 (4365.7) (at 2332.8 m)	87.1	6.5	9	19.1	120 oil
2	2329.0 - 2334.0	352.3 (5108.1) (at 2293.7 m)	86.2	99	21	6.4	270 oil