SIMON PETROLEUM TECHNOLOGY

WELL: 1/2-1

Print: 8029CC	Units: M [✓ F]	Top	Bottom	Scale	TD
Length: 29 FT	Initials: TS	50	11750	1:500	11725

DIGITAL WIRELINE LOGS PACKAGE
1994
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SIMON PETROLEUM TECHNOLOGY

COMPLETION LOG

U-404 1/2-1 COMPOSITE LOG 308 - 11700

COMPOSITE WELL LOG

1/2-1

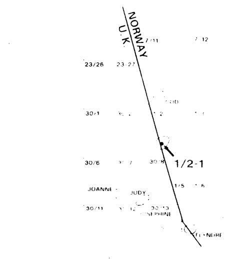
COMPANY:	PHILLIPS PETROLEUM COMPANY
COUNTRY:	NORWAY
AREA:	NORTH SEA/CENTRAL TROUGH
LICENSE:	143
BLOCK:	1/2
GROUP INTEREST:	PHILLIPS PETR. CO. NORWAY 25% (OP)
	ENTERPRISE OIL 15%
	ÖMV 10%
	STATOIL 50%

LOCATION (DERRICK COORDINATES):
LAT: 56°53' 15.07"N LONG: 02°28' 35.70"E
SEISMIC LOCATION: LINE NO. PW 8303A-10
SHOTPOINT NO. 290
K.B. ELEVATION: 72' 22m
WATER DEPTH: 235' 72m
TOTAL DEPTH: 11725' 3574m MD RKB
BOTTOM HOLE FORMATION: MAASTRICHTIAN
LATE CRETACEOUS

WELL CLASSIFICATION: EXPLORATION
SPUD DATE: 20.03.89
COMPLETION DATE: 05.06.89
STATUS: P & A OIL WELL
TESTS: 1 DST (2 INTERVALS)
CORES: 8

RIG: ROSS ISLE
DRILLING CONTRACTOR: ROSS DRILLING
LOGGING CONTRACTOR: SCHLUMBERGER/EXLOG
MUDLOGGING CONTRACTOR: EXLOG
WELLSITE GEOLOGIST: R. TILSLEY BAKER, M. KINGSLEY (EXLOG)
G.V. SØILAND (PPCON)
PHILLIPS GEOLOGISTS: G.V. SØILAND, M. ROGERS

LOCATION MAP



CASING DATA LEAK OFF TESTS:

Casing		Depth (ft)	Depth (m)	LOT (ppg)	LOT (sg)
30"		559'	170m		
20"		2116'	645m	12.6ppg	1.51 sg
13 3/8"		5002'	1525m	15.2ppg	1.82 sg
9 5/8"	9730'	10013'	3052m	15.7ppg	1.88 sg
7"		11710'	3569m		

DRILLING FLUID DATA

36"	SEAWATER
26"	SEAWATER
17 1/2"	NATURE MUD
12 1/4"	SEAWATER 16cl
8 1/2"	SEAWATER 16cl

LOGGING SUMMARY

LOG	RUN	DATE	INTERVAL MD (FT)	HOLE SIZE	B.H.T. °F	TIME SINCE CIRC HR.
MWD EXLOG						
GR/RES/DIRECTION	1-21	19/3-11/5 1989	308 - 11725	36"- 8 1/2"		

WIRELINE SCHLUMBERGER							
DIL/SLS/GR	1		2116 - 5024	17 1/2"	103°F	8 h	5 min
	2		5000 - 10013	12 1/4"	187°F	6 h	20 min
SLS/GR	3		10014 - 11725	8 1/2"	253°F	13 h	57 min
DLL/MSFL/GR	1		10014 - 11720	8 1/2"	238°F	6 h	40 min
LDL/CNL/NGT	1		2116 - 5030	17 1/2"	108°F	13 h	5 min
	2		5000 - 10018	12 1/4"	201°F	12 h	14 min
	3		14 - 11731	8 1/2"	238°F	5 h	47 min
CST/GR	1		2185 - 4972	17 1/2"			
	2		5050 - 10013	12 1/4"			
	3		10744 - 11671	8 1/2"			
FMS/GR	1		10014 - 11732	8 1/2"	256°F	13 h	40 min
RFT/GR	1		10038 - 10524	8 1/2"			

LITHOLOGICAL SYMBOLS

- CONGLOMERATE
- SANDSTONE
- SILTSTONE
- CLAY/CLAYSTONE
- SHALE
- LIMESTONE
- DOLOMITE
- ANHYDRITE
- GYPSUM
- SALT
- COAL
- VOLCANICS

- SANDY
- SILTY
- ARGILLACEOUS
- CALCAREOUS
- CHALKY
- DOLOMITIC
- ANHYDRITIC
- OOLITIC
- CHERTY
- MICROFOSSILS
- SHELL FRAGMENTS
- LITHIC FRAGMENTS

- M MICACEOUS
- V TUFFACEOUS
- G GLAUCONITIC
- P PYRITIC
- C CARBONACEOUS

OPERATIONAL SYMBOL

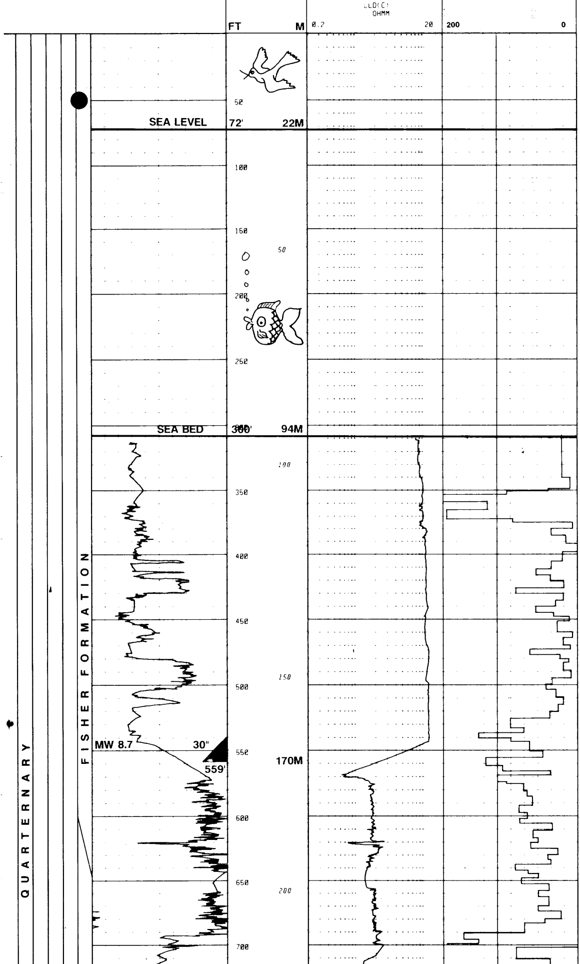
- CORED INTERVAL (WITH DEPTH & RECOVERY)
- SIDEWALL CORES RECOVERED
- NOT RECOVERED
- 4567psi RFT PRESSURETEST
- MW MUD WEIGHT
- SHOW OR STAIN
- HYDROCARBON CUT
- FLUORECENCE
- GAS SHOWS
- CASING SHOE
- LINER TOP
- PERFORATED INTERVAL
- CEMENT PLUG
- DIP DATA
- P_o VITRIN'TE REFLECTANCE

COMMENTS

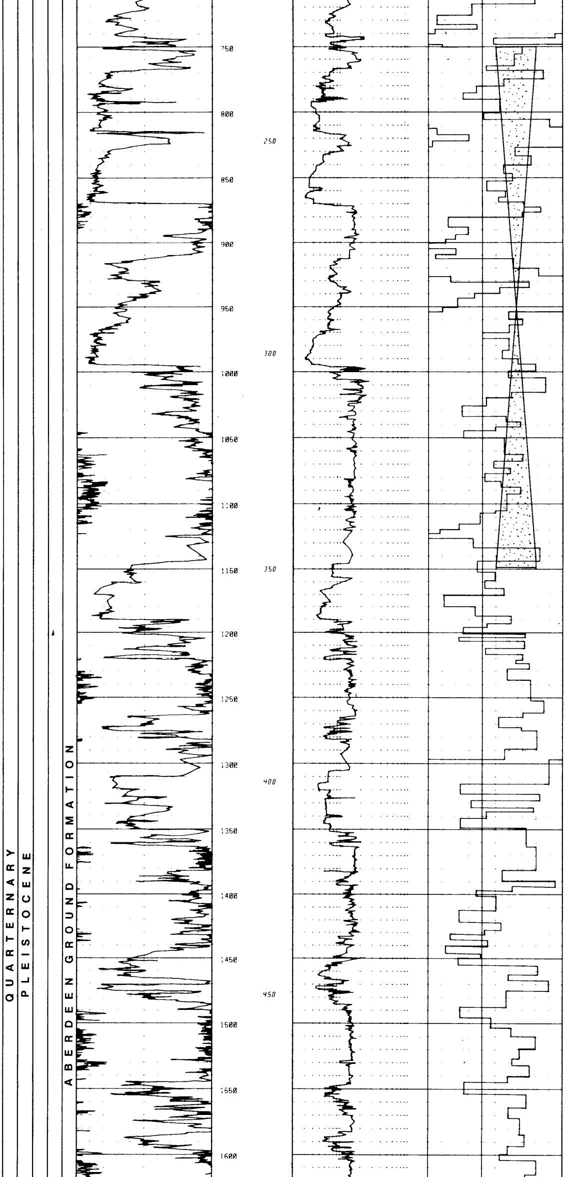
THE WELL WAS DRILLED DOWN TO 10380′, 3164m, WHERE THE CORE ASSEMBLY WITH CORE # 7 WAS ACCIDENTLY DROPPED IN THE HOLE. AFTER FISHING THE CORE AND MOST OF THE CORE BARREL, THE WELL WAS PLUGGED BACK AND SIDE TRACKED AT 10100′, 3076m. T.D. OF THE WELL WAS 11725′, 3574m.

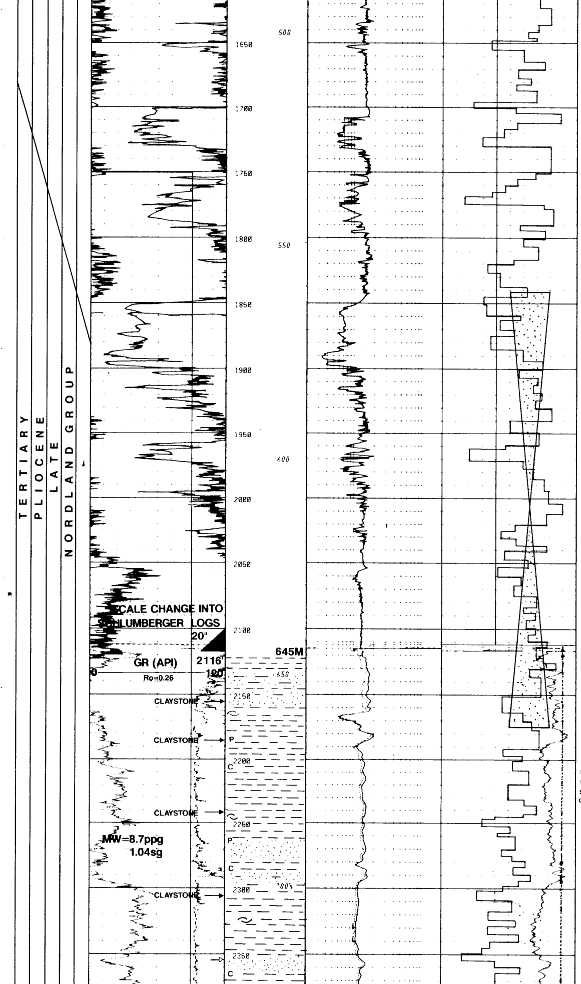
OIL WAS PROVED IN THE FORTIES FORMATION.

CRONO-STRATIGRAPHY	LITHO-STRATIGRAPHY				
		GR(C) API 0 100		ILM(C) OHMM 0.2 20	DT US 140 40
		BIT INCH 8 20		ILD(C) OHMM 0.2 20	TENS LB 11000. 1000.
		CALI INCH 8 20		LLS(C) OHMM 0.2 20	ROP FT/HR

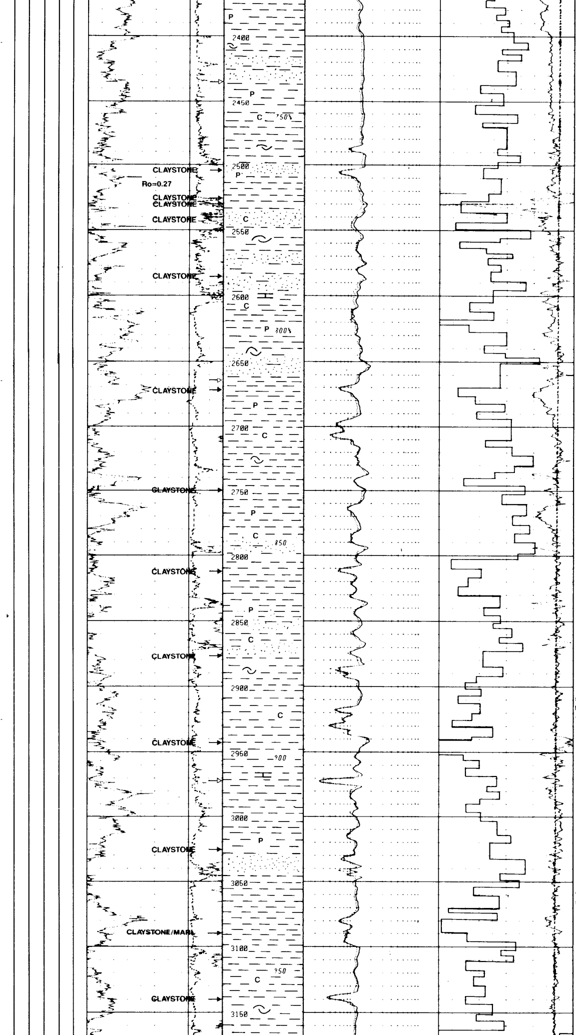


ALL RETURNS TO SEAFLOOR
LITHOLOGY IS INFERRED FROM
ROP AND MWD LOG
LOGGED WITH MWD BY EXLOG





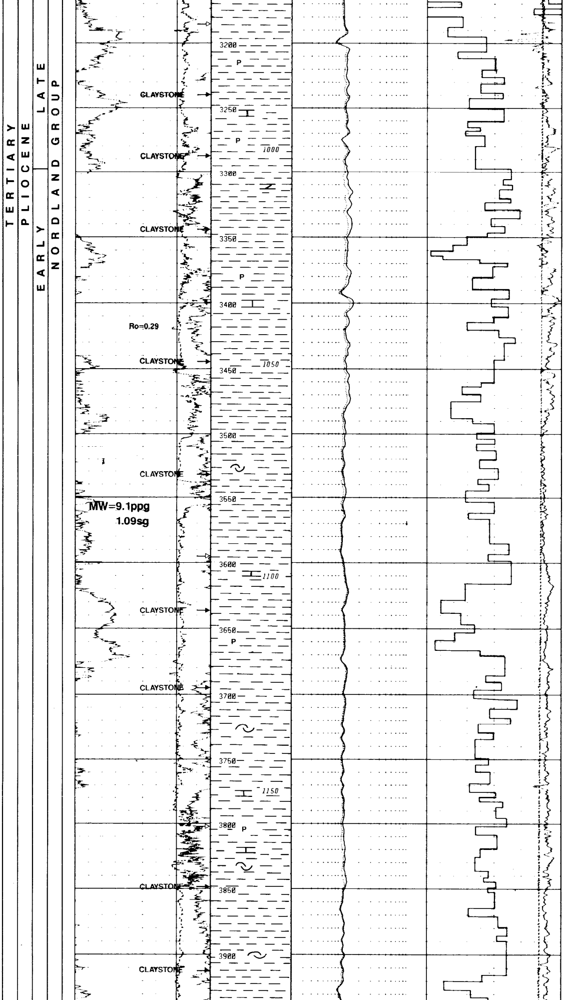
CLAYSTONE: light grey, slight green grey soft, amorphous, sticky, hydraceous, plastic, slight calcareous, **slight traces of** shell fragments, foraminiferas and carbonaceous material.



CLAYSTONE: light to medium grey, very soft amorphous, hydraceous-plastic, non calcareou abundant foraminiferas, carbonaceous fragments, pyrite, bivalves.

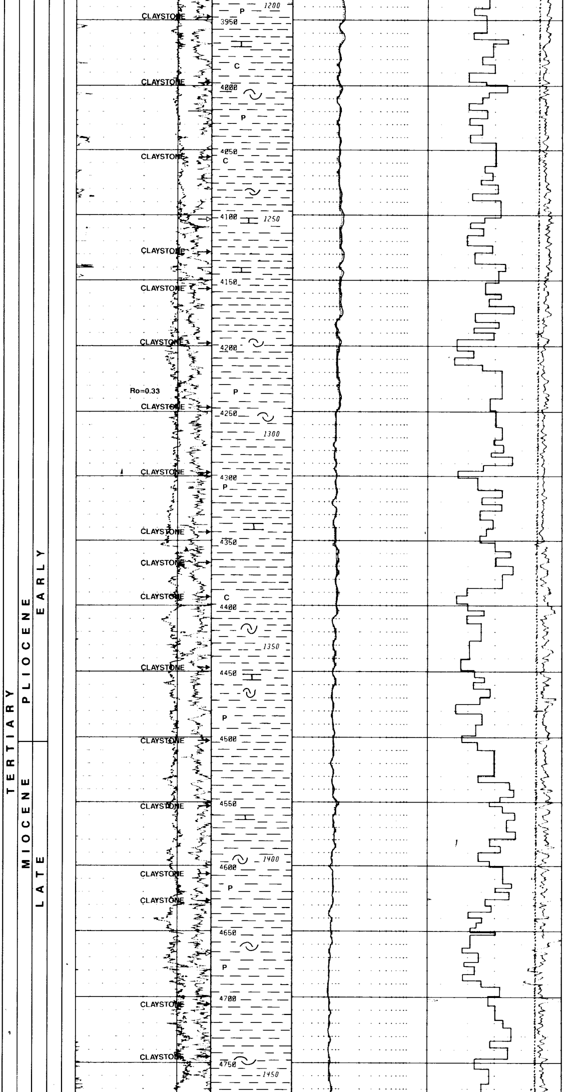
CLAYSTONE: light to medium grey, soft, sticky, hydraceous, amorphous, occasionally firm, blocky, micromicaceous locally slight silty, generally non calcareous.

SAND: transparent-translucent, fine to medium grained, occasionally coarse, subangular to subrounded, poor to moderate sorted.

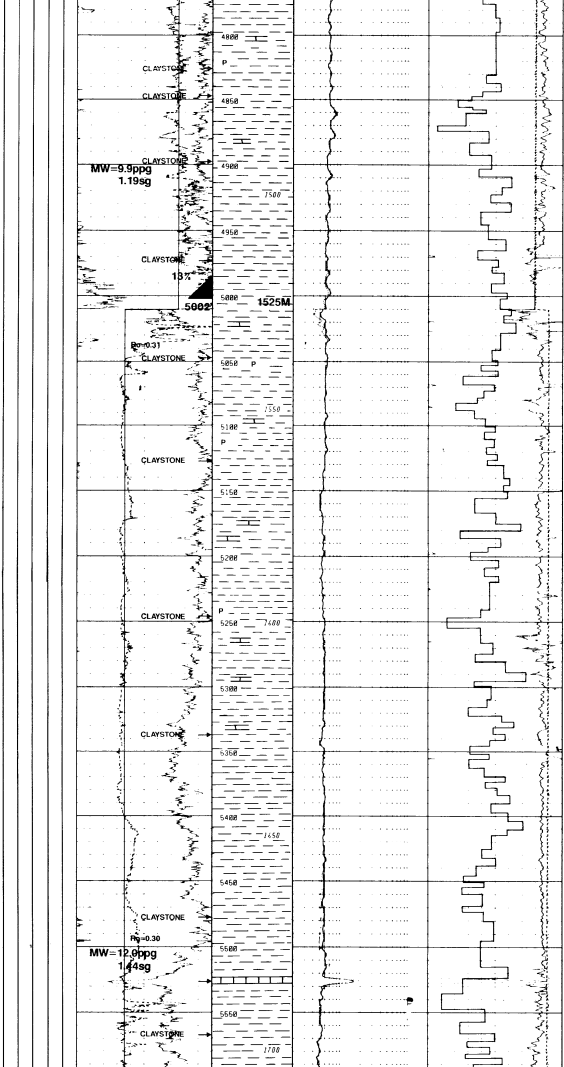


DOLOMITE: brown, occasionaly green brown, hard, blocky, microcrystalline, locally grading to dolomitic limestone.

CLAYSTONE: medium green to grey, soft, sticky, hydraceous.



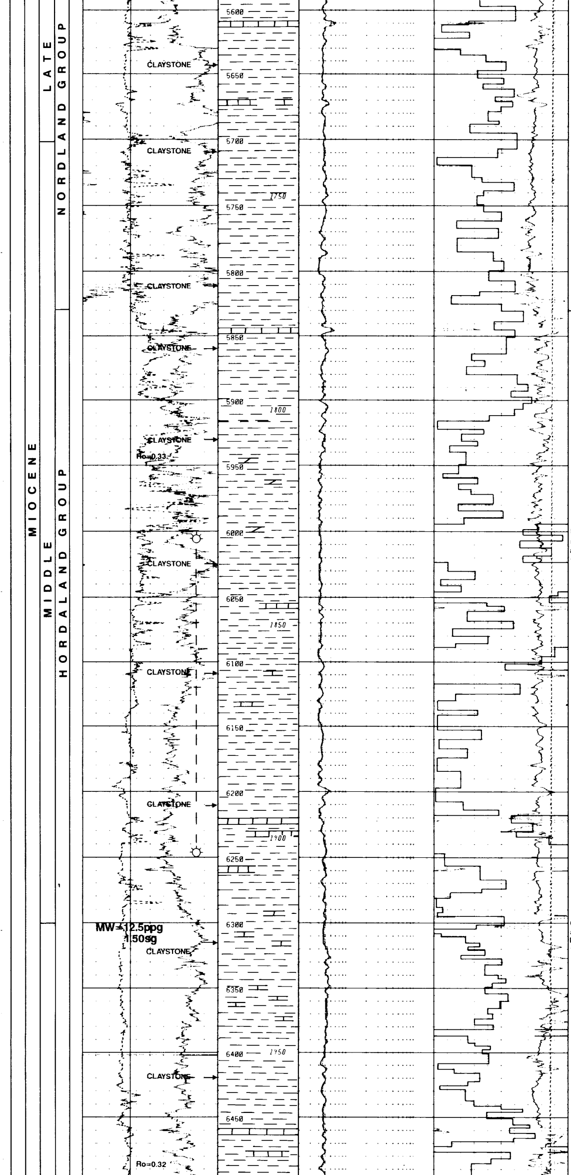
CLAYSTONE: green grey, greey brown, light to medium grey, soft, amorphous, hydraceous, plastic, locally becoming firm, subplaty, micromicaceous, slight calcareous in places.



DOLOMITE: light brown, cream, occasionally dark brown, firm to hard, blocky, cryptocrystalline, slight argillaceous.

CLAYSTONE: predominantly medium grey, soft, sticky, amorphous, locally firm, subfissile, occasionally micromicaceous, non calcareous, commonly pyritic.

CLAYSTONE: pale to medium grey, becoming green grey, soft - occasionally firm, amorphous - platy, occasionally blocky, non calcareous.

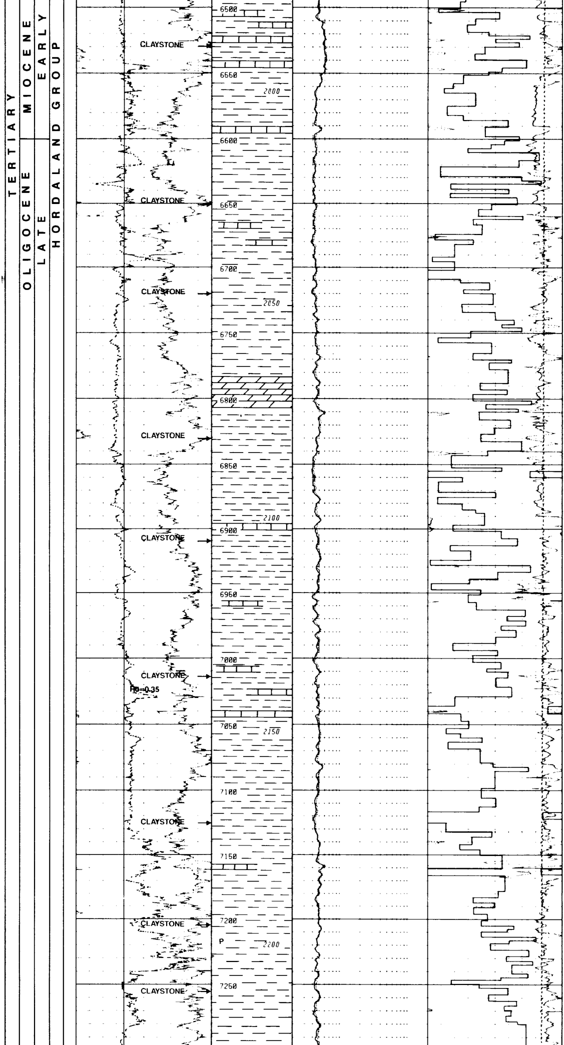


LIMESTONE: cream, firm - moderate hard, crumbly, micritic, dolomitic.

TOP HORDALAND GP. 5.830'
(-5.758', -1755m)
1.857 sec TWT

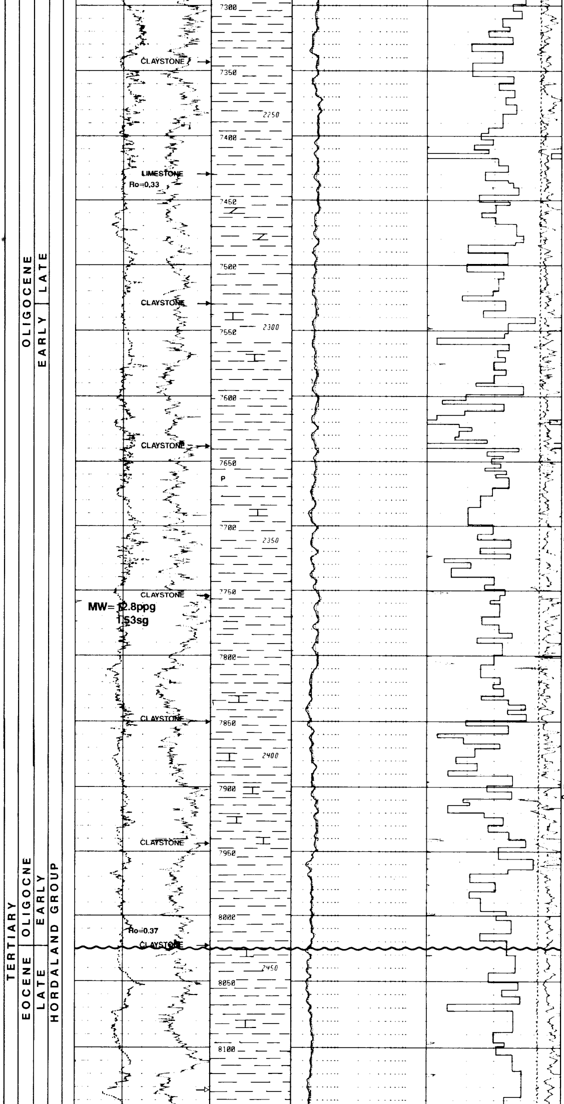
DOLOMITE: light - medium brown, hard, microcrystalline - cryptocrystalline, brittle, argillaceous, calcareous, locally grading to dolomitic limestone.

CLAYSTONE: brown, soft - firm, amorphous - subfissile, locally dark brown, firm, blocky - subfissile, silty in parts, non calcareous.



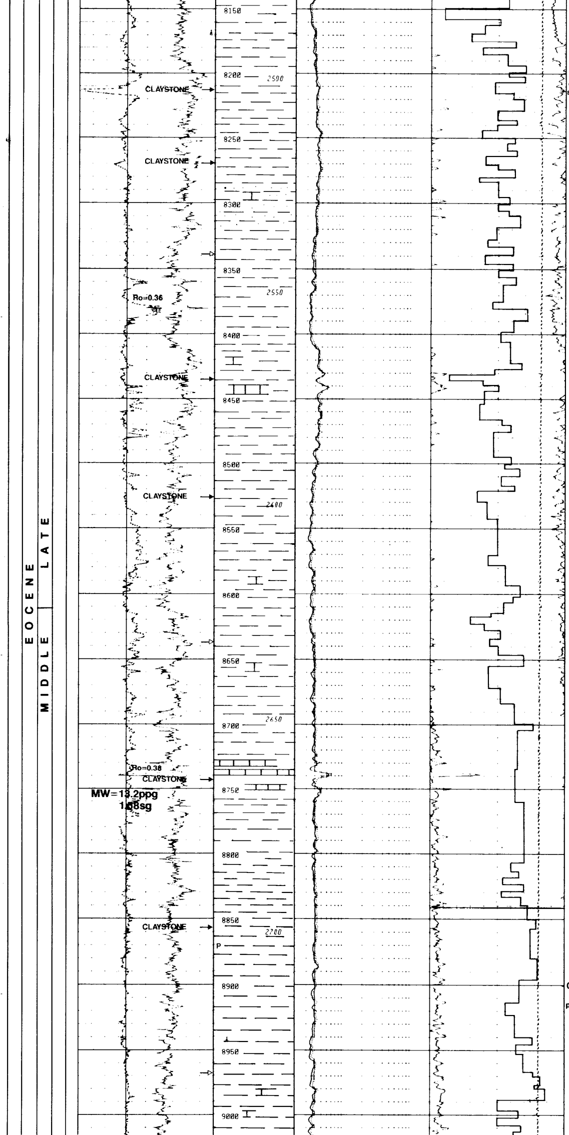
DOLOMITE: tan - dark brown, microcrystalline - cryptocrystalline, hard, argillaceous.

CLAYSTONE: predominantly medium to dark brown, becoming very firm, slight micromicaceous, non calcareous.



CLAYSTONE: medium - dark brown, grey brown pale green grey - olive grey, firm, platy, calcareous.

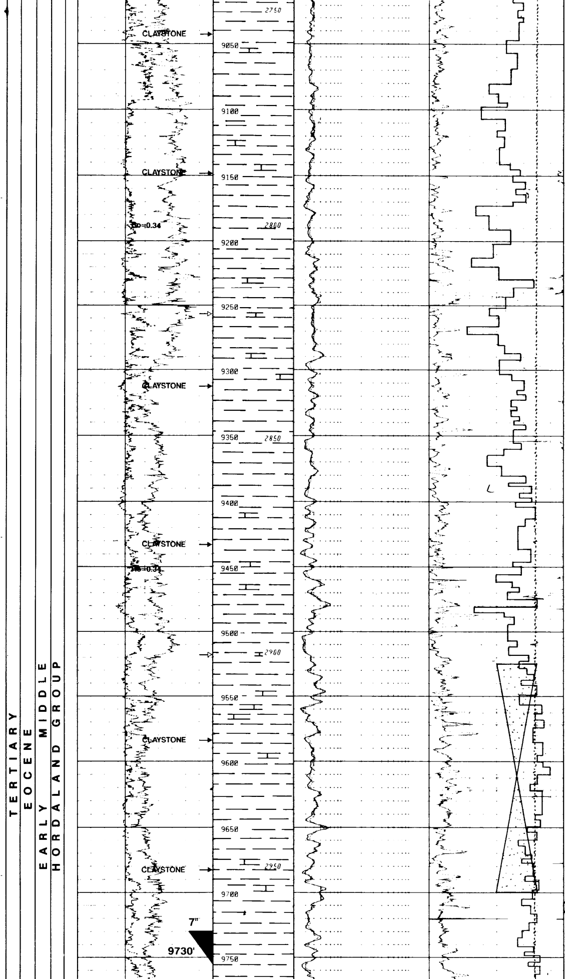
LIMESTONE: cream - tan, firm - hard, chalky - microcrystalline, argillaceous.



CLAYSTONE: light grey to light grey brown, olive grey, predominantly firm, platy - blocky, slight micromicaceous, locally micromicaceous.

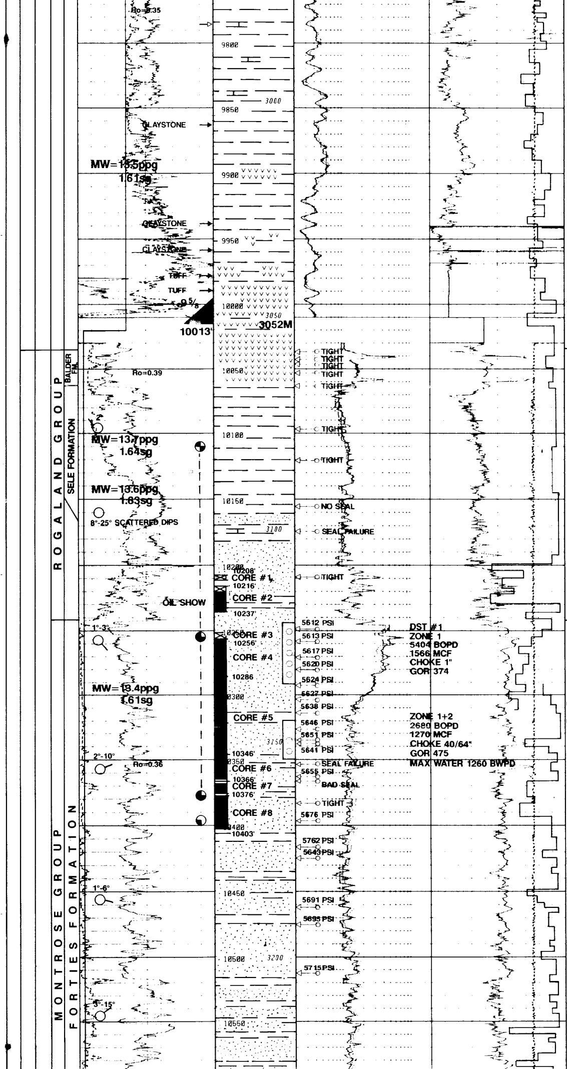
trace of **SANDSTONE**

CLAYSTONE: olive grey - brown grey, becoming firmer, occasionally pale grey green, platy, locally common foraminiferas.



LIMESTONE: cream - tan, occasionally orange brown, firm - hard, microcrystalline - very fine crystalline, brittle, fractured, slight dolomitic.

CLAYSTONE: brown to olive grey, occasionally variegated, very firm - moderate hard, occasionally dark streaks, non calcareous.



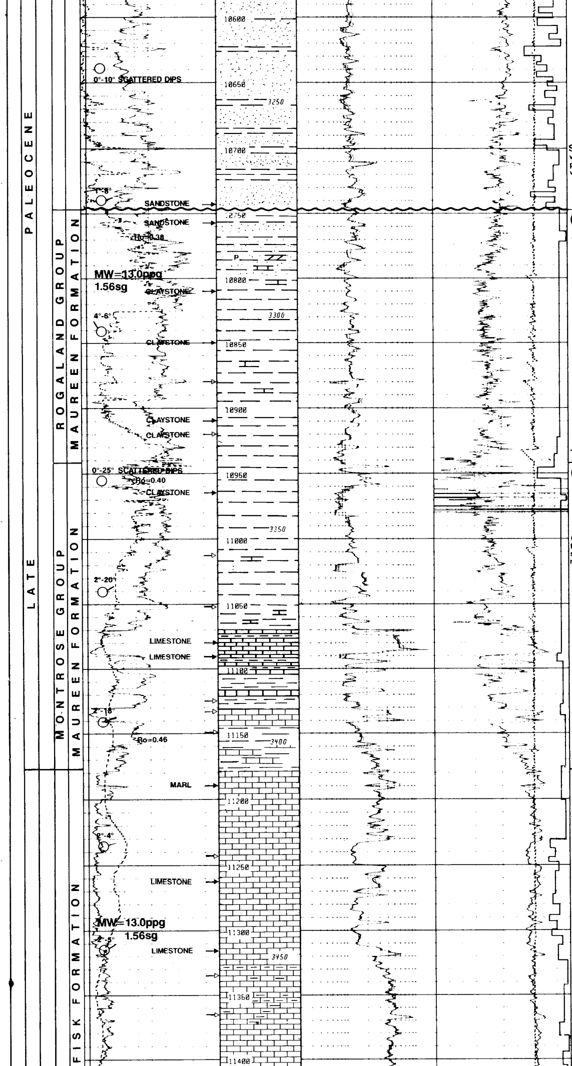
TUFFACEOUS CLAYSTONE: very pale grey, pale green, brown, becoming predominantly pale blue grey, occasionally off white, firm to moderate hard, commonly dark inclusions and laminations, occasionally cream spots.

TOP BALDER FM. 10.036'
(-9.961', -3036m)
3.088 sec TWT

TOP FORTIES FM. 10.242'
(-10.167', -3099m)
3.130 sec TWT

SANDSTONE: light grey, firm, blocky, fine, moderate sorted, angular - subangular, argillaceous, micaceous, becoming silty, moderate hydrocarbon odour, pale yellow white even fluorescense, instant hazy milky white cut.

COMMENT:
HOLE DRILLED TO 10380', 3164M.
PLUGGED BACK AND SIDETRACKED FROM 10100', 3076M.



SANDSTONE: pale grey, pale grey brown, very fine - fine, occasionally medium grained, poor to moderate calcareous cement, poor visible porosity, poor yellow white crush cut.

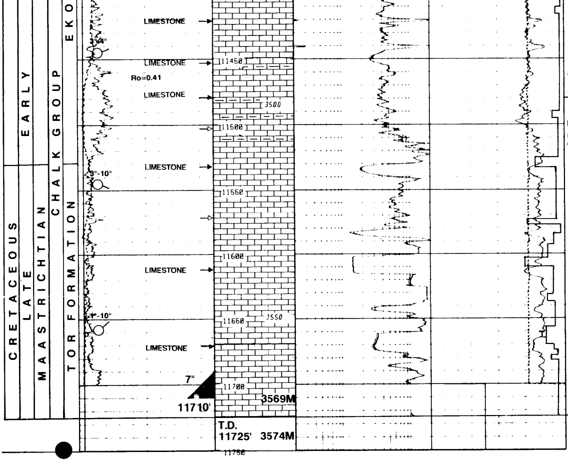
TOP LISTA FM. 10.745'
(-10.669', -3252m)
3.281 sec TWT

TOP MAUREEN FM. 10.962'
(-10.866', -3312m)
3.257 sec TWT

CLAYSTONE: red brown, green, grey brown, firm to moderate hard, platy, occasionally blocky silty in parts, locally micromicaceous, non calcareous.

TOP EKOFISK FM. 11.179'
(-11.103', -3384m)
3.301 sec TWT

LIMESTONE: off white, occasionally pale grey, firm - hard, blocky, micritic, occasionally very fine crystalline, brittle to crumbly, locally white, soft, chalky, pure, no visible porosity.



TOP TOR FM. 11.530'
(-11.454', -3491m)
3.347sec TWT

LIMESTONE: off white to white, v firm to moderate hard, micritic, brittle, clean, occasionally chalky, no visible porosity.

TD
3.371 sec TWT