NORSK HYDRO A.S

FINAL REPORT

WELL 15/2-1

LICENCE 048

July 1982.

Norsk Hydro

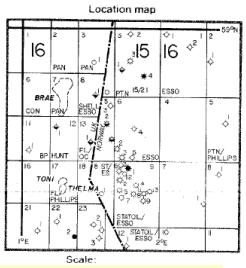
Oslo - Norway

Completion log

Scale 1:500

Well: 15/2-1

Location map



Scale:

Coordinates:	58° 45' 19.57"N 01° 35' 40.54"E
Elevation: K.B.	25 m.
Water Depth:	109 m
Total Depth (Driller):	4600 m
Total Depth (Logger):	4603 m
Formation at Total Depth:	Permian salt

Country:	Norway.
Licence:	048
Owners:	Statoil, Norsk Hydro, Elf, Total.
Field:	-
Date Spudded:	November 26, 1981.
Reached Total Depth:	February 14, 1982.
Completed:	February 25, 1982.
Well Status:	Plugged and Abandoned.
Rig:	Nortrym.
Contractor:	Golar-Nor.
Mudlogging Company:	Gearhard - Geodata
Geologists:	M. J. Henderson, D.E. Nilsen, B. I. Tollefsen, P. A. Midtkandal, K. Kalgraff, J. H. Skogen.
Prepared by:	D. E. Nilsen, M. S. Henderson, B. I. Tollefsen.
Date:	August 24, 1982.

Casing Records

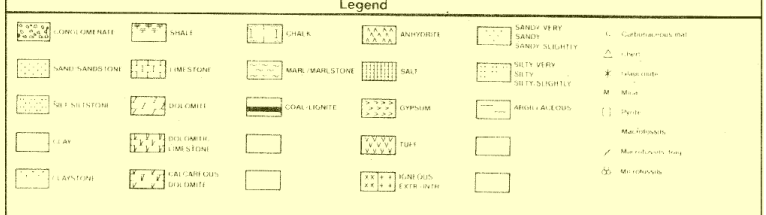
30"	at	196 m
20"	at	653 m
13 3/8"	at	2737 m
9 5/8"	at	3770 m
7" liner at		

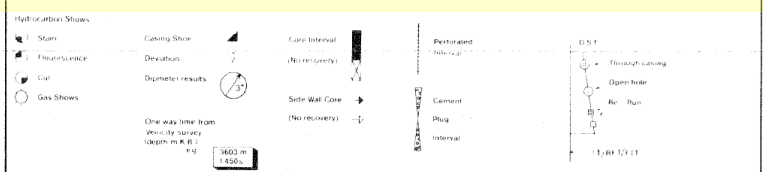
Comments

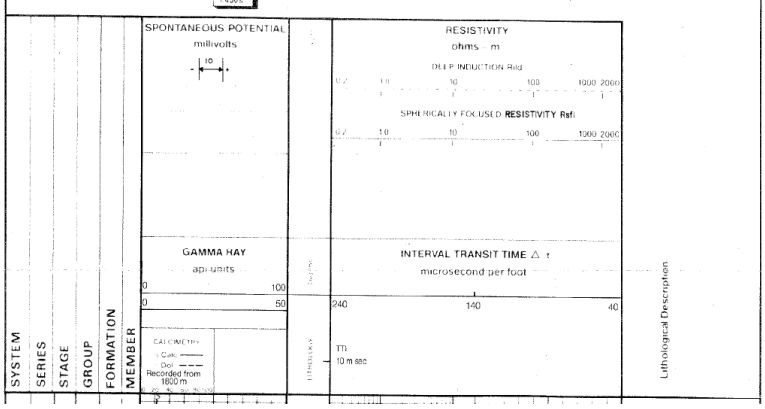
Logs Run

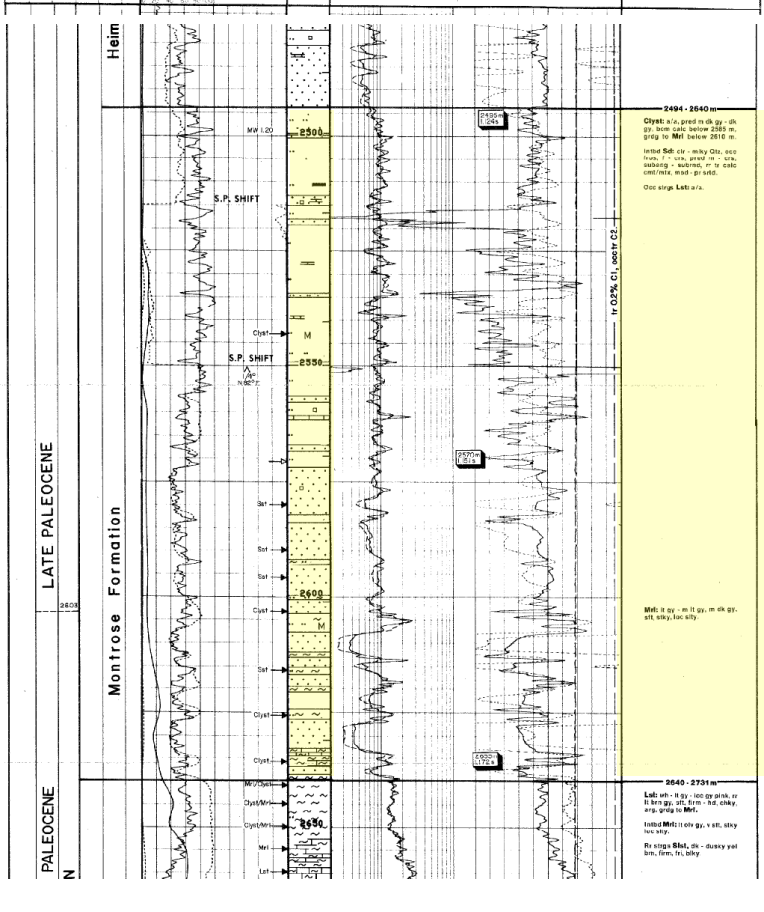
ISF/SONIC	FDC/CNL	HDT	CST	CBL/VDL	RFT
1. 134 - 653 m 2. 653 - 2748.5 m 3. 2736 - 3786 m 4. 3770 - 4451 m 5. 4451 - 4599 m	1. 653 - 2750 m 2. 2136 - 3785 m 3. 3770 - 4451 m 4. 4450 - 4600 m	1. 2736 - 3785 m 2. 3770 - 4565 m	1. 1429 - 2748 m 2. 1429 - 2705 m 3. 3537.5 - 3781 m 4. 2764 - 3520 m 5. 4357 - 4554 m 6. 4131 - 4354 m 7. 3789.5 - 4114.5 m 8. 3844.5 - 4516 m	1. 400 - 2734.5 m 2. 2246 - 3763 m	1. 4365.3 - 4417.5 m 2. 4416.3 - 4419 m

Legend









Well: 15/2-1

2494 - 2640 m

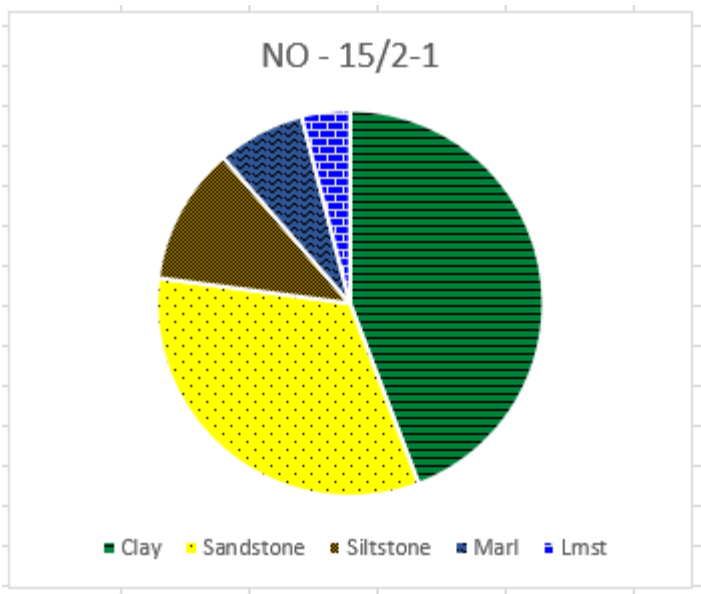
2494 mMDRT

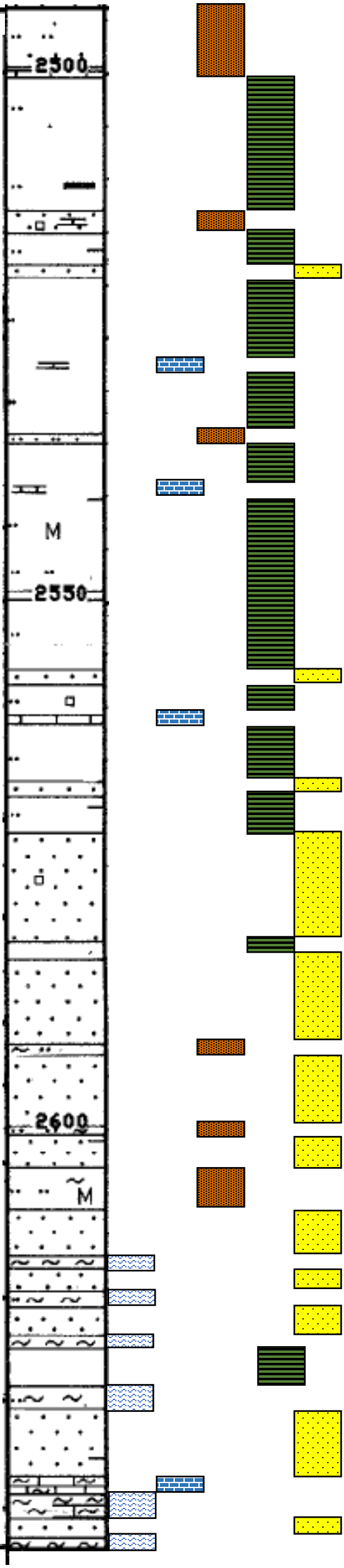
Coordinates: 58° 45' 19.57"N
01° 35' 40.54"E

	Clay	Sandstone	Siltstone	Marl	Lmst	
Height	2.84	0.29	1.55	0.33	0.33	
	0.73	0.29	0.41	0.33	0.33	
	1.64	0.29	0.33	0.28	0.33	
	1.18	2.24	0.33	0.56	0.33	
	0.83	1.86	0.33	0.56		
	3.62	1.44	0.83	0.35		
	0.52	0.67				
	1.09	0.92				
	0.91	0.41				
	0.33	0.62				
	0.81	1.4				
		0.35				
Sub-Sum	15	11	4	2	1	
SUM		33				Sense Check
Litho %	44%	33%	12%	7%	4%	100%

60 %

27 %





2640 mMDRT

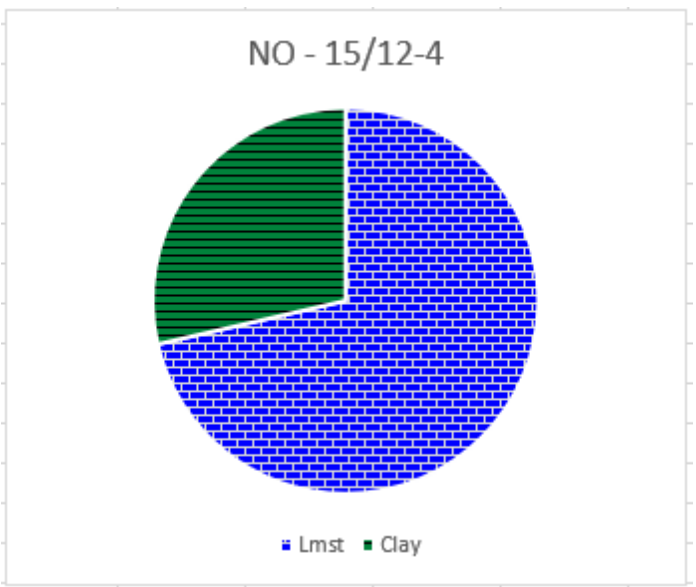
2640 - 2731 m

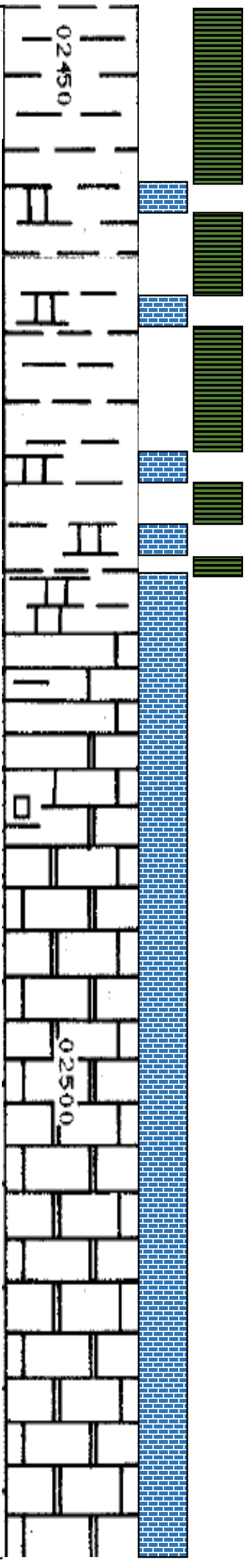
15/12-4

COORDINATES: 58° 03' 09.16" N
01° 54' 11.61" E

TOP MAUREEN FM
2464m (-2441m)
2.396s
CLAYSTONE: lt gry, gn, brn, sft, blky, calc, micromic, sl-v slty

NO - 15/12-4	Lmst	Clay	
Height	0.64	3.61	
	0.64	1.7	
	0.64	2.57	
	0.64	0.86	
	20.2	0.4	
Sub-Sum	23	9	
SUM	32		Sense Check
Litho %	71%	29%	100%



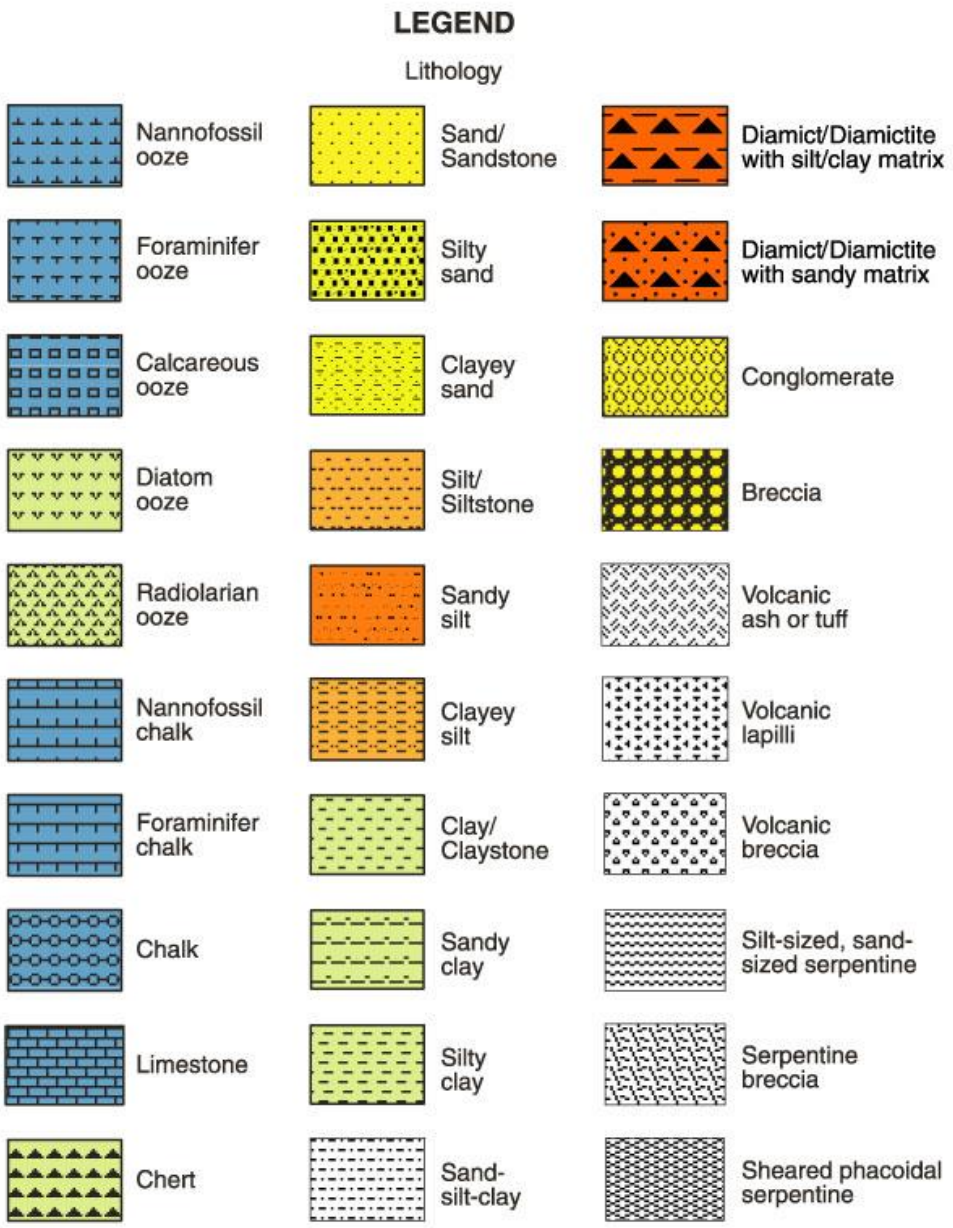


SHALE

LIMESTONE

TOP TOR FM
2482m (-2459m)
2.411s

Pattern to be used to create the lithological pie-charts



is light to pinkish grey, yellowish brown, soft to hard and microcrystalline. The Heimdal Formation is Late Paleocene of age.

Maureen Formation (2494-2640 m)

A sharp change in lithology from sandstone to claystone occur at 2494 m. In the upper part of this interval sand only occurs sporadically as thin beds. From 2572 m sandstone becomes again dominating, claystone occur as interbeds and from 2610 m thin beds of marl are present. Chalky limestones containing rare sand grains, which are considered to be reworked limestone clasts, have been observed throughout the interval.

The claystone is predominantly dark grey and similar to the one above. It is non calcareous in the upper part becoming calcareous downwards and grading into a light grey marl towards the base.

The sandstone is medium to coarse in grain size and occasionally calcite cemented.

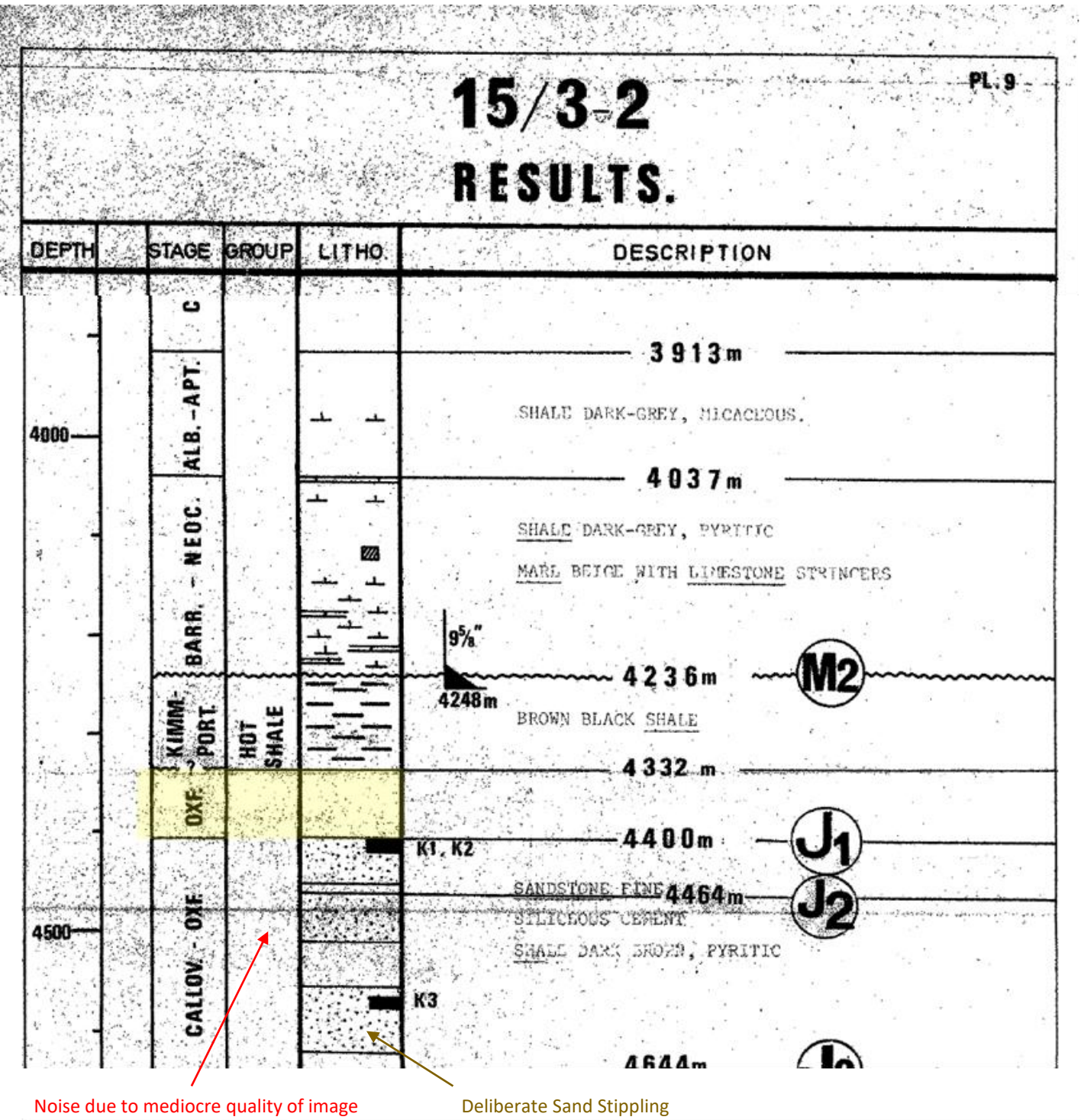
The Maureen Formation is of Late Paleocene to Danian (2603-2755 m) age.

CHALK GROUP (2640-3668 m)

Ekofisk Formation (2640-2731 m)

A marked change in lithology occurs at this level, from the clastic deposits of the Montrose Group to the predominantly non clastic deposits of the Chalk Group. The Ekofisk Formation is mainly a limestone/marl interval with rare stringers of siltstone.

The limestone is white to light grey to locally greyish pink and rarely light brownish grey, soft to hard, chalky and argillaceous grading to marl.



- Middle Oxfordian (4.332 - 4.400 m)

  Shale to marl grey, grey-dark, multicoloured in basal part.

  Argillaceous limestone stringers.

Highlighted in yellow:

- Text description confirms no sand is present in the formation
- Image contains “stippling” associated with symbology of sand
- Some “stippling” is a result of poor quality image / noise.

Some “stippling” is noise because it extends beyond the limits of the lithology column and because it is irregular (in a way that the deliberate symbology is not).