SIMON PETROLEUM TECHNOLOGY

WELL: 2/4-19B

Print: 1947 H	**Units:** M [✓ F]	**Top**	**Bottom**	**Scale**	**TD**
Length: 24 FT	**Initials:** July	4490	15000	1:500	14979

DIGITAL WIRELINE LOGS PACKAGE
1994
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SIMON PETROLEUM TECHNOLOGY

COMPLETION LOG

PHILLIPS PETROLEUM COMPANY

COMPOSITE LOG

Phillips Petroleum Co. Norway — 2/4-B-19

Norway

LATITUDE 56° 33' 54.85" N — PRODUCTION LICENCE 018

03° 12' 13.20" E — BLOCK 2/4

DATE SPUDDED December 17, 1975 — DATE COMPLETED April 7, 1976

16 APR. 1982
REGISTRERT
OLJEDIREKTORATET

ELEVATION KB 114' DF 113' WATER DEPTH 227'

TOTAL DEPTH 15108' PBTD 11316' STATUS

CASING RECORD 30" csg. at 566', 20" csg. at 1632', 13 3/8" csg. at 4497', 9 5/8" csg. at 9568', 7" csg. at 12882'.

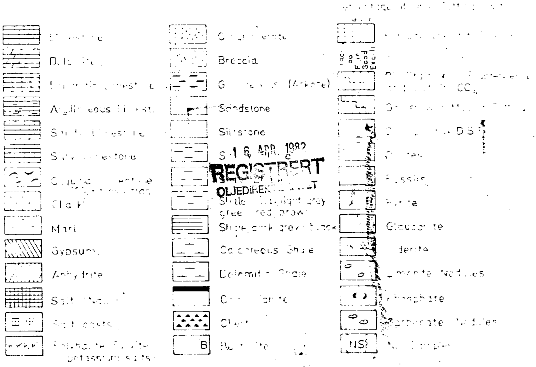
GEOLOGIST C.J. Daigle, T. Andresen, K. Skår

REMARKS Lost hole below 7" csg. after logging.

TESTING AND COMPLETION SUMMARY Bottom hole samples from 9860' and 9852'.

Packer at 9388'. 4½" tubing shoe at 9446'.

LEGEND



16 APR. 1982
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SCALE 1:500

WELL HISTORY AND DRILLING RATE	DEPTH AND GRAPHIC	POROSITY AND SHOWS	LITHOLOGIC DESCRIPTION	CORES AND TESTS
Minutes 5 Feet →				

[illegible]

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SPONTANEOUS-POTENTIAL	DEPTH	6FF40 INDUCTION CONDUCTIVITY MILLIMHOS/M	
40 MILLIVOLTS		4000	2000
		2000	0

RESISTIVITY OHMS. M²/M

AMP. SHORT NORMAL

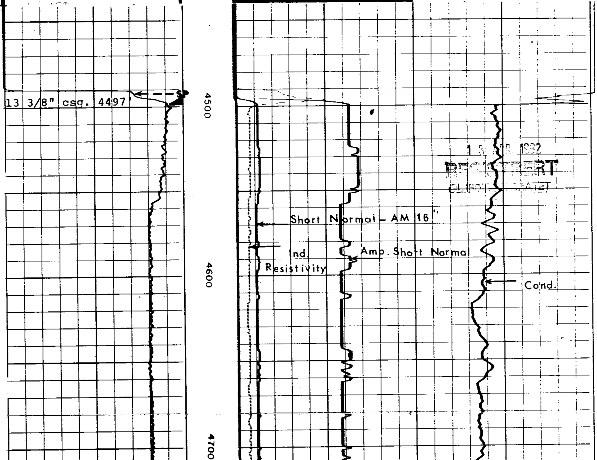
0	2

SHORT NORMAL A-16"-M

0	10
0	100

6 FF40 INDUCTION

0	10
0	100



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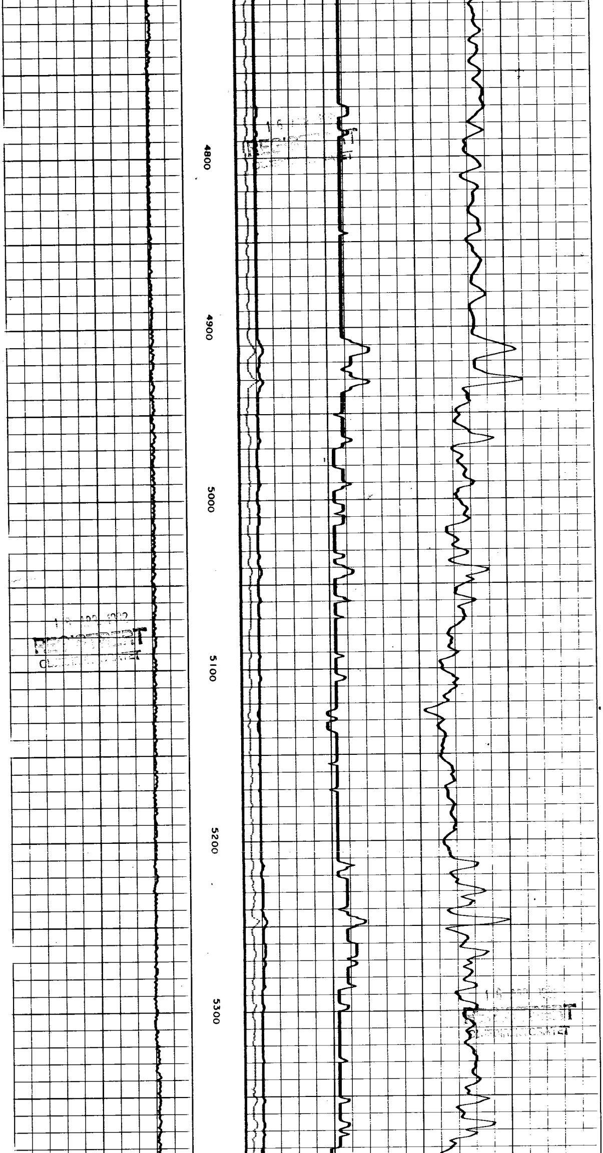

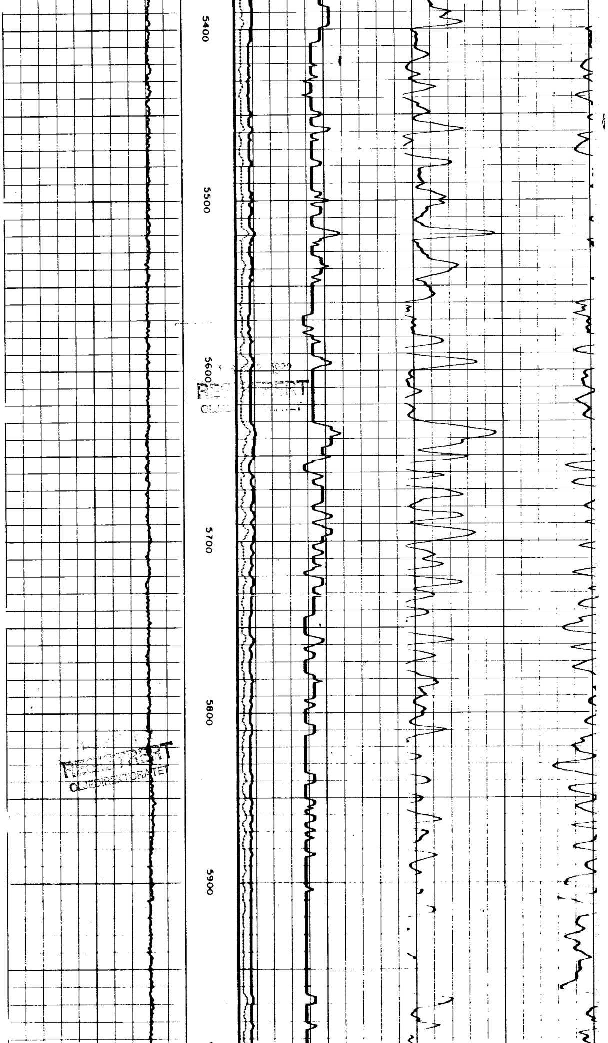

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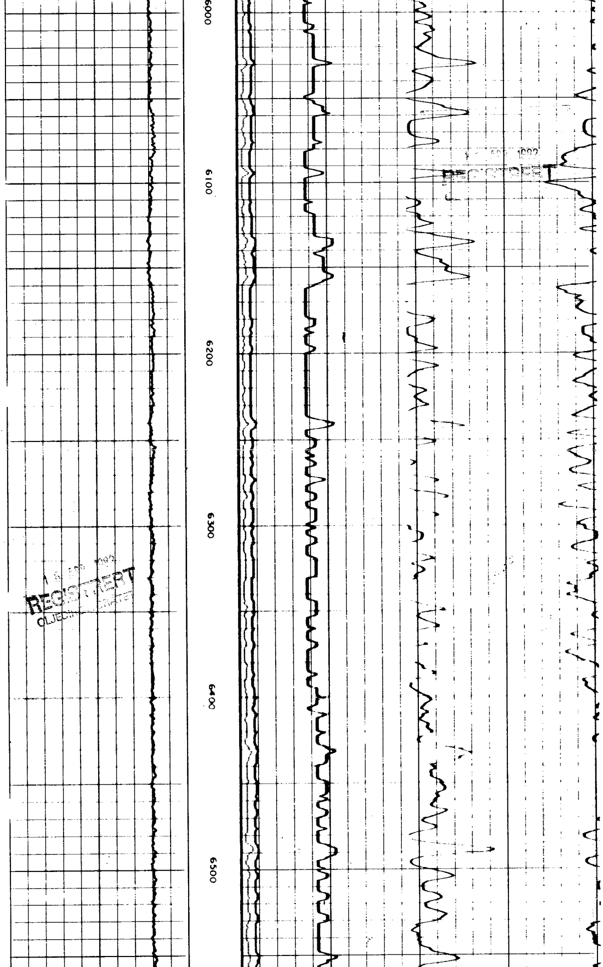

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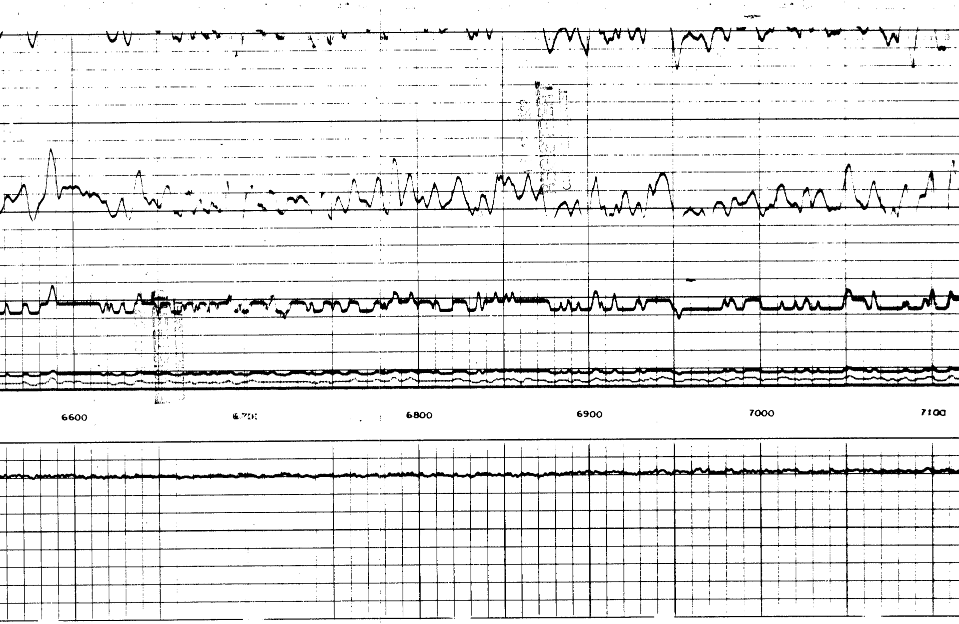

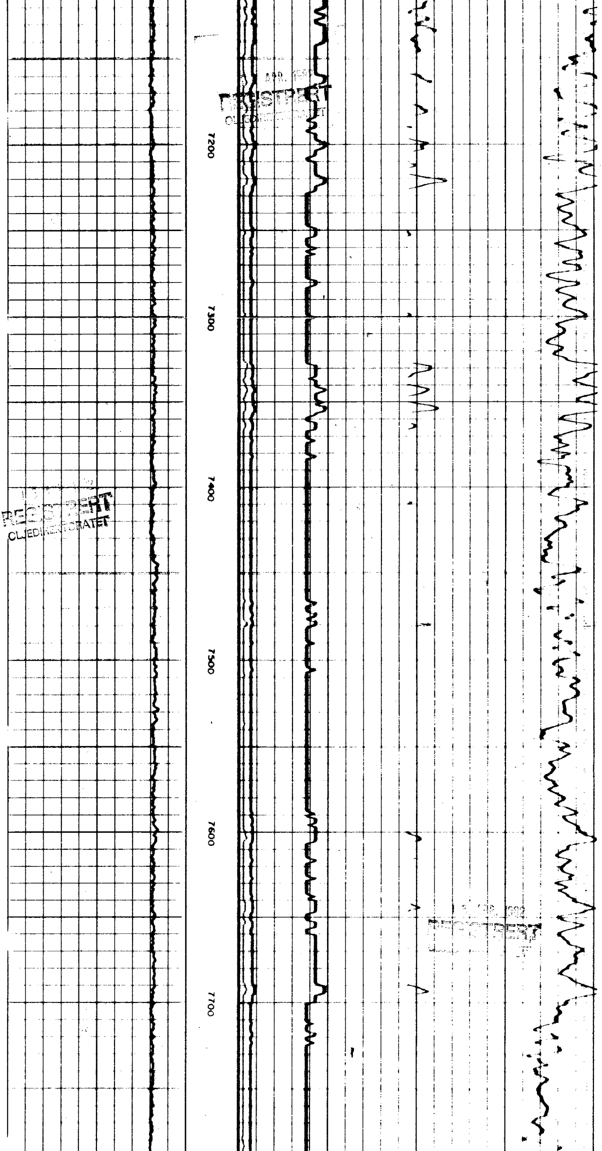

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APR. 1992
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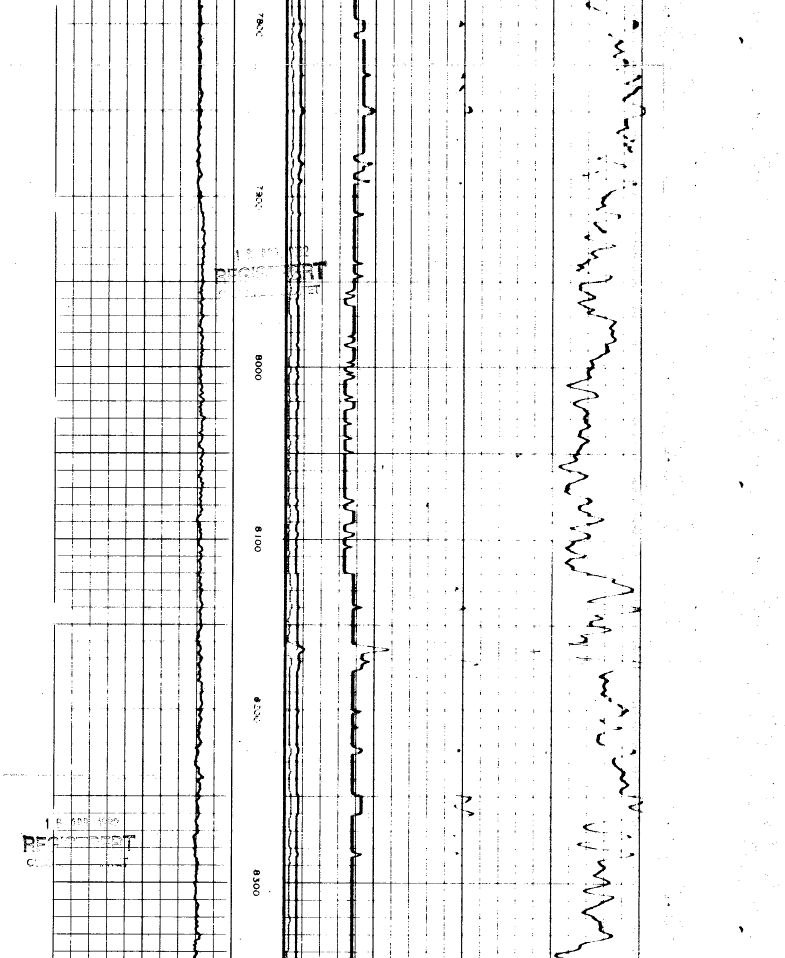

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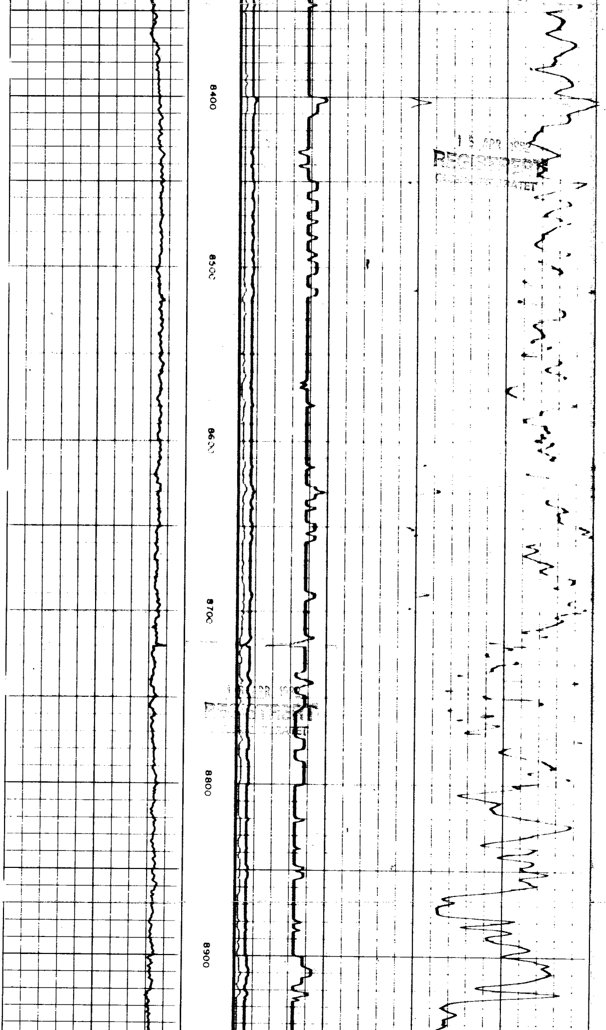

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REGISTERED
[illegible] DIREKTORATET

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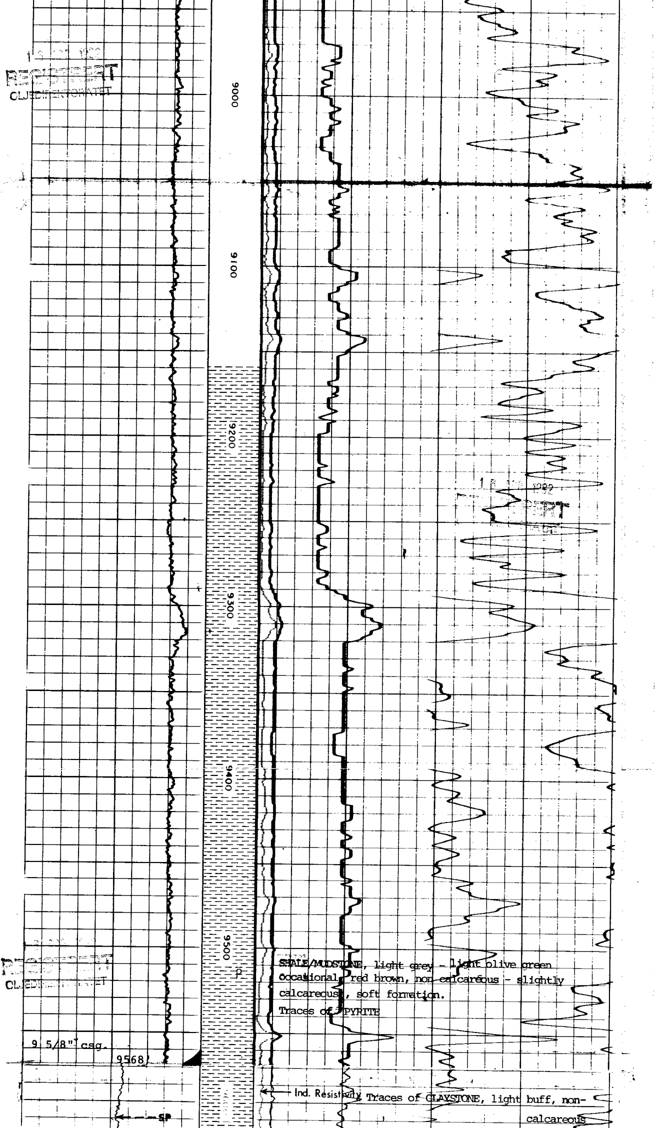

SHALE/MUDSTONE, light grey - light olive green occasional, red brown, non calcareous - slightly calcareous, soft formation.
Traces of PYRITE

Traces of CLAYSTONE, light buff, non-calcareous

1982
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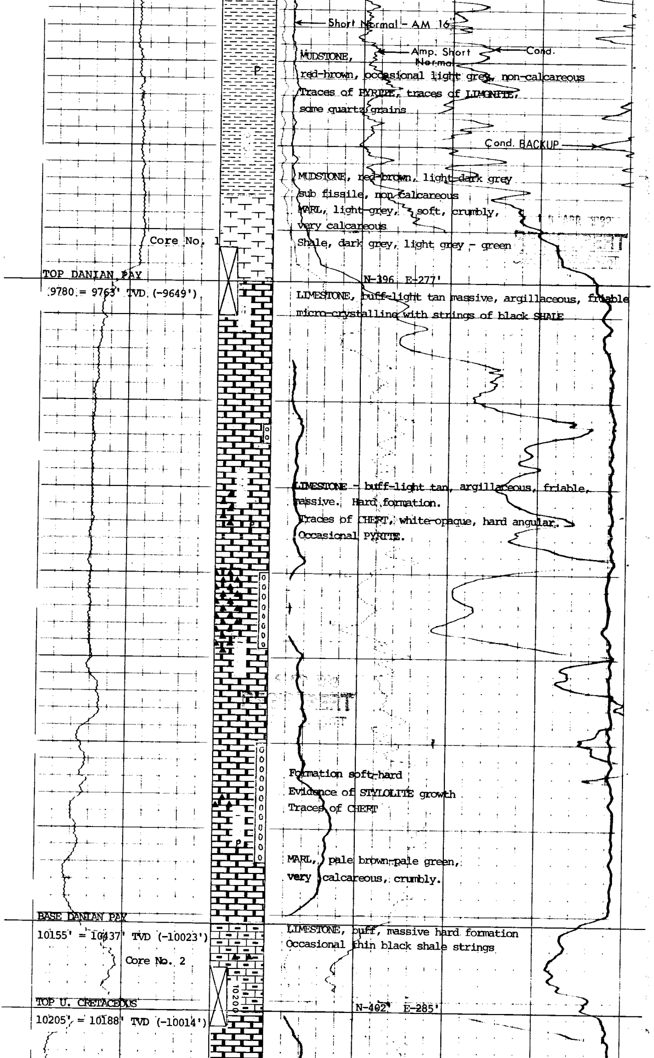
OLJEDIREKTORATET



MUDSTONE, red-brown, occasional light grey, non-calcareous
Traces of PYRITE, traces of LIMONITE,
some quartz grains

MUDSTONE, red-brown, light-dark grey
sub fissile, non calcareous
MARL, light-grey, soft, crumbly,
very calcareous
Shale, dark grey, light grey - green

TOP DANIAN PAY
9780 = 9763' TVD (-9649')

LIMESTONE, buff-light tan massive, argillaceous, friable
micro-crystalline with strings of black SHALE

LIMESTONE - buff-light tan, argillaceous, friable,
massive. Hard formation.
Traces of CHERT, white-opaque, hard angular.
Occasional PYRITE.

Formation soft-hard
Evidence of STYLOLITE growth
Traces of CHERT

MARL, pale brown-pale green,
very calcareous, crumbly.

BASE DANIAN PAY
10155' = 10137' TVD (-10023')

LIMESTONE, buff, massive hard formation
Occasional thin black shale strings

TOP U. CRETACEOUS
10205' = 10188' TVD (-10014')

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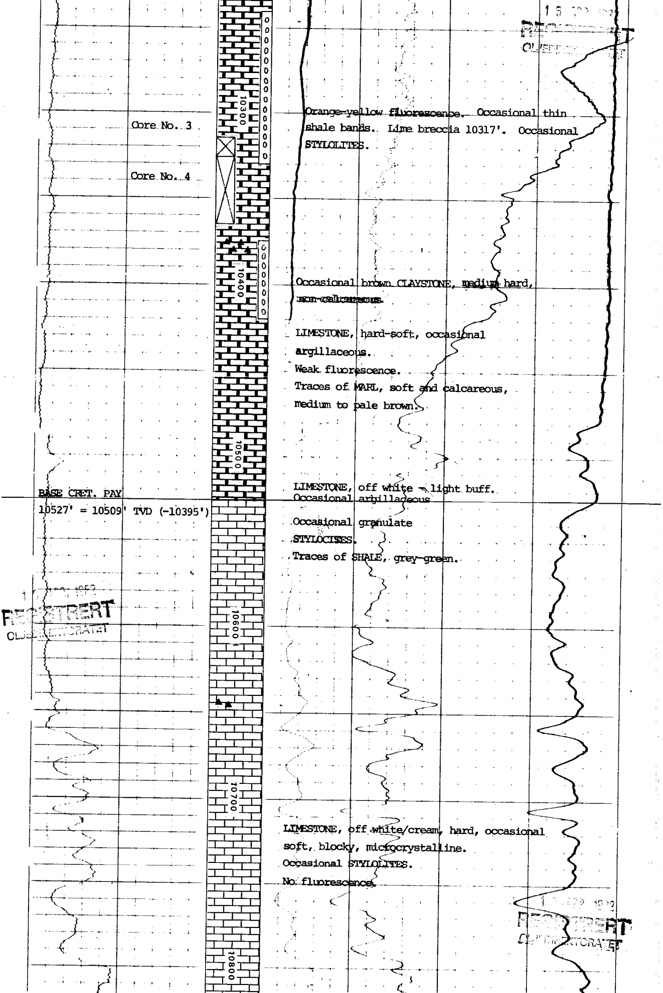

Core No. 3

Core No. 4

Orange-yellow fluorescence. Occasional thin shale bands. Lime breccia 10317'. Occasional STYLOLITES.

Occasional brown CLAYSTONE, medium hard, non-calcareous.

LIMESTONE, hard-soft, occasional argillaceous.

Weak fluorescence.

Traces of MARL, soft and calcareous, medium to pale brown.

BASE CRET. PAY

10527' = 10509' TVD (-10395')

LIMESTONE, off white - light buff.

Occasional argillaceous

Occasional granulate STYLOCISES.

Traces of SHALE, grey-green.

LIMESTONE, off white/cream, hard, occasional soft, blocky, microcrystalline.

Occasional STYLOLITES.

No fluorescence.

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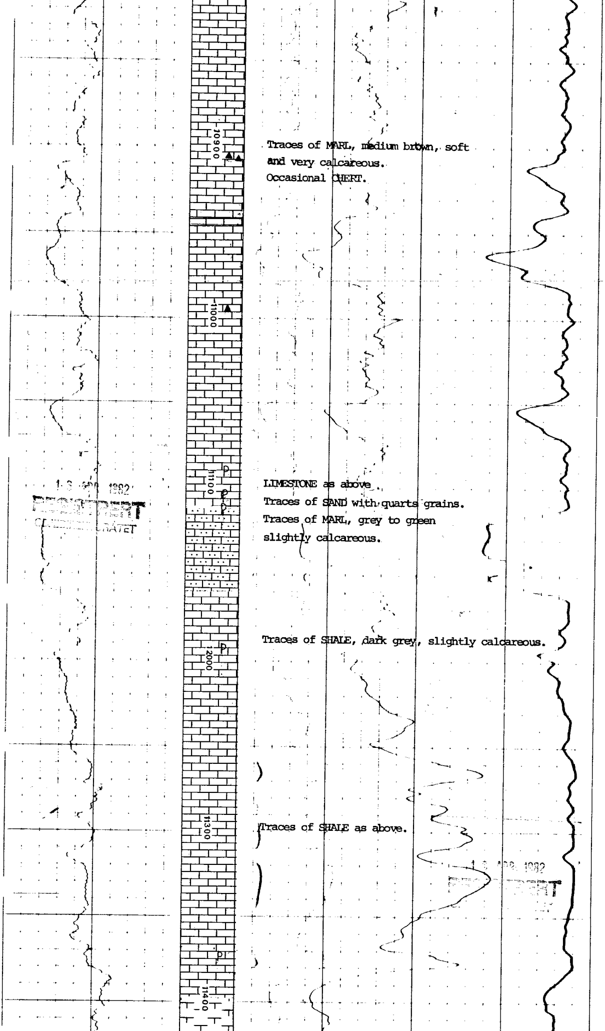

Traces of MARL, medium brown, soft and very calcareous.
Occasional CHERT.

LIMESTONE as above.
Traces of SAND with quarts grains.
Traces of MARL, grey to green slightly calcareous.

Traces of SHALE, dark grey, slightly calcareous.

Traces of SHALE as above.

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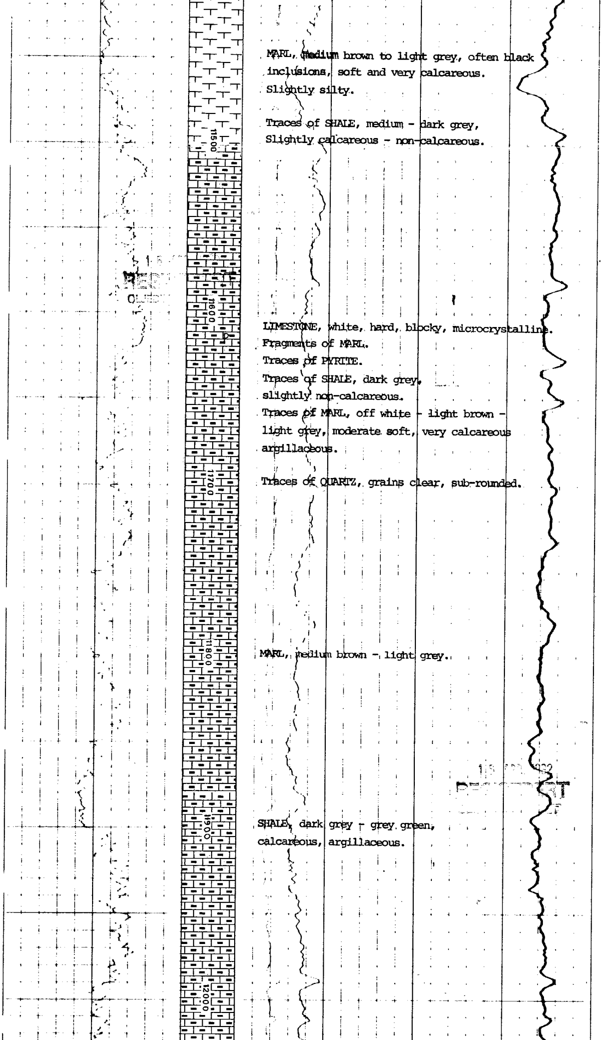


MARL, medium brown to light grey, often black inclusions, soft and very calcareous.
Slightly silty.

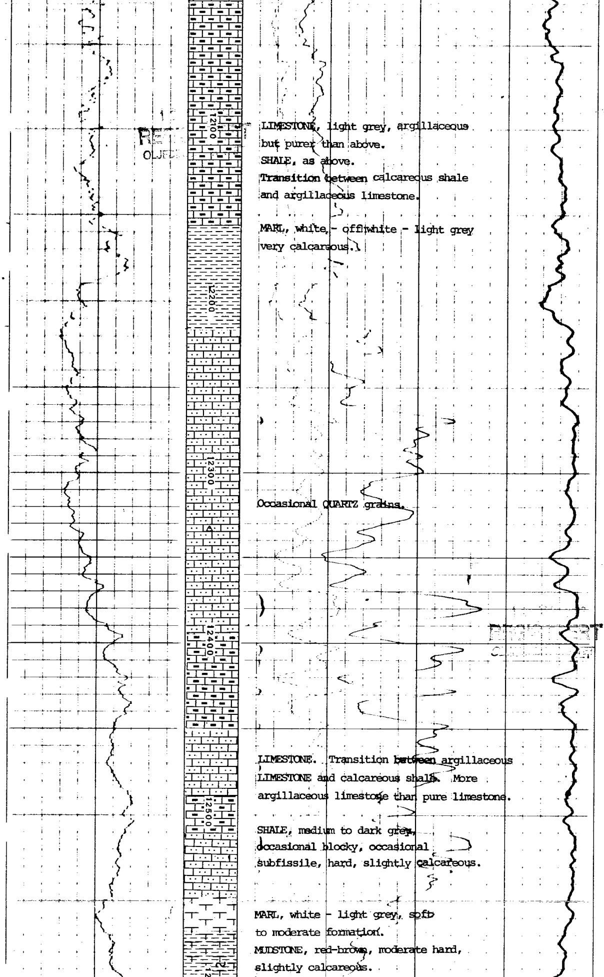
Traces of SHALE, medium - dark grey,
Slightly calcareous - non-calcareous.

LIMESTONE, white, hard, blocky, microcrystalline.
Fragments of MARL.
Traces of PYRITE.
Traces of SHALE, dark grey,
slightly non-calcareous.
Traces of MARL, off white - light brown -
light grey, moderate soft, very calcareous
argillaceous.

Traces of QUARTZ, grains clear, sub-rounded.

MARL, medium brown - light grey.

SHALE, dark grey - grey green,
calcareous, argillaceous.



LIMESTONE, light grey, argillaceous but purer than above.
SHALE, as above.
Transition between calcareous shale and argillaceous limestone.

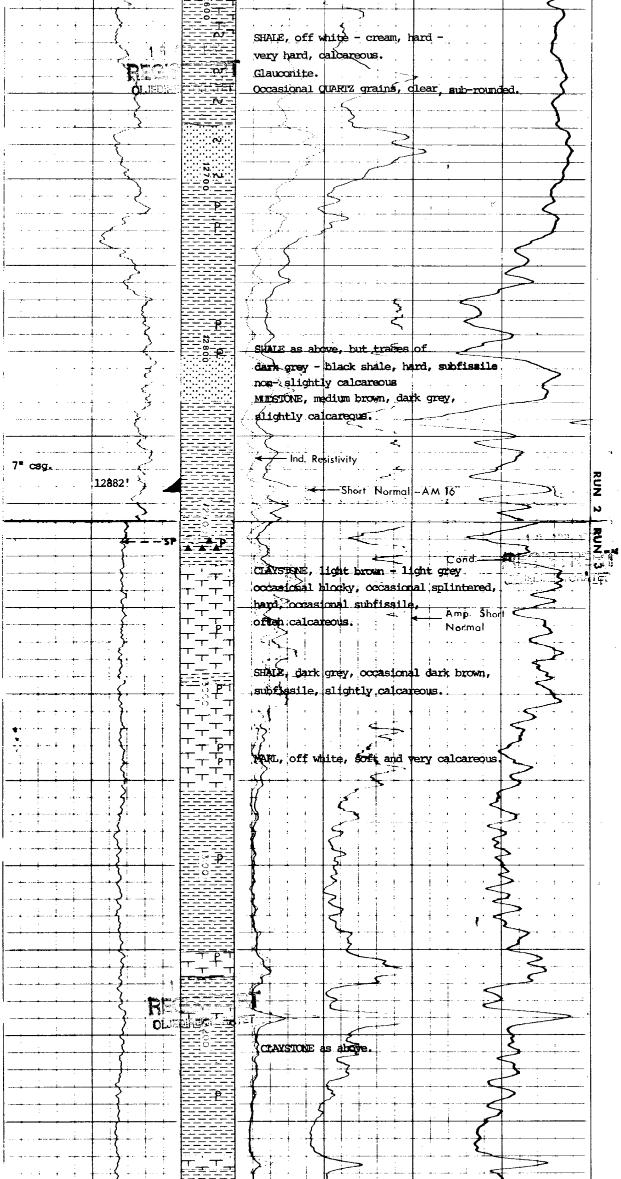
MARL, white - offwhite - light grey very calcareous.

Occasional QUARTZ grains.

LIMESTONE. Transition between argillaceous LIMESTONE and calcareous shale. More argillaceous limestone than pure limestone.

SHALE, medium to dark grey, occasional blocky, occasional subfissile, hard, slightly calcareous.

MARL, white - light grey, soft to moderate formation.
MUDSTONE, red-brown, moderate hard, slightly calcareous.



SHALE, off white - cream, hard - very hard, calcareous.
Glauconite.
Occasional QUARTZ grains, clear, sub-rounded.

SHALE as above, but traces of dark grey - black shale, hard, subfissile non- slightly calcareous
MUDSTONE, medium brown, dark grey, slightly calcareous.

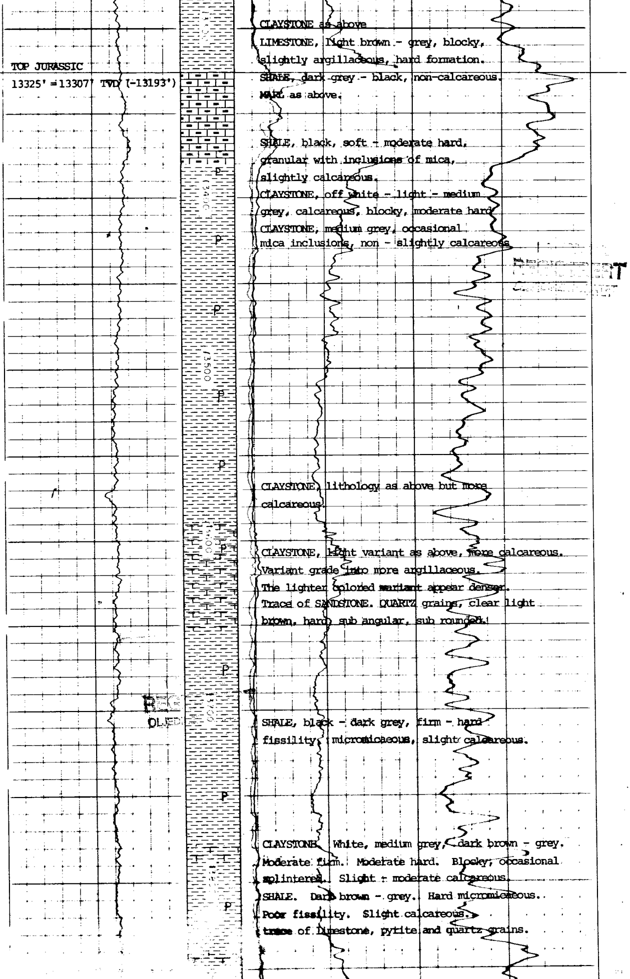
CLAYSTONE, light brown - light grey occasional blocky, occasional splintered, hard, occasional subfissile, often calcareous.

SHALE, dark grey, occasional dark brown, subfissile, slightly calcareous.

MARL, off white, soft and very calcareous.

CLAYSTONE as above.

REGISTRERT OLJEDIREKTORATET



TOP JURASSIC
13325' = 13307' TVD (-13193')

CLAYSTONE as above
LIMESTONE, light brown - grey, blocky, slightly argillaceous, hard formation.
SHALE, dark grey - black, non-calcareous.
MARL as above.

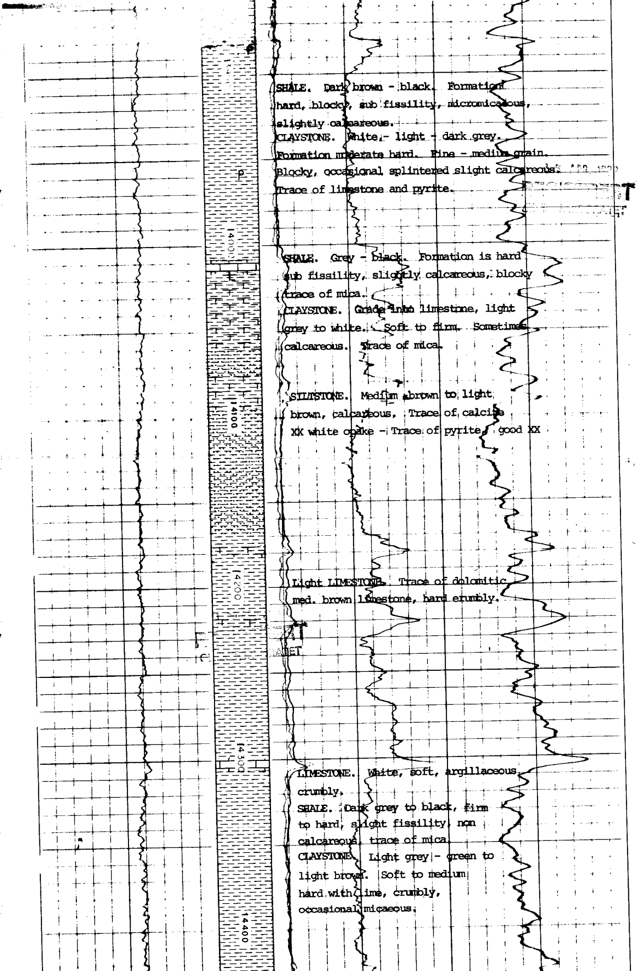
SHALE, black, soft - moderate hard, granular with inclusions of mica, slightly calcareous.
CLAYSTONE, off white - light - medium grey, calcareous, blocky, moderate hard.
CLAYSTONE, medium grey, occasional mica inclusions, non - slightly calcareous.

CLAYSTONE, lithology as above but more calcareous.

CLAYSTONE, light variant as above, more calcareous.
Variant grade into more argillaceous.
The lighter colored variant appear denser.
Trace of SANDSTONE. QUARTZ grains, clear light brown, hard, sub angular, sub rounded.

SHALE, black - dark grey, firm - hard fissility, micromicaceous, slight calcareous.

CLAYSTONE. White, medium grey, dark brown - grey. Moderate firm. Moderate hard. Blocky, occasional splintered. Slight - moderate calcareous.
SHALE. Dark brown - grey. Hard micromicaceous. Poor fissility. Slight calcareous.
trace of limestone, pyrite and quartz grains.



SHALE. Dark brown - black. Formation hard, blocky, sub fissility, micromicaceous, slightly calcareous.

CLAYSTONE. White, - light - dark grey. Formation moderate hard. Fine - medium grain. Blocky, occasional splintered slight calcareous. Trace of limestone and pyrite.

SHALE. Grey - black. Formation is hard sub fissility, slightly calcareous, blocky trace of mica.

CLAYSTONE. Grade into limestone, light grey to white. Soft to firm. Sometimes calcareous. Trace of mica.

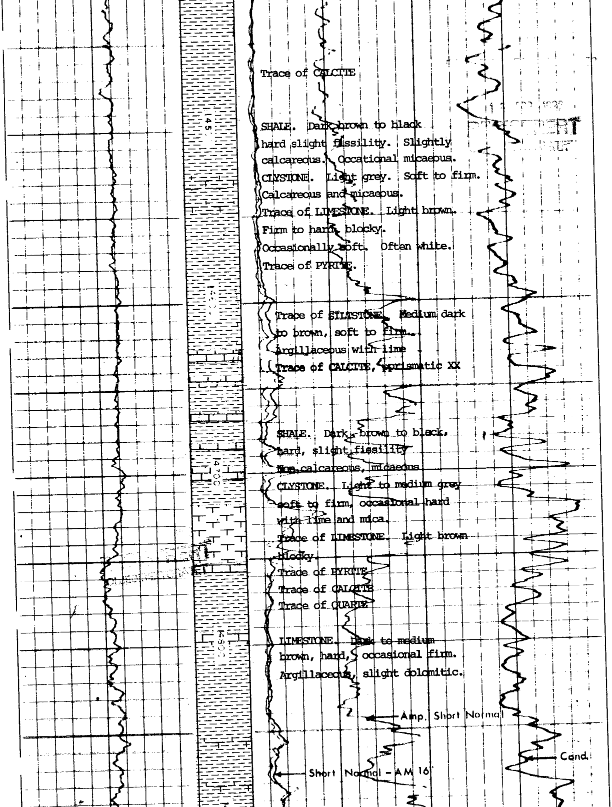
SILTSTONE. Medium brown to light brown, calcareous. Trace of calcite XX white opake - Trace of pyrite, good XX

Light LIMESTONE. Trace of dolomitic med. brown limestone, hard crumbly.

LIMESTONE. White, soft, argillaceous, crumbly.

SHALE. Dark grey to black, firm to hard, slight fissility, non calcareous, trace of mica.

CLAYSTONE. Light grey - green to light brown. Soft to medium hard with lime, crumbly, occasional micaeous.



Trace of CALCITE

SHALE. Dark brown to black hard slight fissility. Slightly calcareous. Occational micaeous.

CLYSTONE. Light grey. Soft to firm. Calcareous and micaeous.

Trace of LIMESTONE. Light brown. Firm to hard, blocky. Occasionally soft. Often white.

Trace of PYRITE.

Trace of SILTSTONE. Medium dark to brown, soft to firm. Argillaceous with lime

Trace of CALCITE, prismatic XX

SHALE. Dark, brown to black, hard, slight fissility Non calcareous, micaeous.

CLYSTONE. Light to medium grey soft to firm, occasional hard with lime and mica.

Trace of LIMESTONE. Light brown blocky.

Trace of PYRITE

Trace of CALCITE

Trace of QUARTZ

LIMESTONE. Dark to medium brown, hard, occasional firm. Argillaceous, slight dolomitic.