SIMON PETROLEUM TECHNOLOGY

WELL: 7/12-4

Print: 7¼H	Units: [✓ M] F	Top	Bottom	Scale	TD
Length: 29 FT	Initials: JC	80	3623	1:500	3623

DIGITAL WIRELINE LOGS PACKAGE
1994

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SIMON PETROLEUM TECHNOLOGY

SPT

COMPLETION LOG

Completion – ϕ

H

BP PET. DEV. OF NORWAY A.S.
CONOCO / PELICAN / STATOIL

BP

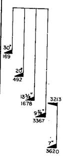
NOCS 7/12-4

NOCS 7/12-4

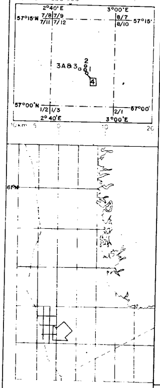
COMPOSITE LOG

LATITUDE 57° 05' 36·66"N LONGITUDE 02°51' 36·96"E
U.T.M. GRID REFERENCE 491532·4 E 6327946·4 N
R.T.E. 25 m A.M.S.L. 95·2 m A.S.B. WATER DEPTH 70·2 m
RIG NORSKALD SPUDDED 12 Sept 1977 COMPLETED DRILLING 8 Nov. 1977
TOTAL DEPTH 3623 m B R T 3598 m S S
WELL STATUS PLUGGED OIL WELL

CASING



LOCATION MAP
SCALE 1:500 000



LITHOLOGICAL

Extrusive igneous
Mn, Manganese Phosphate and other Misc Mins

LITHOLOGICAL QUALIFIERS

Gravelly
Calcareous
Dolomitic
Tuffaceous

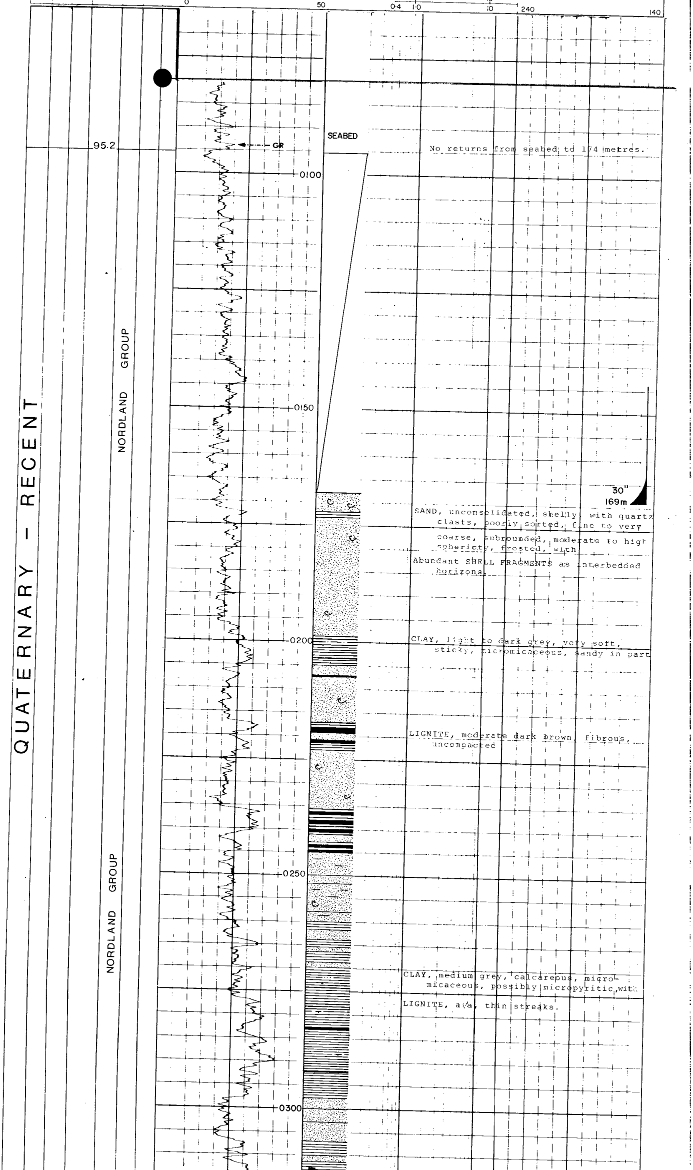
GRAIN TYPE FOSSILIFEROUS:SKELETAL

Macrofossils
Macrofossils
Microfossils
Microfossils
Fossil remains

WELL SYMBOLS

Water Flow
Gas Trace
Gas Show
Show
Hydrocarbon Fluorescence
Drill Stem Test
Perforated Interval
Interval Test

CHRONOSTRAT			DEPTH OF BOUNDARIES	LITHOSTRAT			LOG SCALES	LITHO LOG	CORES	SHOWS	TESTS	DESCRIPTION AND REMARKS	
SYSTEM	SERIES	STAGE		GROUP	FORMATION	MEMBER	SP 10 MV GAMMA RAY API UNITS	1:500				RILD RSFL	Δt
												0·4 1.0 10	140 40



No returns from seabed to 174 metres.

SAND, unconsolidated, shelly, with quartz clasts, poorly sorted, fine to very coarse, subrounded, moderate to high sphericity, frosted, with

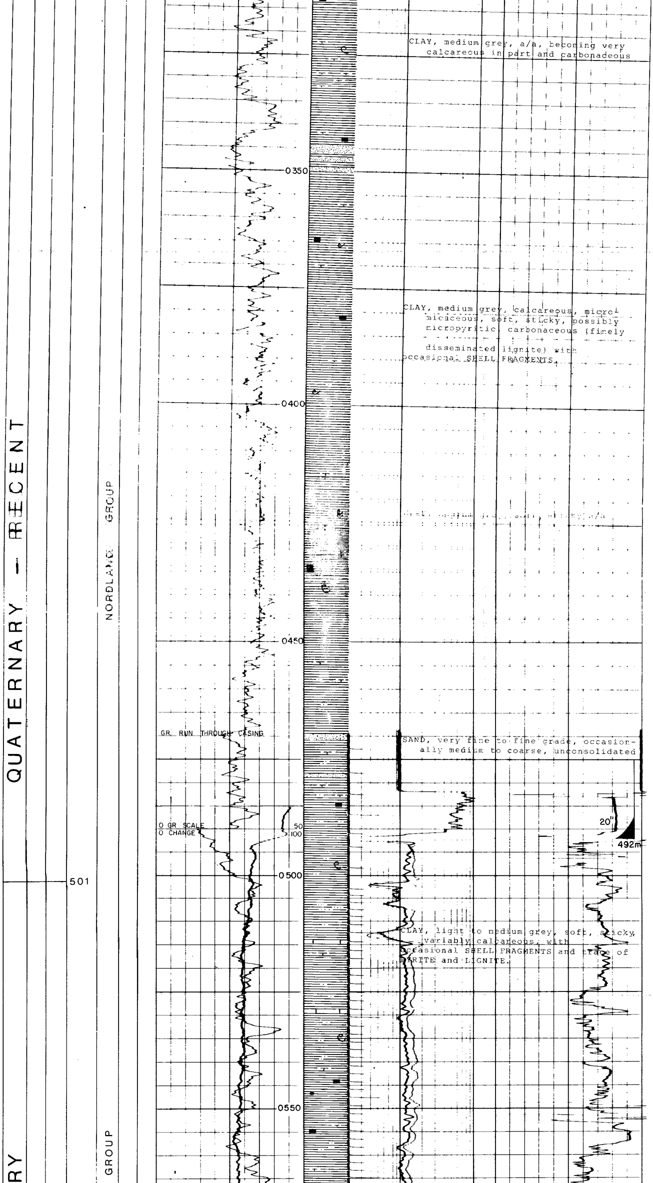
Abundant SHELL FRAGMENTS as interbedded horizons.

CLAY, light to dark grey, very soft, sticky, micromicaceous, sandy in part

LIGNITE, moderate dark brown, fibrous, uncompacted

CLAY, medium grey, calcareous, micro-micaceous, possibly micropyritic, with

LIGNITE, a/a, thin streaks.



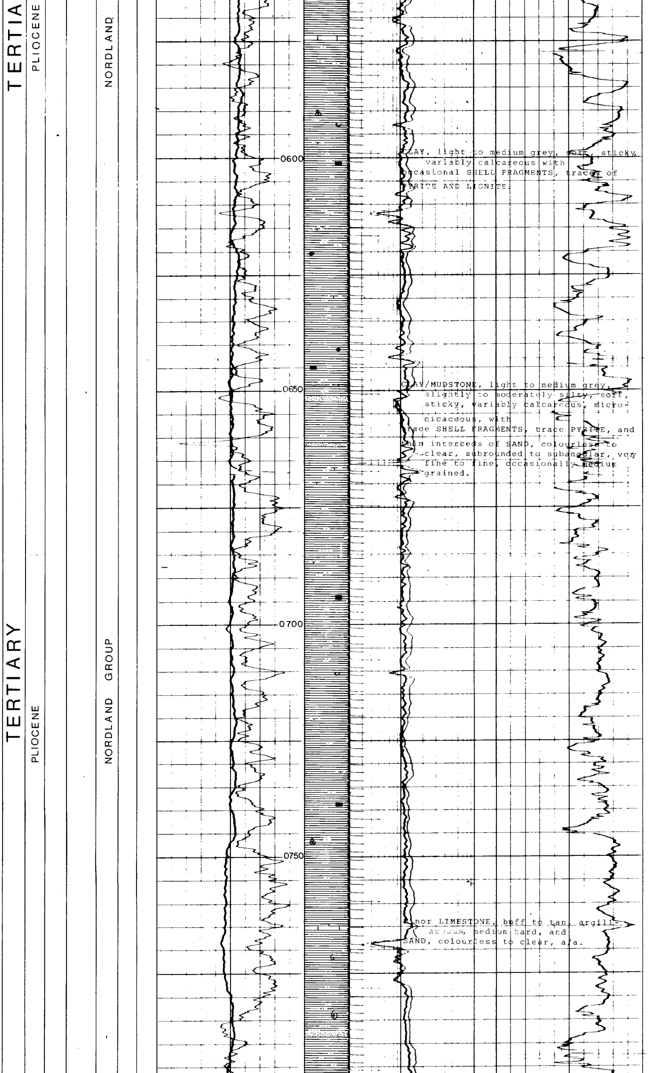
CLAY, medium grey, a/a, becoming very calcareous in part and carbonadeous

CLAY, medium grey, calcareous, micromicaceous, soft, sticky, possibly micropyritic, carbonaceous (finely disseminated lignite) with occasional SHELL FRAGMENTS.

CLAY, medium grey, soft, sticky, a/a

SAND, very fine to fine grade, occasionally medium to coarse, unconsolidated

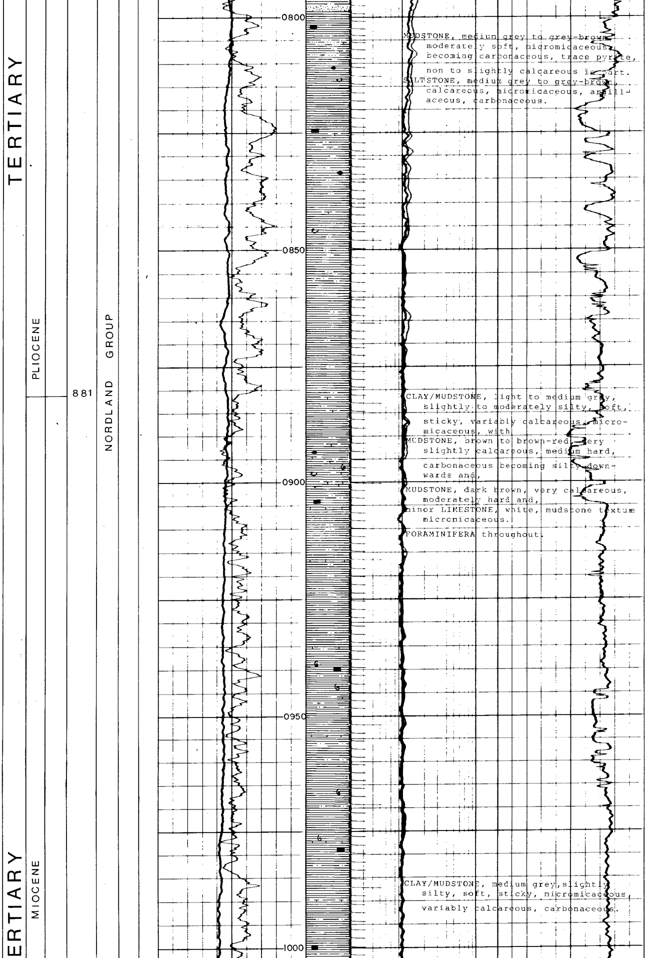
CLAY, light to medium grey, soft, sticky, variably calcareous, with occasional SHELL FRAGMENTS and trace of PYRITE and LIGNITE.



CLAY, light to medium grey, soft, sticky, variably calcareous with occasional SHELL FRAGMENTS, traces of PYRITE AND LIGNITE.

CLAY/MUDSTONE, light to medium grey, slightly to moderately silty, soft, sticky, variably calcareous, micromicaceous, with trace SHELL FRAGMENTS, trace PYRITE, and thin interbeds of SAND, colourless to clear, subrounded to subangular, very fine to fine, occasionally medium grained.

Minor LIMESTONE, buff to tan, argillaceous, medium hard, and SAND, colourless to clear, a/a.



MUDSTONE, medium grey to grey-brown, moderately soft, micromicaceous, becoming carbonaceous, trace pyrite, non to slightly calcareous in part.

SILTSTONE, medium grey to grey-brown, calcareous, micromicaceous, argillaceous, carbonaceous.

CLAY/MUDSTONE, light to medium grey, slightly to moderately silty, soft, sticky, variably calcareous, micromicaceous, with

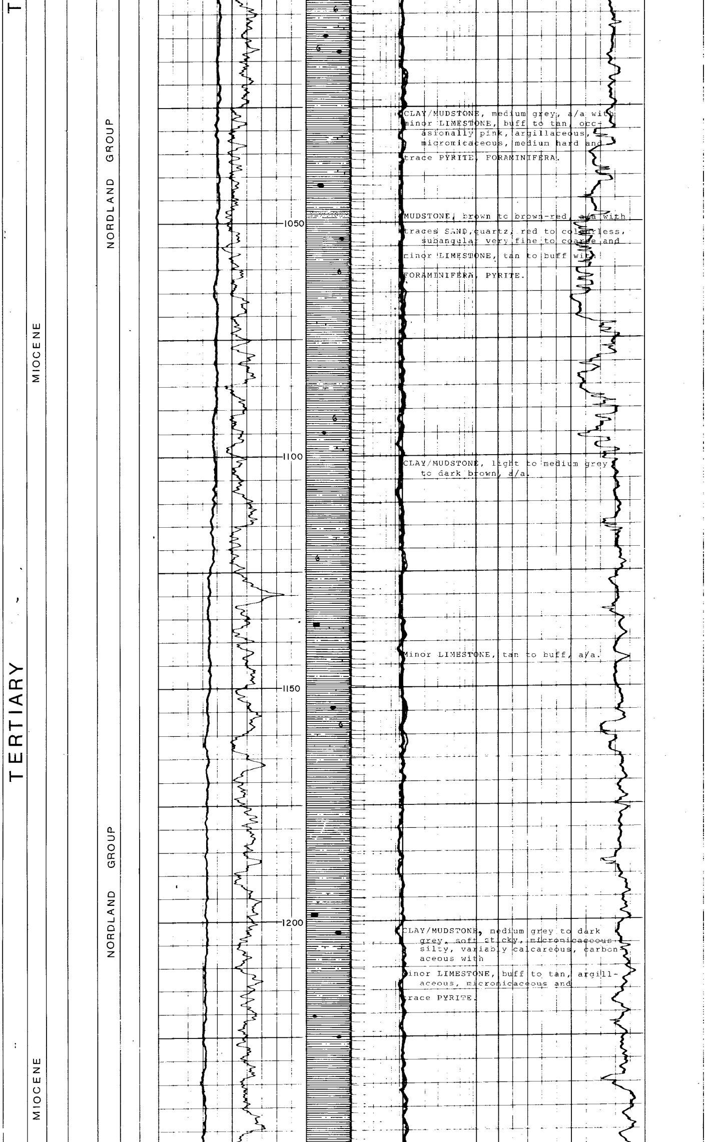
MUDSTONE, brown to brown-red, very slightly calcareous, medium hard, carbonaceous becoming silty downwards and,

MUDSTONE, dark brown, very calcareous, moderately hard and,

minor LIMESTONE, white, mudstone texture micromicaceous.

FORAMINIFERA throughout.

CLAY/MUDSTONE, medium grey, slightly silty, soft, sticky, micromicaceous, variably calcareous, carbonaceous.



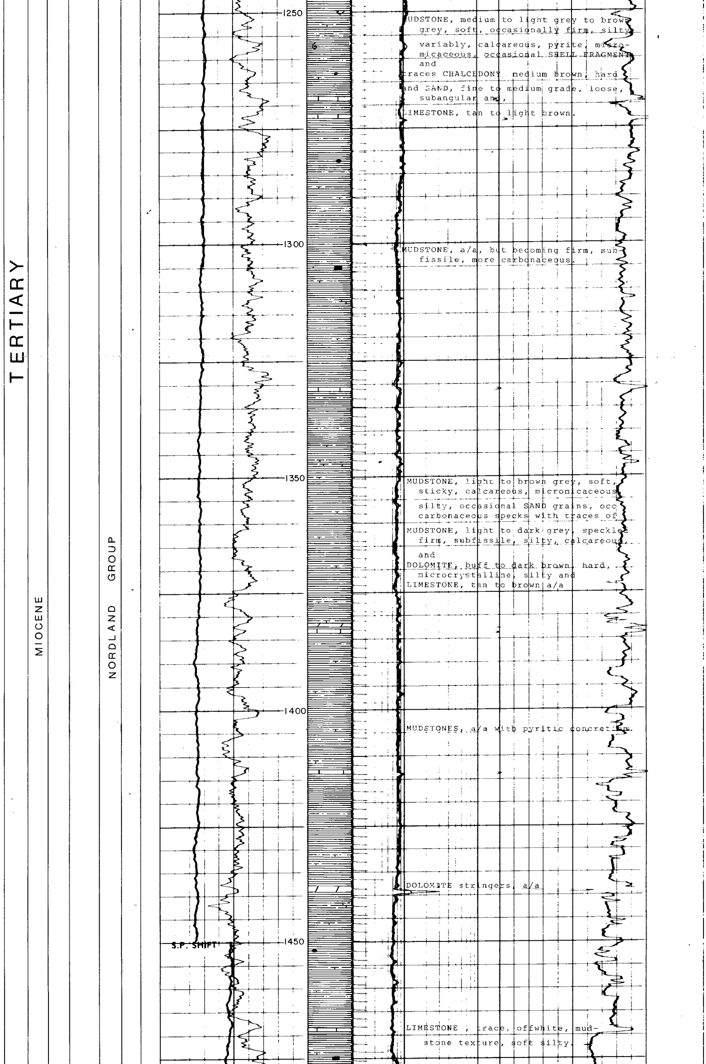
CLAY/MUDSTONE, medium grey, a/a with
minor LIMESTONE, buff to tan, occasionally pink, argillaceous, micromicaceous, medium hard and
trace PYRITE, FORAMINIFERA.

MUDSTONE, brown to brown-red, a/a with
traces SAND, quartz, red to colourless, subangular very fine to coarse and
minor LIMESTONE, tan to buff with
FORAMINIFERA, PYRITE.

CLAY/MUDSTONE, light to medium grey to dark brown, a/a.

Minor LIMESTONE, tan to buff, a/a.

CLAY/MUDSTONE, medium grey to dark grey, soft sticky, micromicaceous silty, variably calcareous, carbonaceous with
minor LIMESTONE, buff to tan, argillaceous, micromicaceous and
trace PYRITE.



MUDSTONE, medium to light grey to brown grey, soft, occasionally firm, silty, variably, calcareous, pyrite, micro-micaceous, occasional SHELL FRAGMENTS and

traces CHALCEDONY medium brown, hard

and SAND, fine to medium grade, loose, subangular and,

LIMESTONE, tan to light brown.

MUDSTONE, a/a, but becoming firm, sub-fissile, more carbonaceous.

MUDSTONE, light to brown grey, soft, sticky, calcareous, micromicaceous, silty, occasional SAND grains, occ carbonaceous specks with traces of

MUDSTONE, light to dark grey, speckled firm, subfissile, silty, calcareous,

and

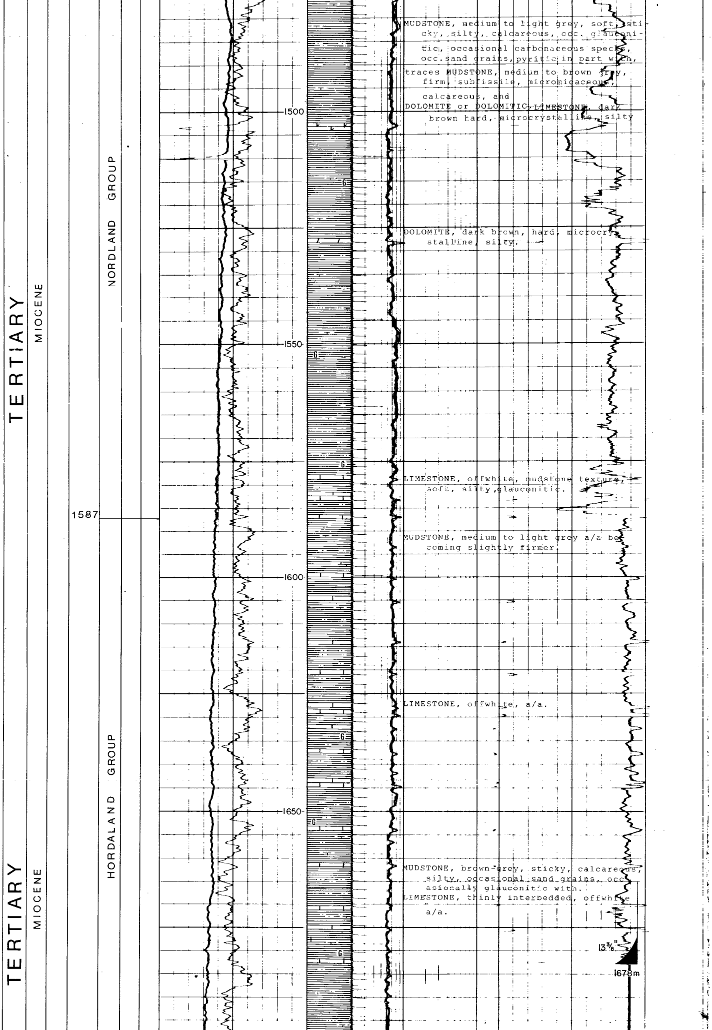
DOLOMITE, buff to dark brown, hard, microcrystalline, silty and

LIMESTONE, tan to brown a/a

MUDSTONES, a/a with pyritic concretions.

DOLOMITE stringers, a/a

LIMESTONE , trace, offwhite, mud-stone texture, soft silty.



MUDSTONE, medium to light grey, soft, sticky, silty, calcareous, occ. glauconitic, occasional carbonaceous specks, occ.sand grains, pyritic in part with,

traces MUDSTONE, medium to brown grey, firm, subfissile, micromicaceous, calcareous, and

DOLOMITE or DOLOMITIC LIMESTONE, dark brown hard, microcrystalline, silty

DOLOMITE, dark brown, hard, microcrystalline, silty.

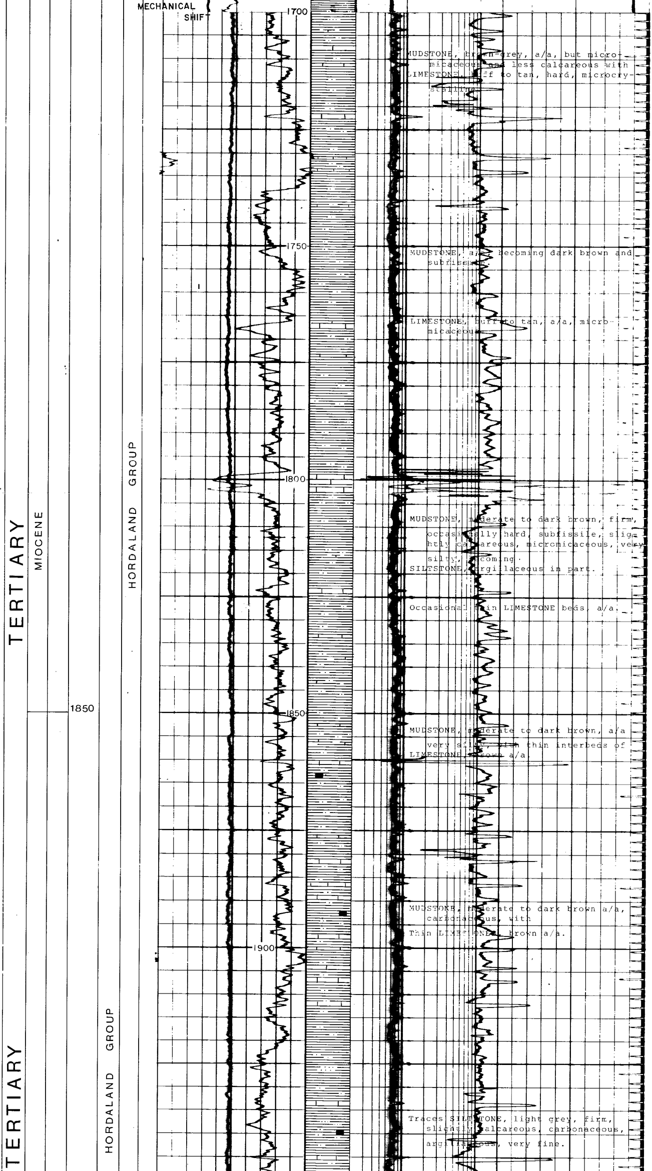
LIMESTONE, offwhite, mudstone texture, soft, silty, glauconitic.

MUDSTONE, medium to light grey a/a becoming slightly firmer.

LIMESTONE, offwhite, a/a.

MUDSTONE, brown-grey, sticky, calcareous, silty, occasional sand grains, occasionally glauconitic with.

LIMESTONE, thinly interbedded, offwhite a/a.



MUDSTONE, brown-grey, a/a, but micromicaceous and less calcareous with LIMESTONE, buff to tan, hard, microcrystalline.

MUDSTONE, a/a, becoming dark brown and subfissile.

LIMESTONE, buff to tan, a/a, micromicaceous.

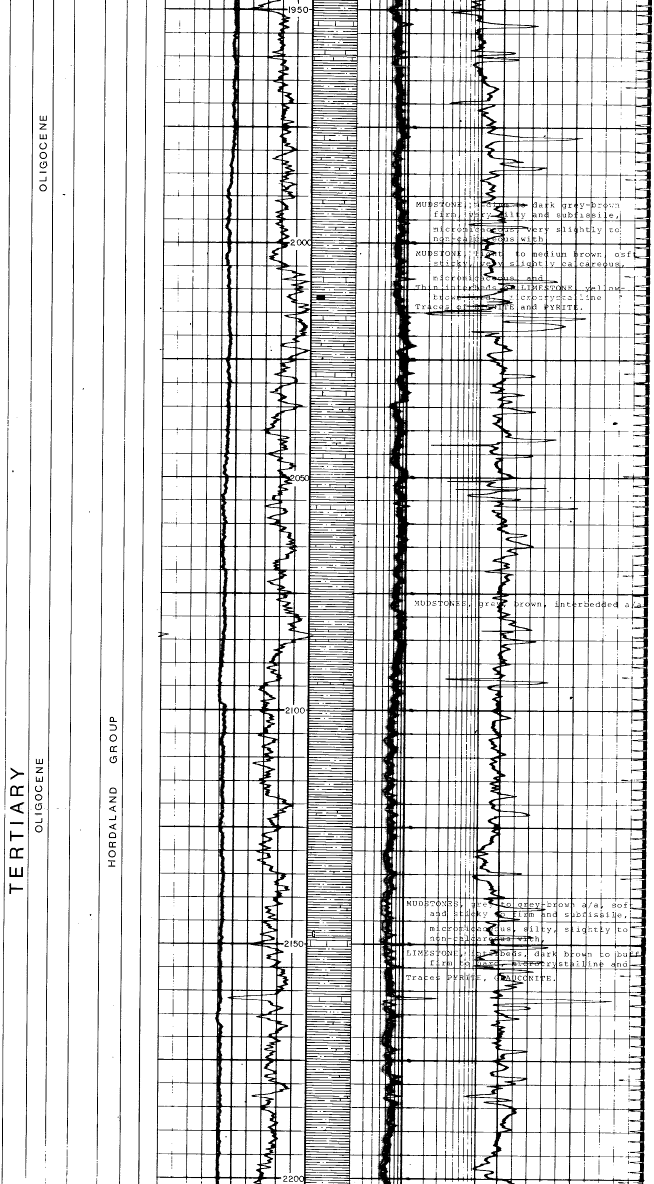
MUDSTONE, moderate to dark brown, firm, occasionally hard, subfissile, slightly calcareous, micromicaceous, very silty, becoming SILTSTONE, argillaceous in part.

Occasional thin LIMESTONE beds, a/a.

MUDSTONE, moderate to dark brown, a/a very silty, with thin interbeds of LIMESTONE, brown a/a.

MUDSTONE, moderate to dark brown a/a, carbonaceous, with Thin LIMESTONES, brown a/a.

Traces SILTSTONE, light grey, firm, slightly calcareous, carbonaceous, argillaceous, very fine.



MUDSTONE, medium to dark grey-brown firm, very silty and subfissile,

micromicaceous, very slightly to non-calcareous with

MUDSTONE, light to medium brown, osft sticky, very slightly calcareous,

micromicaceous, and
Thin interbeds of LIMESTONE, yellow-brown hard, microcrystalline
Traces of LIGNITE and PYRITE.

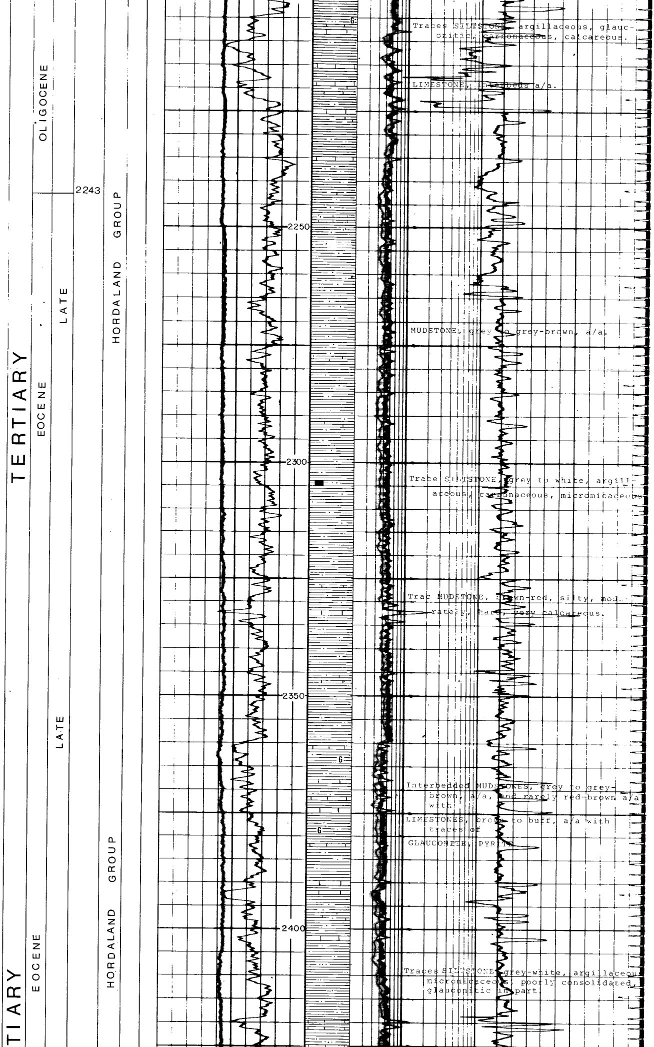
MUDSTONES, grey, brown, interbedded a/a

MUDSTONES, grey to grey-brown a/a, soft and sticky to firm and subfissile,

micromicaceous, silty, slightly to non-calcareous with,

LIMESTONE, interbeds, dark brown to buff firm to hard, microcrystalline and

Traces PYRITE, GLAUCONITE.



Traces SILTSTONE, argillaceous, glauconitic, carbonaceous, calcareous.

LIMESTONE, interbeds a/a.

MUDSTONE, grey to grey-brown, a/a.

Trace SILTSTONE, grey to white, argillaceous, carbonaceous, micromicaceous

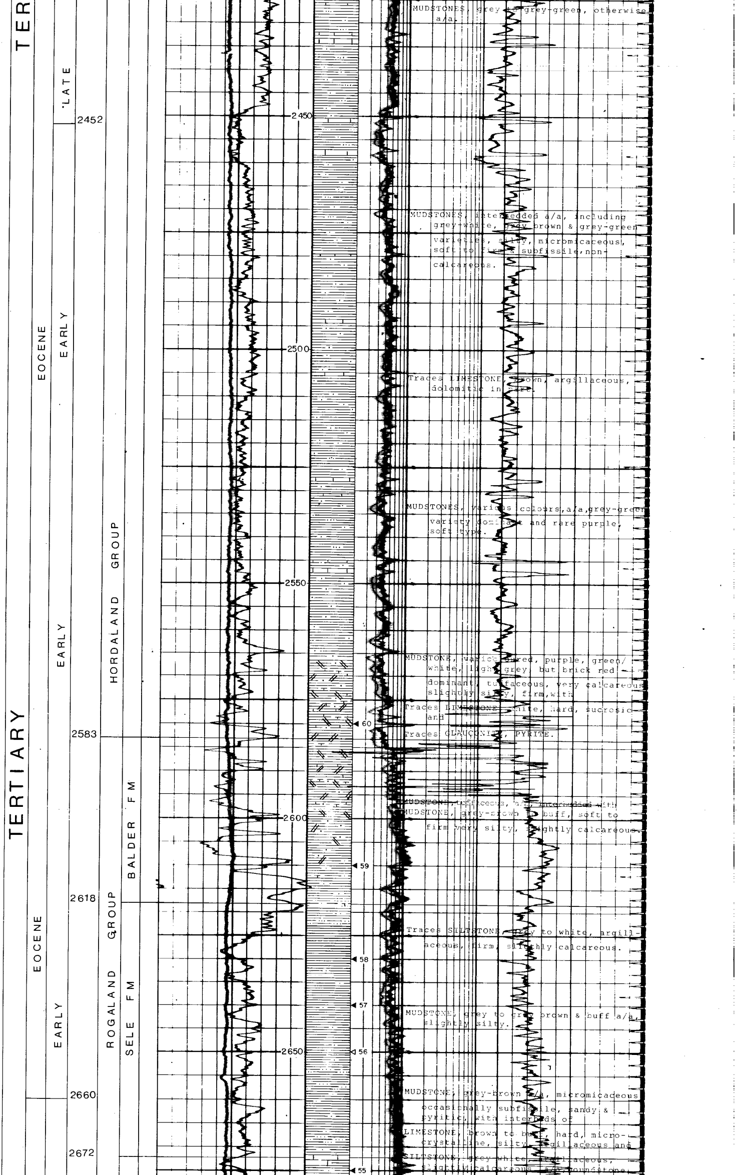
Trac MUDSTONE, brown-red, silty, moderately, hard, very calcareous.

Interbedded MUDSTONES, grey to grey-brown, a/a, and rarely red-brown a/a with

LIMESTONES, brown to buff, a/a with traces of

GLAUCONITE, PYRITE

Traces SILTSTONE, grey-white, argillaceous, micromicaceous, poorly consolidated, glauconitic in part.



MUDSTONES, grey to grey-green, otherwise a/a.

MUDSTONES, interbedded a/a, including grey-white, grey brown & grey-green varieties, silty, micromicaceous, soft to firm & subfissile, non-calcareous.

Traces LIMESTONE, brown, argillaceous, dolomitic in part.

MUDSTONES, various colours, a/a, grey-green variety dominant and rare purple, soft type.

MUDSTONE, varicoloured, purple, green/white, light grey, but brick red dominant, tuffaceous, very calcareous slightly silty, firm, with

Traces LIMESTONE, white, hard, sucrosic and

Traces GLAUCONITE, PYRITE.

MUDSTONE, tuffaceous, a/a, interbedded with

MUDSTONE, grey-brown to buff, soft to firm very silty, slightly calcareous.

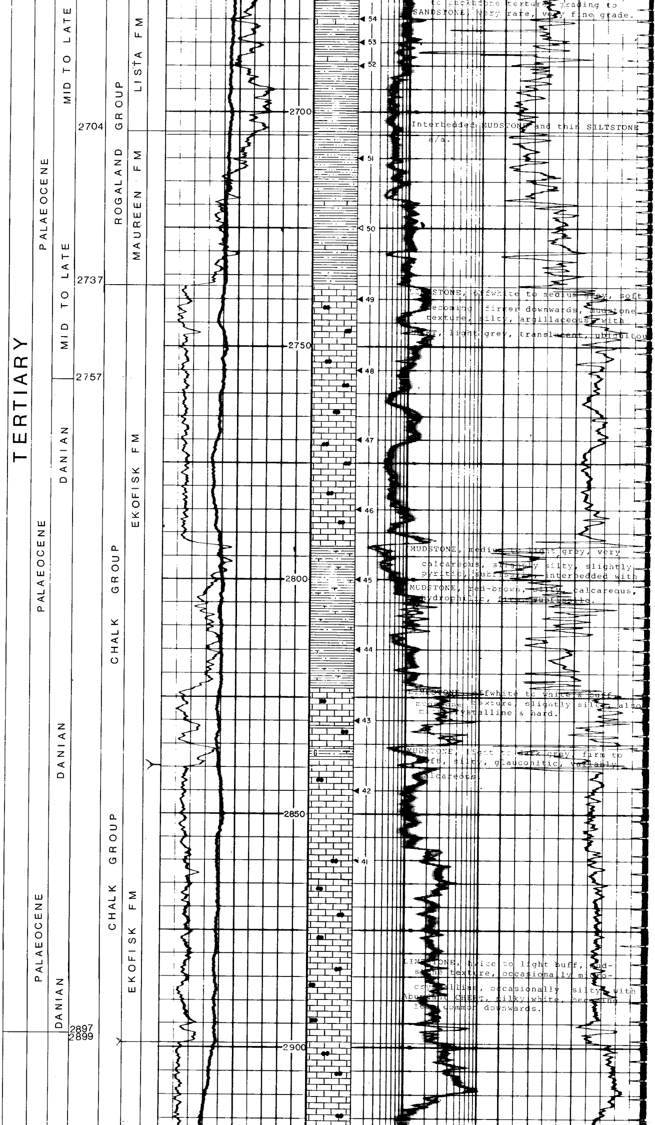
Traces SILTSTONE, grey to white, argillaceous, firm, slightly calcareous.

MUDSTONE, grey to grey brown & buff a/a, slightly silty.

MUDSTONE, grey-brown a/a, micromicaceous occasionally subfissile, sandy & pyritic, with interbeds of

LIMESTONE, brown to buff, hard, microcrystalline, silty, argillaceous and

SILTSTONE, grey white, argillaceous, slightly calcareous, a/a, mudstone,



to packstone texture, grading to SANDSTONE, very rare, very fine grade.

Interbedded MUDSTONE and thin SILTSTONE a/a.

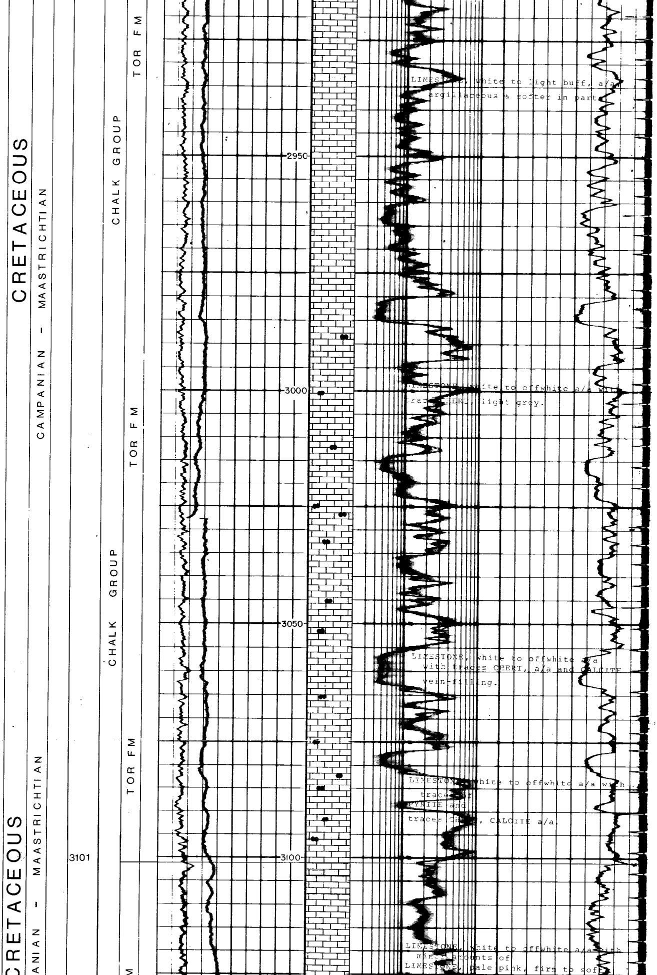
LIMESTONE, offwhite to medium grey, soft becoming firmer downwards, mudstone texture, silty, argillaceous, with CHERT, light grey, translucent, ubiquitou

MUDSTONE, medium to light grey, very calcareous, slightly silty, slightly pyritic, subfissile, interbedded with MUDSTONE, red-brown, silty, calcareous, hydrophilic, firm, subfissile.

LIMESTONE, offwhite to white & buff, mudstone texture, slightly silty, also microcrystalline & hard.

MUDSTONE, light to dark grey, firm to soft, silty, glauconitic, variably calcareous.

LIMESTONE, white to light buff, mudstone texture, occasionally microcrystalline, occasionally silty, with Abundant CHERT, milky white, becoming less common downwards.



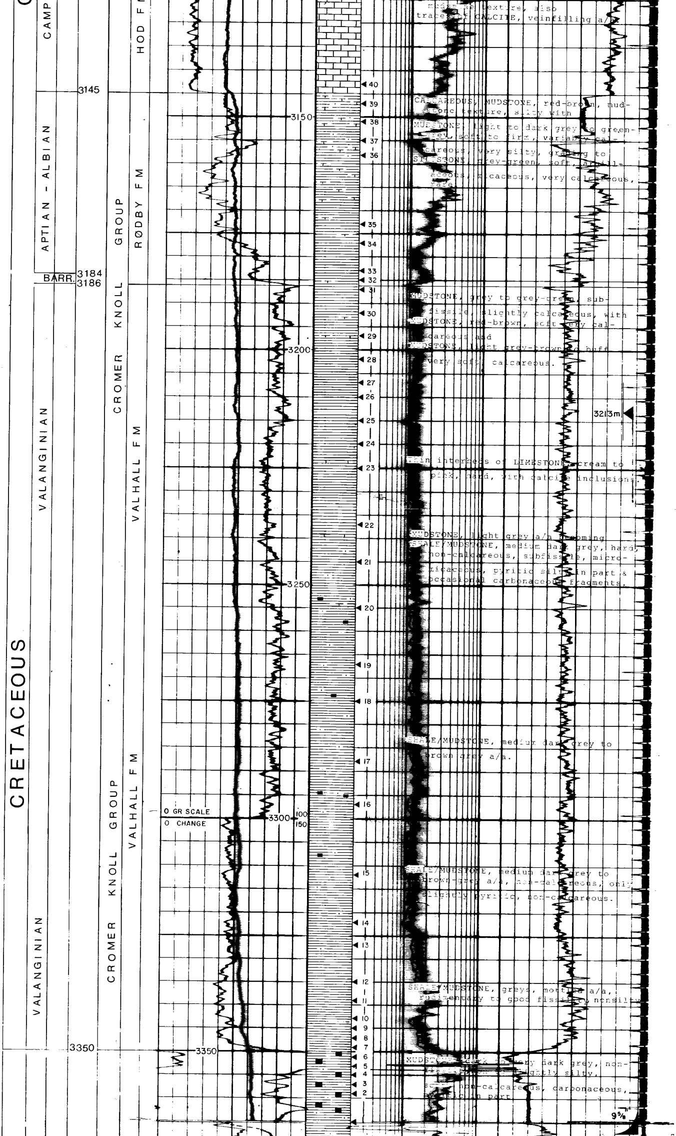
LIMESTONE, white to light buff, a/a, argillaceous & softer in part.

LIMESTONE, white to offwhite a/a with traces CHERT, light grey.

LIMESTONE, white to offwhite a/a with traces CHERT, a/a and CALCITE vein-filling.

LIMESTONE, white to offwhite a/a with traces of PYRITE and traces CHERT, CALCITE a/a.

LIMESTONE, white to offwhite a/a with minor amounts of LIMESTONE, pale pink, firm to soft



mudstone texture, also
traces of CALCITE, veinfilling a/a.

CALCAREOUS, MUDSTONE, red-brown, mudstone texture, silty with

MUDSTONE, light to dark grey to green-grey, soft to firm, variably calcareous, very silty, grading to
SILTSTONE, grey-green, soft, argillaceous, micaceous, very calcareous, rare.

MUDSTONE, grey to grey-green, subfissile, slightly calcareous, with
MUDSTONE, red-brown, soft very calcareous and
MUDSTONE, light grey-brown to buff very soft, calcareous.

Thin interbeds of LIMESTONE, cream to pink, hard, with calcite inclusions.

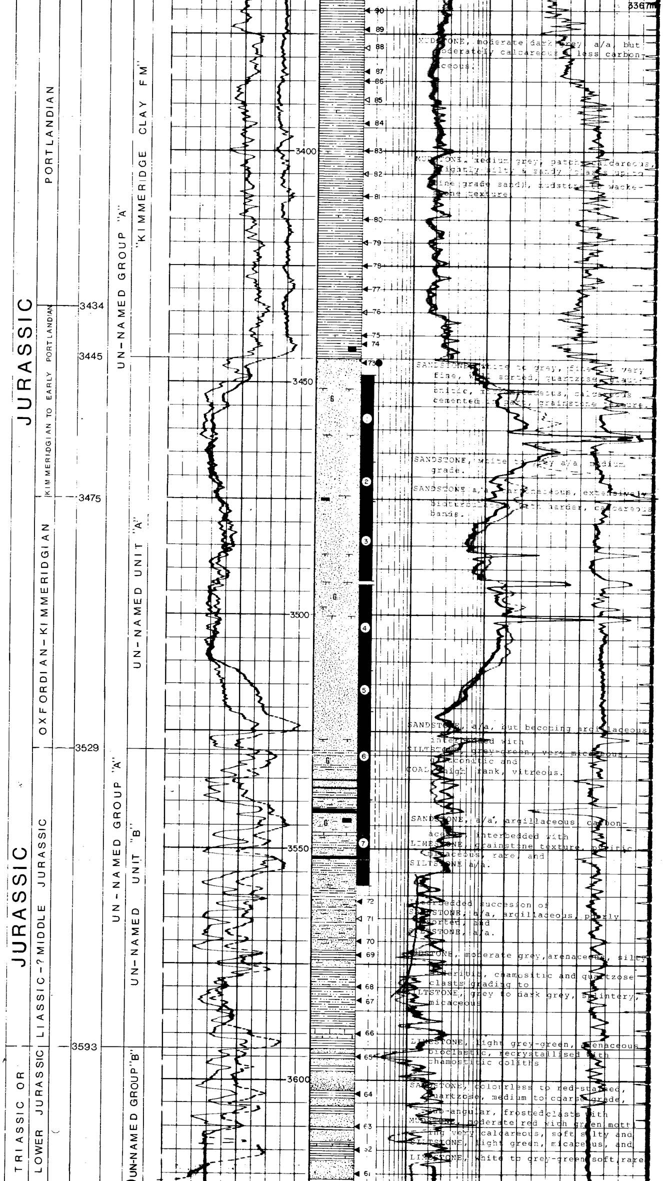
MUDSTONE, light grey a/a becoming
SHALE/MUDSTONE, medium dark grey, hard, non-calcareous, subfissile, micromicaceous, pyritic silty in part &
occasional carbonaceous fragments.

SHALE/MUDSTONE, medium dark grey to brown grey a/a.

SHALE/MUDSTONE, medium dark grey to brown-grey a/a, non-calcareous, only slightly pyritic, non-calcareous.

SHALE/MUDSTONE, greys, mottled a/a, rudimentary to good fissility, nonsilty

MUDSTONE, dark to very dark grey, non-fissile, [illegible] to slightly silty,
soft, non-calcareous, carbonaceous, pyritic in part.



MUDSTONE, moderate dark grey, a/a, but moderately calcareous & less carbonaceous.

MUDSTONE, medium grey, patchy calcareous, slightly silty & sandy (clasts up to fine grade sand), mudstone to wacke-stone texture.

SANDSTONE, white to grey, fine to very fine, well sorted, quartzose, glauconitic, micaceous, calcareous cemented in part, grainstone texture.

SANDSTONE, white to grey a/a, medium grade.

SANDSTONE a/a, carbonaceous, extensively bioturbated, with harder, calcareous bands.

SANDSTONE, a/a, but becoming argillaceous interbedded with
SILTSTONE, grey-green, very micaceous, glauconitic and
COAL, high rank, vitreous.

SANDSTONE, a/a, argillaceous, carbonaceous, interbedded with
LIMESTONE, grainstone texture, pyritic, micaceous, rare, and
SILTSTONE a/a.

Interbedded succession of
SANDSTONE, a/a, argillaceous, poorly sorted, and
SILTSTONE, a/a.

MUDSTONE, moderate grey, arenaceous, silty, sideritic, chamositic and quartzose clasts grading to
SILTSTONE, grey to dark grey, splintery, micaceous

LIMESTONE, light grey-green, arenaceous, bioclastic, recrystallised with chamositic ooliths

SANDSTONE, colourless to red-stained, quartzose, medium to coarse grade, sub-angular, frosted clasts with
MUDSTONE, moderate red with green mottling very calcareous, soft silty and
SILTSTONE, light green, micaceous, and
LIMESTONE, white to grey-green soft, rare

T.D. 3623m (Schlumberger)
3621·3m (Driller)

R.C.W. Mar. '78.

TEST RESULTS

DST 1, 1A	TOOL FAILED
DST 1B	3550-3552 MBRT AND 3536-3540 MBRT FLOWED SALINE FORMATION WATER (141,000 PPM CL$^-$) 60.5 BWPD. TOTAL PRODUCTION 27.5 BBL WATER; WATER CUSHION DID NOT REACH SURFACE. BHCIP 7066 PSIG AT 3544.0 MBRT.
DST 2	3527-3530 MBRT. FLOWED 39° API CRUDE OIL 37.5 BOPD. TOTAL PRODUCTION 26 BBL OIL; WATER CUSHION DID NOT REACH SURFACE. BHCIP 7164 PSIG AT 3528.5 MBRT.
DST 3	3471.5-3463.5 MBRT AND 3460-3453 MBRT. FLOWED 39° API CRUDE OIL WITH ASSOCIATED GAS. FINAL RATE 6974 BOPD THROUGH 32/64" CHOKE. WHFP 2830 PSIG. BHCIP 7088 PSIG AT 3462.25 MBRT

REPEAT FORMATION TESTS

NUMBER	DEPTH (MBRT)	PRESSURE (PSIG)	
5A-1	3551.5	7266	
5A-2	3538.0	7348.5	
5A-3	3505.0	7165.5	
5A-4	3467.0	7126	
5A-5	3458.0	7208	
5A-6	3481.5	7147	
5B	3467.0	NO FULLY BUILT-UP PRESSURE	REC. 1 GAL. OF MUD FILTRATE & 2.75 GAL. OF OIL-WATER EMULSION
5C	3458.0	NO FULLY BUILT-UP PRESSURE	REC. 1 GAL. & 2.75 GAL OF OIL-WATER EMULSION
5D	[illegible].0	NO FULLY BUILT-UP PRESSURE	REC. SMALL VOLUME OF GAS AND TOTAL OF 7L. OF SALINE WATER.

SIDEWALL CORES

GUN NO. [illegible]
GUN NO. 2 [illegible] BY: [illegible]
GUN NO. 3 24 REC.