Partners: Eni Norge A/S, Norsk Hydro ASA, Total E&P AS

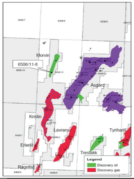
STATOIL

Well 6506/11-8
Composite Log
1:500

Prospect structure
Morvin

AREA:	Haltenbanken
LICENCE:	PL134B
COORDINATES:	65 deg. 07' 13.591" N 06 deg. 26' 49.286" E
KB:	18m
WATER DEPTH:	380m
TOTAL DEPTH:	4989.7 m MD
FM. AT T.D.:	Tilje Fm.
SPUD DATE:	22.03.2006
RIG RELEASE:	18.07.2006
WELL STATUS:	P&A
RIG:	West Alpha
CONTRACTOR:	SeaDrill
GEOLOGIST:	K.Ruud, O.Beyer, O.Giskeødegaard, L.Rasmussen, T.F.Kristensen, N.Townley, J.Basset, B.E.Paulsen, A.Neitzel, R.Hall
PREPARED BY:	C.H. Opsahl

LOCATION MAP



Grafisk/070190_2.dgn

CASING DATA		LEAK OFF TESTS
30"	@446 mMD	
20"	@1341.1 mMD	1.72 g/cc EMW
14"	@2139.5 mMD	1.86 g/cc EMW
9 7/8"	@4500 mMD	2.06 g/cc EMW

VELOCITY SURVEY

Contractor: Schlumberger
Zero offset at 3011-1322m & 3554-3448m.
Zero offset at TD of the well.

LOGS RUN

CONTRACTORS: MWD: BHI WIRELINE: SCHLUMBERGER

Run 1 ONTRAK	440-1350 m		Run 1A	DSI-AIT-IPLT	1413-4505 m
Run 2 ONTRAK	1350-2150 m		Run 2A/B	MSIP-PPC-IS-AIT	4504-4897 m
Run 3 ONTRAK	2150-3955 m		Run 2A/B	CMR-IPLT-ESC	4504-4897 m
Run 4 ONTRAK	3955-4239 m		Run 2A	MDT	4623-4870 m
Run 5 ONTRAK	4239-4500 m		Run 2B	mini DST-MDT	4679 m
Run 6 ONTRAK	4500-4603 m		Run 2C	MDT-PQ	4500-4830 m
Run 7 ONTRAK	4606-4624 m		Run 2D	mini DST-MDT	4782.5-4692.5 m
Run 8 ONTRAK	4699-4743 m		Run 2A	VSP-GR	3011-1322m & 3554-3448m
Run 9 ONTRAK	4775-4843 m		Run 2E	mini DST-MDT	4845.2 m
Run10 ONTRAK	4843-4893 m		Run 3C	AIT-IPLT-DSI-GR	4989-4758 m
Run11 ONTRAK	4893-4989 m		Run 3A	MSCT-GR	4623-4877 m
			Run 3B	VSI-GR	4985-2859.2 m
			Run 3B	MSCT-GR	4599.5-4981 m

COMMENTS:

First TD of the well was set @ 4893 m MD. However, based on encouraging results in the Tofte reservoir it was decided to deepen the well into Tilje Formation. New TD was set @ 4989.7 m MD driller's depth.

LITHOLOGICAL SYMBOLS

▨	CONGLOMERATE	▨	SHALE	▨	MARL	▨	COAL LIGNITE	▨	FORAMS	M M	MICA
▨	SAND SANDSTONE	▨	LIMESTONE	▨	TUFF	▨	WOOD FRAGS	▨	BURROWS	K K	KAOLINITE
▨	SILT SILTSTONE	▨	CHALK	▨	SALT GEN'L	▨	FOSSILS GEN'L	□ □	PYRITE	△ △	CHERT
▨	CLAY CLAYSTONE	▨	DOLOMITE	▨	ANHYDRITE	▨	SHELL FRAGS	✱ ✱	GLAUCONITE	▨	SIDERITE

CUTTINGS/FLUORESCENCE	◊	OIL SHOW	●	OIL/GAS SHOW	✹	GAS SHOW	☼

AZIMUTH &
INCLINATION

SIDEWALL CORES
1.5 ▶ SIDEWALL CORE
2.8 ▷ NO RECOVERY
R 1.2 ▶ ROTARY SIDEWALL CORE

CORES
CORE NO

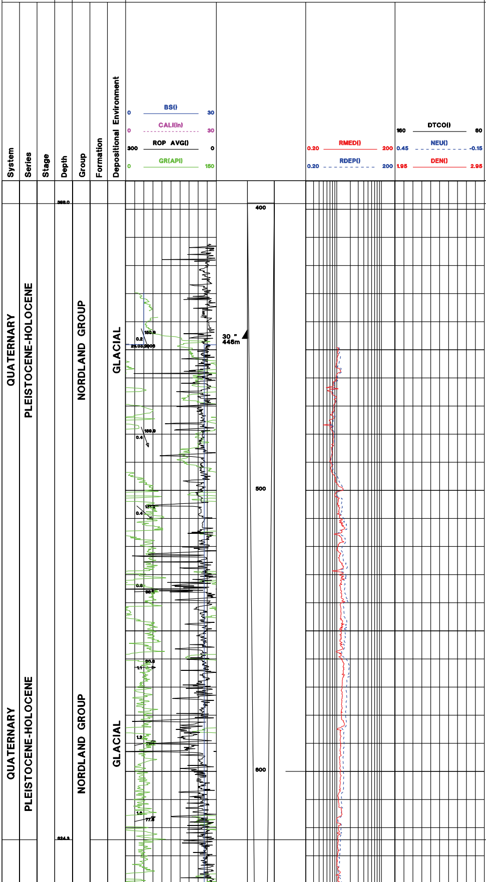
DST

RFT/FMT
SAMPLE

CASING SHOE / LINER

CHRONO STRAT
UNCERTAINTY

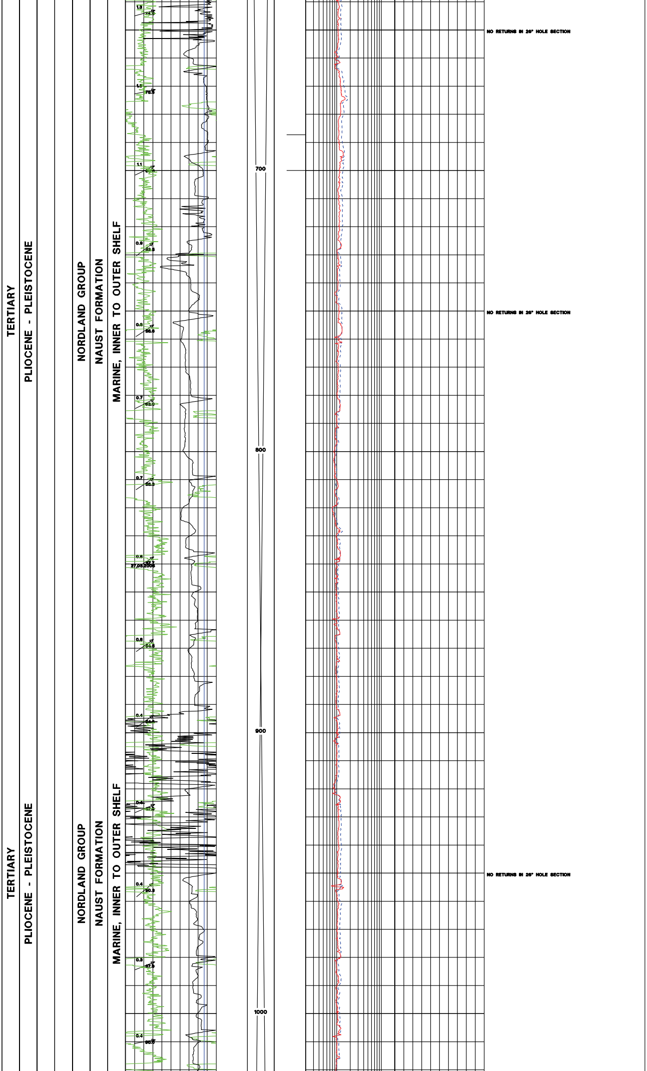
Chron Strat		Litho Strat	Well Log	Lithological Descriptions

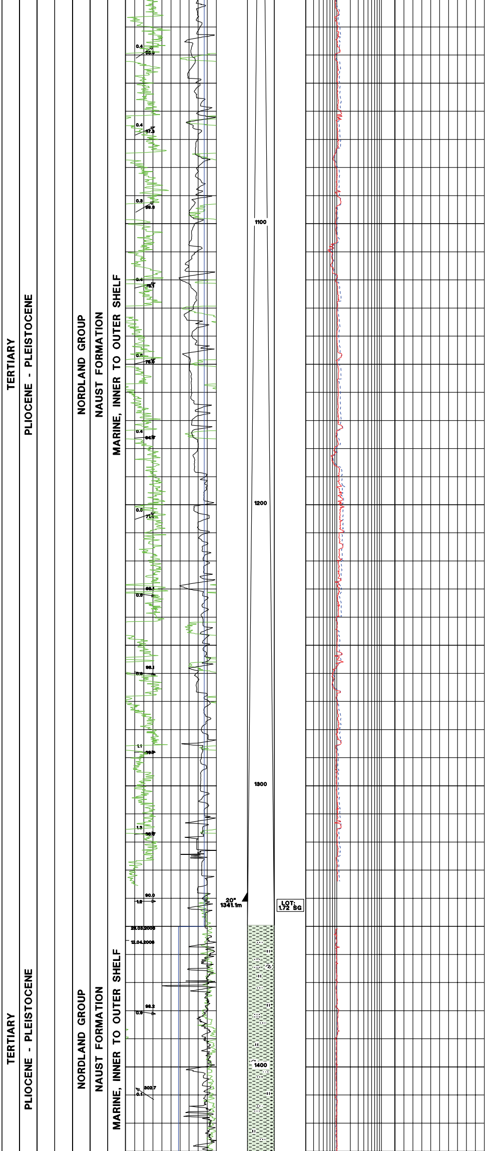


SEABED: 398 m MD (380 m TVD MSL)

NO RETURNS IN 26" HOLE SECTION

NAUST FORMATION
624.3 m MD (606.3 m TVD MSL)





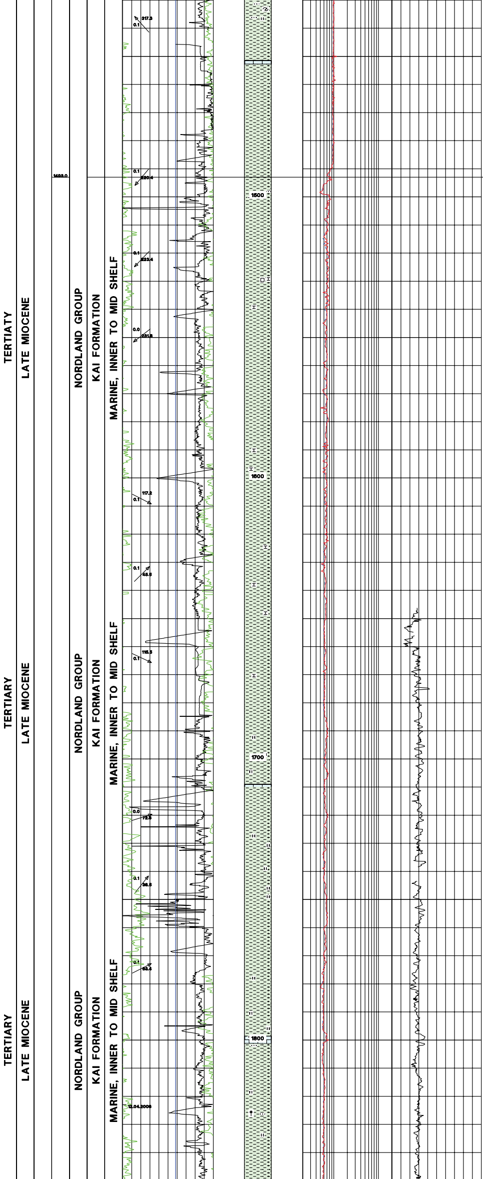
NO RETURNS IN 26" HOLE SECTION

NO RETURNS IN 26" HOLE SECTION

CLAYSTONE: medium grey, soft, amorphous, soluble, sticky, sandy, none - occasionally calcareous

SAND: clear to translucent loose Quartz grains, fine - coarse, subangular - subrounded

ROCK FRAGMENTS: medium - coarse grains



CLAYSTONE: light - medium grey, soft, amorphous, soluable, sticky, sandy, none - occasionally slightly calcareous

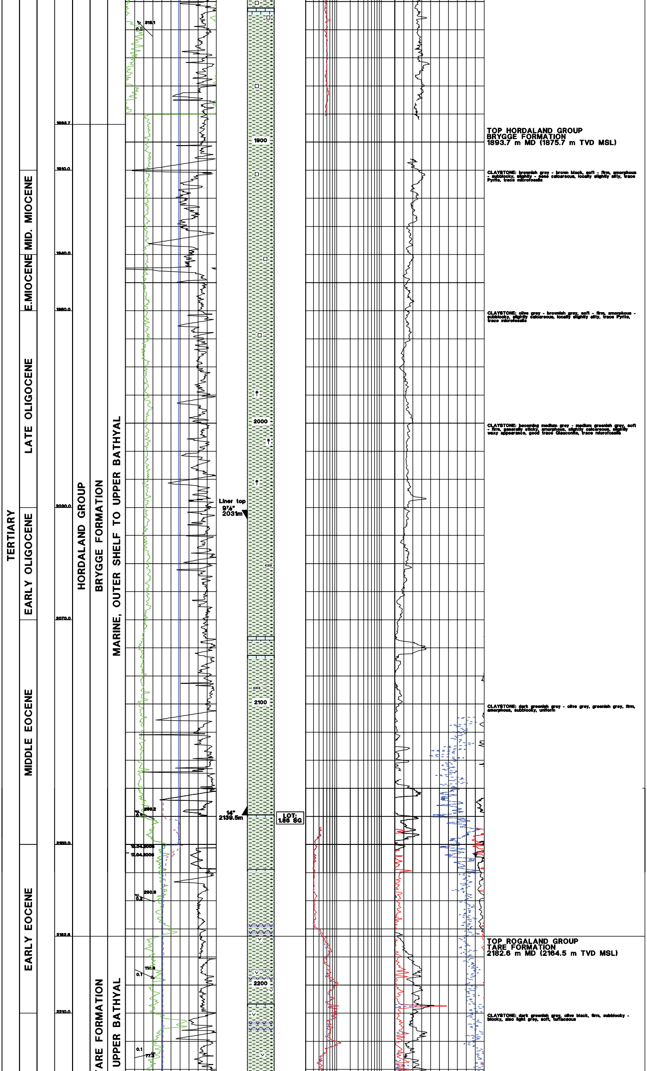
KAI FORMATION
1493 m MD (1475 m TVD MSL)

CLAYSTONE: medium grey - medium dark grey, soft, sticky, amorphous, slightly silty - sandy, calcareous in parts

CLAYSTONE: medium dark grey, olive grey, soft, sticky, amorphous, silty, very calcareous

CLAYSTONE: medium dark grey - olive grey, sticky, firm, slightly calcareous, silty in parts

CLAYSTONE: medium grey - greenish grey, firm - soft, subblocky - amorphous, moderate calcareous, silty - very fine sandy, good trace Glauconite, trace microfossils, locally very abundant micropyrite



TOP HORDALAND GROUP
BRYGGE FORMATION
1893.7 m MD (1875.7 m TVD MSL)

CLAYSTONE: brownish grey - brown black, soft - firm, amorphous - subblocky, slightly - none calcareous, locally slightly silty, trace Pyrite, trace microfossils

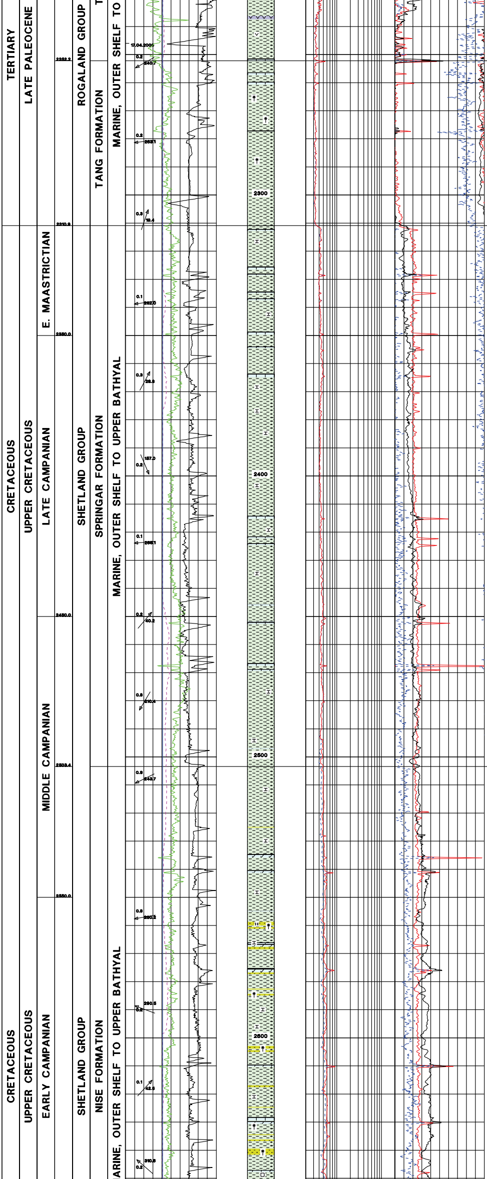
CLAYSTONE: olive grey - brownish grey, soft - firm, amorphous - subblocky, slightly calcareous, locally slightly silty, trace Pyrite, trace microfossils

CLAYSTONE: becoming medium grey - medium greenish grey, soft - firm, generally sticky, amorphous, slightly calcareous, slightly waxy appearance, good trace Glauconite, trace microfossils

CLAYSTONE: dark greenish grey - olive grey, greenish grey, firm, amorphous, subblocky, uniform

TOP ROGALAND GROUP
TARE FORMATION
2182.6 m MD (2164.5 m TVD MSL)

CLAYSTONE: dark greenish grey, olive black, firm, subblocky - blocky, also light grey, soft, tuffaceous



TANG FORMATION
2252.2 m MD (2234.1 m TVD MSL)

CLAYSTONE: dark greenish grey - olive grey, firm, subblocky, locally Glauconitic, interbedded / laminated LIMESTONE

CLAYSTONE: predominantly greenish grey, also moderate brown, firm, subblocky - amorphous, soft - firm, locally Glauconitic, slightly calcareous, uniform

TOP SHETLAND GROUP
SPRINGAR FORMATION
2310.9 m MD (2292.8 m TVD MSL)

CLAYSTONE: predominantly dark greenish grey,soft - firm, subblocky - amorphous, slightly calcareous, minor interlamineted LIMESTONE

CLAYSTONE: greenish grey - medium blue grey, soft - firm, subblocky - amorphous, slightly calcareous, waxy apperance, minor interlaminated LIMESTONE

CLAYSTONE: greenish grey - medium blue grey, soft - firm, subblocky - amorphous, slightly calcareous, waxy apperance, minor interlaminated LIMESTONE / DOLOMITE

LIMESTONE / DOLOMITE: light grey - dark yellowish grey, blocky - angular, firm - moderate hard, dominantly micrite, in parts dolomicrite

CLAYSTONE: greenish grey - medium blue grey, soft - firm, subblocky - amorphous, slightly calcareous, waxy apperance, minor interlaminated LIMESTONE / DOLOMITE

NISE FORMATION
2503.4 m MD (2485.3 m TVD MSL)

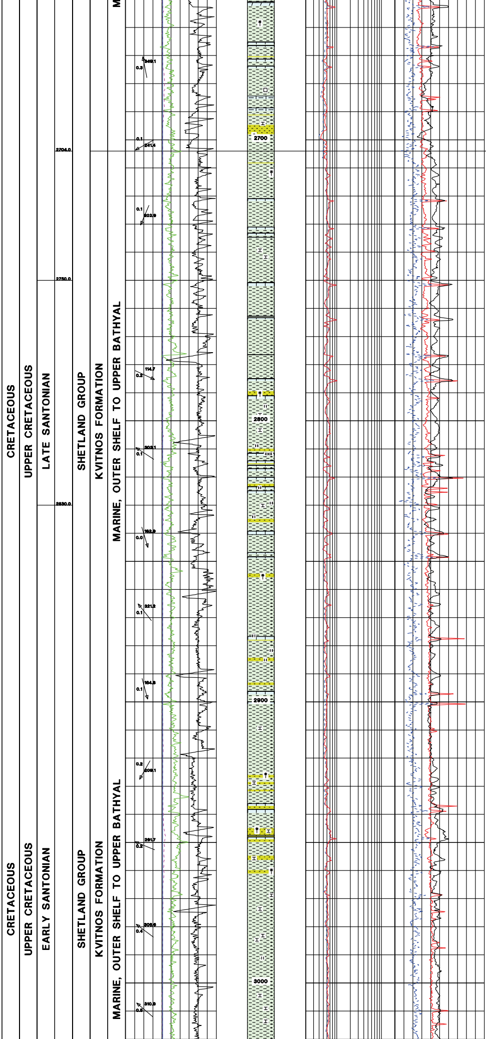
CLAYSTONE: dark greenish grey - medium dark grey, soft - firm, subblocky - amorphous, slightly calcareous, uniform, with minor interlaminated LIMESTONE / DOLOMITE

SILTSTONE: medium grey - brownish grey, argillaceous - very argillaceous, silty to very fine sandy, predominantly Quartz and Glauconite, firm, none calcareous

LIMESTONE / DOLOMITE: yellowish grey - dark yellowish grey, amorphous - cryptocrystalline, blocky - angular, firm - moderate hard, dominantly micrite, in parts dolomicrite

CLAYSTONE: medium dark grey - dark greenish grey, soft - firm, subblocky - amorphous, slightly calcareous, uniform, with minor interlaminated LIMESTONE / DOLOMITE

LIMESTONE / DOLOMITE: light grey - dark yellowish grey, blocky - angular, firm - moderate hard, dominantly micrite, in parts dolomicrite



CLAYSTONE: predominantly olive grey - olive black, soft - firm, subblocky - amorphous, none calcareous, uniform, with minor interlaminated LIMESTONE

SILTSTONE: medium grey - brownish grey, argillaceous - very argillaceous, silt of predominantly Quartz and Glauconite grains, firm, none calcareous

KVITNOS FORMATION
2704.4 m MD (2686.3 m TVD MSL)

CLAYSTONE: predominantly olive grey - olive black, soft - firm, subblocky - amorphous, none calcareous, earthy, with interlaminated LIMESTONE

LIMESTONE: light grey - brownish grey, blocky - angular, soft - firm, dominantly micrite, trace in parts dolomicrite

SILTSTONE: brownish grey - olive black, argillaceous to very argillaceous, silt, predominantly Quartz and Glauconite grains, firm, calcareous

CLAYSTONE: medium dark grey - olive black, soft - firm, subblocky - amorphous, none calcareous, earthy, with interlaminated LIMESTONE

SILTSTONE: brownish grey, medium grey, argillaceous, predominantly silt of Quartz and Glauconite, firm, calcareous cemented

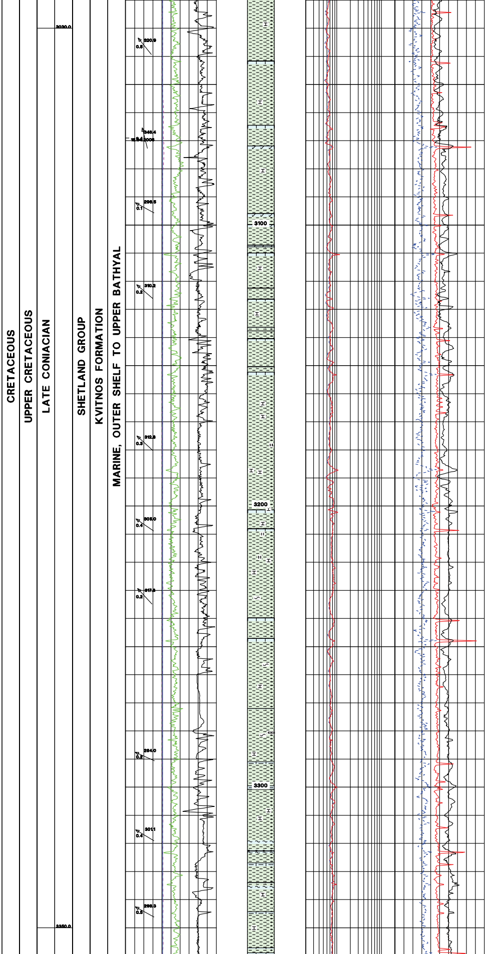
LIMESTONE: light grey - brownish grey, blocky - angular, soft - firm, dominantly micrite, trace in parts dolomicrite

SILTSTONE: brownish grey, medium grey, argillaceous, predominantly silt of Quartz and Glauconite, firm, calcareous cemented

CLAYSTONE: medium dark grey - olive black, soft - firm, subblocky - amorphous, none calcareous, earthy, with minor interlaminated LIMESTONE

SILTSTONE: brownish grey - olive grey, argillaceous, predominantly silt of Quartz, moderate Glauconite, firm, none - slightly calcareous cemented

CLAYSTONE: medium dark grey - olive black, soft - firm, amorphous - blocky, none - slightly calcareous, with interlaminated LIMESTONE



CLAYSTONE: medium dark grey - olive black, soft - firm, amorphous - blocky, none - slightly calcareous, uniform with interlaminated LIMESTONE

LIMESTONE/DOLOMITE: yellowish grey - brownish grey, firm -moderate hard, amorphous, microcrystalline, micrite / dolomicrite

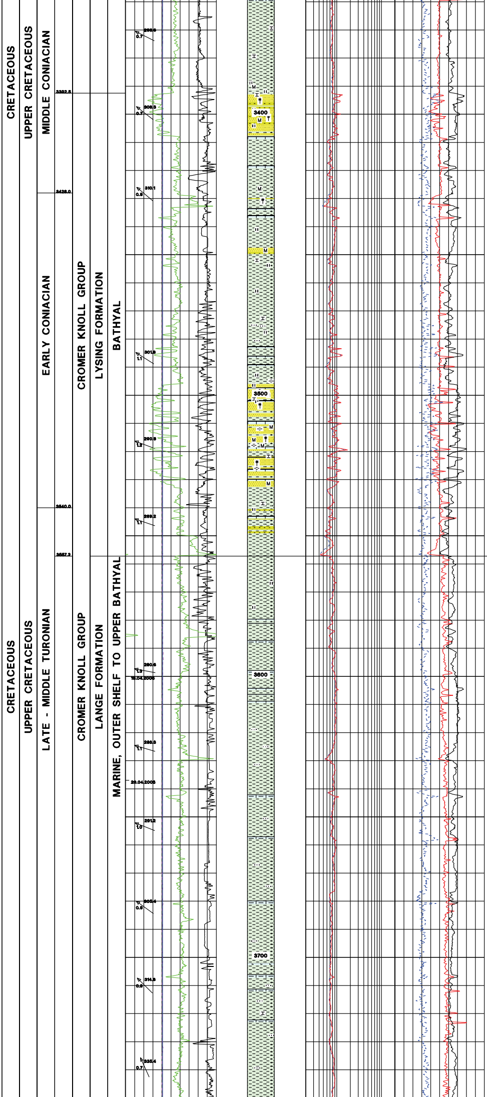
CLAYSTONE: dark grey - olive grey, firm, amorphous, none calcareous, massive, uniform with minor interlaminated dolomitic LIMESTONE

CLAYSTONE: medium grey - medium dark grey, soft - firm, amorphous, none calcareous, locally moderate silty, with interlaminated LIMESTONE

CLAYSTONE: medium grey - medium dark grey, soft - firm, amorphous, none calcareous, locally moderate silty, with interlaminated marly LIMESTONE

CLAYSTONE: medium grey - medium dark grey, soft - firm, amorphous, none calcareous, locally moderate calcareous, grading to marly LIMESTONE

LIMESTONE/MARL: dominantly light grey - light brown, firm - moderate hard, argillaceous micrite



CLAYSTONE: medium grey - medium dark grey, soft - firm, amorphous, none calcareous, locally moderate calcareous, grading to marly LIMESTONE

TOP CROMER KNOLL GROUP
LYSING FORMATION
3392.9 m MD (3374.8 m TVD MSL)

SANDSTONE: grading to SILTSTONE, clear - translucent, loose Quartz grains, predominantly very fine - fine, occasional medium, rare coarse grains, subangular - subrounded, very Glauconitic rich, trace Muscovite Mica

CLAYSTONE: medium dark grey - olive grey, firm, amorphous - blocky, none calcareous, locally moderate calcareous, locally silty laminae

SILTSTONE: medium dark grey - greyish brown, argillaceous, soft - firm, trace fine Glauconite

CLAYSTONE: dark grey - olive grey, firm, amorphous - blocky, none calcareous, locally silty, else uniform

LIMESTONE: dominantly light grey - light brown, soft - firm, locally moderate hard Dolomite, argillaceous micrite, locally arenaceous / sucrosic

SANDSTONE: locally grading to SILTSTONE, clear - translucent, predominantly Quartz, firm - moderate hard, predominantly very fine - fine, occasional medium, rare coarse grains, subangular - subrounded, moderate Glauconite, trace Muscovite Mica

CLAYSTONE: dark grey - brownish grey, minor olive black, firm, amorphous - subblocky, none calcareous, locally silty / sandy interlaminations

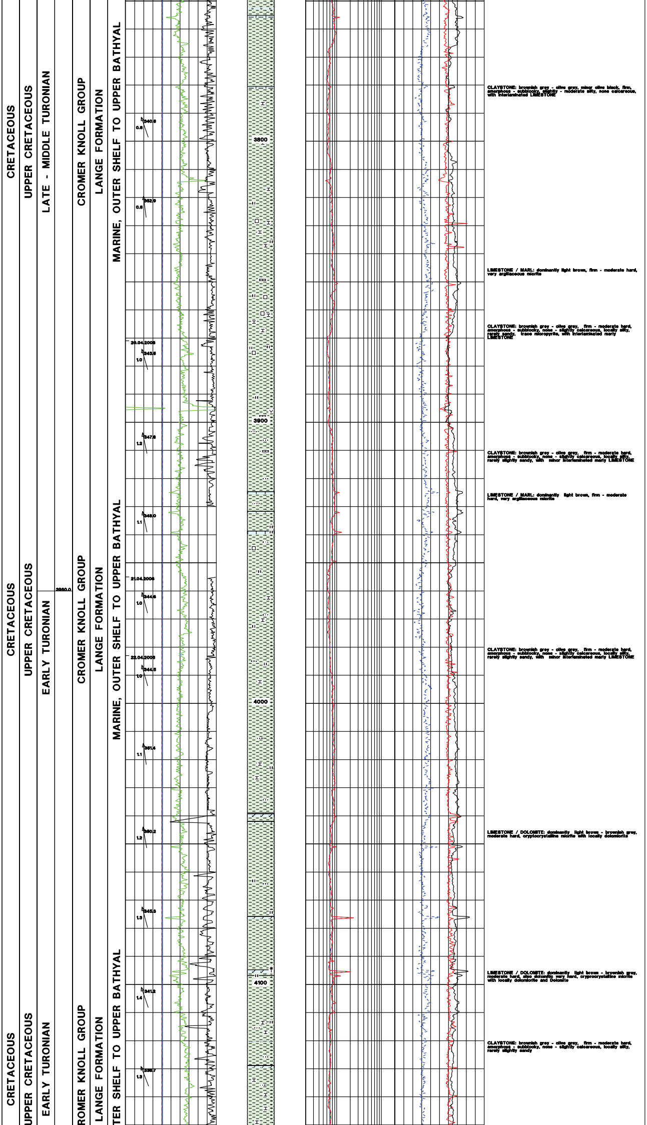
LANGE FORMATION
3557.2 m MD (3539.1 m TVD MSL)

CLAYSTONE: light grey - brownish grey, minor olive grey - olive black, firm, subblocky to blocky, none calcareous, uniform

LIMESTONE/MARL: dominantly light grey - light brown, firm - moderate hard, very argillaceous micrite

CLAYSTONE: light grey - olive grey, firm, subblocky - blocky, uniform none silty, none calcareous

CLAYSTONE: light grey - olive grey, firm, subblocky, uniform none silty, none calcareous



CLAYSTONE: brownish grey - olive grey, minor olive black, firm, amorphous - subblocky, slightly - moderate silty, none calcareous, with interlaminated LIMESTONE

LIMESTONE / MARL: dominantly light brown, firm - moderate hard, very argillaceous micrite

CLAYSTONE: brownish grey - olive grey, firm - moderate hard, amorphous - subblocky, none - slightly calcareous, locally silty, rarely sandy, trace micropyrite, with interlaminated marly LIMESTONE

CLAYSTONE: brownish grey - olive grey, firm - moderate hard, amorphous - subblocky, none - slightly calcareous, locally silty, rarely slightly sandy, with minor interlaminated marly LIMESTONE

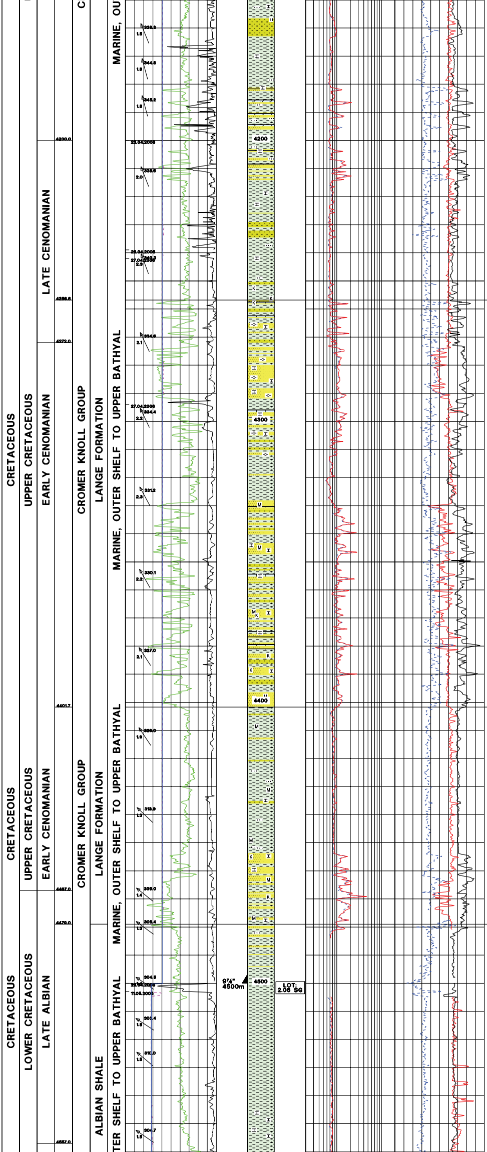
LIMESTONE / MARL: dominantly light brown, firm - moderate hard, very argillaceous micrite

CLAYSTONE: brownish grey - olive grey, firm - moderate hard, amorphous - subblocky, none - slightly calcareous, locally silty, rarely slightly sandy, with minor interlaminated marly LIMESTONE

LIMESTONE / DOLOMITE: dominantly light brown - brownish grey, moderate hard, cryptocrystalline micrite with locally dolomicrite

LIMESTONE / DOLOMITE: dominantly light brown - brownish grey, moderate hard, also dolomitic very hard, cryprocrystalline micrite with locally dolomicrite and Dolomite

CLAYSTONE: brownish grey - olive grey, firm - moderate hard, amorphous - subblocky, none - slightly calcareous, locally silty, rarely slightly sandy



SANDSTONE: light grey - medium grey, clear - milky white Quartz, very fine, subangular - subrounded, firm, well sorted, slightly silica cemented, locally argillaceous and silty

LIMESTONE / DOLOMITE: dominantly light brown - brownish grey, moderate hard, cryptocrystalline micrite with locally dolomicrite, only rarely sandstone laminations

CLAYSTONE: olive grey - dark grey, soft - firm, local hard calcareous and slightly sandy laminae, amorphous - blocky with frequent very hard LIMESTONE / DOLOMITE laminations

TOP LANGE SANDSTONE UNIT
4256.8 m MD (4238.6 m TVD MSL)

SANDSTONE: light grey - medium grey, dominantly clear Quartz, very fine - fine, trace medium, subangular - angular, predominatly kaolinitic matrix supported grains, firm, moderate well sorted, rarely calcareous cemented, locally argillaceous

CLAYSTONE: olive grey - medium grey, dark grey , soft - firm, subblocky, none calcareous, slightly silty, rare micropyrite

LIMESTONE: pale yellowish brown, hard to moderately hard, blocky, sucrosic, locally grading Dolomite

CLAYSTONE: olive grey - medium dark grey, firm, subblocky to blocky, none calcareous, slightly silty to very fine sandy, trace of micromica

SANDSTONE: clear to translucent Quartz, very fine - fine, firm - friable, argillaceous matrix, micromica, slightly calcareous cemented

CLAYSTONE: olive grey - medium dark grey, light grey, firm to locally soft, blocky to subblocky, locally amorphous, none calcareous, trace of silt, rare micromica, locally very fine sandy

SANDSTONE: very light grey - medium grey, clear to translucent quartz, very fine - fine, subangular - subrounded, firm - friable, locally loose, well sorted, generally Kaolin matrix, locally argillaceous, slightly calcareous cemented, trace of micromica / Mica, silty in part, no visual porosity

CLAYSTONE: olive grey - dark grey, brownish grey, firm, blocky to subblocky, none calcareous, locally silty, rare micromica, in parts very fine sandy

SANDSTONE: very light grey - medium grey, clear to translucent Quartz, very fine to fine, rarely very coarse, subangular to subrounded, firm to friable, locally loose, sorted, generally Kaolin matrix, locally argillaceous, slightly calcareous cemented, occasionally carbonaceous, trace micromica, in part silty, no visible porosity

BASE LANGE SANDSTONE UNIT
4401.7 m MD (4383.4 m TVD MSL)

CLAYSTONE: predominantly olive black, dark grey, grading to brown grey, grey black, soft to moderately hard, amorphous to blocky, micromicaceous in parts occasional coarse Muscovite Mica, calcareous in places, occasionally silty

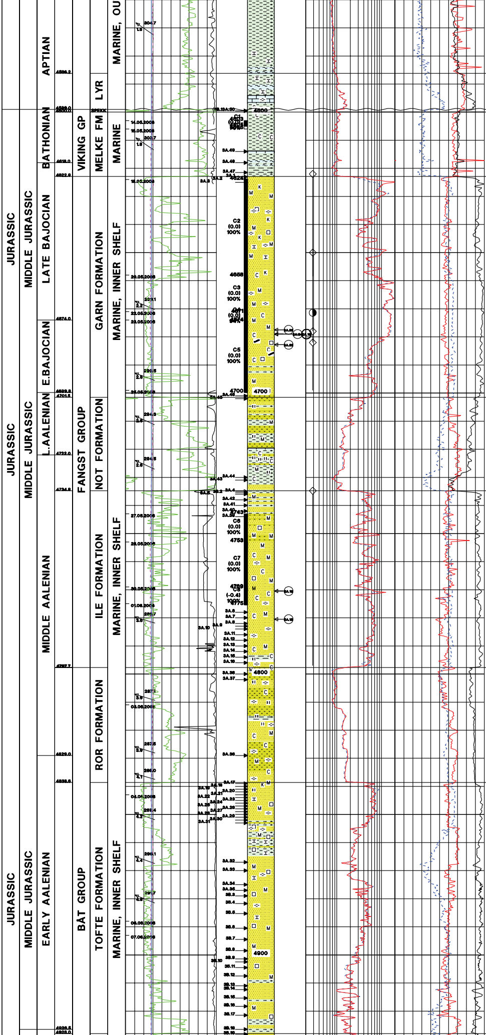
SANDSTONE: very light grey - medium grey, clear to translucent Quartz, very fine to fine, rarely very coarse, subangular to subrounded, firm to friable, locally loose, sorted, generally Kaolin matrix, locally argillaceous, slightly calcareous cemented, occasionally carbonaceous, trace micromica, micromica, in parts silty, no visible porosity

ALBIAN SHALE
4479m MD (4460.6 m TVD MSL)

CLAYSTONE : medium dark grey - grey black, olive black, black, firm - moderate hard, blocky - subfissile, slightly silty, partly calcareous

CLAYSTONE : red brown, firm, blocky - subfissile

CLAYSTONE : olive grey - olive black, greyish brown, moderate hard, blocky - subfissile, slightly silty, occasional calcareous



TOP LYR FORMATION
4586.2 m MD (4567.7 m TVD MSL)

CLAYSTONE : red brown, dusky red, grey red, firm - moderate hard, blocky - occasional subfissile, slightly silty, calcareous - very calcareous, grading to MARL in parts

LIMESTONE : yellow grey - light olive grey, occasional grey, moderate hard, micro crystalline, slightly - occasional moderate argillaceous

TOP SPEKK FM.: 4599 m MD (4580.5 m TVD MSL)

MELKE FORMATION
4600 m MD (4581.5 m TVD MSL)

CLAYSTONE : olive black, grey black, brown black, common metallic lustre, firm - moderate hard, blocky, partly silty, partly - common carbonaceous

SHOWS : no direct fluorescence, very weak blue white blooming cut fluorescence, no hydrocarbon odour

GARN FORMATION
4622.9 m MD (4604.4 m TVD MSL)

SANDSTONE: brown black, olive black, with clear, transparent, occasionally light green grey, blue white, translucent, very fine to occasionally very coarse / pebbly, angular to subrounded, predominantly moderatly to well sorted Quartz grains, with very good hard translucent Silica, occasional calcareous cement. None to occasionally abundant brown black argillaceous matrix, micropyritic in places, occasional light green grey, white soft Kaolonite often as 'rims' to Feldspars? Occasional very coarse Muscovites, sometimes orientated as laminations. Very tight, none to very occasional very poor (3%) visible porosity

SHOWS: very poor to occasional moderate odour, non to very poor spotty (5%) blue white direct fluorescence, occasional instantaneous streaming to predominatly very slow diffuse blue white cut fluorescence with depth, very occasional pale brown residual ring

SANDSTONE: olive black, green black,olive grey with clear transparent occasional light green grey, blue grey translucent, very fine to occasionally pebbly, predominately upper medium to coarse, becoming fine with depth, subangular to subrounded, occasionally angular, subelongate to spherical, poorly to well sorted Quartz. Predominately good moderately hard to hard, to occasionally weak friable translucent Silica cement. Very occasional Pyrite cement / pore infill and grain coatings. Occasional to abundant dark brown clay matrix with black micropyritic carbonaceous pore infill/matrix. Very occasional carbonaceous plant debris. None to abundant, unorientated coarse Muscovite grains / sheaves compacted around Quartz grains and occasionally orientated to form lineations. Occasional light olive grey, blue white, soft altered Feldspars replaced with Kaolinite, very occasional dark grey rounded rock / lithic fragments. Poor to occasionally moderate visible porosity (5 - 10%)

SHOWS: good to very strong HC odour, occasional dark brown oil stain / dead oil coating grains, slow bleeding dark brown hydrocarbon fluids in porespaces, release of light HC film on chip surface, uniform bright yellow / straw to dull pinpoint direct fluorescence. Instantaneous streaming bright blue white to very slow diffuse dull milky white cut fluorescence, occasional light brown residual ring. Dark brown / black light oil bleed from core onto deck. Occasional filtrate invasion of outer 5mm of core

CLAYSTONE: medium dark grey, hard, splintery with abundant very fine to coarse Muscovite, micromicaceous, trace micropyrite

NOT FORMATION
4701.5 m MD (4683 m TVD MSL)

SILTSTONE: varicoloured brown grey, dark green grey, grading to green grey, olive grey, soft to firm, amorphous to crumbly, occasionally sucrosic, abundant very fine to fine grained clear, shattered Quartz grains, none to very argillaceous grading to CLAYSTONE

LIMESTONE: yellow grey, light brown, crumbly, sucrosic, microcrystalline, grading to moderate yellow brown, firm, crumbly DOLOMITE

CLAYSTONE: dark grey, brown black, olive black, soft to very occasionally very hard, amorphous to blocky, trace coarse Muscovite, micromicaceous, occasionally carbonaceous, occasional very fine Quartz grading to SILTSTONE in places

ILE FORMATION
4734.8 m MD (4716.2 m TVD MSL)

SANDSTONE: observed as either brown grey, olive black, medium dark grey, or light green grey, blue grey, soft, crumbly, sucrosic siliceous Rock Flour. Abundant, very fine to fine, angular, subspherical Quartz grains, occasional weak friable Silica cement, micorpyritic in parts, with occasional carbonaceous material. No Shows

SANDSTONE: brown black, olive black, clear to translucent, trace blue white Quartz, silt to occasional pebbels, predominantly coarse, subangular to subrounded, hard dark grey Silica cement, occasional micropyrite cement, none to abundant carbonaceous matrix and grain coating, local rock fragments, none to abundant Muscovite / Biotite, occasional silty laminae, moderate to good visible porosity

SILTSTONE: brown black, brown grey, hard, fissile with abundant fine to coarse orientated Muscovite / Biotite sheaves, carbonaceous, micropyrite, hard dark grey translucent Silica cement, occasional very fine to fine Quartz

SHOWS: moderate to good, local poor HC odour, strong very good sulphourous odour in coarse sandstone jammed in core catcher (num.7). None to good spotty bright to blue white direct fluorescence, predominantly uniform dull yellow direct fluorescence. Moderate instant blue white to occasional very slow streaming cloudy milky white fluorescence cut

ROR FORMATION
4797.7 m MD (4779 m TVD MSL)

SANDSTONE: light grey, firm, blocky, very fine to fine, commonly silty, grading SILTSTONE, firm to moderately hard, well cemented, very argillaceous matrix, pyritic, carbonaceous, micaceous, no visible porosity

SHOWS: No Shows above oil based mud fluorescence, no cut fluorescence above oil based mud cut fluorescence

SILTSTONE: light grey to olive grey, dark grey, brown grey to brown black, firm to moderately hard, none to slightly calcareous, slightly dolomitic, none - slightly carbonaceous, slightly pyritic, very argillaceous matrix

LIMESTONE: very dusky red, hard, blocky, very argillaceous, grading very calcareous CLAYSTONE

TOFTE FORMATION
4838.6 m MD (4819.9 m TVD MSL)

SANDSTONE: light grey, clear to translucent, Quartz, very fine to coarse, sub angular to angular, generally loose, trace firm, poorly sorted, locally with Silica cement, loose Kaolin matrix, trace Mica, trace micropyrite, rare carbonaceous material, on aggregate cuttings no visible porosity

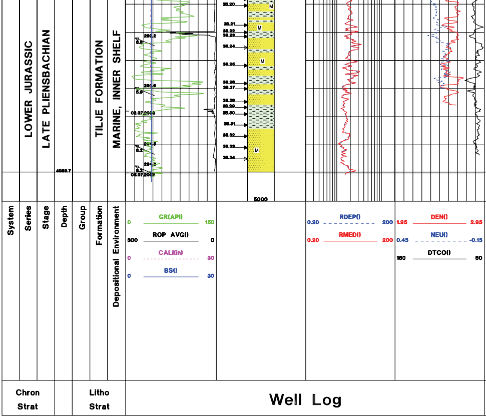
CLAYSTONE: dark grey to grey black, dark brown grey, becoming very dark grey speckled with light grey, firm, crumbly to subblocky, very calcareous, very finely disseminated Pyrite also mediumsized Pyrite masses, calcite crystals, becoming slightly sandy

SILTSTONE: light grey to olive grey, firm to moderately hard, blocky, none calcareous, slightly dolomitic, none carbonaceous, very pyritic in parts, very argillaceous matrix

SANDSTONE: light brown grey, brown grey to light grey, predominantly loose Quartz, becoming clear to translucent, light grey in parts, fine to medium, occasionally fine to coarse to very coarse in parts, loose, in part hard, well to poorly sorted, sub angular to sub round, local calcareous cement, also Kaolin matrix, trace Pyrite, rare Mica, no visible porosity

SHOWS: No direct fluorescence above oil based mud fluorescence, no cut fluorescence above oil based mud fluorescenc

TRACE CLAYSTONE: dark grey, local brown grey, moderate hard, subblocky to subfissile, none to slight calcareous, micropyrite, silty in part grading SILTSTONE, local very fine sandy, abundant micropyrite in parts



TILJE FORMATION
4928 m MD (4908.9 m TVD MSL)

SANDSTONE: predominantly loose Quartz, milky white to translucent, very fine to fine, occasionally coarse in parts, poorly to moderate sorted, subangular to subround, rare Mica

CLAYSTONE: olive black to dark grey, firm to hard, subblocky to blocky, none calcareous

Driller's TD
@ 4989.7 m MD (4970.3 m TVD MSL)

Logger's TD @ 4993.5 m MD

Lithological Descriptions