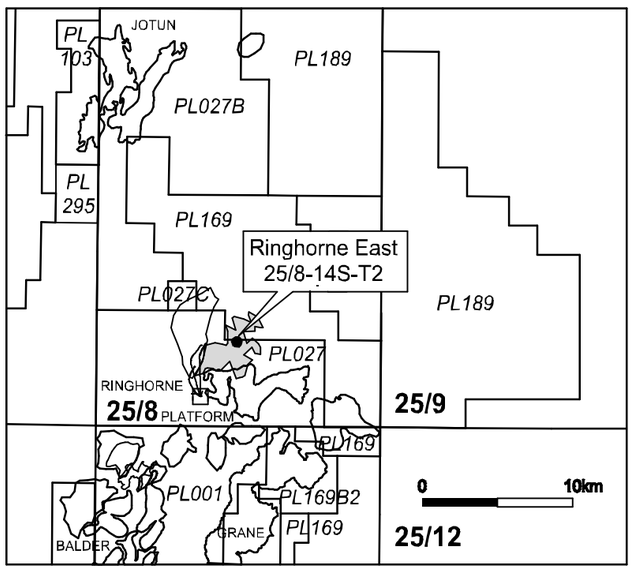
ESSO NORGE AS

COMPOSITE LOG 1:500

WELL : 25/8-14ST2

REGIONAL MAP

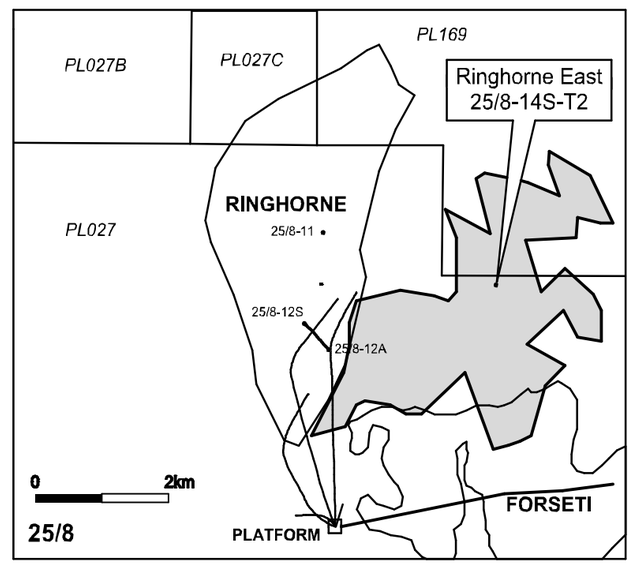


COUNTRY	:	NORWAY
FIELD	:	RINGHORNE EAST
BLOCK	:	25/8
LICENCE	:	PL027 and PL169
OPERATOR	:	ESSO NORGE AS
DRILLING PERMIT	:	1067L
PRE-DRILL STATUS	:	PILOT HOLE
RIG NAME/TYPE	:	Deepsea Trym/Semi-sub
STATUS	:	Exploration

OBJECTIVE

PRIMARY	:	Statfjord Sands

LOCATION MAP



RIG DATA

RKB - MSL	: 25.0m	WATER DEPTH	:	128.0m
SPUD DATE	: 22th Aug 2003			
TD REACHED	: 10th Sept 2003			
TD (Driller)	: 2825.0m MDRKB	TVD	:	-2120.0m TVDSS

LOCATION DATA

SURFACE LATITUDE	:	6 573 509.66mN	59° 17' 53.381" N
SURFACE LONGITUDE	:	471 869.61mE	02° 30' 22.013" E
TD LATITUDE	:	6 573 688.31m N	59° 17' 58.8582" N
TD LONGITUDE	:	470 651.93E	02° 29' 04.9656" E

PARTNERS

ESSO NORGE AS	PL027 100%
PL169	
Norsk Hydro	45%
Petoro	30%
Statoil	12%
Esso	13%

CONTRACTORS

DRILLING	:	ODFJELL DRILLING
WELLSITE GEOLOGY	:	CAMBRIAN
MUDLOGGING	:	GEOSERVICES
WIRELINE	:	BAKER ATLAS
DIRECTIONAL	:	BAKER HUGHES INTEQ
MWD/LWD	:	BAKER HUGHES INTEQ
MUD	:	MI ANCHOR DRILLING FLUIDS
CASING	:	WEATHERFORD
CEMENT	:	HALLIBURTON
VSP	:	BAKER ATLAS
SONIC	:	PATHFINDER

GEOLOGISTS

OPERATIONS	:	T.VALHEIM
PROJECT	:	P.VARHAUG
WELLSITE	:	G.HEYES
		G.WATTS
		C.GREENE

LOG COMPILER(S)

R.HOWES, I.MCLEOD

DATE : MARCH 2004

LITHOSTRATIGRAPHIC TOPS

GROUP	FORMATION	MEMBER	SEQUENCE/ CYCLE	DEPTH (MDRKB)	DEPTH (TVDSS)
Seabed				153.0	128.0
Rogaland	Utsira			597.0	572
Hordaland				987.0	962.0
Oligocene				?	?
		Top Skade	Sand	1147.0	1121.9
		Base Skade	Sand	1231.0	1204.8
Eocene				1372.0	1334.7
	Balder			2044.0	1695.8
	Sele			2184.0	1764.0
	Lista			2319.0	1813.8
Shetland				2375.0	1838.0
	Statfjord Upper			2541.0	1910.0
	Statfjord	Sand		2584.0	1932.5
		Base reservoir		2636.5	1964.1
TD Driller				2825.0	2120.0

WIRELINE LOGS

DATE	RUN No.	LOGGING SUITE	INTERVAL
	1	GR/CN/ZNL/HDIL Cancelled	
12/09/03	2	RCI Wireline-aborted	
12/09/03	3	RCI RCI TCL-aborted	
14/09/03	4	VSP VSP(TCL)	1374-2800
15/09/03	5	RCI RCI(TCL)	2585-2715
17/09/03	6	SWC SWC(TCL)	2542-2739

CASING DATA

BIT SIZE	INTERVAL	CASING	SHOE DEPTH	MUD SYSTEM
36"	0 -228	30"	224	WBM
12.25"	228 - 1056	9 5/8"	1050	WBM
8.5"				Versavert OBM

CONVENTIONAL CORES

CORE	INTERVAL	RECOVERY
	No Coring	

BIOSTRATIGRAPHIC TOPS

SERIES	STAGE	ZONE	DEPTH (MDRKB)	DEPTH (TVDSS)
L.Eocene		ME(P)1A	2050	
L.Eocene		MP(P)6	2110	2190
U.Paleocene			2250	2375(log)
U.Cretaceous		?MP(P)4	2375(log)	2504
	? Cenomanian	MUK26-MUK30	2504	
Lower Cretaceous	U.Albian	MLK1-?MLK2	2512	2528
L.Jurassic	L.P'bachian-U.Sinem'		2542	
	U.Sinemurian	MLJ3 or older	2552	2784
	U.-L.? Sinemurian	Indeterminate	2812(bns)	

DRILLSTEM TESTS

DST No	INTERVAL	FLOW	CHOKE	WHP
	No DST			

MISCELLANEOUS

MISCELLANEOUS

SIDEWALL CORES

RUN	SHOT	DEPTH	RECOVERY	RUN	SHOT	DEPTH	RECOVERY
1	1	2739.0	Lost barrel				
	2	2737.5	2.5 cm				
	3	2733.0	3.4 cm				
	4	2712.5	3.0 cm				
	5	2708.5	3.0 cm				
	6	2704.0	3.0 cm				
	7	2644.5	3.0 cm				
	8	2642.0	3.2 cm				
	9	2639.0	3.3 cm				
	10	2632.5	Misfire				
	11	2630.0	Misfire				
	12	2629.5	Misfire				
	13	2624.0	Misfire				
	14	2623.5	Misfire				
	15	2621.0	Misfire				
	16	2611.0	Misfire				
	17	2610.0	Misfire				
	18	2609.0	Misfire				
	19	2608.0	Misfire				
	20	2607.0	Misfire				
	21	2606.0	Misfire				
	22	2605.0	Misfire				
	23	2604.0	Misfire				
	24	2603.0	Misfire				
	25	2602.0	Misfire				
	26	2601.0	Lost barrel				
	27	2600.0	3.0 cm				
	28	2599.0	2.5 cm				
	29	2598.0	Empty barrel				
	30	2597.0	Empty barrel				
	31	2596.0	Empty barrel				
	32	2595.0	Empty barrel				
	33	2594.0	2.5 cm				
	34	2593.0	3.0 cm				
	35	2592.0	2.5 cm				

RFT DATA

TEST	DEPTH (RKB)	HYDROSTATIC PRESS (bar)	FORMATION PRESS (bar)	COMMENT	FORMATION
1	2584.7			Tight	Statfjord fm
2	2585.3	280.6	195.5	Good Test	Statfjord fm
3	2588.0	282.3	195.6	Good Test	Statfjord fm
4	2591.0	282.4	195.7	Good Test	Statfjord fm
5	2596.5			Tight	Statfjord fm
6	2596.8	282.8	195.9	Good Test	Statfjord fm
7	2598.0	282.3	195.6	Good Test	Statfjord fm
8	2600.0	283.3	196.1	Good Test	Statfjord fm
9	2603.0			Tight	Statfjord fm
10	2603.3	283.3	196.2	Good Test	Statfjord fm
11	2605.3	283.5	196.3	Good Test	Statfjord fm
12	2607.0	283.5	196.3	Good Test	Statfjord fm
13	2610.0	283.7	196.5	Good Test	Statfjord fm
14	2611.7	283.7	196.7	Good Test	Statfjord fm
15	2616.0	284.2	196.9	Good Test	Statfjord fm
16	2623.0	284.7	198.0	Good Test	Statfjord fm
17	2624.0			Tight	Statfjord fm
18	2623.7	284.56	197.5	Good Test	Statfjord fm
19	2629.5	285.5	197.7	Good Test	Statfjord fm
20	2630.5	285.1	197.7	Good Test	Statfjord fm
21	2634.7	285.8	198.1	Good Test	Statfjord fm
22	2714.0	295.4	204.2	Good Test	Statfjord fm
23	2715.0	295.5	204.3	Good Test	Statfjord fm
24	2723.8			Tight	Statfjord fm
25	2723.5	295.8	205.0	Good Test	Statfjord fm
26	2752.0	299.8	207.5	Good Test	Statfjord fm
27	2757.0	300.7	207.9	Good Test	Statfjord fm
28	2761.0	301.2	208.3	Good Test	Statfjord fm
29	2769.0	302.4	209.0	Good Test	Statfjord fm
30	2773.5	303.0	209.4	Good Test	Statfjord fm
31	2781.0	304.25	210.1	Good Test	Statfjord fm
32	2791.0	306.0	211.0	Good Test	Statfjord fm
33	2793.0	305.7	211.2	Good Test	Statfjord fm

36	2591.0	3.0 cm					34	2800.0	307.1	211.8	Good Test	Statfjord fm
37	2590.0	Lost Barrel					35	2611.4	281.3	196.6	Good Test	Statfjord fm
38	2589.0	2.5 cm					36	2611.7	281.5	196.6	Repeated test	Statfjord fm
39	2588.0	2.7 cm										
40	2587.0	3.0 cm										
41	2586.0	2.7 cm										
42	2585.0	Lost Barrel										
43	2583.0	3.5 cm										
44	2581.0	3.7 cm										
45	2577.5	3.6 cm										
46	2542.0	3.3 cm										

LITHOLOGY SYMBOLS

- CONGLOMERATE
- BRECCIA
- SANDSTONE
- SILTSTONE
- CLAY CLAYSTONE SHALE
- CALCAREOUS CLAYSTONE
- MARL
- CHALK
- NO RETURNS
- LIMESTONE
- ARGILLACEOUS LIMESTONE
- DOLOMITIC LIMESTONE
- OOLITIC LIMESTONE
- DOLOMITE
- CALCAREOUS DOLOMITE
- ANHYDRITE GYPSUM
- COAL
- HALITE
- POLYHALITE
- VOLCANICS TUFF
- INTRUSIVE IGNEOUS
- EXTRUSIVE IGNEOUS
- METAMORHPIC
- BASEMENT
- CEMENT

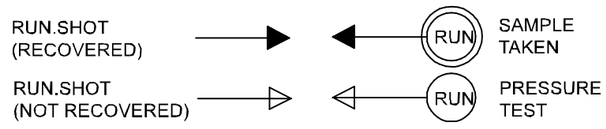
ACCESSORY SYMBOLS

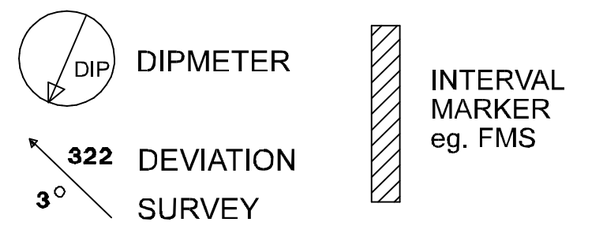
- CONGLOMERATIC
- SANDY
- SILTY
- ARGILLACEOUS
- SHALY
- MARLY
- CALCAREOUS
- DOLOMITIC
- LIMESTONE STRINGER
- ANHYDRITIC GYPSIFEROUS
- VOLCANICS TUFFACEOUS
- CALCITIC (Ca)
- CHERTY
- GLAUCONITIC
- FERRUGINOUS (Fe)
- PYRITIC
- CARBONACEOUS
- MICACEOUS (M)
- FELDSPATHIC (K)
- PHOSPHATIC (Ph)
- OOLITIC
- MACROFOSSILS UNDIFF
- MICROFOSSILS UNDIFF
- AMMONITES
- BELEMNITES
- CORALS
- ECHINOIDS
- GASTROPODS
- BIOTURBATED
- ROOTS
- PLANT REMAINS

OPERATIONAL SYMBOLS

SIDEWALL CORES

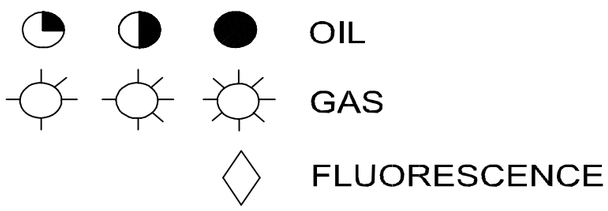
RFT/FMT





SHOWS

POOR MOD GOOD



CHRONO/LITHO STRATIGRAPHY						GAMMA RAY	DEPTH AND LITH	RESISTIVITY	SONIC	LITHOLOGY DESCRIPTION
SYSTEM	SERIES	STAGE	GROUP	FORMATION	MEMBER	0 GRAFM(Api) 150		0.20 RPCELM(Ohm.m) 200 0.20 RACELM(Ohm.m) 200 0.20 RPCEHM(Ohm.m) 200 0.20 RACEHM(Ohm.m) 200	140 DTP2(us/ft) 40 45 NPLFM(pu) -15 1.95 BDCFM(g/cm3) 2.95	

200

300

30 "
224m

140.8
0.1

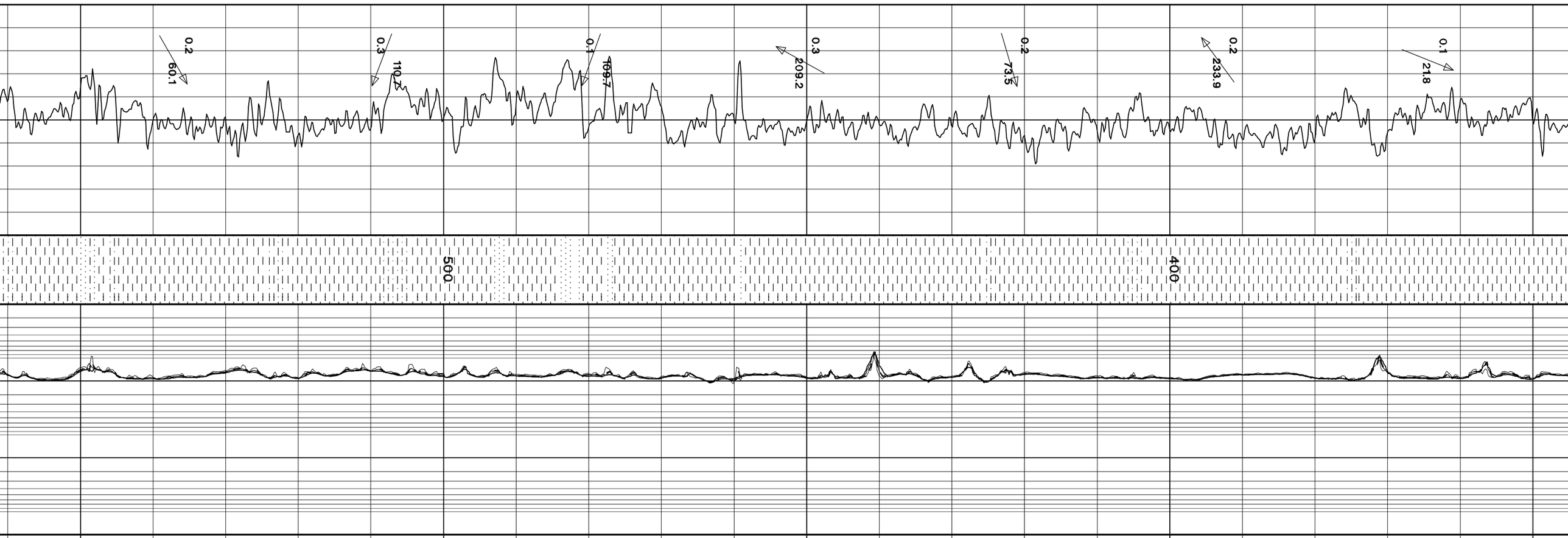
164.2
0.2

0.3
46.8

DRILLED 12 1/4" HOLE TO
1056.0m MDRKB (-1031.0m TVDSS)

RETURNS TO SEABED
LITHOLOGY INTERPRETED FROM MWD

NORDLAND

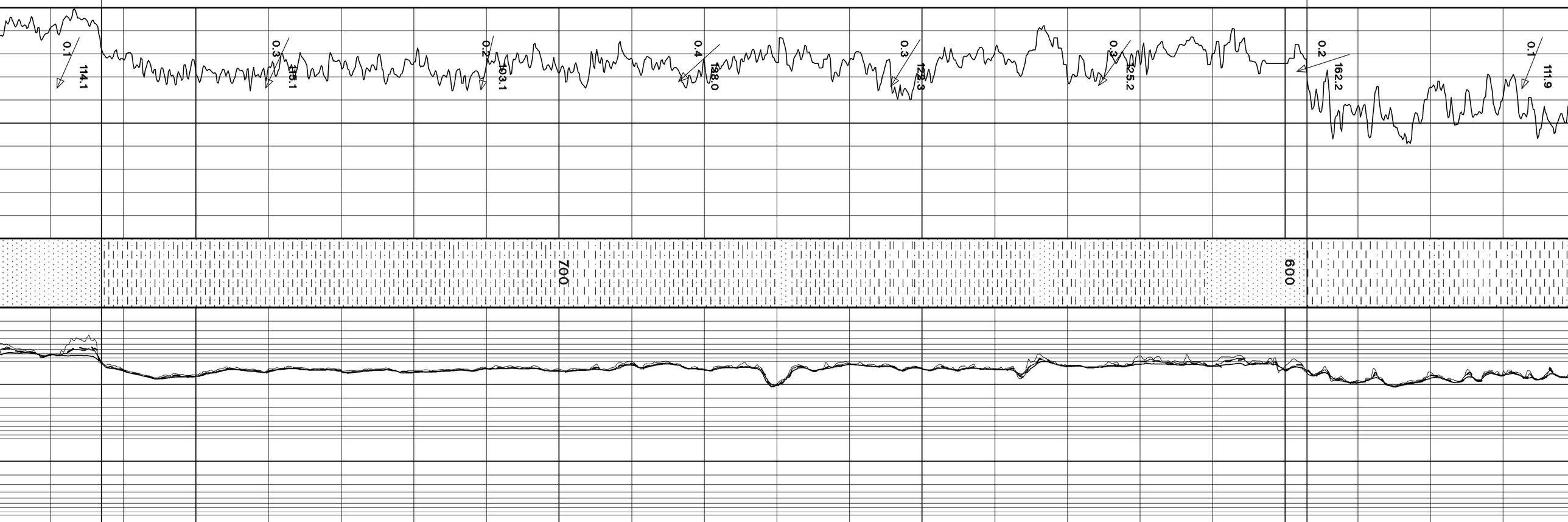


TERTIARY

NORDLAND

UTSIRA

VE SAND



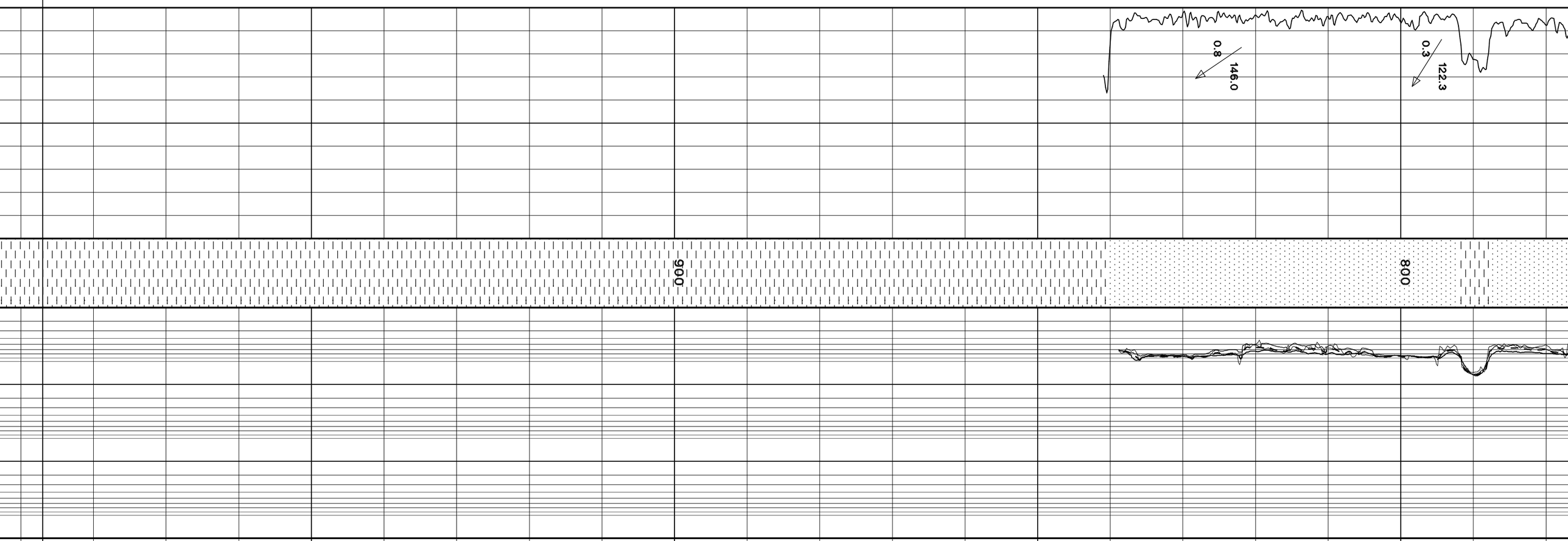
UTSIRA FORMATION
597.0m MDRKB (-572.0m TVDSS)

UTSIRA MASSIVE SANDS
763.0m MDRKB (-738.0m TVDSS)

TERTIARY

ND | NORDLAND | NORDLAND

UTSIRA MASSIVE SANDS | UTSIRA MASSIV



MWD Tool Failure at 840m

HORDALAND GROUP
987.0m MDRKB (-962.0m TVDSS)

TERTIARY

NORDALAND

HORDALAND

SKADE SAND

SANDS

1000

1100

1200

127.7
0.6

98.7
0.7

9⅝"
1050m

103.3
1.1

127.8
2.9

175.4
3.8

2.7
227.2

275.0
3.5

280.0
9.6

MWD re-started

DRILLED 8 1/2" HOLE FROM
1056.0m MDRKB (-1031.0m TVDSS)

CLAYSTONE: medium to dark grey, firm, subblocky, silty in part, subfissile, crumbly, non calcareous.

Trace SANDSTONE: predominently loose quartz, clear, colourless, very poor sample, very fine to fine, subangular, moderately sorted, also soft, blocky, crumbly, grading to Siltstone, light to medium grey, trace rock flour.

CLAYSTONE: olive grey to grey black, firm to moderately hard, blocky, moderately calcareous, generally very silty, locally grading to Siltstone, common carbonaceous specks, trace mica.

SAND: loose, clear to colourless, frequently milky, common orange, very fine to fine, well sorted, subangular and subspherical, occasional trace feldspar, as thin beds and washing out of sample in part.

CLAYSTONE: dark grey to grey black, locally medium dark grey, firm to moderately hard, blocky to subblocky, swelling, non to occasionally slightly calcareous, generally silty.

SKADE SANDS
1147.0m MDRKB (-1121.9m TVDSS)

SANDSTONE: loose, clear, colourless, generally clean, occasionally pale grey, fine to medium, local coarse grains, moderately sorted, subrounded to rounded, weak inferred siliceous cement, good inferred porosity, NO SHOWS.

CLAYSTONE: generally olive black, firm to moderately hard, blocky to subblocky, non calcareous, generally very silty, locally grading to Siltstone, common very fine floating quartz, local trace very fine disseminated pyrite and course granular pyrite, moderate to good inferred porosity, NO SHOWS.

SANDSTONE: loose, clear, colourless, pale grey, very fine to fine, becoming fine to medium in part, moderate to well sorted, subrounded, subspherical to subelongated, trace lithic fragments, trace glauconitic

HORDALAND

BASE SKADE

14.5
268.4

17.6
269.2

19.7
269.6

1300

270.9
23.6

272.2
28.4

273.9
32.1

EOCENE

276.8
35.5

1400

material, moderate to good inferred porosity, NO SHOWS.

WELL 25/8-14S SIDETRACKED DUE TO SUBSTANTIAL MUD LOSSES

KICK OFF POINT
1230.0m MDRKB (-1203.8m TVDSS)

CLAYSTONE: predominantly olive black, firm to moderately hard, blocky, moderately calcareous, slightly silty, trace very fine disseminated pyrite, rare granular course pyrite, trace mica.

LIMESTONE: light olive grey to yellow grey, locally very light grey, moderately hard, blocky to crumbly, mudstone to rare wackestone texture, microcrystalline, slightly to moderately argillaceous, rare carbonaceous streaks, no visible porosity, NO SHOWS.

CLAYSTONE: predominantly olive black, firm to moderately hard, blocky, slightly calcareous, silty, trace very fine disseminated pyrite.

Trace LIMESTONE: light olive grey to yellow grey, brown grey in part, moderately hard, blocky to crumbly, mudstone texture, microcrystalline, moderately argillaceous, rare carbonaceous streaks, no visible porosity, NO SHOWS.

CLAYSTONE: predominantly olive black, moderately hard, blocky, calcareous in part, silty, occasionally very silty, rare very fine carbonaceous specks, trace micropyrite.

EOCENE MARKER
1372.0m MDRKB (-1334.7m TVDSS)

LIMESTONE: yellow grey to moderate grey brown, firm, generally crumbly, mudstone, microcrystalline, chalky texture in part, very

TERTIARY

HORDALAND

277.2
38.4

275.9
41.1

274.1
44.3

1500

275.2
46.0

274.1
48.7

271.3
53.0

1600

56.4
269.2

270.4
59.6

argillaceous, locally dolomitic, no visible porosity, NO SHOWS.

CLAYSTONE: olive black to grey black, moderately hard, blocky, waxy texture, slightly silty, non calcareous.

CLAYSTONE: grey black to olive black, moderately hard, blocky, waxy texture, slightly silty in part, non calcareous, rare micropyrite.

Trace LIMESTONE: pale yellow grey, grey orange, firm to hard, blocky, angular, micro-cryptocrystalline, white calcite streaks, argillaceous laminations, wackestone, no visible porosity, NO SHOWS.

CLAYSTONE: olive black to dark green grey to green black, moderately hard, blocky,slightly waxy texture, slightly silty, non calcareous, rare micropyrite, locally glauconitic.

CLAYSTONE: grey black to olive black, moderately hard, blocky, slightly waxy texture, slight to moderately silty, non calcareous, rare micropyrite, locally micromicaceous.

TERTIARY

HORDALAND

271.3
63.6

270.5
63.6

1700

271.0
63.8

270.4
64.4

64.4
268.9

1800

270.7
64.4

64.5
269.5

Trace LIMESTONE: medium grey, yellow grey, orange brown, firm to hard, subblocky, crumbly, argillaceous streaks, microcrystalline, NO SHOWS.

CLAYSTONE: grey black, olive black, homogenous, firm, subblocky to subplaty, crumbly, occasionally brittle, good trace micromica, trace carbonaceous specks, non calcareous.

Trace LIMESTONE: medium grey, yellow grey, orange brown, firm to hard, subblocky, crumbly, argillaceous streaks, microcrystalline, NO SHOWS.

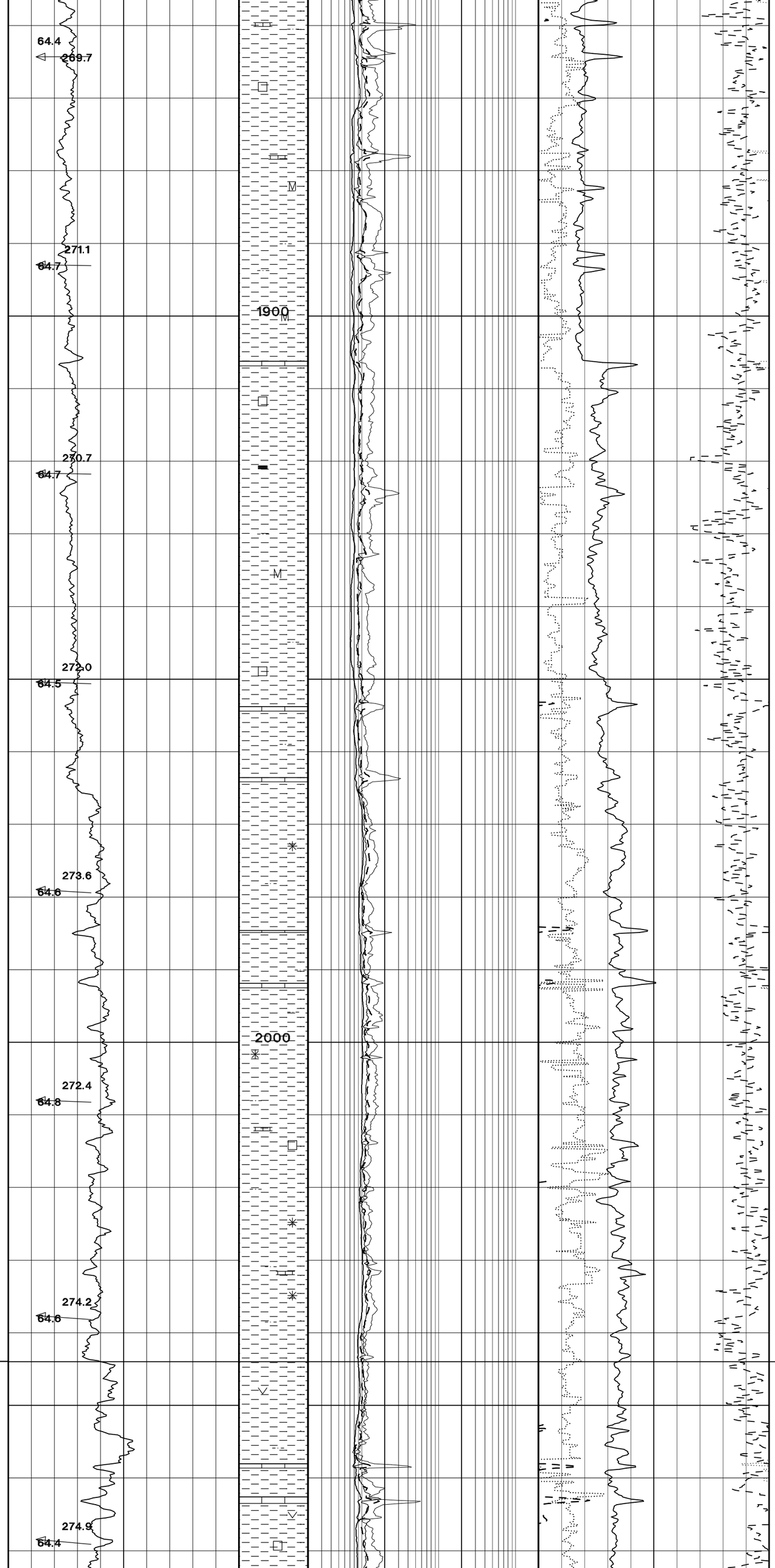
CLAYSTONE: grey black to olive black, very occasionally brown black, firm, homogenous, subblocky to crumbly, trace disseminated pyrite, non calcareous.

CLAYSTONE: predominently olive black, rarely green black, homogenous, firm to occasionally hard, subblocky, crumbly, occasional carbonaceous specks, non calcareous.

CLAYSTONE: olive black, grey black, occasionally green black, homogenous, firm, subblocky to subplaty, crumbly to brittle, micromicaceous, trace carboniferous specks, slightly silty in part, non calcareous.

Trace LIMESTONE: dark yellow orange, medium grey in part, firm to hard, blocky, crumbly, microcrystalline, mudstone, argillaceous, no visible porosity, NO SHOWS.

Trace LIMESTONE: dark yellow orange, medium grey in part, firm to hard, blocky, crumbly, microcrystalline, mudstone, argillaceous, no visible porosity, NO SHOWS.



Lower EOCENE

ROGALAND

HORDALAND

BALDER

CLAYSTONE: olive black to rare green black, firm to moderately hard, blocky to rarely subfissile, trace very fine disseminated pyrite, locally micromicaceous, non calcareous, slightly silty in part.

CLAYSTONE: olive black, also dark green grey, occasionally green black, homogenous, firm to moderately hard, blocky to subplaty, crumbly to brittle, slightly silty, micromicaceous in parts, trace carbonaceous specks, non calcareous.

CLAYSTONE: green black and olive black, moderately hard, generally blocky, micromicaceous in part, slight to moderately silty, trace carbonaceous specks, glauconitic specks, slightly calcareous in part.

LIMESTONE: dark yellow grey brown, firm to rarely hard, predominantly crumbly, locally subangular break, chalky, mudstone, microcrystalline, argillaceous, no visible porosity, NO SHOWS.

CLAYSTONE: predominatly dark green grey to green black, olive black in part, moderately hard, generally blocky, slightly silty, trace carbonaceous specks, abundant glauconitic specks, non calcareous.

CLAYSTONE: dark green grey to green black, olive black, moderately hard, generally blocky, slightly silty, trace carbonaceous specks, abundant glauconitic specks, non calcareous.

BALDER FORMATION
2044.0m MDRKB (-1695.8m TVDSS)

CLAYSTONE: predominantly olive black, locally dark green grey and dusky brown, moderately hard, generally blocky, slight to moderately silty, trace carbonaceous specks, locally abundant micropyrite, non calcareous.

TUFF: dark grey, mottled in part, firm, subblocky to locally crumbly, ashy, trace of feldspars, flattened siliceous shards, slightly to

TERTIARY

Lower EOCENE

ROGALAND

BALDER

SELE

274.6
64.7

276.1
64.5

277.9
64.7

278.5
64.6

279.2
64.5

282.8
64.8

286.6
64.6

2100

2200

ashy, trace of feldspars, flattened siliceous shards, slightly to moderately calcareous.

Dolomitic LIMESTONE: dark yellow grey brown to yellow grey, firm, crumbly, chalky, mudstone, microcrystalline, rarely sucrosic, argillaceous, locally dolomitic, no visible porosity, NO SHOWS.

Trace SANDSTONE: loose, clear, colourless, translucent in part, very fine to fine, well sorted, subrounded to angular, moderate inferred calcite cement, NO SHOWS.

CLAYSTONE: predominantly olive black to grey black, moderately hard, generally blocky, slight to moderately silty, trace carbonaceous specks, trace micropyrite, slightly calcareous in part.

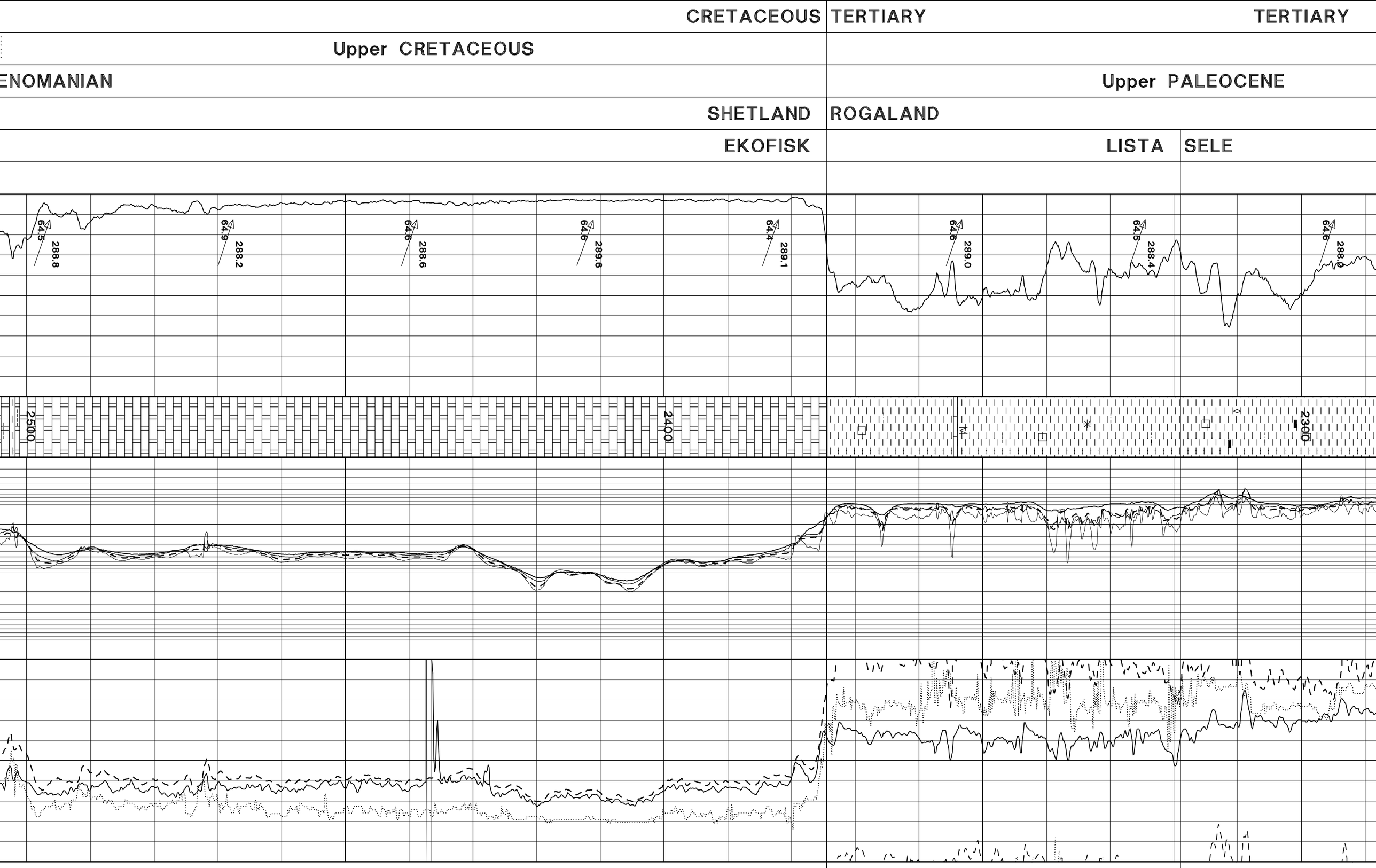
TUFF: dark grey to medium dark grey, mottled, firm, subblocky to locally crumbly, ashy, laminated, trace very fine feldspars, flattened siliceous shards, slight to moderately calcareous.

SELE FORMATION
2184.0m MDRKB (-1764.0m TVDSS)

CLAYSTONE: predominantly olive black, occasionally dark green grey, trace dark green blue, firm, subblocky to blocky, crumbly, trace micropyrite, non calcareous.

CLAYSTONE: olive black, rare to occasional medium dark grey, firm, blocky, crumbly, trace 0.5-1.0mm calcite bands, trace micropyrite, slightly silty in parts, non calcareous.

LIMESTONE: medium grey to medium light grey, translucent in part, moderately hard, cryptocrystalline to crystalline, mudstone texture, slightly argillaceous, trace carbonaceous laminations, no visible porosity, NO SHOWS.



CLAYSTONE: olive black to grey black, locally dark grey (silty), firm to hard, blocky, crumbly in part, trace micropyrite, trace carbonaceous streaks, moderately silty, non calcareous, local thin calcite veins.

LISTA FORMATION
2319.0m MDRKB (-1813.8m TVDSS)

CLAYSTONE: dark green grey, olive black, moderately hard, blocky to locally brittle, slightly silty, trace glauconitic specks, rare trace micropyrite, non calcareous.

CLAYSTONE: predominantly dusky yellow brown, locally dark green grey, moderately hard, blocky to locally brittle, earthy, non calcareous, slightly silty, rare trace micropyrite.

TOP SHETLAND GROUP
EKOFISK FORMATION
2375.0m MDRKB (-1838.0m TVDSS)

CHALK: white, clean, moderately hard to hard, brittle, subangular, crypto-microcrystalline, mudstone, no visible porosity, NO SHOWS.

CHALK: white to very light grey, clean, moderately hard to hard, brittle, subangular, homogeneous, crypto-microcrystalline, mudstone, no visible porosity, NO SHOWS.

CHALK: predominantly white, pink grey to dark pink grey in part, predominantly hard, blocky, angular, brittle, NO SHOWS.

Trace CLAYSTONE: brown grey to dark green grey, firm, blocky, crumbly, glauconitic specks, very calcareous.

JURASSIC | CRETACEOUS | U.ALBIAN ? CR | SHETLAND | EKOFISK

CLAYSTONE: predominantly moderate brown, also grey brown, pink grey to dark pink grey, firm to hard, blocky, crumbly, very calcareous.

CLAYSTONE: grey black, olive black, firm, subblocky, crumbly, no modifiers seen, non very slightly calcareous.

288.4
62.9

CHALK: dark red brown, dusky red, firm, blocky, crumbly, NO SHOWS.

JURASSIC | Lower JURASSIC | STATFJORD UPPER

STATFJORD UPPER FORMATION
2540.0m MDRKB (-1909.6m TVDSS)

CLST run 1.46

CLAYSTONE: dark grey, grey brown, becoming grey black, olive black, also light to moderate olive brown, firm, blocky crumbly, glauconitic specks, non to slightly calcareous.

288.9
59.4

CLAYSTONE: dark grey, grey black, firm to blocky, crumbly, silty in parts, rare carbonaceous specks, slightly calcareous.

CLST run 1.45
CLST run 1.44
CLST run 1.43

LIMESTONE: dark red brown, dusky red, firm, blocky, angular, crumbly, microcrystalline, mudstone, NO SHOWS.

288.4
56.3

JURASSIC | Upper SINEMURIAN | STATFJORD SAND

UPPER STATFJORD SAND FM.
2583.0m MDRKB (-1931.9m TVDSS)

SST run 1.41
SST run 1.40
SST run 1.39
SST run 1.38
SST run 1.36
SST run 1.35
SST run 1.34
SST run 1.33
SST run 1.28
SST run 1.27

LIMESTONE: white to very light grey, yellow grey in part, firm to locally hard, blocky, crumbly, clean, mudstone to wackestone, floating fine to medium quartz.

RCI SAMPLING 2596.5m
6 450cc samples
2 4000cc samples (no pressure)

2600

SANDSTONE: loose, clear, colourless, transparent to frosted appearance, predominantly coarse grained, grading very coarse in parts, occasionally medium, trace very fine to fine, subangular to rounded, subspherical to spherical, moderate to well sorted, good inferred porosity, NO SHOWS above OBM.

288.2
52.8

SILTSTONE: olive grey, firm, crumbly, non calcareous, rare trace micropyrite.

UPPER STATFJORD SAND

Argillaceous SANDSTONE: olive grey to olive dark grey, firm, crumbly, locally friable, very fine to fine, occasionally medium, frequently silty, locally very argillaceous matrix, rare trace micropyrite, trace carbonaceous specks, non calcareous

S6

S6 (BASE RESERVOIR)
2636.5m MDRKB (-1964.1m TVDSS)

288.4
48.2

SLTST run 1.9
CLST run 1.8
CLST run 1.7

Silty CLAYSTONE: olive black to olive grey, subblocky to subfissile, firm, locally crumbly, abundant very fine sand in part, carbonaceous specks, trace micropyrite, locally laminated, grading to Siltstone in part, non calcareous.

Silty CLAYSTONE: olive black to olive grey, subblocky to subfissile, locally crumbly, very finely arenaceous, carbonaceous specks, rare micropyrite, non to slightly calcareous, trace calcite bands, common sand lenses and laminations, grades to Siltstone.

289.0
42.9

289.5
37.8

2700

Silty CLAYSTONE: olive black to olive grey, subblocky to subfissile, locally crumbly, very finely arenaceous, carbonaceous specks, rare micropyrite, non to slightly calcareous, trace calcite bands, common sand lenses and laminations, grades to Siltstone.

SANDSTONE: olive grey, very fine to silt, well sorted, slight calcite cement in part, carbonaceous laminae, grades to Siltstone.

CLST run 1.6
CLST run 1.5
CLST run 1.4

SANDSTONE: loose, clear, colourless, locally translucent light grey, very fine to medium, well sorted, well rounded to rounded, good sphericity, poor inferred porosity, local calcite cement, good inferred porosity NO SHOWS over OBM.

SYSTEM	SERIES	STAGE	GROUP	FORMATION	MEMBER	GAMMA RAY	DEPTH AND LITH	RESISTIVITY	SONIC	LITHOLOGY DESCRIPTION
		Upp. - Lwr SINEMURIAN				0 GRAFM(Api) 150		0.20 RACEHM(Ohm.m) 200 0.20 RPCEHM(Ohm.m) 200 0.20 RACELM(Ohm.m) 200 0.20 RPCELM(Ohm.m) 200	1.95 BDCFM(g/cm3) 2.95 45 NPLFM(pu) -15 140 DTP2(us/ft) 40	

289.7
33.3

CLST run 1.3

CLST run 1.2

205

SANDSTONE: loose, clear and colourless, locally translucent light grey, fine to medium, well sorted, well rounded to rounded, good sphericity, good inferred porosity, local calcite cement, occurs as rock flour in part, good inferred porosity, NO SHOWS over OBM.

288.9
29.4

208
208
208

SANDSTONE: clear and colourless, fine to medium, well sorted, well rounded to rounded, good sphericity, good inferred porosity, loose in part, local calcite cement, predominantly occurs as rock flour, good inferred porosity, NO SHOWS above OBM.

209
209

SANDSTONE: predominantly medium grained and well sorted, weak inferred calcite cement, loose in part.

289.0
24.0

210

SANDSTONE: loose, clear, colourless, transparent, medium to coarse, occasionally fine to very fine, angular to subrounded, subelongate to subspherical poor to moderately sorted, calcareous cement, occurs commonly as rock flour, NO SHOWS above OBM.

211
211

2800

212

CLAYSTONE: dark grey to grey, grey black, green black in part, occasionally dark grey brown, rarely brown grey, firm, subblocky to blocky, crumbly, very silty, trace glauconite, non calcareous.

288.0
19.4

SANDSTONE: loose, clear, colourless, transparent, predominantly medium, occasionally coarse, rarely very fine to fine, dominantly angular to subrounded, poor to moderately sorted, subelongate to subspherical, calcareous cement, moderate inferred porosity, NO SHOWS above OBM.

TD DRILLER
2825.0m MDRKB (-2120.0m TVDSS)