



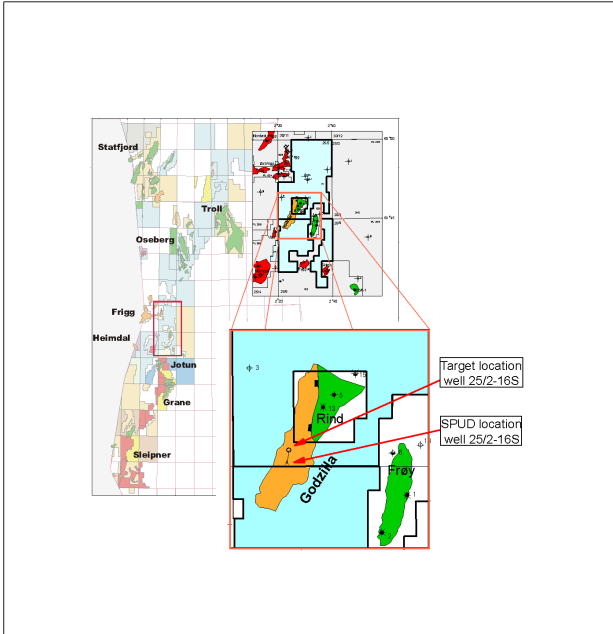
COMPOSITE LOG

GODZILLA

Scale: 1 / 500

Well: 25/2-16 S / -16 S T2

Location Map



KB Elevation	24m	Country	Norway
Water Depth	115 m MSL(139 m RKB)	Licence	PL 244
Depth Reference	RKB	Owners	Norsk Hydro ASA 30 %, Enterprise Oil Norge AS 25 %, Pelican AS 45 %
Total Depth (Driller)	4013 m MD 3792 m TVD	Field Platform	Godzilla Transocean Arctic
Total Depth (Logger)	N/A N/A	Drilling Contractor	Transocean Offshore Europe
Formation at Total Depth	Dunlin Group	Mudlogging Company	Geoservices
Date Spudded	03.08.2001	Logging Company	Schlumberger W/S
Date Reached TD	07.09.2001	MWD Company	Schlumberger Anadrill
Date Completed	14.09.2001	Geologists	K.Kalgraff, T.W.Snåre, C.Dons, B.Schønningsen, E.Skottlien
Well Status	Plugged and abandoned	Well Classification	Exploration
Well Coordinates	Final position (ED 50) ED50 UTM zone 31 (SM3deg East)	Prepared by	C.Dons, B.Schønningsen, E.Skottlien
	59 45' 07.70" N 6 624 110.1 mN	Controlled by	Tone Rognlien
	02 24' 33.21"E 466 800,3 m E	Date	January 2002

Output log file created : 2002-02-15 14:28:31
 Winlog well ID : 25_2_16 S
 Winlog template version : 20010309 - AJC

Casing Records			LOT / FIT				Comments
Diameter	Shoe depth m MD RKB	Shoe depth m TVD RKB	Type	Result SG	Depth m MD RKB	Depth m TVD RKB	
30" Casing shoe	223	223	LOT	1.54	1151.0	1151.0	Well 25/2-16 S drilled to 3088 m MD/ 2938.4 m TVD where the BHA (Bit+PowerDrive+MWD+drillpipe) got stuck. Attempted to Fish the BHA, experienced 2 drillpipe twist-offs at 677m and 2098m. Fishing not successful. Cement plug was set 2050-1750m and Well 25/2-16 S T2 was sidetracked 23.08.01 with KOP= 1915 mMD/1881.8 m TVD. Sampling (Cuttings) down to 3070m is performed in well 25/2-16S. From 3075m sampling continued in well 25/2-16 S T2.
13 3/8" Casing shoe	1151	1151	LOT	1.84	3179.0	3012.3	
9 5/8" Casing shoe	3179	3012,4					

Logs			Cores					Pressure points (MDT)							
Run no.	Log type	Logged interval	Core no.	Cored interval m MD RKB	Recovered interval m MD RKB	Rec. mMD	Rec. %	Test no.	Depth m MD RKB	Depth m TVD RKB	Fmn. Press. SG	Test no.	Depth m MD RKB	Depth m TVD RKB	Fmn. Press. SG
LWD 1	DIR	139-223m	No cores					1	3826.0	3610.1	374.07	9	3867.0	3649.8	376.06
2-4	DIR/GR/RES/APWD	223-3036						2	3828.0	3612.0	374.26	10	3882.5	3664.9	377.59
5-7	DIR/GR/RES/DENS/NEU	2912-3185						3	3830.0	3614.0	374.49	11	3894.0	3676.1	378.22
8-9	DIR/GR/RES/DENS/NEU/SONIC	3185-4013						4	3832.0	3615.9	374.71	12	3895.0	3677.0	378.27
WL								5	3843.0	3626.6	375.84	13	3896.0	3678.0	378.26
1A	GR/MDT	2796.5-3969						6	3857.0	3640.1	374.96	14	3898.0	3680.0	378.60
1A	GR/VSP	2365-4000						7	3859.0	3642.1	375.02	15	3939.0	3719.9	388.88
								8	3861.0	3644.0	375.43				

Lithology Legend

	CONGLOMERATE		LIMESTONE		ANHYDRITE		SANDY, VERY		CARBONACEOUS MAT.
	SAND/SANDSTONE		DOLOMITE		SALT		SANDY, SLIGHTLY		GLAUCONITE
	SILT/SILTSTONE		DOL. LIMESTONE		GYPSUM		SILTY, VERY		MICA
	CLAY/CLAYSTONE		CALC. DOLOMITE		TUFF		SILTY		PYRITE
	SHALE		CHALK		INTR. IGNEOUS		SILTY, SLIGHTLY		TUFFACEOUS
	MARL		CEMENT: QUARTZ		ARGILLACEOUS		CALCAREOUS		MACROFOSSILS
	CEMENT: CARBONATE		MACROFOSSILS FRAG		CEMENT: KAOLINITE		MICROFOSSILS		

Symbol legend

	Casing shoe		Open hole		Oil stain
	Liner hanger		Open hole (rerun)		Fluorescence
	Liner shoe		Through casing		Visible cut
	Deviation survey - MWD		Through casing (rerun)		Fluorescence cut
	Deviation survey - Other		Gas shows		
	Core interval		Perforation interval		
	Sidewall core		RFT / MDT		
	(No recovery)				

STRATIGRAPHY		GAMMA RAY			Depths m MD RKB	RESISTIVITY			NEUTRON/DENSITY			HYDROCARBON SHOWS	LITHOLOGICAL DESCRIPTION	SONIC								
SYSTEM	SERIES	STAGE	GROUP	FORMATION		DIRECTIONAL SURVEYS	CALI in	ROP m/hr	BS in	GR api	RS ohmm		RD ohmm	RMD ohmm	RHOB g/cc	NPHI frac	DT us/ft	GAS %				
QUATERNARY	Pleistocene	Nordland	Nordland		Inc:0.3° Az:162.6° 139.5 m																	
					Inc:0.2° Az:157.0° 148.6 m																	
					Inc:0.3° Az:220.3° 159.0 m																	
					Inc:0.4° Az:128.3° 168.8 m																	
					Inc:0.2° Az:73.7° 178.0 m																	
					Inc:0.4° Az:70.7° 188.5 m																	
					Inc:0.6° Az:57.5° 198.1 m																	
					Inc:0.8° Az:36.9° 208.3 m																	
					Inc:0.5° Az:33.3° 235.7 m																	
					Inc:0.7° Az:33.1° 253.2 m																	
TERTIARY	Miocene/Pleistocene	Nordland	Utsira		Inc:0.5° Az:44.8° 268.2 m																	
					Inc:0.5° Az:61.4° 282.6 m																	
					Inc:0.4° Az:47.9° 311.0 m																	
					Inc:0.4° Az:31.8° 339.7 m																	
					Inc:0.4° Az:37.5° 370.6 m																	
													Seabed at 138 m MD / 138 m TVD RKB									
													Interval 139m to 1160 m Drilled with returns to Seabed. Lithology interpreted from MWD logs and Drilling Parameters.									
													Hi-Vis Bentonite									
													Utsira Formation at 258 m MD / 258 m TVD RKB									
													Hi-Vis Bentonite									

Miocene/Pleistocene

Miocene/Pleistocene

Miocene/Pleistocene

Nordland

Nordland

Nordland

Utsira

Utsira

Utsira

Inc: 0.9°
Az: 259.5°
636.5 m

Inc: 1.0°
Az: 249.8°
636.4 m

Inc: 0.5°
Az: 242.9°
606.5 m

Inc: 0.5°
Az: 246.4°
577.1 m

Inc: 0.5°
Az: 245.5°
547.7 m

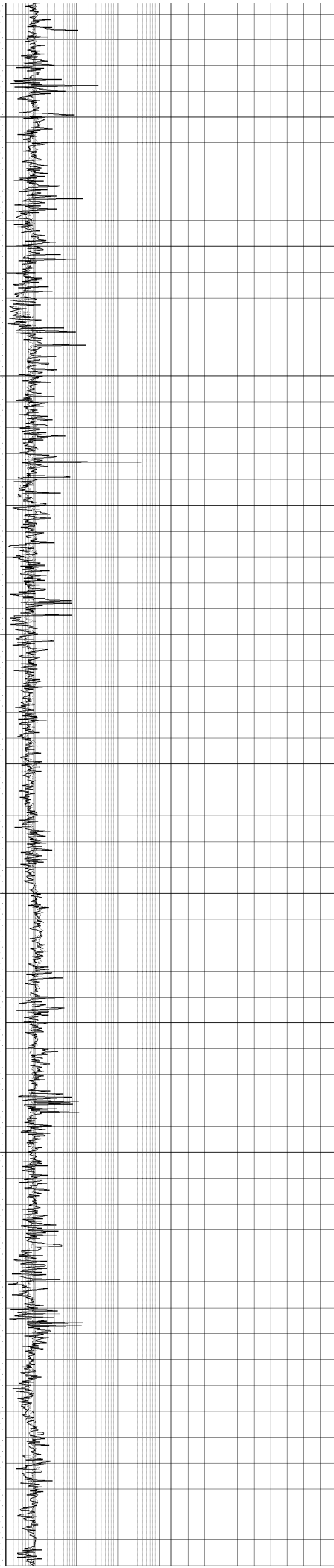
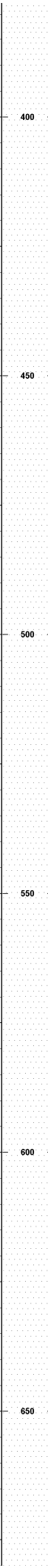
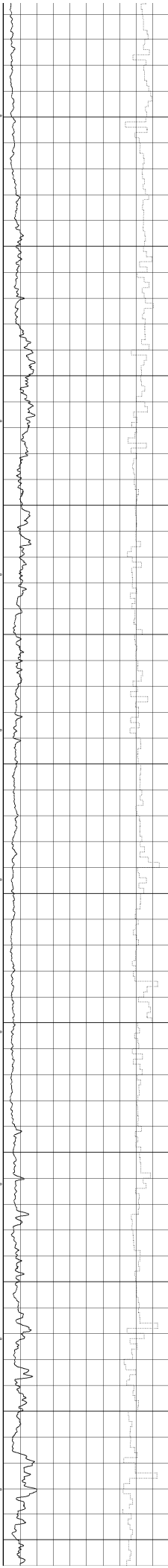
Inc: 0.2°
Az: 259.4°
518.8 m

Inc: 0.2°
Az: 308.8°
488.8 m

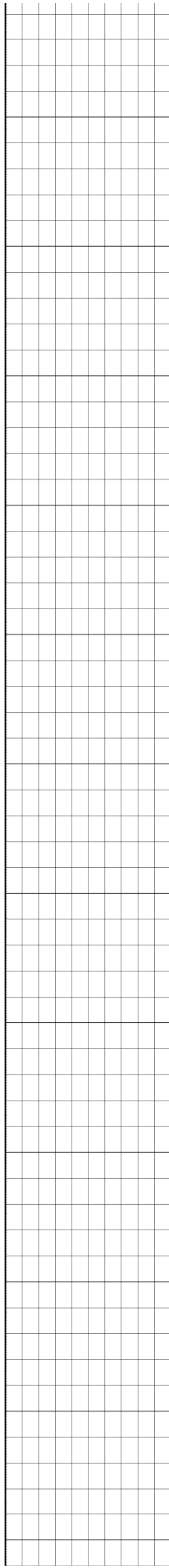
Inc: 0.4°
Az: 328.4°
459.1 m

Inc: 0.1°
Az: 14.4°
429.1 m

Inc: 0.1°
Az: 344.1°
400.1 m



Hi-Vis Bentonite



Miocene/Pleistocene

Miocene/Pleistocene

Miocene/Pleistocene

Nordland

Nordland

Nordland

Utsira

Utsira

Utsira

Inc: 1.0°
Az: 281.3°
659.9 m

Inc: 0.7°
Az: 274.5°
930.0 m

Inc: 0.6°
Az: 279.3°
900.8 m

Inc: 0.4°
Az: 275.8°
871.3 m

Inc: 0.5°
Az: 274.8°
842.5 m

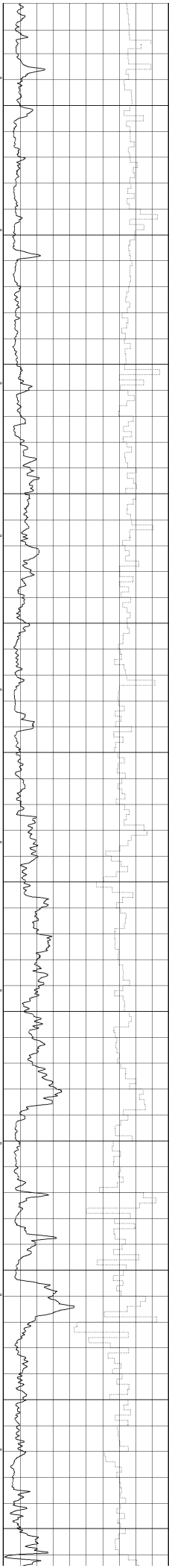
Inc: 0.8°
Az: 290.7°
813.1 m

Inc: 1.3°
Az: 302.7°
783.5 m

Inc: 1.0°
Az: 286.5°
754.0 m

Inc: 1.4°
Az: 276.4°
724.4 m

Inc: 1.0°
Az: 275.9°
695.0 m



950

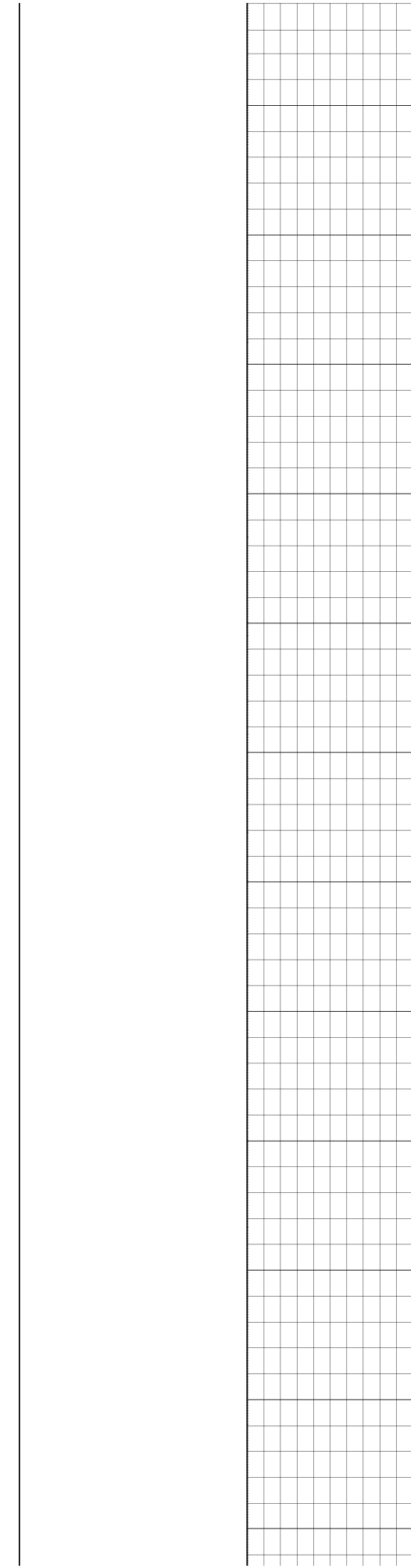
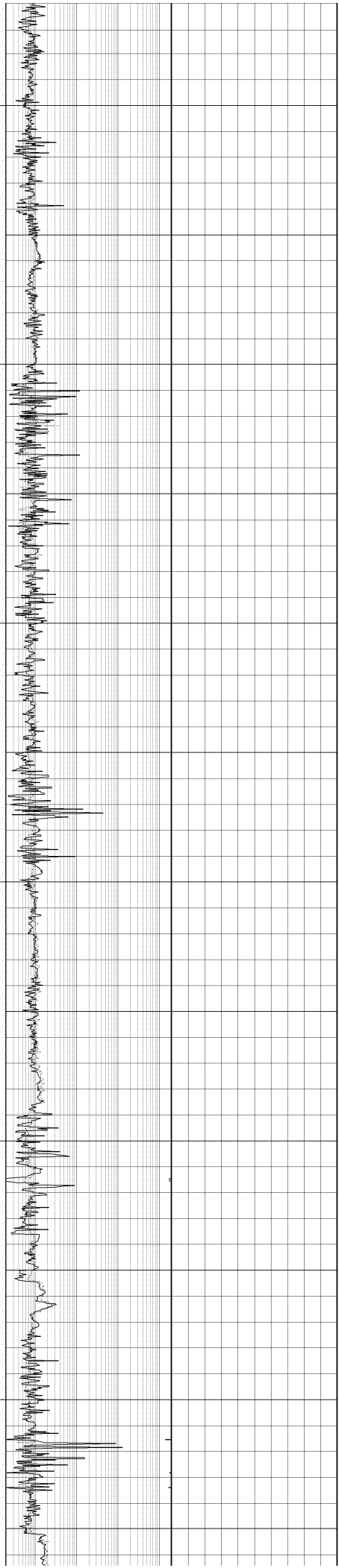
900

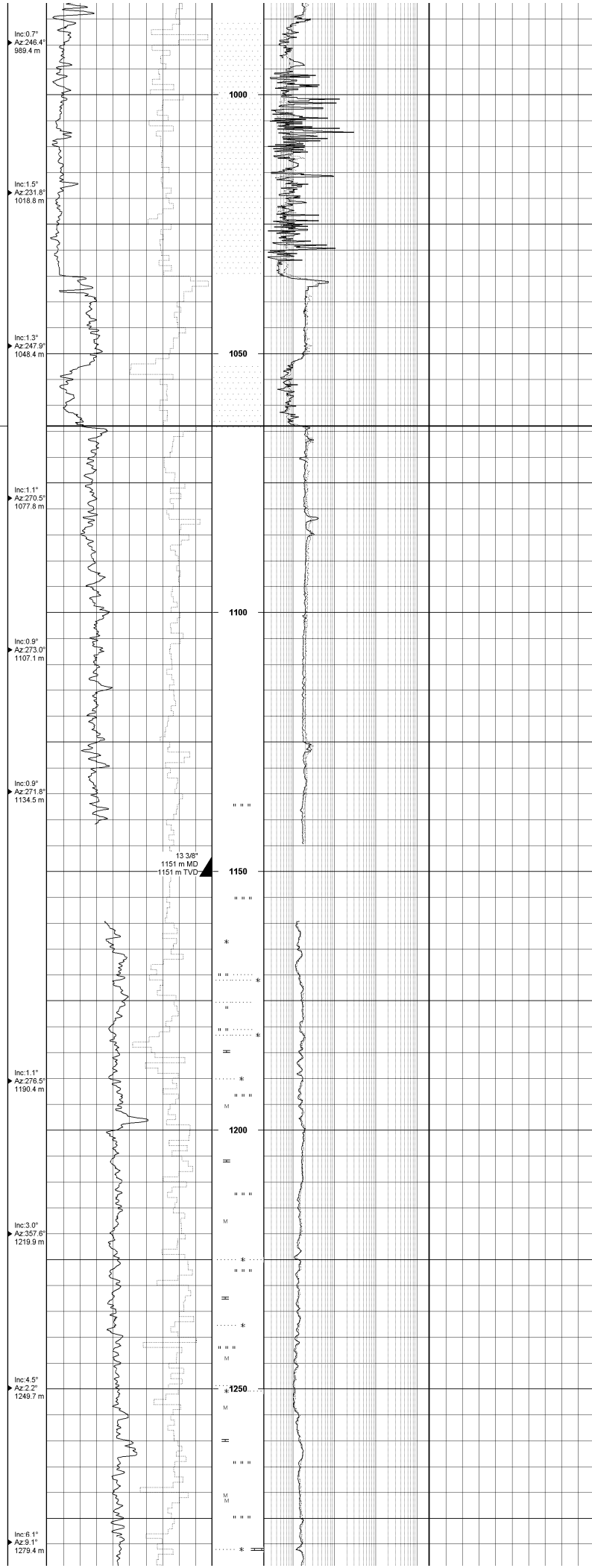
850

800

750

700





Hi-Vis Bentonite

Hordaland Group at 1064 m MD / 1064 m TVD RKB

Interval 139m to 1160 m. Drilled with returns to Seabed. Lithology interpreted from MWD logs and Drilling Parameters.

LOT at 1151.0 m MD / 1151.0 m TVD, 1.54 SG

1150.0 - 1300.0 m
Claystone with Sandstone laminae
 Clst: olv gry, sft, occ firm, blk, sly, loc vf sdy.
 Sst: lse Qtz g, vf, wl srt, Tr Glauc.

Start 15 m Sampling from 13 3/8" shoe 1151m. Start 10 m sampling interval from 2250m

Mudweight 1.25 sg Versavert OBM from 13 3/8" shoe to 2915m (Sidetrack KOP 1915 m MD). MW increased to 1.31 sg from 1960m in sidetrack hole

Eocene

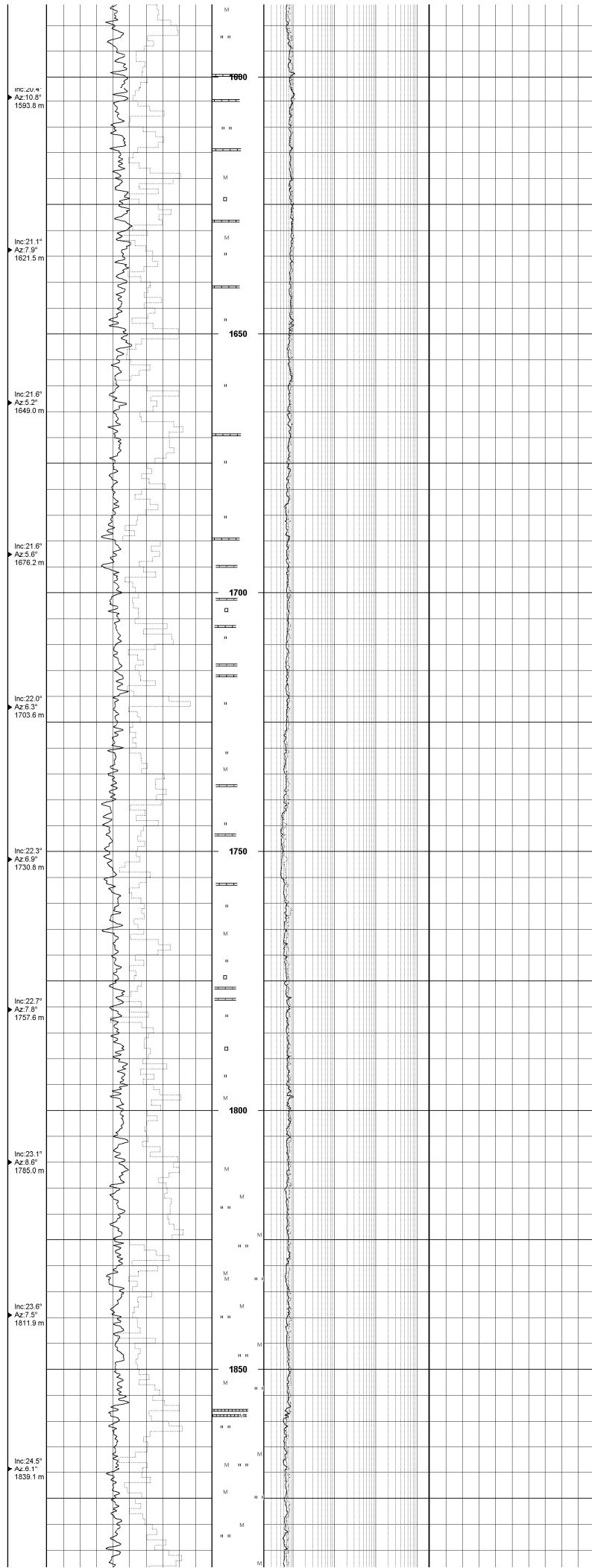
Eocene

Eocene

Hordaland

Hordaland

Hordaland

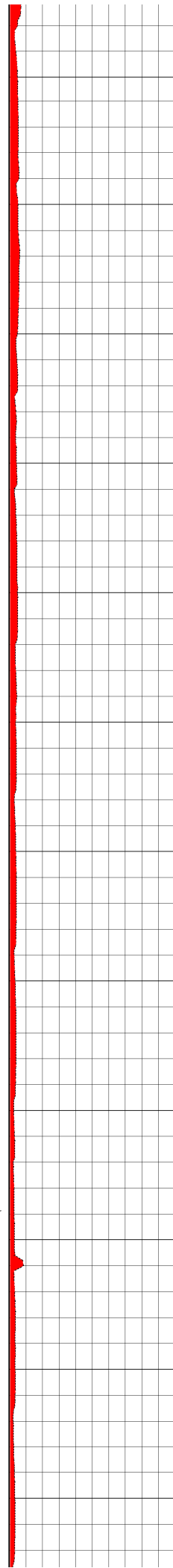


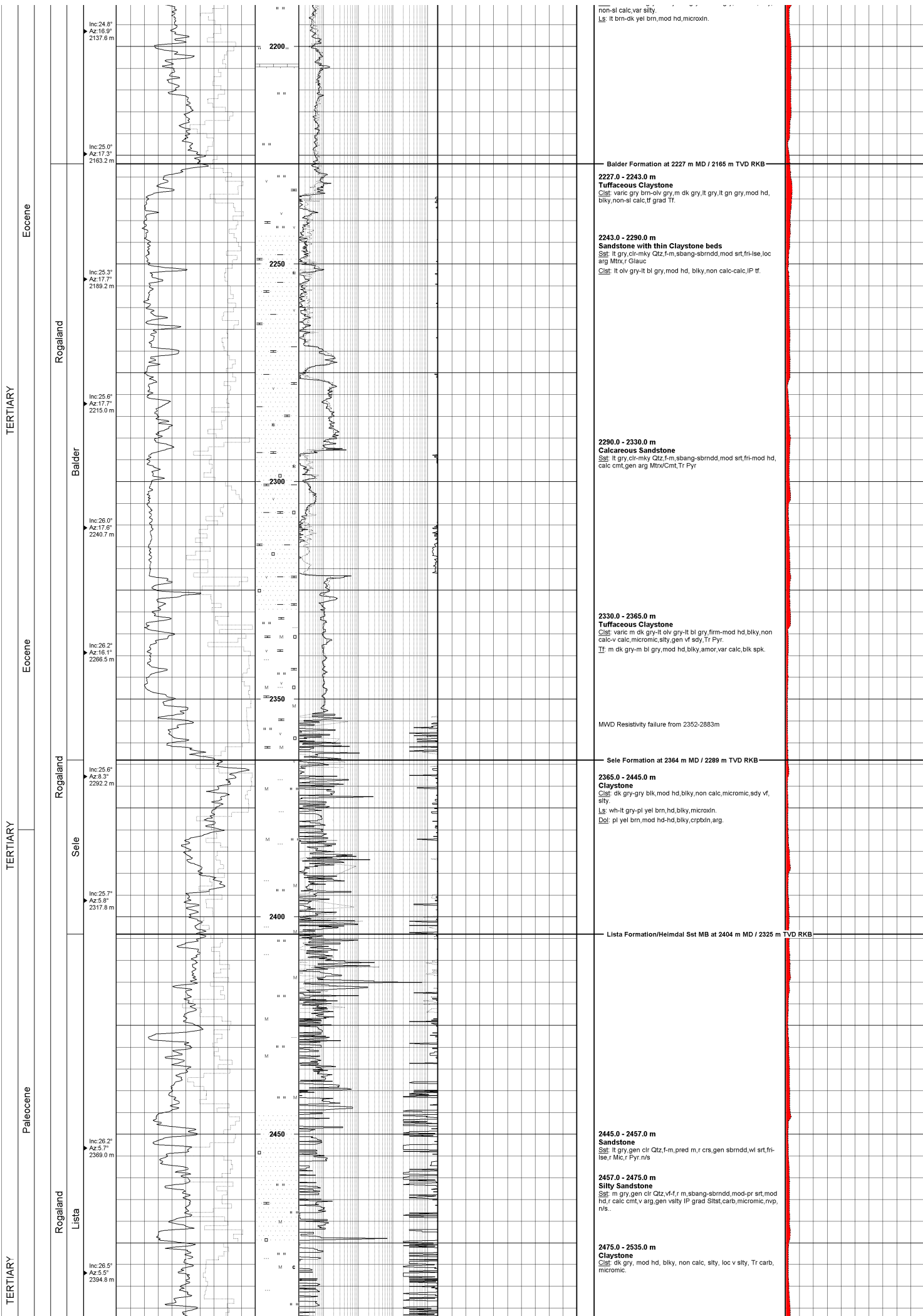
1690.0 - 1690.0 m
Claystone with Dolomitic Limestone stringers
 Clst: gen olv gry, IP grad dk grn gry, firm-mod hd, blkly, non calc, loc sl calc, micromic, gen stly, tr sdy vf, Tr microphy
 Ls: pl yel brn-dk yel brn, hd-v hd, gen microxin, r sucr, IP crasin, occ arg lam, gen var dol, loc vf sdy
 Dol: brn gry, blkly, GL, vf, strong, mod sl, Tr lase, gen arg, v stly grad Stlst, ns

1690.0 - 1800.0 m
Claystone with Dolomite and Limestone stringers
 Clst: m gry-olv gry, mod hd, blkly-sbfis, non calc, r sl calc, micromic, stly, Tr microphy
 Ls: pl yel brn-dk yel brn, hd-v hd, gen microxin, r sucr, IP crasin, occ arg lam, gen var dol, loc vf sdy
 Dol: pl yel brn-gry brn, gen hd-v hd, crpxln, blkly.

Mw= 1.25 sg Versavert OBM down to KOP for 25/2-16 S T2 @ 1915m

1815.0 - 2010.0 m
Claystone with Dolomite and Limestone stringers
 Clst: med dk gry-olv gry, mod hd, blkly, non calc, micromic, tr sit
 Ls: pl yel brn, mod hd, blkly, microxin
 Dol: pl yel brn-dk yel brn, mod hd, dkly crpxln





non-sl calc, var silty.
Ls: lt brn-dk, yet brn, mod hd, microxin.

Balder Formation at 2227 m MD / 2165 m TVD RKB

2227.0 - 2243.0 m
Tuffaceous Claystone
Cst: varic gry brn-olv gry, m dk gry, lt gry, lt gn gry, mod hd, blk, non-sl calc, lf grad Tf.

2243.0 - 2290.0 m
Sandstone with thin Claystone beds
Sst: lt gry, clr-mky Qtz, f-m, sbang-sbrndd, mod srt, fri-lse, loc arg Mtr, r Glauc
Cst: lt olv gry-lt bl gry, mod hd, blk, non calc-calc, IP lf.

2290.0 - 2330.0 m
Calcareous Sandstone
Sst: lt gry, clr-mky Qtz, f-m, sbang-sbrndd, mod srt, fri-mod hd, calc cmt, gen arg Mtr/Cmt, Tr Pyr

2330.0 - 2365.0 m
Tuffaceous Claystone
Cst: varic m dk gry-lt olv gry-lt bl gry, firm-mod hd, blk, non calc, v calc, micromic, stly gen vf sdy, Tr Pyr.
Tf: m dk gry-m bl gry, mod hd, blk, amor, var calc, blk spk.

MWD Resistivity failure from 2352-2883m

Sele Formation at 2364 m MD / 2289 m TVD RKB

2365.0 - 2445.0 m
Claystone
Cst: dk gry-gry blk, mod hd, blk, non calc, micromic, sdy vf, silty.
Ls: wh-lt gry-pl yet brn, hd, blk, microxin.
Dol: pl yet brn, mod hd-hd, blk, crptkn, arg.

Lista Formation/Heimdal Sst MB at 2404 m MD / 2325 m TVD RKB

2445.0 - 2457.0 m
Sandstone
Sst: lt gry, gen clr Qtz, f-m, pred m, r crs, gen sbrndd, wl srt, fri-lse, r Mic, r Pyr, n/s

2457.0 - 2475.0 m
Silty Sandstone
Sst: m gry, gen clr Qtz, vf, f, r m, sbang-sbrndd, mod-pr srt, mod hd, r calc cmt, v arg, gen vsily IP grad Sstst, carb, micromic, rvo, n/s.

2475.0 - 2535.0 m
Claystone
Cst: dk gry, mod hd, blk, non calc, stly, loc v stly, Tr carb, micromic.

TERTIARY

TERTIARY

TERTIARY

Paleocene

Paleocene

Paleocene

Rogaland

Rogaland

Rogaland

Lista

Lista

Lista

Inc:28.3°
Az:3.8°
2649.6 m

Inc:28.4°
Az:3.7°
2624.3 m

Inc:28.1°
Az:4.7°
2598.4 m

Inc:28.3°
Az:4.9°
2574.5 m

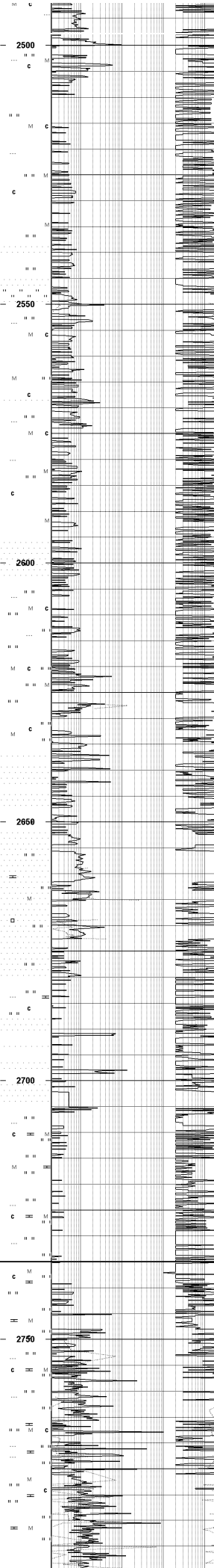
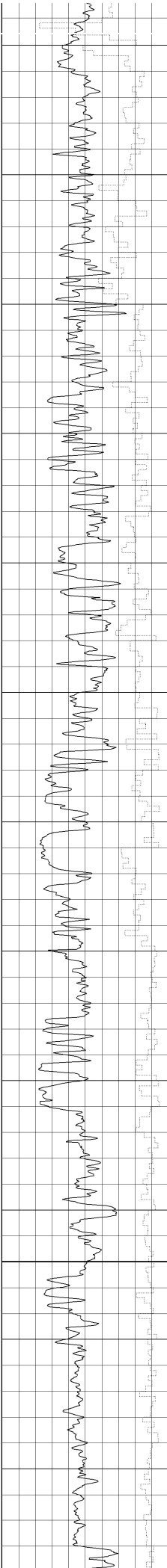
Inc:27.9°
Az:5.3°
2523.3 m

Inc:27.6°
Az:5.5°
2498.5 m

Inc:27.3°
Az:6.3°
2472.2 m

Inc:26.9°
Az:6.3°
2447.3 m

Inc:26.7°
Az:5.5°
2420.9 m



2535.0 - 2660.0 m
Interbedded Sandstone, Siltstone and Claystone
 Sst: med gry, gen cir Qtz, gen vf-f, tr med-crs, sbang-sbrnd, pr srt, mod hd, r calc cmt, gen sil cmt, gen v arg mtb, loc v silty grad siltst
 Siltst: m dk gry, mod hd, blk, non calc, cily grad cist, loc v sdy, grad sst, micromic, carb
 Cist: dk gry - otvblk, mod hd, blk, non calc, tr micromic

2660.0 - 2680.0 m
Sandstone
 Sst: Lt gry - med dk gry, vf - f, frm - mod hd, sbrnd - sbang, mod srt

2680.0 - 2720.0 m
Interbedded Claystone and Sandstone
 Cist: dk gry - otvblk, mod hd, blk, non calc, tr micromic
 Sst: lt - med dk gry, vf - f, mod srt, occ med - crs pr srt, sbrnd - sbang, occ v arg, non calc

2720.0 - 2750.0 m
Calcareous Sandstone, Marl and Claystone
 Sst: m dk gry - med dk gry, silty - vf, occ silty grad silty sst, occ cily, mod hd, calc cmt
 Mrl: offwh - v pl org, arg calc grad marl, frm - mod hd
 Cist: dk med gry - dk gry, occ olv blk, frm - mod hd, occ hd, occ calc, loc silty

Vale Formation at 2735 m MD / 2619 m TVD RKB

2750.0 - 2910.0 m
Calcareous Claystone, Sandstone, Dolomite stringers
 Cist: m dk gry, mod hd-hd, blk, calc, occ non calc, loc silty
 Sst: m dk gry, gen cir Qtz, vf-f, sbang-sbrnd, mod srt, mod hd, calc cmt, occ v arg grad sdy cist
 Sst: lt gry, cir-trnsl Qtz, vf-crs, sbrnd-d-ndd, pr-mod srt, lse
 Siltst: dk gry, mod hd, blk, calc, micromic, v arg, v pyr, sdy vf grad Sst
 Ls: wh-lt gry, hd, crs, in, sdy m-crs
 Dol: pl yel brn, vhd, crpxin, arg

TERTIARY

CRETACEOUS

Paleocene

Rogaland

Late Maastrichtian

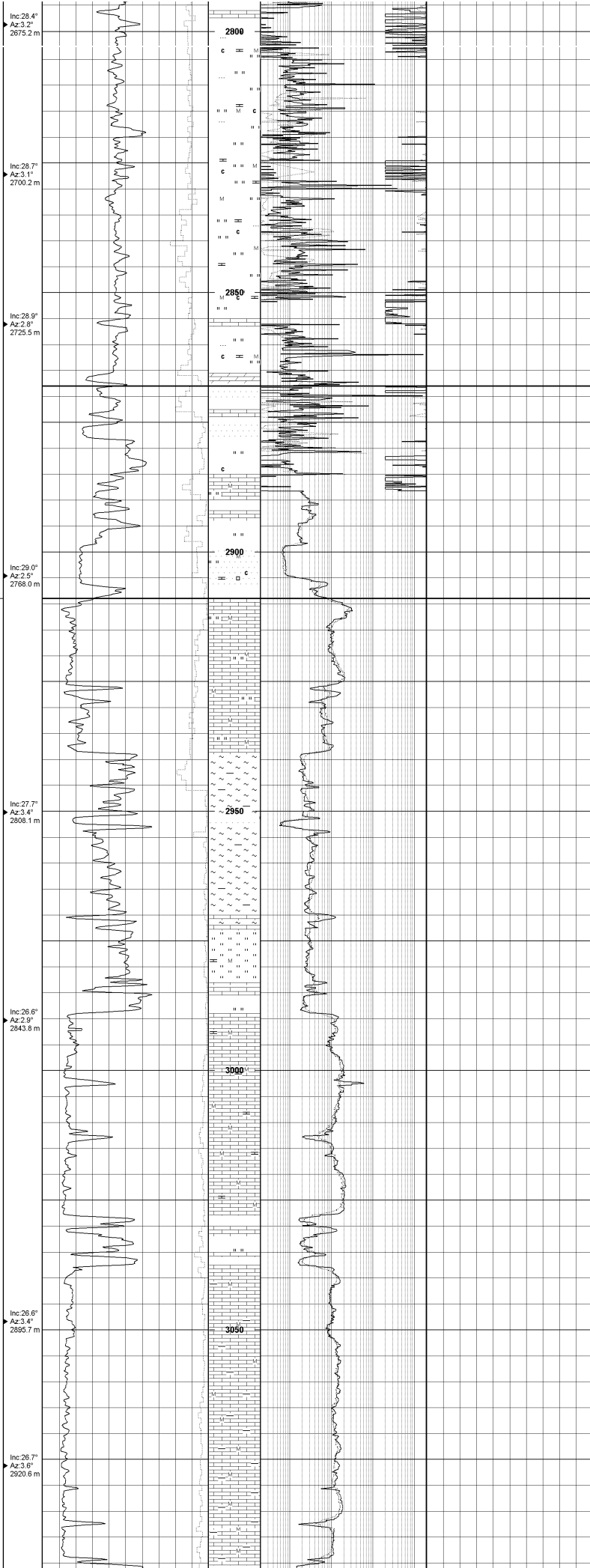
Shetland

Late Maastrichtian

Vale

Hardråde

Hardråde



Ty Member at 2868 m MD / m TVD RKB

Clst: mod brn, mod hd, blk, amor, v calc grad Mrl, micromic, silty;
Clst: dk gn gry, hd, fis, Spln, non calc, micromic, silty.
Sst: dk gry-ll gry, clr-trnst Qtz, gen v-l-r, m, shang-sbrnrd, Tr mdd, mod-pr srt, mod hd-hd, gen calc cmt, gen varg, loc v silty grad Silst, micromic, tr carb, Pyr, mvp, n/s.,
Ls: lt gry-yel gry, hd, blk, IP chky, IP crsxn.

Hardråde Formation at 2908 m MD / 2776 m TVD RKB
2910.0 - 2945.0 m
Limestone
Ls: Yel gry - v pl org, hd, loc mod hd, loc chky, microxin

Mari
Ml: Med gry - lt olv gry, arg ls, frm occ mod hd, microxin occ chky

2965.0 - 3068.0 m
Limestone, stringers of claystone, siltstone + dolomite
Ls: yel gry - lt gry, hd, arg l, P, microxin
Clst: med dk gry, mod hd - hd, silty, sl calc - calc
Silst: med dk gry - olv gry, cl, hd, sl calc, micromic
Dol: lt brn, hd, micromix

Limestone
Ls: yel gry - lt olv gry, hd, microxin

 Mw= 1.33 sg. Start increase Mw to 1.40 sg from 3010m in order to stabilise possible unstable formation encountered in 292-168 at 3017-3037m (Probable Stuck Pipe zone)

3028.0 - 3038.0 m
Claystone w Limestone stringers
Clst: gry blk, hd, blk, ip v silty grad silst, v calc grad mari
Ls: yel gry - lt olv gry, hd, micr, arg ip

3038.0 - 3095.0 m
Limestone
Ls: yel gry - lt olv gry, hd, micr, v sl arg

3095.0 - 3104.0 m

