

### FORMATION EVALUATION LOG

Drilling Rate		MD meters	TVDRT meters	Cuttings Lithology	Visual Inferred Porosity	Oil Show	Gas Data		Chromatograph Data		Calcmetry	Interpreted Lithology	Lithology Description
ROP (m/hr)	ROP (m/hr)						Gas Hydrocarbon Avg %	Methane ppm	Ethane ppm	Propane ppm			
200	200	1520	1519.9				0.1   1   10   100	1	100000	100000			
180	180	1530	1539.9				0.1	1	10000	100000	CaCO3 %		
160	160	1540	1539.9						1	100000	MgCO3 %		
140	140	1550	1559.9						1	100000			
120	120	1560	1559.9						1	100000			
100	100	1570	1579.9						1	100000			
80	80	1580	1579.9						1	100000			
60	60	1590	1599.9						1	100000			
40	40	1600	1599.9						1	100000			
20	20	1610	1599.9						1	100000			
Gamma Ray													
API													

WOB: 50.0 - 79.2 kbf  
 RPM: 146 - 181  
 GPM: 1181 - 1205  
 SPP: 3970 - 4485 psi

08/11/2008  
 11/11/2008

11/11/2008  
 12/11/2008

NB3 Smith- MI519BPX  
 216 mm (8-1/2") 5x13  
 Depth In: 1537.0m  
 Depth Out: XXXX.Xm  
 Drilled: XXm in XXhrs  
 Grade: XXXXXXXX

WOB: 6.3 - 13.3 kbf  
 RPM: 99 - 122  
 GPM: 607 - 815  
 SPP: 2060 - 3057 psi

Survey @ 1519.07 mMDRT  
 Incl: 0.33 deg  
 Azi: 354.14 deg  
 TVD: 1518.99m

Survey @ 1555.75 mMDRT  
 Incl: 0.62 deg  
 Azi: 13.67 deg  
 TVD: 1555.66m

Survey @ 1584.25 mMDRT  
 Incl: 0.70 deg  
 Azi: 1.92 deg  
 TVD: 1584.16m

Survey @ 1612.64 mMDRT  
 Incl: 0.68 deg

340mm (13-3/8") Casing Shoe @  
 1532.14 mMDRT

Reached 406mm (16") Section TD @  
 1537.0m at 00:30 hrs on 08/11/2008

Drill with 9.6 ppg (1.15 sg) WBM

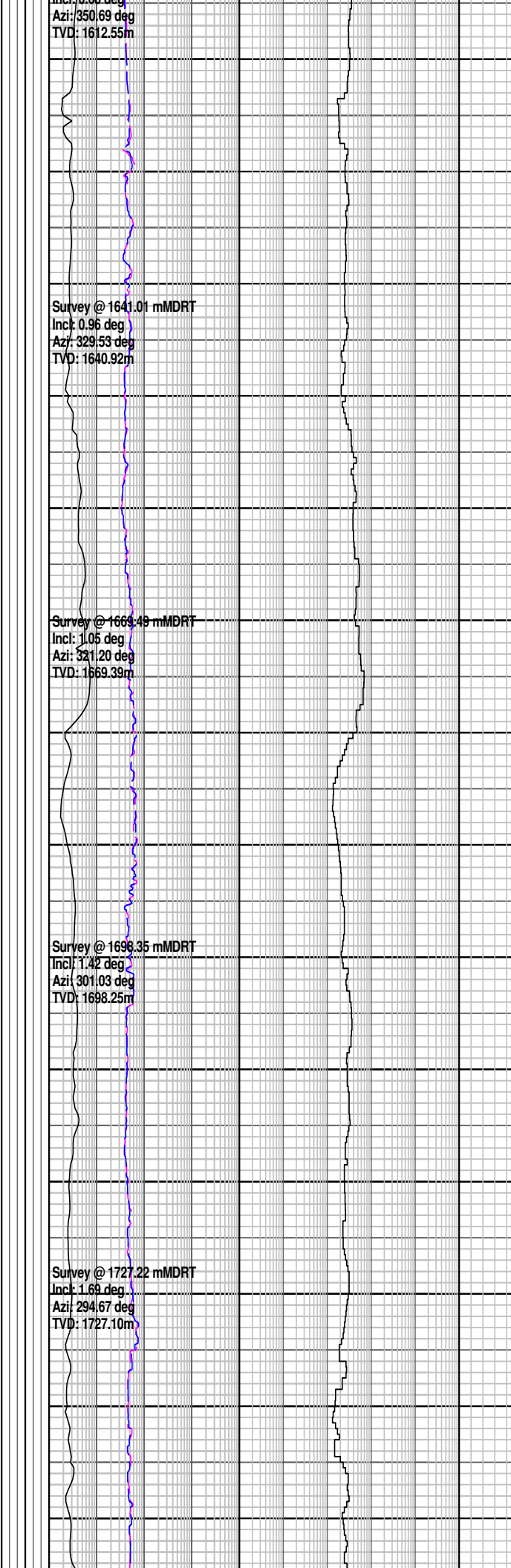
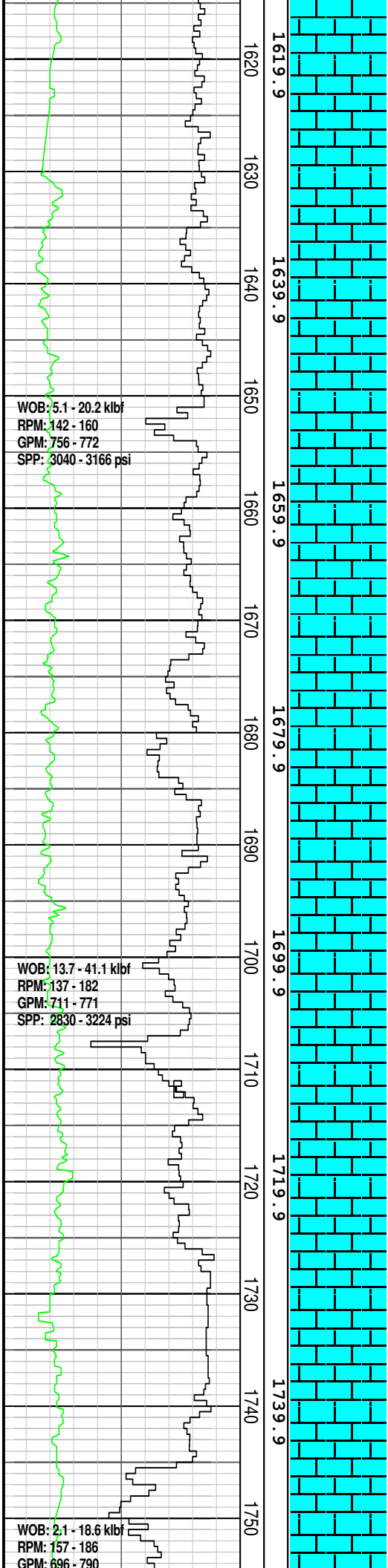
MW 1.15 V 54 PV 13 YP 20  
 GELS 5/7/7 CI 60 K Sol 4.8

DOLOMITIC CLAYSTONE: It  
 yel, or, abdt calc mat, mnr  
 lith, mod hd-hd, sb-blky

LOT@ 1540.00 mMDRT: 1.34 sg  
 (EMW)

CALCILUTITE: It gry, It gn  
 gry, It gry-off wh, m gn gry,  
 com arg mtrx, occ f qtz gr,  
 com dk lit & glau mat, occ  
 mic fos, occ or calc frag,  
 frm-mod hd, sbbly-blky

CALCILUTITE: It gry, It gn  
 gry, It gry-off wh, m gn gry,

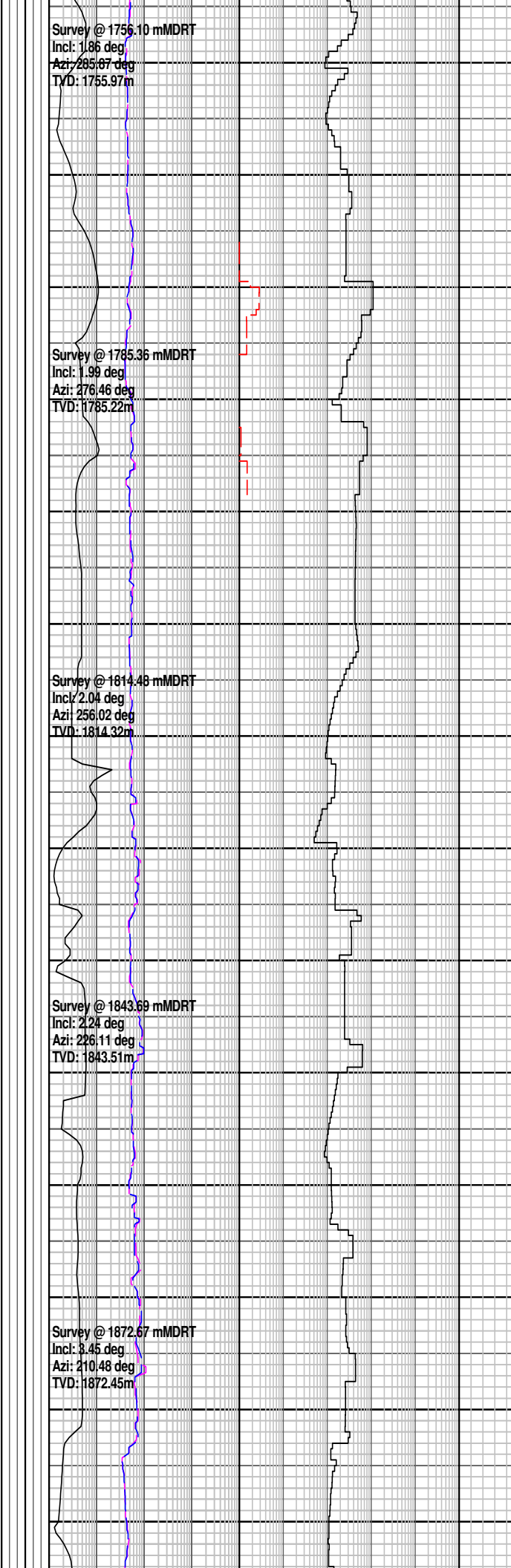
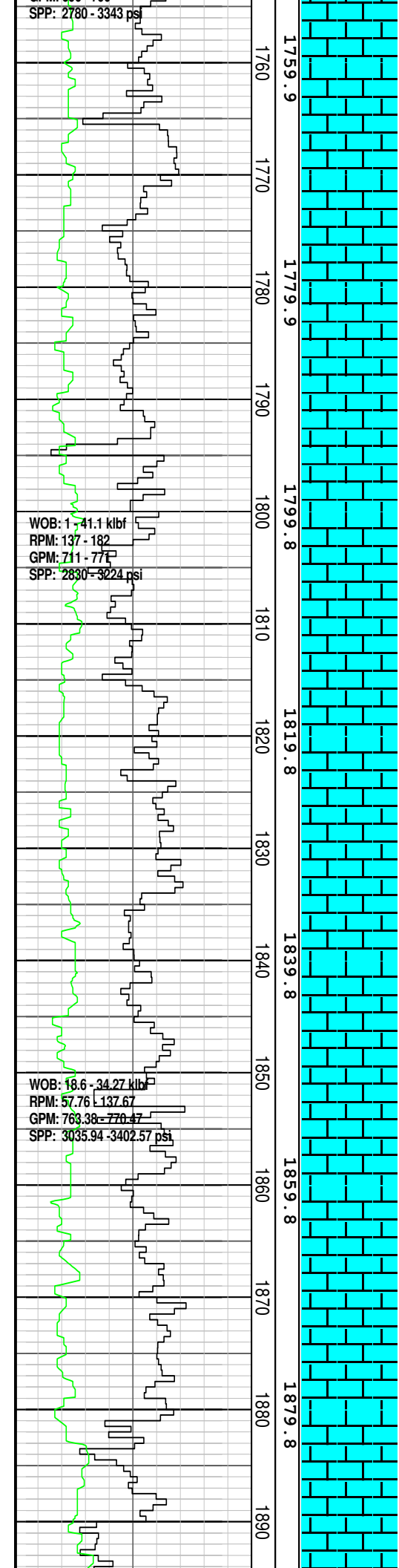


com arg mtrx, occ r qtz gr,  
 com dk lit & glau mat, occ  
 mic fos, occ or calc frag, slit  
 i/p & loc grd-ARG CALC,  
 frm-mod hd, sbblky-blky

OOLITIC CALCARENITE: m lt  
 gry-m gry, v f-v crs, pr srt,  
 rnd-sbang, abdt, arg, mtx, rry  
 mixin, mnr qtz grn v fn-v crs,  
 wl rnd, tr lit, abdt foss, oo,  
 foram, amm, mnr  
 glauc, ise, brit- mod hd i/p,  
 dom n vis por, gd infrd por, n  
 shw

CALCISILTITE: m lt gry-lt olv  
 gry, mnr m gry, abdt mtx &  
 grad-CLCLT i/p, grad-CLCAR  
 i/p, abdt v f dk lit, com Foss  
 (Foram &Oo), abdt v f qtz grn,  
 tr Glauc,  
 tr carb Mat, sft-brit, domy frm,  
 com sft & brit, sb-blky, n vis  
 por

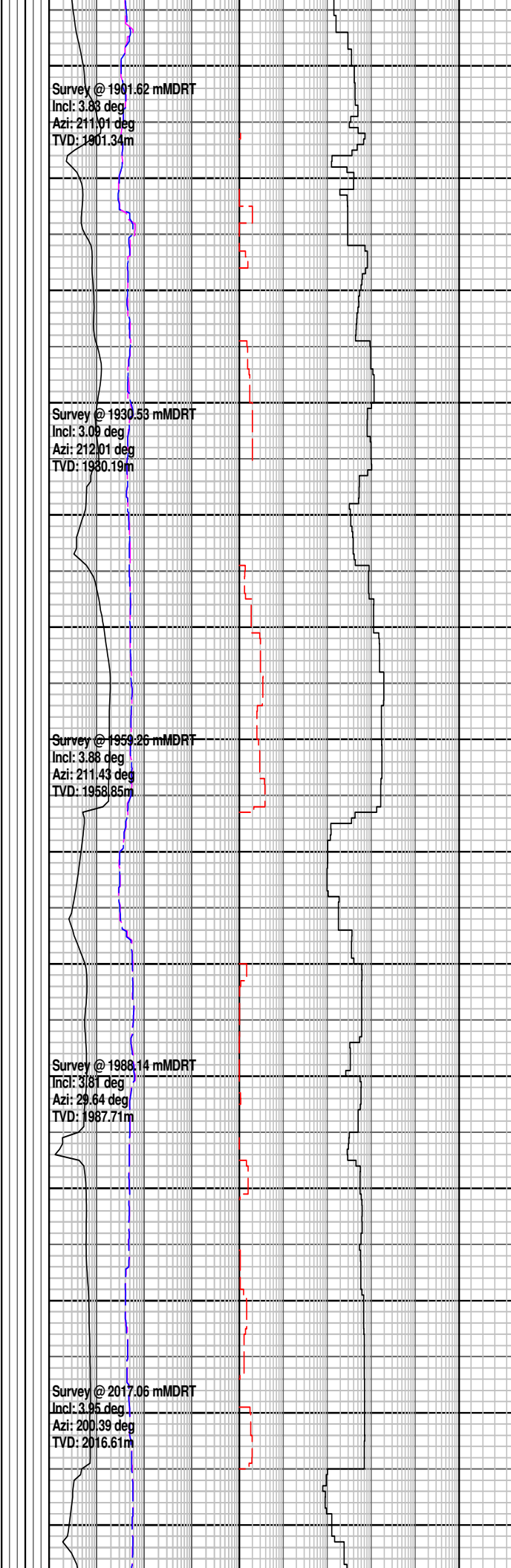
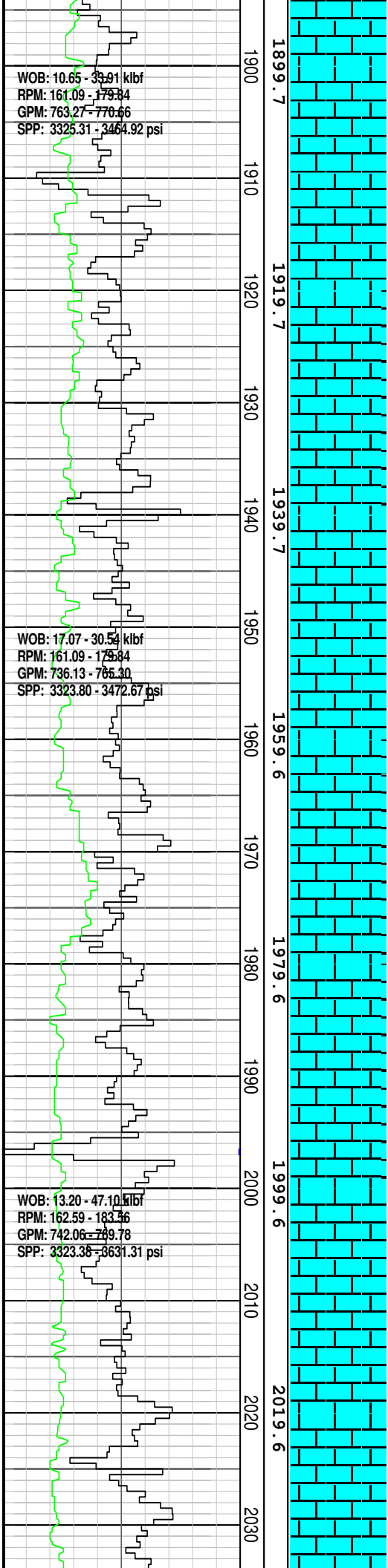
CALCISILTITE: Domy gnsh  
 gry-lt olv gry, com m lt gry-lt  
 olv gry, abdt mtx &  
 grad-CACLT i/p, abdt v f drk  
 lit, mnr foss, Oo, abdt v f qtz  
 grn, tr-com v f Glauc, tr carb,  
 mat, sft-brit, domy frm mnr  
 sft & brit sb-blky, n vis por



**CALCARENITE:** m lt gry-mid gry, v f-f, wl std, rnd-sbang, abdt argl mtx, r microxln, tr lit, com foss (Oo, Foram, Amm), r glauc, mnr lse, dom brit-mody hd i/p, v p vis por, tr moldic por, n shw

**CALCISILTITE:** m lt gry, com lt olv gry-lt gry, mnr olv gry, abdt argl mtx, mnr f drk lit, mnr foss Oo, mnr v f qtz grn, tr Glauc, tr carb, mat, sft-brit, domy frm mnr sft& brit, sb-blky, n vis por, n shw

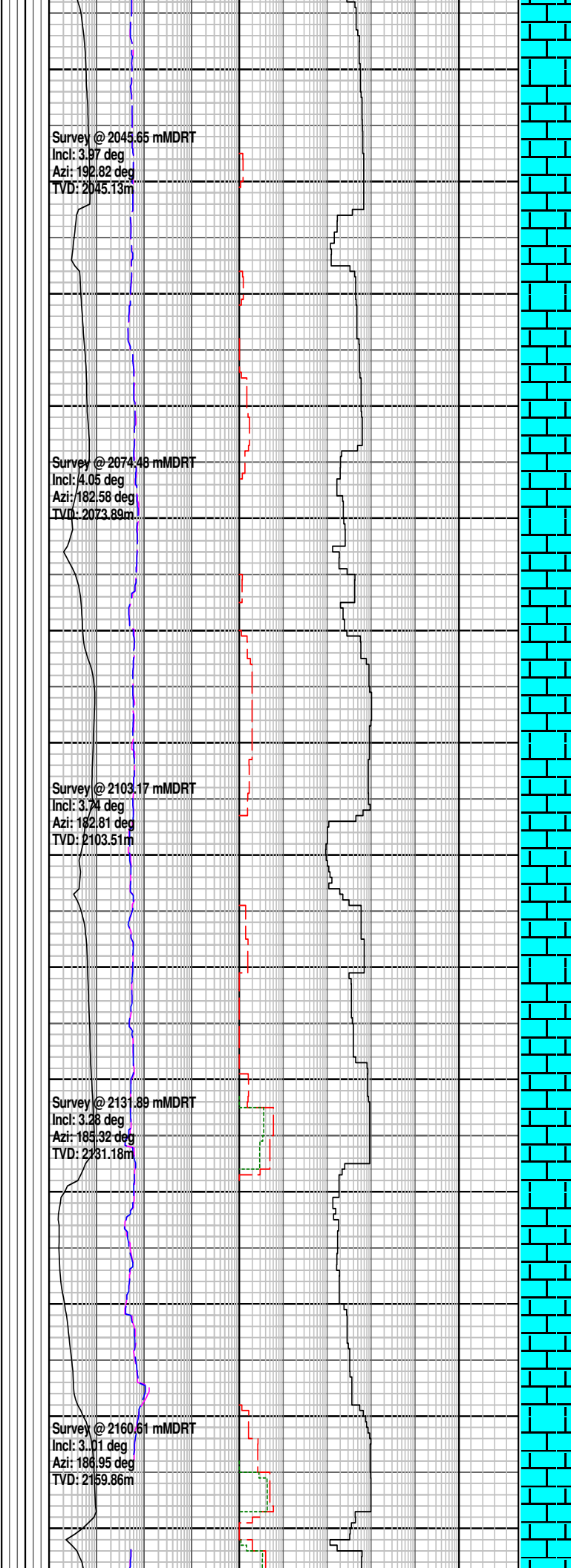
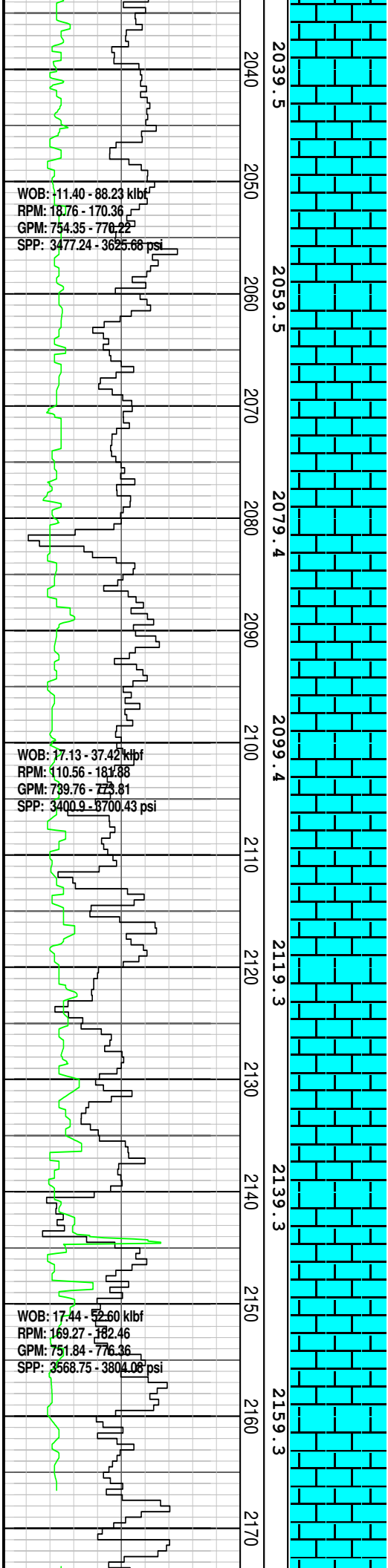
**CALCILUTITE:** argl, olv gry, grad-CLCARE CLSTE i/p, mnr



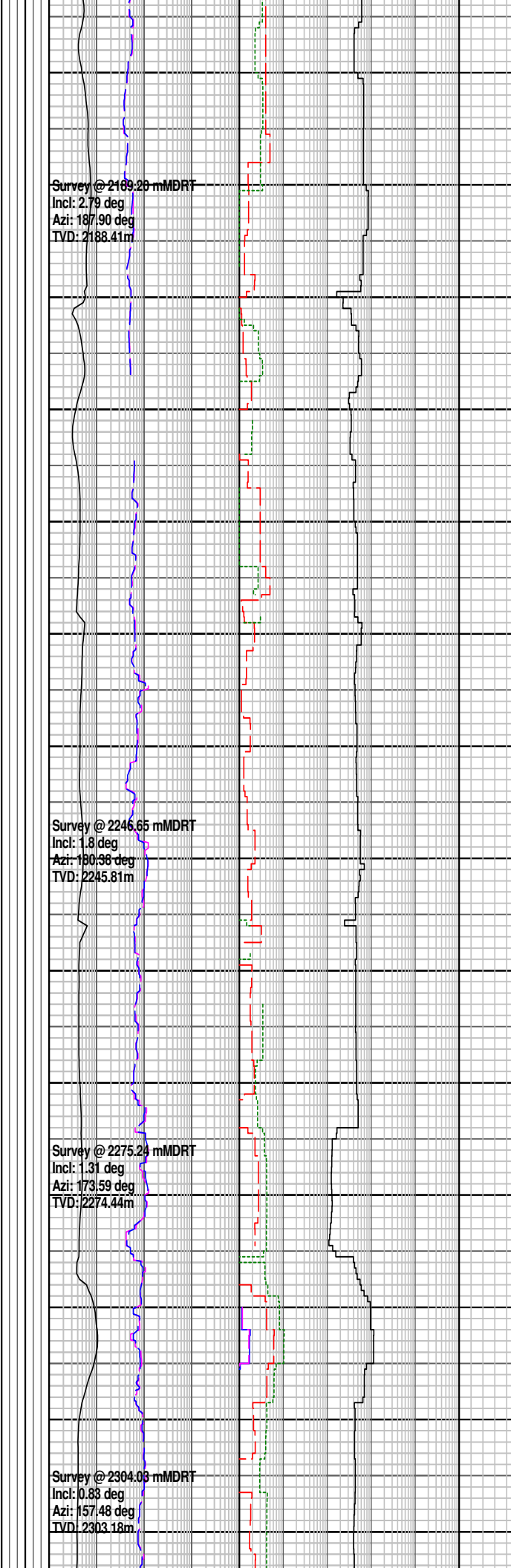
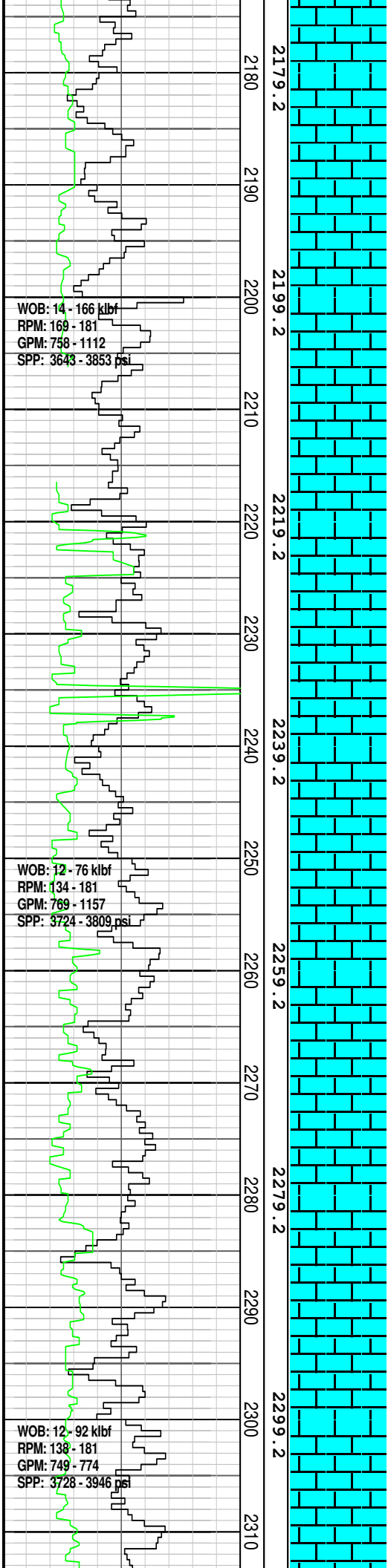
v f drk lit, tr glauc mat, mnr oo, tr carb mat, frm, sbbkly, n vis por, n shw

**DOLOMITE:** m drk gry-drk gry, microxln, tr glauc mat, v hd, ang

**CALCILUTITE:** argil, olv gry, abd v f dk lit, tr glauc mat, tr oo, tr carb mat, tr v f qtz gr, frm-brit, dom frm, com brit, sbbkly, n vis por, n shw



CALCSILTITE: olv gry, gnsh gry, lt olv gry-of wh, com-abd arg mtx & loc grd-CALC i/p, com v f dk lit, com oo, mnr v f fltg qtz gr, tr v f glauc, tr carb mat, frm-mod hd, sbbkly, n vis n shw

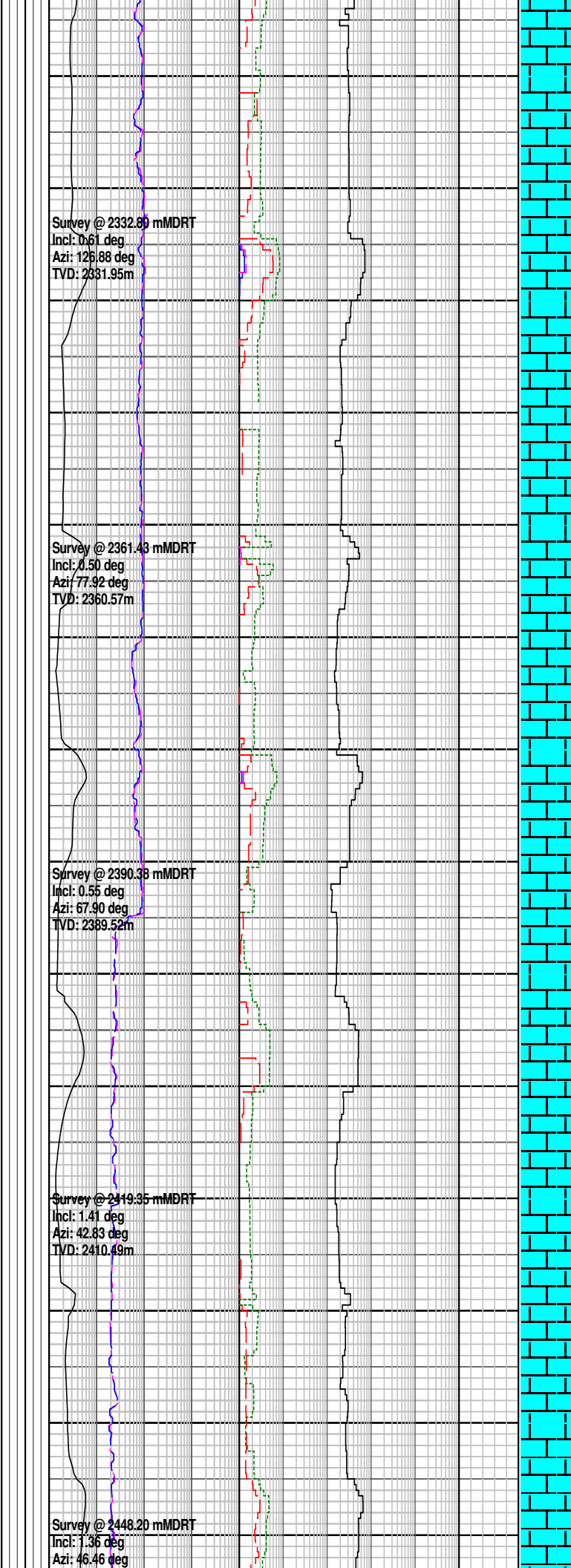
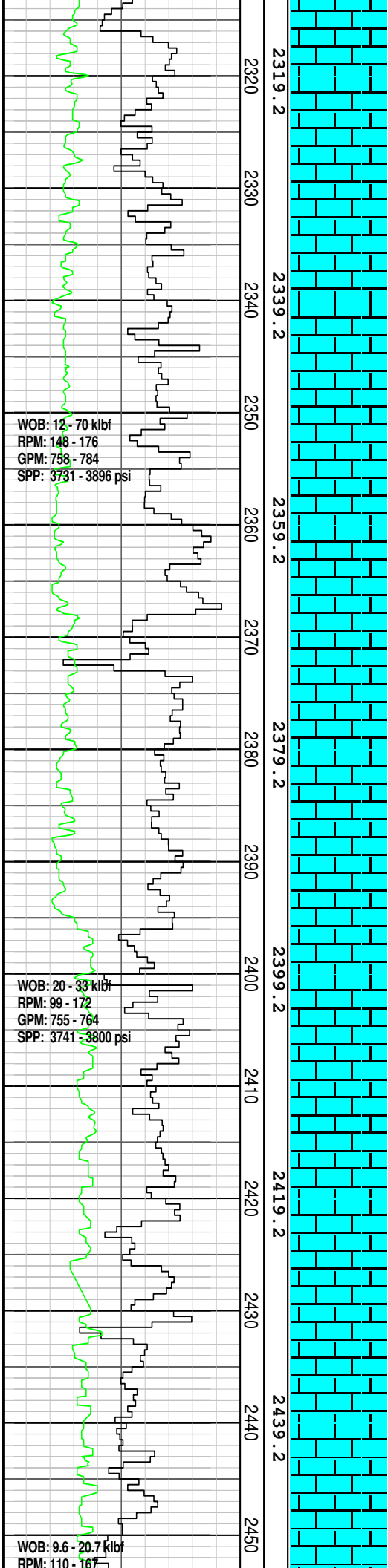


**CALCILUTITE:** argil, olv gry, abd v f dk lit, tr glauc mat, tr oo, tr carb mat, tr v f qtz gr, frm-brit, dom frm, com brit, sbbkly, n vis por, n shw

**CALCISILTITE:** olv gry, gnsh gry, lt olv gry-of wh, com-abd arg mtx & loc grd-CALC i/p, loc aren, com v f dk lit, com oo, mnr v f fltg qtz gr, tr v f glauc, tr carb mat, frm-mod hd, sbbkly, n vis por, sbbkly, n vis por, n shw

**CALCILUTITE:** argil, olv gry, abd v f dk lit, tr glauc mat, tr oo, tr carb mat, tr v f qtz gr, frm-brit, dom frm, com brit, sbbkly, n vis por, n shw





**CALCISILTITE:** olv gry, gnsh gry, lt olv gry-of wh, com-abd arg mtx & loc grd-CALC i/p, loc aren, com v f dk lit, com oo, mnv v f fltg qtz gr, tr v f glauc, tr carb mat, frm-mod hd, sbbkly, n vis por, sbbkly, n vis por, n shw

**CALCILUTITE:** argil, olv gry, abd v f dk lit, tr glauc mat, tr oo, tr carb mat, tr v f qtz gr, frm-brit, dom frm, com brit, sbbkly, n vis por, n shw

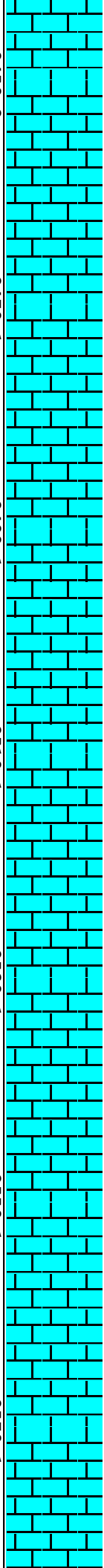
GPM: 756 - 772  
SPP: 3782 - 4066 psi

WOB: 10.8 - 52 kbf  
RPM: 150 - 168  
GPM: 757 - 791  
SPP: 3973 - 4278 psi

12/11/2008  
13/11/2008

WOB: 1 - 33 kbf  
RPM: 112 - 164  
GPM: 718 - 796  
SPP: 3214 - 4146 psi

2459.2  
2470  
2479.1  
2490  
2499.1  
2510  
2519.1  
2530  
2539.1  
2550  
2559.1  
2570  
2579.1  
2590



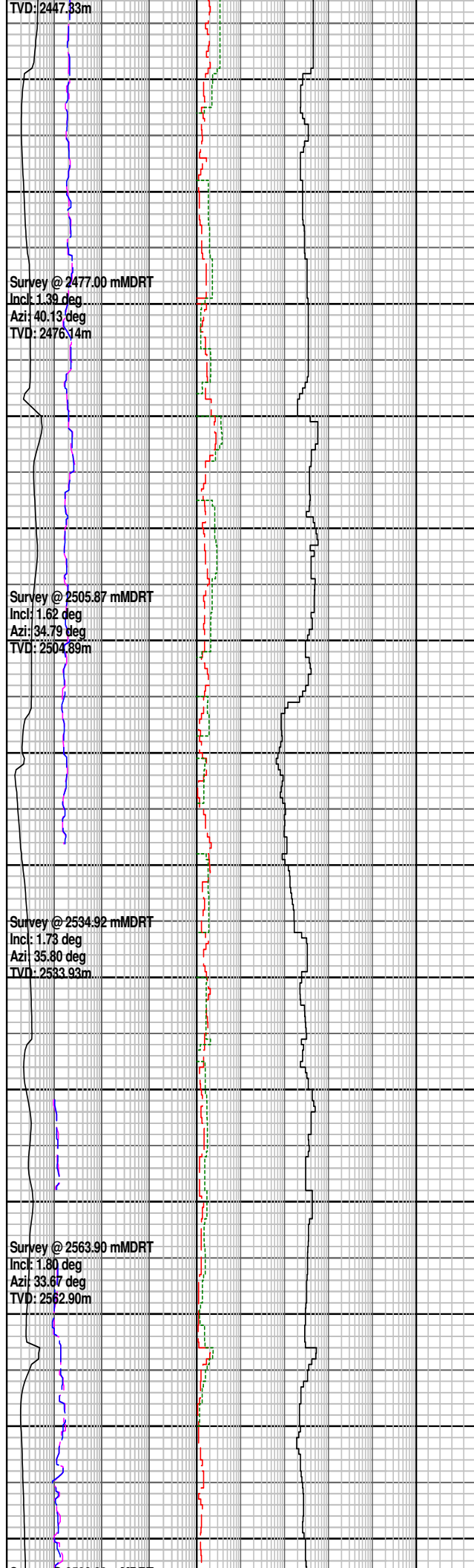
TVD: 2447.83m

Survey @ 2477.00 mMDRT  
Incl: 1.39 deg  
Azi: 40.13 deg  
TVD: 2476.14m

Survey @ 2505.87 mMDRT  
Incl: 1.62 deg  
Azi: 34.79 deg  
TVD: 2504.89m

Survey @ 2534.92 mMDRT  
Incl: 1.73 deg  
Azi: 35.80 deg  
TVD: 2533.93m

Survey @ 2563.90 mMDRT  
Incl: 1.80 deg  
Azi: 33.67 deg  
TVD: 2562.90m

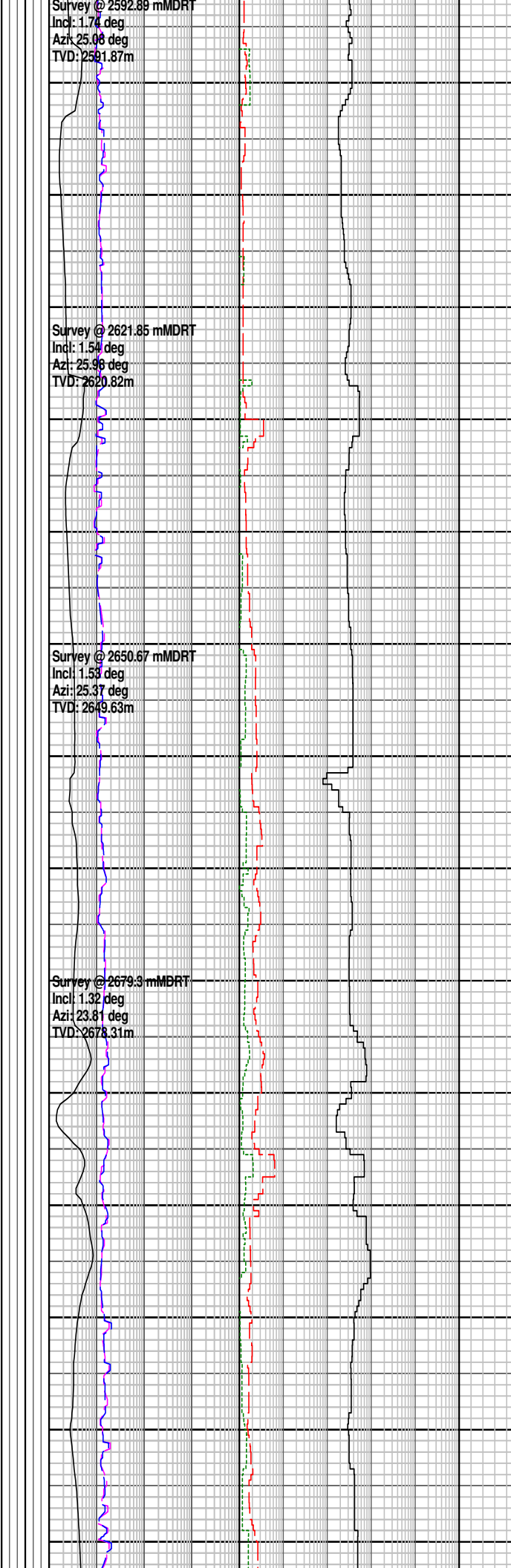
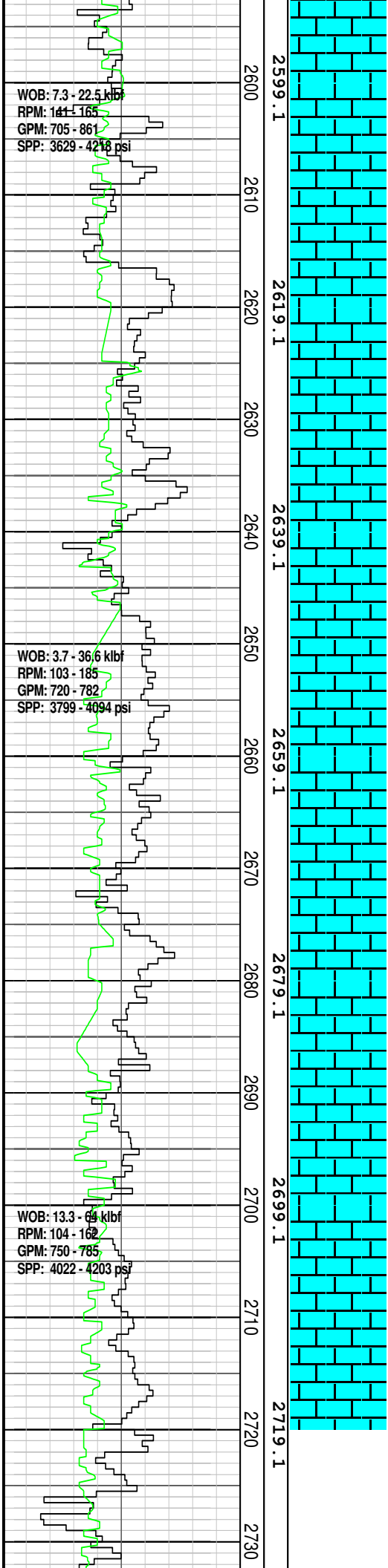


CALCILUTITE: dom lt olv gry, lt gnsh gry, olv gry, occ v f dk lit, occ glauc mat, r oo, r carb mat, tr fltg qtz gr, mnr microxn frag, r dissem pyr, mod hd-hd, v hd incl i/p, sbbly-bly, n vis por, n shw

CALCISILTITE: olv gry, gnsh gry, lt olv gry-of wh, com-abd arg mtx & loc grd-CALC i/p, loc aren, com v f dk lit, com oo, mnr v f fltg qtz gr, tr v f glauc, tr carb mat, frm-mod hd, sbbly, n vis por, sbbly, n vis por, n shw

CALCILUTITE: v lt olv gry, lt gnsh gry, lt gry-of wh, occ v f dk lit, occ glauc mat, r oo, r carb mat, mnr v f fltg qtz gr, r or calc frag, mnr nod & dissem pyr, mod hd-hd, v hd incl i/p, sbbly-bly, n vis por, n shw





CALCISILTITE: olv gry, gnsh gry, lt olv gry-of wh, com-abd arg mtx & loc grd-CALC i/p, loc aren, com v f dk lit, com oo, mnr v f fltg qtz gr, tr v f glauc, tr carb mat, frm-mod hd, sbbkly, n vis por, sbbkly, n vis por, n shw

CALCILUTITE: v lt olv gry, lt gnsh gry, lt gry-of wh, occ glauc mat, r oo, r carb mat, mnr v f fltg qtz gr, mnr nod & dissem pyr, mod hd-hd i/p, sbbkly-blky, n vis por, n shw

CALCILUTITE: v lt olv gry, lt gnsh gry, lt gry-of wh, occ glauc mat, r oo, r carb mat, mnr v f fltg qtz gr, mnr nod & dissem pyr, mod hd-hd i/p, sbbkly-blky, n vis por, n shw

