

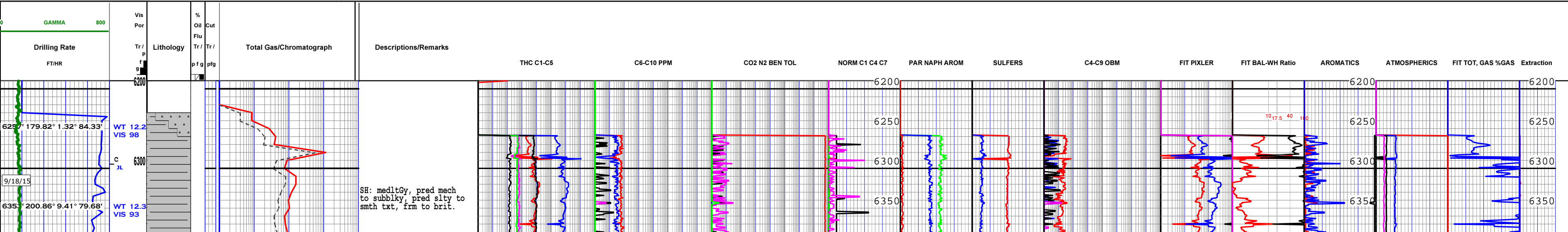


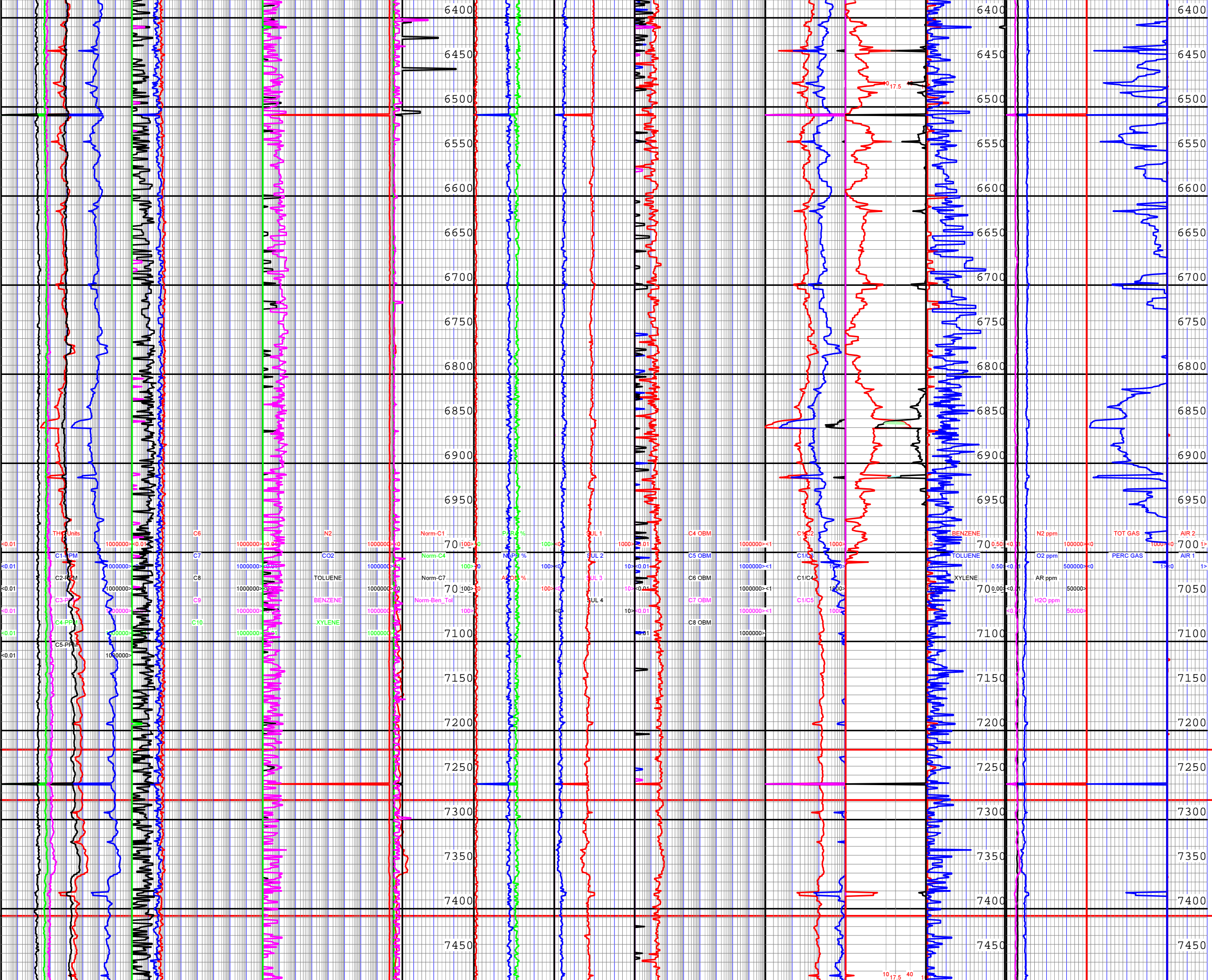
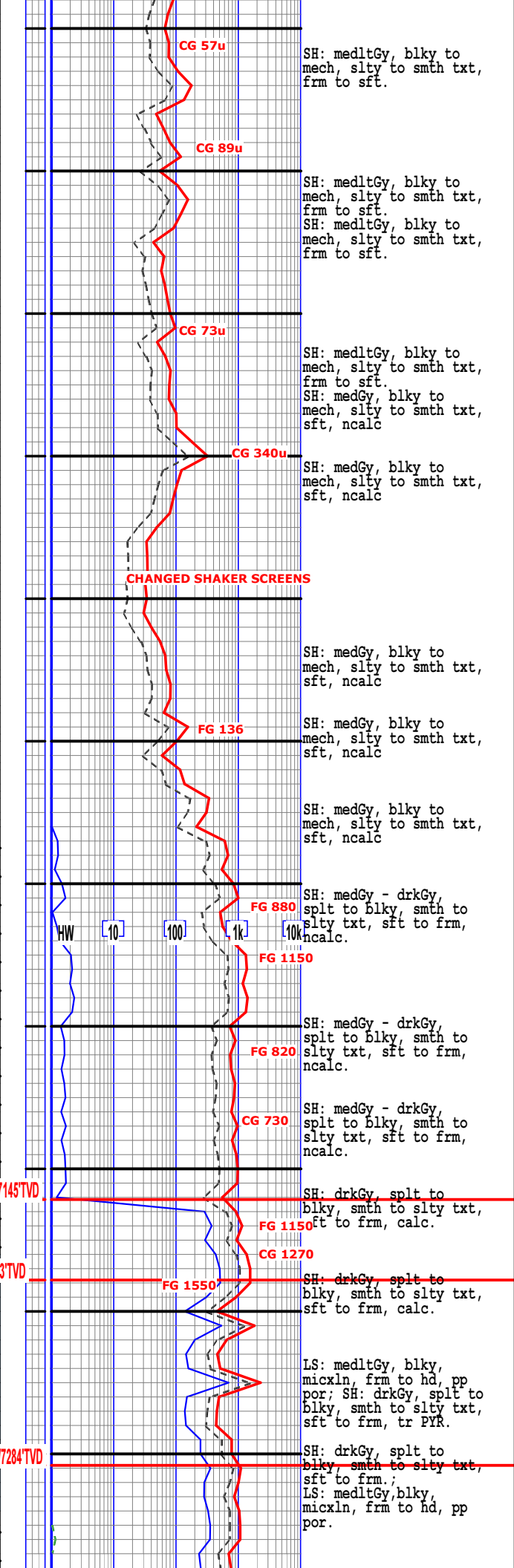
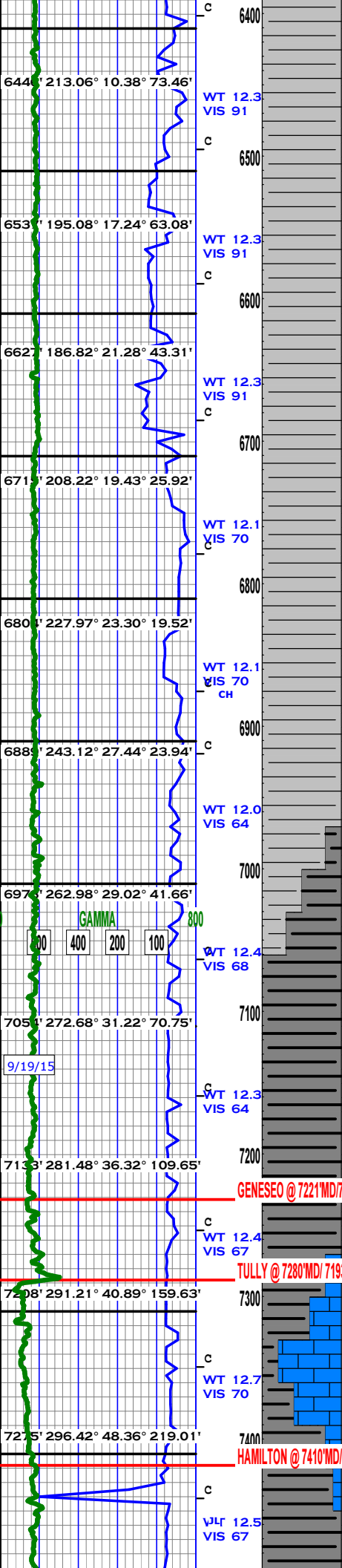
711 W TENTH ST  
 RESERVE, LA 70084  
 800-280-2096

COMPANY: Northeast Natural Resources  
 WELL: MIP 3H  
 FIELD: Marcellus COUNTY: Monongalia STATE: WV  
 LOCATION: Morgantown  
 Interval Logged: 6228 To: 13874 G.L.: \_\_\_\_\_ K.B: \_\_\_\_\_  
 Date Logged: 09/17/2015 To: 9/22/2015 Spud Date: 09/17/2015  
 Rig: Patterson 254 Unit No.: DT-117  
 Loggers: Chuck Hubbard / James Liles / Jonathan Leya  
 Api No.: 4706101707  
 Filename: mip\_3h.mlw  
 Geologist: Emily Jordan

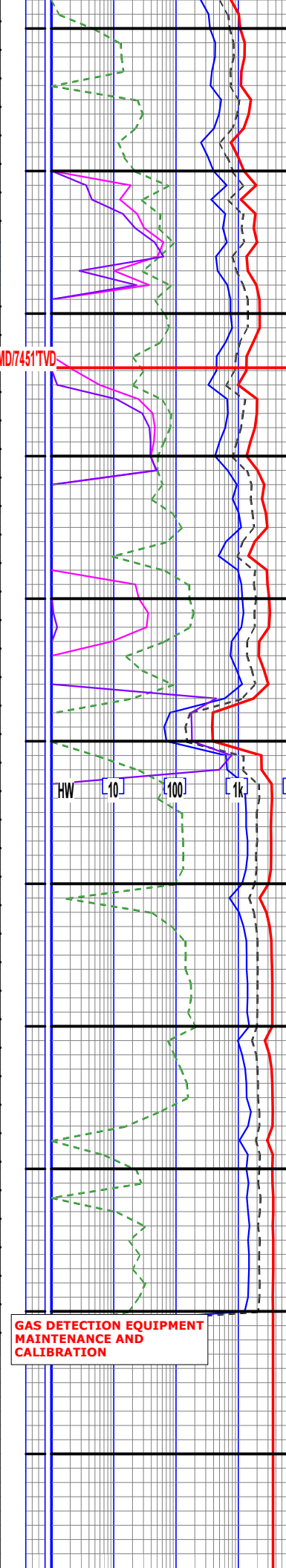
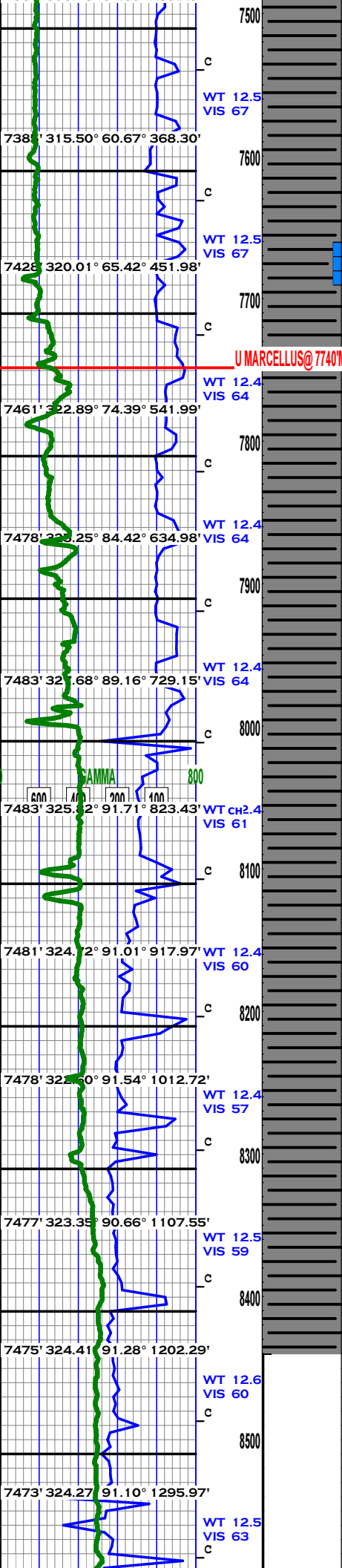
Created By MainLog

Abbreviations:		Lithology Symbols:			Gas Chromatograph Analysis:		
NB...New Bit	DST...Drill Stem Test	Anhydrite	Salt	Granite	TOT	---	
CO...Circ Out	DS...Directional Survey	Siltstone	Chert	Sandstone	C1	---	
NR...No Returns	CG...Connection gas	Dolomite	Conglomerate	Limestone	C2	---	
TG...Trip Gas	LAT...Logged After Trip	Coal	Shale	Bentonite	C3	---	
WOB...Wt on Bit	PP...Pump Pressure	Carb Shale	Granite Wash	Quartz Wash	IC4	---	
RPM...Rev/Min	SPM...Strokes/Min	Red Sh	Org Sh	Green Sh	NC4	---	
SG...Survey Gas	DTG...Down Time Gas	Cust Sh1	Cust Sh2	Cust Sh3	IC5	---	
		Cust Sh4	Cust Sh5	Cust Sh6			
Mud Data		Accessories					
WT...Weight	V...Viscosity	Glauconite	Pyrite	Fossils			
PH...Acidity	F...Filtrate	Fractures	Cement	Oolites			
CHL...Chlorides	SC...Solids Content						









SH: drkGy, splt to blky to mech, smth to slty txt, sft to frm, calc.

SH: drkGy-blk, sbbly to blky to mech, smth to wxy txt, sft to frm, v calc.

SH: drkGy-blk, sbbly to blky to mech, smth to wxy txt, sft to frm, v calc, trace IM

SH: drkGy-blk, sbbly to blky to mech, smth to wxy txt, sft to frm, v calc

SH: vdrkGy-blk, sbbly to blky to mech, smth to wxy txt, sft to frm, v calc

SH: blk-dkblk, sbbly to blky to mech, smth to wxy txt, sft to brit, v calc

SH: blk-dkblk, sbbly to blky to mech, smth to wxy txt, sft to brit, v calc

SH: blk-dkblk, sbbly to blky to mech, smth to wxy txt, sft to brit, v calc

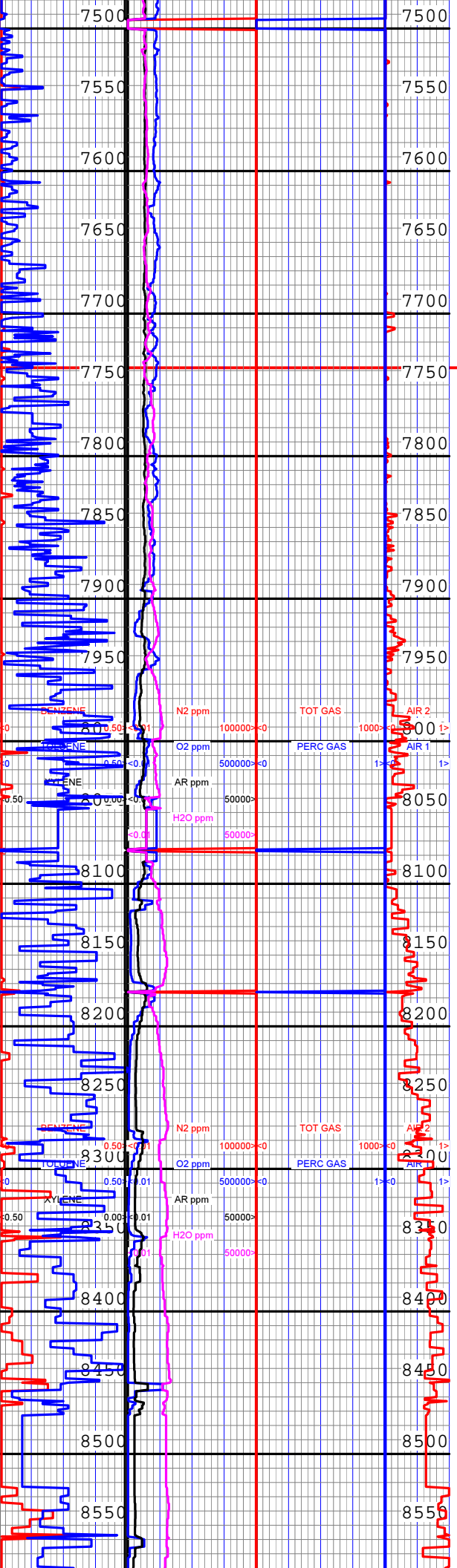
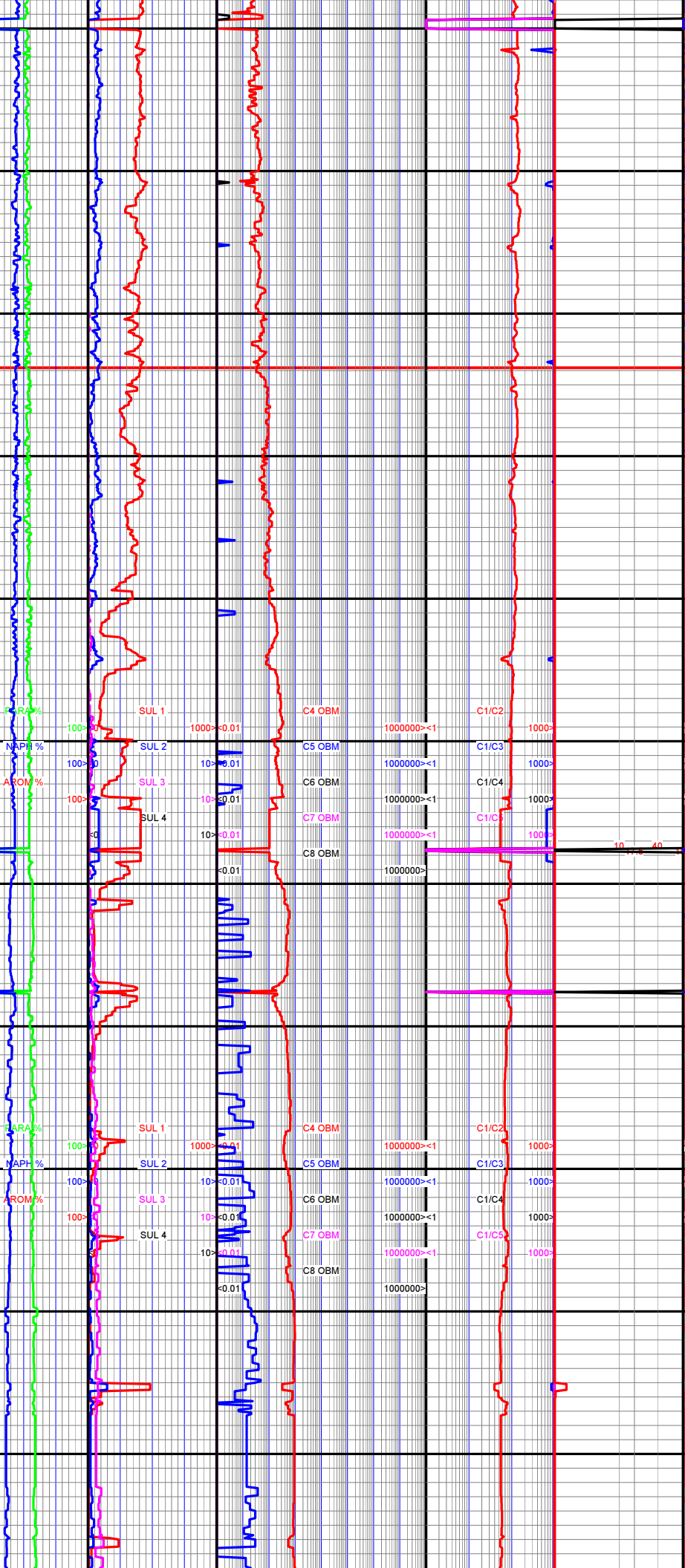
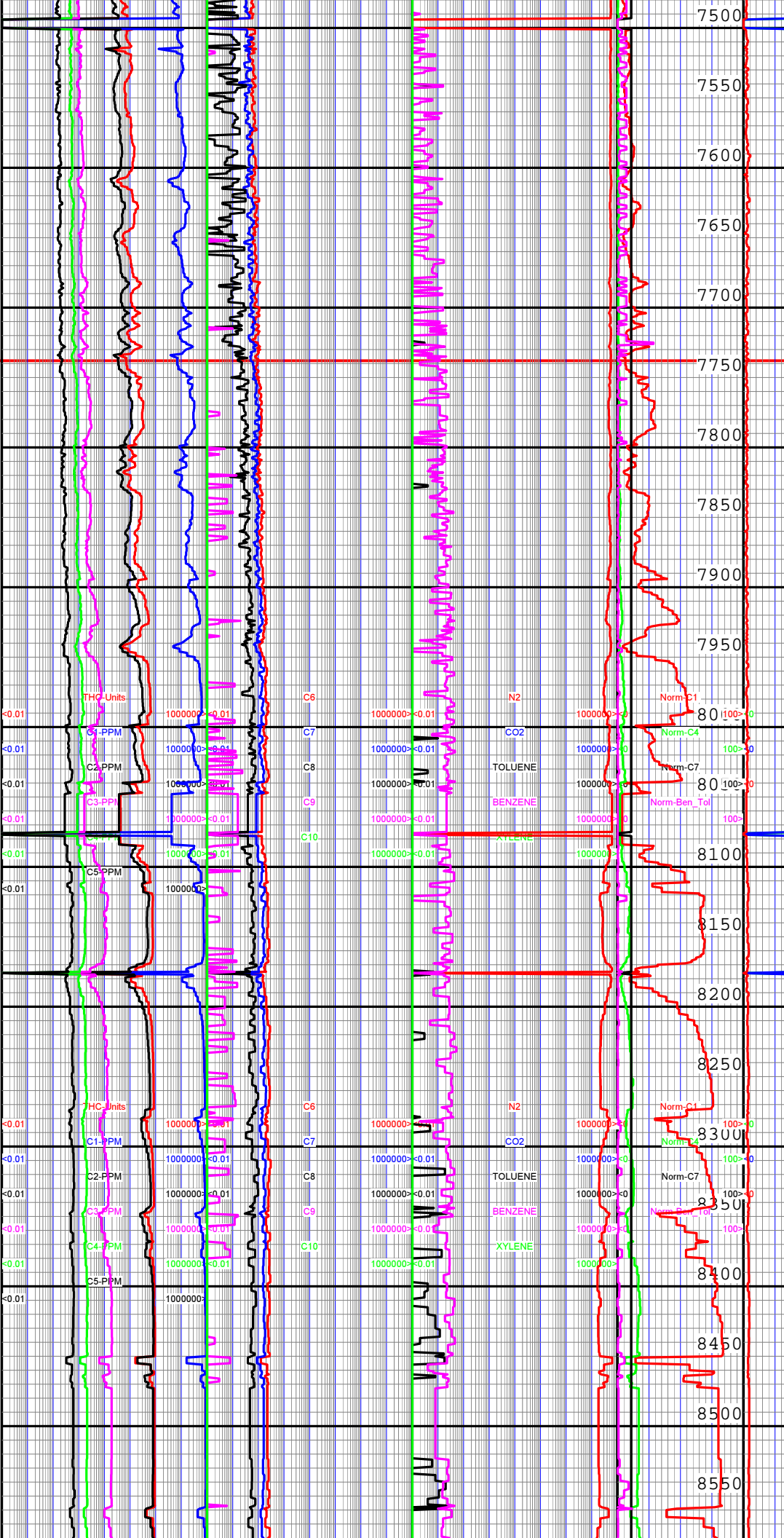
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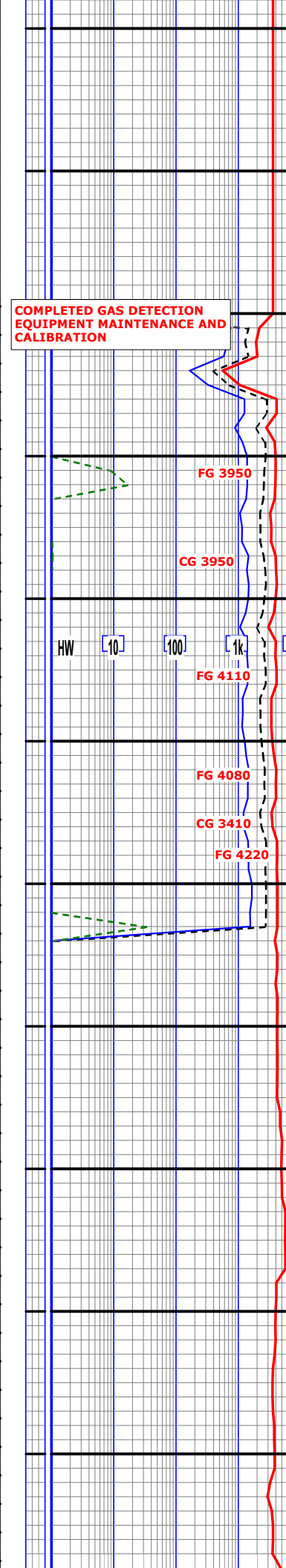
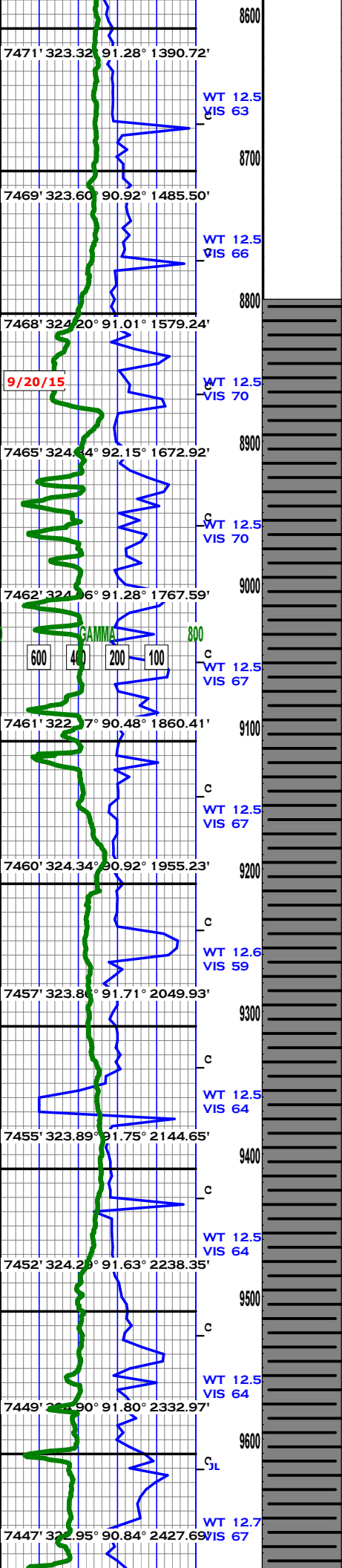
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SH: blk-dkblk, sbbly to blky to mech, smth to wxy txt, sft to brit, v calc

SH: blk, sbbly to mech, smth to wxy txt, sft to brit, v calc





SH: GyshBlk - Blk, blkly to mech, smth to wxy txt, sft to brit, tr imbd LS & tr PYRC lamm.

SH: GyshBlk - Blk, blkly to mech, smth to wxy txt, sft to brit, tr imbd LS & tr PYRC lamm.

SH: GyshBlk - Blk, blkly to mech, smth to wxy txt, sft to brit, tr imbd LS & tr PYRC lamm.

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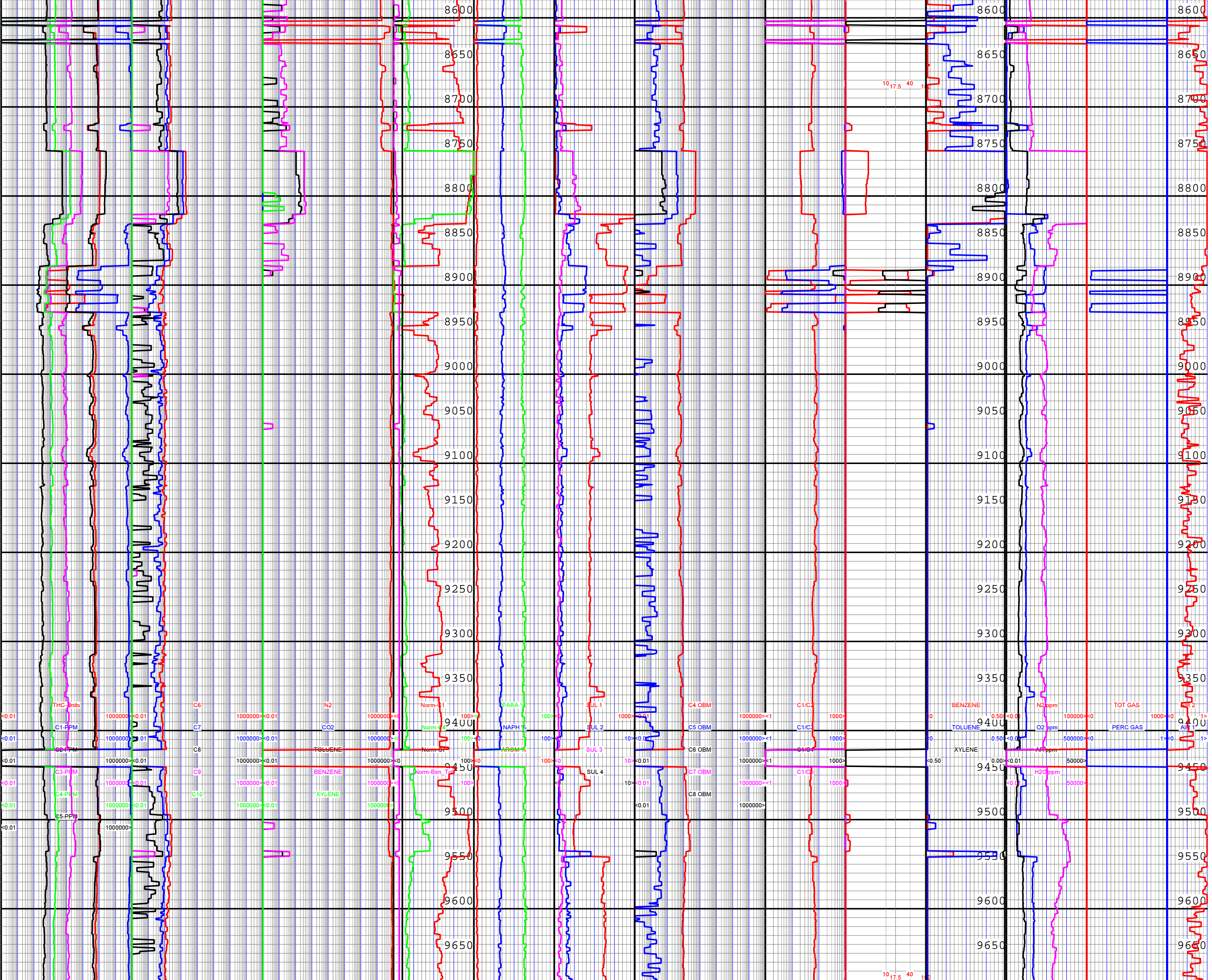
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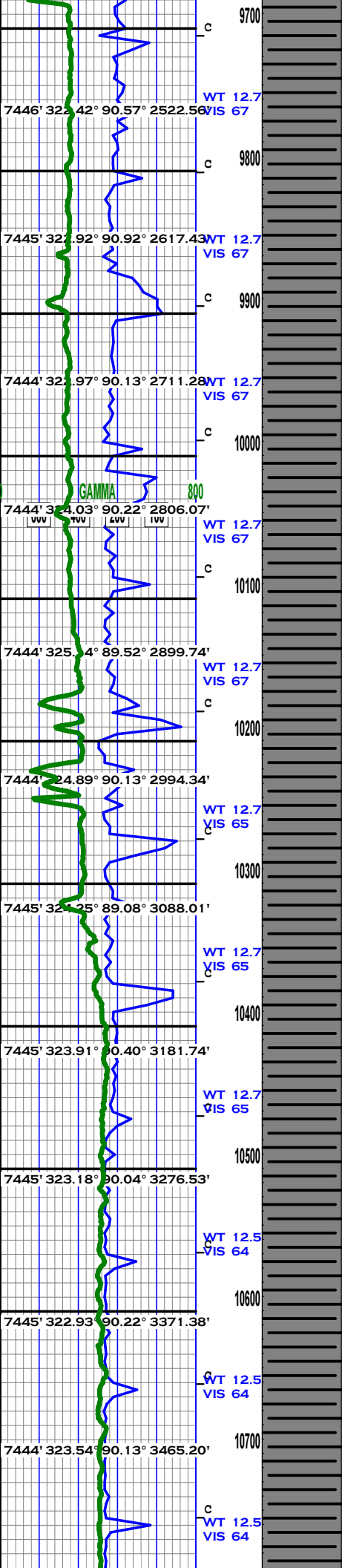
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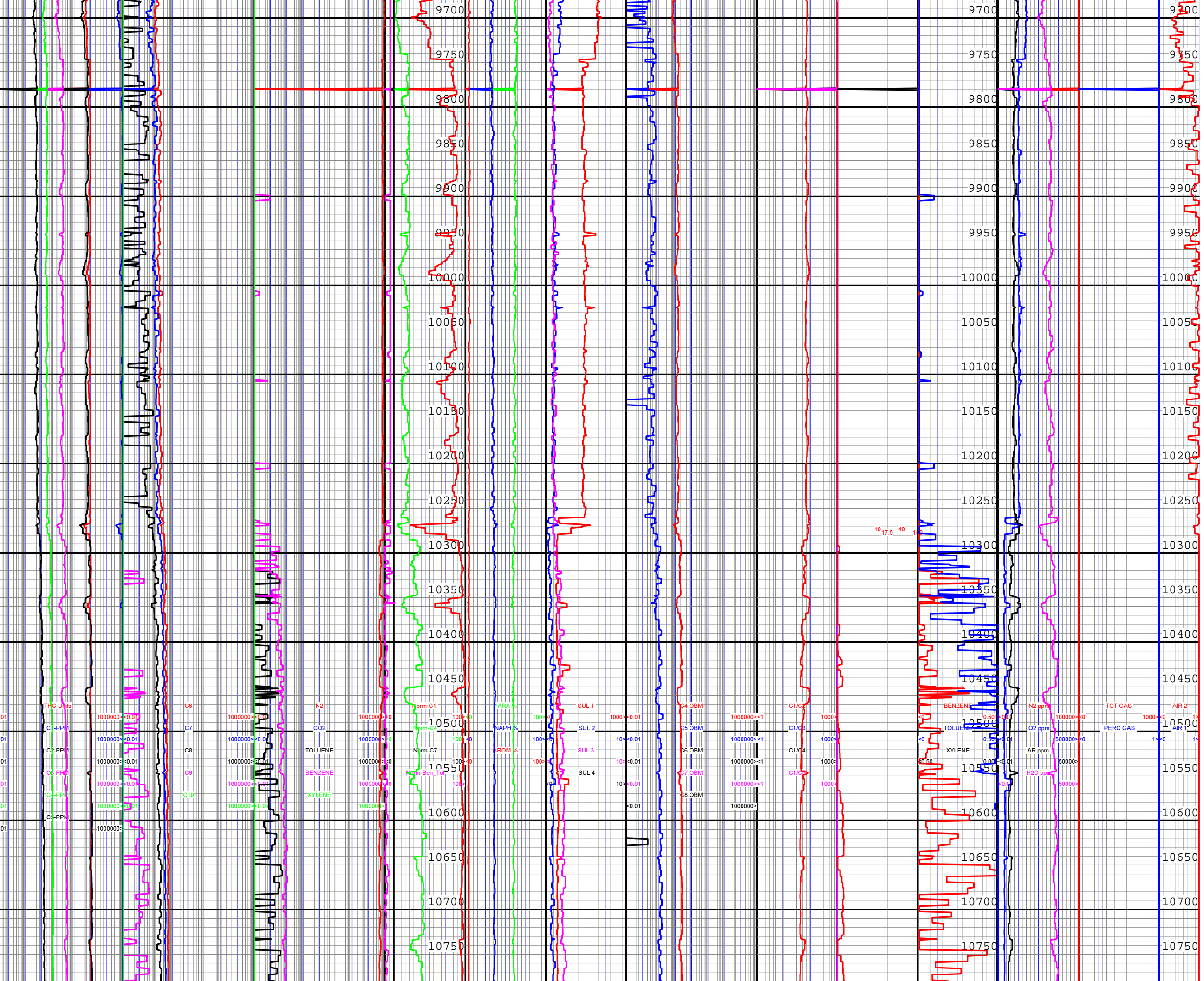
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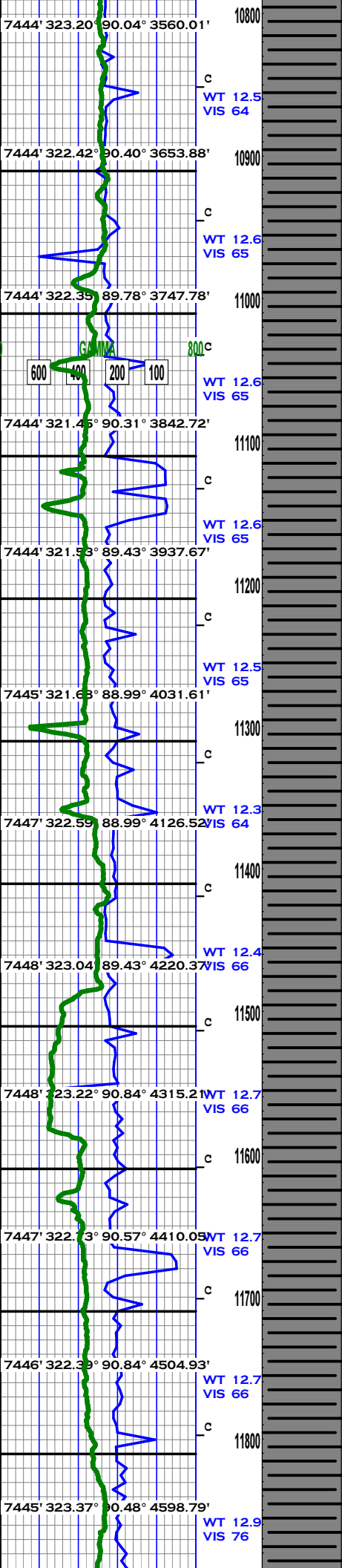






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SH: dkBlk - GryshBlk, blkly to mech, smth to wxy txt, sft to frm, vcalc, TR IM





SH: dkBlk - GryshBlk, blky to mech smth to wxy txt, sft to frm, calc

SH: dkBlk - GryshBlk, blky to sbblky, smth to wxy txt, sft to frm, calc

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SH: GryshBlk - Blk, blky to sbblky occ splntry, smth to wxy txt, sft to frm, tr imbd LS.

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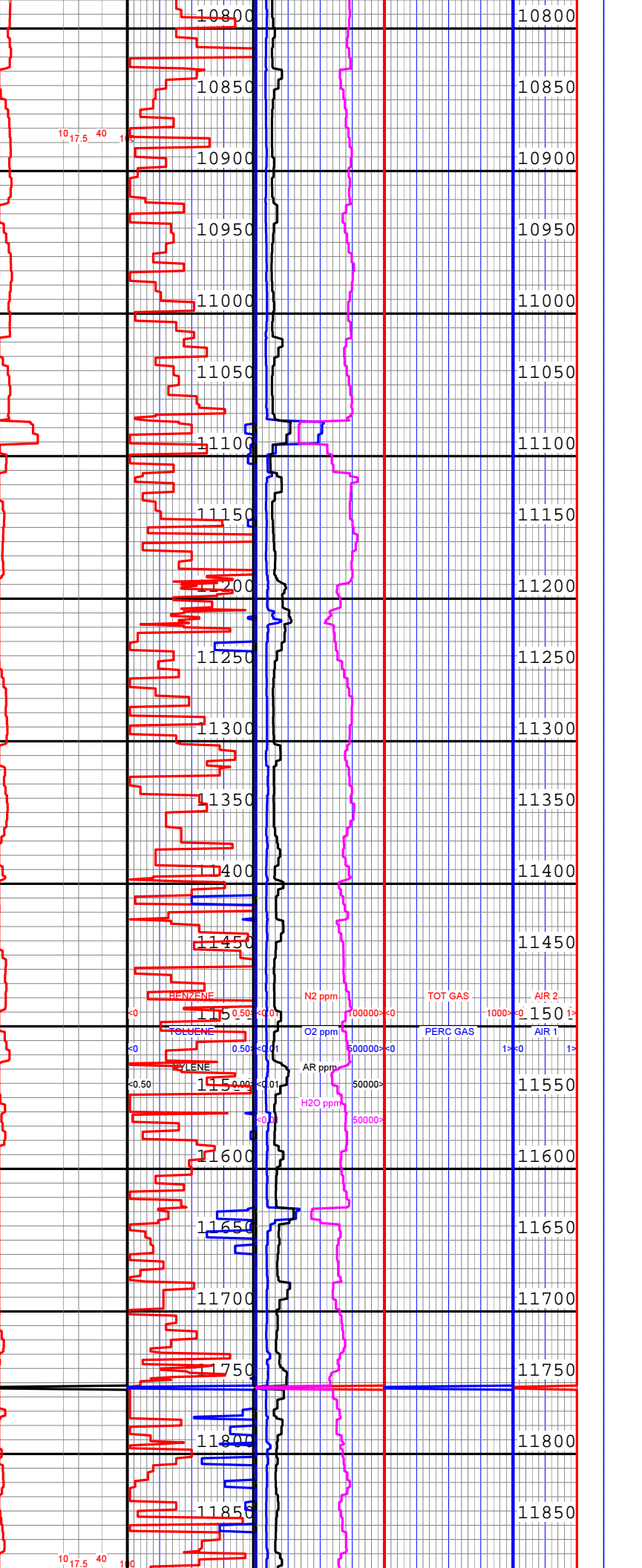
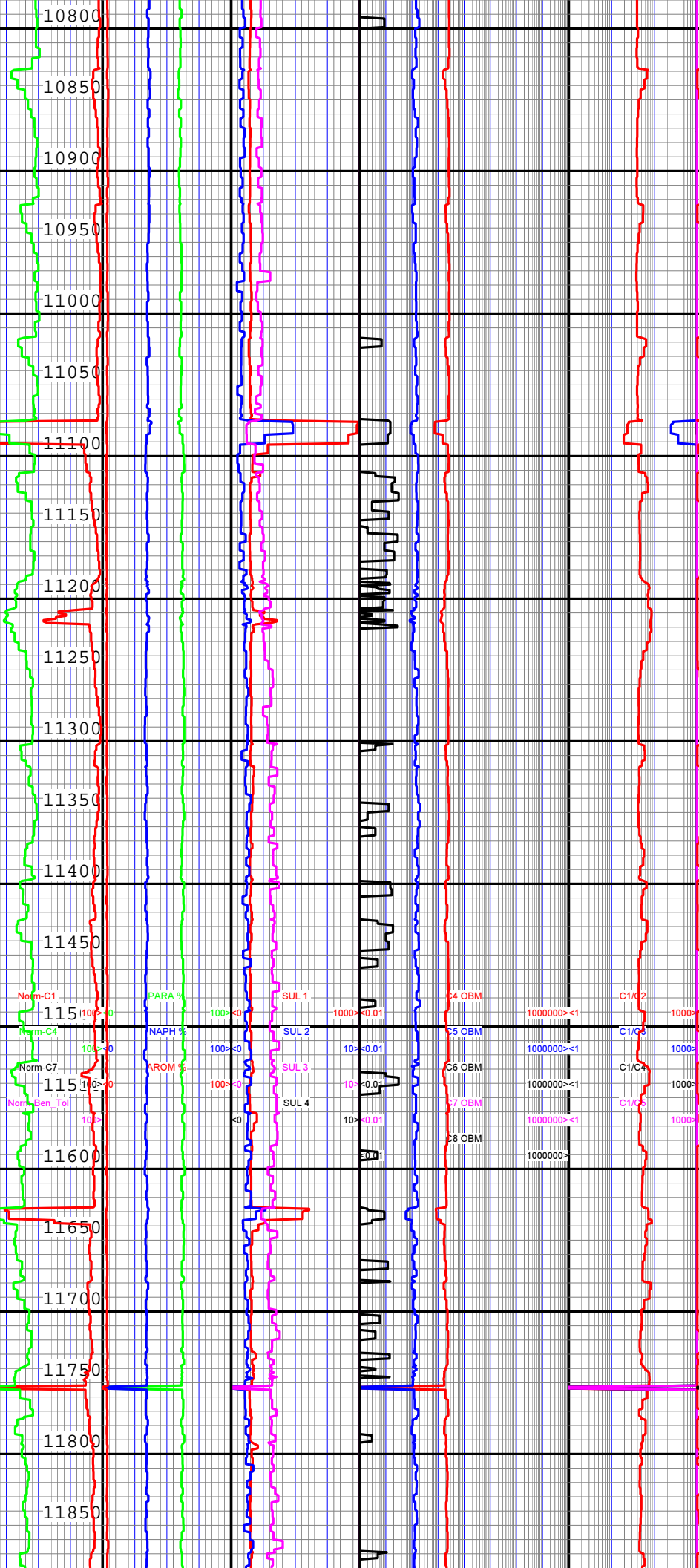
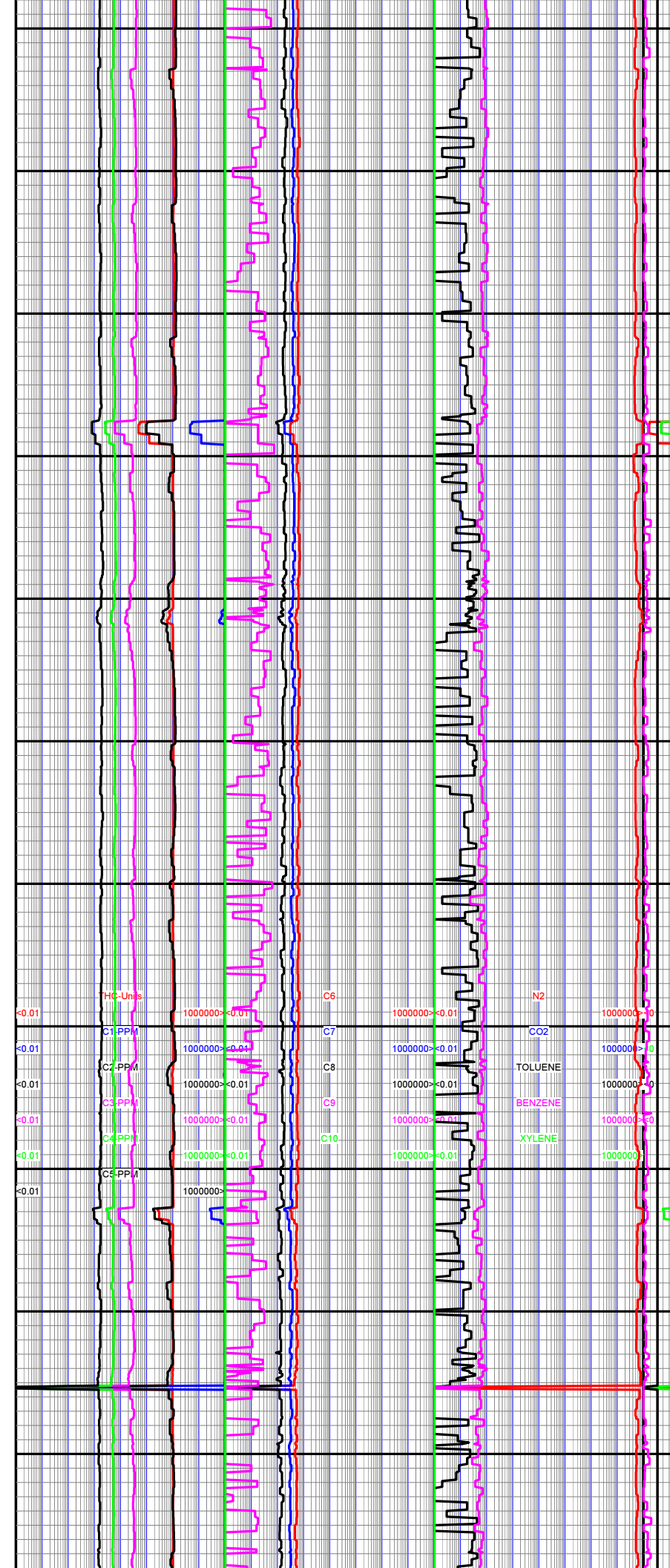
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SH: GryshBlk - Blk, blky to sbblky occ splntry, smth to wxy txt, sft to frm, tr imbd LS.



HW 10 100 RIG SERVICE PUMPS OFF

CG 5780

FG 5950

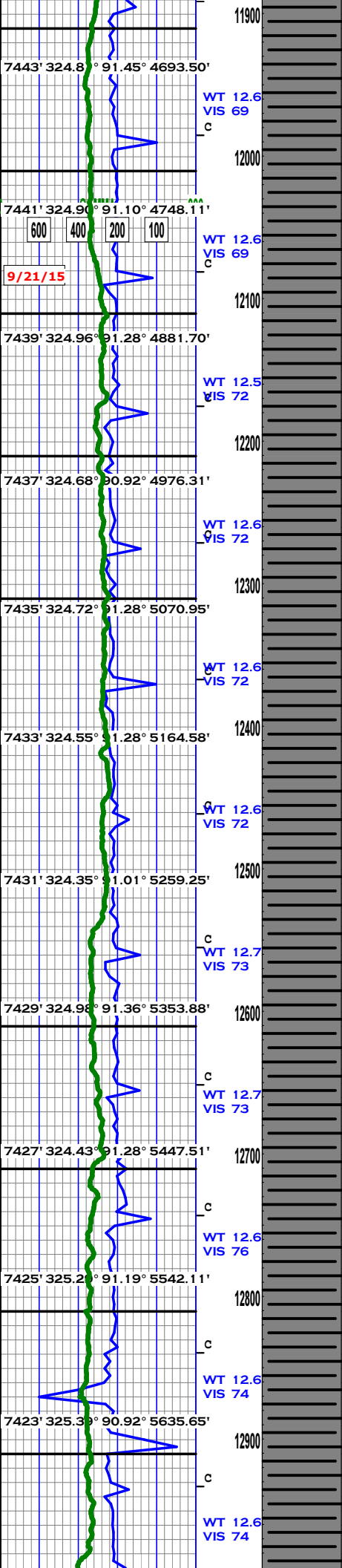
CG 5890

CG 5880

10,17.5 40

10,17.5 40





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SH: GryshBlk - Blk, blkly to sbblky occ splntry, smth to wxy txt, sft to frm, tr imbd LS.

SH: GyshBlk - Blk, blkly to subsplt, smth to wxy txt, sft to occ frm.

SH: GyshBlk - Blk, blkly to subsplt, smth to wxy txt, sft to occ frm.

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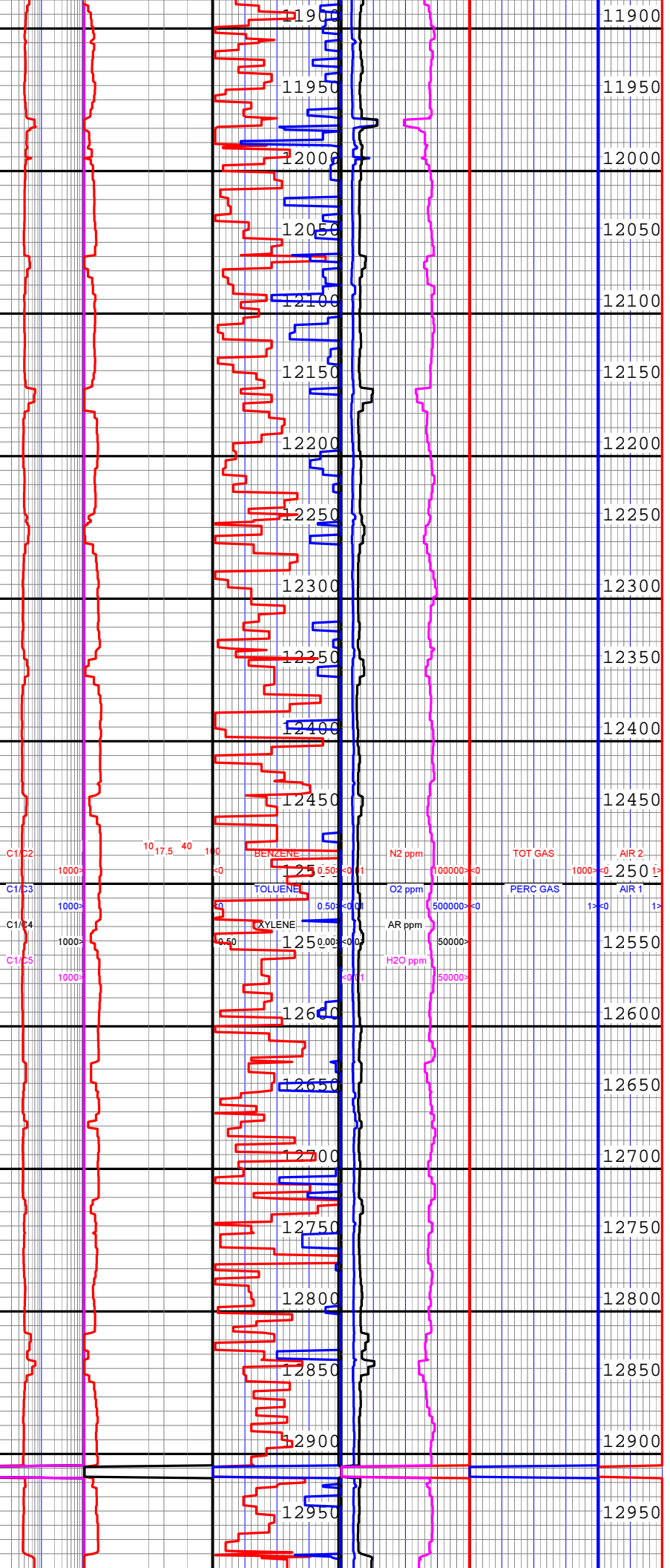
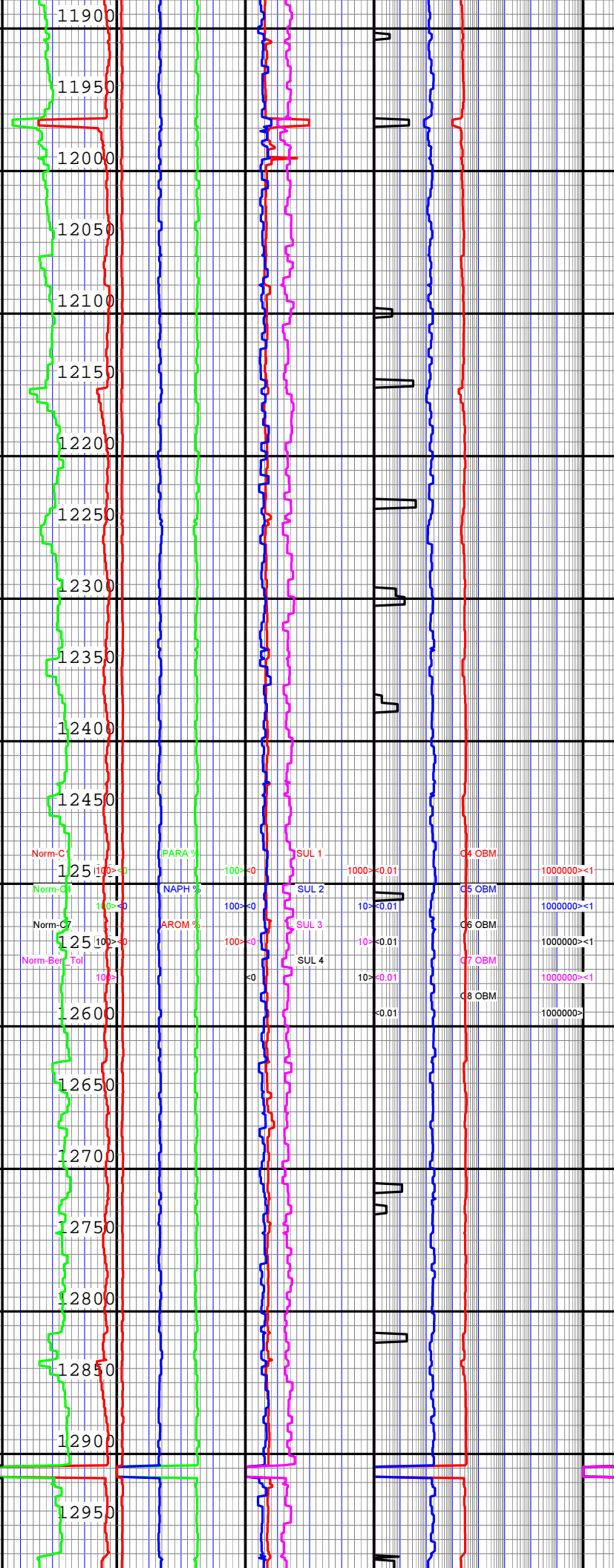
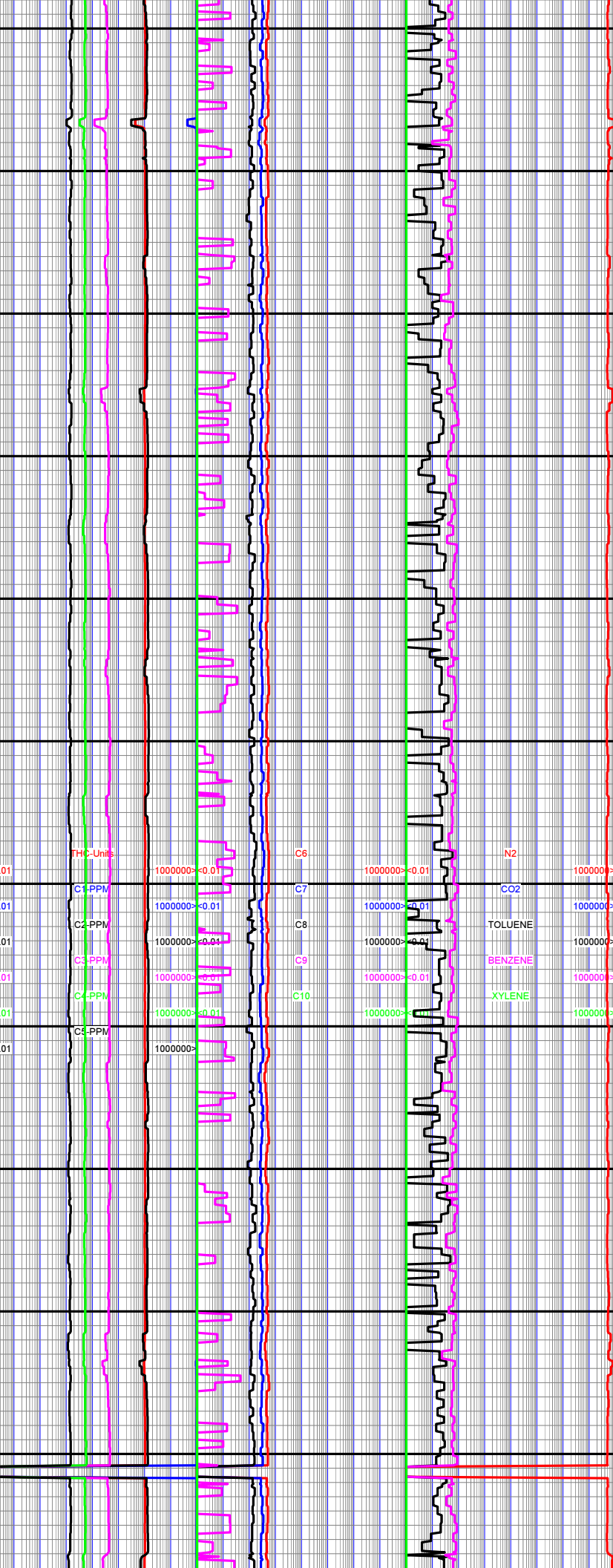
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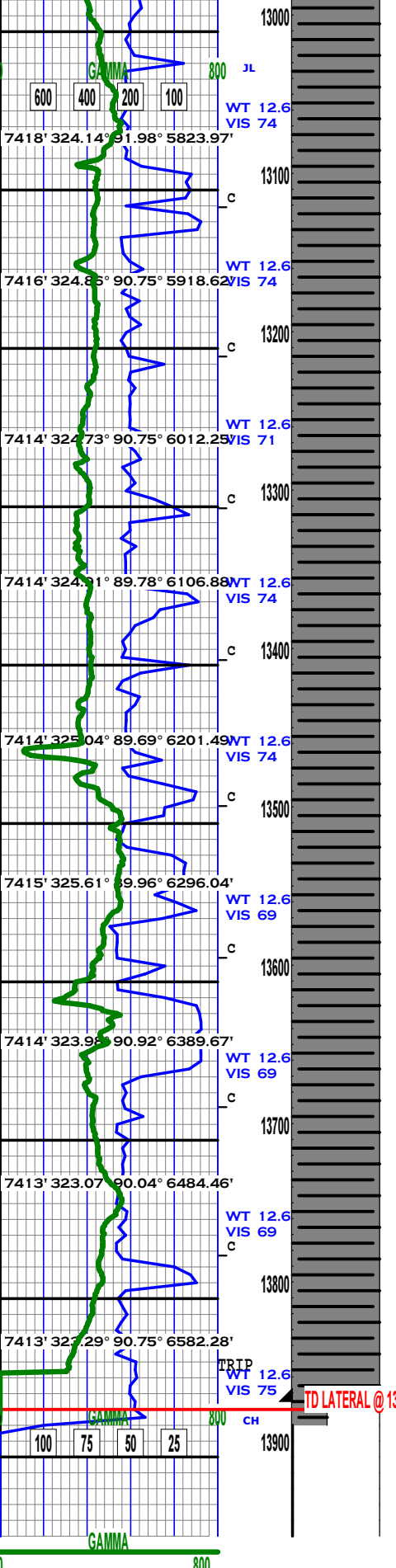
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SH: GyshBlk - Blk, blkly to splt, smth to wxy txt, sft to frm, tr imbd LS & tr PYRC lamm.

SH: GyshBlk - Blk, blkly to splt, smth to wxy txt, sft to frm, tr imbd LS & tr PYRC lamm.





SH: GyshBlk - Blk, blkly to splt, smth to wxy txt, sft to frm, tr lmbd LS.  
 SH: GyshBlk - Blk, blkly to splt, smth to wxy txt, sft to frm, tr LS.  
 SH: GyshBlk - Blk, blkly to splt, smth to wxy txt, sft to frm, tr LS.  
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 SH: GyshBlk - Blk, blkly to splt, smth to wxy txtto lam, sft to frm, tr LS.  
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GAS EQUIPMENT MAINT  
 GAS EQUIPMENT ONLINE

