

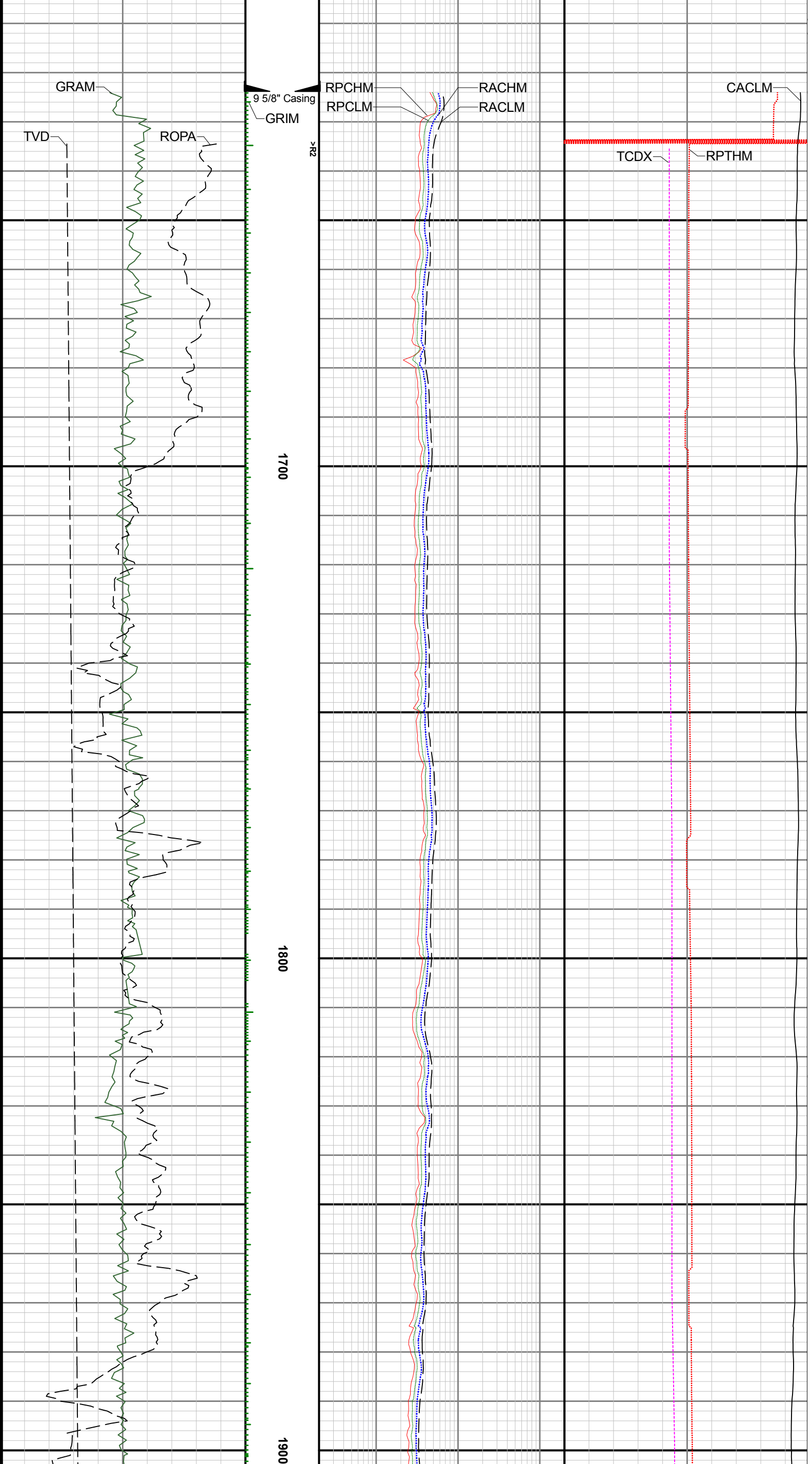
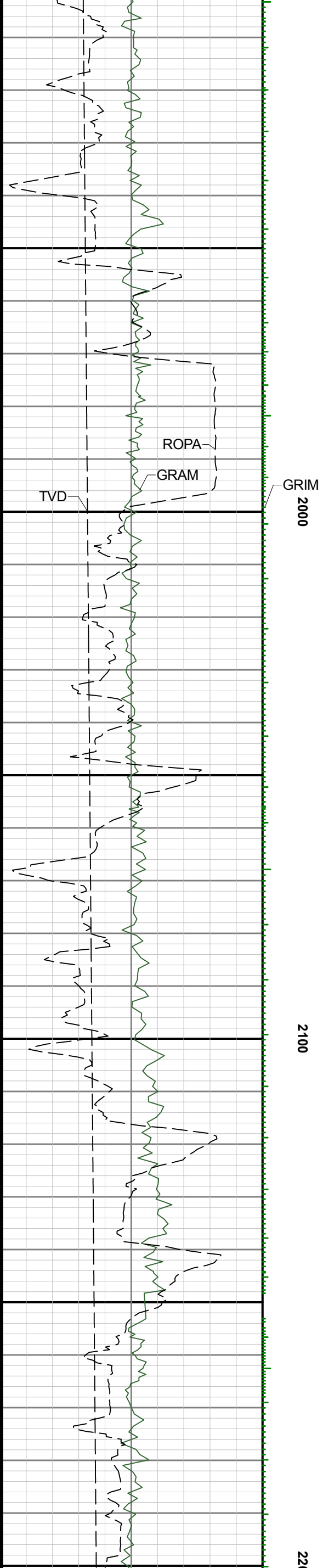
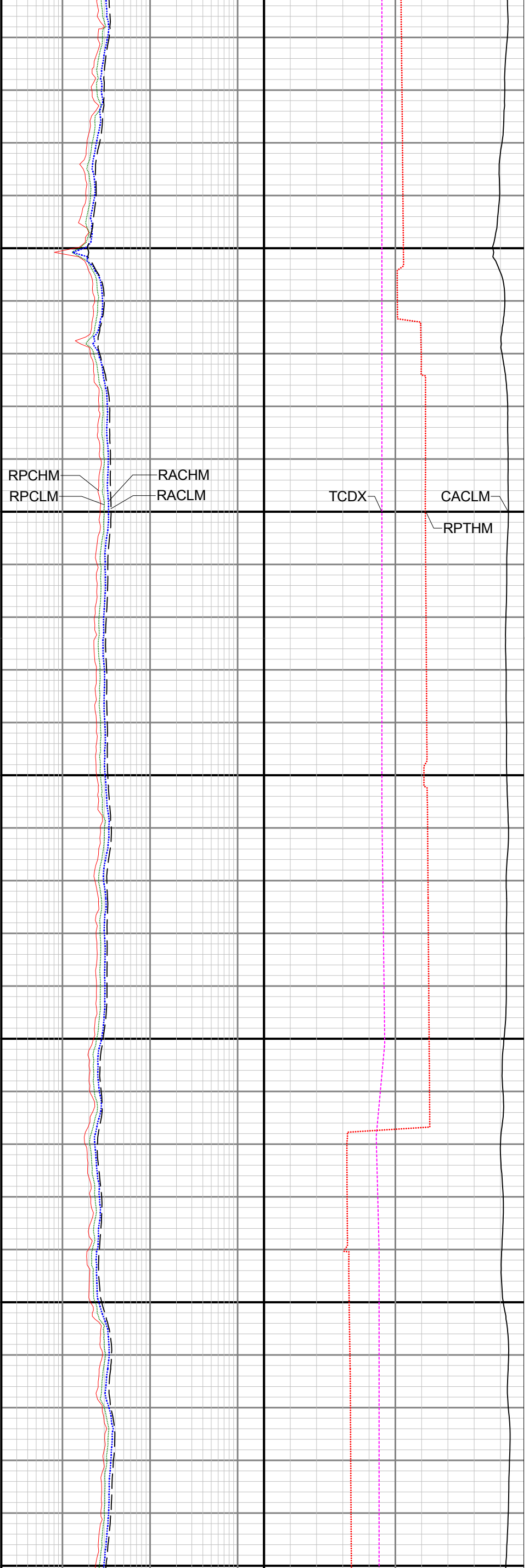
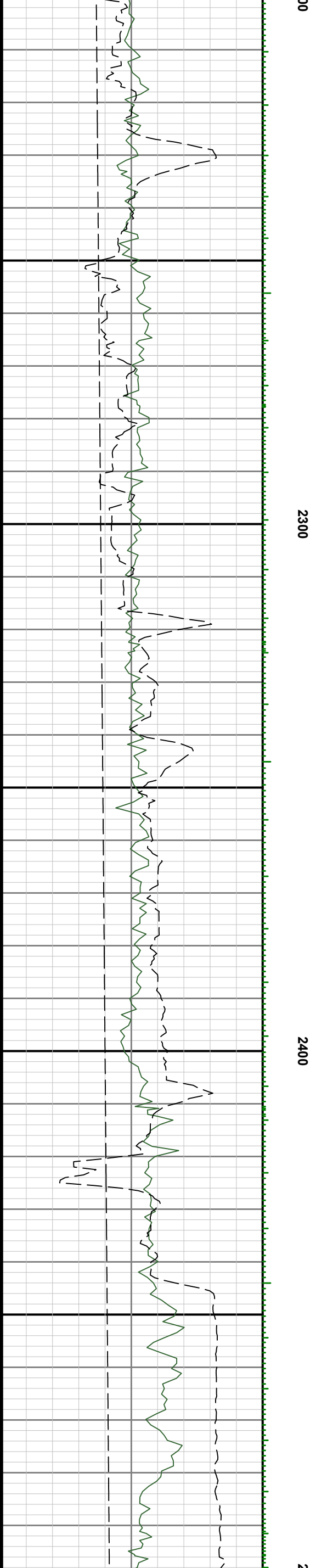
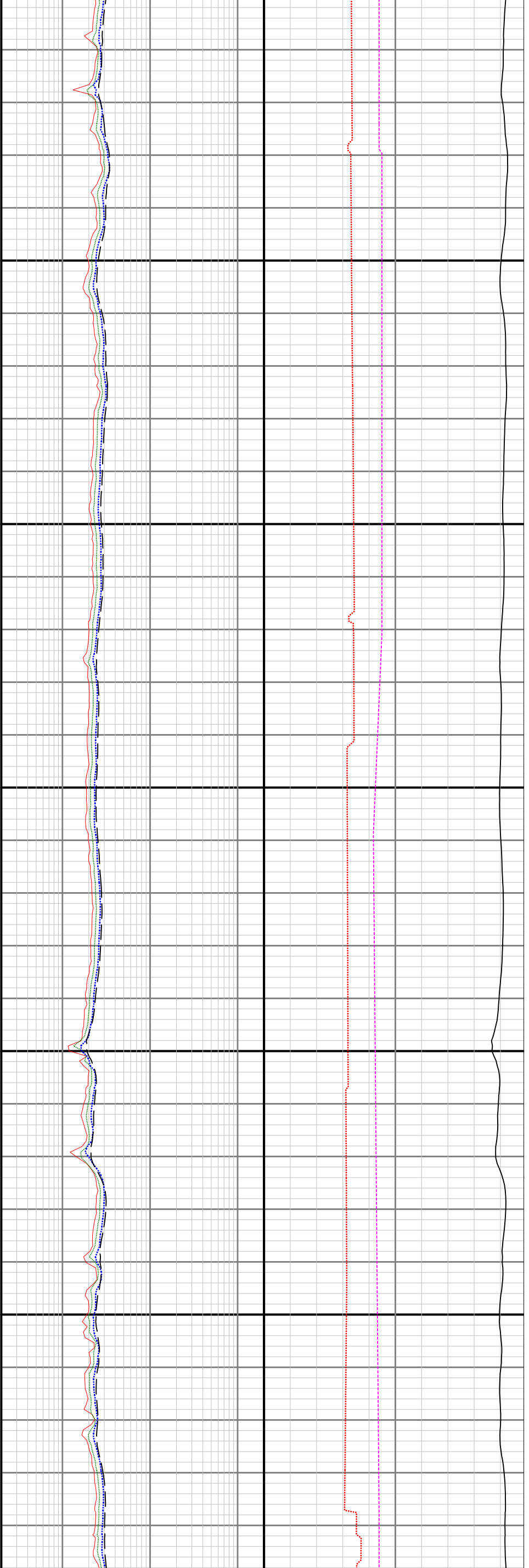


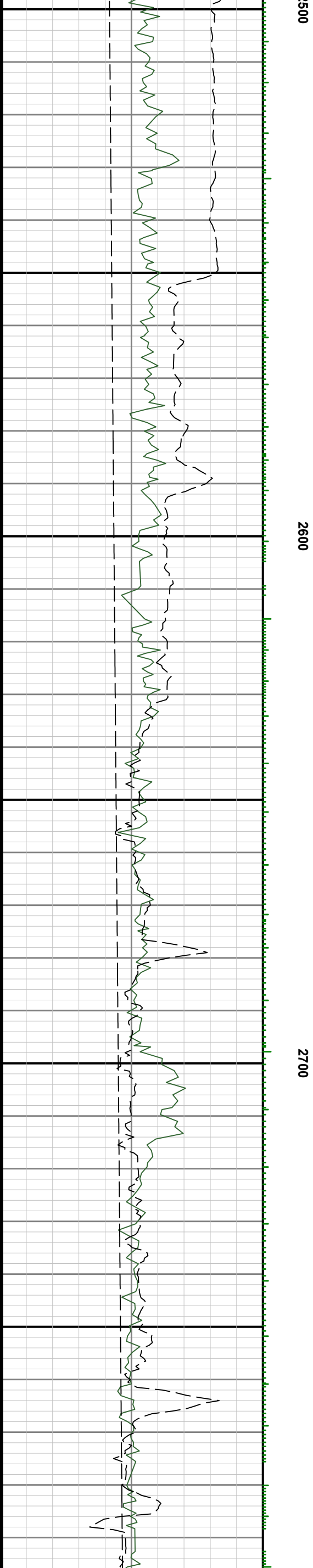
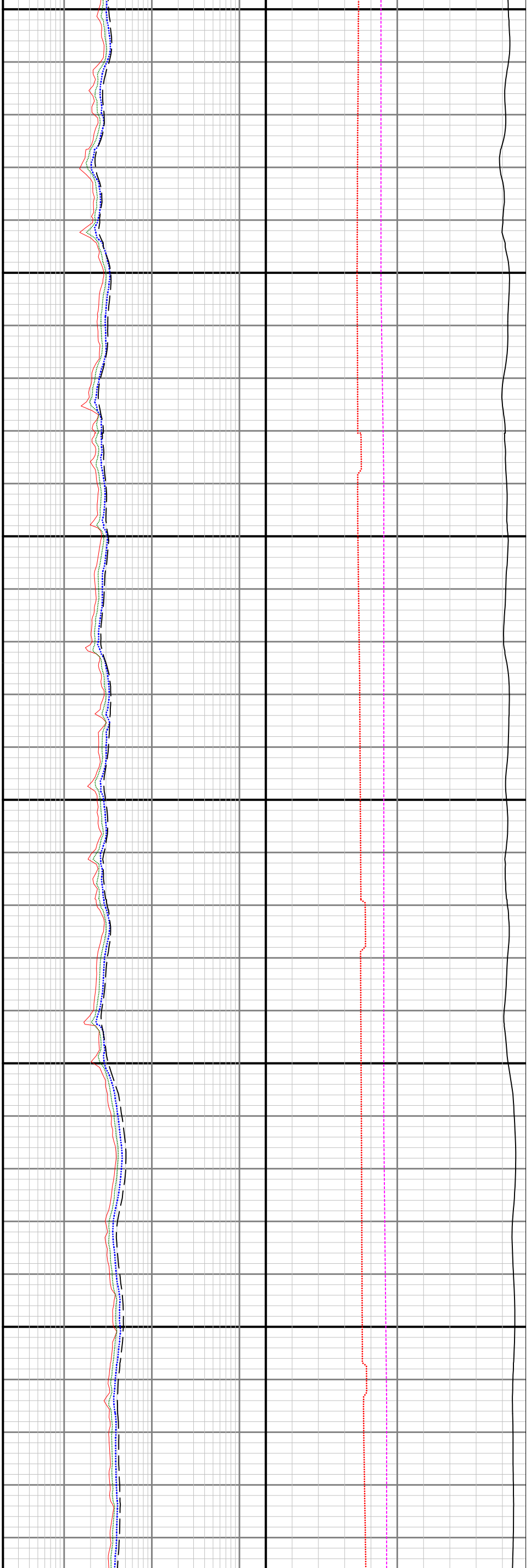
LWD MEMORY LOG														
<div></div>			<div>Multiple Propagation Resistivity</div> <div>Gamma Ray</div>											
Scale:	1:240 MD		Company: Bonanza Creek Oil Company											
Depth Reference:	Driller's Depth		Well: State Longhorn D14-11-12XRLNB											
			Field: Weld County											
			County: Weld County Country: United States											
			State: Colorado											
Status:	Final Print		Surface Location:					Other Services:						
API No:	05123450860000		Latitude: 040° 14' 04.782" N Longitude: 104° 24' 50.473" W					Directional						
Job ID:	8731087		SEC: 11		TWN: 3N		RGE: 63W							
Permanent Datum (P.D.):			Ground Level		Elevation:		4782.00 ft		Elev. KB:		N/A			
Log Measured From:			Rig Floor		Above P.D.		17.00 ft		Elev. DF:		4799.00 ft			
									Elev. GL:		4782.00 ft			
Dates	Interval Logged					Magnetic Field Reference								
Date From: 2017-08-25			Top: (ft)		1624.00		Azi Reference North: True			Dip Angle: (deg)		66.78		
Date To: 2017-09-01			Bottom: (ft)		5675.00		Total Magnetic Field Strength: (nT)						52317	
Spud Date: 2017-08-25						Mag to Reference North Correction: (deg)							8.16 E	
Borehole Record														
Casing Record														
Hole Size (in)			From (ft)		To (ft)		Size (in)		Weight (lb/ft)		From (ft)		To (ft)	
13.500			17.00		1634.00		9.625		36.00		17.00		1624.00	
8.500			1634.00		16664.00									
Mud Record														
Deviation Record														
Type			From (ft)		To (ft)		Hole Size (in)		Interval (ft)		Inc Az (Start)		Inc Az (End)	
Diesel-Oil Based Mud			1634.00		16664.00		13.500		1617.00		1.08 244.13		0.37 357.44	
							8.500		15030.00		0.37 357.44		90.52 90.35	
Acquisition System														
Software Version			Other											
Baker Hughes Cadence			RT4.1											
PlotStudio			4.1.7763.3											
			Rig:		Xtreme 19		Contractor:		Xtreme Drilling		Unit:		D&E	
			District:		RMD									

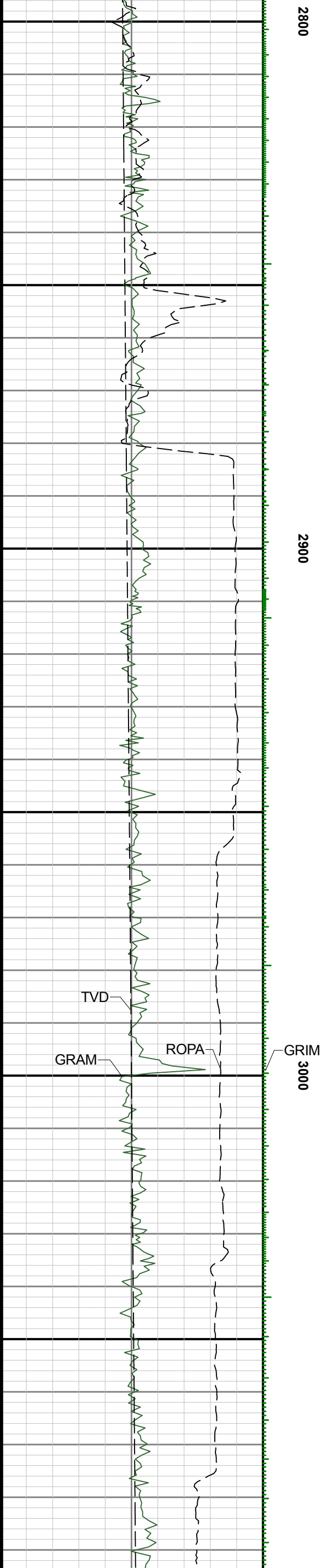
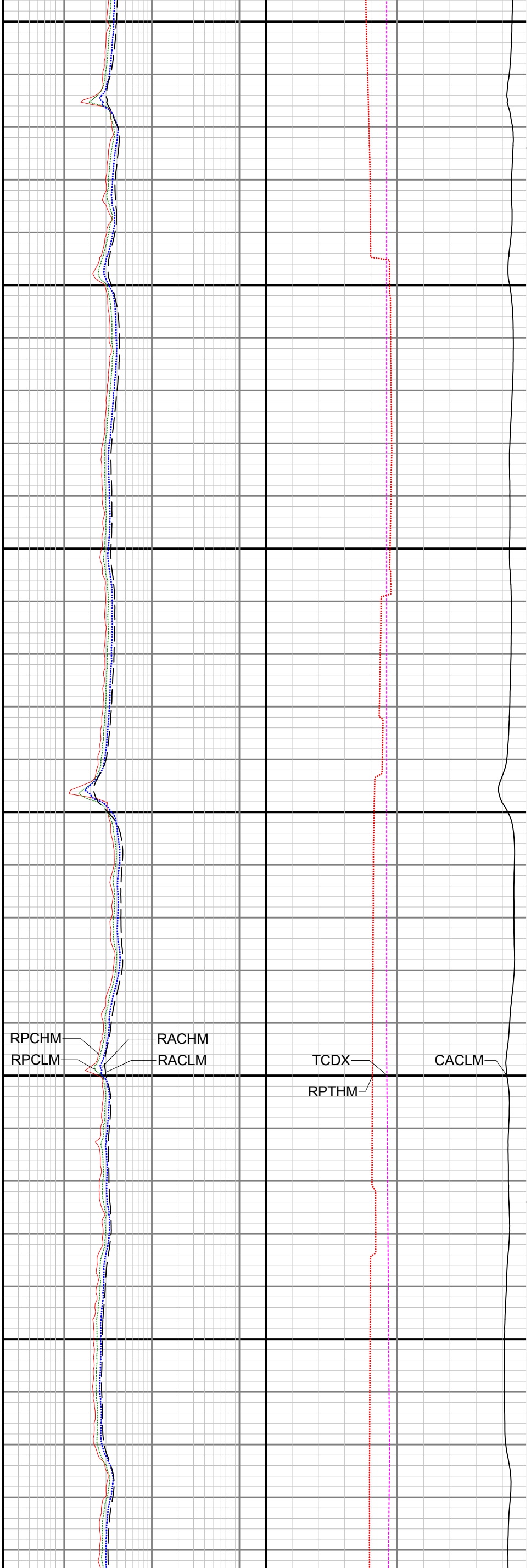
Equipment and Service Data							
Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
2	OnTrak	12115658	Pressure	1.05	10905.40	6.750	0.000
2	OnTrak	12115658	Gamma (double)	1.94	10906.29	6.750	0.000
2	OnTrak	12115658	Resistivity (4tx)	5.98	10910.33	6.750	0.000
2	OnTrak	12115658	Directional (mag)	11.77	10916.12	6.750	0.000
Service and Tool Mnemonics							
Mnemonic	Name	Description					
OTK	OnTrak	Sensor Sub (Inc, Azi, Temp, Azimuthal GR, Res, AP, VSS), OnTrak Platform					
BCPM	BCPM	Bi-Directional Communication and Power Module, OnTrak Platform					
Comments							
<div>1</div> <div>Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.</div> <div>2</div> <div>Baker Hughes LWD Run 2 utilized 6 3/4 inch OnTrak services (Multiple Propagation Resistivity, Gamma Ray, and Directional) behind an 8 1/2 inch bit and rotary steerable assembly to perform a MAD (Measurements After Drilling) Pass from 1624 to 5675 feet MD (1624 to 5623 feet TVD). The data collected during this run was ream logged up to 64 hours after being drilled and is presented independent of the drilling log.</div>							
Remarks							
Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark			
1	3907.00	8.500	2	The interval from 3907 to 3920 feet MD (3892 to 3905 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
2	4174.00	8.500	2	The interval from 4174 to 4181 feet MD (4154 to 4161 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
3	4347.00	8.500	2	The interval from 4347 to 4361 feet MD (4324 to 4337 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
4	4433.00	8.500	2	The interval from 4433 to 4449 feet MD (4408 to 4423 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
5	4699.00	8.500	2	The interval from 4699 to 4716 feet MD (4668 to 4685 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
6	5016.00	8.500	2	The interval from 5016 to 5033 feet MD (4978 to 4994 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
7	5079.00	8.500	2	The interval from 5079 to 5097 feet MD (5039 to 5057 feet TVD) does not have memory data due to the OnTrak tool losing power due to the amount of mud flow being diverted while downlinking to the AutoTrak Curve rotary steerable assembly.			
8	5675.00	8.500	2	The interval from 5675 to 16664 feet MD (5623 to 6480 feet TVD) was not logged with OnTrak services due to sensor to bit offset at well TD.			
Curve Mnemonics							
Presented Curves		Description					Units
CACLM		Conductivity Attenuation - Corrected - 400kHz					mmho/m
RACHM		Resistivity Attenuation - Corrected - 2MHz					ohm.m
RACLM		Resistivity Attenuation - Corrected - 400kHz					ohm.m
RPCHM		Resistivity Phase - Corrected - 2MHz					ohm.m
RPCLM		Resistivity Phase - Corrected - 400kHz					ohm.m
RPTHM		Resistivity Time Since Drilled					min
TCDX		Downhole Temperature					degF
ROPA		Depth Averaged ROP 3 ft Average					ft/h
TVD		True Vertical Depth					ft
GRAM		OnTrak - Gamma Ray - Apparent - Memory 0.5 ft Average					API
GRIM		OnTrak - Gamma Ray - Data Point Indicator - Memory					unitless
<div><div><div><div><div></div><div>BAKER HUGHES</div></div><div><div>Company</div><div>Well</div><div>Interval</div><div>Created</div></div><div>Bonanza Creek Oil Company</div><div>State Longhorn D14-11-12XRLNB</div><div><div>Date From:2017-08-25 08:15:09</div><div>Date To:2017-09-01 14:42:16</div></div><div><div>Top:17.00</div><div>Bottom:5675.00</div></div><div>2017-09-02 14:15:29</div></div></div></div>							
Gamma Ray - Apparent 0.5 ft Average [GRAM]		MD 1:240 feet	Resistivity Phase - Corrected - 2MHz [RPCHM]		Downhole Temperature [TCDX]		
0 200			0.2 200		0 250		
API			ohm.m		degF		
Depth Averaged ROP 3 ft Average [ROPA]			Resistivity Phase - Corrected - 400kHz [RPCLM]		Conductivity Attenuation - Corrected - 400kHz [CACLM]		
1200 0			0.2 200		4000 0		
ft/h		1600	ohm.m		mmho/m		
True Vertical Depth [TVD]			Resistivity Attenuation - Corrected - 2MHz [RACHM]		Resistivity Time Since Drilled [RPTHM]		
0 6000			0.2 200		0 600		
ft			ohm.m		min		
			Resistivity Attenuation - Corrected - 400kHz [RACLM]				
0.2 200			ohm.m				

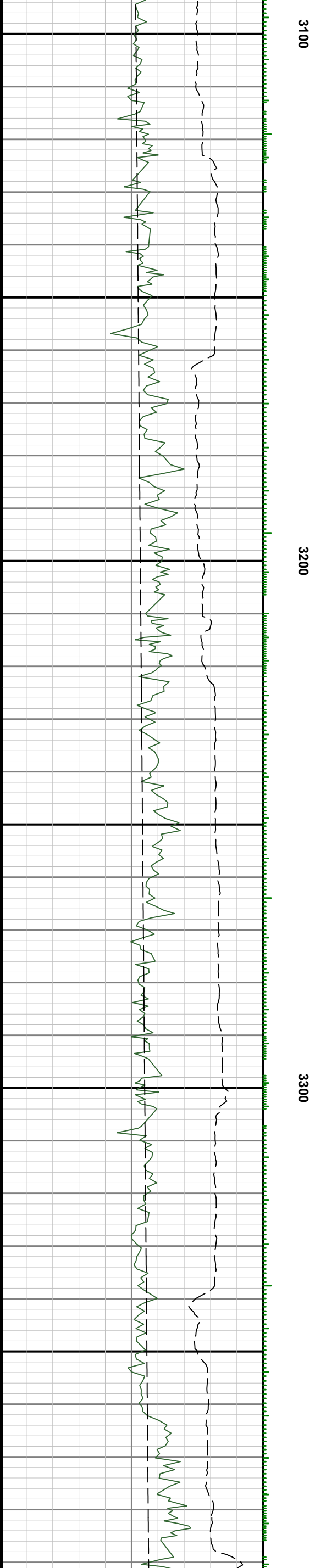
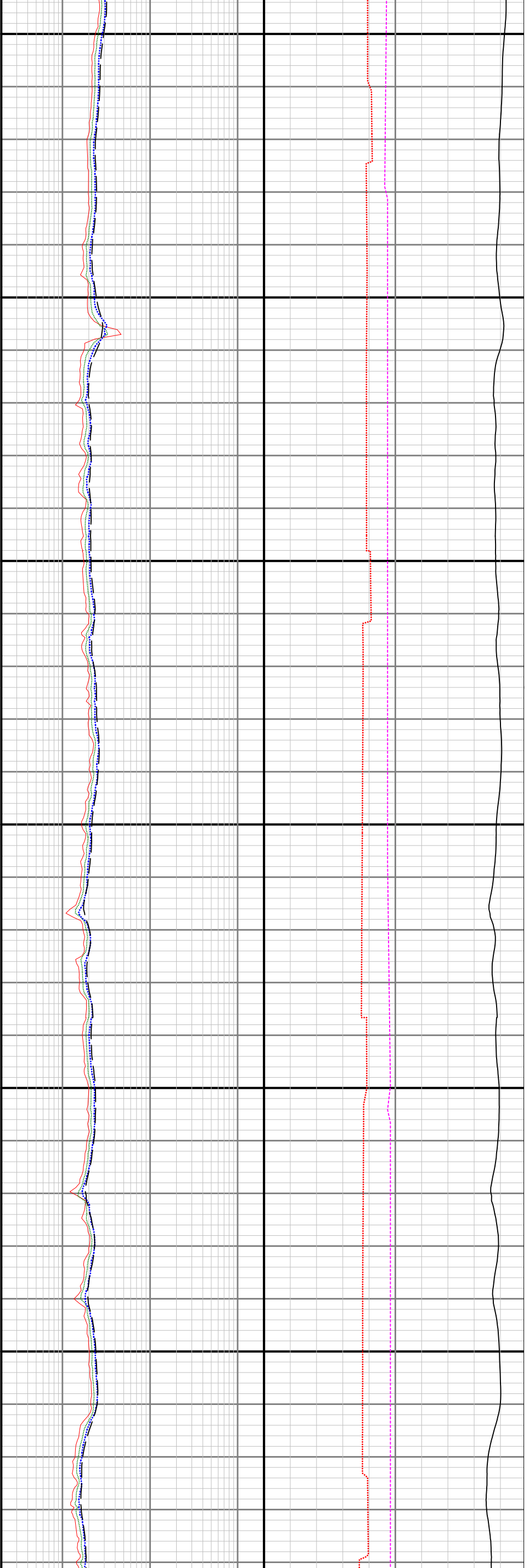


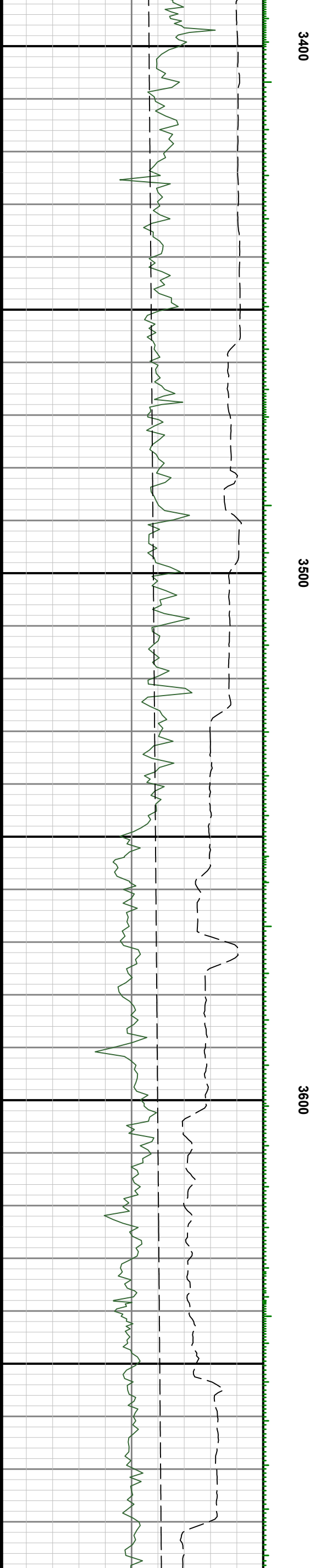
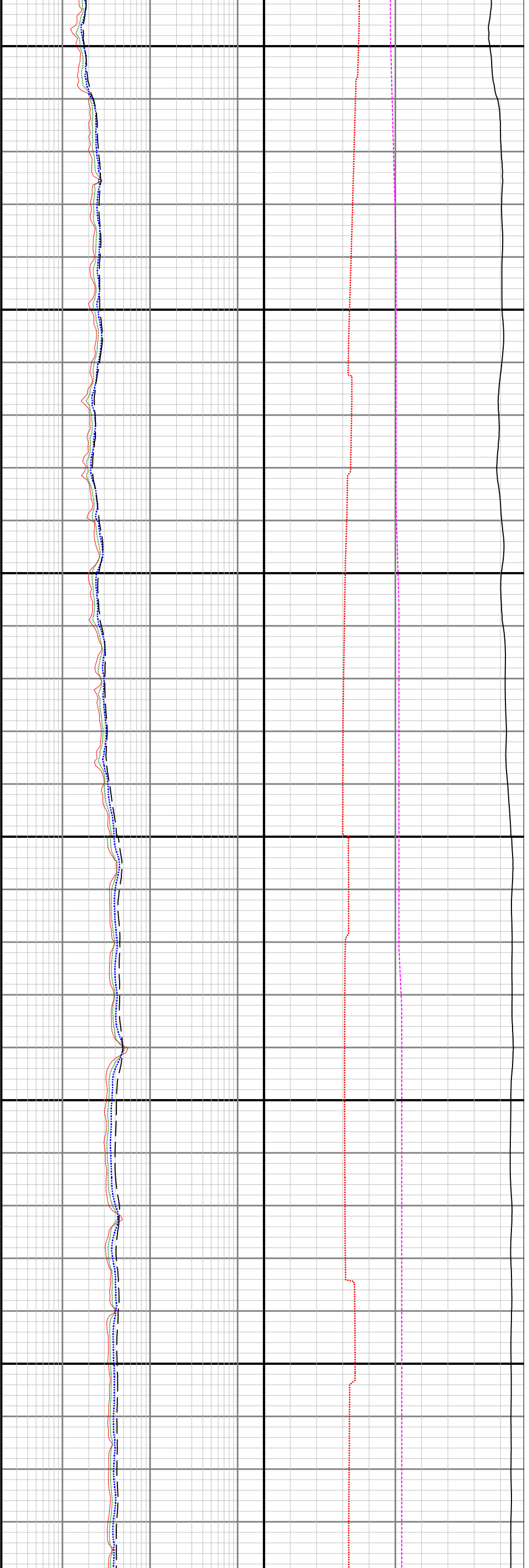


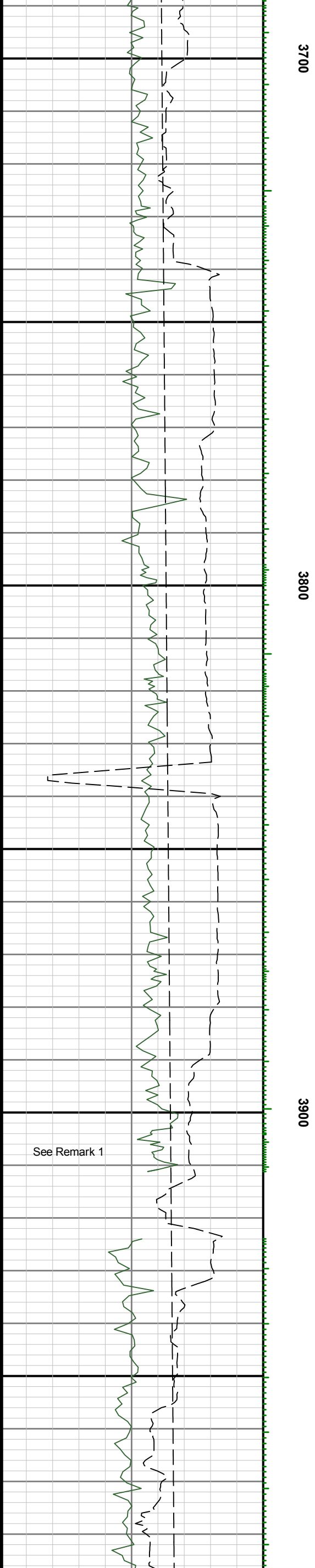
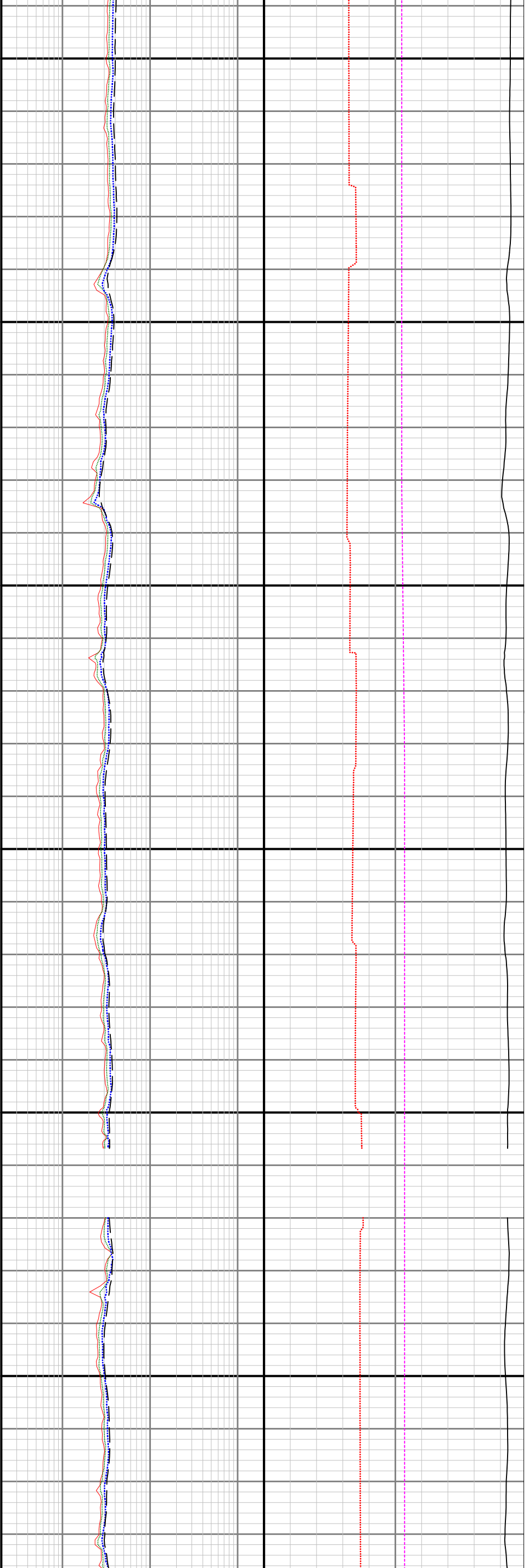


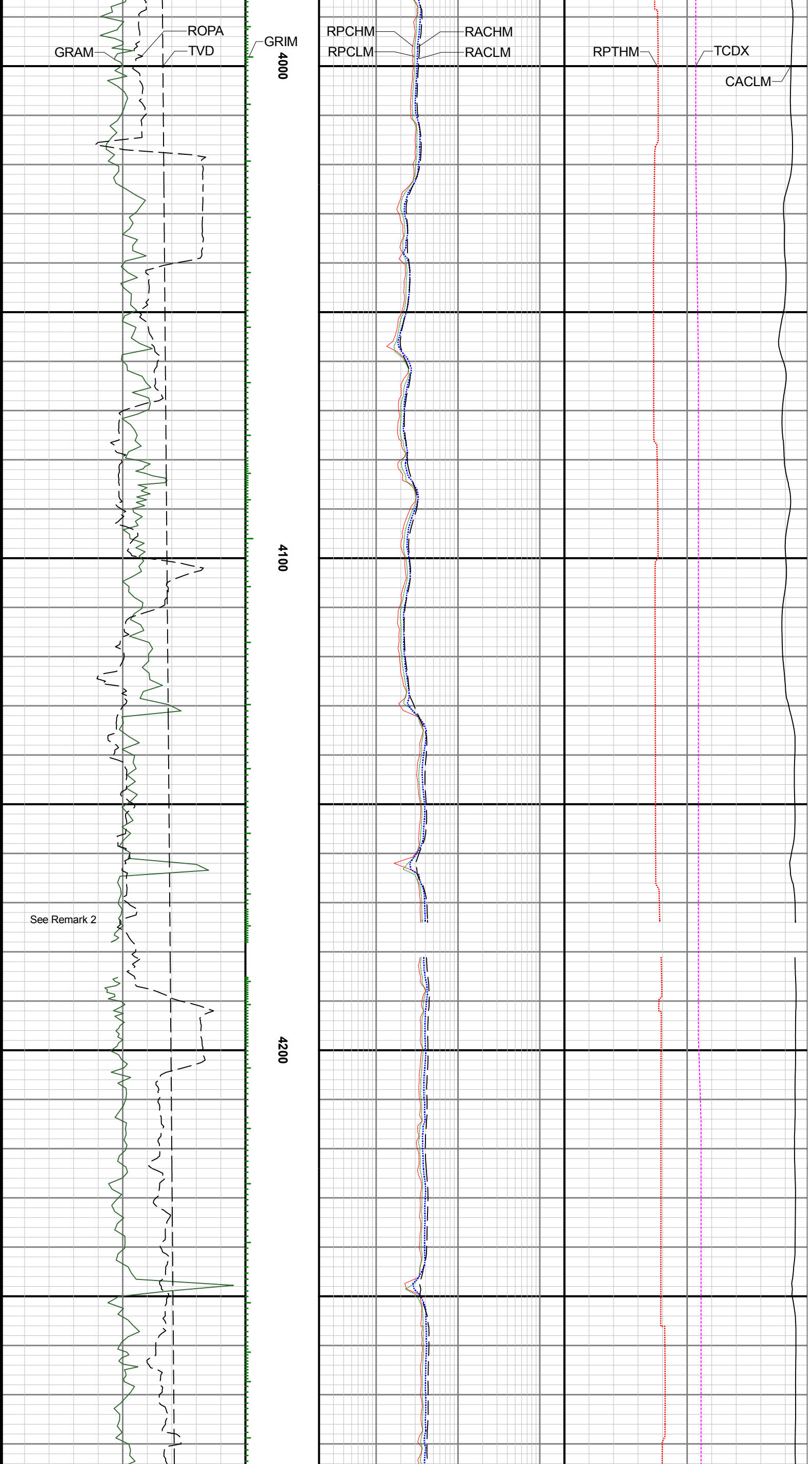


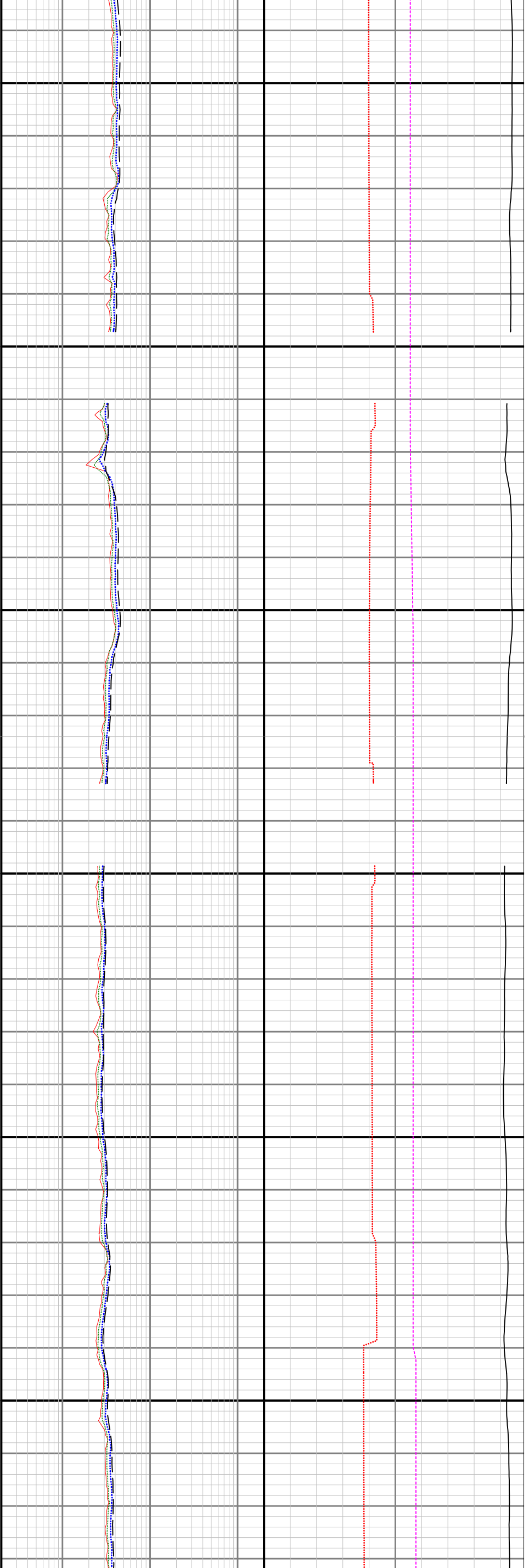












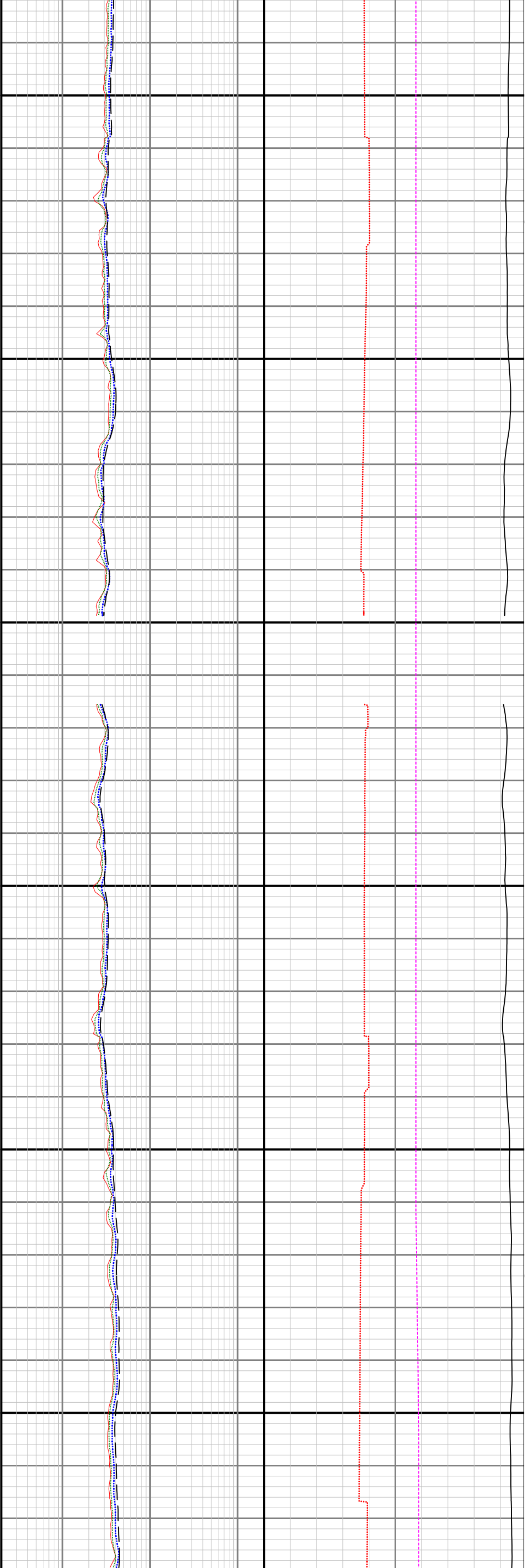
4300

4400

4500

See Remark 3

See Remark 4

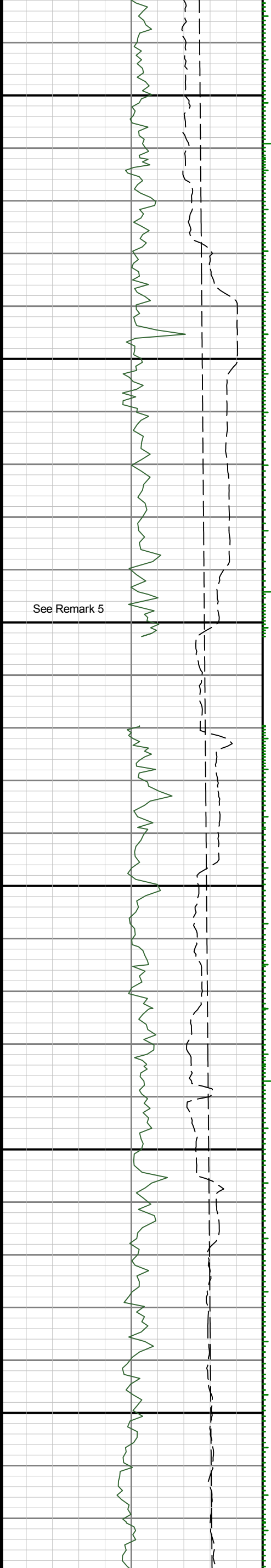


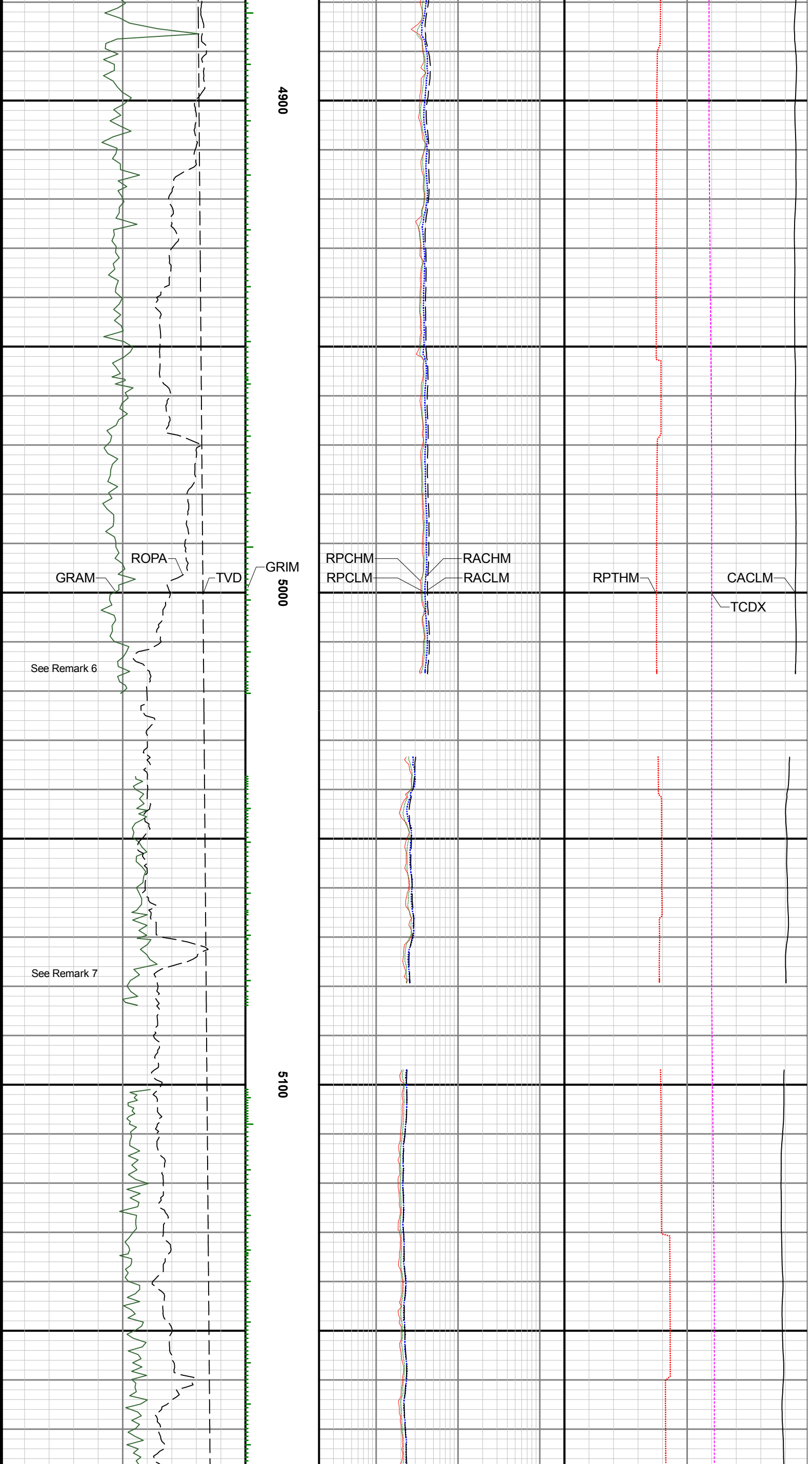
4600

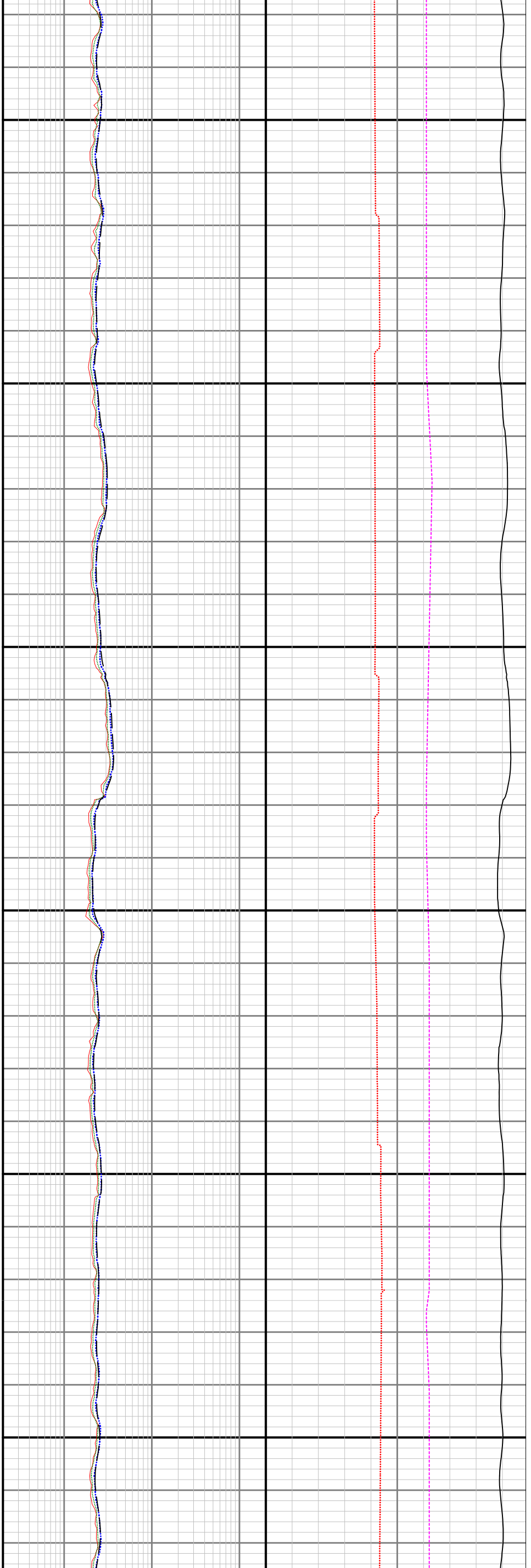
4700

4800

See Remark 5







5200

5300

5400

