



LWD MEMORY LOG

Gamma Ray

Scale:		Company: Verdad Oil and Gas Corporation															
1:1200 MD		Well:		Helen 24-3H													
Depth Reference:		Field:		Weld													
Driller's Depth		County:		Weld		Country: United States											
State:		State:		Colorado													
Status:		Surface Location:				Other Services:											
Final Print		Latitude:				040° 07' 12.212" N											
API No: 05-123-46822-00		Longitude:				104° 30' 06.458" W											
Job ID: 9172823		SEC:		24 TWN:		2N RGE:		64W		Directional							
Permanent Datum (P.D.):		Mean Sea Level		Elevation:		0.00 ft		Elev. KB:		N/A							
Log Measured From:		Rig Floor		Above P.D.		4943.00 ft		Elev. DF:		4943.00 ft		Elev. GL: 4926.00 ft					
Dates		Interval Drilled				Magnetic Field Reference											
Date From: 2018-05-16		Top: (ft)		1760.00		Azi Reference North:		True		Dip Angle: (deg)		66.65					
Date To: 2018-05-22		Bottom: (ft)		16883.00		Total Magnetic Field Strength: (nT)						52210					
Spud Date: 2018-05-15						Mag to Reference North Correction: (deg)						8.14					
Borehole Record														Casing Record			
Hole Size (in)		From (ft)		To (ft)		Size (in)		Weight (lb/ft)		From (ft)		To (ft)					
13.500		17.00		1774.00		9.625		36.00		17.00		1763.00					
8.500		1774.00		17200.00													
Mud Record														Deviation Record			
Type		From (ft)		To (ft)		Hole Size (in)		Interval (ft)		Inc Az (Start)		Inc Az (End)					
Water Based Mud		17.00		1774.00		13.500		1757.00		0.54 2.85		26.06 232.93					
Oil Based Mud		1774.00		16883.00		8.500		15109.00		26.06 232.93		90.03 176.26					
Acquisition System														Software Version		Other	
Baker Hughes Cadence		RT 4.2				Rig:		Xtreme 24									
Pilot Studio		4.2.8155.1				Contractor:		Xtreme Drilling									
						District:		RMA				Unit: D&E					

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Log Run Summary

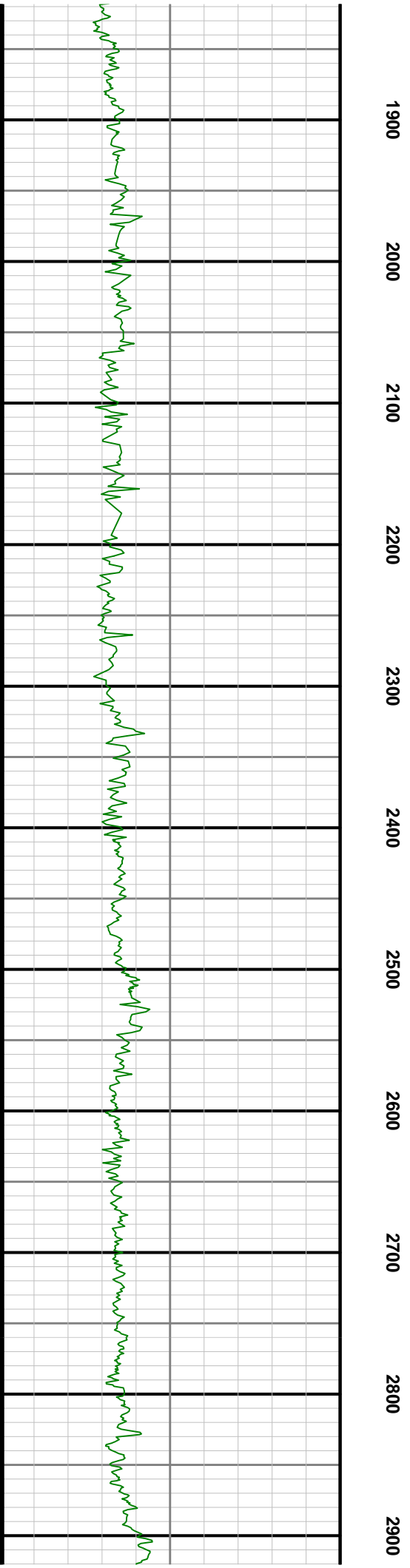
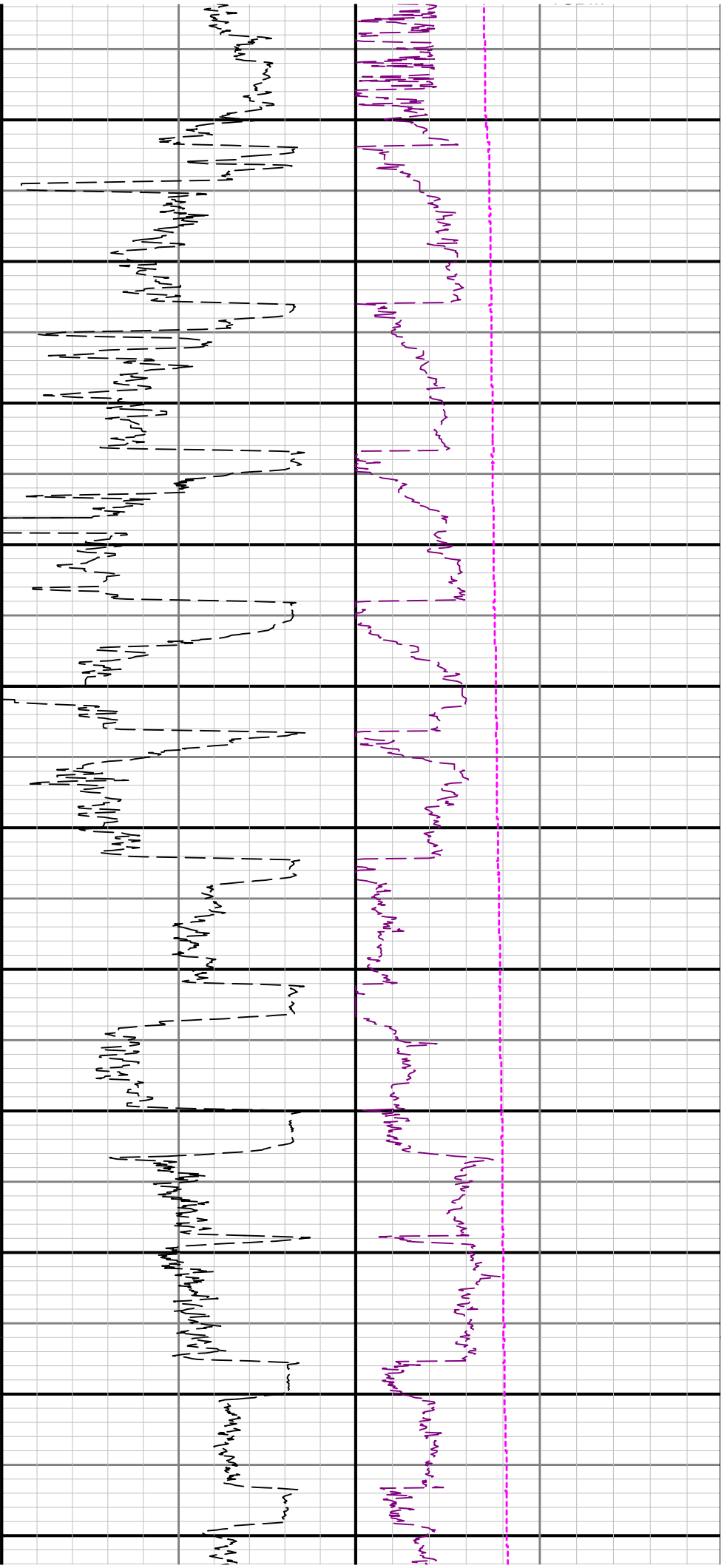
Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours
						Top	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	13.500	PDC	4.00	Steerable	0.00	0.00	17.00	1774.00	N/A	N/A	9.67
2	2	8.500	PDC	3.00	Rotary Steerable	1774.00	6642.00	1774.00	6655.00	2018-05-18 02:46	2018-05-19 04:15	25.79
3	3	8.500	PDC	3.00	Rotary Steerable	6642.00	16870.00	6655.00	16883.00	2018-05-19 14:27	2018-05-22 04:06	55.83

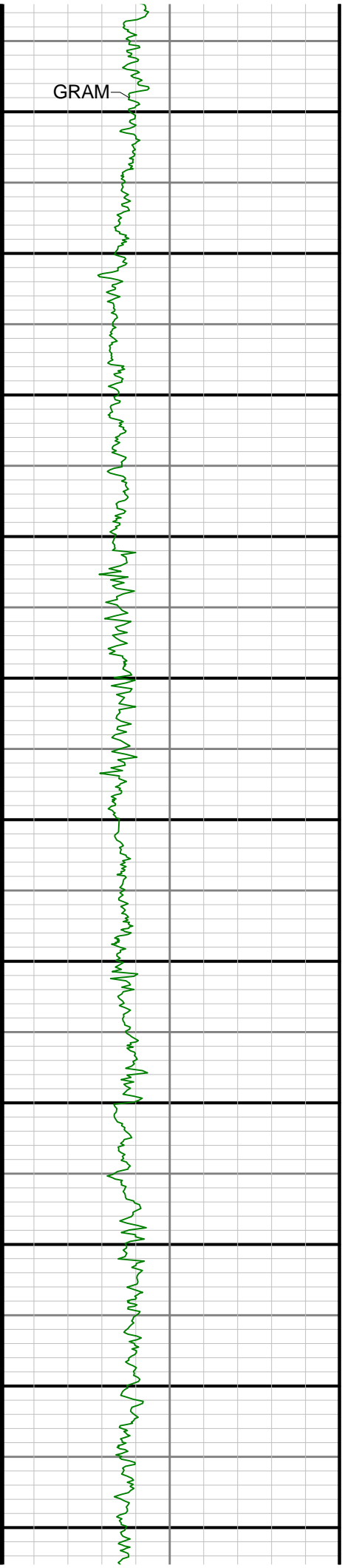
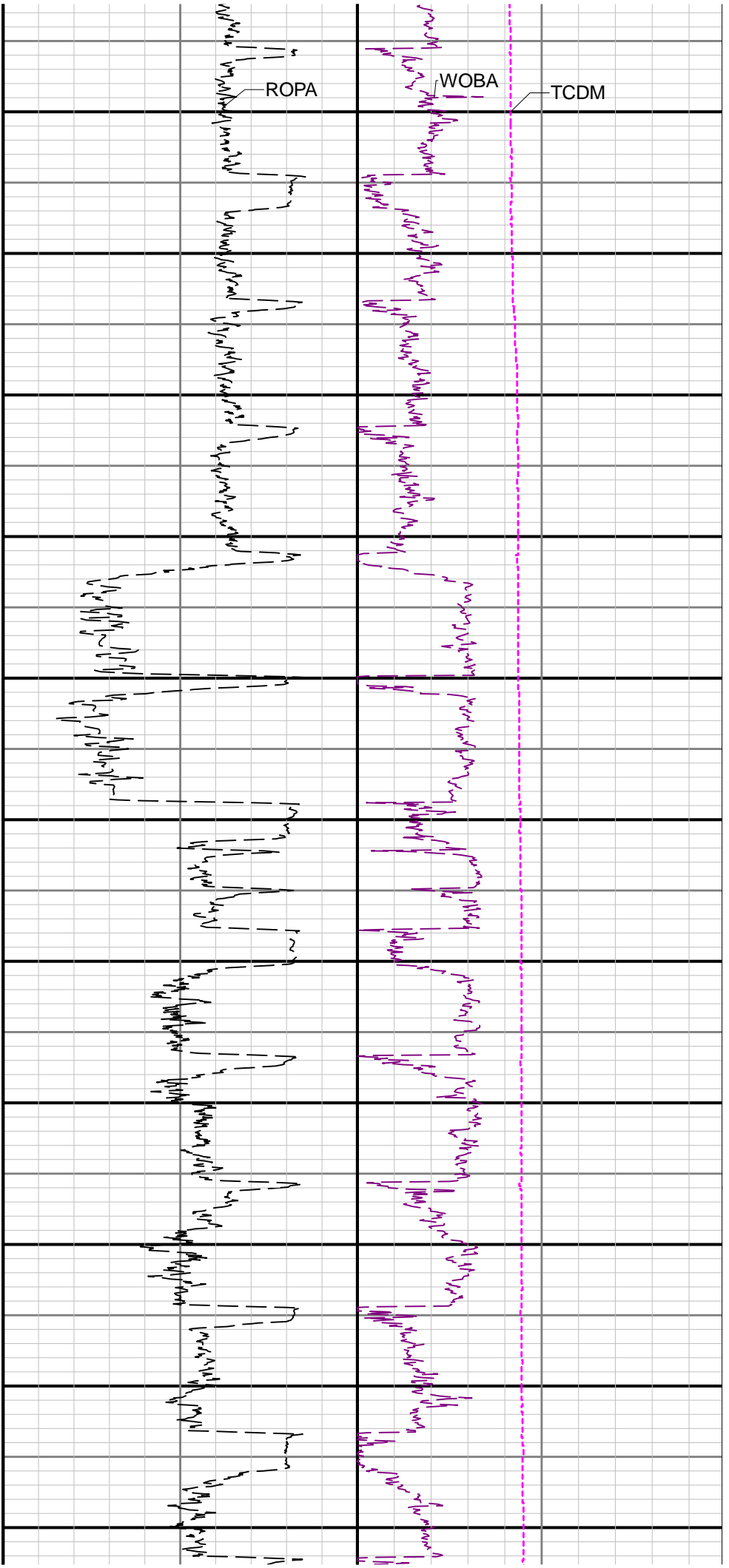
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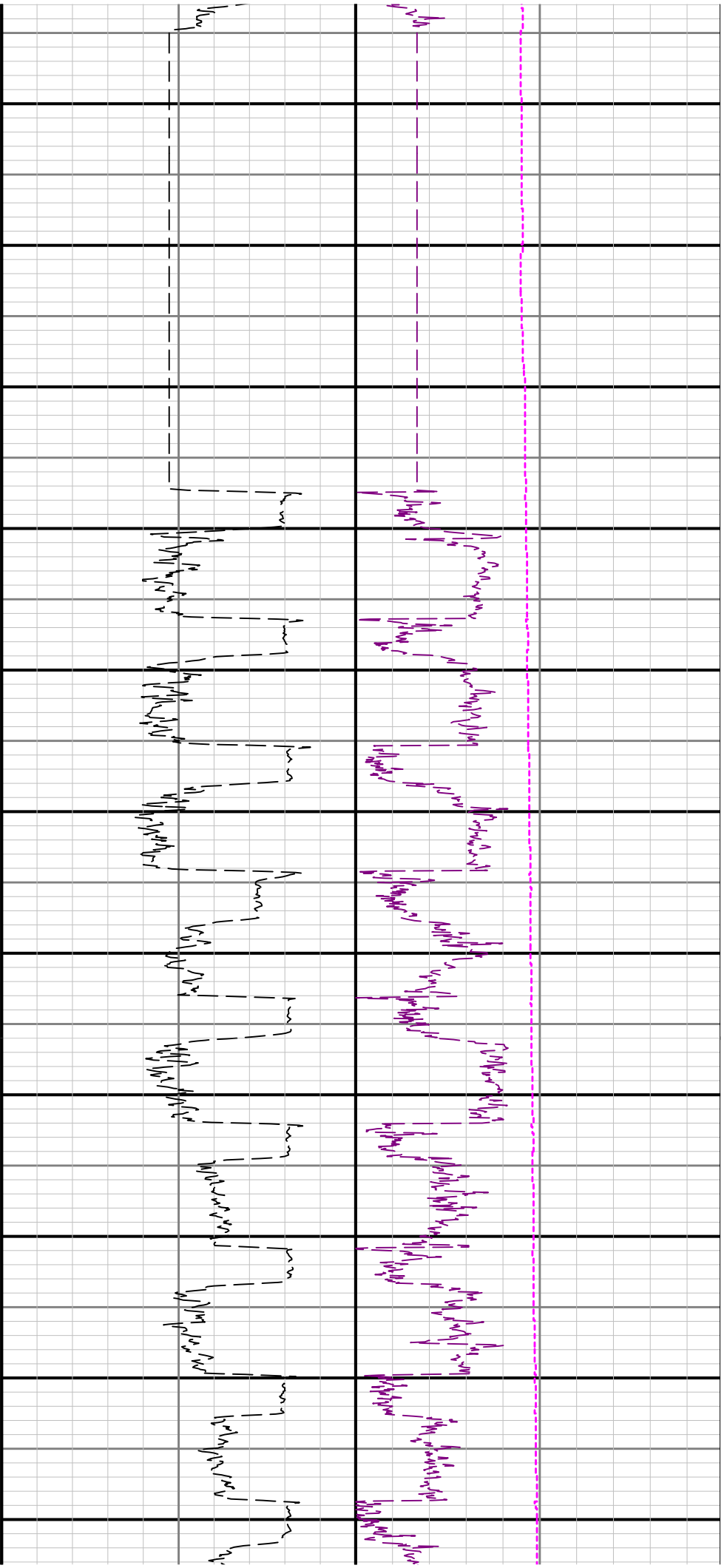
Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Matthew Yule	2018-05-16	2018-05-17	Enyonam Anyigba	2018-05-17	2018-05-22			

Mud Properties Record

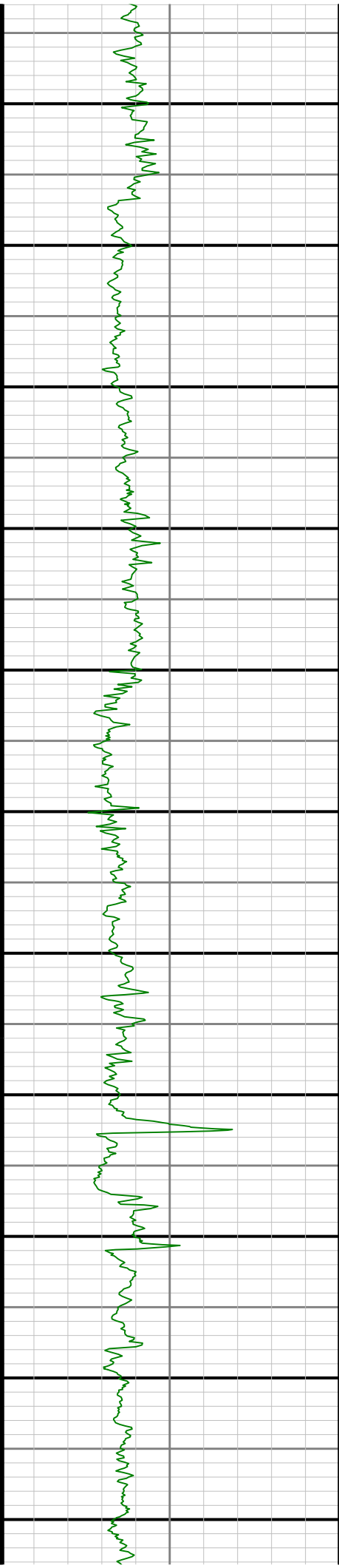
Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2018-05-16 08:38	1	575.00	Water Based Mud	8.4	1	9	N/A	1/99	Active Pit	400	0.00
2018-05-17 08:39	2	1774.00	Oil Based Mud	10.2	17	N/A	10.0	74/26	Active Pit	26000	0.00
2018-05-18 06:10	2	2190.00	Oil Based Mud	9.6	18	N/A	9.6	74/26	Active Pit	34000	0.00
2018-05-19 10:25	3	6655.00	Oil Based Mud	9.6	15	N/A	9.8	77/23	Active Pit	29000	0.00

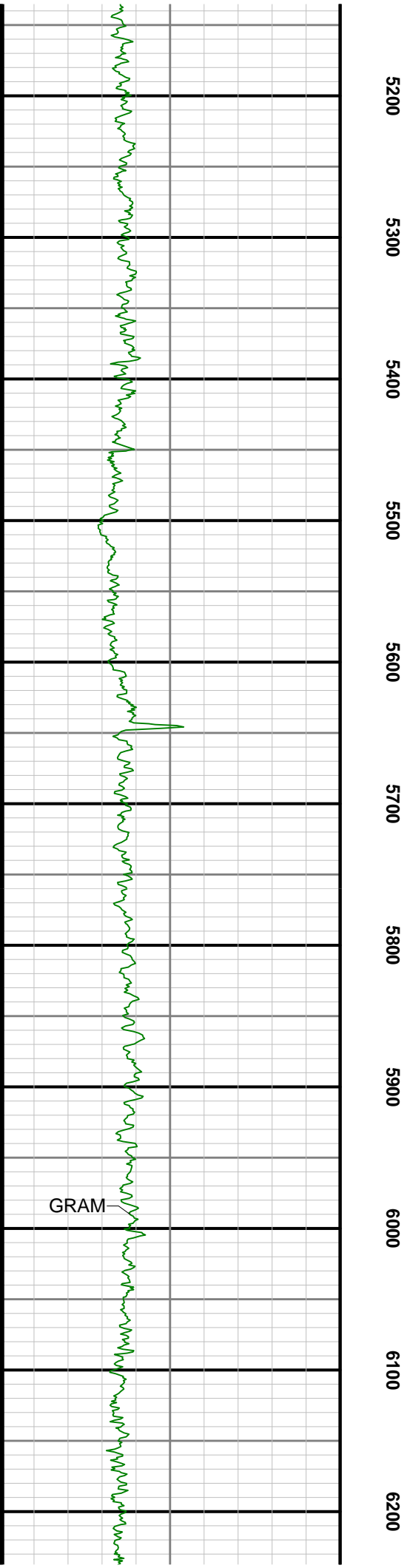
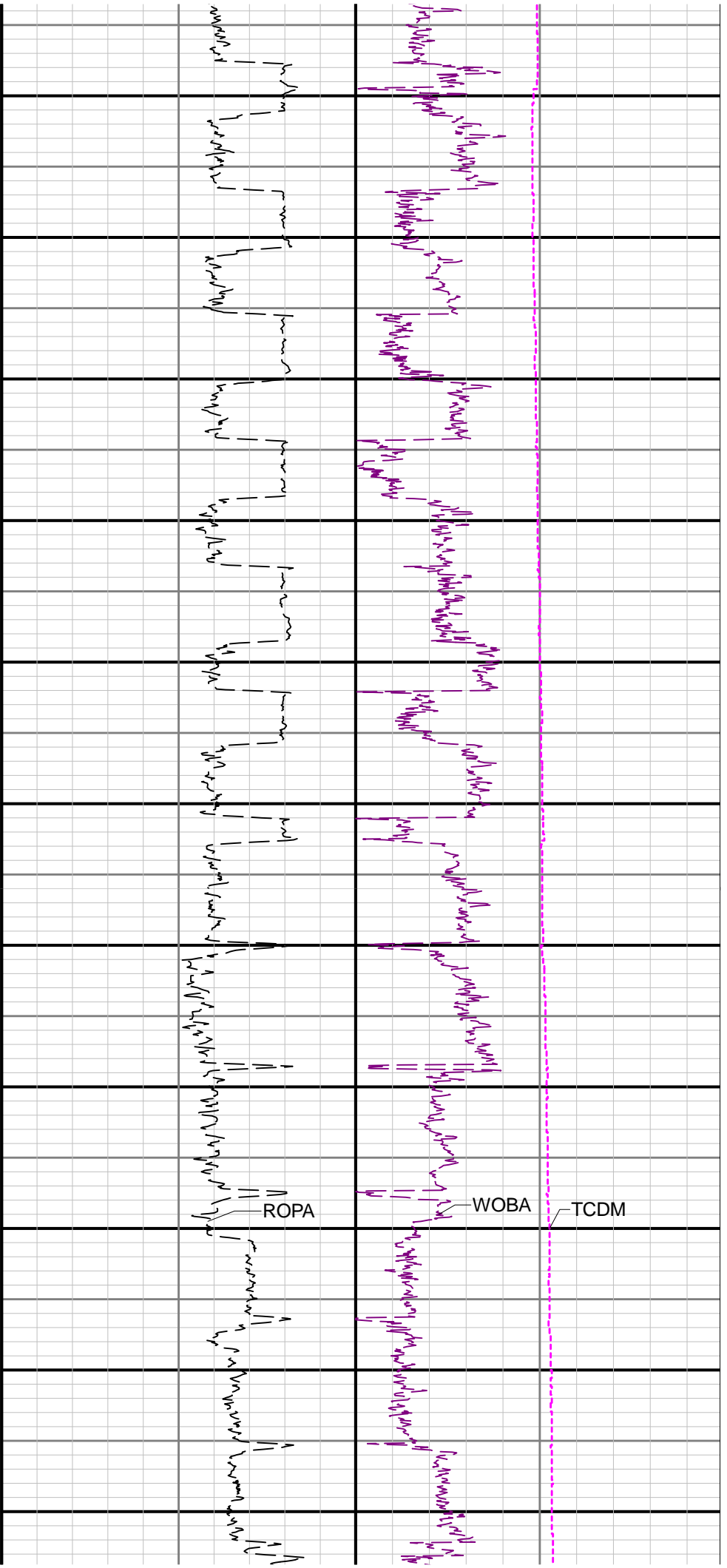


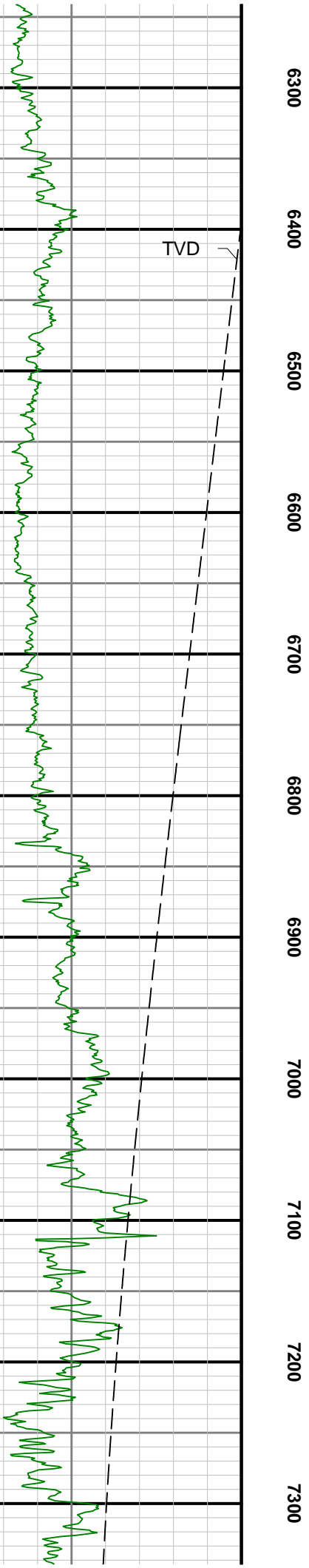
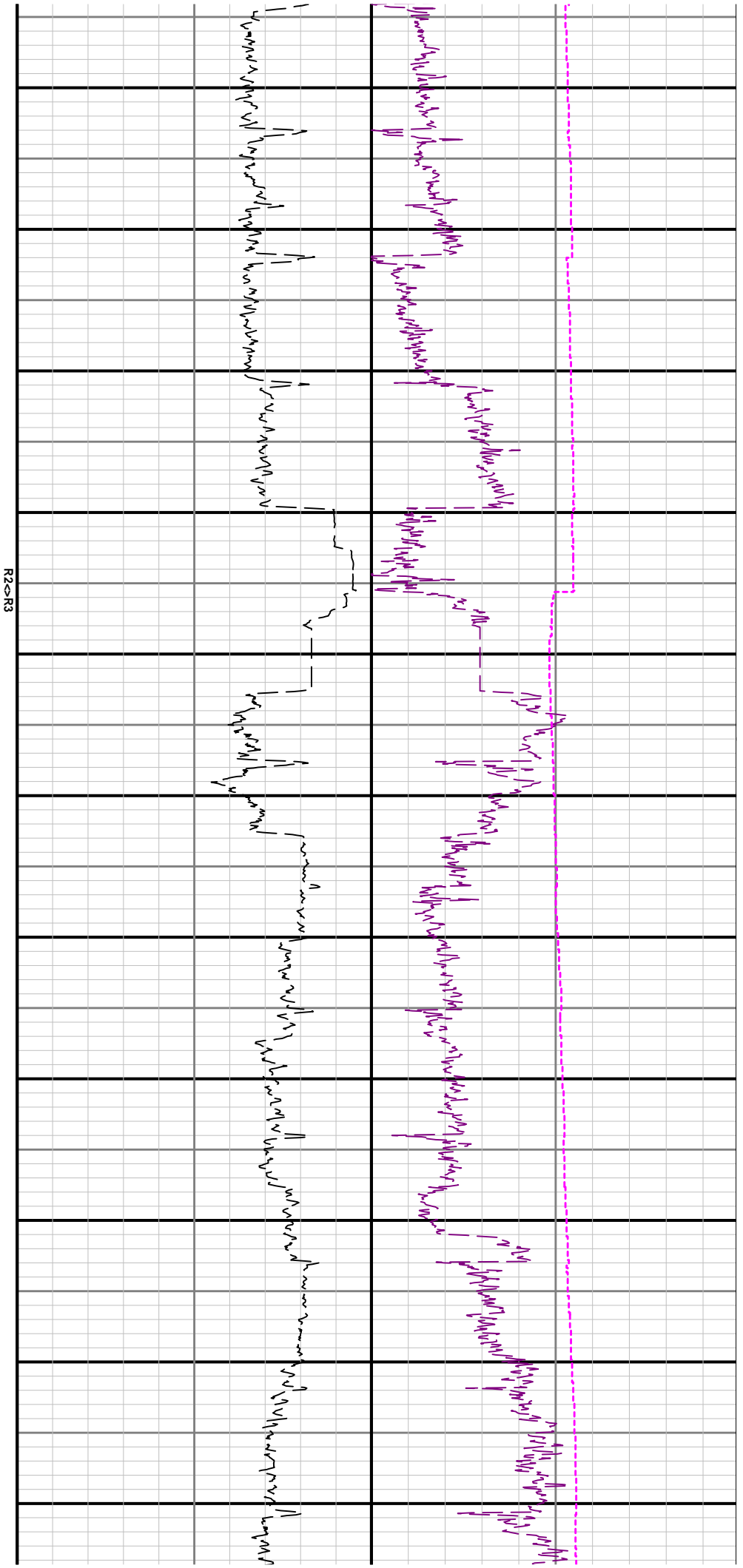


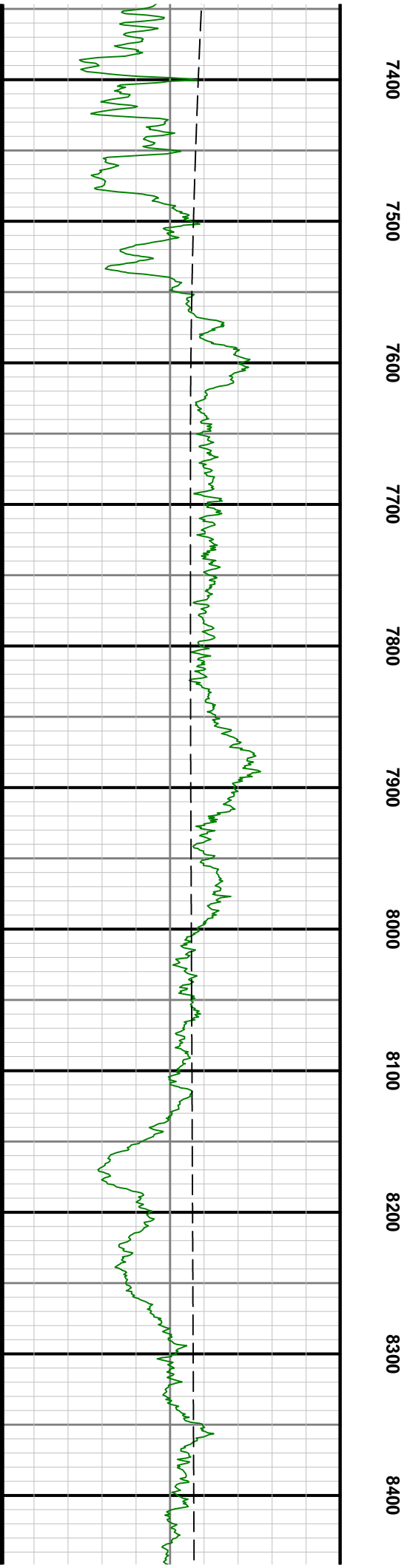
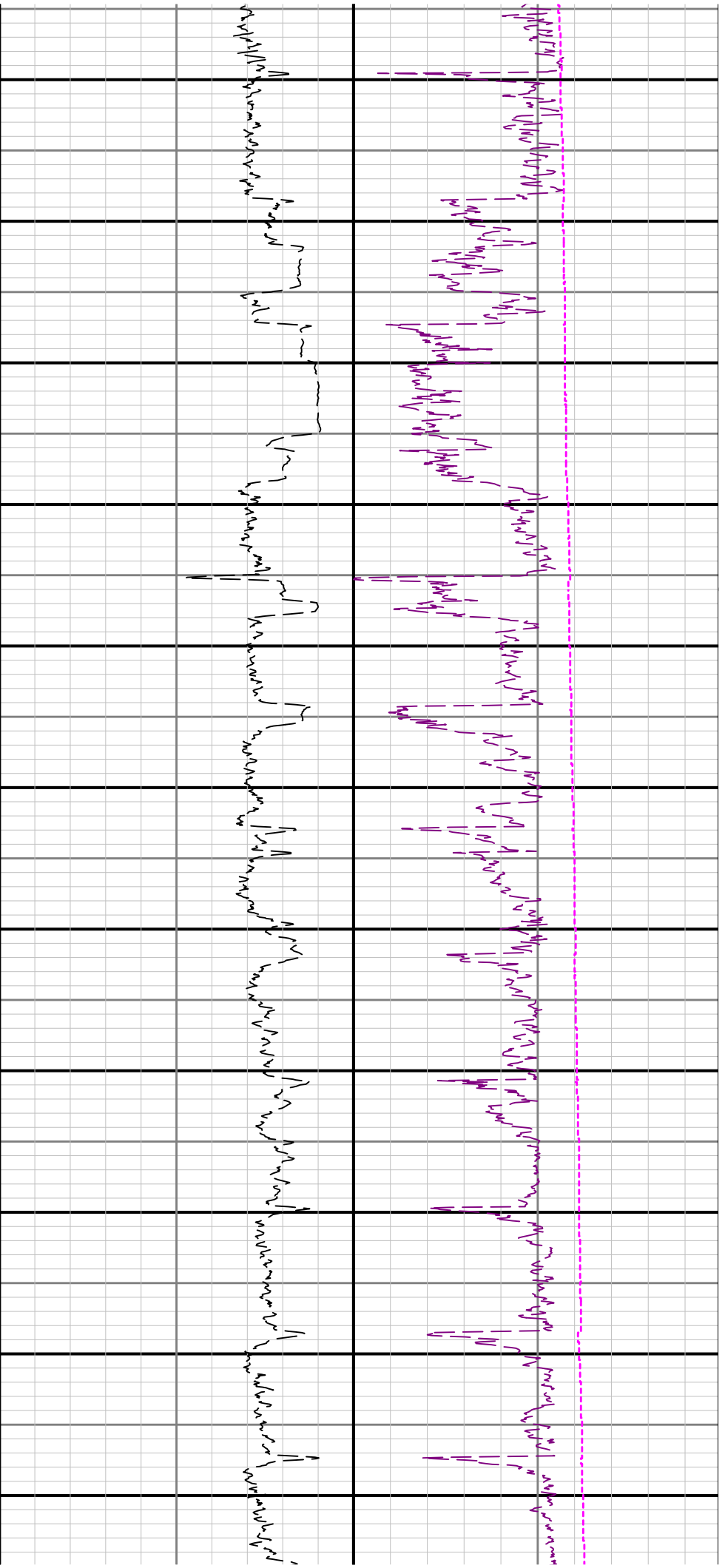


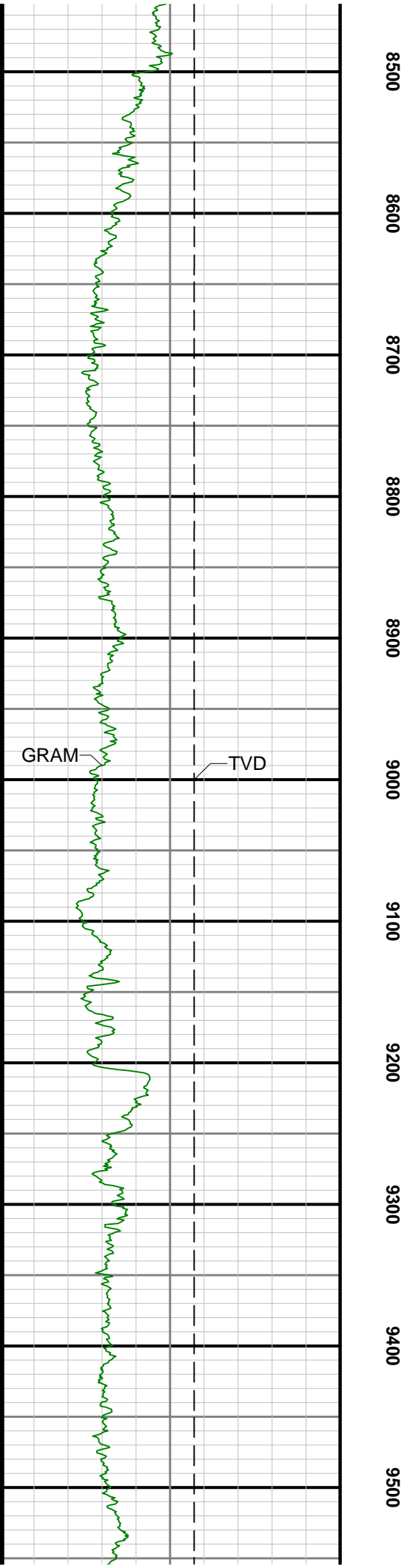
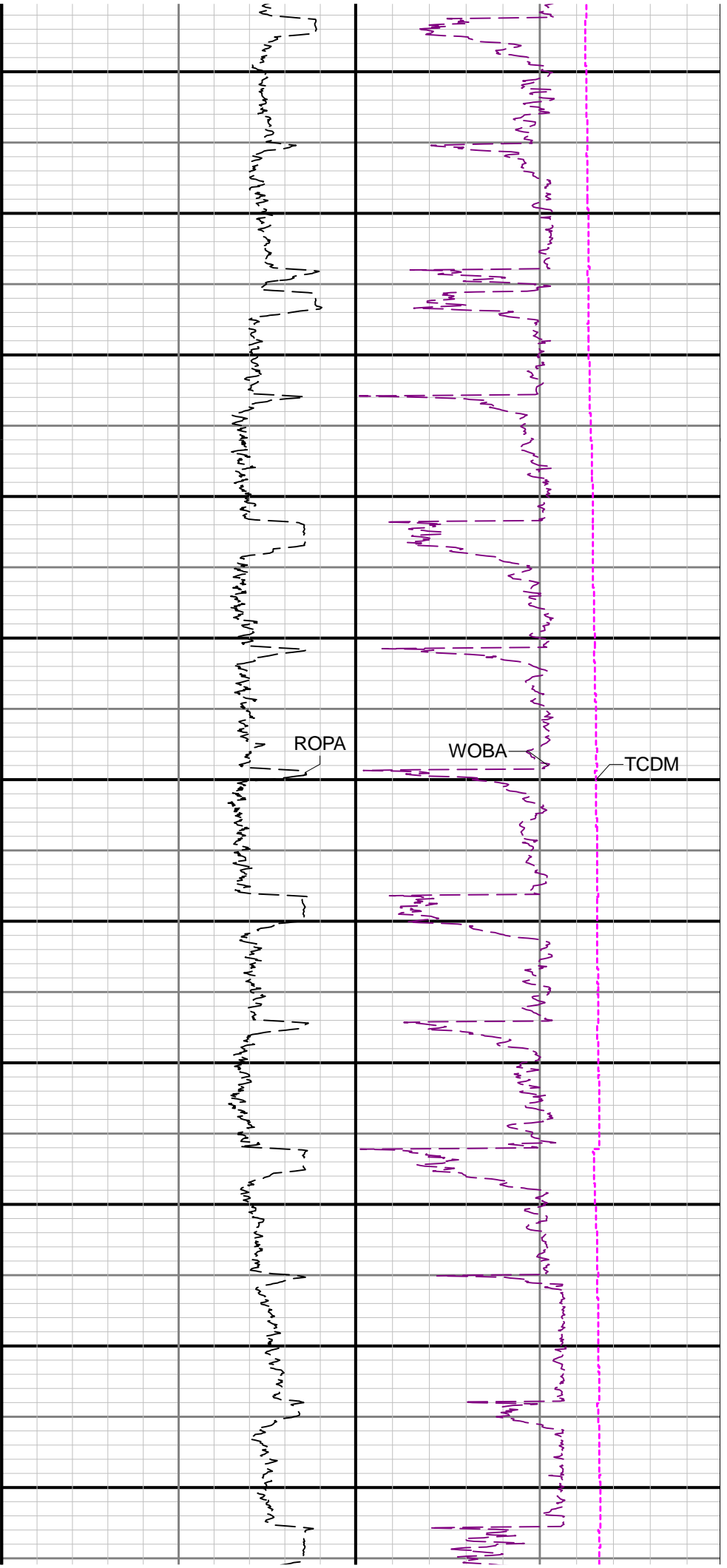
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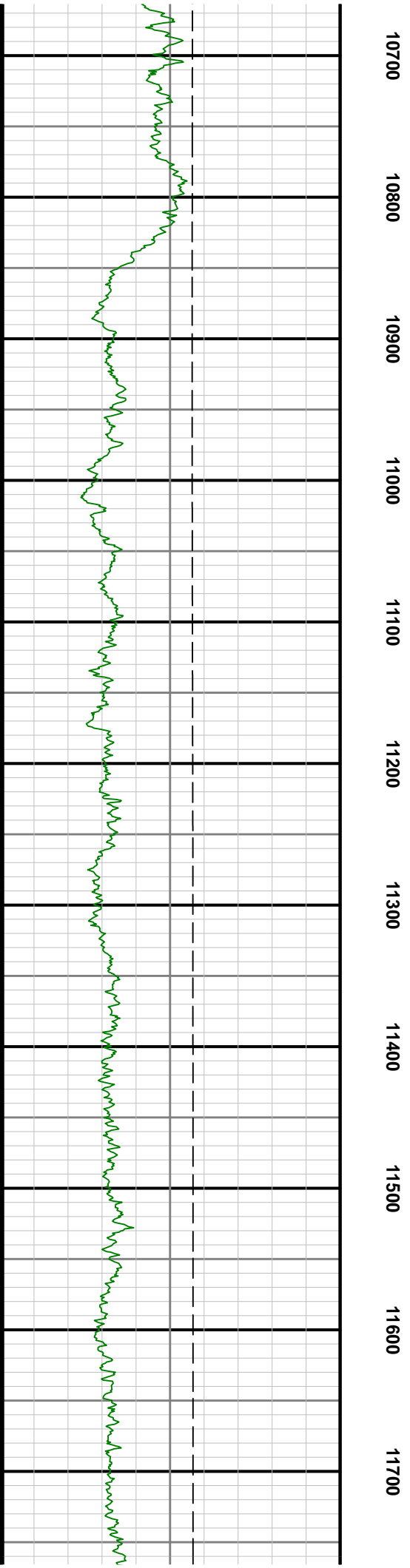
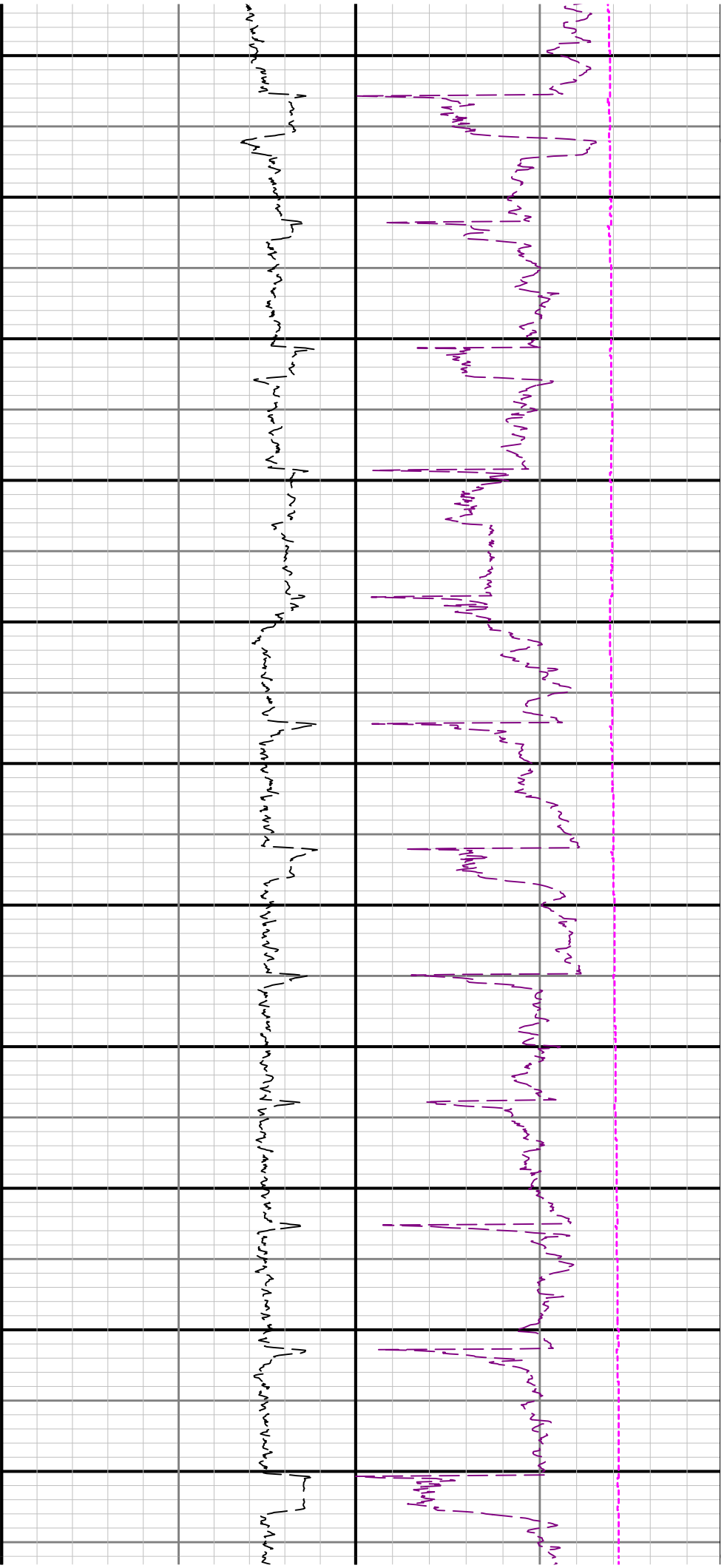


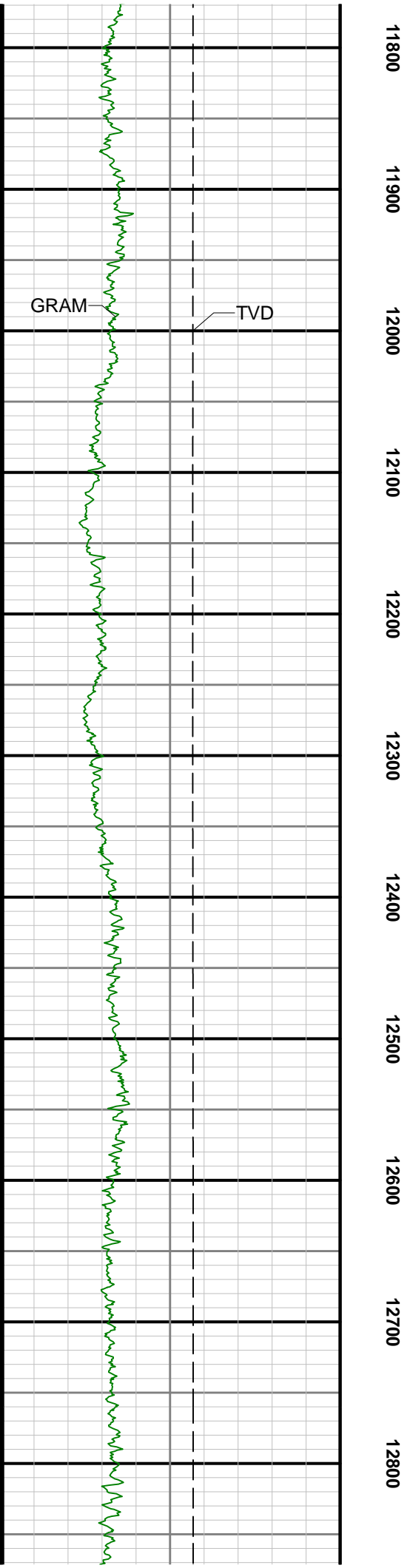
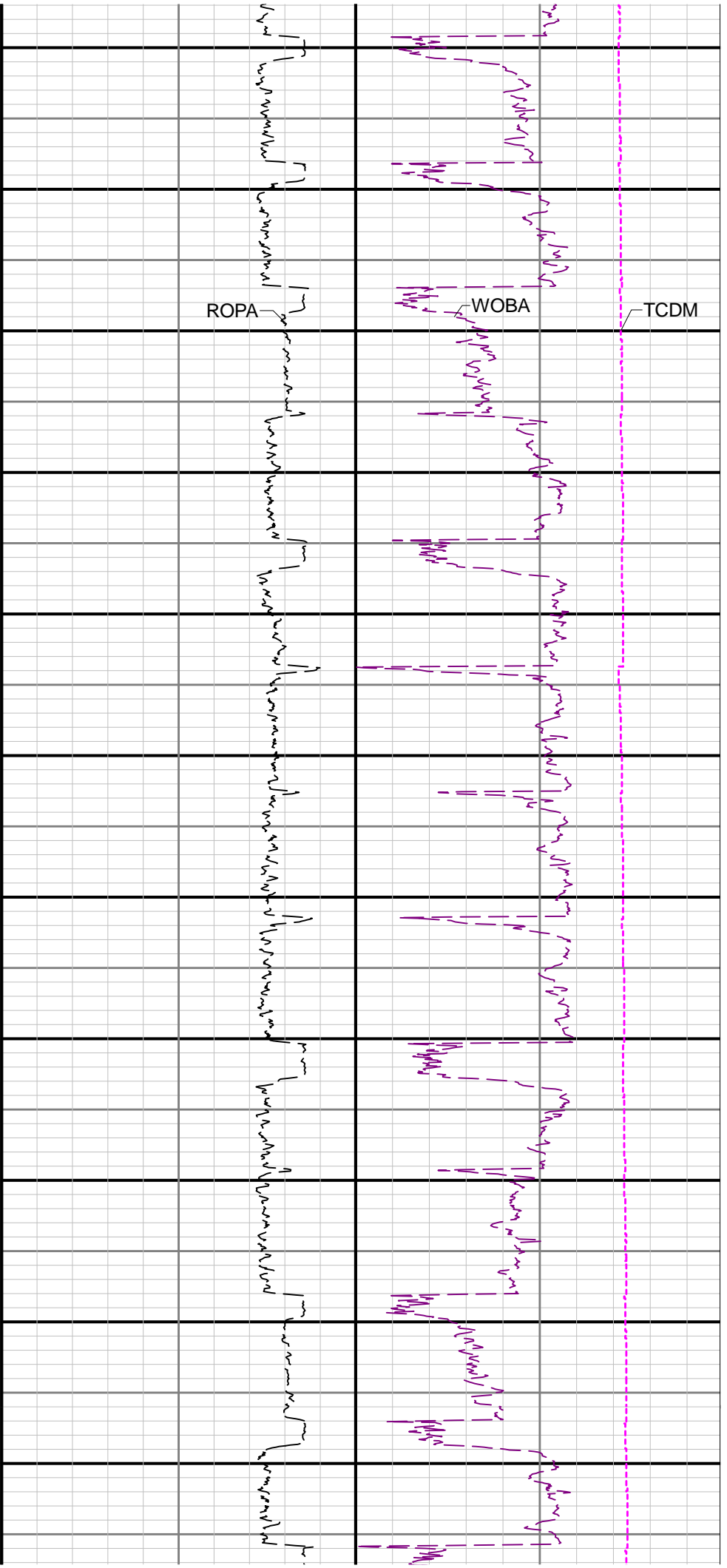


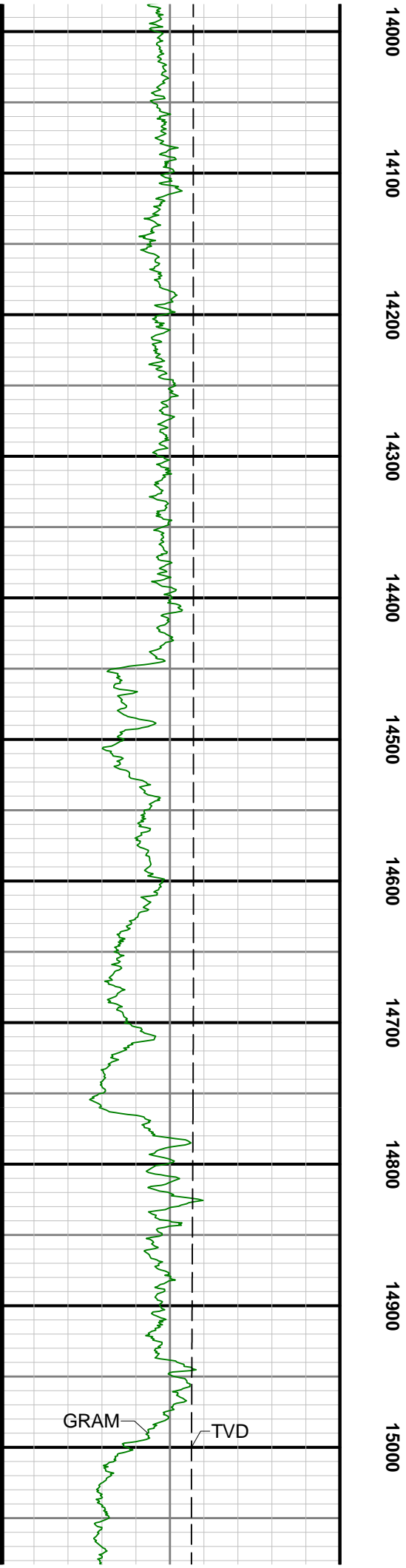
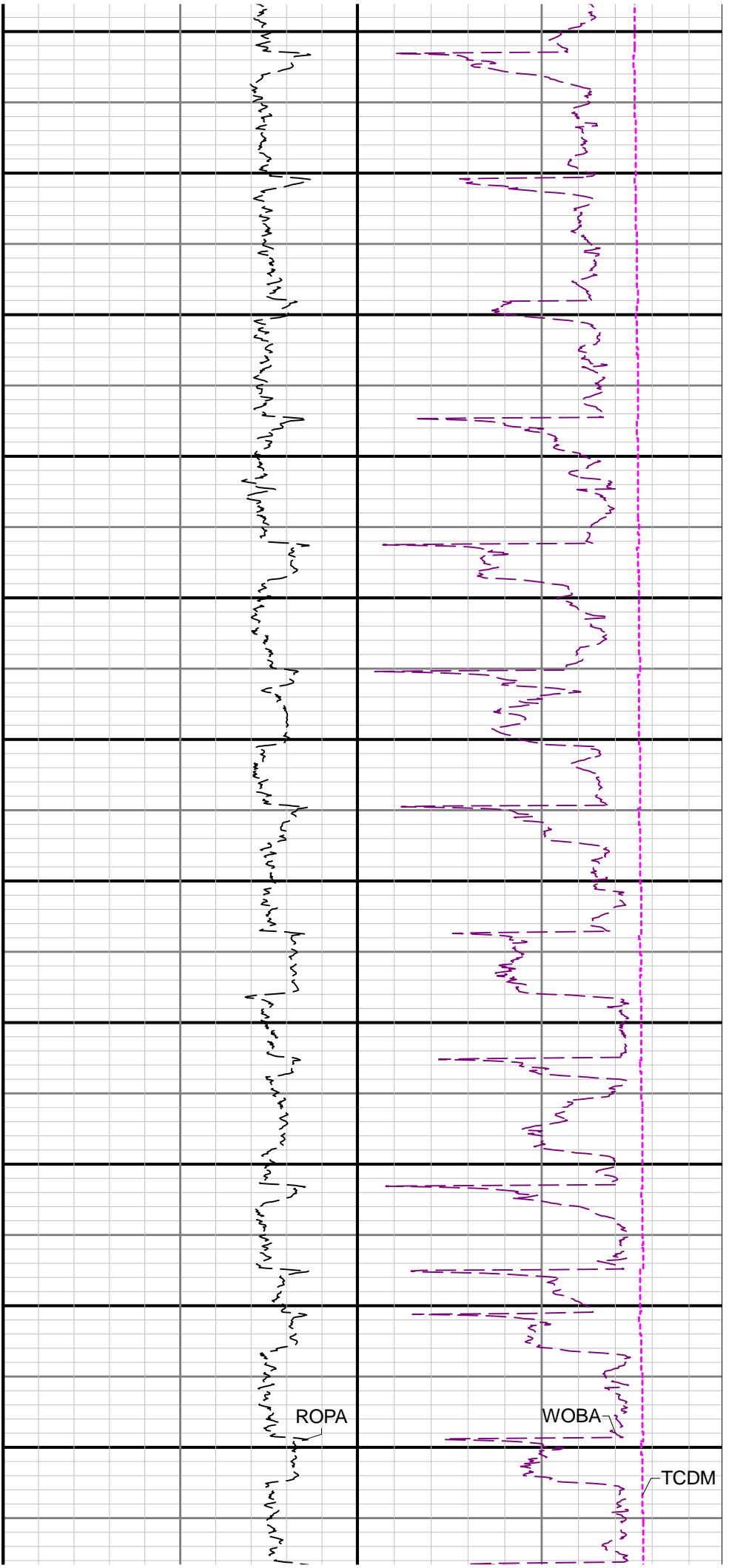


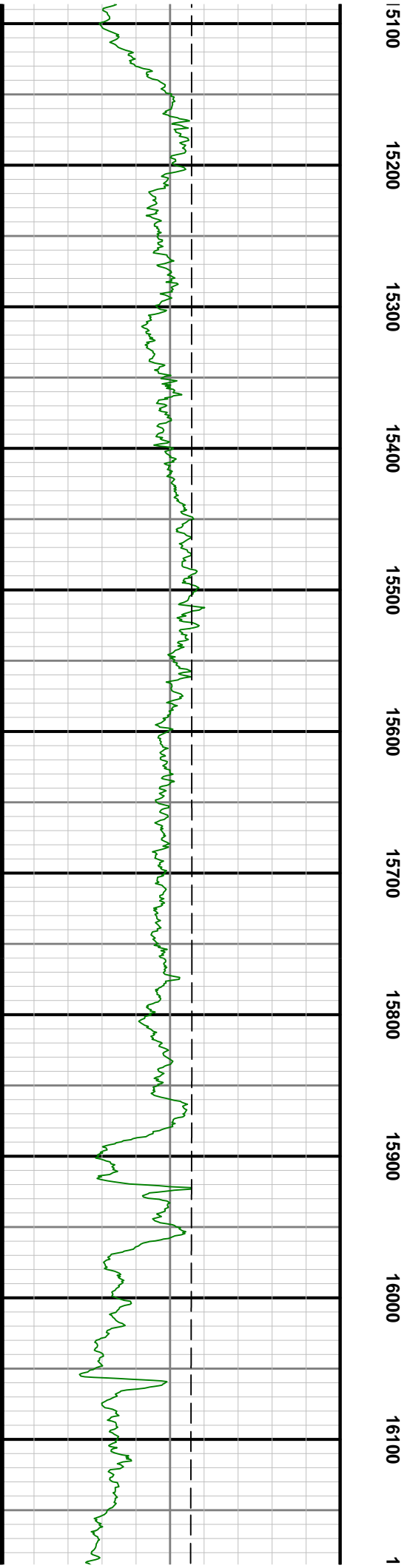
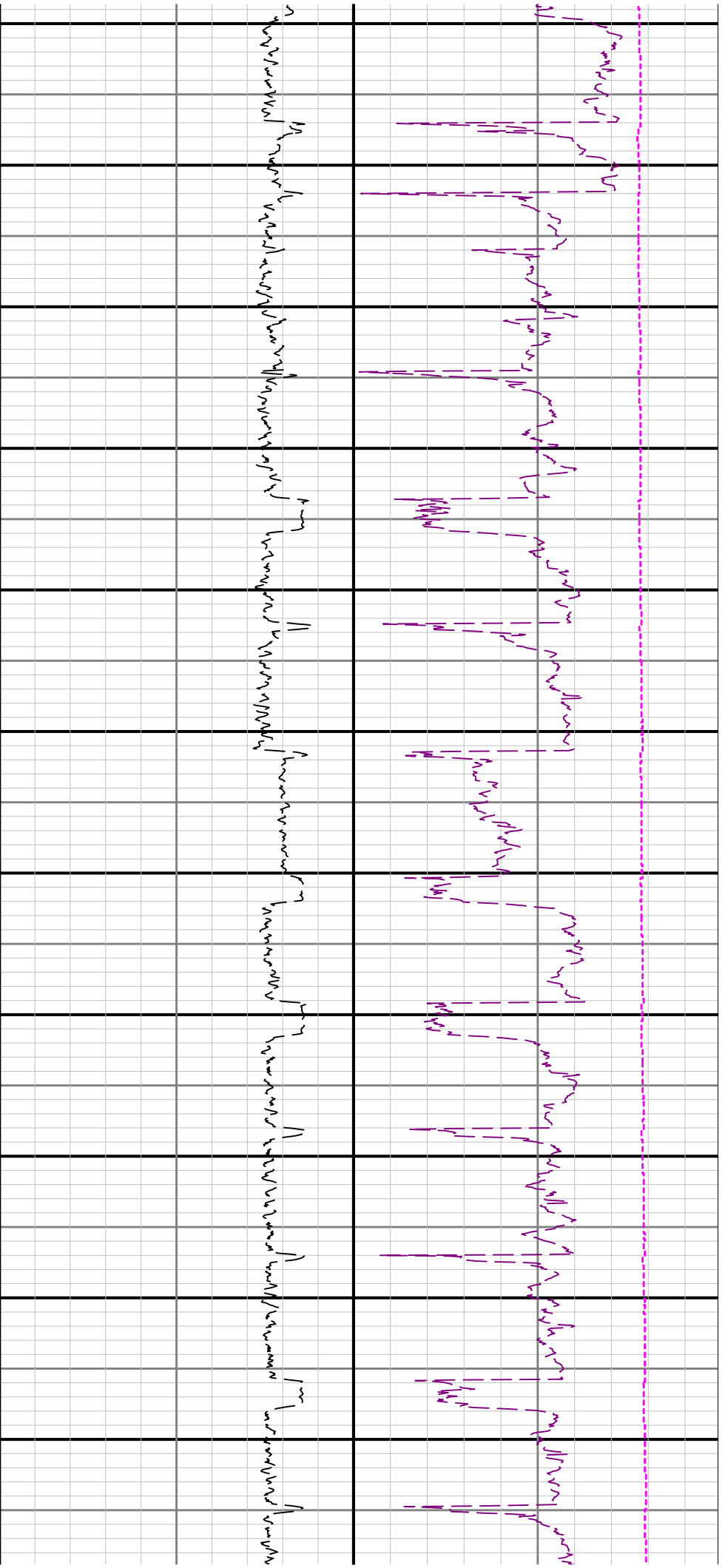


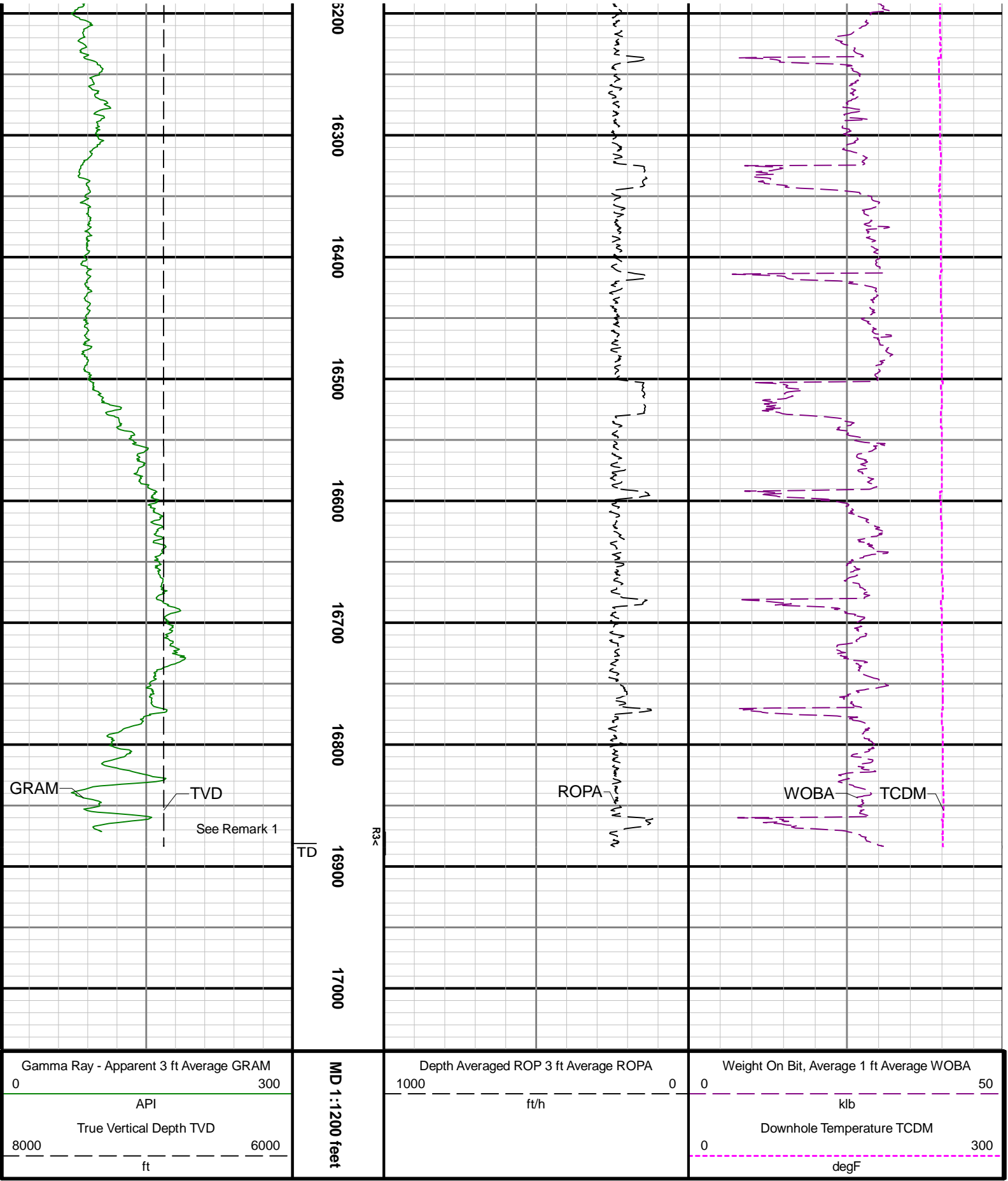












16200

16300

16400

16500

16600

16700

16800

16900

17000

MD 1:1200 feet

ROP

ROP

WOB

TCDM