



Gamma Ray MD
(Scale: 5":100' (10'))

Company: CAFRIZO OIL & GAS, Inc.

Well: STATE #16-11-9-60 H

Field: PAWNEE BUTTES

Well ID: 05-123-31642

Job Number: DR1010080-01-276

Location: NW 1/4 NW 1/4 SEC 16 - T9N - R60W 6th PM

Operator 1: M. Webster

Operator 2: C.A. Riney

State: CO

County: WELD

Country: USA

Elev KB: 5026.4

Elev DF: 5026.4

Elev GL: 5011.4

Comment 1: 5" = 100' MD GR (api) vs ROP (fph)

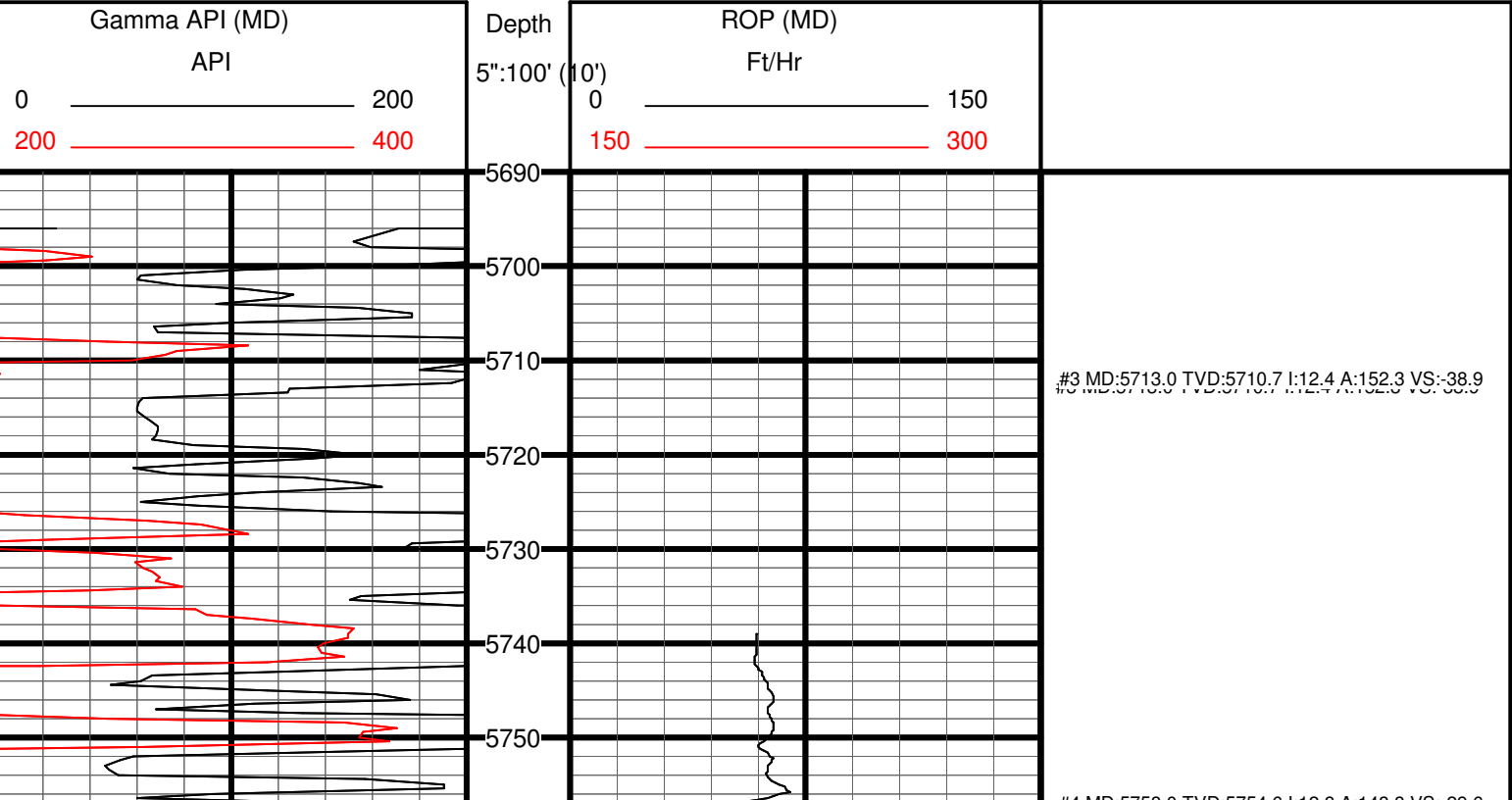
Comment 2: Rig: Xtreme Drig #15

Comment 3: LAT: 40.755031

Comment 4: LONG: -104.104749

Comment 5:

Hole Data			Casing Record		
Size	From	To	Size	From	To
17"	Surface	65'	16"	Surface	65'
13"	65'	1400'	9.625"	65'	1400'
9"	1400'	6659'	7"	1400'	6659'
6.125"	6659'	11709'			
Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	N/A	PGM023	PGM023		
Cal Factor		4.77	3.15		
Gamma Offset		43'	45'		
Start Depth		5696'	6708'		
Start Date		10-23-2010	10-27-2010		
Start Time		18:30	18:30		
End Depth		6708'	11709'		
End Date		10-26-2010	11-6-2010		
End Time		1:30	11:00		





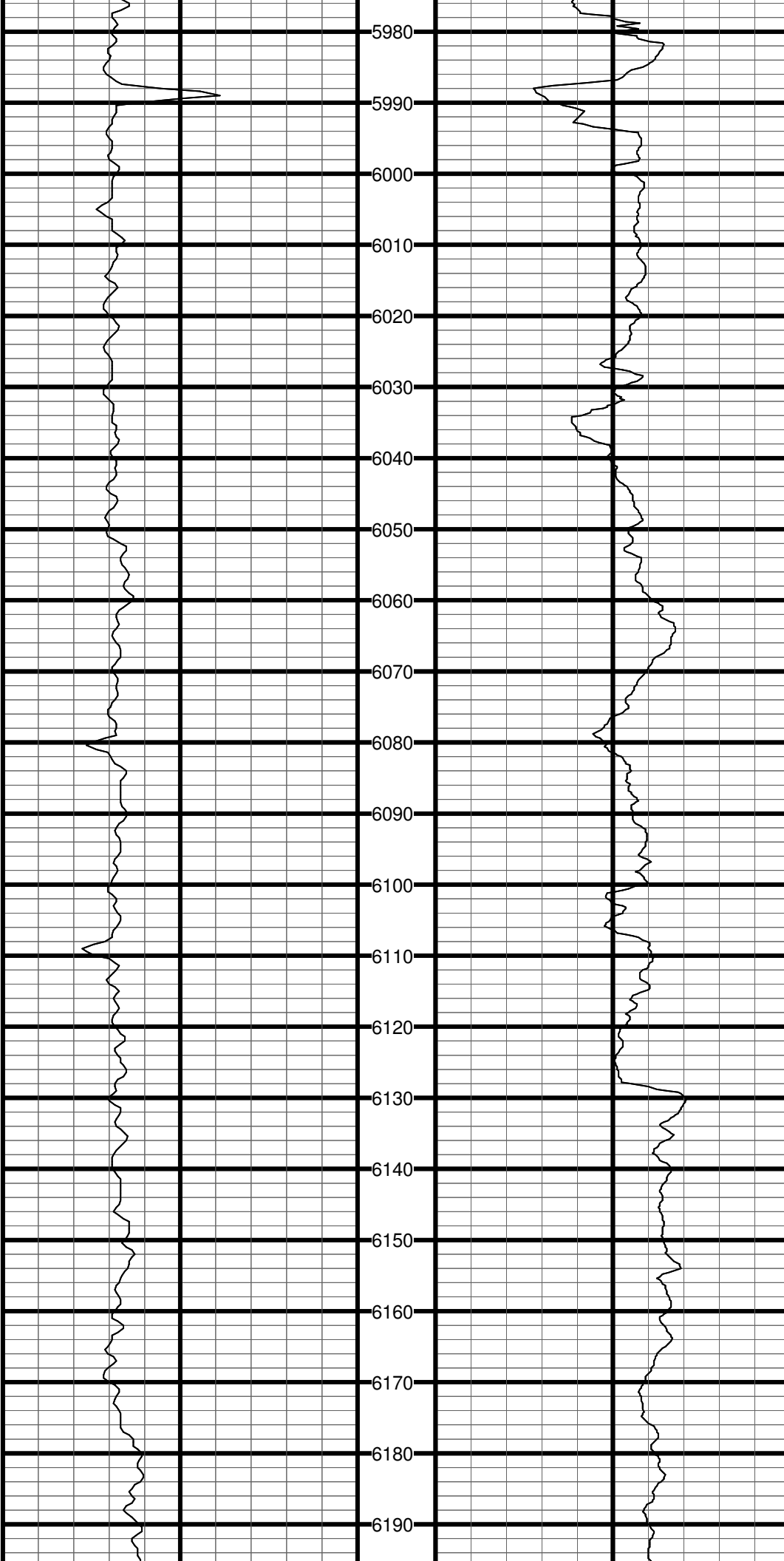
#4 MD:5758.0 TVD:5754.6 I:12.8 A:148.8 VS:-29.6

#5 MD:5802.0 TVD:5797.5 I:12.4 A:145.3 VS:-20.3

#6 MD:5846.0 TVD:5840.5 I:12.0 A:143.3 VS:-11.1

#7 MD:5889.0 TVD:5882.6 I:11.7 A:140.9 VS:-2.4

#8 MD:5934.0 TVD:5926.7 I:11.8 A:139.8 VS:6.7



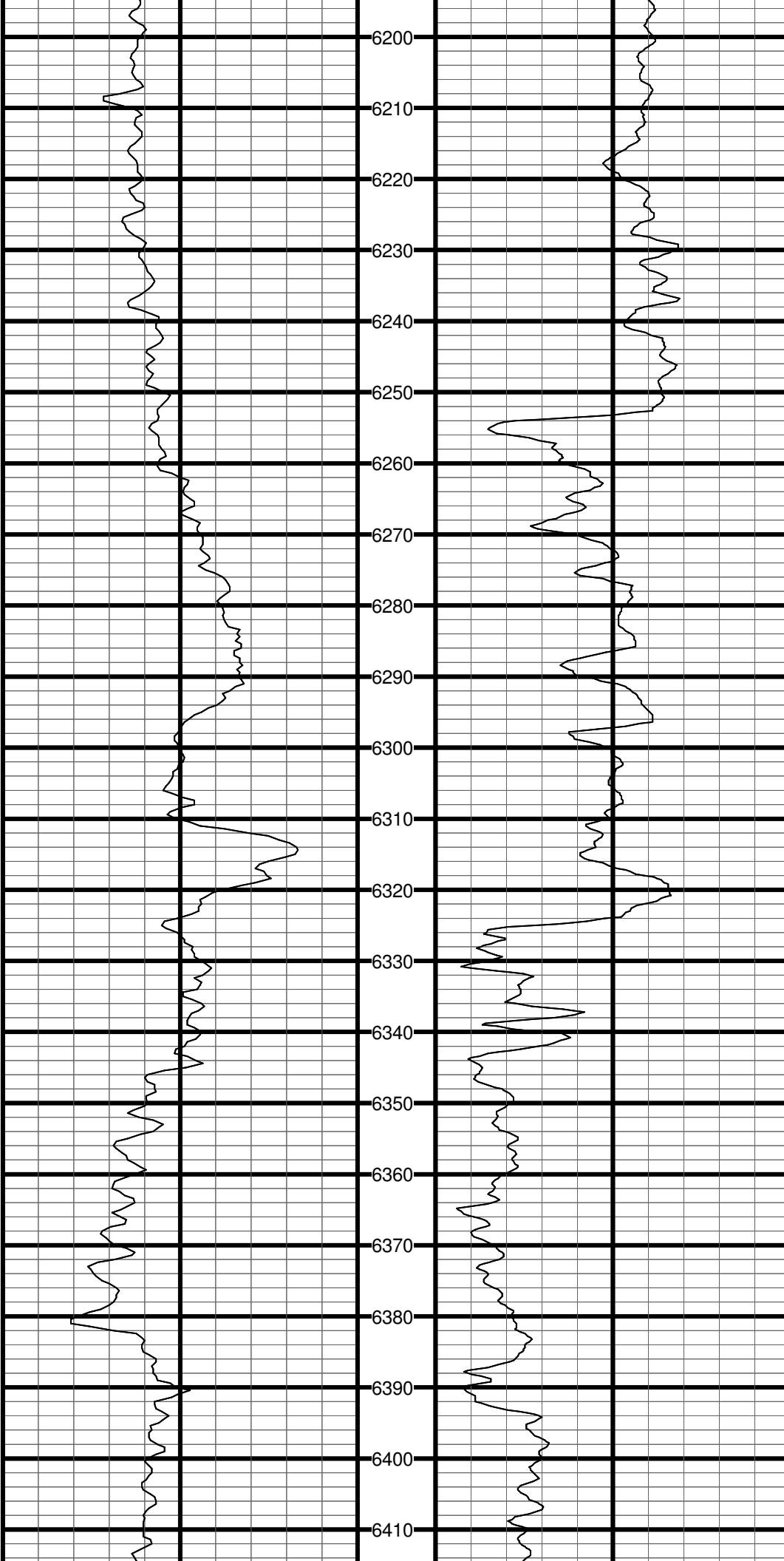
#9 MD:5979.0 TVD:5970.3 I:16.1 A:142.5 VS:17.4

#10 MD:6022.0 TVD:6011.2 I:20.0 A:143.2 VS:30.5

#11 MD:6066.0 TVD:6052.2 I:22.9 A:143.3 VS:46.4

#12 MD:6111.0 TVD:6093.1 I:26.3 A:143.4 VS:64.8

#13 MD:6155.0 TVD:6131.7 I:30.7 A:139.4 VS:85.6



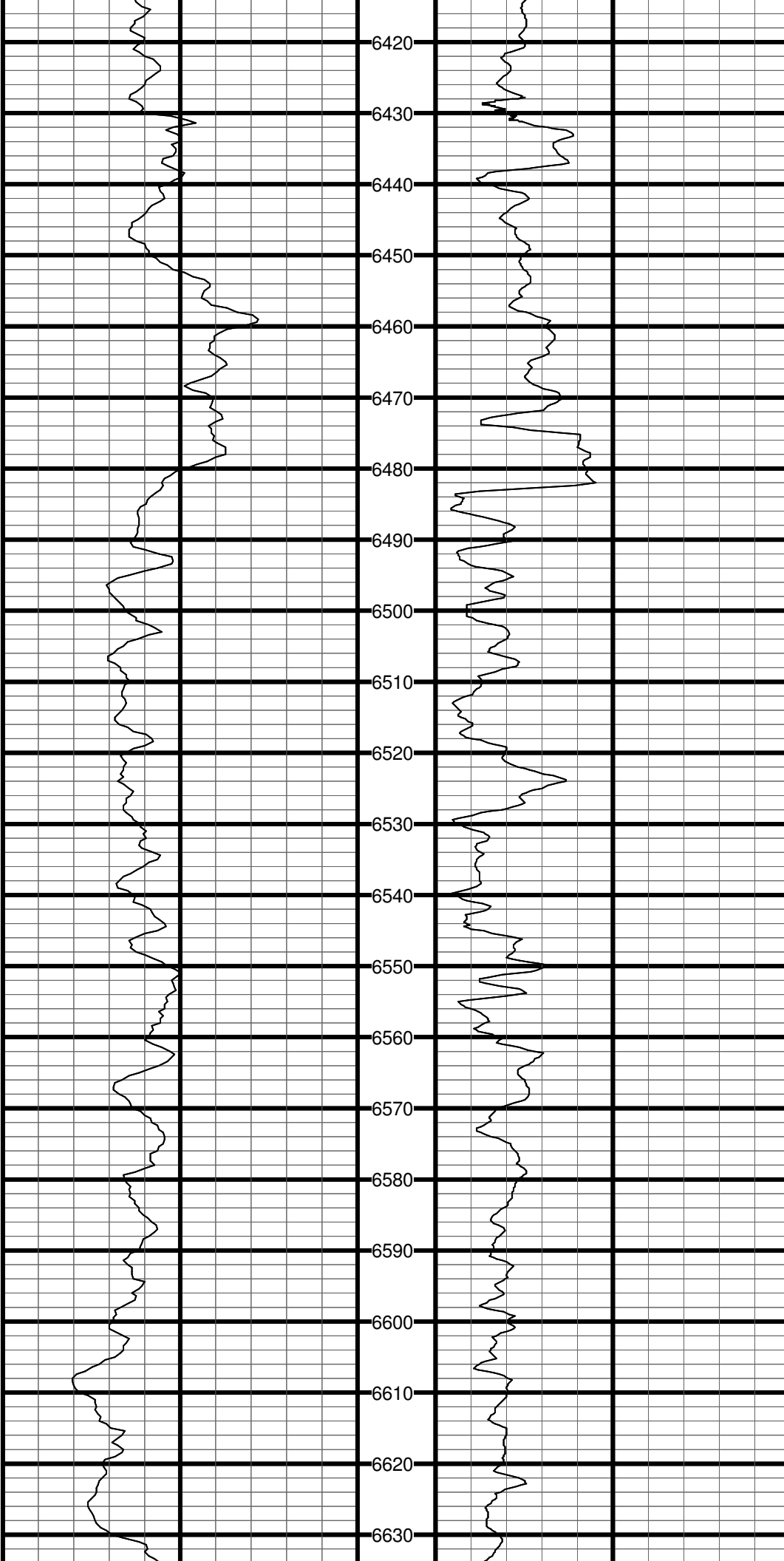
#14 MD:6199.0 TVD:6168.8 I:34.7 A:138.3 VS:109.2

#15 MD:6242.0 TVD:6203.3 I:38.4 A:135.7 VS:134.8

#16 MD:6288.0 TVD:6238.2 I:43.0 A:133.1 VS:164.8

#17 MD:6331.0 TVD:6268.5 I:47.4 A:130.6 VS:195.3

#18 MD:6376.0 TVD:6297.3 I:52.9 A:131.1 VS:229.8



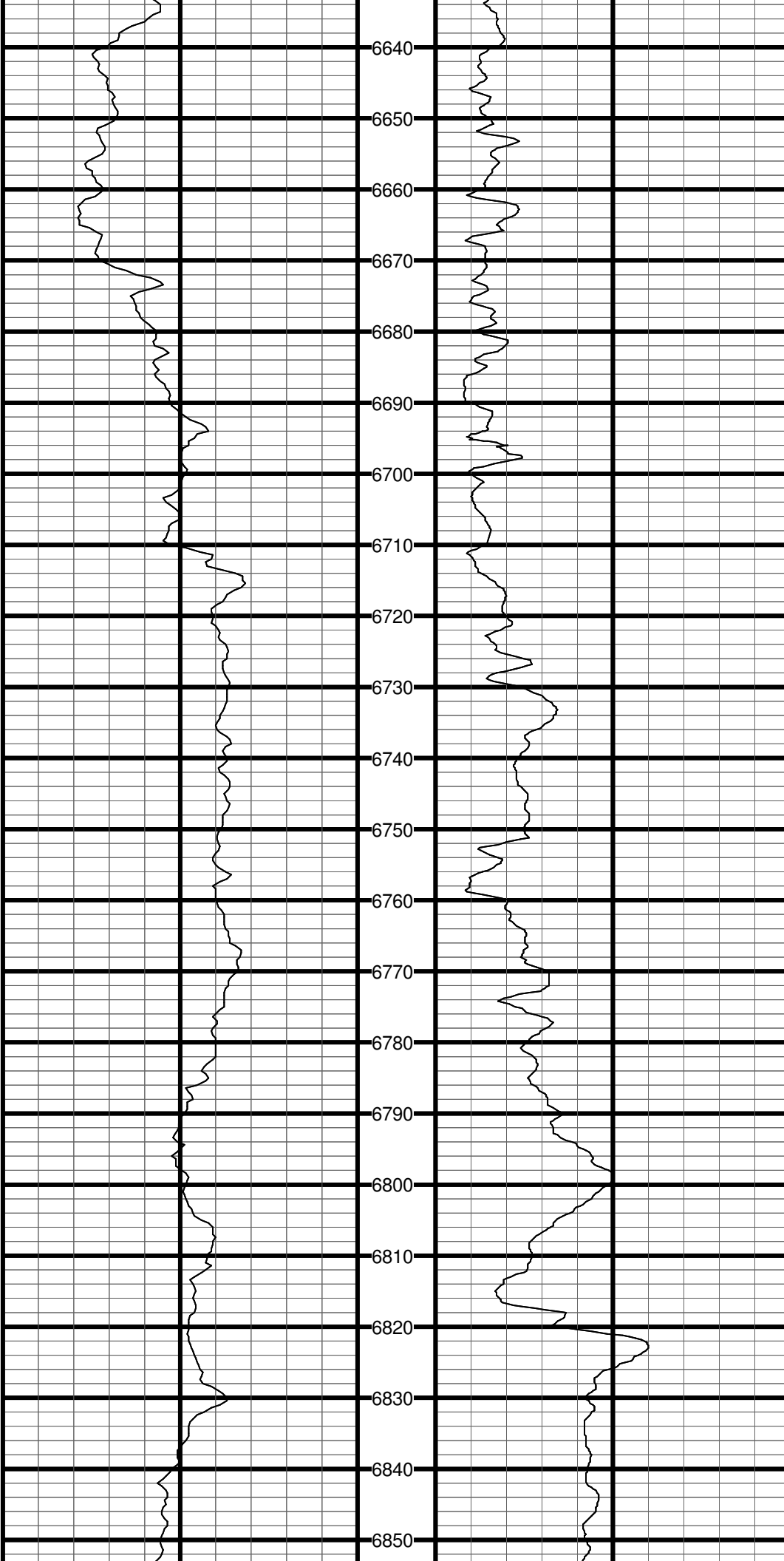
#19 MD:6420.0 TVD:6322.3 I:57.8 A:133.6 VS:265.9

#20 MD:6463.0 TVD:6343.8 I:62.2 A:135.3 VS:303.2

#21 MD:6507.0 TVD:6363.5 I:64.6 A:136.3 VS:342.5

#22 MD:6552.0 TVD:6381.4 I:68.6 A:136.6 VS:383.7

#23 MD:6597.0 TVD:6395.7 I:74.3 A:134.7 VS:426.3



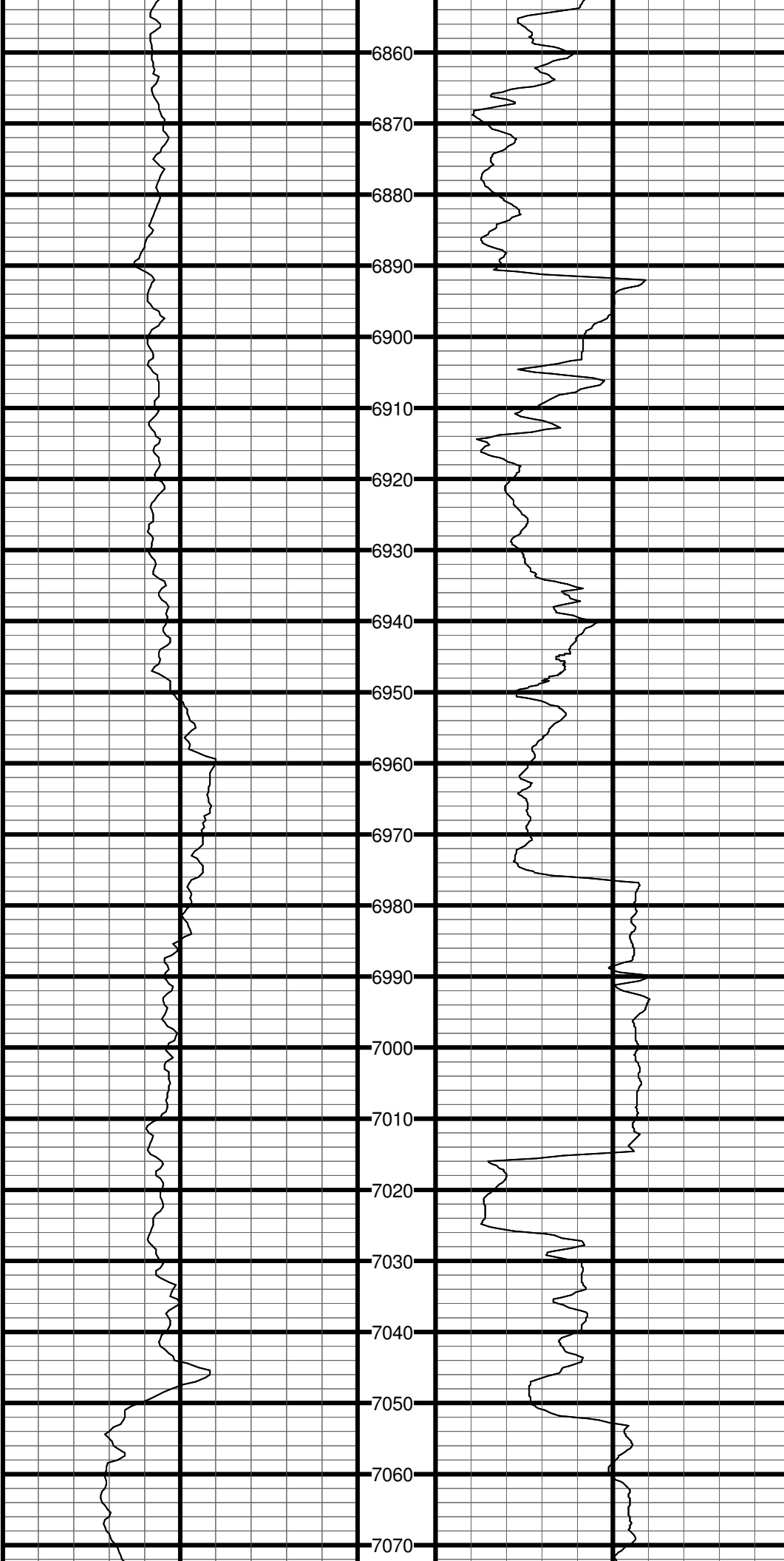
#24 MD:6643.0 TVD:6405.9 I:80.0 A:133.1 VS:471.1

#25 MD:6714.0 TVD:6413.3 I:88.0 A:131.0 VS:541.6

#26 MD:6759.0 TVD:6413.5 I:91.6 A:130.2 VS:586.6

#27 MD:6804.0 TVD:6412.1 I:91.8 A:130.0 VS:631.5

#28 MD:6847.0 TVD:6410.6 I:92.2 A:129.7 VS:674.4



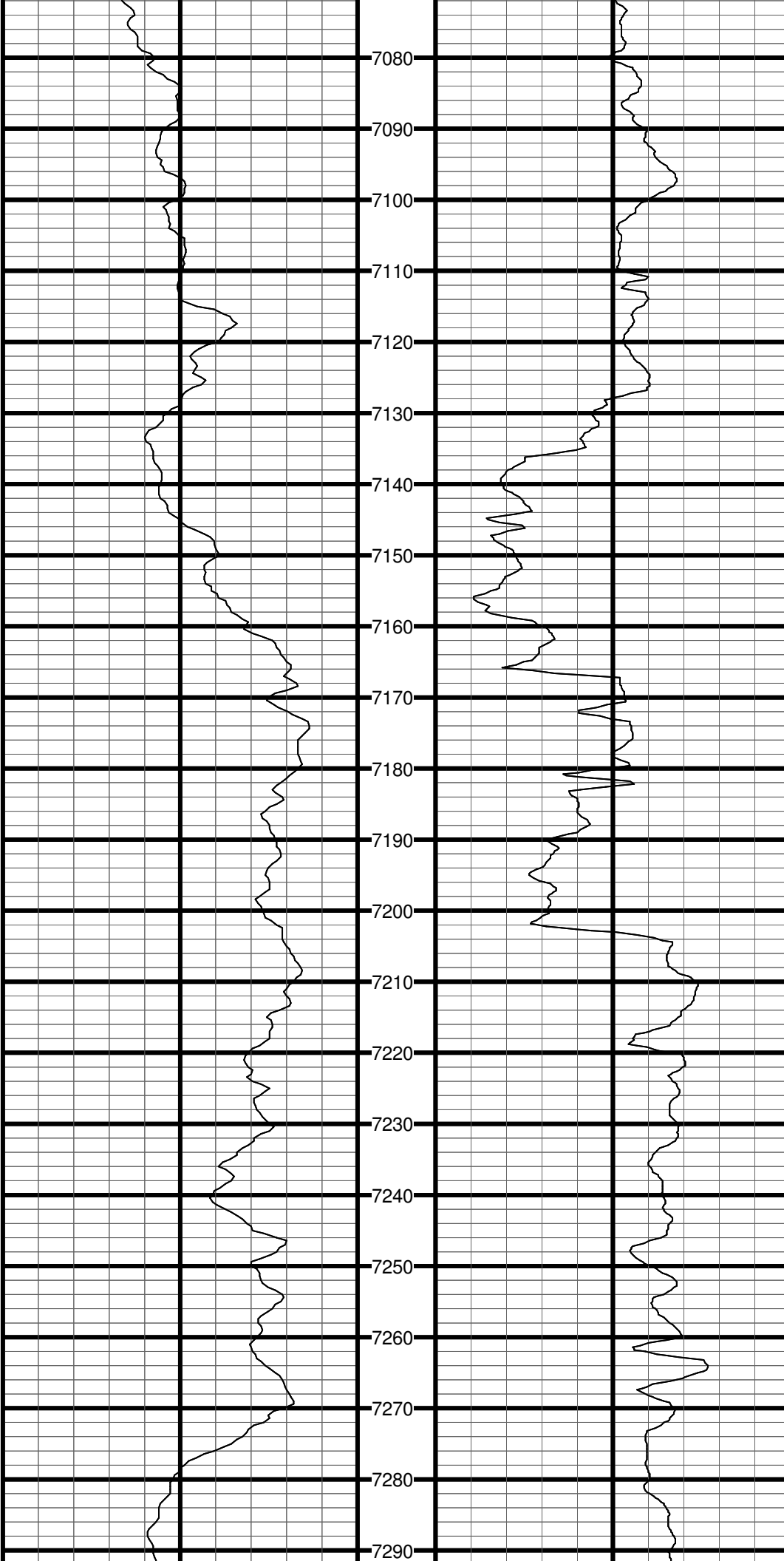
#29 MD:6891.0 TVD:6409.7 I:90.3 A:131.6 VS:718.3

#30 MD:6936.0 TVD:6410.1 I:88.5 A:133.5 VS:763.3

#31 MD:6981.0 TVD:6410.4 I:90.9 A:133.3 VS:808.3

#32 MD:7026.0 TVD:6408.9 I:93.0 A:133.0 VS:853.3

#33 MD:7071.0 TVD:6406.3 I:93.5 A:132.9 VS:898.2



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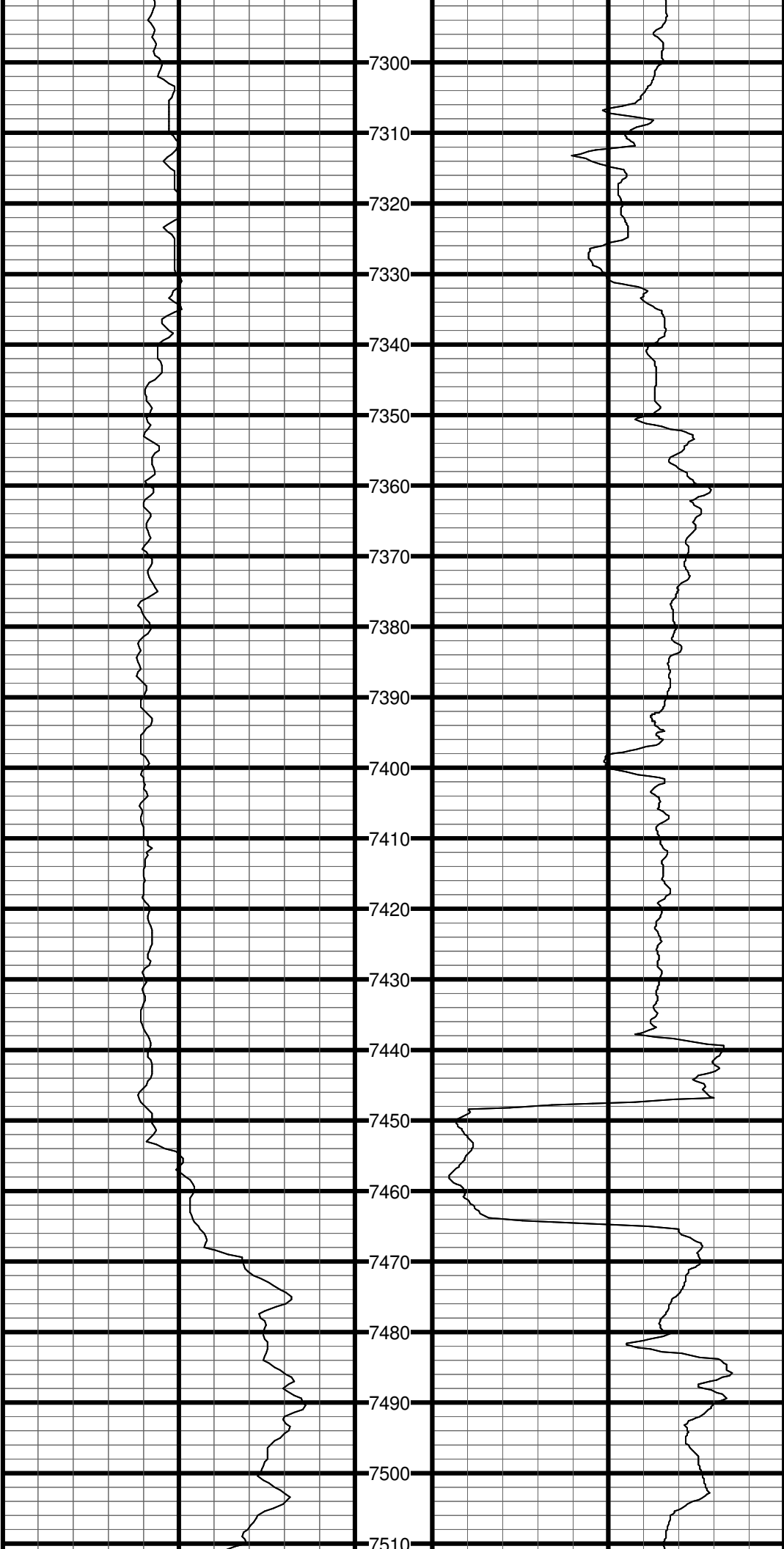
7290

#34 MD:7116.0 TVD:6403.4 I:94.0 A:132.8 VS:943.1

#35 MD:7161.0 TVD:6400.8 I:92.4 A:133.9 VS:988.1

#36 MD:7205.0 TVD:6399.8 I:90.2 A:134.9 VS:1032.0

#37 MD:7250.0 TVD:6399.7 I:90.3 A:134.4 VS:1077.0



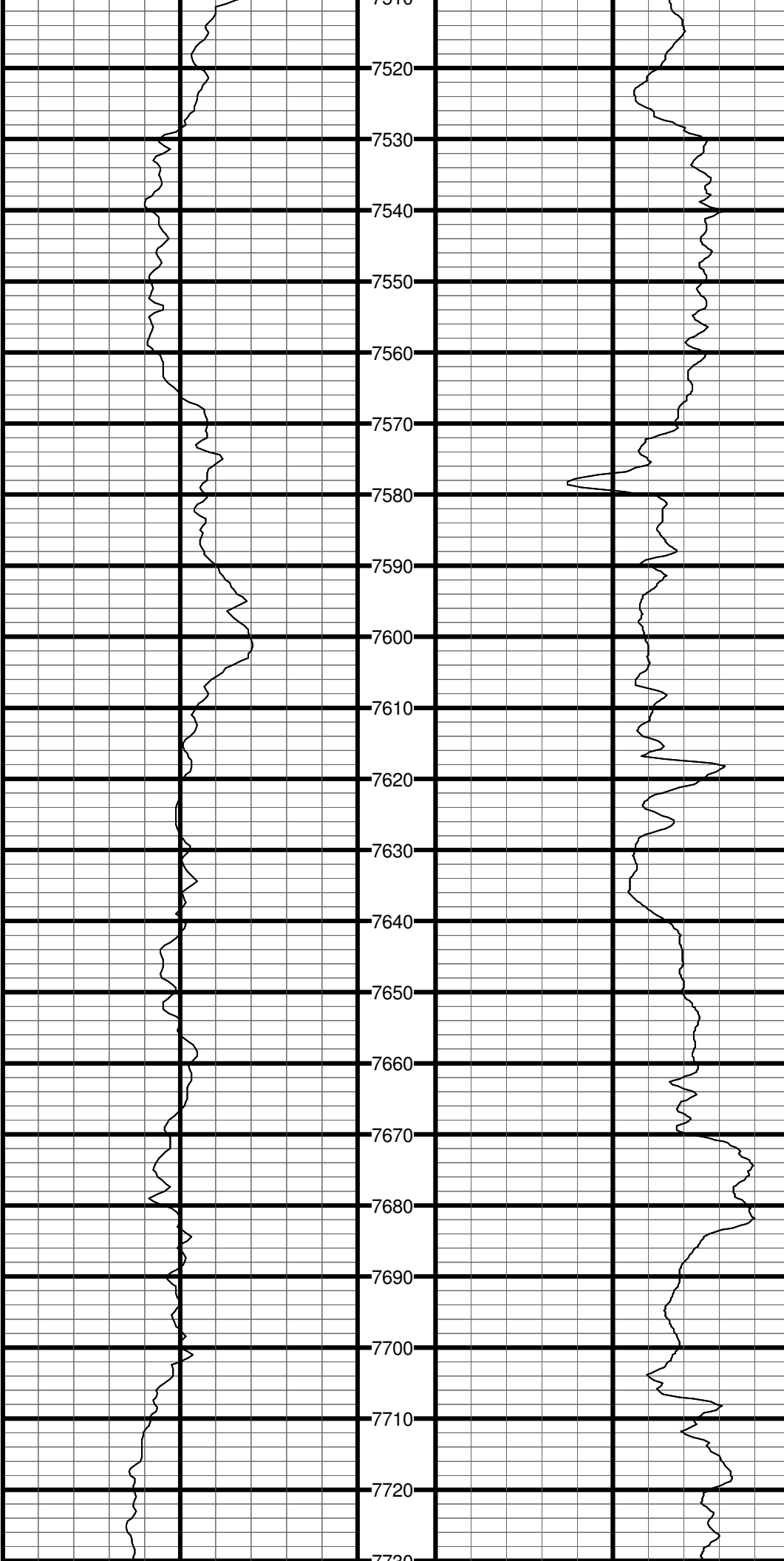
#38 MD:7293.0 TVD:6399.4 I:90.4 A:133.8 VS:1120.0

#39 MD:7339.0 TVD:6399.0 I:90.6 A:133.6 VS:1166.0

#40 MD:7384.0 TVD:6398.3 I:91.2 A:133.6 VS:1211.0

#41 MD:7427.0 TVD:6397.2 I:91.6 A:133.0 VS:1254.0

#42 MD:7472.0 TVD:6396.6 I:89.9 A:134.2 VS:1299.0



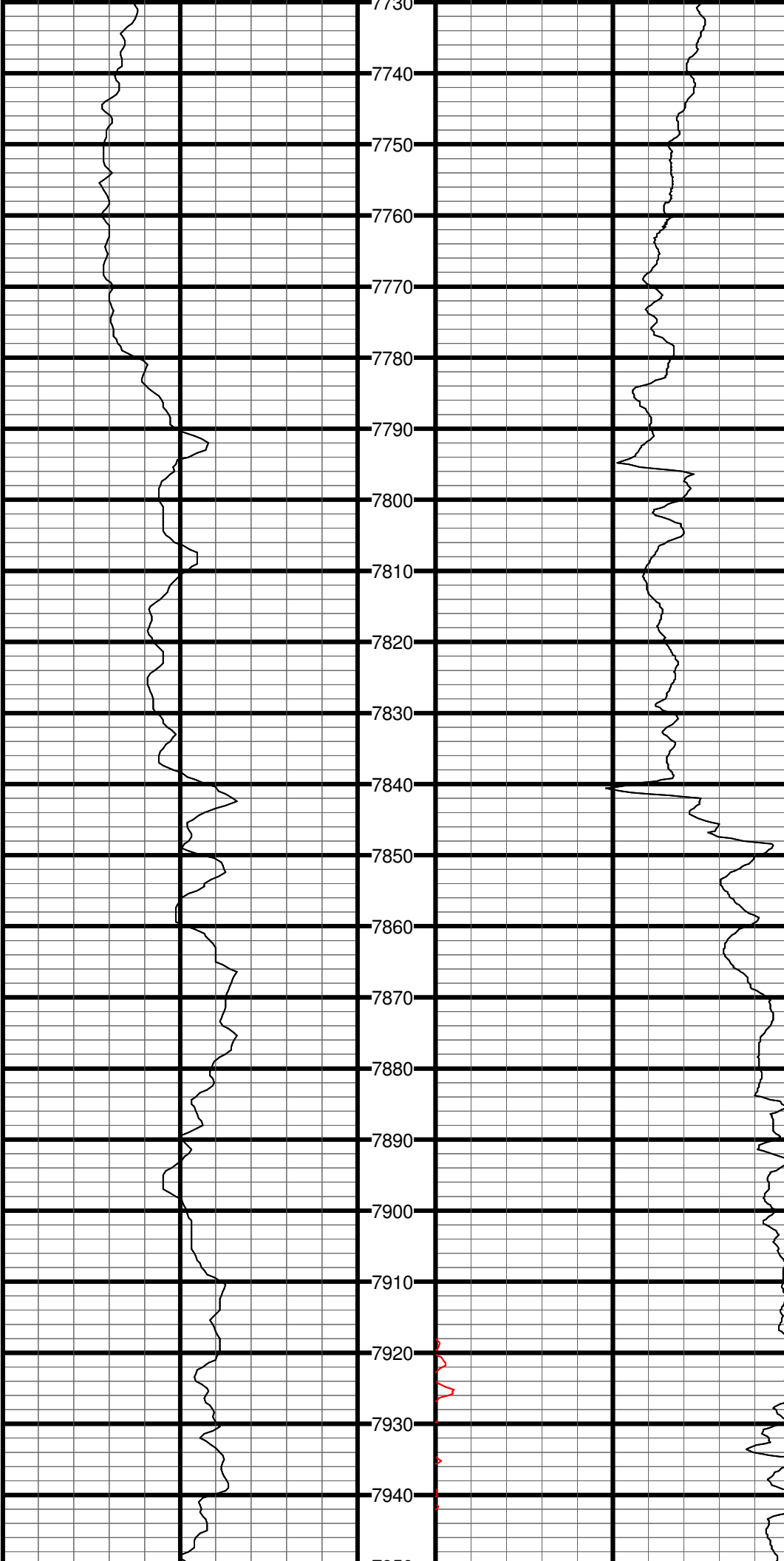
#43 MD:7518.0 TVD:6396.6 I:90.2 A:134.5 VS:1345.0

#44 MD:7562.0 TVD:6396.4 I:90.4 A:134.2 VS:1389.0

#45 MD:7607.0 TVD:6396.0 I:90.5 A:134.0 VS:1434.0

#46 MD:7651.0 TVD:6395.6 I:90.7 A:133.7 VS:1478.0

#47 MD:7694.0 TVD:6395.0 I:90.7 A:133.4 VS:1520.9



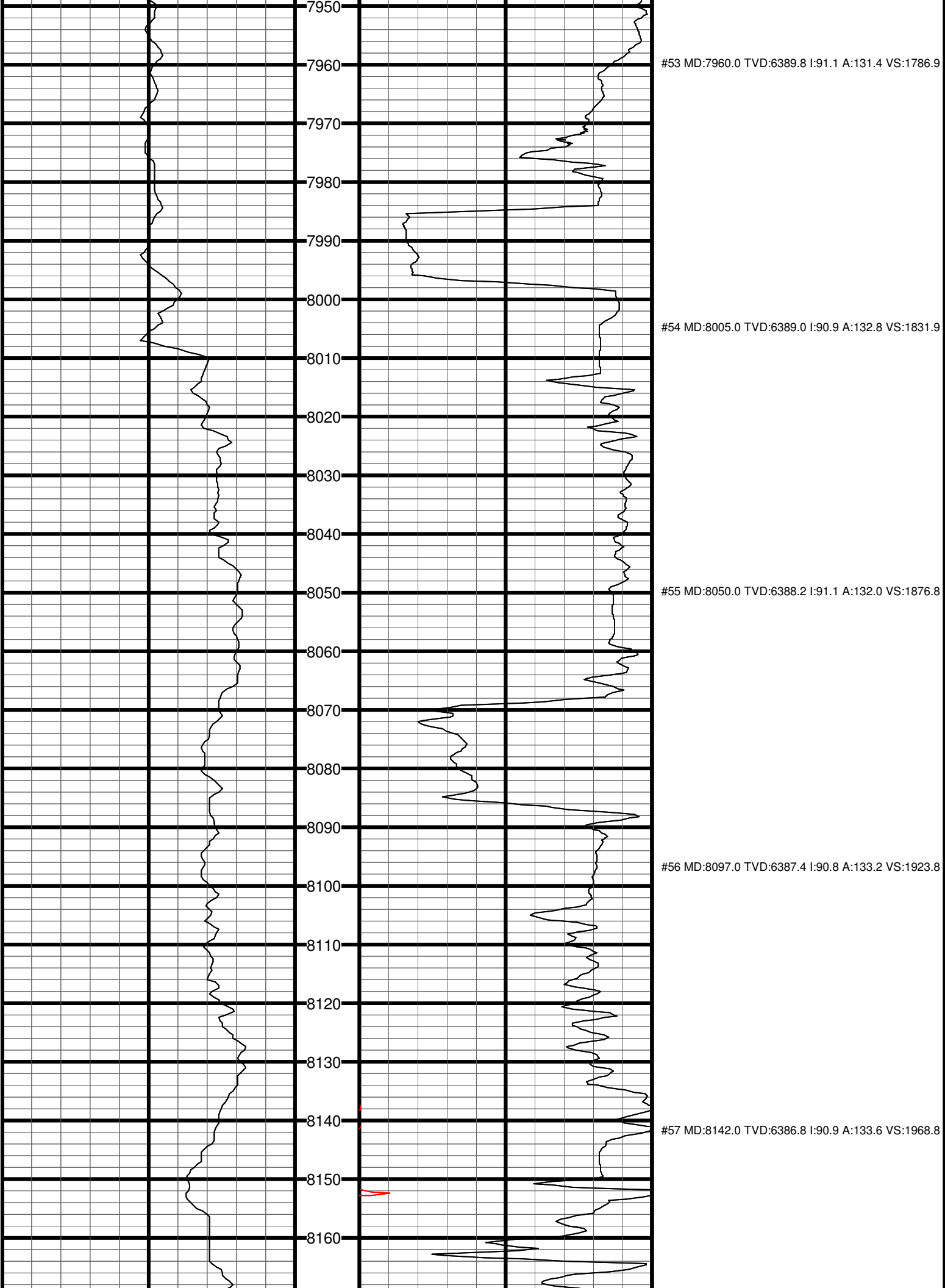
#48 MD:7739.0 TVD:6394.4 I:91.0 A:133.2 VS:1565.9

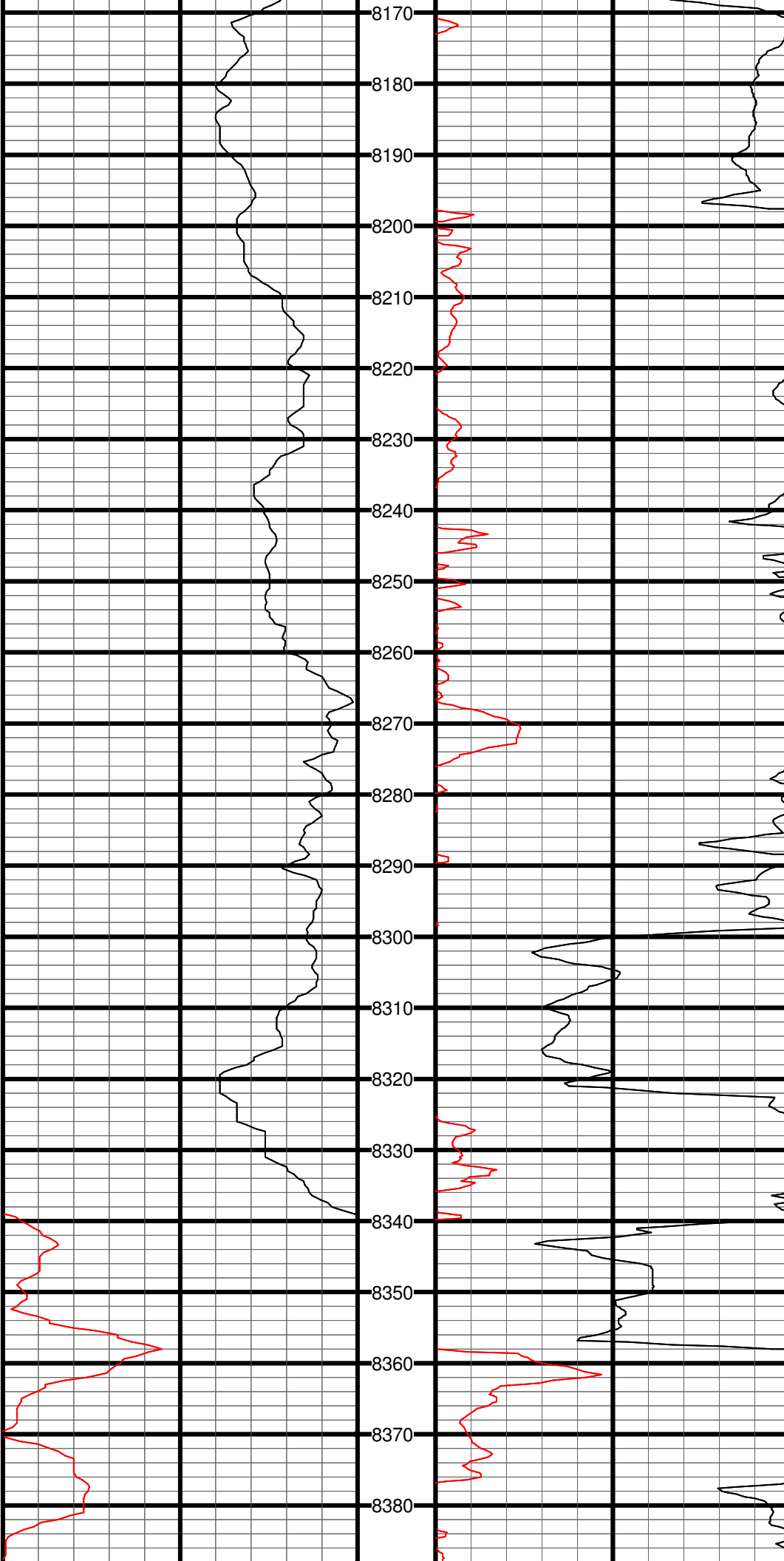
#49 MD:7784.0 TVD:6393.5 I:91.2 A:132.7 VS:1610.9

#50 MD:7827.0 TVD:6392.6 I:91.3 A:132.5 VS:1653.9

#51 MD:7870.0 TVD:6391.6 I:91.3 A:132.4 VS:1696.9

#52 MD:7915.0 TVD:6390.6 I:91.1 A:132.2 VS:1741.9





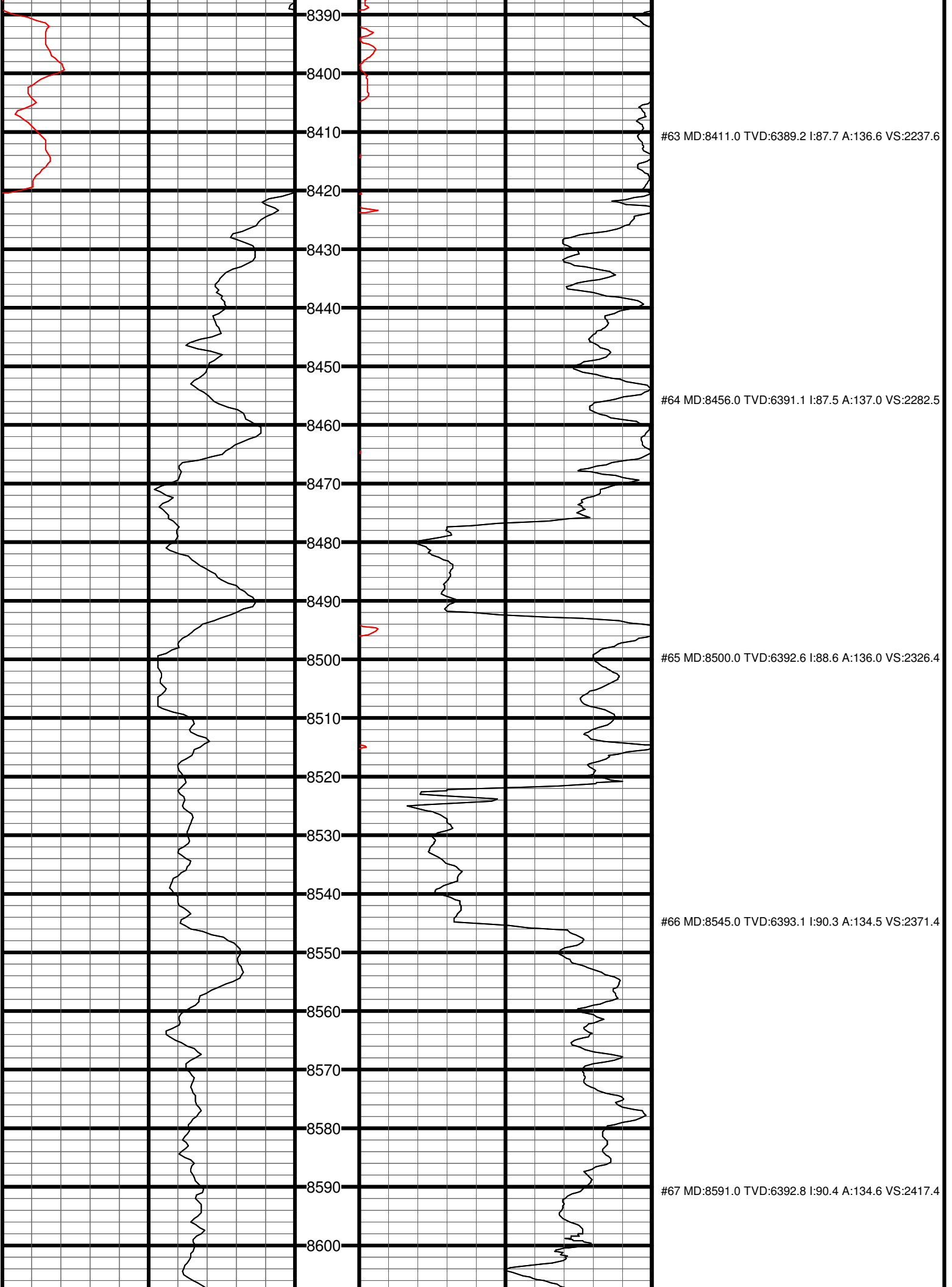
#58 MD:8187.0 TVD:6386.3 I:90.4 A:133.3 VS:2013.8

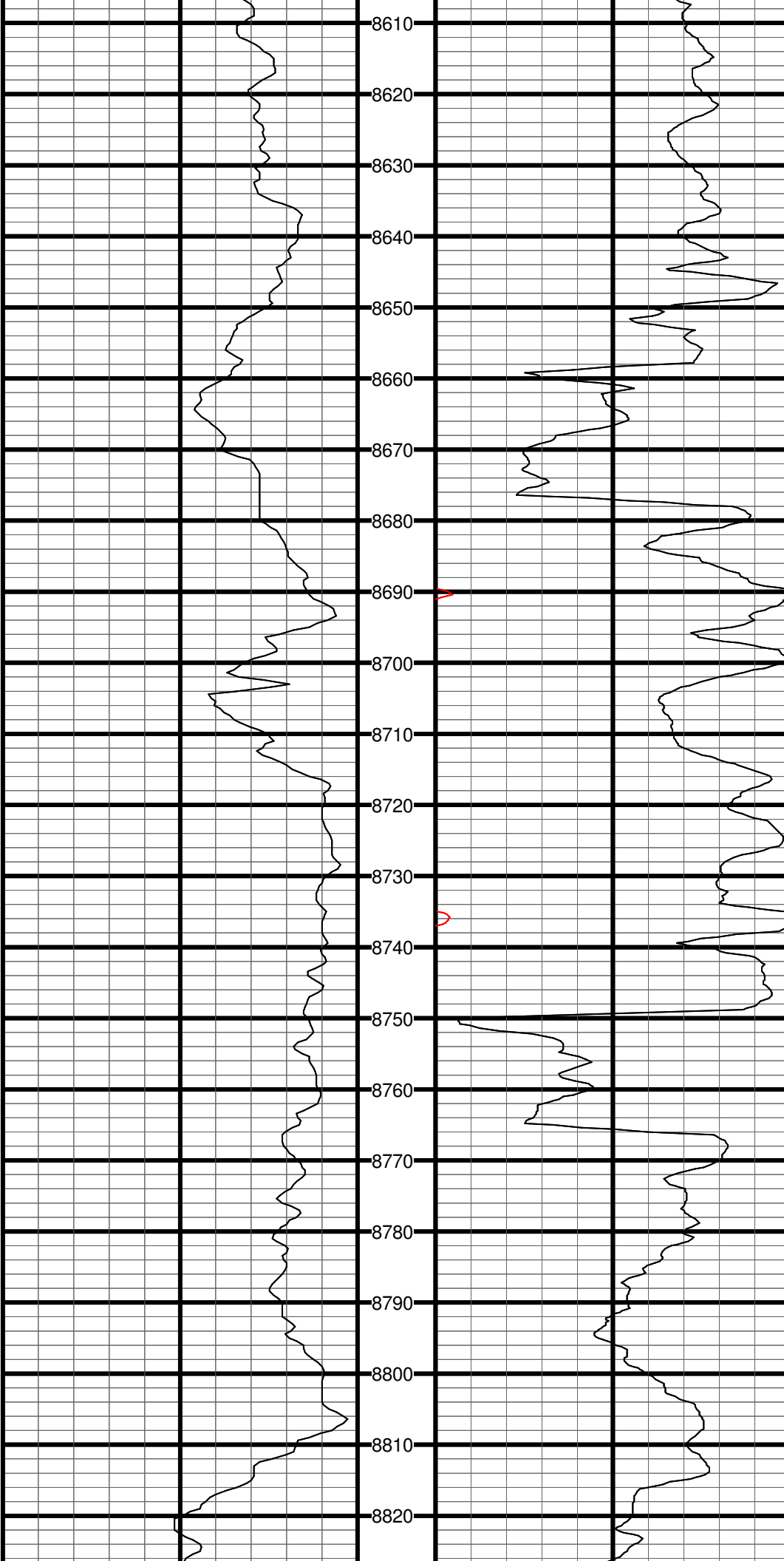
#59 MD:8232.0 TVD:6386.0 I:90.3 A:133.4 VS:2058.8

#60 MD:8277.0 TVD:6385.7 I:90.4 A:133.3 VS:2103.8

#61 MD:8322.0 TVD:6386.0 I:88.8 A:135.2 VS:2148.8

#62 MD:8366.0 TVD:6387.4 I:87.6 A:136.3 VS:2192.7





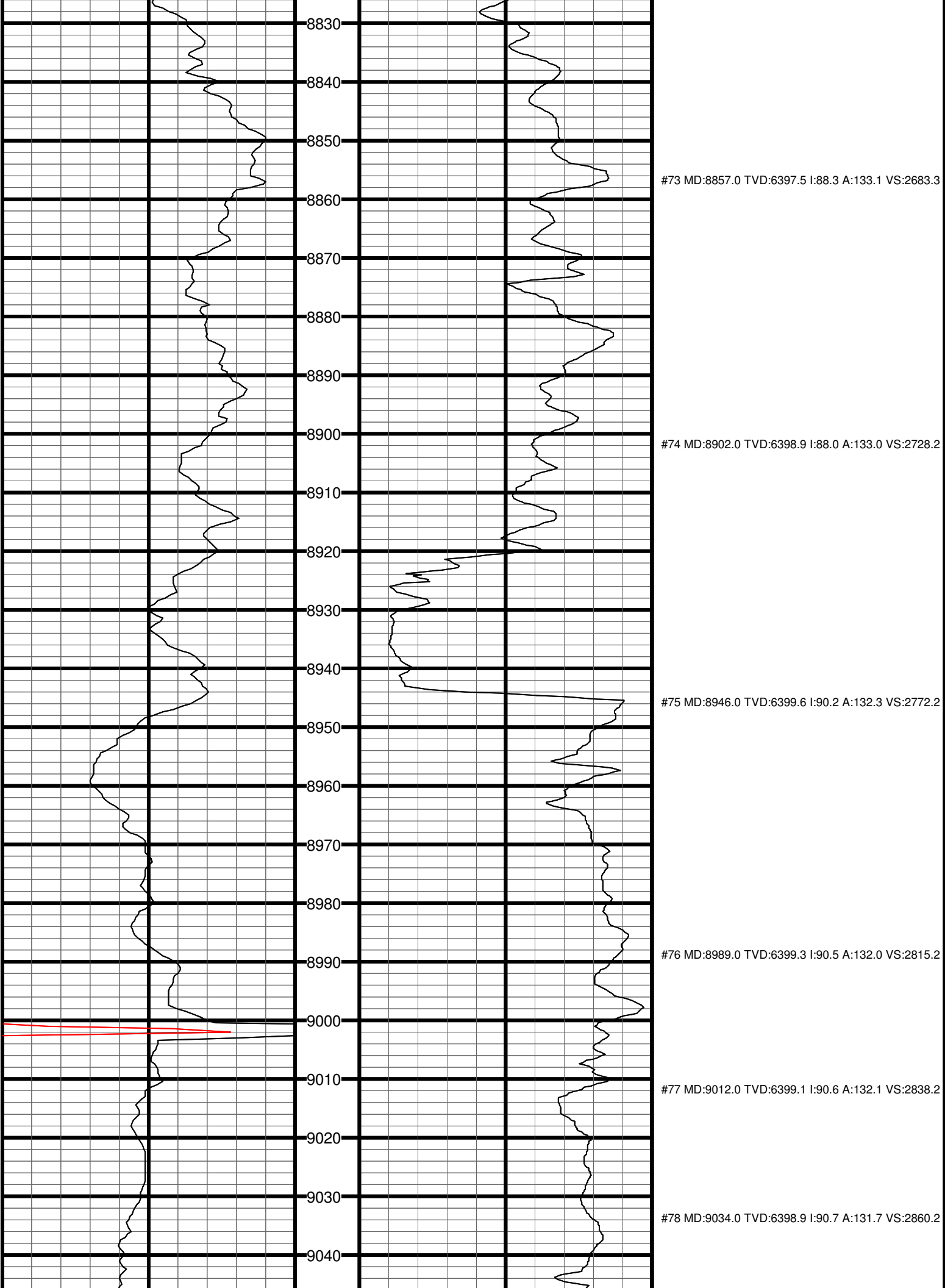
#68 MD:8636.0 TVD:6392.5 I:90.3 A:134.6 VS:2462.3

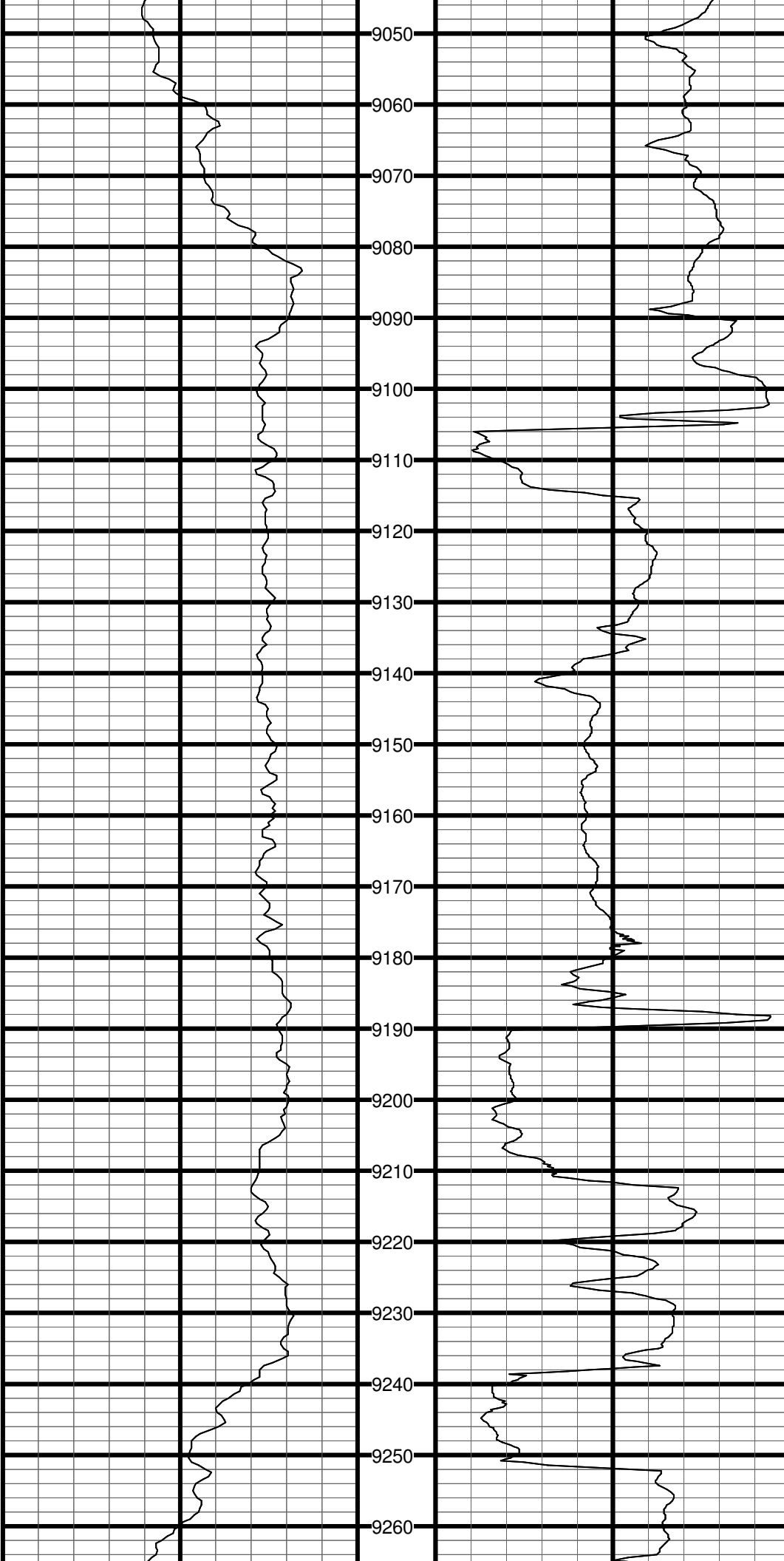
#69 MD:8679.0 TVD:6392.8 I:88.9 A:134.2 VS:2505.3

#70 MD:8725.0 TVD:6393.8 I:88.7 A:134.2 VS:2551.3

#71 MD:8768.0 TVD:6394.9 I:88.4 A:132.9 VS:2594.3

#72 MD:8813.0 TVD:6396.1 I:88.3 A:132.8 VS:2639.3





#79 MD:9079.0 TVD:6398.2 I:91.0 A:131.6 VS:2905.2

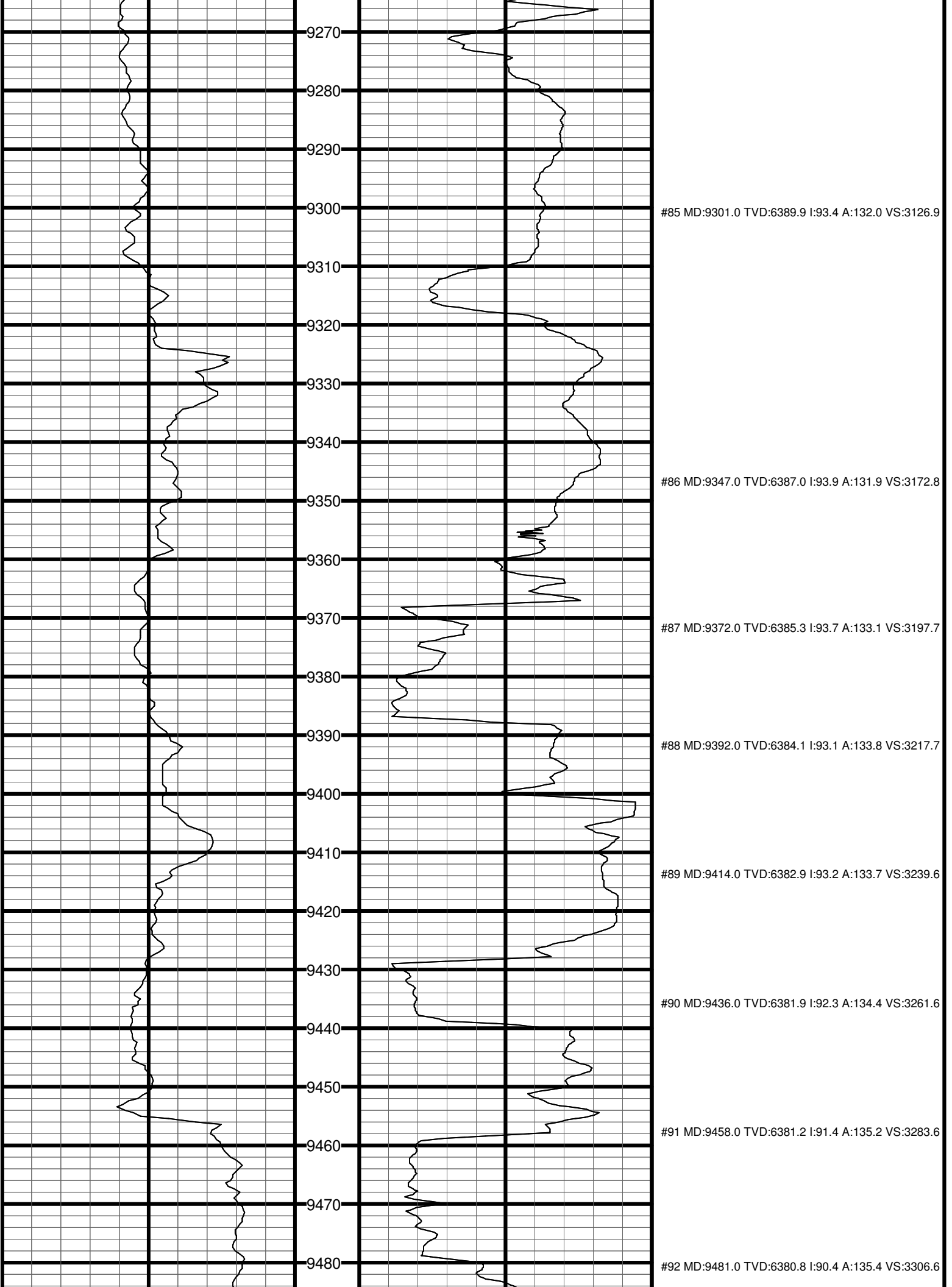
#80 MD:9123.0 TVD:6397.2 I:91.5 A:131.3 VS:2949.2

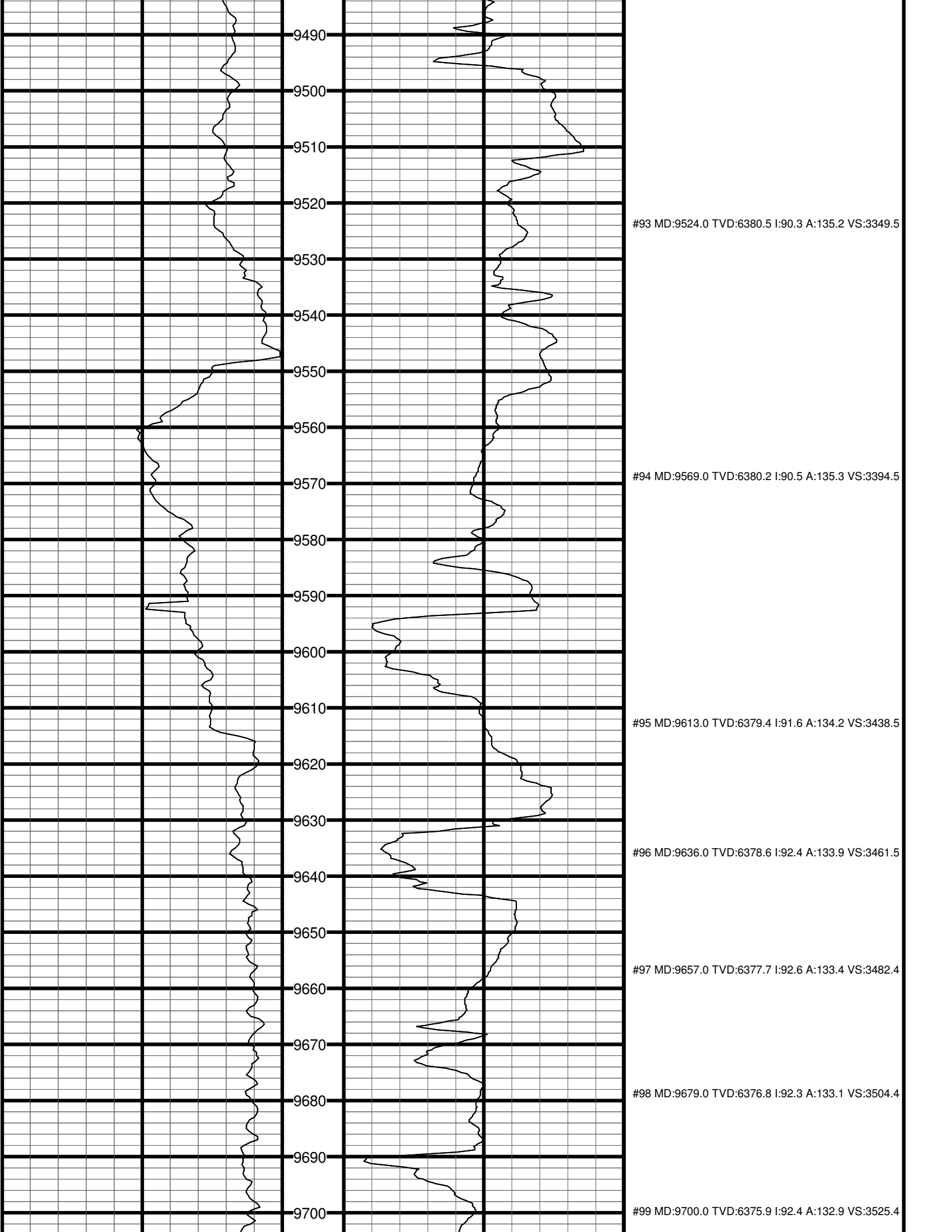
#81 MD:9167.0 TVD:6396.1 I:91.4 A:129.7 VS:2993.1

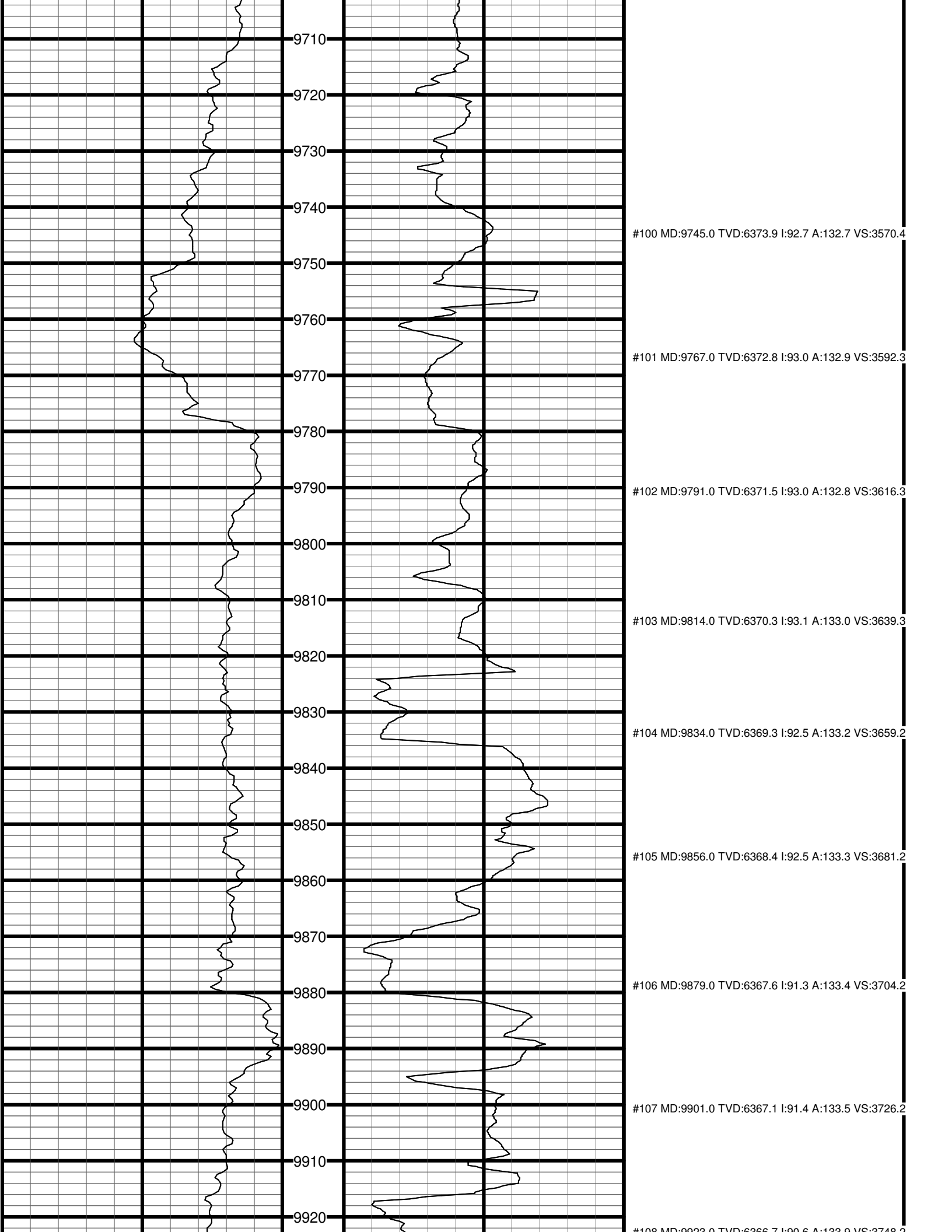
#82 MD:9189.0 TVD:6395.5 I:92.0 A:130.4 VS:3015.0

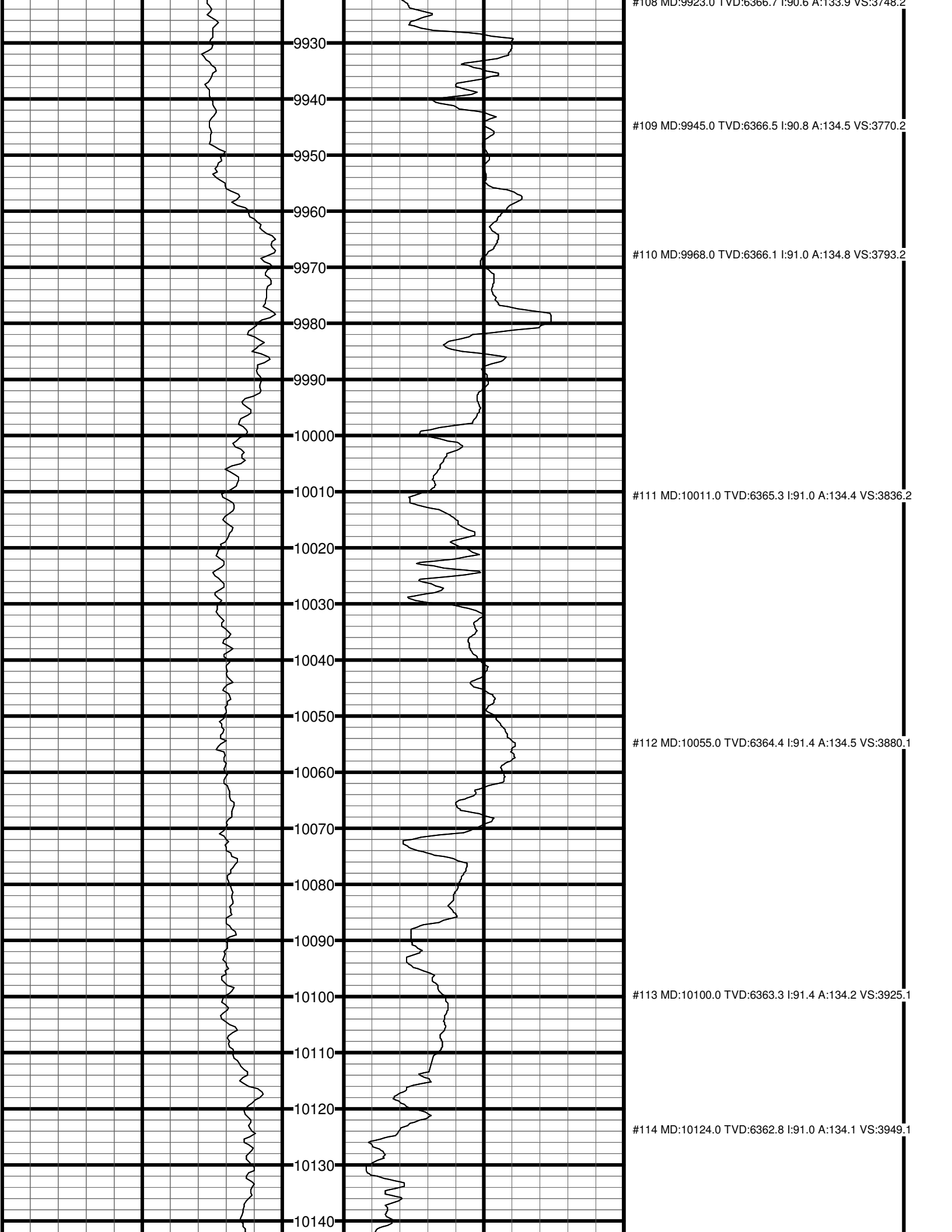
#83 MD:9212.0 TVD:6394.5 I:92.7 A:131.6 VS:3038.0

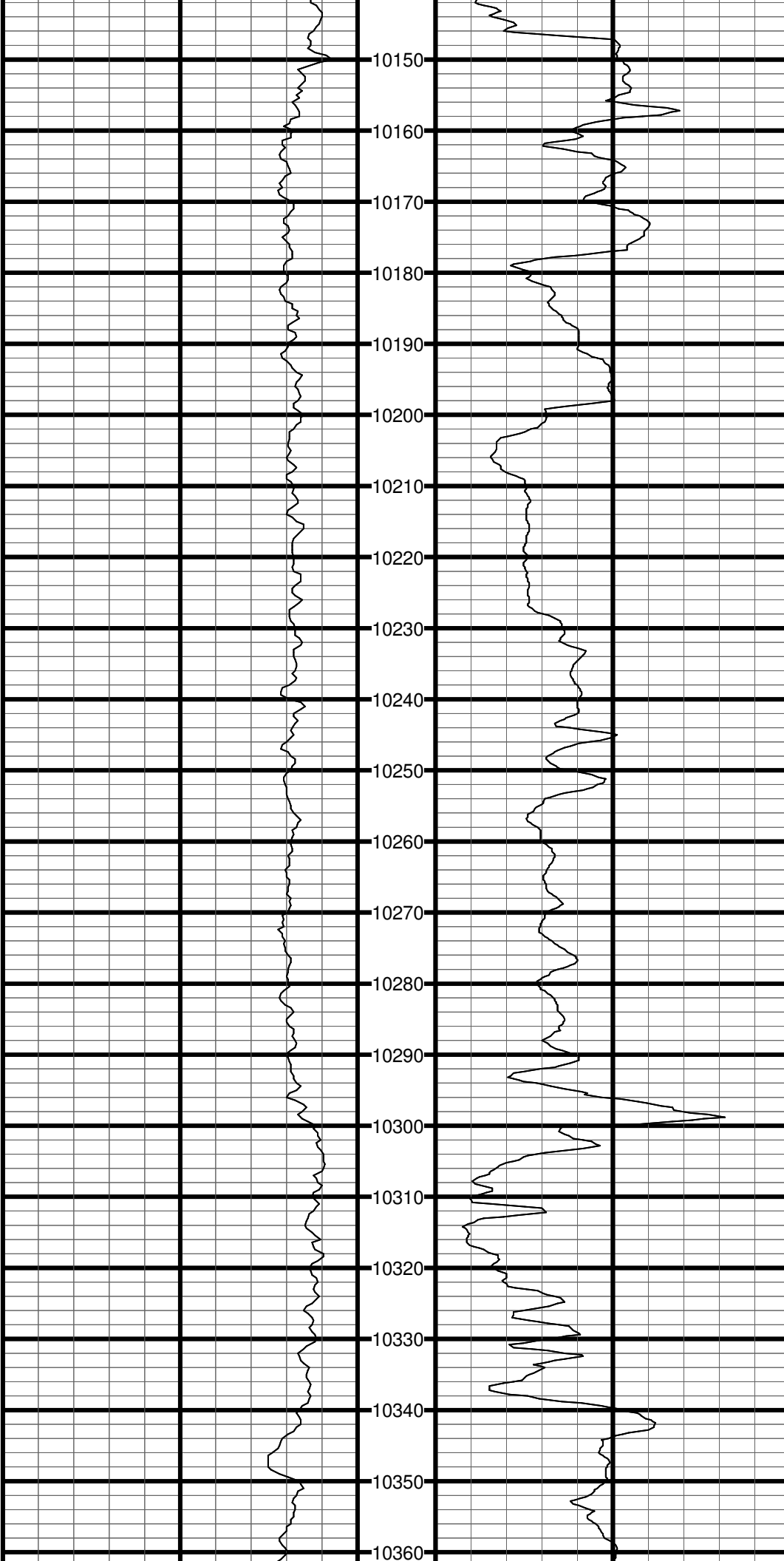
#84 MD:9256.0 TVD:6392.4 I:92.9 A:132.0 VS:3081.9











#115 MD:10144.0 TVD:6362.7 I:89.9 A:133.7 VS:3969.1

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#116 MD:10188.0 TVD:6362.7 I:90.0 A:133.4 VS:4013.1

10190

10200

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10230

#117 MD:10232.0 TVD:6362.5 I:90.5 A:133.6 VS:4057.1

10240

10250

#118 MD:10256.0 TVD:6362.2 I:90.8 A:133.6 VS:4081.1

10260

10270

#119 MD:10277.0 TVD:6361.9 I:91.1 A:133.7 VS:4102.1

10280

10290

#120 MD:10299.0 TVD:6361.4 I:91.5 A:133.5 VS:4124.1

10300

10310

#121 MD:10320.0 TVD:6361.1 I:90.3 A:133.5 VS:4145.1

10320

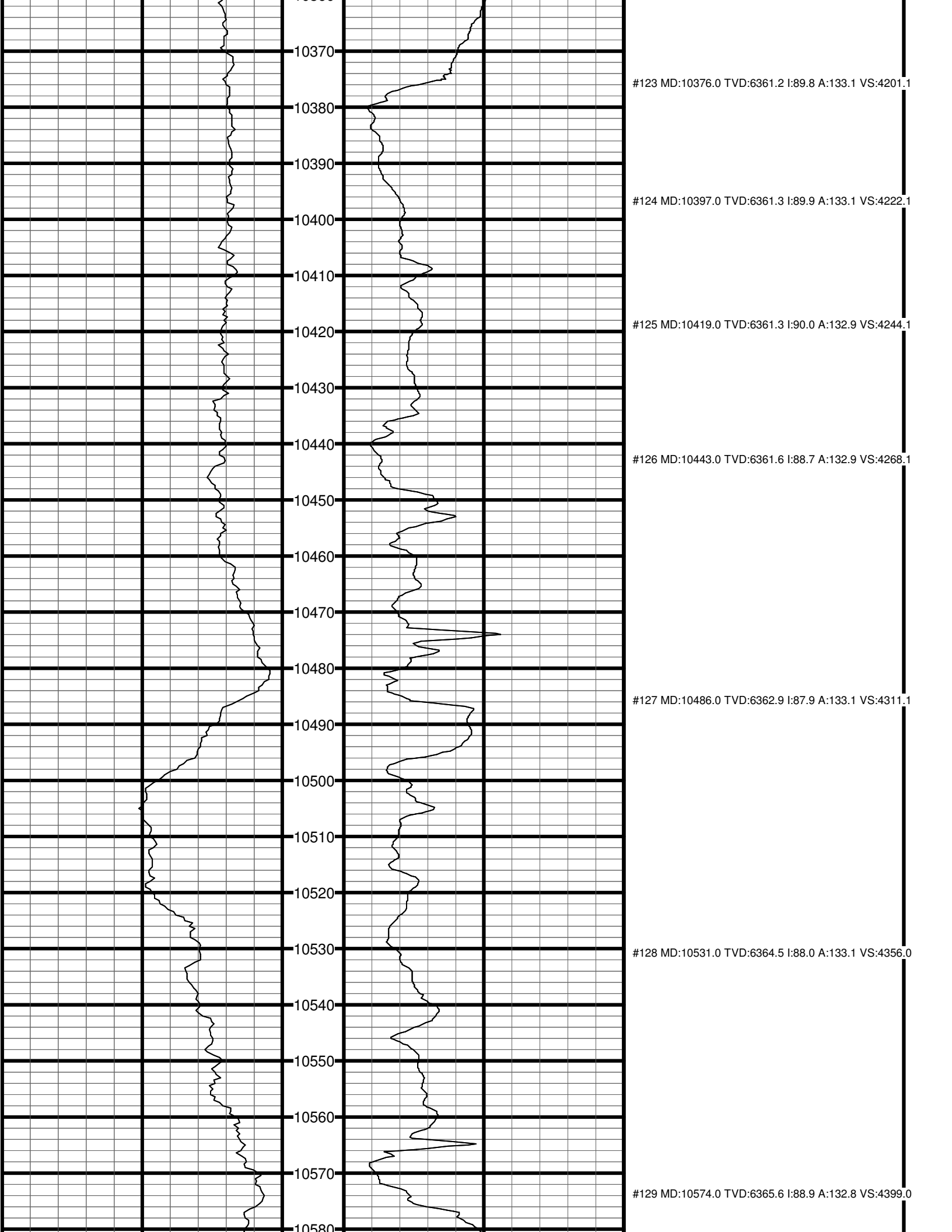
10330

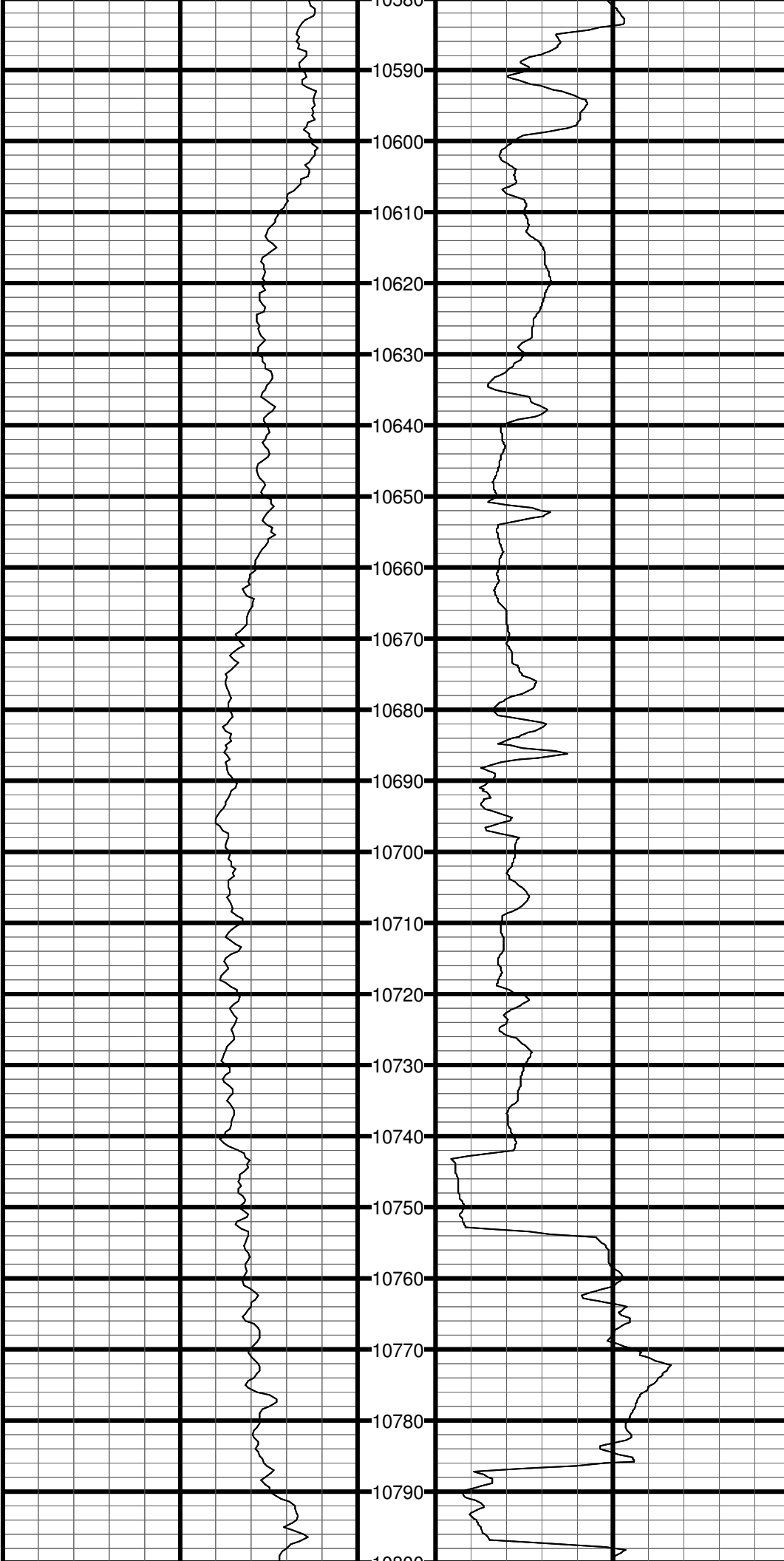
10340

#122 MD:10354.0 TVD:6361.1 I:89.5 A:133.1 VS:4179.1

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10360





#130 MD:10597.0 TVD:6366.0 I:89.2 A:132.7 VS:4422.0

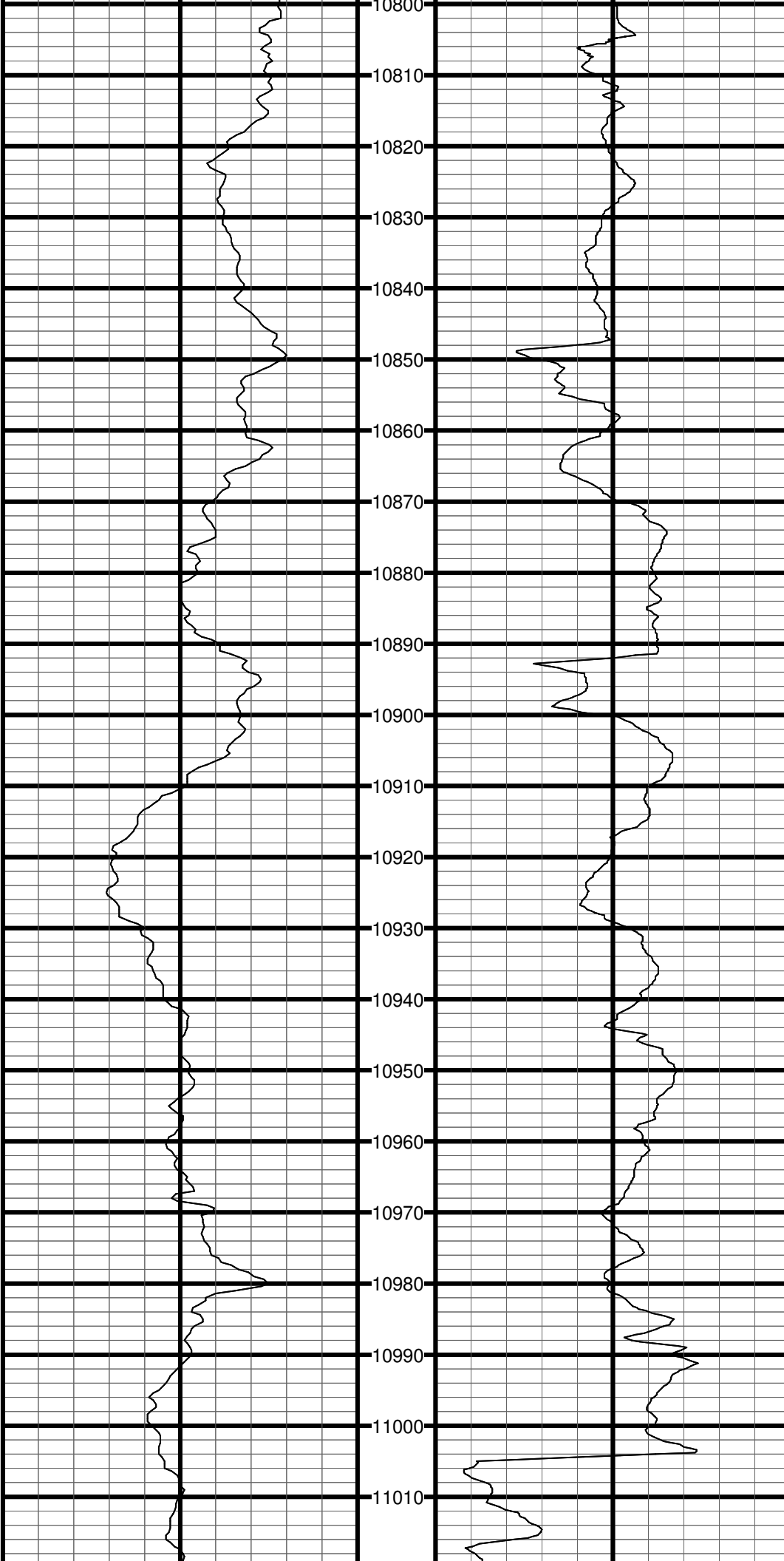
#131 MD:10620.0 TVD:6366.3 I:89.4 A:132.8 VS:4445.0

#132 MD:10664.0 TVD:6366.7 I:89.7 A:132.7 VS:4489.0

#133 MD:10707.0 TVD:6366.8 I:89.9 A:133.3 VS:4532.0

#134 MD:10751.0 TVD:6367.3 I:88.7 A:133.4 VS:4576.0

#135 MD:10795.0 TVD:6368.7 I:87.7 A:134.0 VS:4620.0



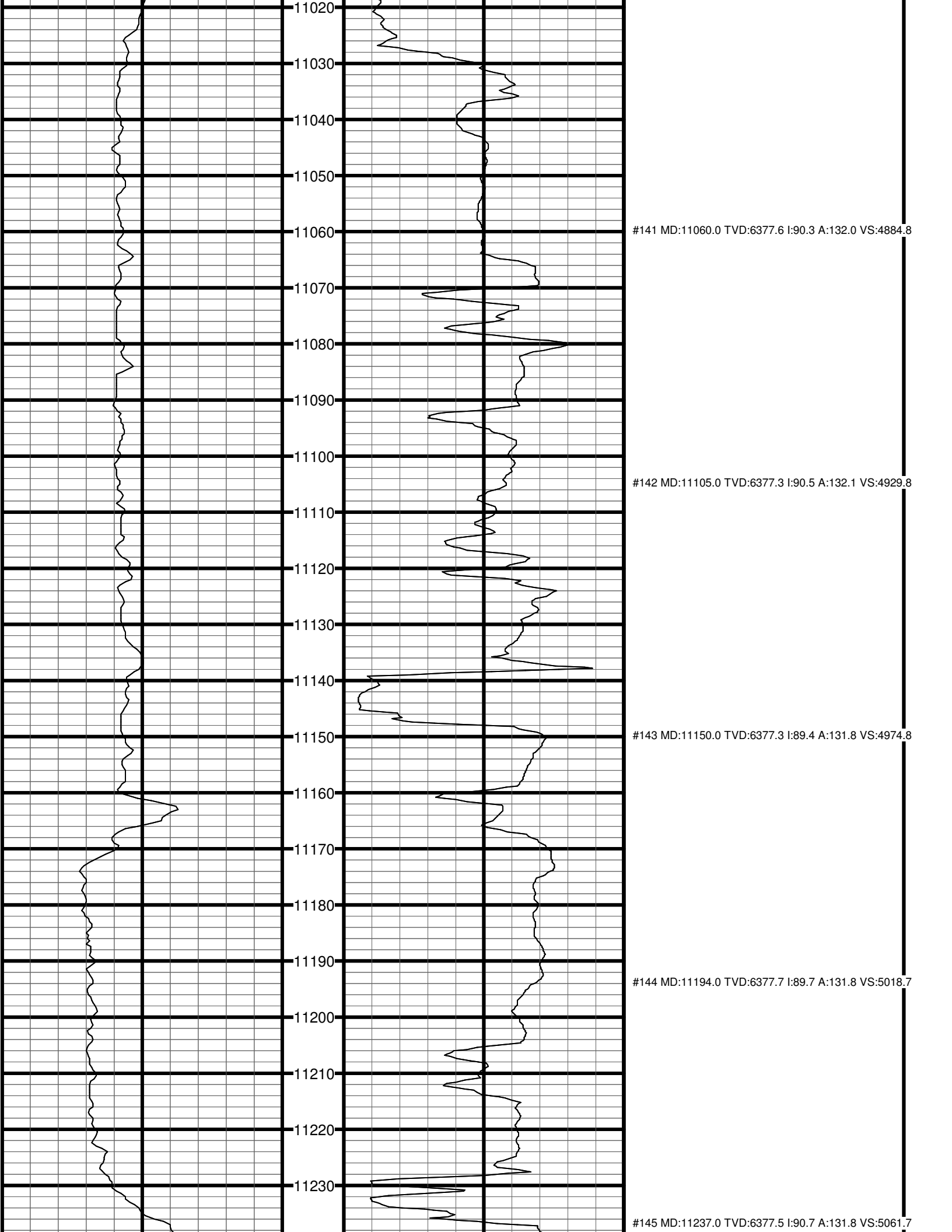
#136 MD:10838.0 TVD:6370.5 I:87.5 A:133.8 VS:4662.9

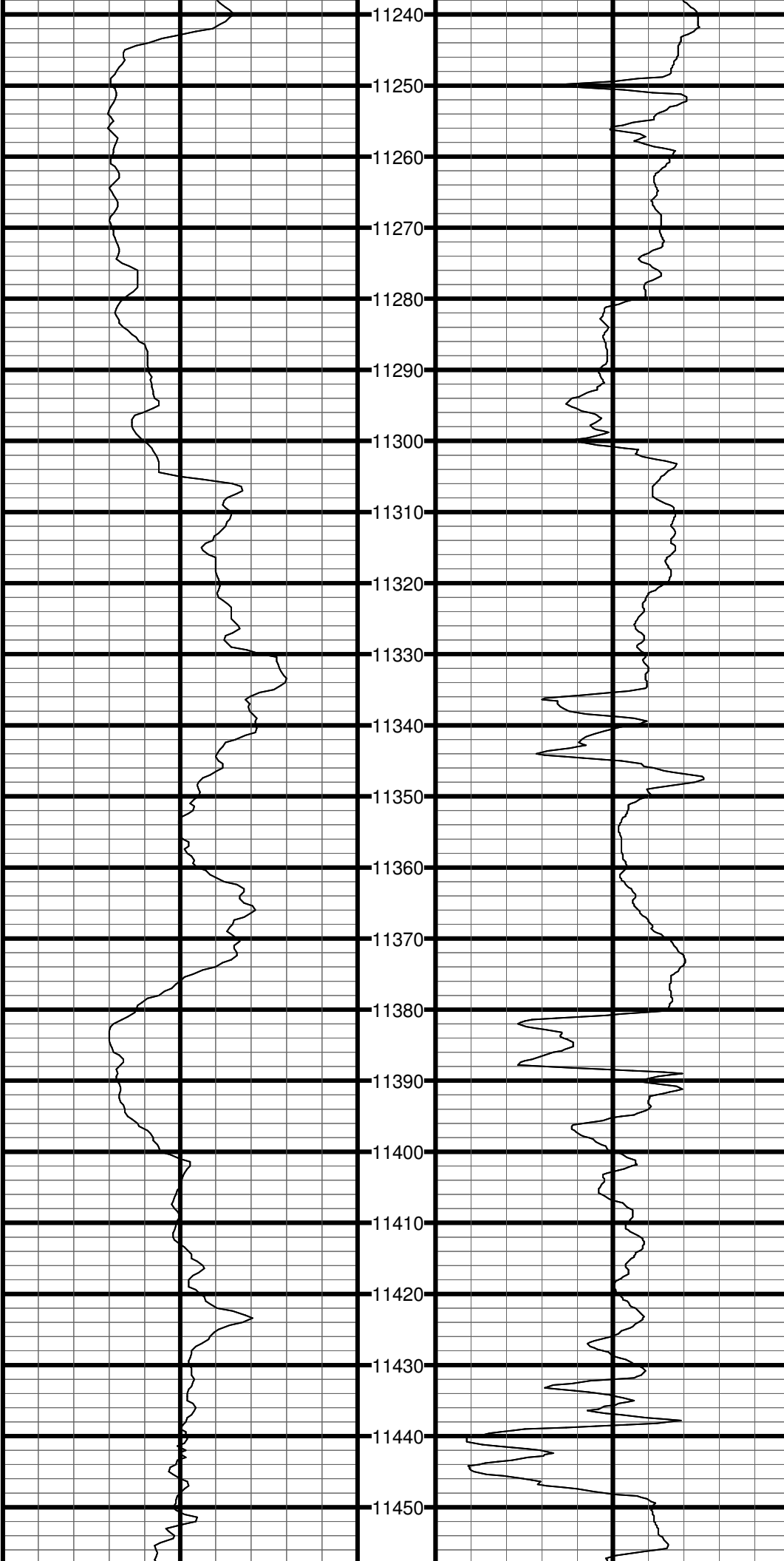
#137 MD:10884.0 TVD:6372.5 I:87.6 A:133.2 VS:4708.9

#138 MD:10927.0 TVD:6374.3 I:87.5 A:133.0 VS:4751.9

#139 MD:10972.0 TVD:6376.3 I:87.4 A:132.7 VS:4796.8

#140 MD:11016.0 TVD:6377.5 I:89.5 A:131.9 VS:4840.8





#146 MD:11281.0 TVD:6377.0 I:90.6 A:131.7 VS:5105.7

#147 MD:11324.0 TVD:6376.6 I:90.6 A:131.4 VS:5148.7

#148 MD:11370.0 TVD:6376.1 I:90.5 A:131.1 VS:5194.7

#149 MD:11415.0 TVD:6375.8 I:90.4 A:131.0 VS:5239.6

#150 MD:11459.0 TVD:6375.4 I:90.3 A:131.5 VS:5282.6

