

PRO DIRECTIONAL

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

Company: Tapstone Energy
 Well: Hazel 23-34-9 2H
 Field: Mississippi Lime
 Well ID: 15-077-22151-01-00
 Job Number: LKS6118515

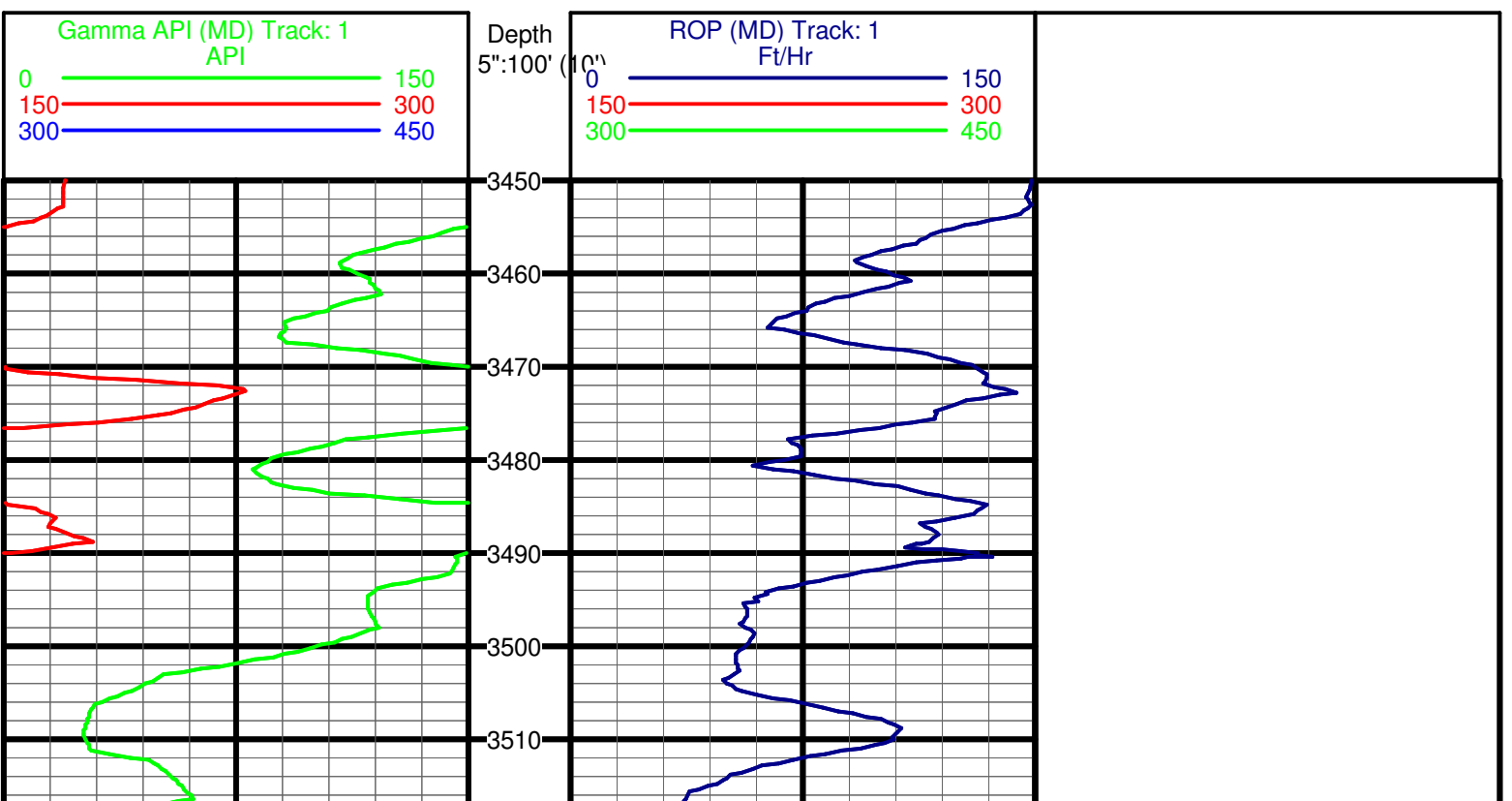
State: Kansas
 County: Harper
 Country: USA

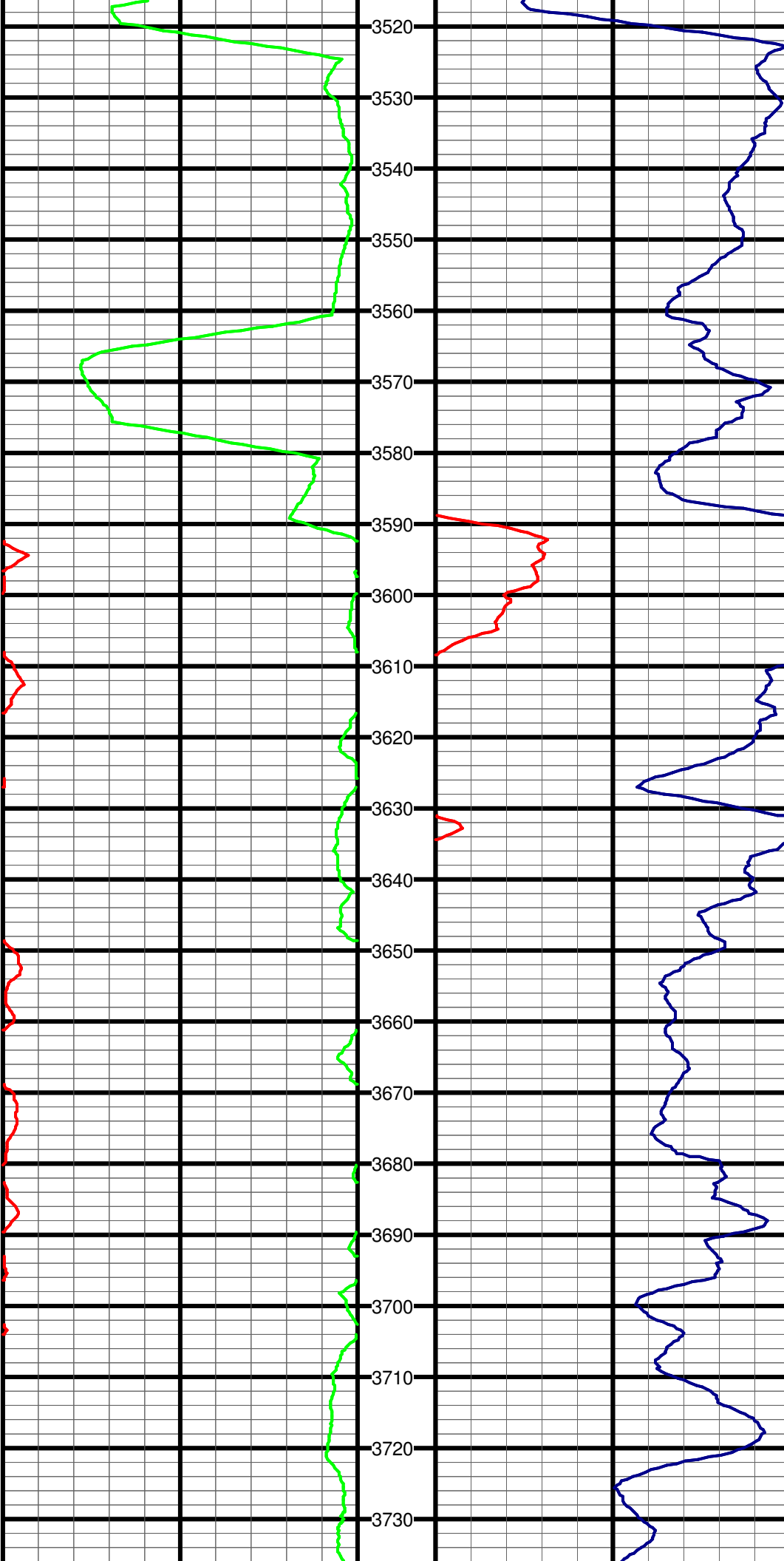
Elev KB: 22' + 1,288' = 1,310'
 Elev DF: 22'
 Elev GL: 1,288'

Operator 1: J. Treille
 Operator 2: B. Bagby
 Comment 1: LAT: 37° 4' 43.63 N
 Comment 2: LONG: 98° 15' 51.95 W
 Comment 3: Y: 150148.00 / X: 206872700
 Comment 4: Mud Density (lb/bbl): 8.35 / Funnel viscosity (sec/qt): 27
 Comment 5: Max Temp (DegF): 160° (NAD 1927) Gamma Ray in Reference to Elev KB (Kansas South 1502)

Hole Data			Casing Record		
Size	From	To	Size	From	To
12 1/4"	0'	815'	9 5/8"	0'	815'
8 3/4"	815'	5,361'	7"	815'	5,361'
6 1/8"	5,361'	8,918'			

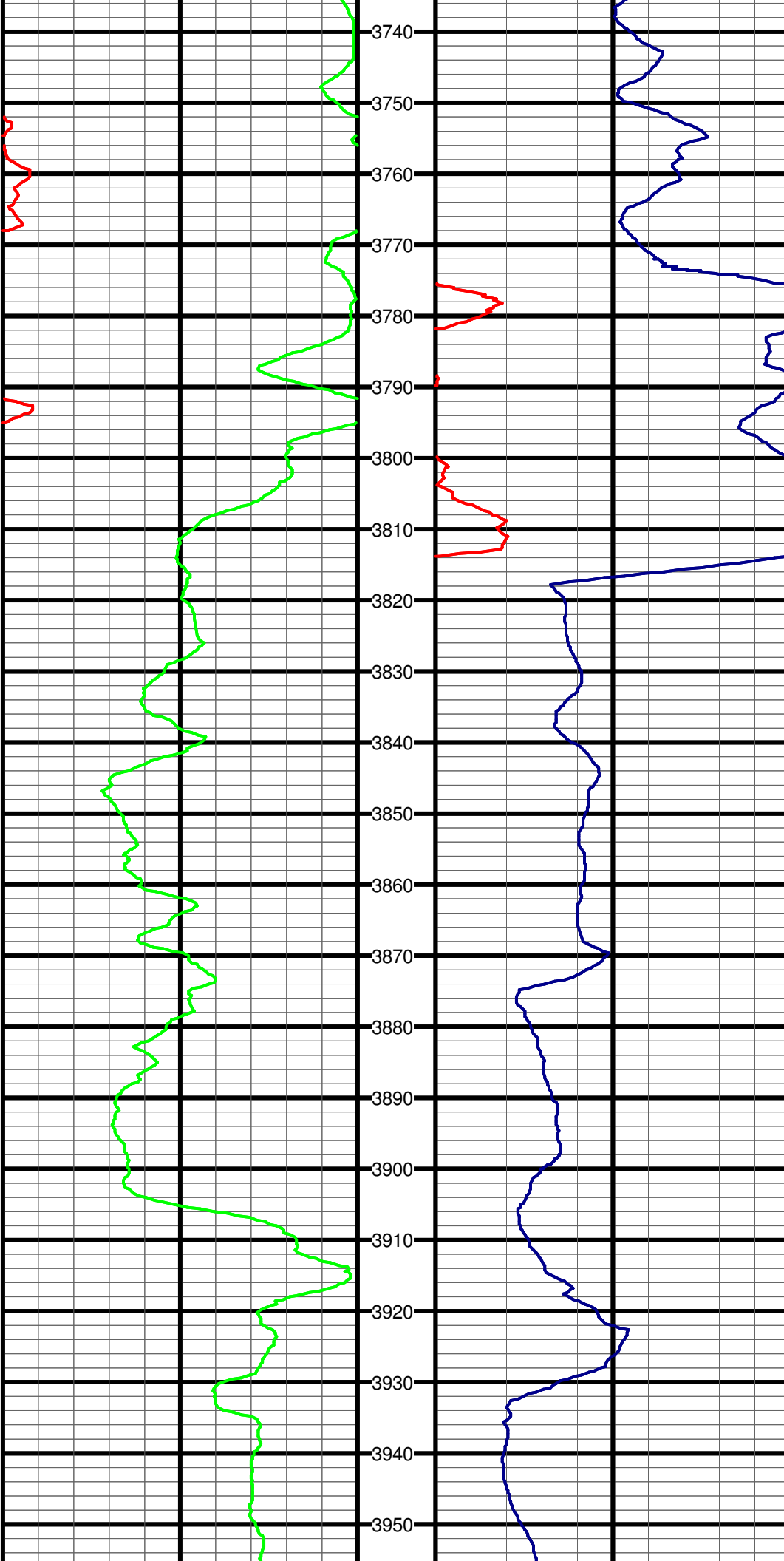
Tool Run Data		Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	2591	1000	3023	2599	3023	
Cal Factor	4.85	4.85	2.75	2.75	2.75	
Gamma Offset	43'	47'	40'	40'	40'	
Start Depth	3,450'	3,915'	5,318'	7,181'	8,572'	
Start Date	07/23/2015	07/23/2015	07/28/2015	07/31/2015	08/02/2015	
Start Time	05:25	05:00	00:40	04:00	08:06	
End Depth	3,915'	5,318'	7,181'	8,572'	8,878'	
End Date	07/23/2015	07/26/2015	07/30/2015	08/01/2015	08/02/2015	
End Time	13:00	16:53	17:37	20:15	22:00	





#17 MD:3528.0 TVD:3527.7 I:0.4 A:22.4 VS:-9.6

#18 MD:3717.0 TVD:3716.7 I:0.1 A:39.6 VS:-10.3



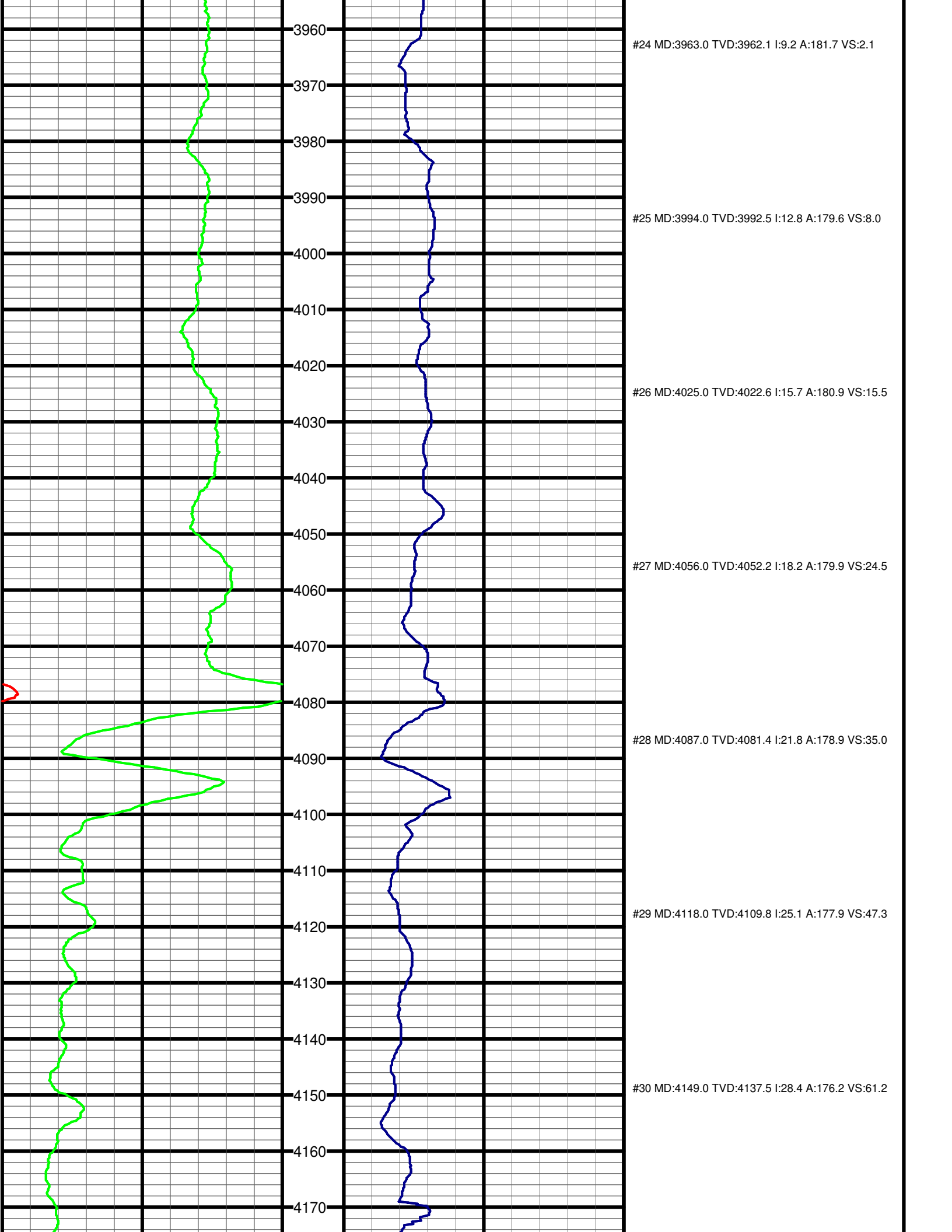
#19 MD:3812.0 TVD:3811.7 I:0.5 A:155.4 VS:-9.9

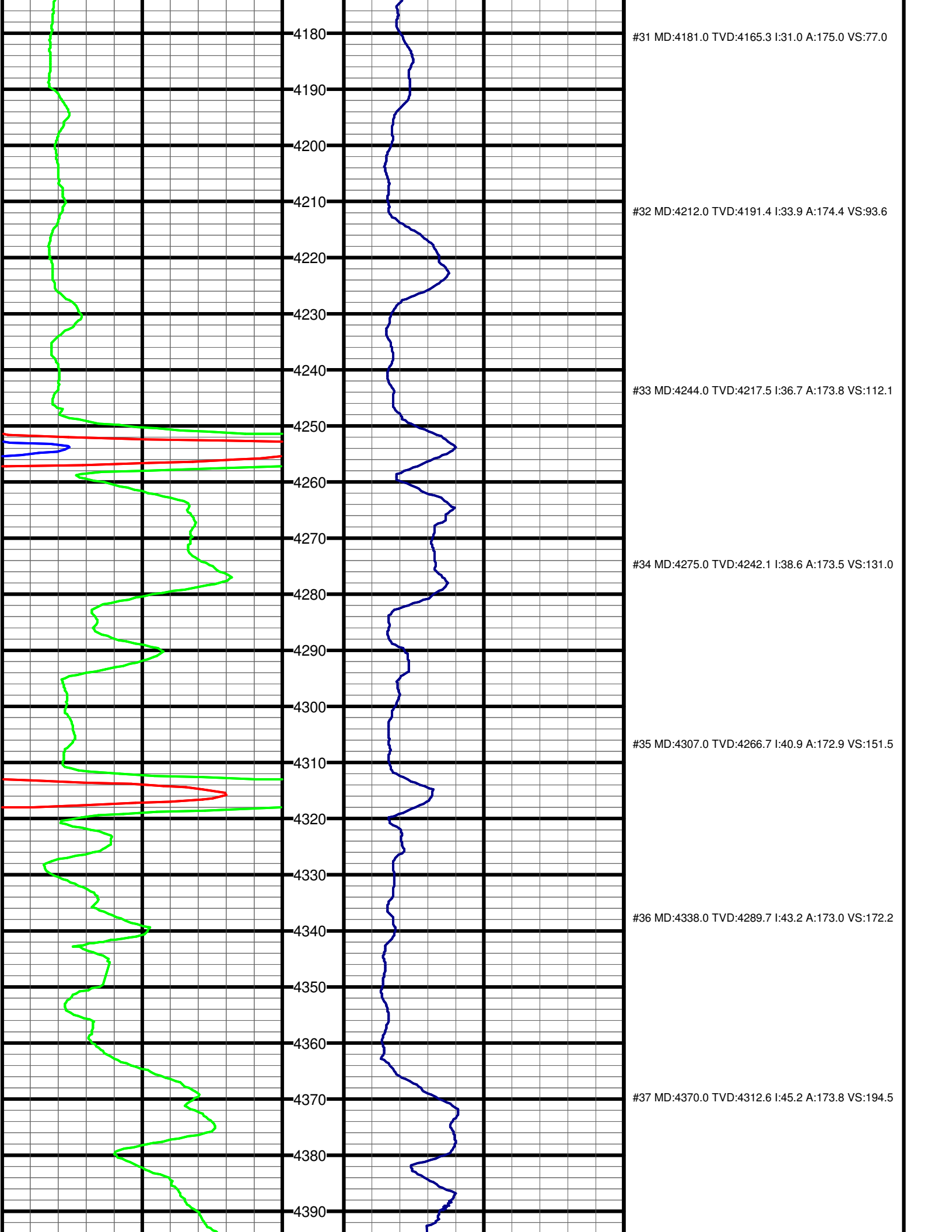
#20 MD:3843.0 TVD:3842.7 I:2.2 A:178.2 VS:-9.2

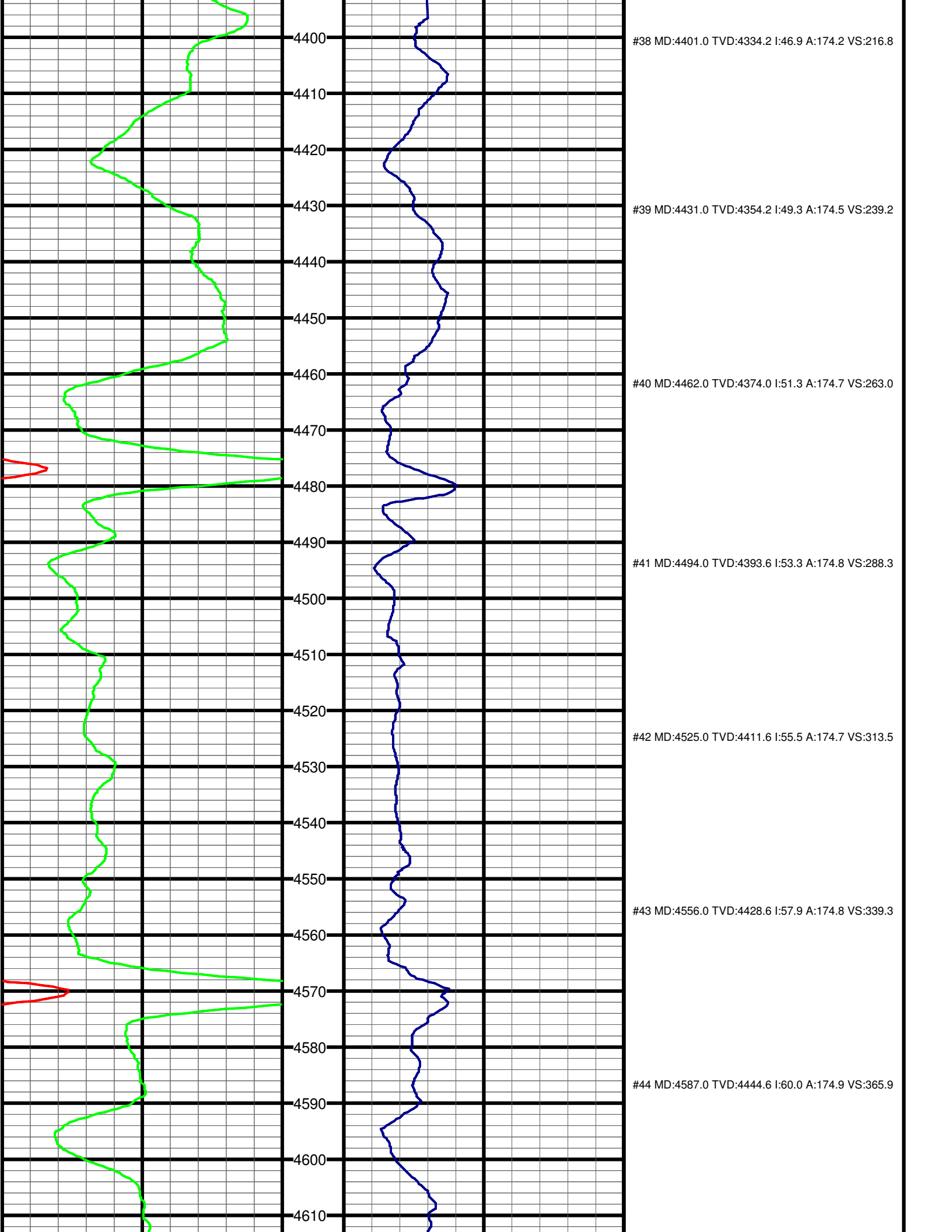
#21 MD:3874.0 TVD:3873.7 I:4.0 A:185.2 VS:-7.6

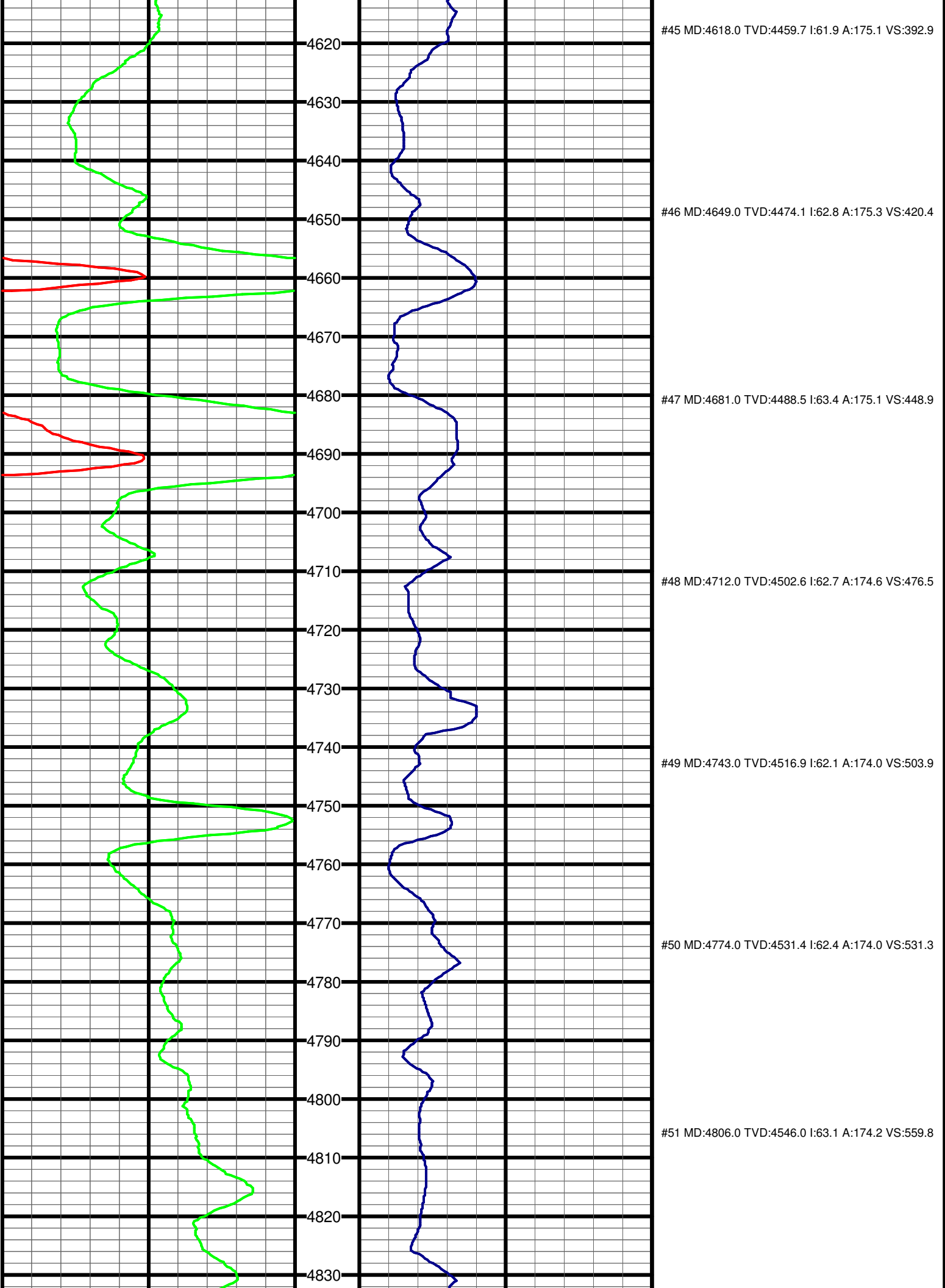
#22 MD:3905.0 TVD:3904.6 I:5.6 A:181.8 VS:-5.0

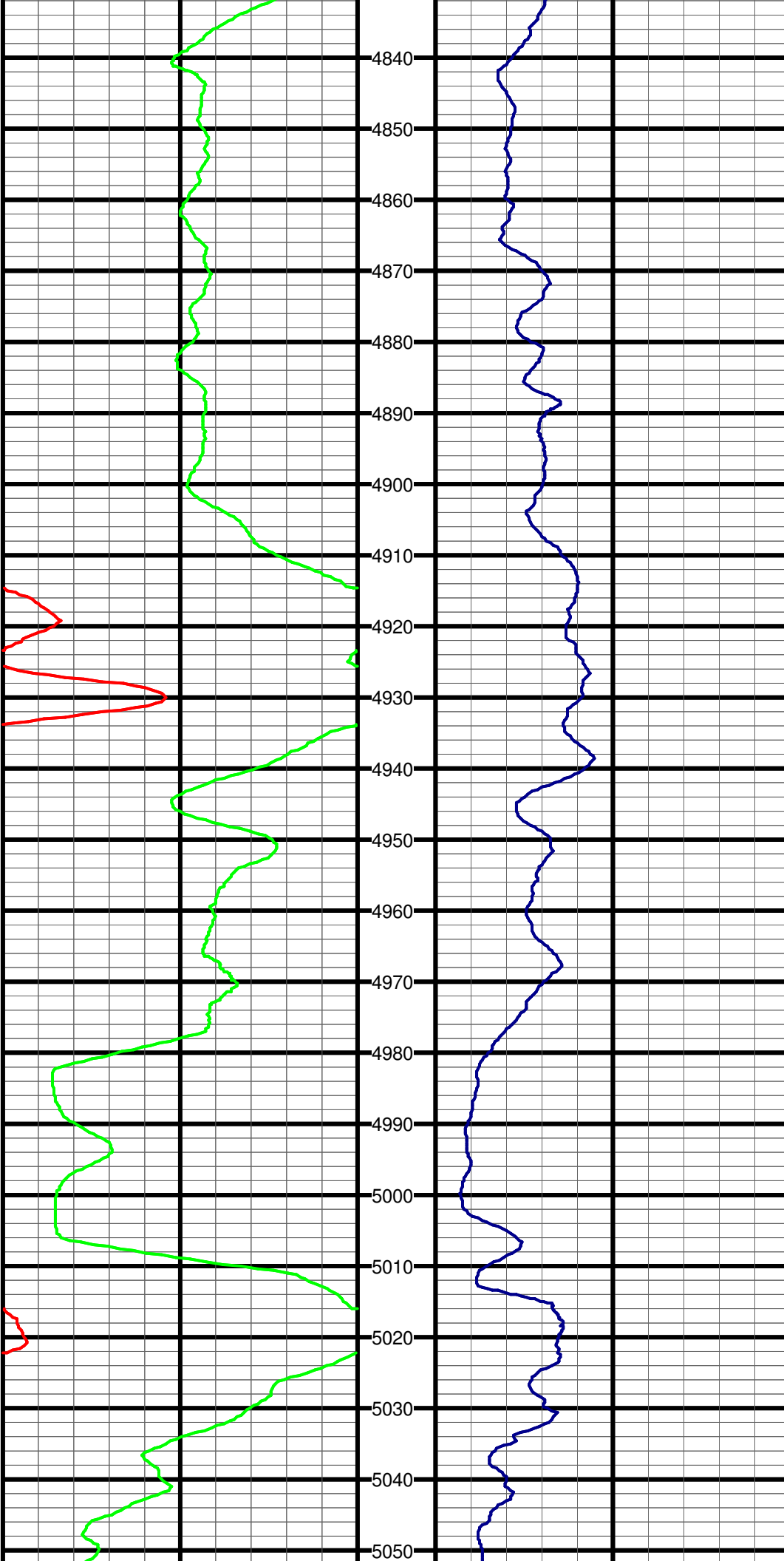
#23 MD:3932.0 TVD:3931.4 I:6.8 A:180.4 VS:-2.1











#52 MD:4837.0 TVD:4559.9 I:63.8 A:174.7 VS:587.5

4840

4850

4860

#53 MD:4868.0 TVD:4573.0 I:66.1 A:174.8 VS:615.5

4870

4880

4890

#54 MD:4900.0 TVD:4585.3 I:68.8 A:174.6 VS:645.0

4900

4910

4920

#55 MD:4931.0 TVD:4595.9 I:71.0 A:174.6 VS:674.1

4930

4940

4950

4960

#56 MD:4963.0 TVD:4605.6 I:73.9 A:174.4 VS:704.6

4970

4980

4990

#57 MD:4994.0 TVD:4613.5 I:76.6 A:174.9 VS:734.6

5000

5010

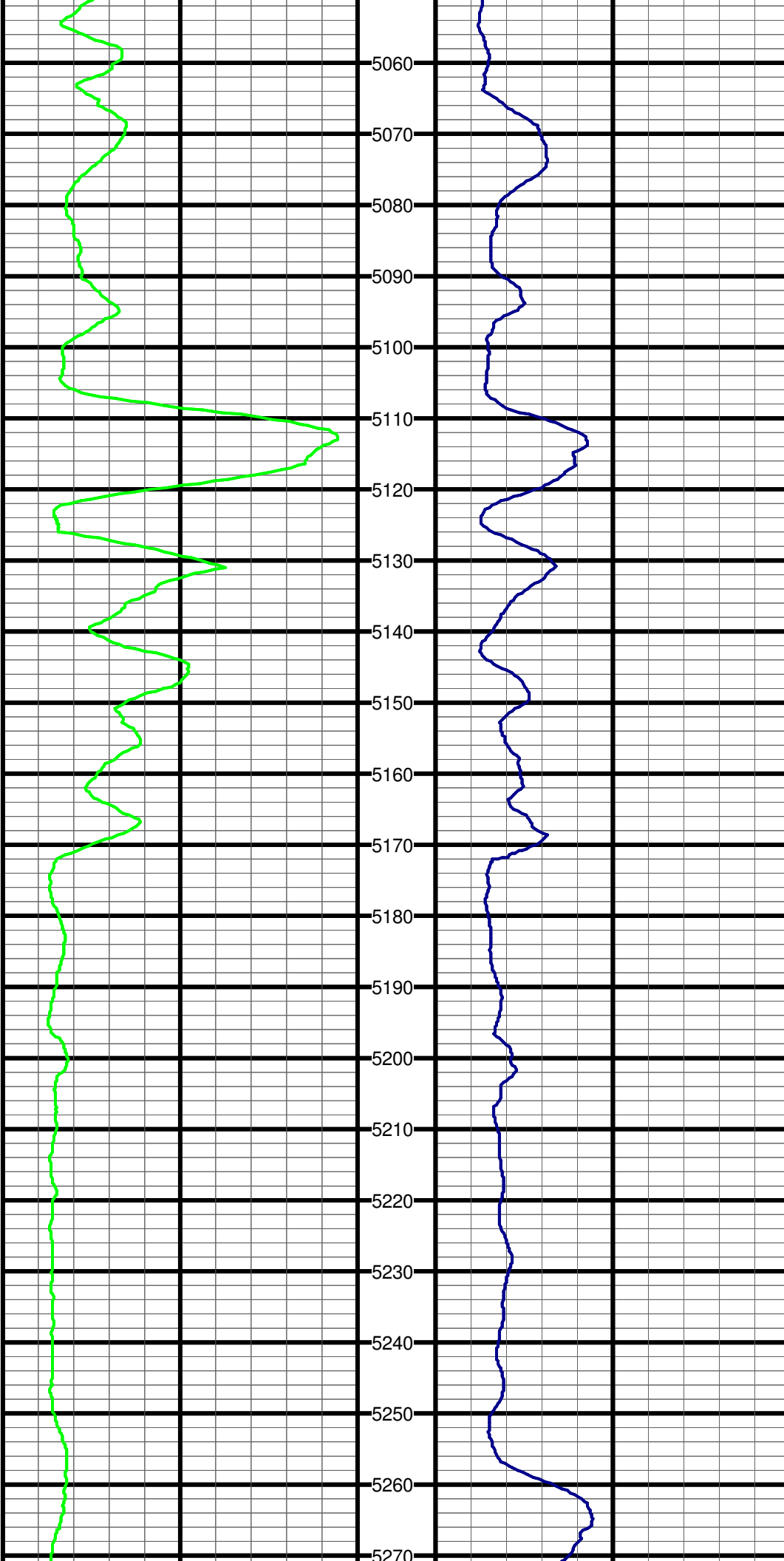
5020

#58 MD:5025.0 TVD:4620.5 I:77.2 A:175.3 VS:764.7

5030

5040

5050



#59 MD:5057.0 TVD:4627.4 I:77.9 A:175.4 VS:795.9

5060

5070

5080

#60 MD:5088.0 TVD:4633.6 I:79.0 A:175.7 VS:826.2

5090

5100

5110

#61 MD:5120.0 TVD:4639.5 I:79.6 A:175.7 VS:857.6

5120

5130

5140

#62 MD:5151.0 TVD:4645.0 I:80.1 A:176.1 VS:888.1

5150

5160

5170

#63 MD:5183.0 TVD:4650.3 I:80.7 A:176.2 VS:919.6

5180

5190

5200

5210

#64 MD:5214.0 TVD:4655.2 I:81.3 A:176.6 VS:950.1

5220

5230

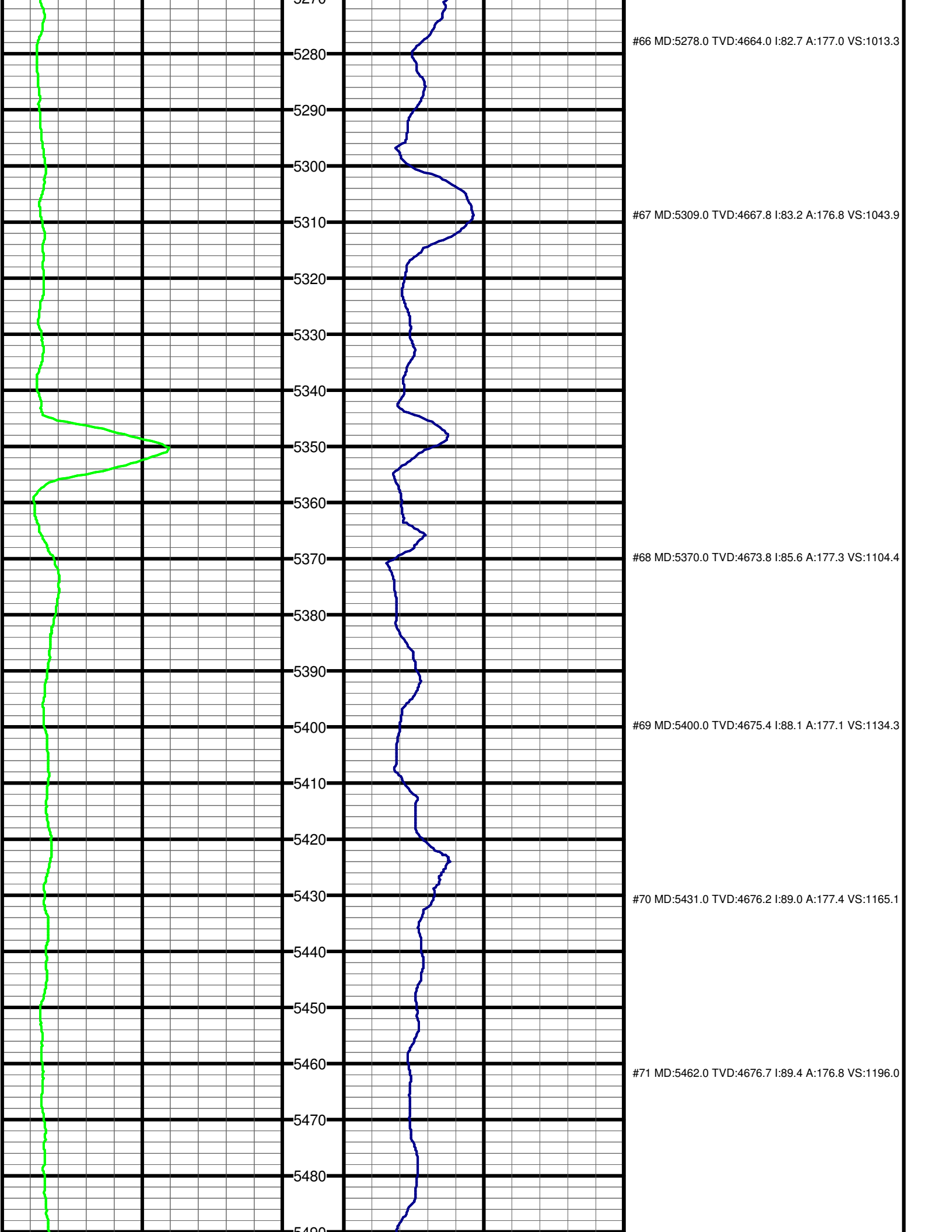
5240

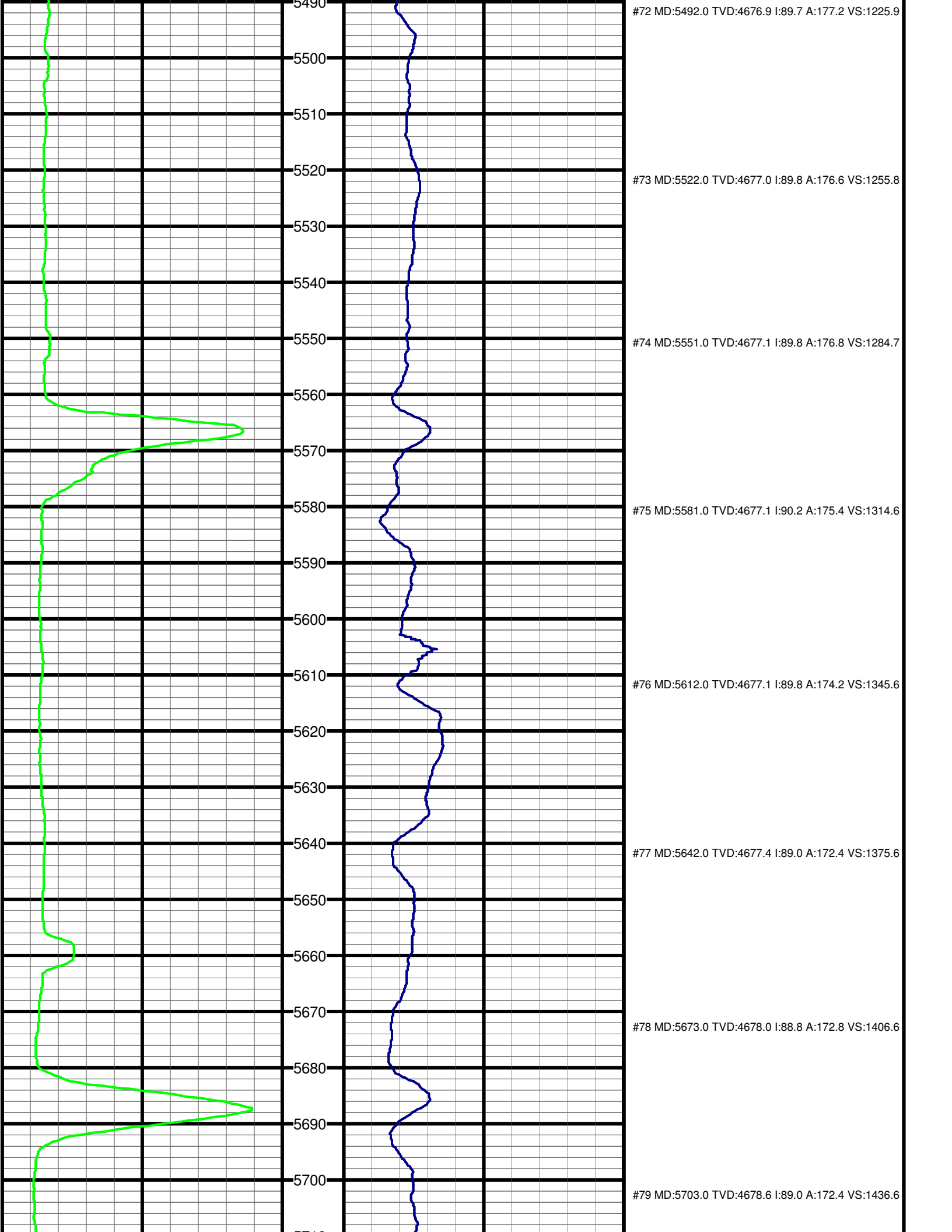
#65 MD:5246.0 TVD:4659.8 I:82.1 A:176.7 VS:981.7

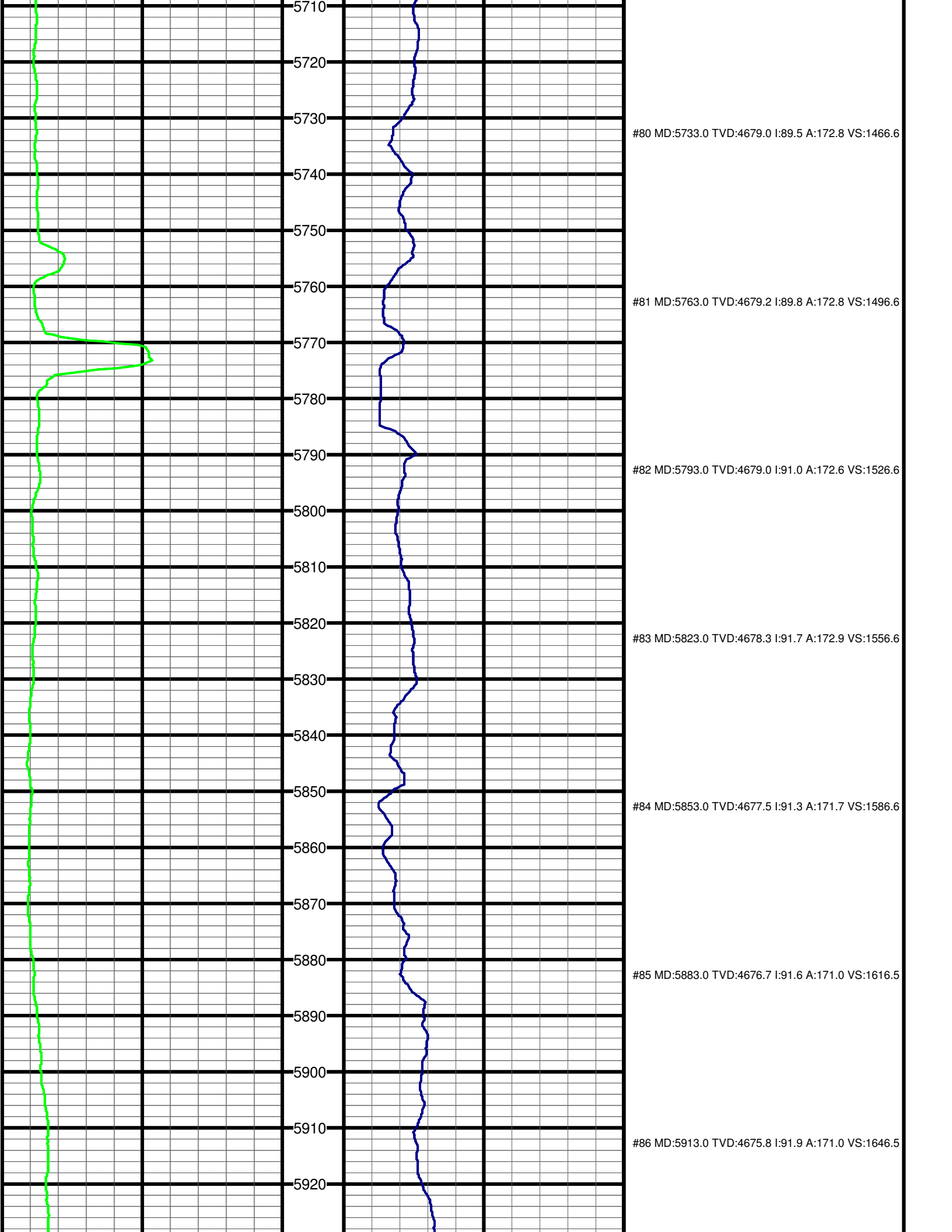
5250

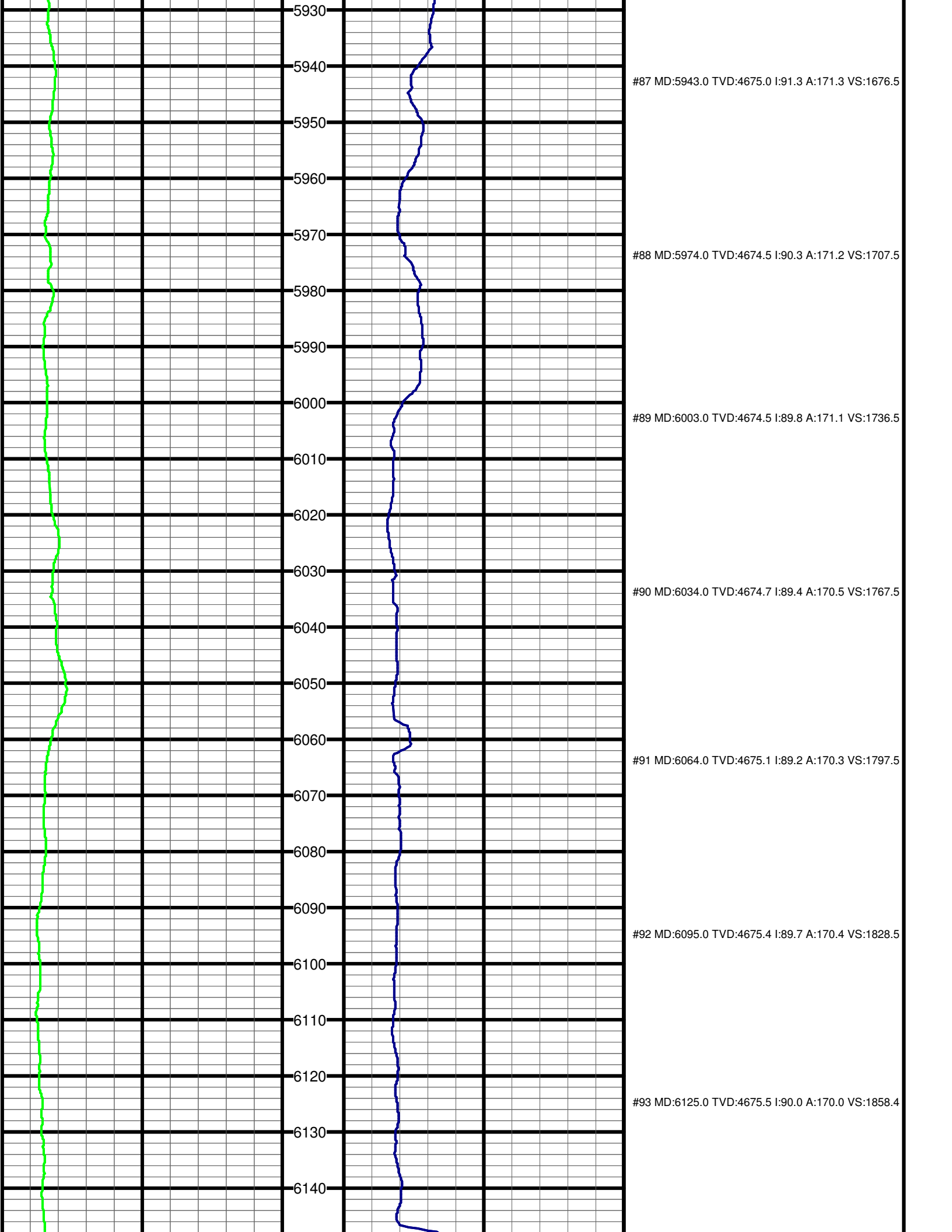
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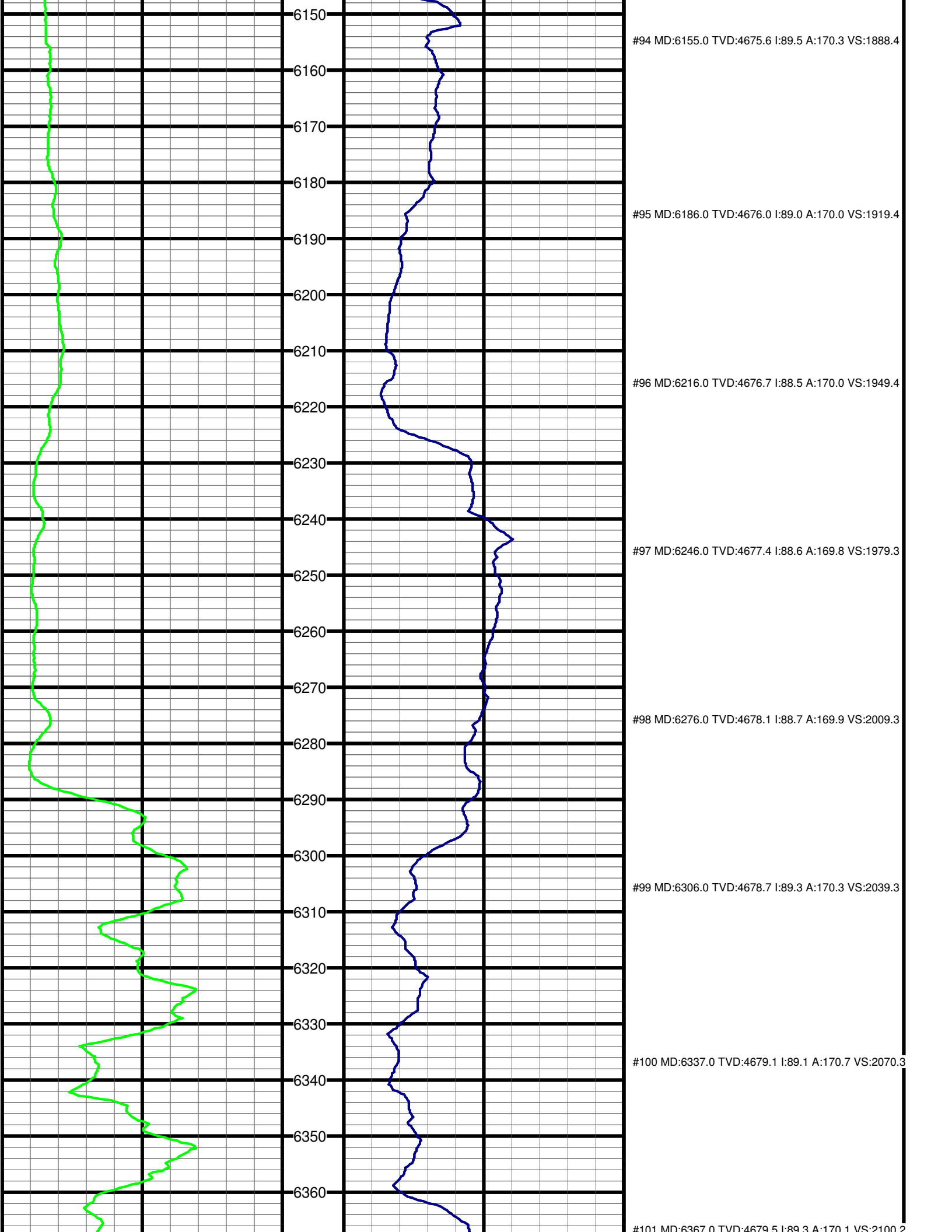
5270

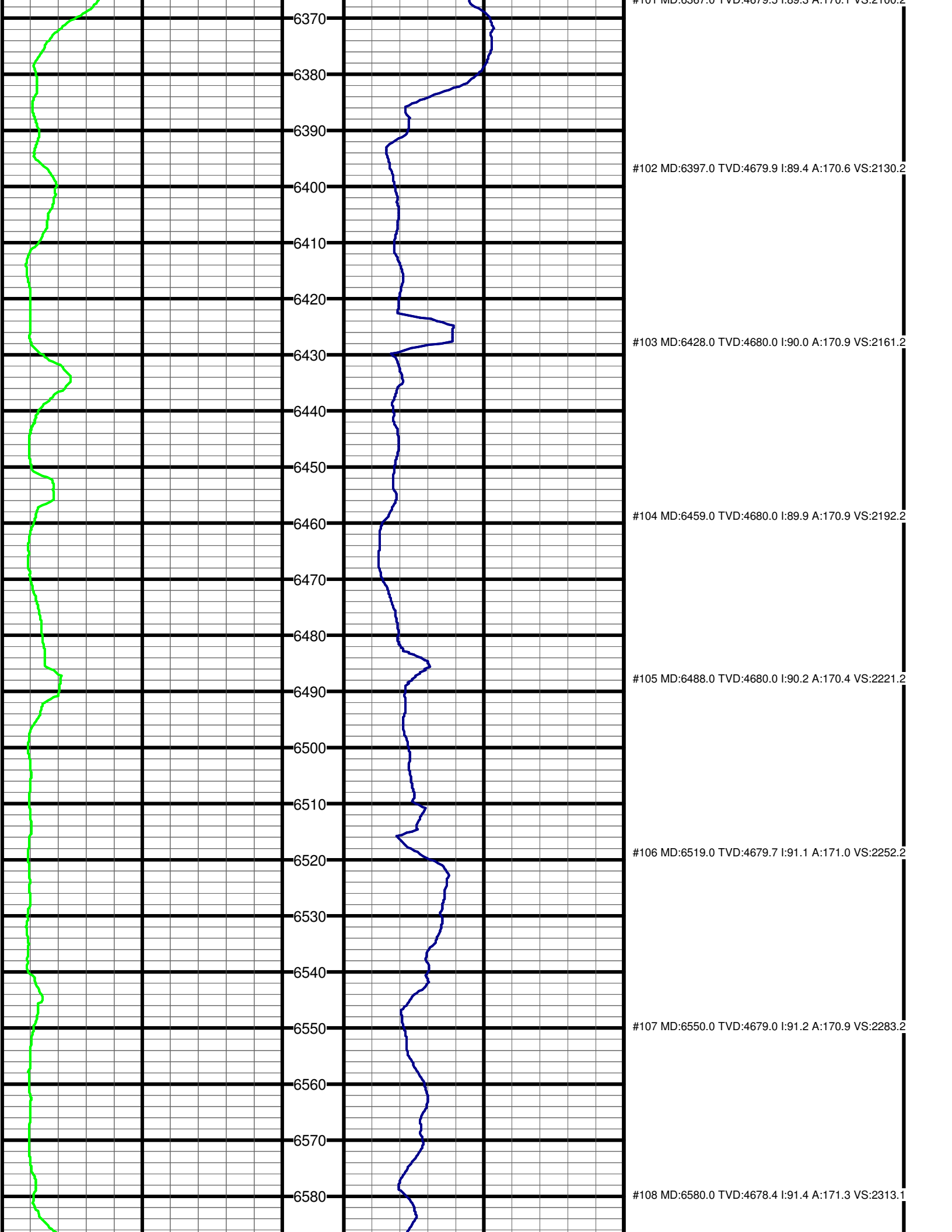












#102 MD:6397.0 TVD:4679.9 I:89.4 A:170.6 VS:2130.2

#103 MD:6428.0 TVD:4680.0 I:90.0 A:170.9 VS:2161.2

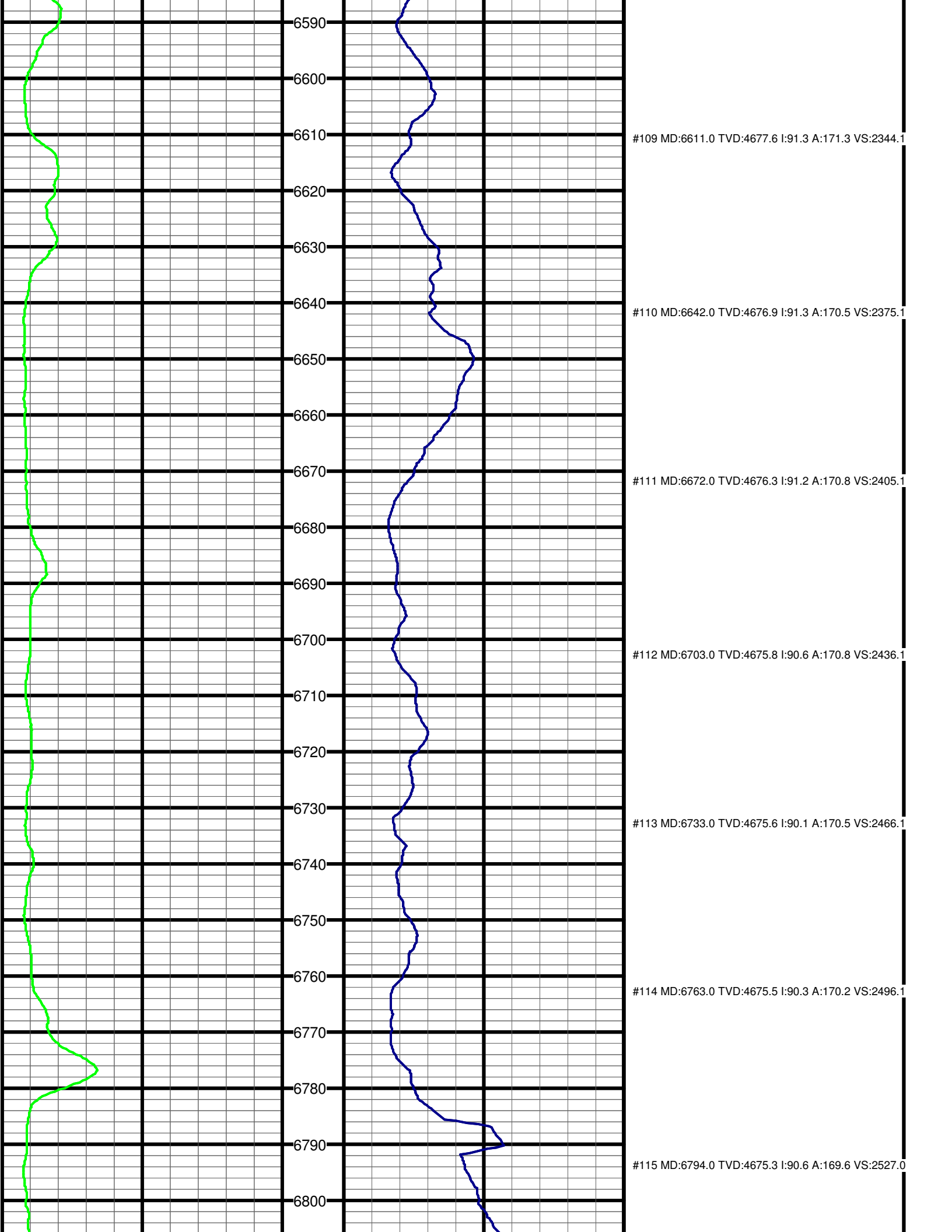
#104 MD:6459.0 TVD:4680.0 I:89.9 A:170.9 VS:2192.2

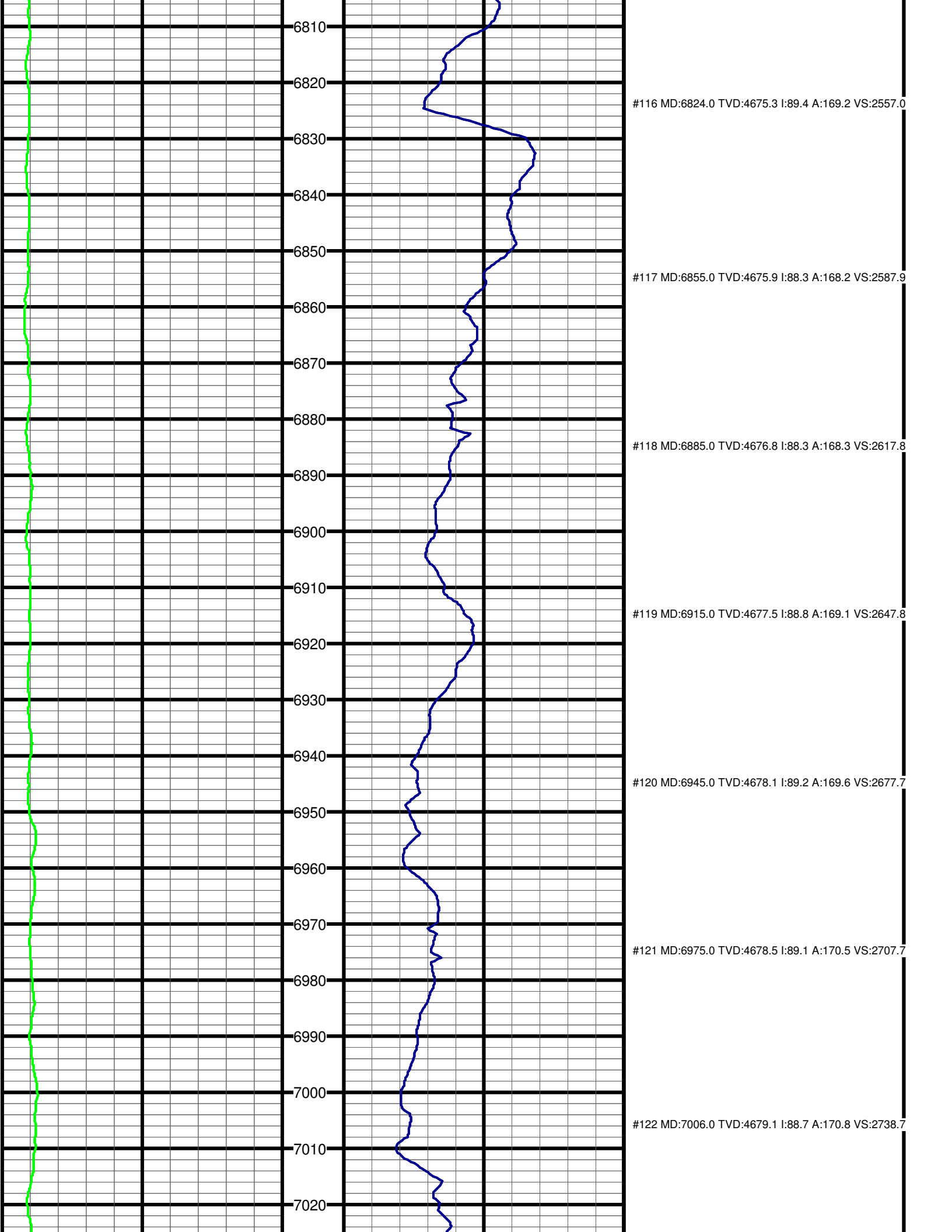
#105 MD:6488.0 TVD:4680.0 I:90.2 A:170.4 VS:2221.2

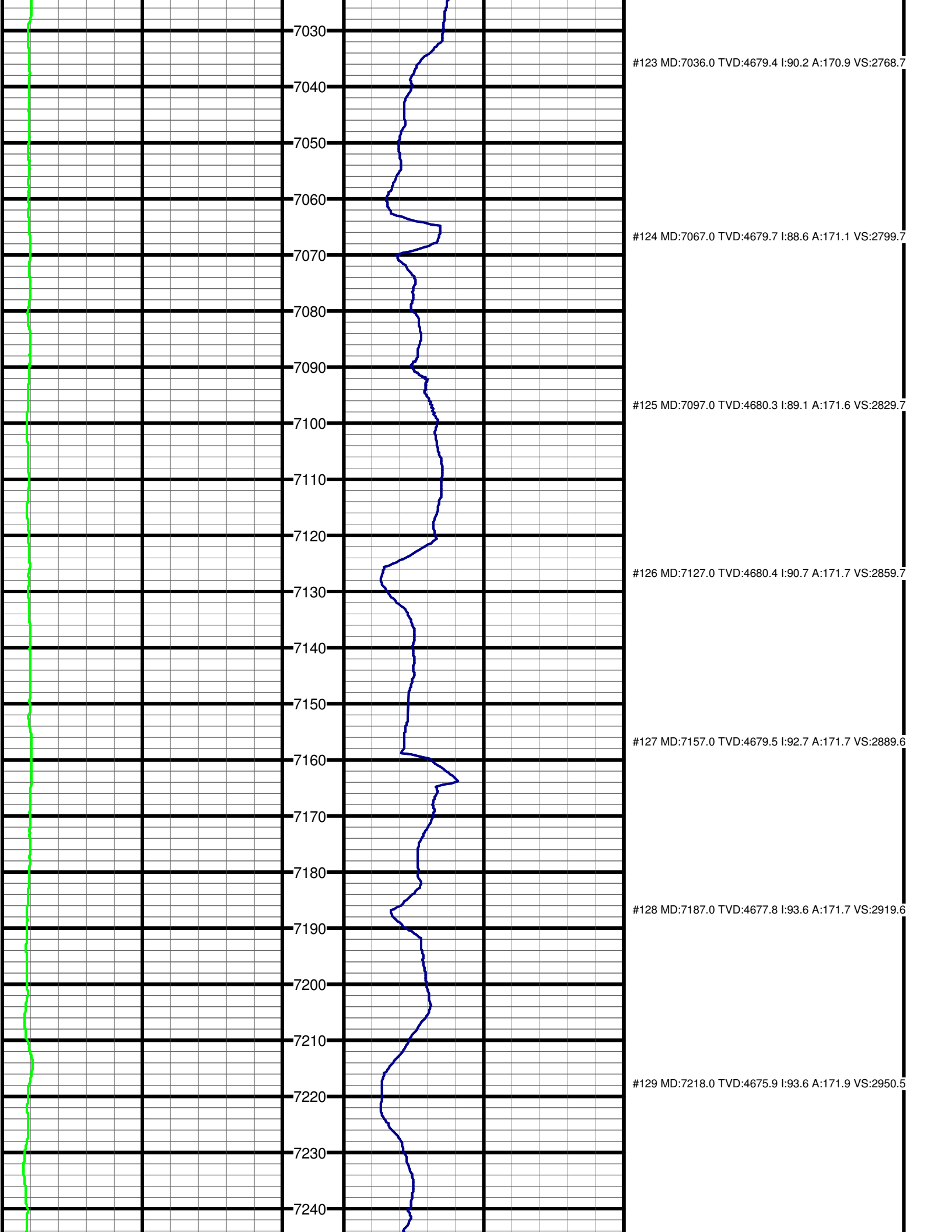
#106 MD:6519.0 TVD:4679.7 I:91.1 A:171.0 VS:2252.2

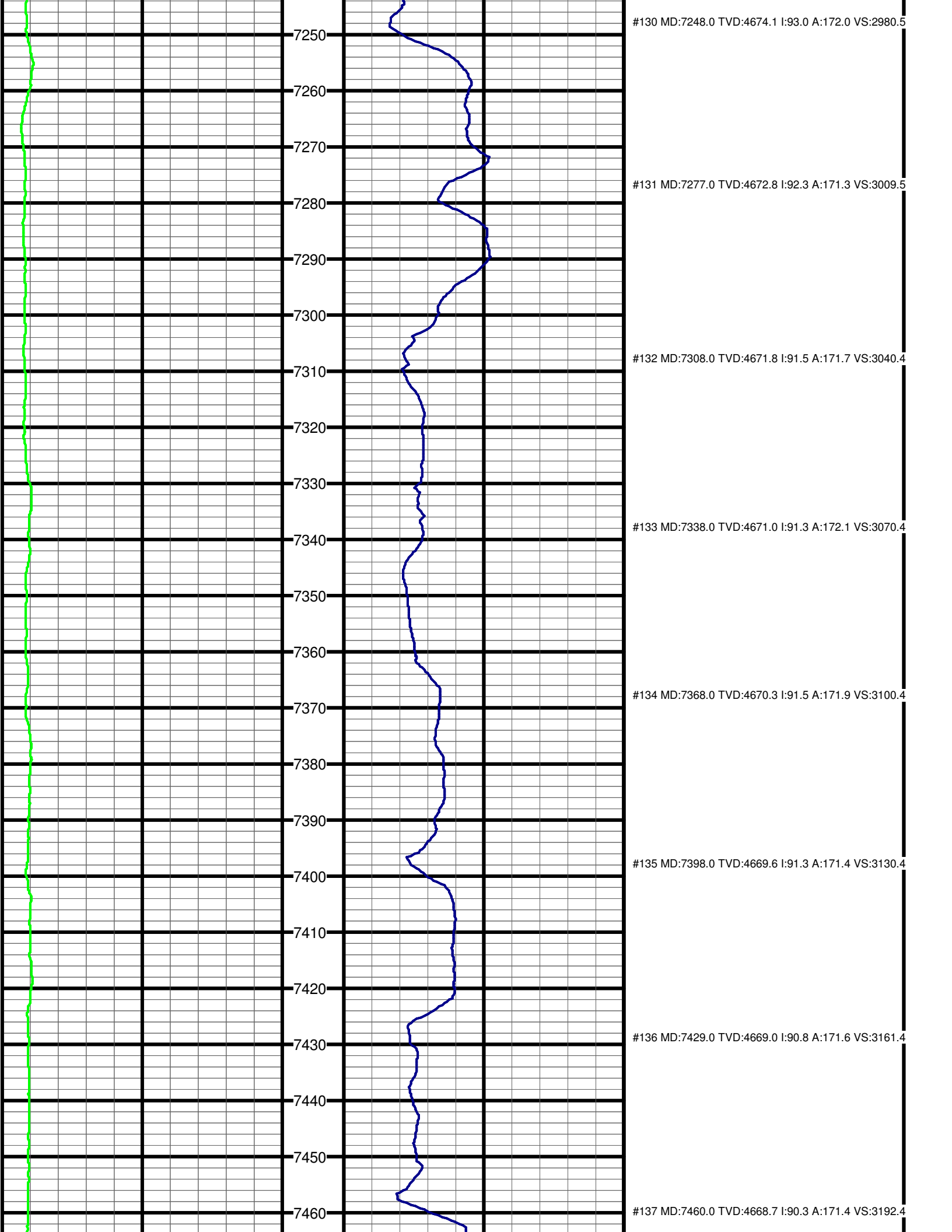
#107 MD:6550.0 TVD:4679.0 I:91.2 A:170.9 VS:2283.2

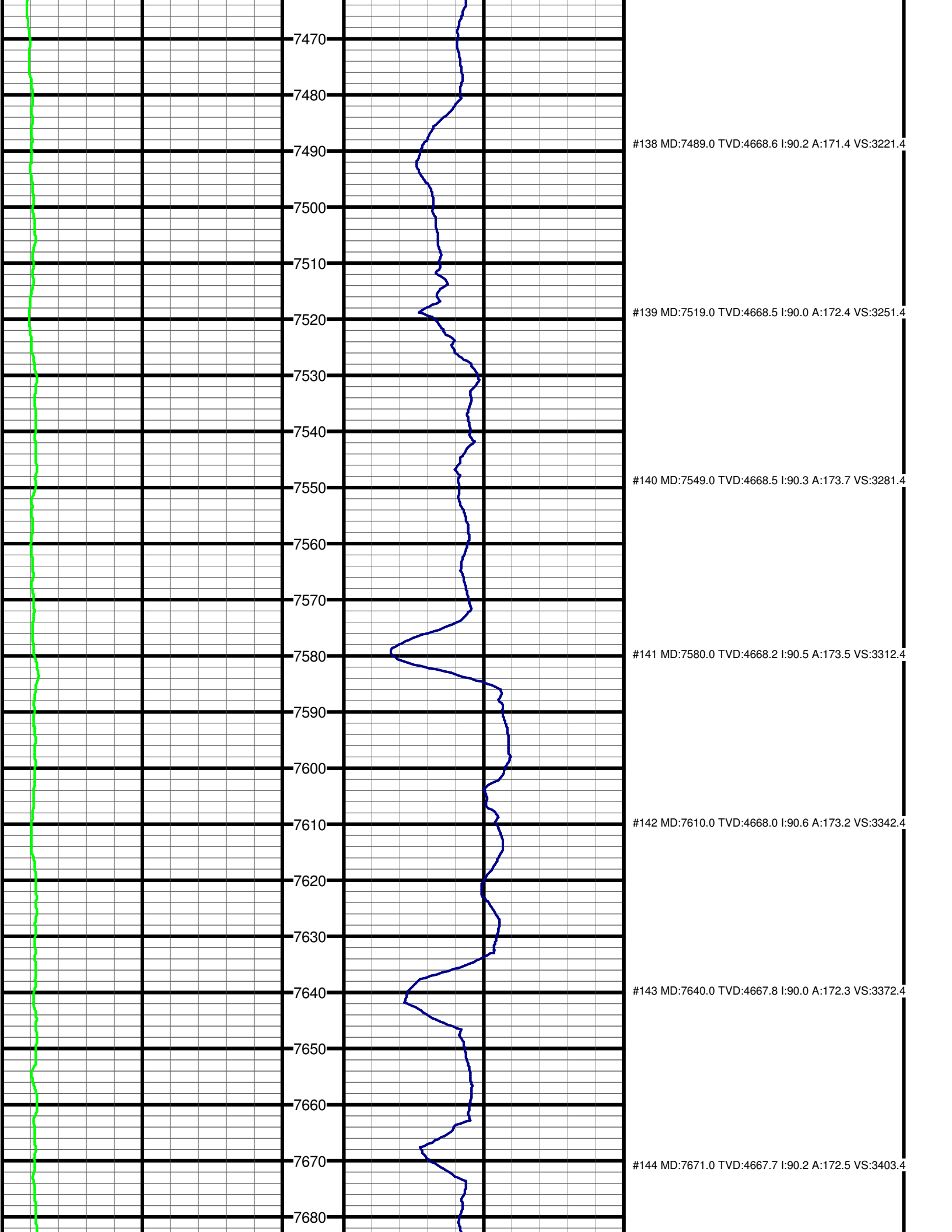
#108 MD:6580.0 TVD:4678.4 I:91.4 A:171.3 VS:2313.1

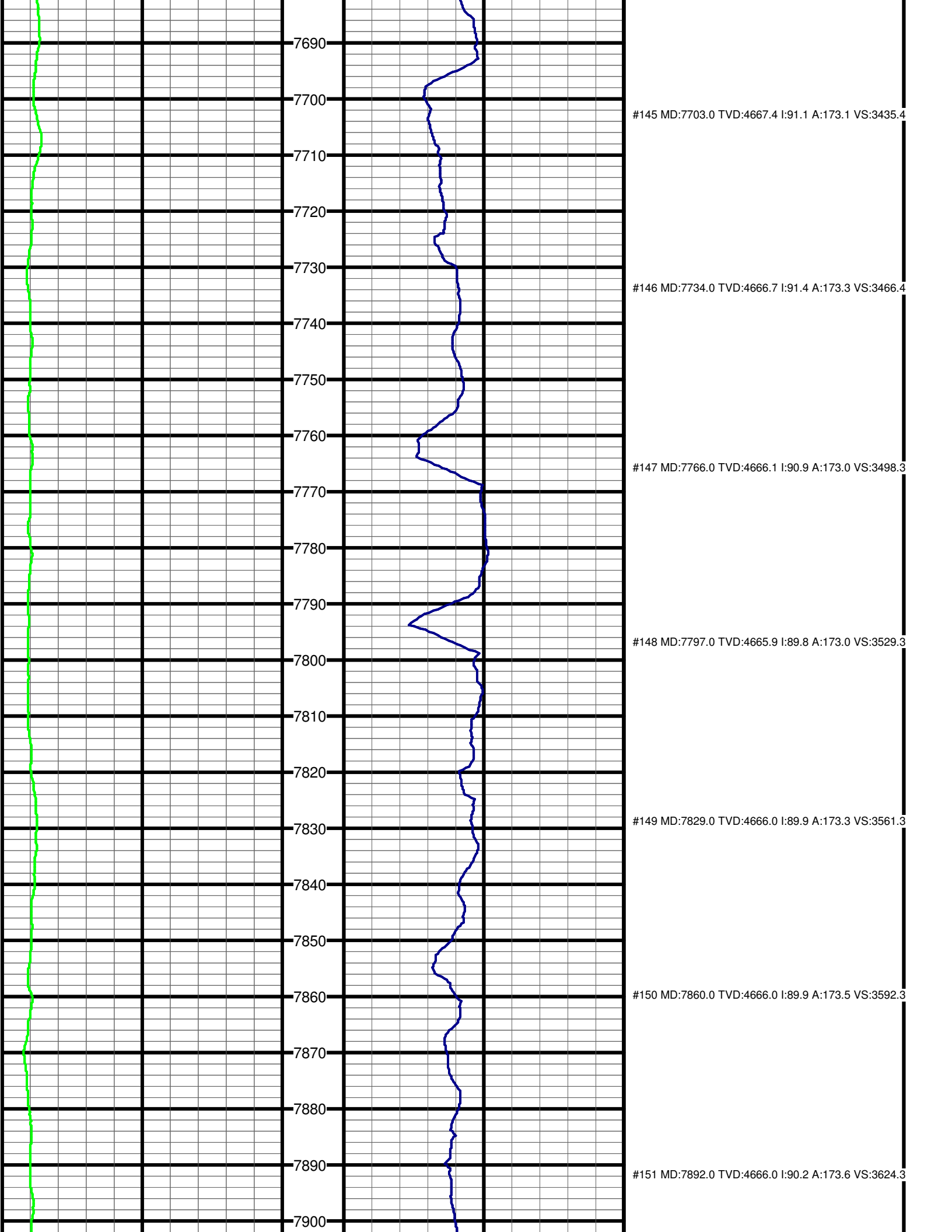


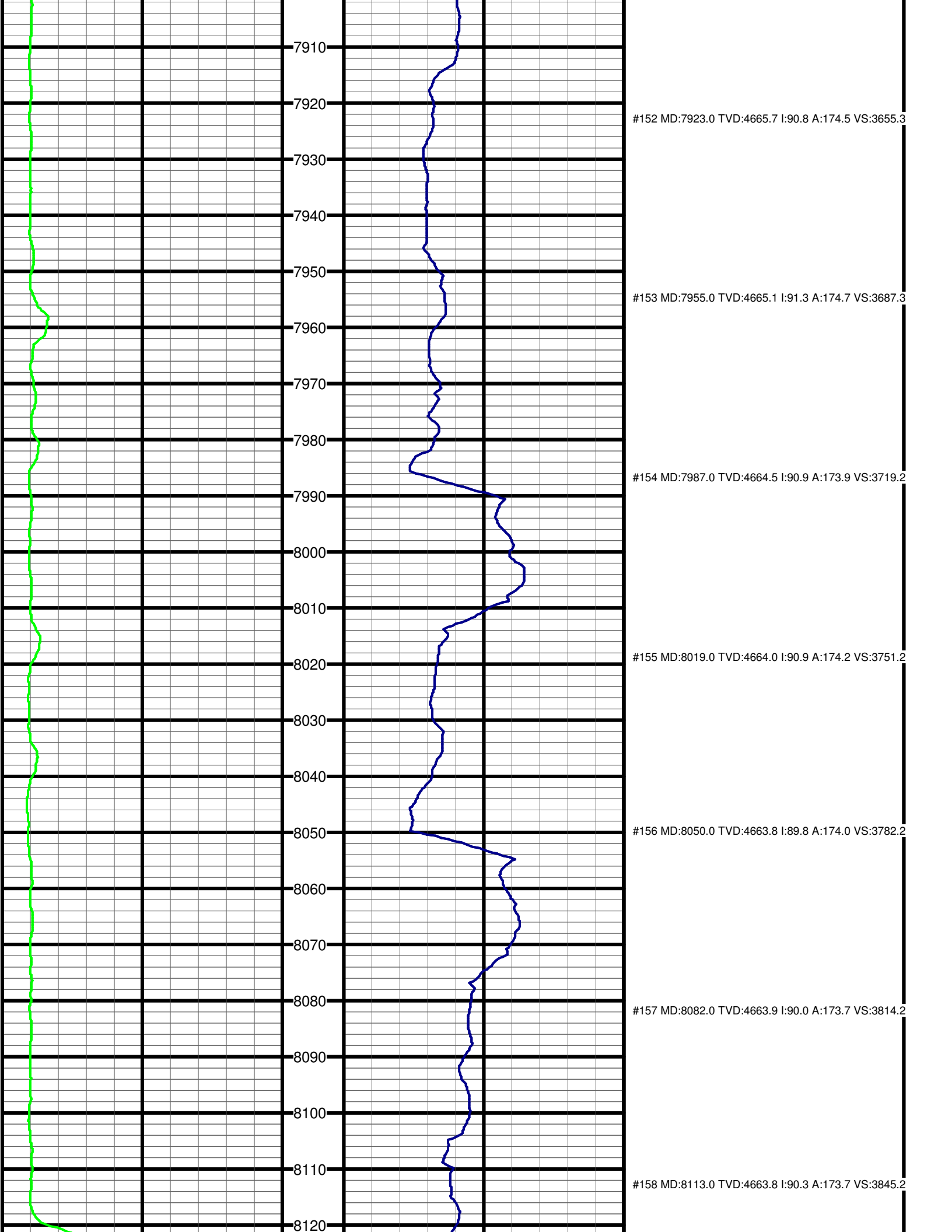


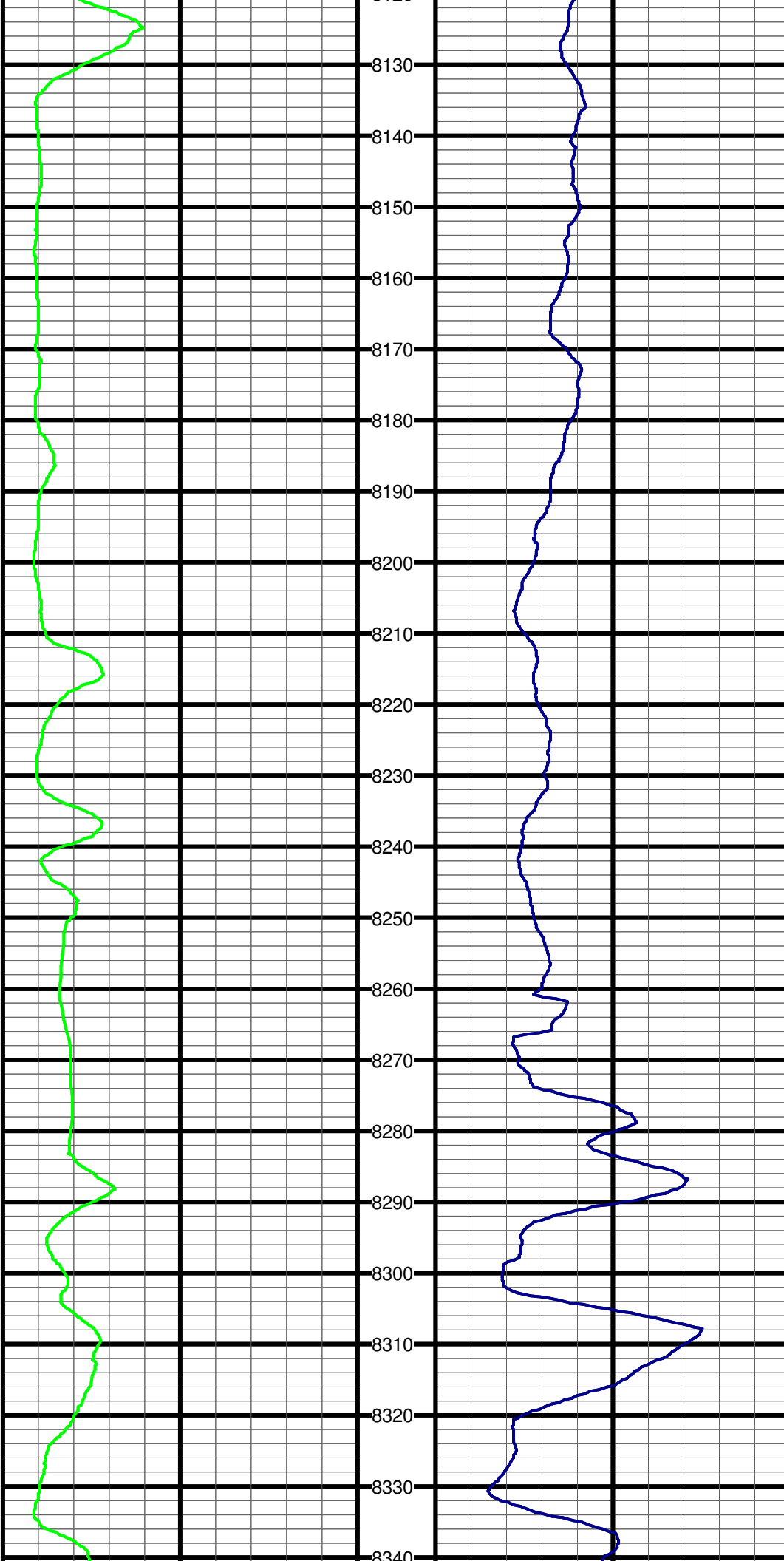












#159 MD:8145.0 TVD:4663.6 I:90.5 A:174.2 VS:3877.2

#160 MD:8177.0 TVD:4663.3 I:90.6 A:174.0 VS:3909.1

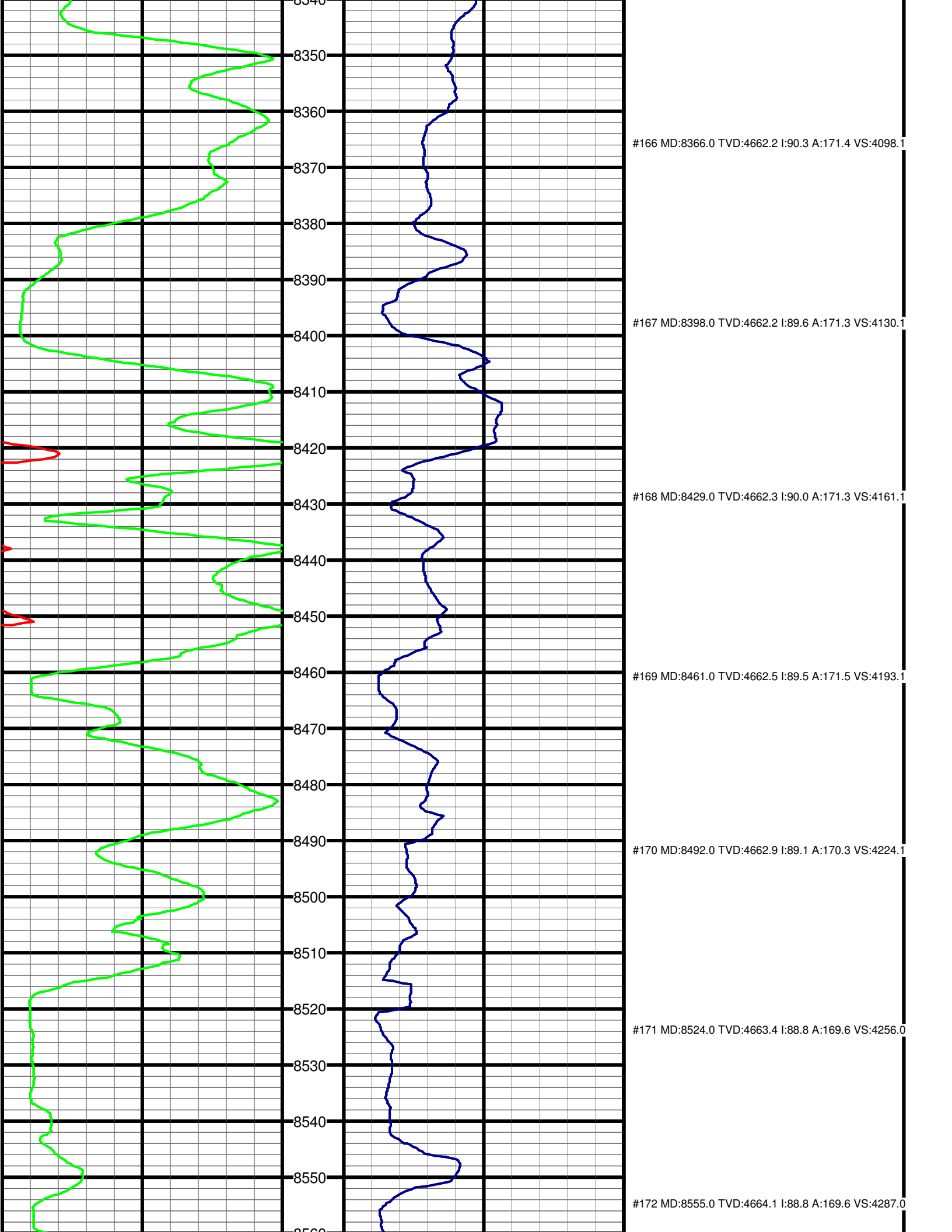
#161 MD:8209.0 TVD:4662.9 I:90.8 A:174.0 VS:3941.1

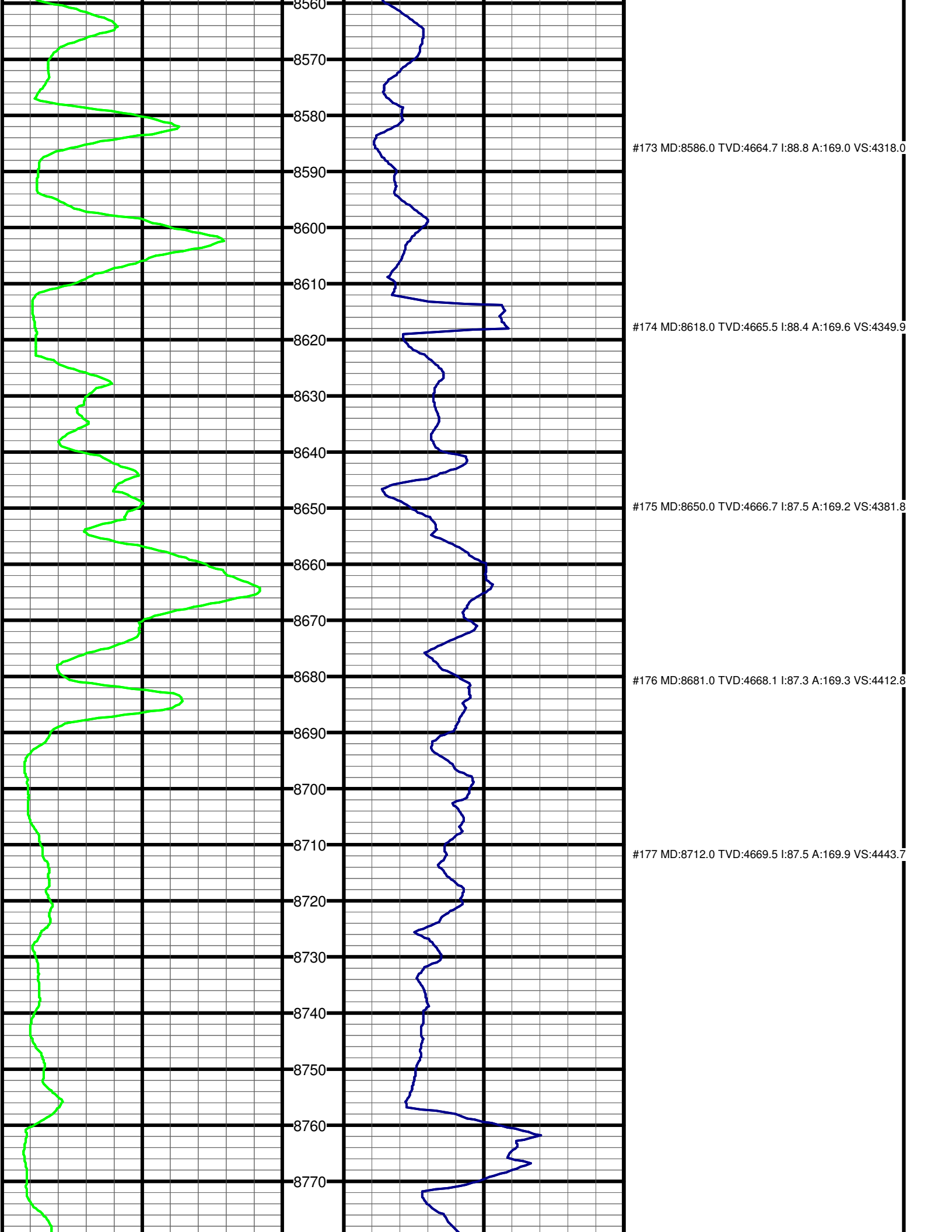
#162 MD:8240.0 TVD:4662.4 I:90.8 A:174.0 VS:3972.1

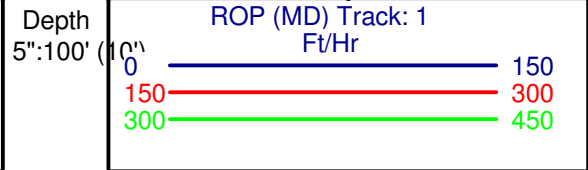
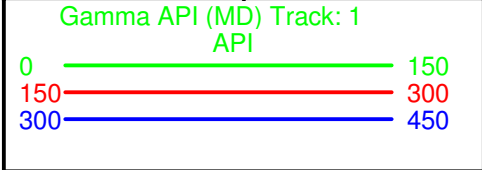
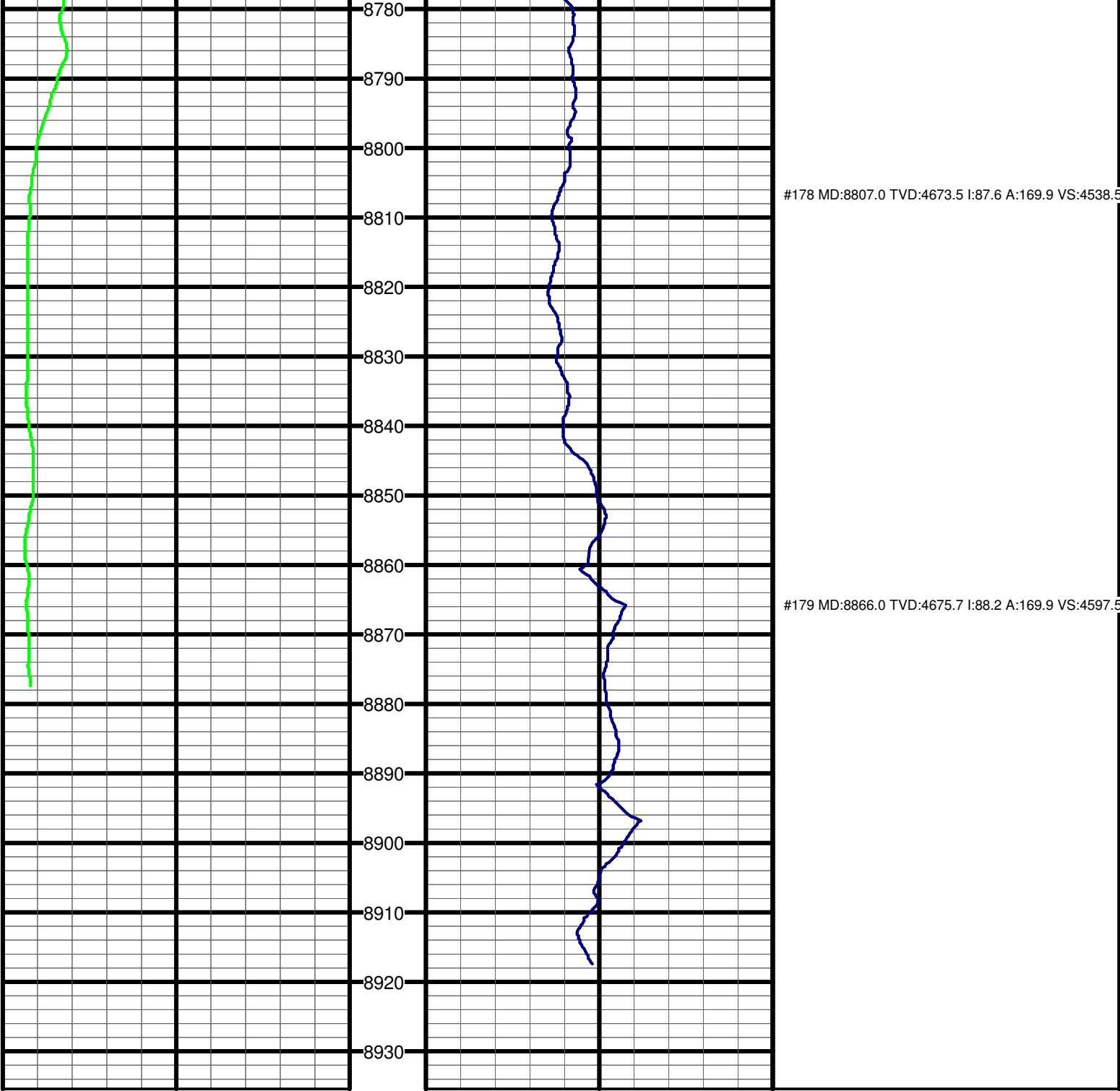
#163 MD:8271.0 TVD:4662.2 I:90.2 A:172.8 VS:4003.1

#164 MD:8303.0 TVD:4662.3 I:89.7 A:172.2 VS:4035.1

#165 MD:8335.0 TVD:4662.3 I:90.0 A:171.3 VS:4067.1







Depth 5":100' (10")

