



Digital Drilling Data  
Systems, LLC

**GeologPlot**  
(Scale: 5":100' (100'))

Company: Cathedral Energy Services

State: CO

Well: Chavez 4A=4H

County:

Field: DJ Basin

Country: US

Well ID: 05 123 35476 00

Job Number: 125406

Location: Hudson

Operator 1: Encana Oil & Gas

Operator 2: Chris McCain

Elev KB: 4928

Elev DF: 13

Elev GL: 4915

- Comment 1:
- Comment 2:
- Comment 3:
- Comment 4:
- Comment 5:

**Hole Data**

**Casing Record**

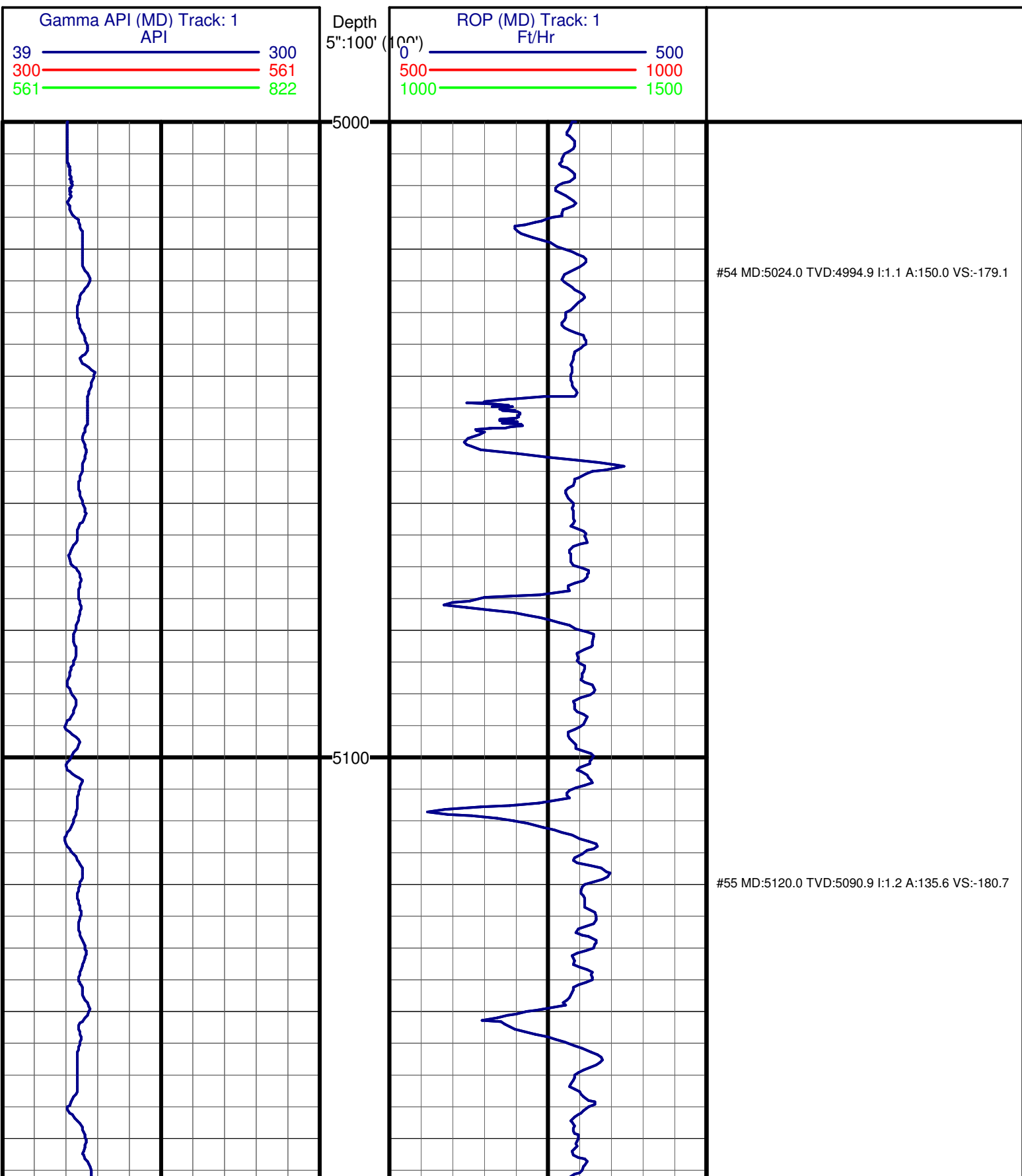
| Size  | From | To    | Size  | From | To    |
|-------|------|-------|-------|------|-------|
| 12.25 | 0    | 978   | 9.625 | 0    | 968   |
| 8.75  | 978  | 7342  | 7.0   | 0    | 7321  |
| 6.125 | 7342 | 11775 | 4.5   | 0    | 11760 |
|       |      |       |       |      |       |
|       |      |       |       |      |       |

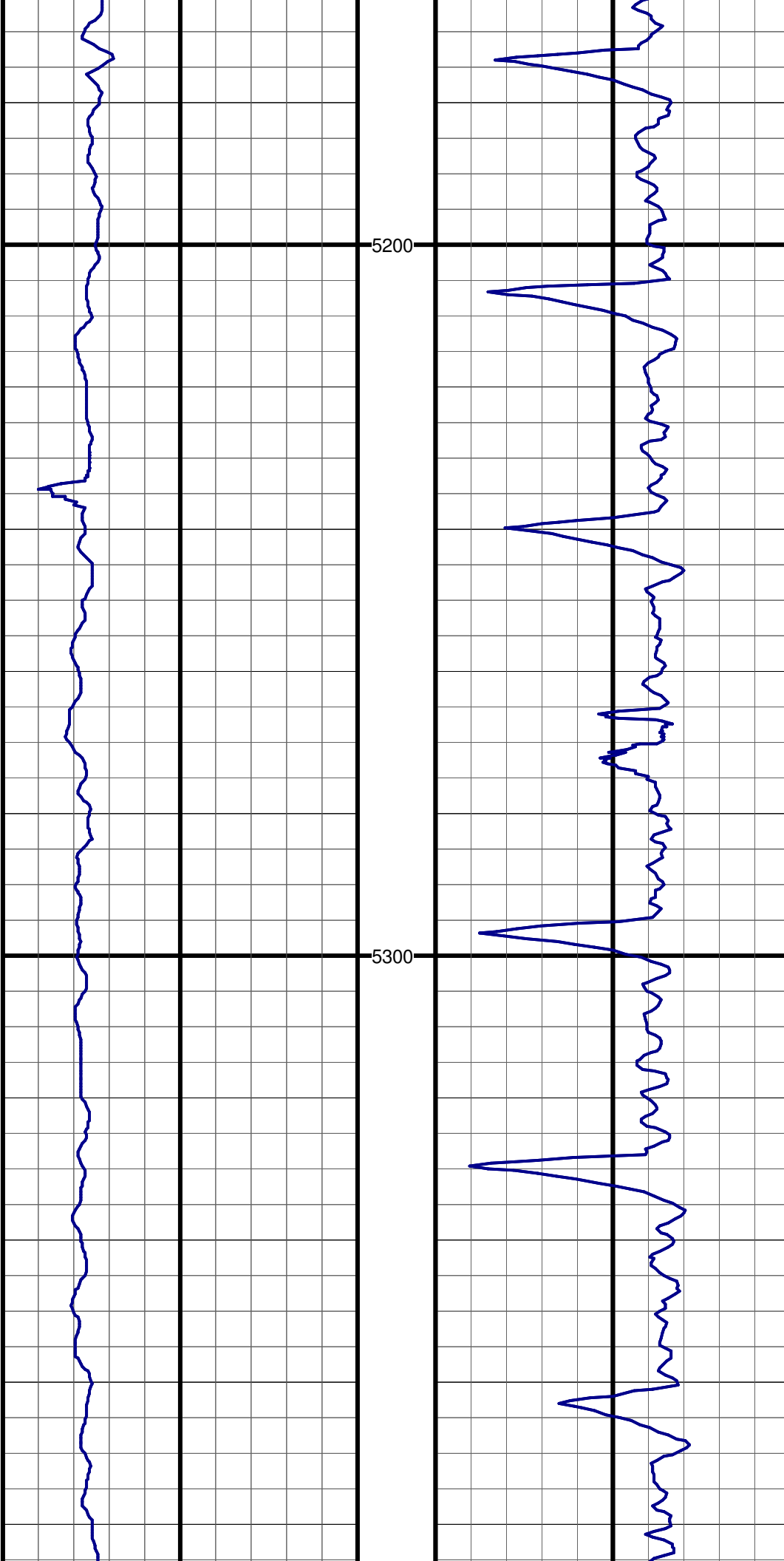
| Tool Run Data |         | Run #1  | Run #2  | Run #3  | Run #4  | Run #5 |
|---------------|---------|---------|---------|---------|---------|--------|
| Tool S/N      | 1278    | 1278    | 1278    | 1402    | 1278    |        |
| Cal Factor    |         |         |         |         |         |        |
| Gamma Offset  | 38.26   | 37.89   | 37.63   | 38.26   | 35.68   |        |
| Start Depth   | 0       | 978     | 6983    | 7342    | 10910   |        |
| Start Date    | 6/14/12 | 6/16/12 | 6/19/12 | 6/23/12 | 6/26/12 |        |
| Start Time    | 12:00   | 13:30   | 17:30   | 03:00   | 23:30   |        |
| End Depth     | 978     | 6983    | 7342    | 10910   | 11775   |        |
| End Date      | 6/15/12 | 6/19/12 | 6/21/12 | 6/26/12 | 6/28/12 |        |
| End Time      | 20:00   | 15:00   | 4:00    | 21:30   | 19:00   |        |

| Tool Run Data | Run #6 | Run #7 | Run #8 | Run #9 | Run #10 |
|---------------|--------|--------|--------|--------|---------|
| Tool S/N      |        |        |        |        |         |
| Cal Factor    |        |        |        |        |         |
| Offset        |        |        |        |        |         |
| Start Depth   |        |        |        |        |         |
| Start Date    |        |        |        |        |         |
| Start Time    |        |        |        |        |         |
| End Depth     |        |        |        |        |         |
| End Date      |        |        |        |        |         |
| End Time      |        |        |        |        |         |

| Tool Run Data | Run #11 | Run #12 | Run #13 | Run #14 | Run #15 |
|---------------|---------|---------|---------|---------|---------|
| Tool S/N      |         |         |         |         |         |
| Cal Factor    |         |         |         |         |         |
| Offset        |         |         |         |         |         |
| Start Depth   |         |         |         |         |         |
| Start Date    |         |         |         |         |         |
| Start Time    |         |         |         |         |         |
| End Depth     |         |         |         |         |         |

|          |  |  |  |  |  |
|----------|--|--|--|--|--|
| End Date |  |  |  |  |  |
| End Time |  |  |  |  |  |



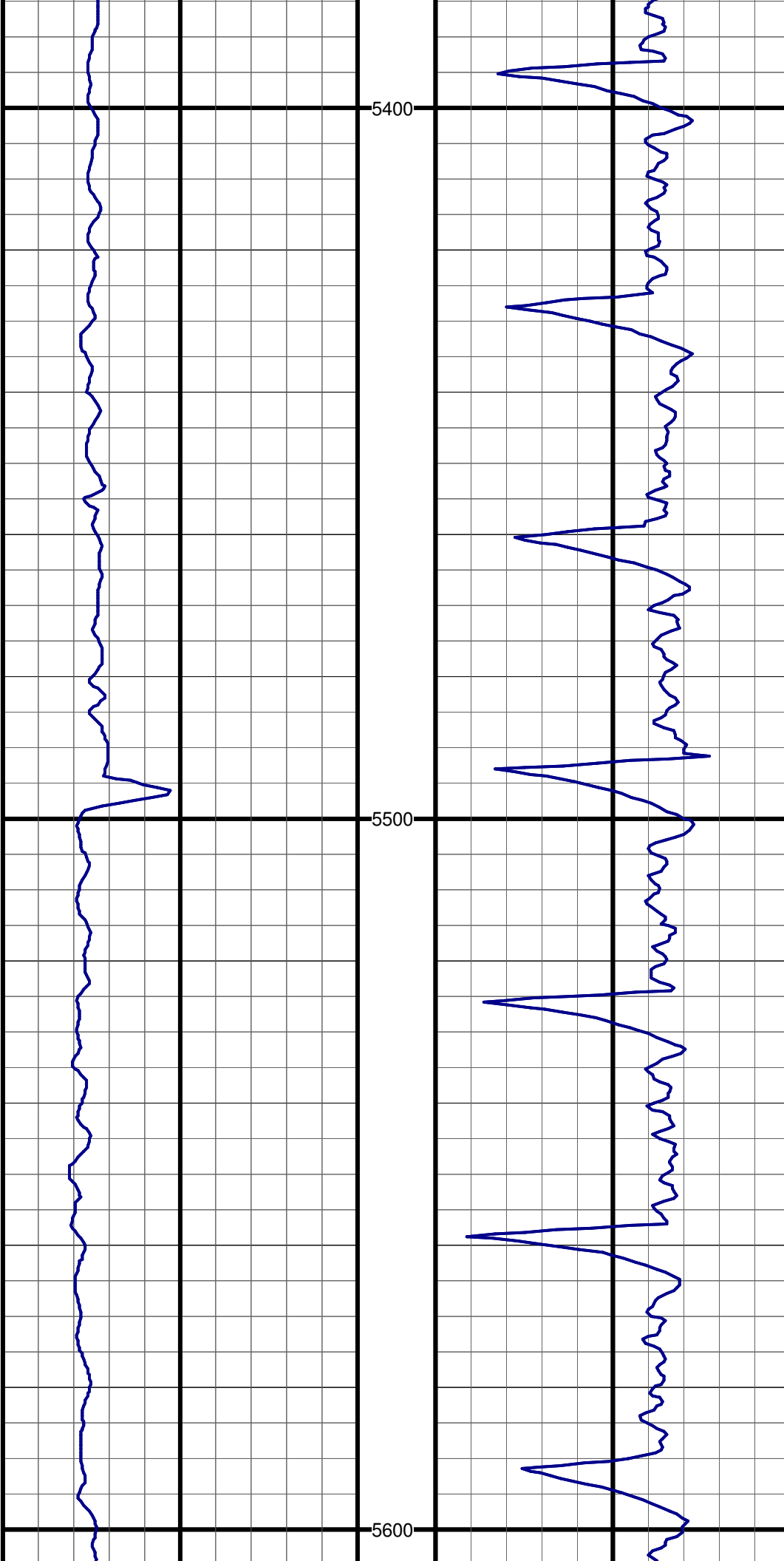


5200

#56 MD:5215.0 TVD:5185.9 I:1.1 A:122.3 VS:-182.1

5300

#57 MD:5310.0 TVD:5280.8 I:1.1 A:102.2 VS:-182.9



5400

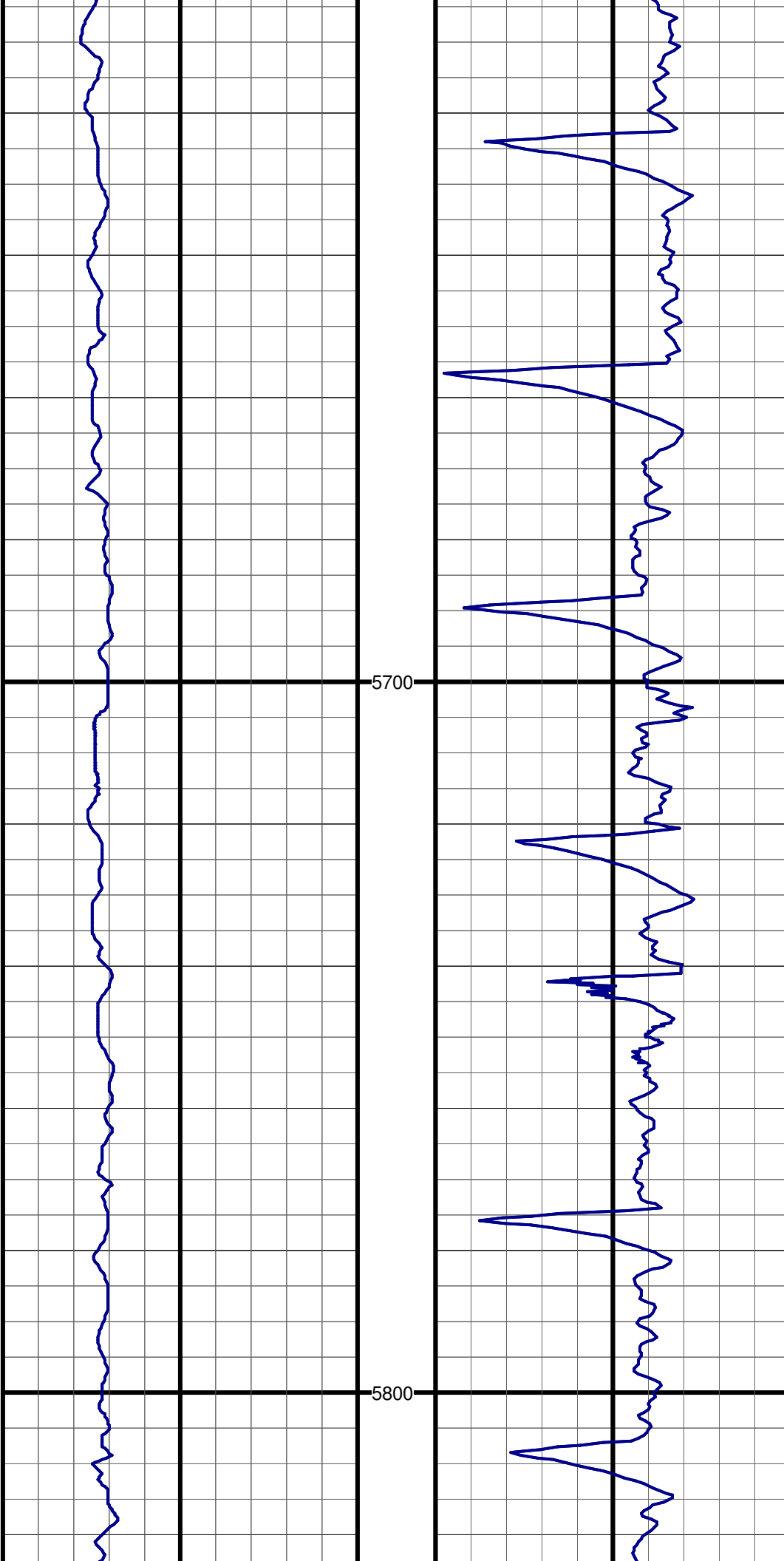
#58 MD:5405.0 TVD:5375.8 I:0.6 A:75.8 VS:-183.1

5500

#59 MD:5500.0 TVD:5470.8 I:0.7 A:9.8 VS:-182.4

5600

#60 MD:5595.0 TVD:5565.8 I:0.9 A:10.7 VS:-181.1

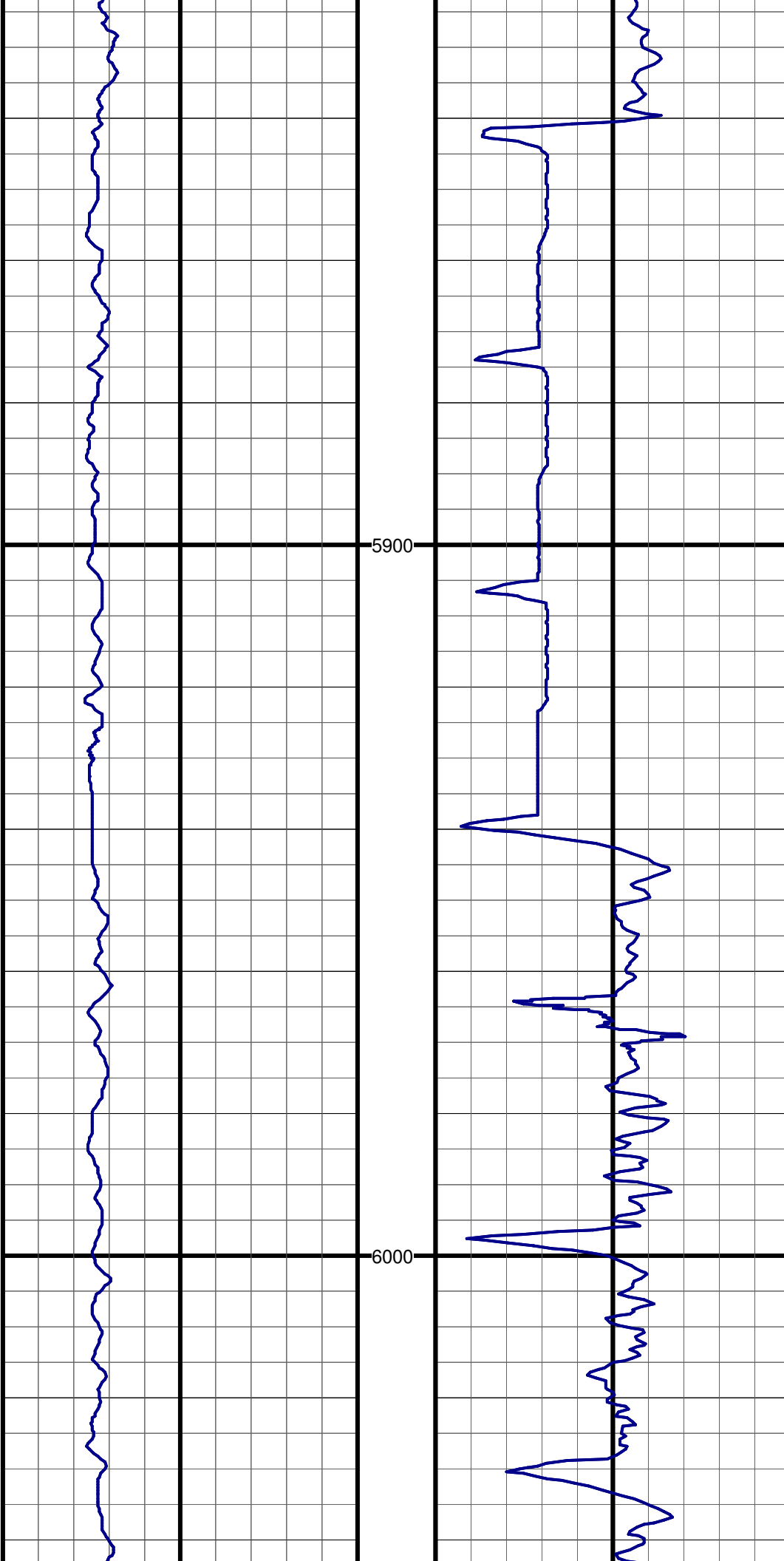


#61 MD:5691.0 TVD:5661.8 I:0.9 A:355.8 VS:-179.7

5700

#62 MD:5786.0 TVD:5756.8 I:0.9 A:357.4 VS:-178.2

5800

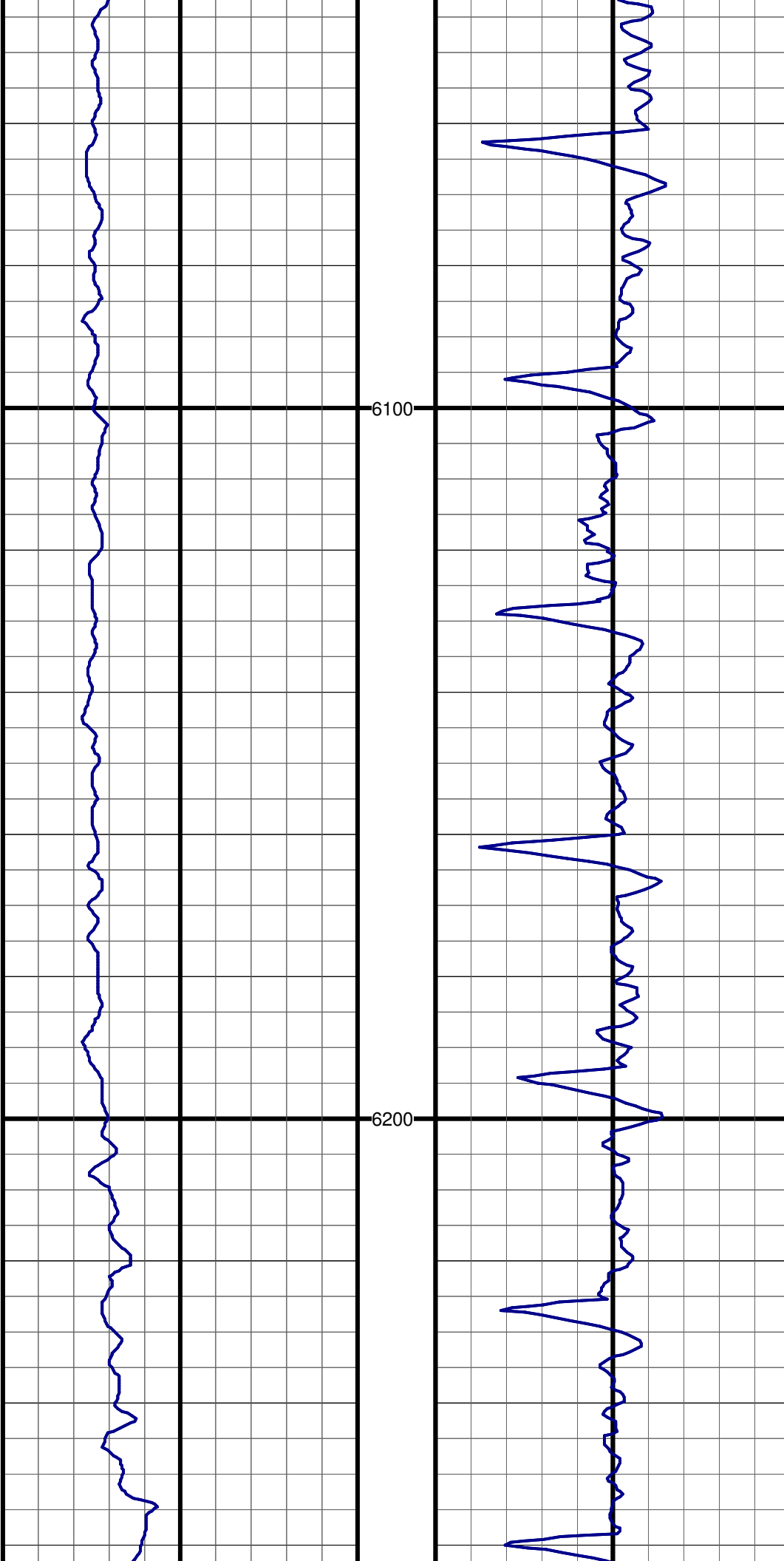


#63 MD:5881.0 TVD:5851.8 I:0.9 A:0.7 VS:-176.7

5900

#64 MD:5976.0 TVD:5946.8 I:0.7 A:354.2 VS:-175.4

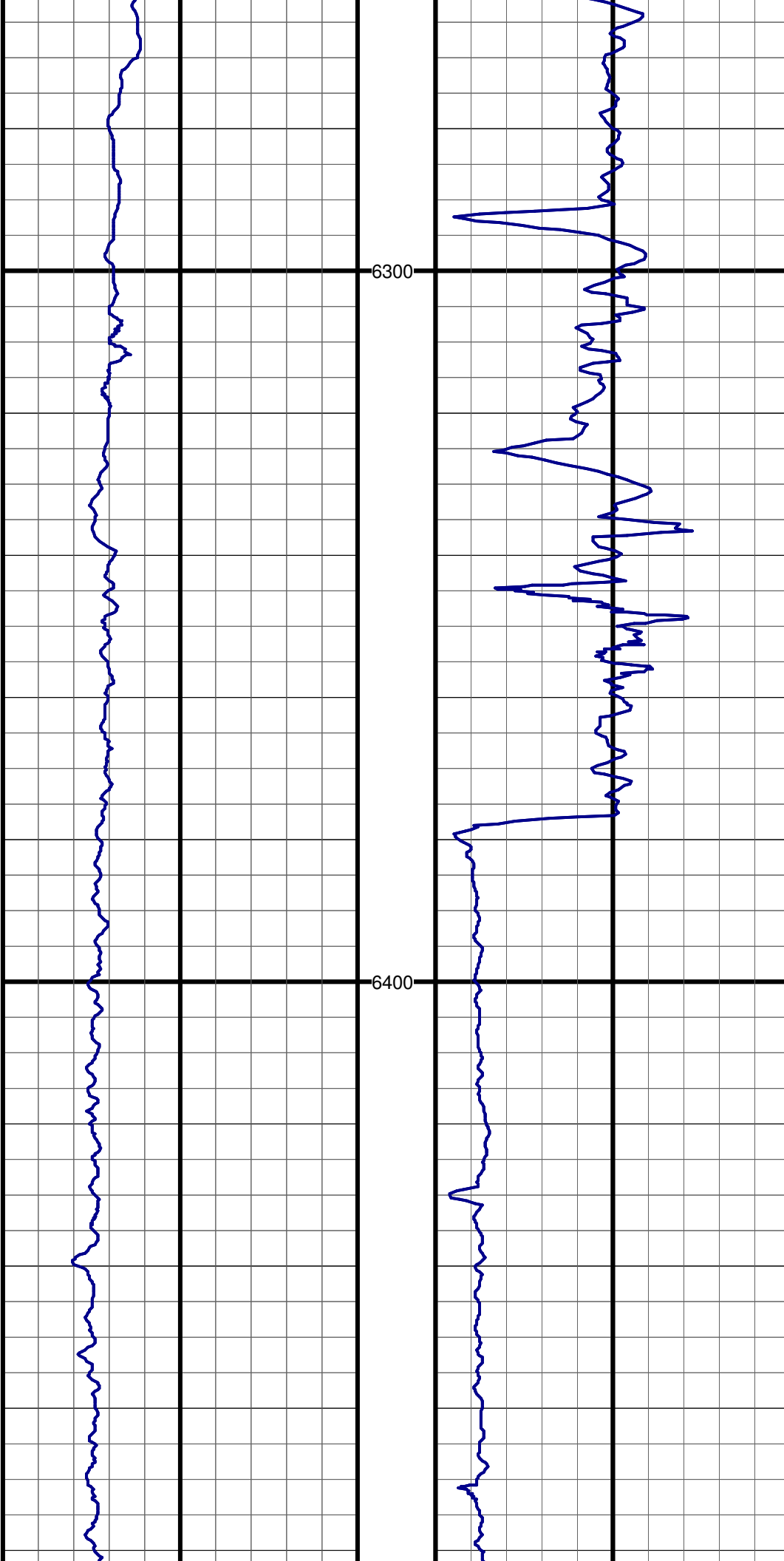
6000



#65 MD:6071.0 TVD:6041.8 I:0.5 A:8.6 VS:-174.4

#66 MD:6167.0 TVD:6137.8 I:0.4 A:338.9 VS:-173.6

#67 MD:6262.0 TVD:6232.8 I:0.3 A:3.3 VS:-173.1



#67 MD:6262.0 TVD:6292.8 I:0.3 A:3.3 VS:-173.1

6300

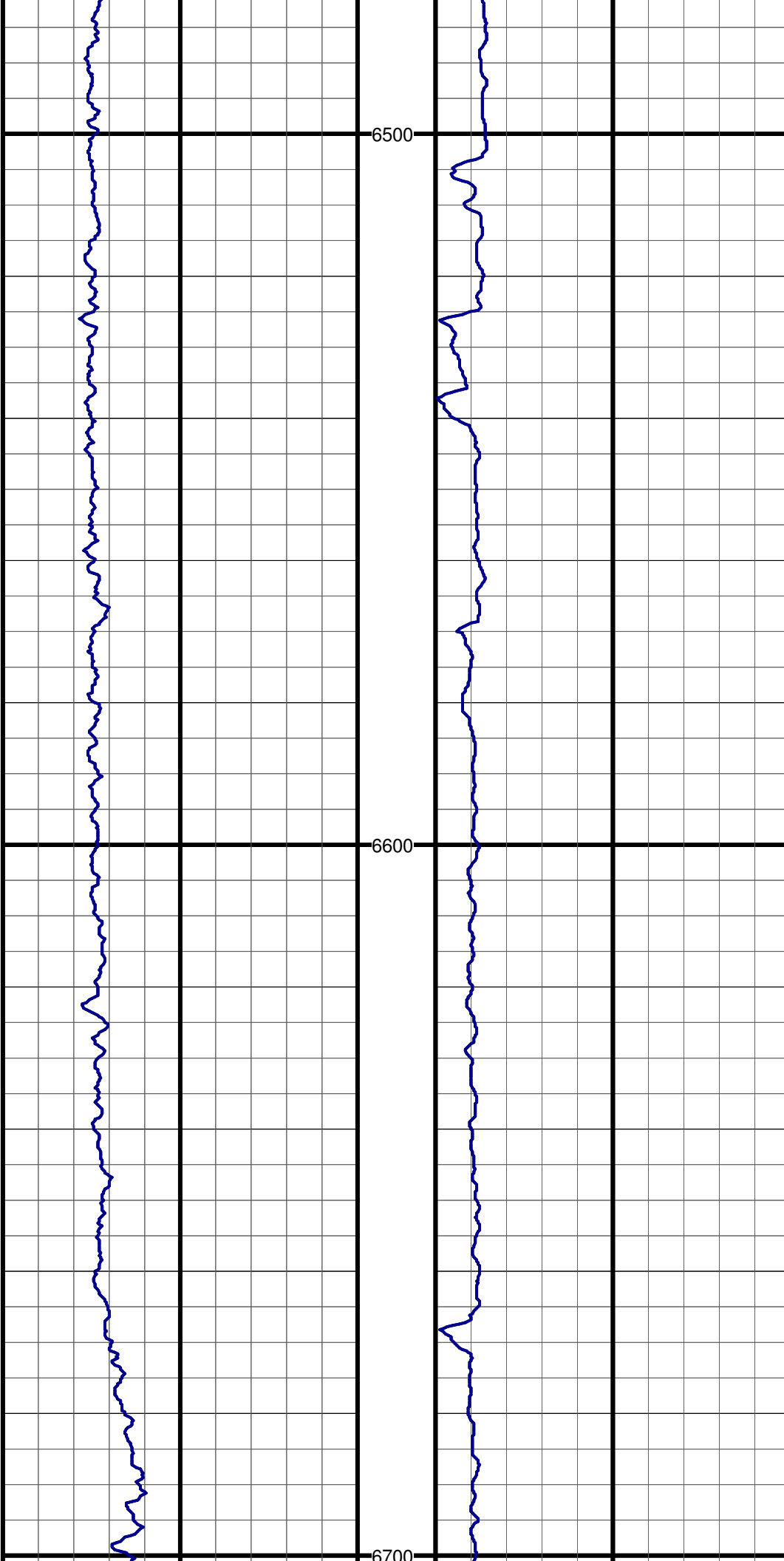
#68 MD:6325.0 TVD:6295.8 I:0.2 A:87.5 VS:-172.9

#69 MD:6389.0 TVD:6359.8 I:1.5 A:18.0 VS:-172.2

6400

#70 MD:6420.0 TVD:6390.7 I:4.1 A:15.8 VS:-170.7

#71 MD:6452.0 TVD:6422.6 I:6.4 A:15.5 VS:-168.0



#72 MD:6484.0 TVD:6454.3 I:8.4 A:15.4 VS:-164.1

6500

#73 MD:6515.0 TVD:6484.9 I:9.9 A:14.4 VS:-159.5

#74 MD:6547.0 TVD:6516.3 I:12.1 A:14.4 VS:-153.7

#75 MD:6579.0 TVD:6547.5 I:13.6 A:15.9 VS:-147.0

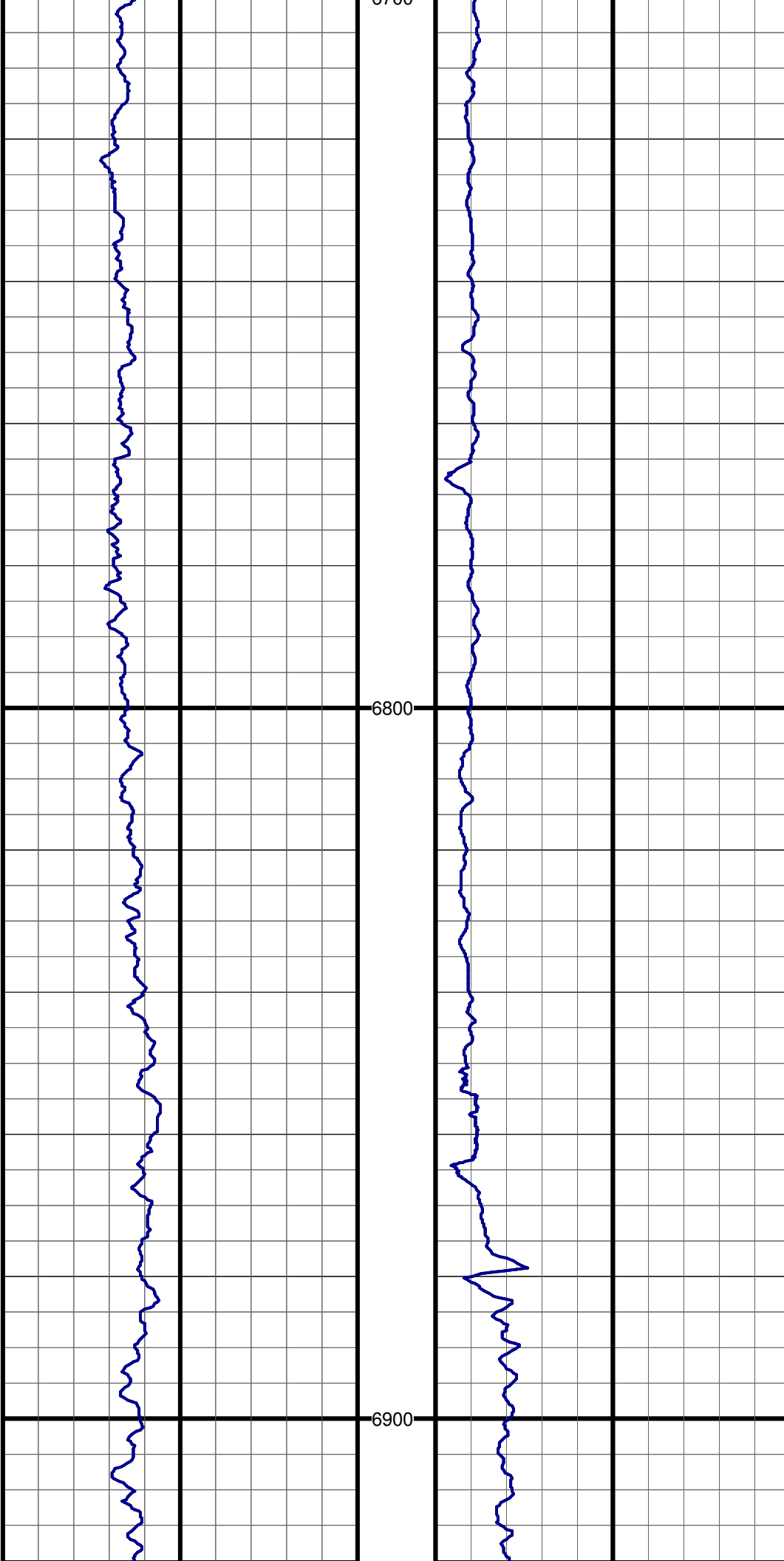
6600

#76 MD:6610.0 TVD:6577.5 I:15.6 A:16.2 VS:-139.7

#77 MD:6642.0 TVD:6608.2 I:17.6 A:16.7 VS:-131.2

#78 MD:6674.0 TVD:6638.5 I:19.9 A:16.8 VS:-121.7

6700



#79 MD:6705.0 TVD:6667.4 I:22.2 A:16.4 VS:-111.3

#80 MD:6737.0 TVD:6696.8 I:24.6 A:15.8 VS:-99.4

#81 MD:6769.0 TVD:6725.6 I:26.9 A:15.2 VS:-86.4

6800

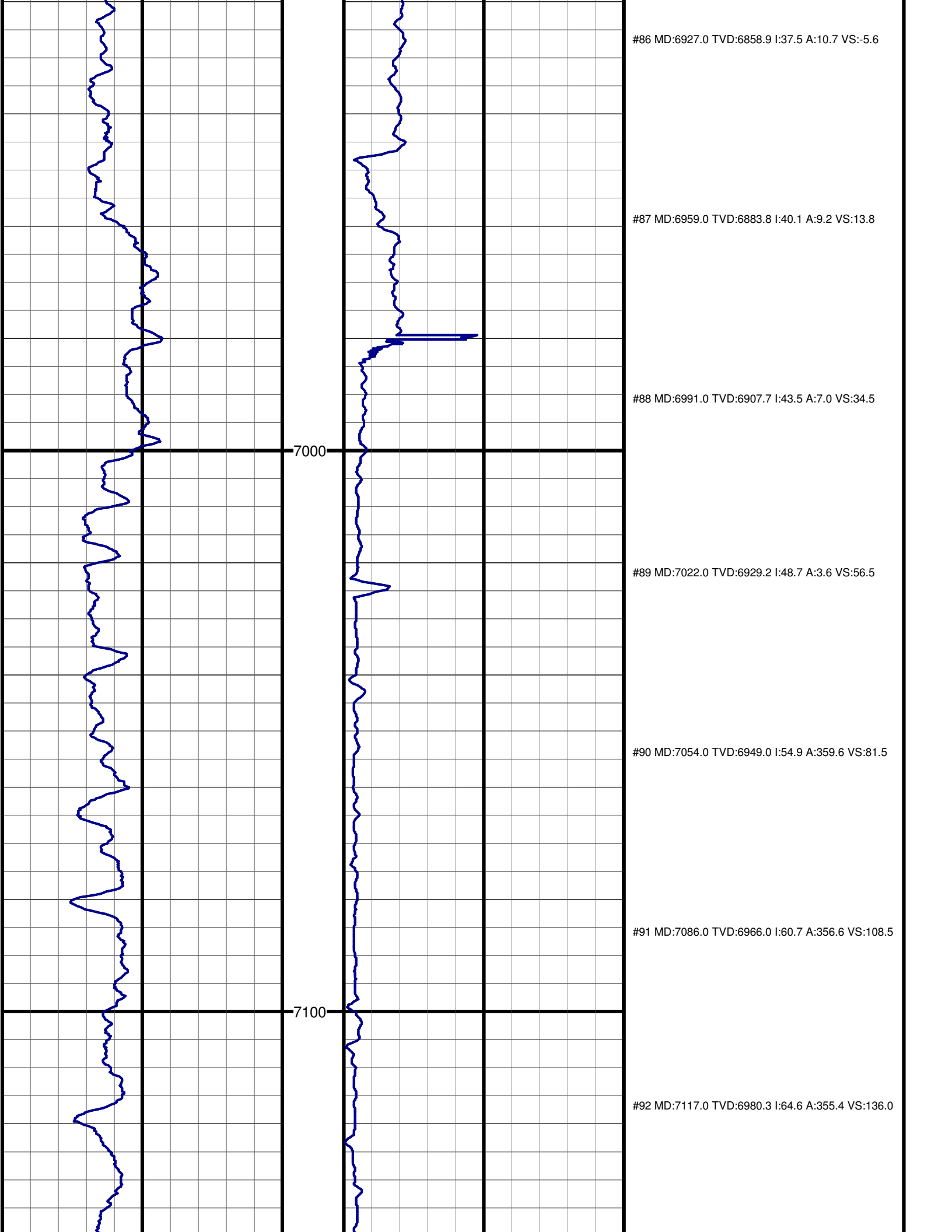
#82 MD:6800.0 TVD:6753.0 I:29.1 A:14.5 VS:-72.7

#83 MD:6832.0 TVD:6780.6 I:31.5 A:12.6 VS:-57.3

#84 MD:6864.0 TVD:6807.6 I:33.5 A:10.7 VS:-40.9

6900

#85 MD:6896.0 TVD:6834.0 I:35.4 A:10.4 VS:-23.4



#86 MD:6927.0 TVD:6858.9 I:37.5 A:10.7 VS:-5.6

#87 MD:6959.0 TVD:6883.8 I:40.1 A:9.2 VS:13.8

#88 MD:6991.0 TVD:6907.7 I:43.5 A:7.0 VS:34.5

7000

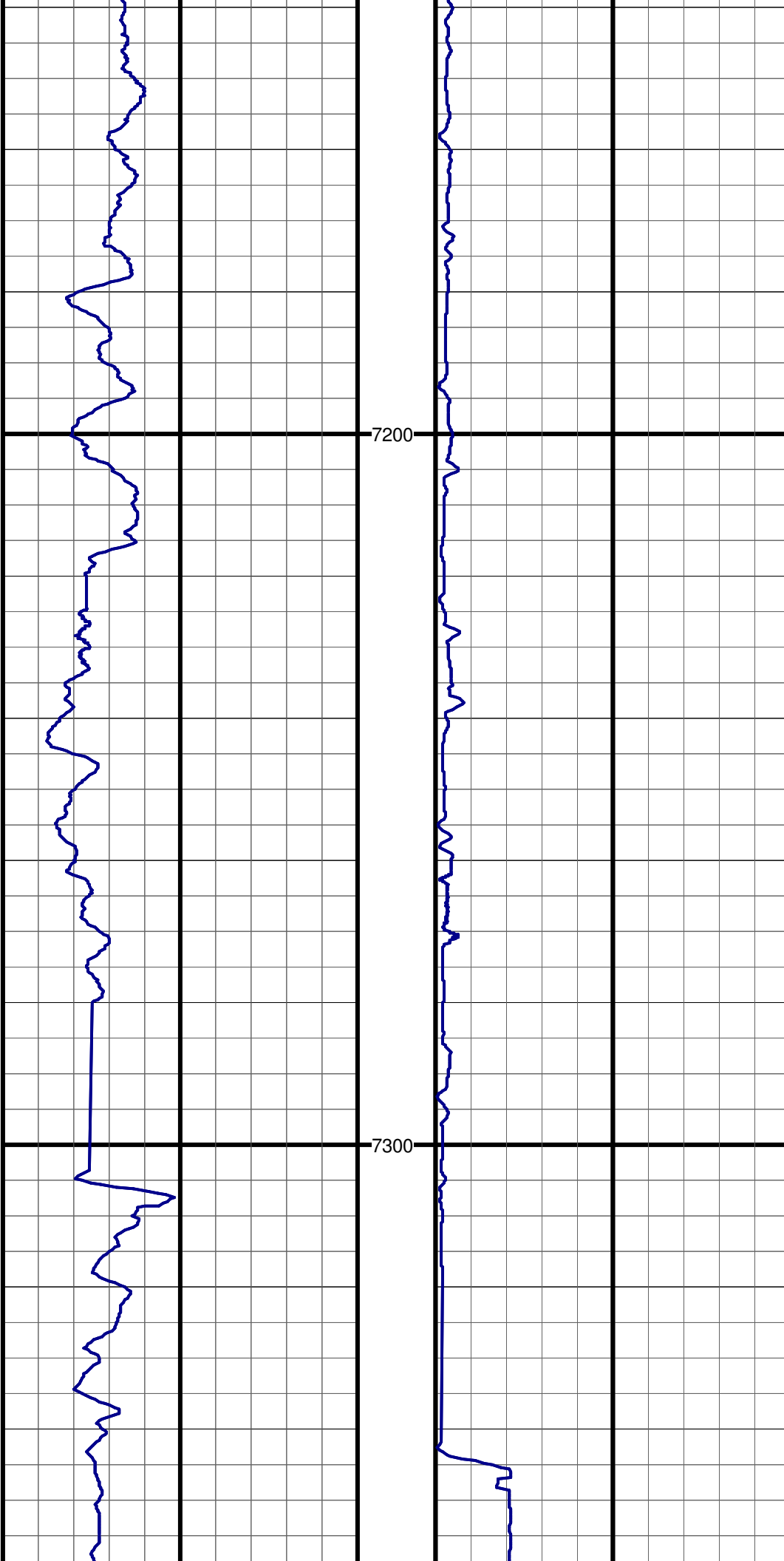
#89 MD:7022.0 TVD:6929.2 I:48.7 A:3.6 VS:56.5

#90 MD:7054.0 TVD:6949.0 I:54.9 A:359.6 VS:81.5

#91 MD:7086.0 TVD:6966.0 I:60.7 A:356.6 VS:108.5

7100

#92 MD:7117.0 TVD:6980.3 I:64.6 A:355.4 VS:136.0



#93 MD:7149.0 TVD:6993.2 I:67.6 A:354.0 VS:165.3

#94 MD:7180.0 TVD:7004.1 I:71.2 A:352.3 VS:194.3

7200

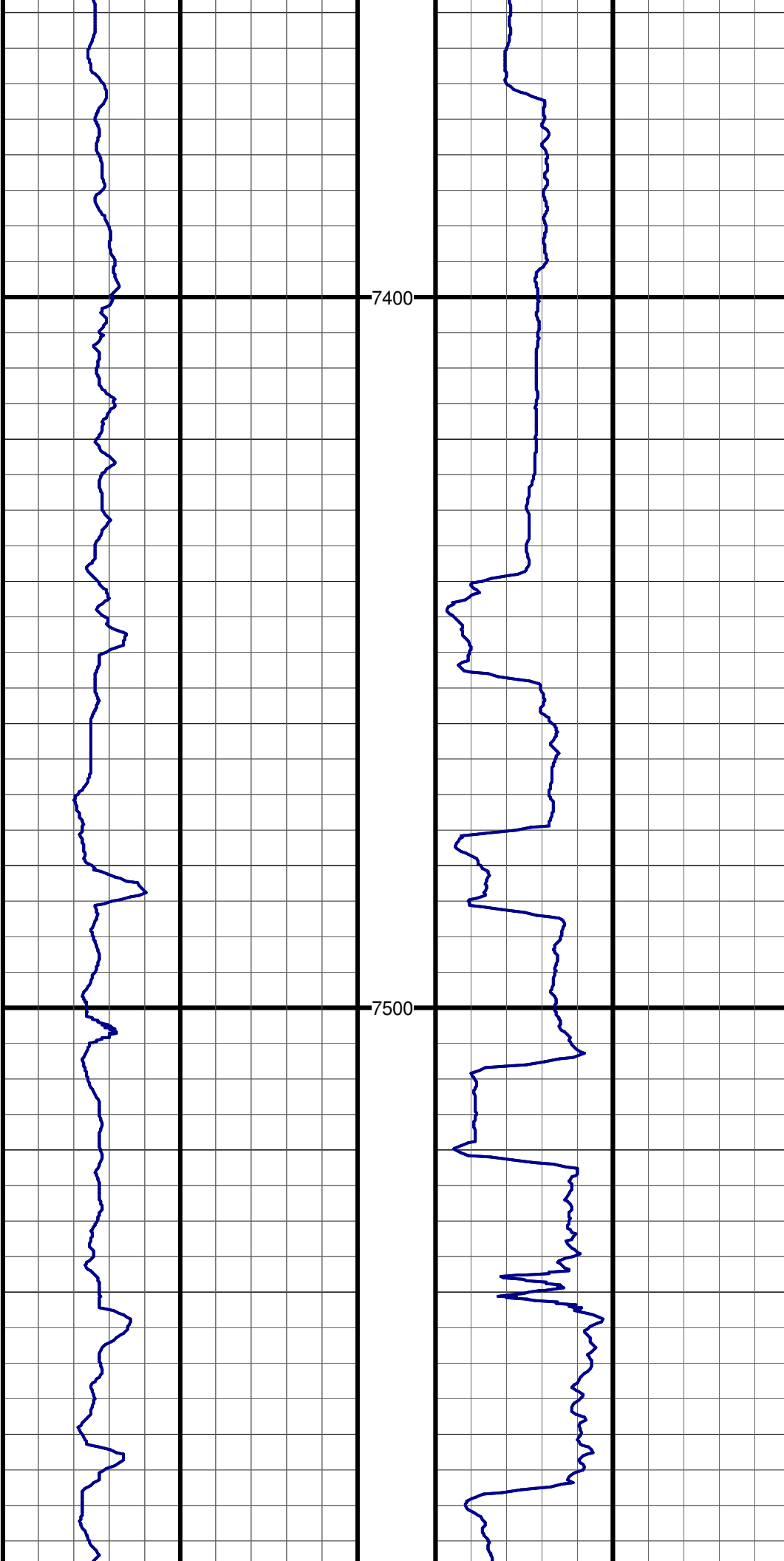
#95 MD:7212.0 TVD:7013.5 I:74.6 A:350.6 VS:224.8

#96 MD:7244.0 TVD:7021.1 I:78.0 A:349.9 VS:255.8

#97 MD:7275.0 TVD:7026.6 I:81.5 A:349.8 VS:286.1

7300

#98 MD:7292.0 TVD:7028.7 I:84.2 A:349.8 VS:302.9



#99 MD:7360.0 TVD:7032.3 I:89.8 A:348.4 VS:370.4

#100 MD:7392.0 TVD:7032.5 I:89.4 A:348.0 VS:402.2

7400

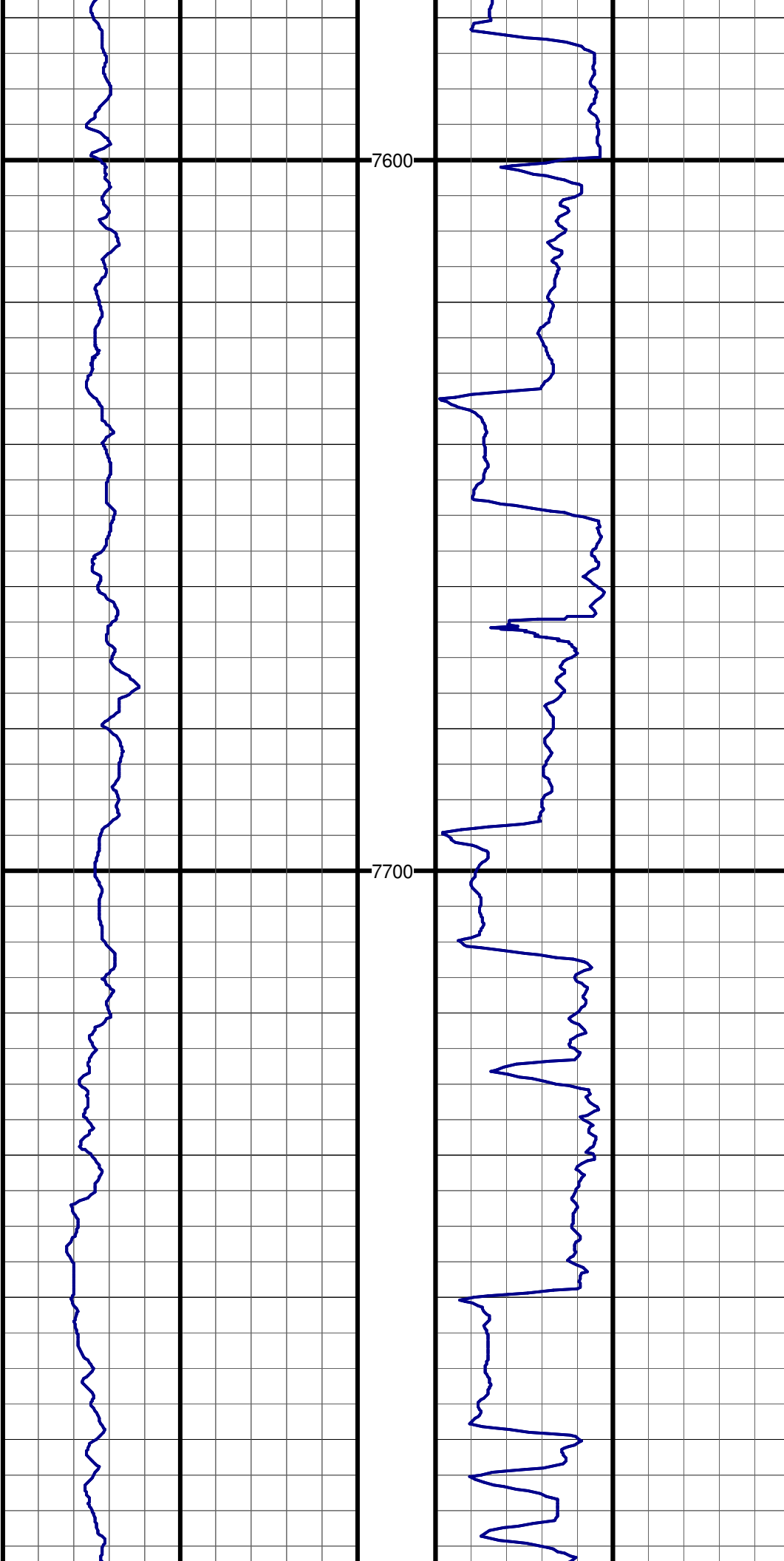
#101 MD:7424.0 TVD:7033.0 I:89.0 A:347.5 VS:433.9

#102 MD:7455.0 TVD:7033.4 I:89.3 A:348.0 VS:464.6

#103 MD:7487.0 TVD:7033.7 I:89.6 A:349.6 VS:496.4

7500

#104 MD:7550.0 TVD:7034.3 I:89.4 A:351.2 VS:559.2



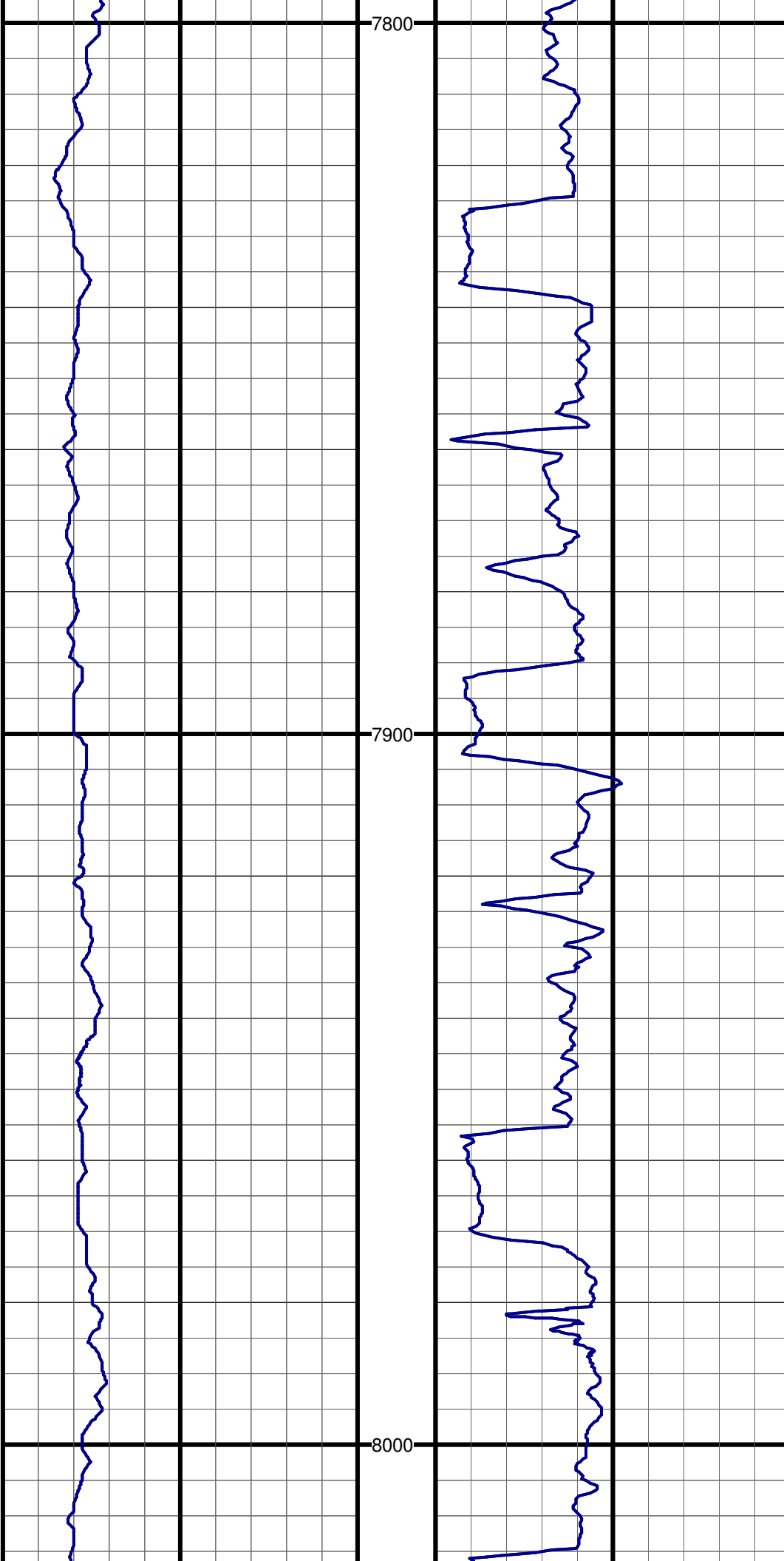
7600

#105 MD:7614.0 TVD:7034.7 I:89.8 A:353.2 VS:623.1

#106 MD:7677.0 TVD:7035.0 I:89.7 A:354.5 VS:686.1

7700

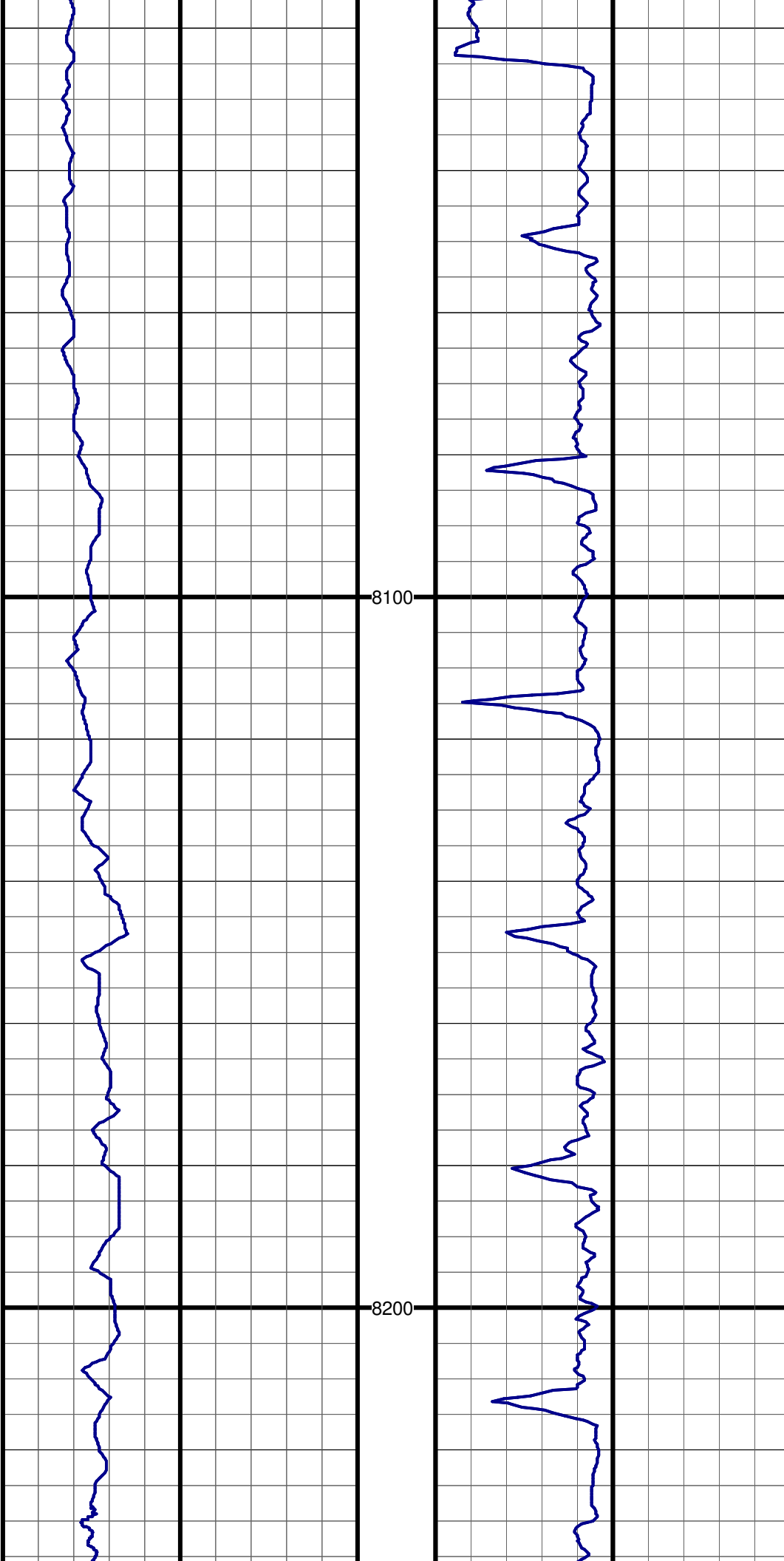
#107 MD:7772.0 TVD:7035.1 I:90.2 A:357.7 VS:781.1



#108 MD:7835.0 TVD:7035.0 I:90.0 A:359.1 VS:844.0

#109 MD:7899.0 TVD:7035.3 I:89.4 A:0.2 VS:907.8

#110 MD:7962.0 TVD:7035.3 I:90.6 A:2.9 VS:970.4



#111 MD:8025.0 TVD:7035.0 I:89.9 A:3.9 VS:1032.8

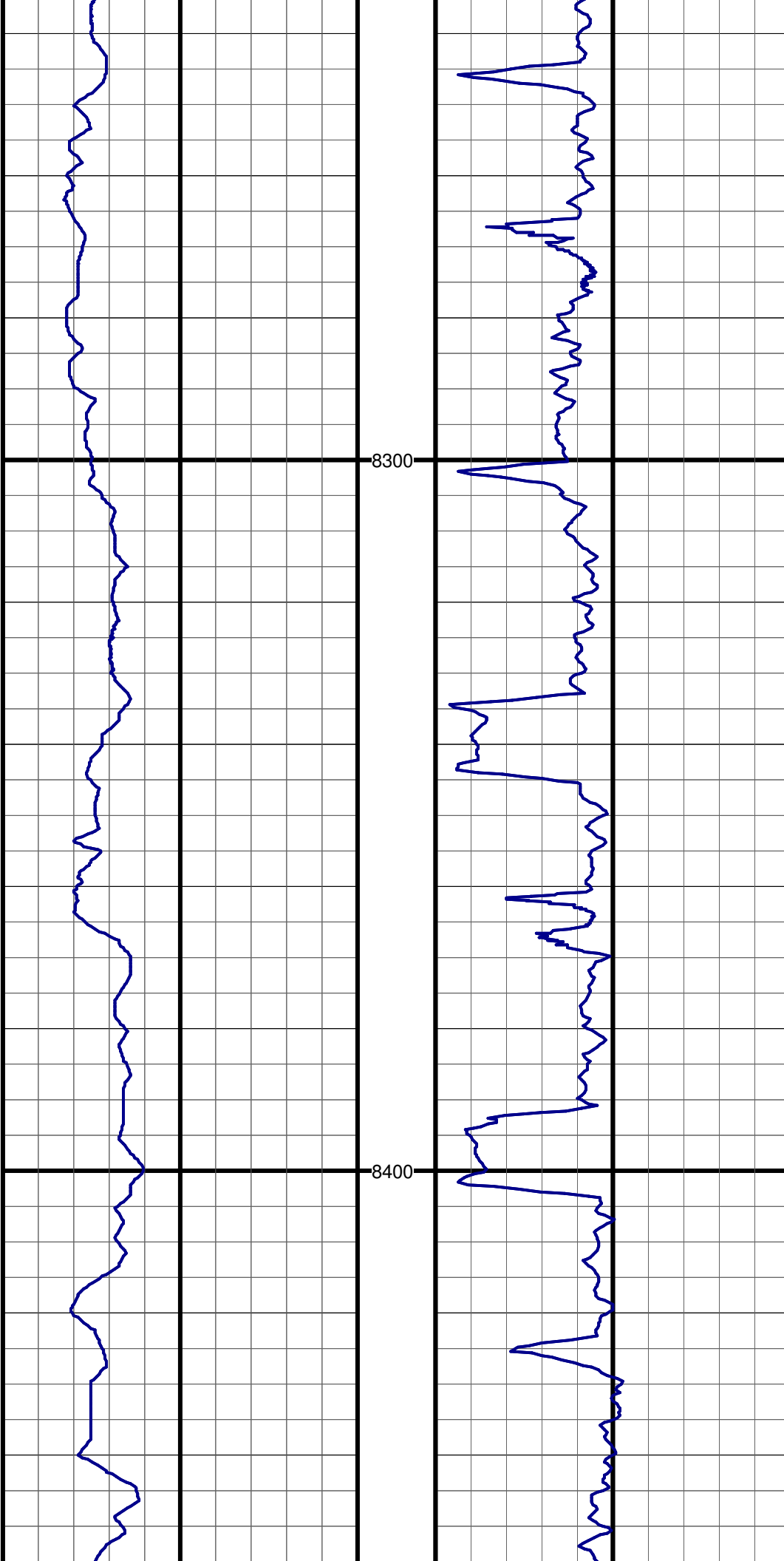
#112 MD:8089.0 TVD:7035.2 I:89.9 A:3.8 VS:1096.0

8100

#113 MD:8152.0 TVD:7035.2 I:90.0 A:3.2 VS:1158.4

8200

#114 MD:8216.0 TVD:7035.2 I:90.1 A:2.9 VS:1221.8



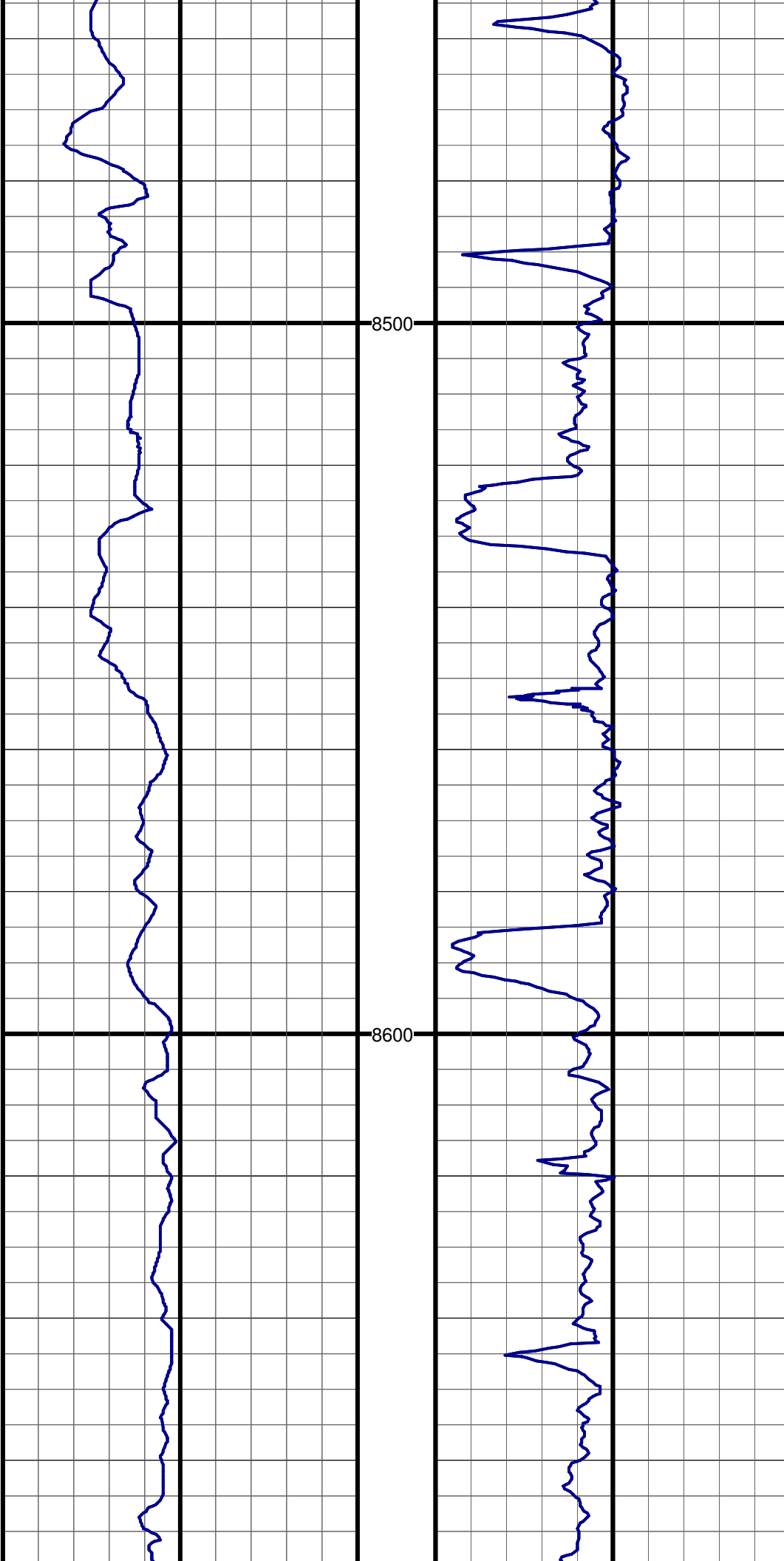
#115 MD:8279.0 TVD:7034.8 I:90.6 A:2.4 VS:1284.2

8300

#116 MD:8343.0 TVD:7034.1 I:90.6 A:3.0 VS:1347.7

8400

#117 MD:8406.0 TVD:7034.0 I:89.5 A:3.5 VS:1410.1

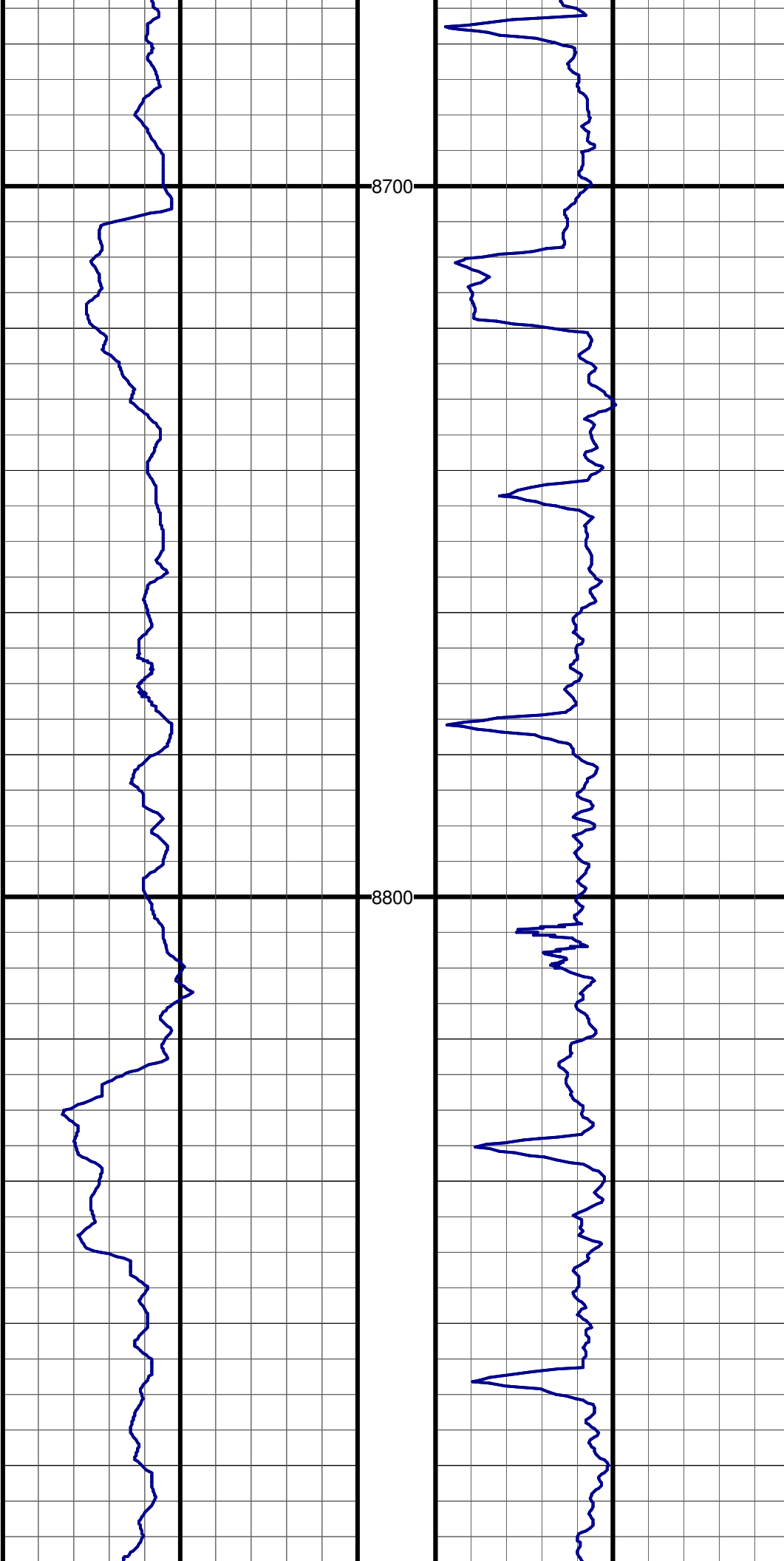


#118 MD:8469.0 TVD:7034.4 I:89.9 A:2.8 VS:1472.4

#119 MD:8533.0 TVD:7034.6 I:89.7 A:3.3 VS:1535.8

#120 MD:8596.0 TVD:7035.3 I:89.0 A:3.7 VS:1598.2

#121 MD:8660.0 TVD:7036.6 I:88.7 A:3.1 VS:1661.5



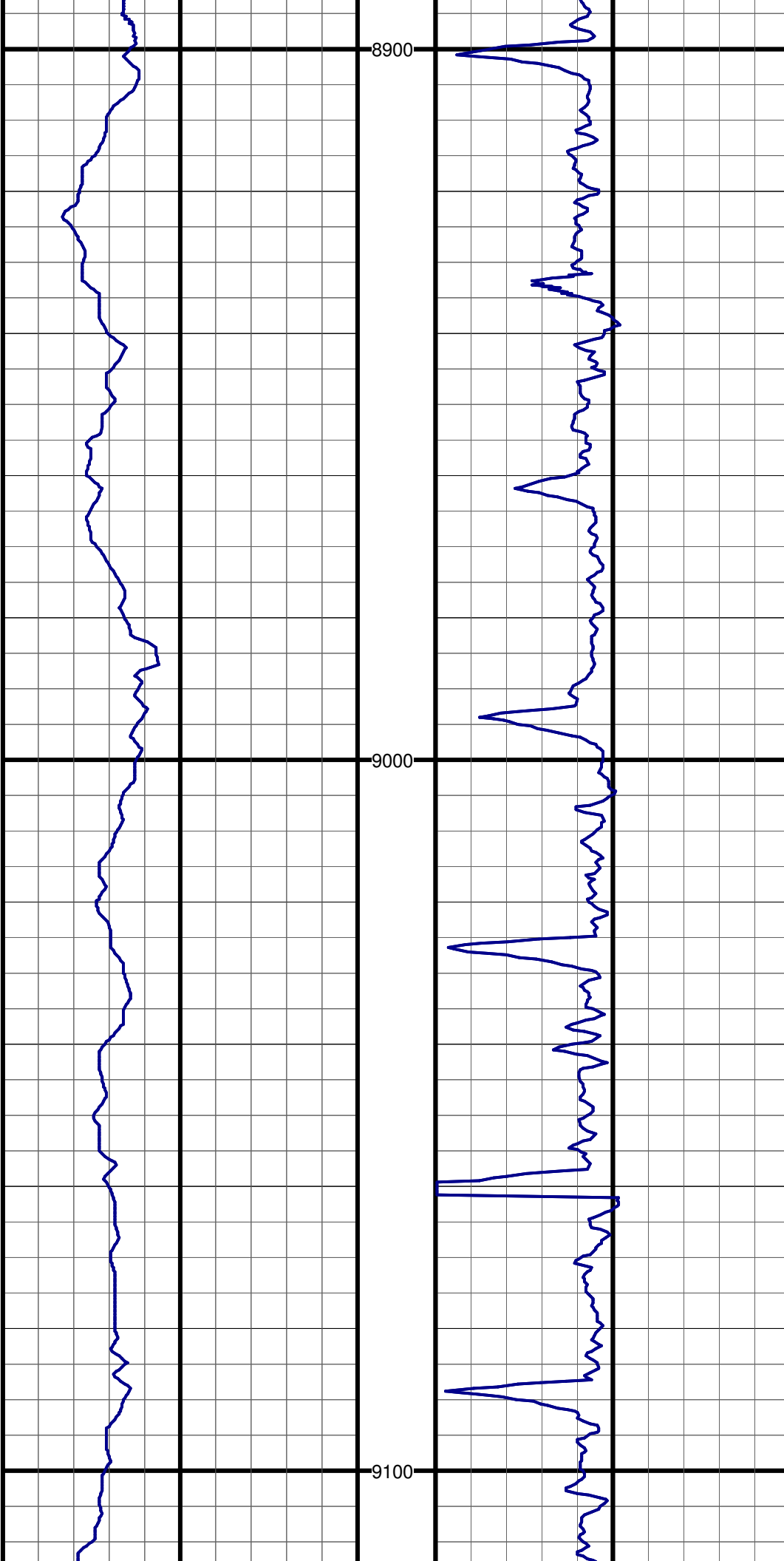
8700

#122 MD:8723.0 TVD:7037.3 I:90.1 A:3.2 VS:1723.9

8800

#123 MD:8786.0 TVD:7037.4 I:89.7 A:3.0 VS:1786.3

#124 MD:8849.0 TVD:7037.5 I:90.1 A:2.2 VS:1848.8



8900

#125 MD:8913.0 TVD:7037.5 I:89.9 A:2.2 VS:1912.3

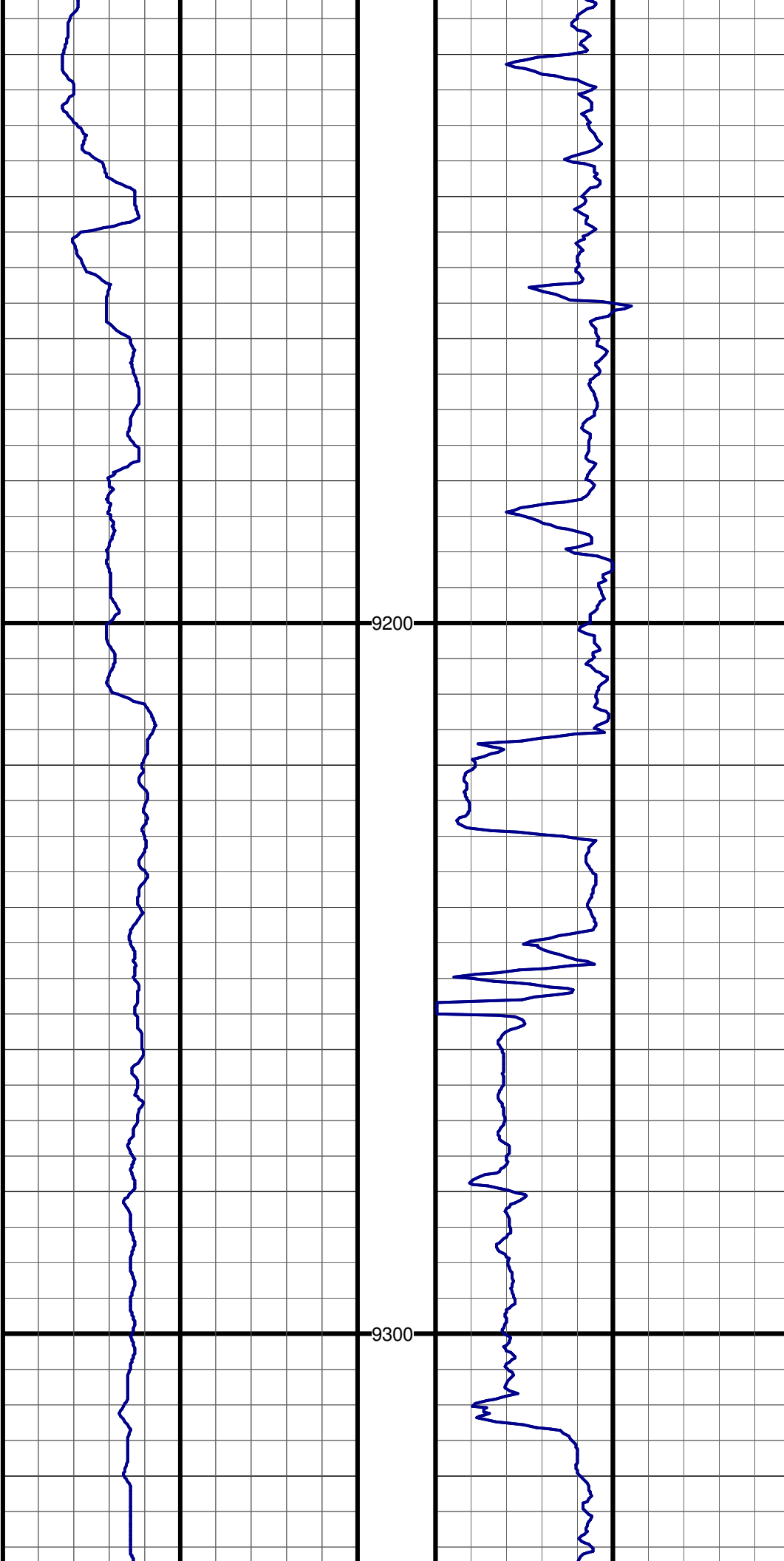
#126 MD:8976.0 TVD:7037.4 I:90.2 A:1.6 VS:1974.9

9000

#127 MD:9039.0 TVD:7037.3 I:90.1 A:1.4 VS:2037.5

9100

#128 MD:9103.0 TVD:7037.4 I:89.7 A:1.1 VS:2101.1



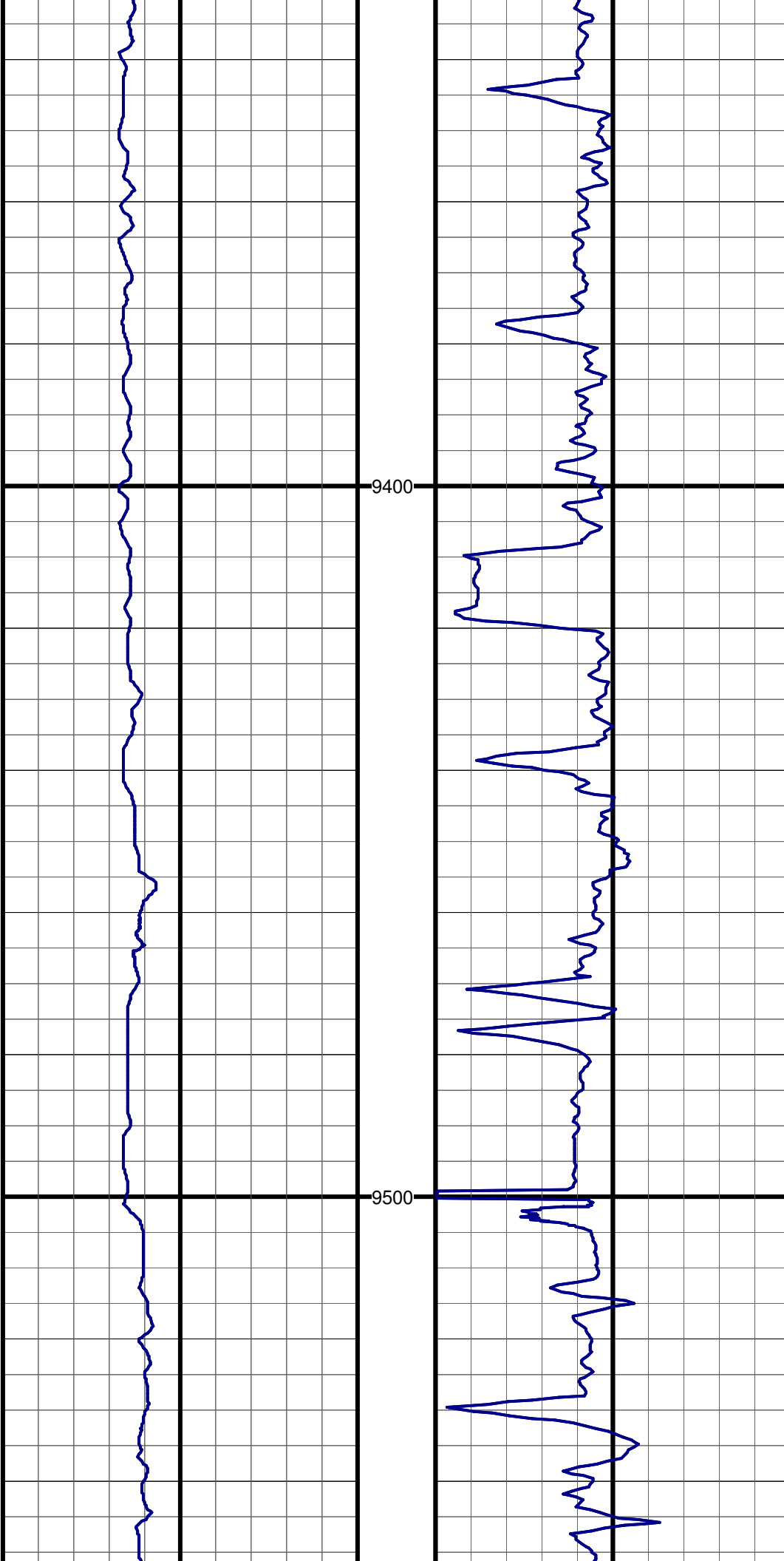
#129 MD:9166.0 TVD:7037.8 I:89.6 A:0.7 VS:2163.8

920

#130 MD:9229.0 TVD:7038.4 I:89.3 A:1.3 VS:2226.5

#131 MD:9292.0 TVD:7039.0 I:89.5 A:1.4 VS:2289.1

930

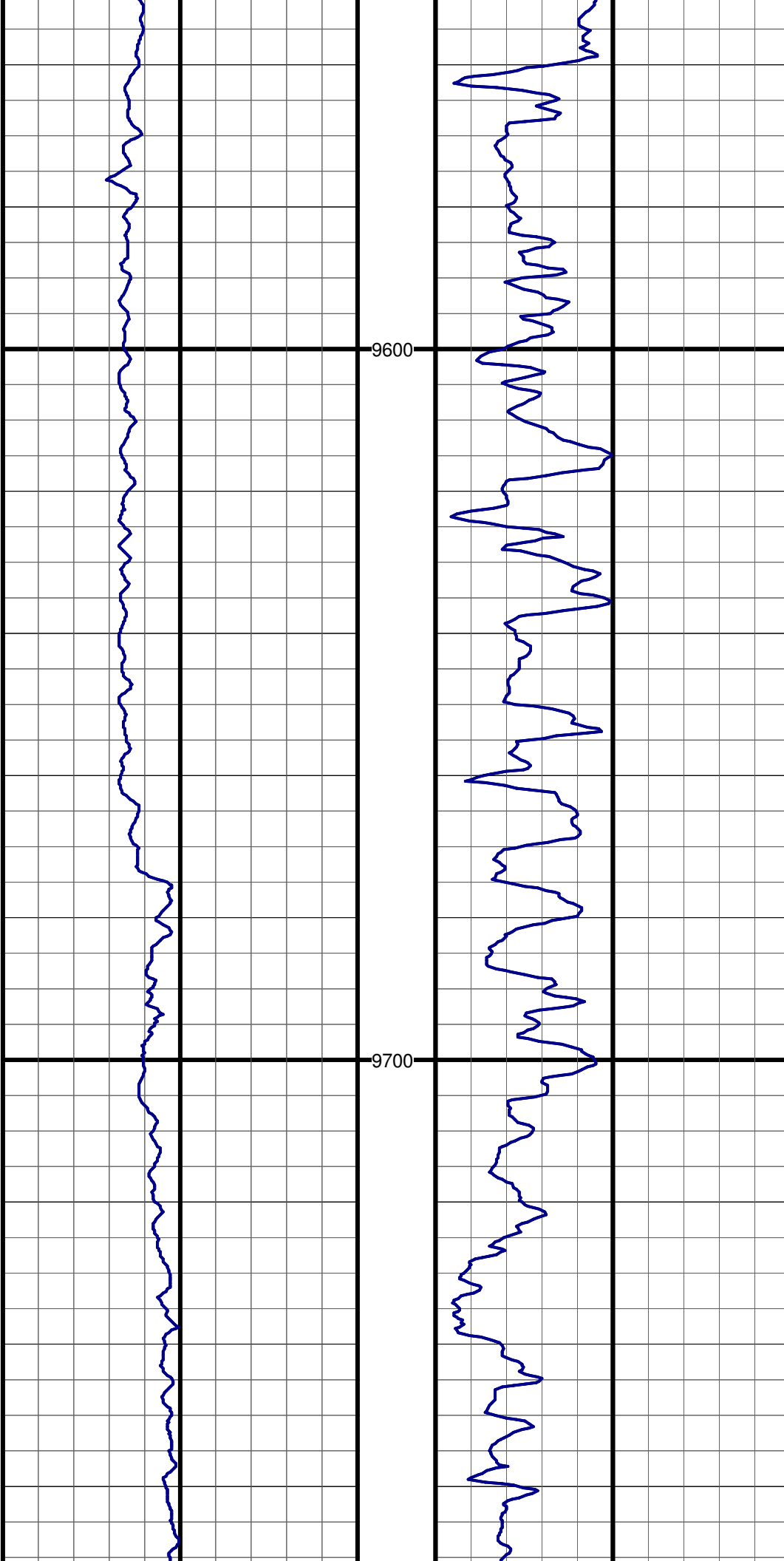


#132 MD:9354.0 TVD:7039.6 I:89.5 A:1.4 VS:2350.8

#133 MD:9417.0 TVD:7039.5 I:90.7 A:1.8 VS:2413.4

#134 MD:9481.0 TVD:7038.8 I:90.4 A:1.6 VS:2477.0

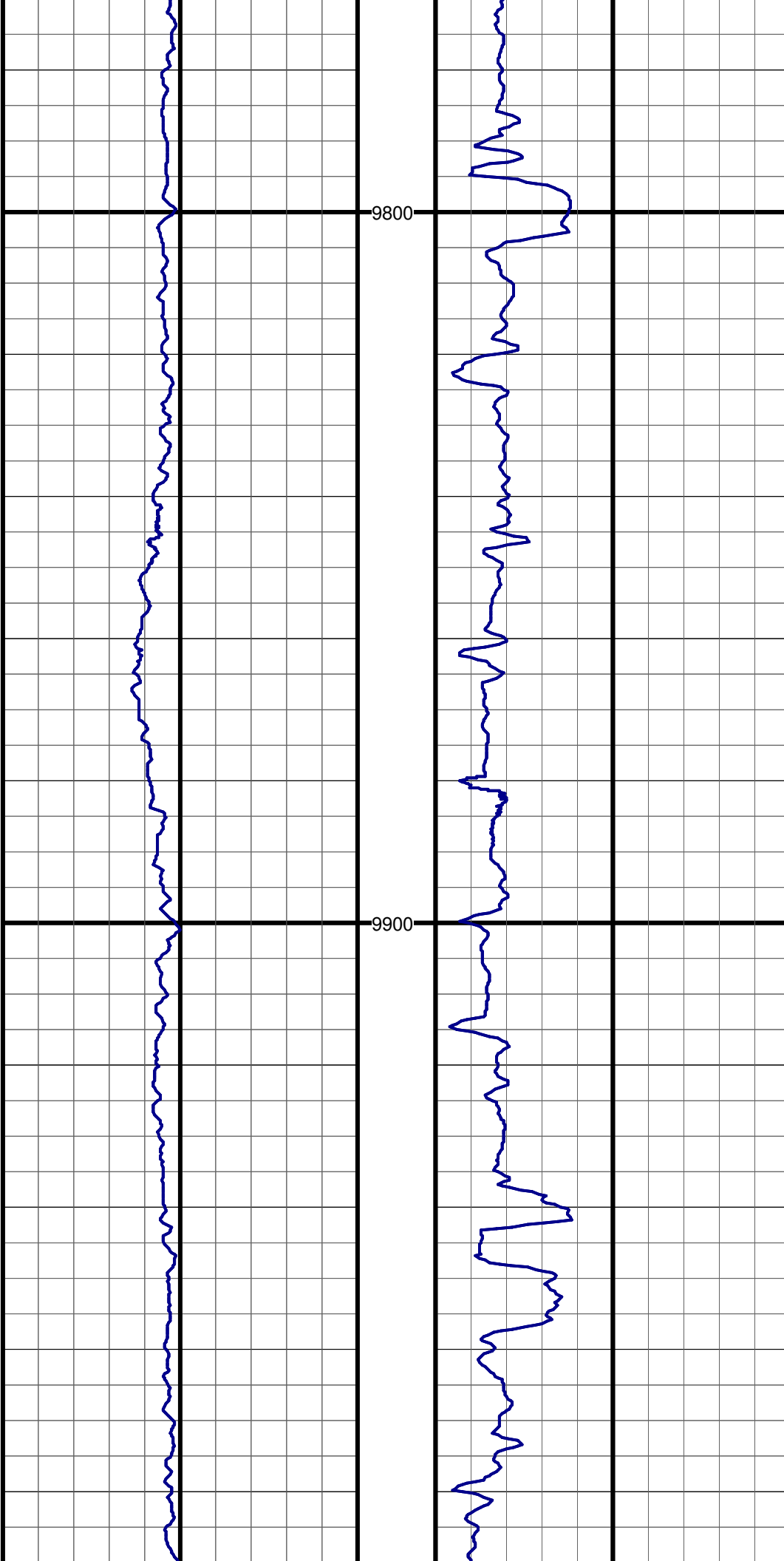
#135 MD:9544.0 TVD:7038.5 I:90.2 A:1.4 VS:2539.6



#136 MD:9607.0 TVD:7038.5 I:89.9 A:0.1 VS:2602.3

#137 MD:9671.0 TVD:7038.8 I:89.5 A:359.3 VS:2666.1

#138 MD:9734.0 TVD:7039.3 I:89.5 A:0.7 VS:2728.9

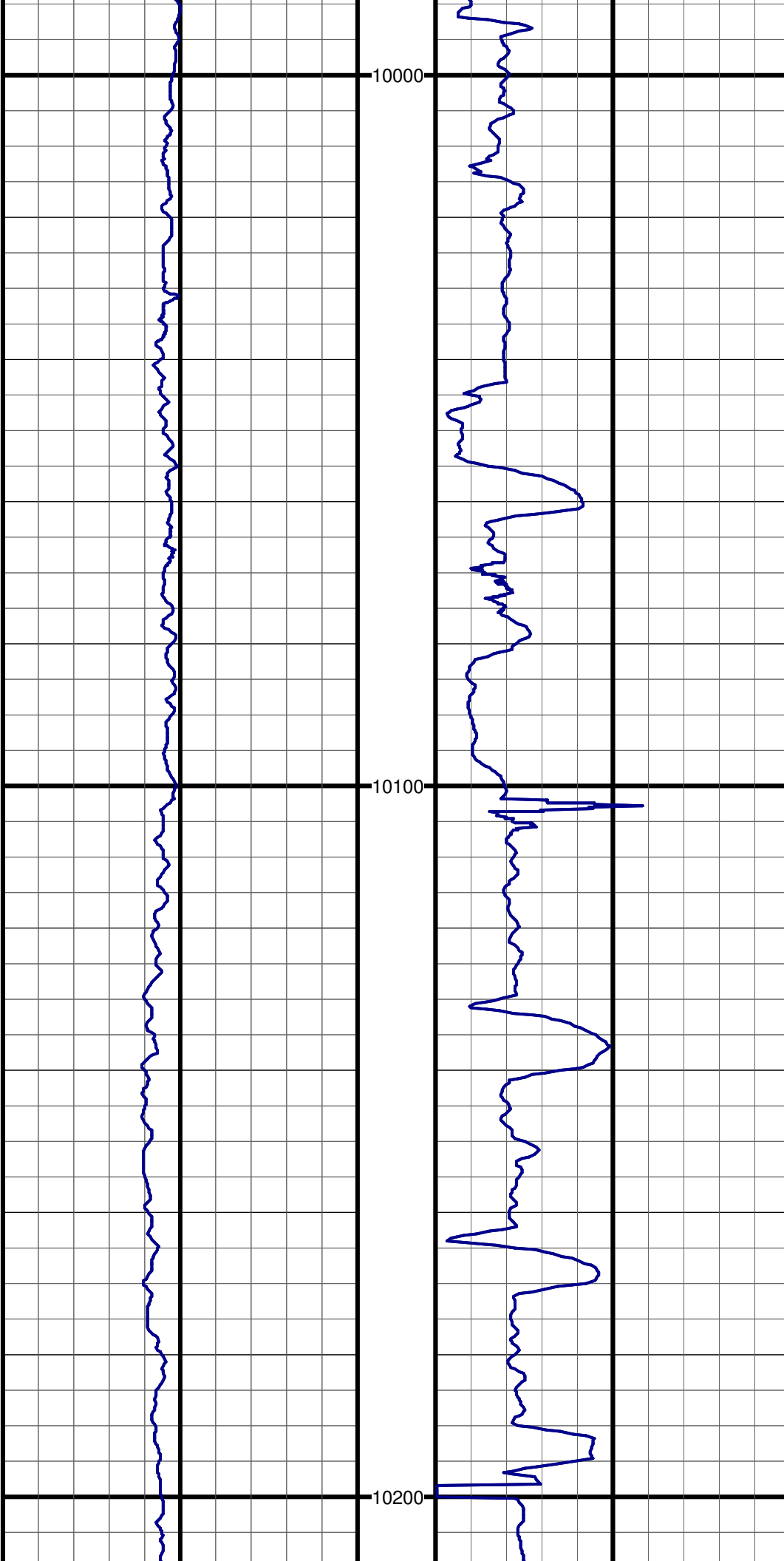


#139 MD:9797.0 TVD:7039.7 I:89.8 A:0.8 VS:2791.6

#140 MD:9861.0 TVD:7039.9 I:89.8 A:0.3 VS:2855.3

#141 MD:9924.0 TVD:7040.2 I:89.7 A:359.2 VS:2918.1

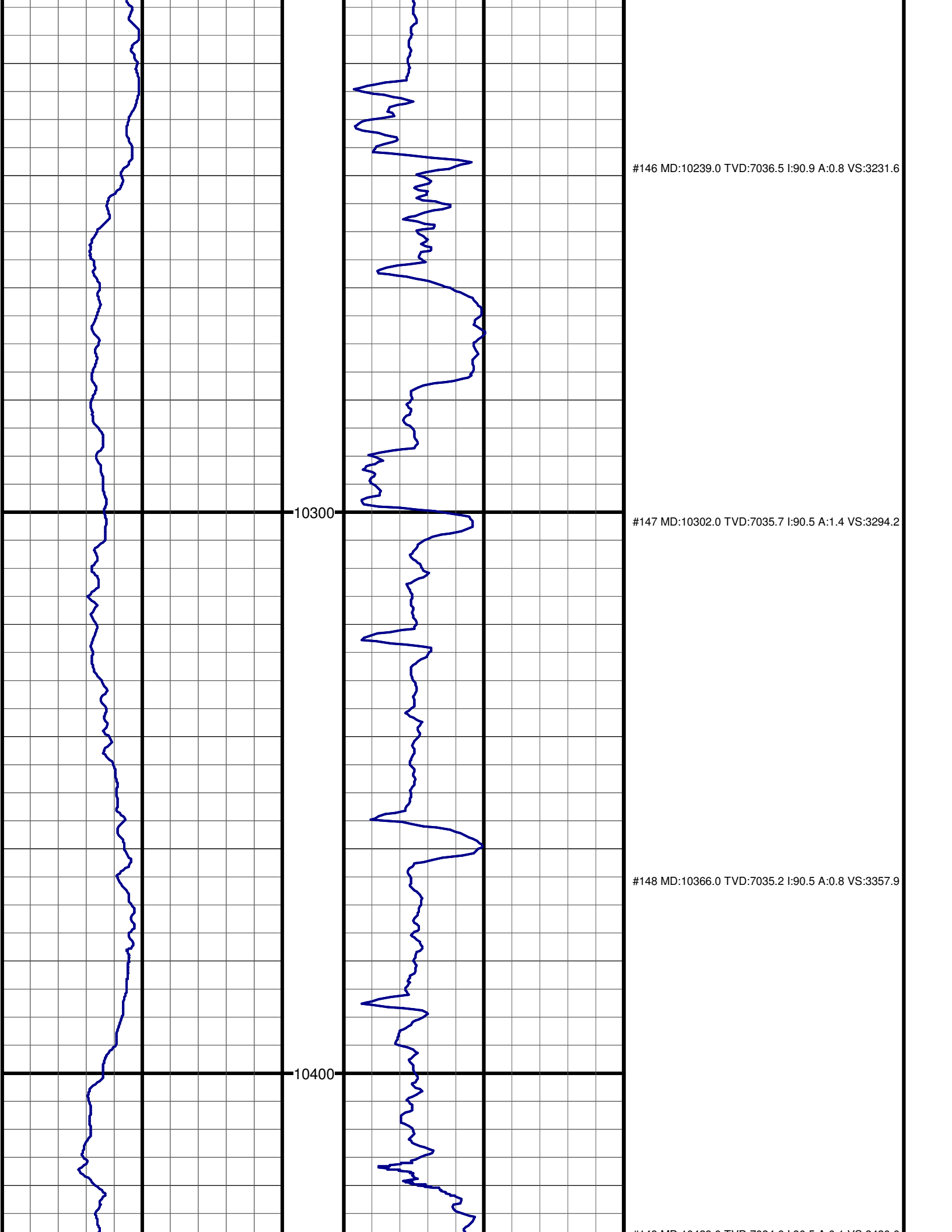
#142 MD:9987.0 TVD:7040.3 I:90.2 A:0.5 VS:2980.9



#143 MD:10050.0 TVD:7039.8 I:90.7 A:2.0 VS:3043.5

#144 MD:10113.0 TVD:7038.9 I:90.9 A:0.8 VS:3106.1

#145 MD:10176.0 TVD:7037.7 I:91.3 A:0.2 VS:3168.9



#146 MD:10239.0 TVD:7036.5 I:90.9 A:0.8 VS:3231.6

10300

#147 MD:10302.0 TVD:7035.7 I:90.5 A:1.4 VS:3294.2

#148 MD:10366.0 TVD:7035.2 I:90.5 A:0.8 VS:3357.9

10400

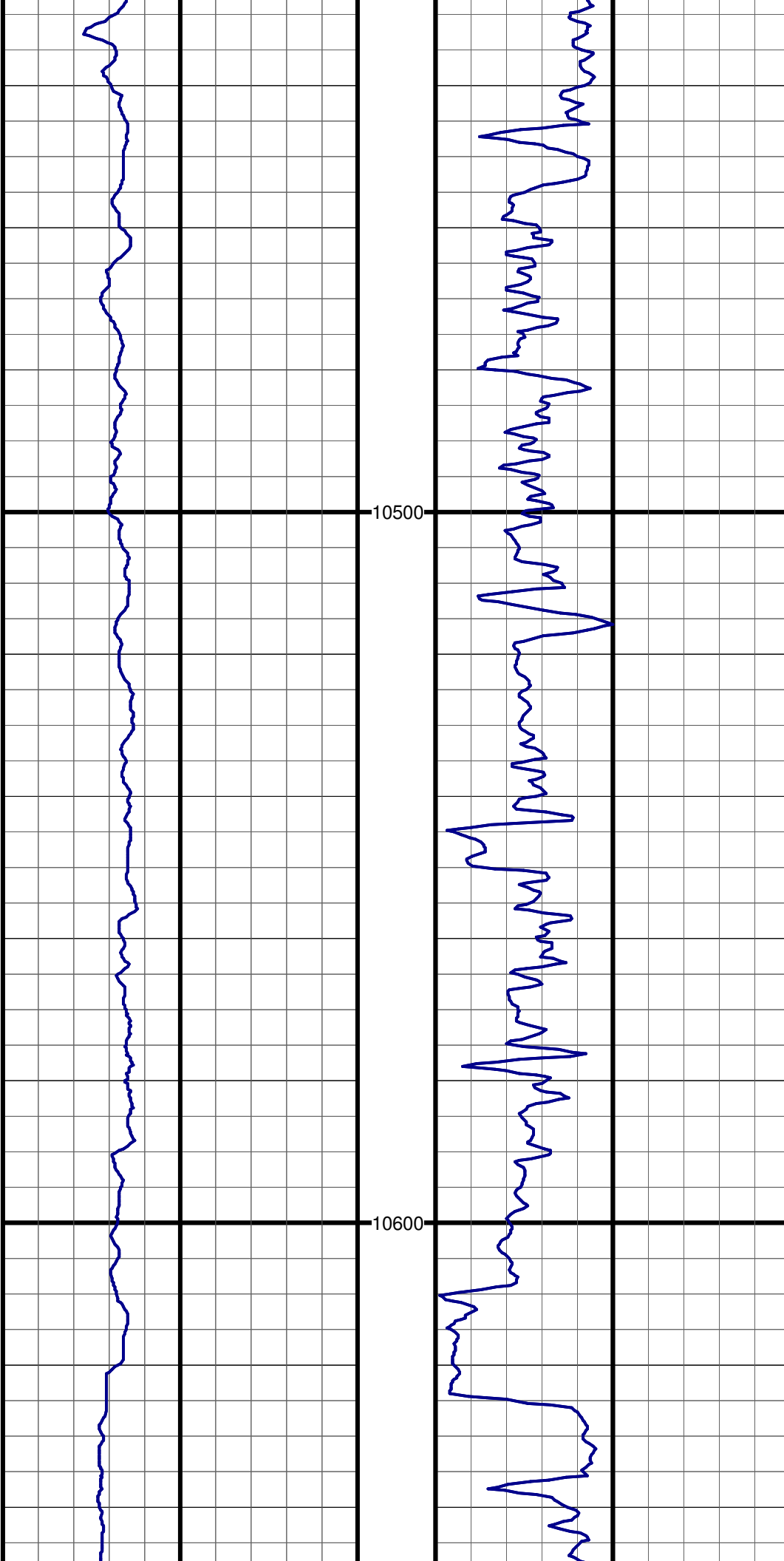
#149 MD:10429.0 TVD:7034.0 I:90.5 A:0.4 VS:3422.0

#149 MD:10429.0 TVD:7034.6 I:90.5 A:0.1 VS:3420.6

#150 MD:10493.0 TVD:7034.3 I:90.1 A:359.3 VS:3484.4

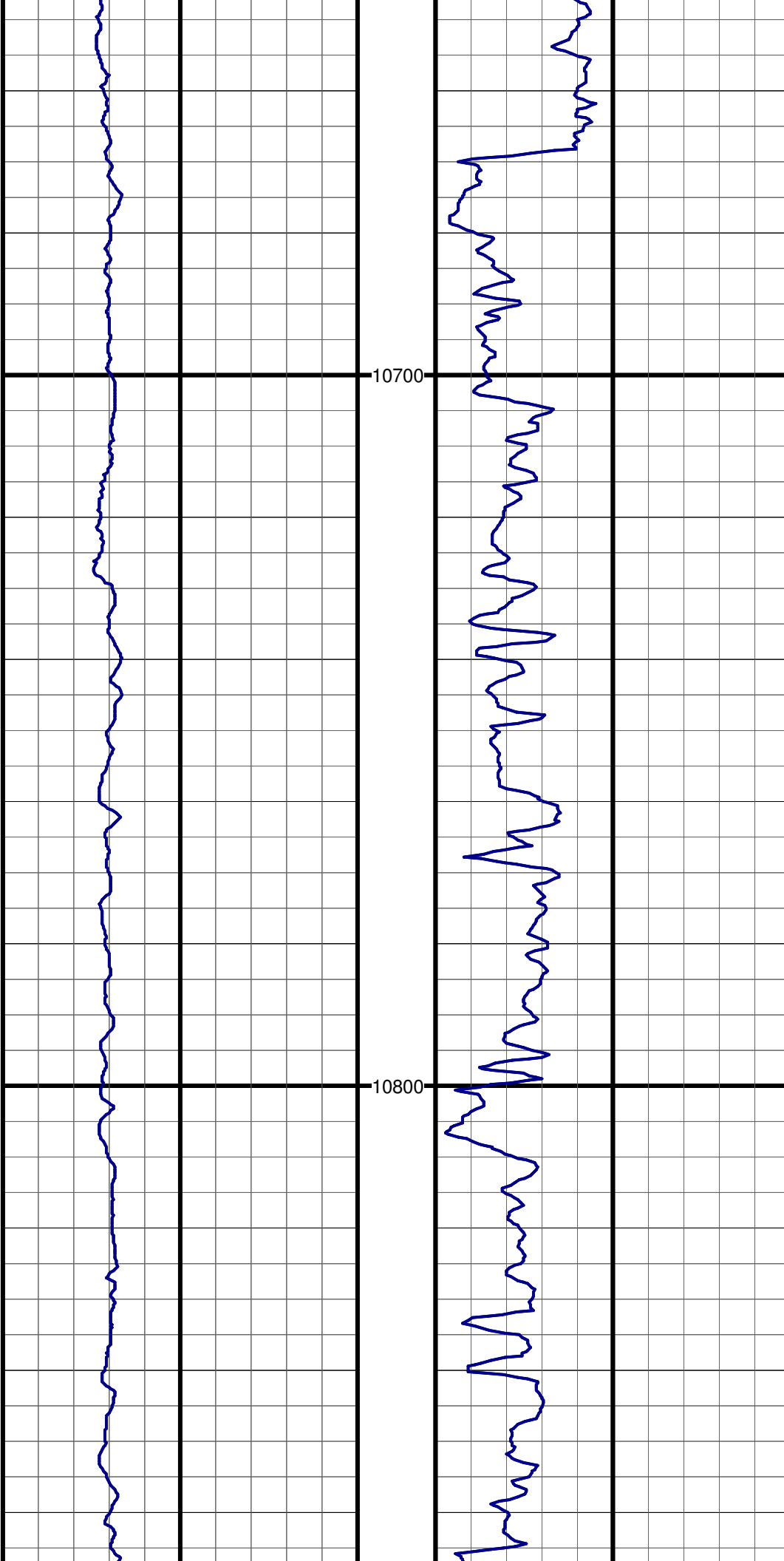
#151 MD:10556.0 TVD:7034.5 I:89.4 A:359.0 VS:3547.3

#152 MD:10619.0 TVD:7034.5 I:90.6 A:359.8 VS:3610.1



10500

10600



#153 MD:10683.0 TVD:7034.2 I:90.1 A:0.4 VS:3673.9

10700

#154 MD:10746.0 TVD:7034.1 I:90.0 A:0.0 VS:3736.6

10800

#155 MD:10810.0 TVD:7034.3 I:89.7 A:359.1 VS:3800.5

#156 MD:10873.0 TVD:7034.7 I:89.5 A:359.2 VS:3863.3

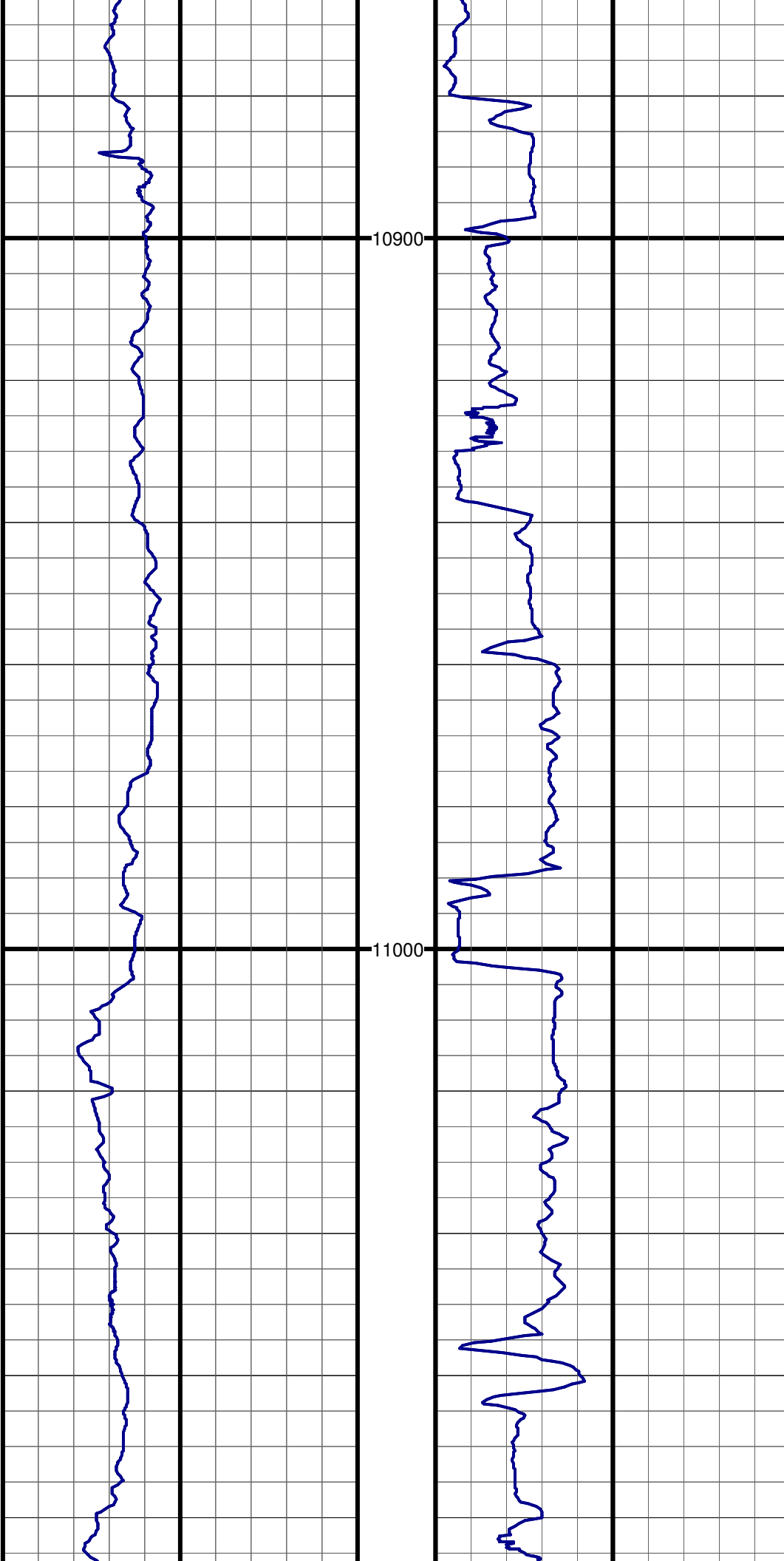
10900

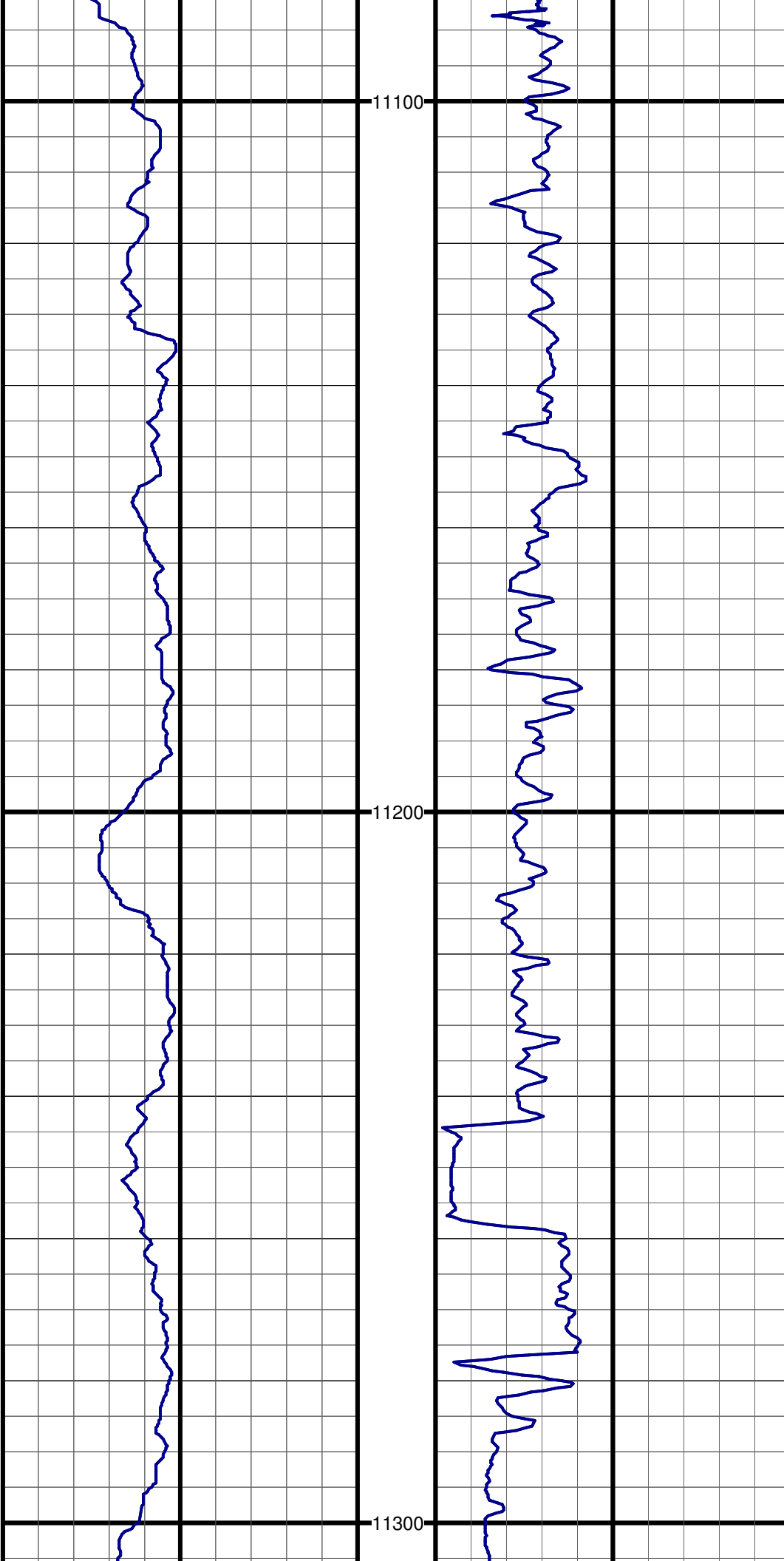
#157 MD:10937.0 TVD:7034.3 I:91.2 A:359.8 VS:3927.1

11000

#158 MD:11000.0 TVD:7033.5 I:90.3 A:0.9 VS:3989.9

#159 MD:11064.0 TVD:7033.2 I:90.3 A:0.7 VS:4053.5

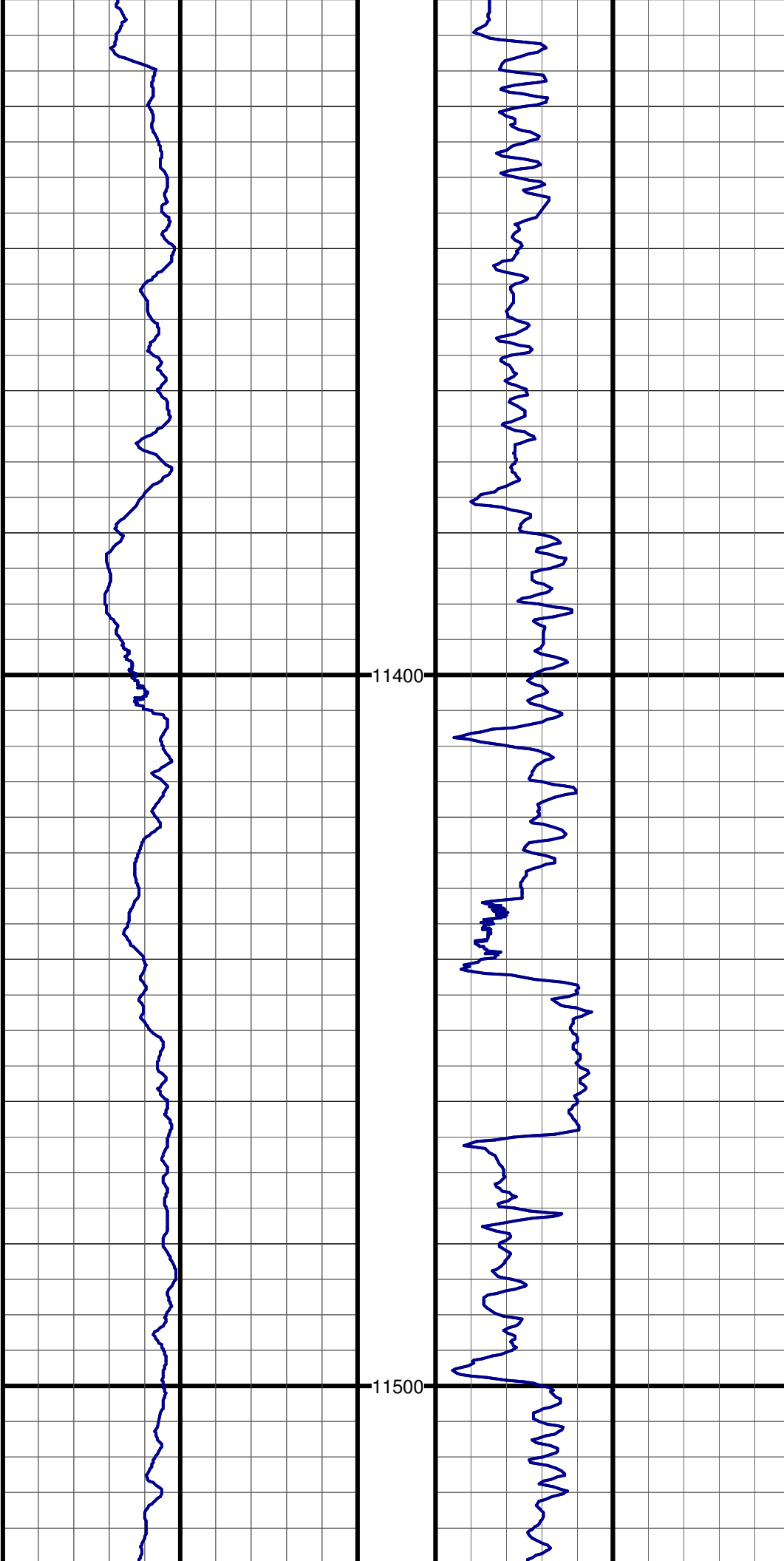




#160 MD:11127.0 TVD:7033.0 I:90.0 A:0.4 VS:4116.3

#161 MD:11191.0 TVD:7033.1 I:89.8 A:359.8 VS:4180.0

#162 MD:11254.0 TVD:7032.8 I:90.7 A:0.8 VS:4242.8



#163 MD:11318.0 TVD:7031.8 I:91.1 A:0.1 VS:4306.5

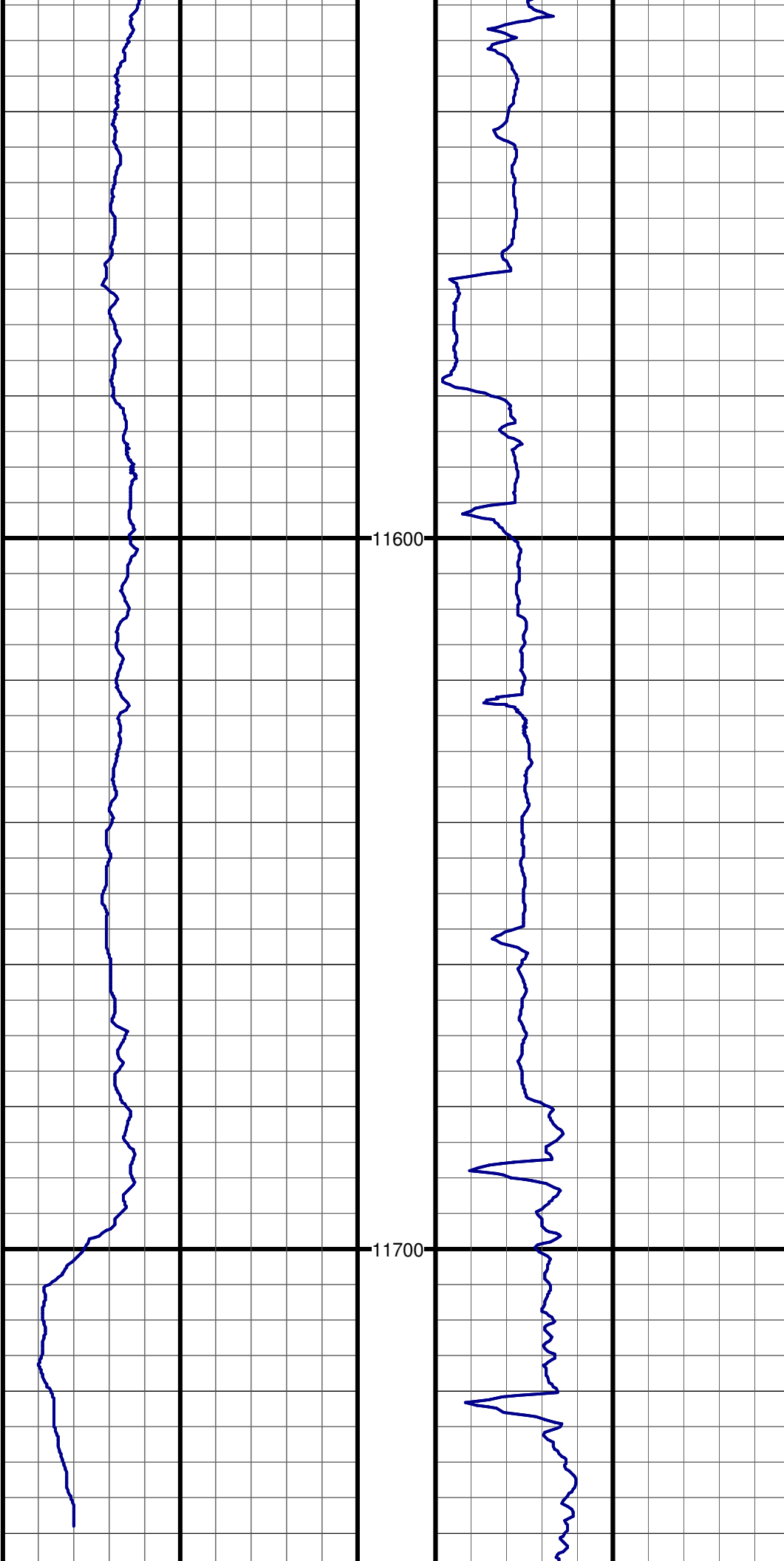
#164 MD:11381.0 TVD:7030.5 I:91.3 A:359.5 VS:4369.3

11400

#165 MD:11445.0 TVD:7030.2 I:89.3 A:358.9 VS:4433.1

11500

#166 MD:11508.0 TVD:7031.2 I:88.8 A:358.0 VS:4496.0

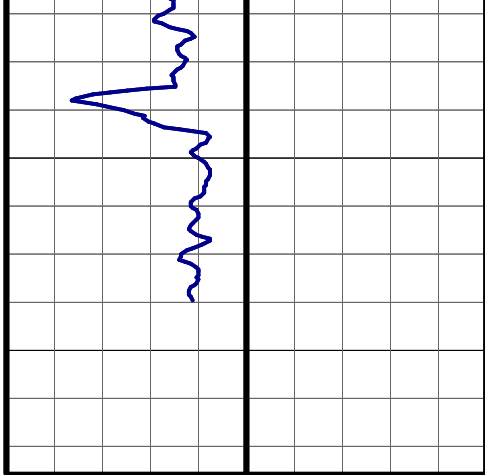
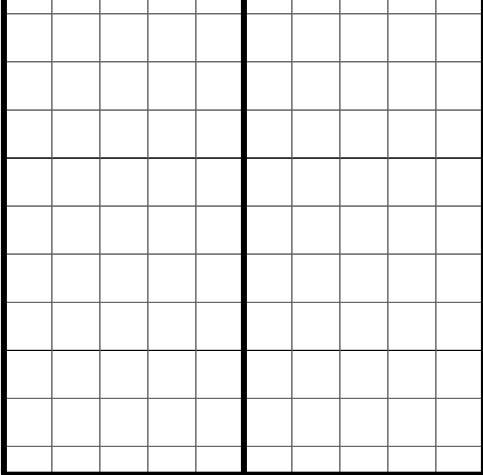


#167 MD:11571.0 TVD:7032.0 I:89.7 A:359.8 VS:4558.9

#168 MD:11635.0 TVD:7032.5 I:89.4 A:358.9 VS:4622.7

#169 MD:11698.0 TVD:7033.6 I:88.6 A:358.3 VS:4685.6

#170 MD:11725.0 TVD:7034.2 I:88.9 A:358.5 VS:4712.5



Gamma API (MD) Track: 1  
API

Depth  
5":100' (100')

ROP (MD) Track: 1  
Ft/Hr

39 ————— 300  
300 ————— 561  
561 ————— 822

0 ————— 500  
500 ————— 1000  
1000 ————— 1500

