Gamma Log

MD
5":100'

Company: Crestone Peak Resources
Well Name: Cosslett East Fed 1G-22H-H168
API: 05-123-51941
County/Parish: Weld
State/Prov: Colorado
Country: US
Job #: Rm-230361

Company:	Crestone Peak Resources
Well Name:	Cosslett East Fed 1G-22H-H168
API:	05-123-51941
County/Parish:	Weld
State or Prov:	Colorado
Country:	US
Job number:	Rm-230361
Field:	DJ Basin
Rig Identification:	Patterson 345
Survey Company:	Total Directional Services
Company Man	Frank Kinney
Company Man	Josh Johnson
DD Days	Mike Gurnsey
DD Nights	Matt Johnson
MWD Days	Blake Stacey
MWD Nights	Dustin Klein
VSD	157.41

Log measurements: Gamma, ROP, Temp
Depth measured from: Kelly Bushing: 5,208' ft
Maximum temperature: 206´°F

	Depth	Date
Start:	145 ft	03/16/2023
End:	18867 ft	05/04/2023

Casing	Depth	Size
Surface:	613 ft	12.5"
Intermediate:		

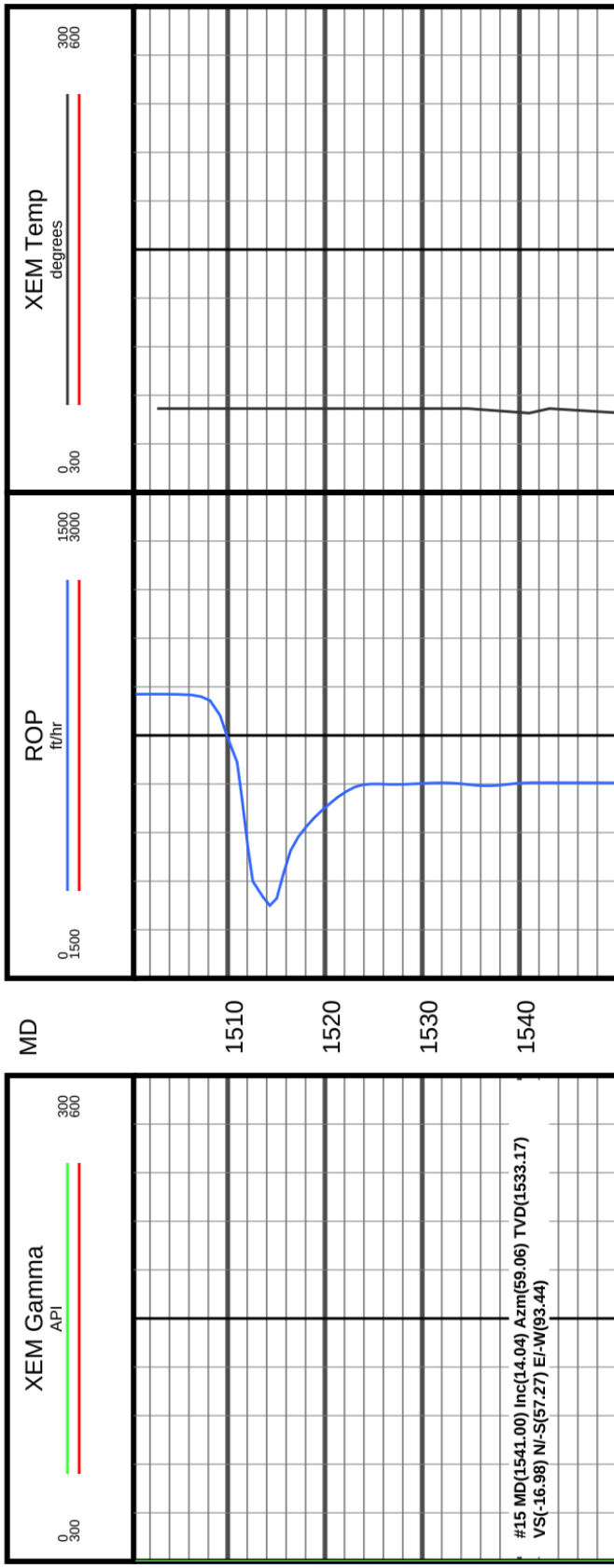
Mud type: WBM/OBM
Density: 9.5
Viscosity: 50
Rm: **Rmf:** **Rmc:**

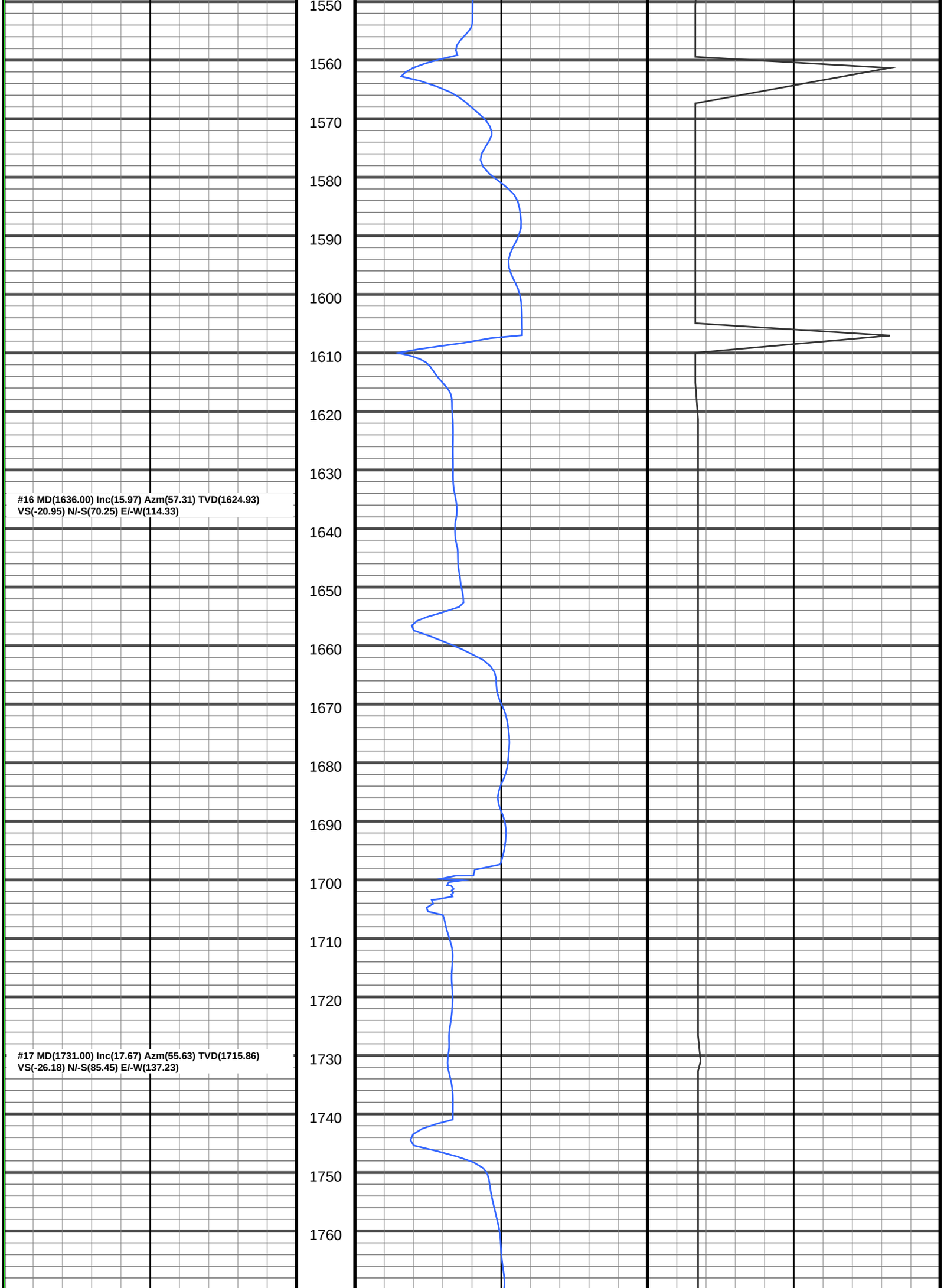
Elevations	
KB:	5208
DF:	25
GL:	5183

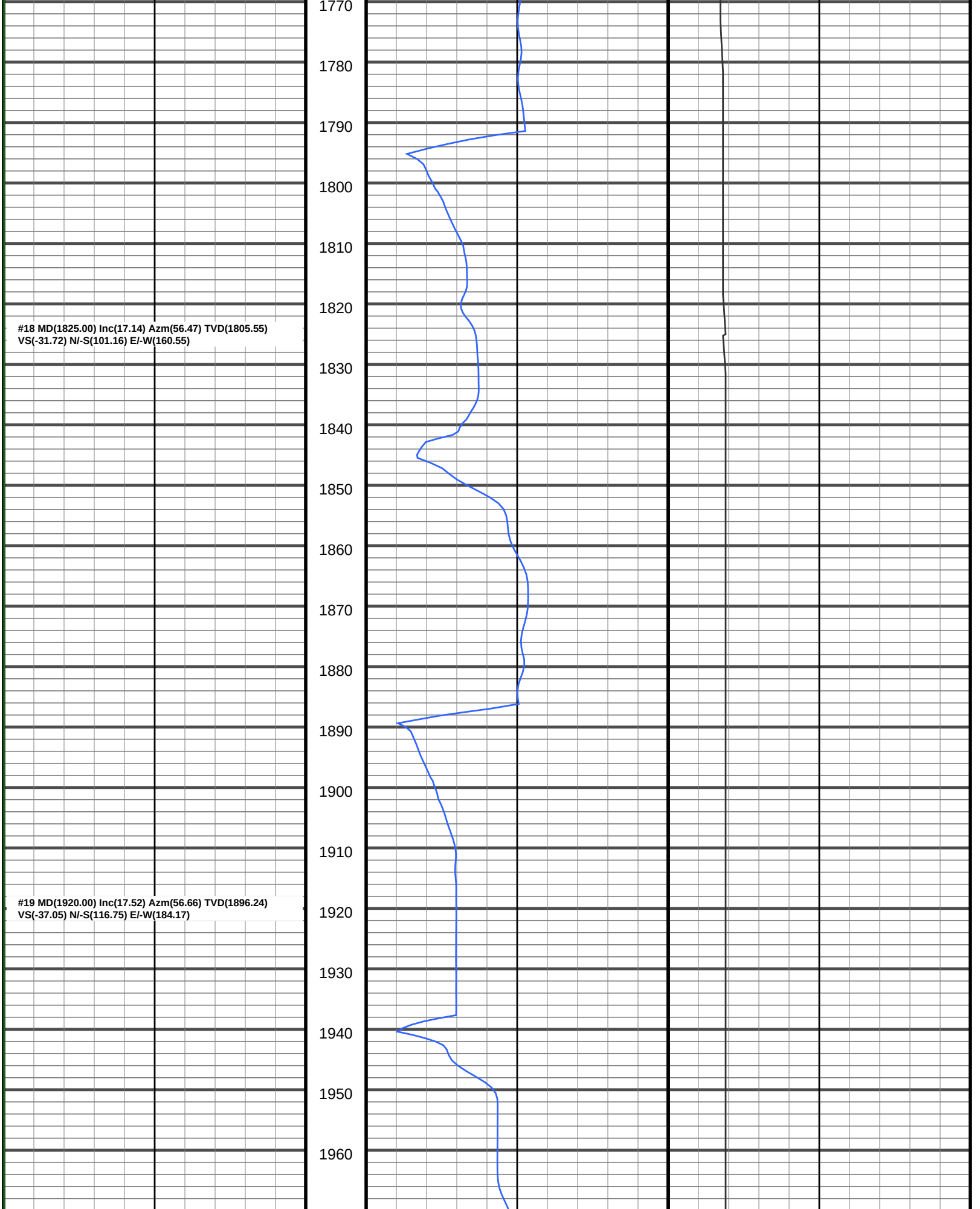
Run	Bit Size	Gamma Factor	Offsets Gamma	Offsets Survey	Depths Start	Depths End	Dates Start	Dates End
1	17.5"	N/A		60.00 ft	145 ft	613 ft	03/16/2023	3/16/2023
2	12.25"	N/A		60.00 ft	613 ft	2609 ft	3/27/2023	3/28/2023
3	8.5"	.512	42.88 ft	62.00 ft	2609 ft	18867 ft	5/1/2023	5/04/2023
4								
5								
6								
7								
8								
9								
10								

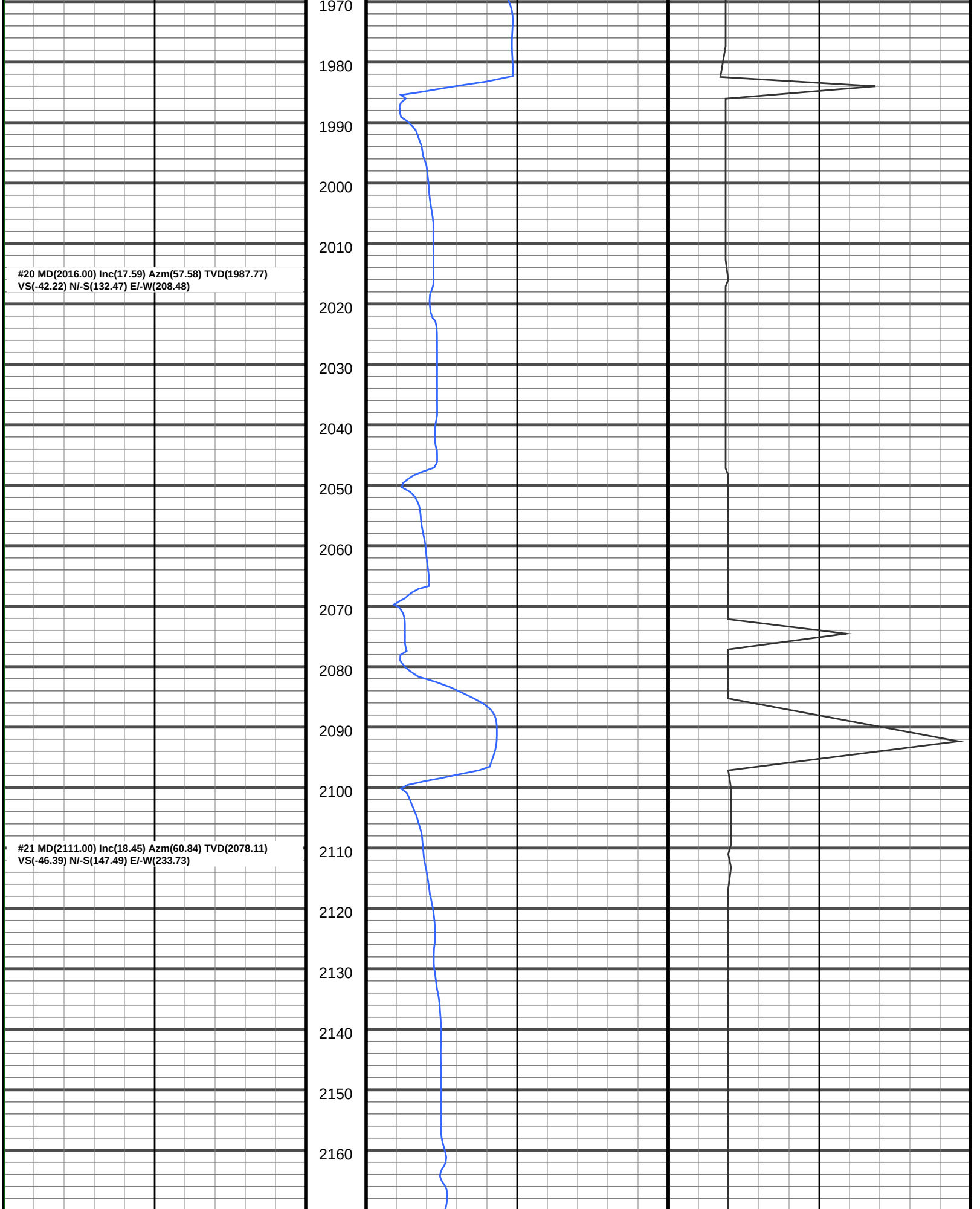
API# 05-123-51941 WELL: Cosslett East 1G-22H-H168 Type of Log:Gamma Logging started at 2220 on 05/01/2023 Ending at 1402 on 05/04/2023 Depth Relative to RKB @ 5,208' Ft Elevation
Logging Company: Total Directional LLC Top of log: 145' Bottom of Log: 18,867'

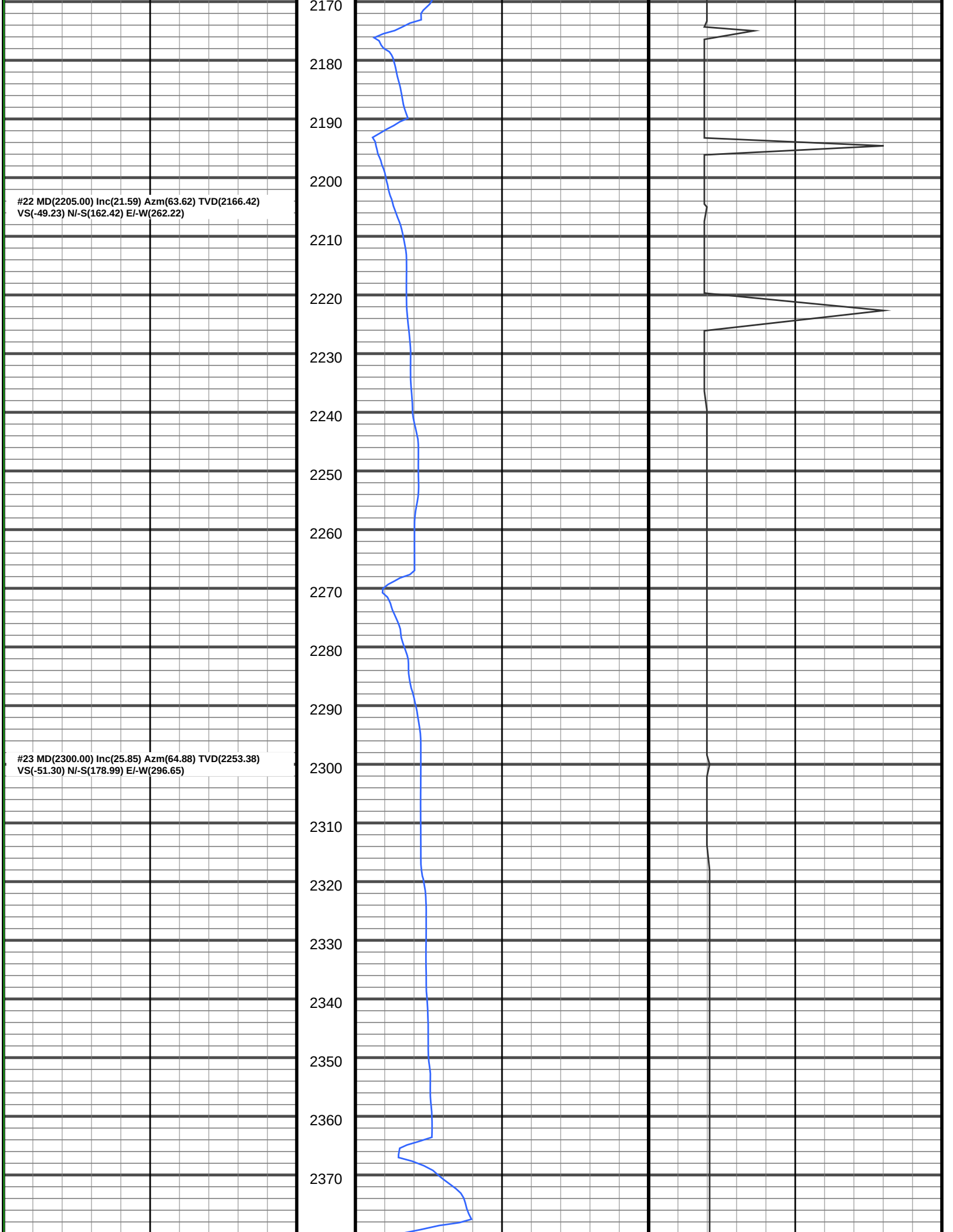
Total Directional Services uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

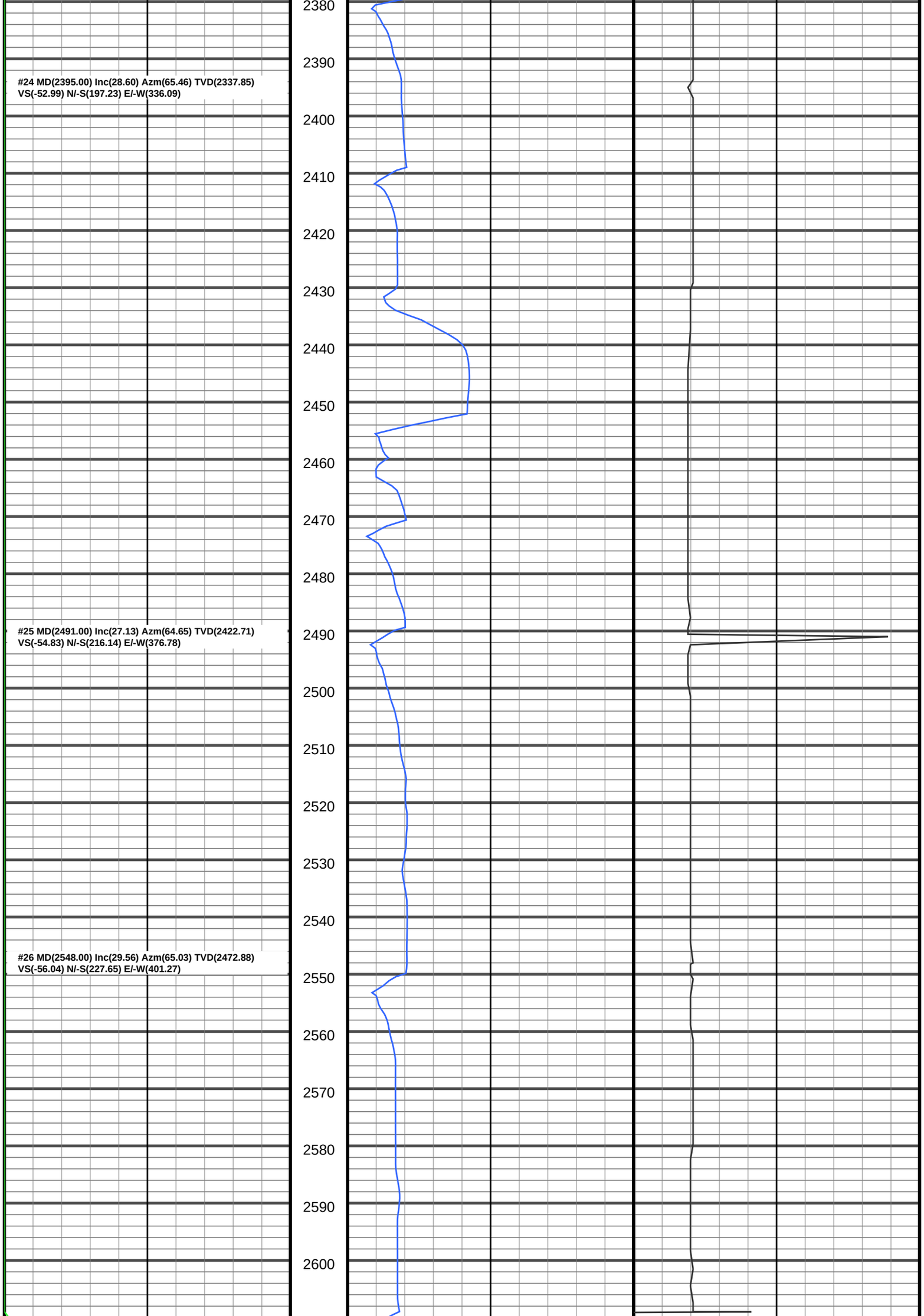


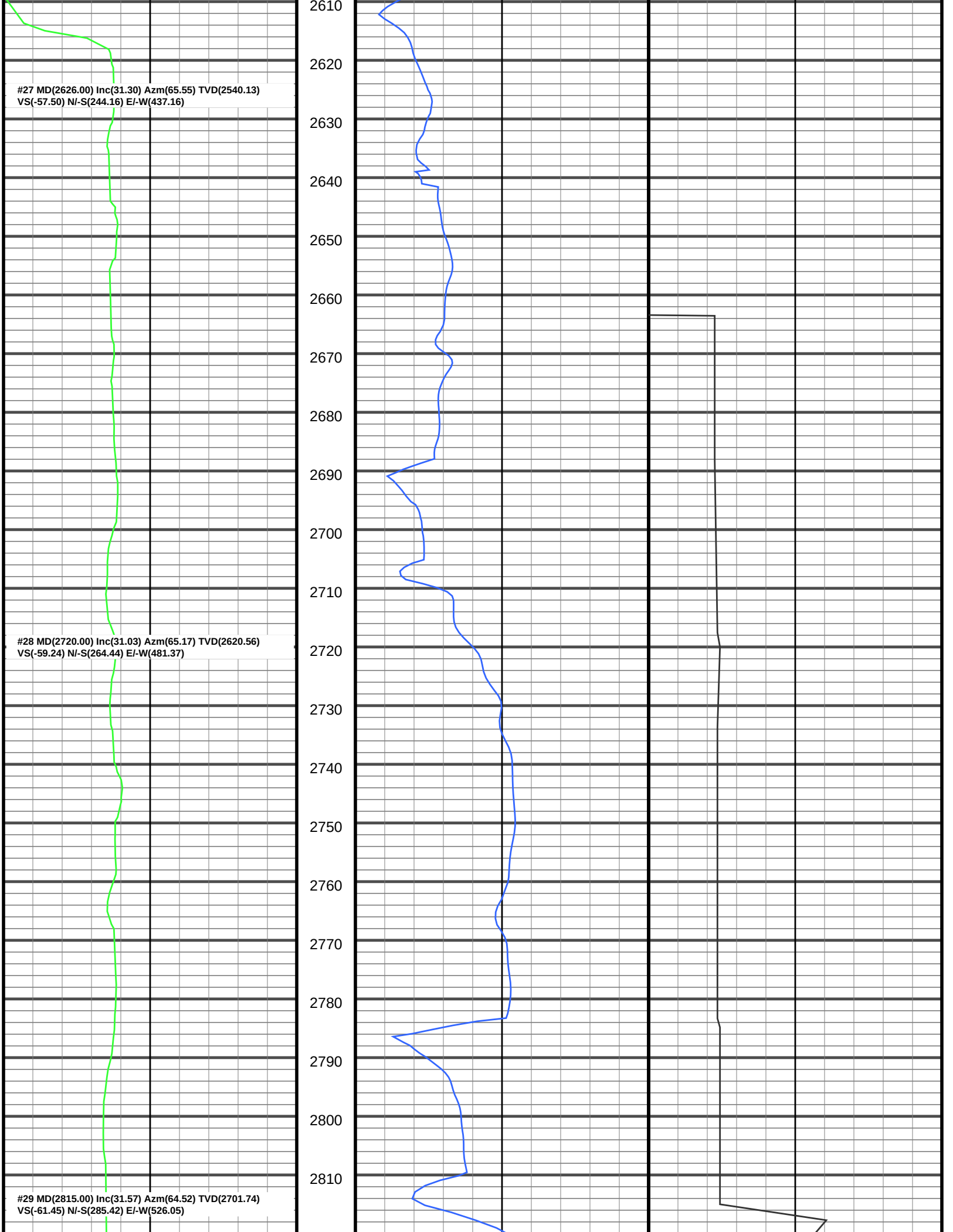

1550
1560
1570
1580
1590
1600
1610
1620
1630
#16 MD(1636.00) Inc(15.97) Azm(57.31) TVD(1624.93)
VS(-20.95) N/-S(70.25) E/-W(114.33)
1640
1650
1660
1670
1680
1690
1700
1710
1720
#17 MD(1731.00) Inc(17.67) Azm(55.63) TVD(1715.86)
VS(-26.18) N/-S(85.45) E/-W(137.23)
1730
1740
1750
1760

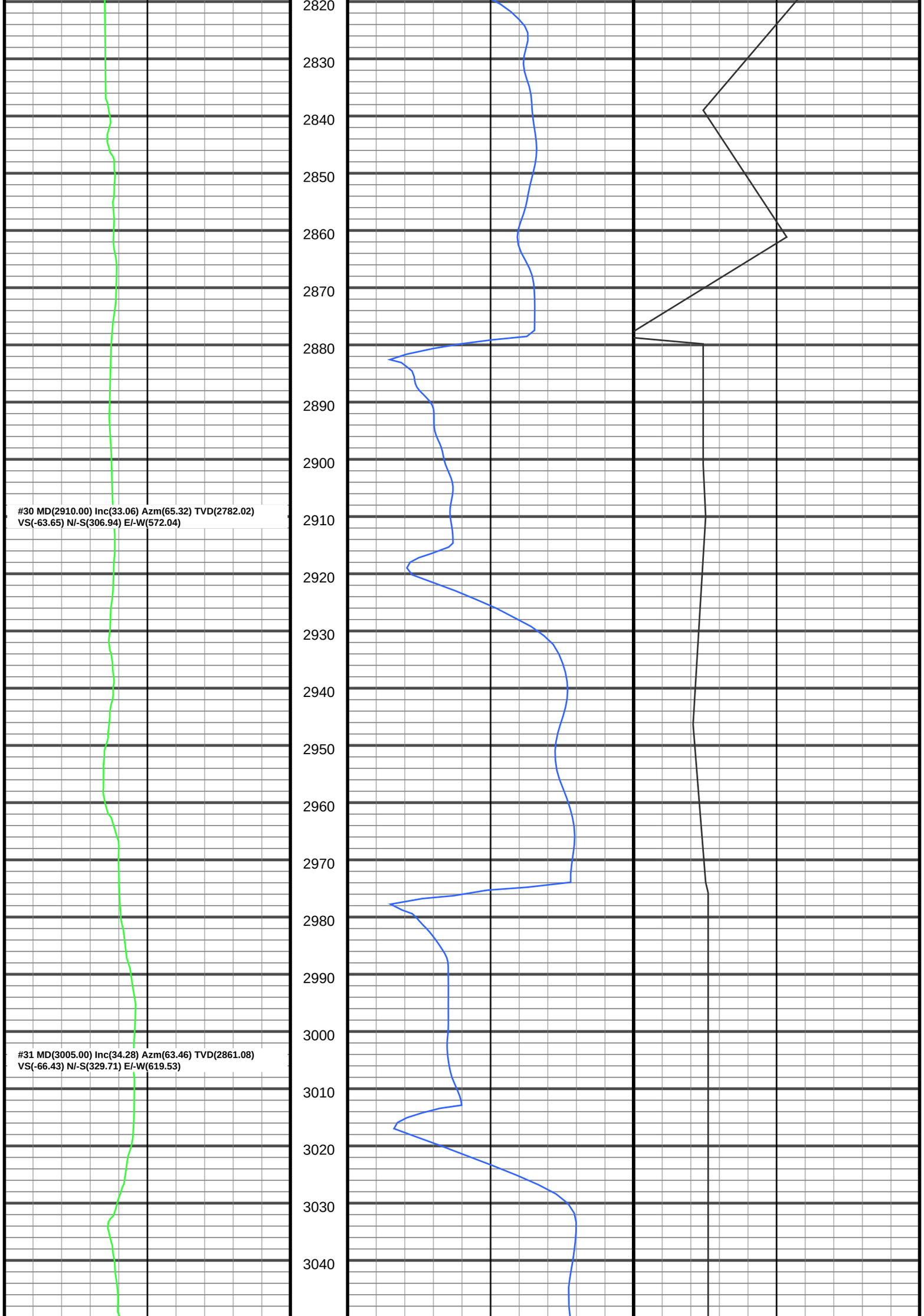

1770
1780
1790
1800
1810
1820
#18 MD(1825.00) Inc(17.14) Azm(56.47) TVD(1805.55)
VS(-31.72) N/-S(101.16) E/-W(160.55)
1830
1840
1850
1860
1870
1880
1890
1900
1910
#19 MD(1920.00) Inc(17.52) Azm(56.66) TVD(1896.24)
VS(-37.05) N/-S(116.75) E/-W(184.17)
1920
1930
1940
1950
1960

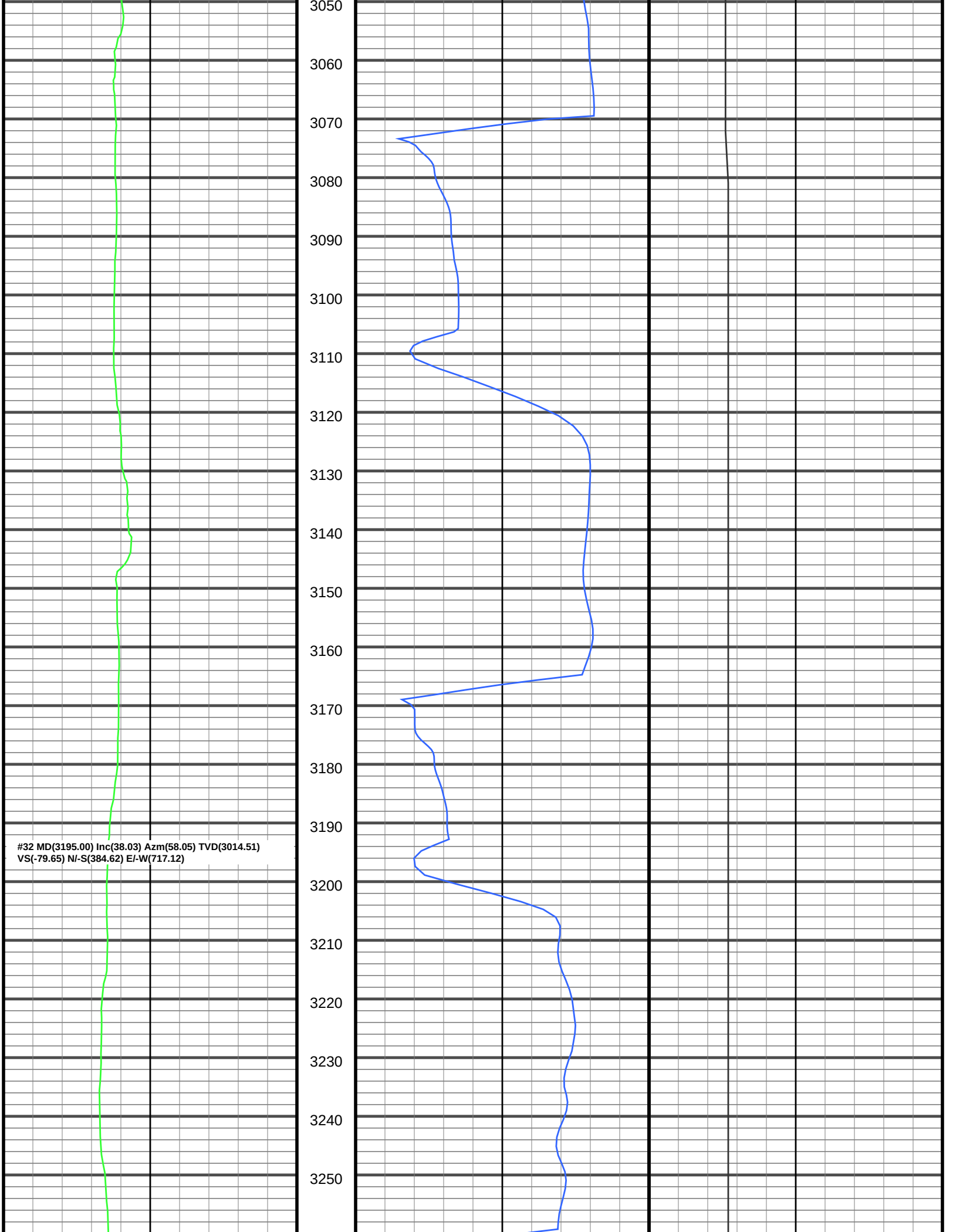

1970
1980
1990
2000
2010
2020
2030
2040
2050
2060
2070
2080
2090
2100
2110
2120
2130
2140
2150
2160
#20 MD(2016.00) Inc(17.59) Azm(57.58) TVD(1987.77)
VS(-42.22) N/-S(132.47) E/-W(208.48)
#21 MD(2111.00) Inc(18.45) Azm(60.84) TVD(2078.11)
VS(-46.39) N/-S(147.49) E/-W(233.73)

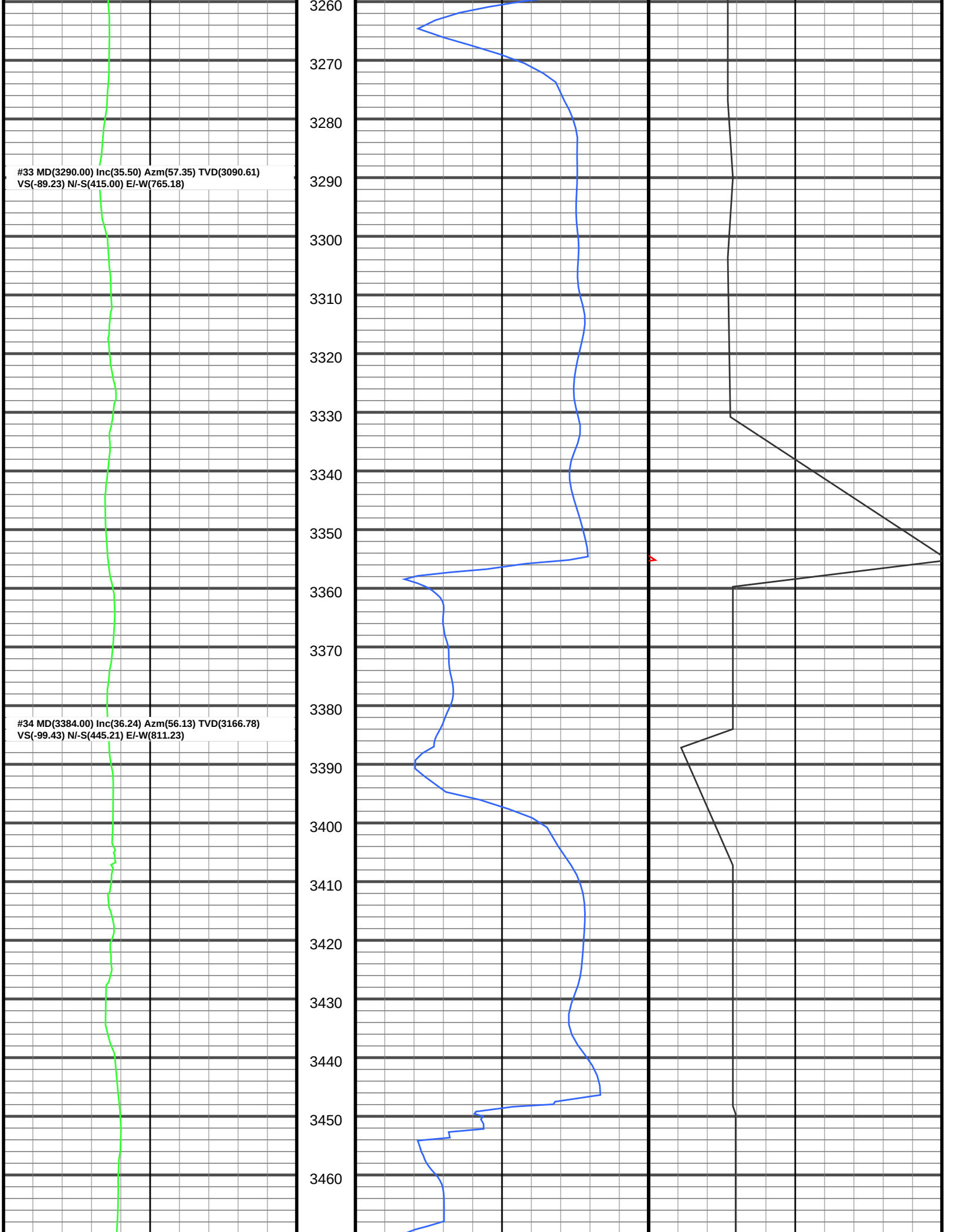

2170
2180
2190
2200
#22 MD(2205.00) Inc(21.59) Azm(63.62) TVD(2166.42)
VS(-49.23) N/-S(162.42) E/-W(262.22)
2210
2220
2230
2240
2250
2260
2270
2280
2290
#23 MD(2300.00) Inc(25.85) Azm(64.88) TVD(2253.38)
VS(-51.30) N/-S(178.99) E/-W(296.65)
2300
2310
2320
2330
2340
2350
2360
2370

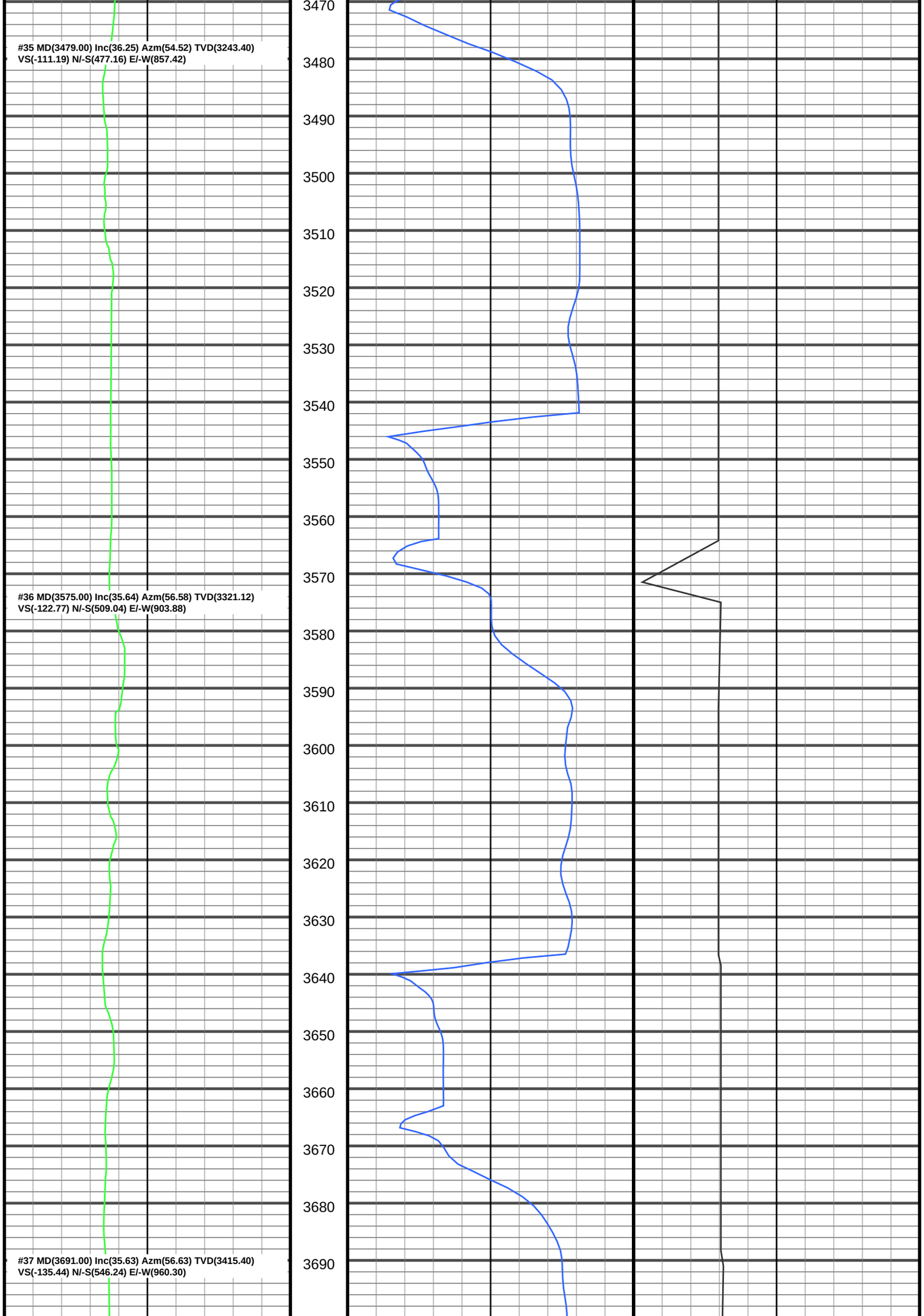

2380
2390
#24 MD(2395.00) Inc(28.60) Azm(65.46) TVD(2337.85)
VS(-52.99) N/-S(197.23) E/-W(336.09)
2400
2410
2420
2430
2440
2450
2460
2470
2480
#25 MD(2491.00) Inc(27.13) Azm(64.65) TVD(2422.71)
VS(-54.83) N/-S(216.14) E/-W(376.78)
2490
2500
2510
2520
2530
2540
#26 MD(2548.00) Inc(29.56) Azm(65.03) TVD(2472.88)
VS(-56.04) N/-S(227.65) E/-W(401.27)
2550
2560
2570
2580
2590
2600

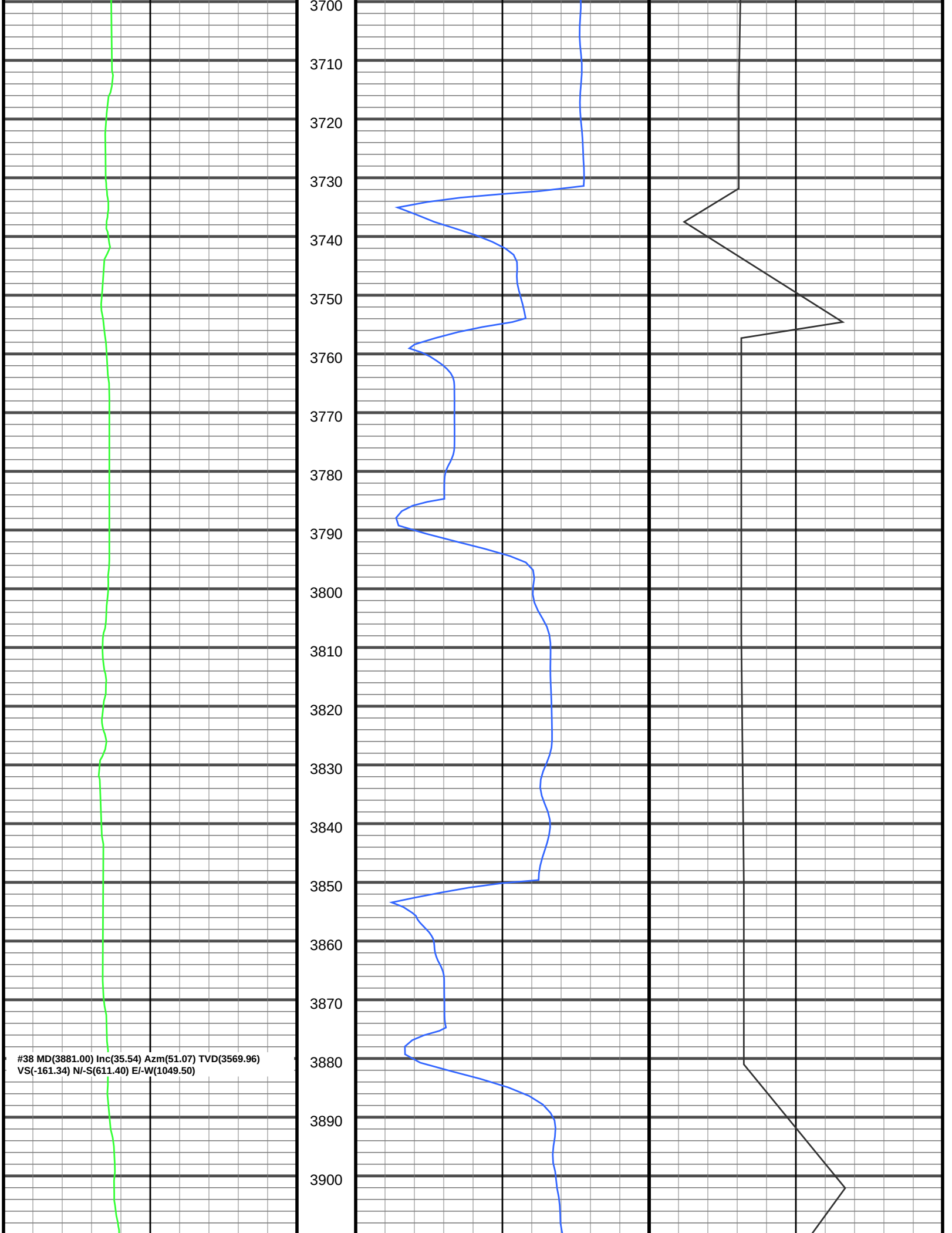

#27 MD(2626.00) Inc(31.30) Azm(65.55) TVD(2540.13)
VS(-57.50) N/-S(244.16) E/-W(437.16)
#28 MD(2720.00) Inc(31.03) Azm(65.17) TVD(2620.56)
VS(-59.24) N/-S(264.44) E/-W(481.37)
#29 MD(2815.00) Inc(31.57) Azm(64.52) TVD(2701.74)
VS(-61.45) N/-S(285.42) E/-W(526.05)
2610
2620
2630
2640
2650
2660
2670
2680
2690
2700
2710
2720
2730
2740
2750
2760
2770
2780
2790
2800
2810

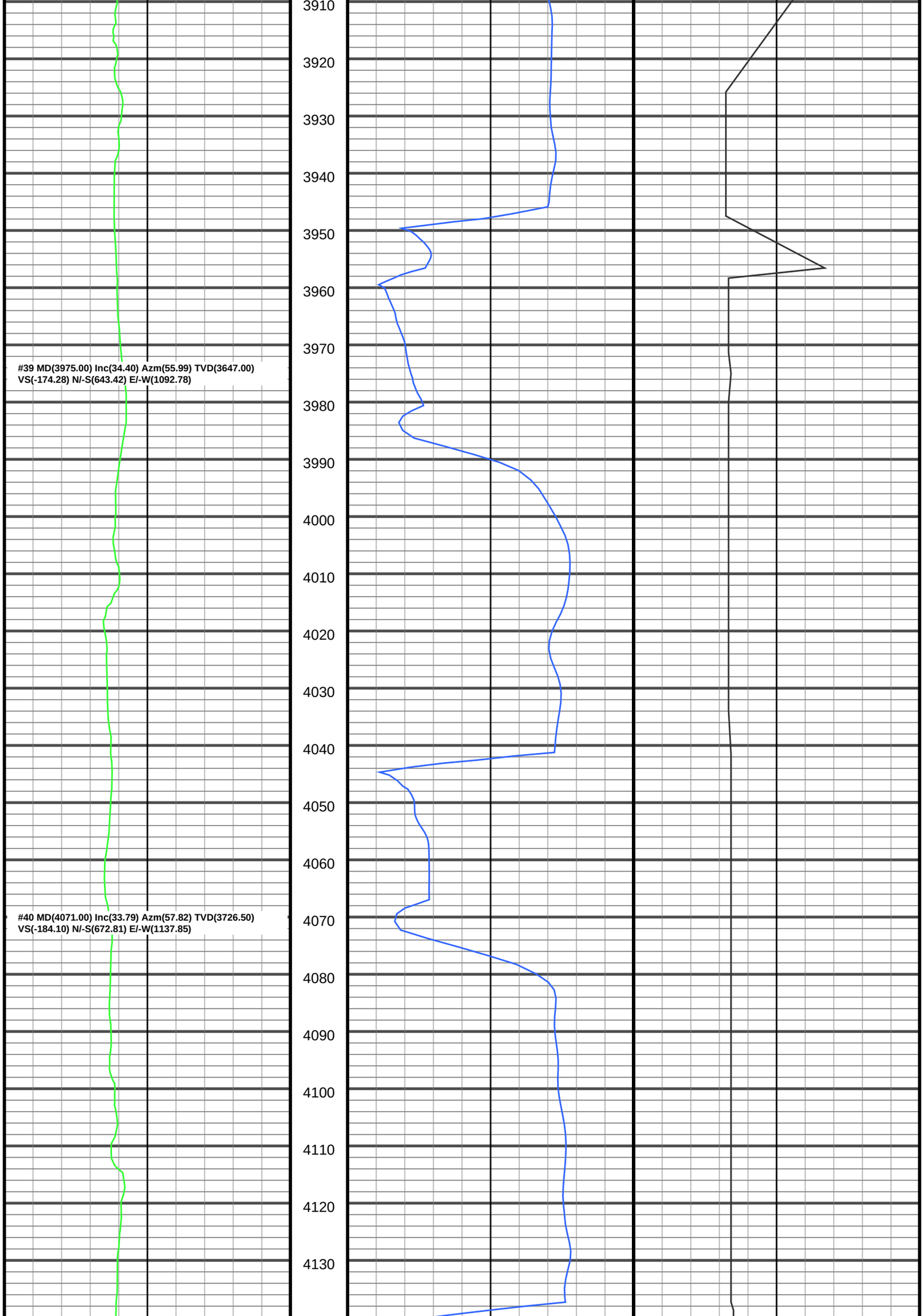

2820
2830
2840
2850
2860
2870
2880
2890
2900
2910
2920
2930
2940
2950
2960
2970
2980
2990
3000
3010
3020
3030
3040
#30 MD(2910.00) Inc(33.06) Azm(65.32) TVD(2782.02)
VS(-63.65) N/-S(306.94) E/-W(572.04)
#31 MD(3005.00) Inc(34.28) Azm(63.46) TVD(2861.08)
VS(-66.43) N/-S(329.71) E/-W(619.53)

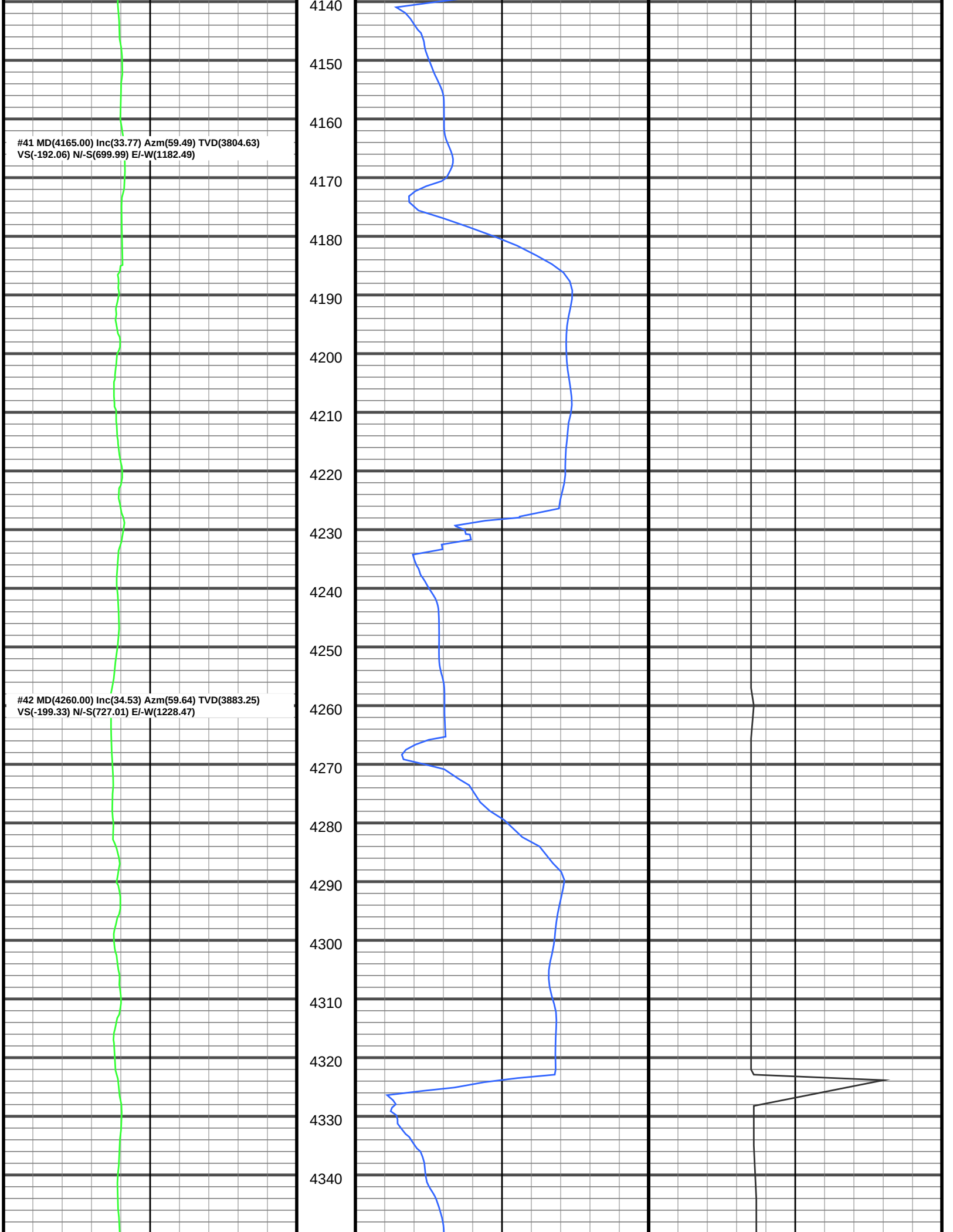

3050
3060
3070
3080
3090
3100
3110
3120
3130
3140
3150
3160
3170
3180
3190
3200
3210
3220
3230
3240
3250
#32 MD(3195.00) Inc(38.03) Azm(58.05) TVD(3014.51)
VS(-79.65) N/-S(384.62) E/-W(717.12)

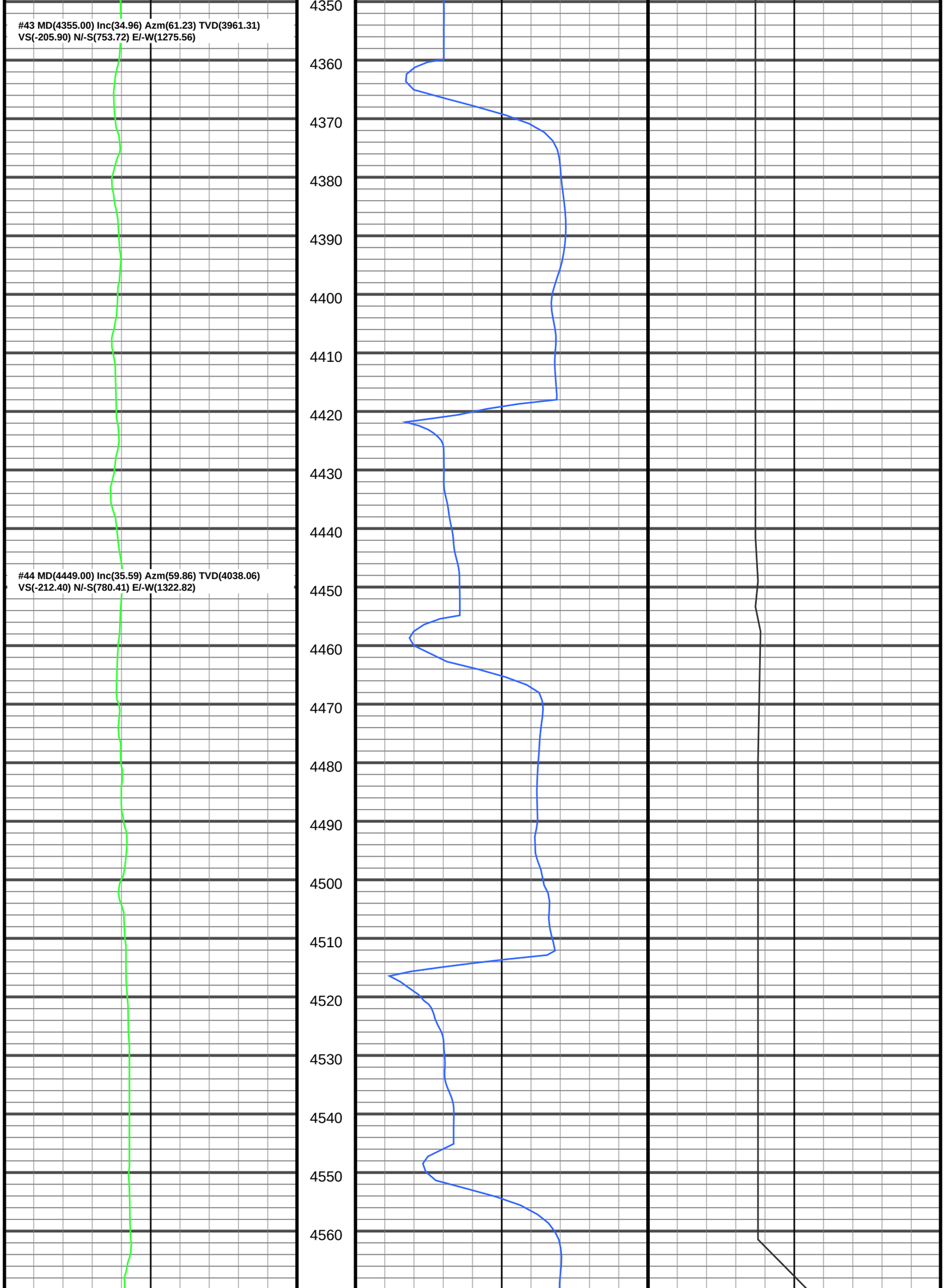

#33 MD(3290.00) Inc(35.50) Azm(57.35) TVD(3090.61)
VS(-89.23) N/-S(415.00) E/-W(765.18)
#34 MD(3384.00) Inc(36.24) Azm(56.13) TVD(3166.78)
VS(-99.43) N/-S(445.21) E/-W(811.23)
3260
3270
3280
3290
3300
3310
3320
3330
3340
3350
3360
3370
3380
3390
3400
3410
3420
3430
3440
3450
3460

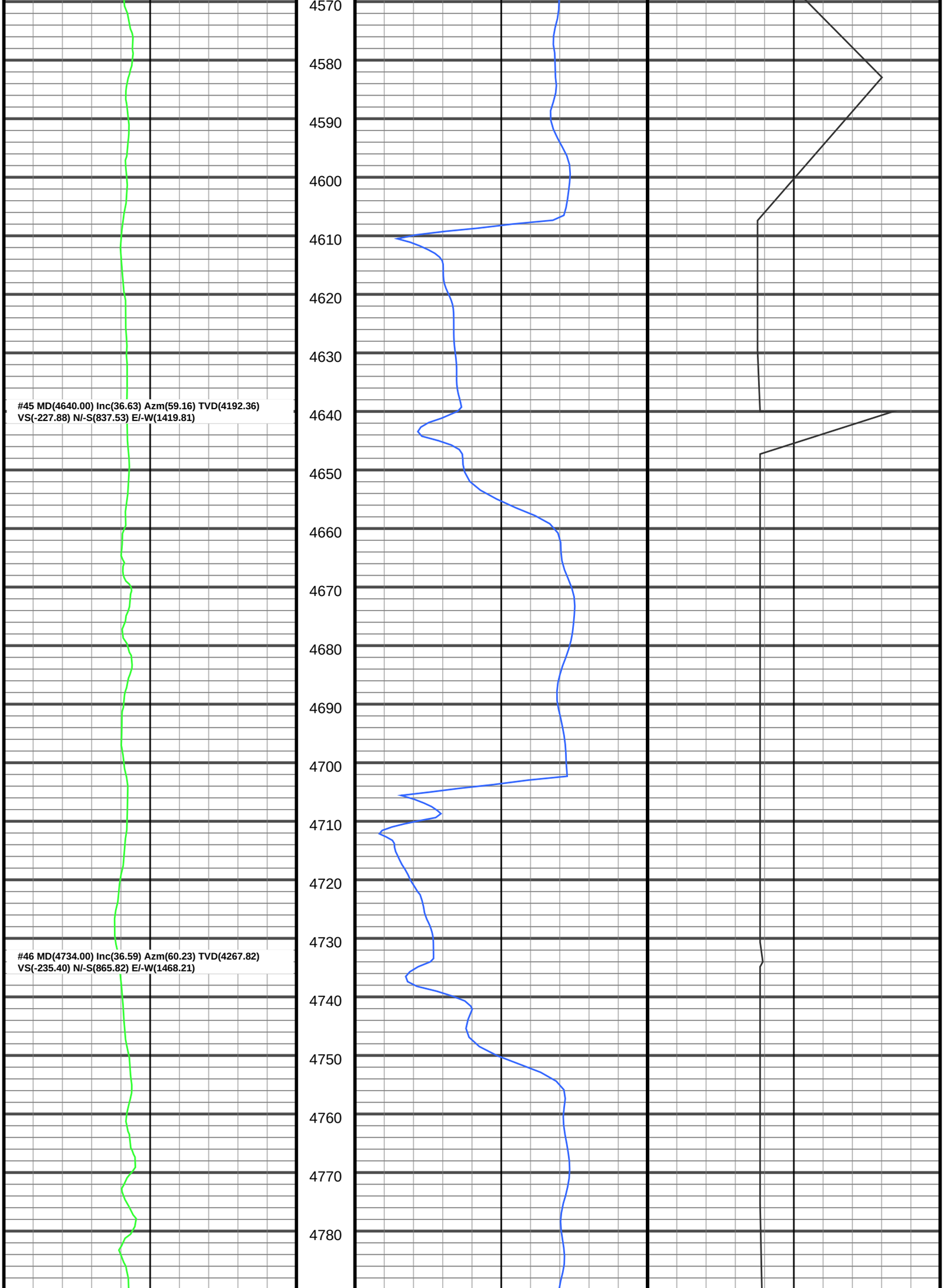

#35 MD(3479.00) Inc(36.25) Azm(54.52) TVD(3243.40)
VS(-111.19) N/-S(477.16) E/-W(857.42)
#36 MD(3575.00) Inc(35.64) Azm(56.58) TVD(3321.12)
VS(-122.77) N/-S(509.04) E/-W(903.88)
#37 MD(3691.00) Inc(35.63) Azm(56.63) TVD(3415.40)
VS(-135.44) N/-S(546.24) E/-W(960.30)
3470
3480
3490
3500
3510
3520
3530
3540
3550
3560
3570
3580
3590
3600
3610
3620
3630
3640
3650
3660
3670
3680
3690

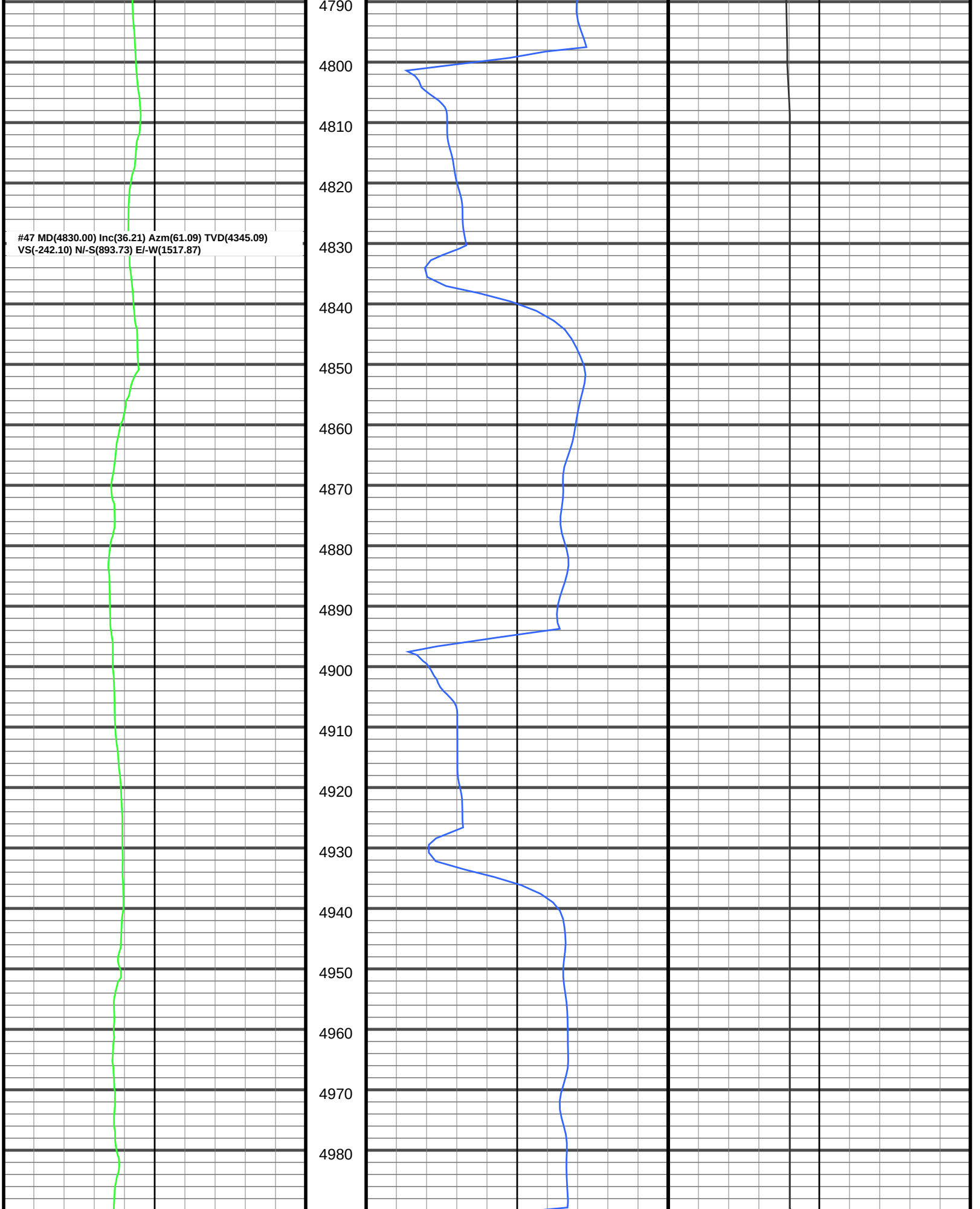

3700
3710
3720
3730
3740
3750
3760
3770
3780
3790
3800
3810
3820
3830
3840
3850
3860
3870
3880
3890
3900
#38 MD(3881.00) Inc(35.54) Azm(51.07) TVD(3569.96)
VS(-161.34) N/-S(611.40) E/-W(1049.50)

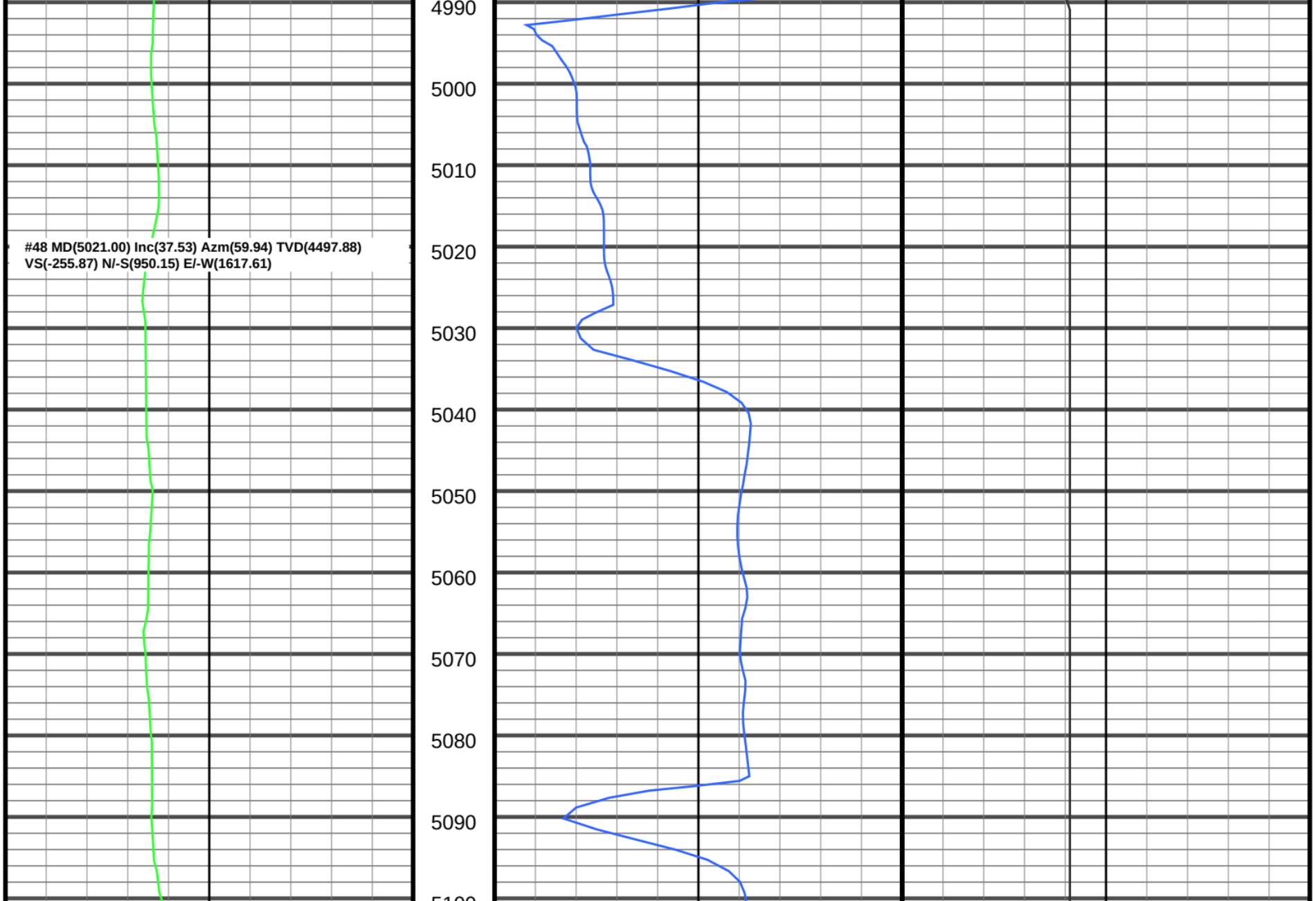

3910
3920
3930
3940
3950
3960
3970
#39 MD(3975.00) Inc(34.40) Azm(55.99) TVD(3647.00)
VS(-174.28) N/-S(643.42) E/-W(1092.78)
3980
3990
4000
4010
4020
4030
4040
4050
4060
#40 MD(4071.00) Inc(33.79) Azm(57.82) TVD(3726.50)
VS(-184.10) N/-S(672.81) E/-W(1137.85)
4070
4080
4090
4100
4110
4120
4130

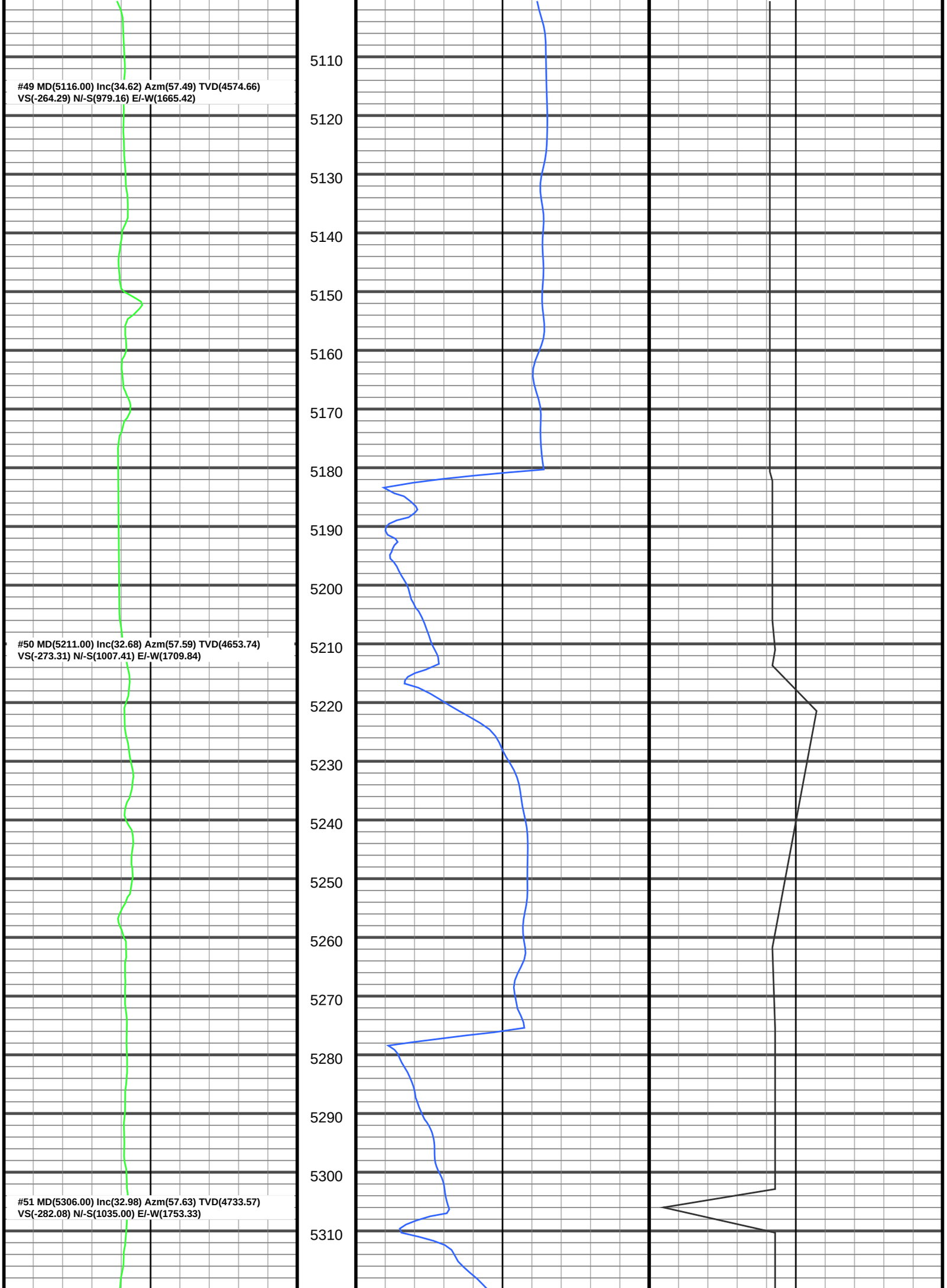

#41 MD(4165.00) Inc(33.77) Azm(59.49) TVD(3804.63)
VS(-192.06) N/-S(699.99) E/-W(1182.49)
#42 MD(4260.00) Inc(34.53) Azm(59.64) TVD(3883.25)
VS(-199.33) N/-S(727.01) E/-W(1228.47)
4140
4150
4160
4170
4180
4190
4200
4210
4220
4230
4240
4250
4260
4270
4280
4290
4300
4310
4320
4330
4340

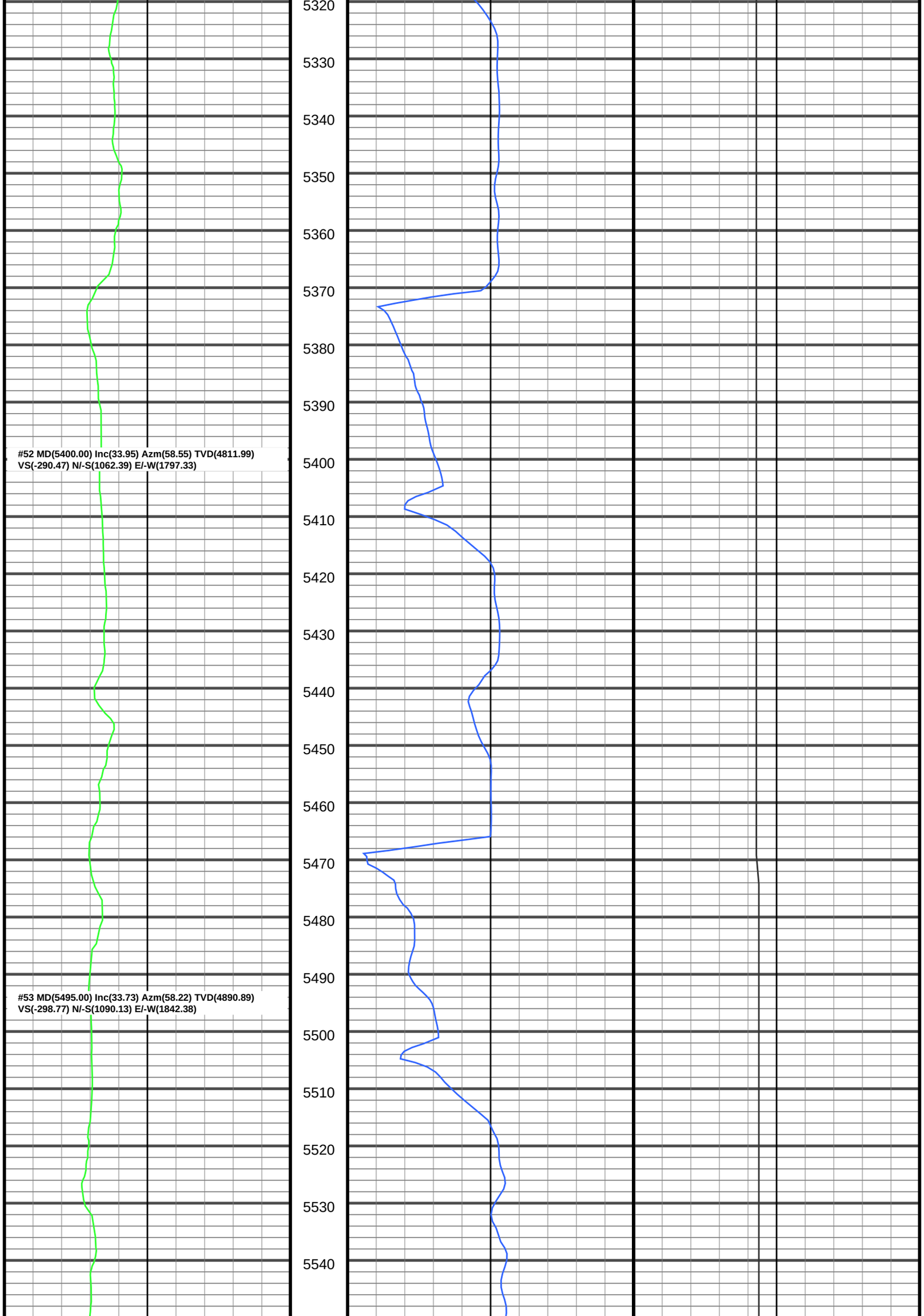

#43 MD(4355.00) Inc(34.96) Azm(61.23) TVD(3961.31)
VS(-205.90) N/-S(753.72) E/-W(1275.56)
#44 MD(4449.00) Inc(35.59) Azm(59.86) TVD(4038.06)
VS(-212.40) N/-S(780.41) E/-W(1322.82)
4350
4360
4370
4380
4390
4400
4410
4420
4430
4440
4450
4460
4470
4480
4490
4500
4510
4520
4530
4540
4550
4560

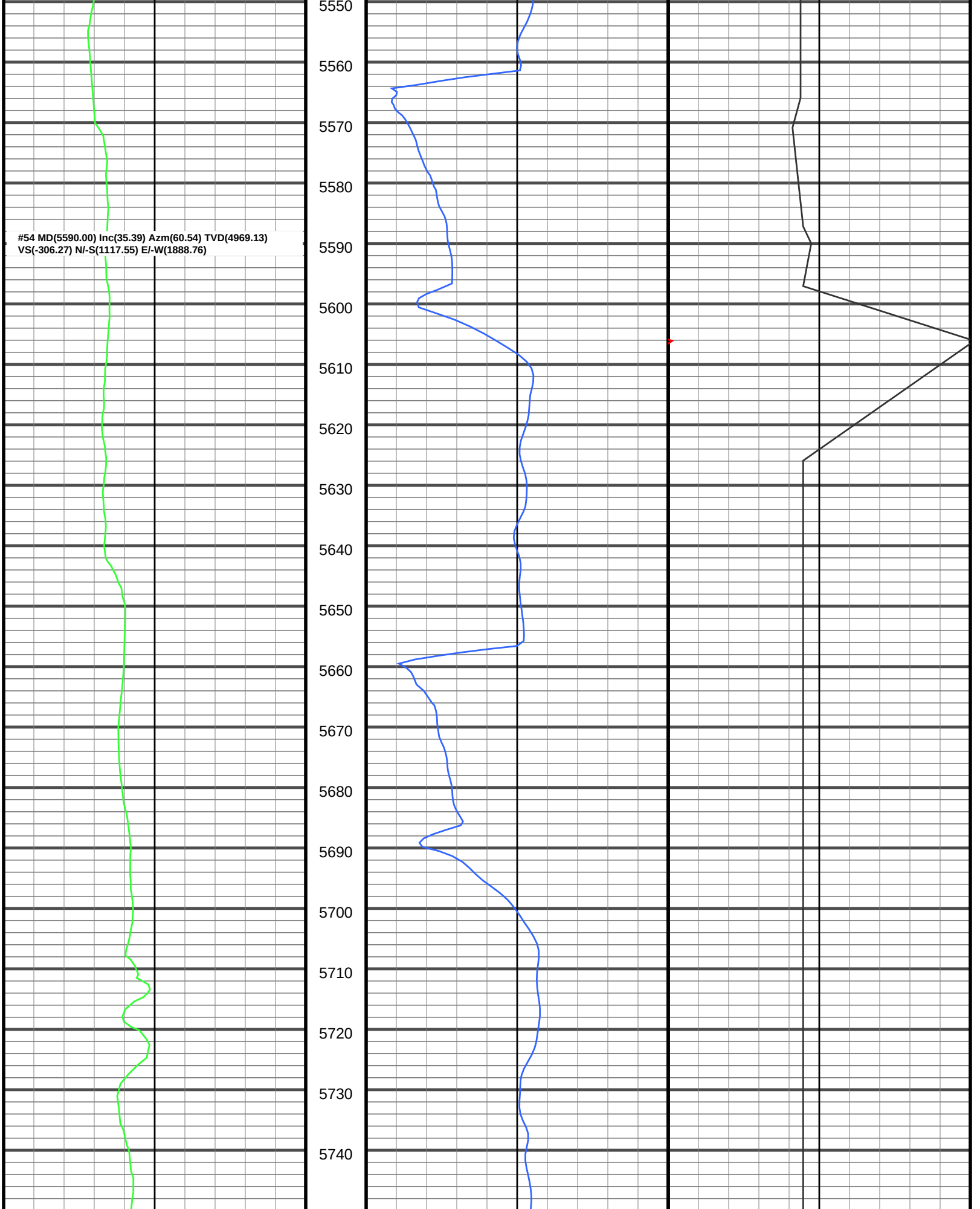

4570
4580
4590
4600
4610
4620
4630
4640
4650
4660
4670
4680
4690
4700
4710
4720
4730
4740
4750
4760
4770
4780
#45 MD(4640.00) Inc(36.63) Azm(59.16) TVD(4192.36)
VS(-227.88) N/-S(837.53) E/-W(1419.81)
#46 MD(4734.00) Inc(36.59) Azm(60.23) TVD(4267.82)
VS(-235.40) N/-S(865.82) E/-W(1468.21)

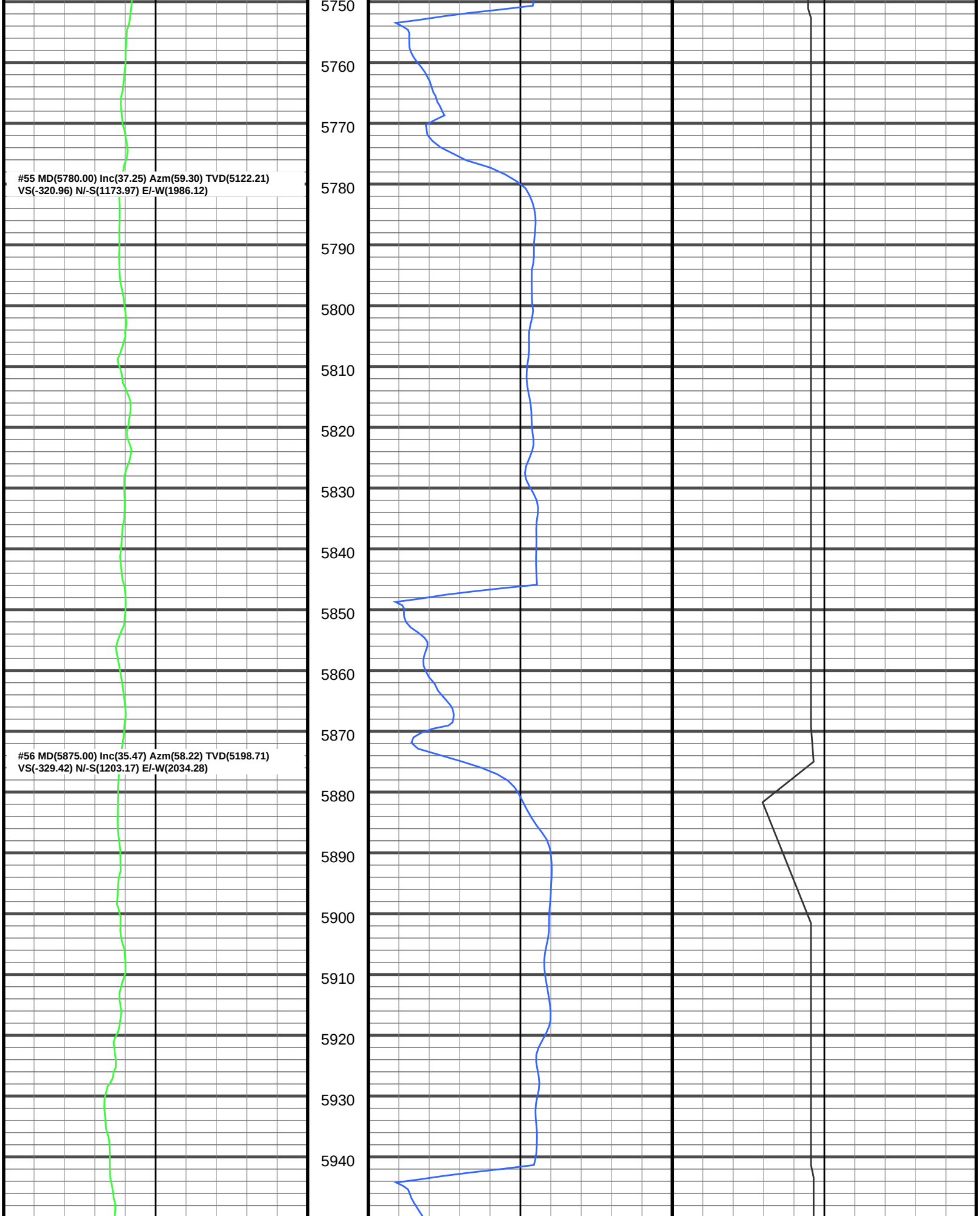

#47 MD(4830.00) Inc(36.21) Azm(61.09) TVD(4345.09)
VS(-242.10) N/-S(893.73) E/-W(1517.87)
4790
4800
4810
4820
4830
4840
4850
4860
4870
4880
4890
4900
4910
4920
4930
4940
4950
4960
4970
4980

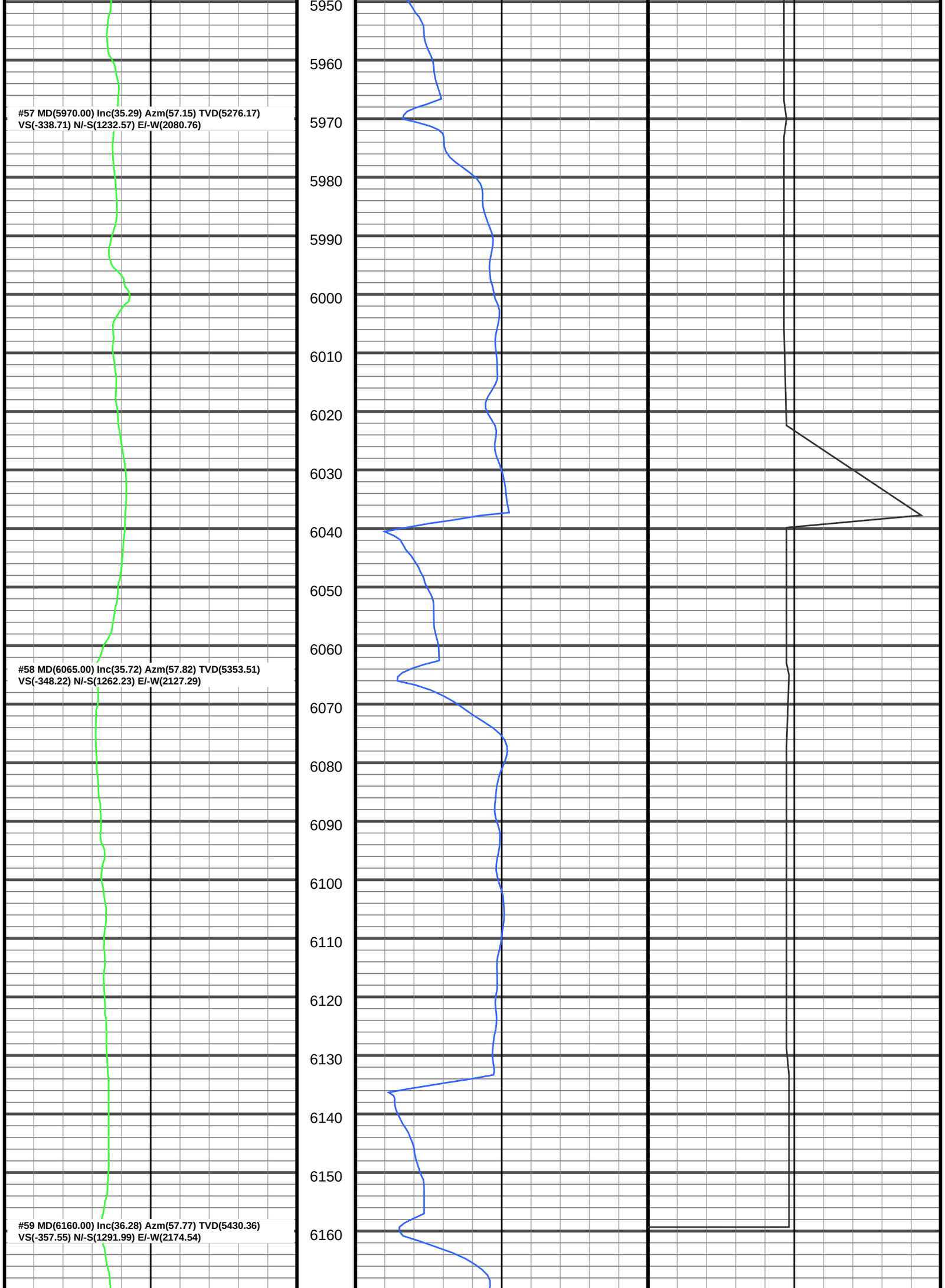

#48 MD(5021.00) Inc(37.53) Azm(59.94) TVD(4497.88)
VS(-255.87) N/-S(950.15) E/-W(1617.61)
4990
5000
5010
5020
5030
5040
5050
5060
5070
5080
5090

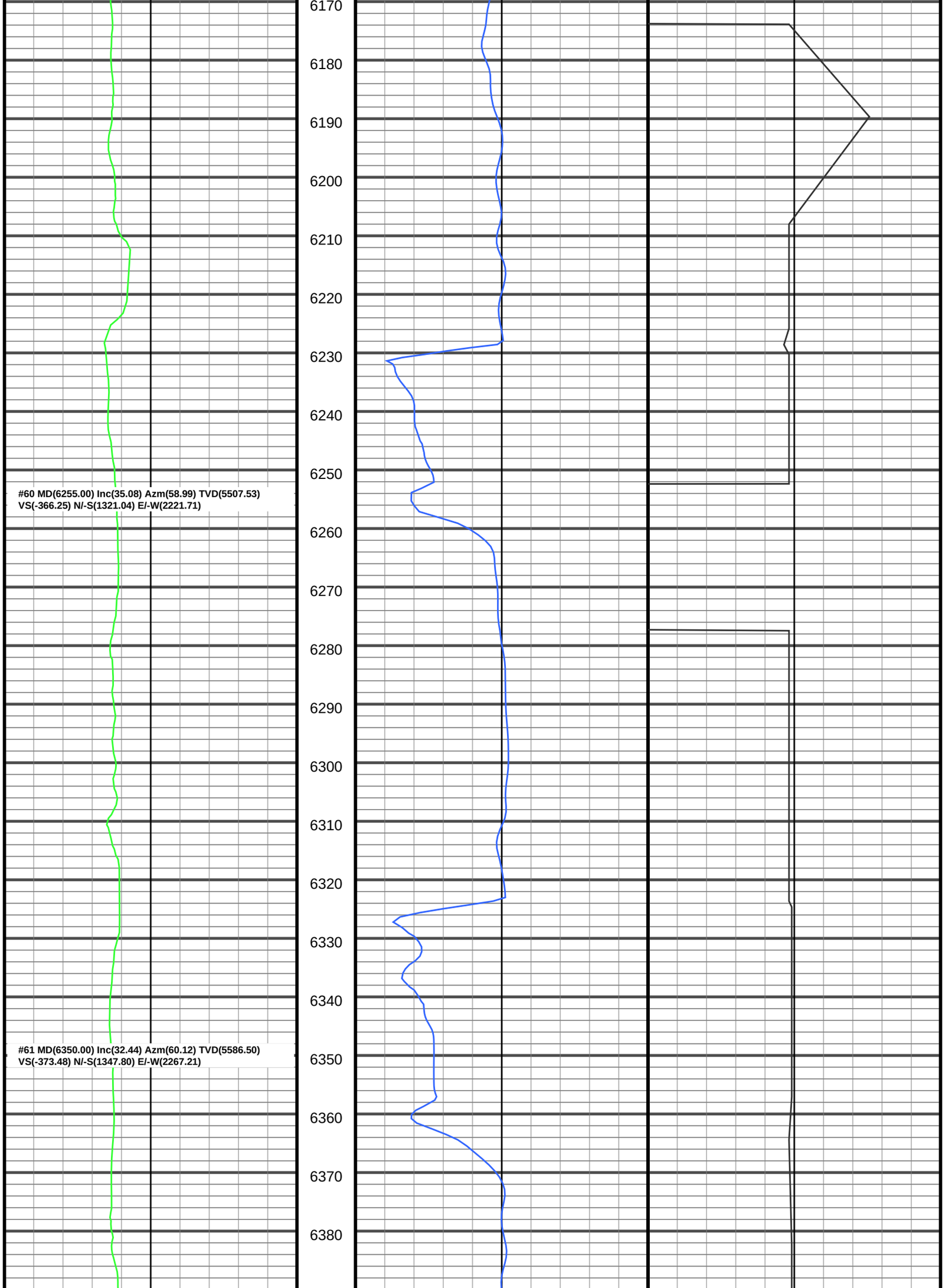

#49 MD(5116.00) Inc(34.62) Azm(57.49) TVD(4574.66)
VS(-264.29) N/-S(979.16) E/-W(1665.42)
#50 MD(5211.00) Inc(32.68) Azm(57.59) TVD(4653.74)
VS(-273.31) N/-S(1007.41) E/-W(1709.84)
#51 MD(5306.00) Inc(32.98) Azm(57.63) TVD(4733.57)
VS(-282.08) N/-S(1035.00) E/-W(1753.33)
5110
5120
5130
5140
5150
5160
5170
5180
5190
5200
5210
5220
5230
5240
5250
5260
5270
5280
5290
5300
5310

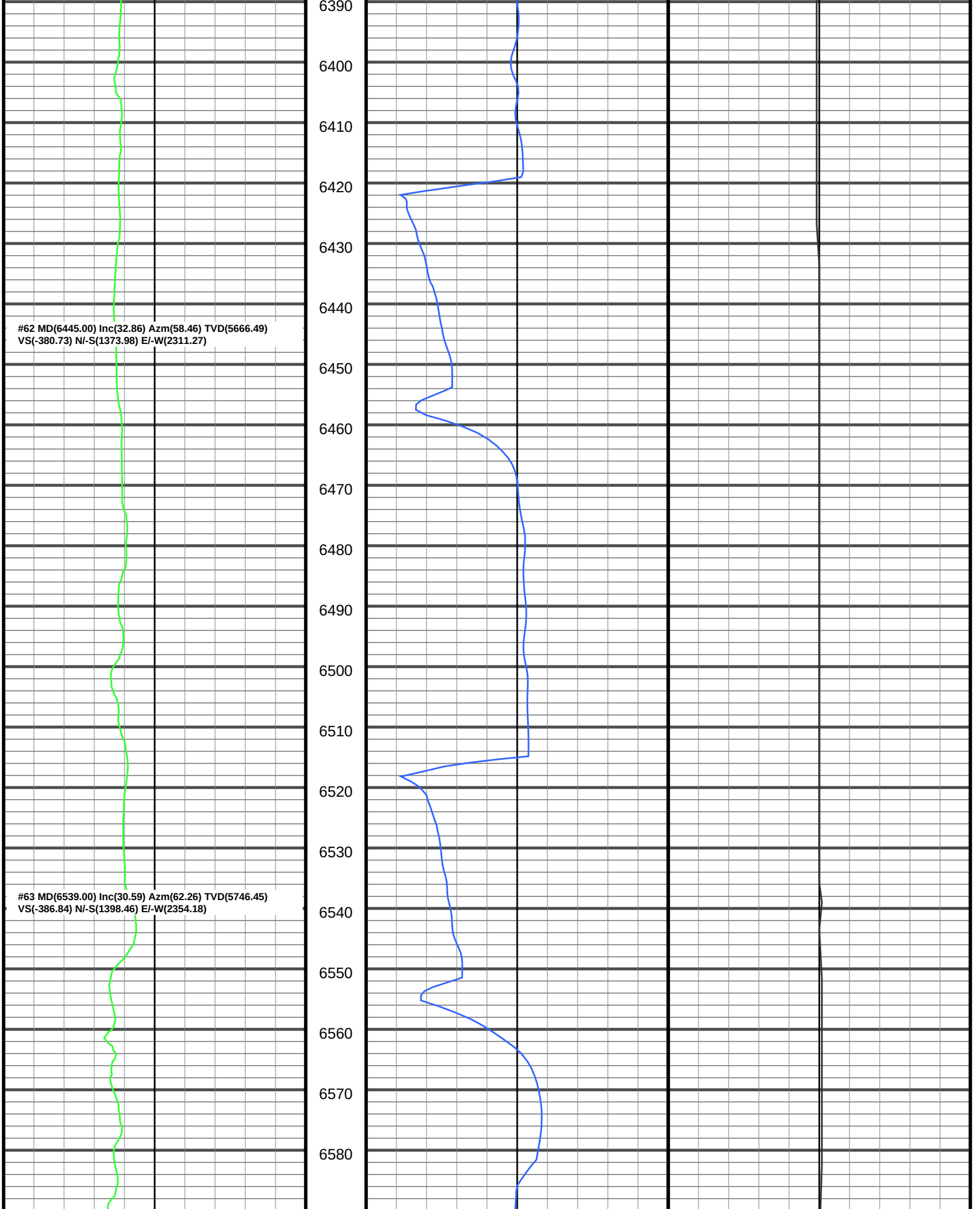

5320
5330
5340
5350
5360
5370
5380
5390
5400
5410
5420
5430
5440
5450
5460
5470
5480
5490
5500
5510
5520
5530
5540
#52 MD(5400.00) Inc(33.95) Azm(58.55) TVD(4811.99)
VS(-290.47) N/-S(1062.39) E/-W(1797.33)
#53 MD(5495.00) Inc(33.73) Azm(58.22) TVD(4890.89)
VS(-298.77) N/-S(1090.13) E/-W(1842.38)

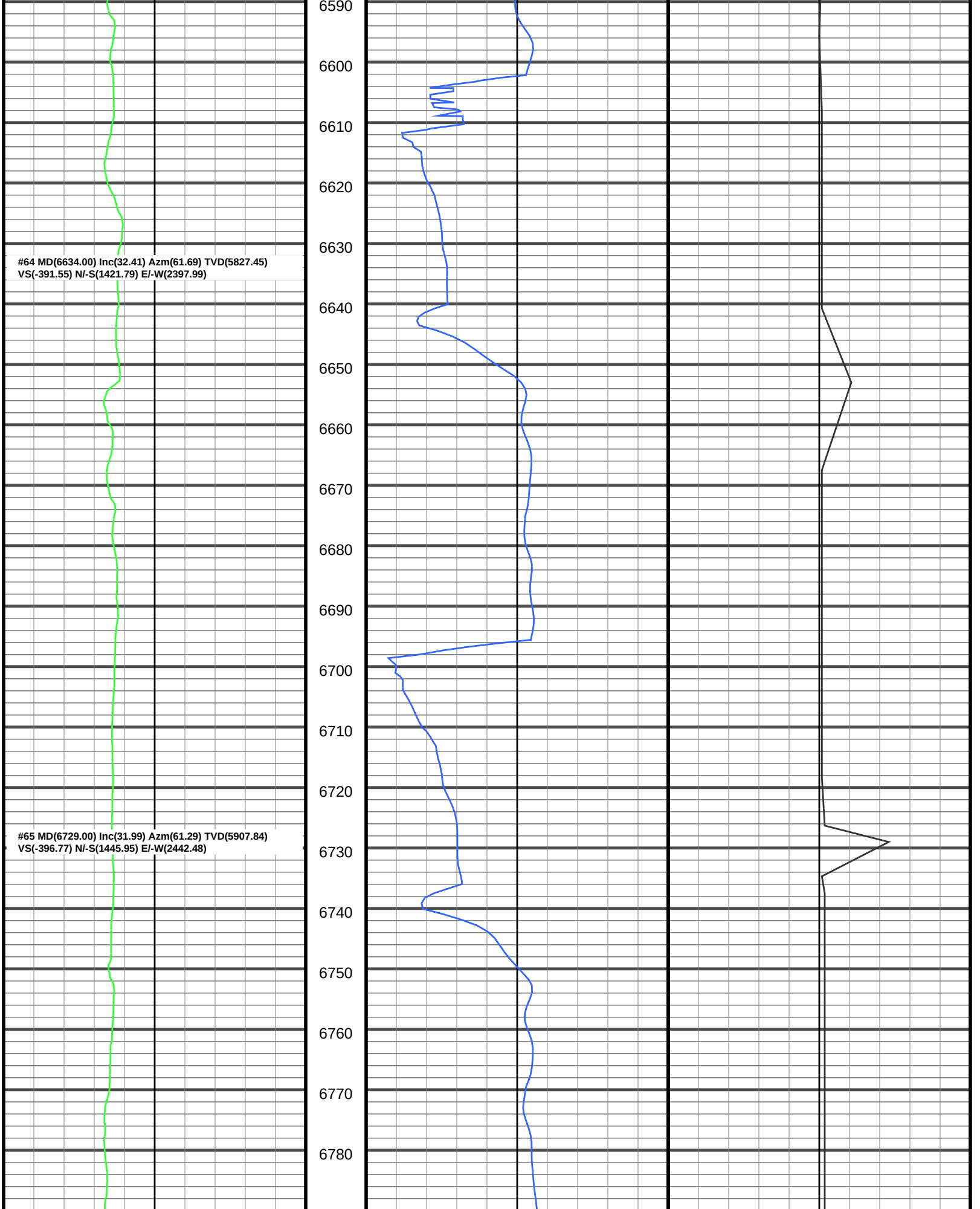

#54 MD(5590.00) Inc(35.39) Azm(60.54) TVD(4969.13)
VS(-306.27) N/-S(1117.55) E/-W(1888.76)
5550
5560
5570
5580
5590
5600
5610
5620
5630
5640
5650
5660
5670
5680
5690
5700
5710
5720
5730
5740

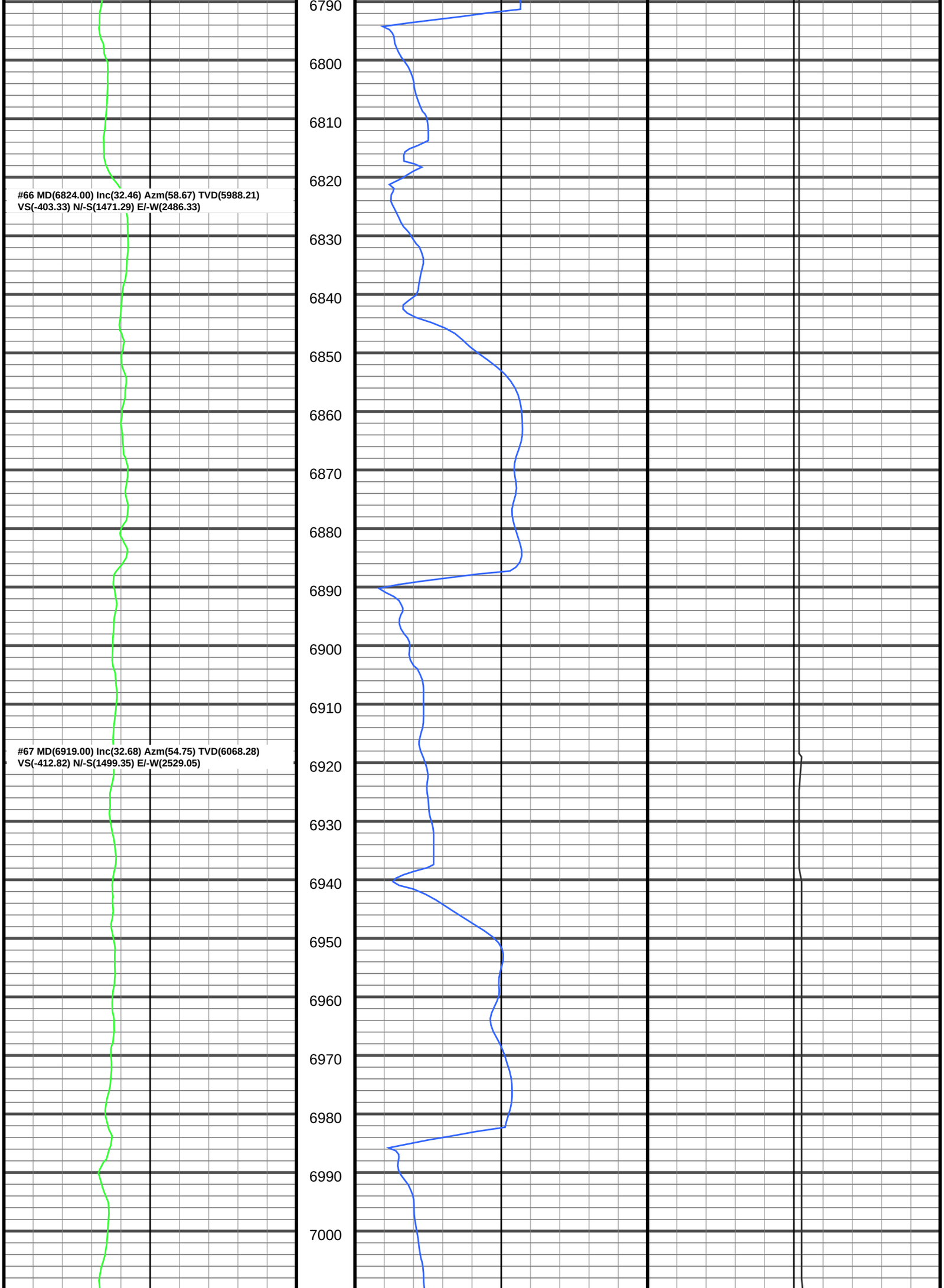

#55 MD(5780.00) Inc(37.25) Azm(59.30) TVD(5122.21)
VS(-320.96) N/-S(1173.97) E/-W(1986.12)
#56 MD(5875.00) Inc(35.47) Azm(58.22) TVD(5198.71)
VS(-329.42) N/-S(1203.17) E/-W(2034.28)
5750
5760
5770
5780
5790
5800
5810
5820
5830
5840
5850
5860
5870
5880
5890
5900
5910
5920
5930
5940

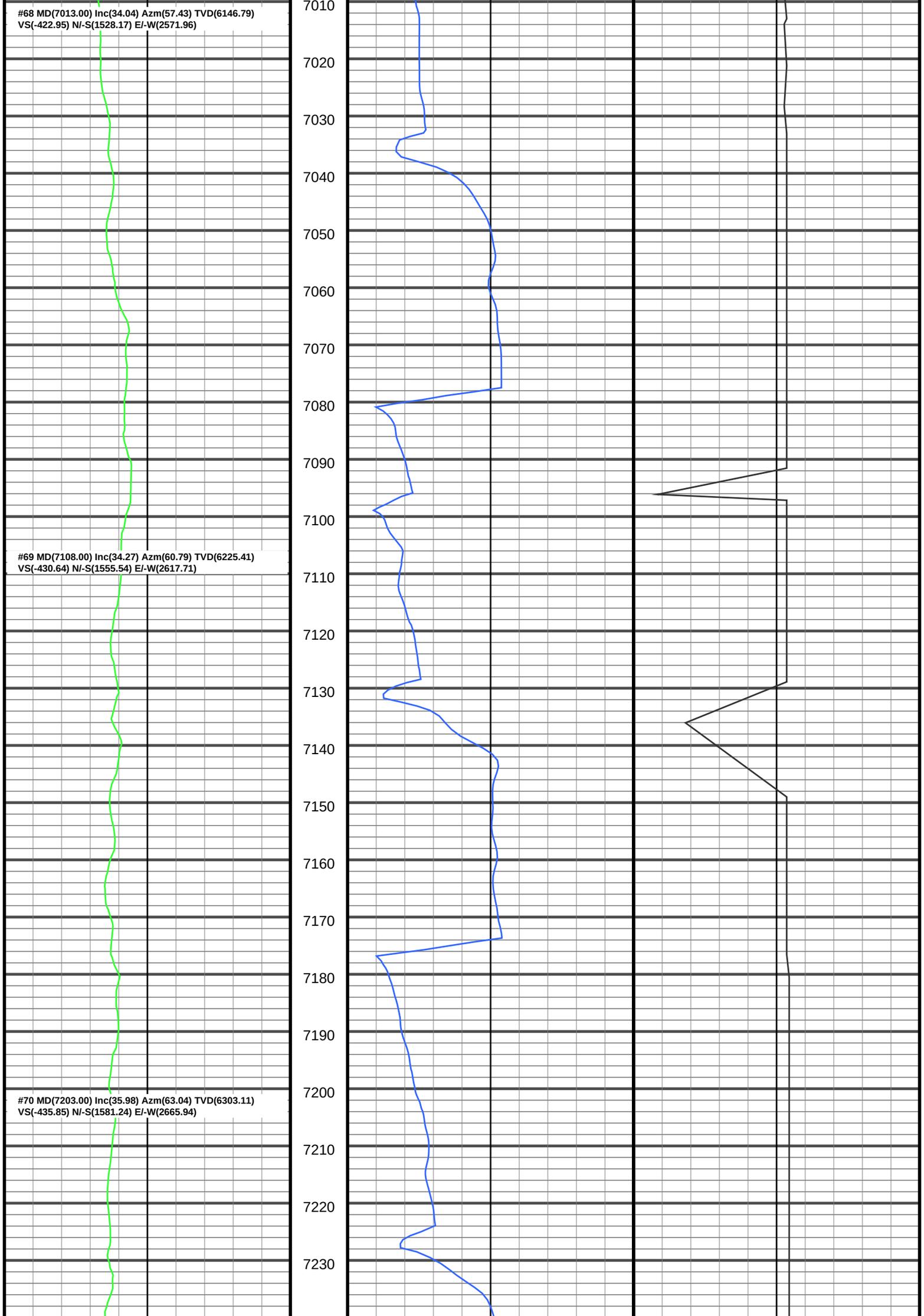

#57 MD(5970.00) Inc(35.29) Azm(57.15) TVD(5276.17)
VS(-338.71) N/-S(1232.57) E/-W(2080.76)
#58 MD(6065.00) Inc(35.72) Azm(57.82) TVD(5353.51)
VS(-348.22) N/-S(1262.23) E/-W(2127.29)
#59 MD(6160.00) Inc(36.28) Azm(57.77) TVD(5430.36)
VS(-357.55) N/-S(1291.99) E/-W(2174.54)
5950
5960
5970
5980
5990
6000
6010
6020
6030
6040
6050
6060
6070
6080
6090
6100
6110
6120
6130
6140
6150
6160

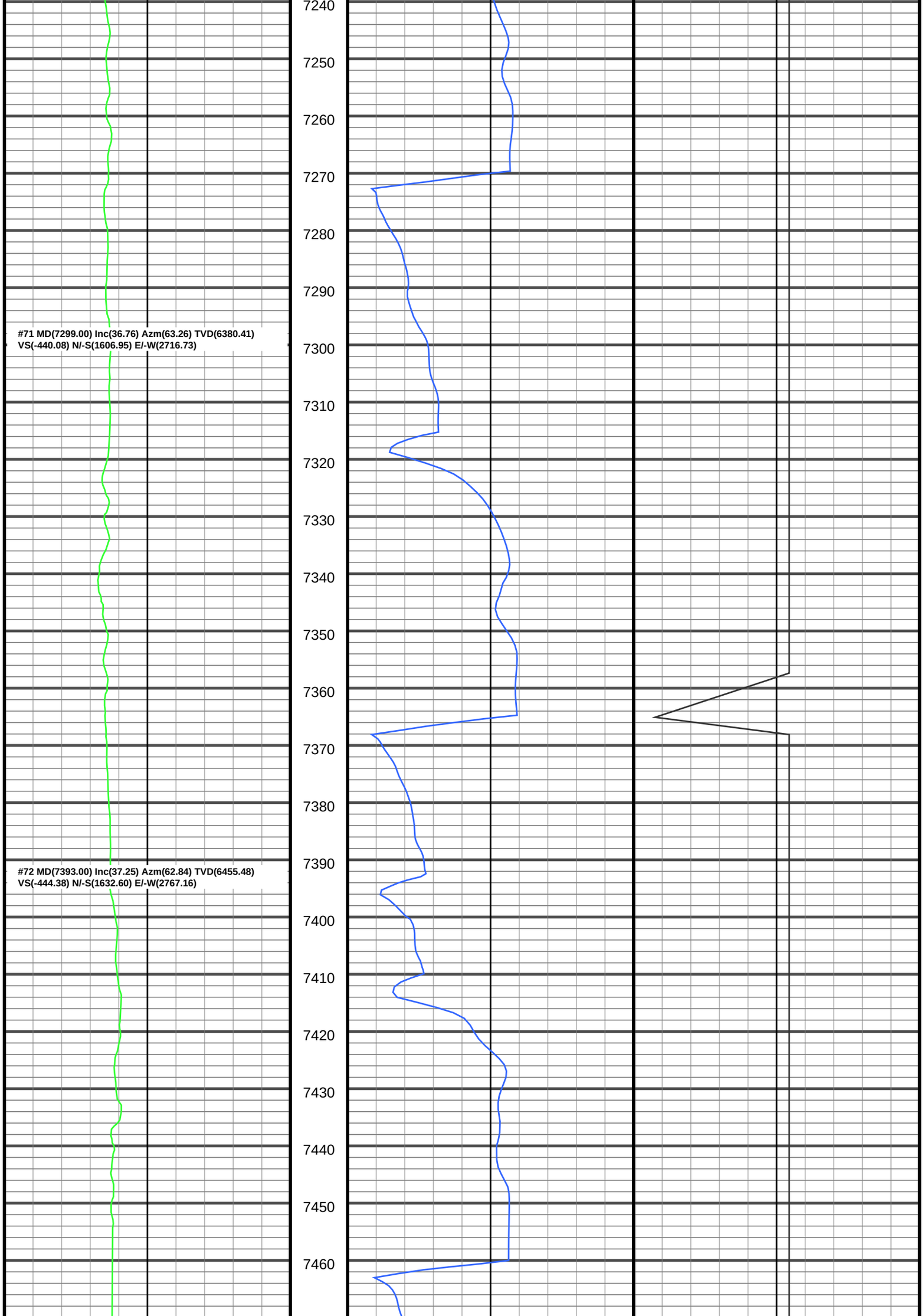

6170
6180
6190
6200
6210
6220
6230
6240
6250
6260
6270
6280
6290
6300
6310
6320
6330
6340
6350
6360
6370
6380
#60 MD(6255.00) Inc(35.08) Azm(58.99) TVD(5507.53)
VS(-366.25) N/-S(1321.04) E/-W(2221.71)
#61 MD(6350.00) Inc(32.44) Azm(60.12) TVD(5586.50)
VS(-373.48) N/-S(1347.80) E/-W(2267.21)

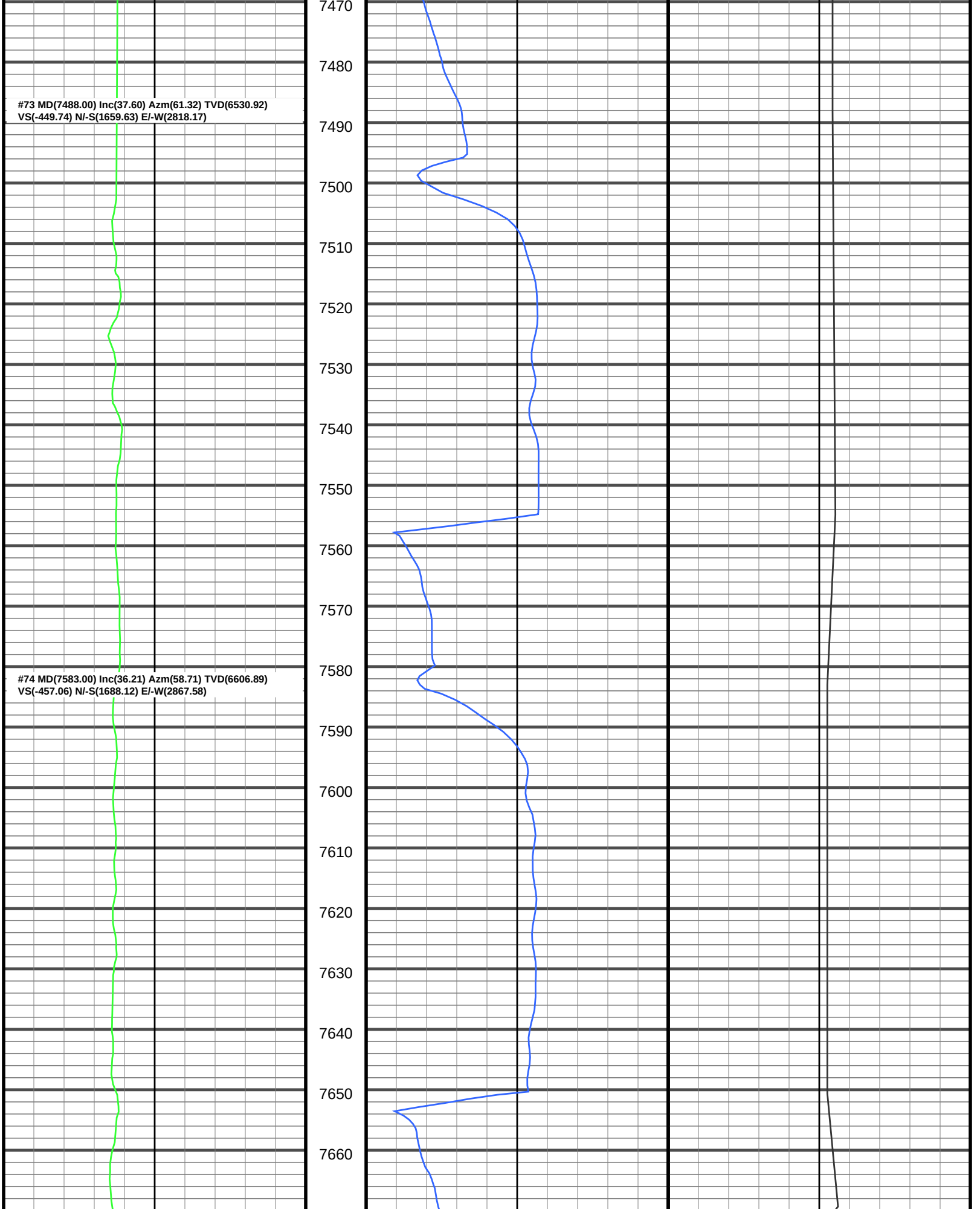

6390
6400
6410
6420
6430
6440
#62 MD(6445.00) Inc(32.86) Azm(58.46) TVD(5666.49)
VS(-380.73) N/-S(1373.98) E/-W(2311.27)
6450
6460
6470
6480
6490
6500
6510
6520
6530
#63 MD(6539.00) Inc(30.59) Azm(62.26) TVD(5746.45)
VS(-386.84) N/-S(1398.46) E/-W(2354.18)
6540
6550
6560
6570
6580

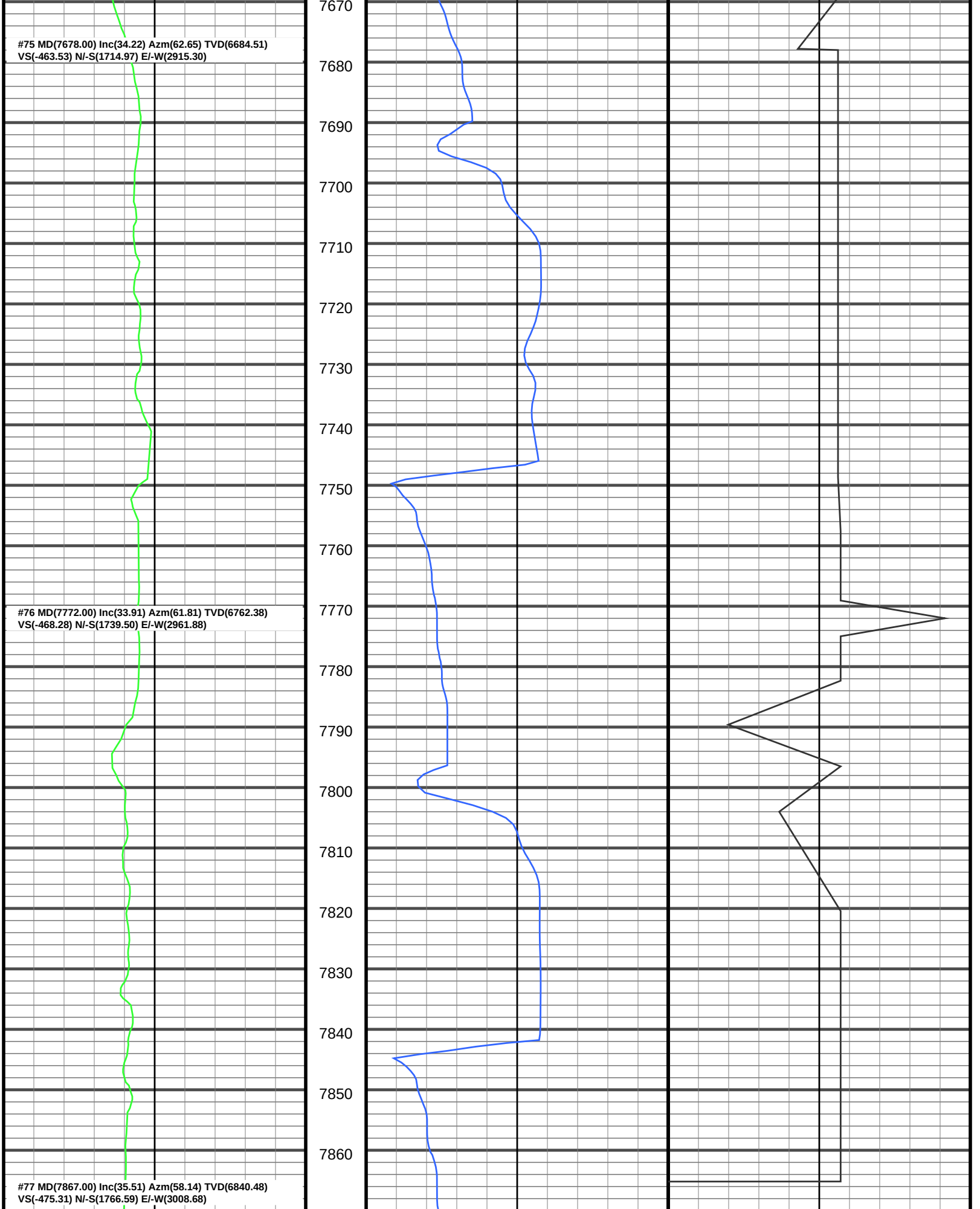

6590
6600
6610
6620
6630
6640
6650
6660
6670
6680
6690
6700
6710
6720
6730
6740
6750
6760
6770
6780
#64 MD(6634.00) Inc(32.41) Azm(61.69) TVD(5827.45)
VS(-391.55) N/-S(1421.79) E/-W(2397.99)
#65 MD(6729.00) Inc(31.99) Azm(61.29) TVD(5907.84)
VS(-396.77) N/-S(1445.95) E/-W(2442.48)

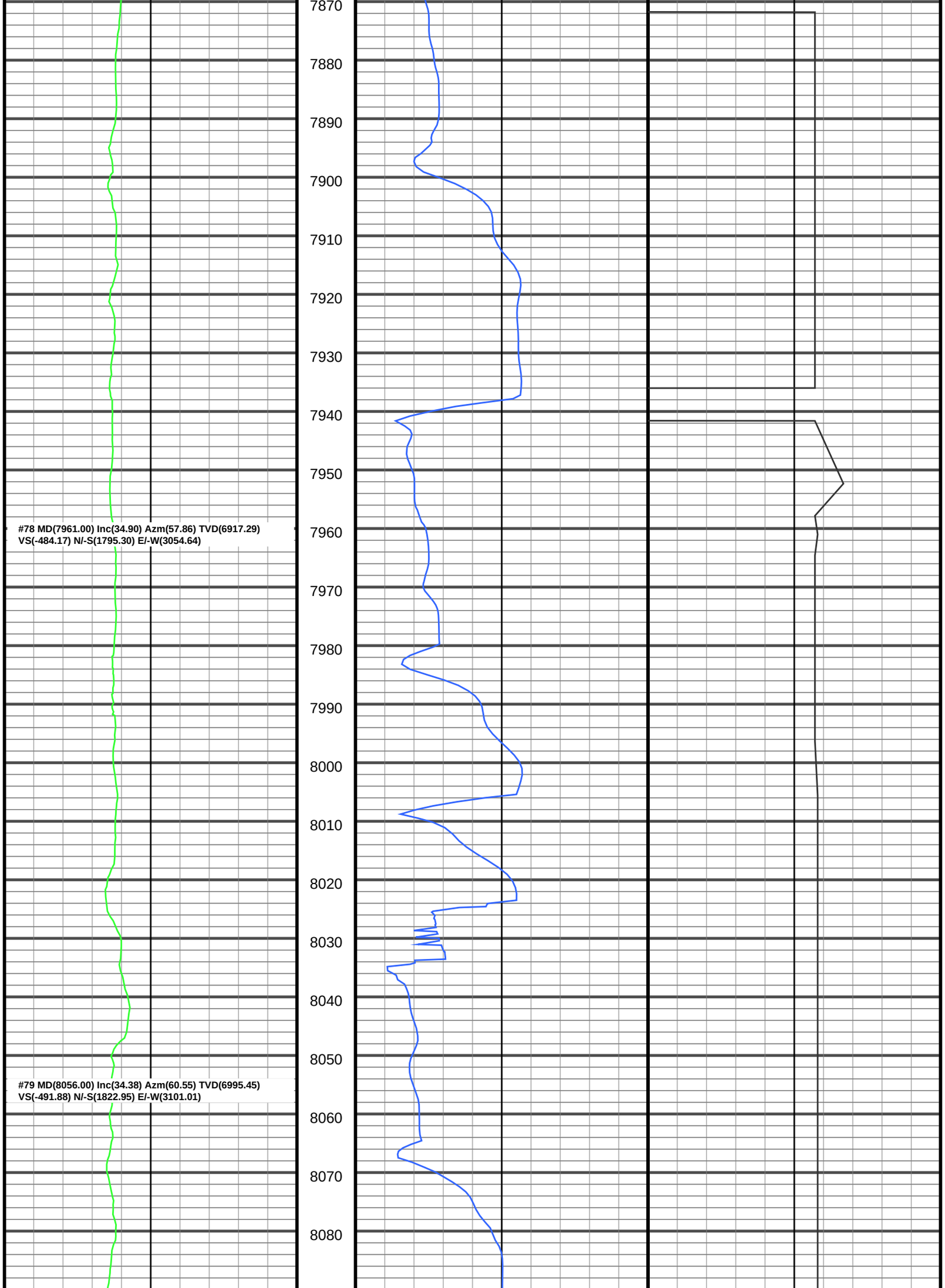

#66 MD(6824.00) Inc(32.46) Azm(58.67) TVD(5988.21)
VS(-403.33) N/-S(1471.29) E/-W(2486.33)
#67 MD(6919.00) Inc(32.68) Azm(54.75) TVD(6068.28)
VS(-412.82) N/-S(1499.35) E/-W(2529.05)
6790
6800
6810
6820
6830
6840
6850
6860
6870
6880
6890
6900
6910
6920
6930
6940
6950
6960
6970
6980
6990
7000

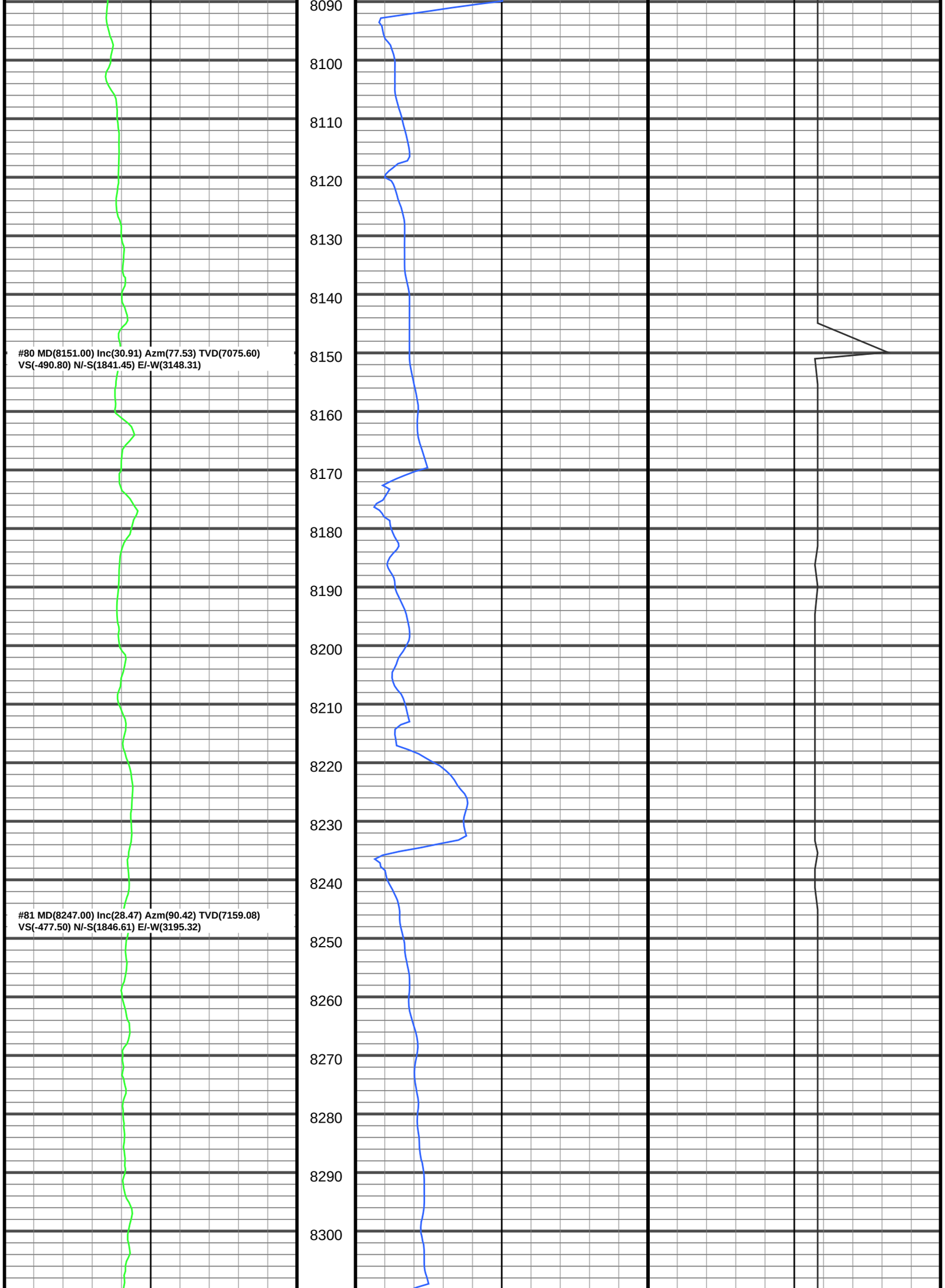

#68 MD(7013.00) Inc(34.04) Azm(57.43) TVD(6146.79)
VS(-422.95) N/-S(1528.17) E/-W(2571.96)
#69 MD(7108.00) Inc(34.27) Azm(60.79) TVD(6225.41)
VS(-430.64) N/-S(1555.54) E/-W(2617.71)
#70 MD(7203.00) Inc(35.98) Azm(63.04) TVD(6303.11)
VS(-435.85) N/-S(1581.24) E/-W(2665.94)
7010
7020
7030
7040
7050
7060
7070
7080
7090
7100
7110
7120
7130
7140
7150
7160
7170
7180
7190
7200
7210
7220
7230

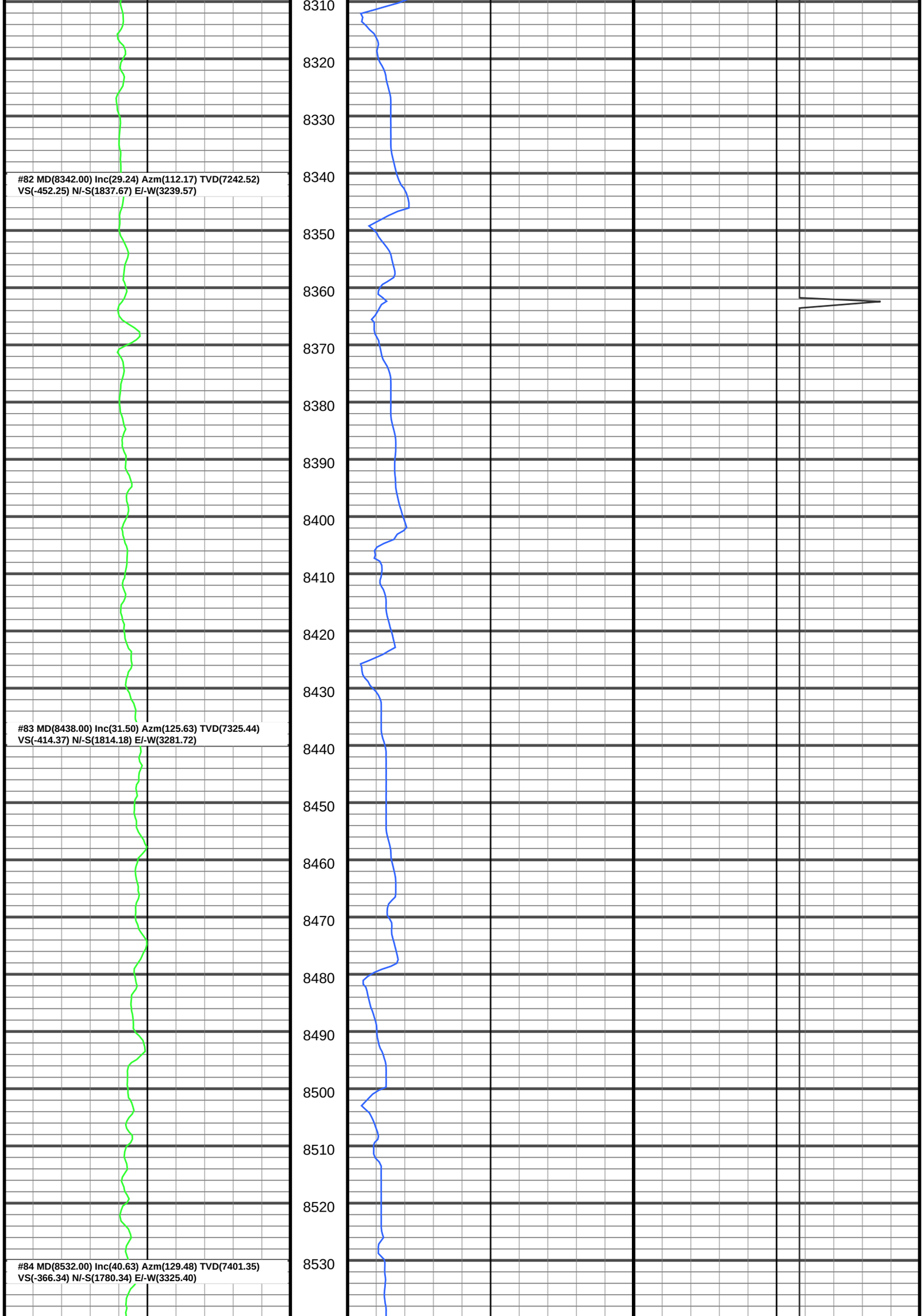

#71 MD(7299.00) Inc(36.76) Azm(63.26) TVD(6380.41)
VS(-440.08) N/-S(1606.95) E/-W(2716.73)
#72 MD(7393.00) Inc(37.25) Azm(62.84) TVD(6455.48)
VS(-444.38) N/-S(1632.60) E/-W(2767.16)
7240
7250
7260
7270
7280
7290
7300
7310
7320
7330
7340
7350
7360
7370
7380
7390
7400
7410
7420
7430
7440
7450
7460

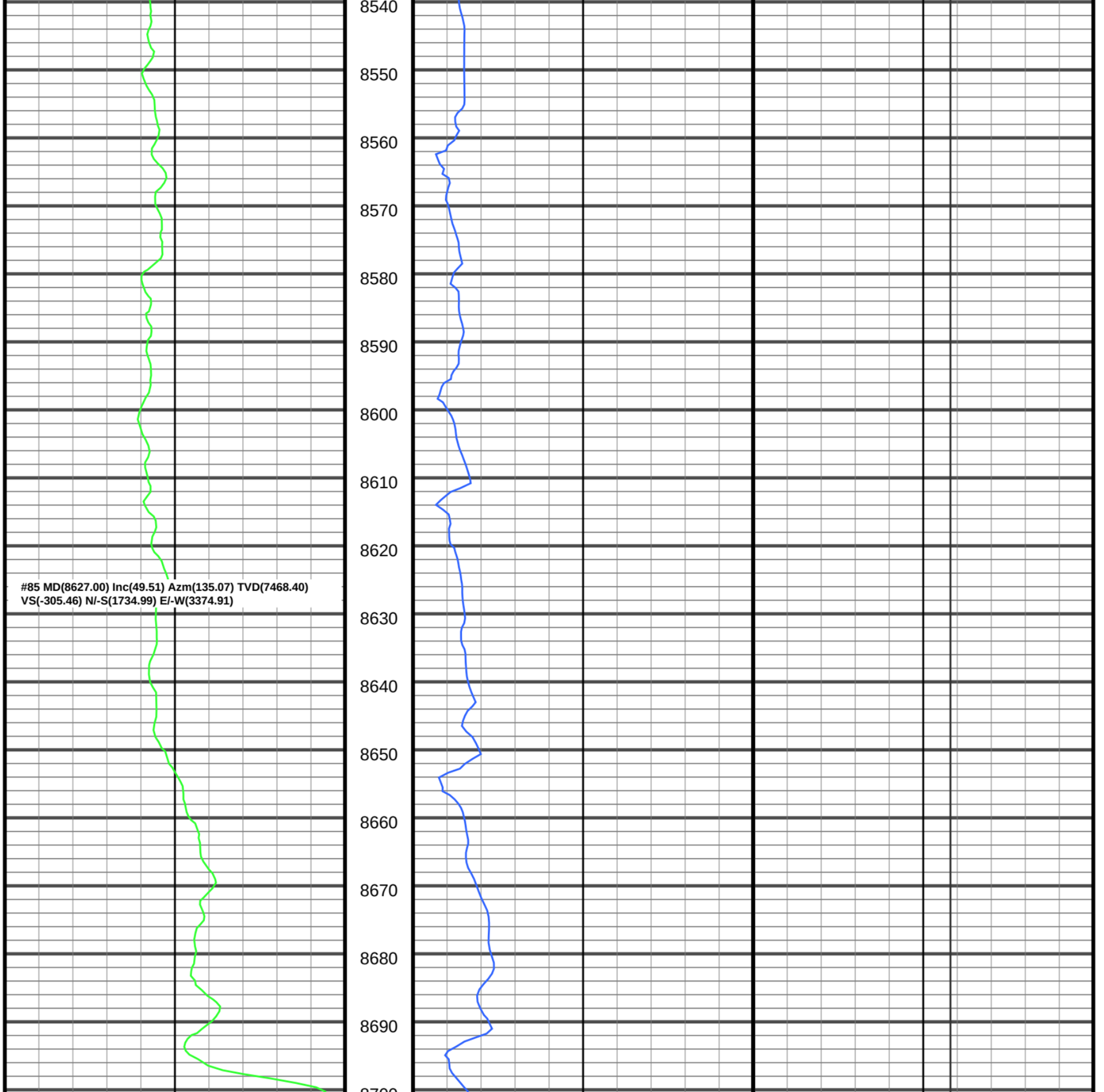

#73 MD(7488.00) Inc(37.60) Azm(61.32) TVD(6530.92)
VS(-449.74) N/-S(1659.63) E/-W(2818.17)
#74 MD(7583.00) Inc(36.21) Azm(58.71) TVD(6606.89)
VS(-457.06) N/-S(1688.12) E/-W(2867.58)
7470
7480
7490
7500
7510
7520
7530
7540
7550
7560
7570
7580
7590
7600
7610
7620
7630
7640
7650
7660

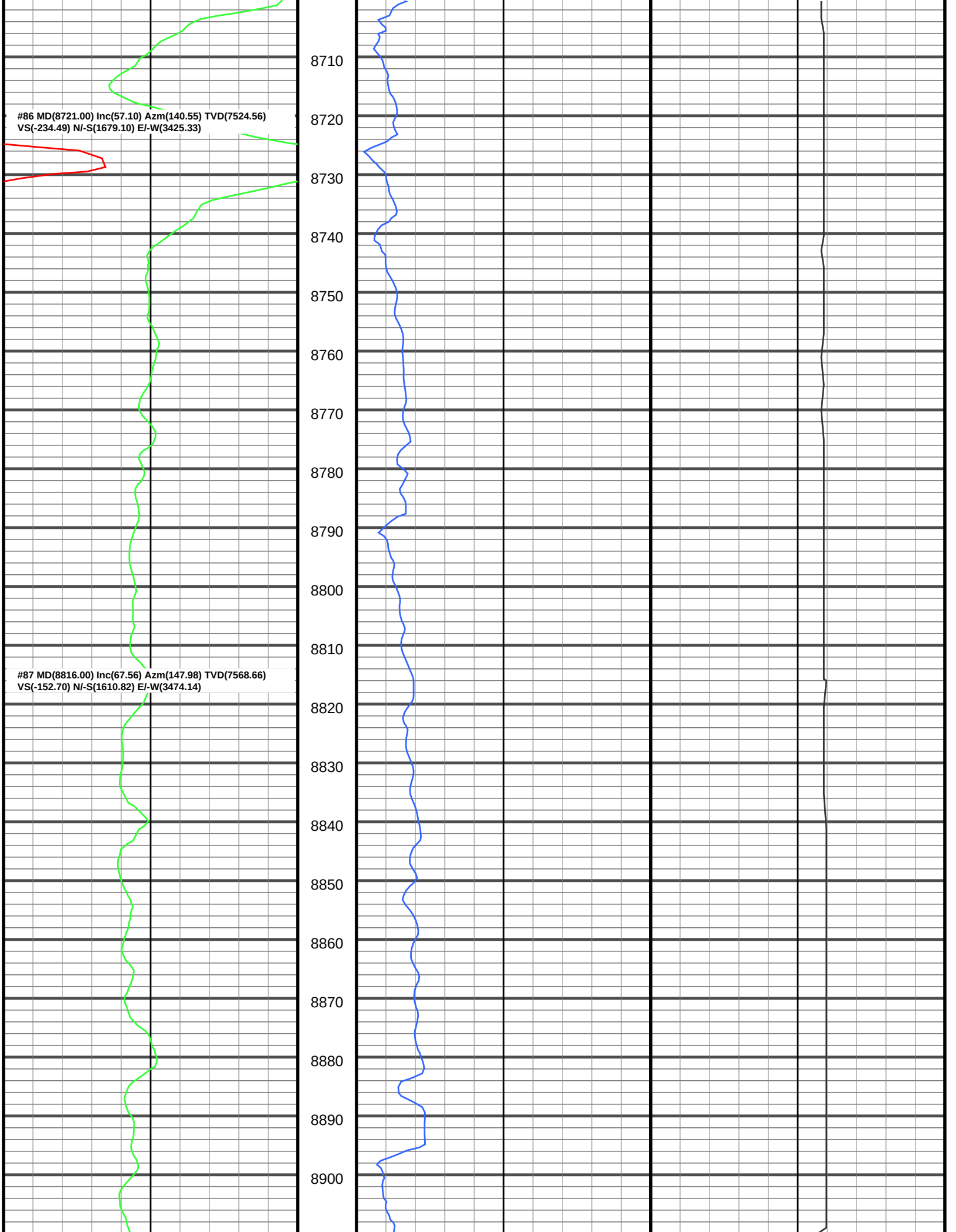

#75 MD(7678.00) Inc(34.22) Azm(62.65) TVD(6684.51)
VS(-463.53) N/-S(1714.97) E/-W(2915.30)
#76 MD(7772.00) Inc(33.91) Azm(61.81) TVD(6762.38)
VS(-468.28) N/-S(1739.50) E/-W(2961.88)
#77 MD(7867.00) Inc(35.51) Azm(58.14) TVD(6840.48)
VS(-475.31) N/-S(1766.59) E/-W(3008.68)
7670
7680
7690
7700
7710
7720
7730
7740
7750
7760
7770
7780
7790
7800
7810
7820
7830
7840
7850
7860

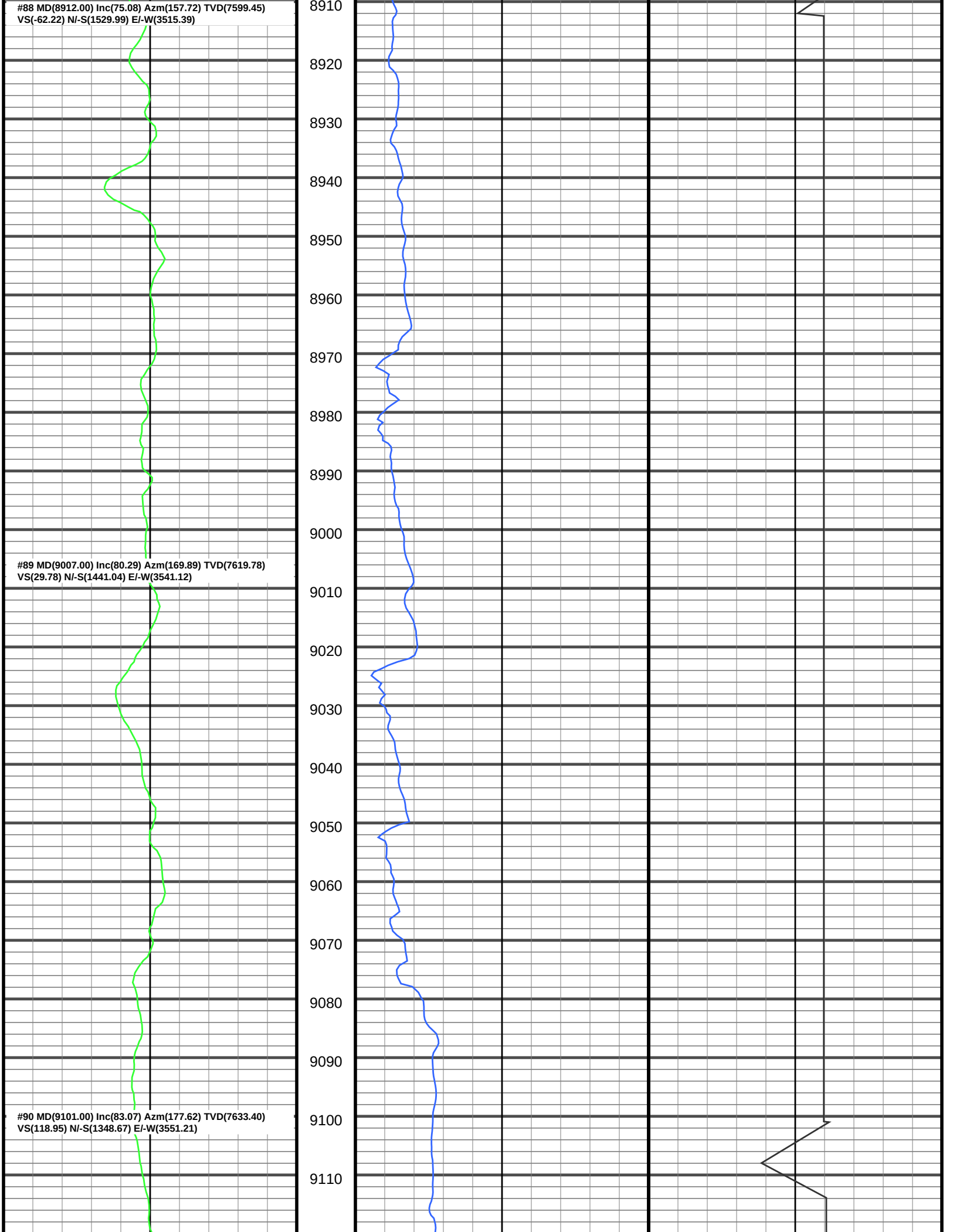

7870
7880
7890
7900
7910
7920
7930
7940
7950
7960
7970
7980
7990
8000
8010
8020
8030
8040
8050
8060
8070
8080
#78 MD(7961.00) Inc(34.90) Azm(57.86) TVD(6917.29)
VS(-484.17) N/-S(1795.30) E/-W(3054.64)
#79 MD(8056.00) Inc(34.38) Azm(60.55) TVD(6995.45)
VS(-491.88) N/-S(1822.95) E/-W(3101.01)

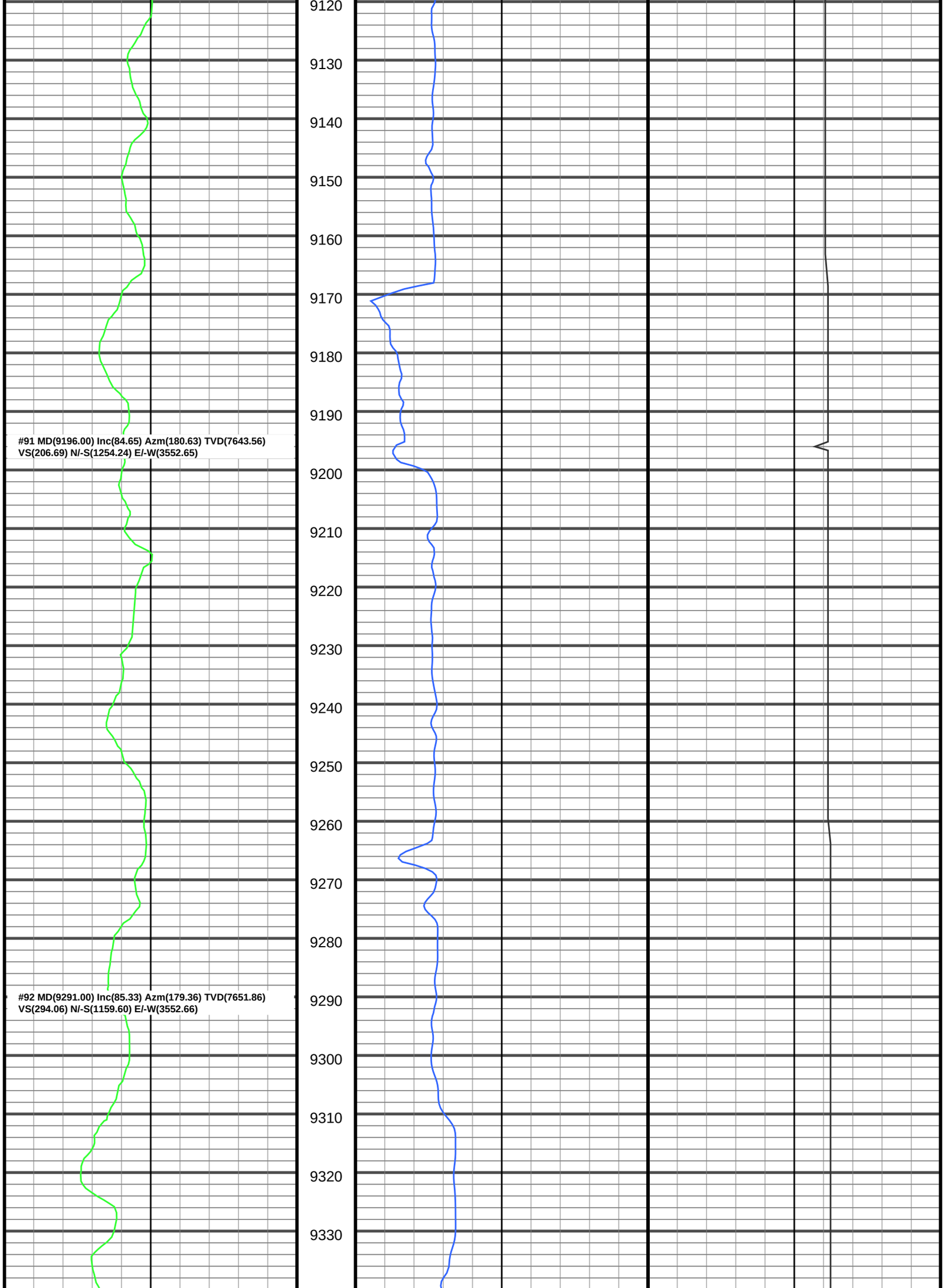

8090
8100
8110
8120
8130
8140
#80 MD(8151.00) Inc(30.91) Azm(77.53) TVD(7075.60)
VS(-490.80) N/-S(1841.45) E/-W(3148.31)
8150
8160
8170
8180
8190
8200
8210
8220
8230
8240
#81 MD(8247.00) Inc(28.47) Azm(90.42) TVD(7159.08)
VS(-477.50) N/-S(1846.61) E/-W(3195.32)
8250
8260
8270
8280
8290
8300

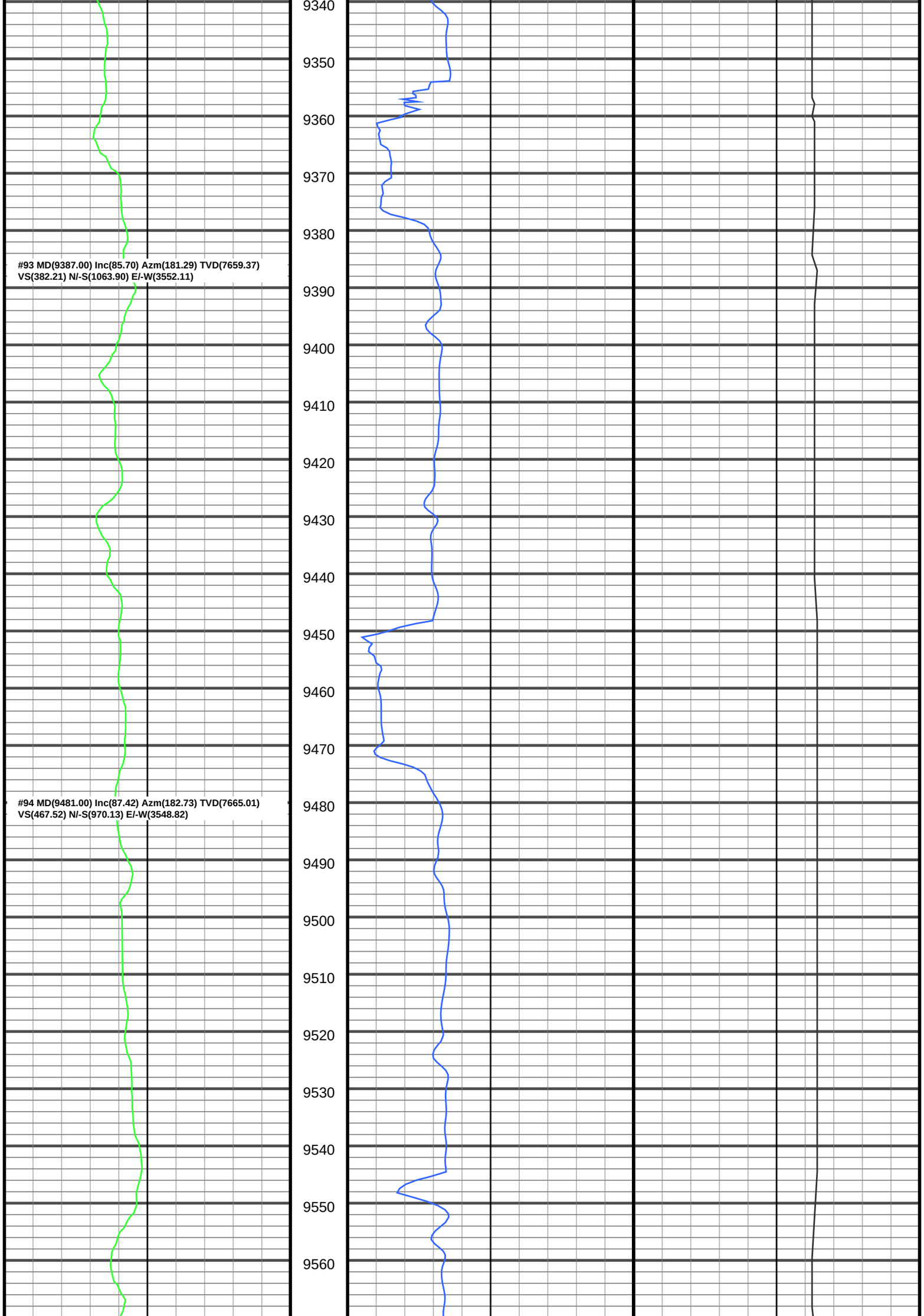

#82 MD(8342.00) Inc(29.24) Azm(112.17) TVD(7242.52)
VS(-452.25) N/-S(1837.67) E/-W(3239.57)
#83 MD(8438.00) Inc(31.50) Azm(125.63) TVD(7325.44)
VS(-414.37) N/-S(1814.18) E/-W(3281.72)
#84 MD(8532.00) Inc(40.63) Azm(129.48) TVD(7401.35)
VS(-366.34) N/-S(1780.34) E/-W(3325.40)
8310
8320
8330
8340
8350
8360
8370
8380
8390
8400
8410
8420
8430
8440
8450
8460
8470
8480
8490
8500
8510
8520
8530

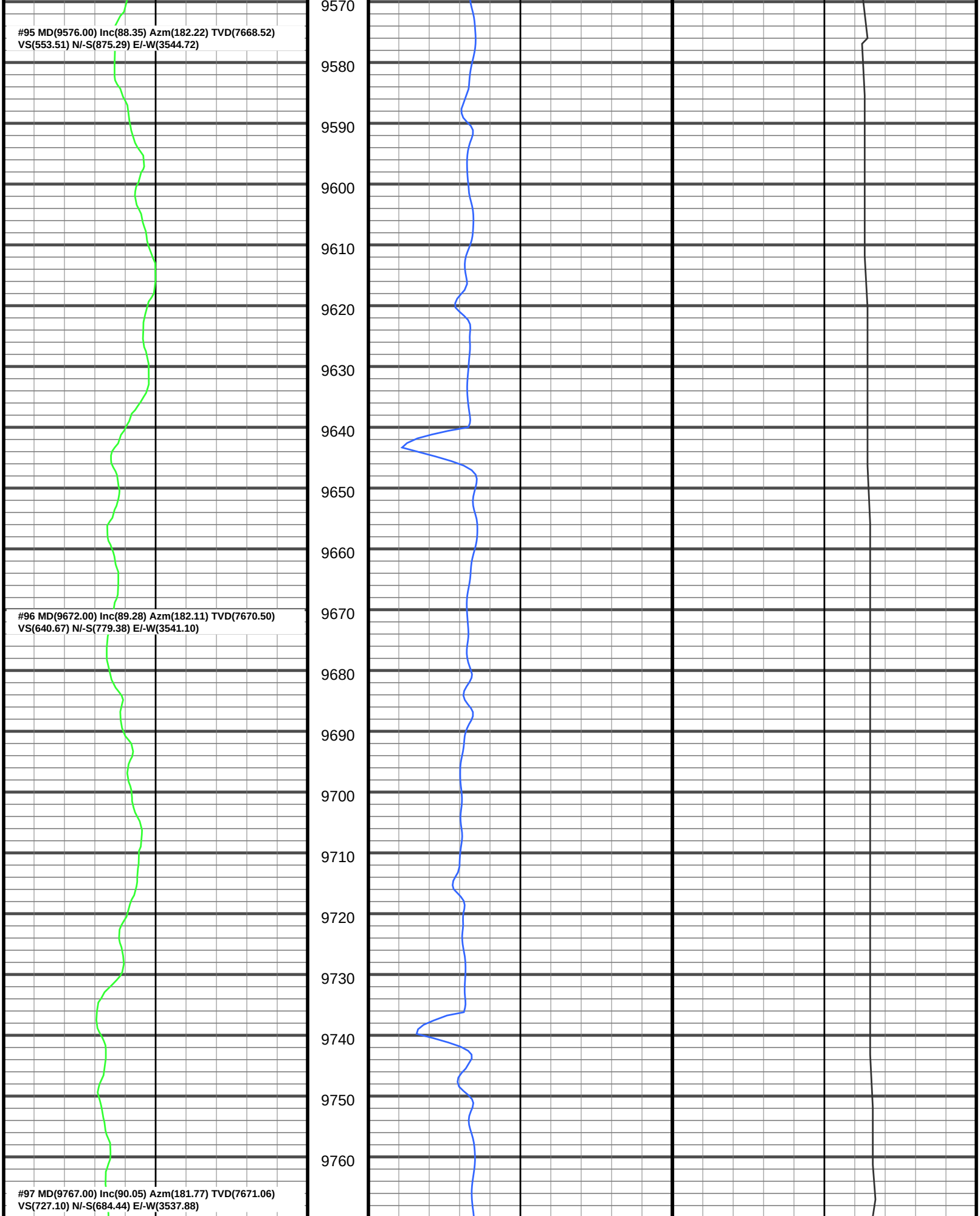

8540
8550
8560
8570
8580
8590
8600
8610
8620
#85 MD(8627.00) Inc(49.51) Azm(135.07) TVD(7468.40)
VS(-305.46) N/-S(1734.99) E/-W(3374.91)
8630
8640
8650
8660
8670
8680
8690

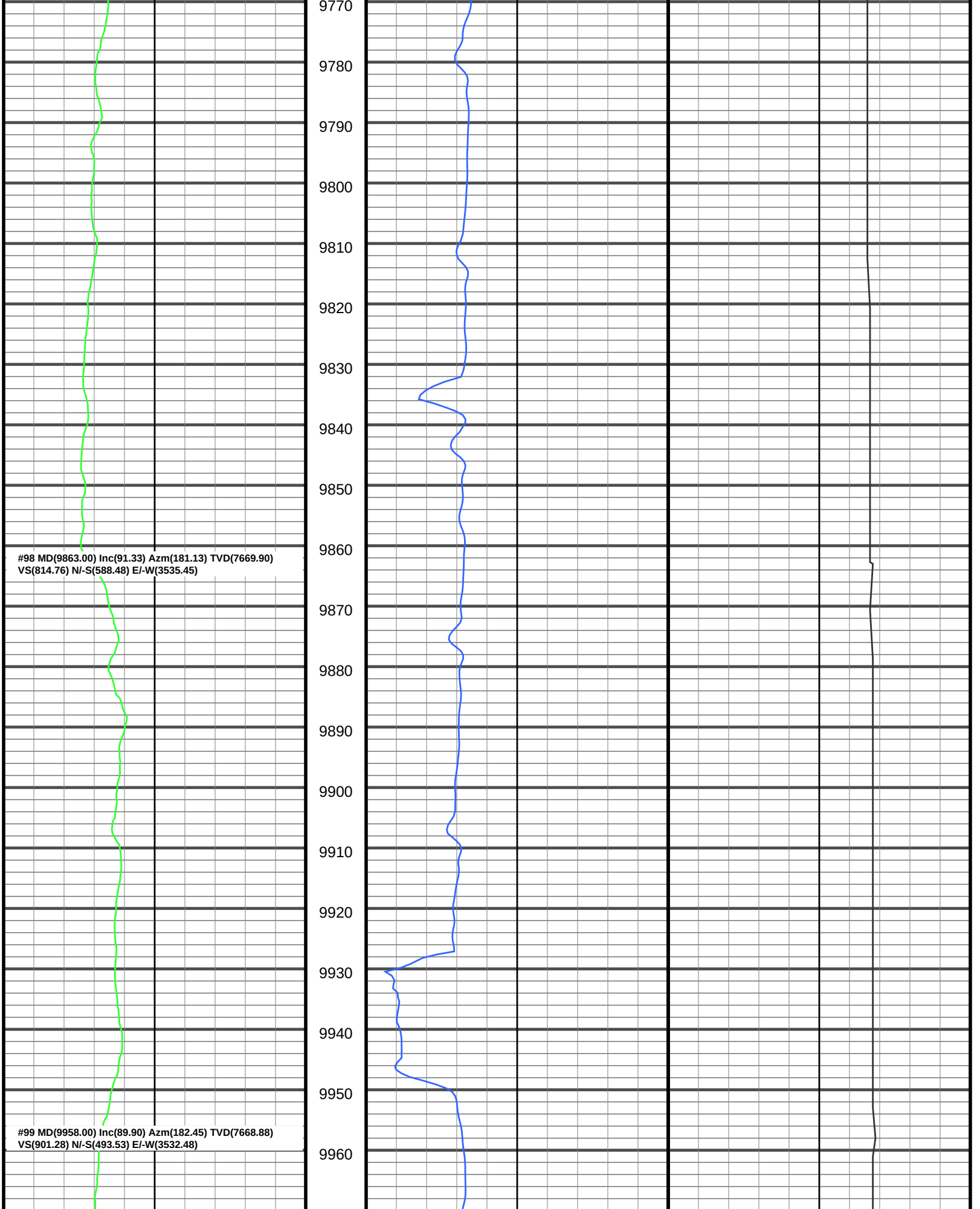

#86 MD(8721.00) Inc(57.10) Azm(140.55) TVD(7524.56)
VS(-234.49) N/-S(1679.10) E/-W(3425.33)
#87 MD(8816.00) Inc(67.56) Azm(147.98) TVD(7568.66)
VS(-152.70) N/-S(1610.82) E/-W(3474.14)
8710
8720
8730
8740
8750
8760
8770
8780
8790
8800
8810
8820
8830
8840
8850
8860
8870
8880
8890
8900

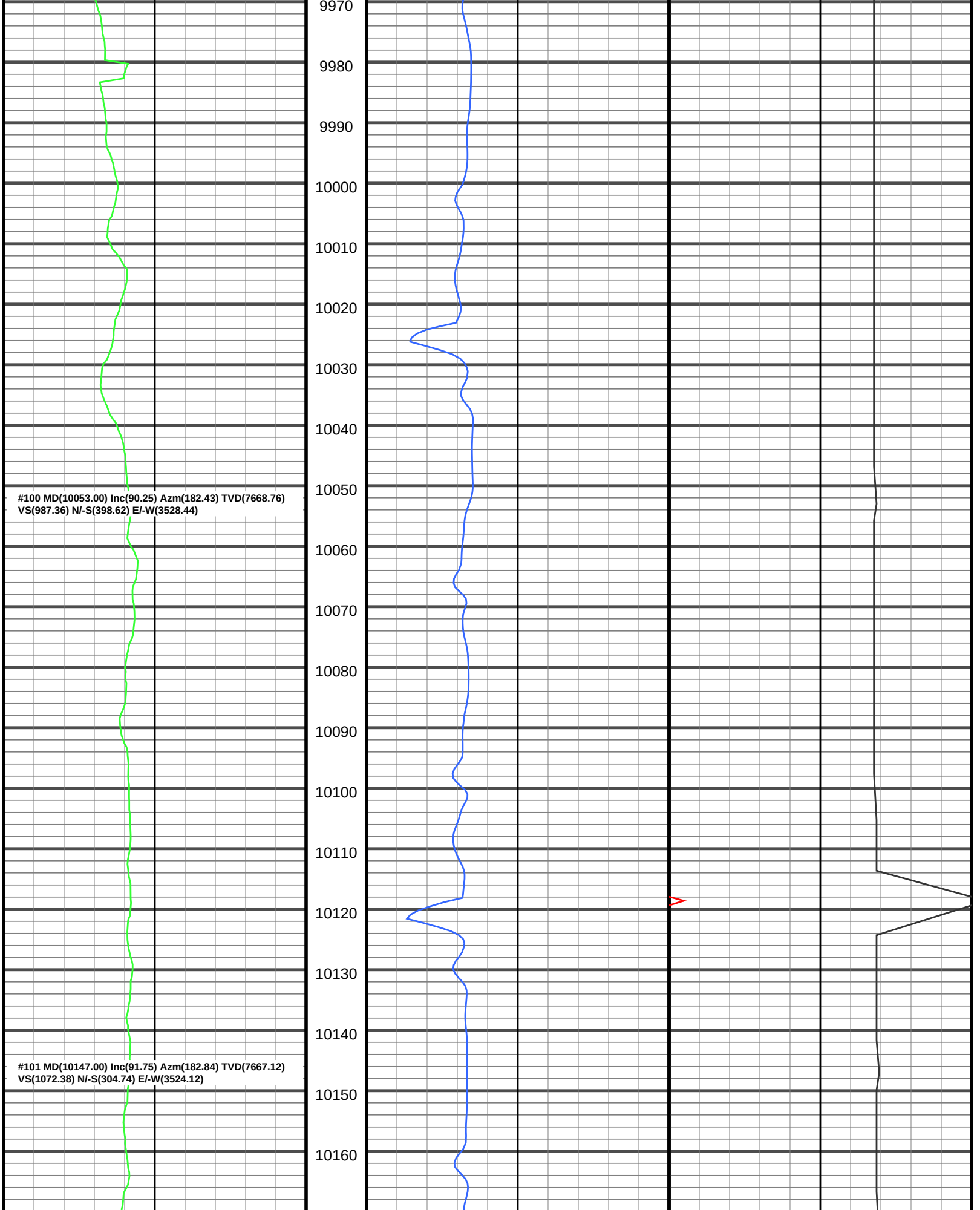

#88 MD(8912.00) Inc(75.08) Azm(157.72) TVD(7599.45)
VS(-62.22) N/-S(1529.99) E/-W(3515.39)
#89 MD(9007.00) Inc(80.29) Azm(169.89) TVD(7619.78)
VS(29.78) N/-S(1441.04) E/-W(3541.12)
#90 MD(9101.00) Inc(83.07) Azm(177.62) TVD(7633.40)
VS(118.95) N/-S(1348.67) E/-W(3551.21)
8910
8920
8930
8940
8950
8960
8970
8980
8990
9000
9010
9020
9030
9040
9050
9060
9070
9080
9090
9100
9110

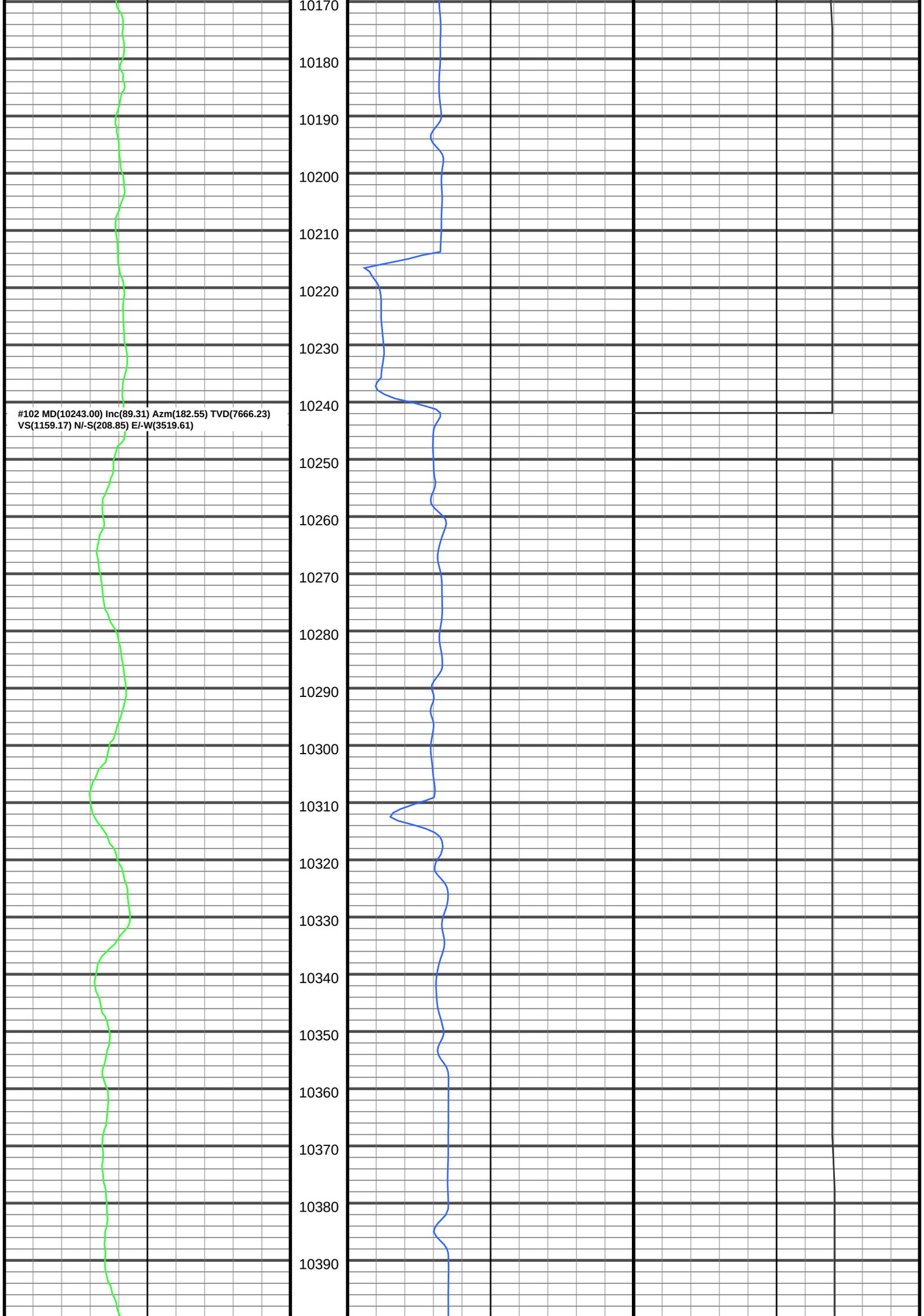

9120
9130
9140
9150
9160
9170
9180
9190
#91 MD(9196.00) Inc(84.65) Azm(180.63) TVD(7643.56)
VS(206.69) N/-S(1254.24) E/-W(3552.65)
9200
9210
9220
9230
9240
9250
9260
9270
9280
#92 MD(9291.00) Inc(85.33) Azm(179.36) TVD(7651.86)
VS(294.06) N/-S(1159.60) E/-W(3552.66)
9290
9300
9310
9320
9330

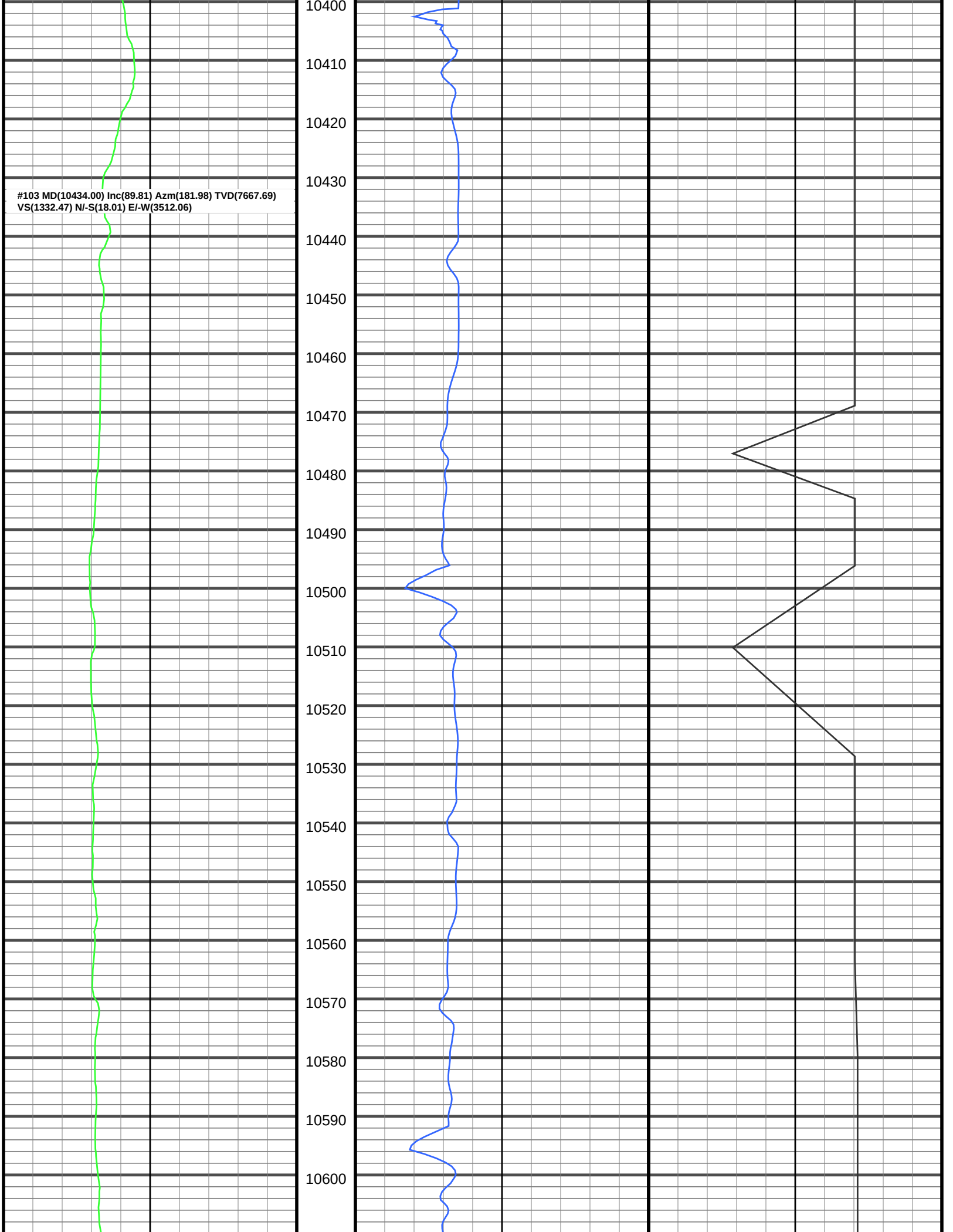

#93 MD(9387.00) Inc(85.70) Azm(181.29) TVD(7659.37)
VS(382.21) N/-S(1063.90) E/-W(3552.11)
#94 MD(9481.00) Inc(87.42) Azm(182.73) TVD(7665.01)
VS(467.52) N/-S(970.13) E/-W(3548.82)
9340
9350
9360
9370
9380
9390
9400
9410
9420
9430
9440
9450
9460
9470
9480
9490
9500
9510
9520
9530
9540
9550
9560

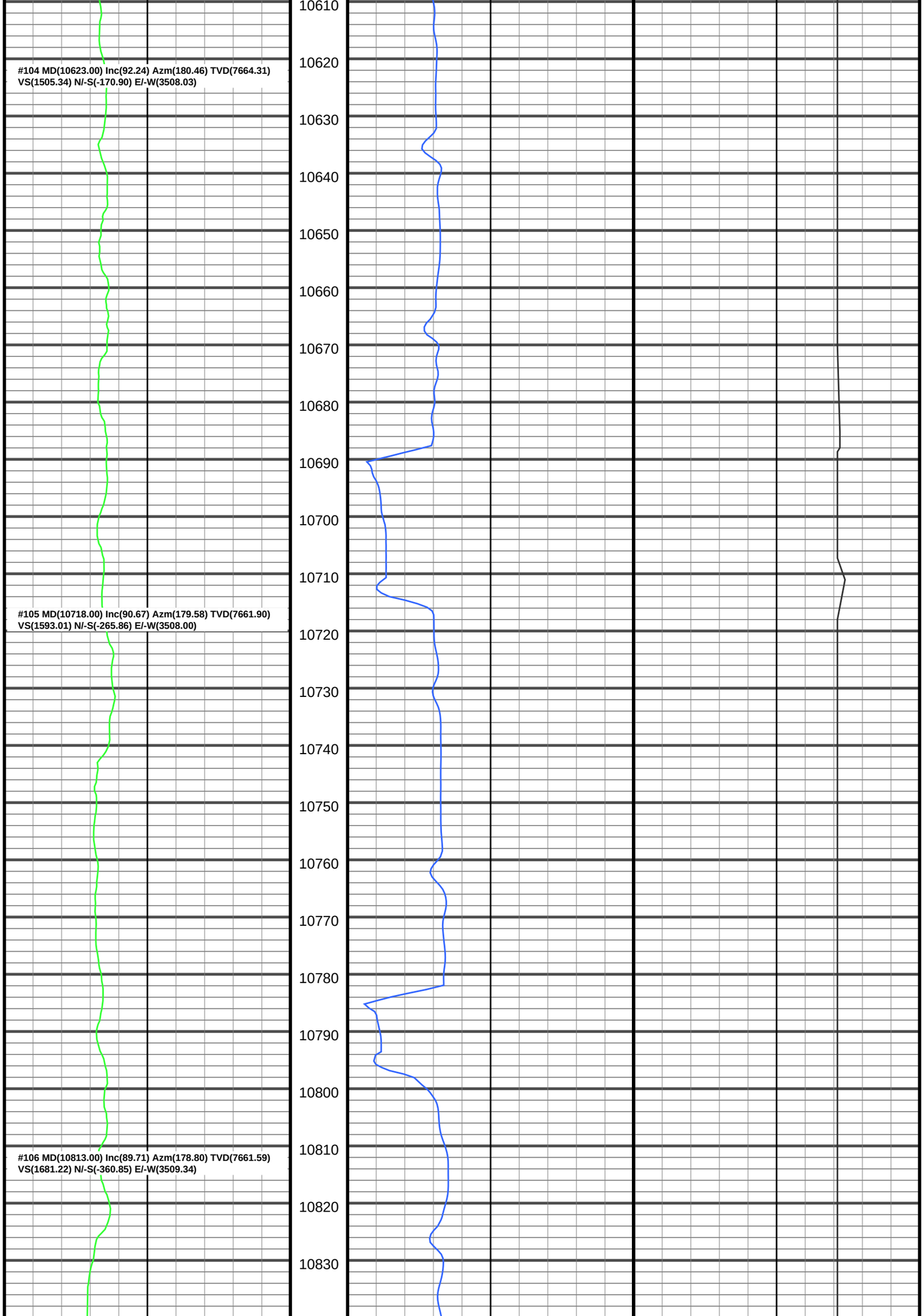

#95 MD(9576.00) Inc(88.35) Azm(182.22) TVD(7668.52)
VS(553.51) N/-S(875.29) E/-W(3544.72)
#96 MD(9672.00) Inc(89.28) Azm(182.11) TVD(7670.50)
VS(640.67) N/-S(779.38) E/-W(3541.10)
#97 MD(9767.00) Inc(90.05) Azm(181.77) TVD(7671.06)
VS(727.10) N/-S(684.44) E/-W(3537.88)
9570
9580
9590
9600
9610
9620
9630
9640
9650
9660
9670
9680
9690
9700
9710
9720
9730
9740
9750
9760

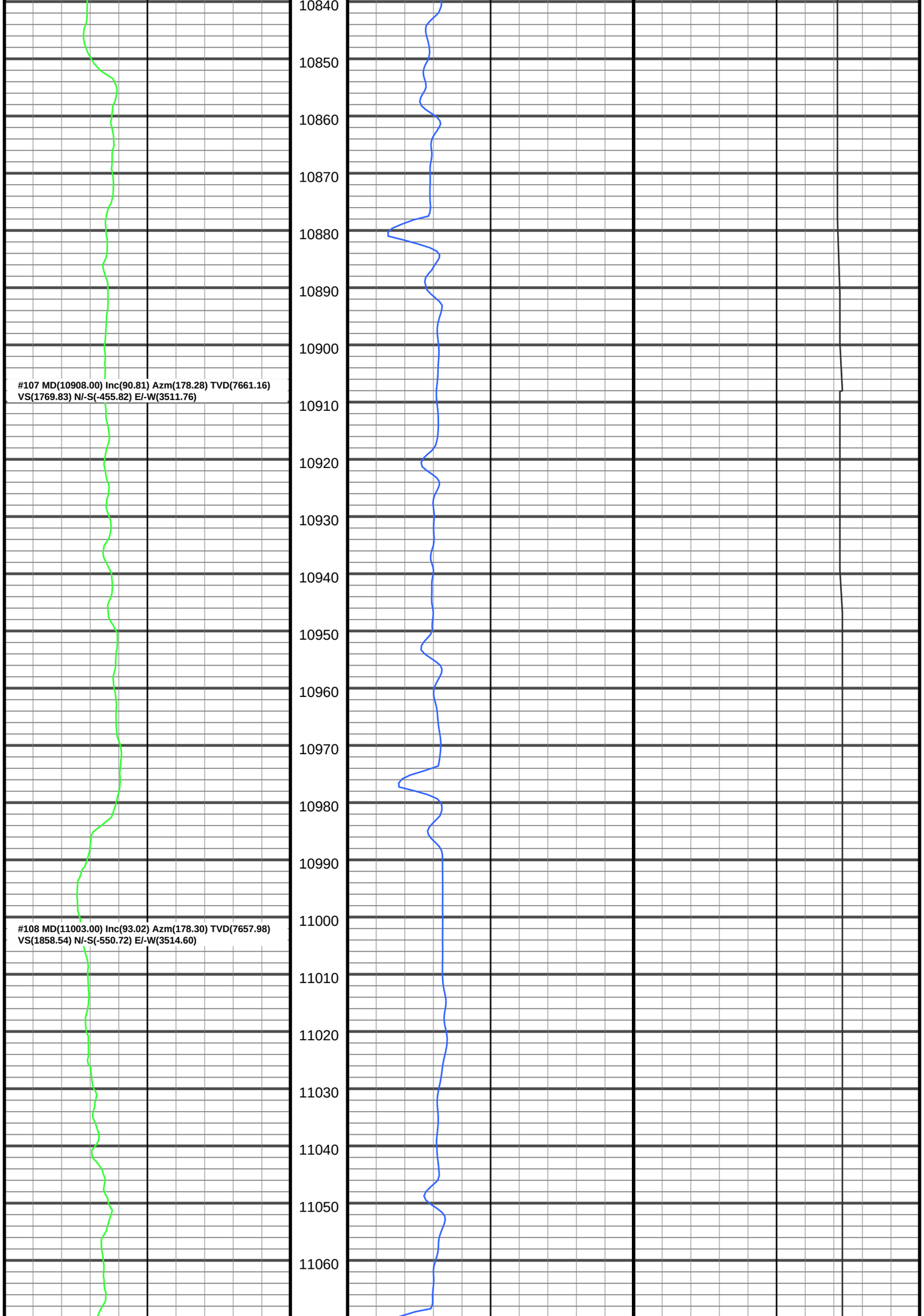

9770
9780
9790
9800
9810
9820
9830
9840
9850
9860
9870
9880
9890
9900
9910
9920
9930
9940
9950
9960
#98 MD(9863.00) Inc(91.33) Azm(181.13) TVD(7669.90)
VS(814.76) N/-S(588.48) E/-W(3535.45)
#99 MD(9958.00) Inc(89.90) Azm(182.45) TVD(7668.88)
VS(901.28) N/-S(493.53) E/-W(3532.48)

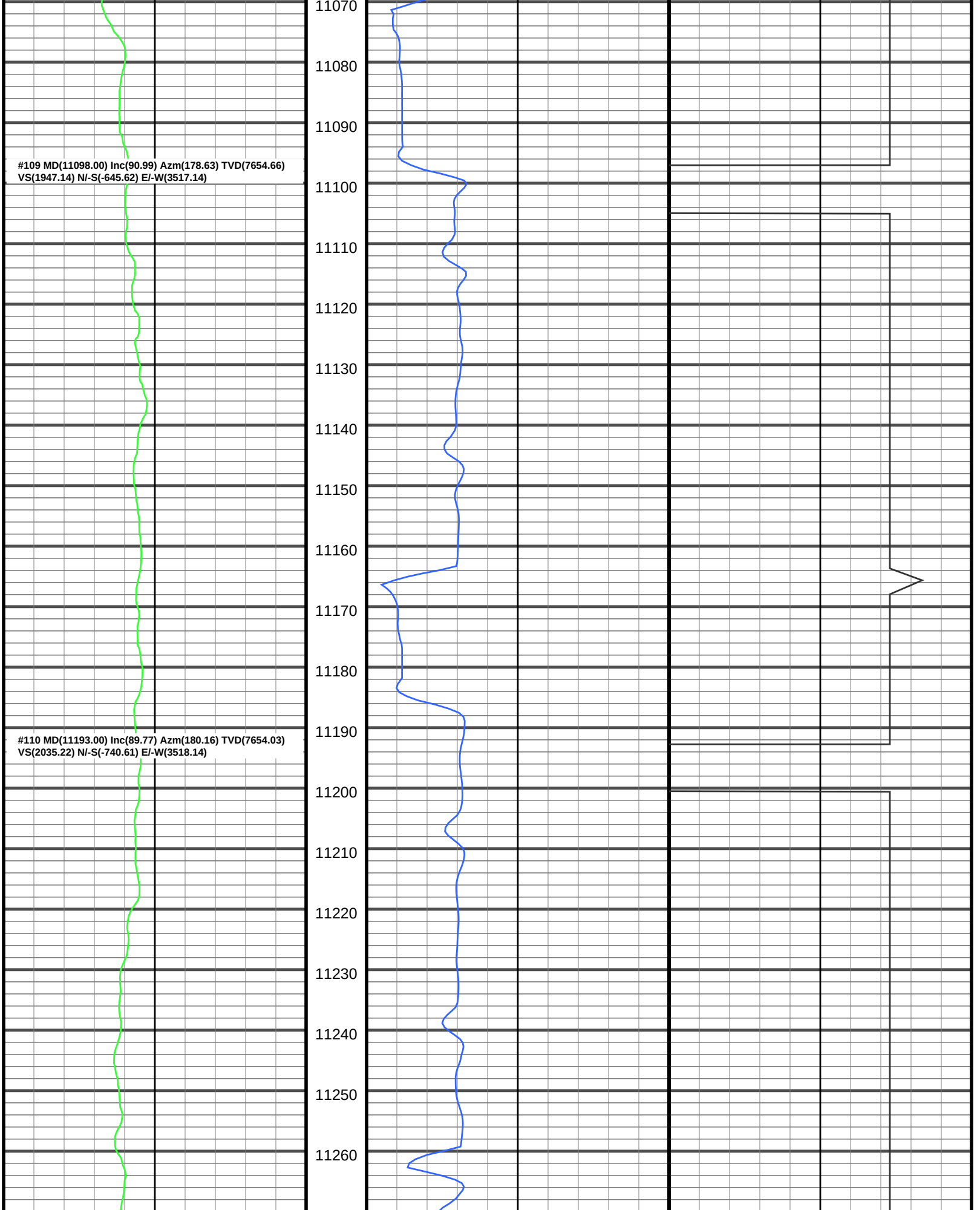

9970
9980
9990
10000
10010
10020
10030
10040
10050
10060
10070
10080
10090
10100
10110
10120
10130
10140
10150
10160
#100 MD(10053.00) Inc(90.25) Azm(182.43) TVD(7668.76)
VS(987.36) N/-S(398.62) E/-W(3528.44)
#101 MD(10147.00) Inc(91.75) Azm(182.84) TVD(7667.12)
VS(1072.38) N/-S(304.74) E/-W(3524.12)

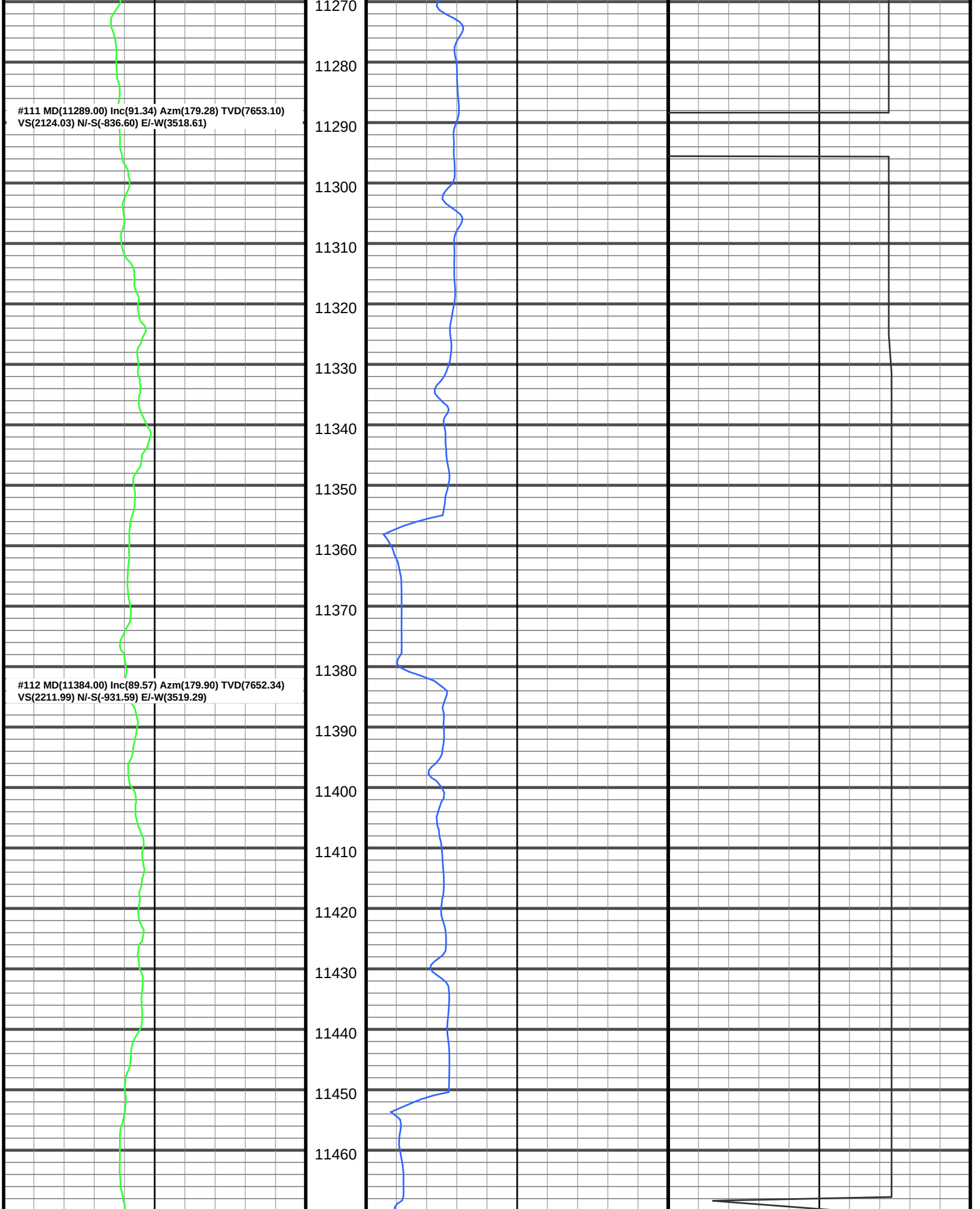

#102 MD(10243.00) Inc(89.31) Azm(182.55) TVD(7666.23)
VS(1159.17) N/-S(208.85) E/-W(3519.61)
10170
10180
10190
10200
10210
10220
10230
10240
10250
10260
10270
10280
10290
10300
10310
10320
10330
10340
10350
10360
10370
10380
10390

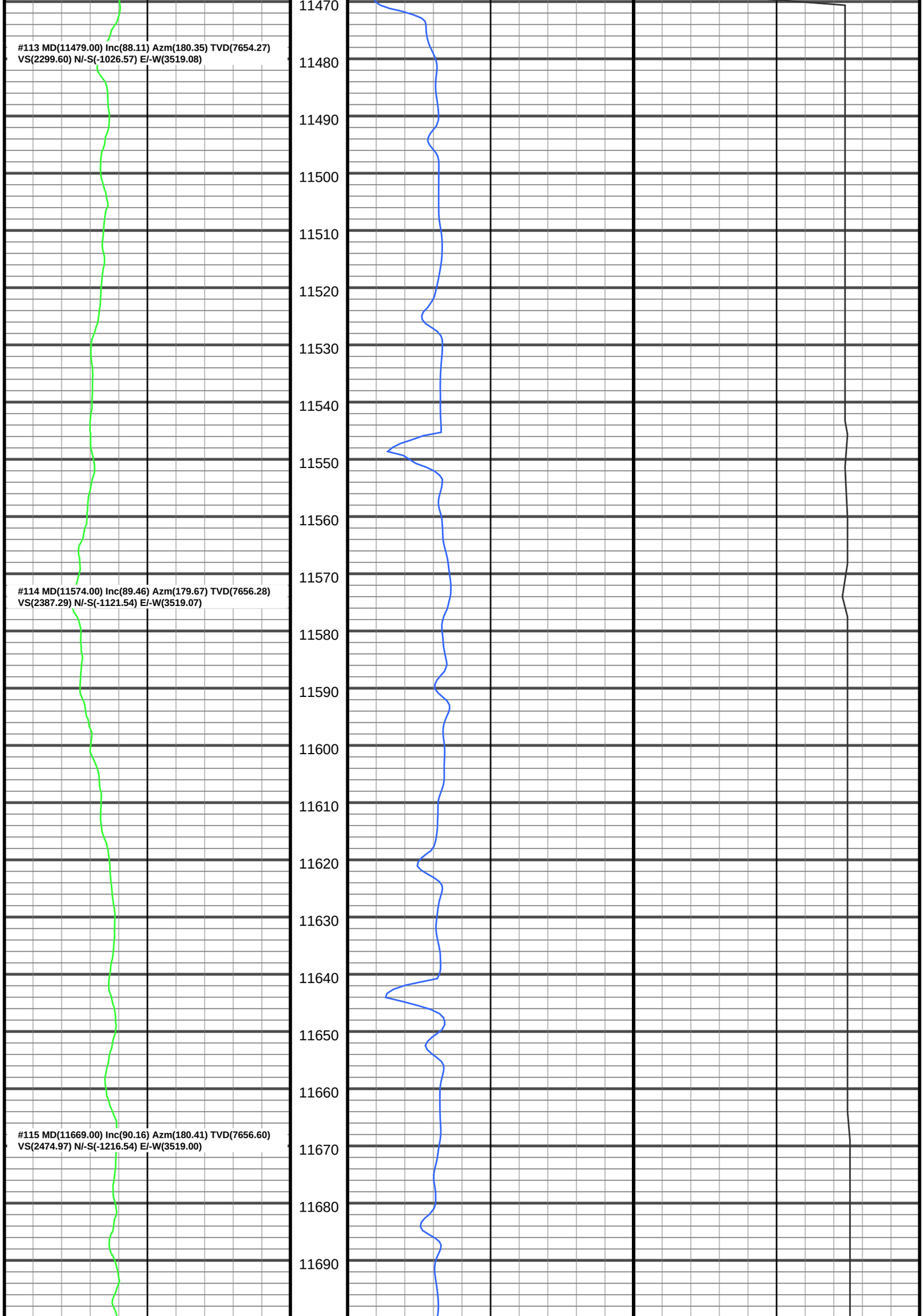

#103 MD(10434.00) Inc(89.81) Azm(181.98) TVD(7667.69)
VS(1332.47) N/-S(18.01) E/-W(3512.06)
10400
10410
10420
10430
10440
10450
10460
10470
10480
10490
10500
10510
10520
10530
10540
10550
10560
10570
10580
10590
10600

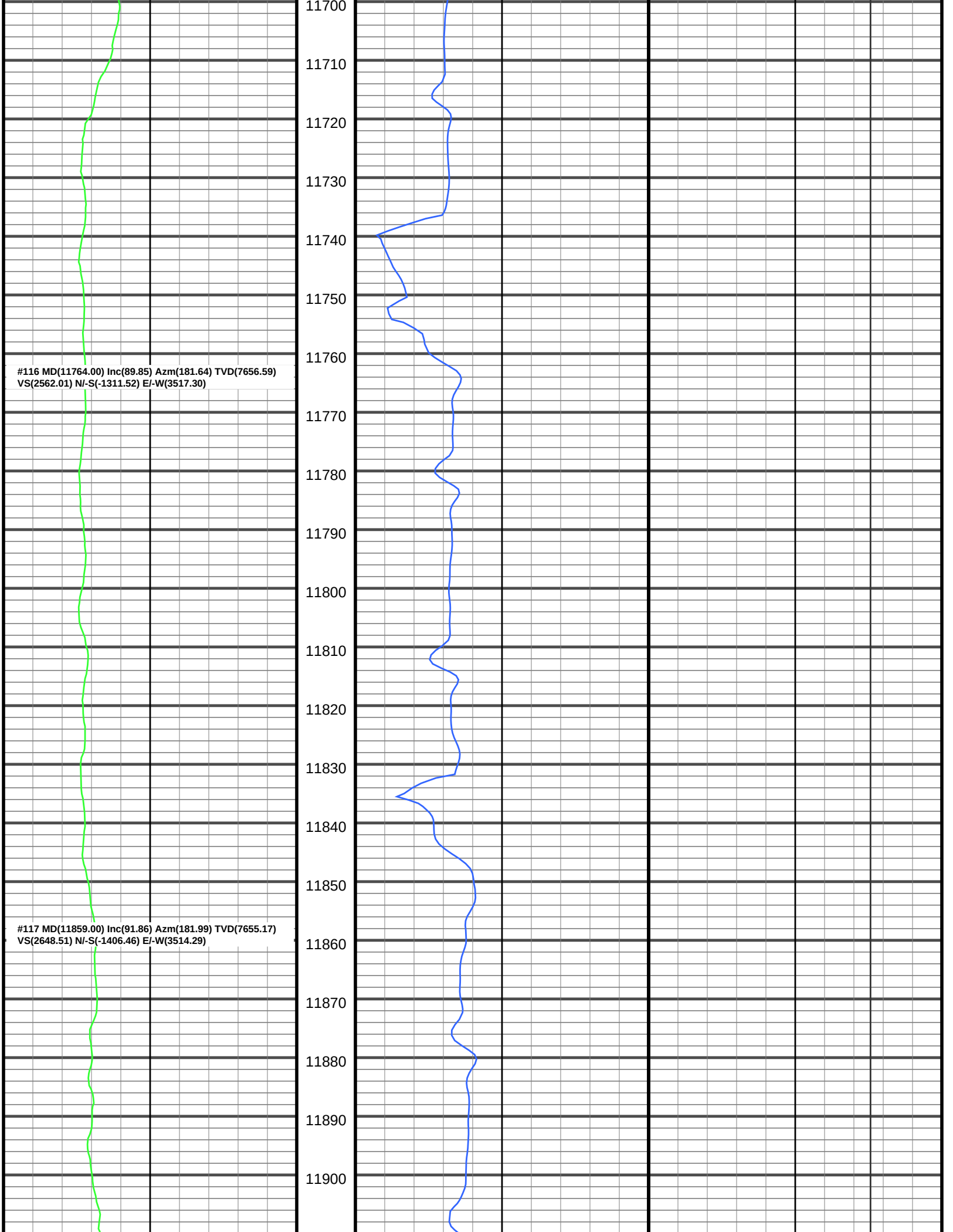

#104 MD(10623.00) Inc(92.24) Azm(180.46) TVD(7664.31)
VS(1505.34) N/-S(-170.90) E/-W(3508.03)
#105 MD(10718.00) Inc(90.67) Azm(179.58) TVD(7661.90)
VS(1593.01) N/-S(-265.86) E/-W(3508.00)
#106 MD(10813.00) Inc(89.71) Azm(178.80) TVD(7661.59)
VS(1681.22) N/-S(-360.85) E/-W(3509.34)
10610
10620
10630
10640
10650
10660
10670
10680
10690
10700
10710
10720
10730
10740
10750
10760
10770
10780
10790
10800
10810
10820
10830

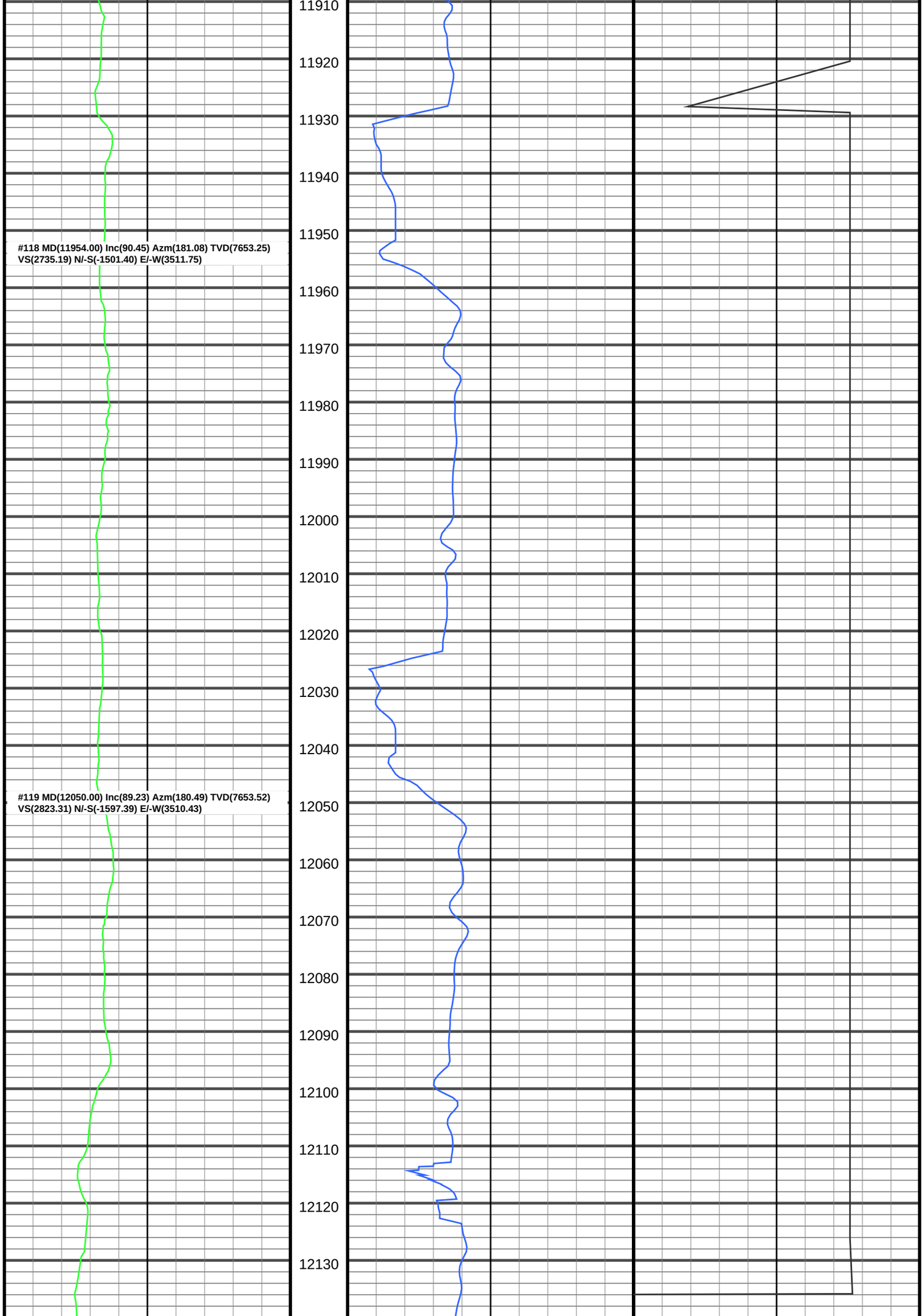

10840
10850
10860
10870
10880
10890
10900
#107 MD(10908.00) Inc(90.81) Azm(178.28) TVD(7661.16)
VS(1769.83) N/-S(-455.82) E/-W(3511.76)
10910
10920
10930
10940
10950
10960
10970
10980
10990
11000
#108 MD(11003.00) Inc(93.02) Azm(178.30) TVD(7657.98)
VS(1858.54) N/-S(-550.72) E/-W(3514.60)
11010
11020
11030
11040
11050
11060

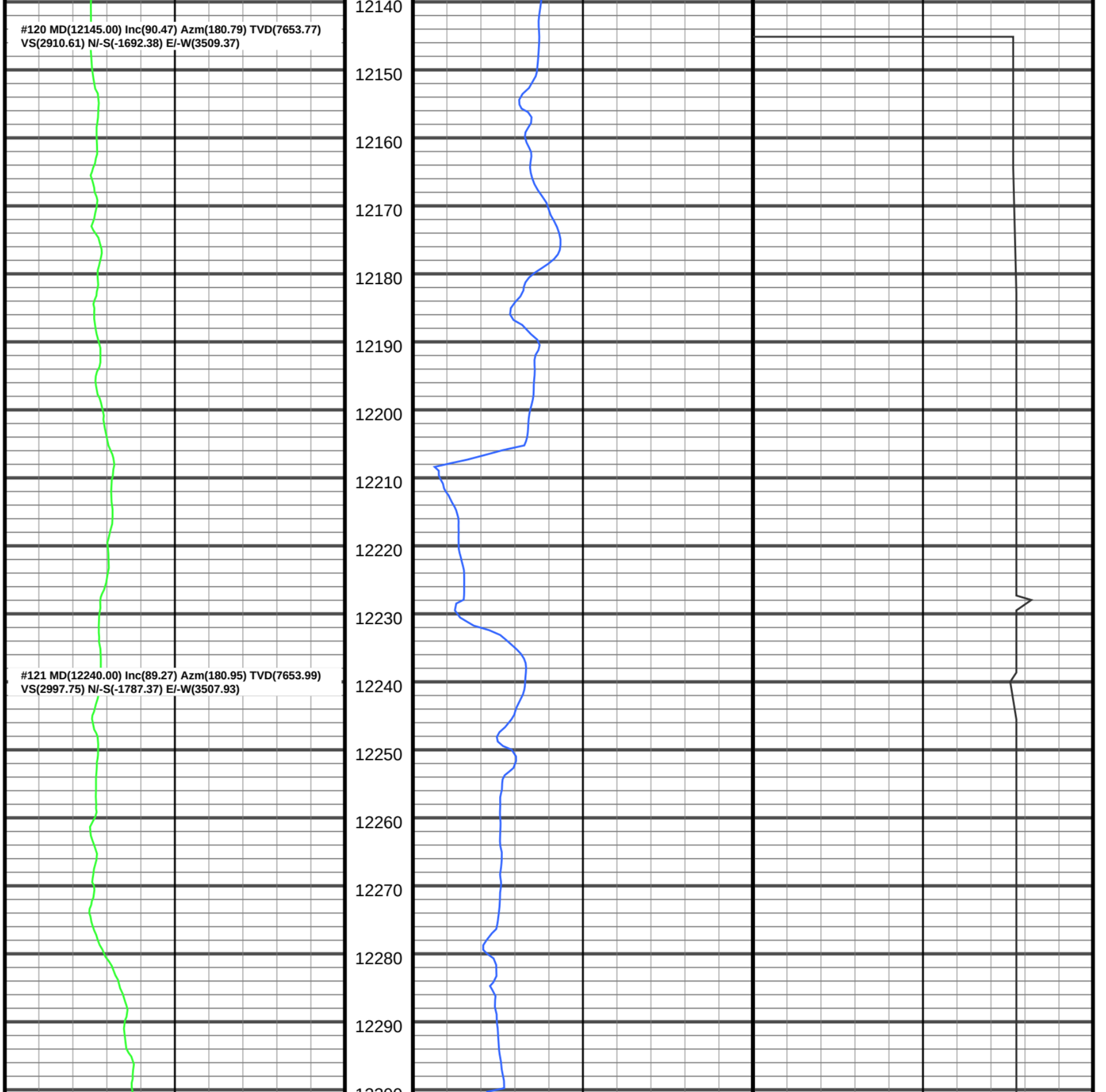

#109 MD(11098.00) Inc(90.99) Azm(178.63) TVD(7654.66)
VS(1947.14) N/-S(-645.62) E/-W(3517.14)
#110 MD(11193.00) Inc(89.77) Azm(180.16) TVD(7654.03)
VS(2035.22) N/-S(-740.61) E/-W(3518.14)
11070
11080
11090
11100
11110
11120
11130
11140
11150
11160
11170
11180
11190
11200
11210
11220
11230
11240
11250
11260

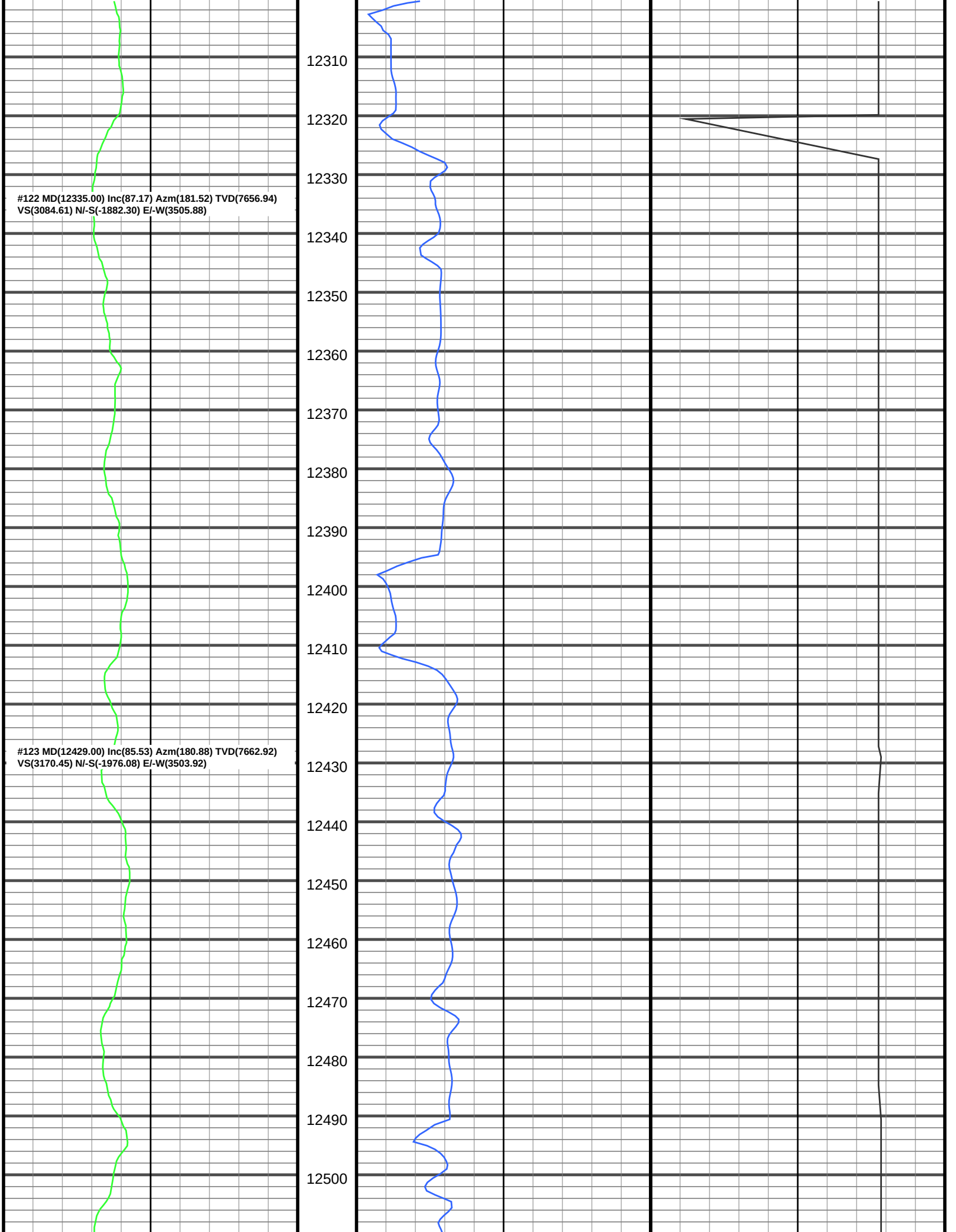

#111 MD(11289.00) Inc(91.34) Azm(179.28) TVD(7653.10)
VS(2124.03) N/-S(-836.60) E/-W(3518.61)
#112 MD(11384.00) Inc(89.57) Azm(179.90) TVD(7652.34)
VS(2211.99) N/-S(-931.59) E/-W(3519.29)
11270
11280
11290
11300
11310
11320
11330
11340
11350
11360
11370
11380
11390
11400
11410
11420
11430
11440
11450
11460

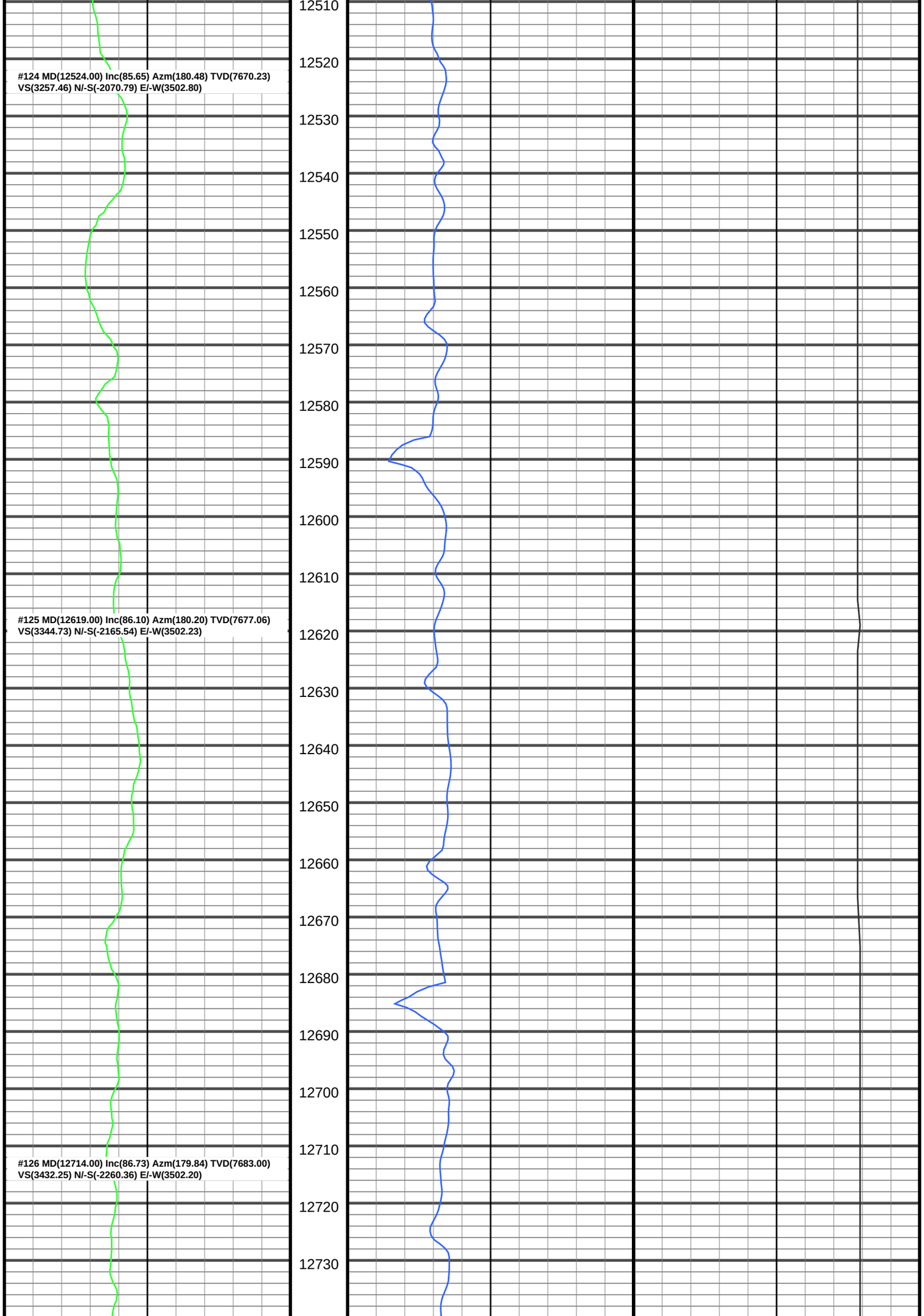

#113 MD(11479.00) Inc(88.11) Azm(180.35) TVD(7654.27)
VS(2299.60) N/-S(-1026.57) E/-W(3519.08)
#114 MD(11574.00) Inc(89.46) Azm(179.67) TVD(7656.28)
VS(2387.29) N/-S(-1121.54) E/-W(3519.07)
#115 MD(11669.00) Inc(90.16) Azm(180.41) TVD(7656.60)
VS(2474.97) N/-S(-1216.54) E/-W(3519.00)
11470
11480
11490
11500
11510
11520
11530
11540
11550
11560
11570
11580
11590
11600
11610
11620
11630
11640
11650
11660
11670
11680
11690

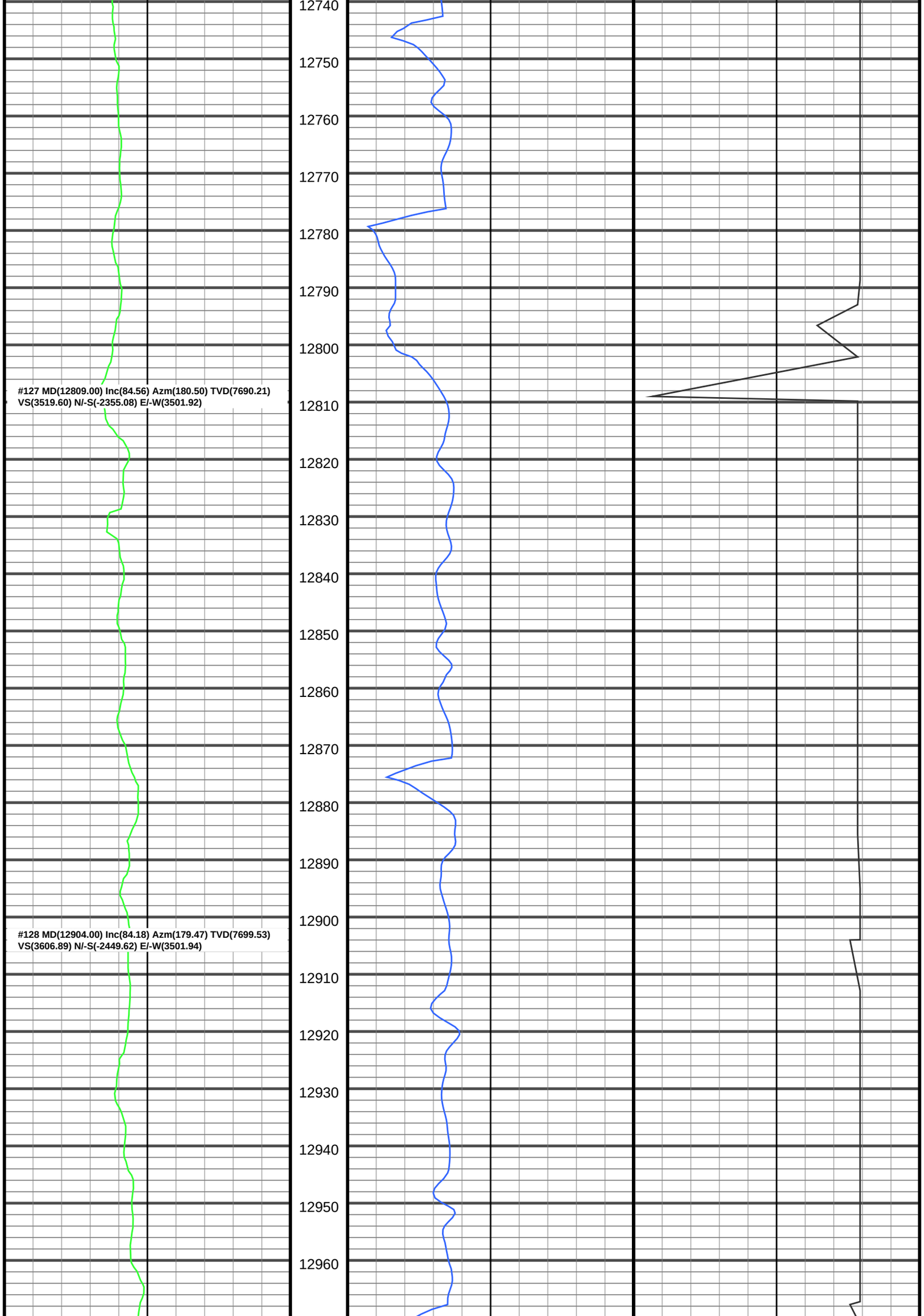

11700
11710
11720
11730
11740
11750
11760
#116 MD(11764.00) Inc(89.85) Azm(181.64) TVD(7656.59)
VS(2562.01) N/-S(-1311.52) E/-W(3517.30)
11770
11780
11790
11800
11810
11820
11830
11840
11850
#117 MD(11859.00) Inc(91.86) Azm(181.99) TVD(7655.17)
VS(2648.51) N/-S(-1406.46) E/-W(3514.29)
11860
11870
11880
11890
11900

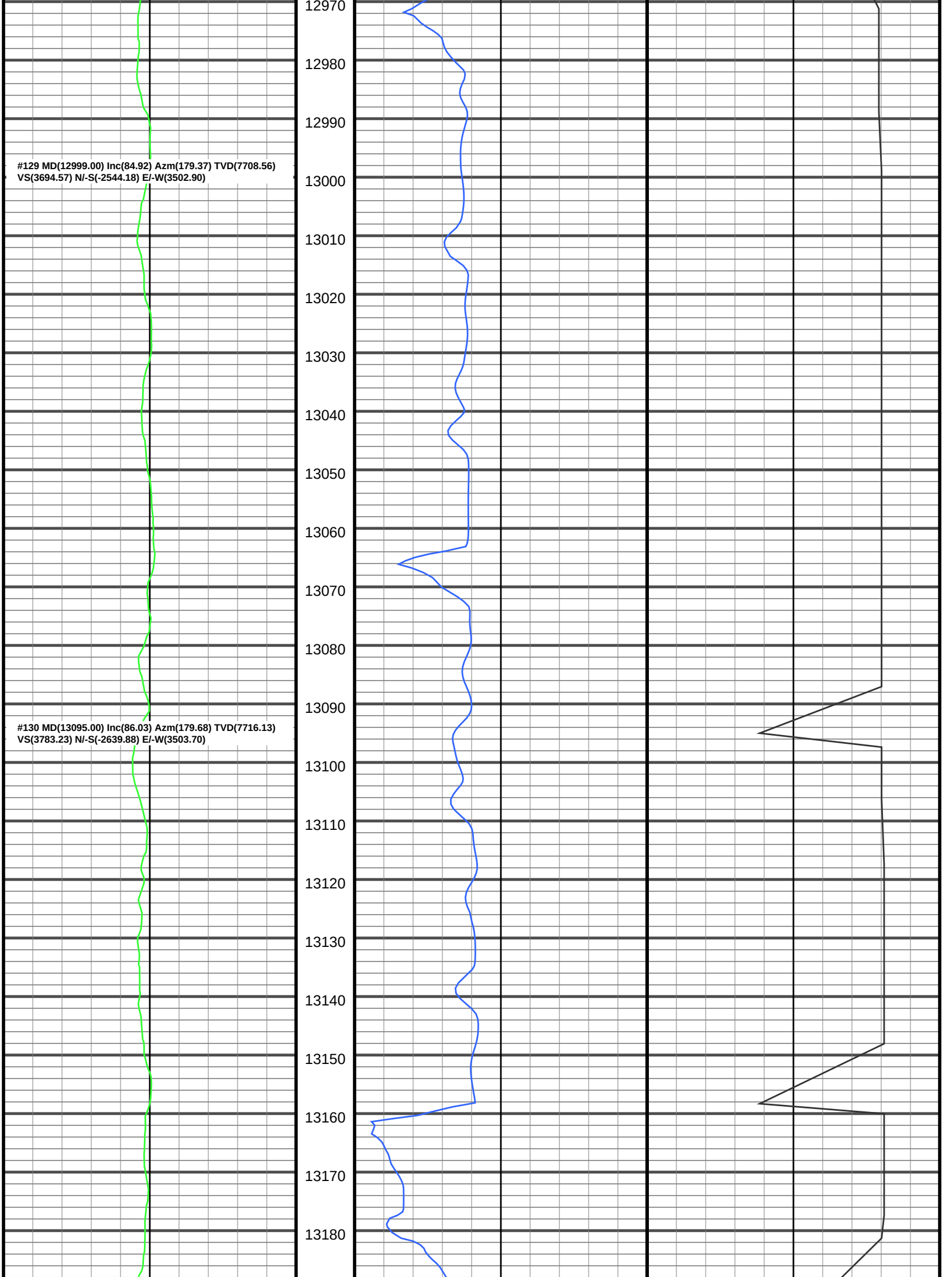

#118 MD(11954.00) Inc(90.45) Azm(181.08) TVD(7653.25)
VS(2735.19) N/-S(-1501.40) E/-W(3511.75)
#119 MD(12050.00) Inc(89.23) Azm(180.49) TVD(7653.52)
VS(2823.31) N/-S(-1597.39) E/-W(3510.43)
11910
11920
11930
11940
11950
11960
11970
11980
11990
12000
12010
12020
12030
12040
12050
12060
12070
12080
12090
12100
12110
12120
12130

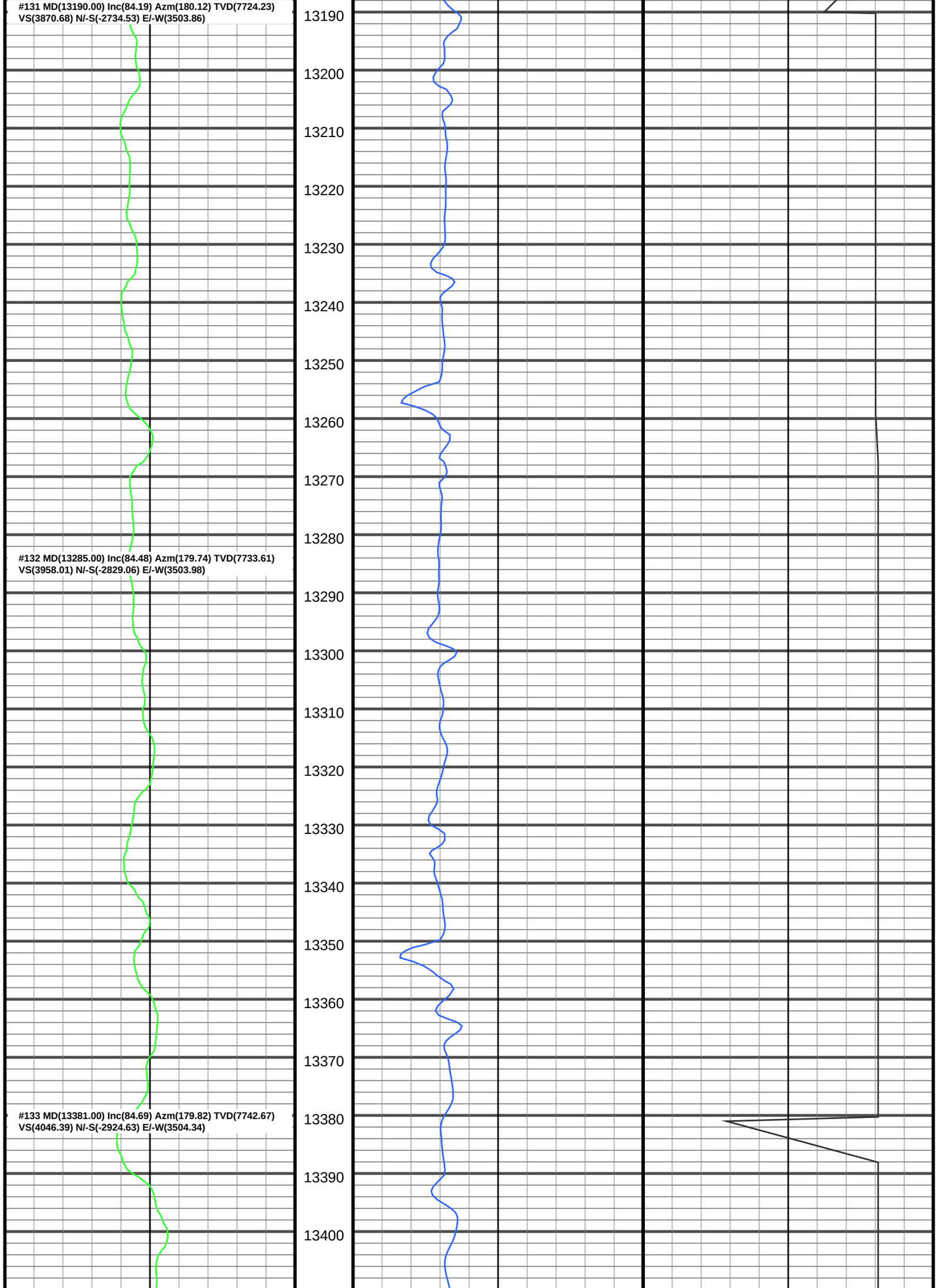

#120 MD(12145.00) Inc(90.47) Azm(180.79) TVD(7653.77)
VS(2910.61) N/-S(-1692.38) E/-W(3509.37)
#121 MD(12240.00) Inc(89.27) Azm(180.95) TVD(7653.99)
VS(2997.75) N/-S(-1787.37) E/-W(3507.93)
12140
12150
12160
12170
12180
12190
12200
12210
12220
12230
12240
12250
12260
12270
12280
12290

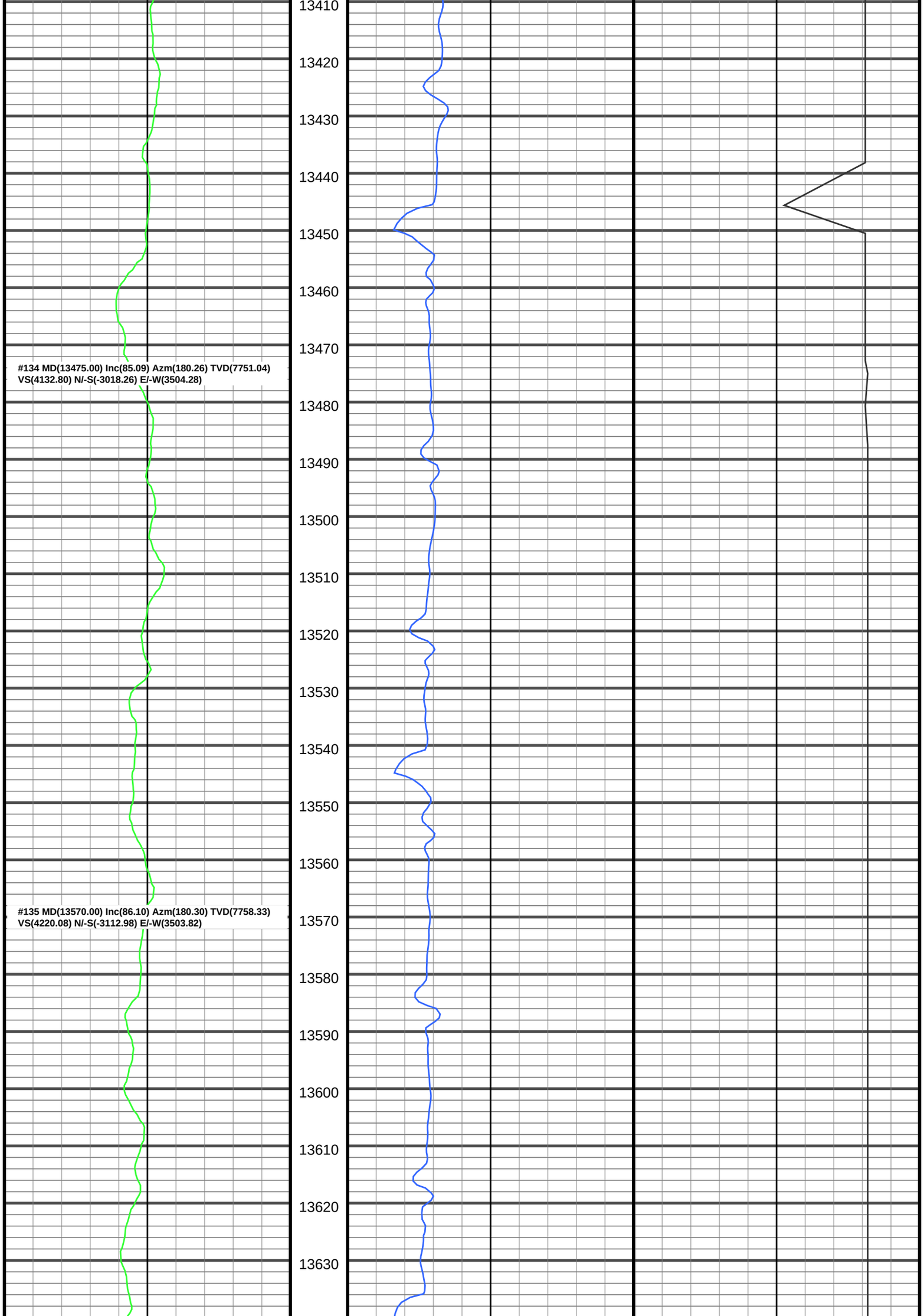

12310
12320
12330
#122 MD(12335.00) Inc(87.17) Azm(181.52) TVD(7656.94)
VS(3084.61) N/-S(-1882.30) E/-W(3505.88)
12340
12350
12360
12370
12380
12390
12400
12410
12420
#123 MD(12429.00) Inc(85.53) Azm(180.88) TVD(7662.92)
VS(3170.45) N/-S(-1976.08) E/-W(3503.92)
12430
12440
12450
12460
12470
12480
12490
12500

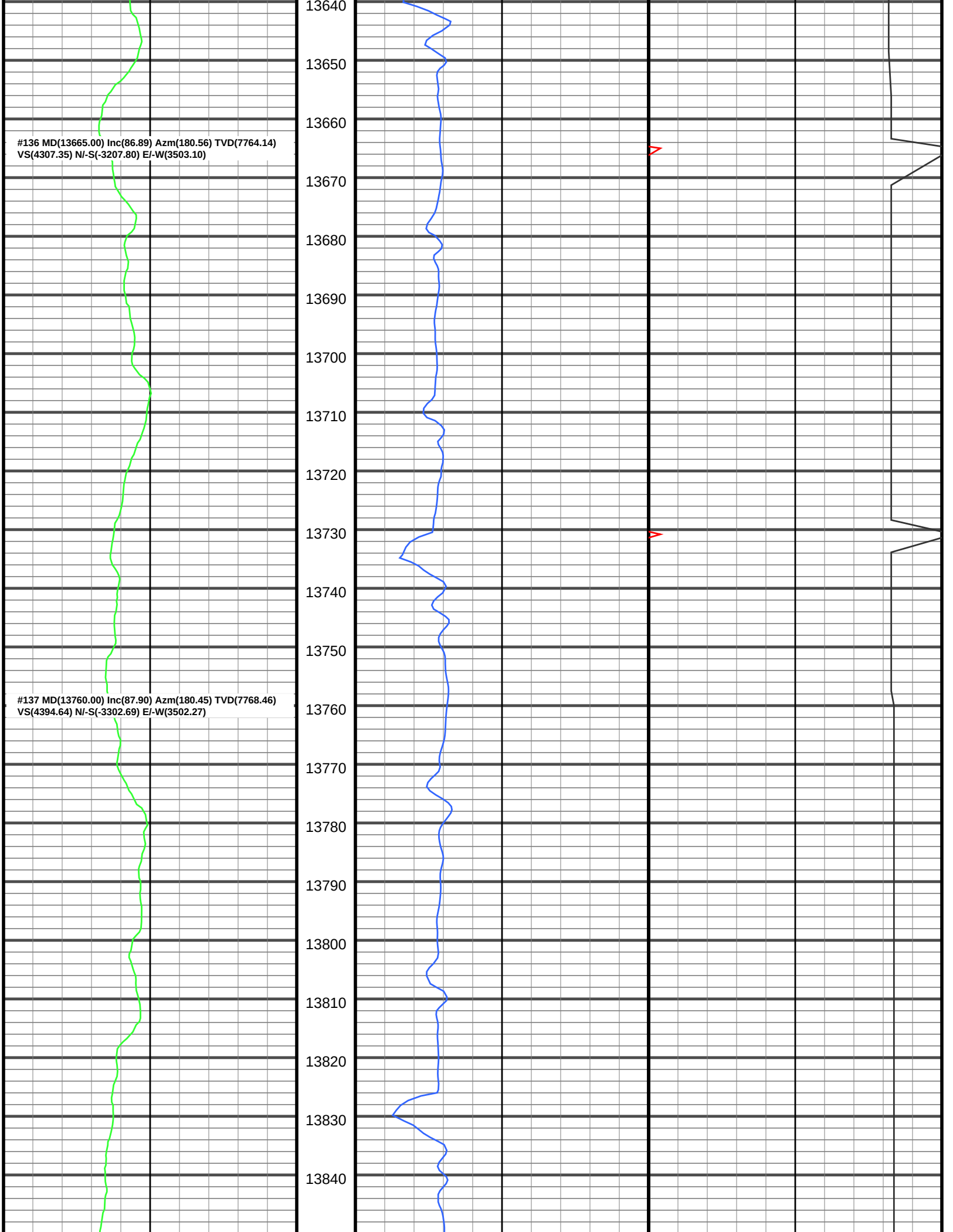

#124 MD(12524.00) Inc(85.65) Azm(180.48) TVD(7670.23)
VS(3257.46) N/-S(-2070.79) E/-W(3502.80)
#125 MD(12619.00) Inc(86.10) Azm(180.20) TVD(7677.06)
VS(3344.73) N/-S(-2165.54) E/-W(3502.23)
#126 MD(12714.00) Inc(86.73) Azm(179.84) TVD(7683.00)
VS(3432.25) N/-S(-2260.36) E/-W(3502.20)
12510
12520
12530
12540
12550
12560
12570
12580
12590
12600
12610
12620
12630
12640
12650
12660
12670
12680
12690
12700
12710
12720
12730

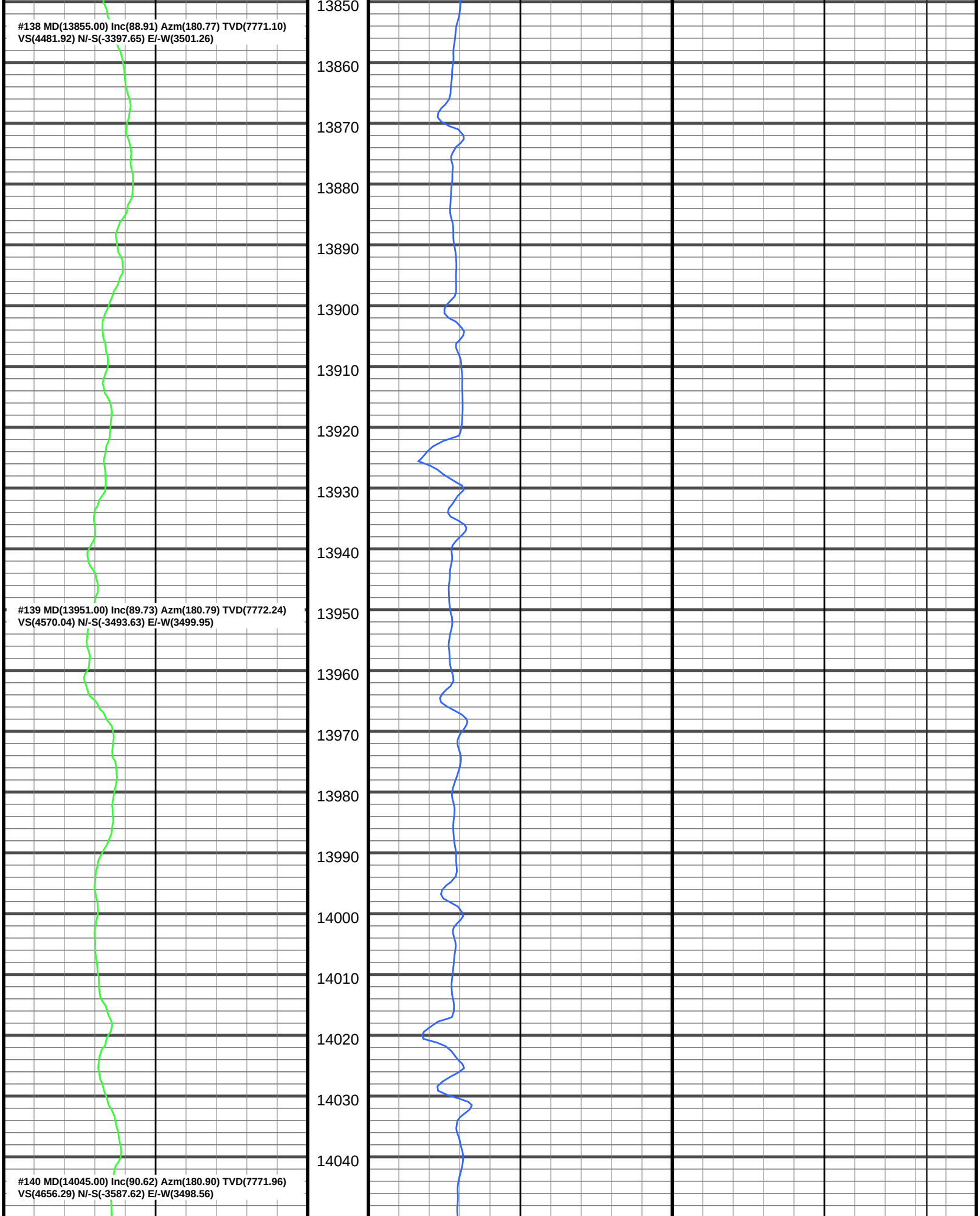

12740
12750
12760
12770
12780
12790
12800
#127 MD(12809.00) Inc(84.56) Azm(180.50) TVD(7690.21)
VS(3519.60) N/-S(-2355.08) E/-W(3501.92)
12810
12820
12830
12840
12850
12860
12870
12880
12890
12900
#128 MD(12904.00) Inc(84.18) Azm(179.47) TVD(7699.53)
VS(3606.89) N/-S(-2449.62) E/-W(3501.94)
12910
12920
12930
12940
12950
12960

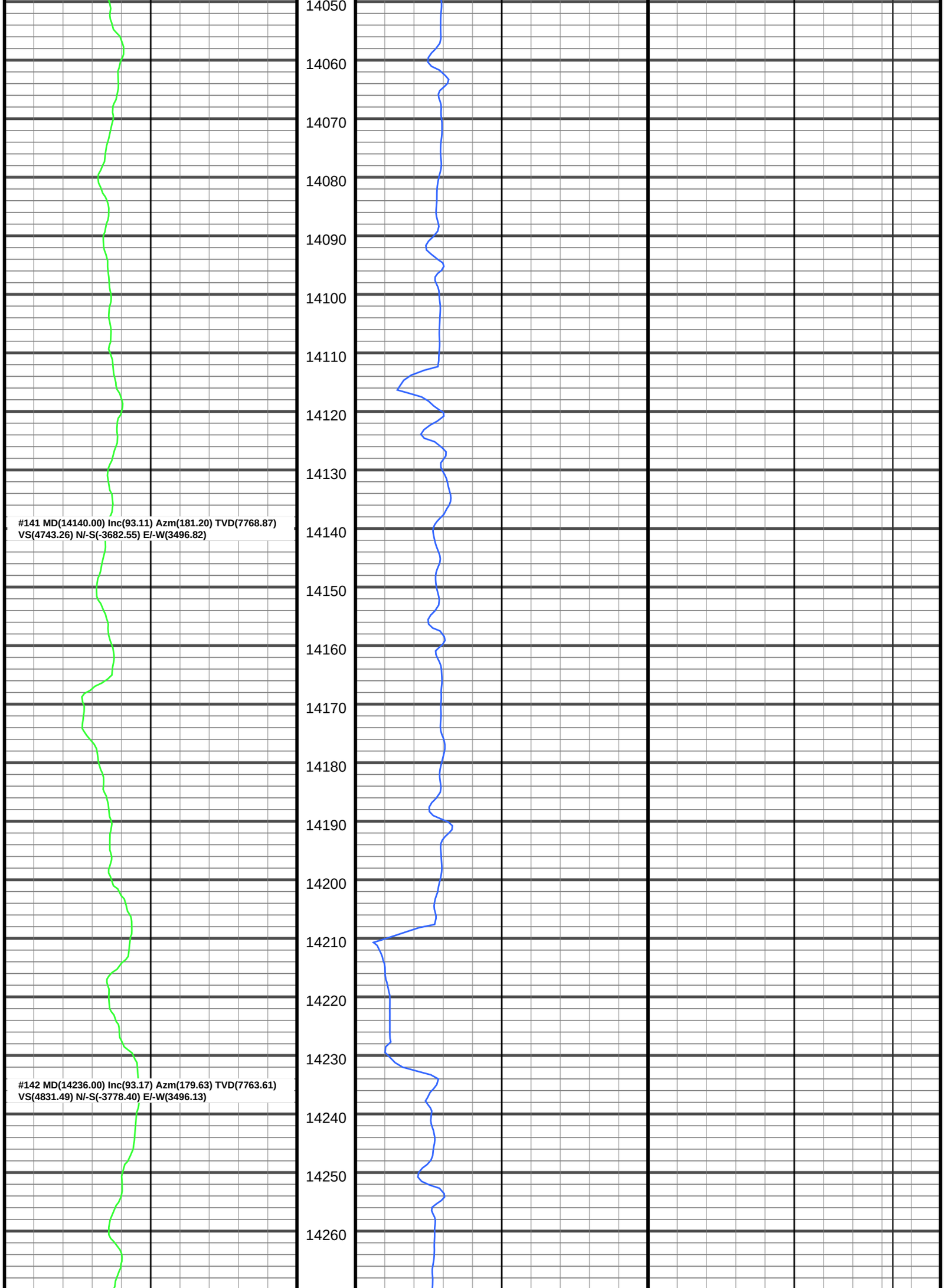

#129 MD(12999.00) Inc(84.92) Azm(179.37) TVD(7708.56)
VS(3694.57) N/-S(-2544.18) E/-W(3502.90)
#130 MD(13095.00) Inc(86.03) Azm(179.68) TVD(7716.13)
VS(3783.23) N/-S(-2639.88) E/-W(3503.70)
12970
12980
12990
13000
13010
13020
13030
13040
13050
13060
13070
13080
13090
13100
13110
13120
13130
13140
13150
13160
13170
13180

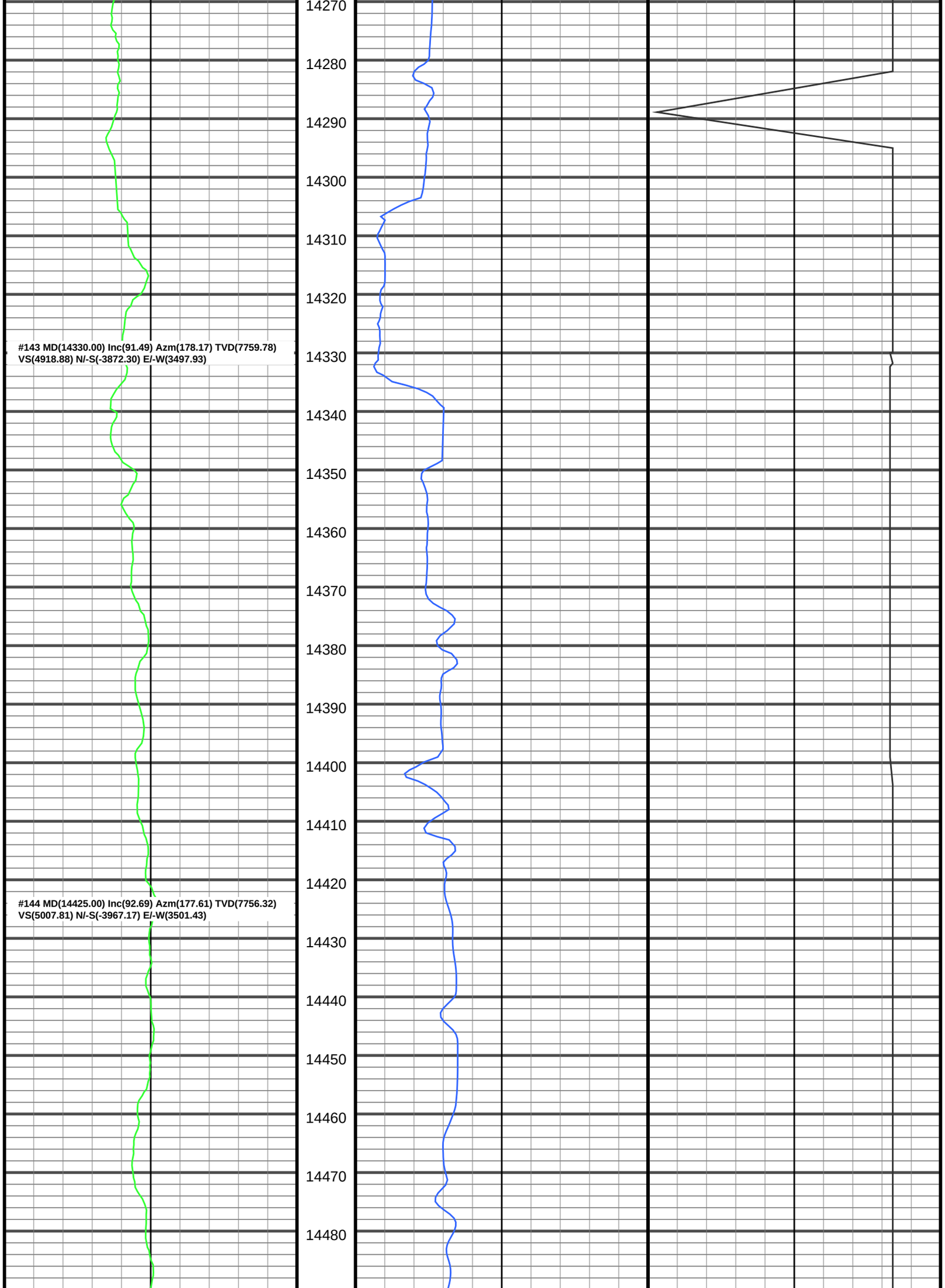

#131 MD(13190.00) Inc(84.19) Azm(180.12) TVD(7724.23)
VS(3870.68) N/-S(-2734.53) E/-W(3503.86)
#132 MD(13285.00) Inc(84.48) Azm(179.74) TVD(7733.61)
VS(3958.01) N/-S(-2829.06) E/-W(3503.98)
#133 MD(13381.00) Inc(84.69) Azm(179.82) TVD(7742.67)
VS(4046.39) N/-S(-2924.63) E/-W(3504.34)
13190
13200
13210
13220
13230
13240
13250
13260
13270
13280
13290
13300
13310
13320
13330
13340
13350
13360
13370
13380
13390
13400

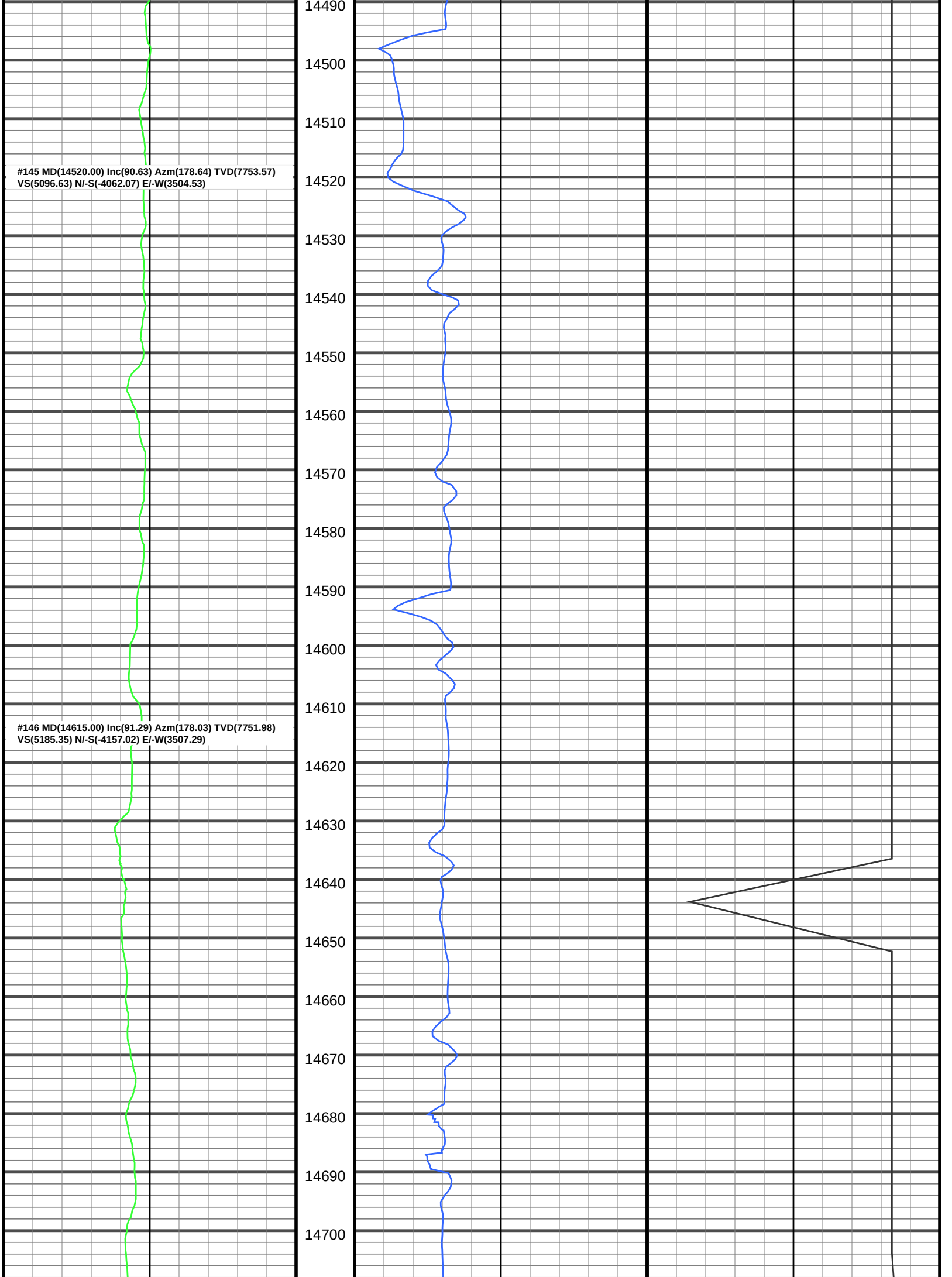

13410
13420
13430
13440
13450
13460
13470
#134 MD(13475.00) Inc(85.09) Azm(180.26) TVD(7751.04)
VS(4132.80) N/-S(-3018.26) E/-W(3504.28)
13480
13490
13500
13510
13520
13530
13540
13550
13560
#135 MD(13570.00) Inc(86.10) Azm(180.30) TVD(7758.33)
VS(4220.08) N/-S(-3112.98) E/-W(3503.82)
13570
13580
13590
13600
13610
13620
13630

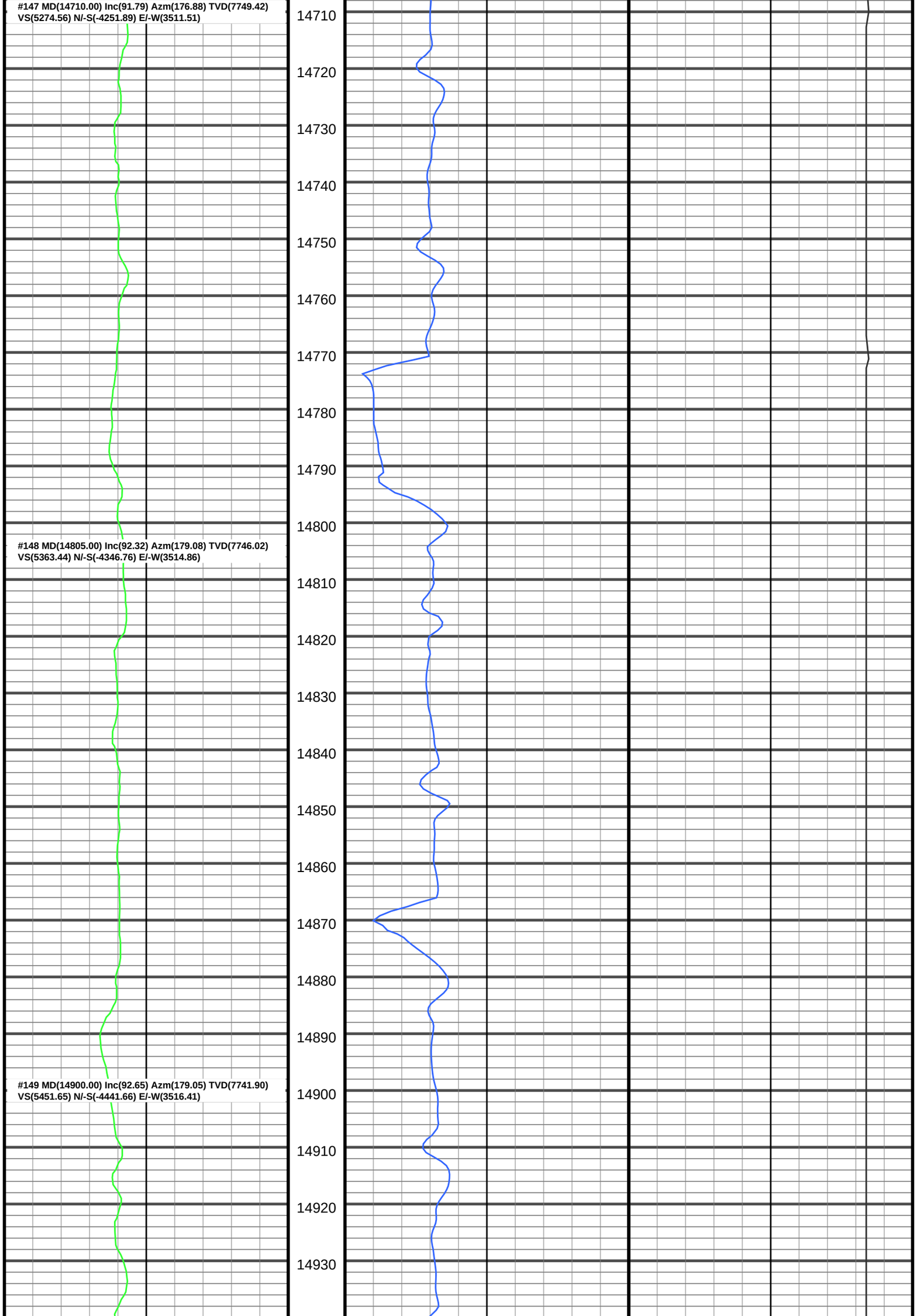

#136 MD(13665.00) Inc(86.89) Azm(180.56) TVD(7764.14)
VS(4307.35) N/-S(-3207.80) E/-W(3503.10)
#137 MD(13760.00) Inc(87.90) Azm(180.45) TVD(7768.46)
VS(4394.64) N/-S(-3302.69) E/-W(3502.27)
13640
13650
13660
13670
13680
13690
13700
13710
13720
13730
13740
13750
13760
13770
13780
13790
13800
13810
13820
13830
13840

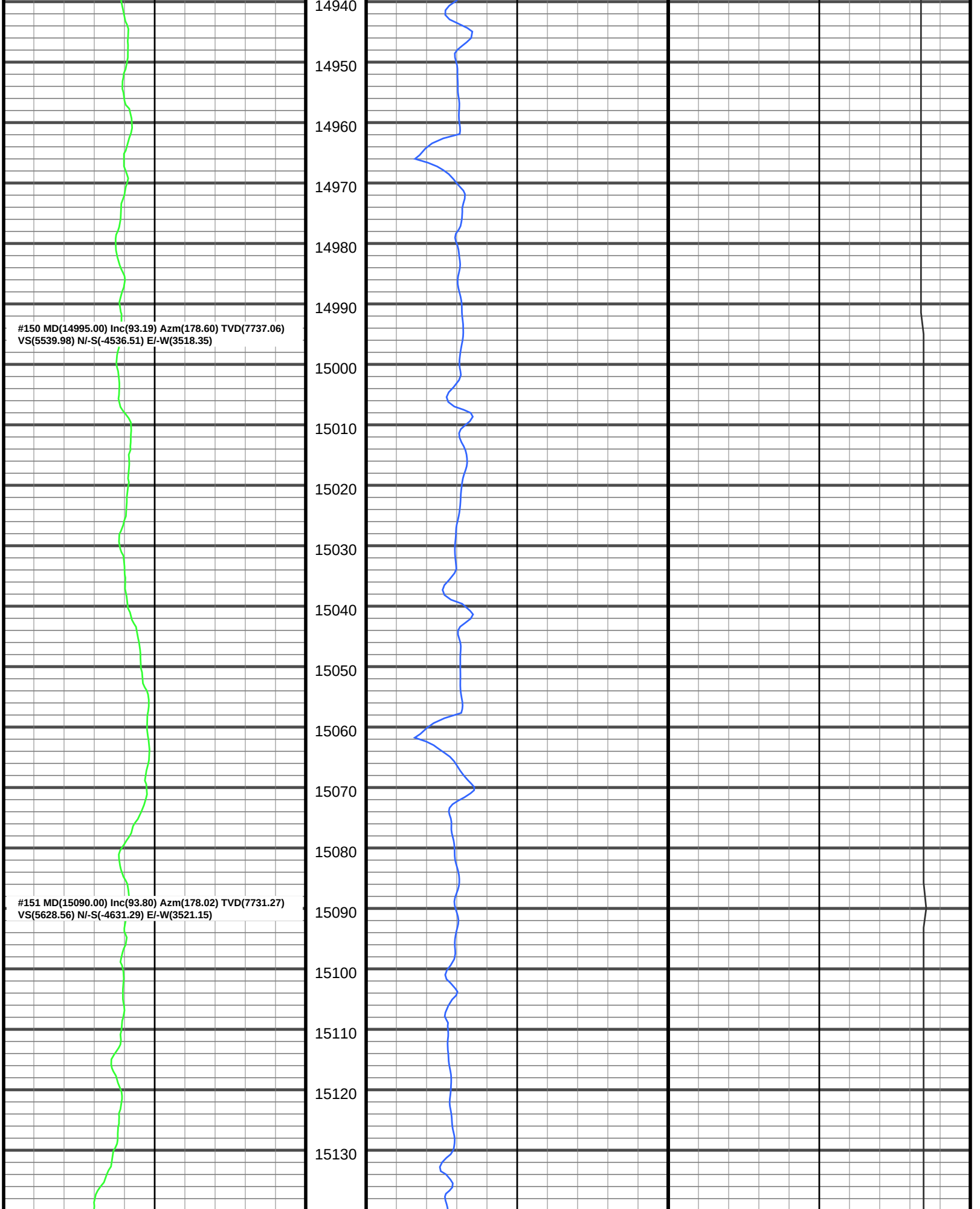

#138 MD(13855.00) Inc(88.91) Azm(180.77) TVD(7771.10)
VS(4481.92) N/-S(-3397.65) E/-W(3501.26)
#139 MD(13951.00) Inc(89.73) Azm(180.79) TVD(7772.24)
VS(4570.04) N/-S(-3493.63) E/-W(3499.95)
#140 MD(14045.00) Inc(90.62) Azm(180.90) TVD(7771.96)
VS(4656.29) N/-S(-3587.62) E/-W(3498.56)
13850
13860
13870
13880
13890
13900
13910
13920
13930
13940
13950
13960
13970
13980
13990
14000
14010
14020
14030
14040

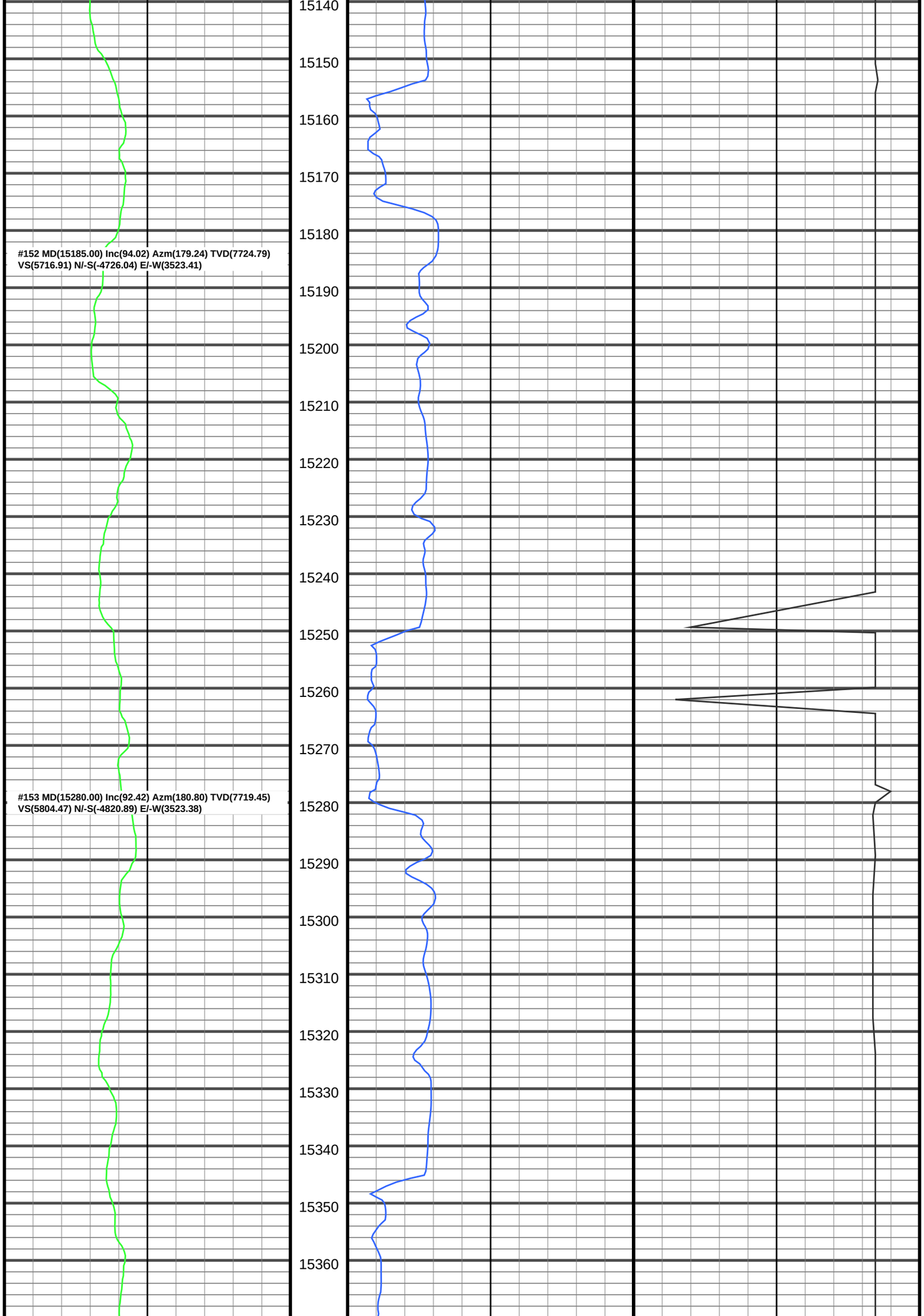

14050
14060
14070
14080
14090
14100
14110
14120
14130
#141 MD(14140.00) Inc(93.11) Azm(181.20) TVD(7768.87)
VS(4743.26) N/-S(-3682.55) E/-W(3496.82)
14140
14150
14160
14170
14180
14190
14200
14210
14220
14230
#142 MD(14236.00) Inc(93.17) Azm(179.63) TVD(7763.61)
VS(4831.49) N/-S(-3778.40) E/-W(3496.13)
14240
14250
14260

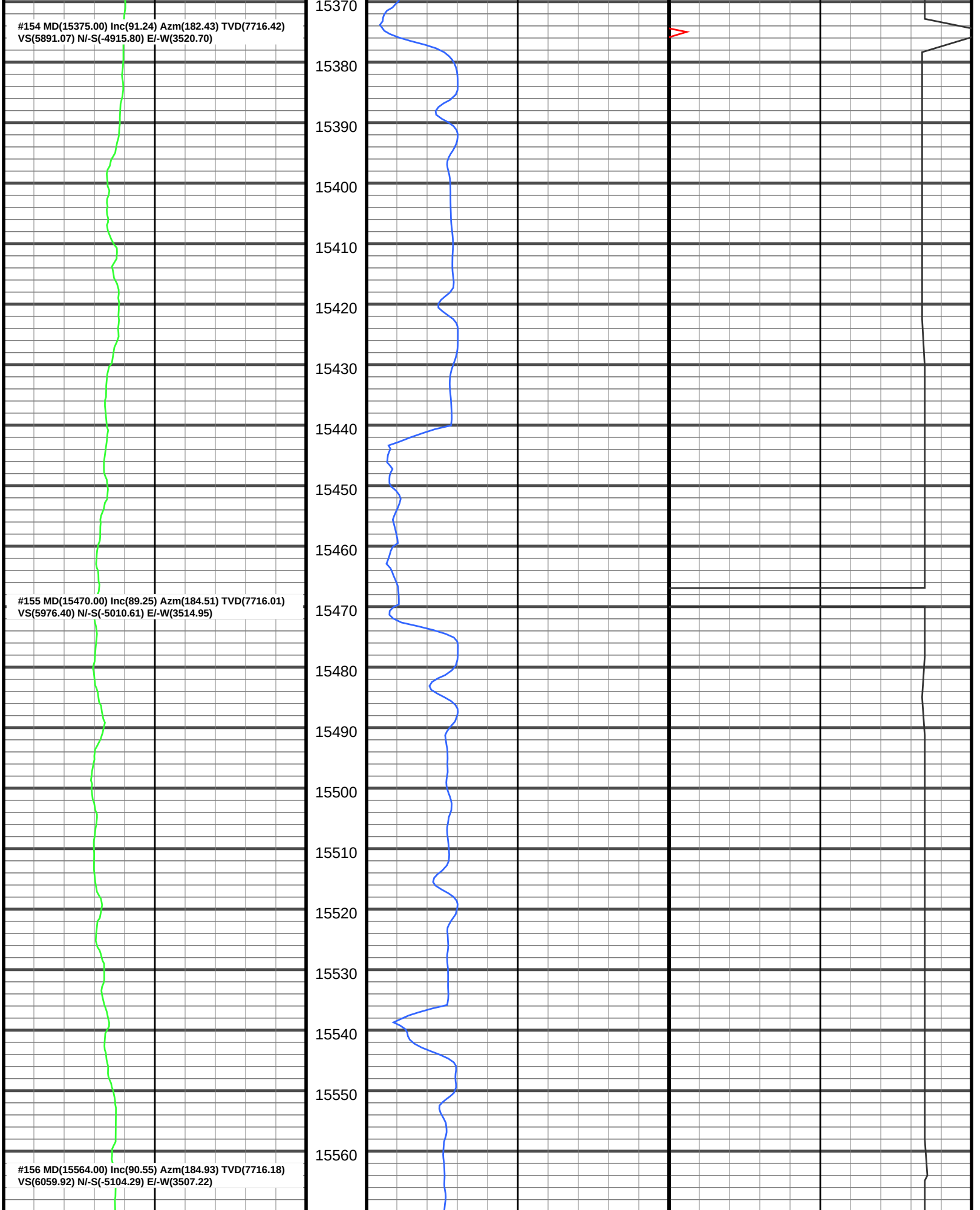

#143 MD(14330.00) Inc(91.49) Azm(178.17) TVD(7759.78)
VS(4918.88) N/-S(-3872.30) E/-W(3497.93)
#144 MD(14425.00) Inc(92.69) Azm(177.61) TVD(7756.32)
VS(5007.81) N/-S(-3967.17) E/-W(3501.43)
14270
14280
14290
14300
14310
14320
14330
14340
14350
14360
14370
14380
14390
14400
14410
14420
14430
14440
14450
14460
14470
14480

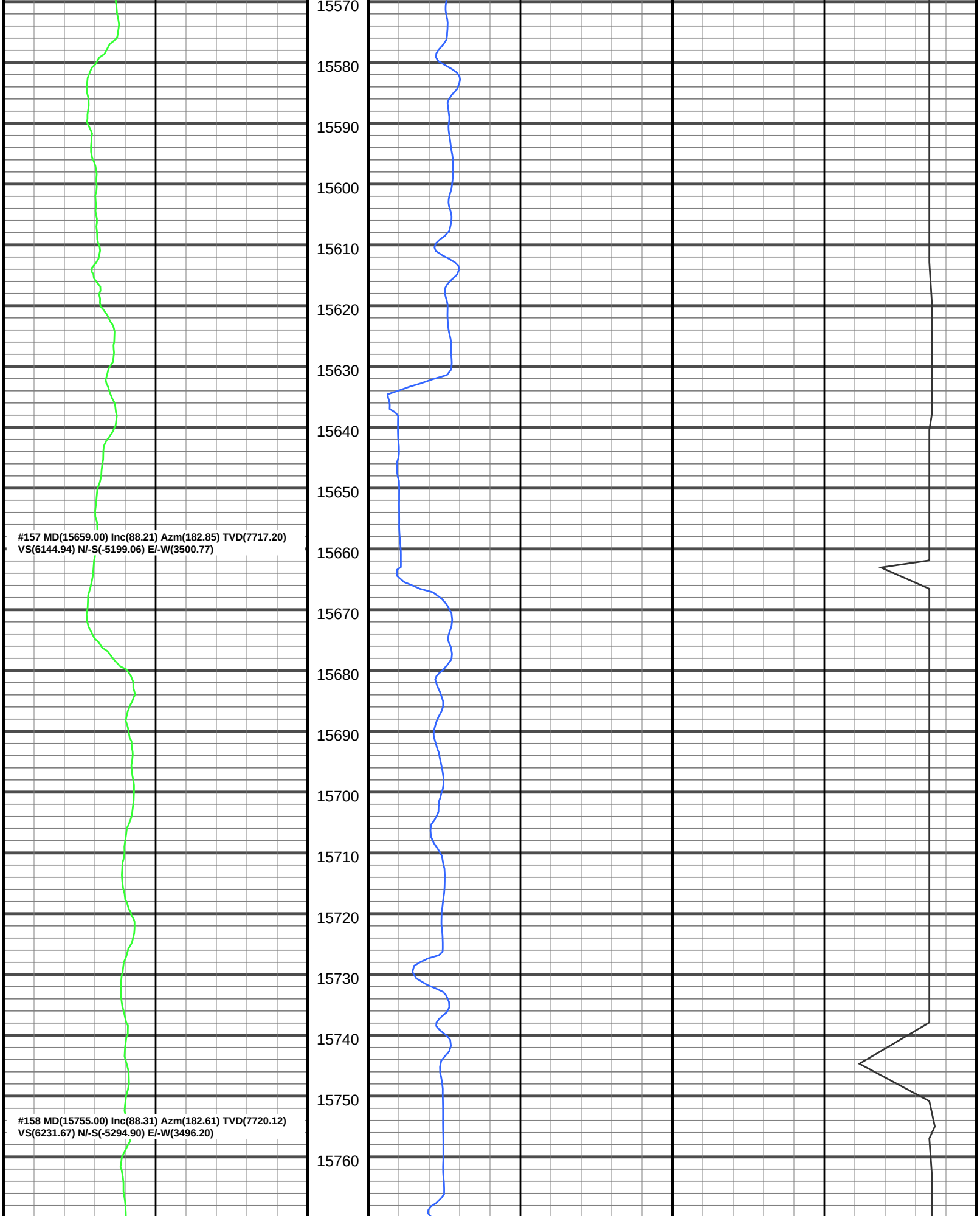

#145 MD(14520.00) Inc(90.63) Azm(178.64) TVD(7753.57)
VS(5096.63) N/-S(-4062.07) E/-W(3504.53)
#146 MD(14615.00) Inc(91.29) Azm(178.03) TVD(7751.98)
VS(5185.35) N/-S(-4157.02) E/-W(3507.29)
14490
14500
14510
14520
14530
14540
14550
14560
14570
14580
14590
14600
14610
14620
14630
14640
14650
14660
14670
14680
14690
14700

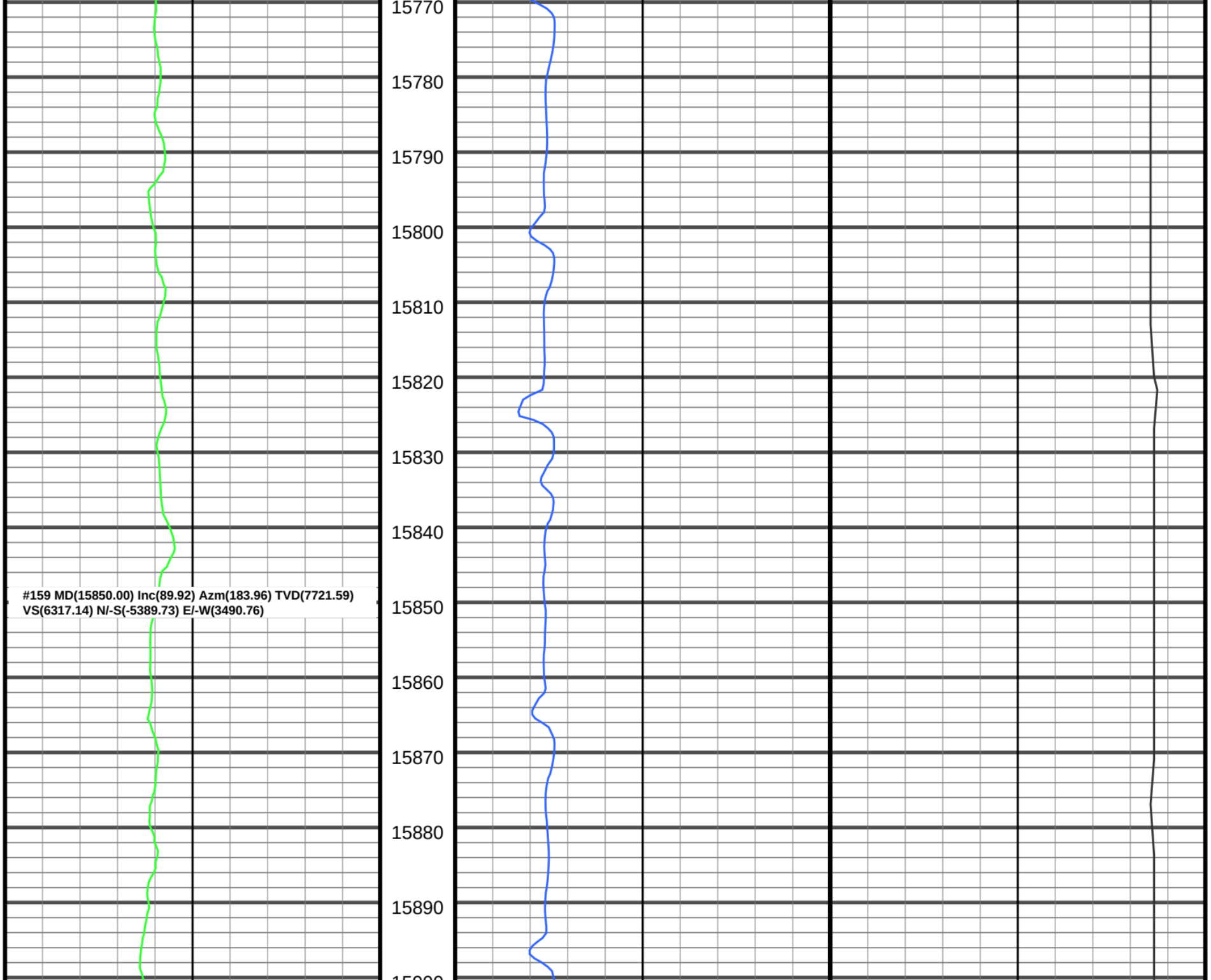

#147 MD(14710.00) Inc(91.79) Azm(176.88) TVD(7749.42)
VS(5274.56) N/-S(-4251.89) E/-W(3511.51)
#148 MD(14805.00) Inc(92.32) Azm(179.08) TVD(7746.02)
VS(5363.44) N/-S(-4346.76) E/-W(3514.86)
#149 MD(14900.00) Inc(92.65) Azm(179.05) TVD(7741.90)
VS(5451.65) N/-S(-4441.66) E/-W(3516.41)
14710
14720
14730
14740
14750
14760
14770
14780
14790
14800
14810
14820
14830
14840
14850
14860
14870
14880
14890
14900
14910
14920
14930

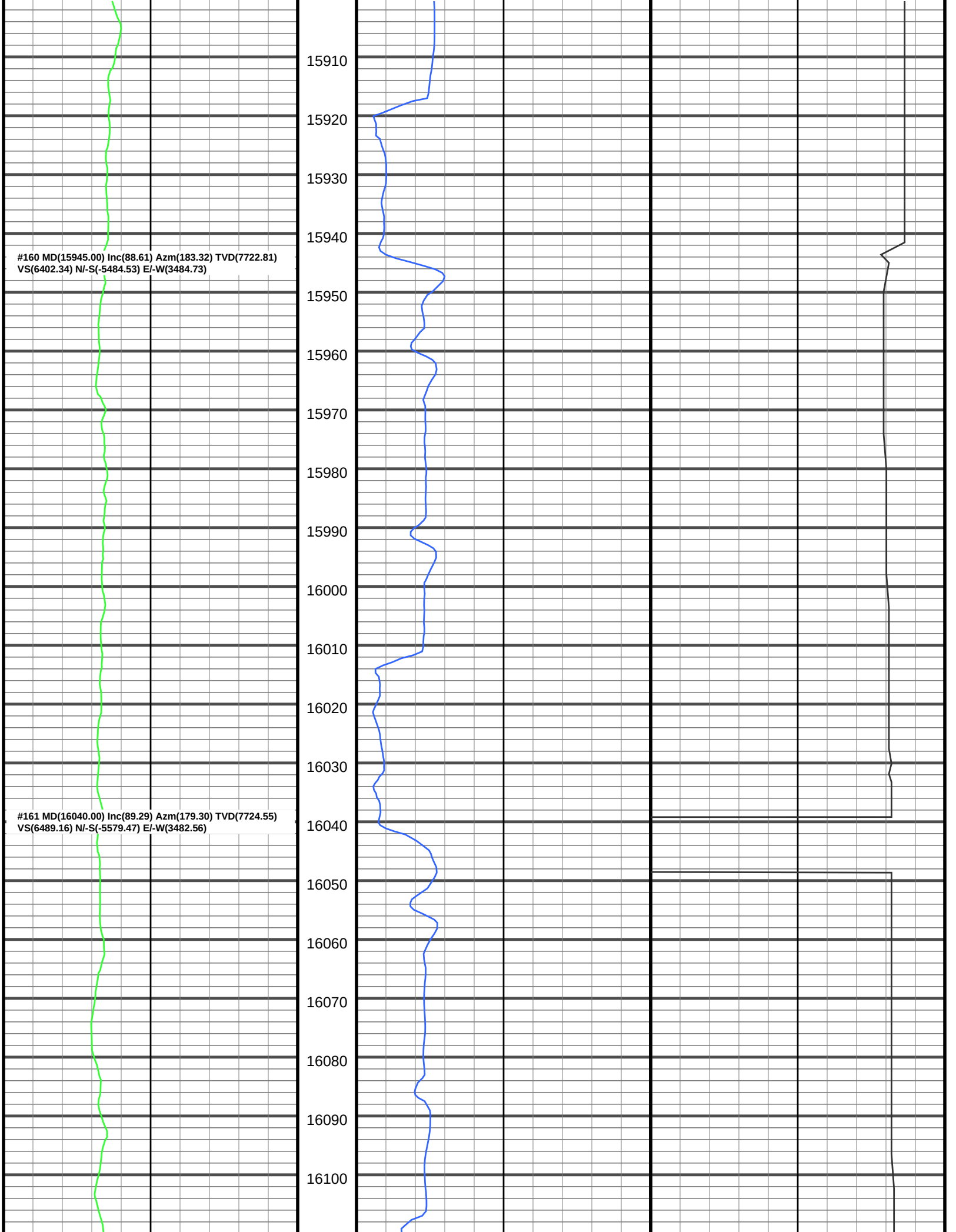

14940
14950
14960
14970
14980
14990
#150 MD(14995.00) Inc(93.19) Azm(178.60) TVD(7737.06)
VS(5539.98) N/-S(-4536.51) E/-W(3518.35)
15000
15010
15020
15030
15040
15050
15060
15070
15080
#151 MD(15090.00) Inc(93.80) Azm(178.02) TVD(7731.27)
VS(5628.56) N/-S(-4631.29) E/-W(3521.15)
15090
15100
15110
15120
15130

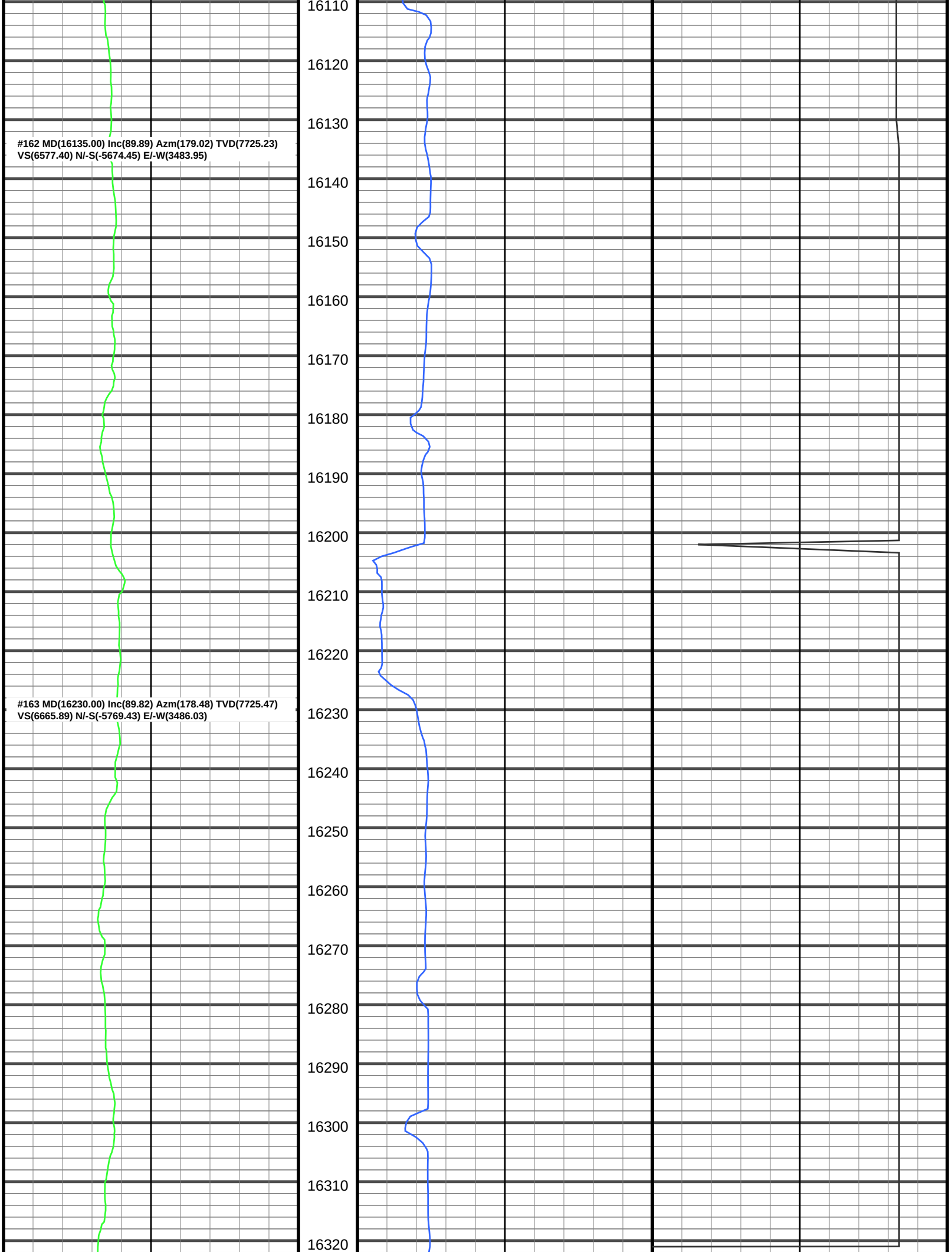

#152 MD(15185.00) Inc(94.02) Azm(179.24) TVD(7724.79)
VS(5716.91) N/-S(-4726.04) E/-W(3523.41)
#153 MD(15280.00) Inc(92.42) Azm(180.80) TVD(7719.45)
VS(5804.47) N/-S(-4820.89) E/-W(3523.38)
15140
15150
15160
15170
15180
15190
15200
15210
15220
15230
15240
15250
15260
15270
15280
15290
15300
15310
15320
15330
15340
15350
15360

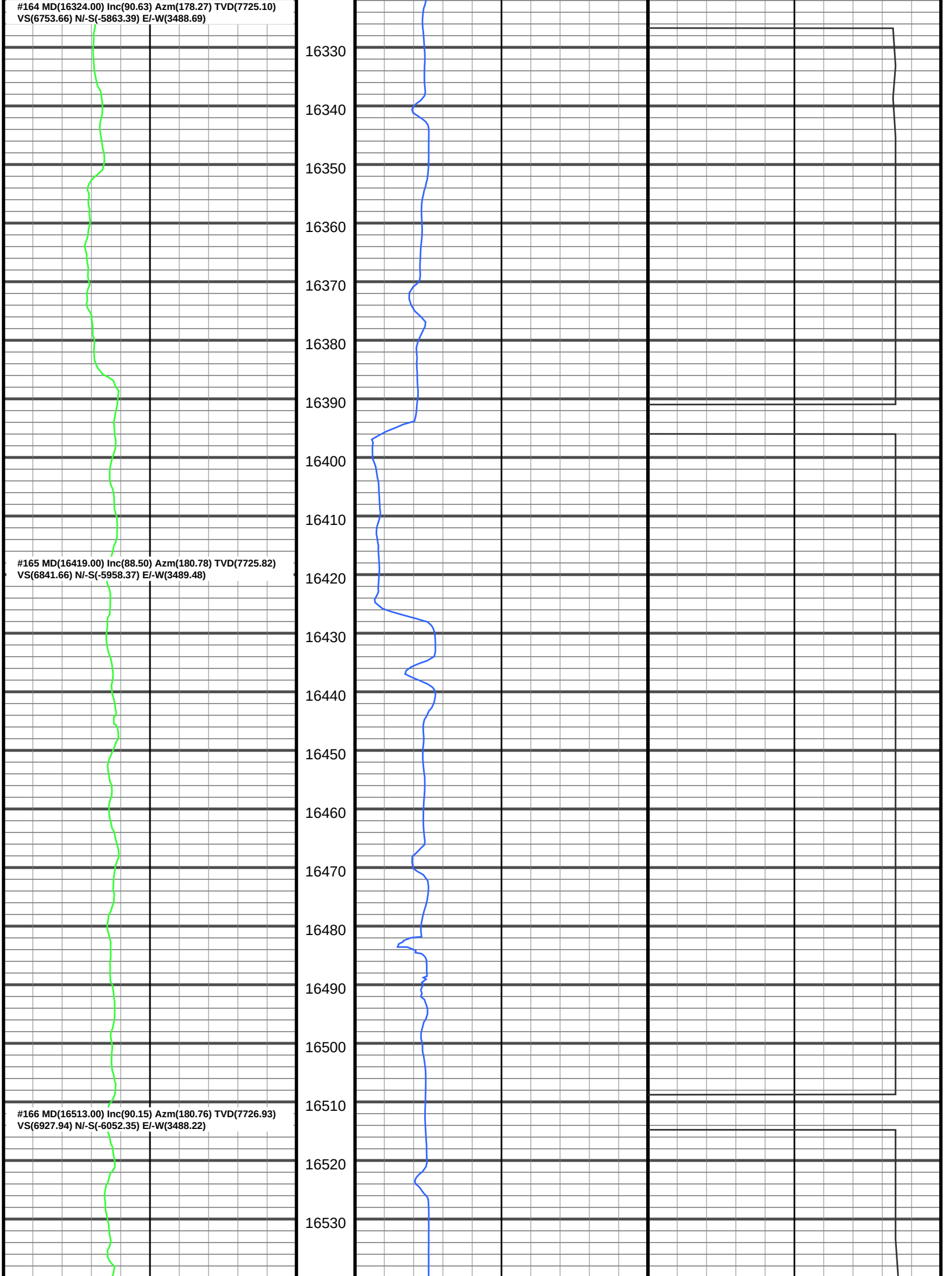

#154 MD(15375.00) Inc(91.24) Azm(182.43) TVD(7716.42)
VS(5891.07) N/-S(-4915.80) E/-W(3520.70)
#155 MD(15470.00) Inc(89.25) Azm(184.51) TVD(7716.01)
VS(5976.40) N/-S(-5010.61) E/-W(3514.95)
#156 MD(15564.00) Inc(90.55) Azm(184.93) TVD(7716.18)
VS(6059.92) N/-S(-5104.29) E/-W(3507.22)
15370
15380
15390
15400
15410
15420
15430
15440
15450
15460
15470
15480
15490
15500
15510
15520
15530
15540
15550
15560

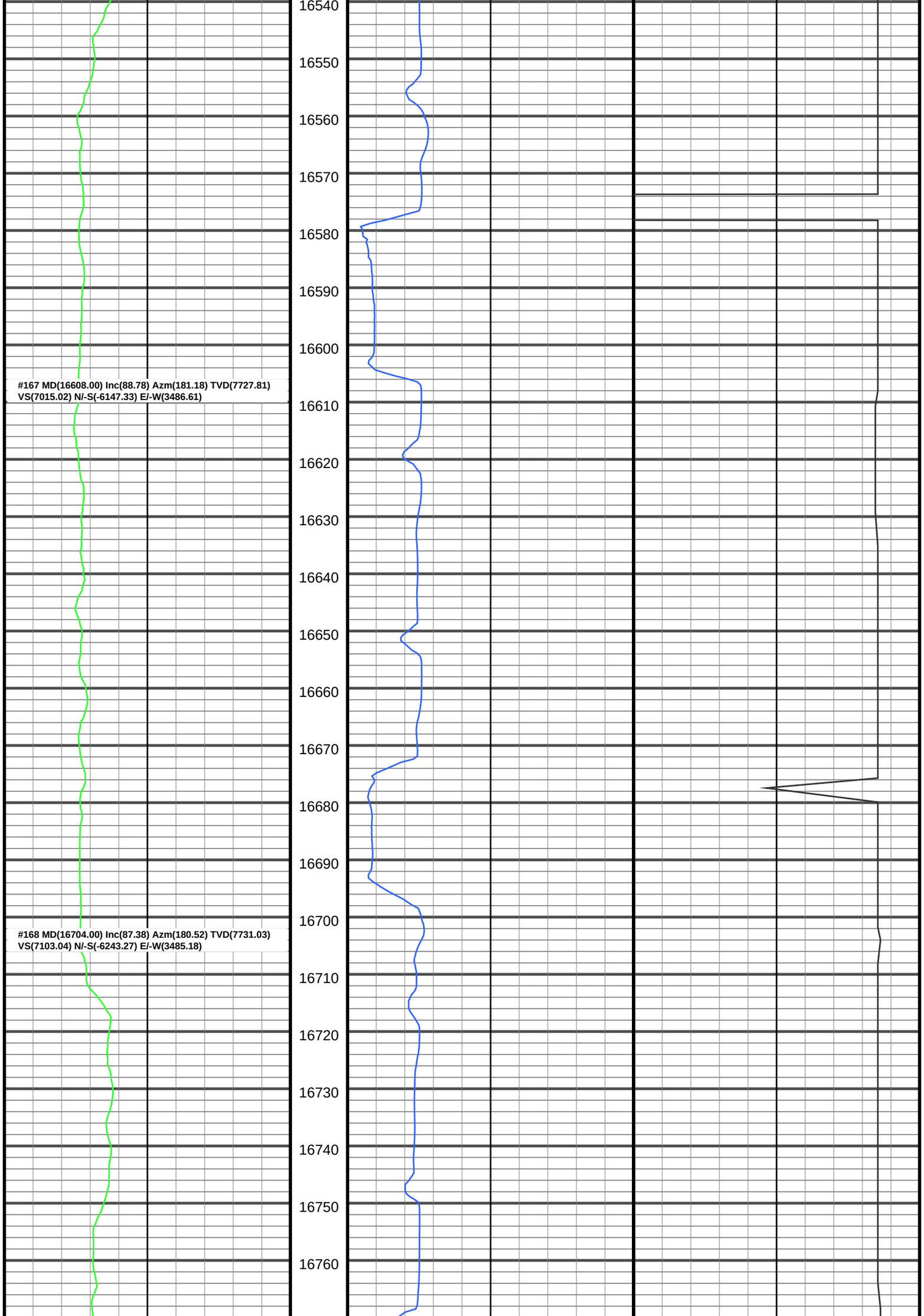

15570
15580
15590
15600
15610
15620
15630
15640
15650
#157 MD(15659.00) Inc(88.21) Azm(182.85) TVD(7717.20)
VS(6144.94) N/-S(-5199.06) E/-W(3500.77)
15660
15670
15680
15690
15700
15710
15720
15730
15740
15750
#158 MD(15755.00) Inc(88.31) Azm(182.61) TVD(7720.12)
VS(6231.67) N/-S(-5294.90) E/-W(3496.20)
15760

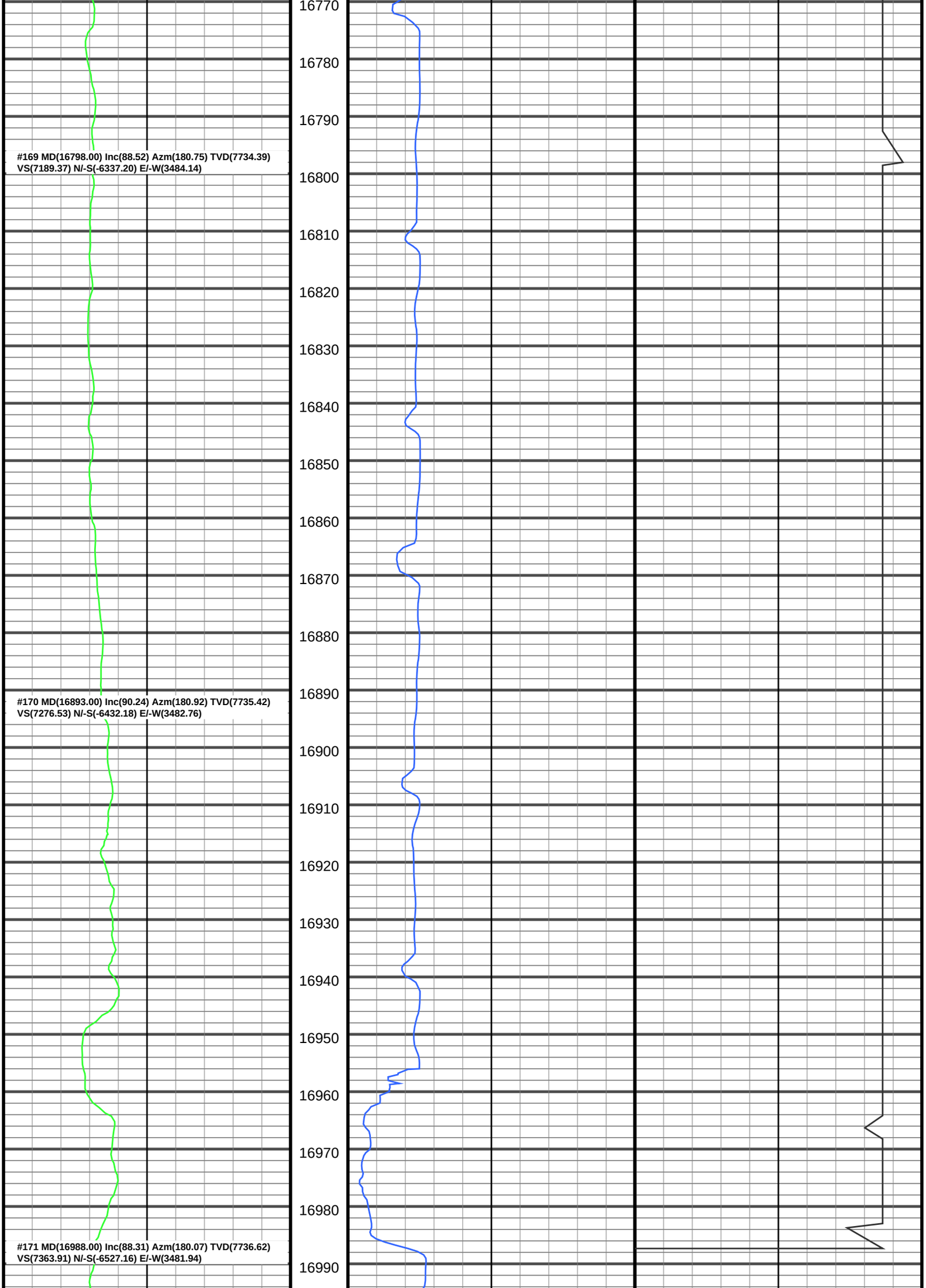

15770
15780
15790
15800
15810
15820
15830
15840
15850
15860
15870
15880
15890
#159 MD(15850.00) Inc(89.92) Azm(183.96) TVD(7721.59)
VS(6317.14) N/-S(-5389.73) E/-W(3490.76)

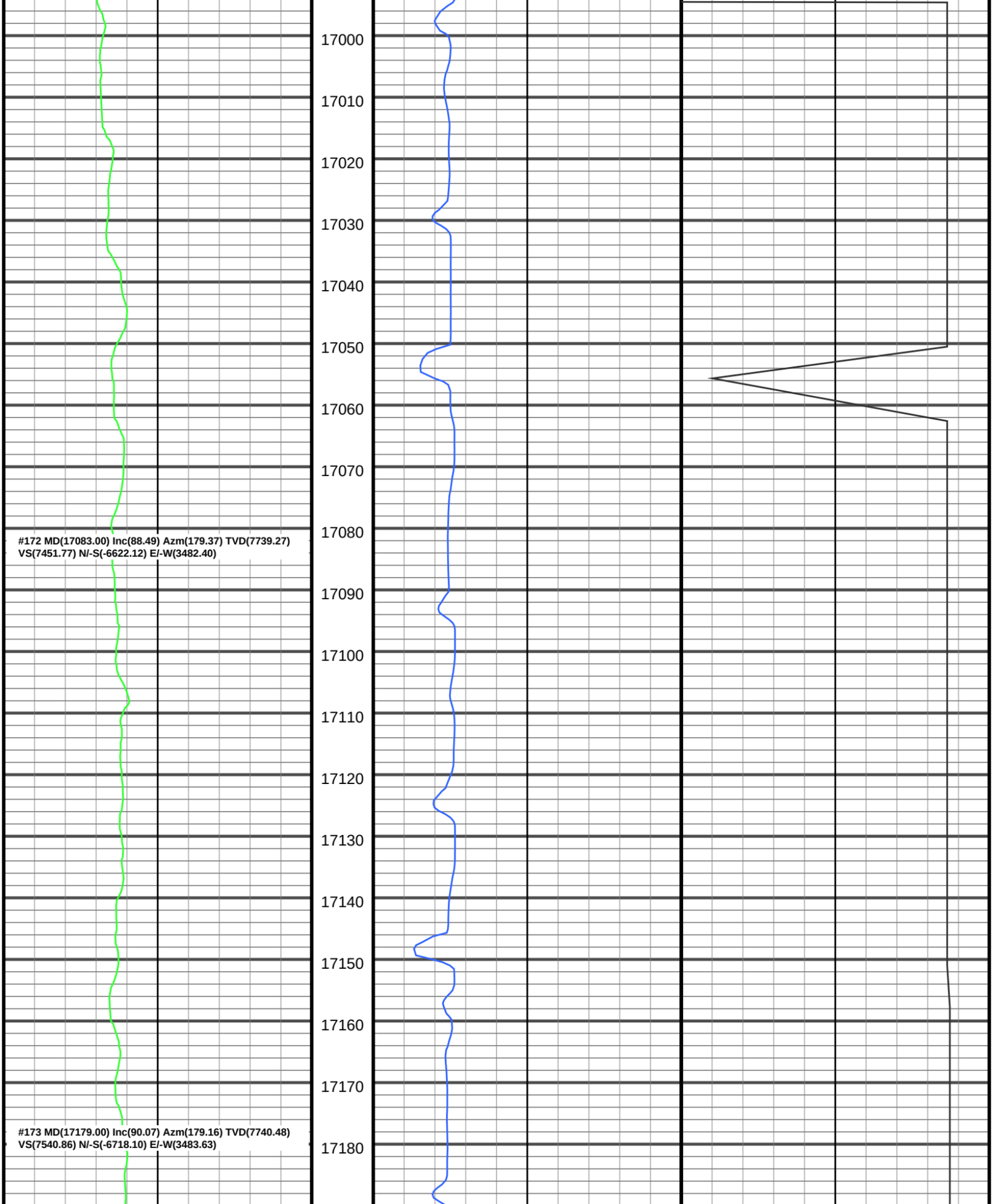

15910
15920
15930
15940
15950
15960
15970
15980
15990
16000
16010
16020
16030
16040
16050
16060
16070
16080
16090
16100
#160 MD(15945.00) Inc(88.61) Azm(183.32) TVD(7722.81)
VS(6402.34) N/-S(-5484.53) E/-W(3484.73)
#161 MD(16040.00) Inc(89.29) Azm(179.30) TVD(7724.55)
VS(6489.16) N/-S(-5579.47) E/-W(3482.56)

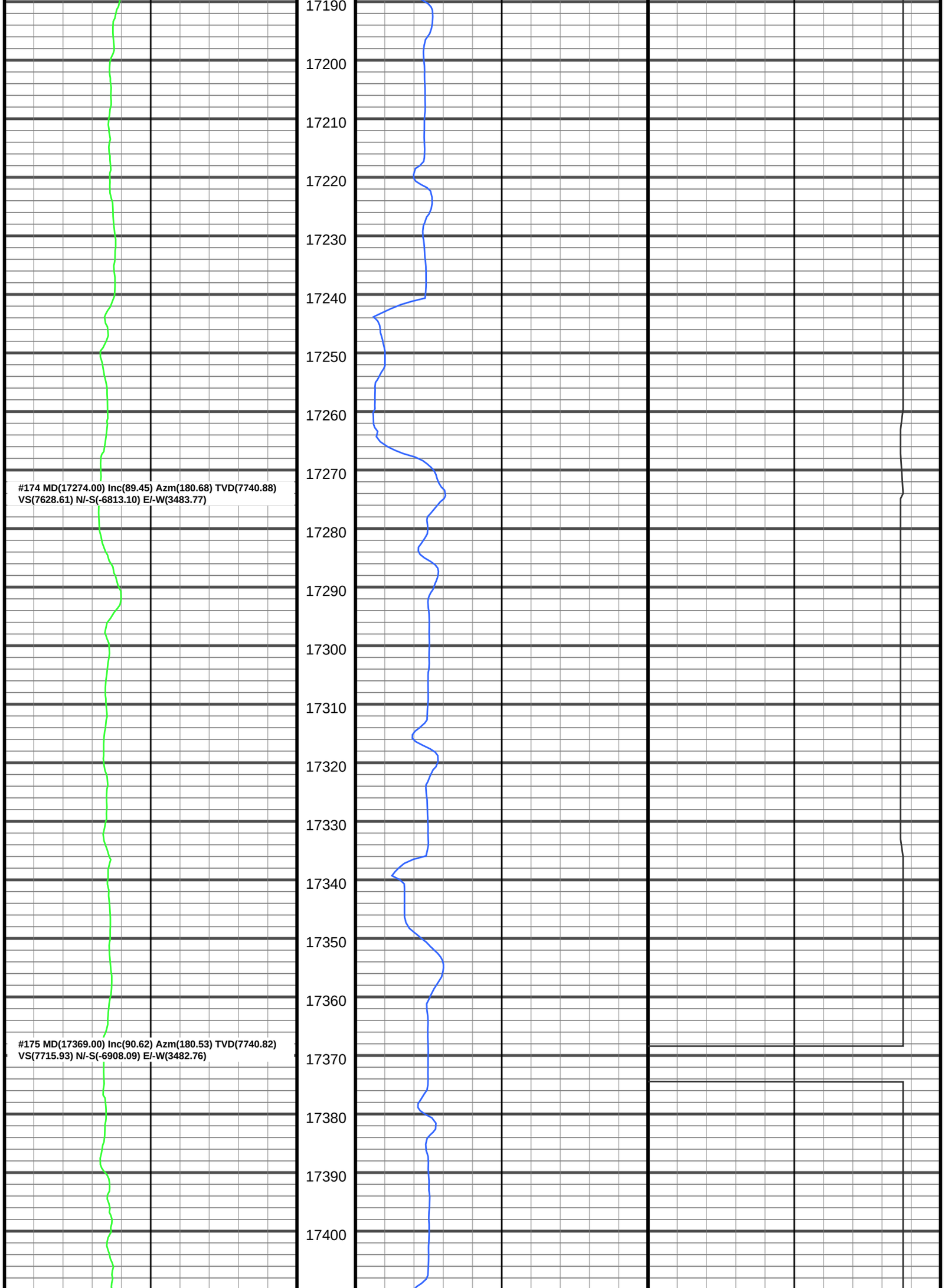

16110
16120
16130
#162 MD(16135.00) Inc(89.89) Azm(179.02) TVD(7725.23)
VS(6577.40) N/-S(-5674.45) E/-W(3483.95)
16140
16150
16160
16170
16180
16190
16200
16210
16220
#163 MD(16230.00) Inc(89.82) Azm(178.48) TVD(7725.47)
VS(6665.89) N/-S(-5769.43) E/-W(3486.03)
16230
16240
16250
16260
16270
16280
16290
16300
16310
16320

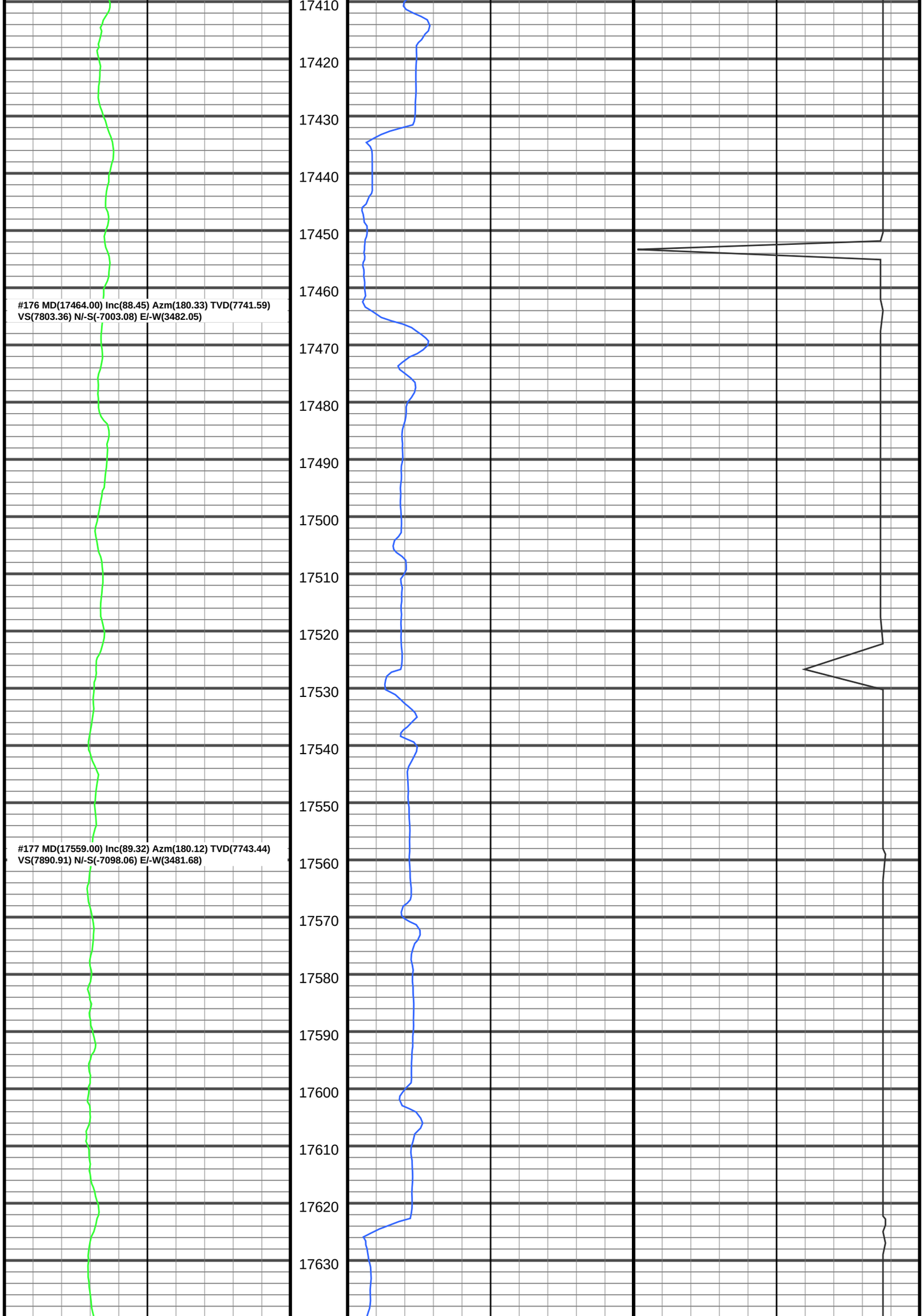

#164 MD(16324.00) Inc(90.63) Azm(178.27) TVD(7725.10)
VS(6753.66) N/-S(-5863.39) E/-W(3488.69)
#165 MD(16419.00) Inc(88.50) Azm(180.78) TVD(7725.82)
VS(6841.66) N/-S(-5958.37) E/-W(3489.48)
#166 MD(16513.00) Inc(90.15) Azm(180.76) TVD(7726.93)
VS(6927.94) N/-S(-6052.35) E/-W(3488.22)
16330
16340
16350
16360
16370
16380
16390
16400
16410
16420
16430
16440
16450
16460
16470
16480
16490
16500
16510
16520
16530

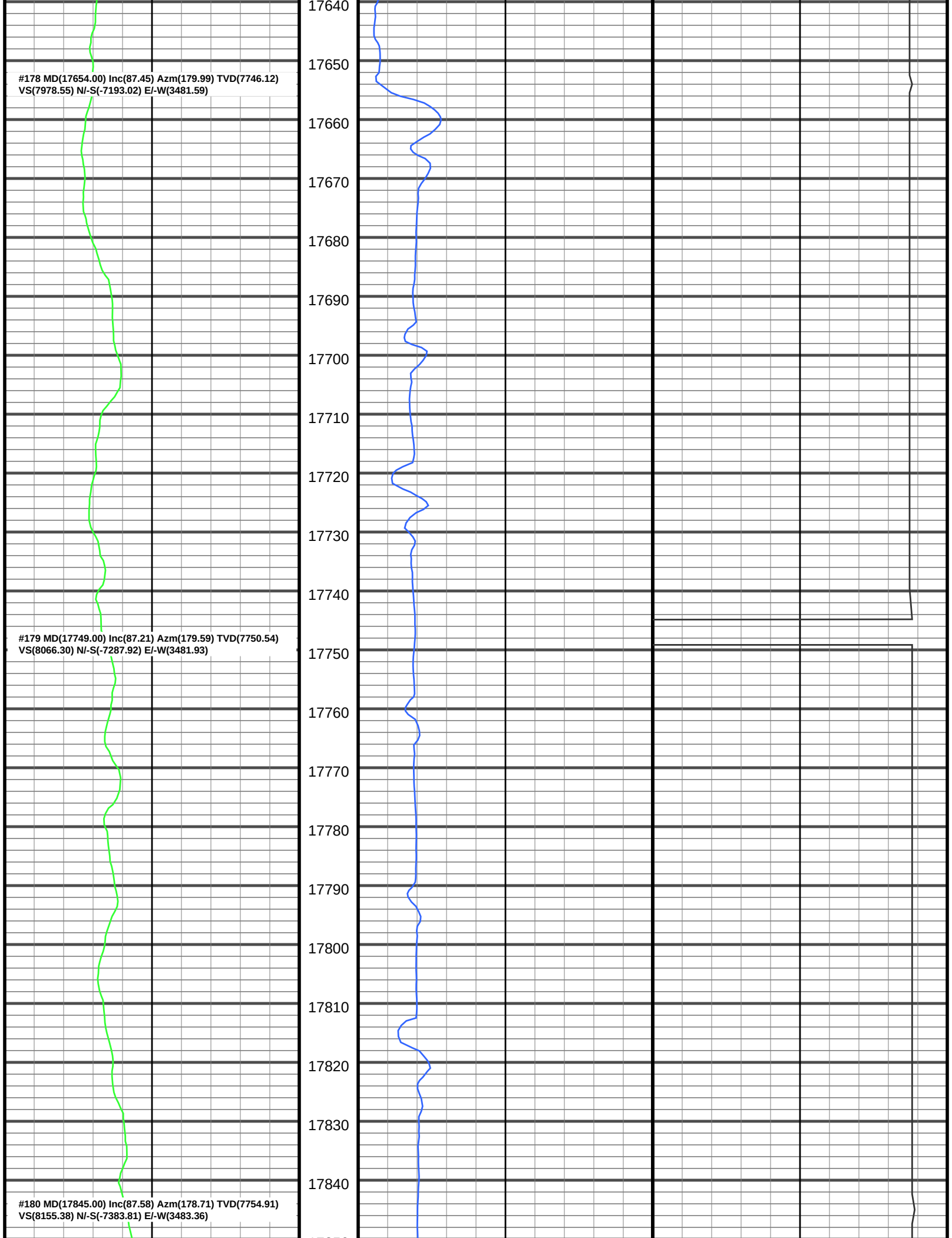

16540
16550
16560
16570
16580
16590
16600
#167 MD(16608.00) Inc(88.78) Azm(181.18) TVD(7727.81)
VS(7015.02) N/-S(-6147.33) E/-W(3486.61)
16610
16620
16630
16640
16650
16660
16670
16680
16690
16700
#168 MD(16704.00) Inc(87.38) Azm(180.52) TVD(7731.03)
VS(7103.04) N/-S(-6243.27) E/-W(3485.18)
16710
16720
16730
16740
16750
16760

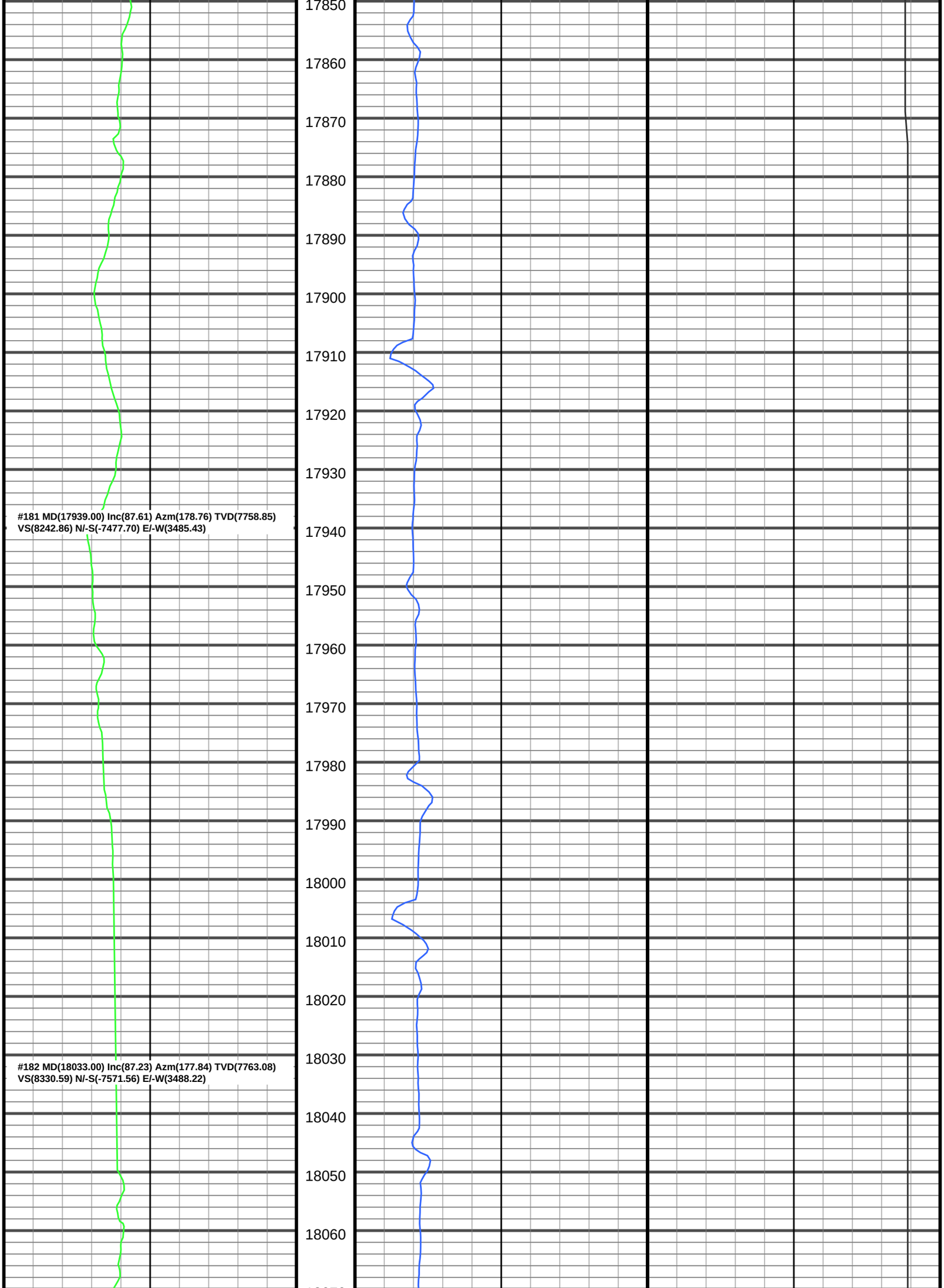

#169 MD(16798.00) Inc(88.52) Azm(180.75) TVD(7734.39)
VS(7189.37) N/-S(-6337.20) E/-W(3484.14)
#170 MD(16893.00) Inc(90.24) Azm(180.92) TVD(7735.42)
VS(7276.53) N/-S(-6432.18) E/-W(3482.76)
#171 MD(16988.00) Inc(88.31) Azm(180.07) TVD(7736.62)
VS(7363.91) N/-S(-6527.16) E/-W(3481.94)
16770
16780
16790
16800
16810
16820
16830
16840
16850
16860
16870
16880
16890
16900
16910
16920
16930
16940
16950
16960
16970
16980
16990

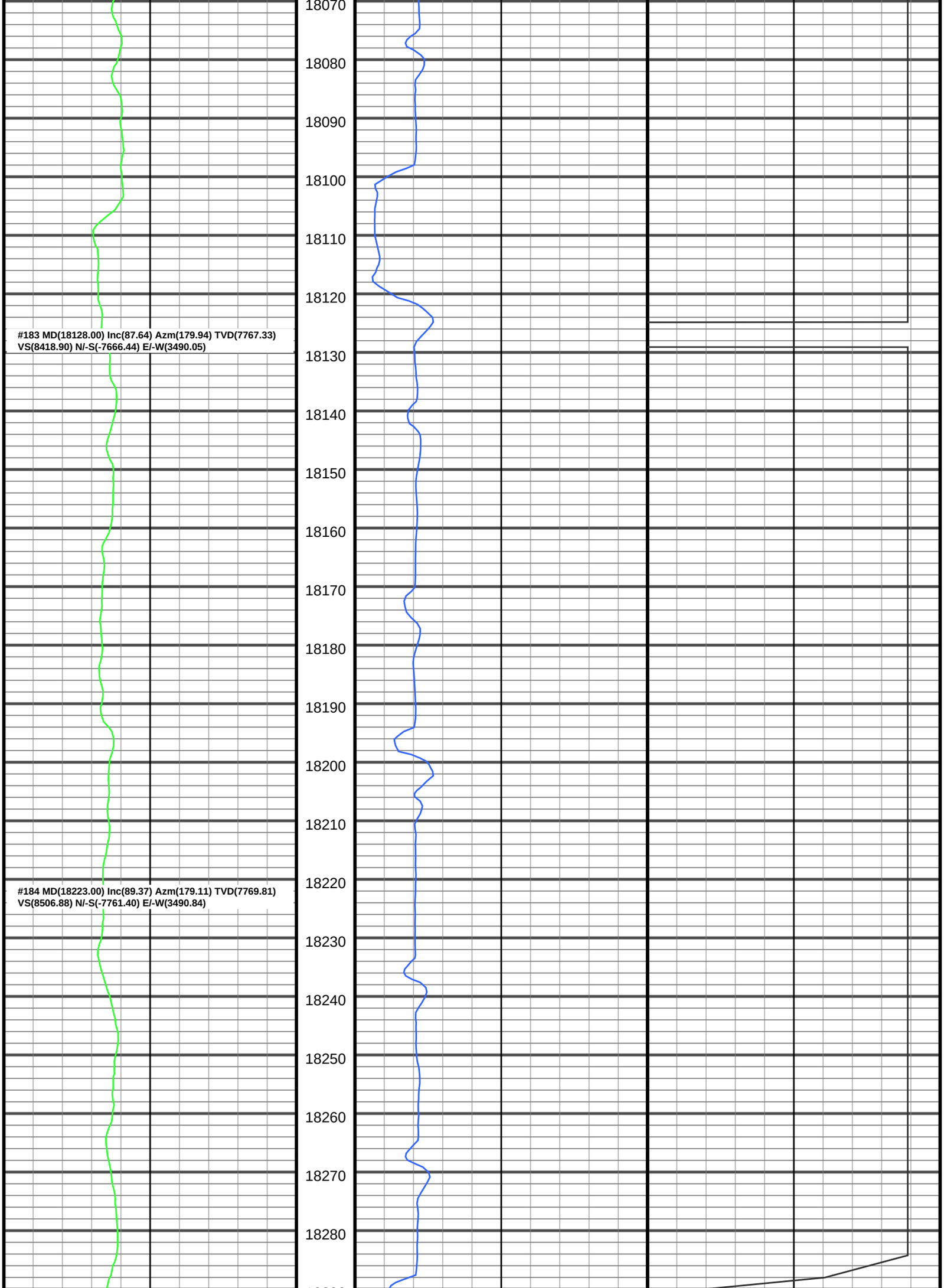

17000
17010
17020
17030
17040
17050
17060
17070
17080
17090
17100
17110
17120
17130
17140
17150
17160
17170
17180
#172 MD(17083.00) Inc(88.49) Azm(179.37) TVD(7739.27)
VS(7451.77) N/-S(-6622.12) E/-W(3482.40)
#173 MD(17179.00) Inc(90.07) Azm(179.16) TVD(7740.48)
VS(7540.86) N/-S(-6718.10) E/-W(3483.63)

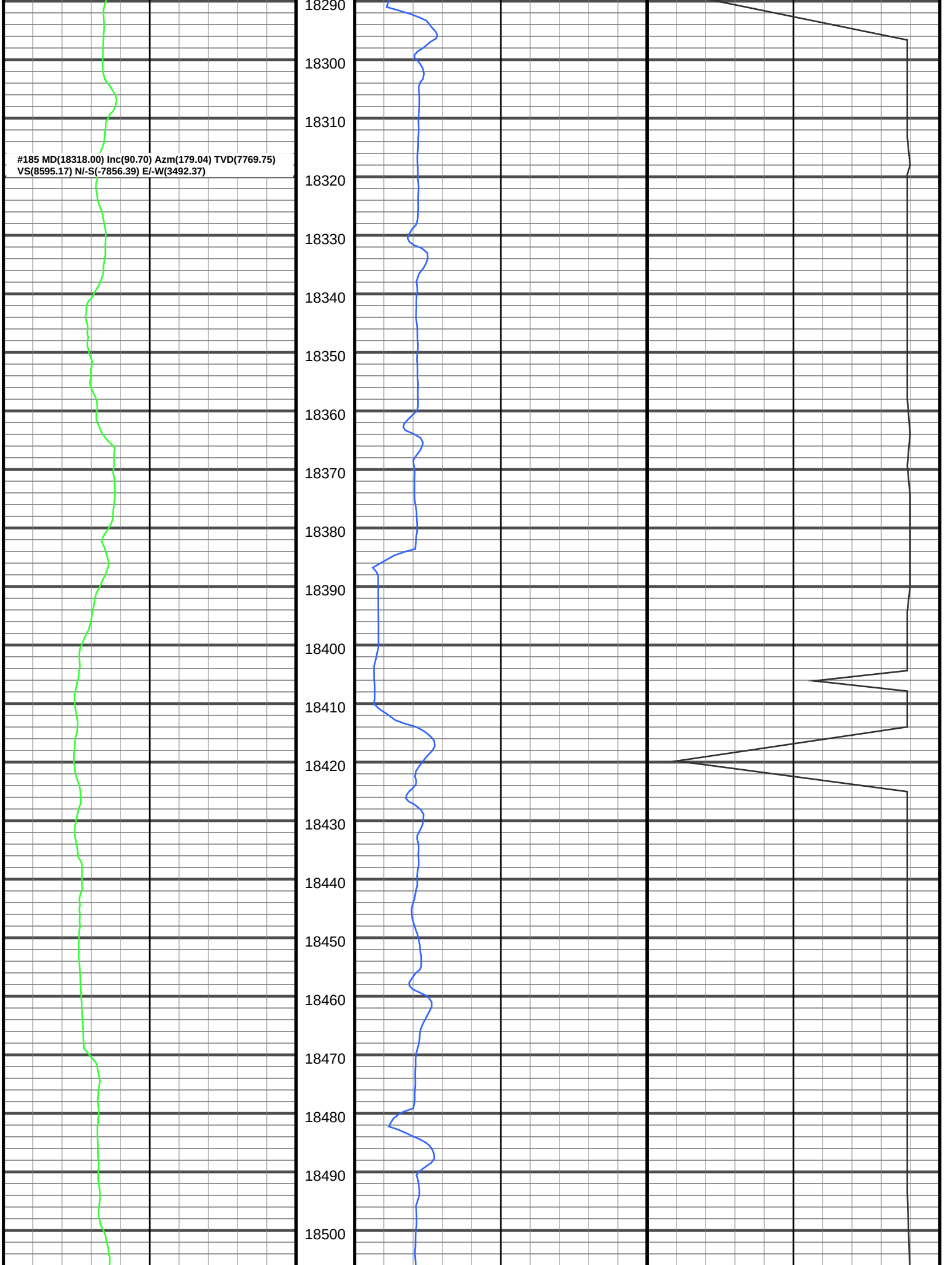

17190
17200
17210
17220
17230
17240
17250
17260
17270
#174 MD(17274.00) Inc(89.45) Azm(180.68) TVD(7740.88)
VS(7628.61) N/-S(-6813.10) E/-W(3483.77)
17280
17290
17300
17310
17320
17330
17340
17350
17360
#175 MD(17369.00) Inc(90.62) Azm(180.53) TVD(7740.82)
VS(7715.93) N/-S(-6908.09) E/-W(3482.76)
17370
17380
17390
17400

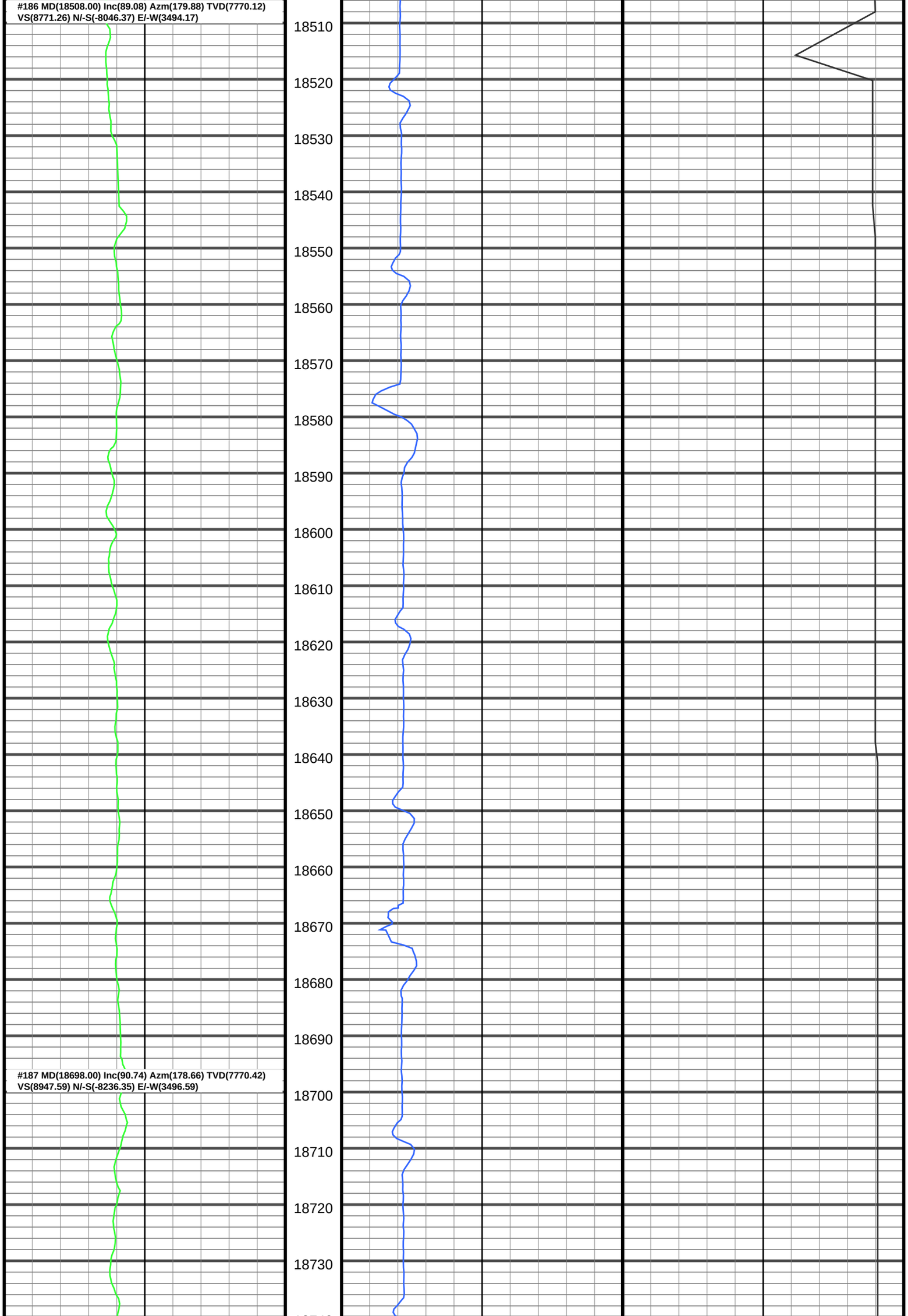

17410
17420
17430
17440
17450
17460
17470
17480
17490
17500
17510
17520
17530
17540
17550
17560
17570
17580
17590
17600
17610
17620
17630
#176 MD(17464.00) Inc(88.45) Azm(180.33) TVD(7741.59)
VS(7803.36) N/-S(-7003.08) E/-W(3482.05)
#177 MD(17559.00) Inc(89.32) Azm(180.12) TVD(7743.44)
VS(7890.91) N/-S(-7098.06) E/-W(3481.68)

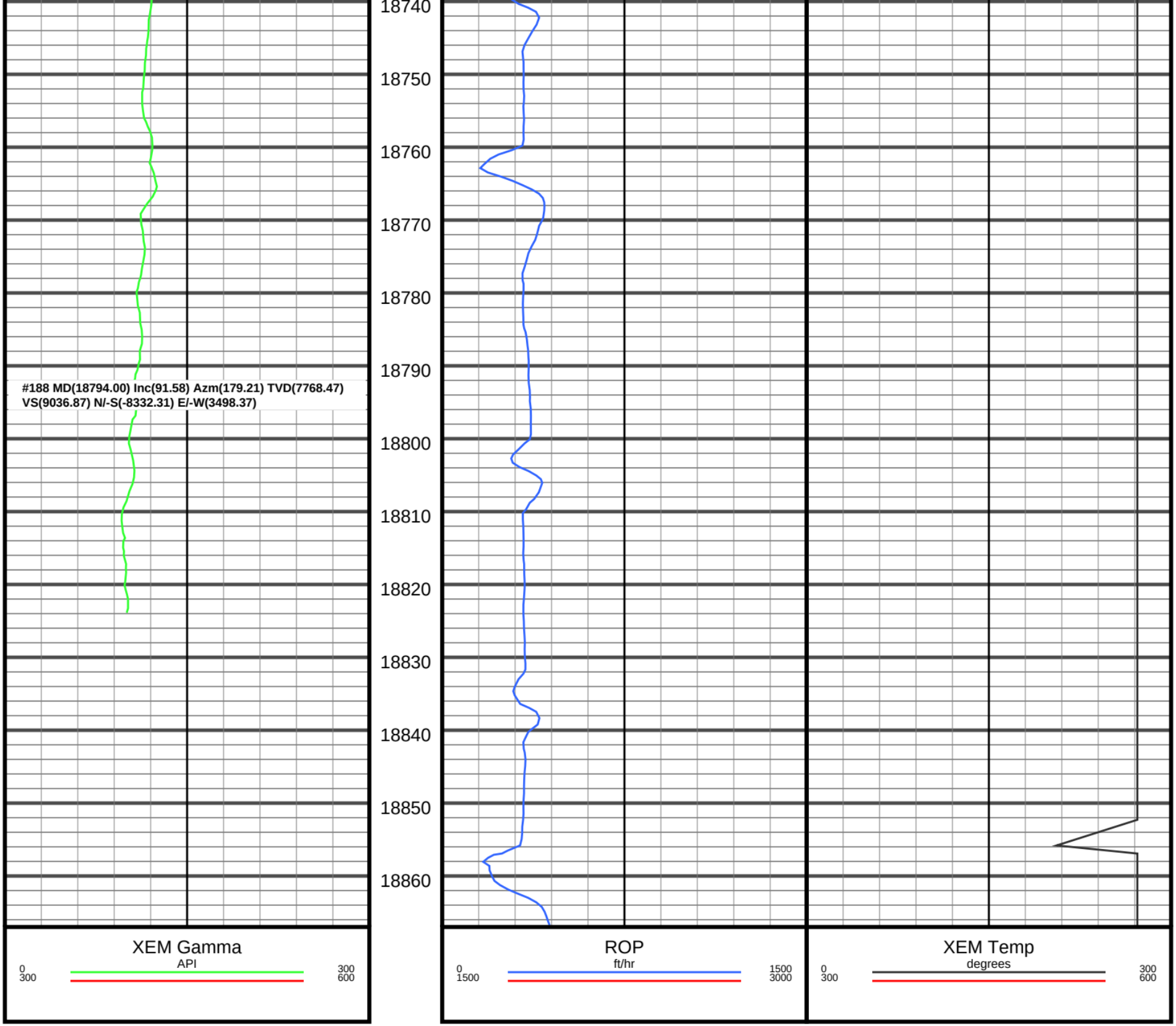

17640
17650
17660
17670
17680
17690
17700
17710
17720
17730
17740
17750
17760
17770
17780
17790
17800
17810
17820
17830
17840
#178 MD(17654.00) Inc(87.45) Azm(179.99) TVD(7746.12)
VS(7978.55) N/-S(-7193.02) E/-W(3481.59)
#179 MD(17749.00) Inc(87.21) Azm(179.59) TVD(7750.54)
VS(8066.30) N/-S(-7287.92) E/-W(3481.93)
#180 MD(17845.00) Inc(87.58) Azm(178.71) TVD(7754.91)
VS(8155.38) N/-S(-7383.81) E/-W(3483.36)


17850
17860
17870
17880
17890
17900
17910
17920
17930
17940
17950
17960
17970
17980
17990
18000
18010
18020
18030
18040
18050
18060
#181 MD(17939.00) Inc(87.61) Azm(178.76) TVD(7758.85)
VS(8242.86) N/-S(-7477.70) E/-W(3485.43)
#182 MD(18033.00) Inc(87.23) Azm(177.84) TVD(7763.08)
VS(8330.59) N/-S(-7571.56) E/-W(3488.22)


18070
18080
18090
18100
18110
18120
#183 MD(18128.00) Inc(87.64) Azm(179.94) TVD(7767.33)
VS(8418.90) N/-S(-7666.44) E/-W(3490.05)
18130
18140
18150
18160
18170
18180
18190
18200
18210
18220
#184 MD(18223.00) Inc(89.37) Azm(179.11) TVD(7769.81)
VS(8506.88) N/-S(-7761.40) E/-W(3490.84)
18230
18240
18250
18260
18270
18280


#185 MD(18318.00) Inc(90.70) Azm(179.04) TVD(7769.75)
VS(8595.17) N/-S(-7856.39) E/-W(3492.37)
18290
18300
18310
18320
18330
18340
18350
18360
18370
18380
18390
18400
18410
18420
18430
18440
18450
18460
18470
18480
18490
18500


#186 MD(18508.00) Inc(89.08) Azm(179.88) TVD(7770.12)
VS(8771.26) N/-S(-8046.37) E/-W(3494.17)
#187 MD(18698.00) Inc(90.74) Azm(178.66) TVD(7770.42)
VS(8947.59) N/-S(-8236.35) E/-W(3496.59)
18510
18520
18530
18540
18550
18560
18570
18580
18590
18600
18610
18620
18630
18640
18650
18660
18670
18680
18690
18700
18710
18720
18730


#188 MD(18794.00) Inc(91.58) Azm(179.21) TVD(7768.47)
VS(9036.87) N/-S(-8332.31) E/-W(3498.37)
18740
18750
18760
18770
18780
18790
18800
18810
18820
18830
18840
18850
18860
XEM Gamma
API
0
300
300
600
ROP
ft/hr
0
1500
1500
3000
XEM Temp
degrees
0
300
300
600