ALMA WEST 26W-20-03

MD
5":100'

Company: Extraction Oil & Gas
Well Name: Alma West 26W-20-03
API: 05-001-10022-00
County/Parish: Adams
State/Prov: Colorado
Country: US
Job #: RM-221870

Company: Extraction Oil & Gas
Well Name: Alma West 26W-20-03
API: 05-001-10022-00
County/Parish: Adams
State or Prov: Colorado
Country: US
Job number: RM-221870
Field: DJ Basin
Rig Identification: Patterson 572
Survey Company: Total Directional Services
Company Man Manny Parras
Company Man Danny Herera
DD Days Jason Cross
DD Nights Breven Williams
MWD Days Jayce Noel
MWD Nights Jeff Lewis

Log measurements: 5200
Depth measured from: KB ft
Maximum temperature: 266

	Depth	Date
Start:	1,639 ft	12-03-2022
End:	18,785 ft	12-08-2022

Casing	Depth	Size
Surface:	18785 ft	10 1/2"
Intermediate:		

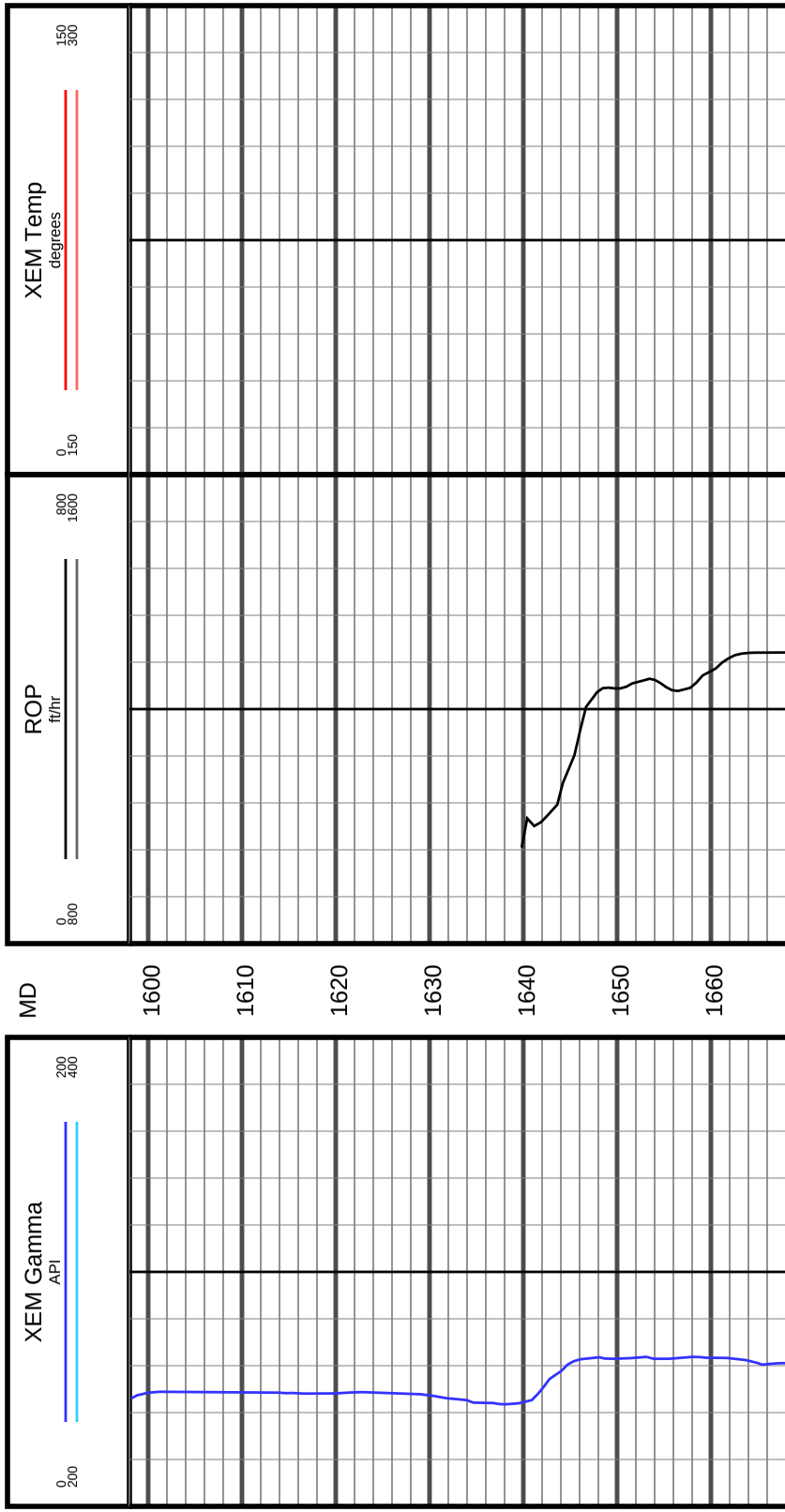
Mud type: OBM
Density: 9.5
Viscosity: 43
Rm: **Rmf:** **Rmc:**

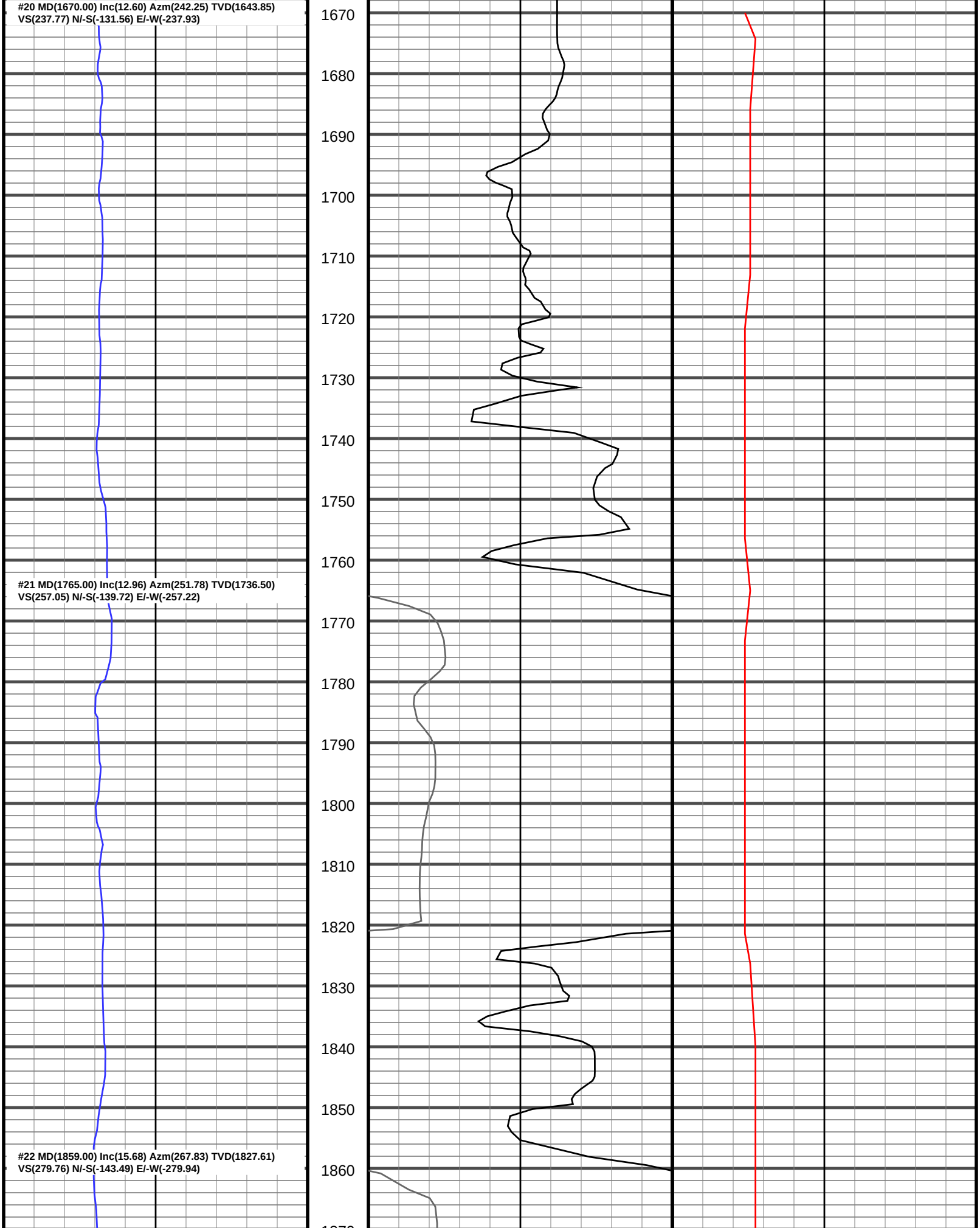
Elevations	
KB:	5200
DF:	25
GL:	5175

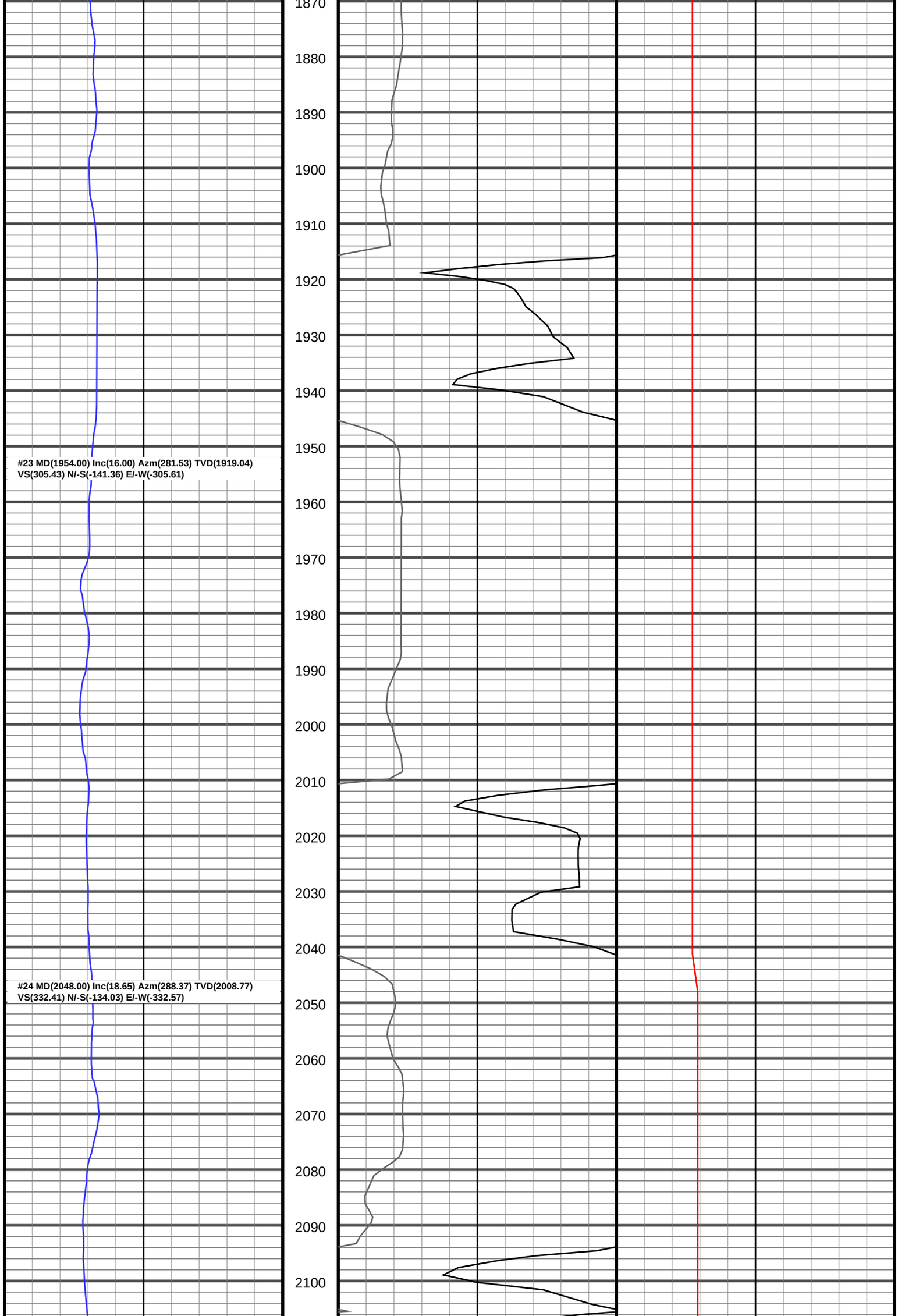
Run	Bit Size	Gamma Factor	Offsets Gamma	Offsets Survey	Depths Start	Depths End	Dates Start	Dates End
1	8.5"	0.524	41.83 ft	60.00 ft	1639 ft	18785 ft	12-03-2022	12-08-2022
2								
3								
4								
5								
6								
7								
8								
9								
10								

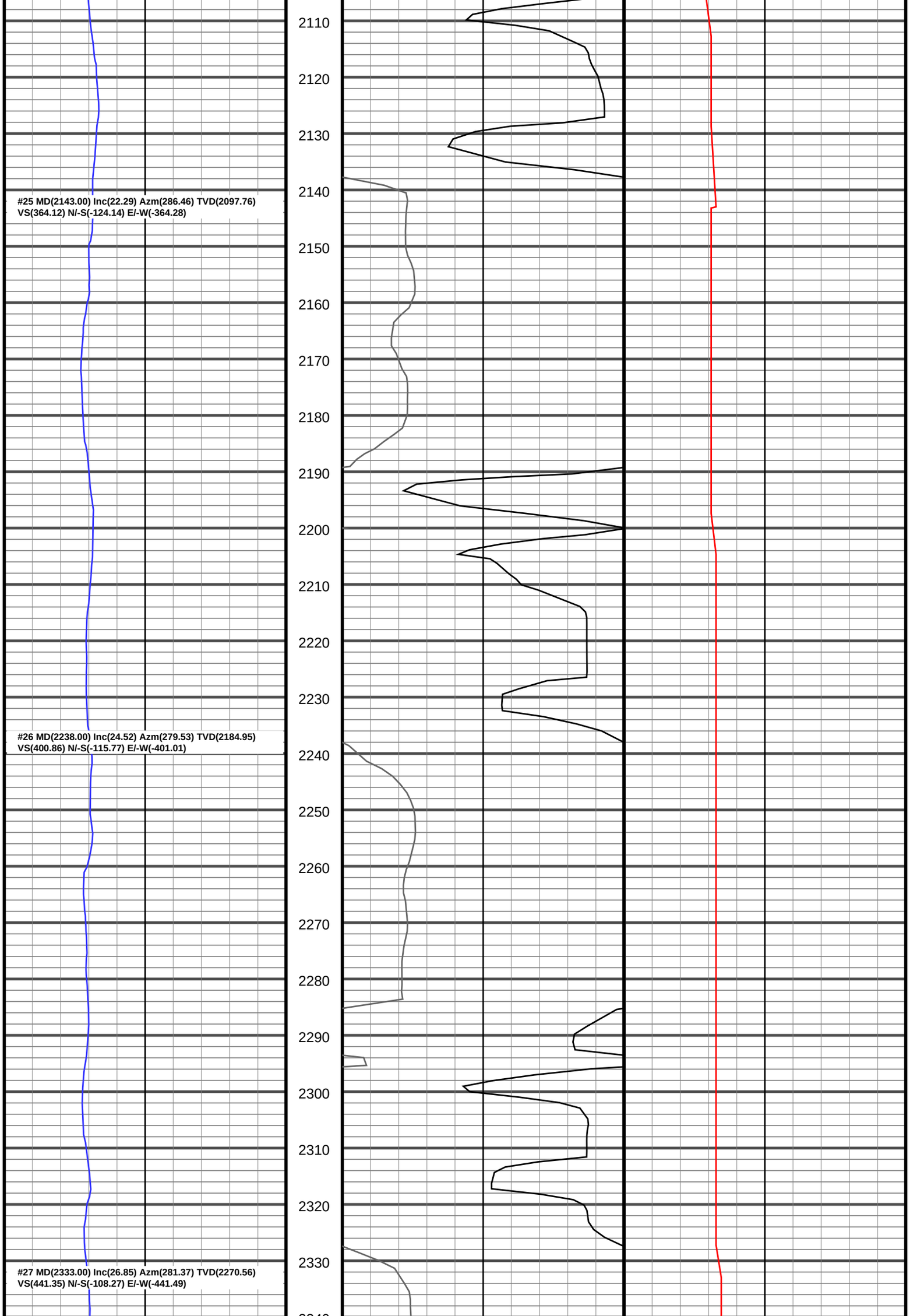
API# 05-001-10022-00 WELL: ALMA WEST 26W-20-03
Type of Log: Gamma Logging started at XX:XX on 12/03/2022
Ending at XX:XX on 12/XX/2022 Depth Relative to Rig Floor at 5,200' Ft Elevation
Logging Company: Total Directional Top of log: X,XXX' Bottom of Log: XX,XXX'

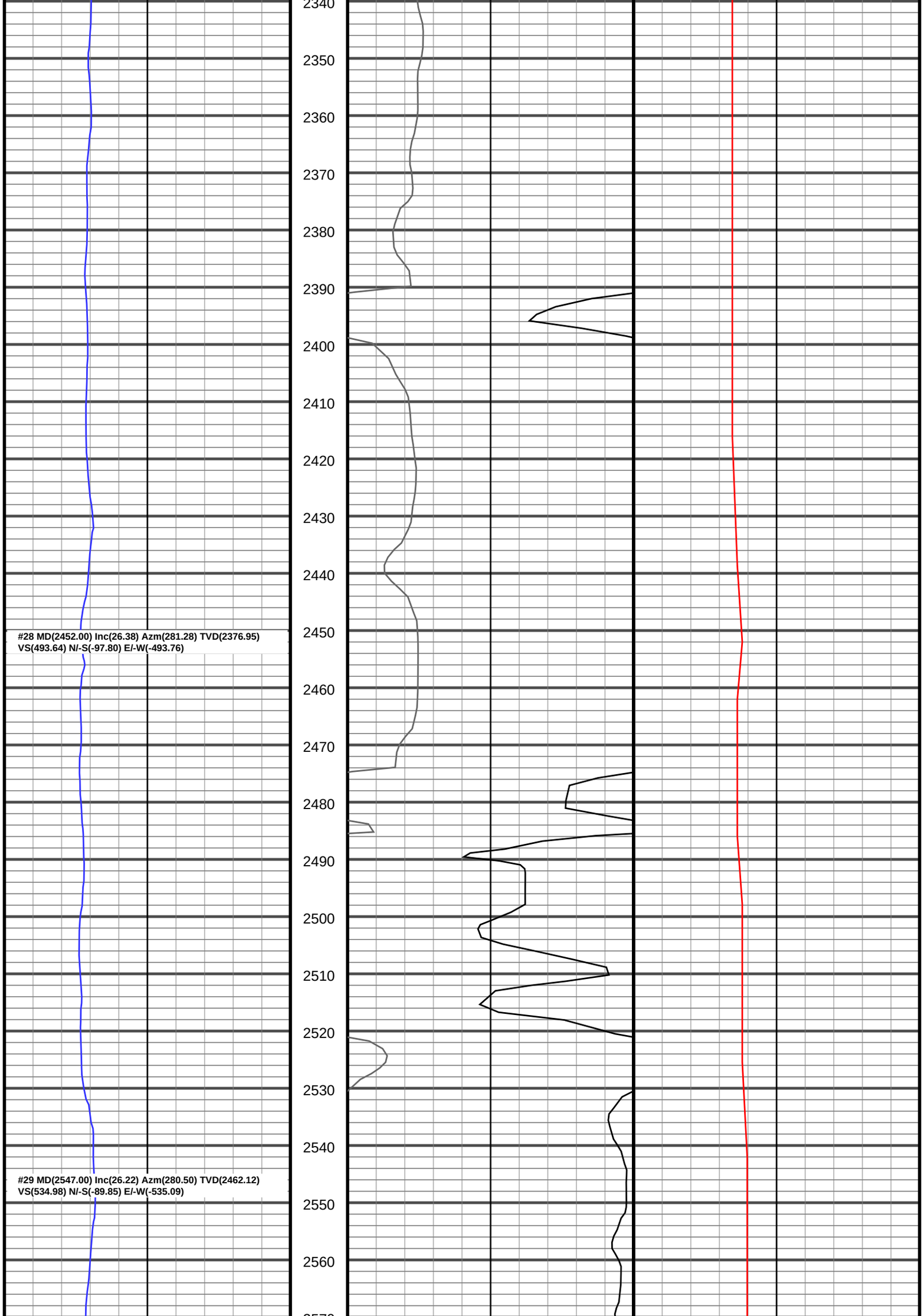
Total Directional Services uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

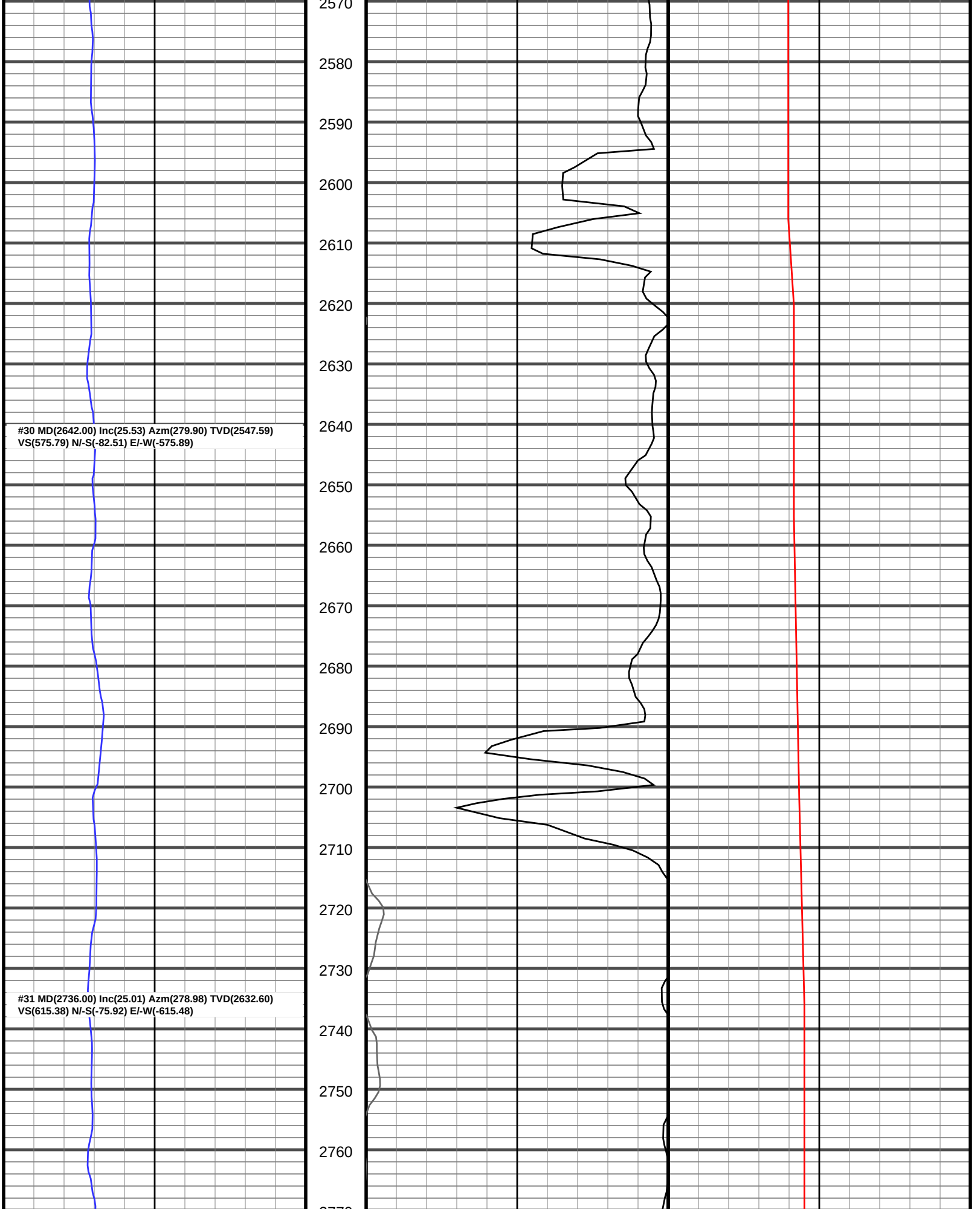


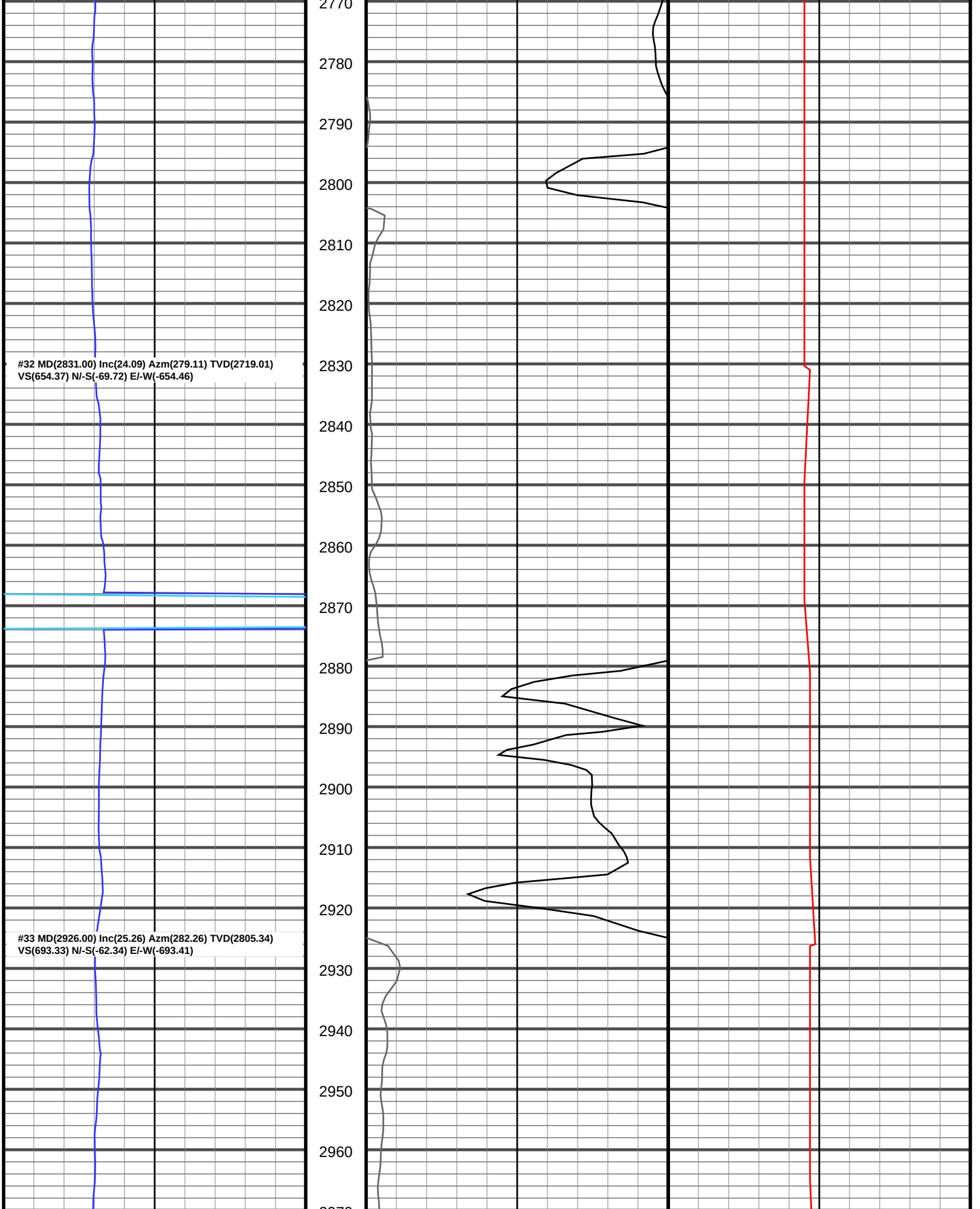

#20 MD(1670.00) Inc(12.60) Azm(242.25) TVD(1643.85)
VS(237.77) N/-S(-131.56) E/-W(-237.93)
#21 MD(1765.00) Inc(12.96) Azm(251.78) TVD(1736.50)
VS(257.05) N/-S(-139.72) E/-W(-257.22)
#22 MD(1859.00) Inc(15.68) Azm(267.83) TVD(1827.61)
VS(279.76) N/-S(-143.49) E/-W(-279.94)
1670
1680
1690
1700
1710
1720
1730
1740
1750
1760
1770
1780
1790
1800
1810
1820
1830
1840
1850
1860

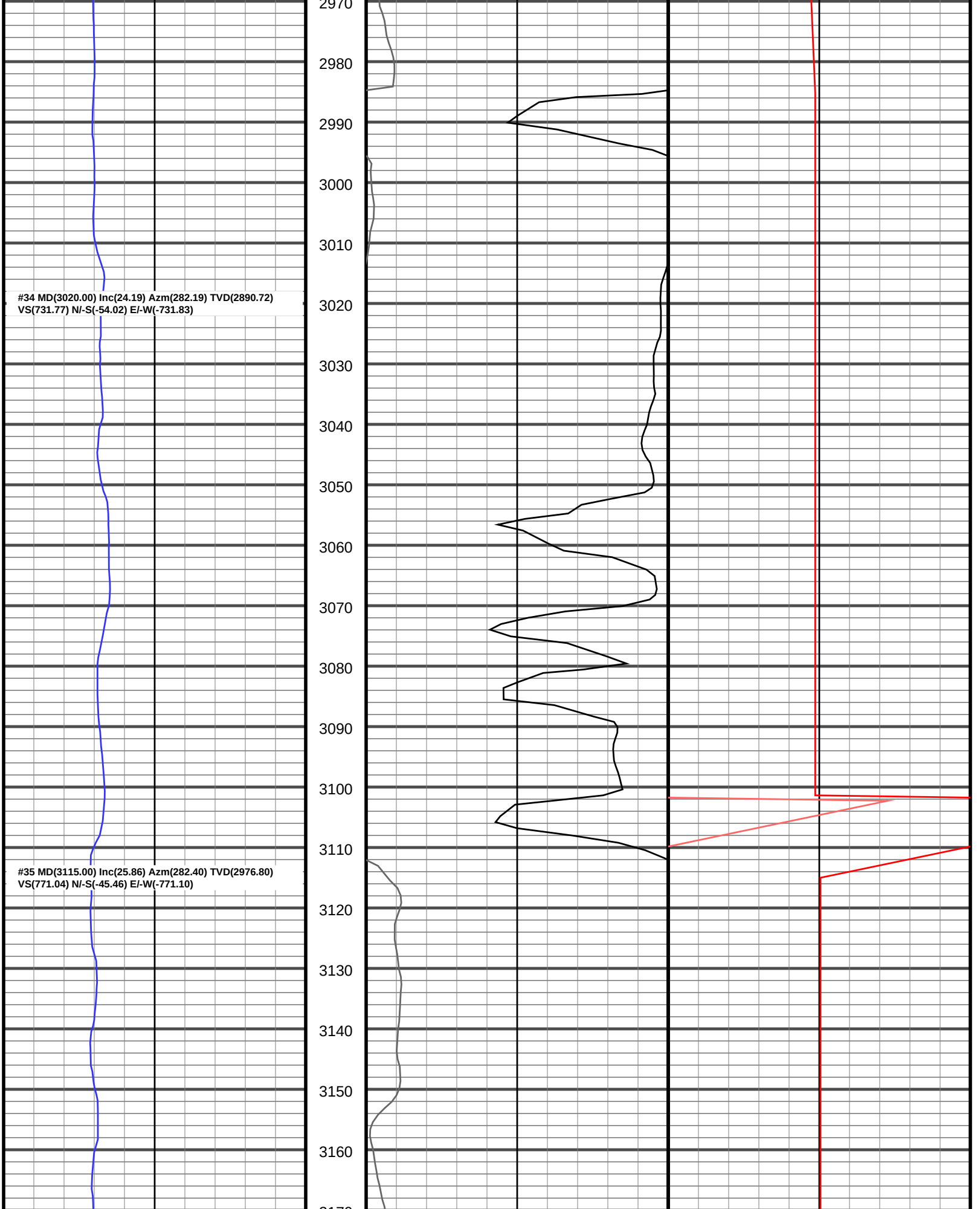

1870
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
2060
2070
2080
2090
2100
#23 MD(1954.00) Inc(16.00) Azm(281.53) TVD(1919.04)
VS(305.43) N/-S(-141.36) E/-W(-305.61)
#24 MD(2048.00) Inc(18.65) Azm(288.37) TVD(2008.77)
VS(332.41) N/-S(-134.03) E/-W(-332.57)

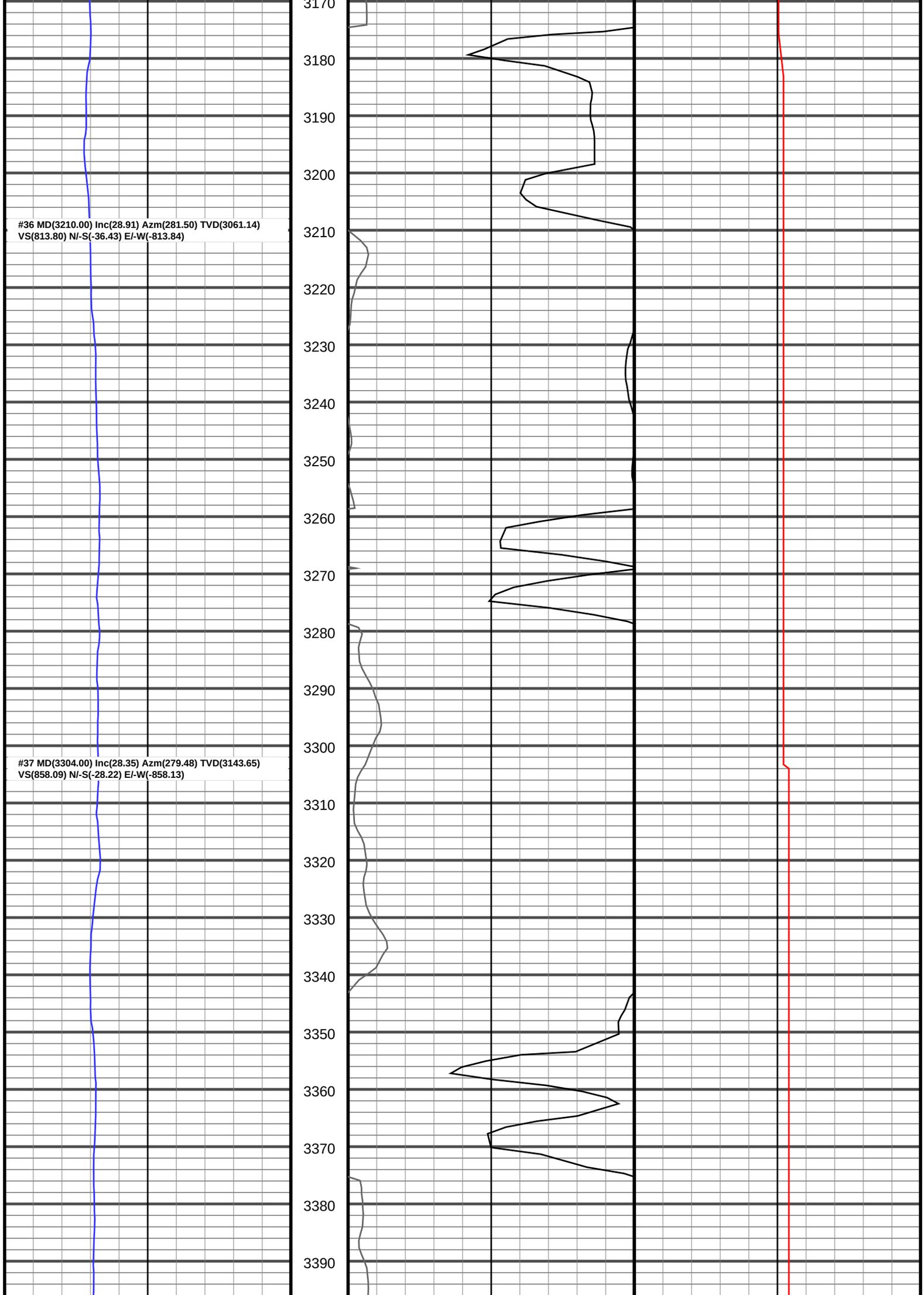

#25 MD(2143.00) Inc(22.29) Azm(286.46) TVD(2097.76)
VS(364.12) N/-S(-124.14) E/-W(-364.28)
#26 MD(2238.00) Inc(24.52) Azm(279.53) TVD(2184.95)
VS(400.86) N/-S(-115.77) E/-W(-401.01)
#27 MD(2333.00) Inc(26.85) Azm(281.37) TVD(2270.56)
VS(441.35) N/-S(-108.27) E/-W(-441.49)
2110
2120
2130
2140
2150
2160
2170
2180
2190
2200
2210
2220
2230
2240
2250
2260
2270
2280
2290
2300
2310
2320
2330


2340
2350
2360
2370
2380
2390
2400
2410
2420
2430
2440
2450
2460
2470
2480
2490
2500
2510
2520
2530
2540
2550
2560
#28 MD(2452.00) Inc(26.38) Azm(281.28) TVD(2376.95)
VS(493.64) N/-S(-97.80) E/-W(-493.76)
#29 MD(2547.00) Inc(26.22) Azm(280.50) TVD(2462.12)
VS(534.98) N/-S(-89.85) E/-W(-535.09)


2570
2580
2590
2600
2610
2620
2630
2640
2650
2660
2670
2680
2690
2700
2710
2720
2730
2740
2750
2760
#30 MD(2642.00) Inc(25.53) Azm(279.90) TVD(2547.59)
VS(575.79) N/-S(-82.51) E/-W(-575.89)
#31 MD(2736.00) Inc(25.01) Azm(278.98) TVD(2632.60)
VS(615.38) N/-S(-75.92) E/-W(-615.48)


2770
2780
2790
2800
2810
2820
2830
2840
2850
2860
2870
2880
2890
2900
2910
2920
2930
2940
2950
2960
#32 MD(2831.00) Inc(24.09) Azm(279.11) TVD(2719.01)
VS(654.37) N/-S(-69.72) E/-W(-654.46)
#33 MD(2926.00) Inc(25.26) Azm(282.26) TVD(2805.34)
VS(693.33) N/-S(-62.34) E/-W(-693.41)

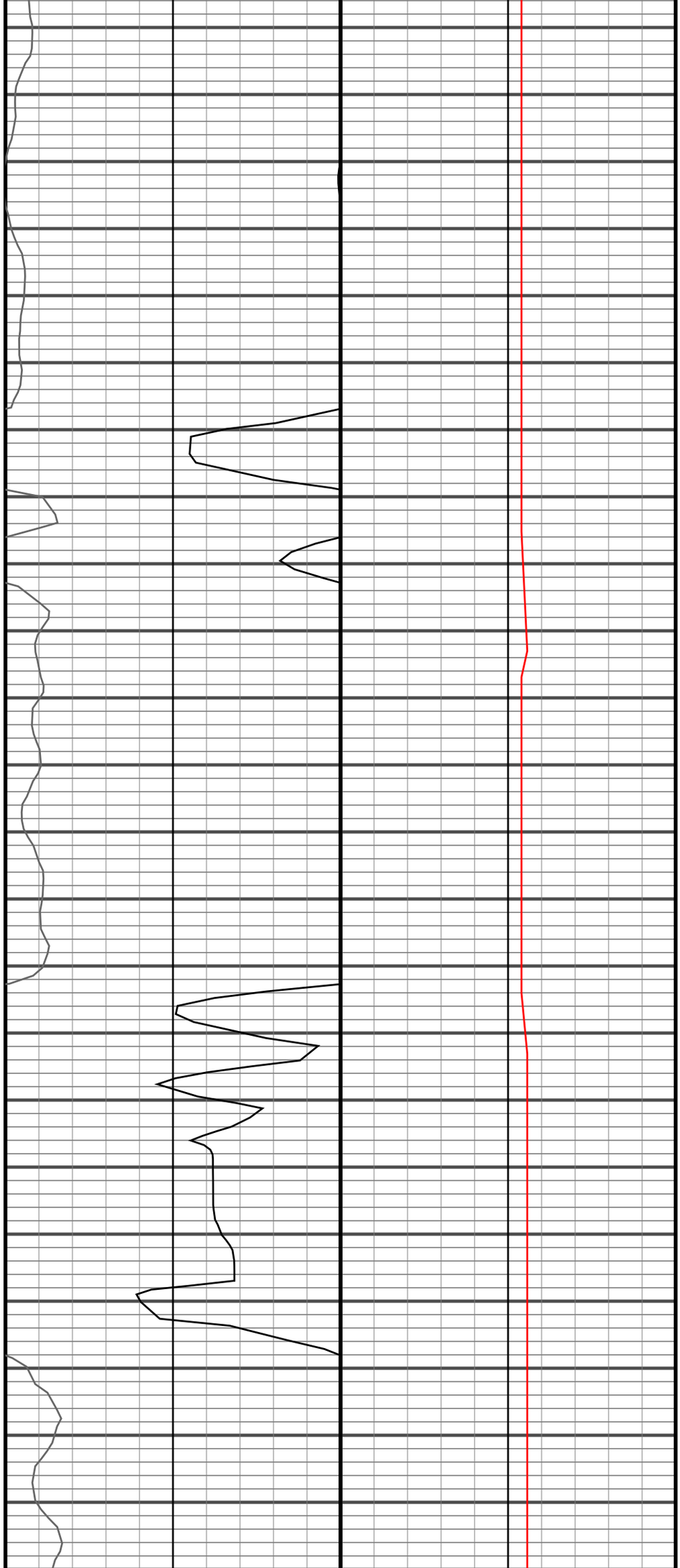

2970
2980
2990
3000
3010
3020
3030
3040
3050
3060
3070
3080
3090
3100
3110
3120
3130
3140
3150
3160
#34 MD(3020.00) Inc(24.19) Azm(282.19) TVD(2890.72)
VS(731.77) N/-S(-54.02) E/-W(-731.83)
#35 MD(3115.00) Inc(25.86) Azm(282.40) TVD(2976.80)
VS(771.04) N/-S(-45.46) E/-W(-771.10)

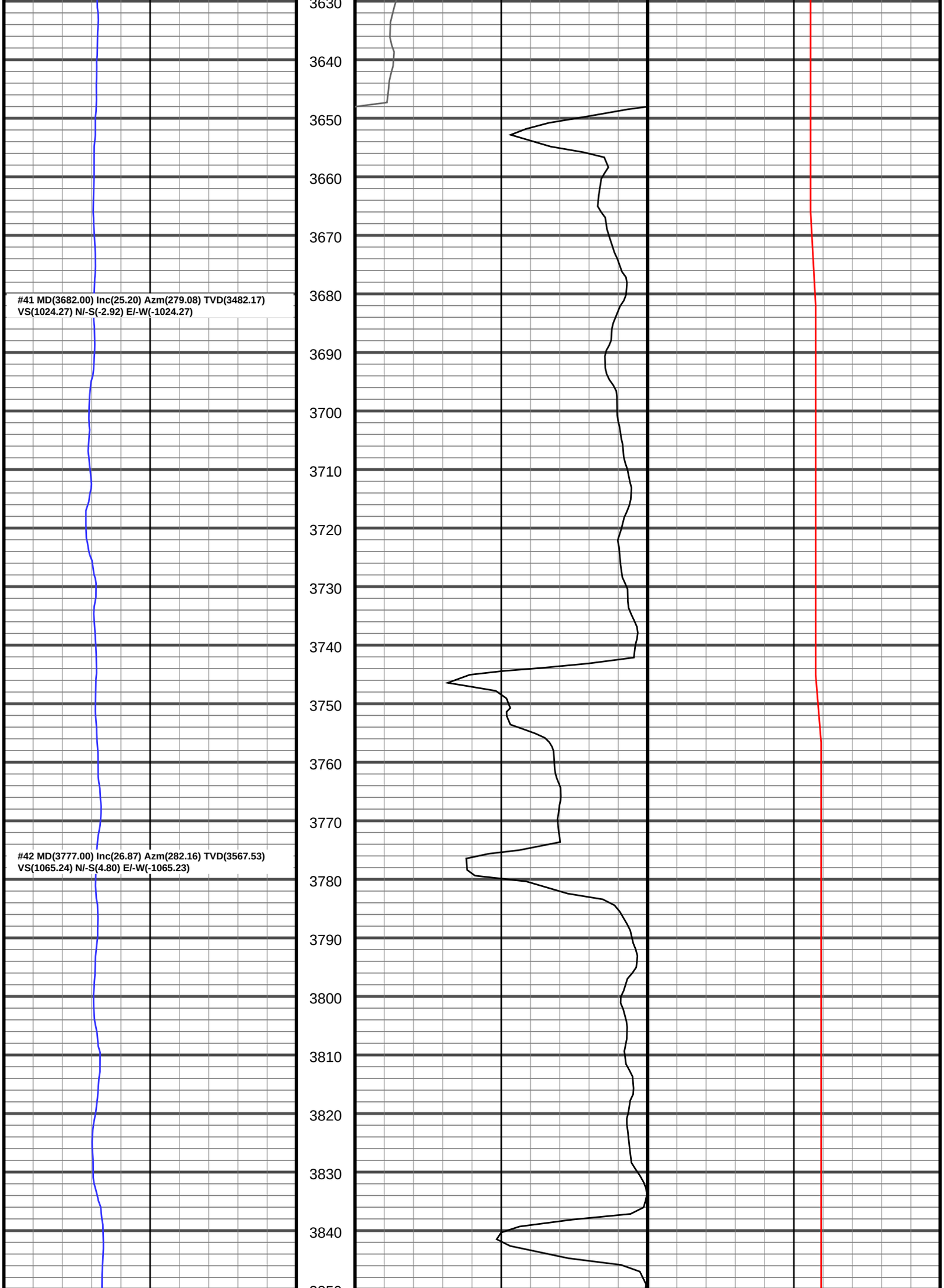

#36 MD(3210.00) Inc(28.91) Azm(281.50) TVD(3061.14)
VS(813.80) N/-S(-36.43) E/-W(-813.84)
#37 MD(3304.00) Inc(28.35) Azm(279.48) TVD(3143.65)
VS(858.09) N/-S(-28.22) E/-W(-858.13)
3170
3180
3190
3200
3210
3220
3230
3240
3250
3260
3270
3280
3290
3300
3310
3320
3330
3340
3350
3360
3370
3380
3390

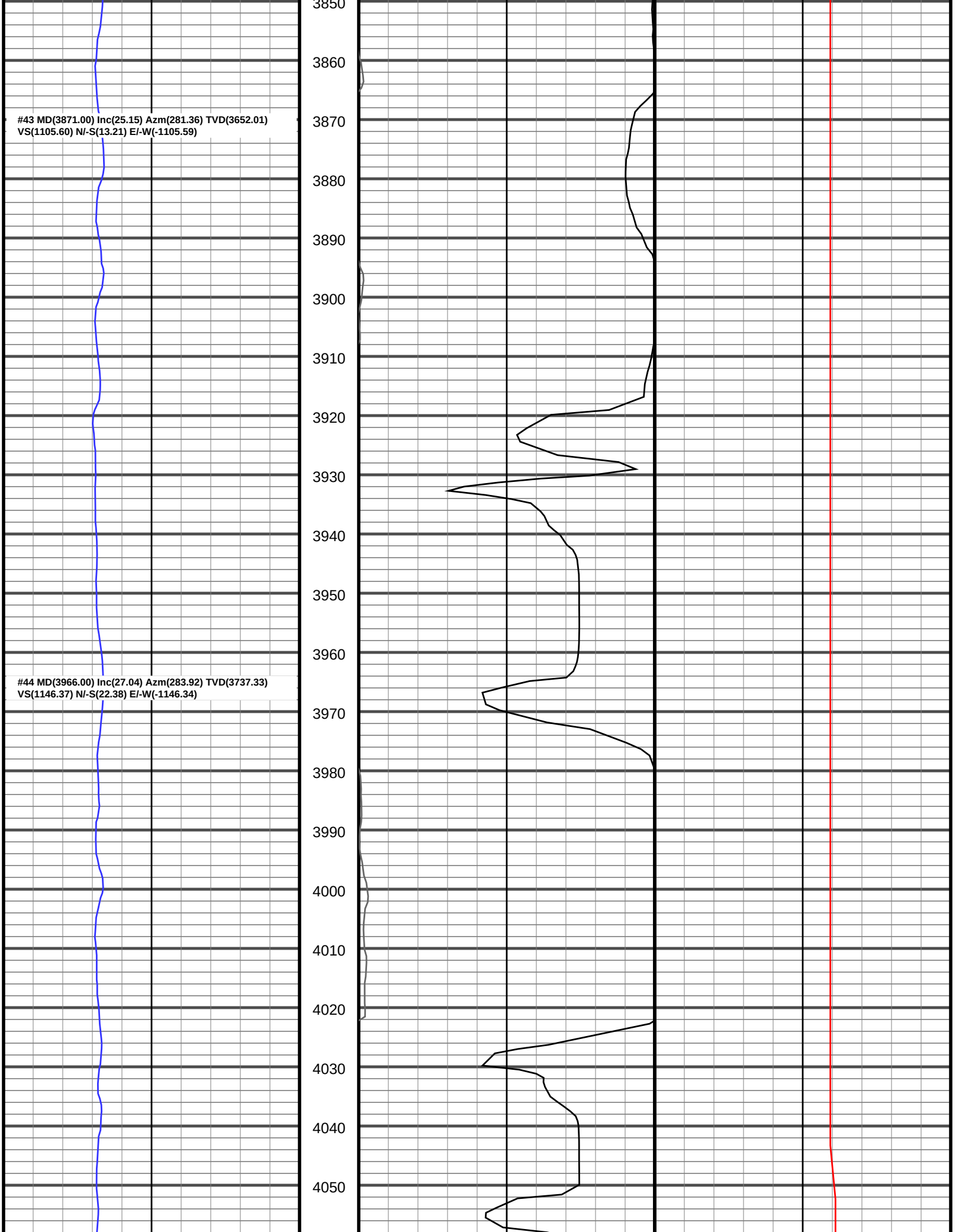
#38 MD(3398.00) Inc(27.09) Azm(277.62) TVD(3226.86)
VS(901.33) N/-S(-21.71) E/-W(-901.36)

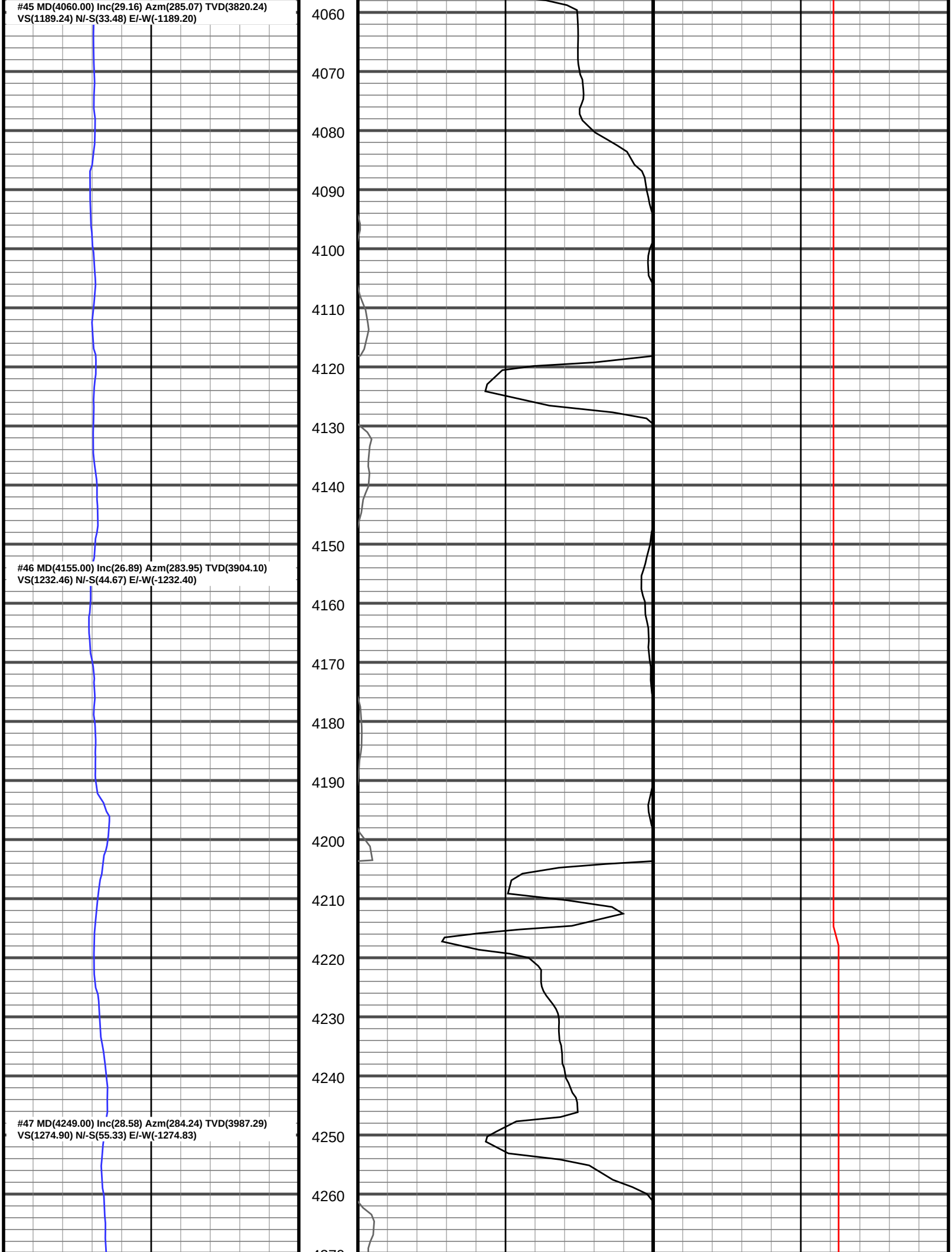
#39 MD(3493.00) Inc(25.42) Azm(277.12) TVD(3312.06)
VS(943.01) N/-S(-16.31) E/-W(-943.03)

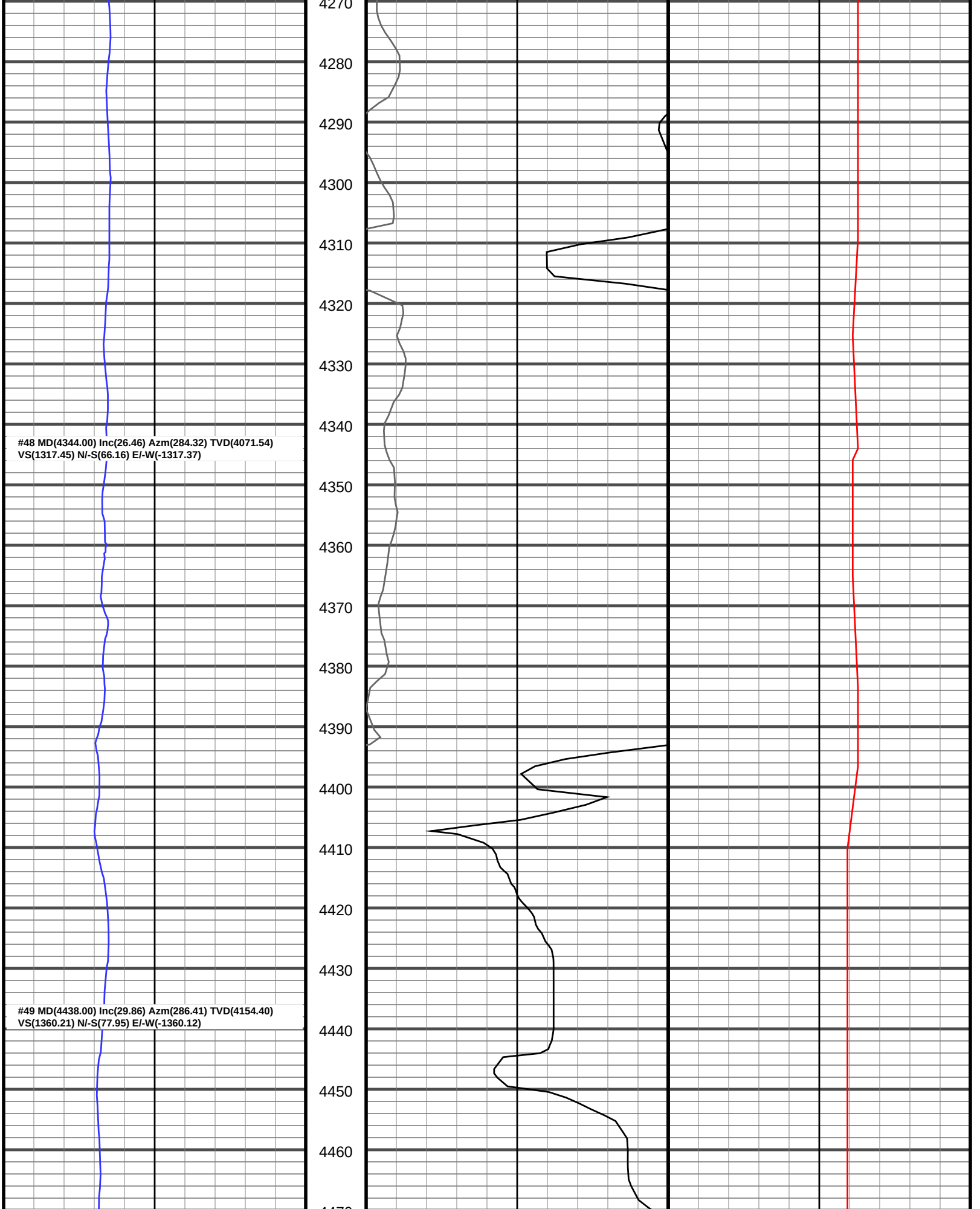
#40 MD(3587.00) Inc(26.36) Azm(280.58) TVD(3396.63)
VS(983.55) N/-S(-9.98) E/-W(-983.57)

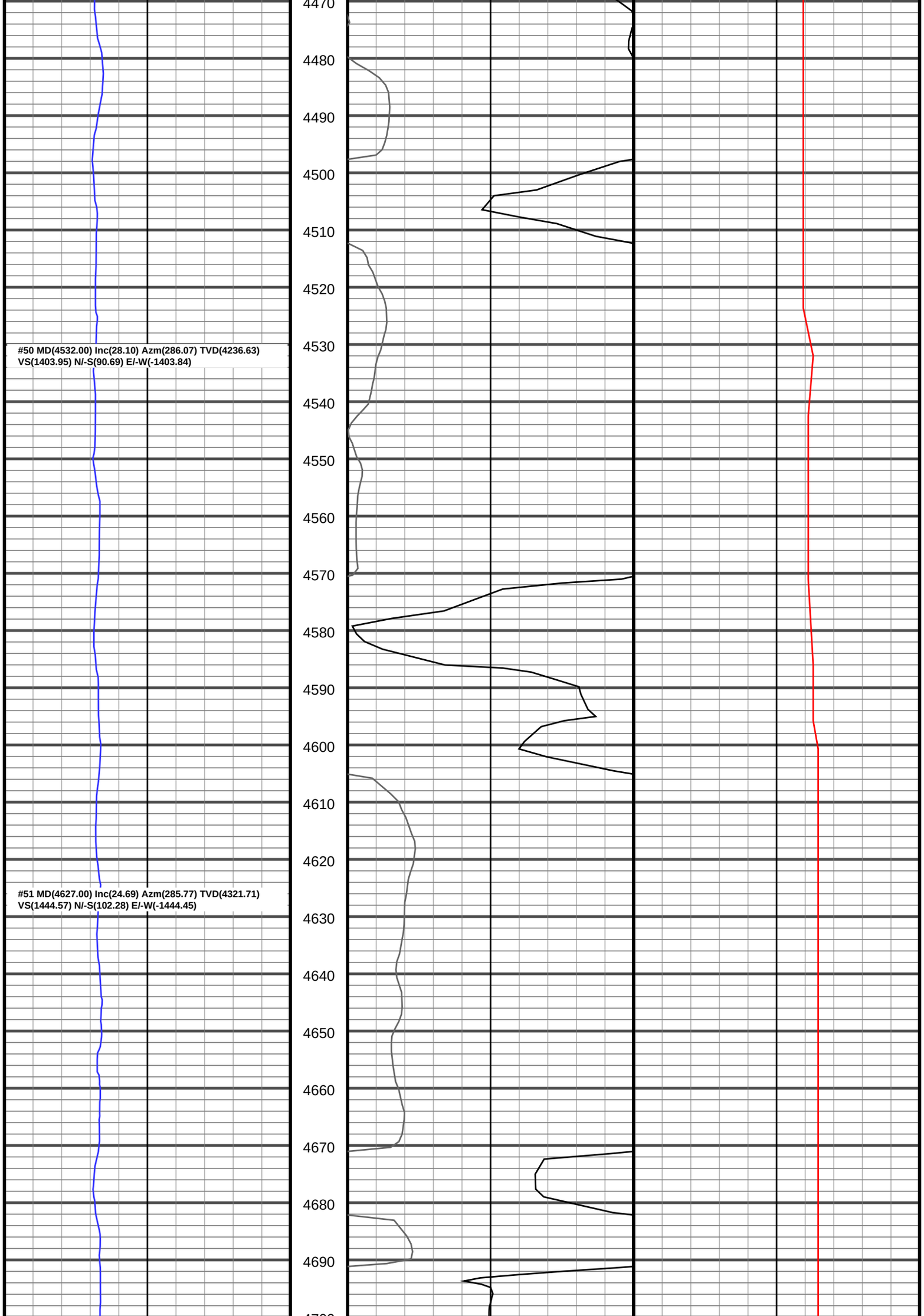


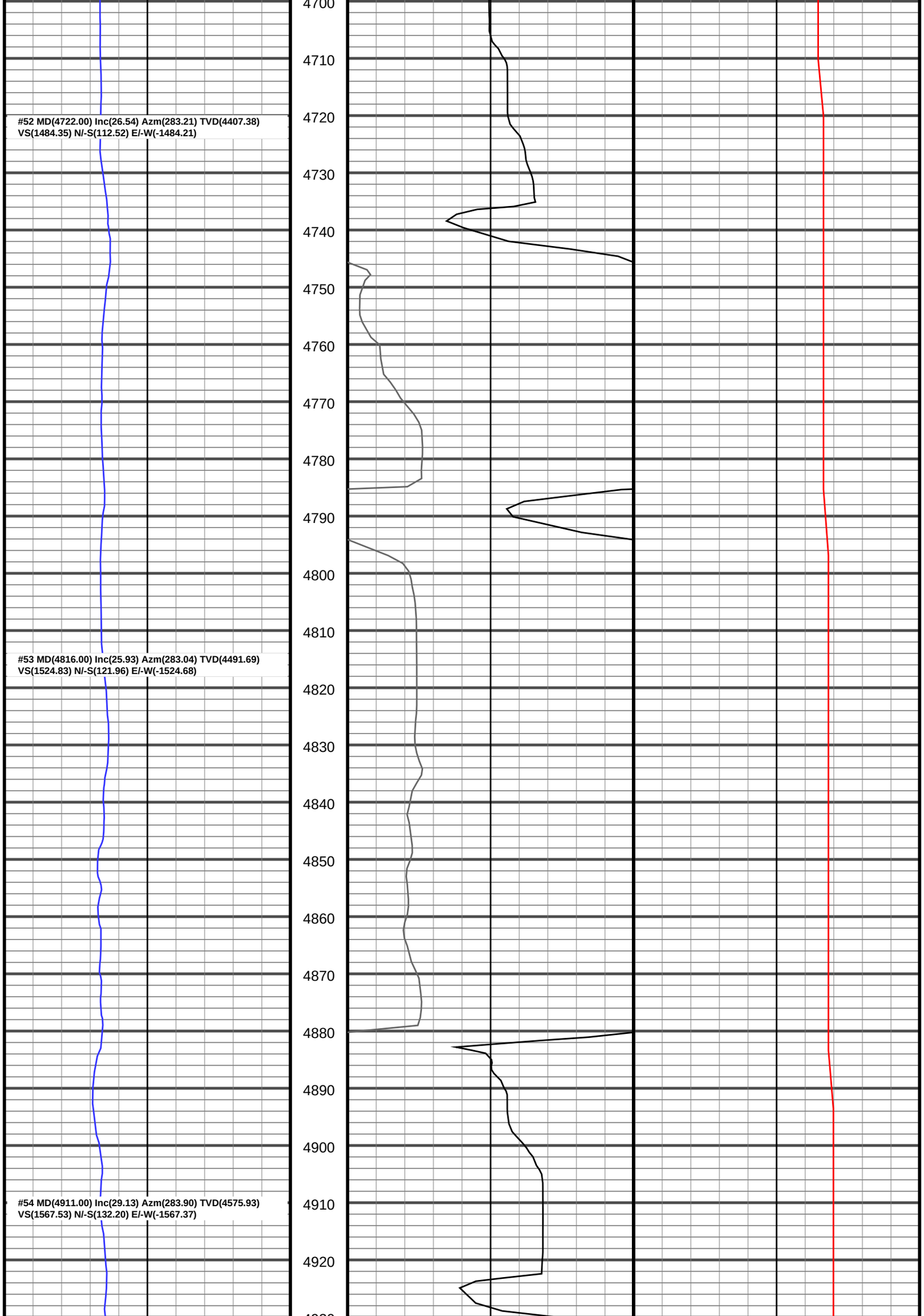

3630
3640
3650
3660
3670
3680
3690
3700
3710
3720
3730
3740
3750
3760
3770
3780
3790
3800
3810
3820
3830
3840
#41 MD(3682.00) Inc(25.20) Azm(279.08) TVD(3482.17)
VS(1024.27) N/-S(-2.92) E/-W(-1024.27)
#42 MD(3777.00) Inc(26.87) Azm(282.16) TVD(3567.53)
VS(1065.24) N/-S(4.80) E/-W(-1065.23)

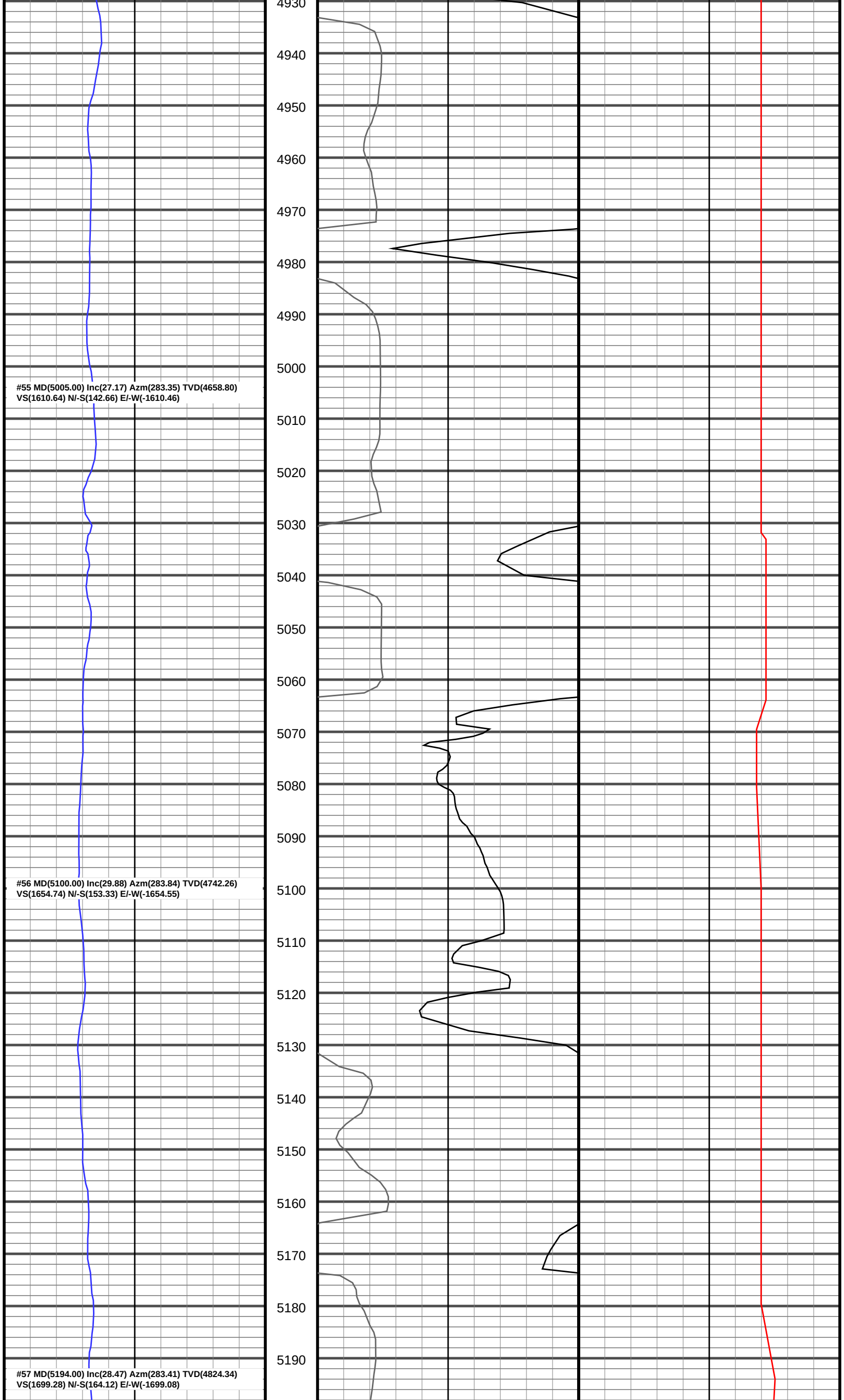

#43 MD(3871.00) Inc(25.15) Azm(281.36) TVD(3652.01)
VS(1105.60) N/-S(13.21) E/-W(-1105.59)
#44 MD(3966.00) Inc(27.04) Azm(283.92) TVD(3737.33)
VS(1146.37) N/-S(22.38) E/-W(-1146.34)
3850
3860
3870
3880
3890
3900
3910
3920
3930
3940
3950
3960
3970
3980
3990
4000
4010
4020
4030
4040
4050

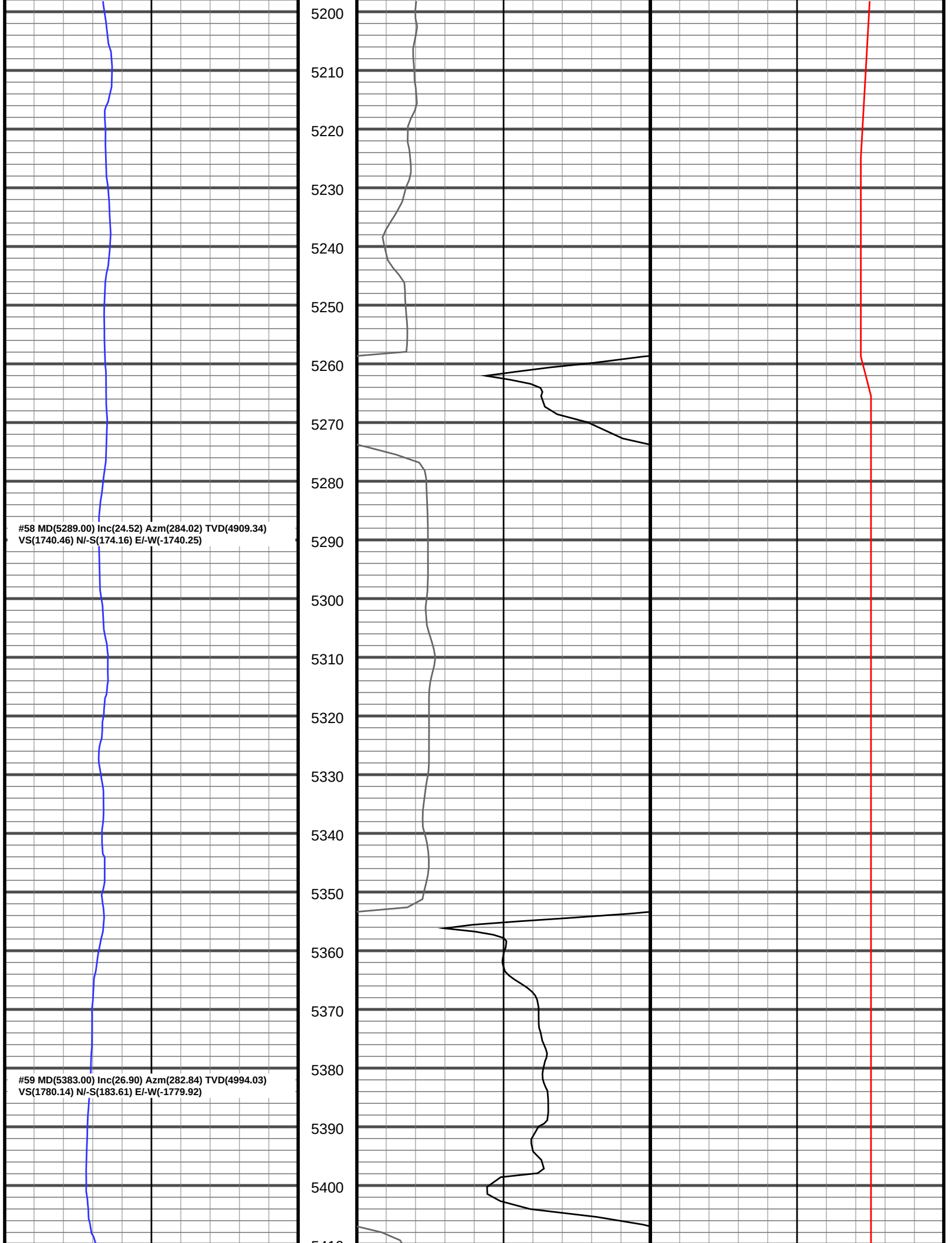

#45 MD(4060.00) Inc(29.16) Azm(285.07) TVD(3820.24)
VS(1189.24) N/-S(33.48) E/-W(-1189.20)
#46 MD(4155.00) Inc(26.89) Azm(283.95) TVD(3904.10)
VS(1232.46) N/-S(44.67) E/-W(-1232.40)
#47 MD(4249.00) Inc(28.58) Azm(284.24) TVD(3987.29)
VS(1274.90) N/-S(55.33) E/-W(-1274.83)
4060
4070
4080
4090
4100
4110
4120
4130
4140
4150
4160
4170
4180
4190
4200
4210
4220
4230
4240
4250
4260

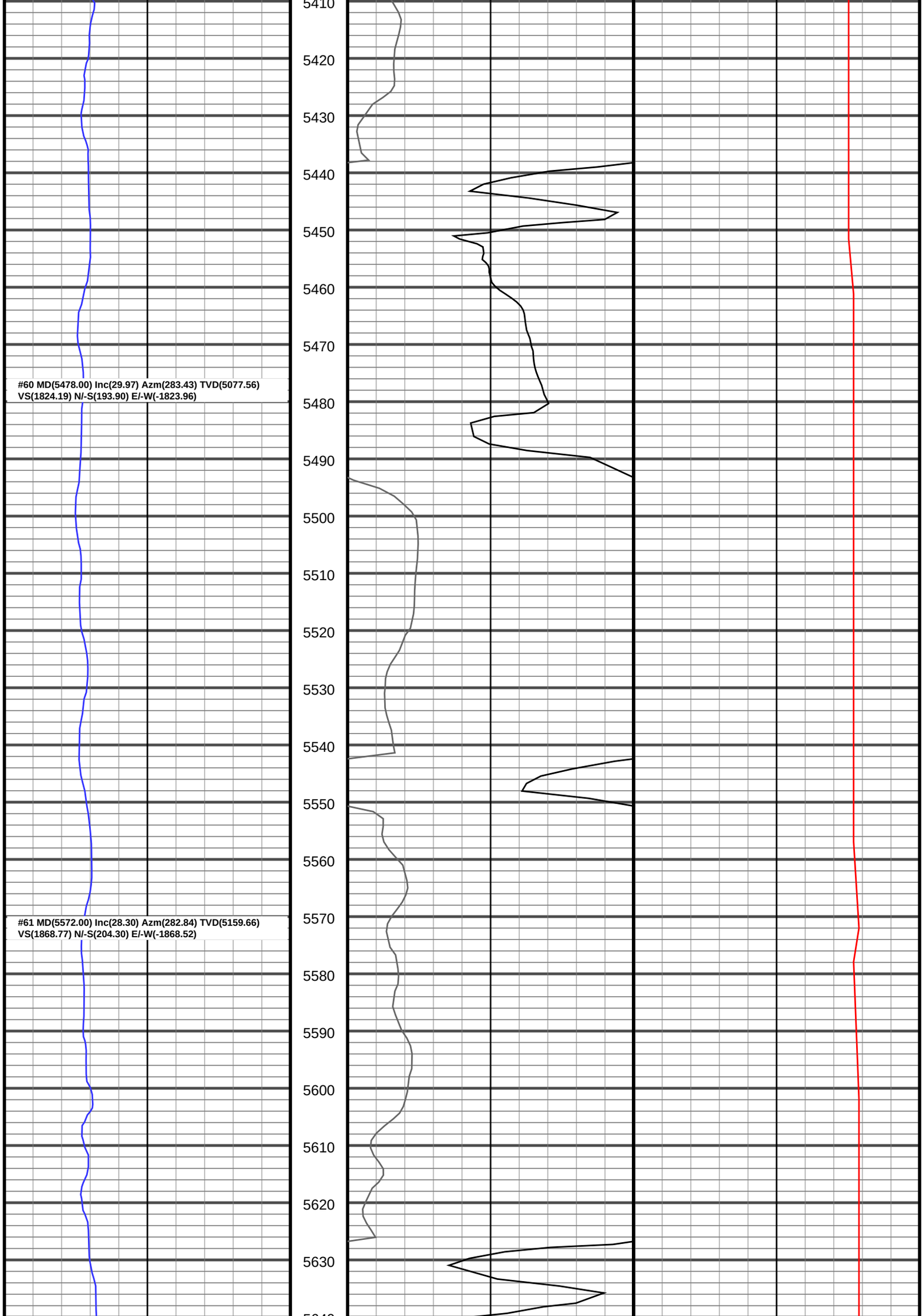

4270
4280
4290
4300
4310
4320
4330
4340
#48 MD(4344.00) Inc(26.46) Azm(284.32) TVD(4071.54)
VS(1317.45) N/-S(66.16) E/-W(-1317.37)
4350
4360
4370
4380
4390
4400
4410
4420
4430
#49 MD(4438.00) Inc(29.86) Azm(286.41) TVD(4154.40)
VS(1360.21) N/-S(77.95) E/-W(-1360.12)
4440
4450
4460

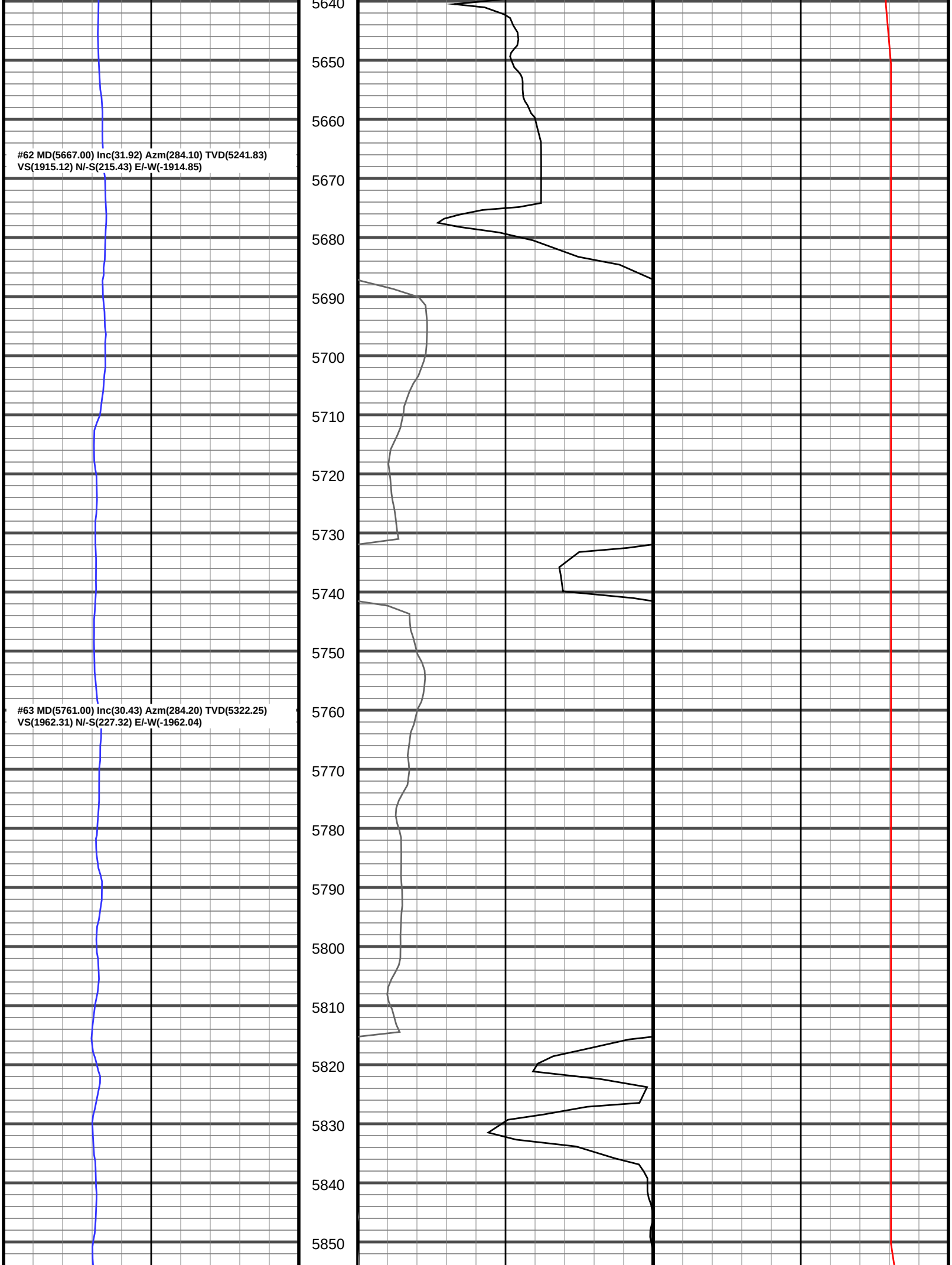

4470
4480
4490
4500
4510
4520
4530
4540
4550
4560
4570
4580
4590
4600
4610
4620
4630
4640
4650
4660
4670
4680
4690
#50 MD(4532.00) Inc(28.10) Azm(286.07) TVD(4236.63)
VS(1403.95) N/-S(90.69) E/-W(-1403.84)
#51 MD(4627.00) Inc(24.69) Azm(285.77) TVD(4321.71)
VS(1444.57) N/-S(102.28) E/-W(-1444.45)

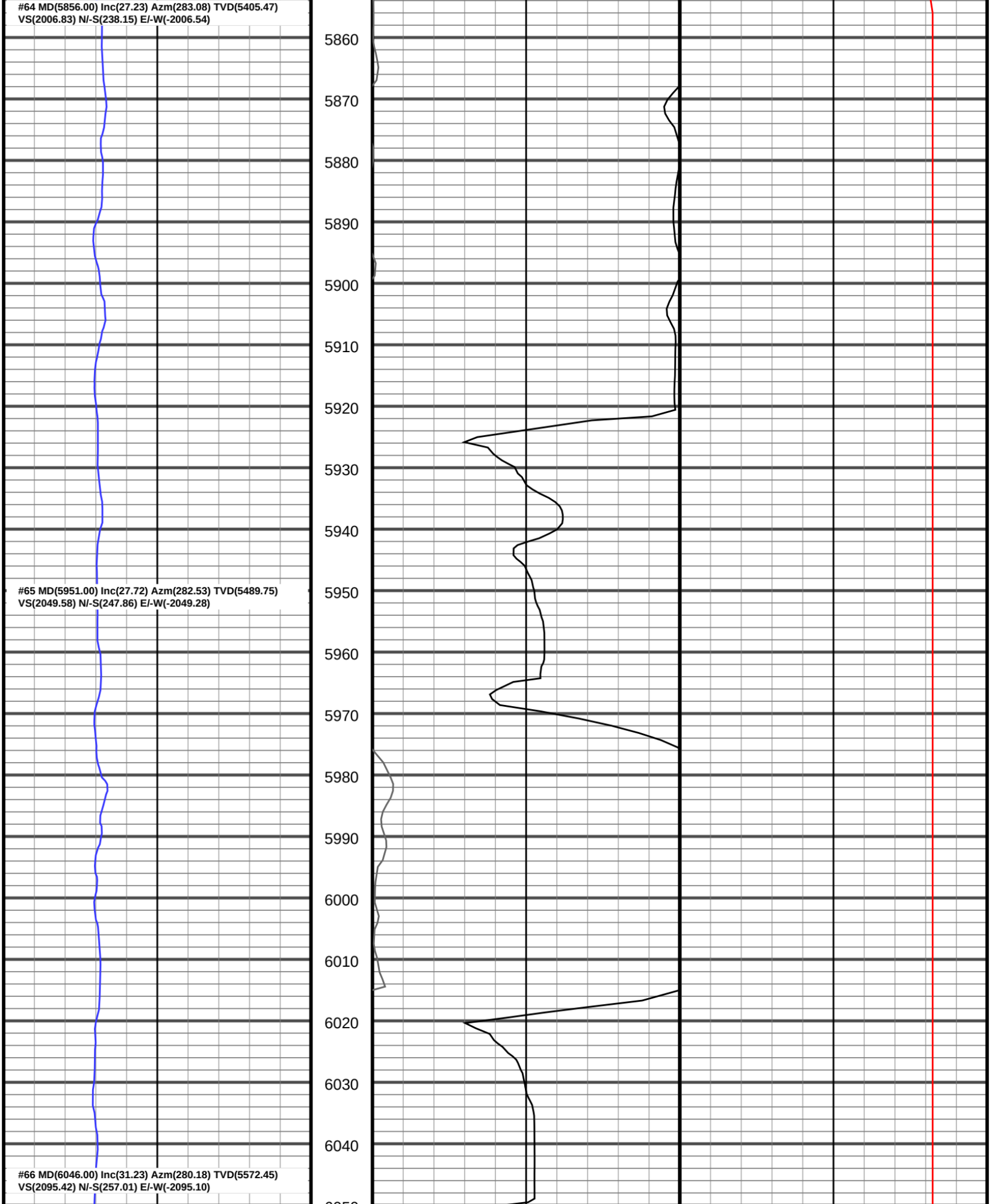

#52 MD(4722.00) Inc(26.54) Azm(283.21) TVD(4407.38)
VS(1484.35) N/-S(112.52) E/-W(-1484.21)
#53 MD(4816.00) Inc(25.93) Azm(283.04) TVD(4491.69)
VS(1524.83) N/-S(121.96) E/-W(-1524.68)
#54 MD(4911.00) Inc(29.13) Azm(283.90) TVD(4575.93)
VS(1567.53) N/-S(132.20) E/-W(-1567.37)
4700
4710
4720
4730
4740
4750
4760
4770
4780
4790
4800
4810
4820
4830
4840
4850
4860
4870
4880
4890
4900
4910
4920

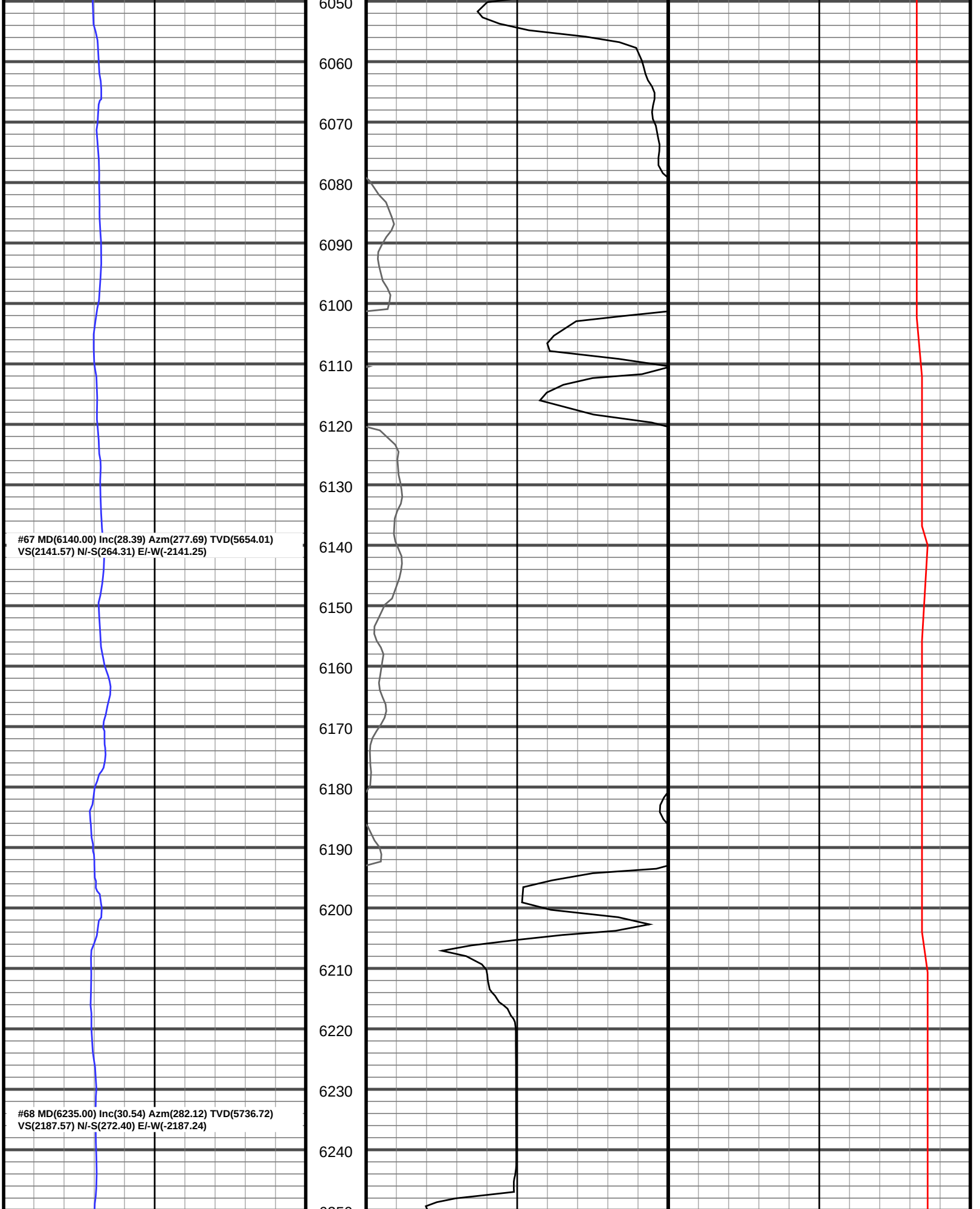

4930
4940
4950
4960
4970
4980
4990
5000
#55 MD(5005.00) Inc(27.17) Azm(283.35) TVD(4658.80)
VS(1610.64) N/-S(142.66) E/-W(-1610.46)
5010
5020
5030
5040
5050
5060
5070
5080
5090
#56 MD(5100.00) Inc(29.88) Azm(283.84) TVD(4742.26)
VS(1654.74) N/-S(153.33) E/-W(-1654.55)
5100
5110
5120
5130
5140
5150
5160
5170
5180
5190
#57 MD(5194.00) Inc(28.47) Azm(283.41) TVD(4824.34)
VS(1699.28) N/-S(164.12) E/-W(-1699.08)

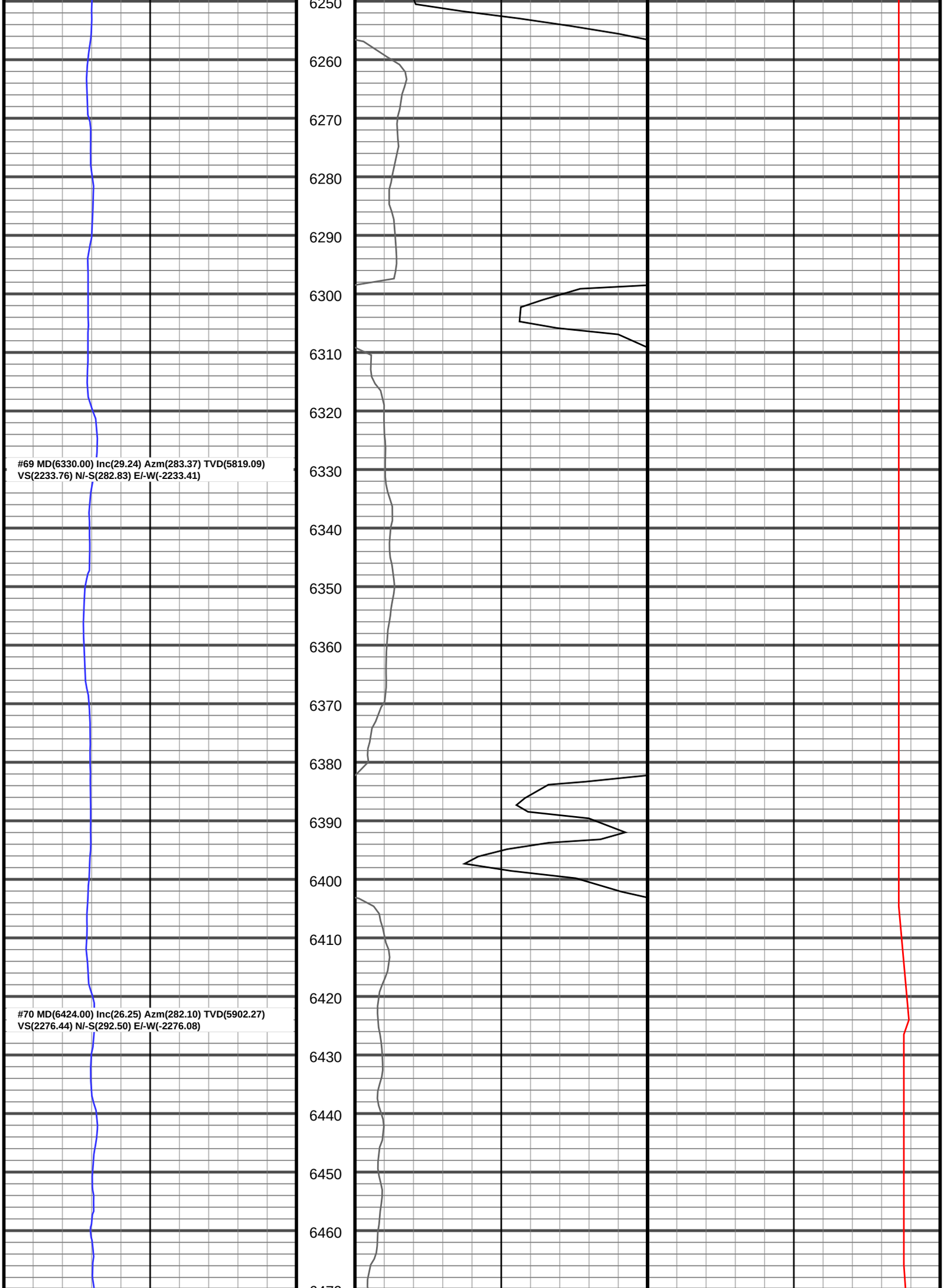

5200
5210
5220
5230
5240
5250
5260
5270
5280
#58 MD(5289.00) Inc(24.52) Azm(284.02) TVD(4909.34)
VS(1740.46) N/-S(174.16) E/-W(-1740.25)
5290
5300
5310
5320
5330
5340
5350
5360
5370
5380
#59 MD(5383.00) Inc(26.90) Azm(282.84) TVD(4994.03)
VS(1780.14) N/-S(183.61) E/-W(-1779.92)
5390
5400

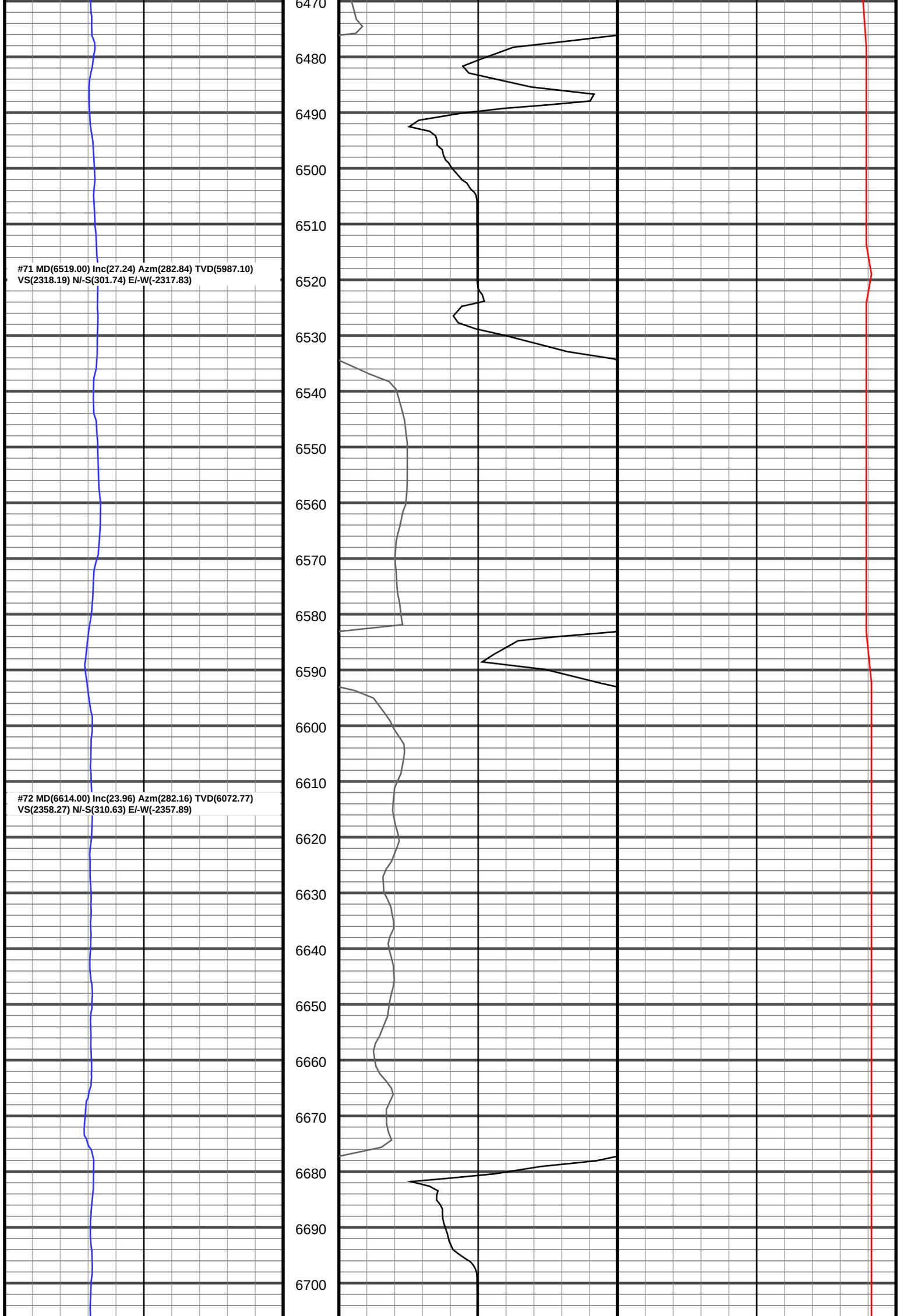

#60 MD(5478.00) Inc(29.97) Azm(283.43) TVD(5077.56)
VS(1824.19) N/-S(193.90) E/-W(-1823.96)
#61 MD(5572.00) Inc(28.30) Azm(282.84) TVD(5159.66)
VS(1868.77) N/-S(204.30) E/-W(-1868.52)
5410
5420
5430
5440
5450
5460
5470
5480
5490
5500
5510
5520
5530
5540
5550
5560
5570
5580
5590
5600
5610
5620
5630

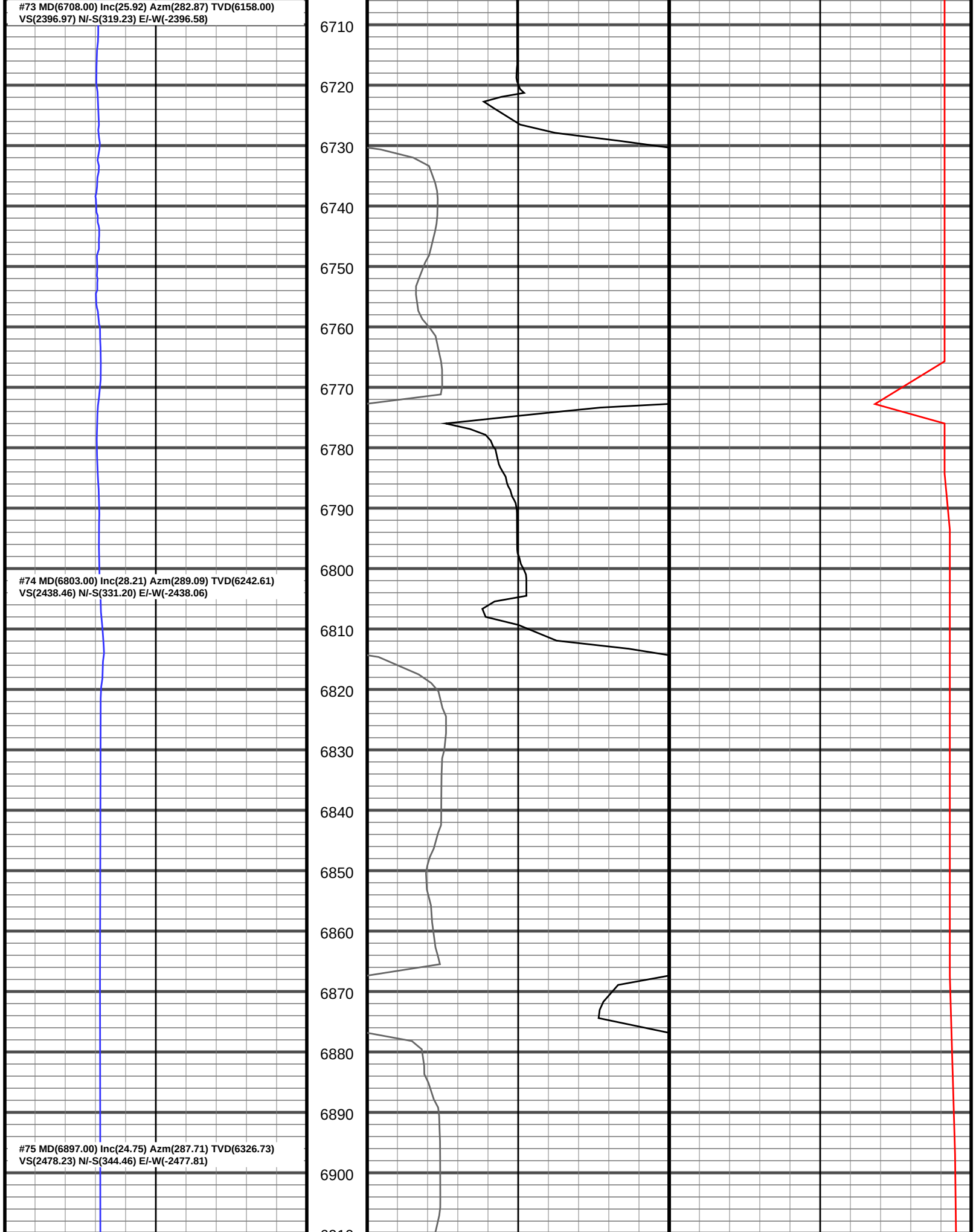

#62 MD(5667.00) Inc(31.92) Azm(284.10) TVD(5241.83)
VS(1915.12) N/-S(215.43) E/-W(-1914.85)
#63 MD(5761.00) Inc(30.43) Azm(284.20) TVD(5322.25)
VS(1962.31) N/-S(227.32) E/-W(-1962.04)
5640
5650
5660
5670
5680
5690
5700
5710
5720
5730
5740
5750
5760
5770
5780
5790
5800
5810
5820
5830
5840
5850

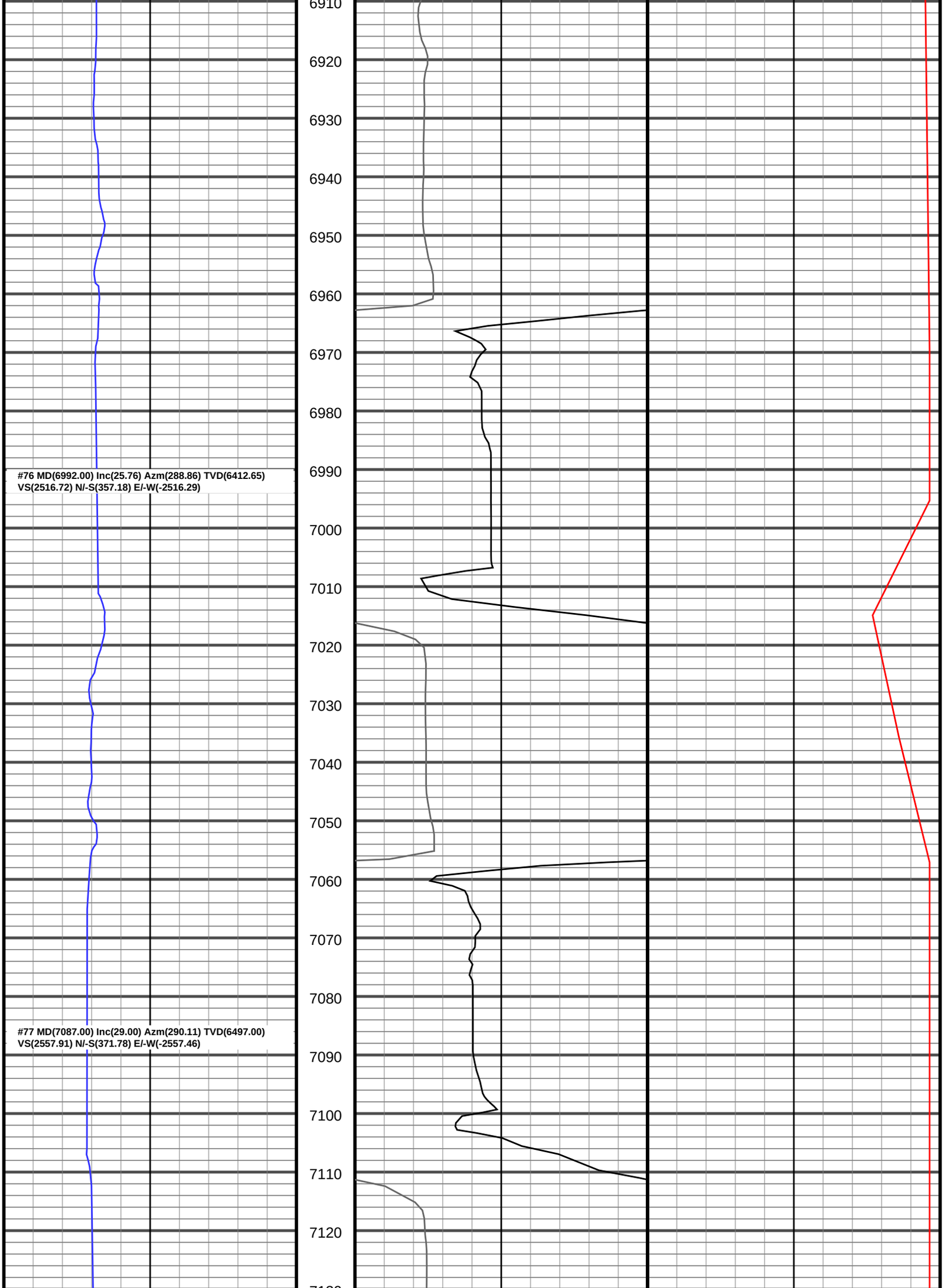

#64 MD(5856.00) Inc(27.23) Azm(283.08) TVD(5405.47)
VS(2006.83) N/-S(238.15) E/-W(-2006.54)
#65 MD(5951.00) Inc(27.72) Azm(282.53) TVD(5489.75)
VS(2049.58) N/-S(247.86) E/-W(-2049.28)
#66 MD(6046.00) Inc(31.23) Azm(280.18) TVD(5572.45)
VS(2095.42) N/-S(257.01) E/-W(-2095.10)
5860
5870
5880
5890
5900
5910
5920
5930
5940
5950
5960
5970
5980
5990
6000
6010
6020
6030
6040

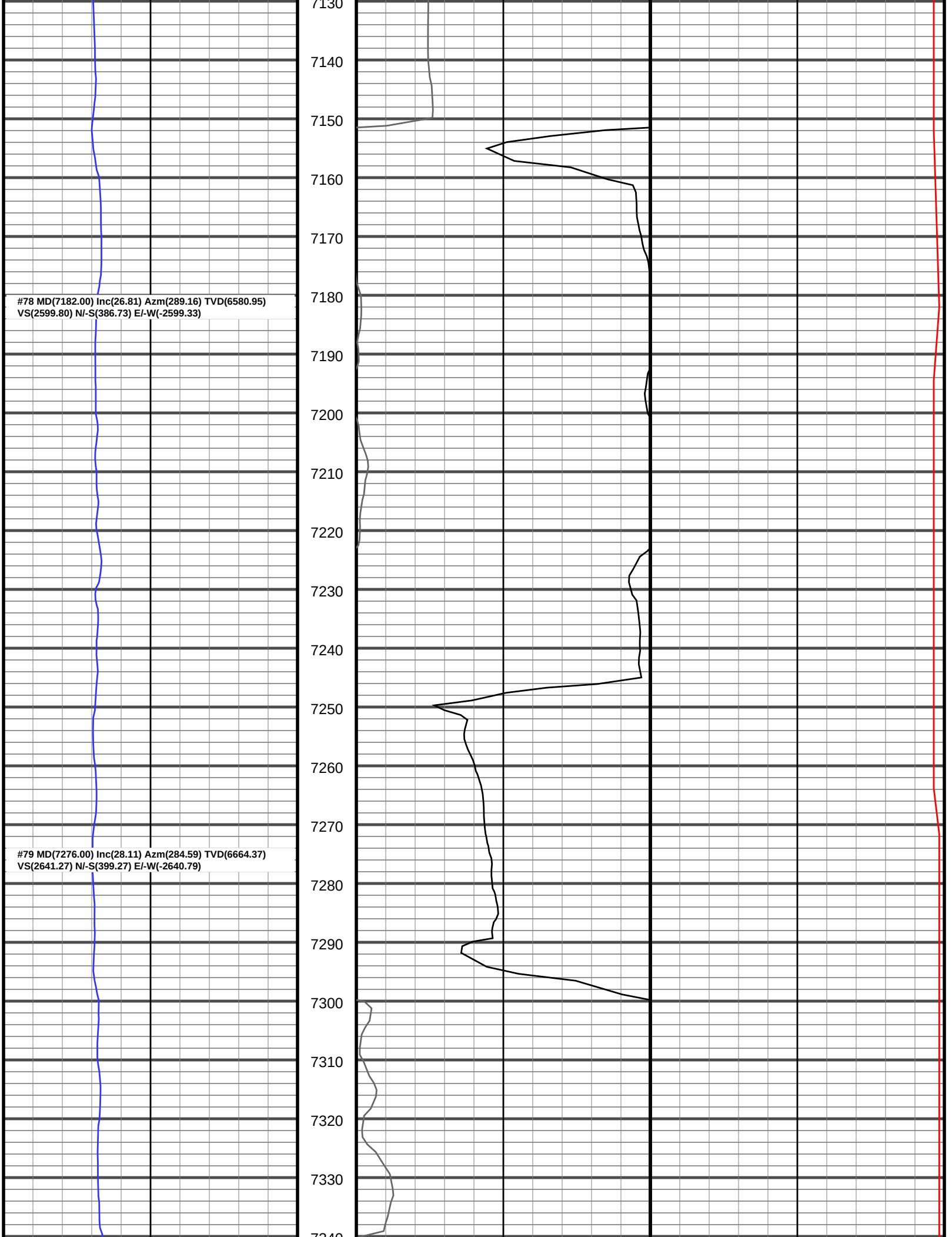

6050
6060
6070
6080
6090
6100
6110
6120
6130
6140
6150
6160
6170
6180
6190
6200
6210
6220
6230
6240
#67 MD(6140.00) Inc(28.39) Azm(277.69) TVD(5654.01)
VS(2141.57) N/-S(264.31) E/-W(-2141.25)
#68 MD(6235.00) Inc(30.54) Azm(282.12) TVD(5736.72)
VS(2187.57) N/-S(272.40) E/-W(-2187.24)

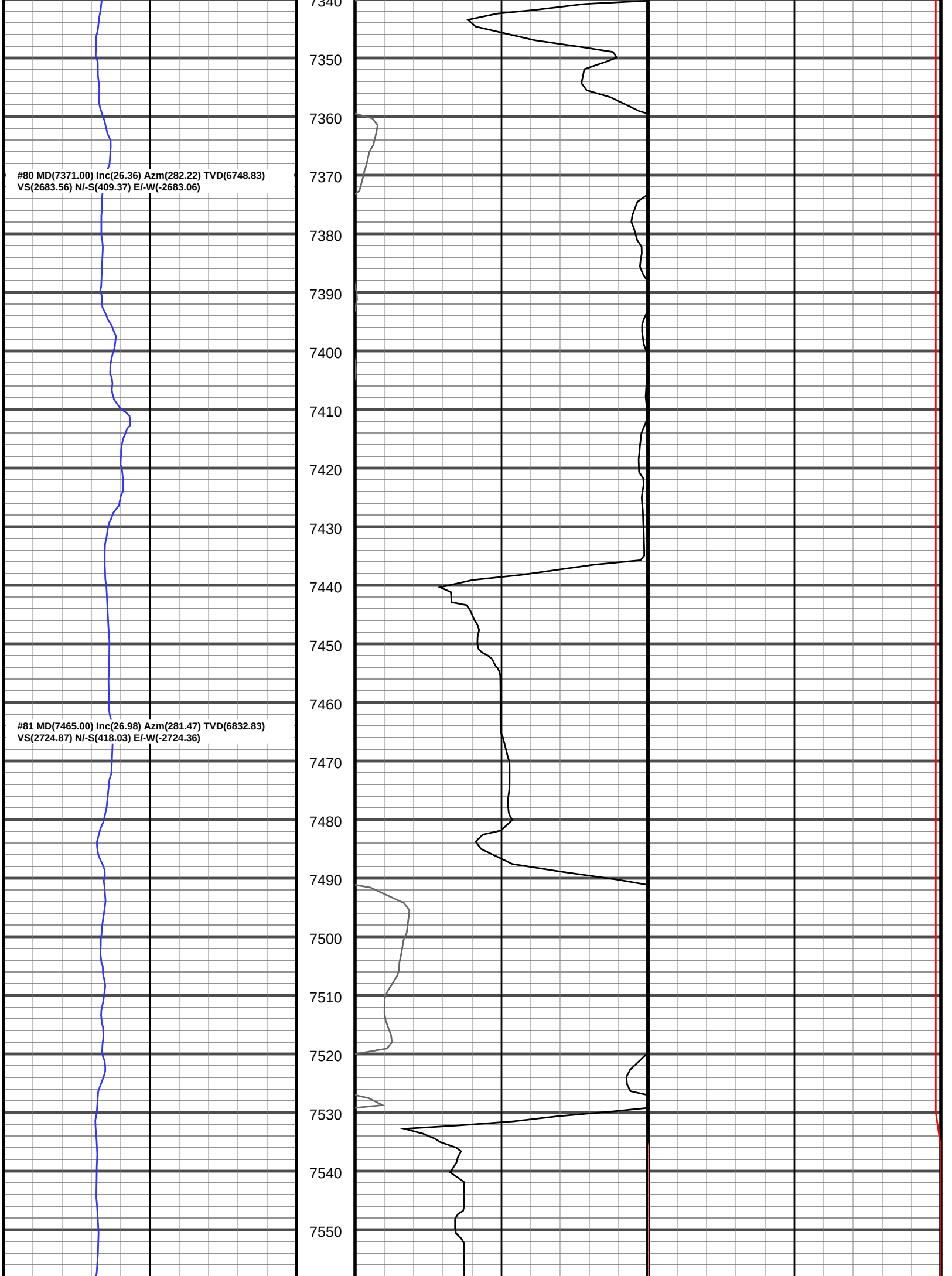

6250
6260
6270
6280
6290
6300
6310
6320
#69 MD(6330.00) Inc(29.24) Azm(283.37) TVD(5819.09)
VS(2233.76) N/-S(282.83) E/-W(-2233.41)
6330
6340
6350
6360
6370
6380
6390
6400
6410
6420
#70 MD(6424.00) Inc(26.25) Azm(282.10) TVD(5902.27)
VS(2276.44) N/-S(292.50) E/-W(-2276.08)
6430
6440
6450
6460

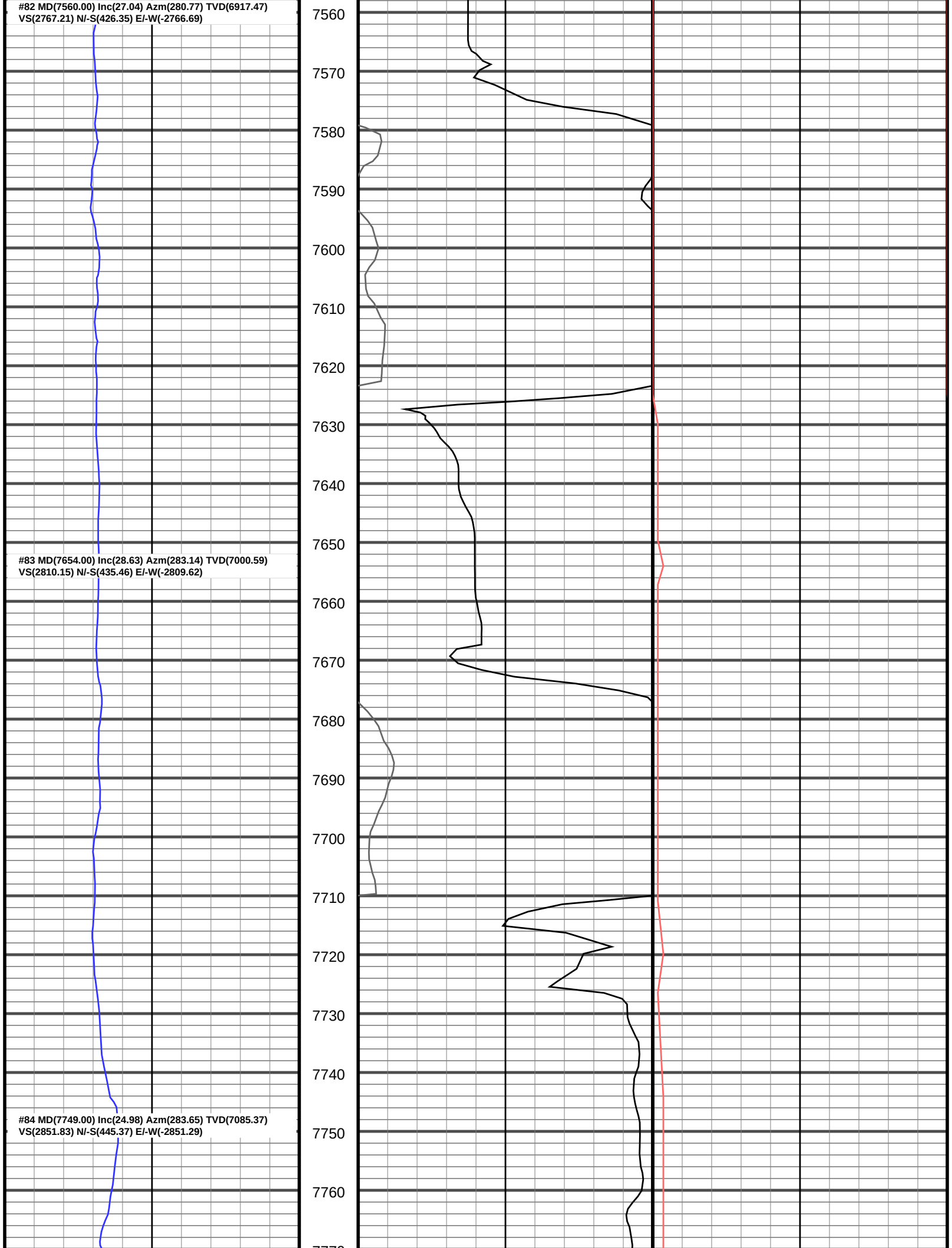

#71 MD(6519.00) Inc(27.24) Azm(282.84) TVD(5987.10)
VS(2318.19) N/-S(301.74) E/-W(-2317.83)
#72 MD(6614.00) Inc(23.96) Azm(282.16) TVD(6072.77)
VS(2358.27) N/-S(310.63) E/-W(-2357.89)
6470
6480
6490
6500
6510
6520
6530
6540
6550
6560
6570
6580
6590
6600
6610
6620
6630
6640
6650
6660
6670
6680
6690
6700

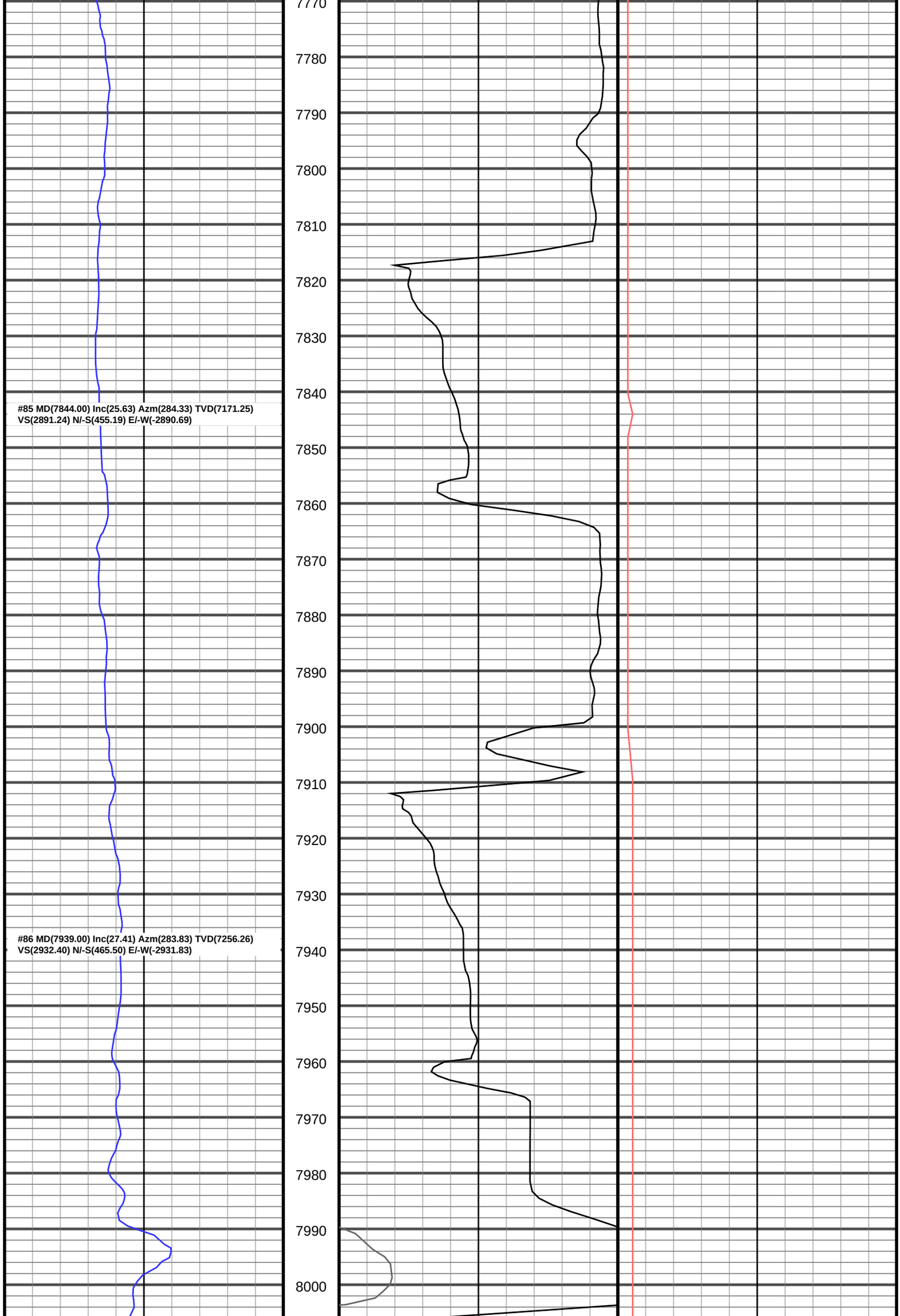

#73 MD(6708.00) Inc(25.92) Azm(282.87) TVD(6158.00)
VS(2396.97) N/-S(319.23) E/-W(-2396.58)
#74 MD(6803.00) Inc(28.21) Azm(289.09) TVD(6242.61)
VS(2438.46) N/-S(331.20) E/-W(-2438.06)
#75 MD(6897.00) Inc(24.75) Azm(287.71) TVD(6326.73)
VS(2478.23) N/-S(344.46) E/-W(-2477.81)
6710
6720
6730
6740
6750
6760
6770
6780
6790
6800
6810
6820
6830
6840
6850
6860
6870
6880
6890
6900

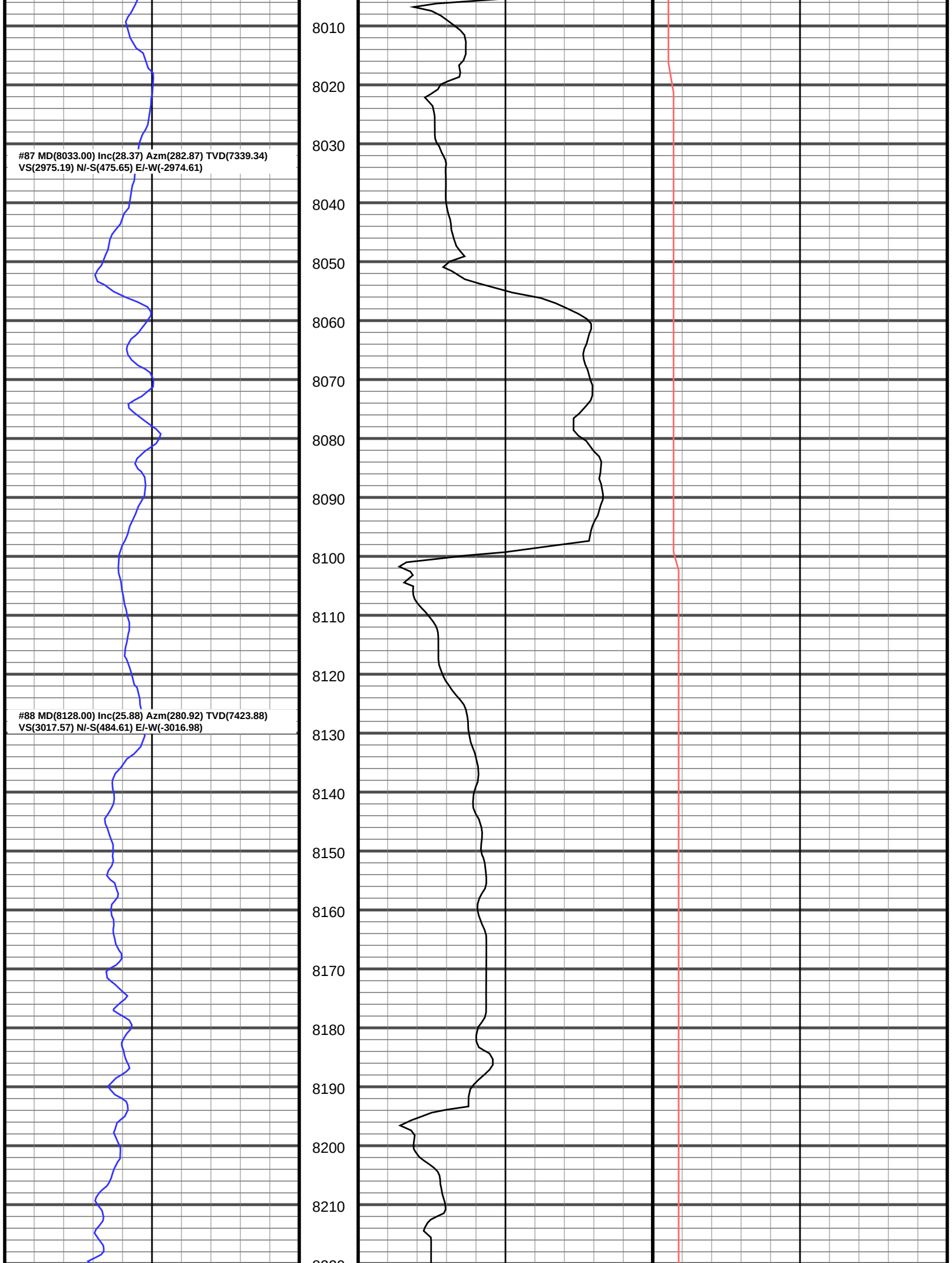

6910
6920
6930
6940
6950
6960
6970
6980
6990
7000
7010
7020
7030
7040
7050
7060
7070
7080
7090
7100
7110
7120
#76 MD(6992.00) Inc(25.76) Azm(288.86) TVD(6412.65)
VS(2516.72) N/-S(357.18) E/-W(-2516.29)
#77 MD(7087.00) Inc(29.00) Azm(290.11) TVD(6497.00)
VS(2557.91) N/-S(371.78) E/-W(-2557.46)

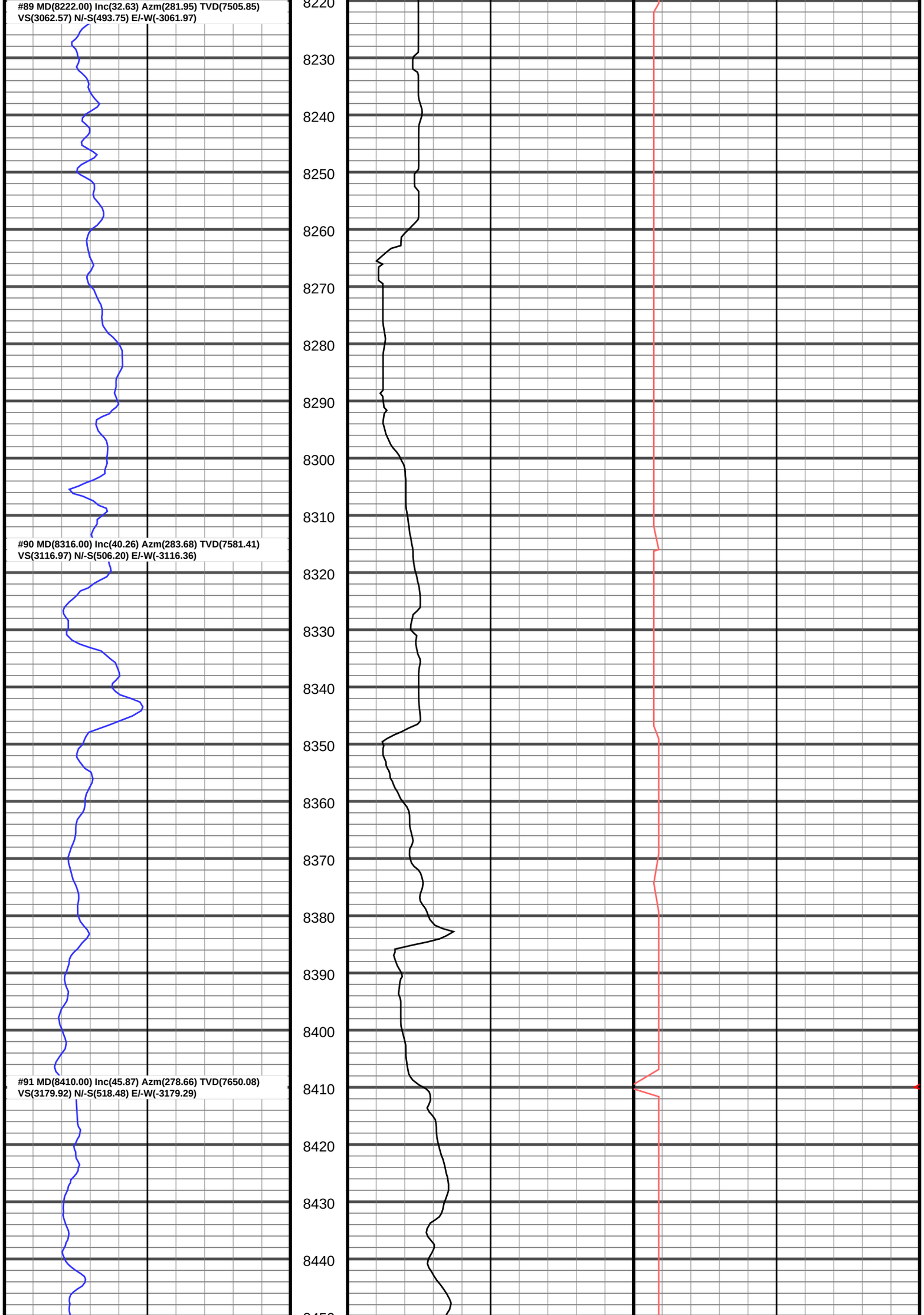

7130
7140
7150
7160
7170
7180
7190
7200
7210
7220
7230
7240
7250
7260
7270
7280
7290
7300
7310
7320
7330
#78 MD(7182.00) Inc(26.81) Azm(289.16) TVD(6580.95)
VS(2599.80) N/-S(386.73) E/-W(-2599.33)
#79 MD(7276.00) Inc(28.11) Azm(284.59) TVD(6664.37)
VS(2641.27) N/-S(399.27) E/-W(-2640.79)

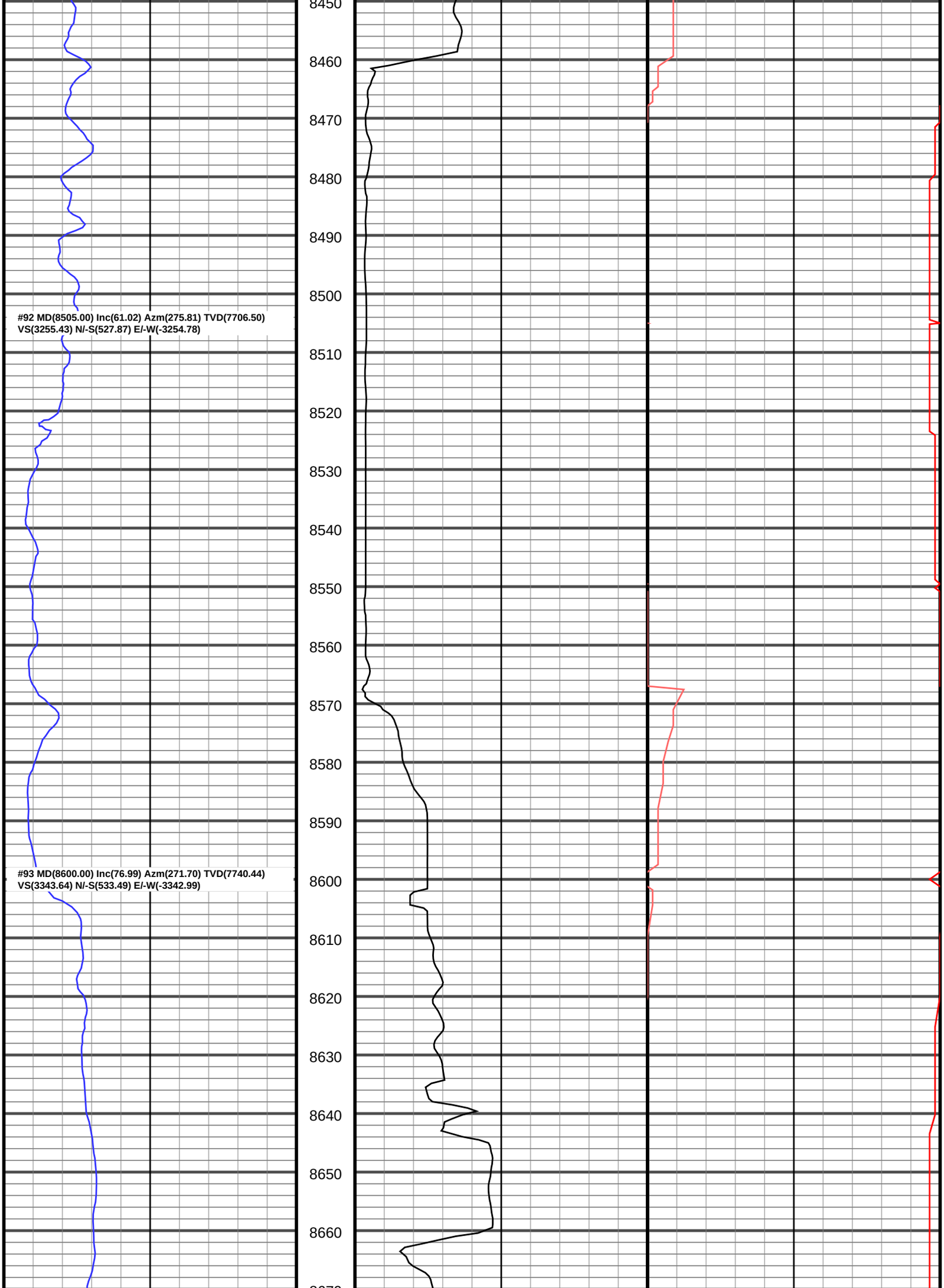

#80 MD(7371.00) Inc(26.36) Azm(282.22) TVD(6748.83)
VS(2683.56) N/-S(409.37) E/-W(-2683.06)
#81 MD(7465.00) Inc(26.98) Azm(281.47) TVD(6832.83)
VS(2724.87) N/-S(418.03) E/-W(-2724.36)
7340
7350
7360
7370
7380
7390
7400
7410
7420
7430
7440
7450
7460
7470
7480
7490
7500
7510
7520
7530
7540
7550

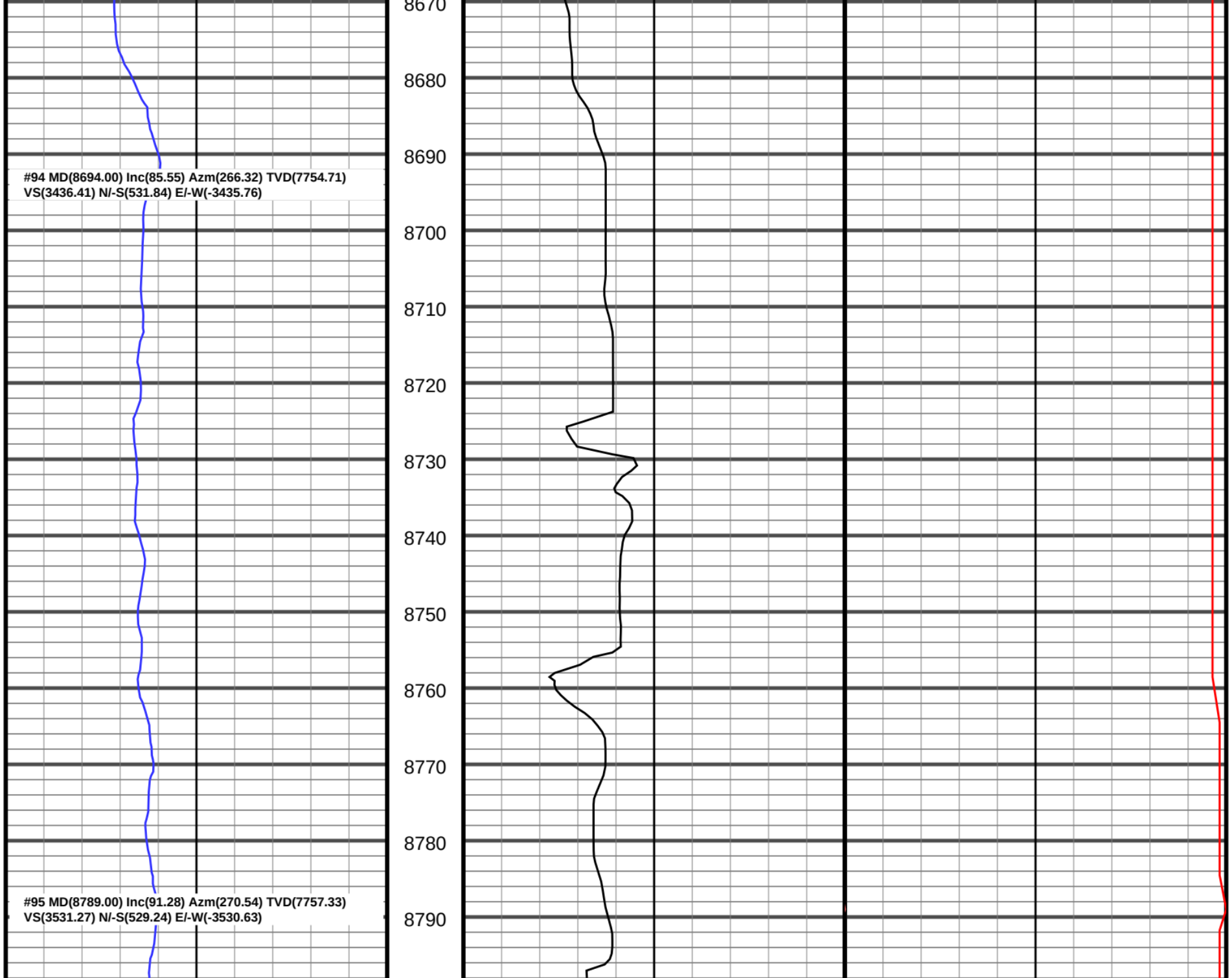

#82 MD(7560.00) Inc(27.04) Azm(280.77) TVD(6917.47)
VS(2767.21) N/-S(426.35) E/-W(-2766.69)
#83 MD(7654.00) Inc(28.63) Azm(283.14) TVD(7000.59)
VS(2810.15) N/-S(435.46) E/-W(-2809.62)
#84 MD(7749.00) Inc(24.98) Azm(283.65) TVD(7085.37)
VS(2851.83) N/-S(445.37) E/-W(-2851.29)
7560
7570
7580
7590
7600
7610
7620
7630
7640
7650
7660
7670
7680
7690
7700
7710
7720
7730
7740
7750
7760

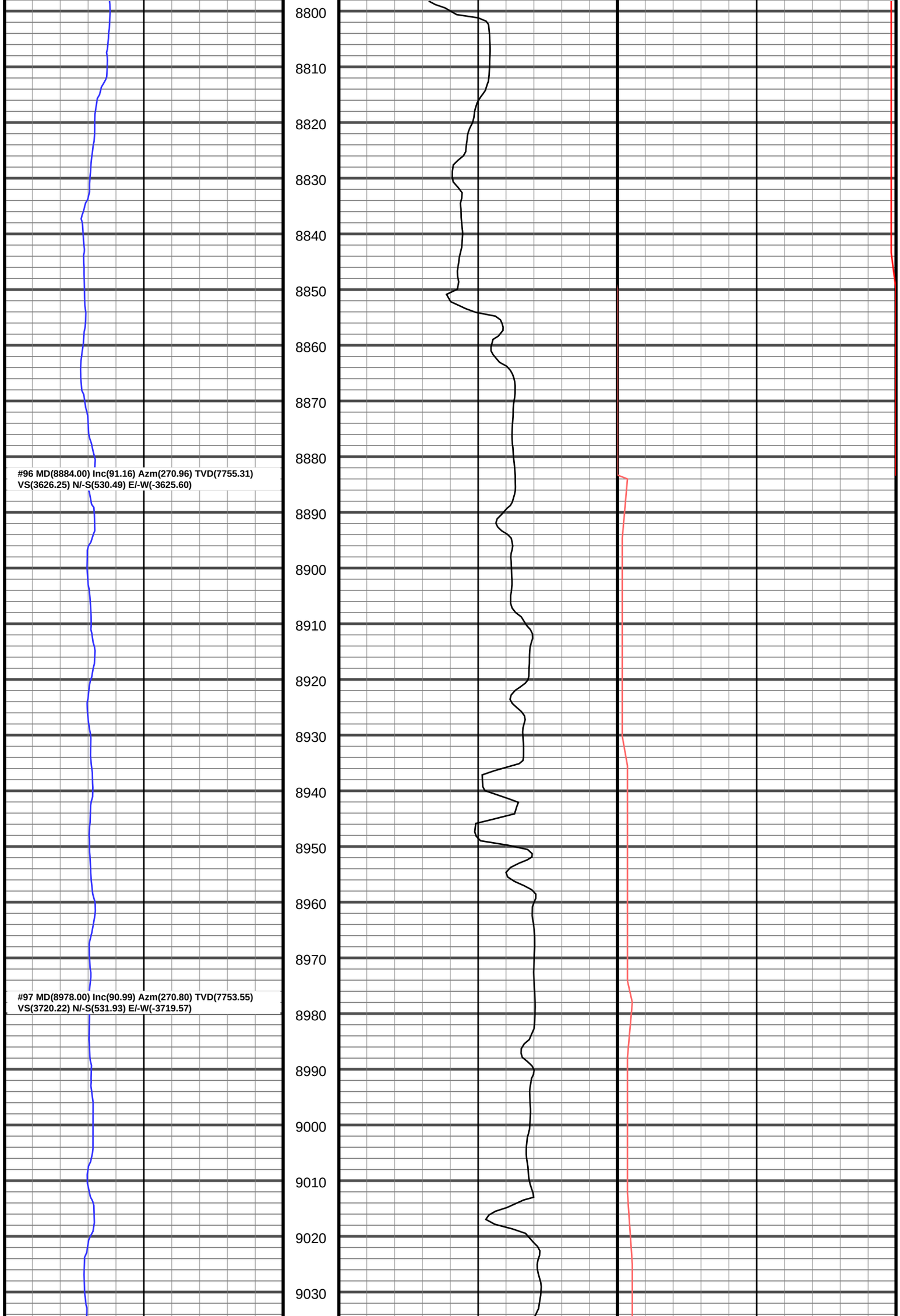

7770
7780
7790
7800
7810
7820
7830
7840
7850
7860
7870
7880
7890
7900
7910
7920
7930
7940
7950
7960
7970
7980
7990
8000
#85 MD(7844.00) Inc(25.63) Azm(284.33) TVD(7171.25)
VS(2891.24) N/-S(455.19) E/-W(-2890.69)
#86 MD(7939.00) Inc(27.41) Azm(283.83) TVD(7256.26)
VS(2932.40) N/-S(465.50) E/-W(-2931.83)

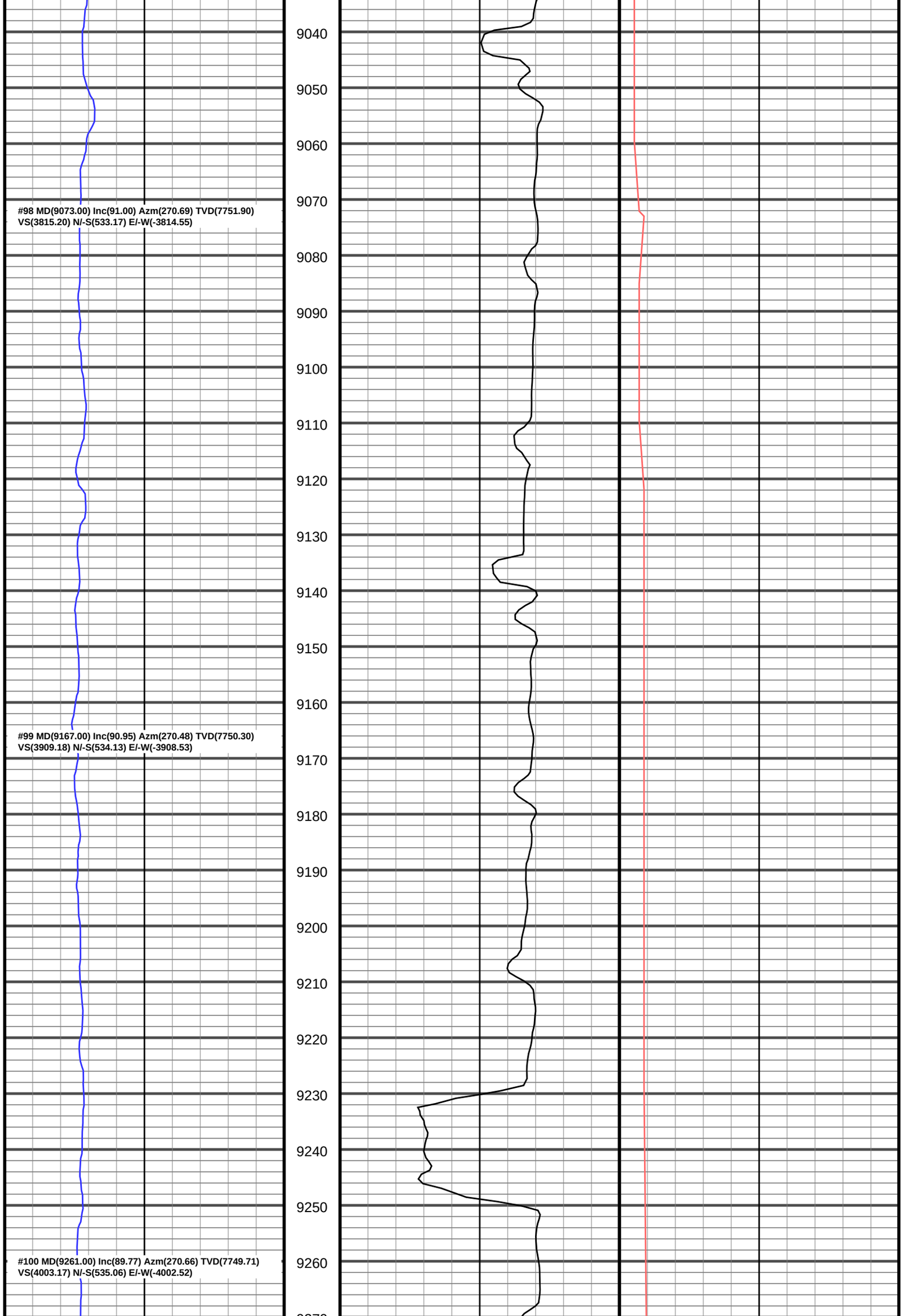

#87 MD(8033.00) Inc(28.37) Azm(282.87) TVD(7339.34)
VS(2975.19) N/-S(475.65) E/-W(-2974.61)
#88 MD(8128.00) Inc(25.88) Azm(280.92) TVD(7423.88)
VS(3017.57) N/-S(484.61) E/-W(-3016.98)
8010
8020
8030
8040
8050
8060
8070
8080
8090
8100
8110
8120
8130
8140
8150
8160
8170
8180
8190
8200
8210

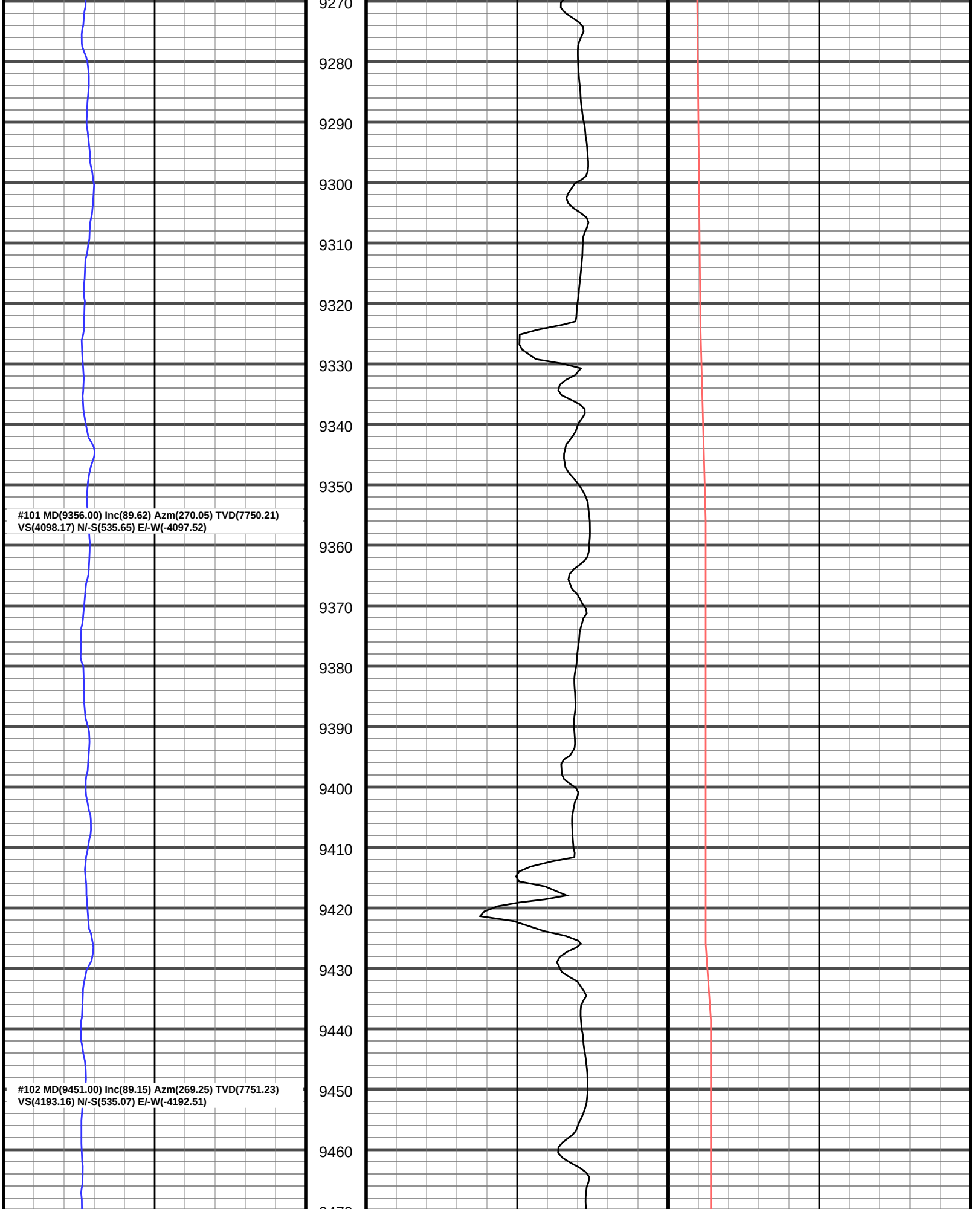

#89 MD(8222.00) Inc(32.63) Azm(281.95) TVD(7505.85)
VS(3062.57) N/-S(493.75) E/-W(-3061.97)
#90 MD(8316.00) Inc(40.26) Azm(283.68) TVD(7581.41)
VS(3116.97) N/-S(506.20) E/-W(-3116.36)
#91 MD(8410.00) Inc(45.87) Azm(278.66) TVD(7650.08)
VS(3179.92) N/-S(518.48) E/-W(-3179.29)
8220
8230
8240
8250
8260
8270
8280
8290
8300
8310
8320
8330
8340
8350
8360
8370
8380
8390
8400
8410
8420
8430
8440

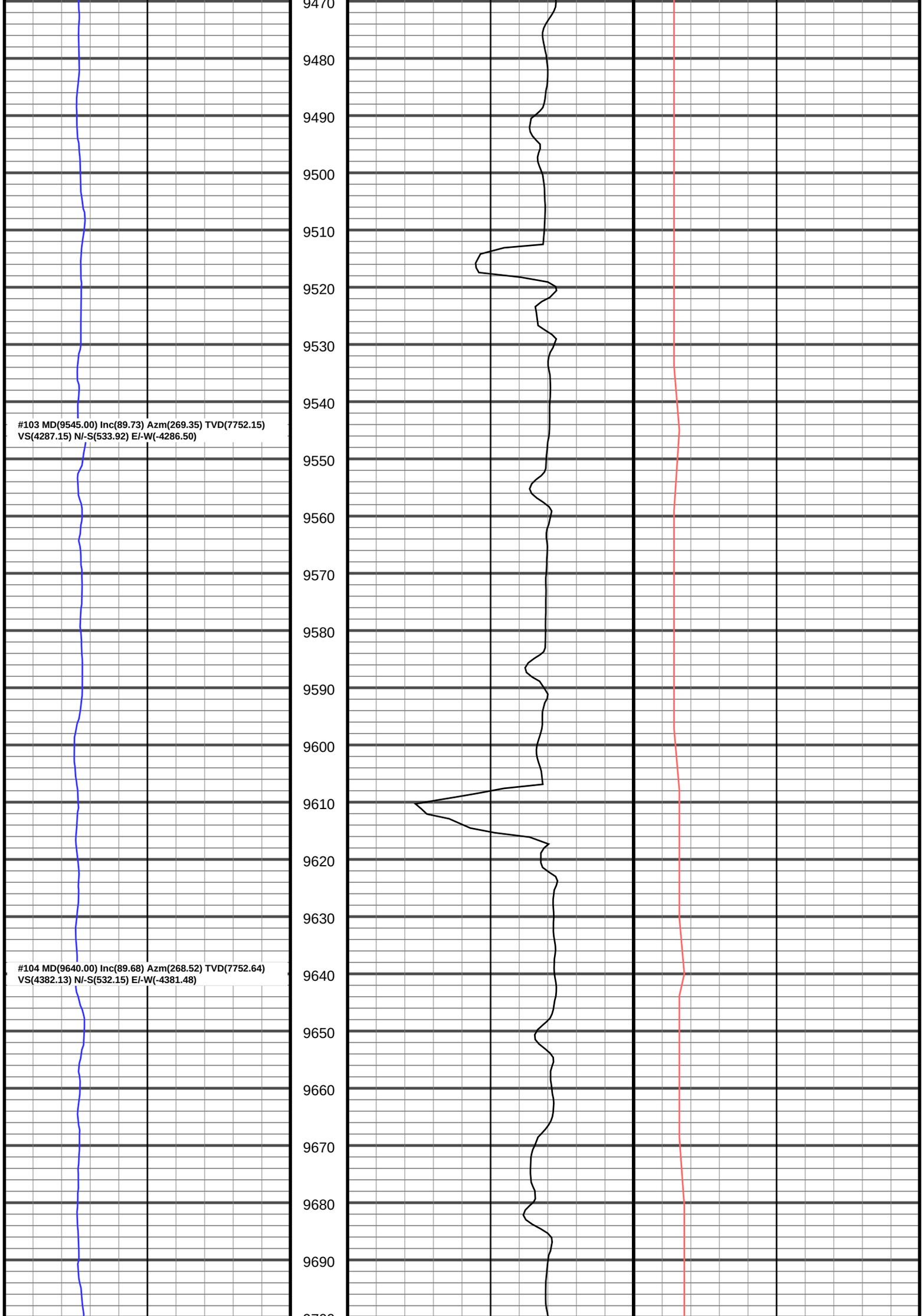

8450
8460
8470
8480
8490
8500
#92 MD(8505.00) Inc(61.02) Azm(275.81) TVD(7706.50)
VS(3255.43) N/-S(527.87) E/-W(-3254.78)
8510
8520
8530
8540
8550
8560
8570
8580
8590
#93 MD(8600.00) Inc(76.99) Azm(271.70) TVD(7740.44)
VS(3343.64) N/-S(533.49) E/-W(-3342.99)
8600
8610
8620
8630
8640
8650
8660

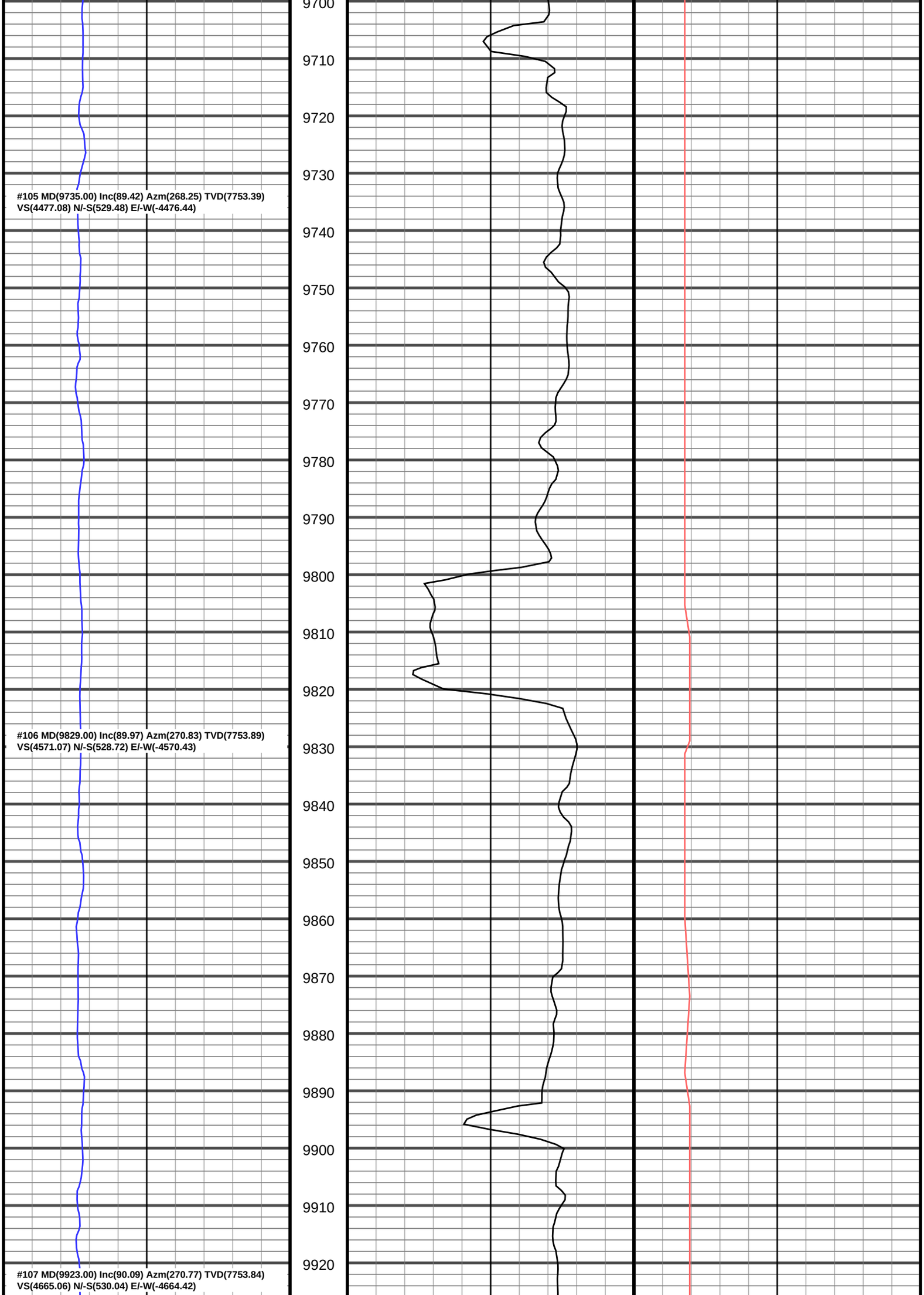

#94 MD(8694.00) Inc(85.55) Azm(266.32) TVD(7754.71)
VS(3436.41) N/-S(531.84) E/-W(-3435.76)
#95 MD(8789.00) Inc(91.28) Azm(270.54) TVD(7757.33)
VS(3531.27) N/-S(529.24) E/-W(-3530.63)
8670
8680
8690
8700
8710
8720
8730
8740
8750
8760
8770
8780
8790

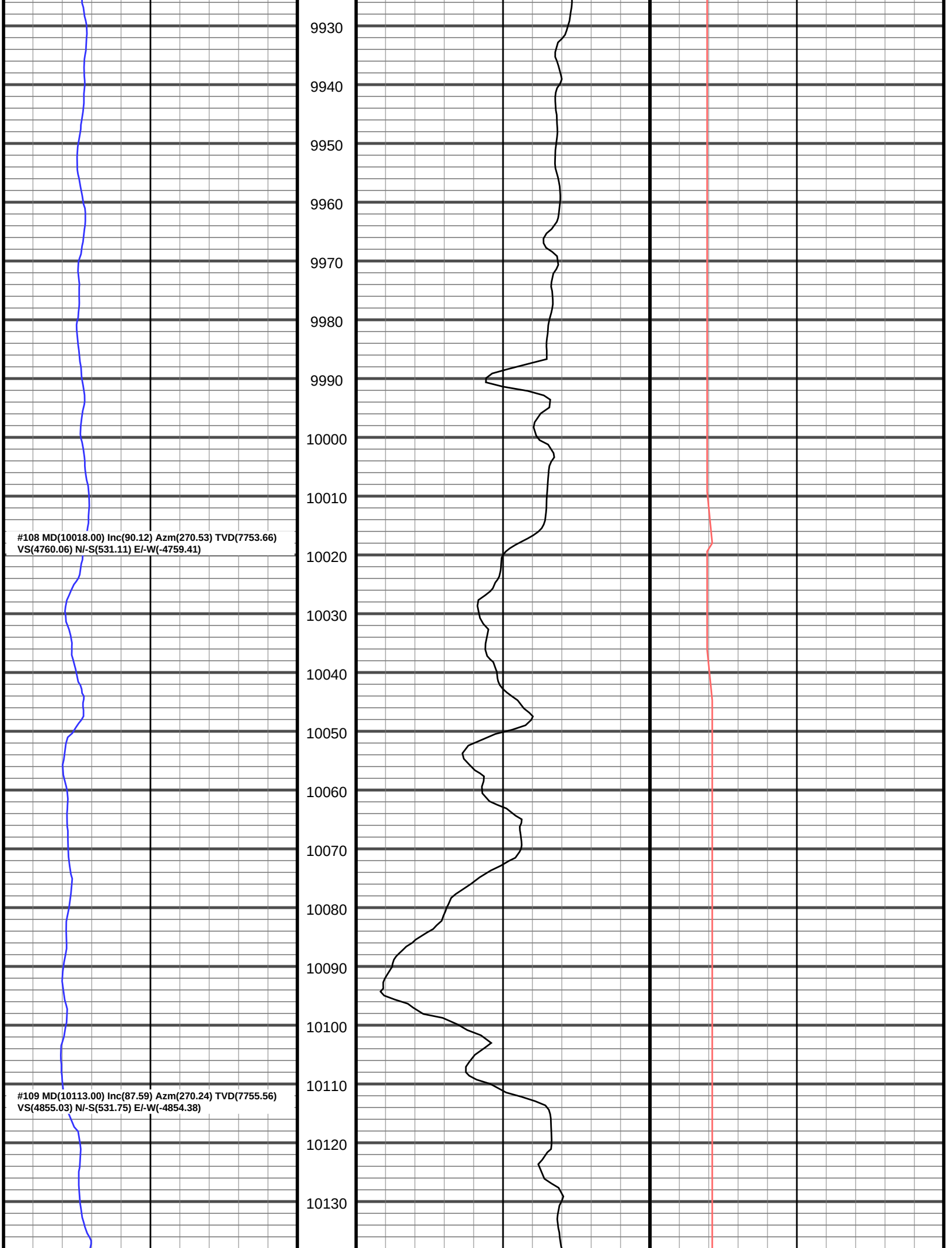

8800
8810
8820
8830
8840
8850
8860
8870
8880
#96 MD(8884.00) Inc(91.16) Azm(270.96) TVD(7755.31)
VS(3626.25) N/-S(530.49) E/-W(-3625.60)
8890
8900
8910
8920
8930
8940
8950
8960
8970
#97 MD(8978.00) Inc(90.99) Azm(270.80) TVD(7753.55)
VS(3720.22) N/-S(531.93) E/-W(-3719.57)
8980
8990
9000
9010
9020
9030

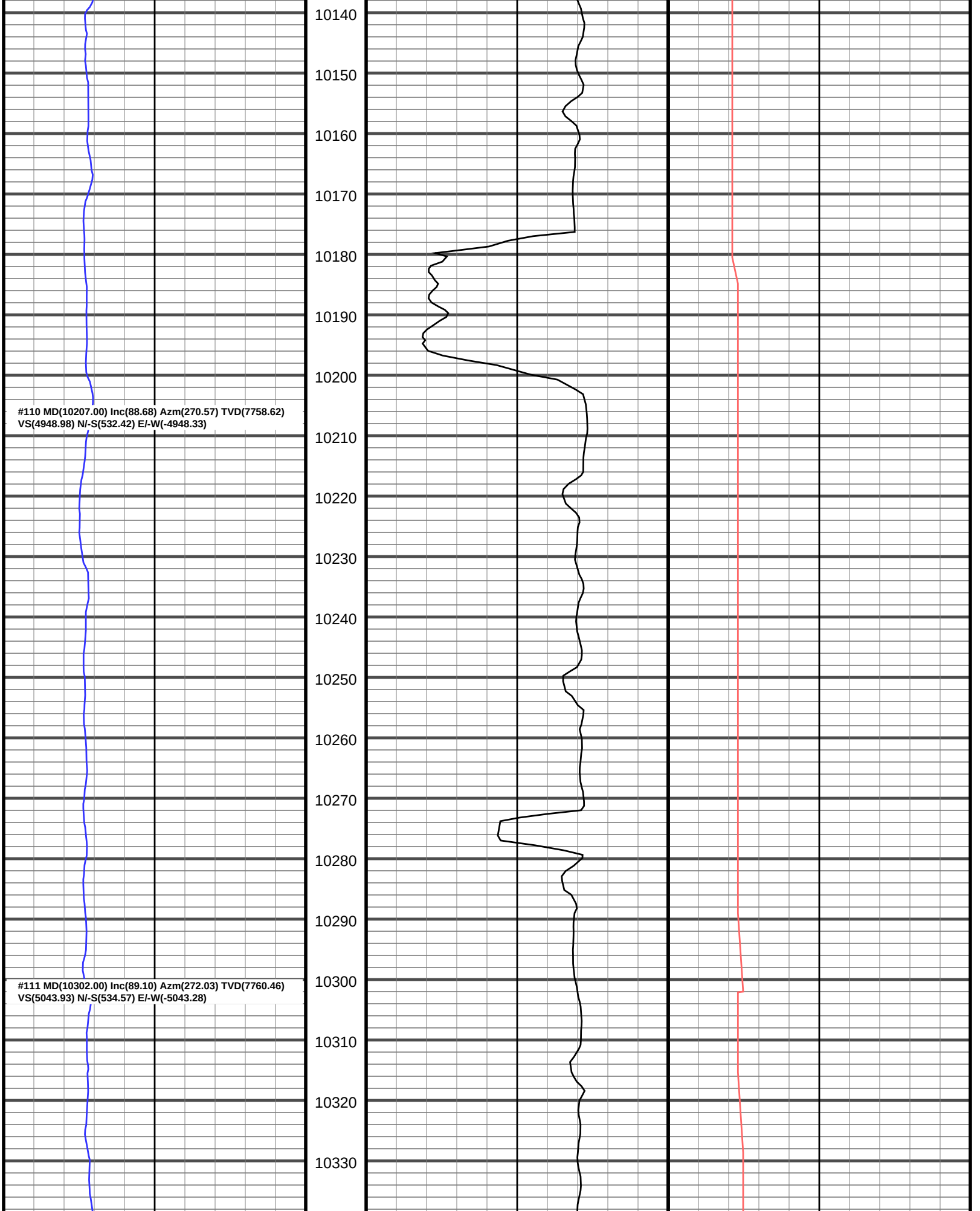

#98 MD(9073.00) Inc(91.00) Azm(270.69) TVD(7751.90)
VS(3815.20) N/-S(533.17) E/-W(-3814.55)
#99 MD(9167.00) Inc(90.95) Azm(270.48) TVD(7750.30)
VS(3909.18) N/-S(534.13) E/-W(-3908.53)
#100 MD(9261.00) Inc(89.77) Azm(270.66) TVD(7749.71)
VS(4003.17) N/-S(535.06) E/-W(-4002.52)
9040
9050
9060
9070
9080
9090
9100
9110
9120
9130
9140
9150
9160
9170
9180
9190
9200
9210
9220
9230
9240
9250
9260

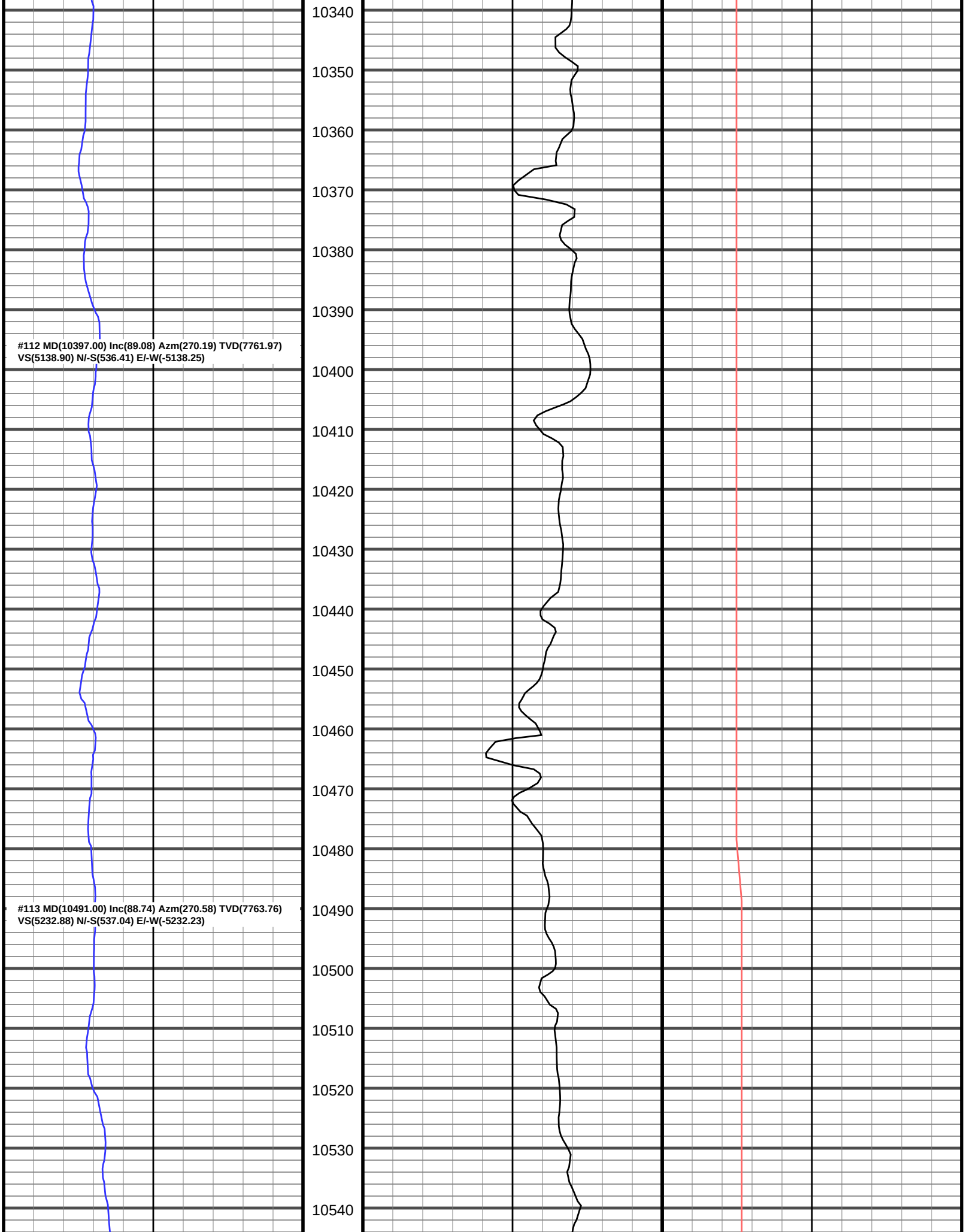

9270
9280
9290
9300
9310
9320
9330
9340
9350
#101 MD(9356.00) Inc(89.62) Azm(270.05) TVD(7750.21)
VS(4098.17) N/-S(535.65) E/-W(-4097.52)
9360
9370
9380
9390
9400
9410
9420
9430
9440
#102 MD(9451.00) Inc(89.15) Azm(269.25) TVD(7751.23)
VS(4193.16) N/-S(535.07) E/-W(-4192.51)
9450
9460

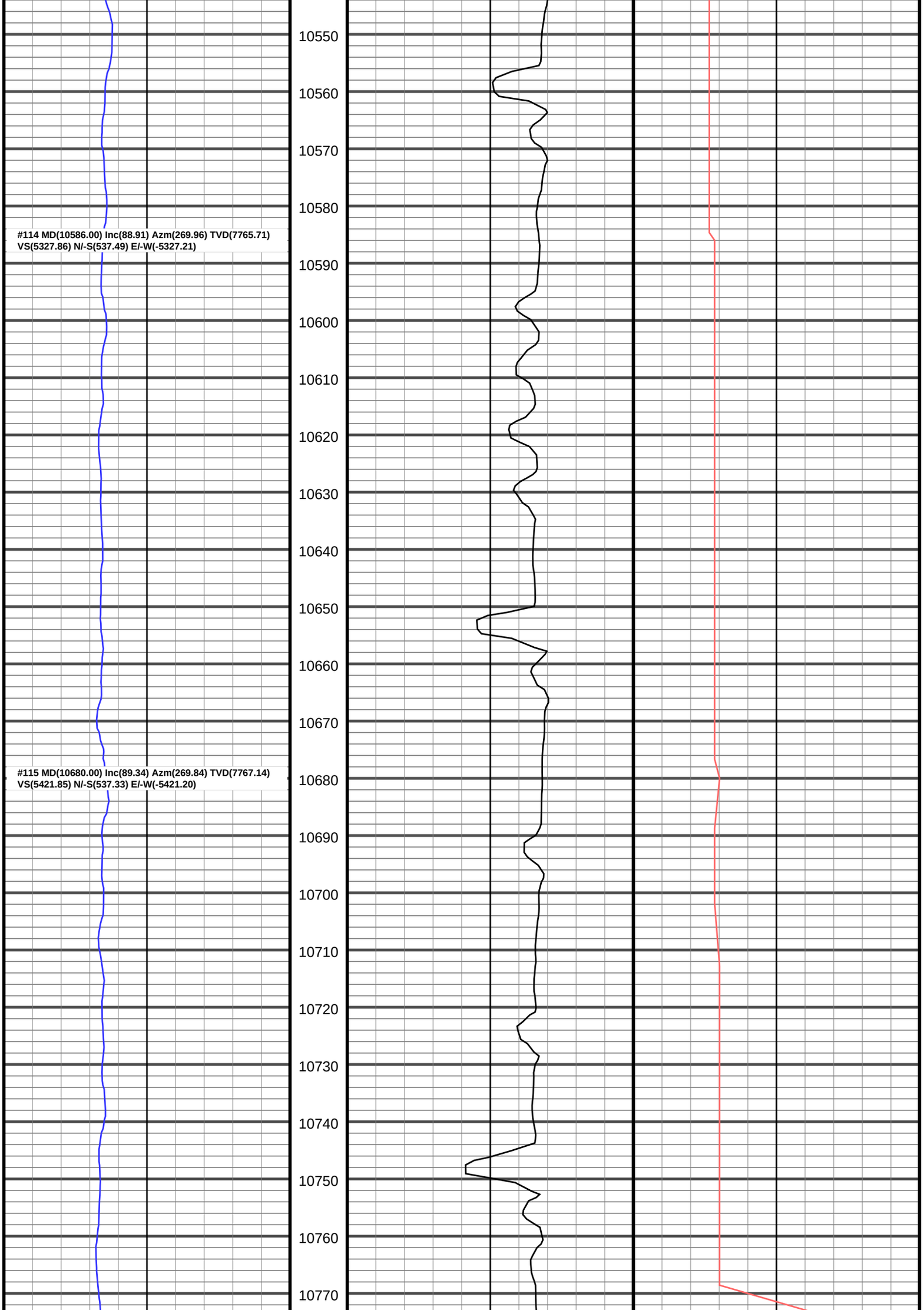

9470
9480
9490
9500
9510
9520
9530
9540
9550
9560
9570
9580
9590
9600
9610
9620
9630
9640
9650
9660
9670
9680
9690
#103 MD(9545.00) Inc(89.73) Azm(269.35) TVD(7752.15)
VS(4287.15) N/-S(533.92) E/-W(-4286.50)
#104 MD(9640.00) Inc(89.68) Azm(268.52) TVD(7752.64)
VS(4382.13) N/-S(532.15) E/-W(-4381.48)

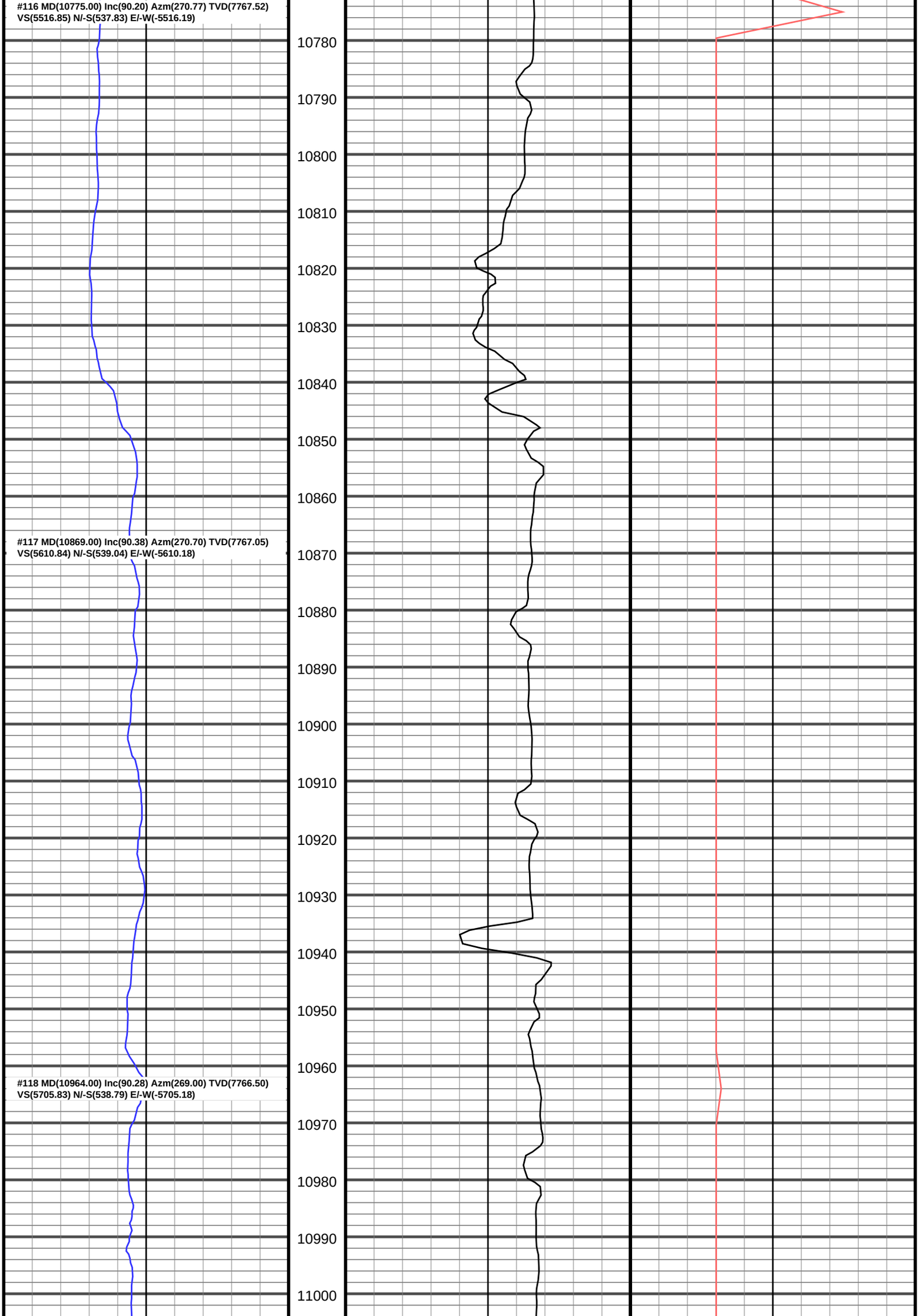

#105 MD(9735.00) Inc(89.42) Azm(268.25) TVD(7753.39)
VS(4477.08) N/-S(529.48) E/-W(-4476.44)
#106 MD(9829.00) Inc(89.97) Azm(270.83) TVD(7753.89)
VS(4571.07) N/-S(528.72) E/-W(-4570.43)
#107 MD(9923.00) Inc(90.09) Azm(270.77) TVD(7753.84)
VS(4665.06) N/-S(530.04) E/-W(-4664.42)
9700
9710
9720
9730
9740
9750
9760
9770
9780
9790
9800
9810
9820
9830
9840
9850
9860
9870
9880
9890
9900
9910
9920

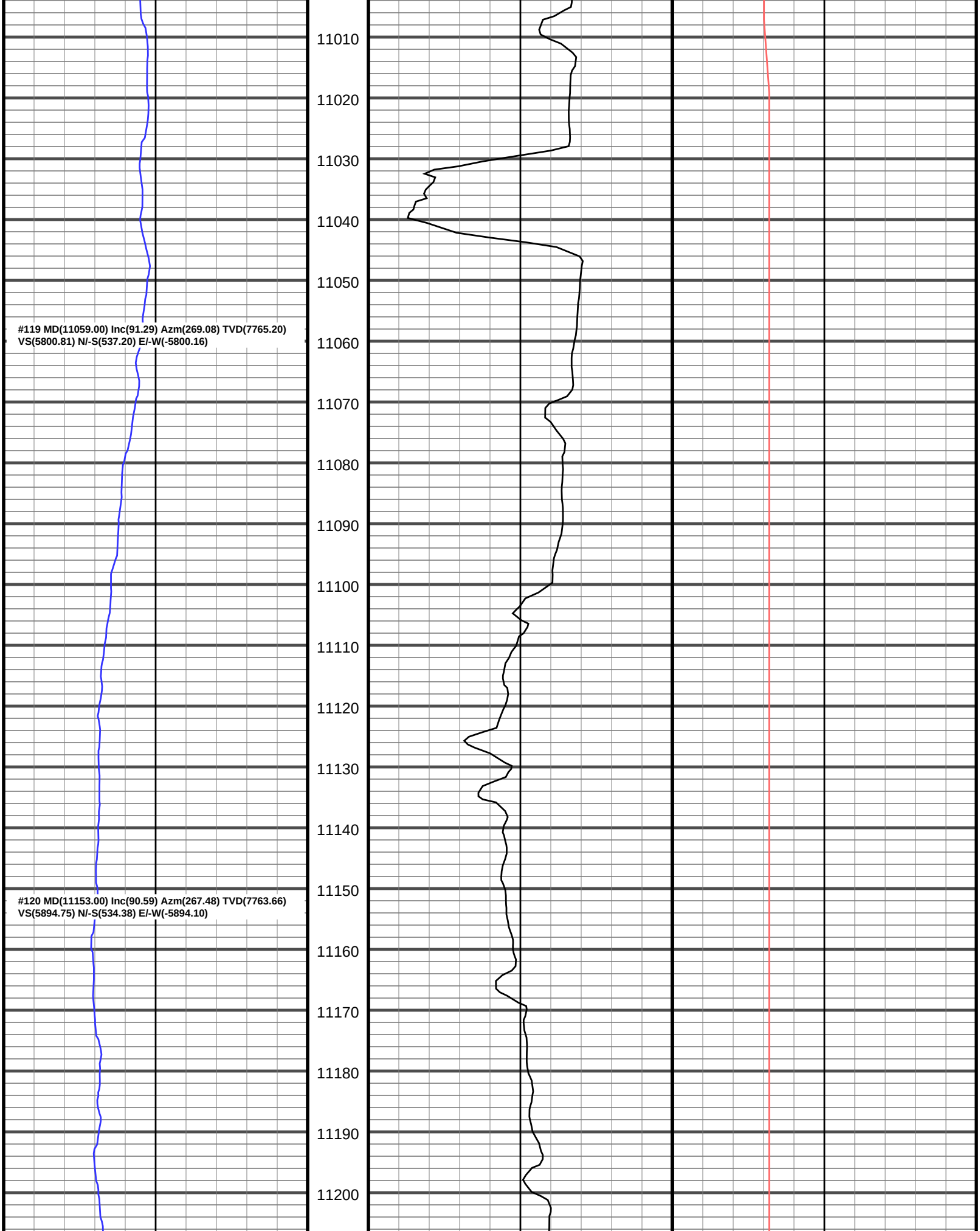

9930
9940
9950
9960
9970
9980
9990
10000
10010
#108 MD(10018.00) Inc(90.12) Azm(270.53) TVD(7753.66)
VS(4760.06) N/-S(531.11) E/-W(-4759.41)
10020
10030
10040
10050
10060
10070
10080
10090
10100
10110
#109 MD(10113.00) Inc(87.59) Azm(270.24) TVD(7755.56)
VS(4855.03) N/-S(531.75) E/-W(-4854.38)
10120
10130

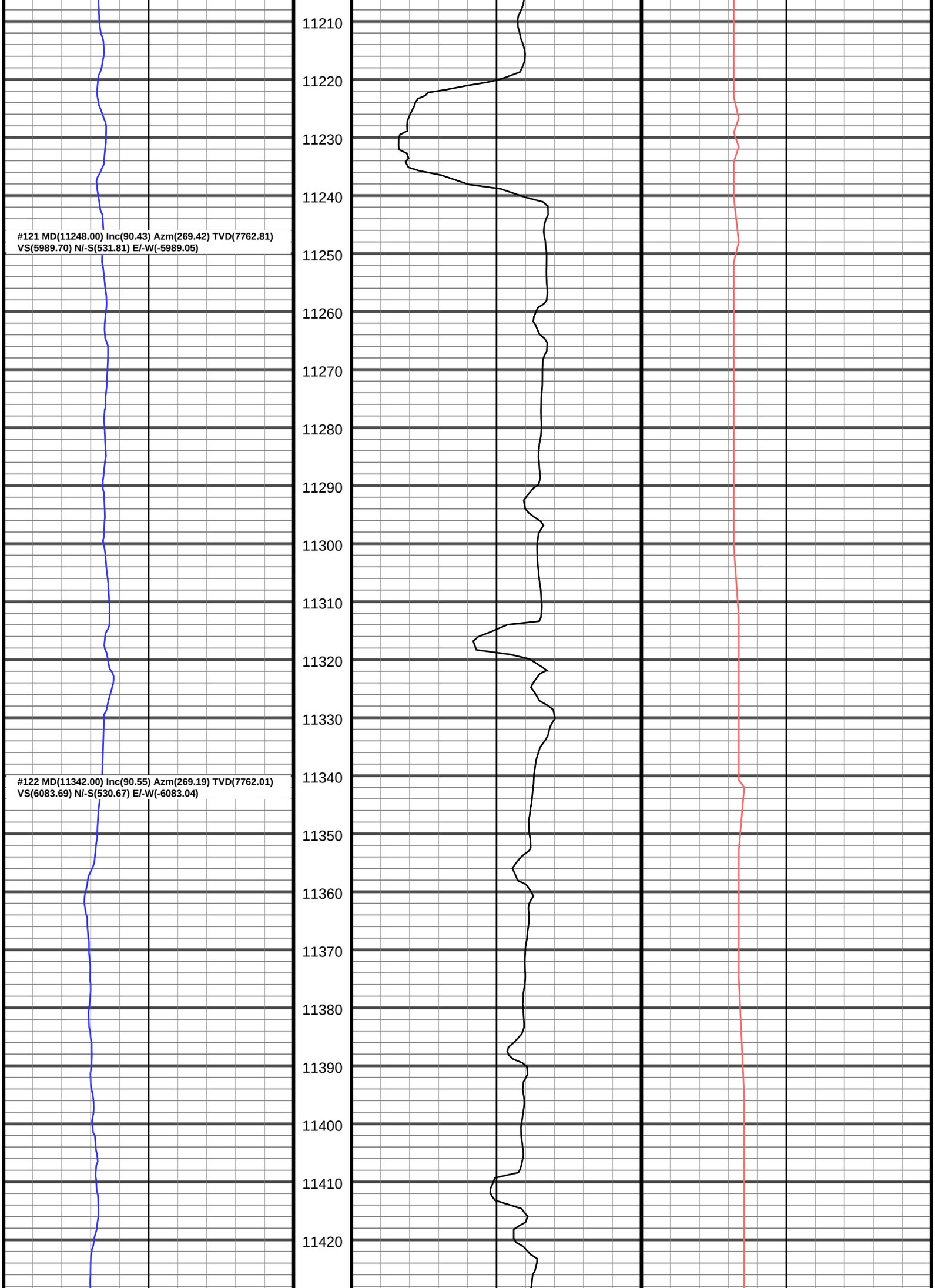

10140
10150
10160
10170
10180
10190
10200
10210
10220
10230
10240
10250
10260
10270
10280
10290
10300
10310
10320
10330
#110 MD(10207.00) Inc(88.68) Azm(270.57) TVD(7758.62)
VS(4948.98) N/-S(532.42) E/-W(-4948.33)
#111 MD(10302.00) Inc(89.10) Azm(272.03) TVD(7760.46)
VS(5043.93) N/-S(534.57) E/-W(-5043.28)

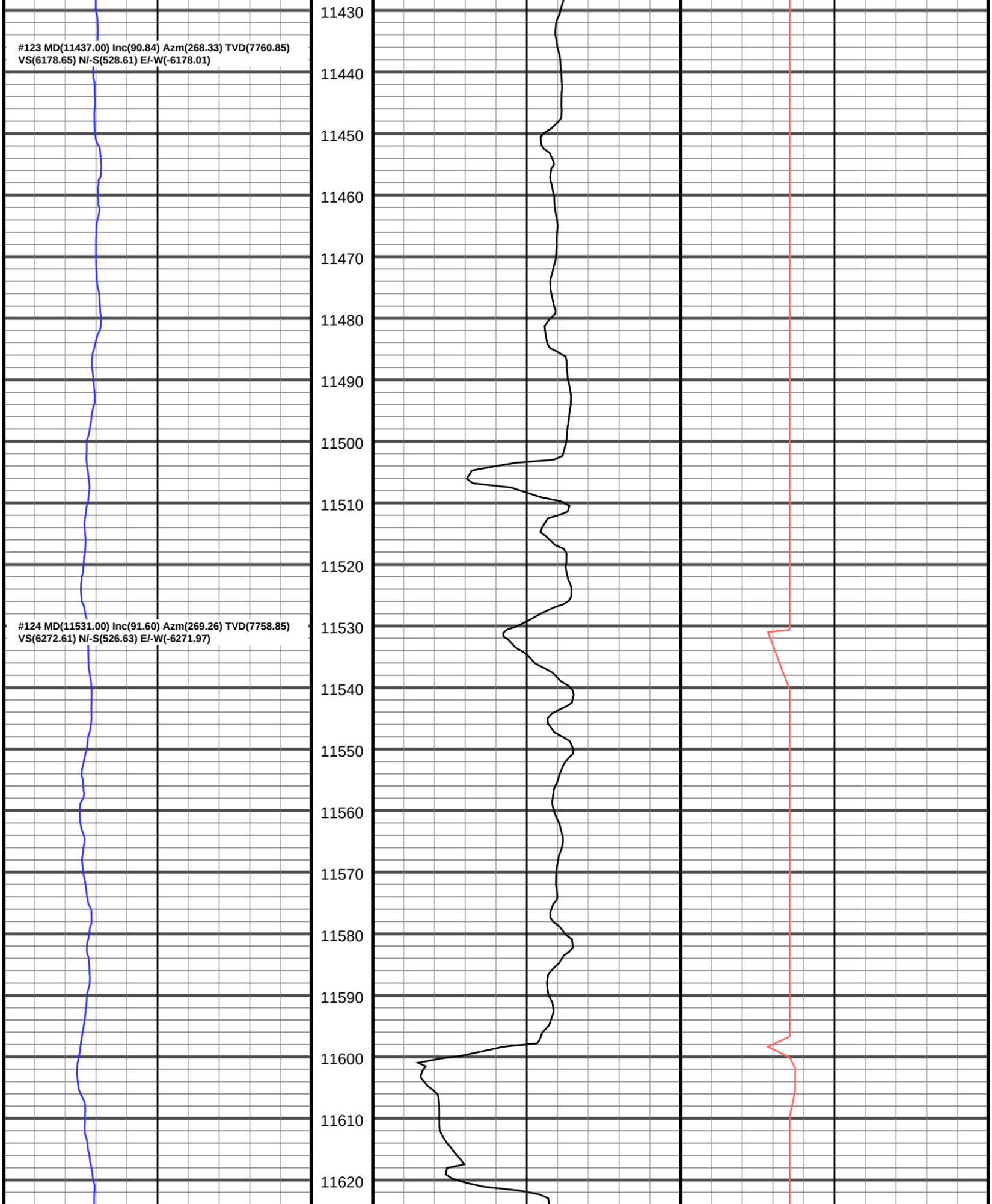

10340
10350
10360
10370
10380
10390
#112 MD(10397.00) Inc(89.08) Azm(270.19) TVD(7761.97)
VS(5138.90) N/-S(536.41) E/-W(-5138.25)
10400
10410
10420
10430
10440
10450
10460
10470
10480
#113 MD(10491.00) Inc(88.74) Azm(270.58) TVD(7763.76)
VS(5232.88) N/-S(537.04) E/-W(-5232.23)
10490
10500
10510
10520
10530
10540

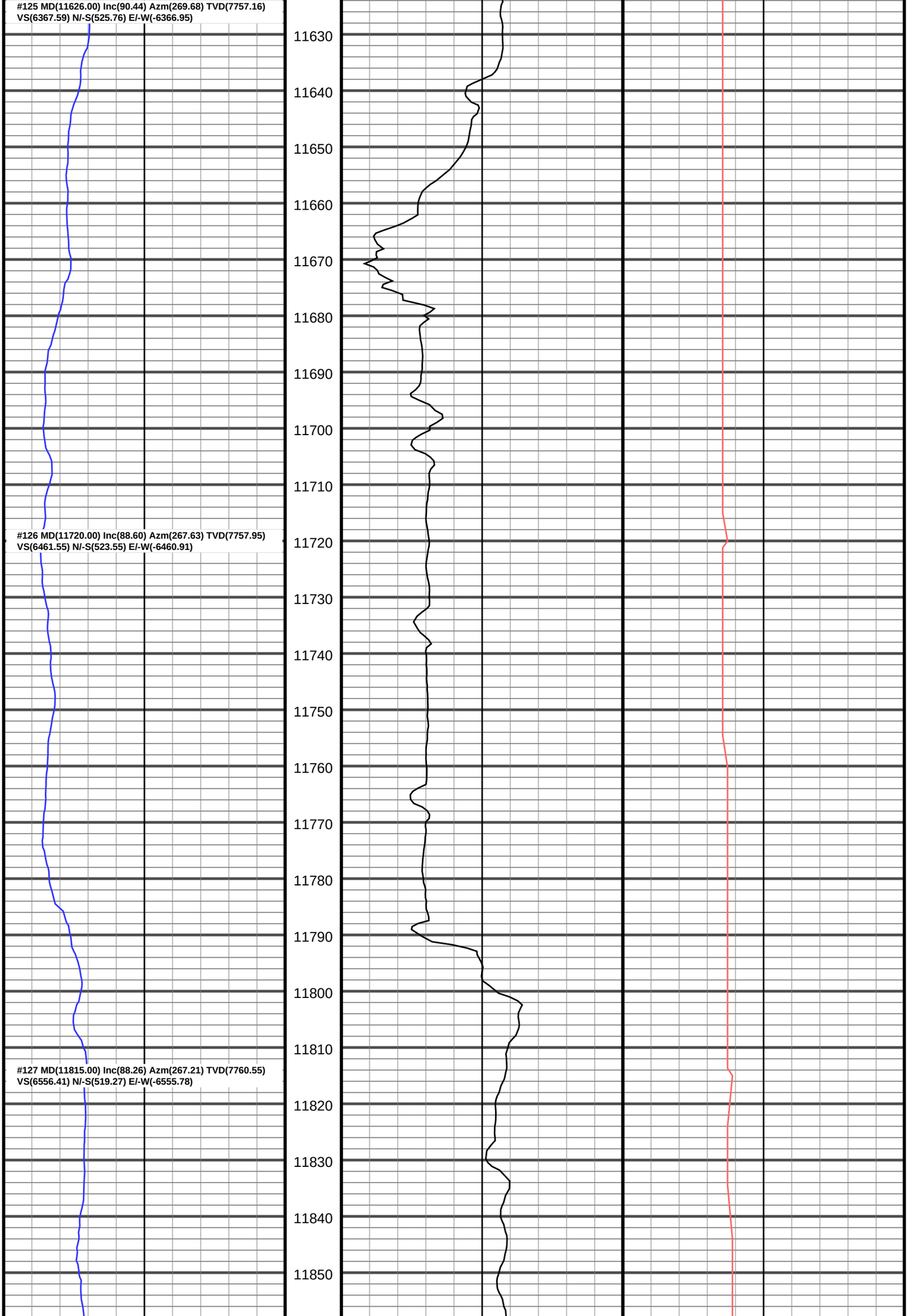

#114 MD(10586.00) Inc(88.91) Azm(269.96) TVD(7765.71)
VS(5327.86) N/-S(537.49) E/-W(-5327.21)
#115 MD(10680.00) Inc(89.34) Azm(269.84) TVD(7767.14)
VS(5421.85) N/-S(537.33) E/-W(-5421.20)
10550
10560
10570
10580
10590
10600
10610
10620
10630
10640
10650
10660
10670
10680
10690
10700
10710
10720
10730
10740
10750
10760
10770

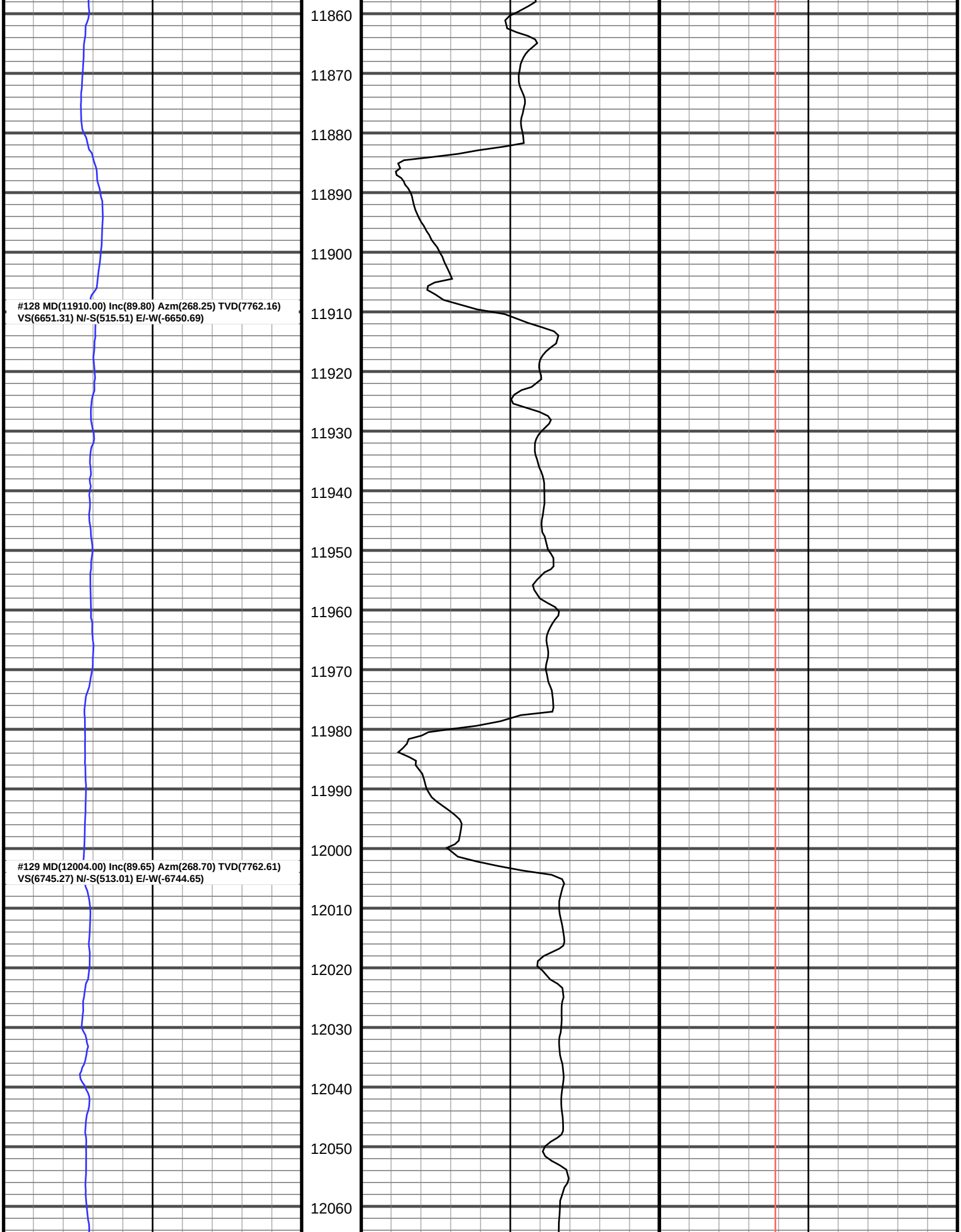

#116 MD(10775.00) Inc(90.20) Azm(270.77) TVD(7767.52)
VS(5516.85) N/-S(537.83) E/-W(-5516.19)
#117 MD(10869.00) Inc(90.38) Azm(270.70) TVD(7767.05)
VS(5610.84) N/-S(539.04) E/-W(-5610.18)
#118 MD(10964.00) Inc(90.28) Azm(269.00) TVD(7766.50)
VS(5705.83) N/-S(538.79) E/-W(-5705.18)
10780
10790
10800
10810
10820
10830
10840
10850
10860
10870
10880
10890
10900
10910
10920
10930
10940
10950
10960
10970
10980
10990
11000

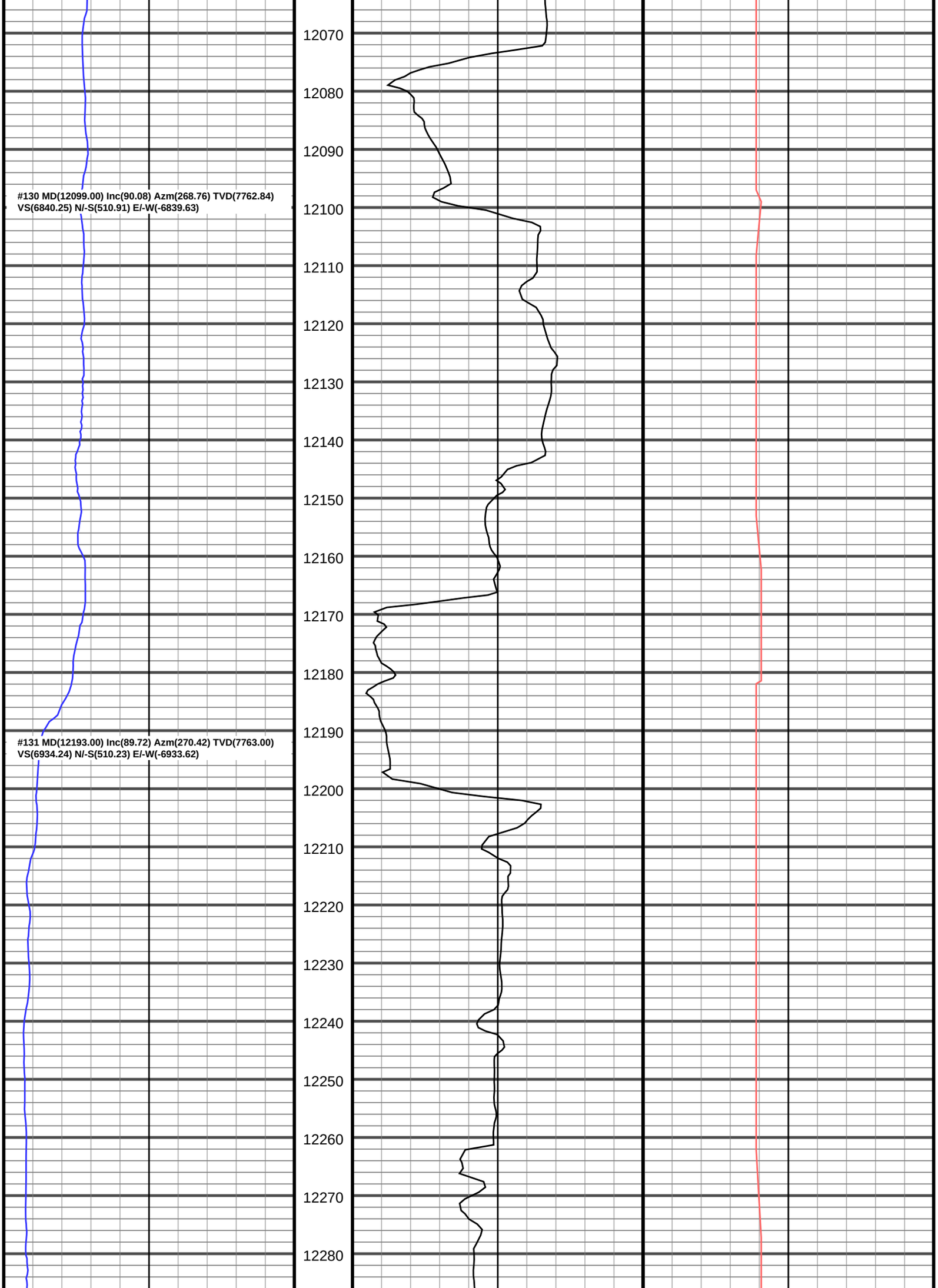

11010
11020
11030
11040
11050
11060
11070
11080
11090
11100
11110
11120
11130
11140
11150
11160
11170
11180
11190
11200
#119 MD(11059.00) Inc(91.29) Azm(269.08) TVD(7765.20)
VS(5800.81) N/-S(537.20) E/-W(-5800.16)
#120 MD(11153.00) Inc(90.59) Azm(267.48) TVD(7763.66)
VS(5894.75) N/-S(534.38) E/-W(-5894.10)

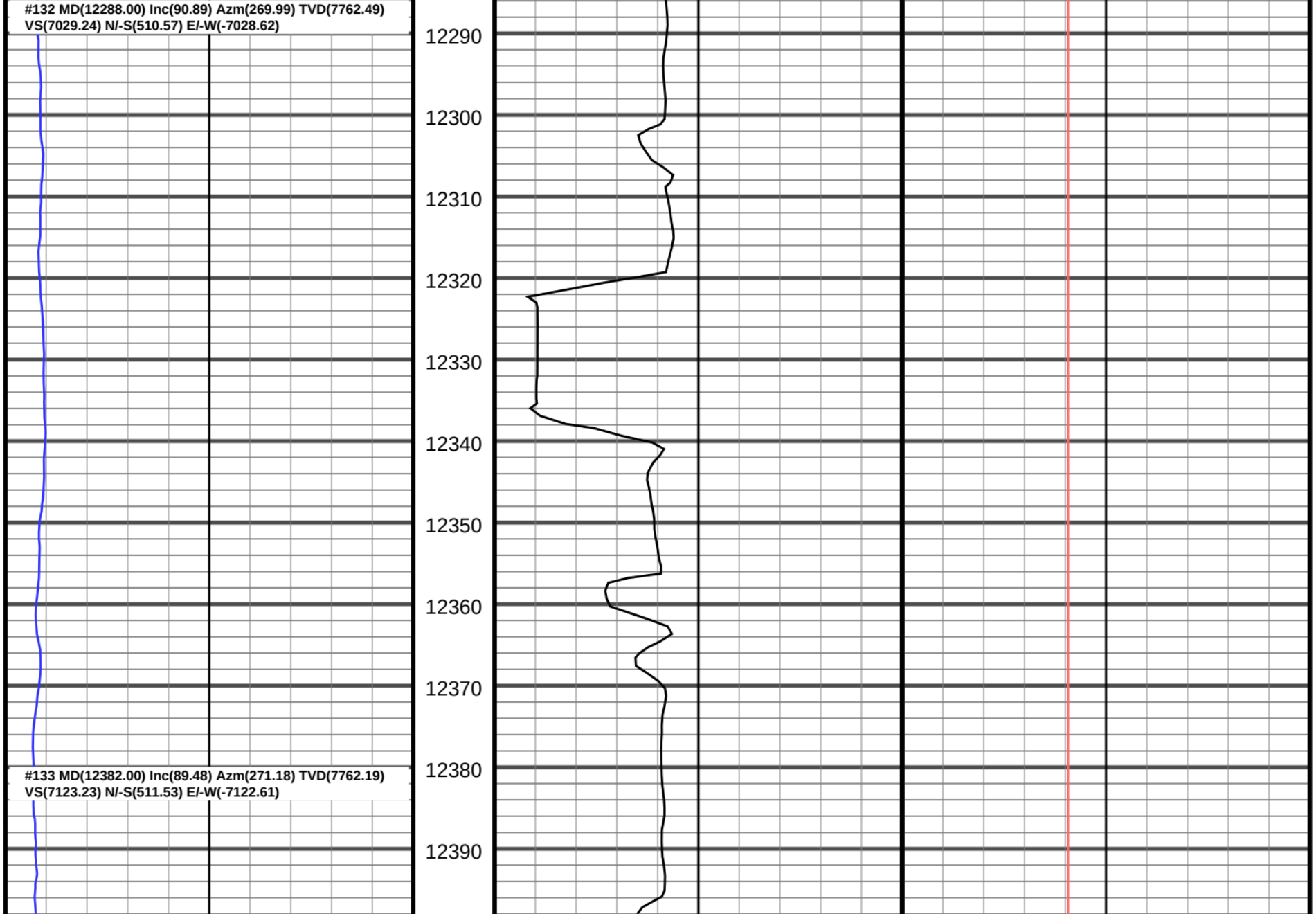

#121 MD(11248.00) Inc(90.43) Azm(269.42) TVD(7762.81)
VS(5989.70) N/-S(531.81) E/-W(-5989.05)
#122 MD(11342.00) Inc(90.55) Azm(269.19) TVD(7762.01)
VS(6083.69) N/-S(530.67) E/-W(-6083.04)
11210
11220
11230
11240
11250
11260
11270
11280
11290
11300
11310
11320
11330
11340
11350
11360
11370
11380
11390
11400
11410
11420

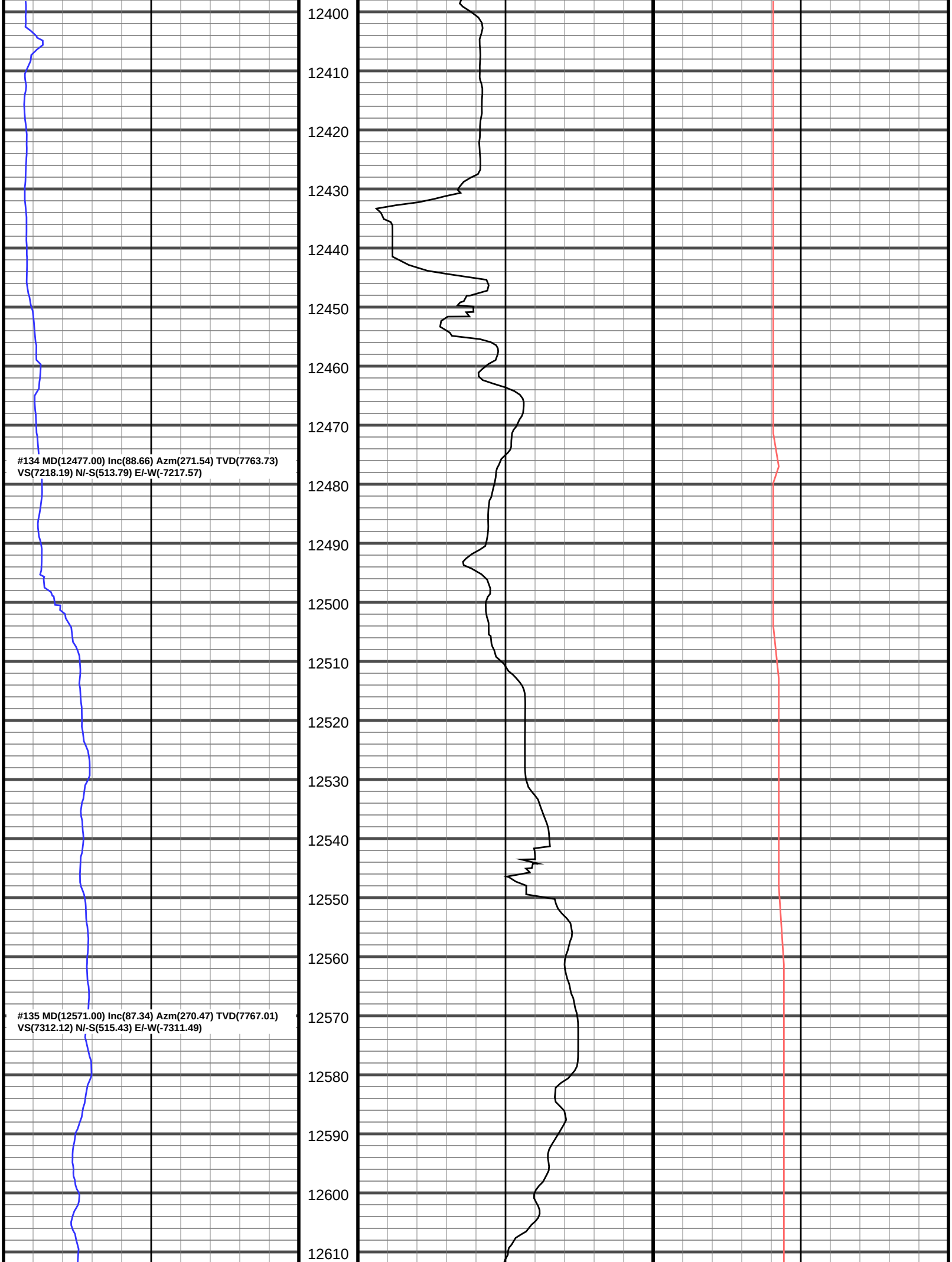

#123 MD(11437.00) Inc(90.84) Azm(268.33) TVD(7760.85)
VS(6178.65) N/-S(528.61) E/-W(-6178.01)
#124 MD(11531.00) Inc(91.60) Azm(269.26) TVD(7758.85)
VS(6272.61) N/-S(526.63) E/-W(-6271.97)
11430
11440
11450
11460
11470
11480
11490
11500
11510
11520
11530
11540
11550
11560
11570
11580
11590
11600
11610
11620

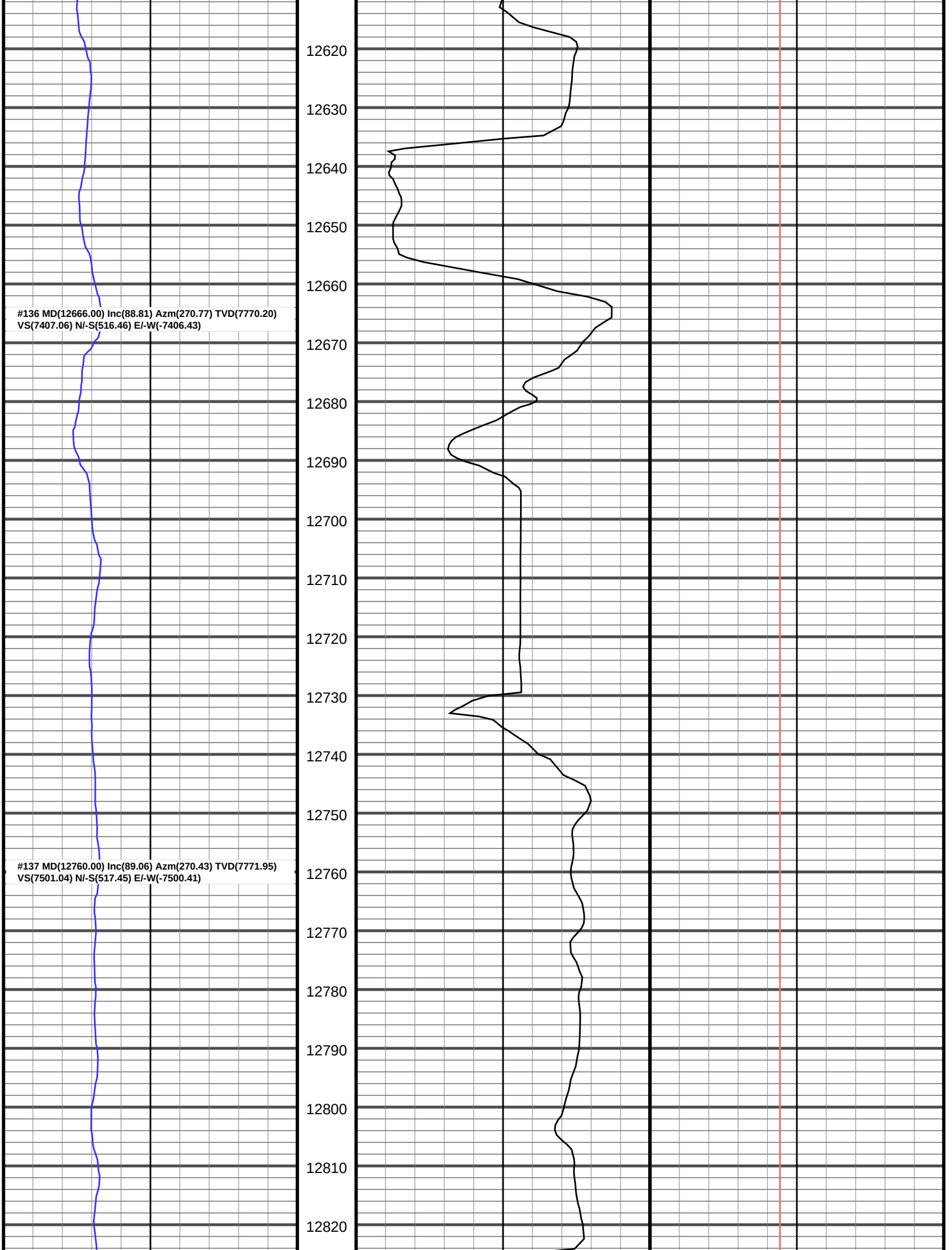

#125 MD(11626.00) Inc(90.44) Azm(269.68) TVD(7757.16)
VS(6367.59) N/-S(525.76) E/-W(-6366.95)
#126 MD(11720.00) Inc(88.60) Azm(267.63) TVD(7757.95)
VS(6461.55) N/-S(523.55) E/-W(-6460.91)
#127 MD(11815.00) Inc(88.26) Azm(267.21) TVD(7760.55)
VS(6556.41) N/-S(519.27) E/-W(-6555.78)
11630
11640
11650
11660
11670
11680
11690
11700
11710
11720
11730
11740
11750
11760
11770
11780
11790
11800
11810
11820
11830
11840
11850

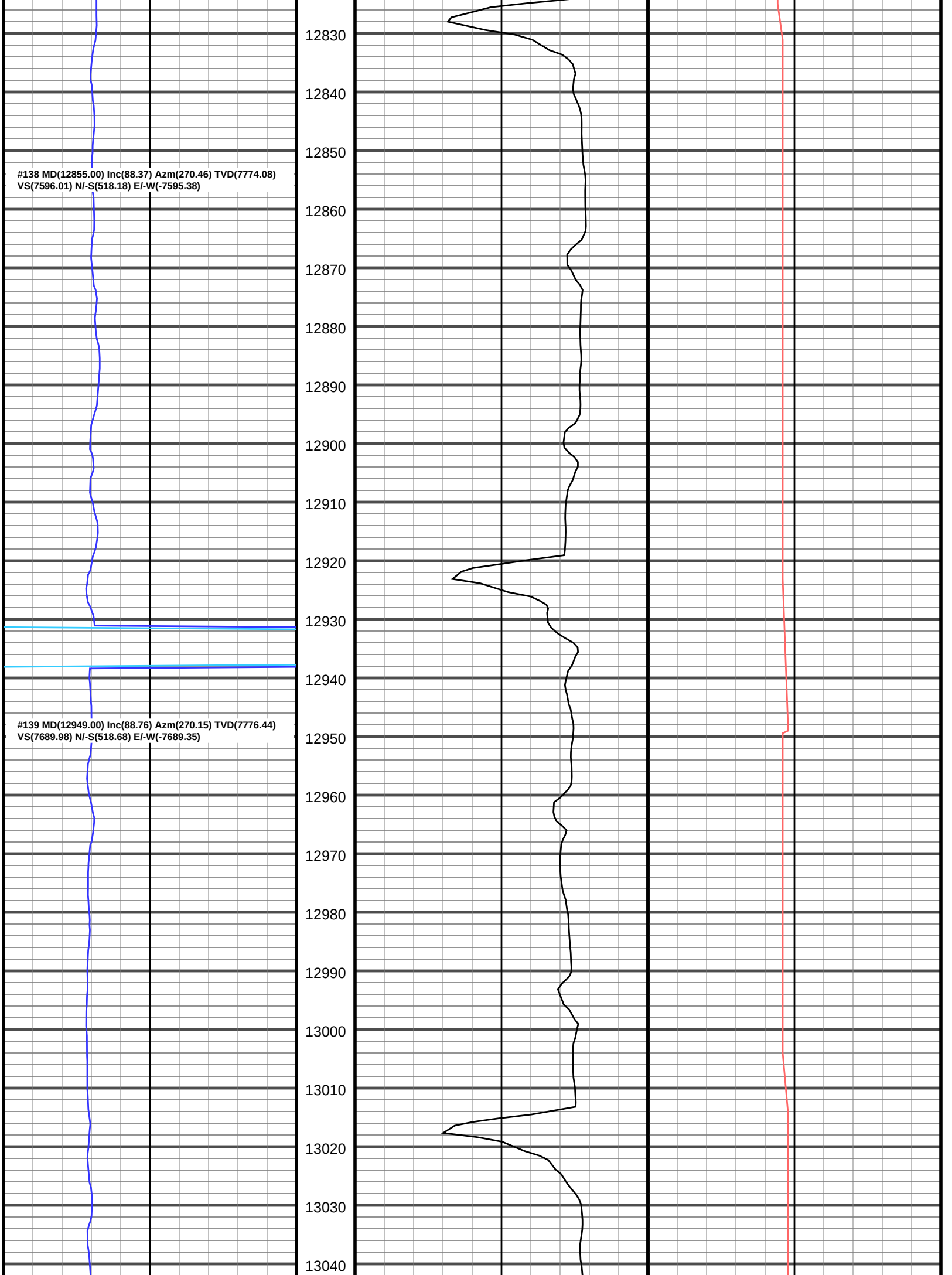

#128 MD(11910.00) Inc(89.80) Azm(268.25) TVD(7762.16)
VS(6651.31) N/-S(515.51) E/-W(-6650.69)
#129 MD(12004.00) Inc(89.65) Azm(268.70) TVD(7762.61)
VS(6745.27) N/-S(513.01) E/-W(-6744.65)
11860
11870
11880
11890
11900
11910
11920
11930
11940
11950
11960
11970
11980
11990
12000
12010
12020
12030
12040
12050
12060

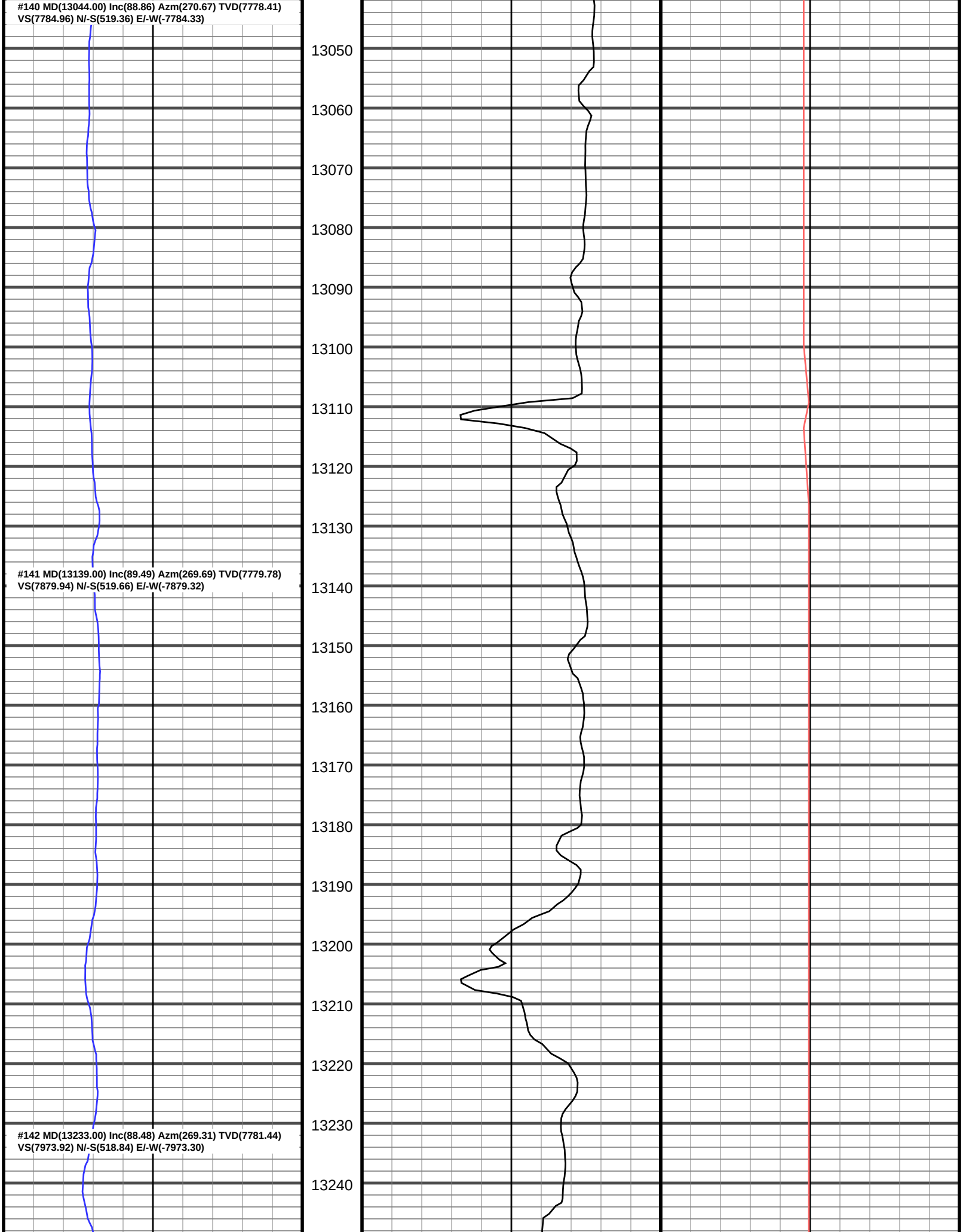

#130 MD(12099.00) Inc(90.08) Azm(268.76) TVD(7762.84)
VS(6840.25) N/-S(510.91) E/-W(-6839.63)
#131 MD(12193.00) Inc(89.72) Azm(270.42) TVD(7763.00)
VS(6934.24) N/-S(510.23) E/-W(-6933.62)
12070
12080
12090
12100
12110
12120
12130
12140
12150
12160
12170
12180
12190
12200
12210
12220
12230
12240
12250
12260
12270
12280

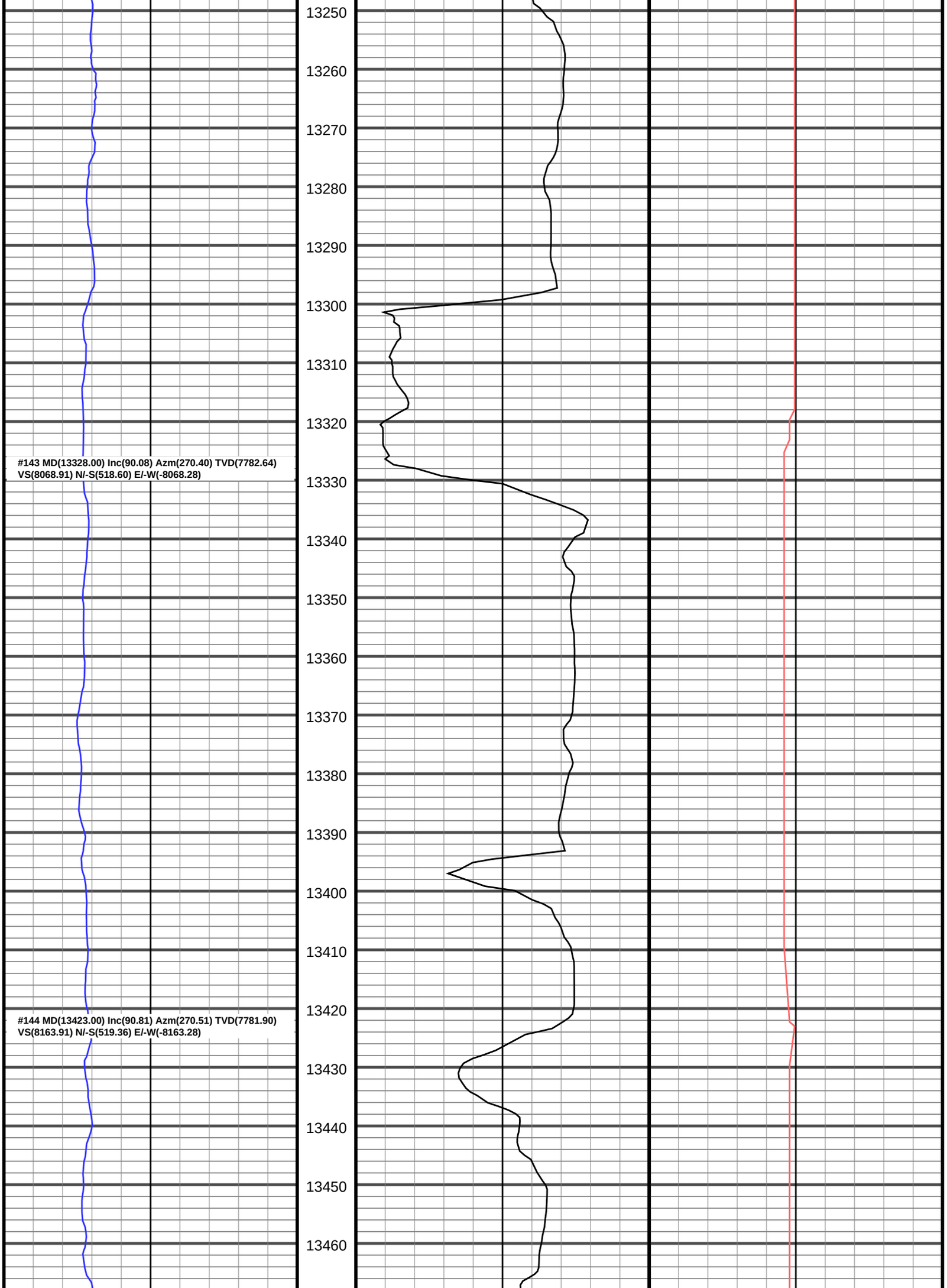

#132 MD(12288.00) Inc(90.89) Azm(269.99) TVD(7762.49)
VS(7029.24) N/-S(510.57) E/-W(-7028.62)
#133 MD(12382.00) Inc(89.48) Azm(271.18) TVD(7762.19)
VS(7123.23) N/-S(511.53) E/-W(-7122.61)
12290
12300
12310
12320
12330
12340
12350
12360
12370
12380
12390

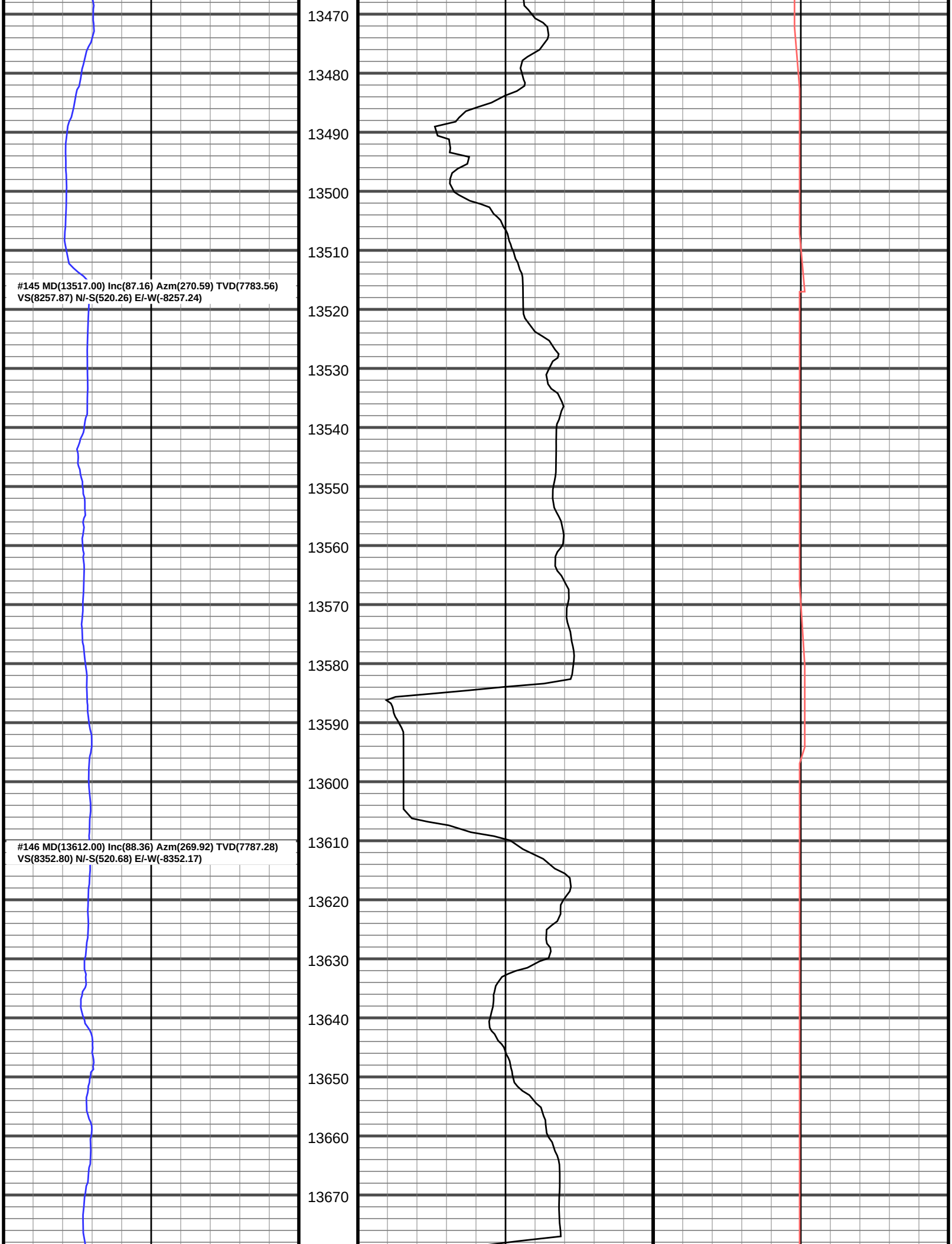

12400
12410
12420
12430
12440
12450
12460
12470
#134 MD(12477.00) Inc(88.66) Azm(271.54) TVD(7763.73)
VS(7218.19) N/-S(513.79) E/-W(-7217.57)
12480
12490
12500
12510
12520
12530
12540
12550
12560
#135 MD(12571.00) Inc(87.34) Azm(270.47) TVD(7767.01)
VS(7312.12) N/-S(515.43) E/-W(-7311.49)
12570
12580
12590
12600
12610

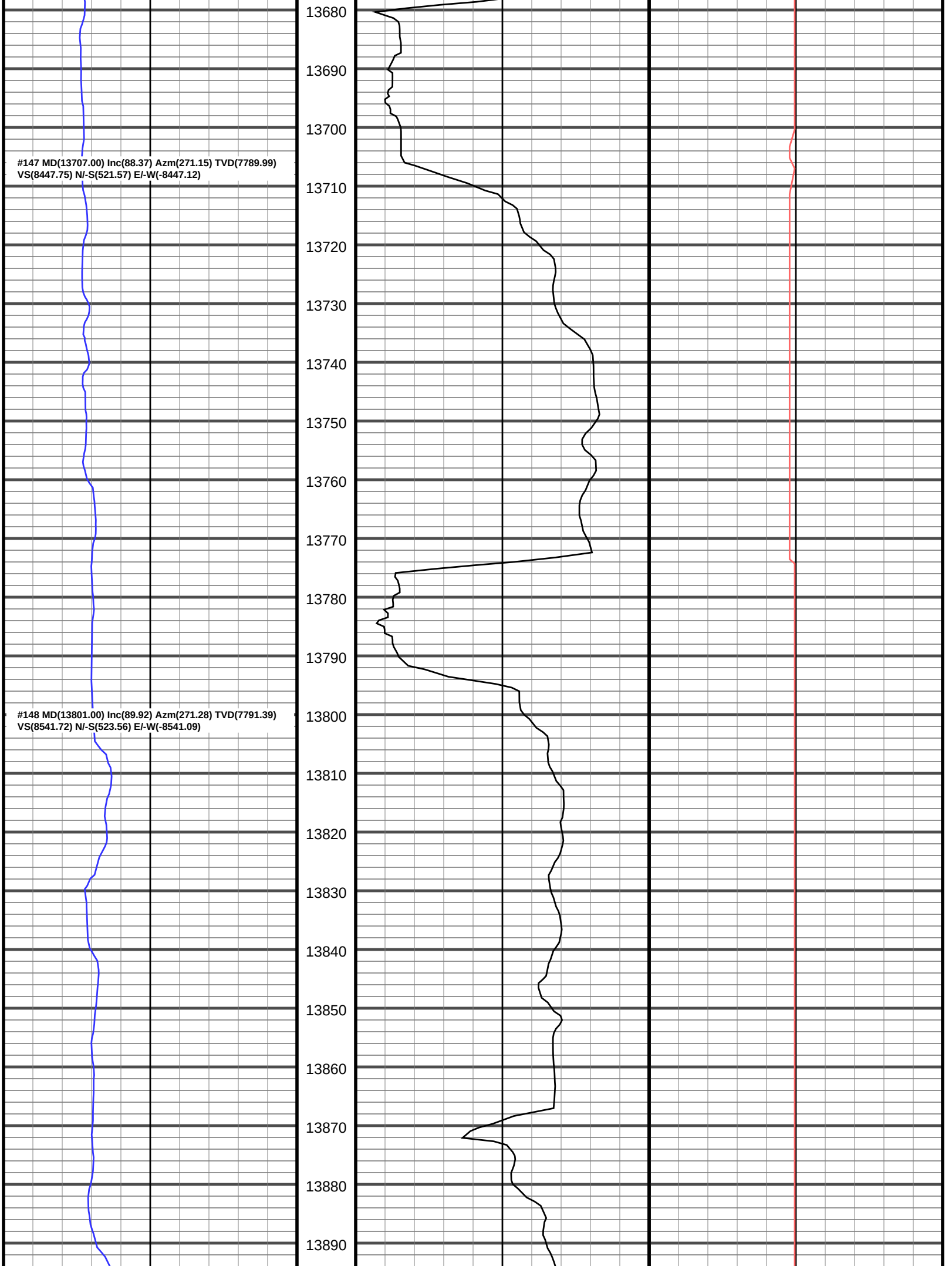

12620
12630
12640
12650
12660
#136 MD(12666.00) Inc(88.81) Azm(270.77) TVD(7770.20)
VS(7407.06) N/-S(516.46) E/-W(-7406.43)
12670
12680
12690
12700
12710
12720
12730
12740
12750
#137 MD(12760.00) Inc(89.06) Azm(270.43) TVD(7771.95)
VS(7501.04) N/-S(517.45) E/-W(-7500.41)
12760
12770
12780
12790
12800
12810
12820

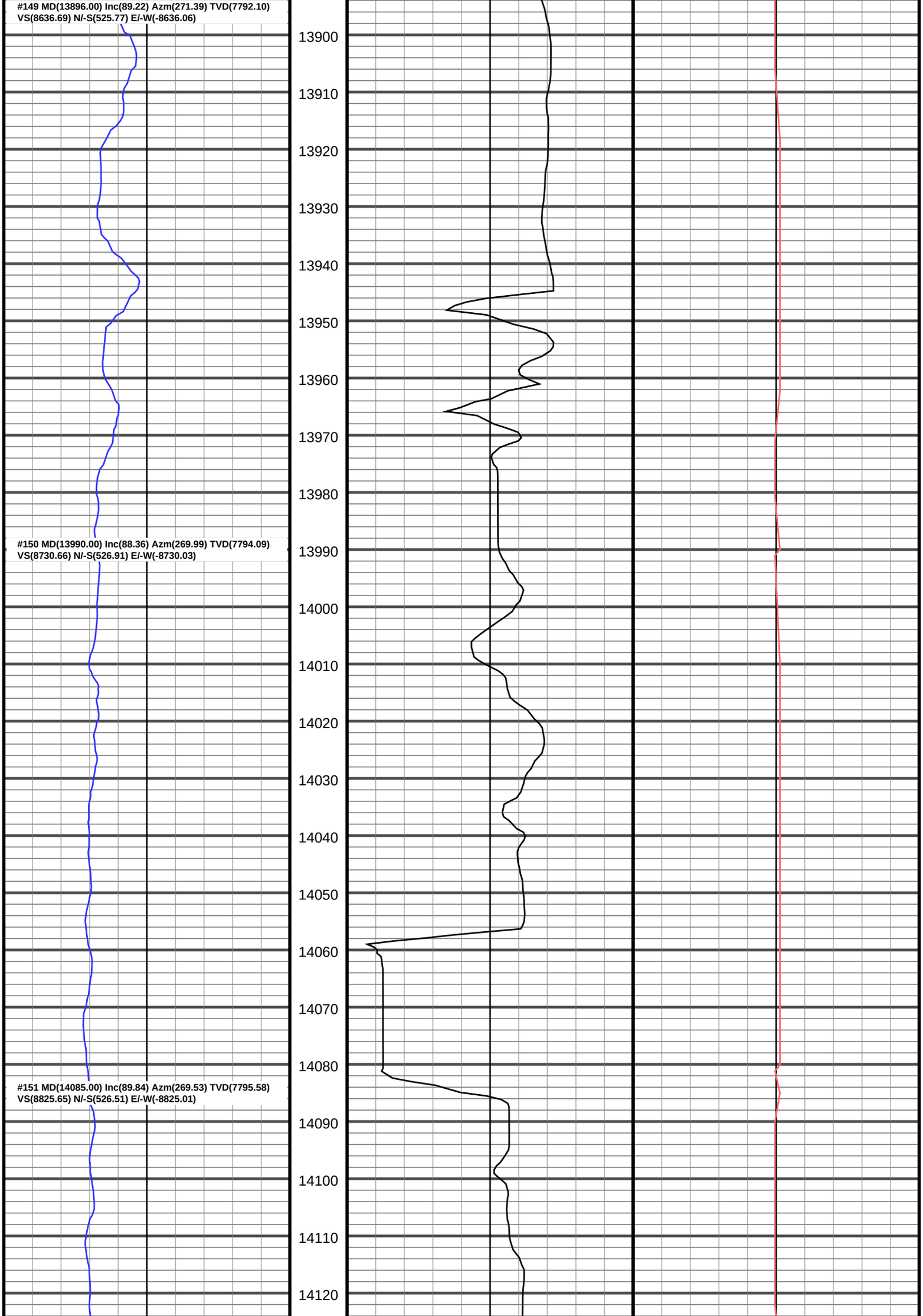

#138 MD(12855.00) Inc(88.37) Azm(270.46) TVD(7774.08)
VS(7596.01) N/-S(518.18) E/-W(-7595.38)
#139 MD(12949.00) Inc(88.76) Azm(270.15) TVD(7776.44)
VS(7689.98) N/-S(518.68) E/-W(-7689.35)
12830
12840
12850
12860
12870
12880
12890
12900
12910
12920
12930
12940
12950
12960
12970
12980
12990
13000
13010
13020
13030
13040

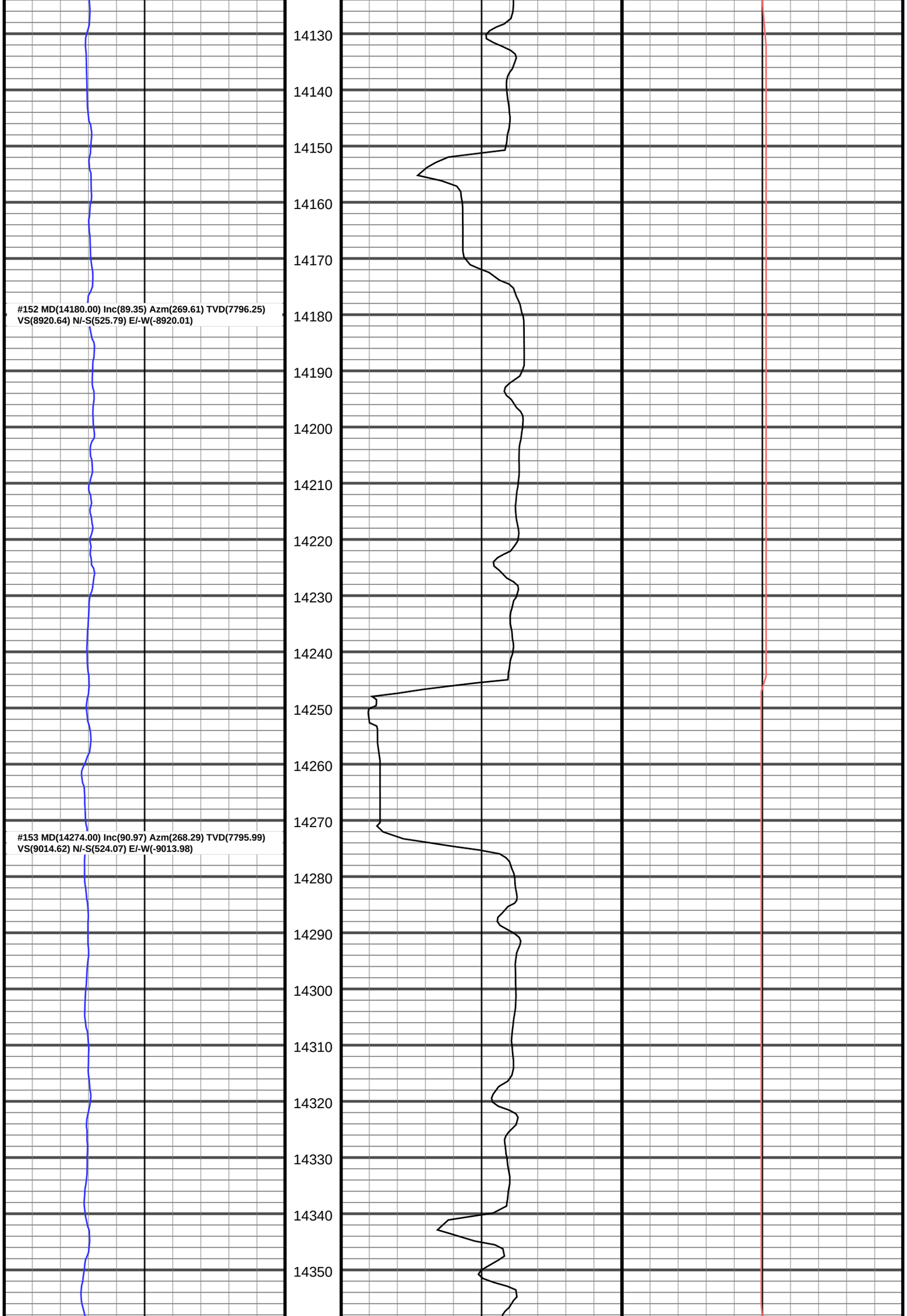

#140 MD(13044.00) Inc(88.86) Azm(270.67) TVD(7778.41)
VS(7784.96) N/-S(519.36) E/-W(-7784.33)
#141 MD(13139.00) Inc(89.49) Azm(269.69) TVD(7779.78)
VS(7879.94) N/-S(519.66) E/-W(-7879.32)
#142 MD(13233.00) Inc(88.48) Azm(269.31) TVD(7781.44)
VS(7973.92) N/-S(518.84) E/-W(-7973.30)
13050
13060
13070
13080
13090
13100
13110
13120
13130
13140
13150
13160
13170
13180
13190
13200
13210
13220
13230
13240

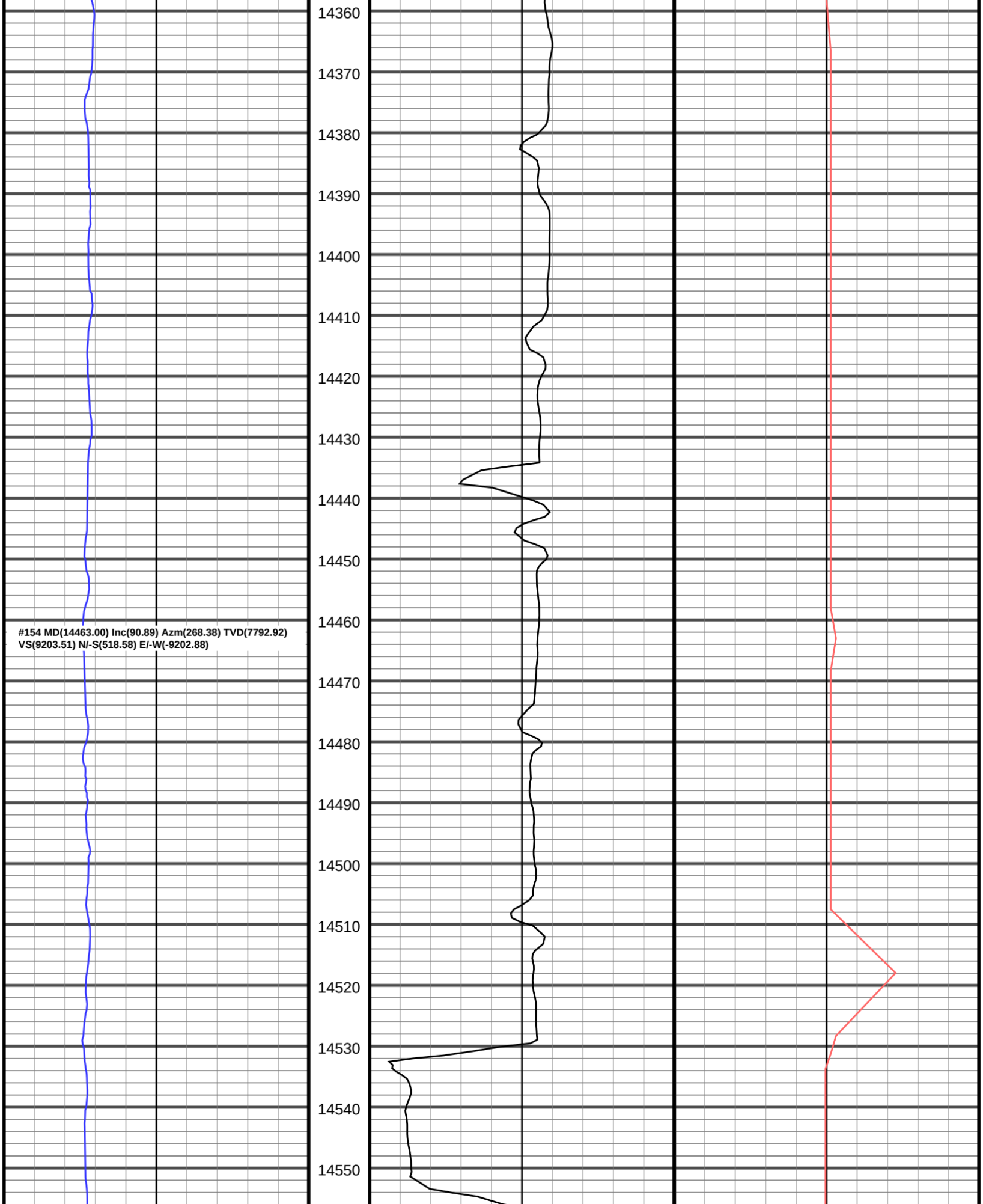

13250
13260
13270
13280
13290
13300
13310
13320
13330
13340
13350
13360
13370
13380
13390
13400
13410
13420
13430
13440
13450
13460
#143 MD(13328.00) Inc(90.08) Azm(270.40) TVD(7782.64)
VS(8068.91) N/-S(518.60) E/-W(-8068.28)
#144 MD(13423.00) Inc(90.81) Azm(270.51) TVD(7781.90)
VS(8163.91) N/-S(519.36) E/-W(-8163.28)

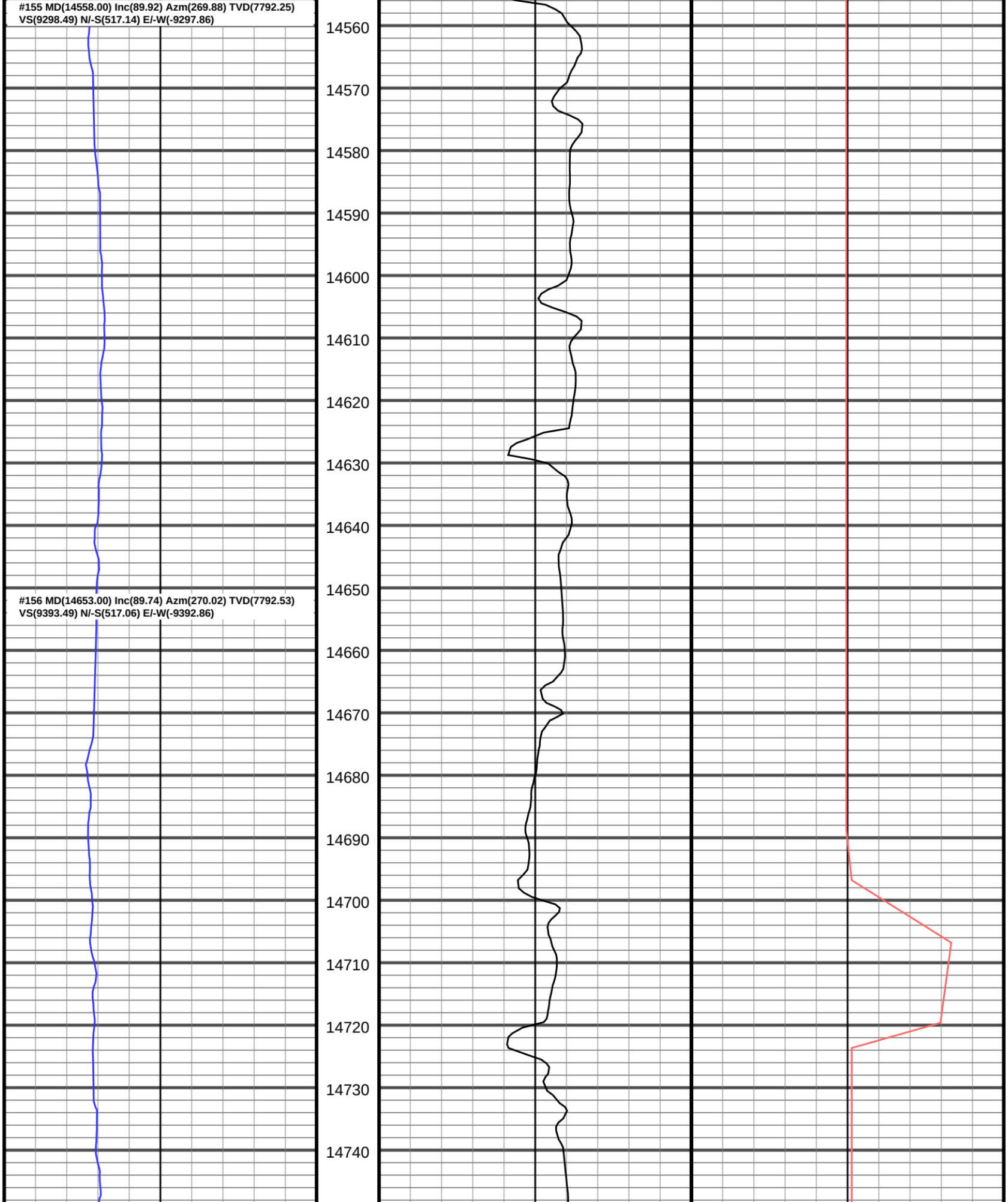

#145 MD(13517.00) Inc(87.16) Azm(270.59) TVD(7783.56)
VS(8257.87) N/-S(520.26) E/-W(-8257.24)
#146 MD(13612.00) Inc(88.36) Azm(269.92) TVD(7787.28)
VS(8352.80) N/-S(520.68) E/-W(-8352.17)
13470
13480
13490
13500
13510
13520
13530
13540
13550
13560
13570
13580
13590
13600
13610
13620
13630
13640
13650
13660
13670

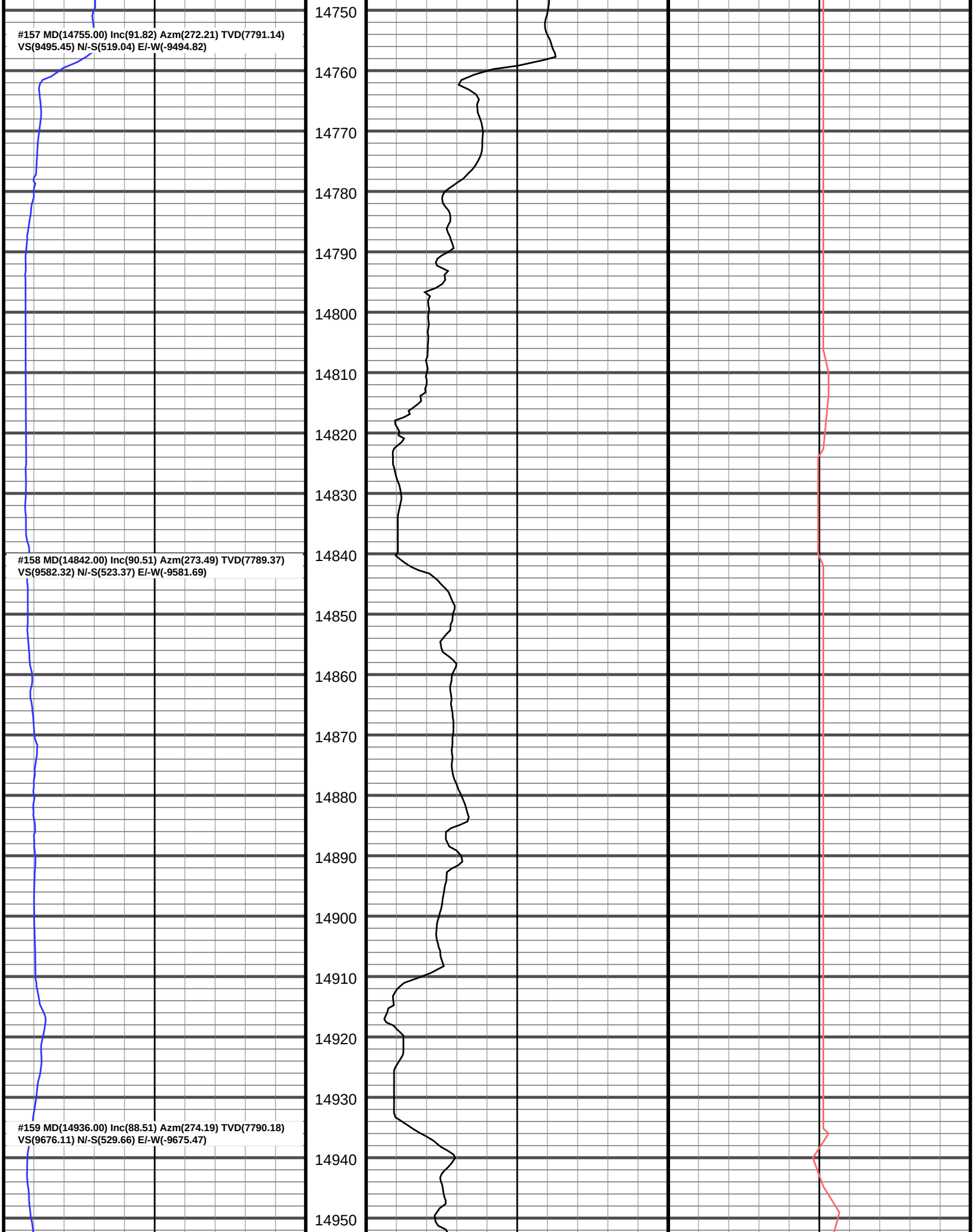

#147 MD(13707.00) Inc(88.37) Azm(271.15) TVD(7789.99)
VS(8447.75) N/-S(521.57) E/-W(-8447.12)
#148 MD(13801.00) Inc(89.92) Azm(271.28) TVD(7791.39)
VS(8541.72) N/-S(523.56) E/-W(-8541.09)
13680
13690
13700
13710
13720
13730
13740
13750
13760
13770
13780
13790
13800
13810
13820
13830
13840
13850
13860
13870
13880
13890

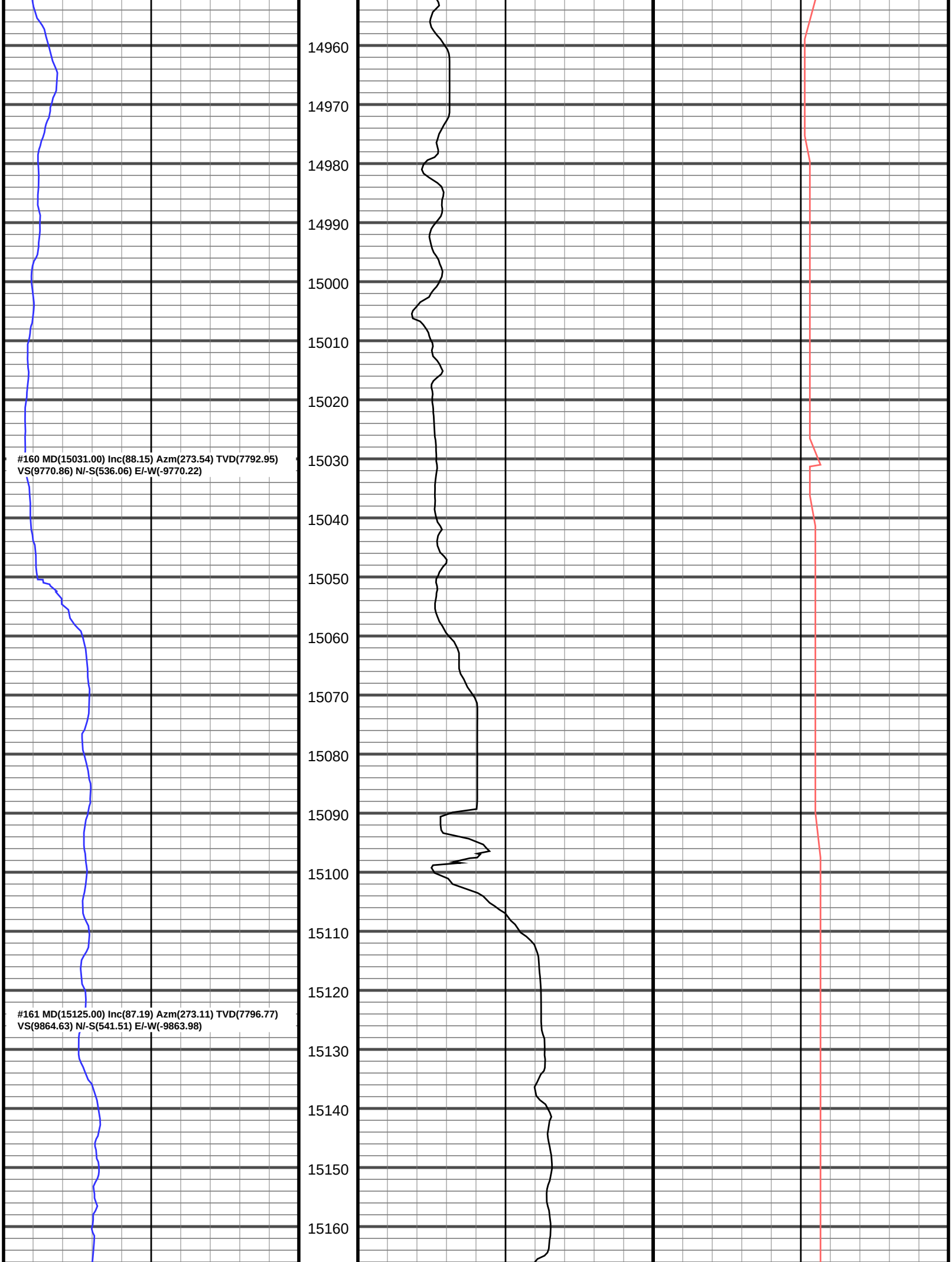

#149 MD(13896.00) Inc(89.22) Azm(271.39) TVD(7792.10)
VS(8636.69) N/-S(525.77) E/-W(-8636.06)
#150 MD(13990.00) Inc(88.36) Azm(269.99) TVD(7794.09)
VS(8730.66) N/-S(526.91) E/-W(-8730.03)
#151 MD(14085.00) Inc(89.84) Azm(269.53) TVD(7795.58)
VS(8825.65) N/-S(526.51) E/-W(-8825.01)
13900
13910
13920
13930
13940
13950
13960
13970
13980
13990
14000
14010
14020
14030
14040
14050
14060
14070
14080
14090
14100
14110
14120

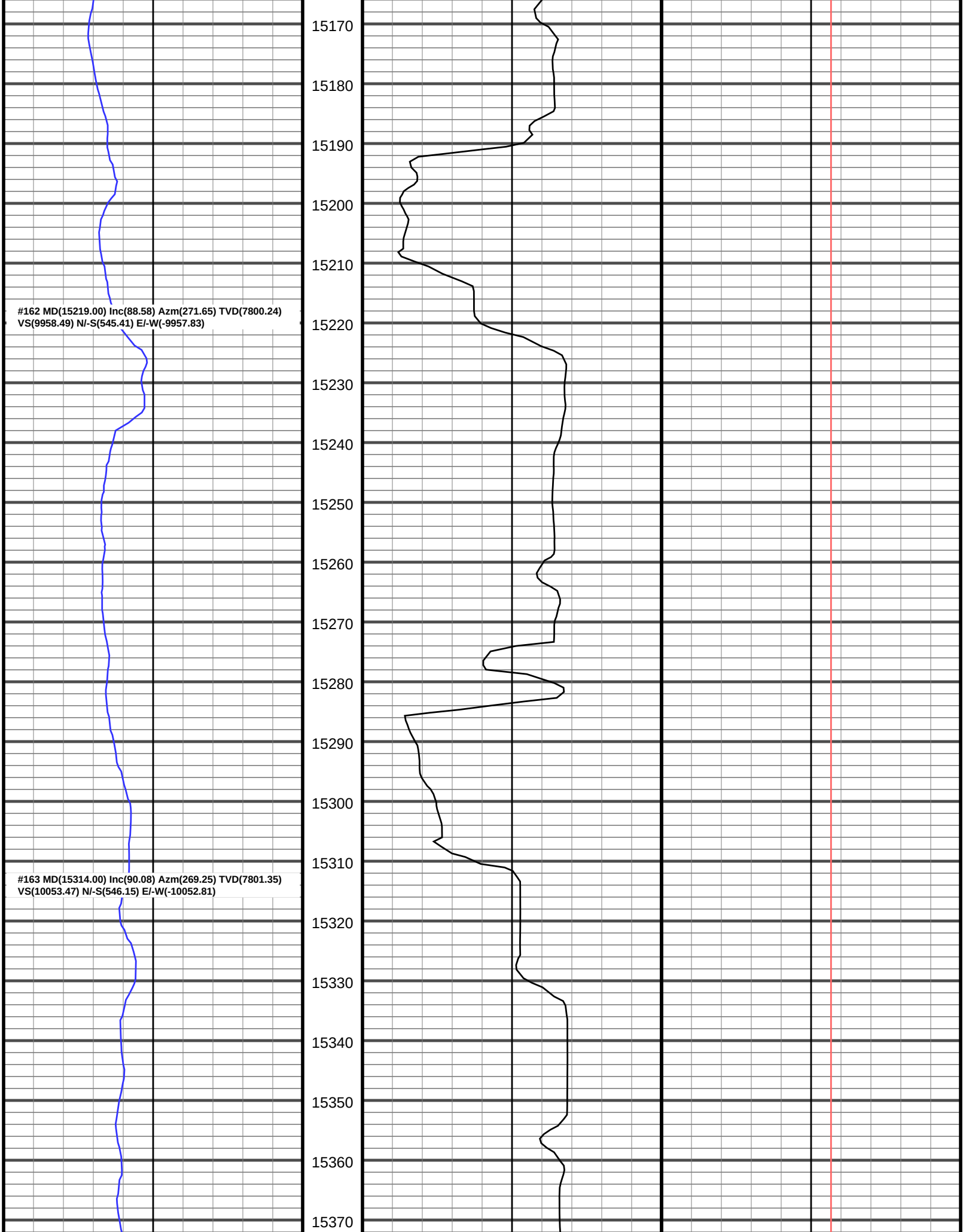

#152 MD(14180.00) Inc(89.35) Azm(269.61) TVD(7796.25)
VS(8920.64) N/-S(525.79) E/-W(-8920.01)
#153 MD(14274.00) Inc(90.97) Azm(268.29) TVD(7795.99)
VS(9014.62) N/-S(524.07) E/-W(-9013.98)
14130
14140
14150
14160
14170
14180
14190
14200
14210
14220
14230
14240
14250
14260
14270
14280
14290
14300
14310
14320
14330
14340
14350

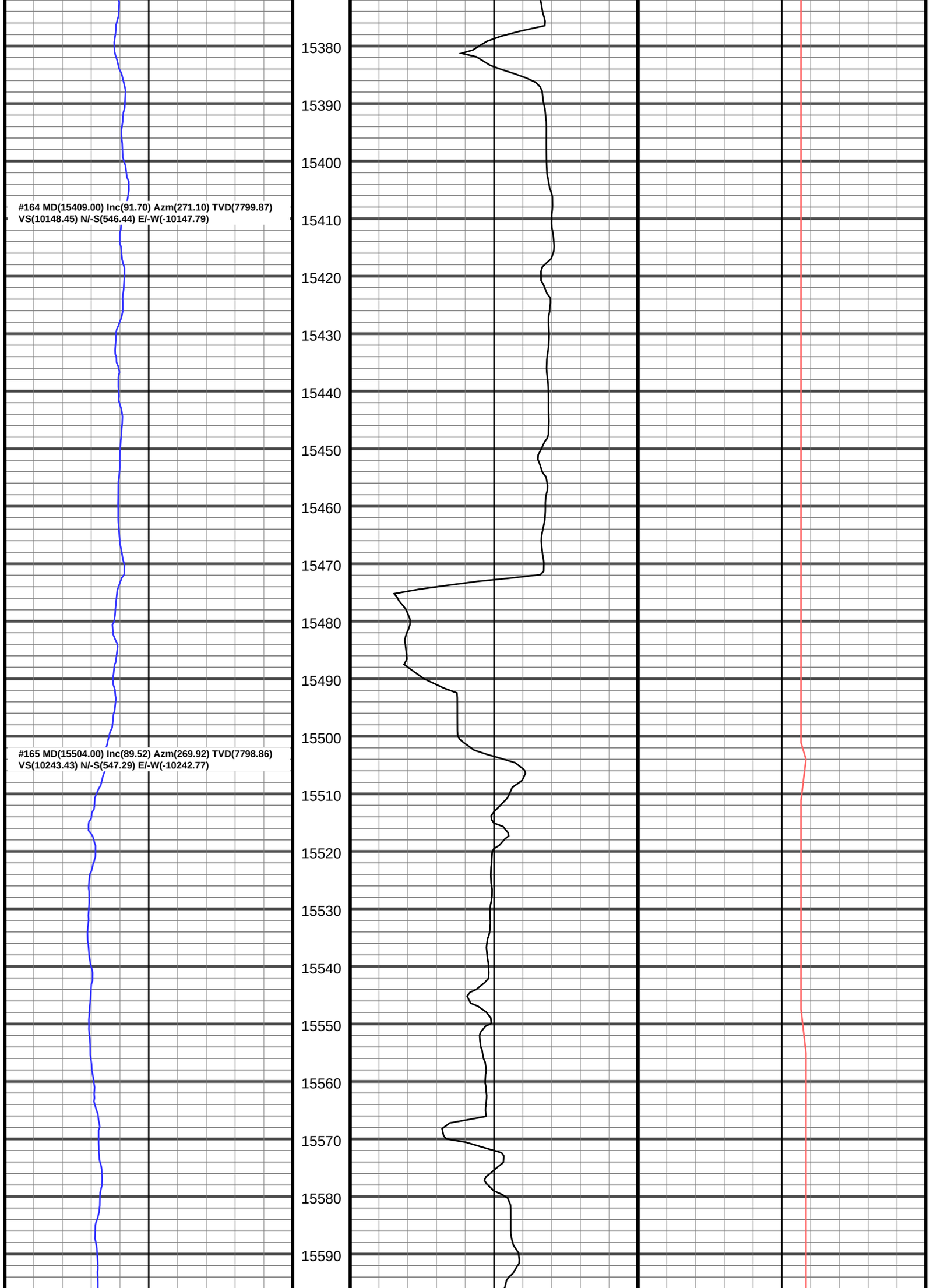

#154 MD(14463.00) Inc(90.89) Azm(268.38) TVD(7792.92)
VS(9203.51) N/-S(518.58) E/-W(-9202.88)
14360
14370
14380
14390
14400
14410
14420
14430
14440
14450
14460
14470
14480
14490
14500
14510
14520
14530
14540
14550

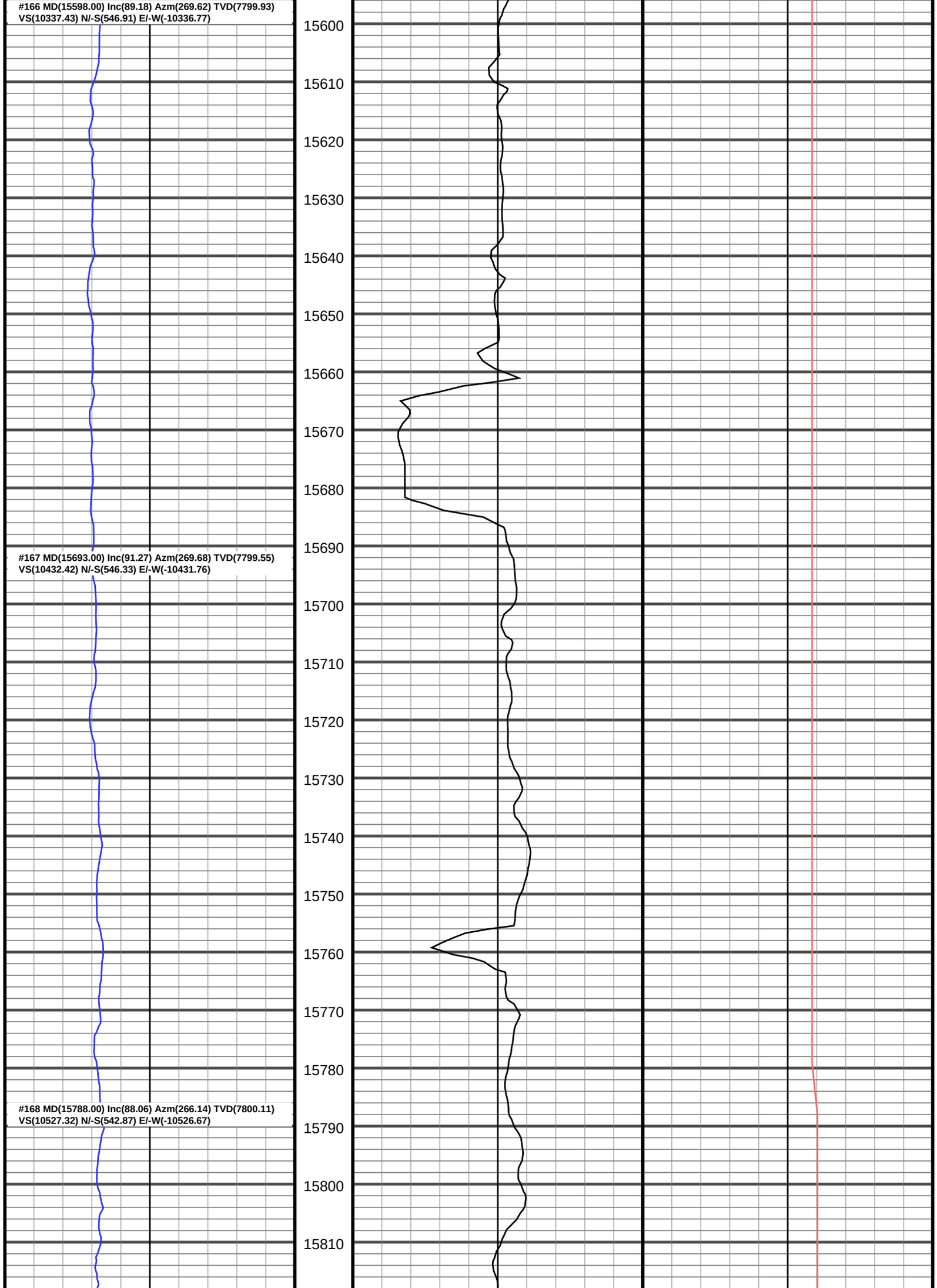

#155 MD(14558.00) Inc(89.92) Azm(269.88) TVD(7792.25)
VS(9298.49) N/-S(517.14) E/-W(-9297.86)
#156 MD(14653.00) Inc(89.74) Azm(270.02) TVD(7792.53)
VS(9393.49) N/-S(517.06) E/-W(-9392.86)
14560
14570
14580
14590
14600
14610
14620
14630
14640
14650
14660
14670
14680
14690
14700
14710
14720
14730
14740

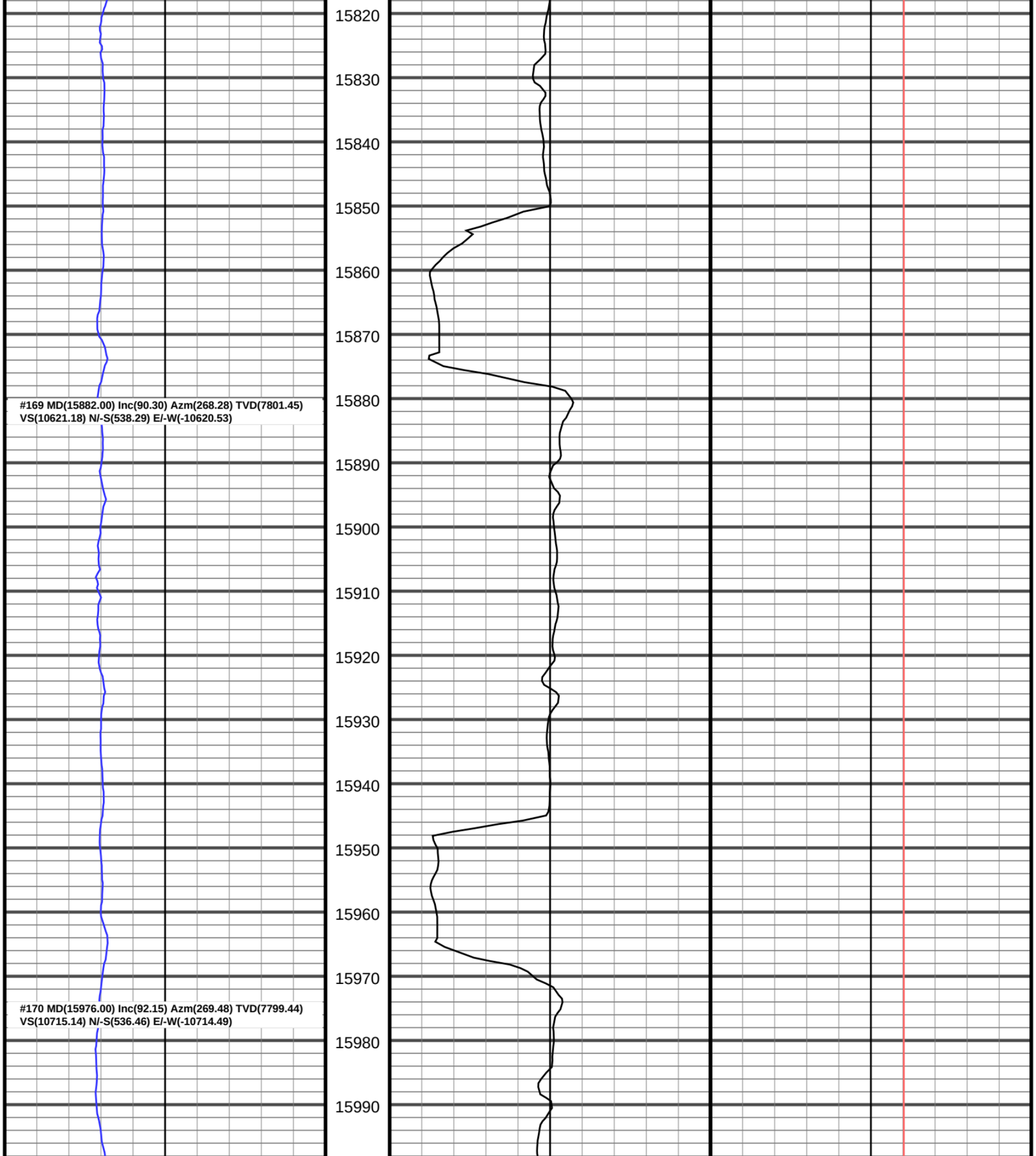

#157 MD(14755.00) Inc(91.82) Azm(272.21) TVD(7791.14)
VS(9495.45) N/-S(519.04) E/-W(-9494.82)
#158 MD(14842.00) Inc(90.51) Azm(273.49) TVD(7789.37)
VS(9582.32) N/-S(523.37) E/-W(-9581.69)
#159 MD(14936.00) Inc(88.51) Azm(274.19) TVD(7790.18)
VS(9676.11) N/-S(529.66) E/-W(-9675.47)
14750
14760
14770
14780
14790
14800
14810
14820
14830
14840
14850
14860
14870
14880
14890
14900
14910
14920
14930
14940
14950

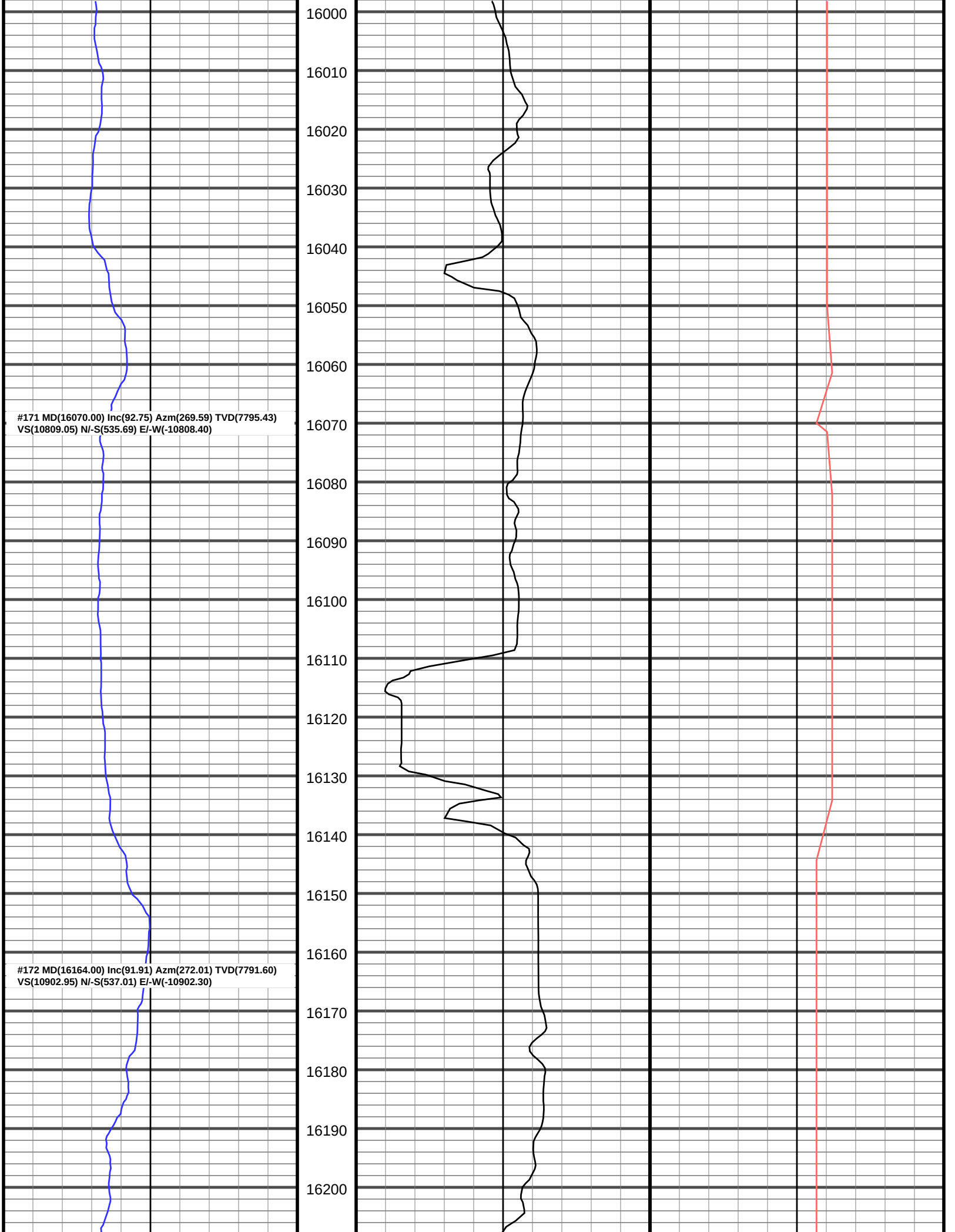

14960
14970
14980
14990
15000
15010
15020
15030
15040
15050
15060
15070
15080
15090
15100
15110
15120
15130
15140
15150
15160
#160 MD(15031.00) Inc(88.15) Azm(273.54) TVD(7792.95)
VS(9770.86) N/-S(536.06) E/-W(-9770.22)
#161 MD(15125.00) Inc(87.19) Azm(273.11) TVD(7796.77)
VS(9864.63) N/-S(541.51) E/-W(-9863.98)

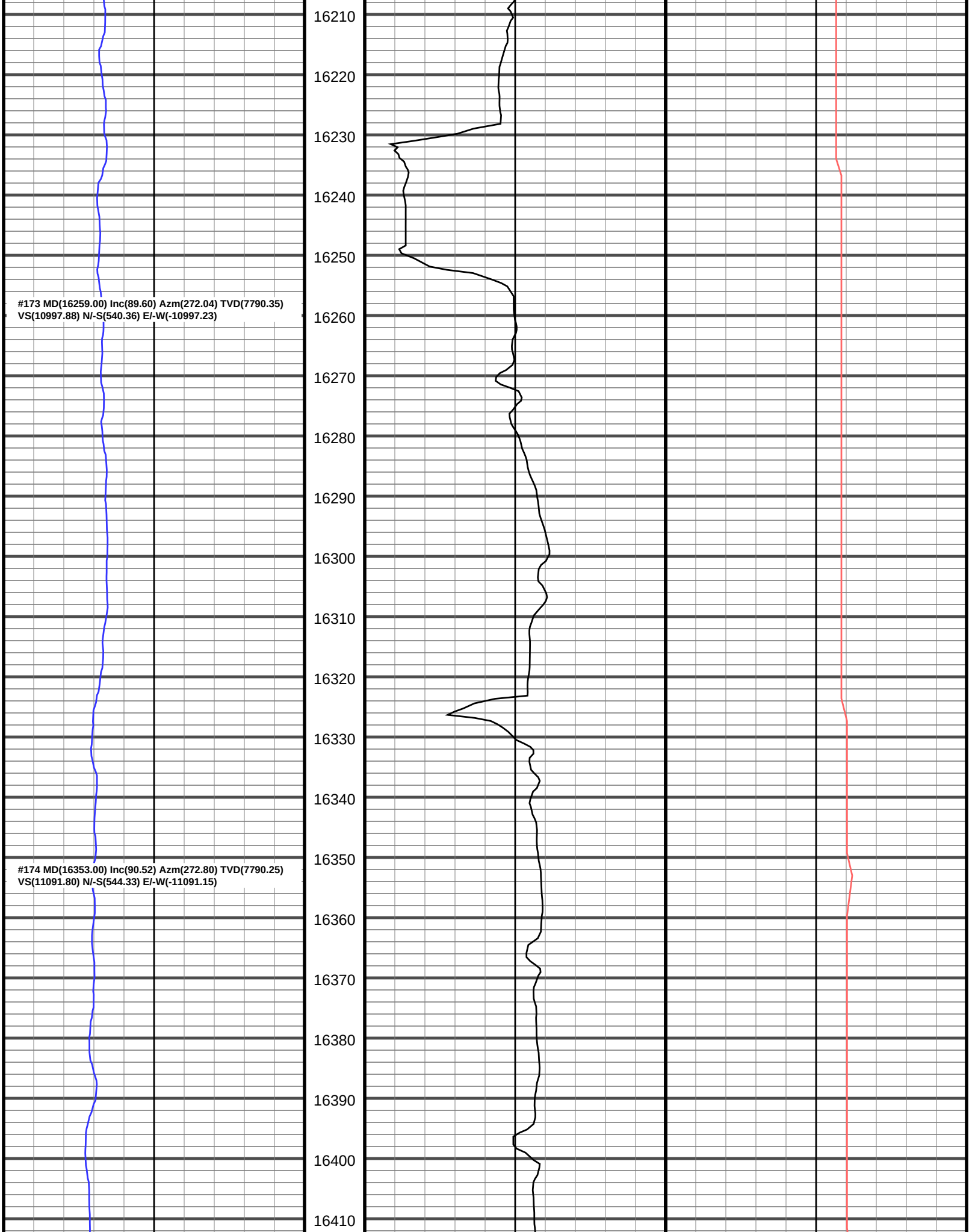

#162 MD(15219.00) Inc(88.58) Azm(271.65) TVD(7800.24)
VS(9958.49) N/-S(545.41) E/-W(-9957.83)
#163 MD(15314.00) Inc(90.08) Azm(269.25) TVD(7801.35)
VS(10053.47) N/-S(546.15) E/-W(-10052.81)
15170
15180
15190
15200
15210
15220
15230
15240
15250
15260
15270
15280
15290
15300
15310
15320
15330
15340
15350
15360
15370

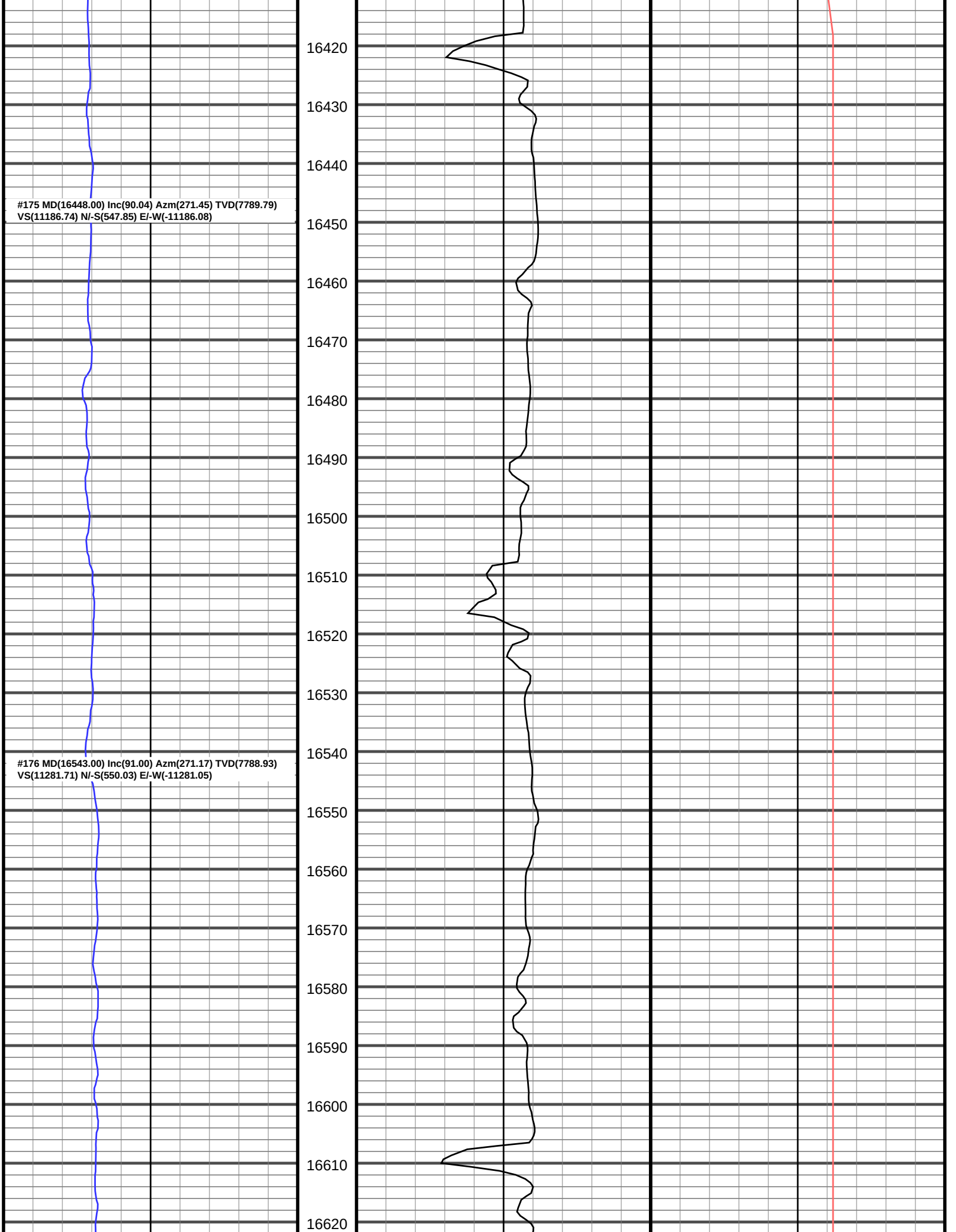

#164 MD(15409.00) Inc(91.70) Azm(271.10) TVD(7799.87)
VS(10148.45) N/-S(546.44) E/-W(-10147.79)
#165 MD(15504.00) Inc(89.52) Azm(269.92) TVD(7798.86)
VS(10243.43) N/-S(547.29) E/-W(-10242.77)
15380
15390
15400
15410
15420
15430
15440
15450
15460
15470
15480
15490
15500
15510
15520
15530
15540
15550
15560
15570
15580
15590

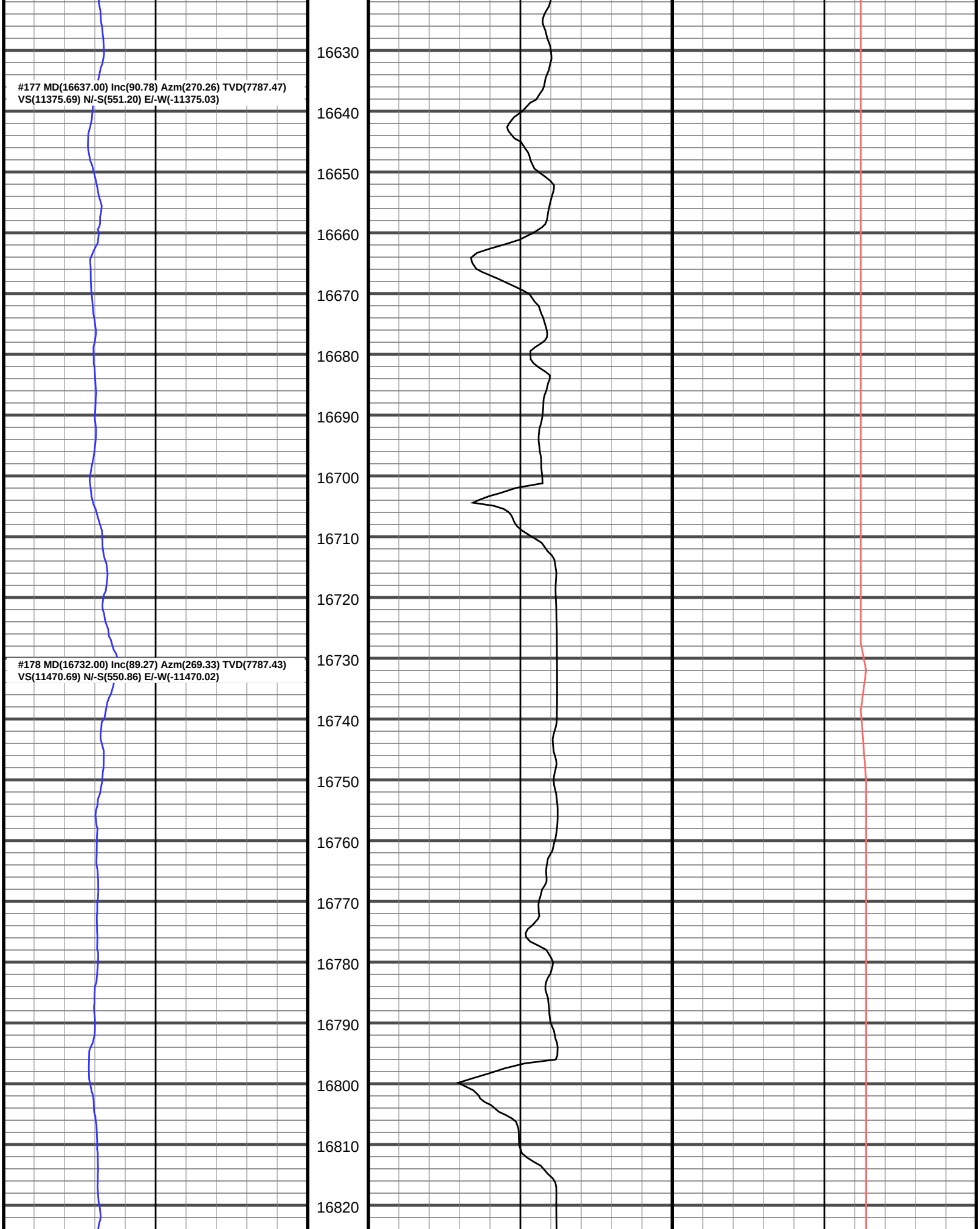

#166 MD(15598.00) Inc(89.18) Azm(269.62) TVD(7799.93)
VS(10337.43) N/-S(546.91) E/-W(-10336.77)
#167 MD(15693.00) Inc(91.27) Azm(269.68) TVD(7799.55)
VS(10432.42) N/-S(546.33) E/-W(-10431.76)
#168 MD(15788.00) Inc(88.06) Azm(266.14) TVD(7800.11)
VS(10527.32) N/-S(542.87) E/-W(-10526.67)
15600
15610
15620
15630
15640
15650
15660
15670
15680
15690
15700
15710
15720
15730
15740
15750
15760
15770
15780
15790
15800
15810

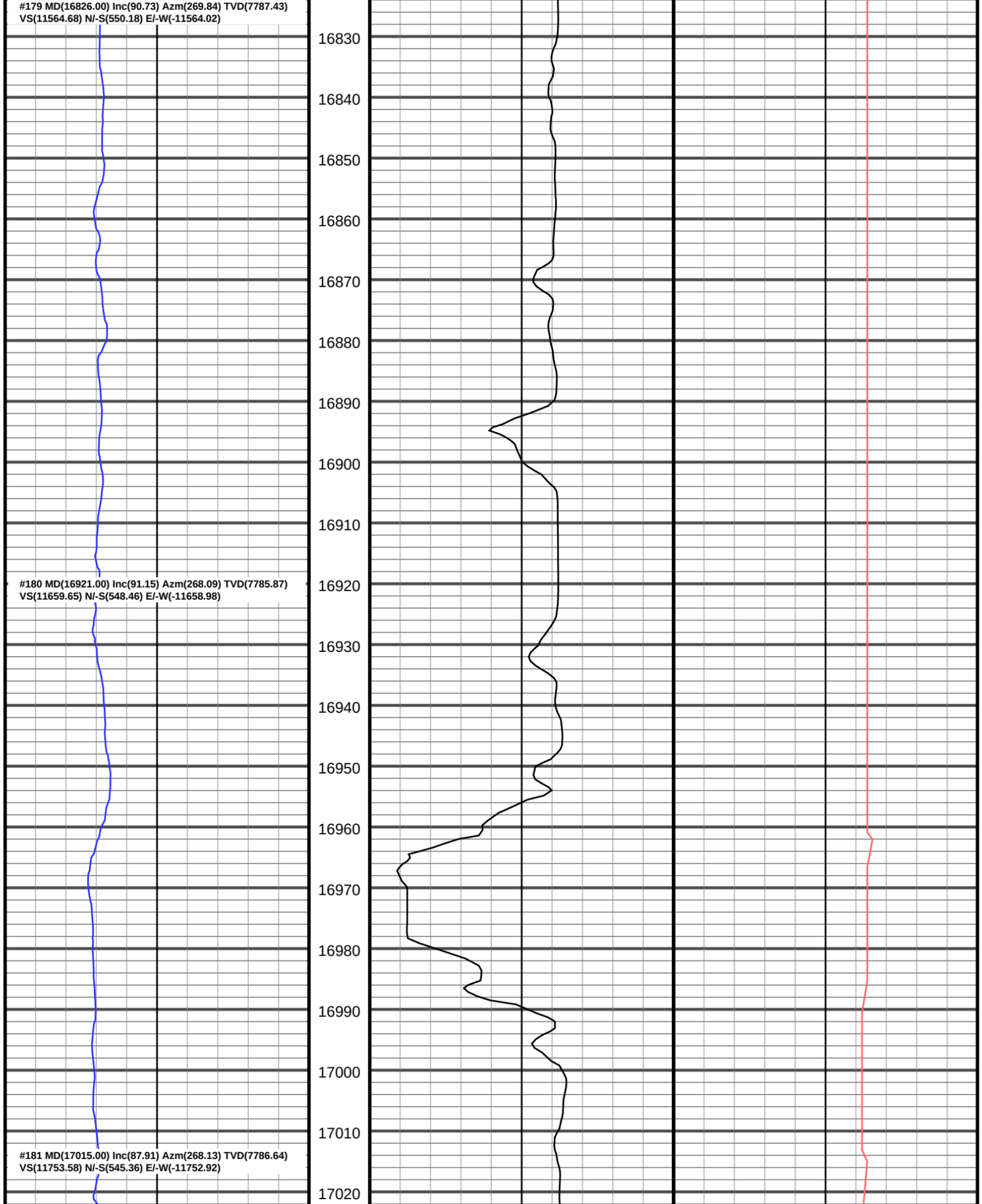

15820
15830
15840
15850
15860
15870
15880
15890
15900
15910
15920
15930
15940
15950
15960
15970
15980
15990
#169 MD(15882.00) Inc(90.30) Azm(268.28) TVD(7801.45)
VS(10621.18) N/-S(538.29) E/-W(-10620.53)
#170 MD(15976.00) Inc(92.15) Azm(269.48) TVD(7799.44)
VS(10715.14) N/-S(536.46) E/-W(-10714.49)

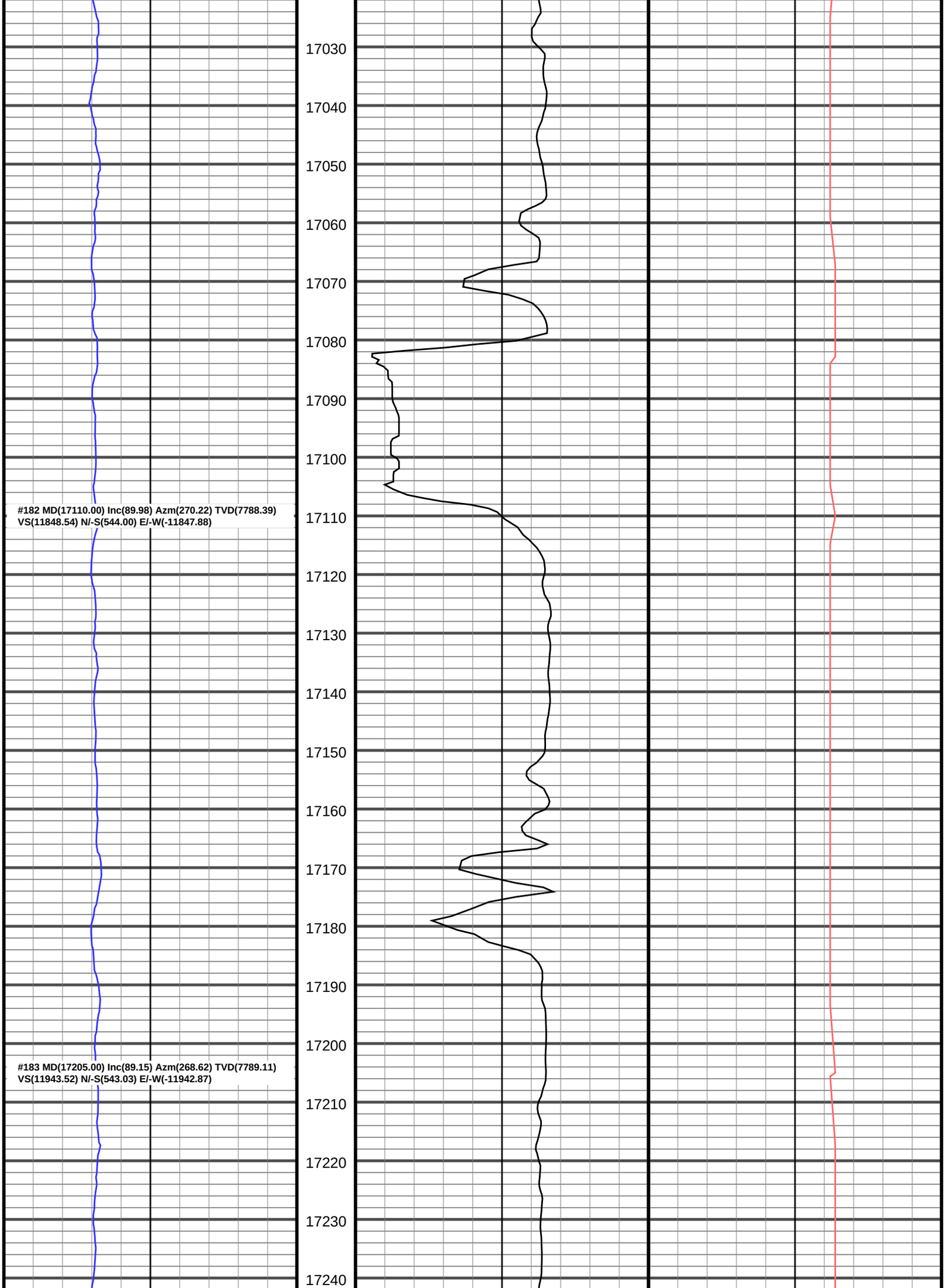

16000
16010
16020
16030
16040
16050
16060
#171 MD(16070.00) Inc(92.75) Azm(269.59) TVD(7795.43)
VS(10809.05) N/-S(535.69) E/-W(-10808.40)
16070
16080
16090
16100
16110
16120
16130
16140
16150
16160
#172 MD(16164.00) Inc(91.91) Azm(272.01) TVD(7791.60)
VS(10902.95) N/-S(537.01) E/-W(-10902.30)
16170
16180
16190
16200

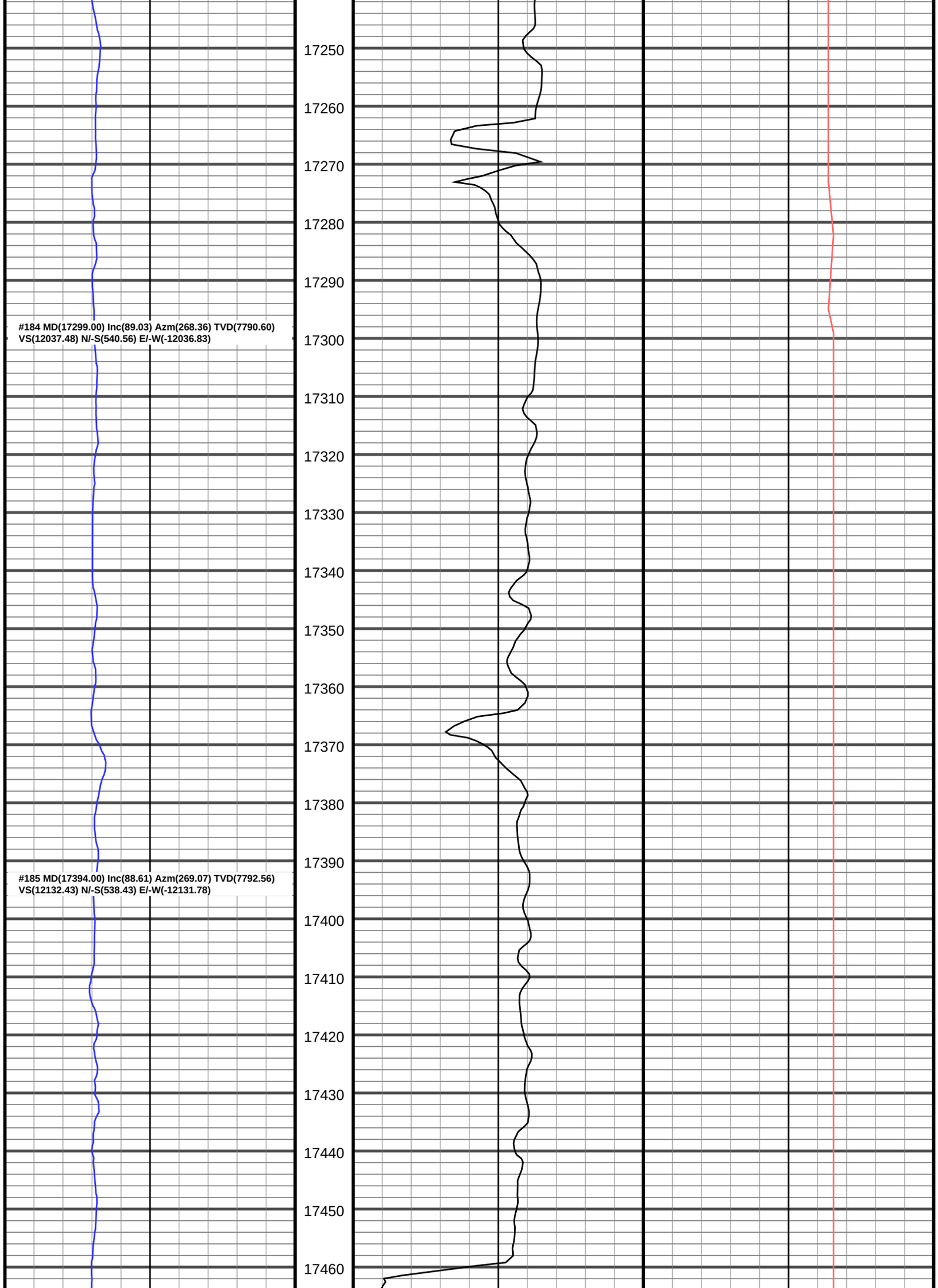

#173 MD(16259.00) Inc(89.60) Azm(272.04) TVD(7790.35)
VS(10997.88) N/-S(540.36) E/-W(-10997.23)
#174 MD(16353.00) Inc(90.52) Azm(272.80) TVD(7790.25)
VS(11091.80) N/-S(544.33) E/-W(-11091.15)
16210
16220
16230
16240
16250
16260
16270
16280
16290
16300
16310
16320
16330
16340
16350
16360
16370
16380
16390
16400
16410

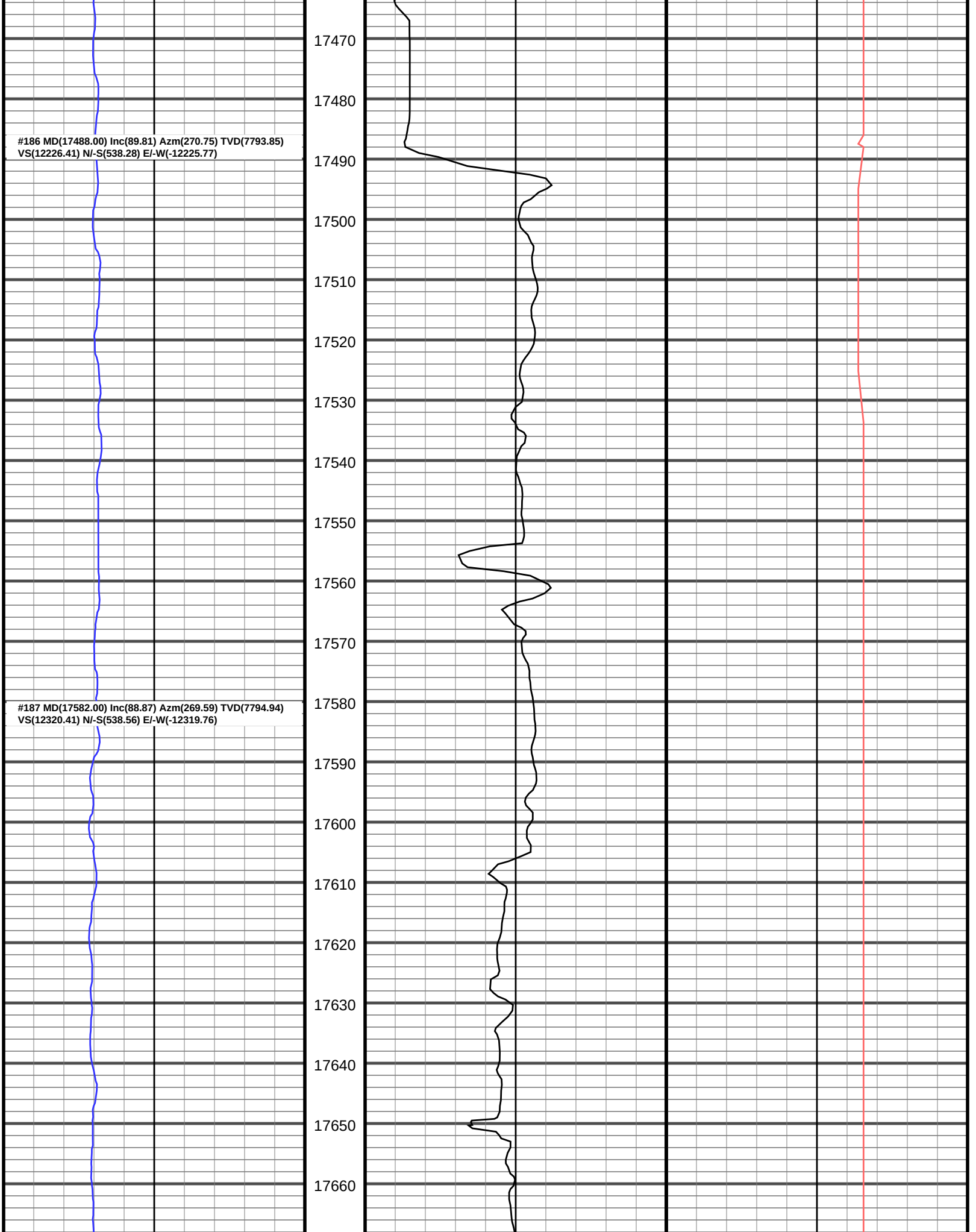

#175 MD(16448.00) Inc(90.04) Azm(271.45) TVD(7789.79)
VS(11186.74) N/-S(547.85) E/-W(-11186.08)
#176 MD(16543.00) Inc(91.00) Azm(271.17) TVD(7788.93)
VS(11281.71) N/-S(550.03) E/-W(-11281.05)
16420
16430
16440
16450
16460
16470
16480
16490
16500
16510
16520
16530
16540
16550
16560
16570
16580
16590
16600
16610
16620

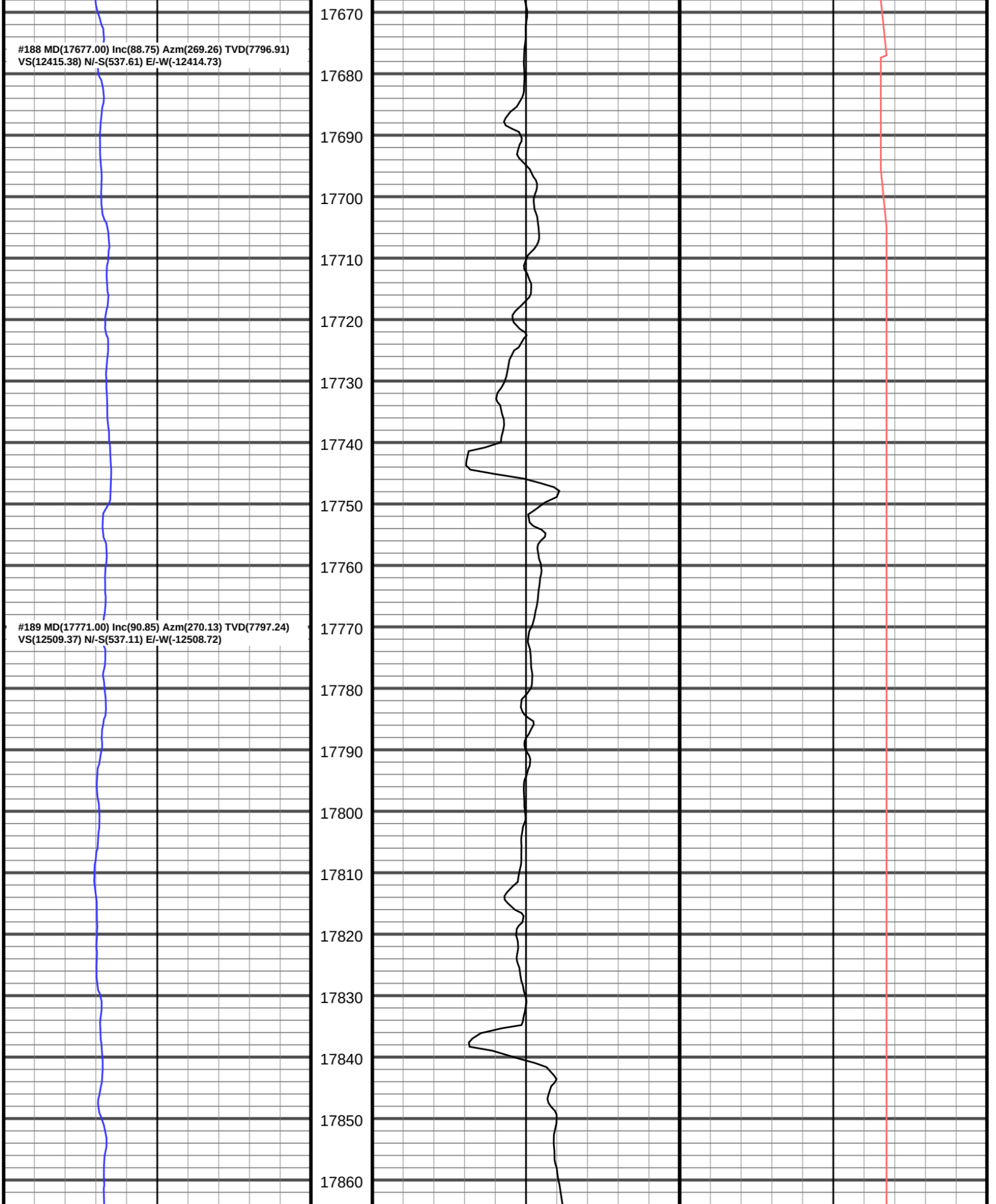

#177 MD(16637.00) Inc(90.78) Azm(270.26) TVD(7787.47)
VS(11375.69) N/-S(551.20) E/-W(-11375.03)
#178 MD(16732.00) Inc(89.27) Azm(269.33) TVD(7787.43)
VS(11470.69) N/-S(550.86) E/-W(-11470.02)
16630
16640
16650
16660
16670
16680
16690
16700
16710
16720
16730
16740
16750
16760
16770
16780
16790
16800
16810
16820

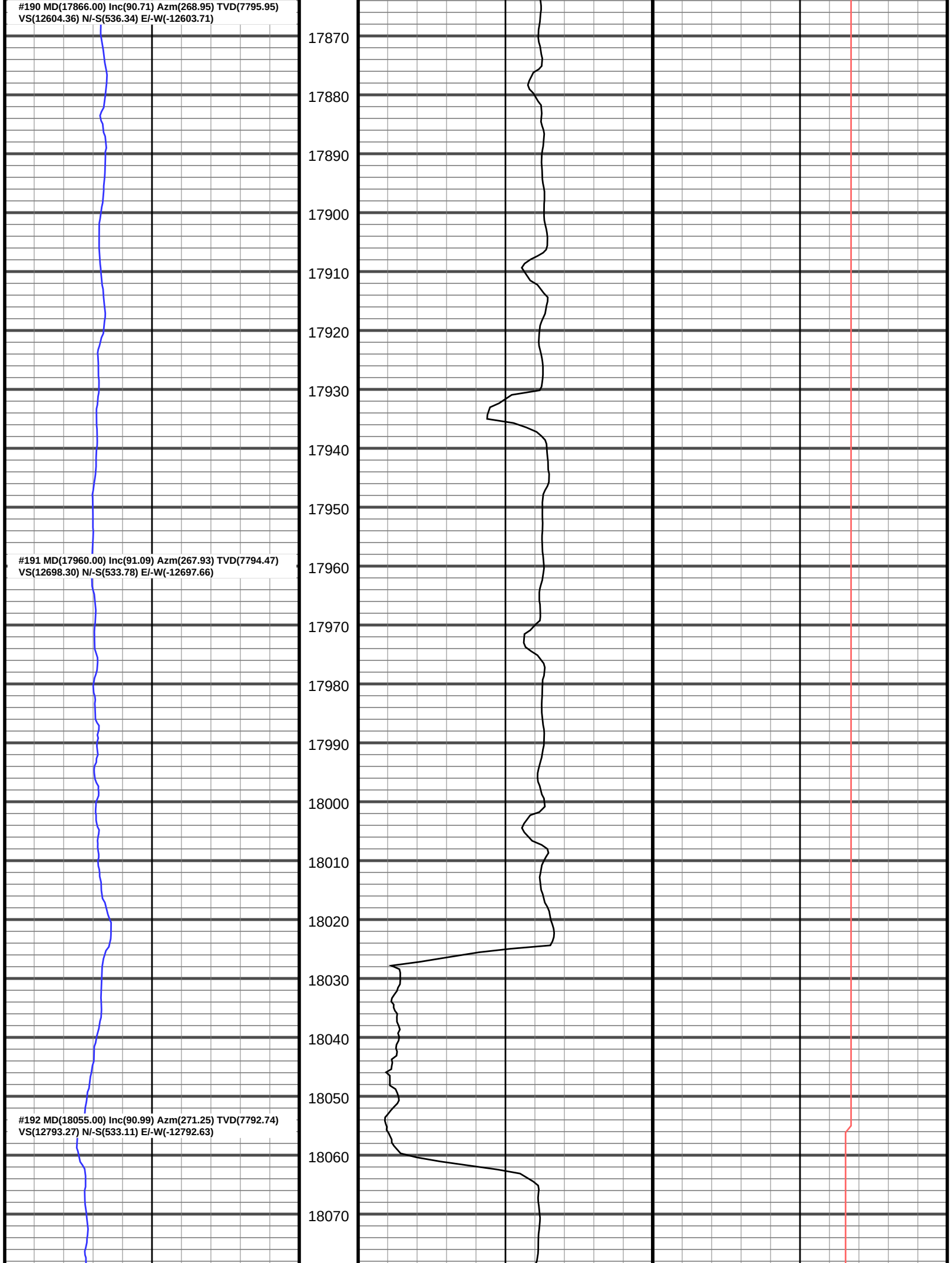

#179 MD(16826.00) Inc(90.73) Azm(269.84) TVD(7787.43)
VS(11564.68) N/-S(550.18) E/-W(-11564.02)
#180 MD(16921.00) Inc(91.15) Azm(268.09) TVD(7785.87)
VS(11659.65) N/-S(548.46) E/-W(-11658.98)
#181 MD(17015.00) Inc(87.91) Azm(268.13) TVD(7786.64)
VS(11753.58) N/-S(545.36) E/-W(-11752.92)
16830
16840
16850
16860
16870
16880
16890
16900
16910
16920
16930
16940
16950
16960
16970
16980
16990
17000
17010
17020

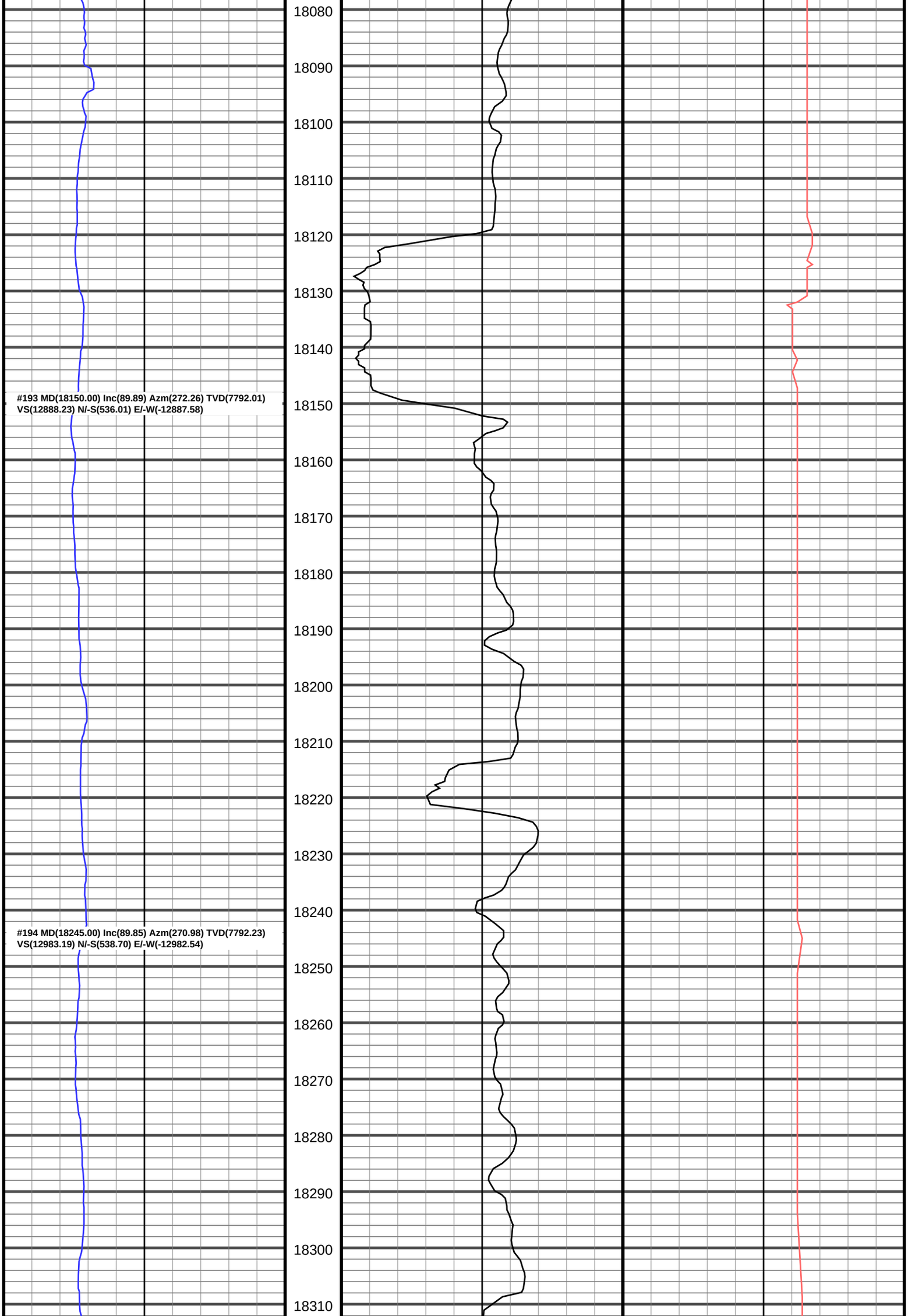

17030
17040
17050
17060
17070
17080
17090
17100
#182 MD(17110.00) Inc(89.98) Azm(270.22) TVD(7788.39)
VS(11848.54) N/-S(544.00) E/-W(-11847.88)
17110
17120
17130
17140
17150
17160
17170
17180
17190
17200
#183 MD(17205.00) Inc(89.15) Azm(268.62) TVD(7789.11)
VS(11943.52) N/-S(543.03) E/-W(-11942.87)
17210
17220
17230
17240

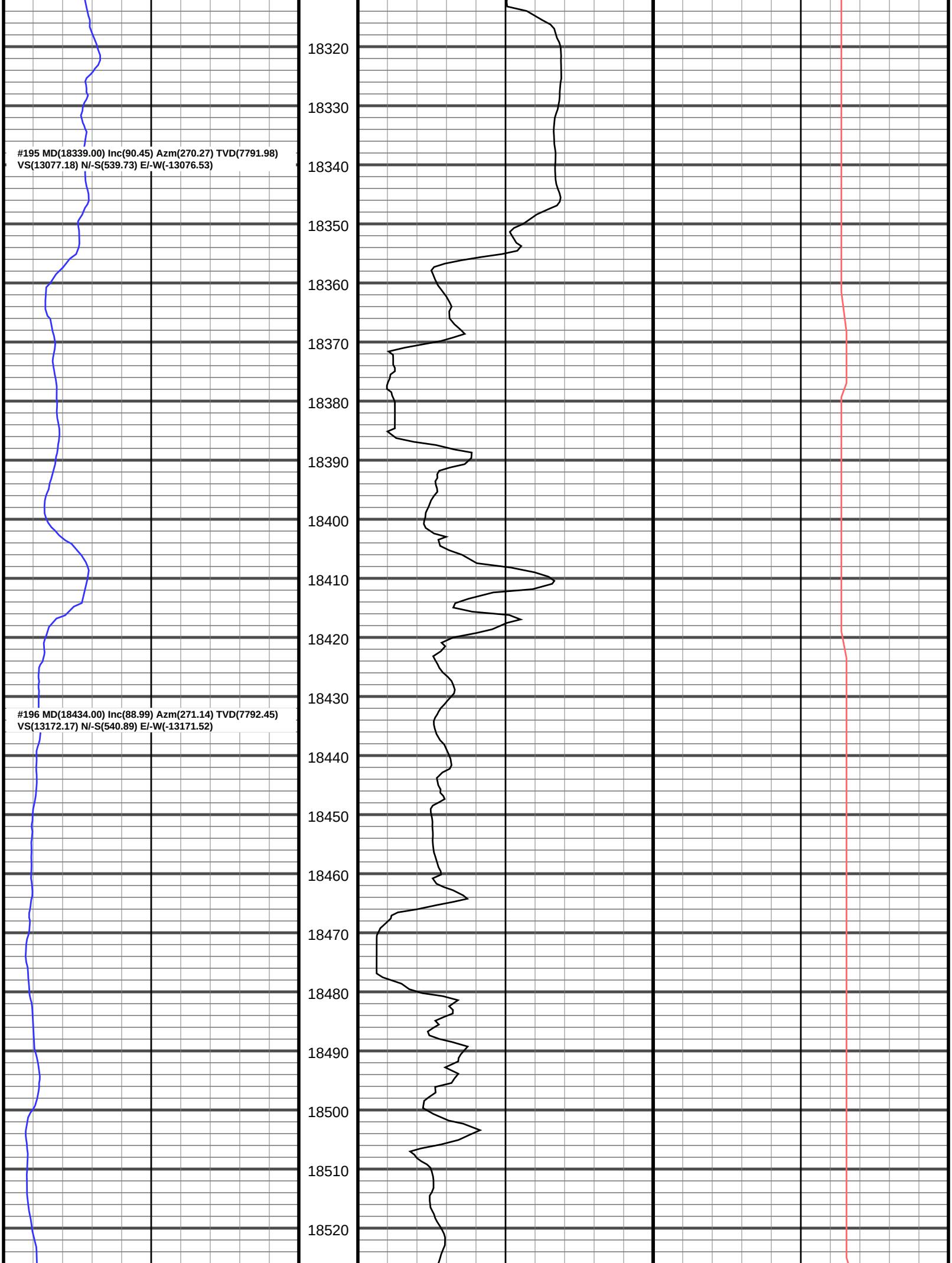

#184 MD(17299.00) Inc(89.03) Azm(268.36) TVD(7790.60)
VS(12037.48) N/-S(540.56) E/-W(-12036.83)
#185 MD(17394.00) Inc(88.61) Azm(269.07) TVD(7792.56)
VS(12132.43) N/-S(538.43) E/-W(-12131.78)
17250
17260
17270
17280
17290
17300
17310
17320
17330
17340
17350
17360
17370
17380
17390
17400
17410
17420
17430
17440
17450
17460

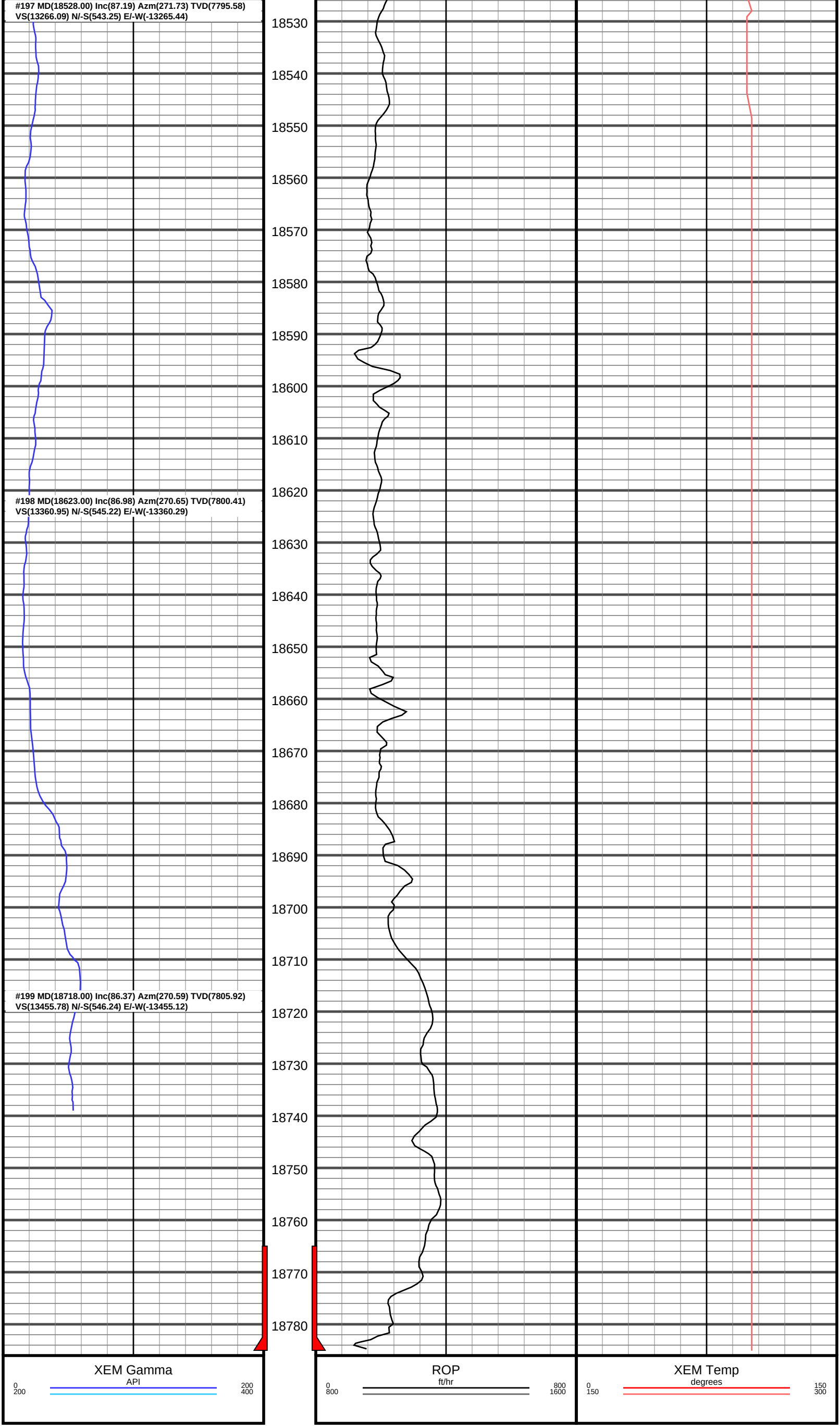

#186 MD(17488.00) Inc(89.81) Azm(270.75) TVD(7793.85)
VS(12226.41) N/-S(538.28) E/-W(-12225.77)
#187 MD(17582.00) Inc(88.87) Azm(269.59) TVD(7794.94)
VS(12320.41) N/-S(538.56) E/-W(-12319.76)
17470
17480
17490
17500
17510
17520
17530
17540
17550
17560
17570
17580
17590
17600
17610
17620
17630
17640
17650
17660


#188 MD(17677.00) Inc(88.75) Azm(269.26) TVD(7796.91)
VS(12415.38) N/-S(537.61) E/-W(-12414.73)
#189 MD(17771.00) Inc(90.85) Azm(270.13) TVD(7797.24)
VS(12509.37) N/-S(537.11) E/-W(-12508.72)
17670
17680
17690
17700
17710
17720
17730
17740
17750
17760
17770
17780
17790
17800
17810
17820
17830
17840
17850
17860


#190 MD(17866.00) Inc(90.71) Azm(268.95) TVD(7795.95)
VS(12604.36) N/-S(536.34) E/-W(-12603.71)
#191 MD(17960.00) Inc(91.09) Azm(267.93) TVD(7794.47)
VS(12698.30) N/-S(533.78) E/-W(-12697.66)
#192 MD(18055.00) Inc(90.99) Azm(271.25) TVD(7792.74)
VS(12793.27) N/-S(533.11) E/-W(-12792.63)
17870
17880
17890
17900
17910
17920
17930
17940
17950
17960
17970
17980
17990
18000
18010
18020
18030
18040
18050
18060
18070


#193 MD(18150.00) Inc(89.89) Azm(272.26) TVD(7792.01)
VS(12888.23) N/-S(536.01) E/-W(-12887.58)
#194 MD(18245.00) Inc(89.85) Azm(270.98) TVD(7792.23)
VS(12983.19) N/-S(538.70) E/-W(-12982.54)
18080
18090
18100
18110
18120
18130
18140
18150
18160
18170
18180
18190
18200
18210
18220
18230
18240
18250
18260
18270
18280
18290
18300
18310


#195 MD(18339.00) Inc(90.45) Azm(270.27) TVD(7791.98)
VS(13077.18) N/-S(539.73) E/-W(-13076.53)
#196 MD(18434.00) Inc(88.99) Azm(271.14) TVD(7792.45)
VS(13172.17) N/-S(540.89) E/-W(-13171.52)
18320
18330
18340
18350
18360
18370
18380
18390
18400
18410
18420
18430
18440
18450
18460
18470
18480
18490
18500
18510
18520


#197 MD(18528.00) Inc(87.19) Azm(271.73) TVD(7795.58)
VS(13266.09) N/-S(543.25) E/-W(-13265.44)
#198 MD(18623.00) Inc(86.98) Azm(270.65) TVD(7800.41)
VS(13360.95) N/-S(545.22) E/-W(-13360.29)
#199 MD(18718.00) Inc(86.37) Azm(270.59) TVD(7805.92)
VS(13455.78) N/-S(546.24) E/-W(-13455.12)
18530
18540
18550
18560
18570
18580
18590
18600
18610
18620
18630
18640
18650
18660
18670
18680
18690
18700
18710
18720
18730
18740
18750
18760
18770
18780
XEM Gamma
API
0
200
200
400
ROP
ft/hr
0
800
800
1600
XEM Temp
degrees
0
150
150
300