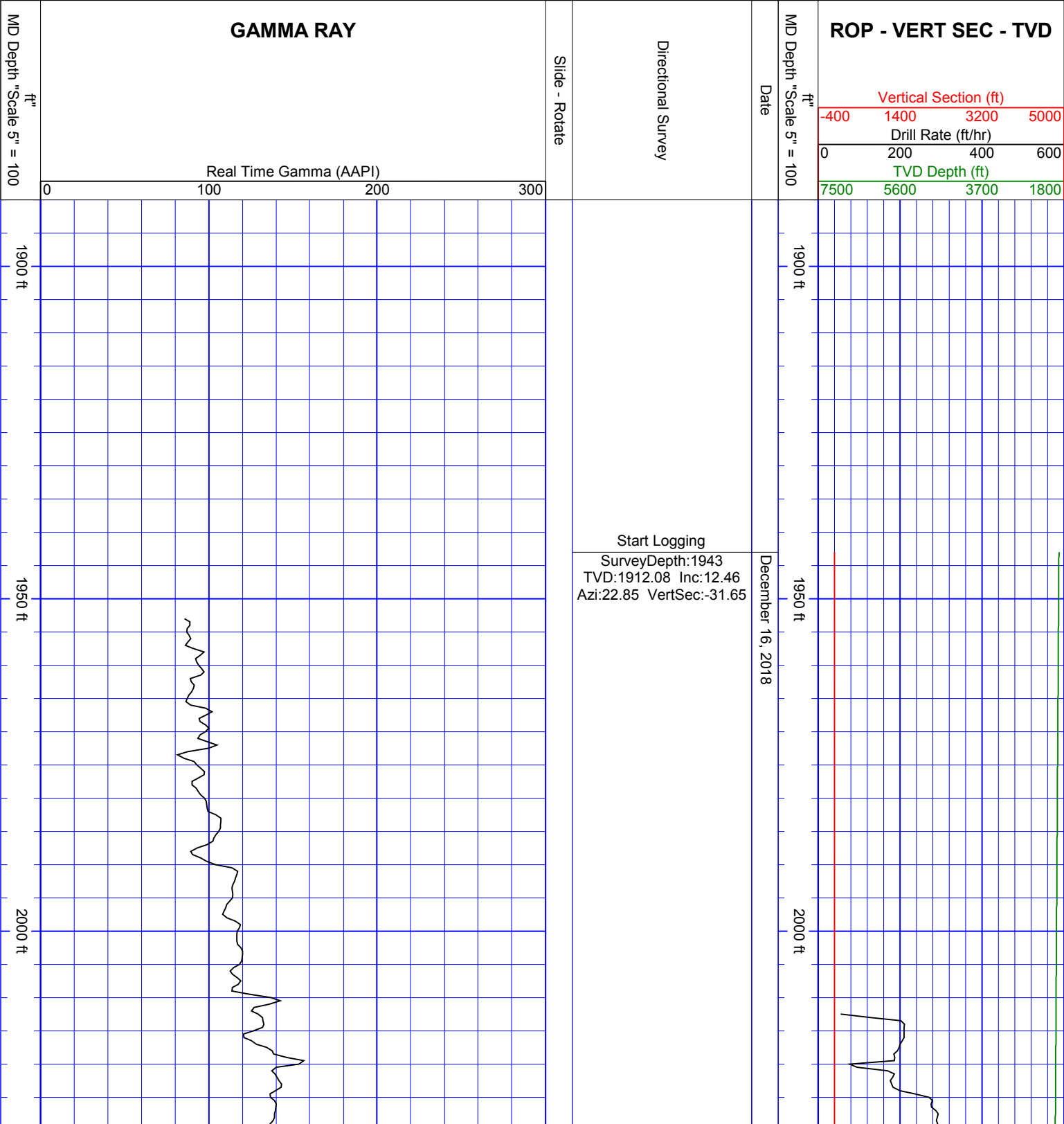
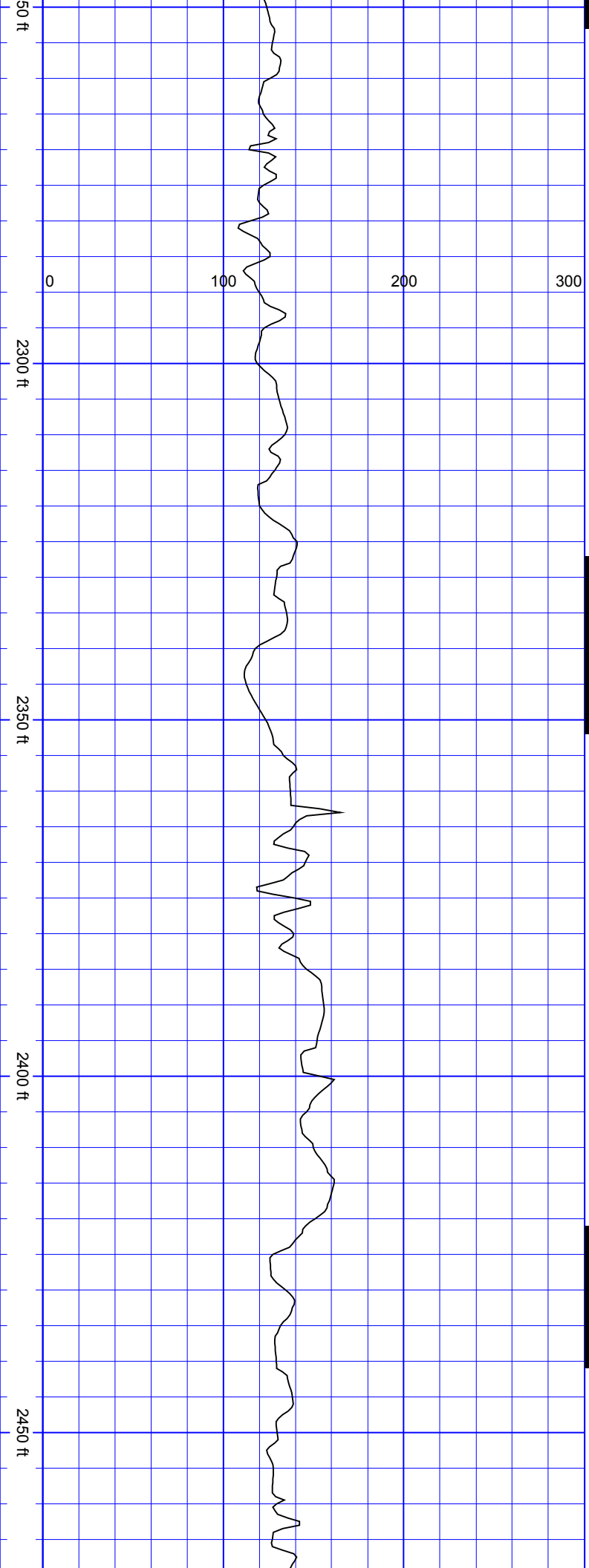


Interpretations of this data by Cathedral Energy Services will be of best judgment as to correctness. Cathedral Energy Services cannot and does not guarantee the accuracy or correctness of interpretations or any surveys derived therefrom. Cathedral Energy Services makes no warranties of performance, results, fitness or suitability for any particular purposes with respect to the goods being furnished under the terms and conditions. Cathedral Energy Services warrants that the equipment furnished will conform to Cathedral Energy Services published specifications in effect at the time and be in good working order.

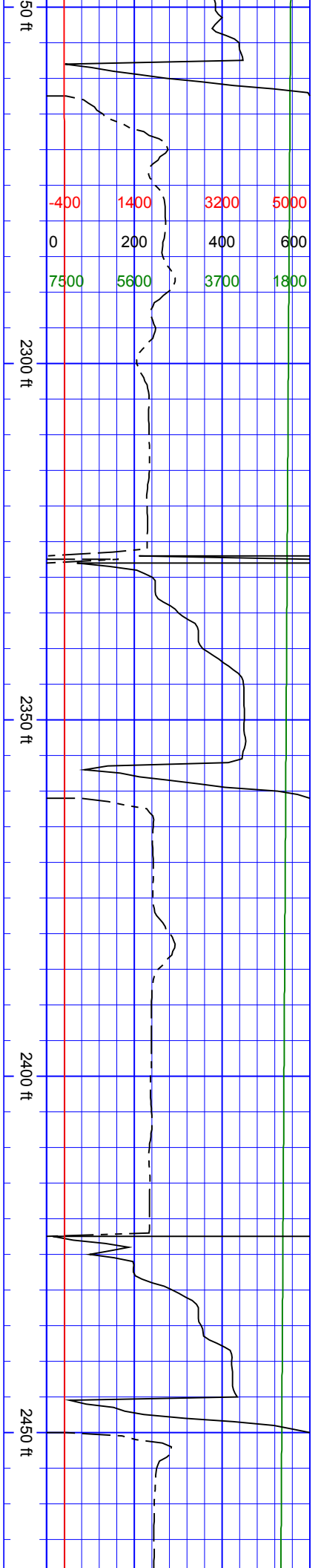


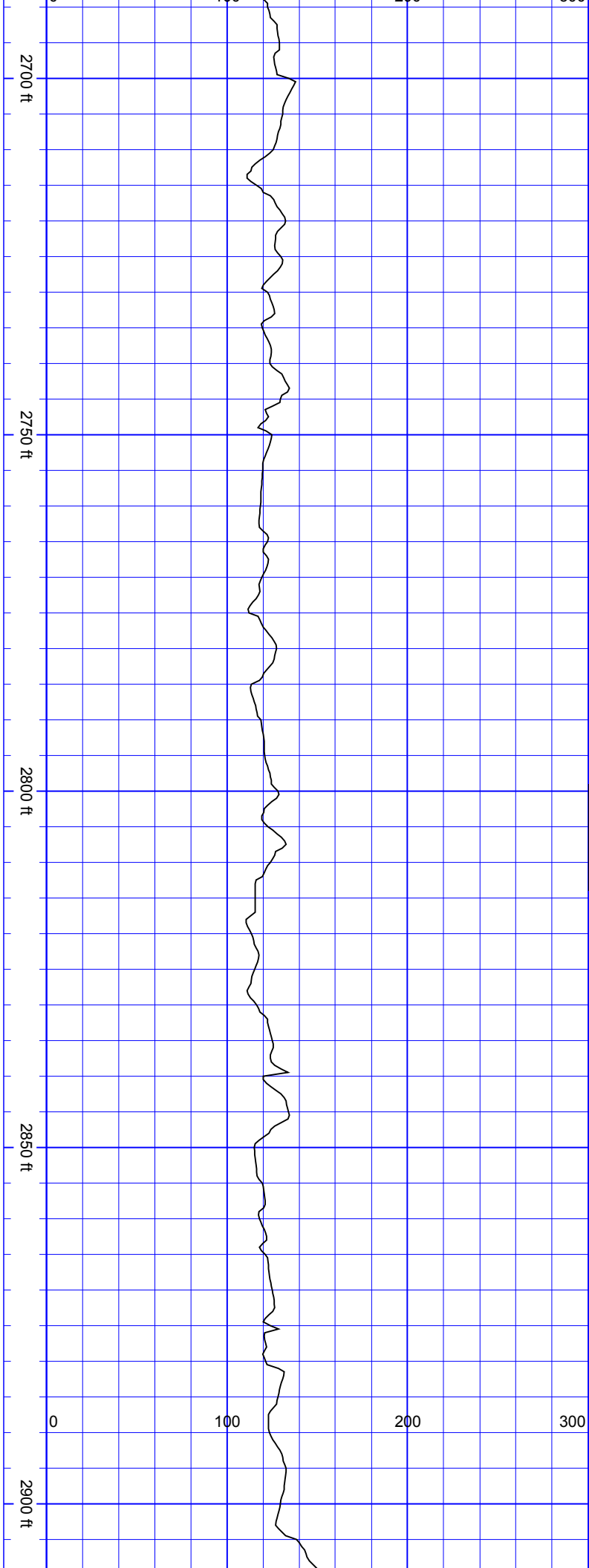


SurveyDepth:2262
TVD:2223.26 Inc:14.81
Azi:14.83 VertSec:-30.34

SurveyDepth:2356
TVD:2313.7 Inc:16.79
Azi:16.76 VertSec:-28.58

SurveyDepth:2450
TVD:2403.56 Inc:17.36
Azi:19.92 VertSec:-27.89

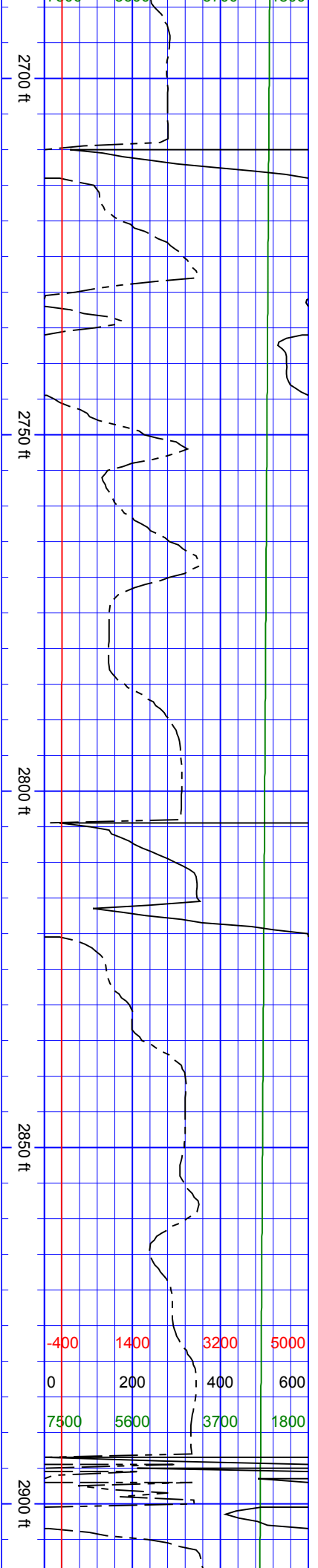


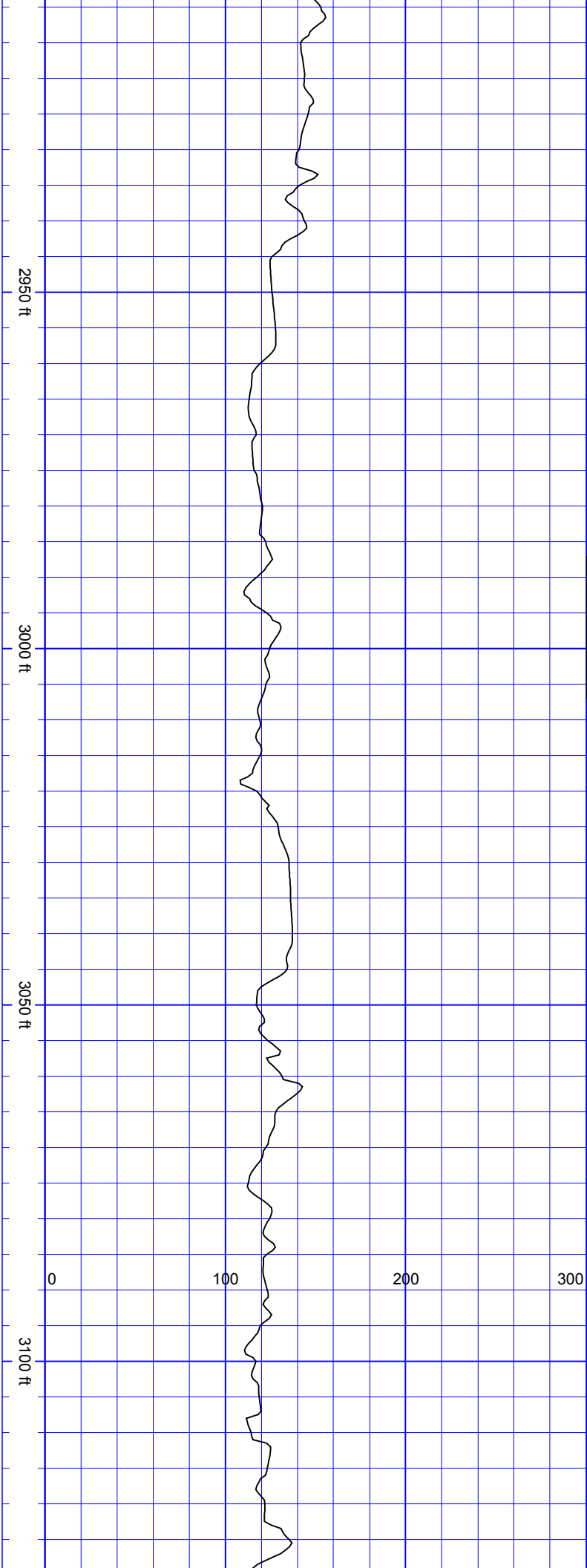


SurveyDepth:2734
TVD:2673.45 Inc:17.84
Azi:26.69 VertSec:-37.98

SurveyDepth:2828
TVD:2763.33 Inc:16.22
Azi:28.71 VertSec:-41.74

S
S
S
S
S

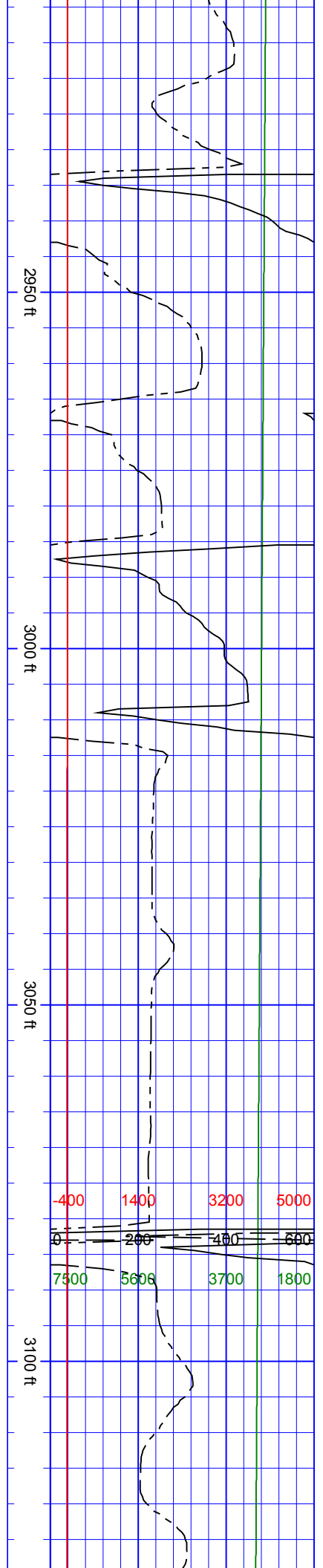


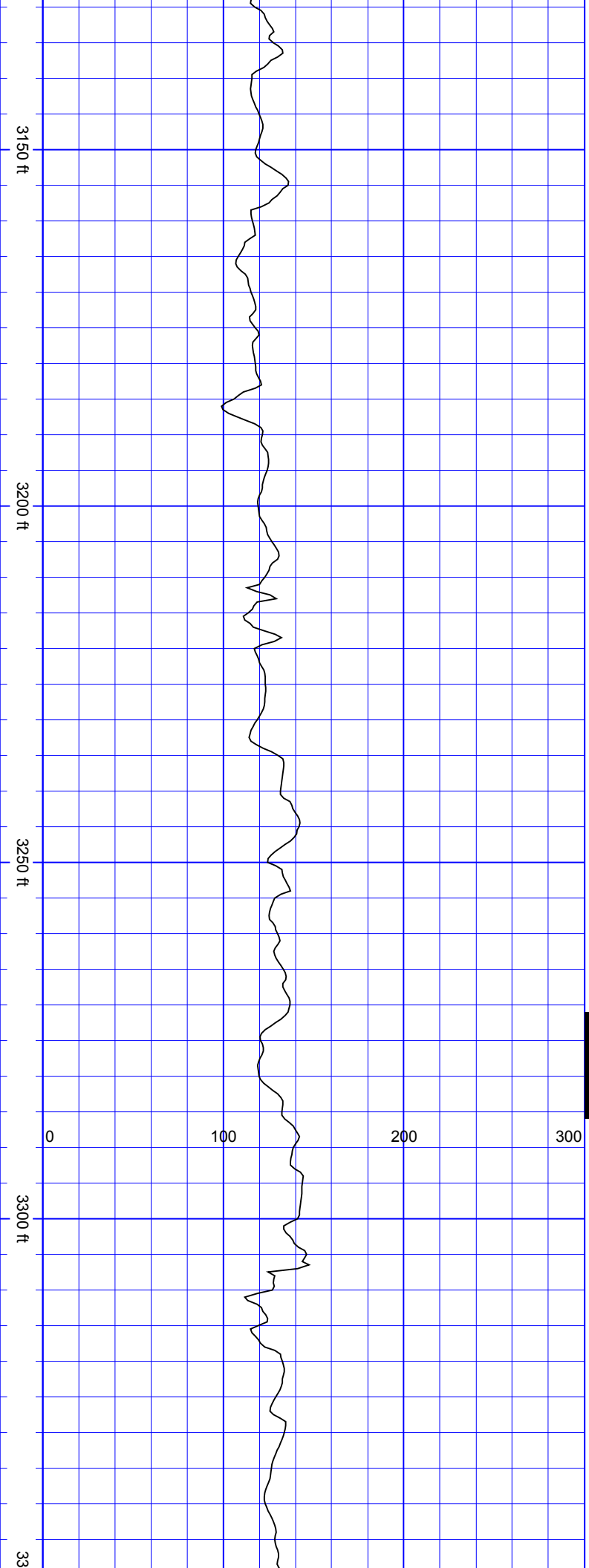


SurveyDepth:2922
TVD:2853.92 Inc:14.72
Azi:26.52 VertSec:-45.17

SurveyDepth:3016
TVD:2944.95 Inc:14.24
Azi:35.48 VertSec:-49.69

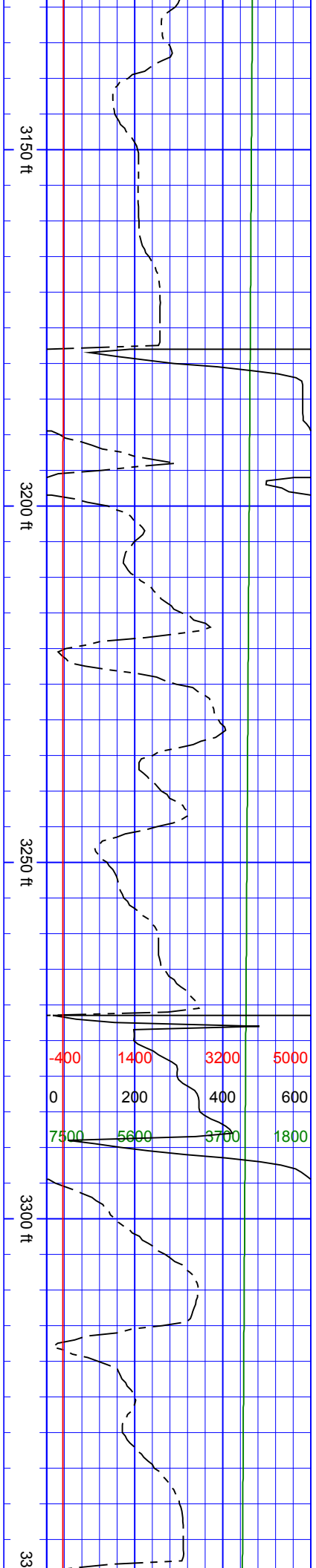
SurveyDepth:3111
TVD:3037.29 Inc:12.92
Azi:33.72 VertSec:-55.4

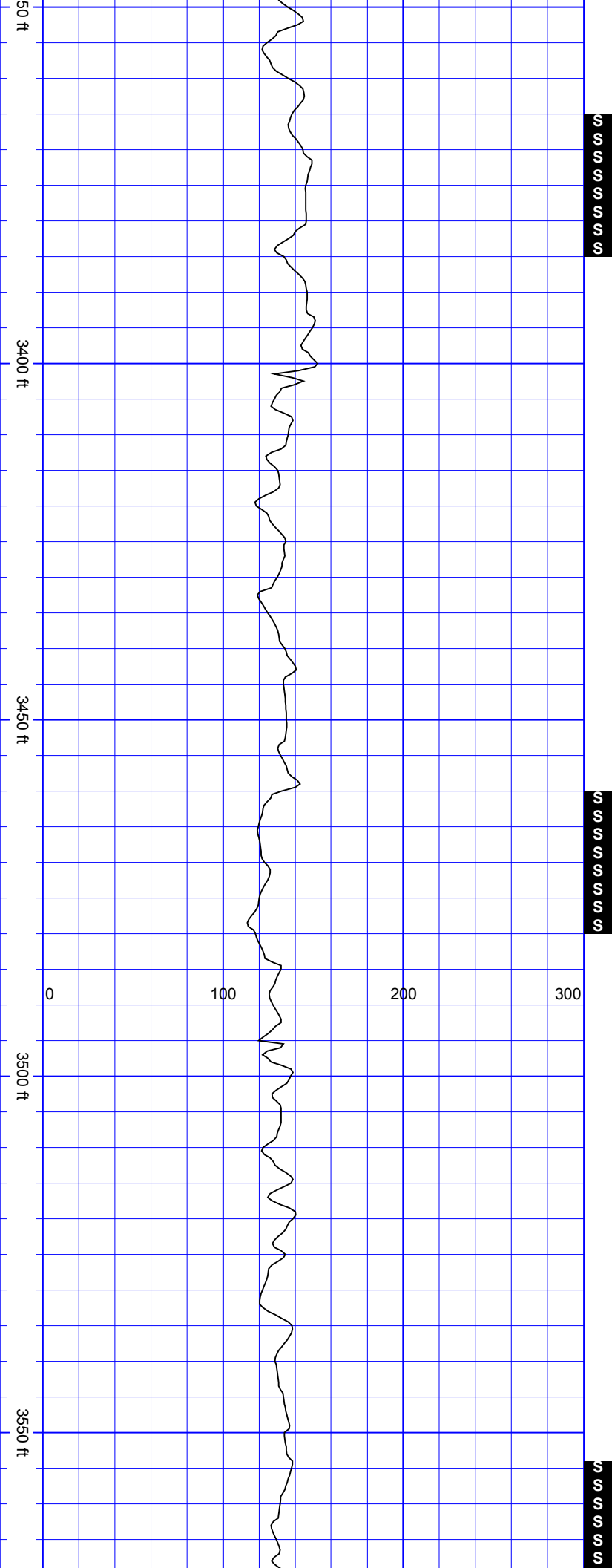




SurveyDepth:3206
TVD:3130.13 Inc:11.56
Azi:33.64 VertSec:-60.24

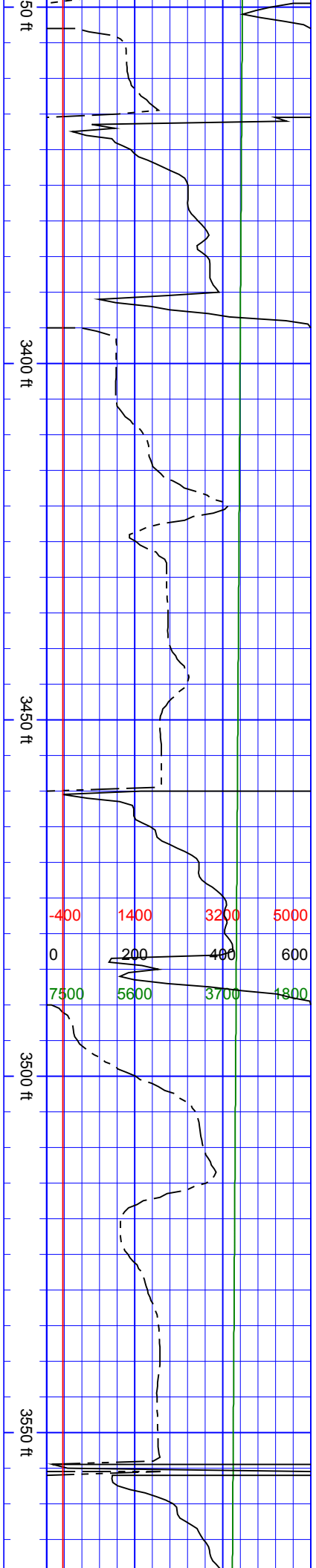
SurveyDepth:3300
TVD:3222.39 Inc:10.59
Azi:23.79 VertSec:-63.09

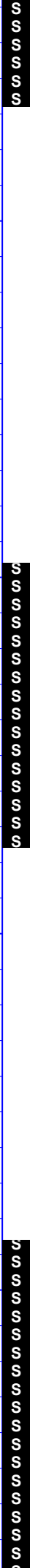
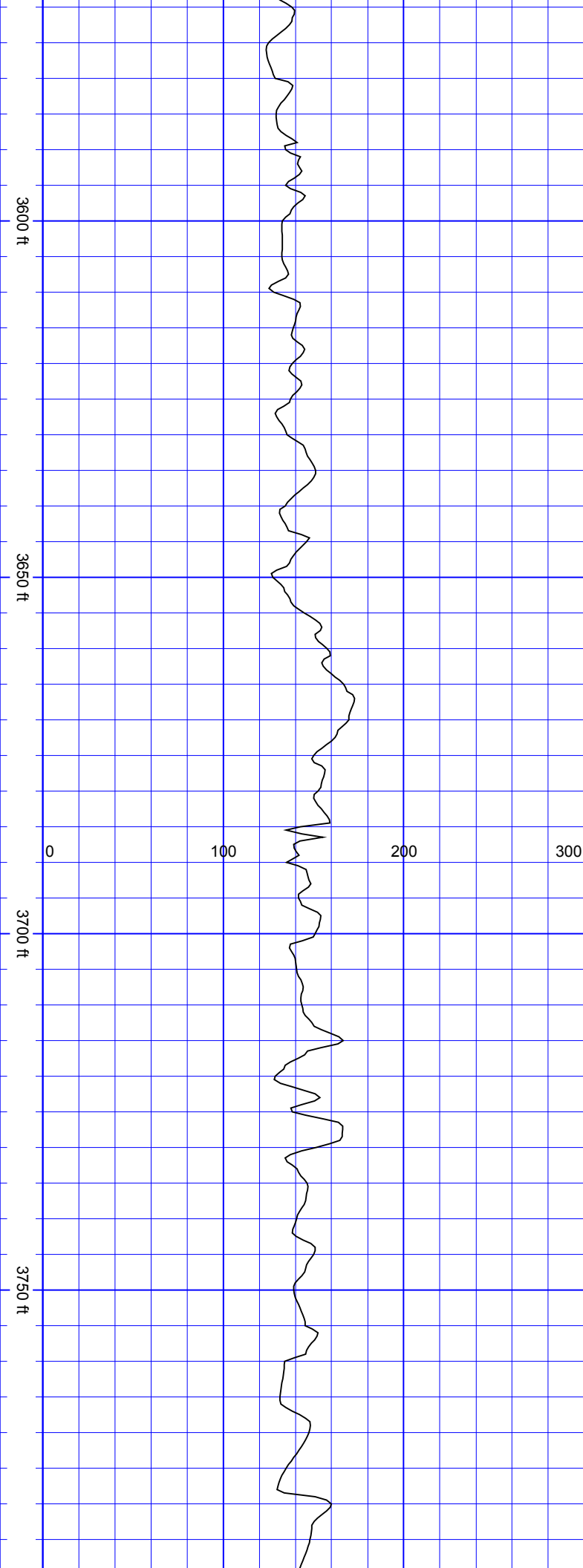




SurveyDepth:3395
TVD:3315.54 Inc:12.04
Azi:22.65 VertSec:-64.19

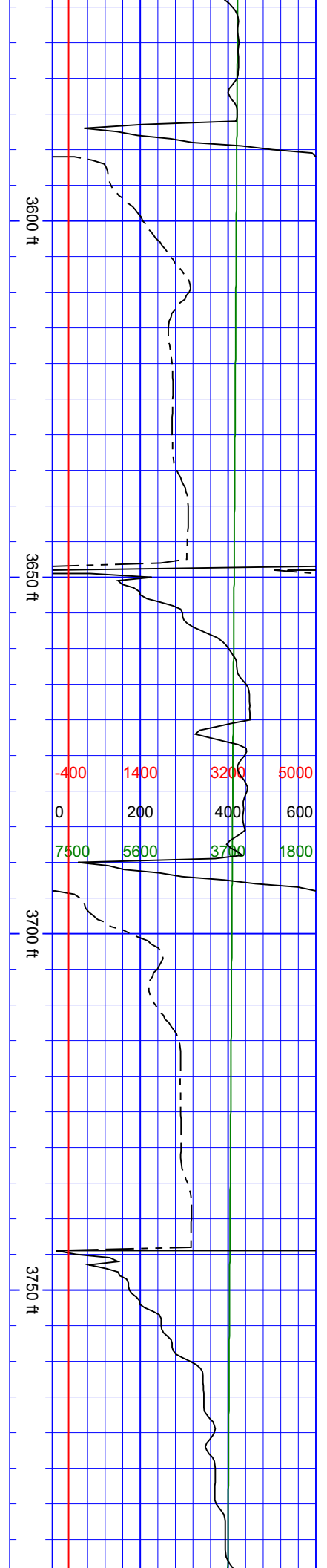
SurveyDepth:3489
TVD:3407.53 Inc:11.69
Azi:20.54 VertSec:-64.8

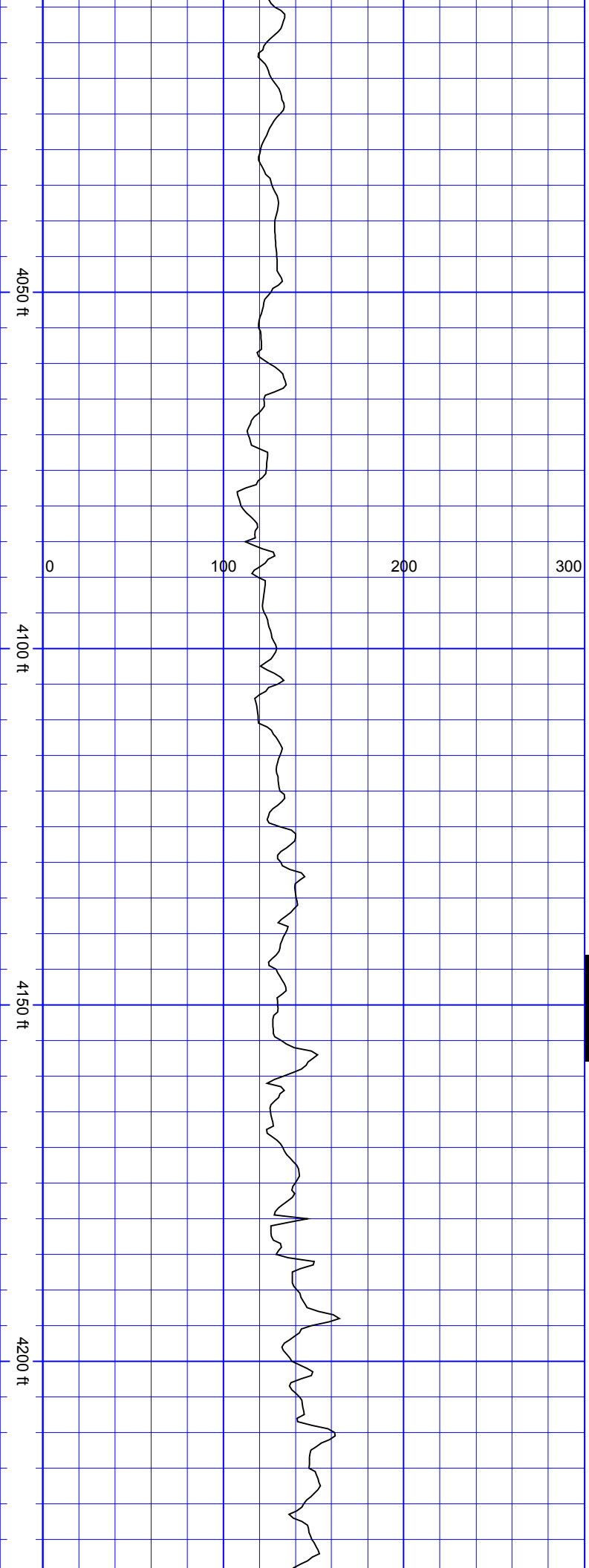




SurveyDepth:3583
TVD:3499.57 Inc:11.73
Azi:22.56 VertSec:-65.39

SurveyDepth:3678
TVD:3592.64 Inc:11.43
Azi:24.93 VertSec:-66.69

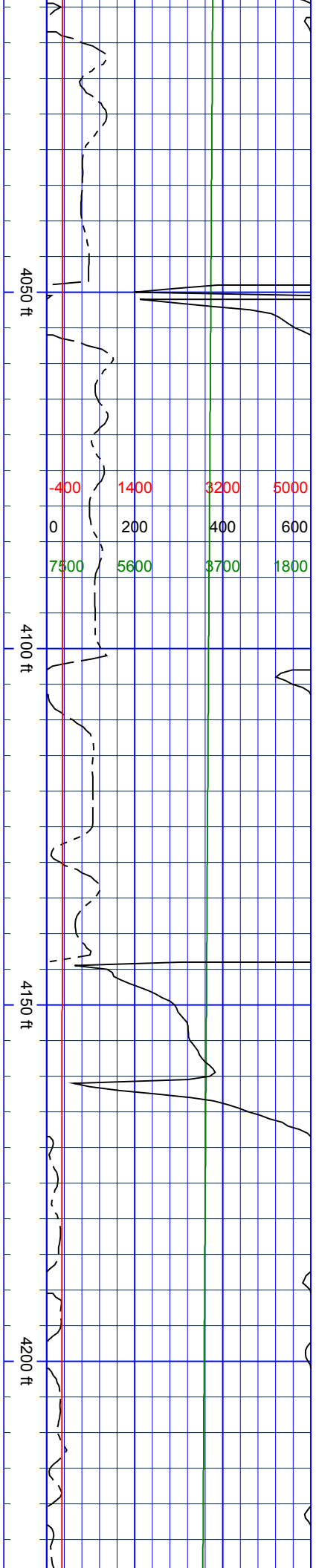


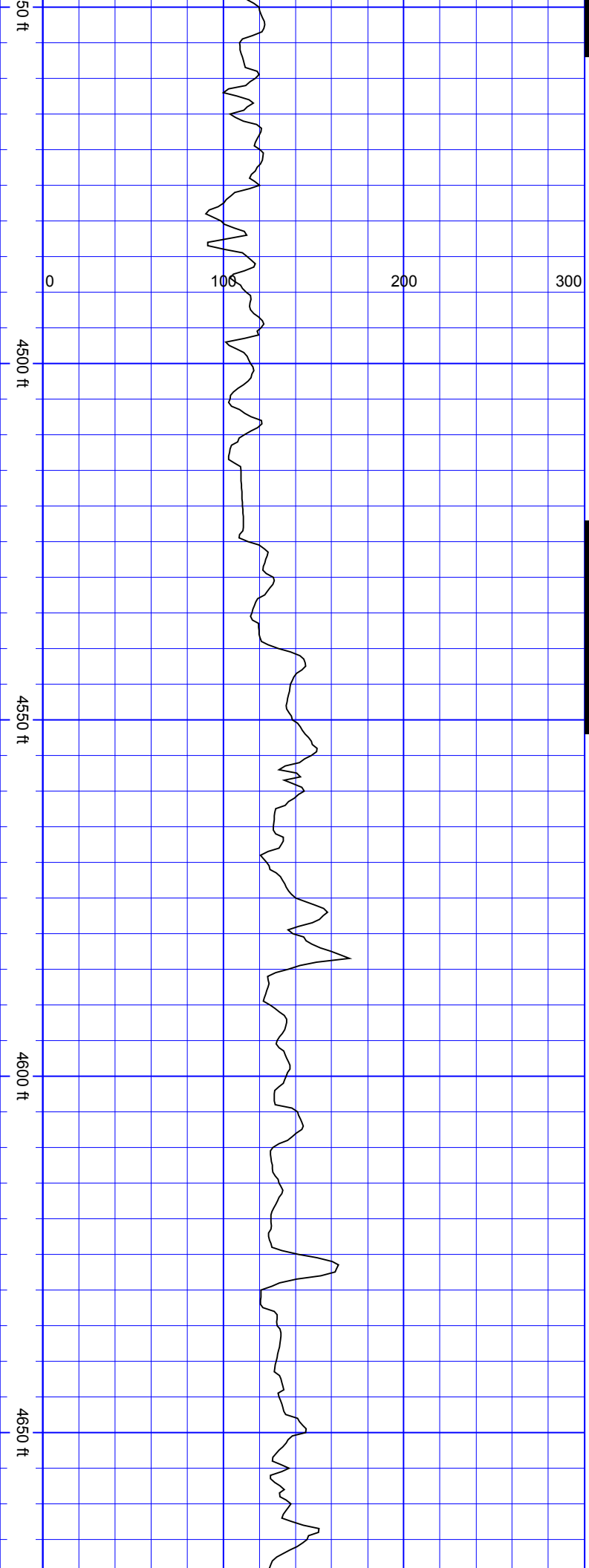


SurveyDepth:4078
TVD:3978.04 Inc:15.21
Azi:27.66 VertSec:-77.07

S
S
S
S
S
S

SurveyDepth:4173
TVD:4069.81 Inc:14.77
Azi:23.18 VertSec:-79.48

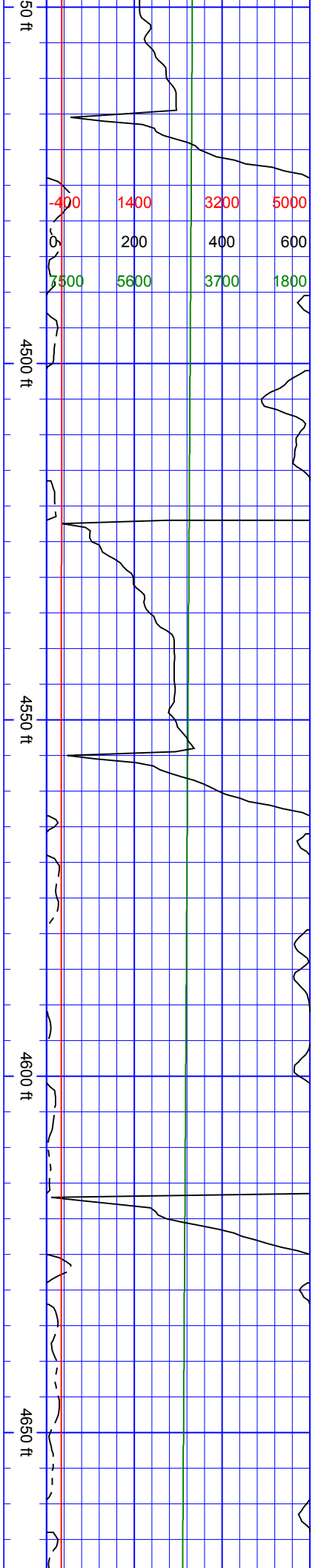


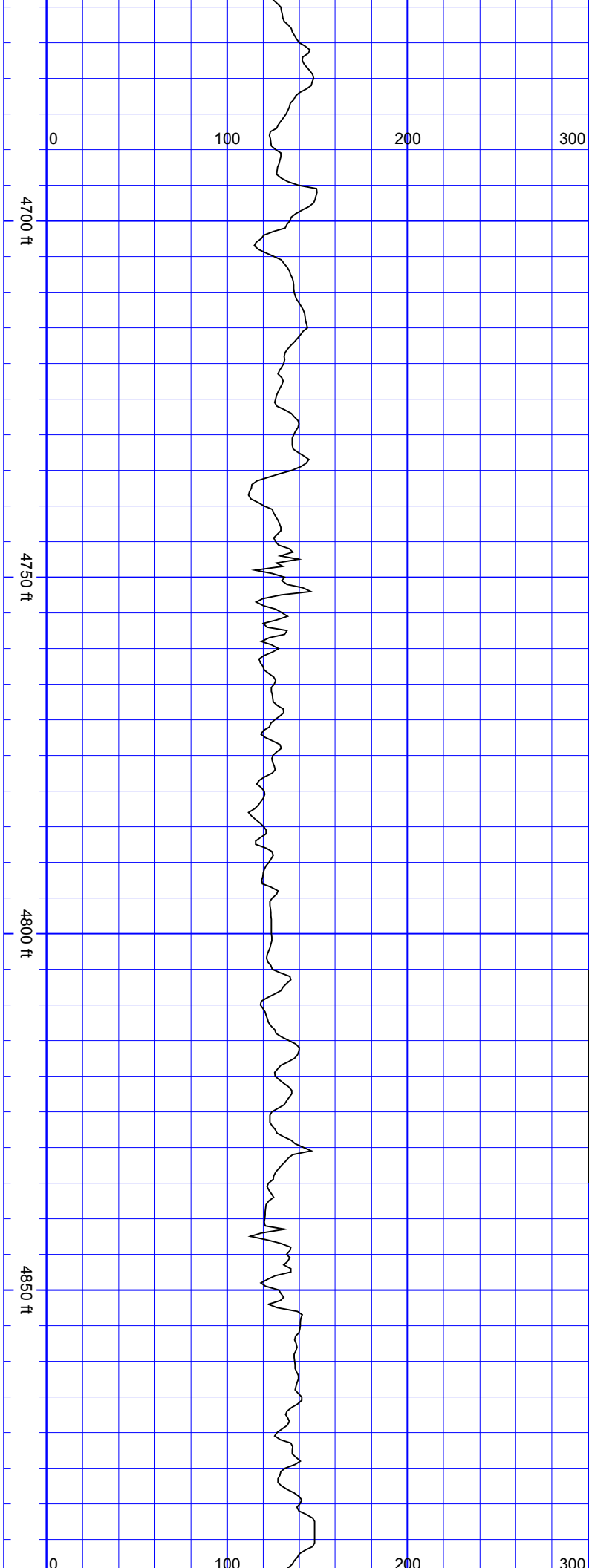


SurveyDepth:4457
TVD:4344.86 Inc:14.59
Azi:25.29 VertSec:-85.81

SurveyDepth:4551
TVD:4435.32 Inc:16.96
Azi:30.82 VertSec:-89.57

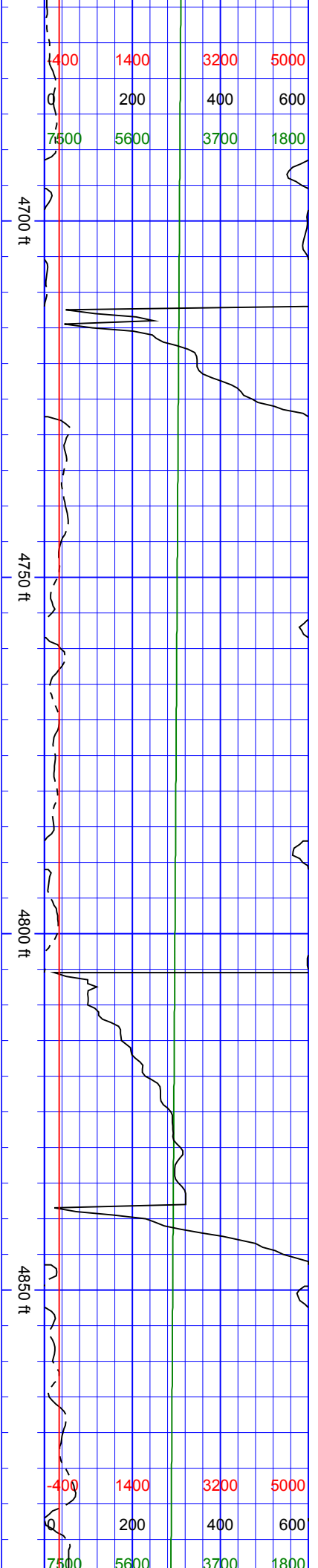
SurveyDepth:4646
TVD:4526.41 Inc:16
Azi:28.45 VertSec:-94.18

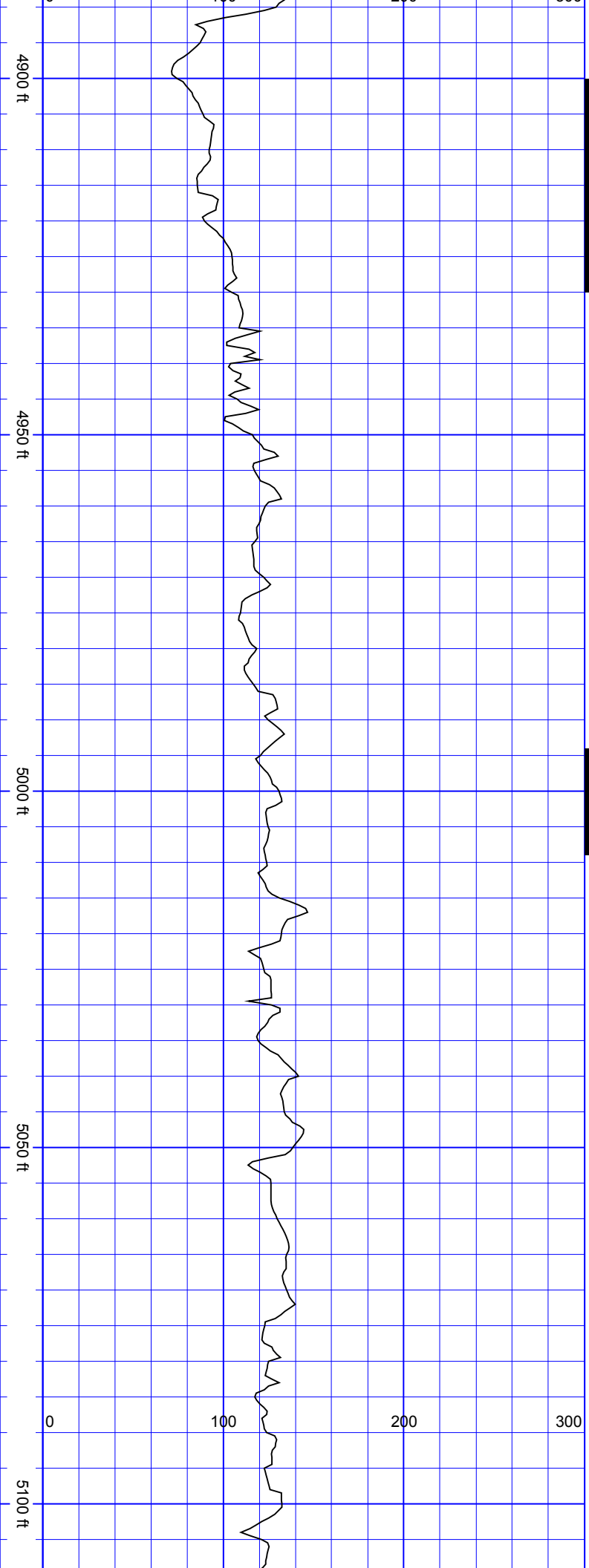




SurveyDepth:4740
TVD:4617.38 Inc:13.18
Azi:21.86 VertSec:-96.52

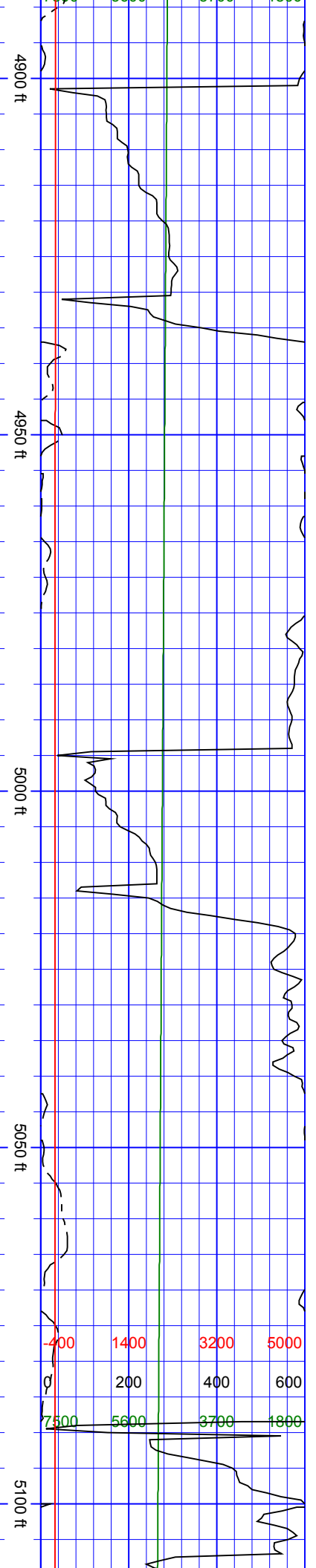
SurveyDepth:4835
TVD:4709.72 Inc:14.02
Azi:19.75 VertSec:-96.9

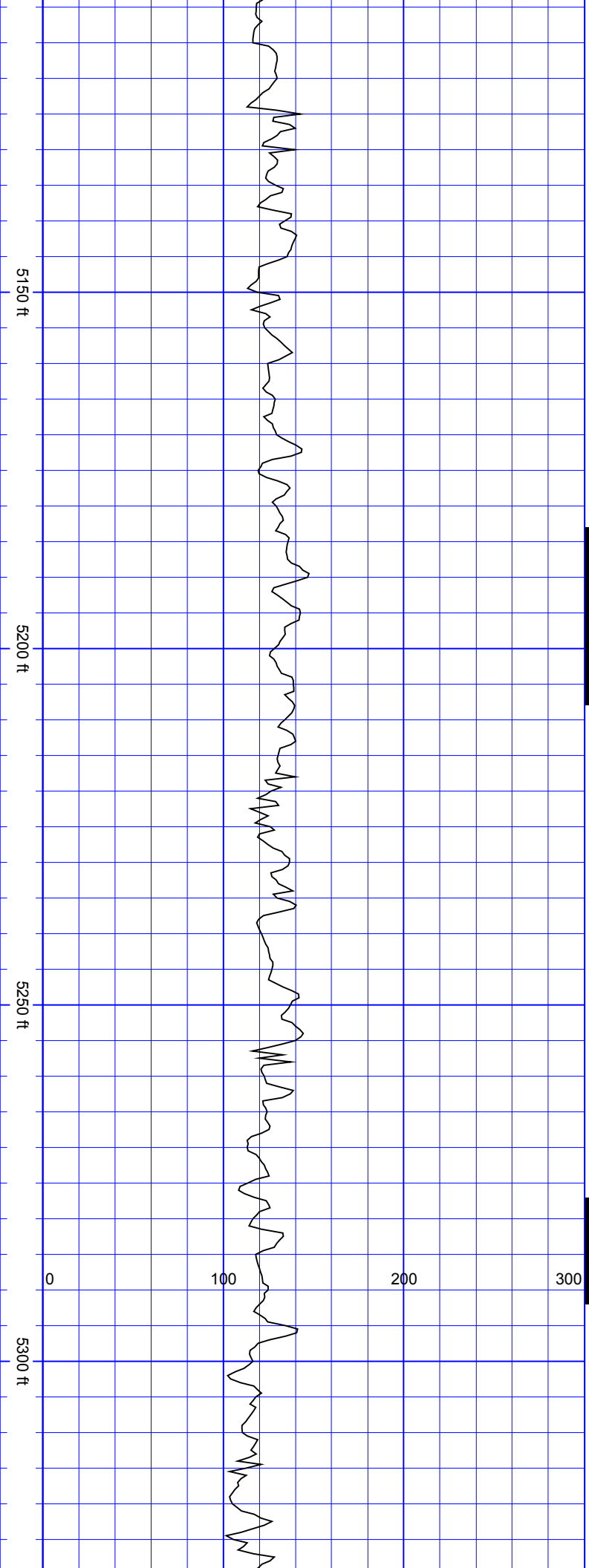




SurveyDepth:4929
TVD:4800.59 Inc:15.6
Azi:23.97 VertSec:-97.81

SurveyDepth:5024
TVD:4891.87 Inc:16.61
Azi:28.71 VertSec:-100.84





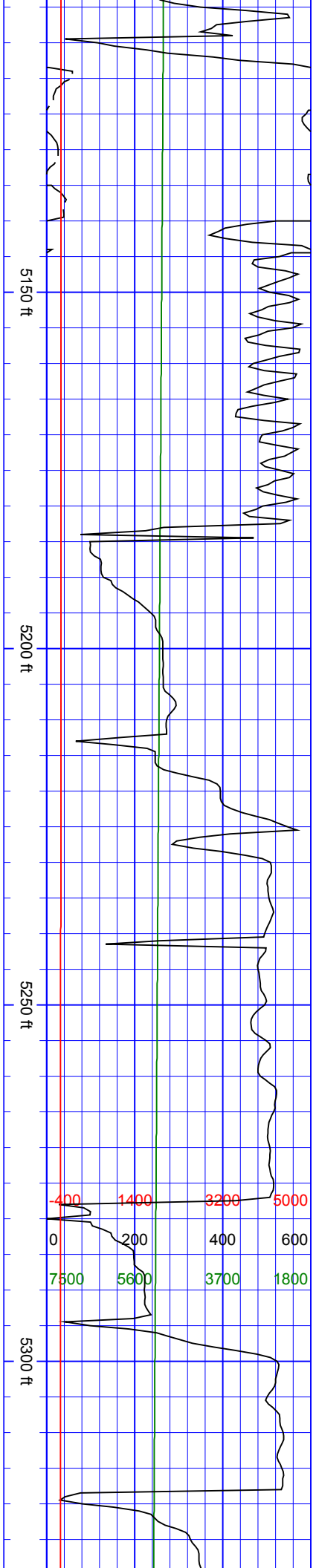
SSSSSSSS

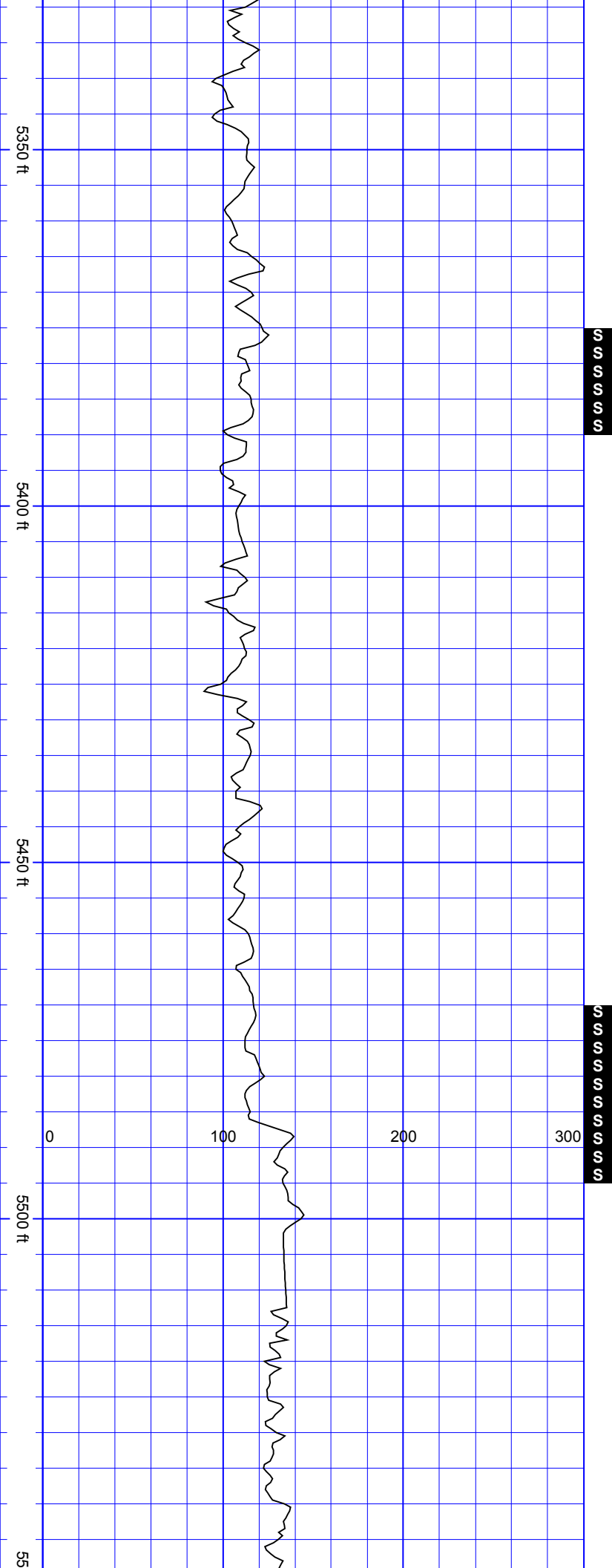
SSSSSS

SurveyDepth:5118
TVD:4982.38 Inc:14.68
Azi:25.81 VertSec:-
104.17

SurveyDepth:5212
TVD:5073.21 Inc:15.16
Azi:26.87 VertSec:-
106.93

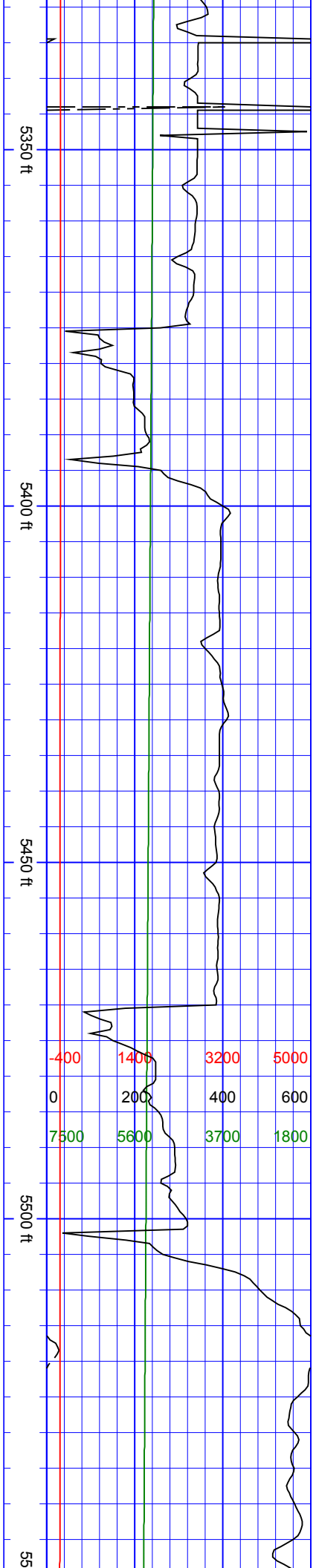
SurveyDepth:5307
TVD:5165.18 Inc:13.89
Azi:32.76 VertSec:-
111.01

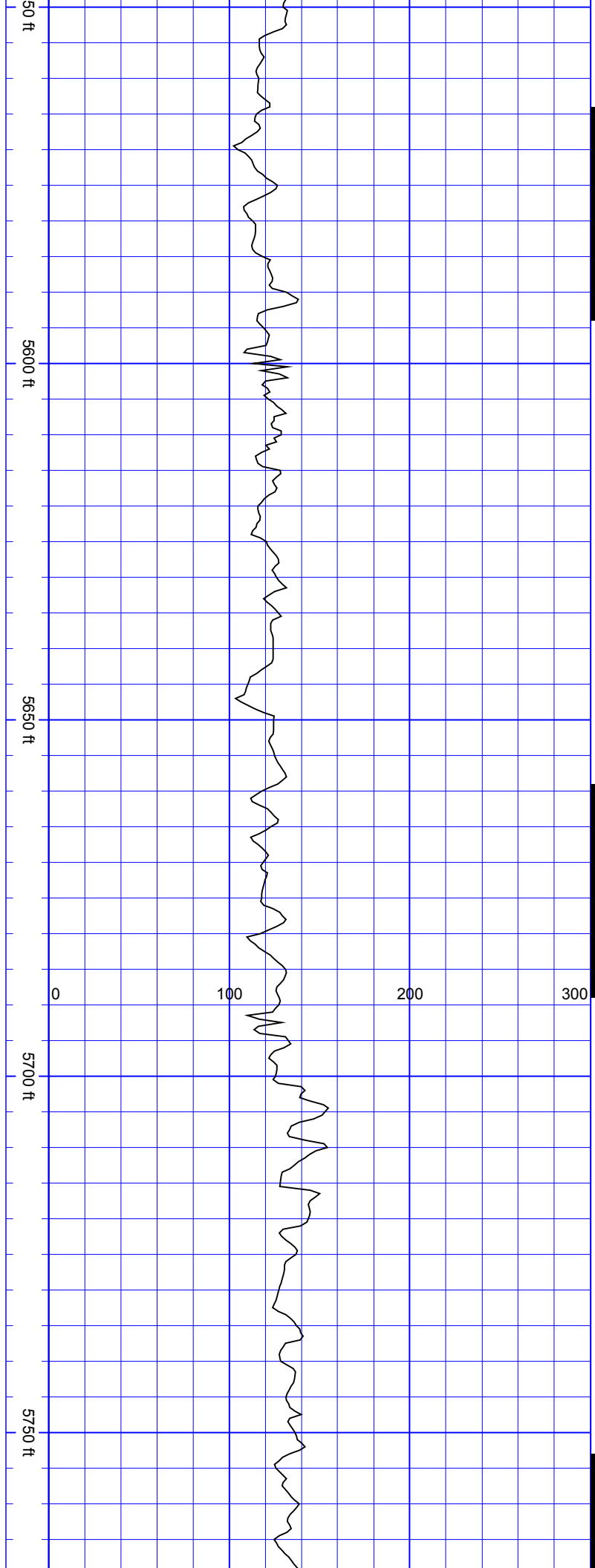




SurveyDepth:5402
TVD:5257.58 Inc:13.01
Azi:37.5 VertSec:-116.82

SurveyDepth:5496
TVD:5349.04 Inc:13.67
Azi:39.44 VertSec:-123.77

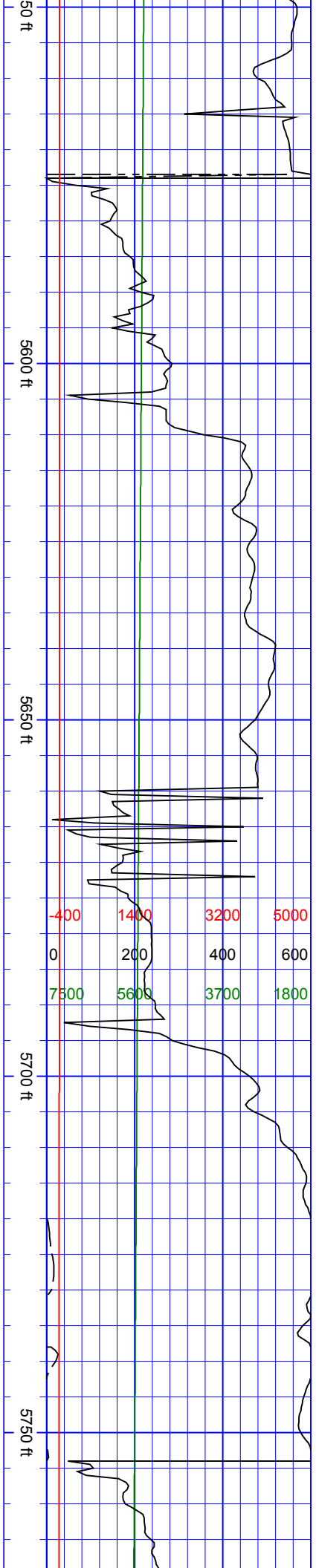


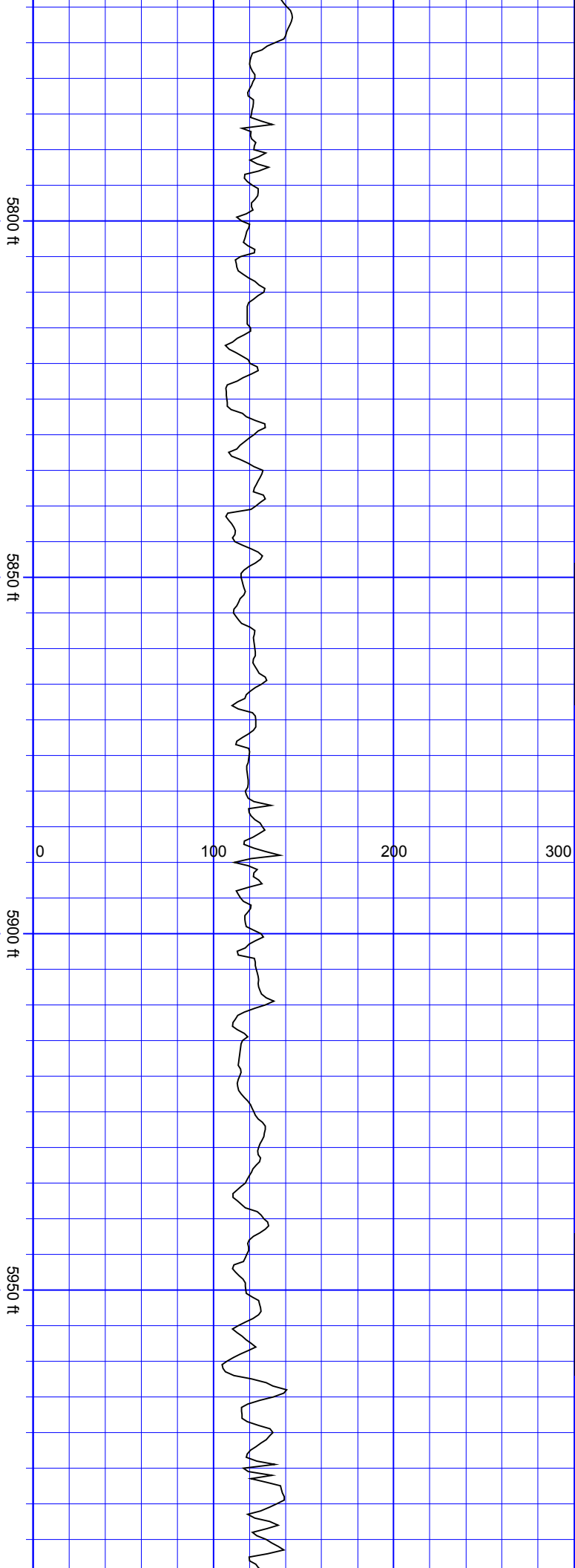


SurveyDepth:5591
TVD:5441.13 Inc:14.77
Azi:34.78 VertSec:-
130.68



SurveyDepth:5685
TVD:5531.95 Inc:15.12
Azi:32.58 VertSec:-
136.48





S
S
S
S
S
S
S

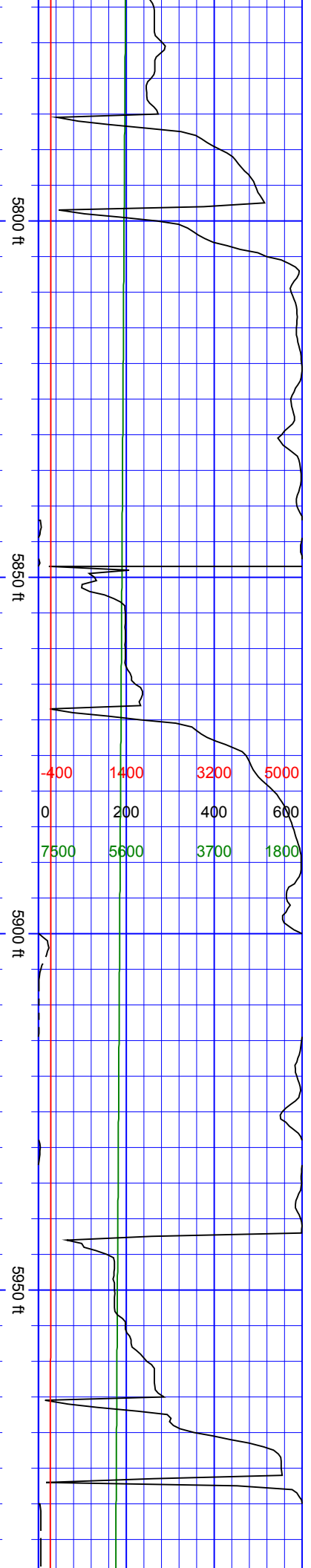
SurveyDepth:5780
TVD:5623.53 Inc:15.73
Azi:27.57 VertSec:-
140.97

S
S
S
S
S
S
S

SurveyDepth:5874
TVD:5713.9 Inc:16.22
Azi:29.33 VertSec:-
144.86

S
S
S
S
S
S
S

SurveyDepth:5968
TVD:5804.29 Inc:15.69
Azi:20.72 VertSec:-
147.24



6250 ft

0 100 200 300

6300 ft

6350 ft

6400 ft



SurveyDepth:6251
TVD:6078.39 Inc:13.84
Azi:21.15 VertSec:-
148.47

SurveyDepth:6346
TVD:6170.47 Inc:14.63
Azi:22.56 VertSec:-
149.31

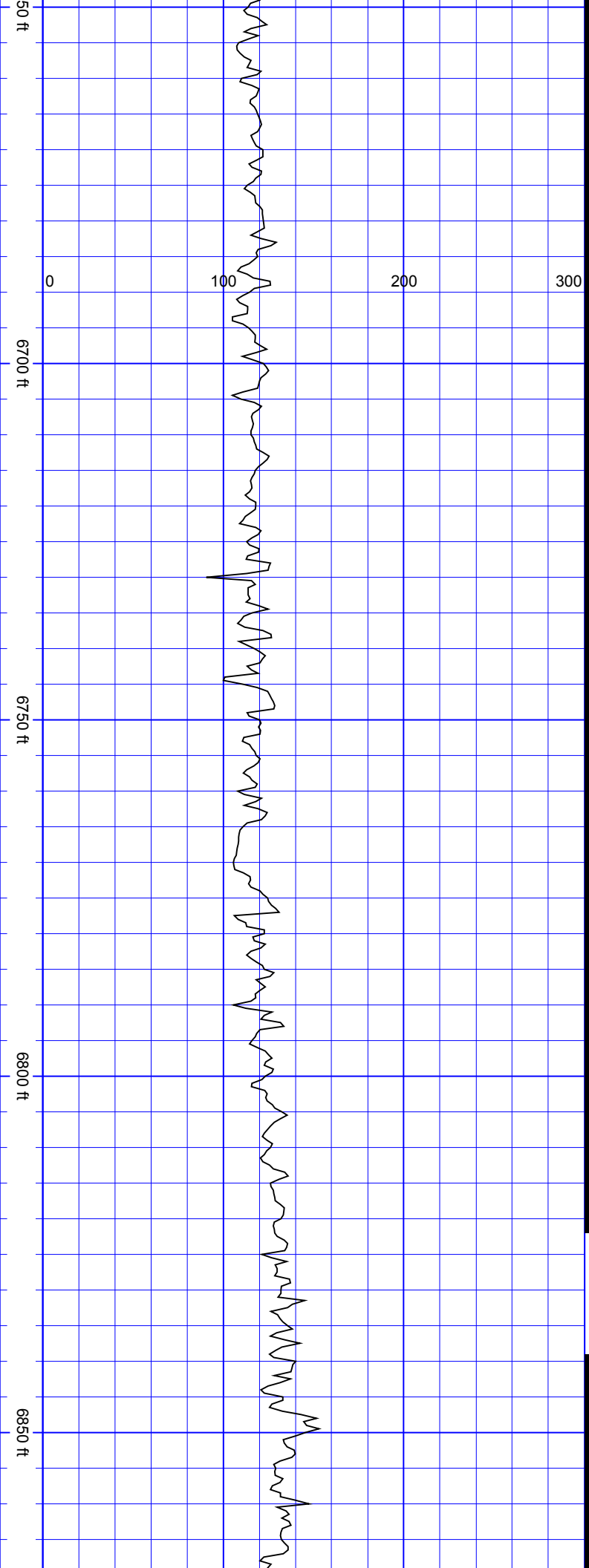
6250 ft

6300 ft

6350 ft

6400 ft

-400	1400	3200	5000
0	200	400	600
7500	5600	3700	1800



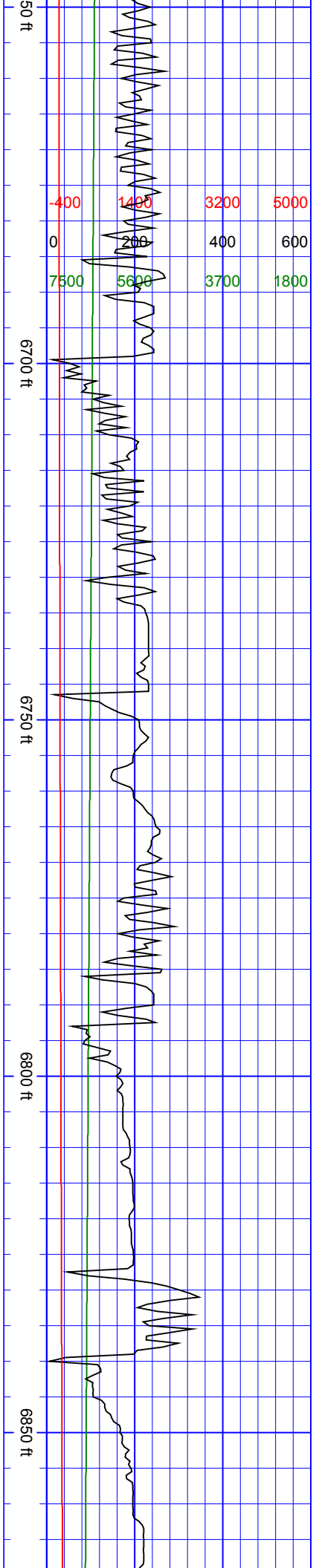
SurveyDepth:6677
TVD:6488.74 Inc:21.8
Azi:347.58 VertSec:-
140.29

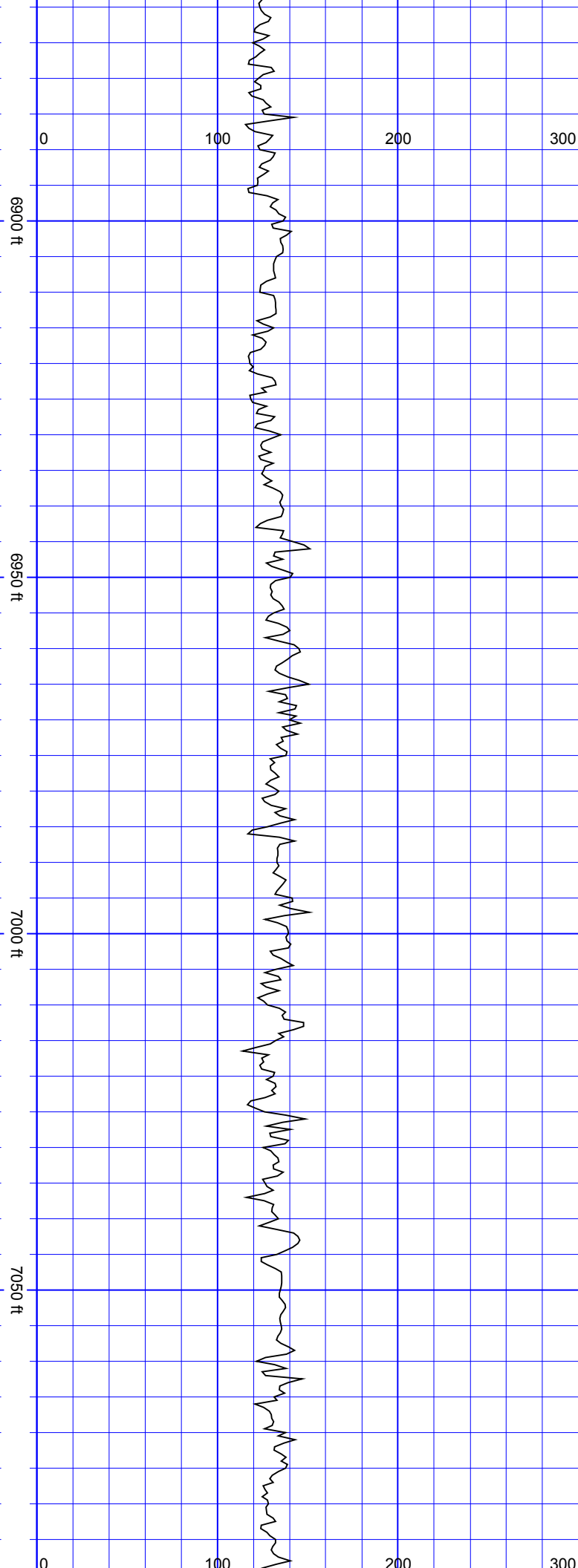
SurveyDepth:6724
TVD:6531.86 Inc:25.18
Azi:337.03 VertSec:-
128.84

SurveyDepth:6771
TVD:6574.02 Inc:27.29
Azi:334.48 VertSec:-
114.39

SurveyDepth:6818
TVD:6615.23 Inc:30.23
Azi:327.45 VertSec:-
97.35

SurveyDepth:6865
TVD:6655.25 Inc:33.09





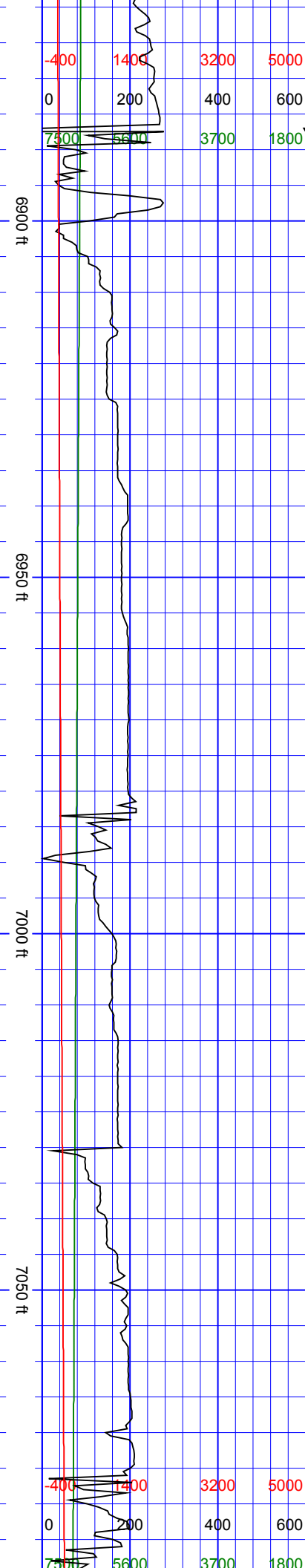
Azi:318.84 VertSec:-
76.75

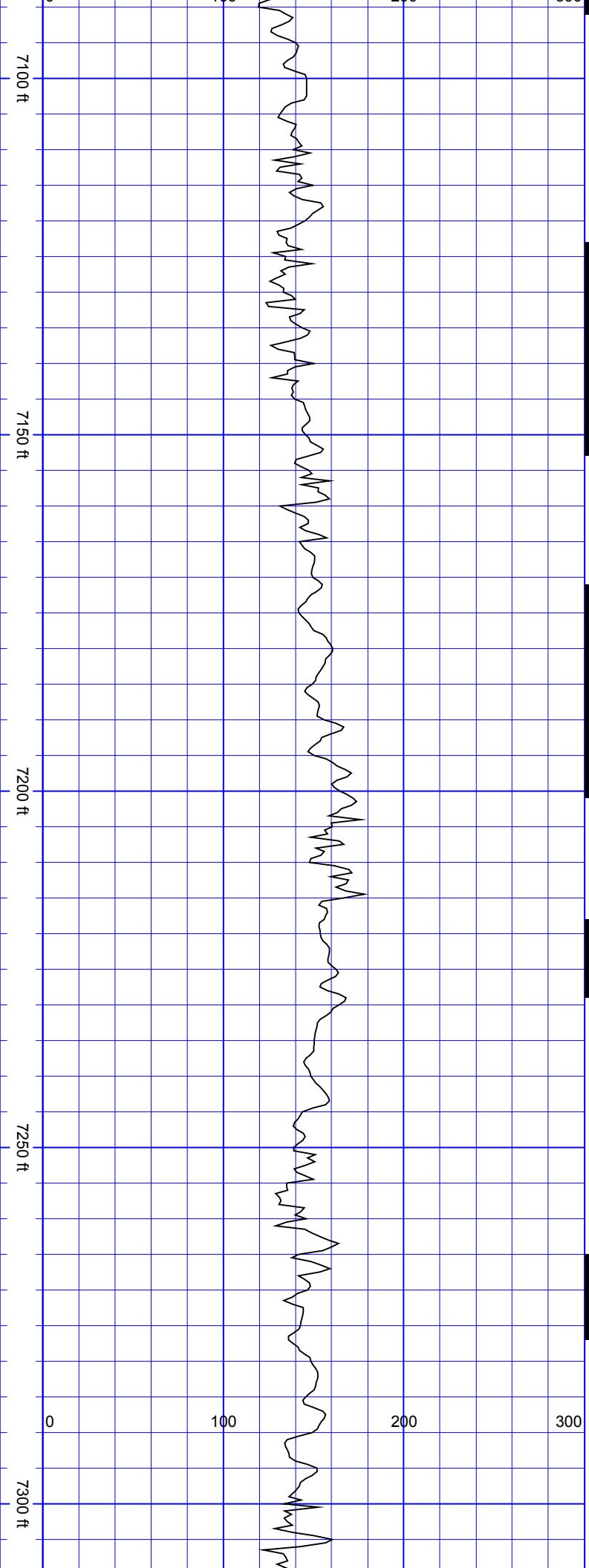
SurveyDepth:6914 TVD:6696.03 Inc:34.28 Azi:312.51 VertSec:- 52.32
--

SurveyDepth:6961 TVD:6734.02 Inc:37.93 Azi:303.9 VertSec:-26.07

SurveyDepth:7008 TVD:6770.14 Inc:41.7 Azi:296.87 VertSec:3.48

SurveyDepth:7055
TVD:6804.37 Inc:44.91
Azi:287.81
VertSec:35.61





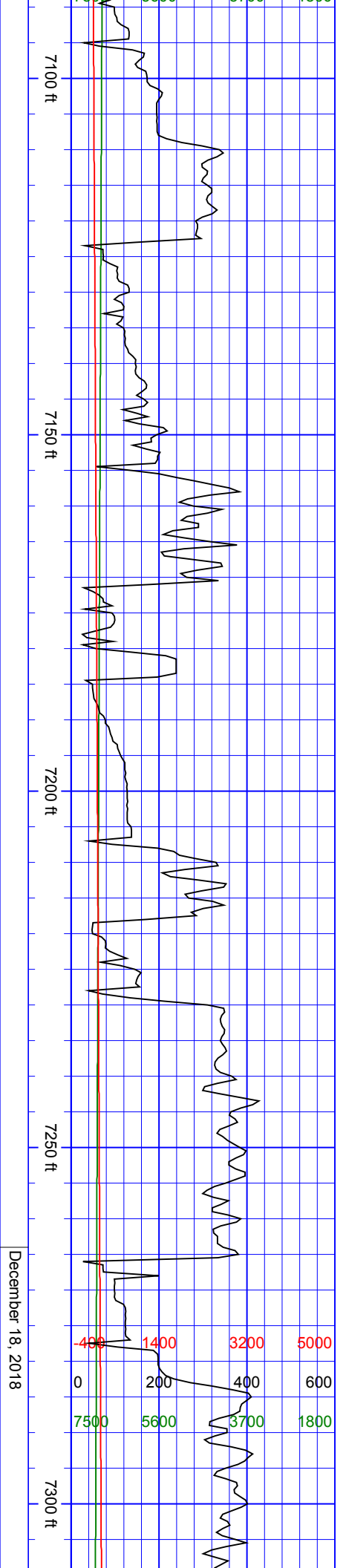
SurveyDepth:7103
TVD:6837.47 Inc:47.9
Azi:284.74 VertSec:70.3

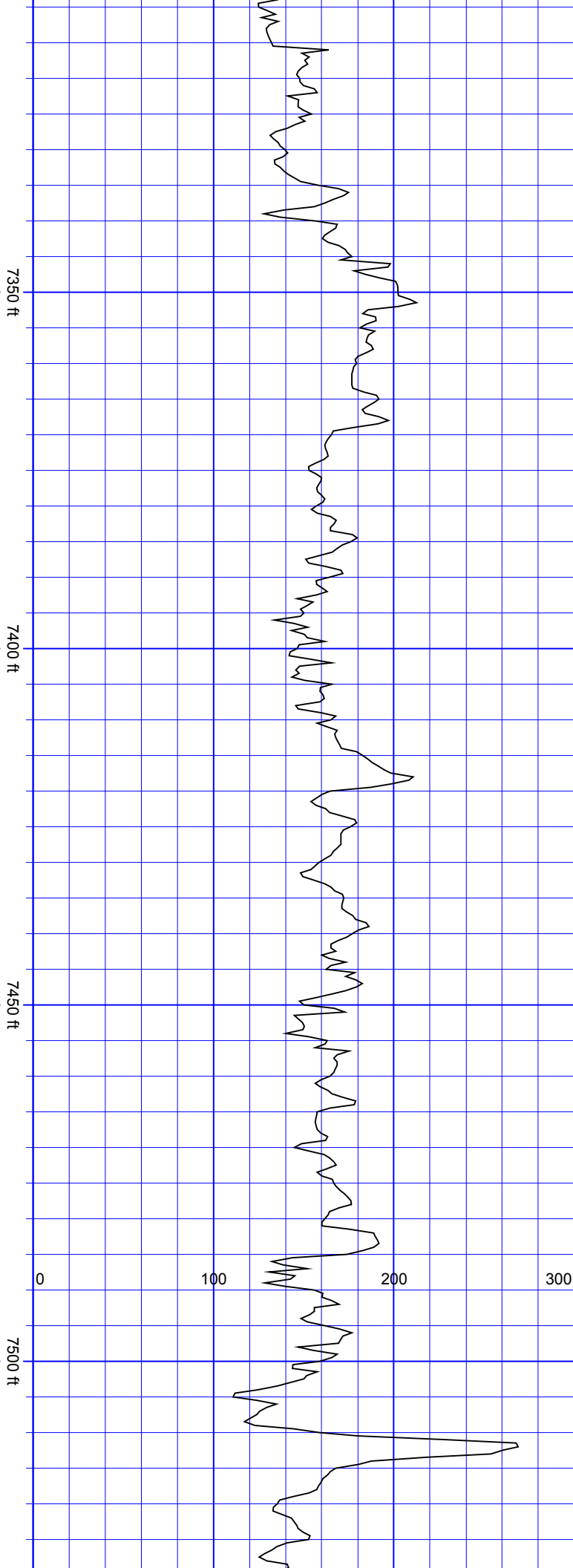
SurveyDepth:7150
TVD:6868.58 Inc:49.26
Azi:279.11
VertSec:105.18

SurveyDepth:7197
TVD:6898.9 Inc:50.41
Azi:274.81
VertSec:140.18

SurveyDepth:7244
TVD:6928.63 Inc:51.11
Azi:274.63
VertSec:175.33

SurveyDepth:7292
TVD:6958.46 Inc:52.03
Azi:274.89
VertSec:211.64





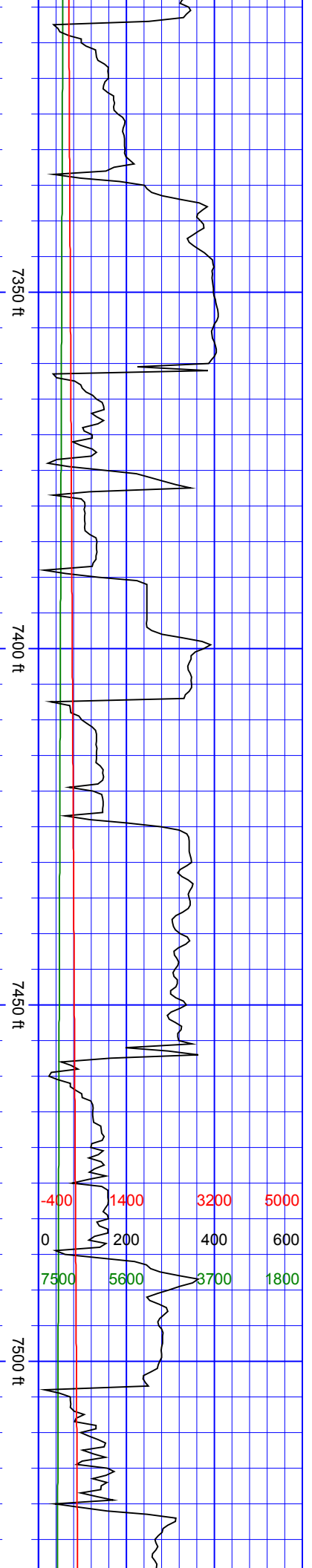
SurveyDepth:7339
TVD:6986.49 Inc:54.76
Azi:275.07
VertSec:248.11

SurveyDepth:7386
TVD:7013.25 Inc:55.81
Azi:275.86
VertSec:285.54

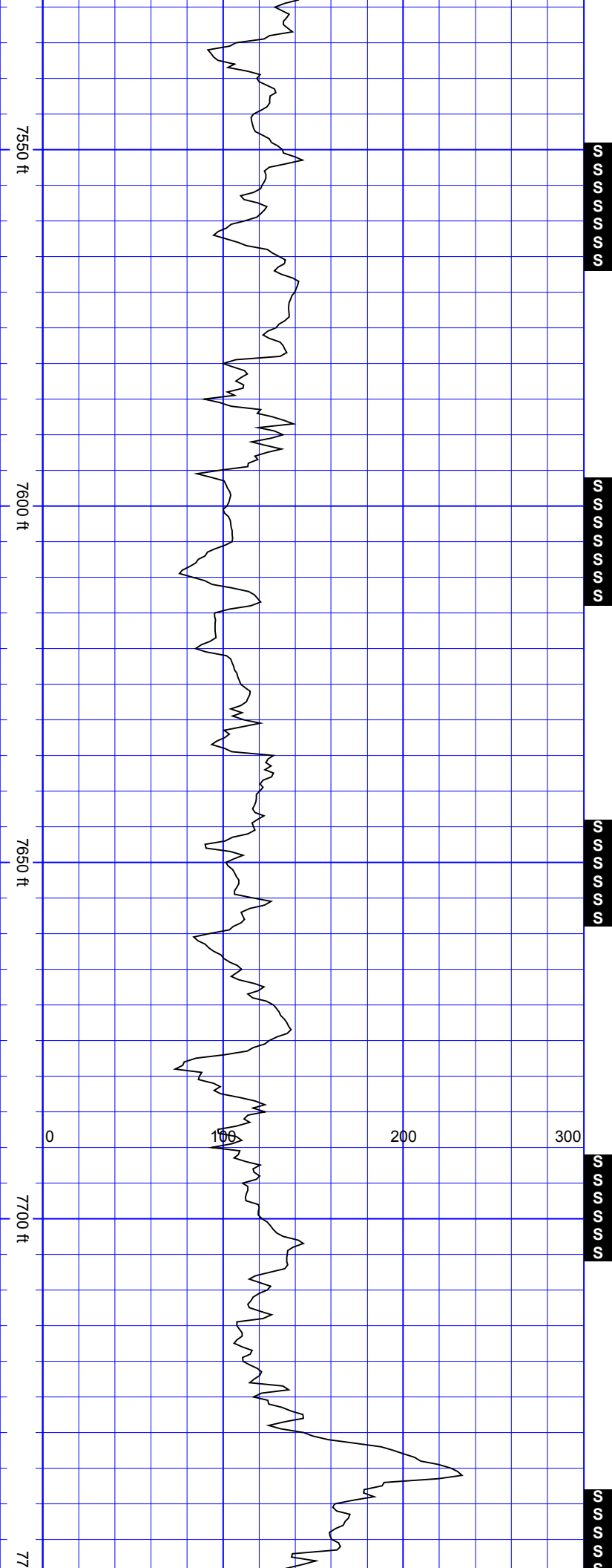
SurveyDepth:7433
TVD:7038.62 Inc:58.84
Azi:275.77
VertSec:323.93

SurveyDepth:7481
TVD:7062.43 Inc:61.7
Azi:273.4
VertSec:364.14

SurveyDepth:7529



7500
3700
5600
7500



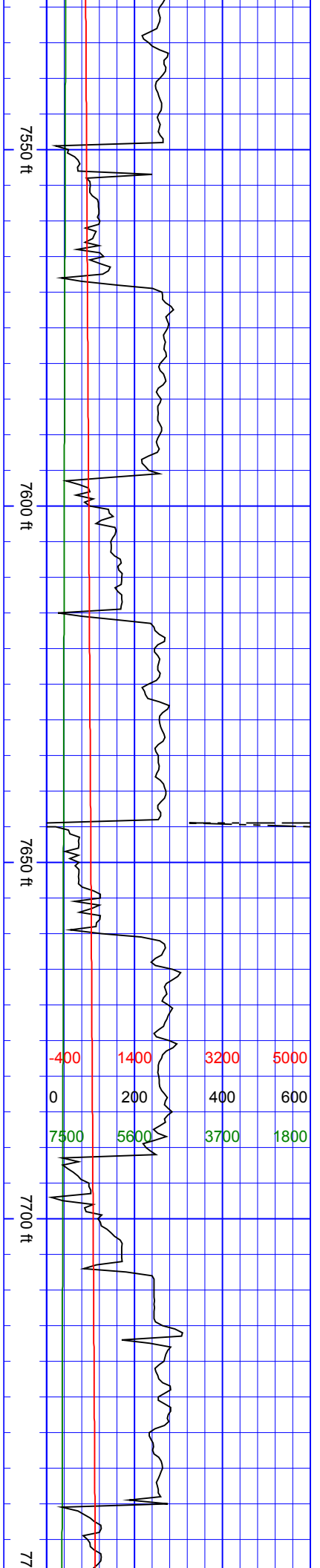
SurveyDepth:7528
TVD:7083.88 Inc:63.98
Azi:272.79
VertSec:404.19

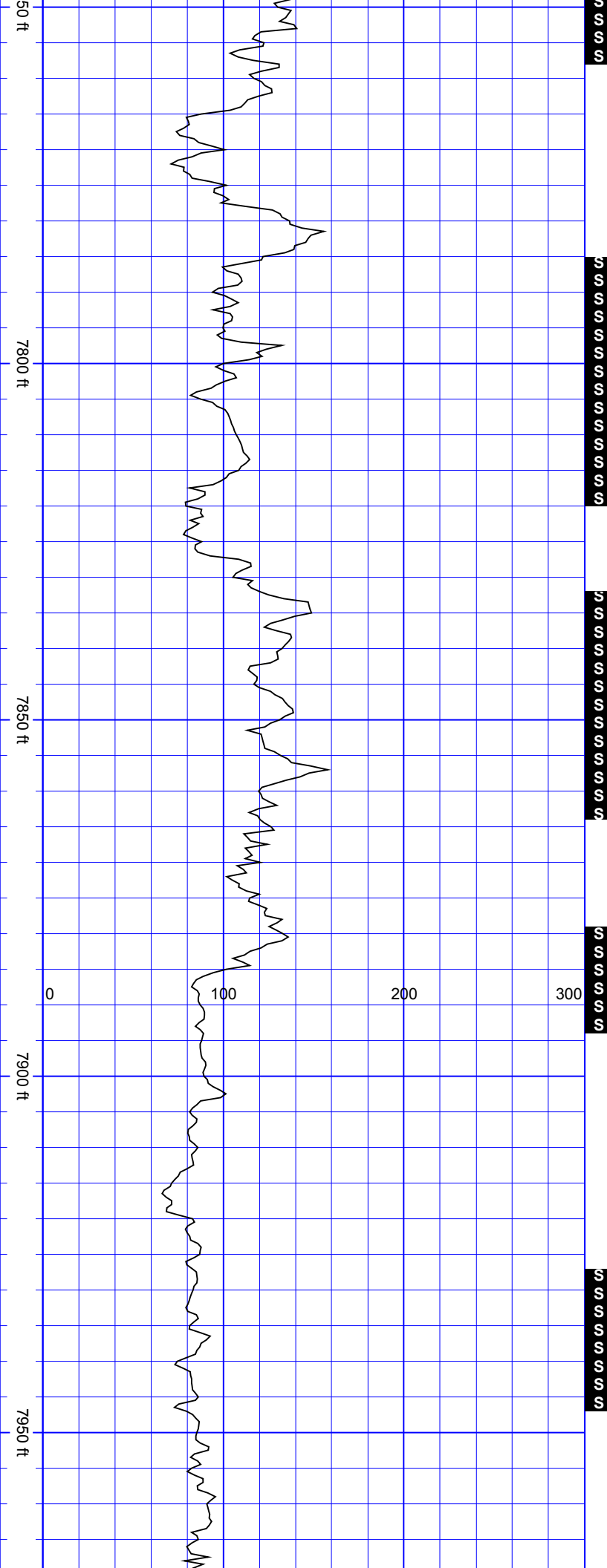
SurveyDepth:7576
TVD:7104.02 Inc:66.4
Azi:272.87
VertSec:445.86

SurveyDepth:7623
TVD:7121.77 Inc:69.21
Azi:272.96
VertSec:487.49

SurveyDepth:7670
TVD:7137.95 Inc:70.53
Azi:273.4
VertSec:529.78

SurveyDepth:7717
TVD:7153.17 Inc:71.68
Azi:274.02
VertSec:572.5



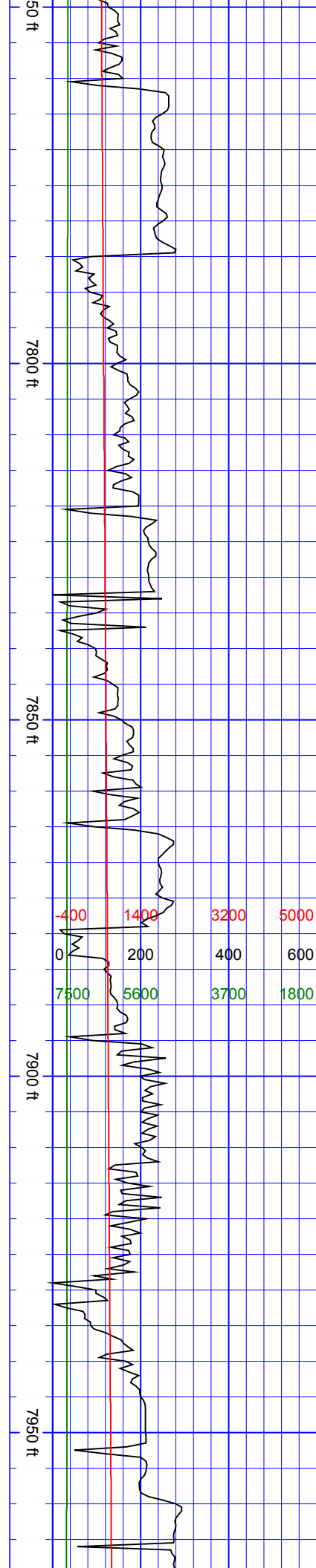


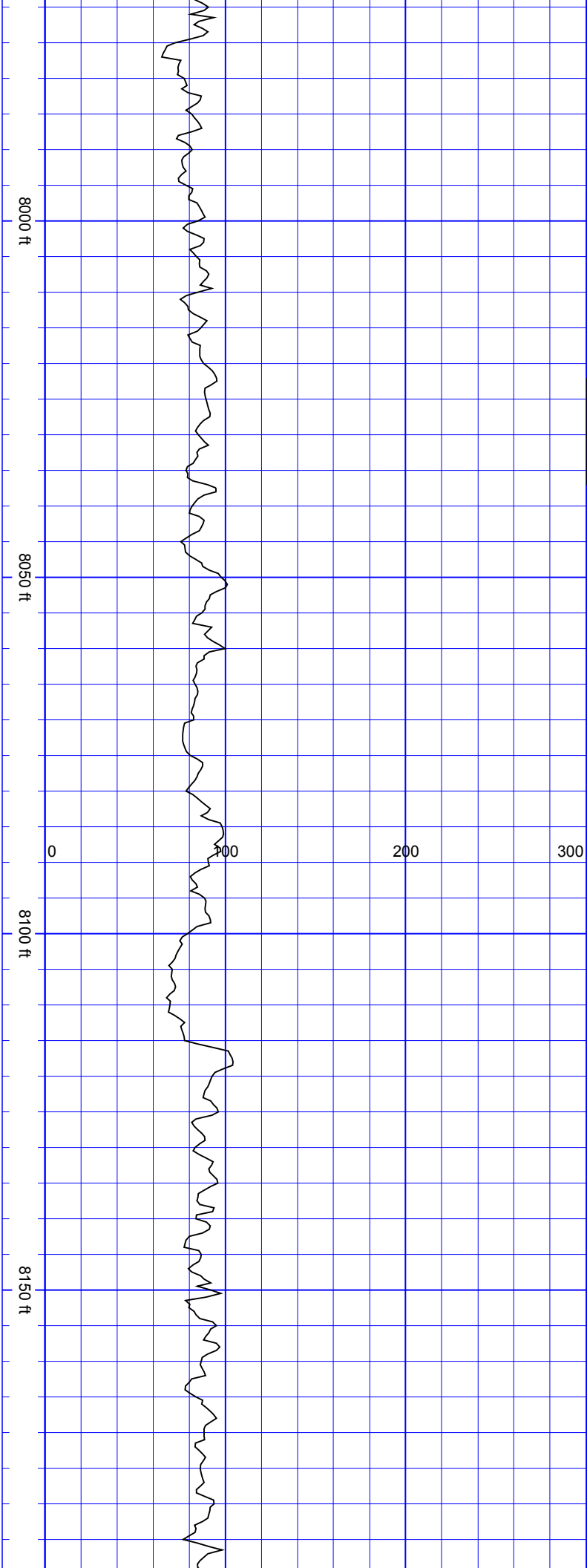
SurveyDepth:7764
TVD:7167.03 Inc:74
Azi:273.4
VertSec:615.65

SurveyDepth:7811
TVD:7178.03 Inc:78.93
Azi:272.87
VertSec:659.41

SurveyDepth:7859
TVD:7185.24 Inc:83.8
Azi:272.08
VertSec:704.7

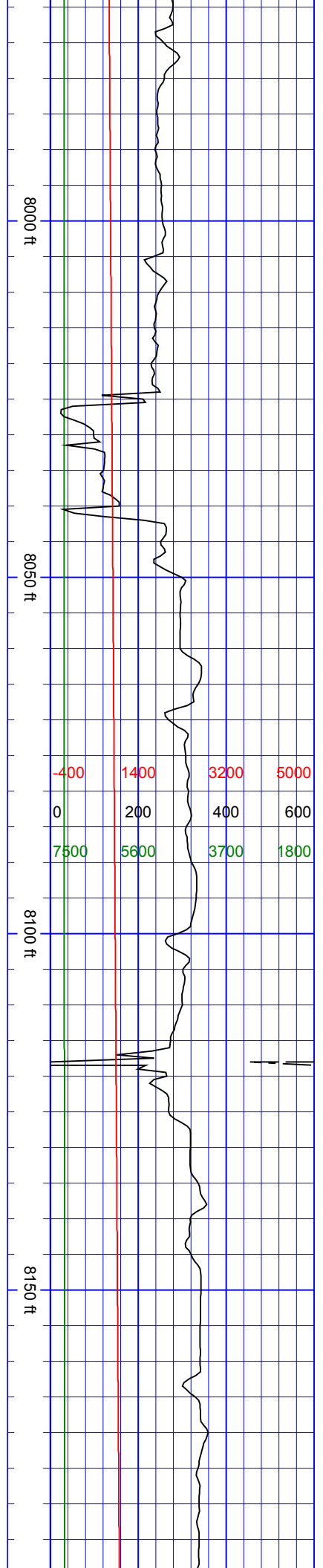
SurveyDepth:7954
TVD:7191.83 Inc:88.24
Azi:271.03
VertSec:794.68

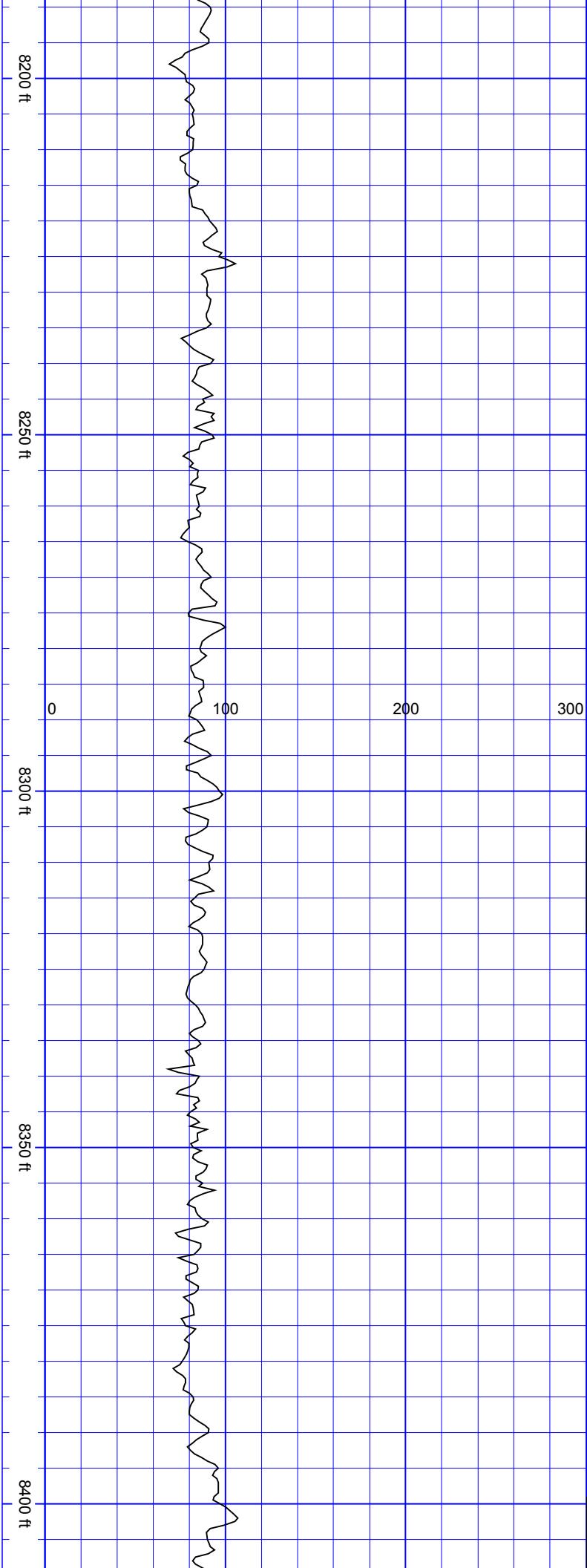




SurveyDepth:8048
TVD:7192.73 Inc:90.66
Azi:270.41
VertSec:883.5

SurveyDepth:8142
TVD:7191.57 Inc:90.75
Azi:270.06
VertSec:972.07



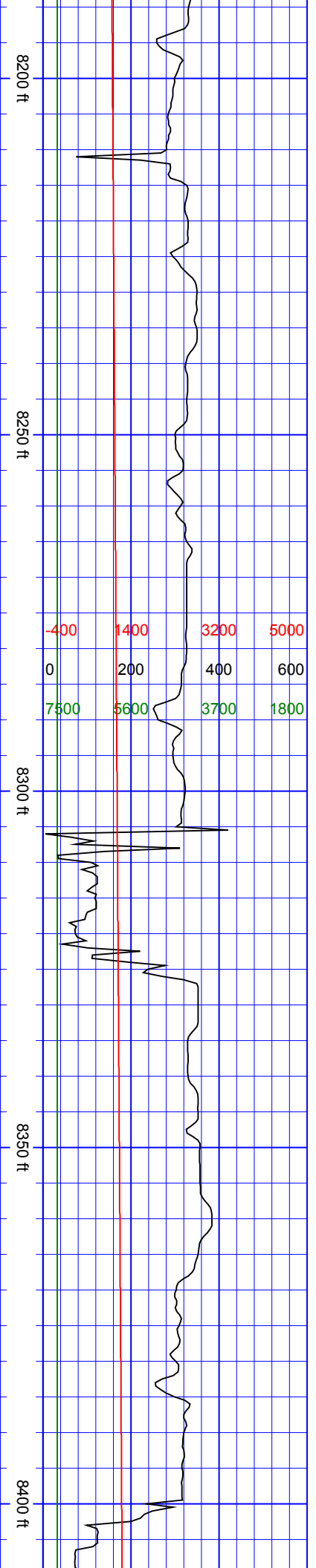


SurveyDepth:8237
TVD:7190.88 Inc:90.09
Azi:269.09
VertSec:1061.21

S
S
S
S
S

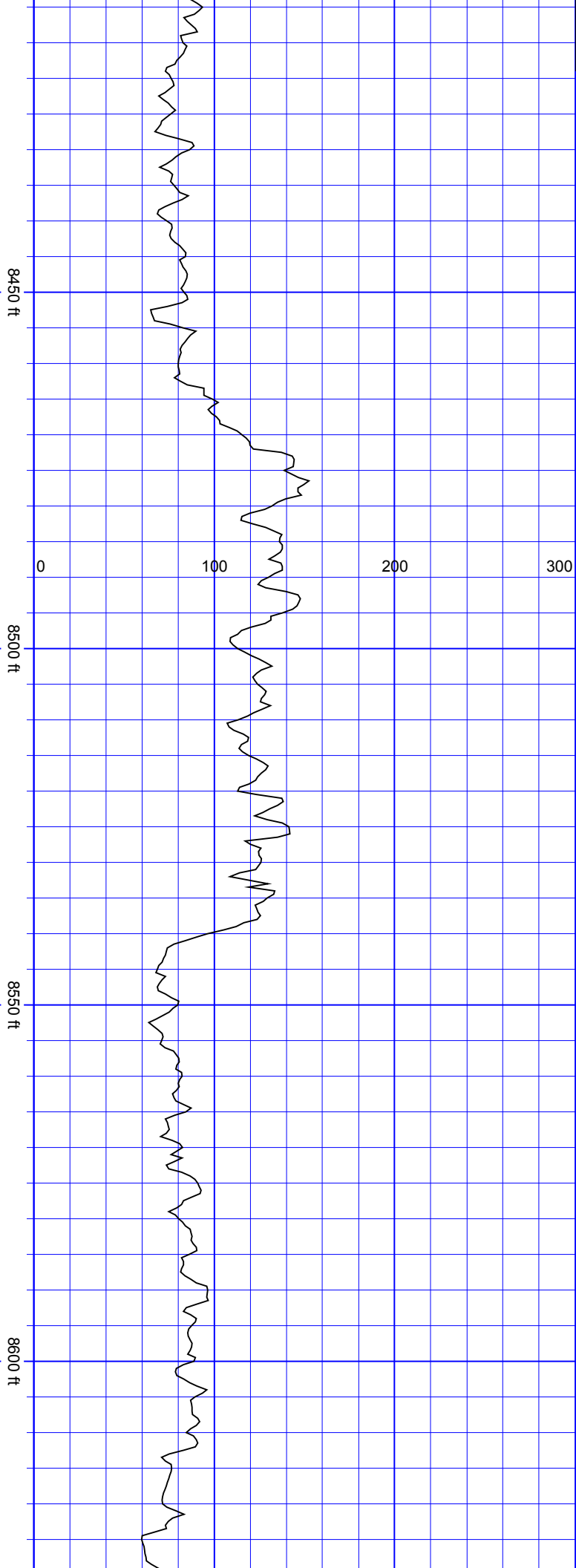
SurveyDepth:8331
TVD:7190.84 Inc:89.96
Azi:269.53
VertSec:1149.26

S
S
S
S

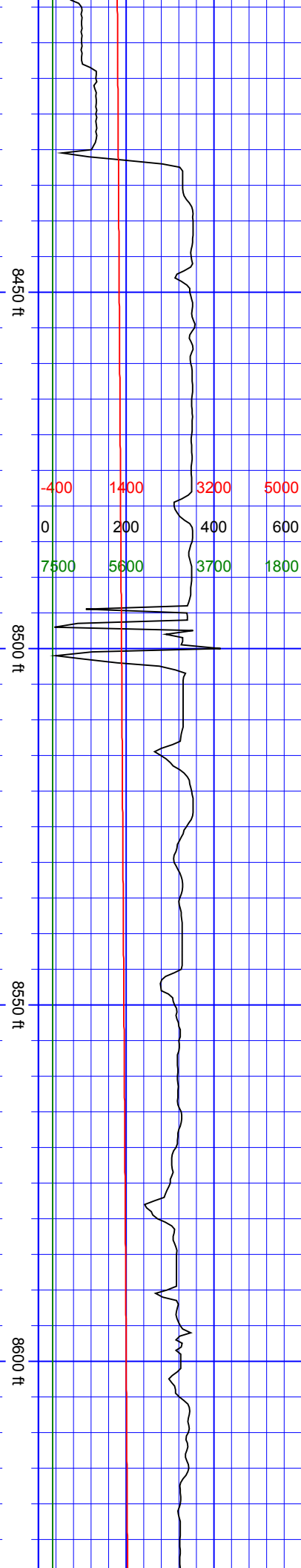


S
S
S
S

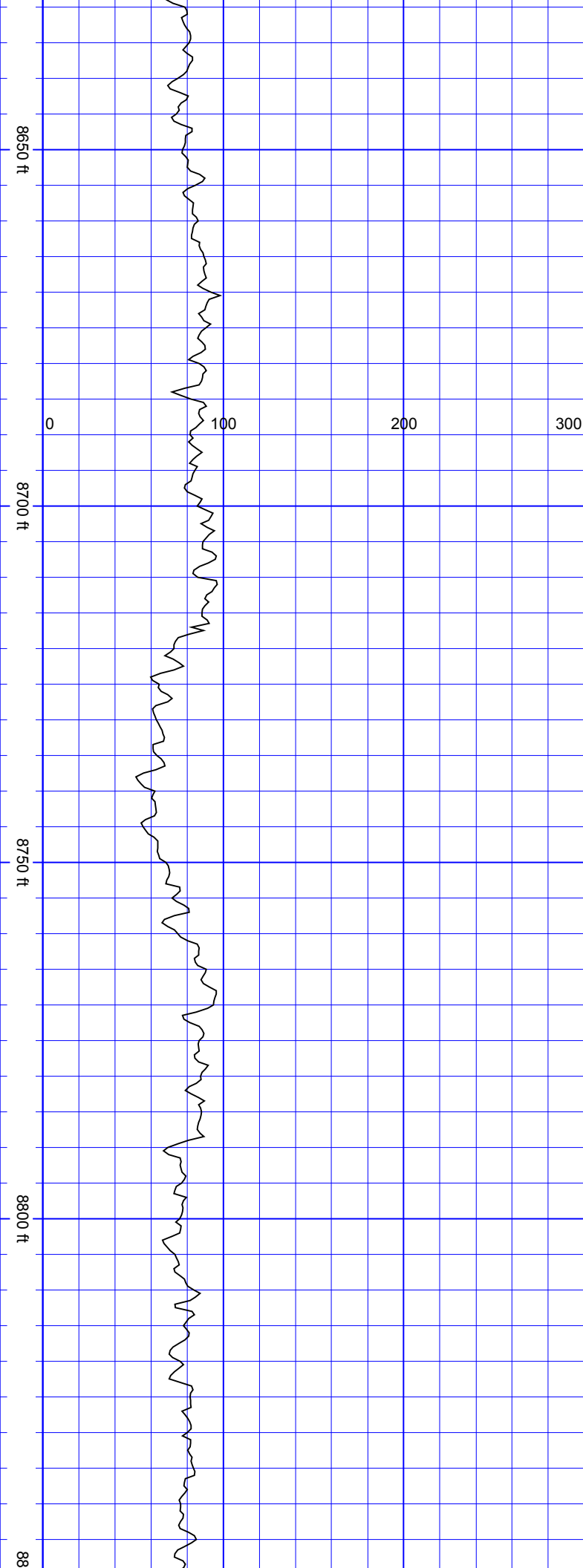
SurveyDepth:8426
TVD:7190.43 Inc:90.53
Azi:272.87
VertSec:1239.28



SurveyDepth:8521
TVD:7189.11 Inc:91.06
Azi:273.05
VertSec:1330.2

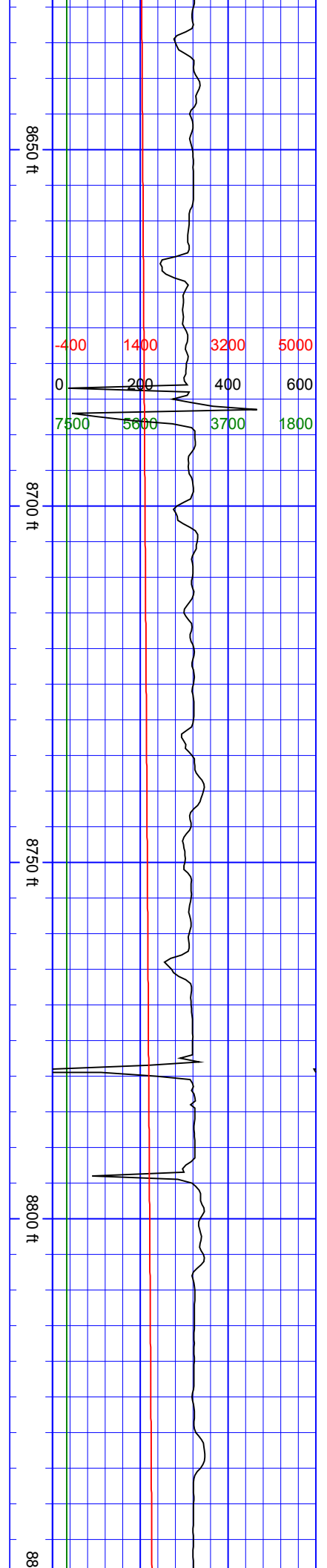


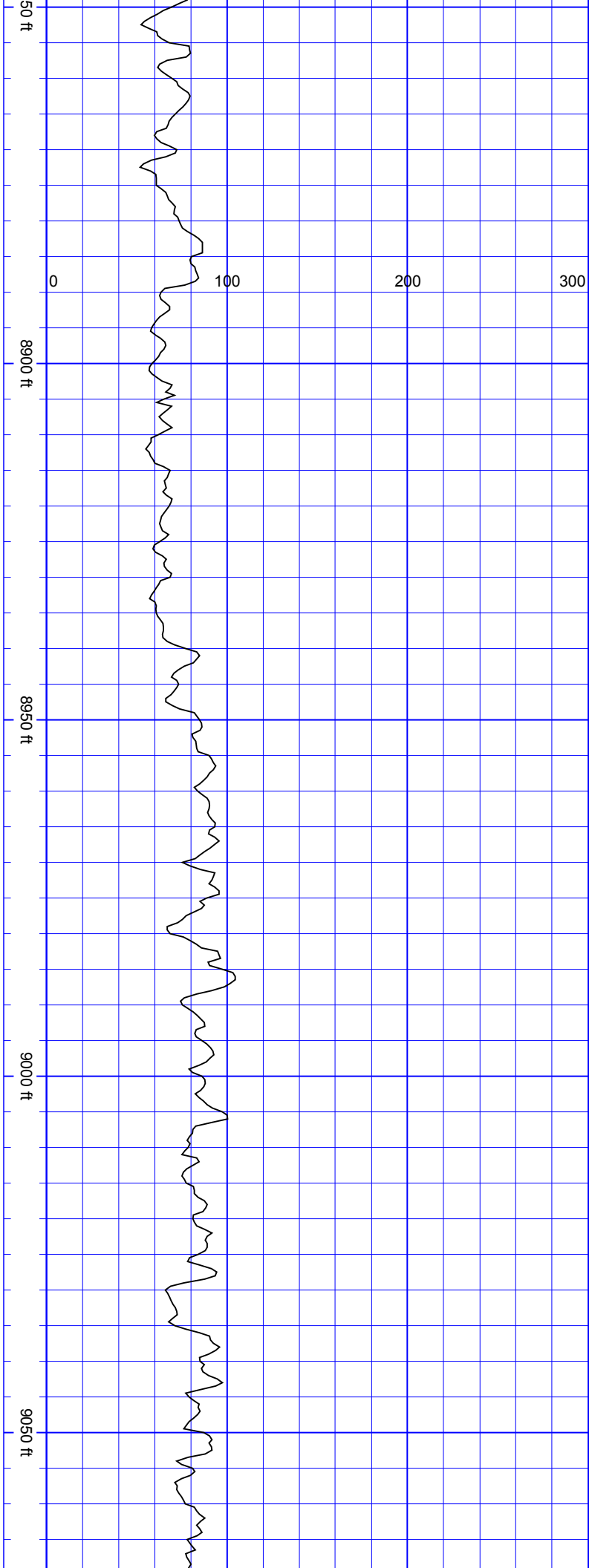
SurveyDepth:8615
TVD:7187.55 Inc:90.84
Azi:272.79
VertSec:1420.14



SurveyDepth:8709
TVD:7186.07 Inc:90.97
Azi:272.79
VertSec:1510.02

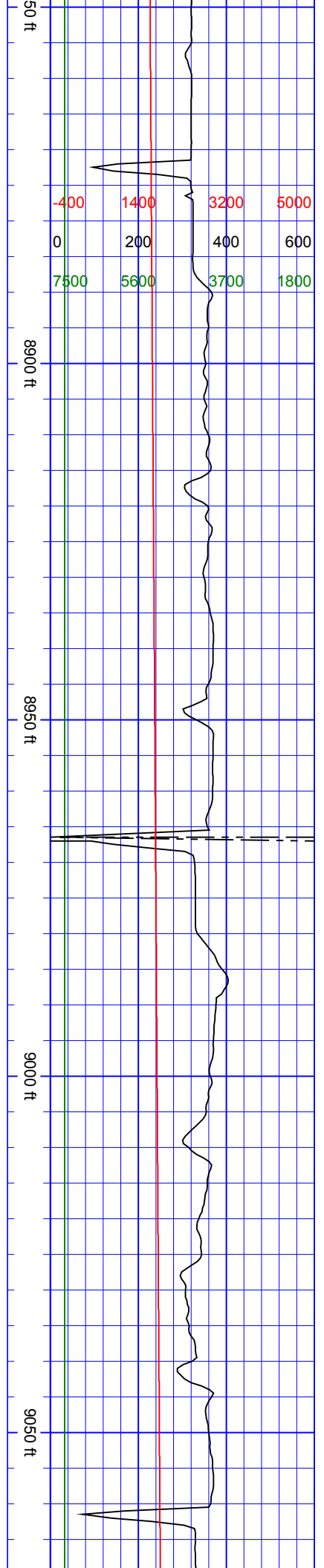
SurveyDepth:8803
TVD:7184.76 Inc:90.62
Azi:272.43
VertSec:1599.81

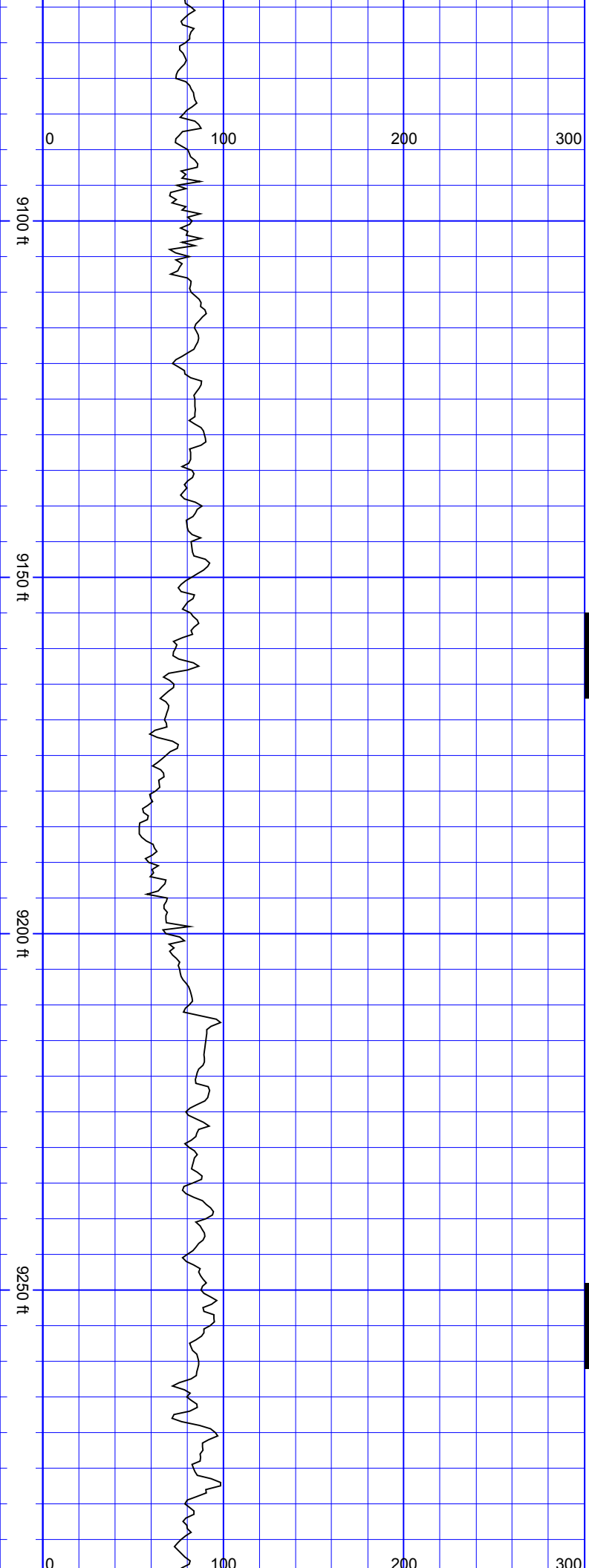




SurveyDepth:8898
TVD:7183.74 Inc:90.62
Azi:271.99
VertSec:1690.36

SurveyDepth:8992
TVD:7182.54 Inc:90.84
Azi:271.99
VertSec:1779.85

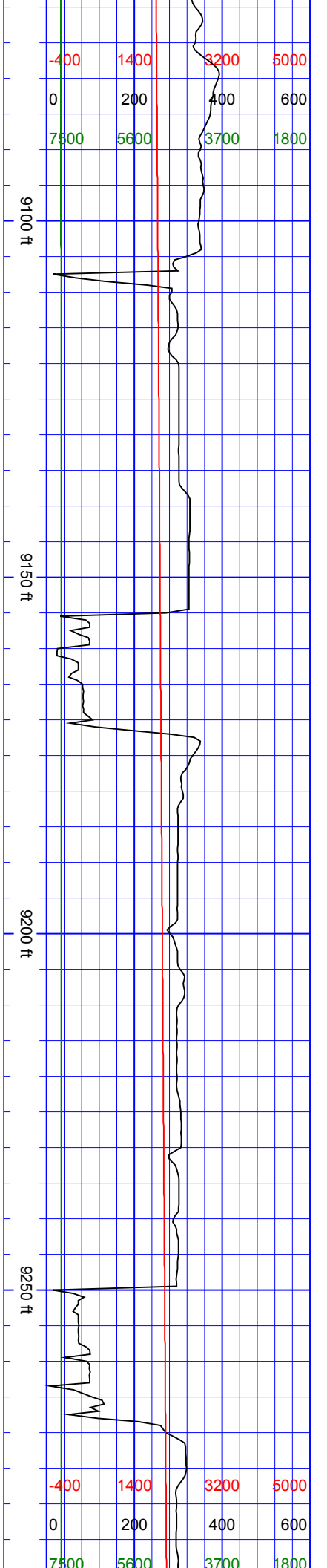


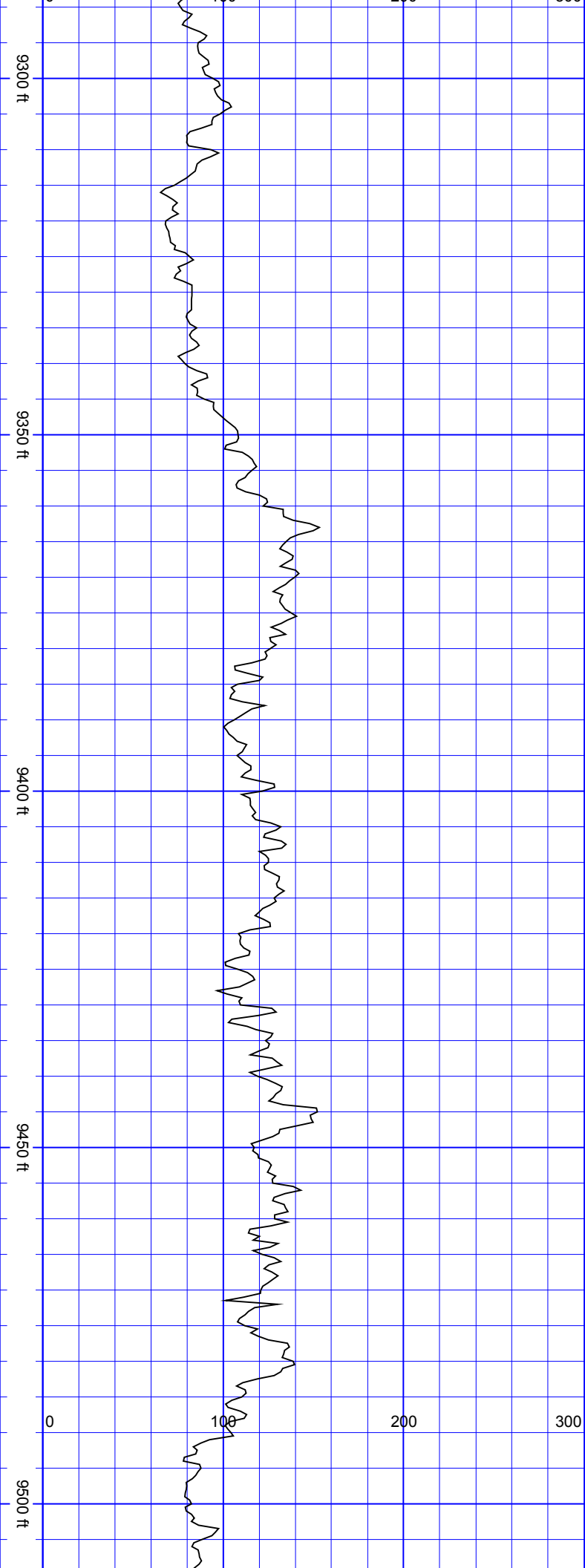


SurveyDepth:9087
TVD:7181.69 Inc:90.18
Azi:271.29
VertSec:1870.11

SurveyDepth:9181
TVD:7181.29 Inc:90.31
Azi:272.17
VertSec:1959.47

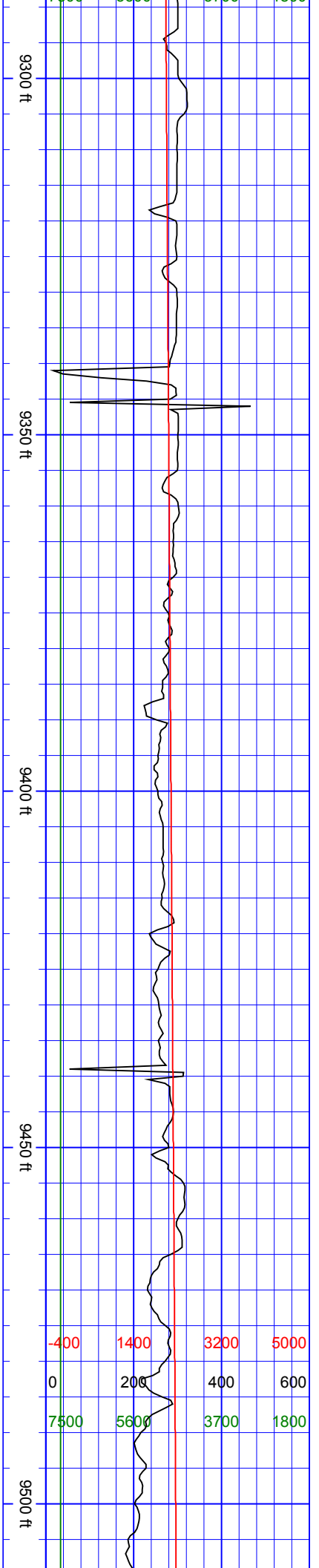
SurveyDepth:9276
TVD:7180.78 Inc:90.31
Azi:274.28
VertSec:2050.52

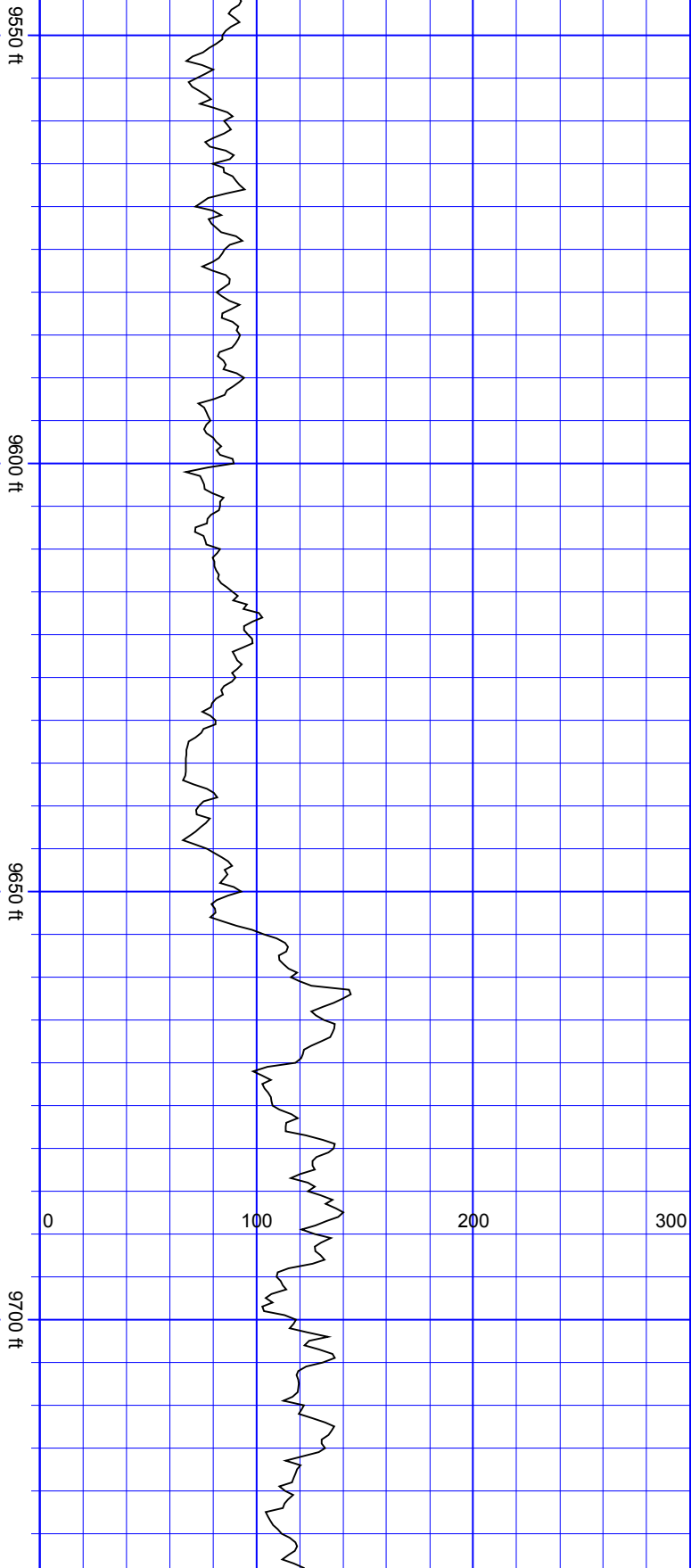




SurveyDepth:9370
TVD:7180.05 Inc:90.57
Azi:273.93
VertSec:2141.01

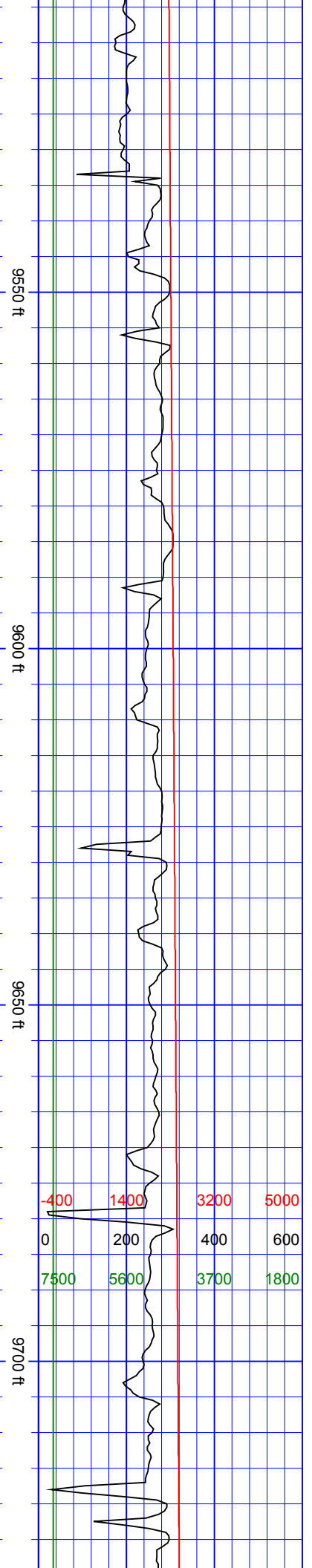
SurveyDepth:9465
TVD:7178.96 Inc:90.75
Azi:273.75
VertSec:2232.34

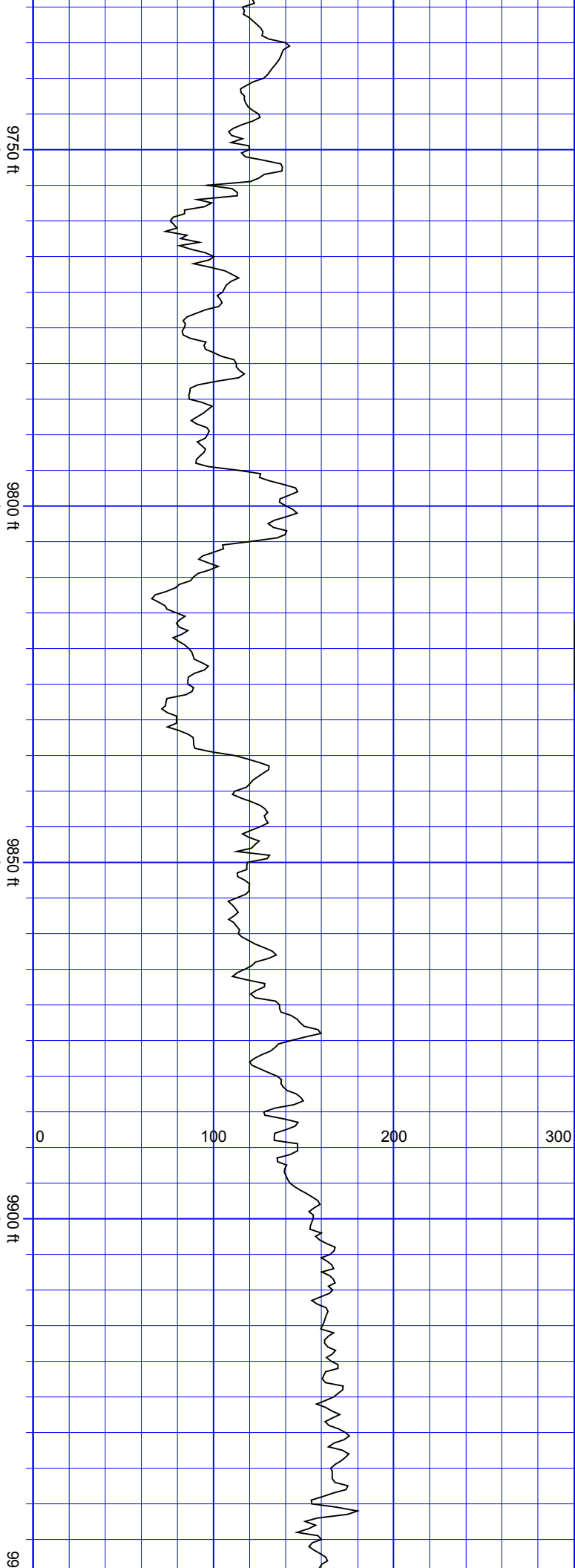




SurveyDepth:9559
TVD:7177.44 Inc:91.1
Azi:273.49
VertSec:2322.61

SurveyDepth:9653
TVD:7175.38 Inc:91.41
Azi:273.05
VertSec:2412.7

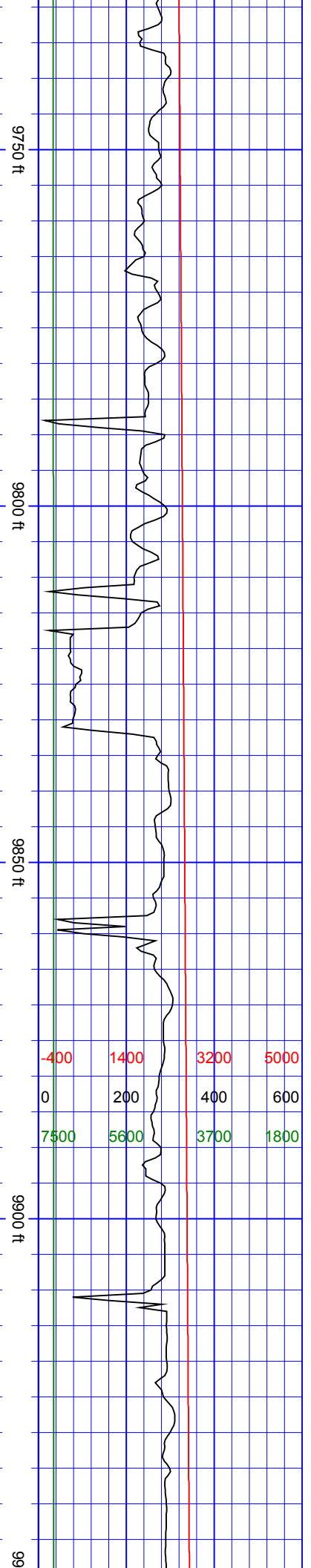


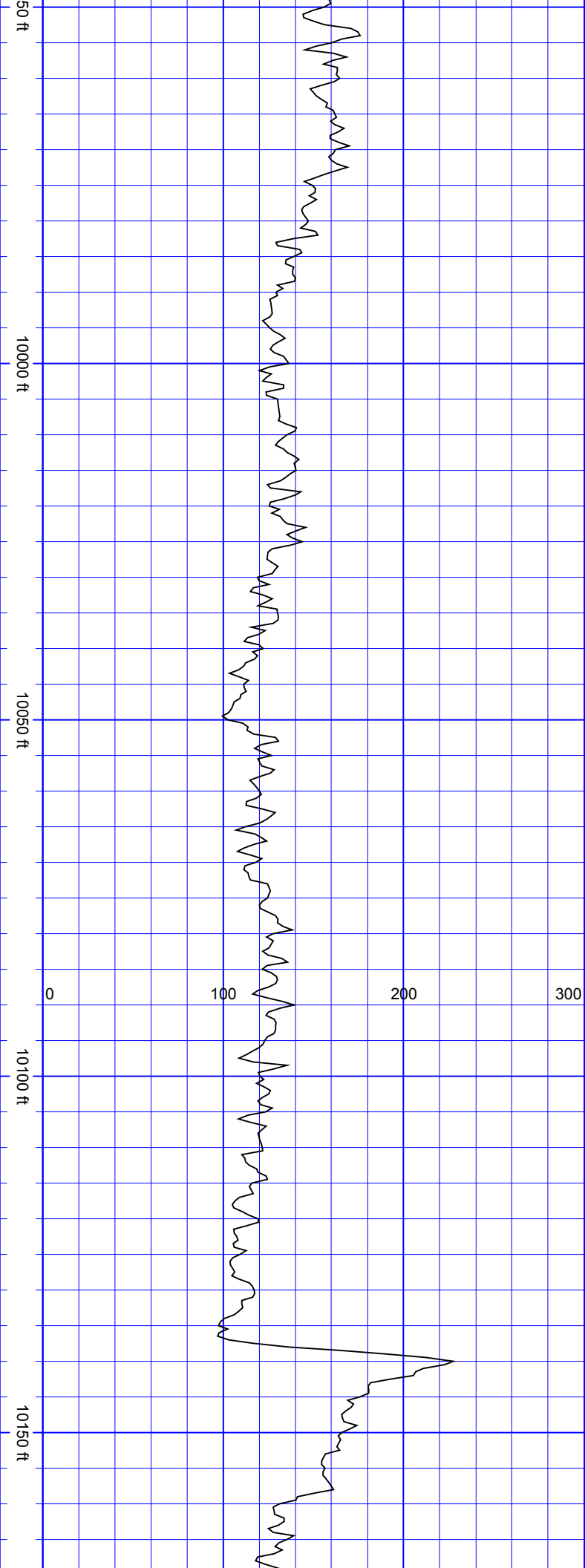


SurveyDepth:9748
TVD:7172.54 Inc:92.02
Azi:272.87
VertSec:2503.59

SurveyDepth:9842
TVD:7170.2 Inc:90.84
Azi:273.05
VertSec:2593.53

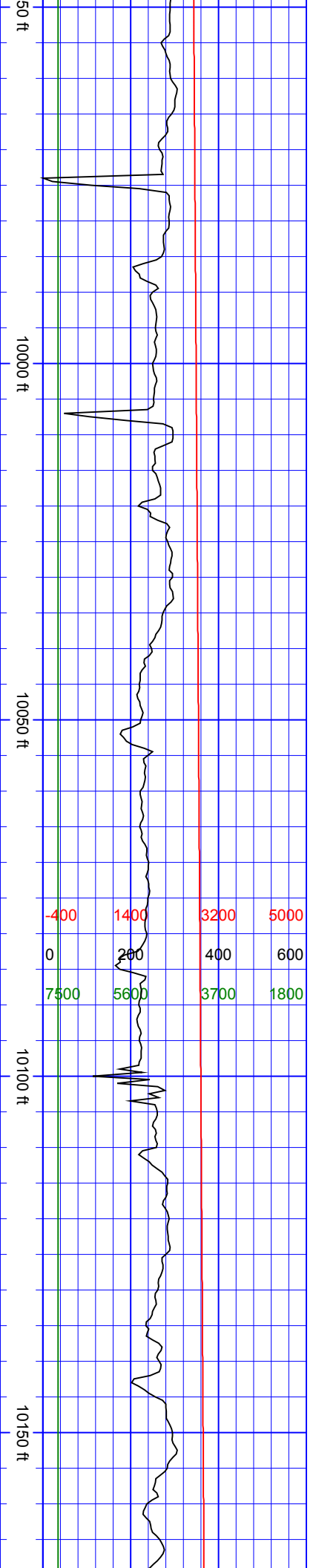
SurveyDepth:9937
TVD:7168.66 Inc:91.01
Azi:273.84
VertSec:2684.67





SurveyDepth:10031
TVD:7167.26 Inc:90.7
Azi:273.93
VertSec:2775.06

SurveyDepth:10125
TVD:7166.47 Inc:90.26
Azi:273.58
VertSec:2865.39



10200 ft

10250 ft

10300 ft

10350 ft

0 100 200 300

S
S
S
S

SurveyDepth:10220
TVD:7166.41 Inc:89.82
Azi:273.49
VertSec:2956.59

SurveyDepth:10314
TVD:7166.45 Inc:90.13
Azi:271.29
VertSec:3046.28

S
S
S
S

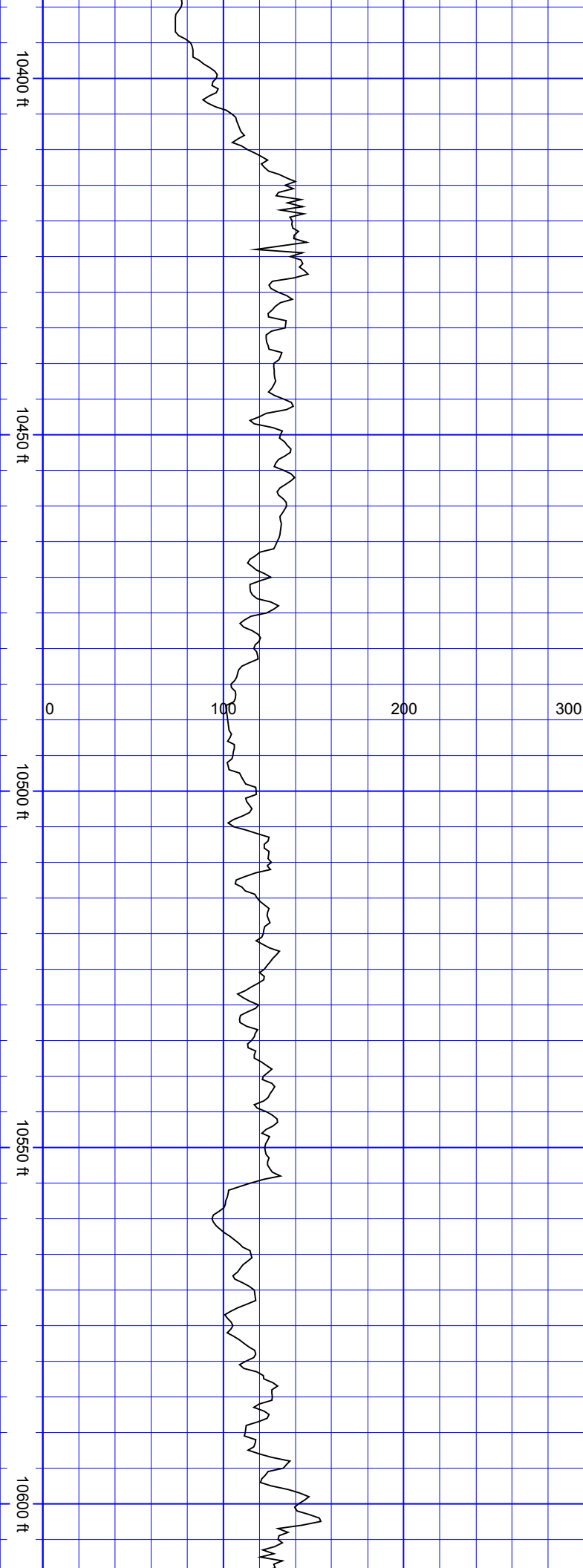
10200 ft

10250 ft

10300 ft

10350 ft

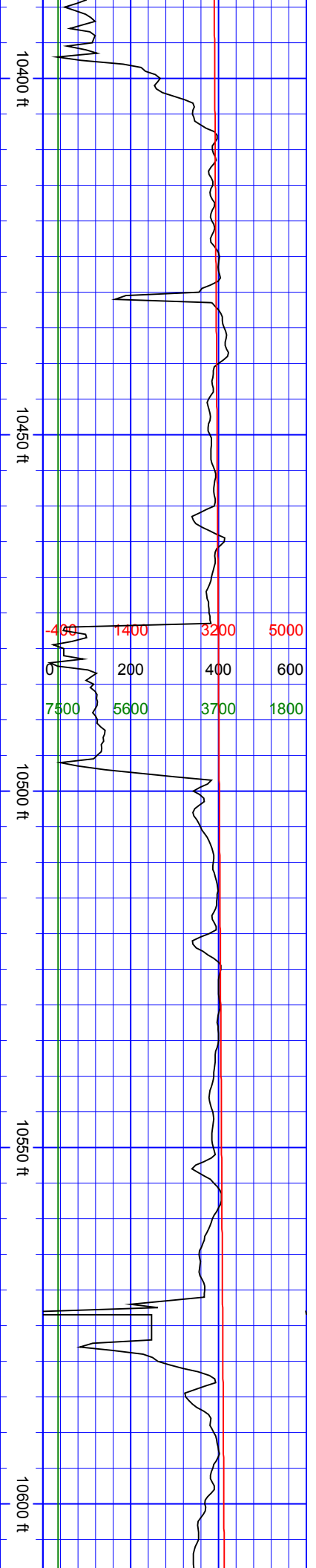
-400	1400	3200	5000
0	200	400	600
7500	5000	3700	1800

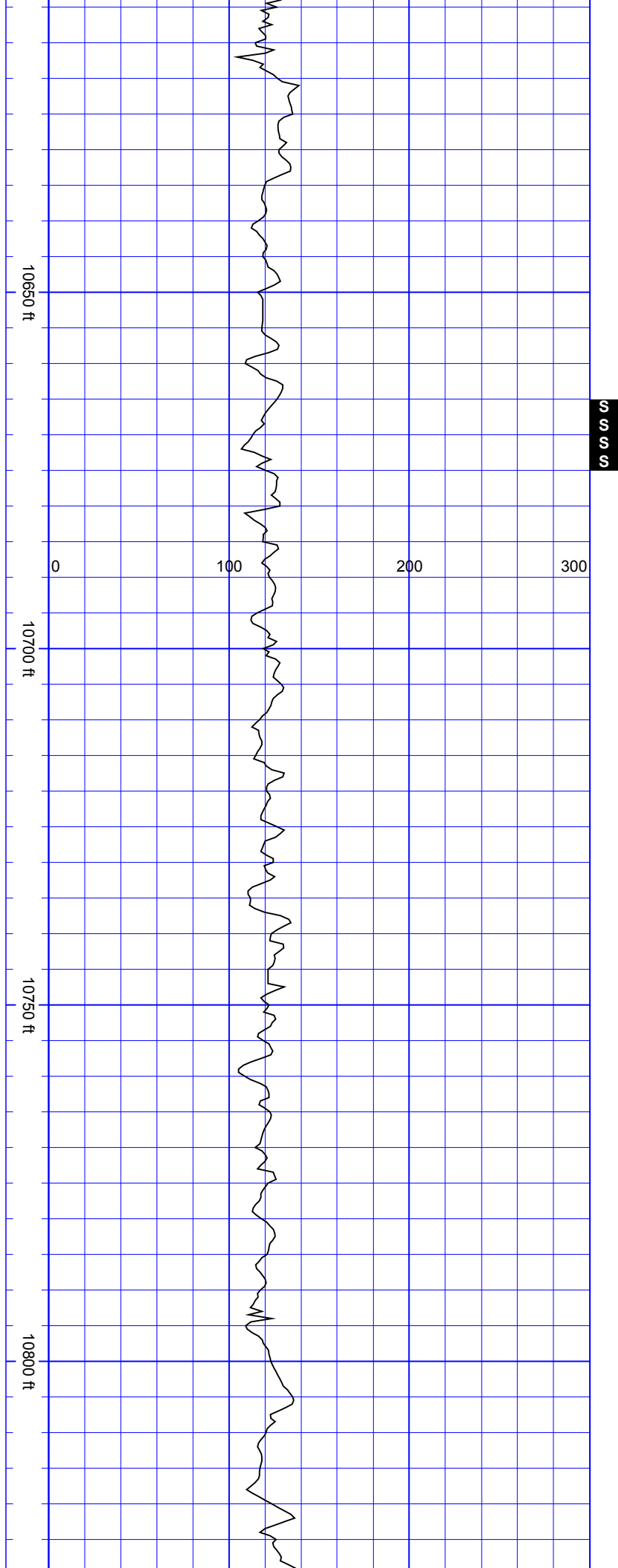


SurveyDepth:10409
TVD:7166.05 Inc:90.35
Azi:269.71
VertSec:3135.93

SurveyDepth:10503
TVD:7166.38 Inc:89.25
Azi:267.78
VertSec:3223.65

SurveyDepth:10597
TVD:7167.39 Inc:89.52
Azi:267.51
VertSec:3310.71

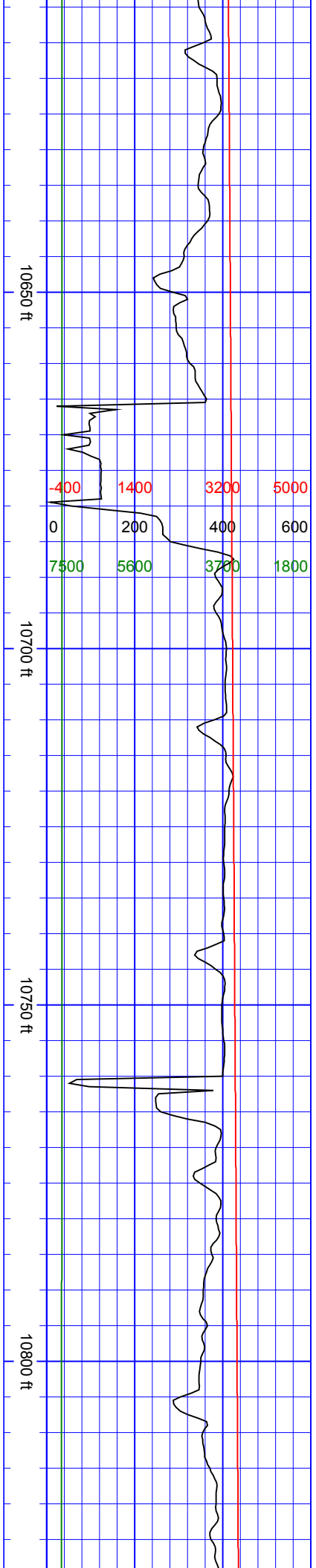


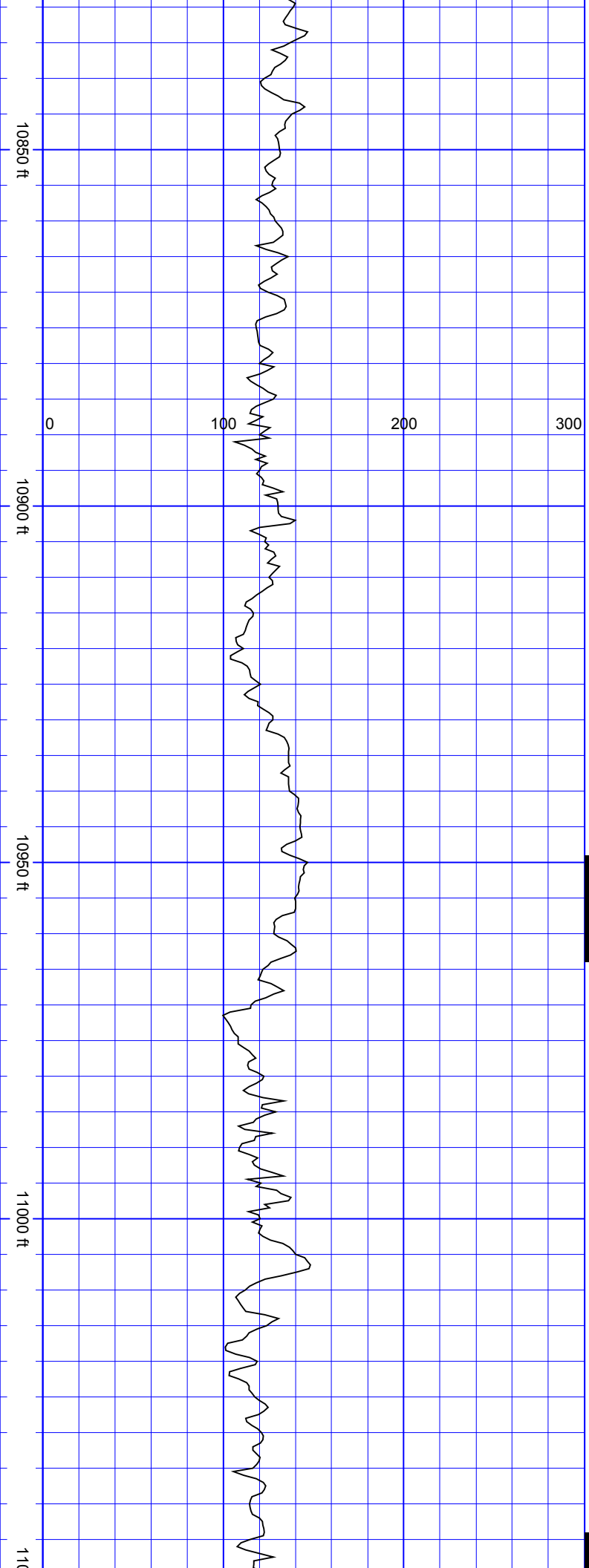


S
S
S
S

SurveyDepth:10692
TVD:7169.09 Inc:88.42
Azi:266.46
VertSec:3398.26

SurveyDepth:10787
TVD:7171.31 Inc:88.9
Azi:266.19
VertSec:3485.37



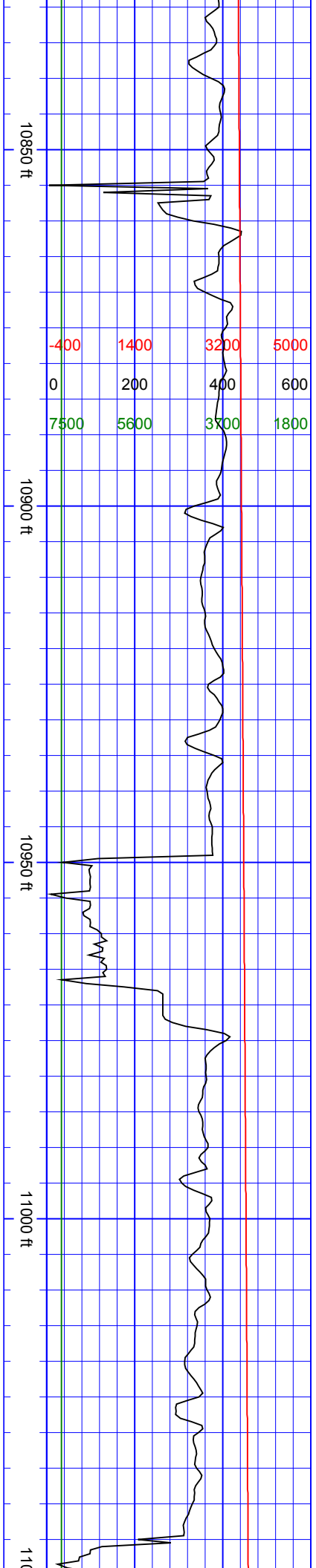


SurveyDepth:10881
TVD:7173.26 Inc:88.73
Azi:265.23
VertSec:3571.16

SurveyDepth:10976
TVD:7176.17 Inc:87.76
Azi:266.98
VertSec:3658.11

S
S
S
S
S

S
S

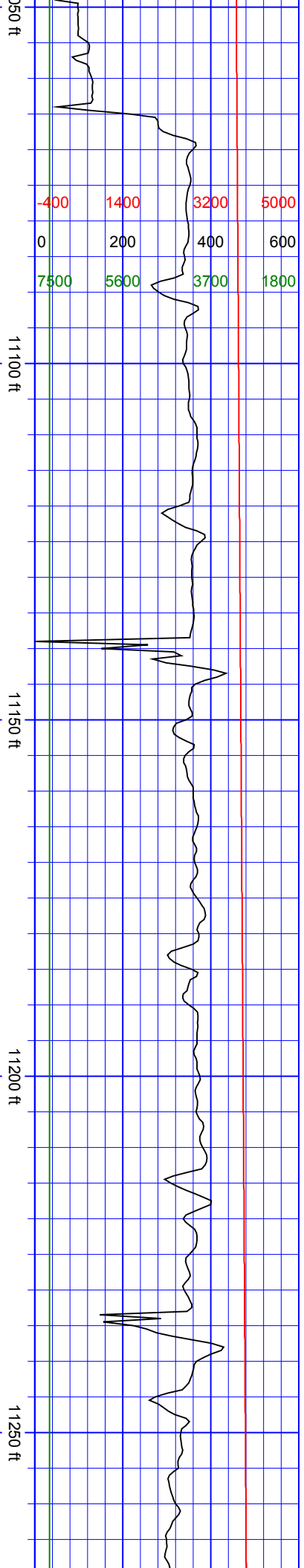
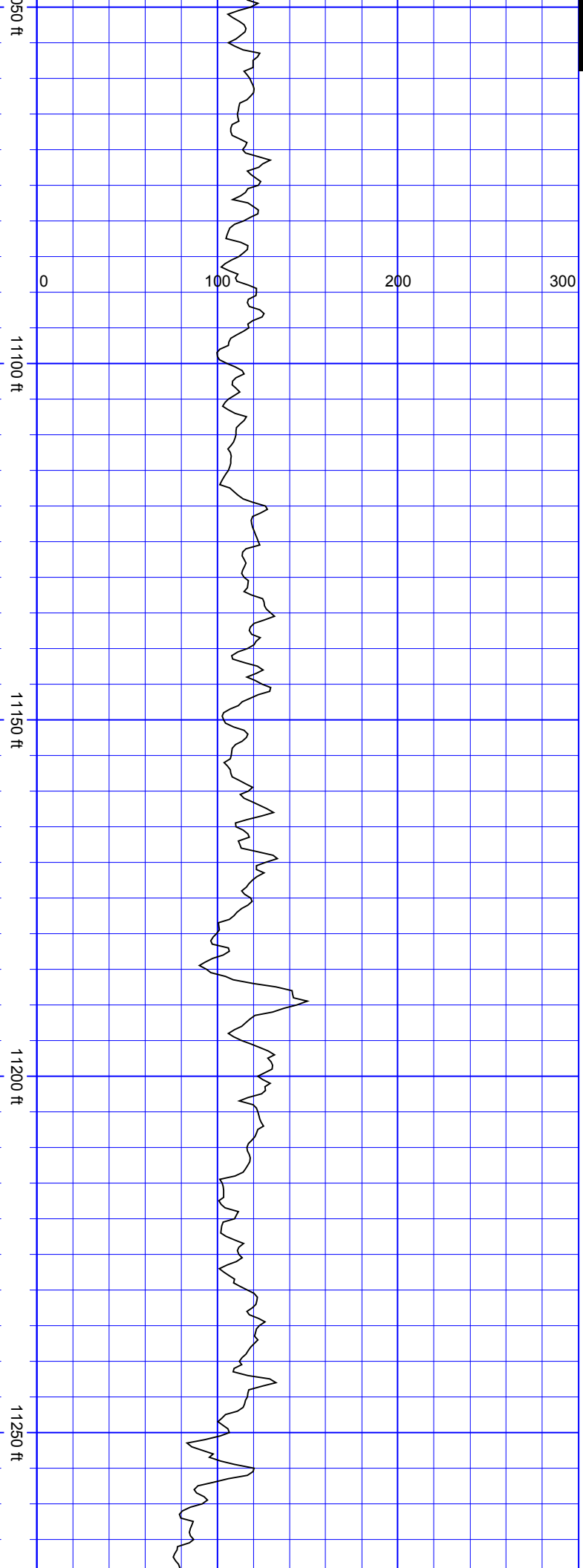


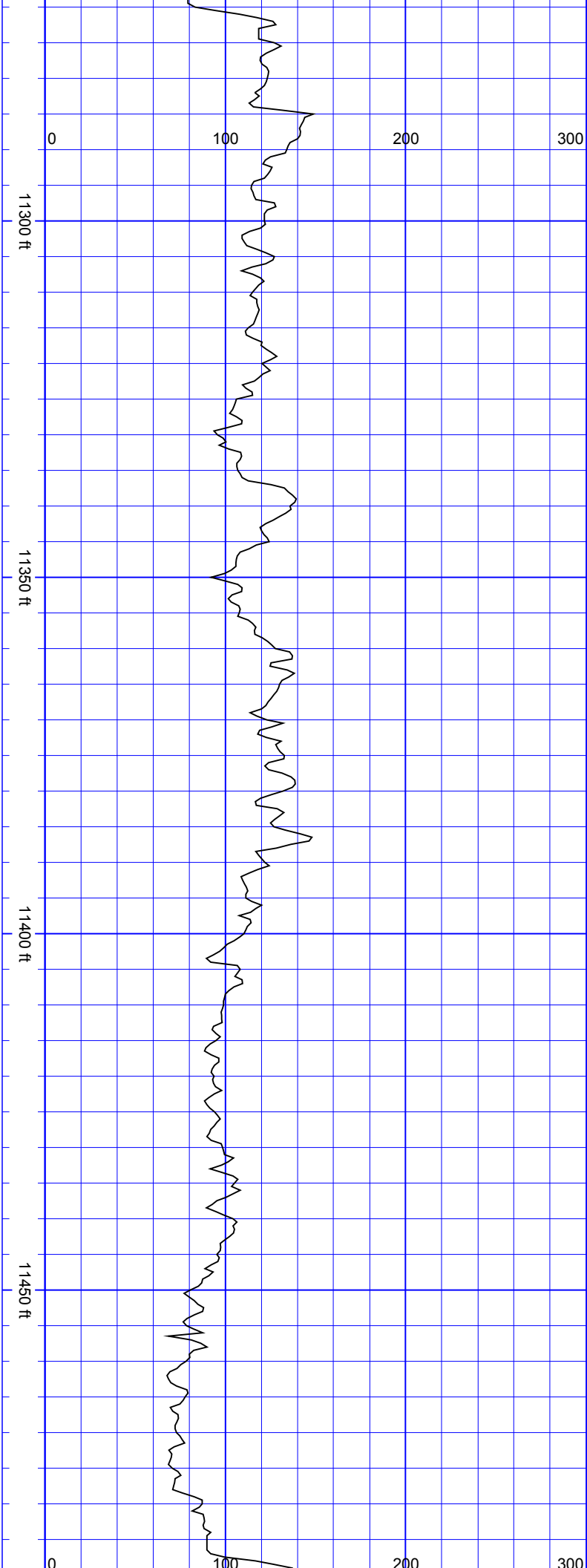
S
S
S
S

SurveyDepth:11071
TVD:7178.28 Inc:89.69
Azi:268.65
VertSec:3746.17

SurveyDepth:11165
TVD:7178.79 Inc:89.69
Azi:268.3
VertSec:3833.74

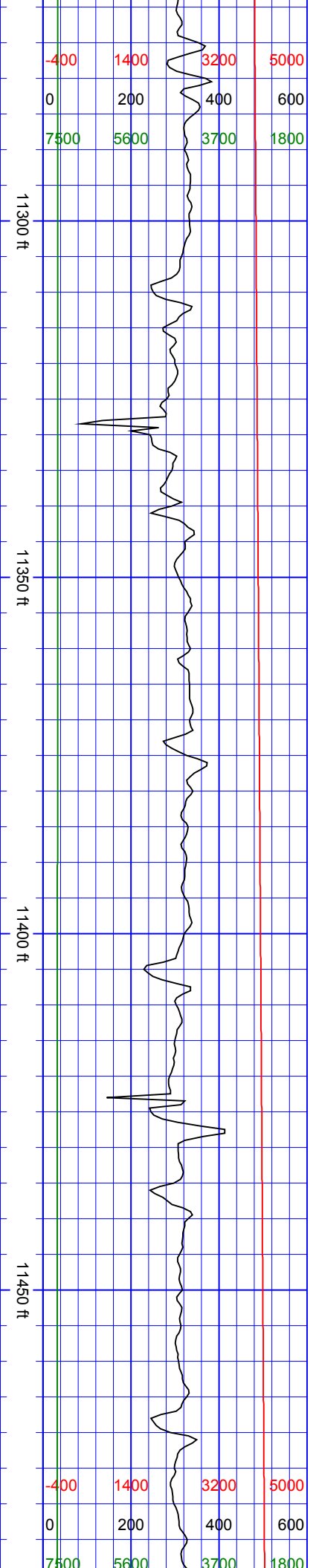
SurveyDepth:11260
TVD:7179.49 Inc:89.47
Azi:268.74
VertSec:3922.26

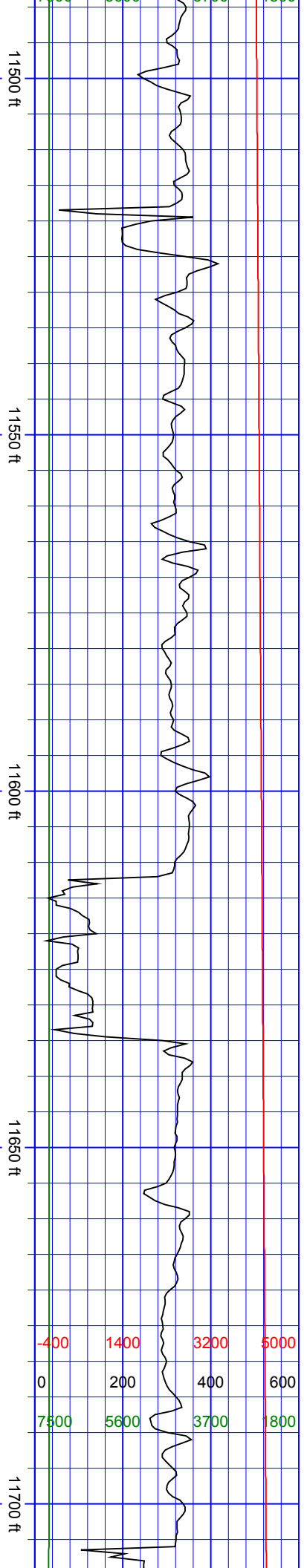




SurveyDepth:11354
TVD:7180.86 Inc:88.86
Azi:268.92
VertSec:4010.02

SurveyDepth:11449
TVD:7182.85 Inc:88.73
Azi:269.01
VertSec:4098.79



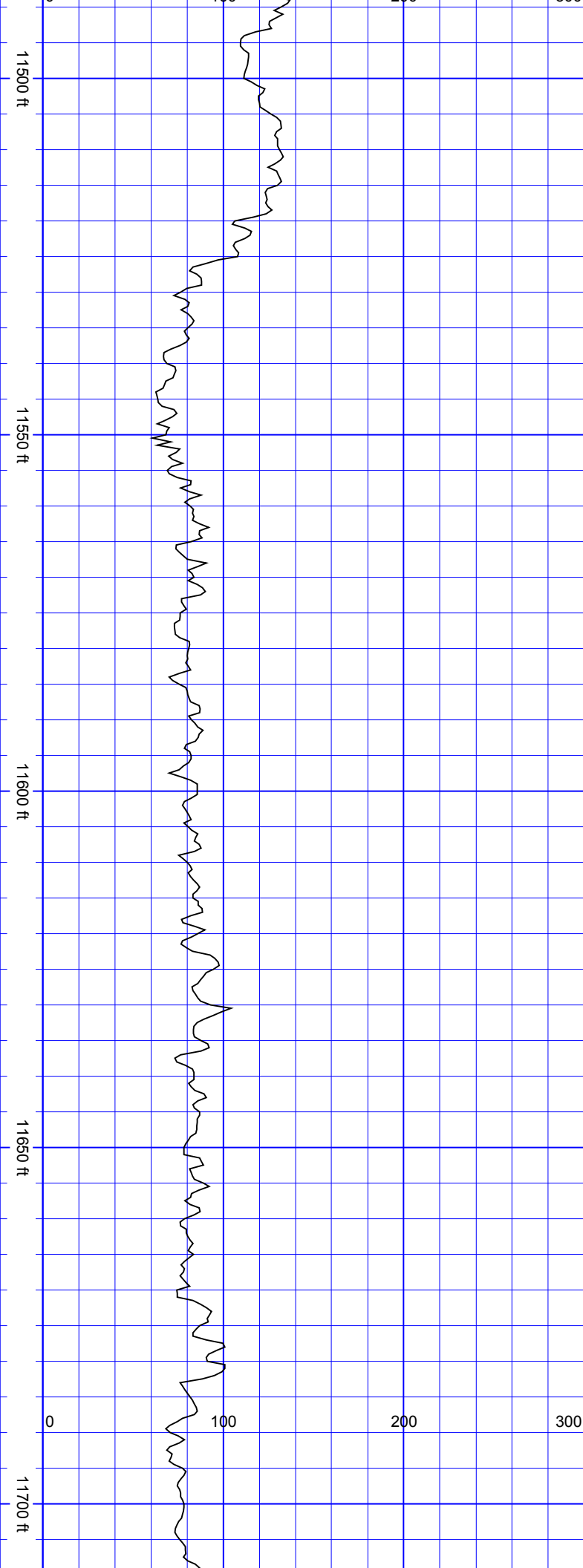


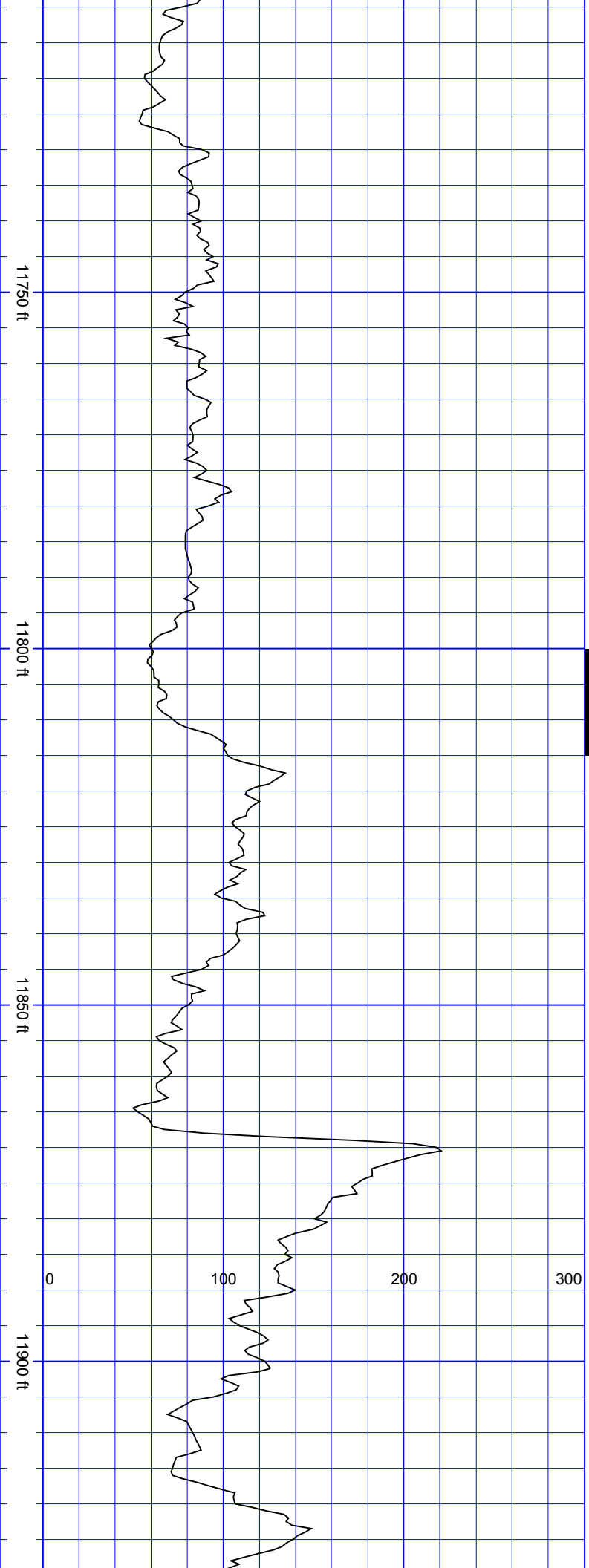
December 19, 2018

SurveyDepth:11544
TVD:7185.37 Inc:88.24
Azi:269.18
VertSec:4187.62

SurveyDepth:11638
TVD:7188.72 Inc:87.67
Azi:267.51
VertSec:4275.05

SSSSS





S
S
S
S
S

SurveyDepth:11732
TVD:7193.08 Inc:87.01
Azi:267.34
VertSec:4361.88

SurveyDepth:11827
TVD:7197.24 Inc:87.98
Azi:268.13
VertSec:4449.83

SurveyDepth:11922
TVD:7201.5 Inc:86.88
Azi:268.57

