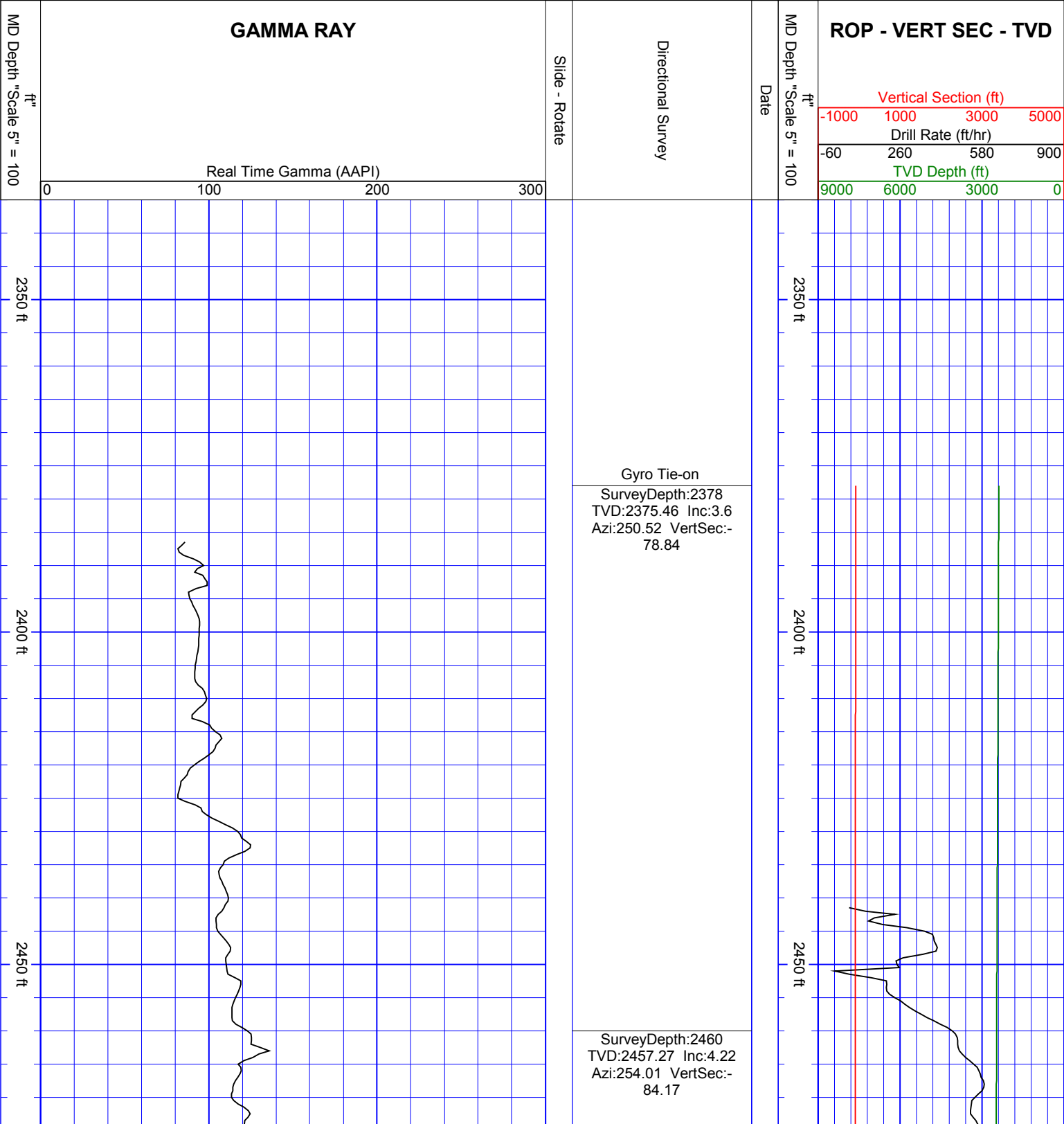
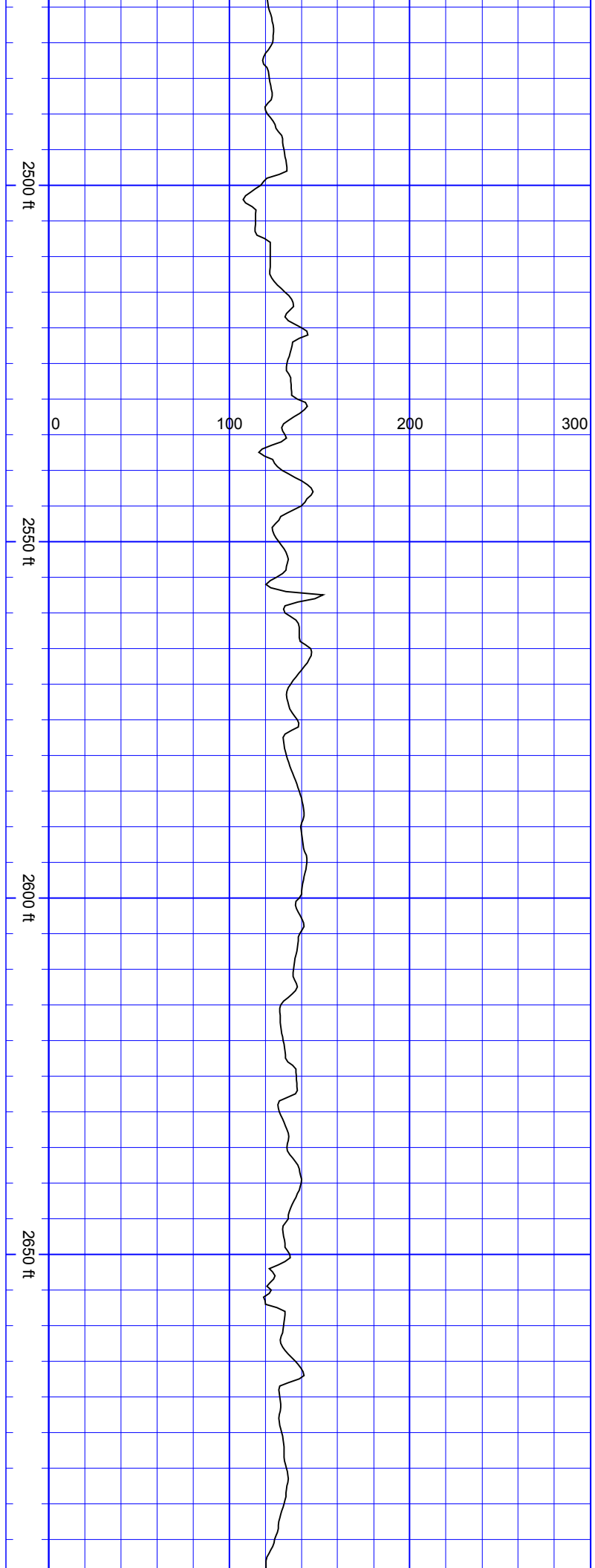


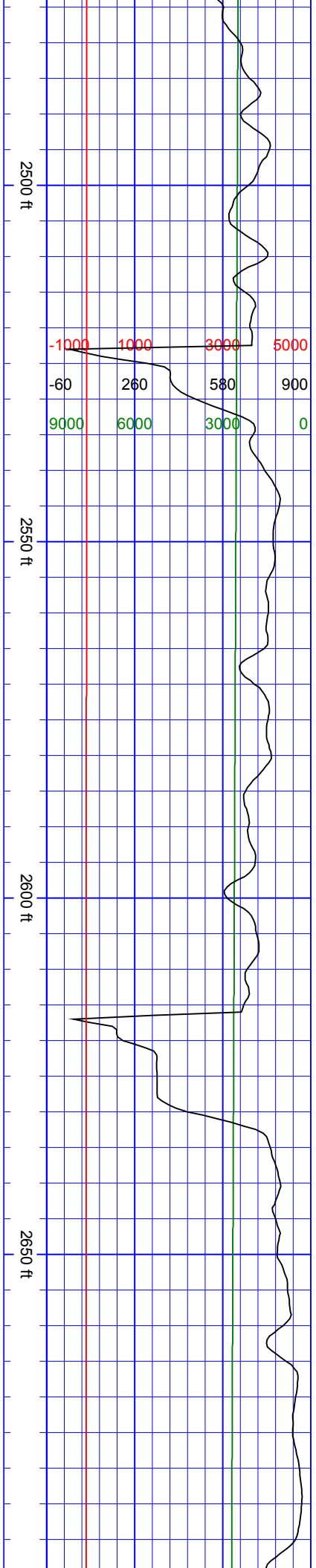
Interpretations of this data by Cathedral Energy Services will be of best judgment as to correctness. Cathedral Energy Services cannot and does not guarantee the accuracy or correctness of interpretations or any surveys derived therefrom. Cathedral Energy Services makes no warranties of performance, 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.

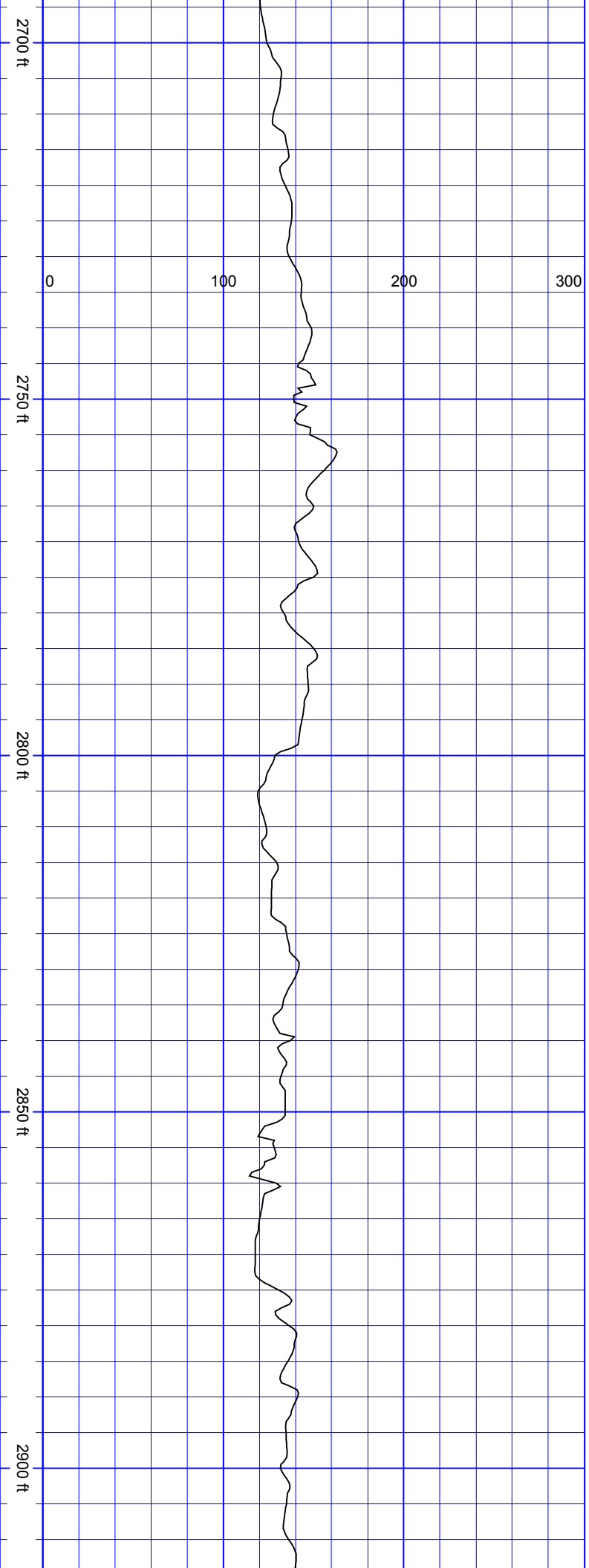




SurveyDepth:2555
TVD:2552.02 Inc:4.09
Azi:251.99 VertSec:-90.75

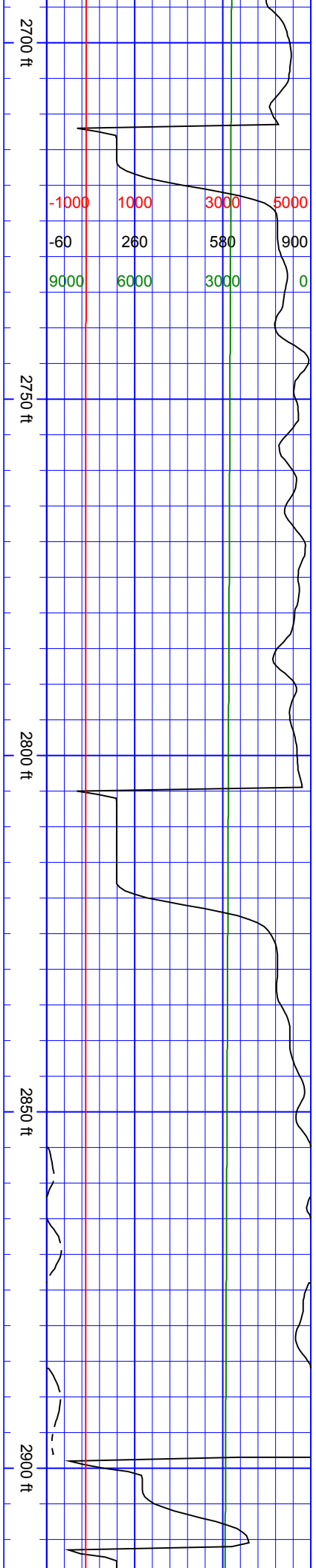
SurveyDepth:2649
TVD:2645.78 Inc:4.09
Azi:248.39 VertSec:-97.06

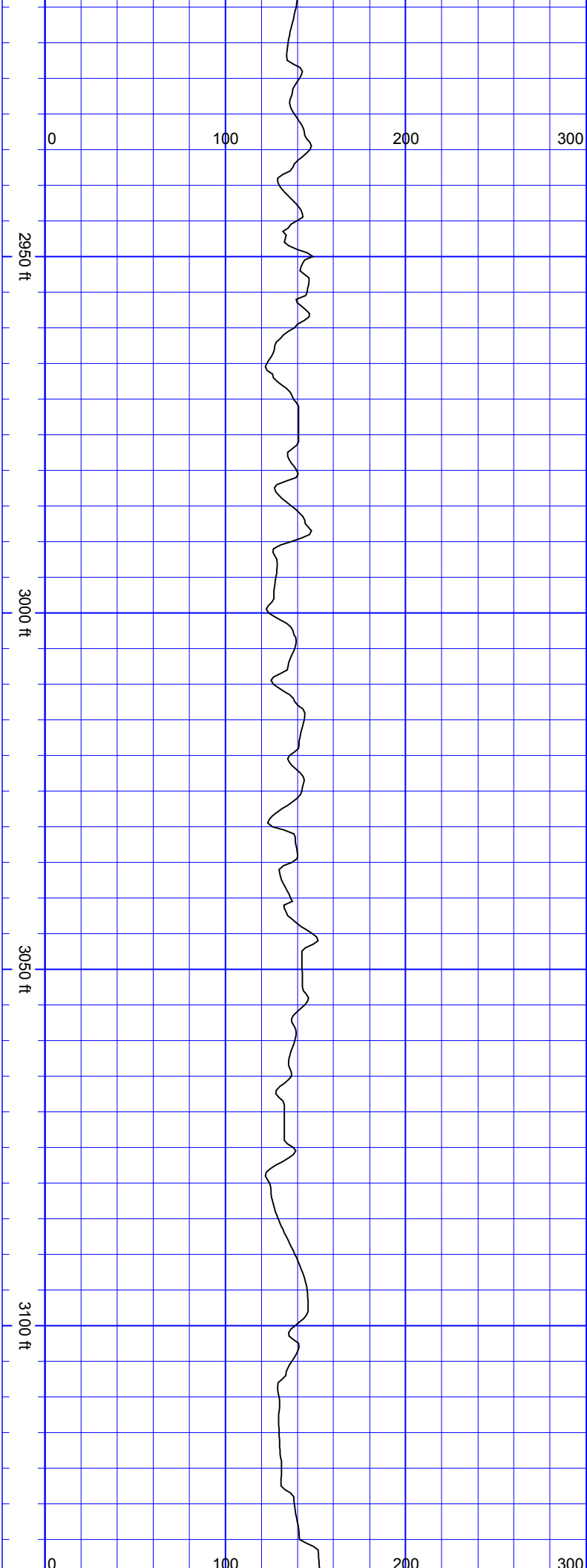




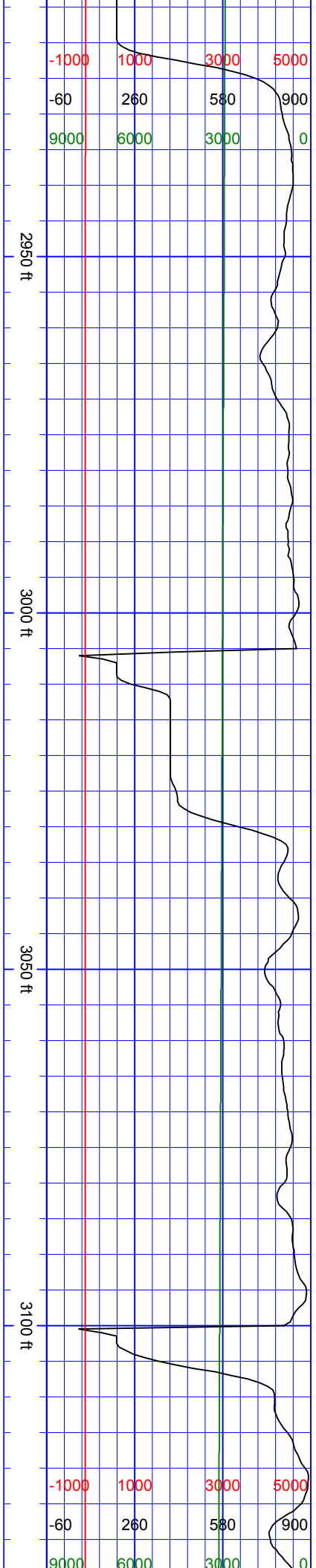
SurveyDepth:2743
TVD:2739.56 Inc:3.69
Azi:246.1 VertSec:-
102.95

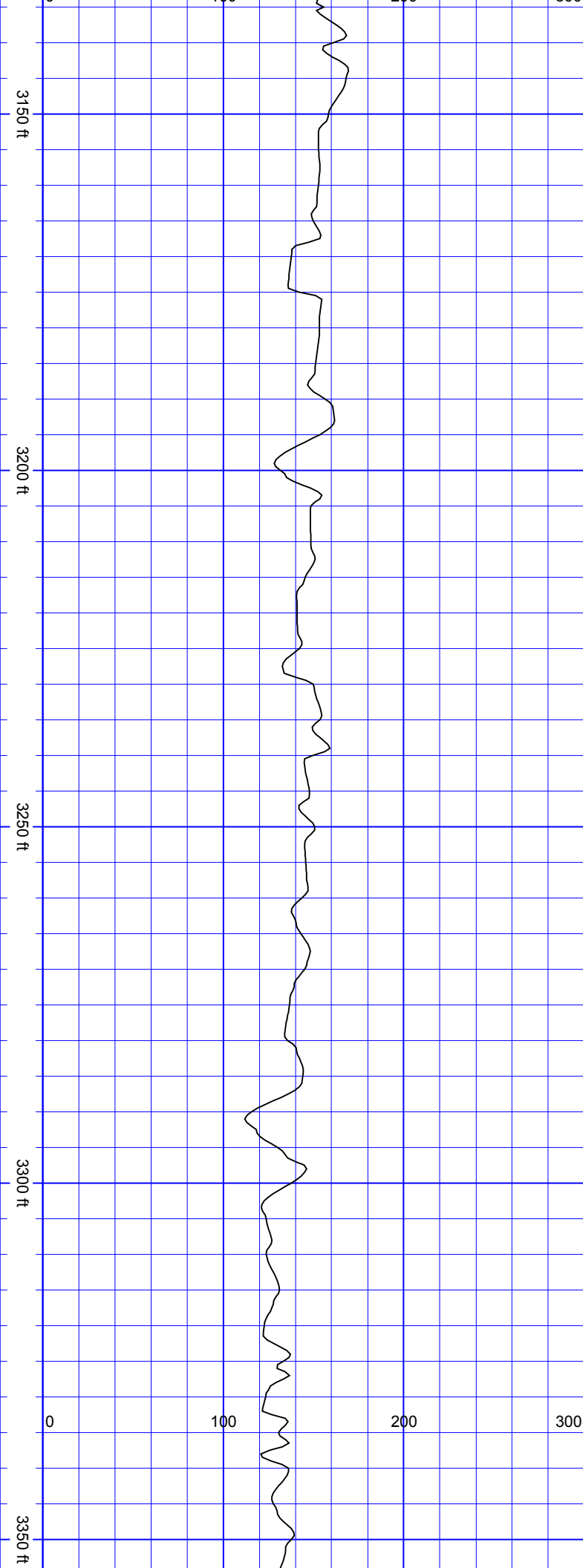
SurveyDepth:2849
TVD:2845.36 Inc:3.47
Azi:243.64 VertSec:-
108.94





SurveyDepth:2943 TVD:2939.19 Inc:3.3 Azi:242.85 VertSec:-113.9	SurveyDepth:3038 TVD:3034.05 Inc:3.08 Azi:240.65 VertSec:-118.56	SurveyDepth:3132
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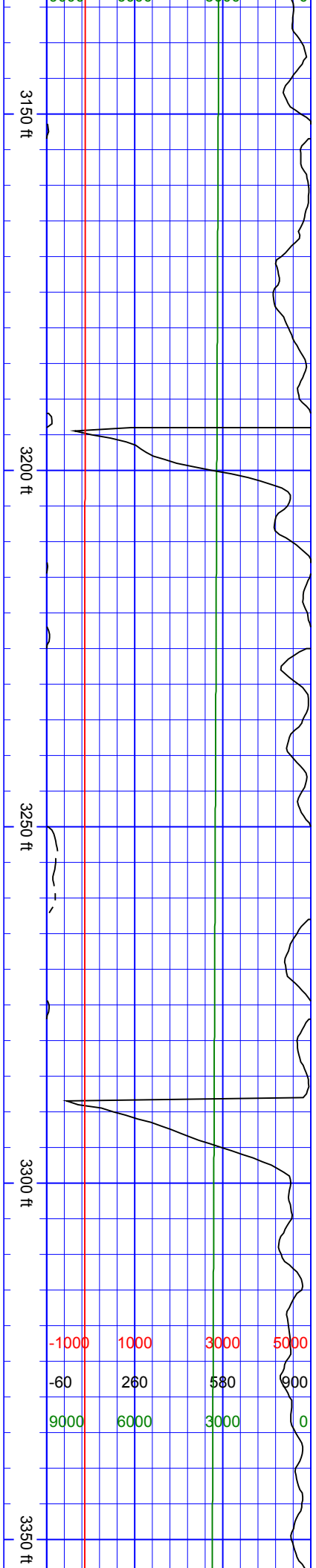


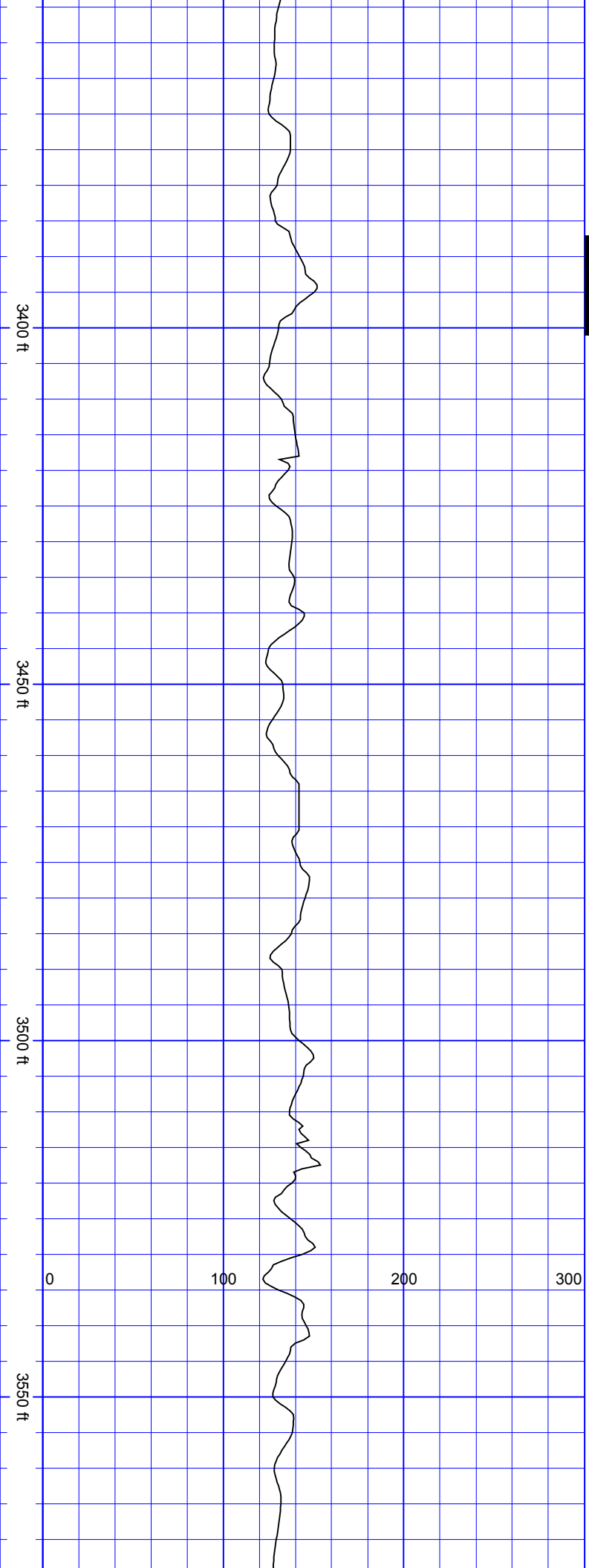


TVD:3127.94 Inc:2.37
Azi:236.78 VertSec:-122.39

SurveyDepth:3227
TVD:3222.87 Inc:2.02
Azi:212 VertSec:-124.93

SurveyDepth:3322
TVD:3317.82 Inc:1.89
Azi:212.35 VertSec:-126.66

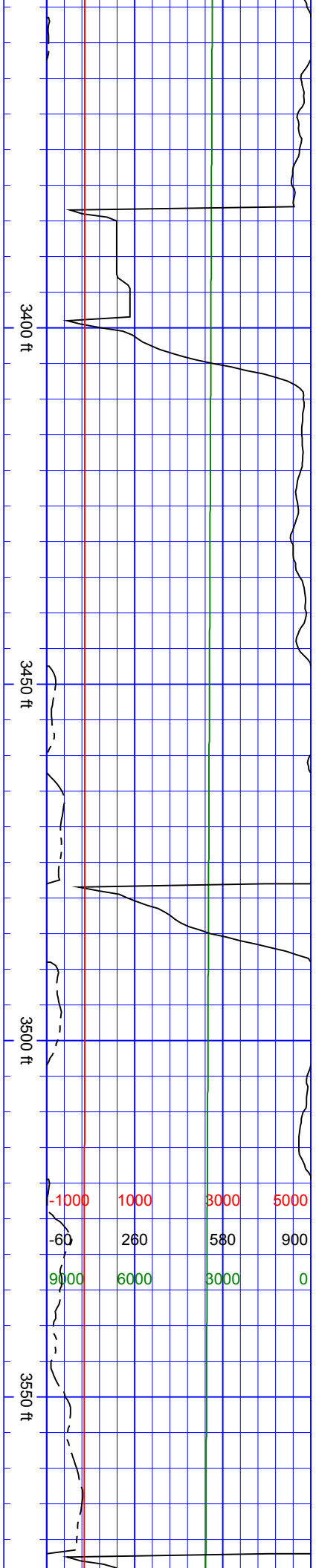


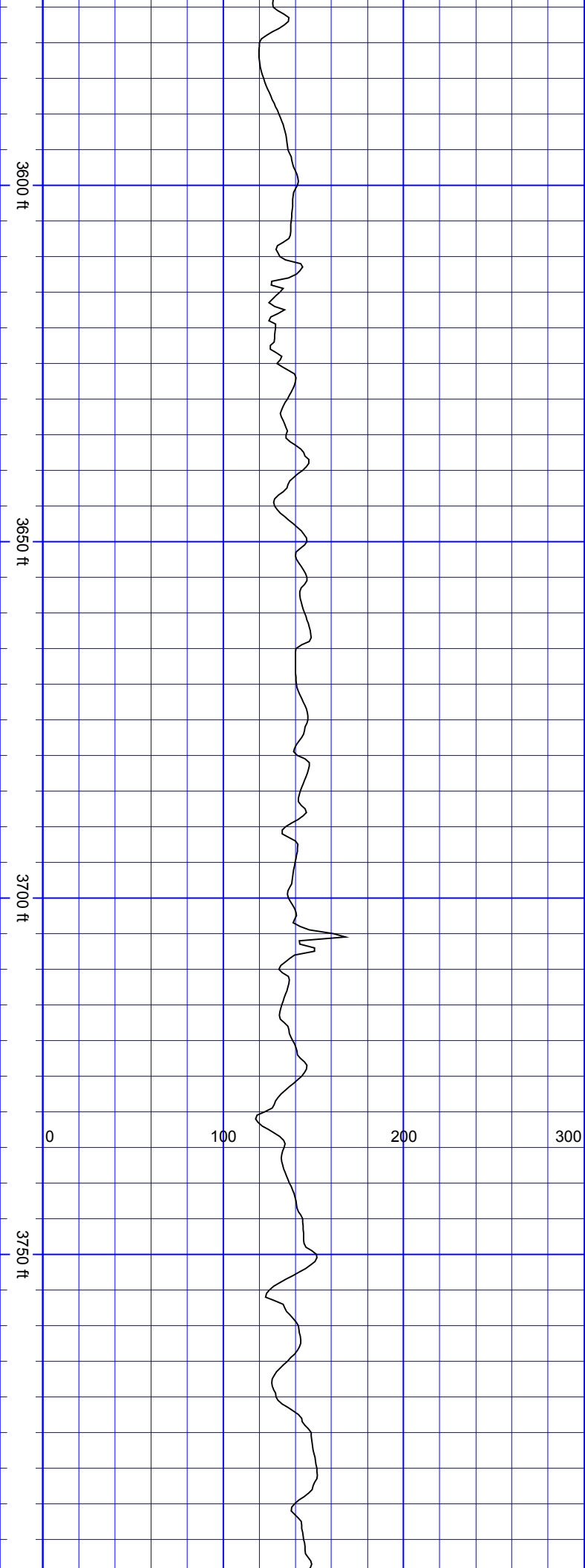


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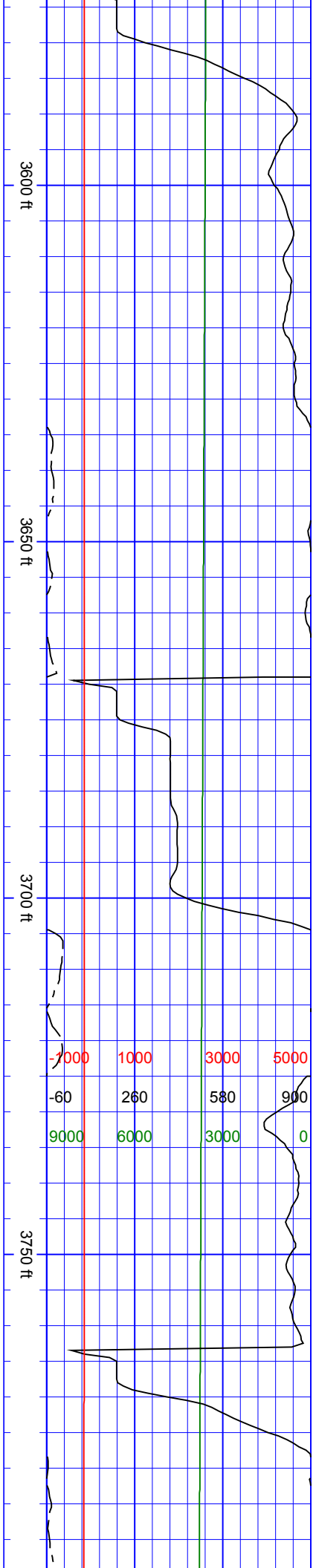
SurveyDepth:3416
TVD:3411.73 Inc:3.16
Azi:259.72 VertSec:-
130.04

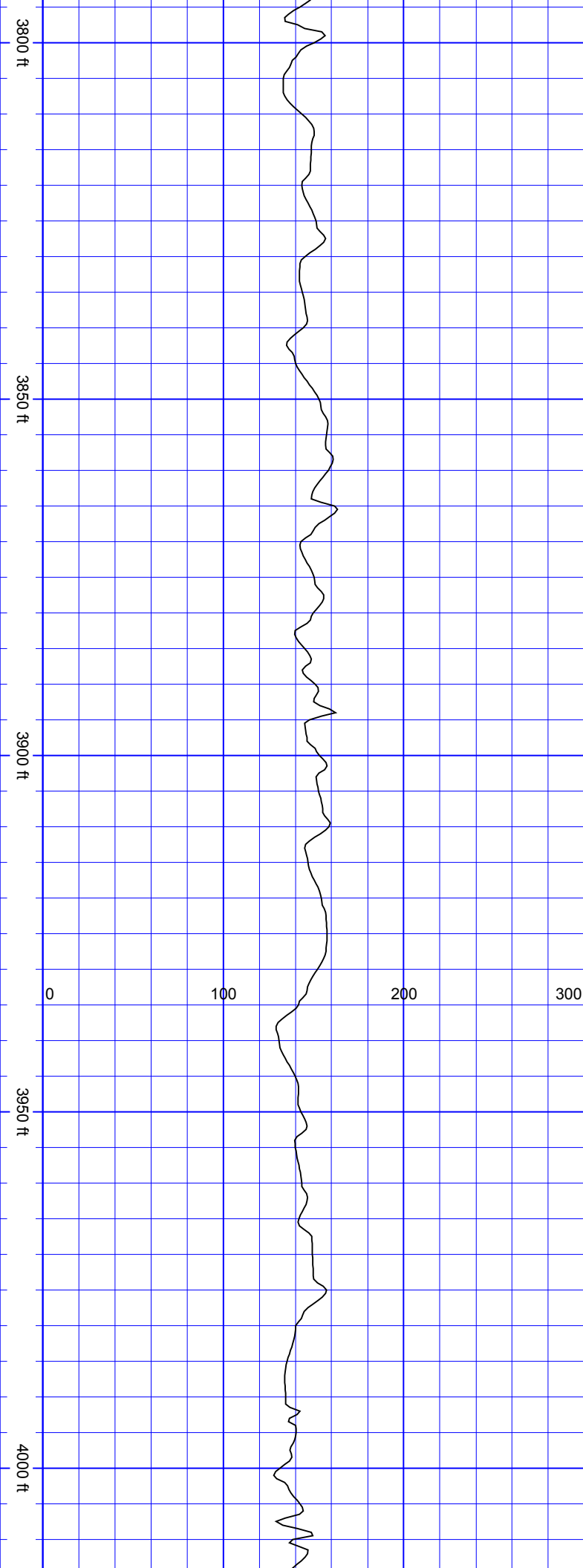
SurveyDepth:3511
TVD:3506.6 Inc:2.86
Azi:260.69 VertSec:-
134.96





SurveyDepth:3606 TVD:3601.49 Inc:2.73 Azi:263.33 VertSec:- 139.54
SurveyDepth:3701 TVD:3696.4 Inc:2.24 Azi:266.05 VertSec:- 143.64

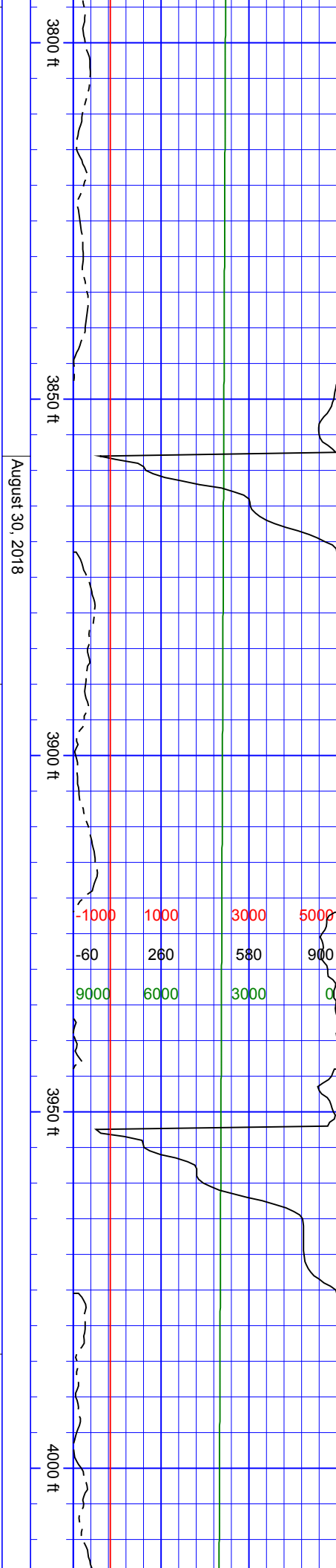


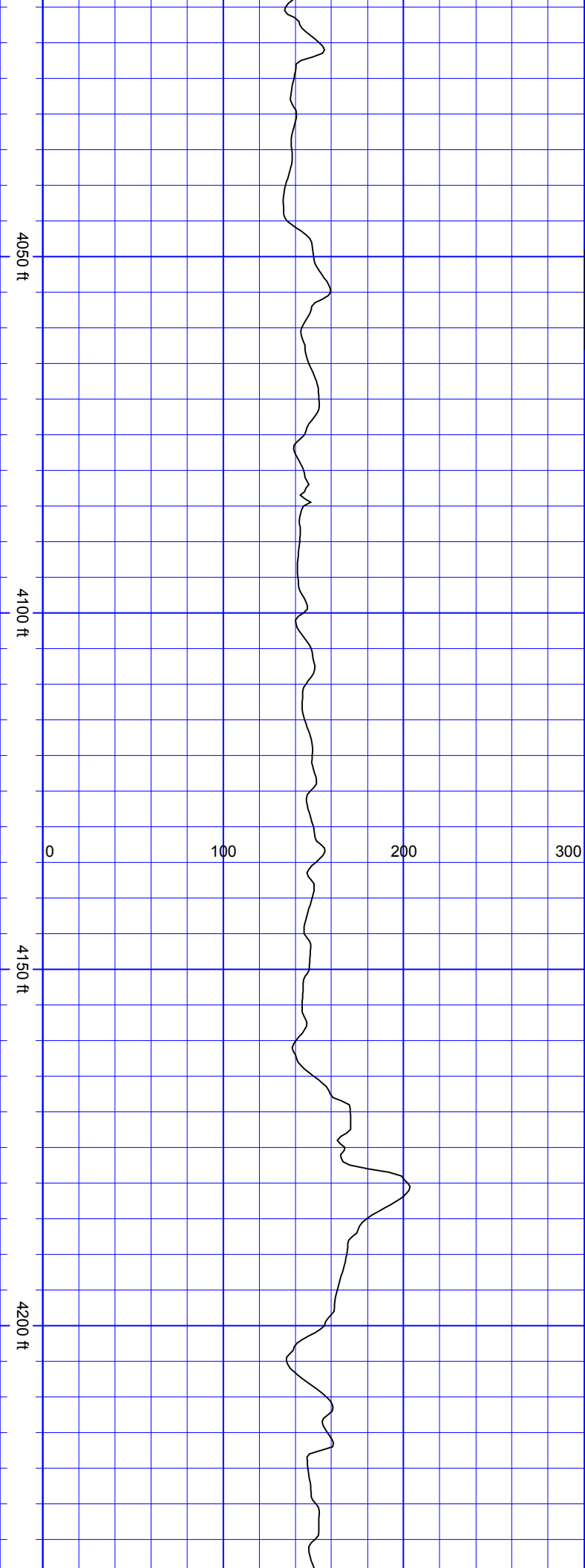


SurveyDepth:3795
TVD:3790.35 Inc:1.54
Azi:270.01 VertSec:-146.74

SurveyDepth:3890
TVD:3885.32 Inc:1.01
Azi:292.68 VertSec:-148.79

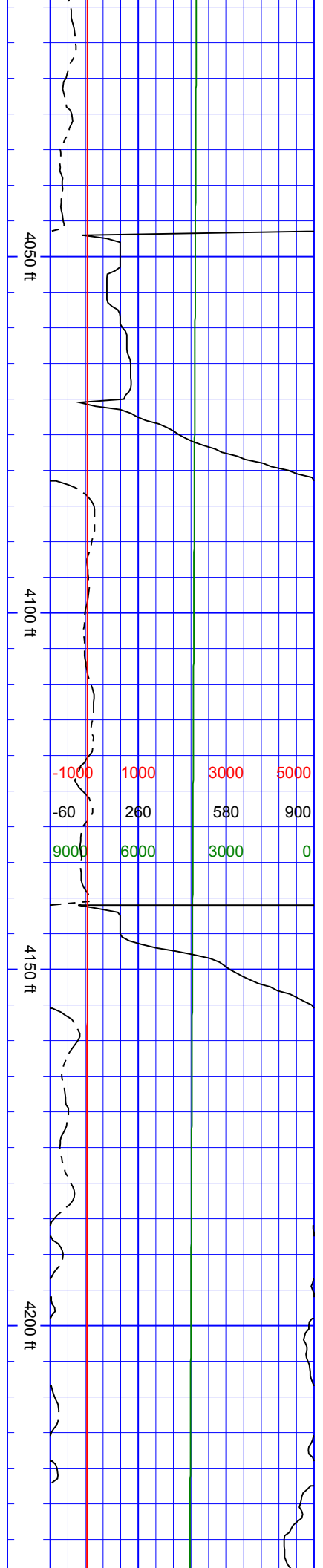
SurveyDepth:3984
TVD:3979.31 Inc:0.88
Azi:307.8 VertSec:-150.12

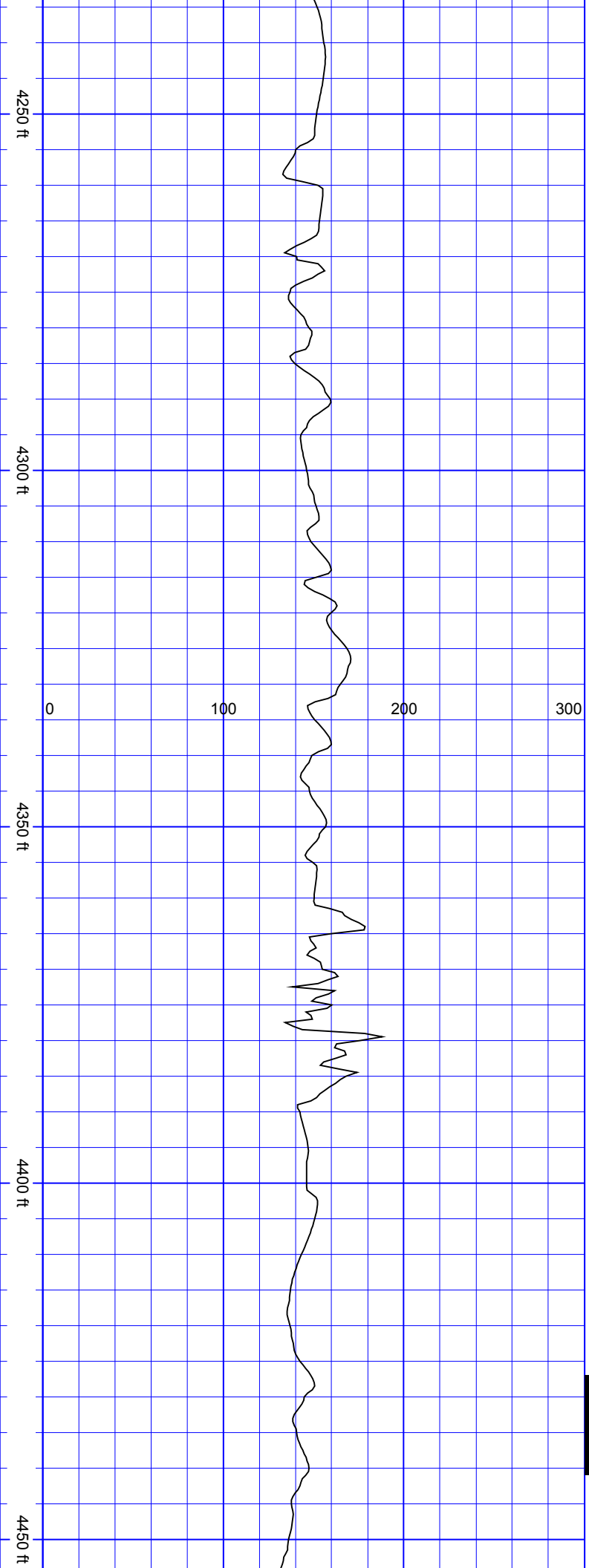




SurveyDepth:4078
TVD:4073.26 Inc:2.73
Azi:264.82 VertSec:-
152.92

SurveyDepth:4173
TVD:4168.15 Inc:2.81
Azi:271.06 VertSec:-
157.5

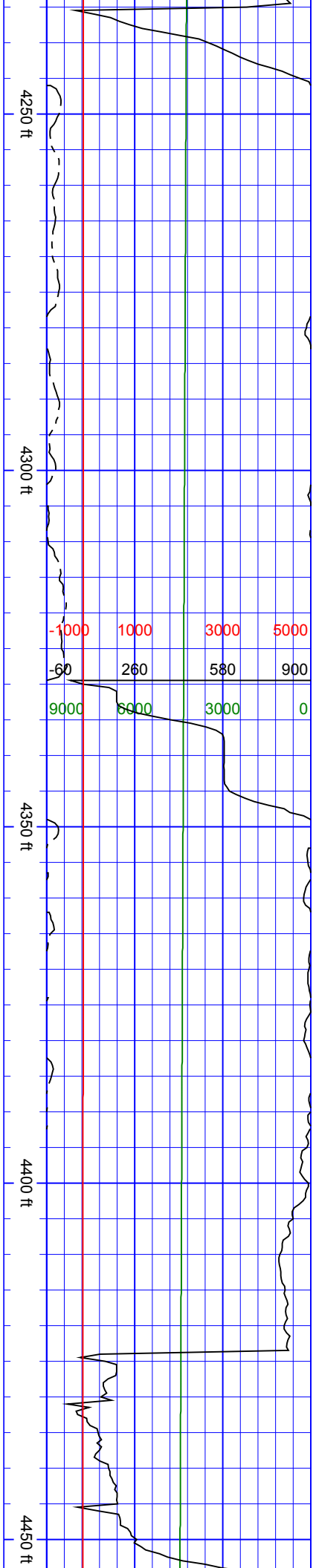


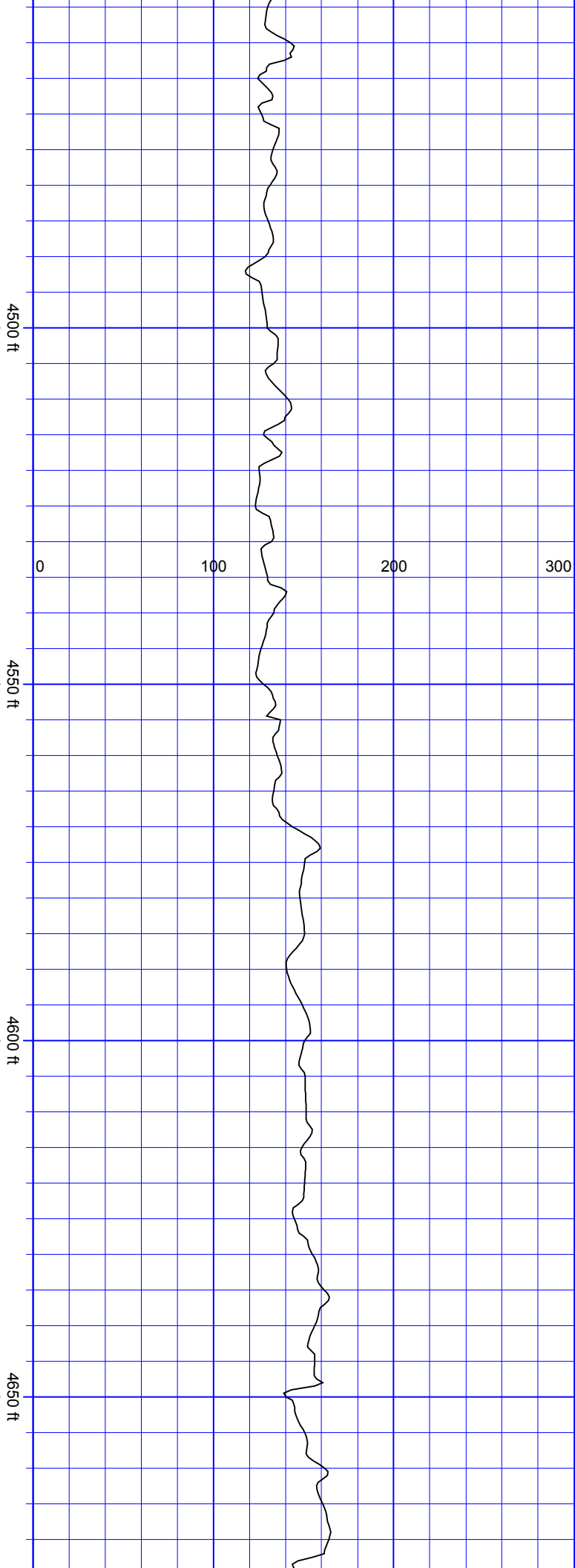


SurveyDepth:4268
TVD:4263.05 Inc:2.59
Azi:267.37 VertSec:-
161.97

SurveyDepth:4362
TVD:4356.96 Inc:2.42
Azi:270.18 VertSec:-
166.08

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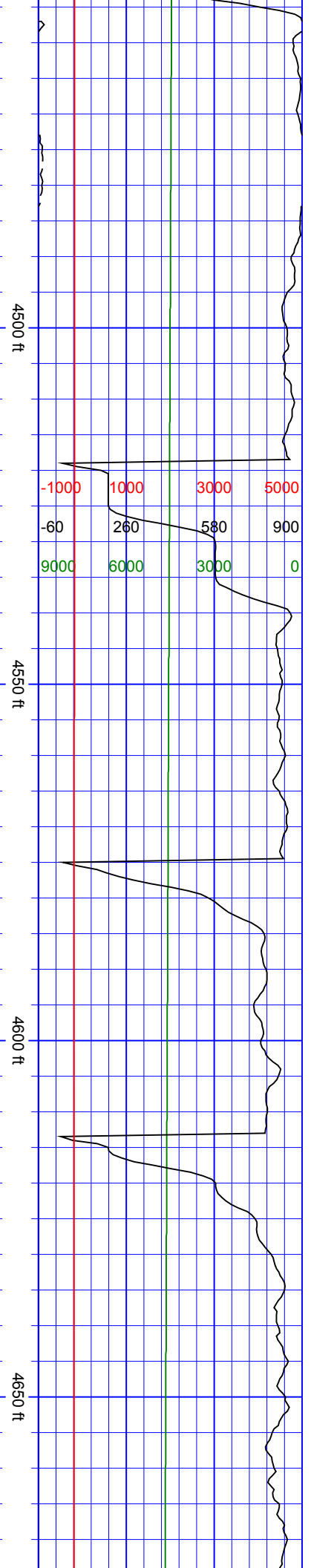


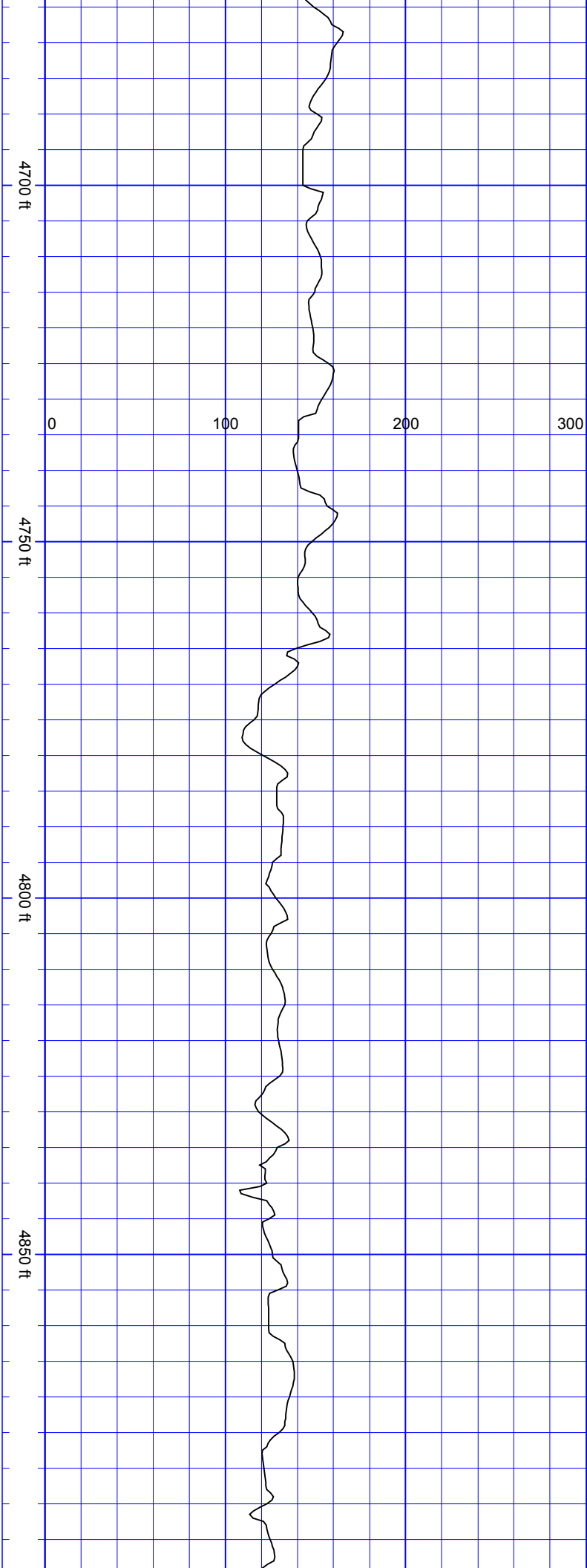


SurveyDepth:4457
TVD:4451.78 Inc:4.48
Azi:248.3 VertSec:-
171.54

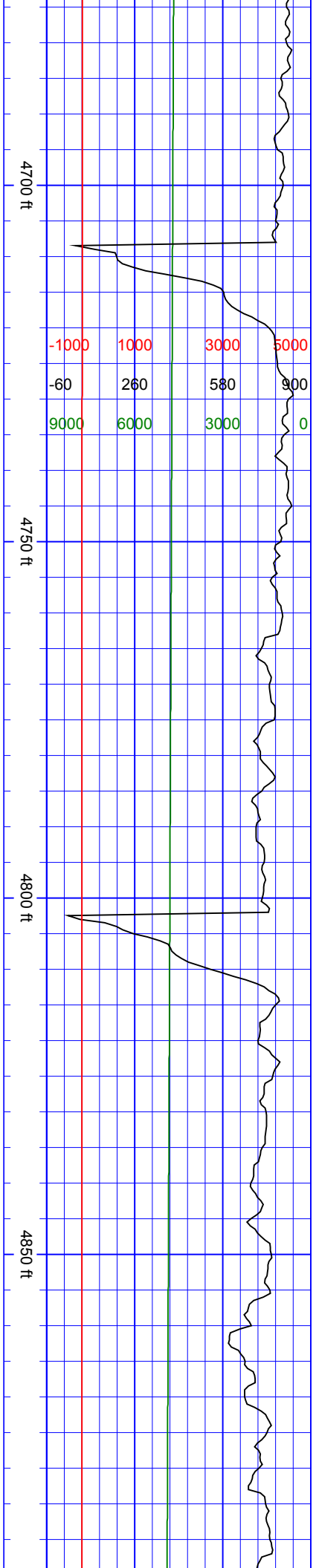
SurveyDepth:4551
TVD:4545.51 Inc:4.31
Azi:244.08 VertSec:-
178.13

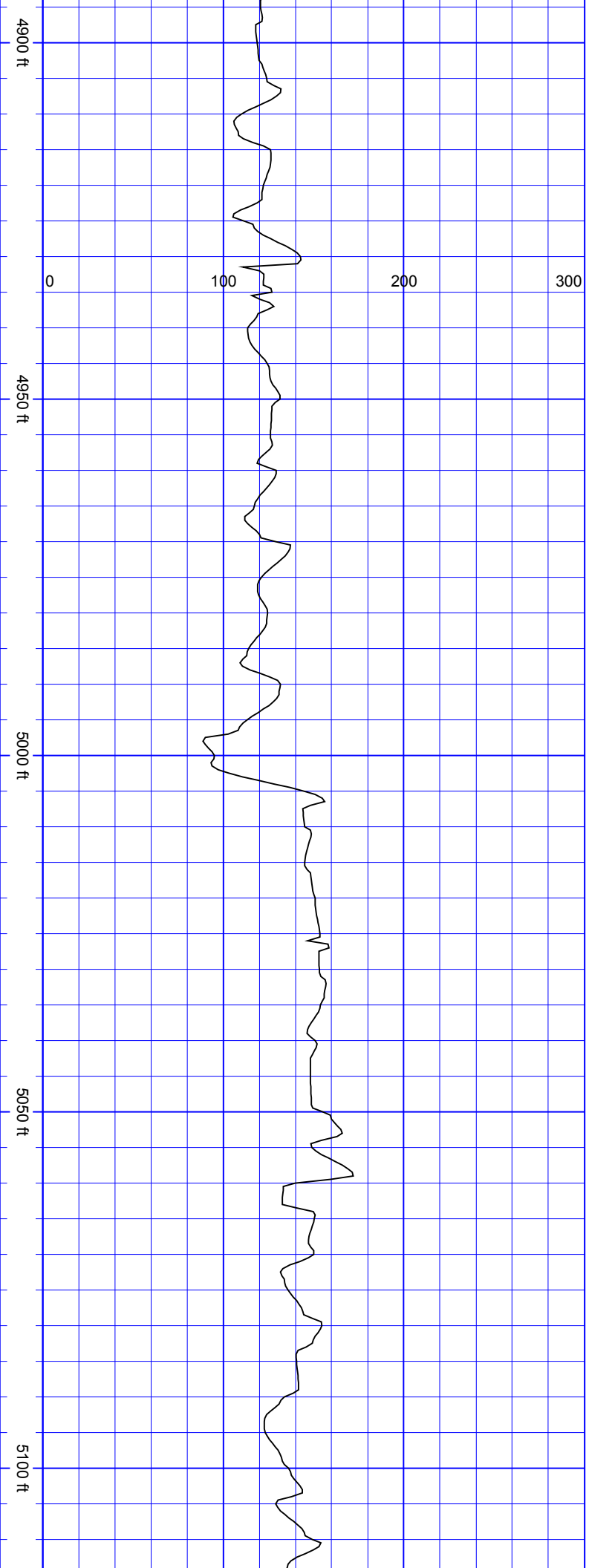
SurveyDepth:4646
TVD:4640.27 Inc:3.74
Azi:245.66 VertSec:-
184.17





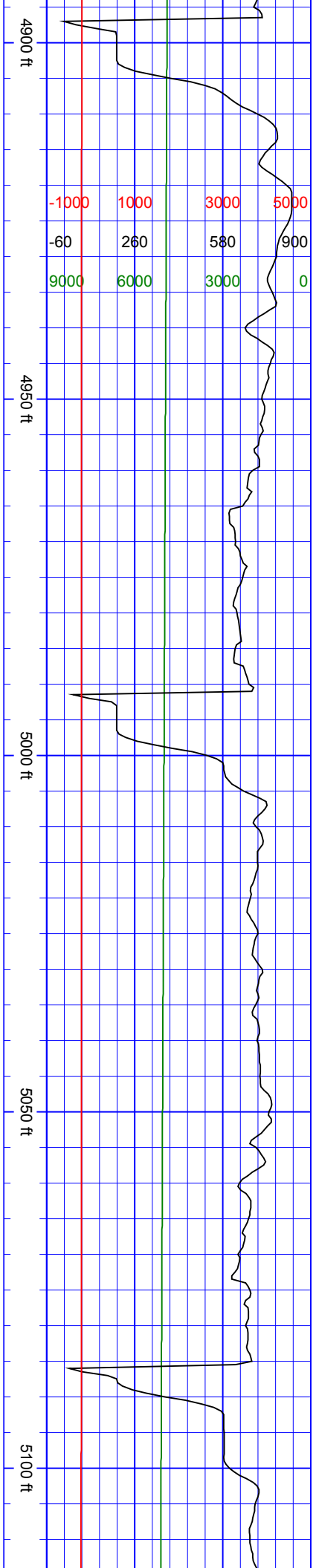
SurveyDepth:4741 TVD:4735.07 Inc:3.65 Azi:251.29 VertSec:- 189.86	SurveyDepth:4835 TVD:4828.89 Inc:3.56 Azi:249.53 VertSec:- 195.43
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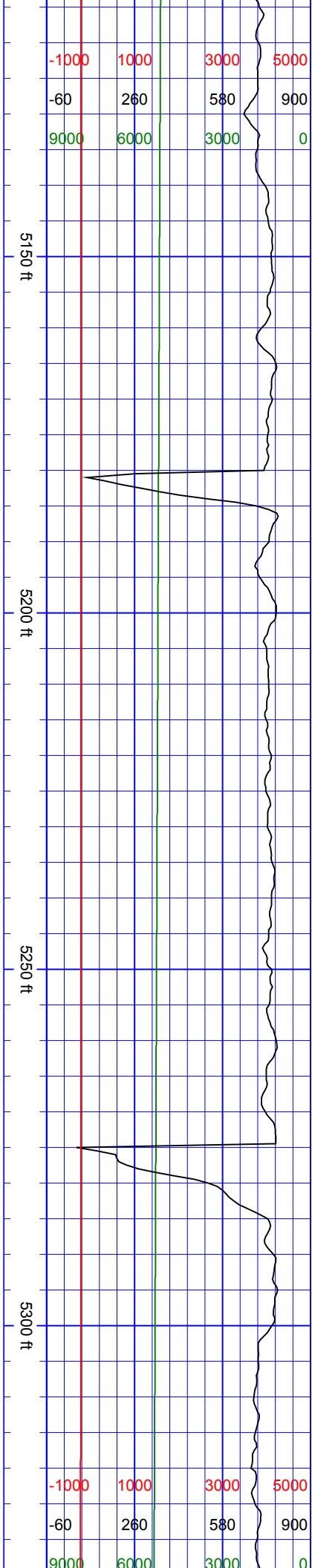
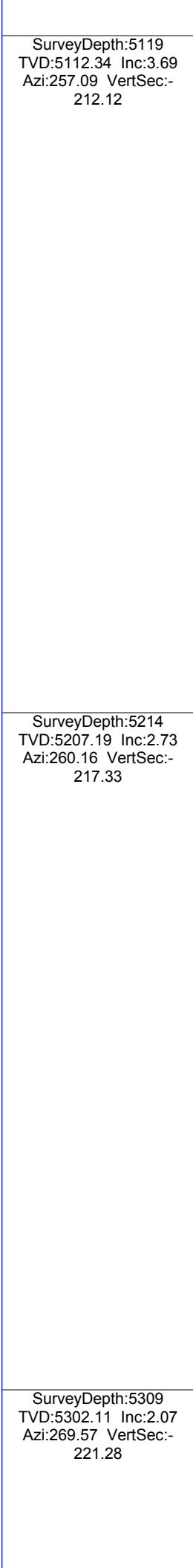
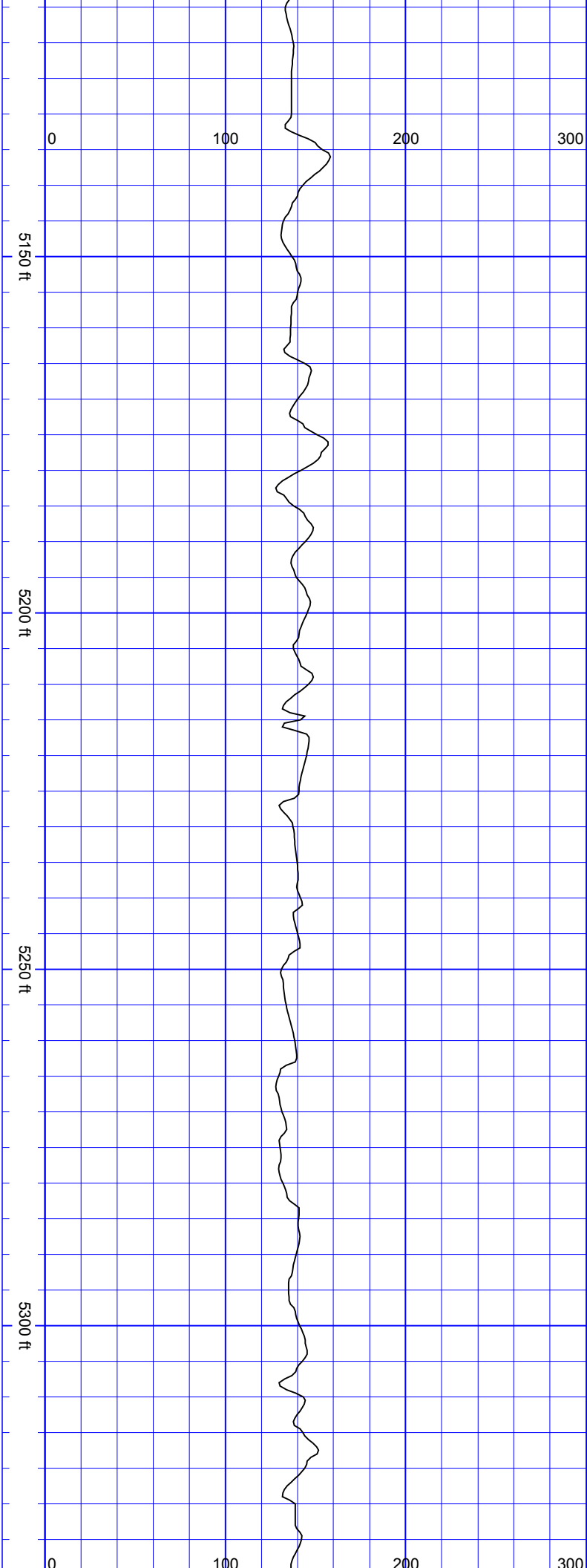


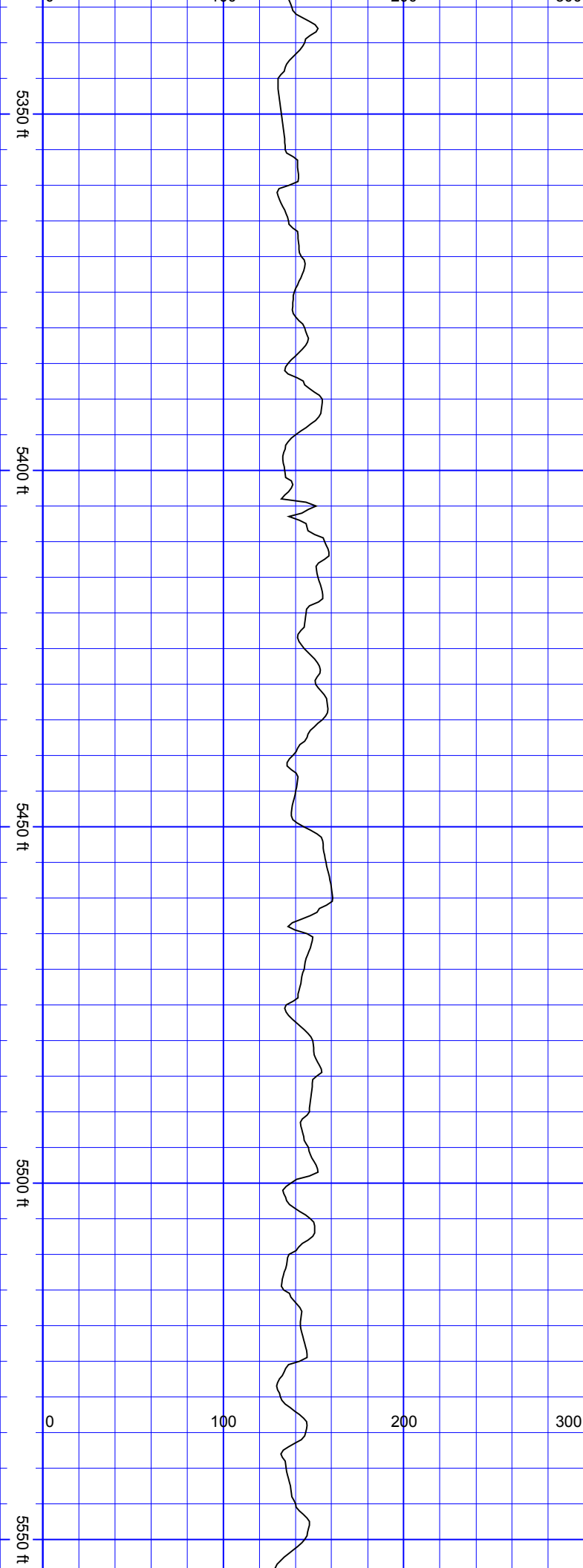


SurveyDepth:4930
TVD:4923.71 Inc:3.43
Azi:249.7 VertSec:-
200.86

SurveyDepth:5024
TVD:5017.54 Inc:3.6
Azi:251.99 VertSec:-
206.3

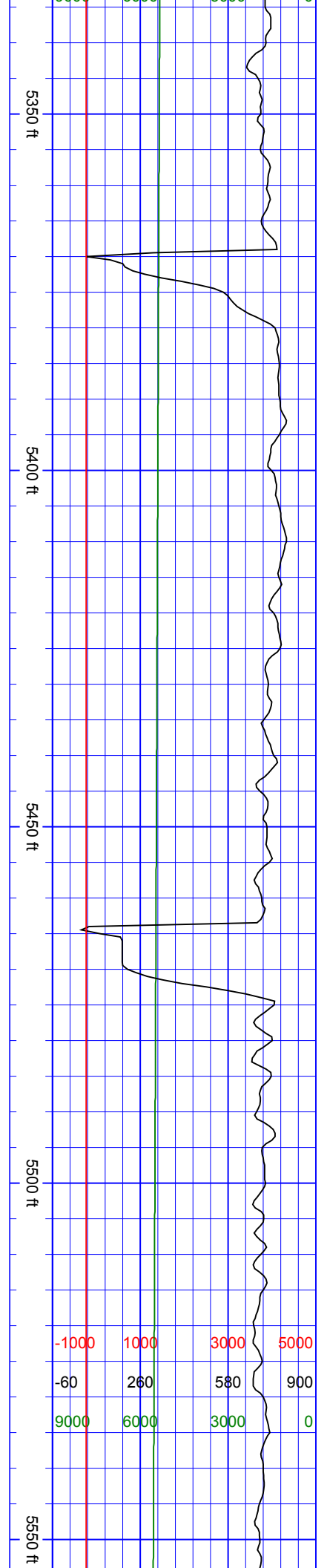


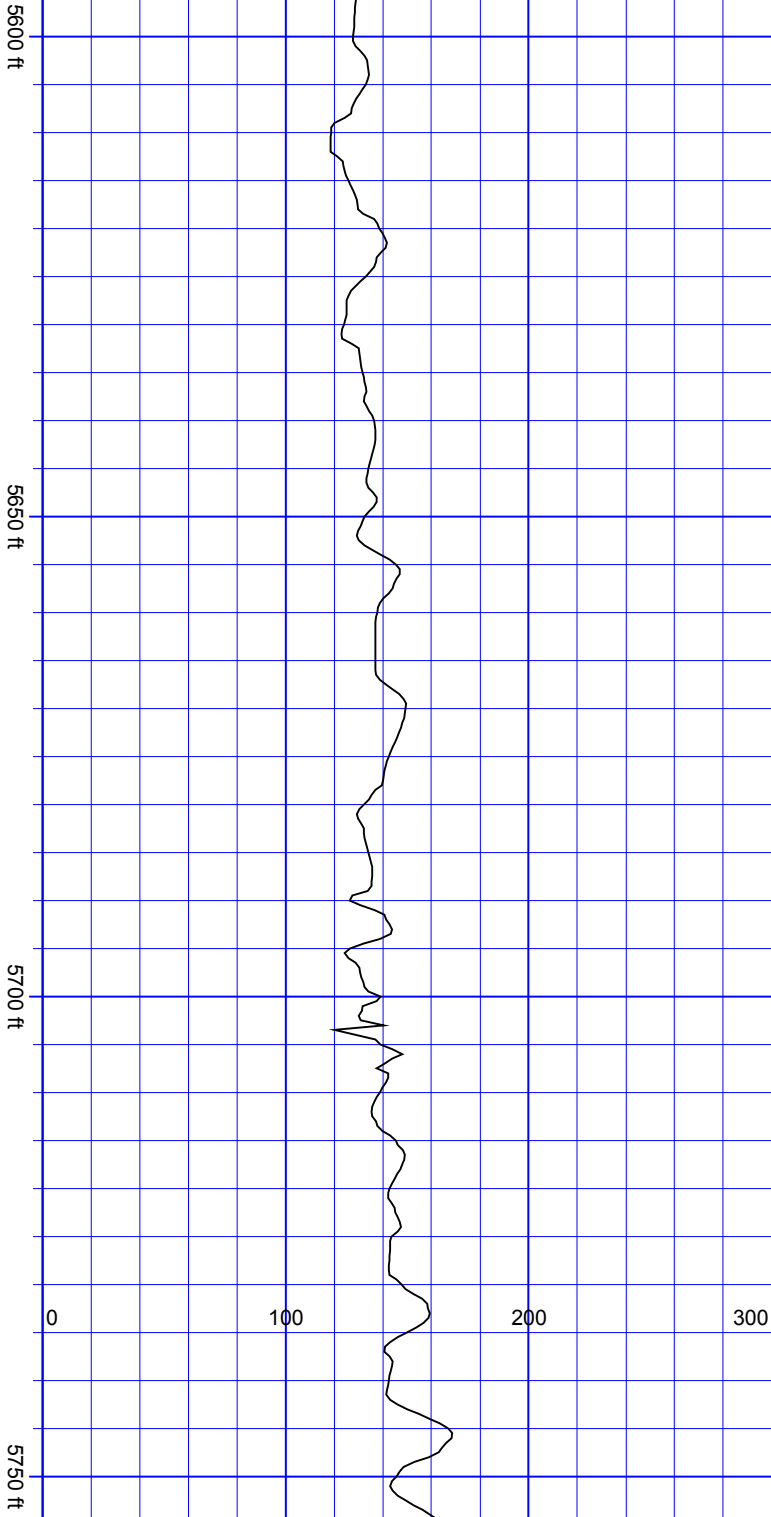




SurveyDepth:5403
TVD:5396.05 Inc:1.93
Azi:276.6 VertSec:-
224.55

SurveyDepth:5497
TVD:5490 Inc:1.85
Azi:272.03 VertSec:-
227.64

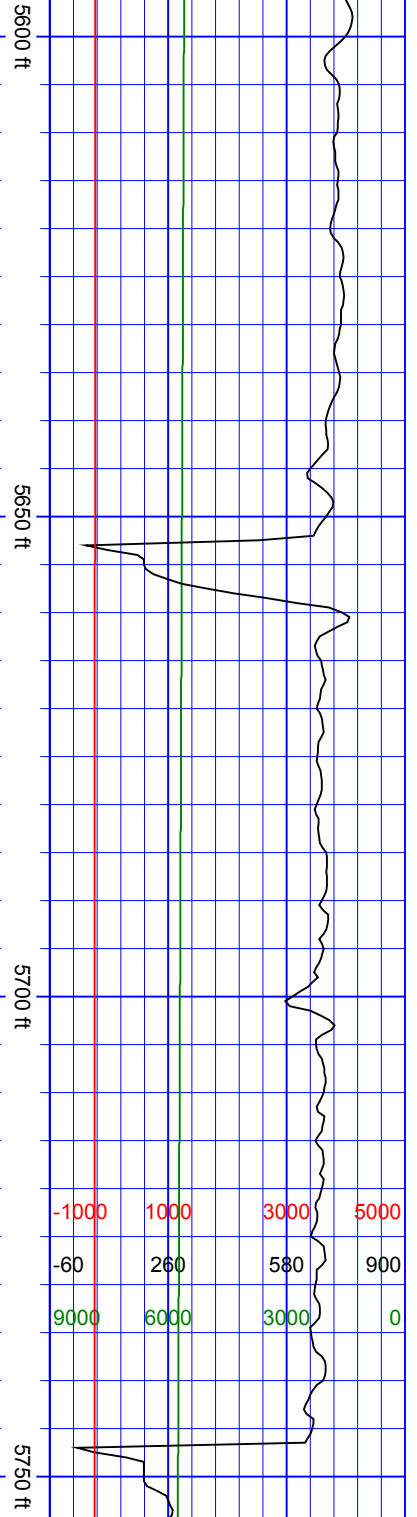


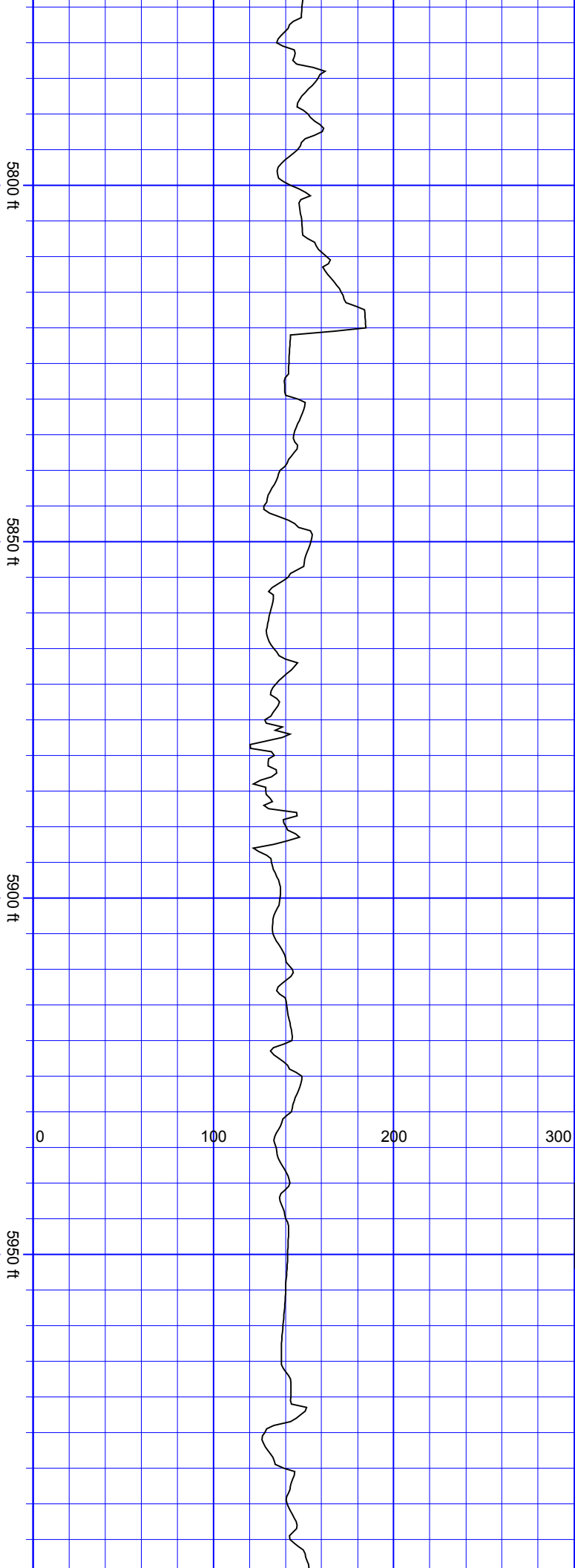


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SurveyDepth:5592
TVD:5584.96 Inc:1.71
Azi:269.66 VertSec:-
230.59

SurveyDepth:5686
TVD:5678.91 Inc:1.67
Azi:273.26 VertSec:-
233.36

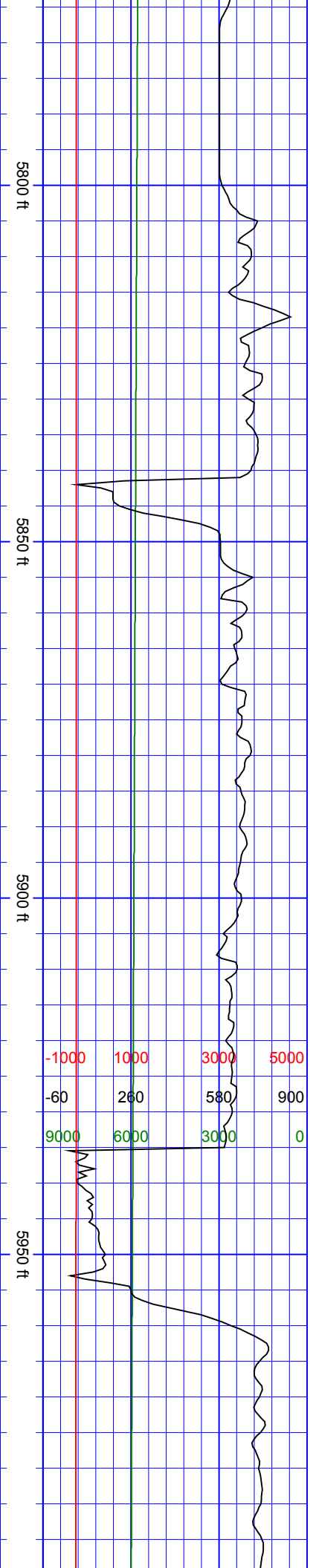


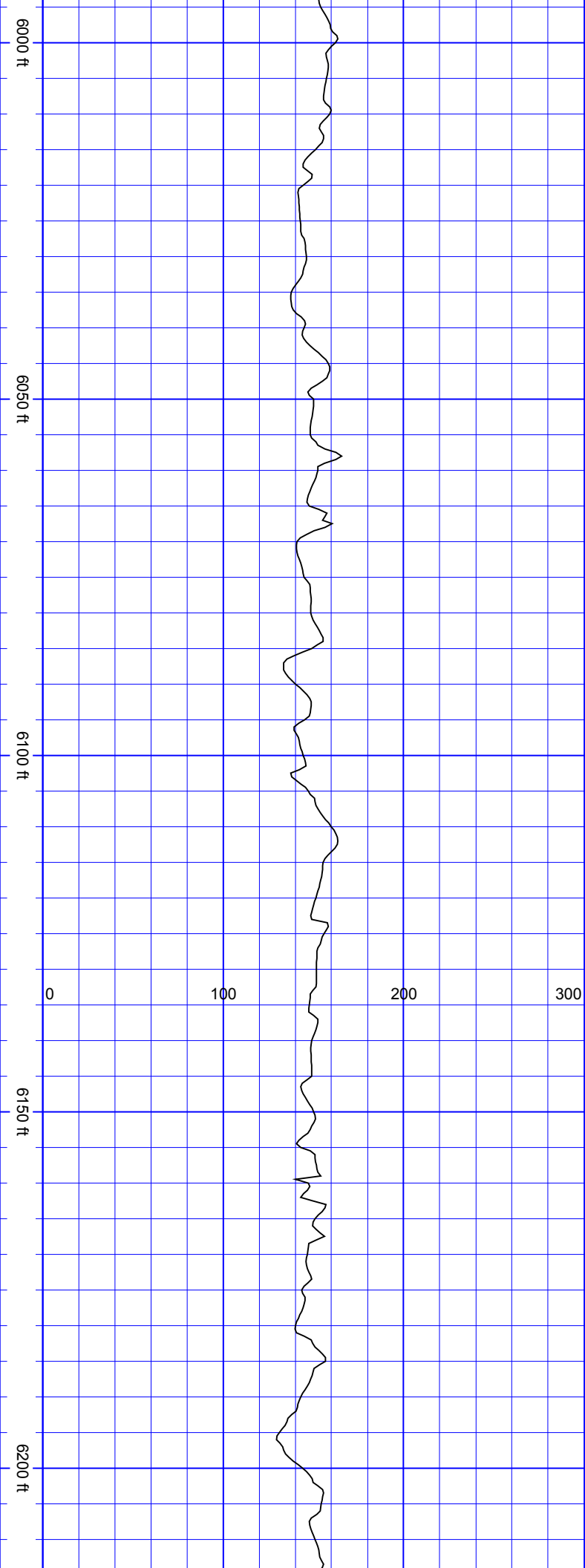


SurveyDepth:5780
TVD:5772.86 Inc:2.33
Azi:258.32 VertSec:-
236.6

SurveyDepth:5875
TVD:5867.79 Inc:2.07
Azi:252.43 VertSec:-
240.12

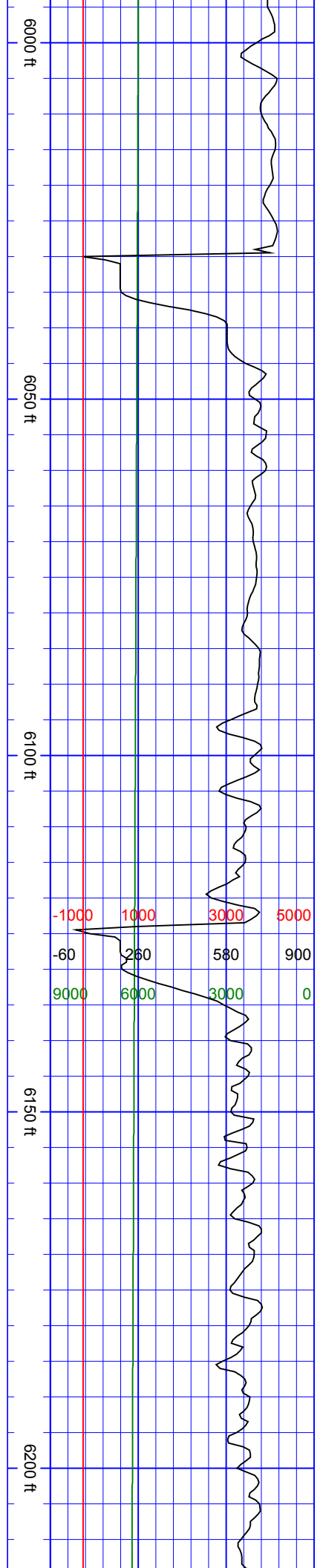
SurveyDepth:5970
TVD:5962.68 Inc:3.43
Azi:245.13 VertSec:-
244.34

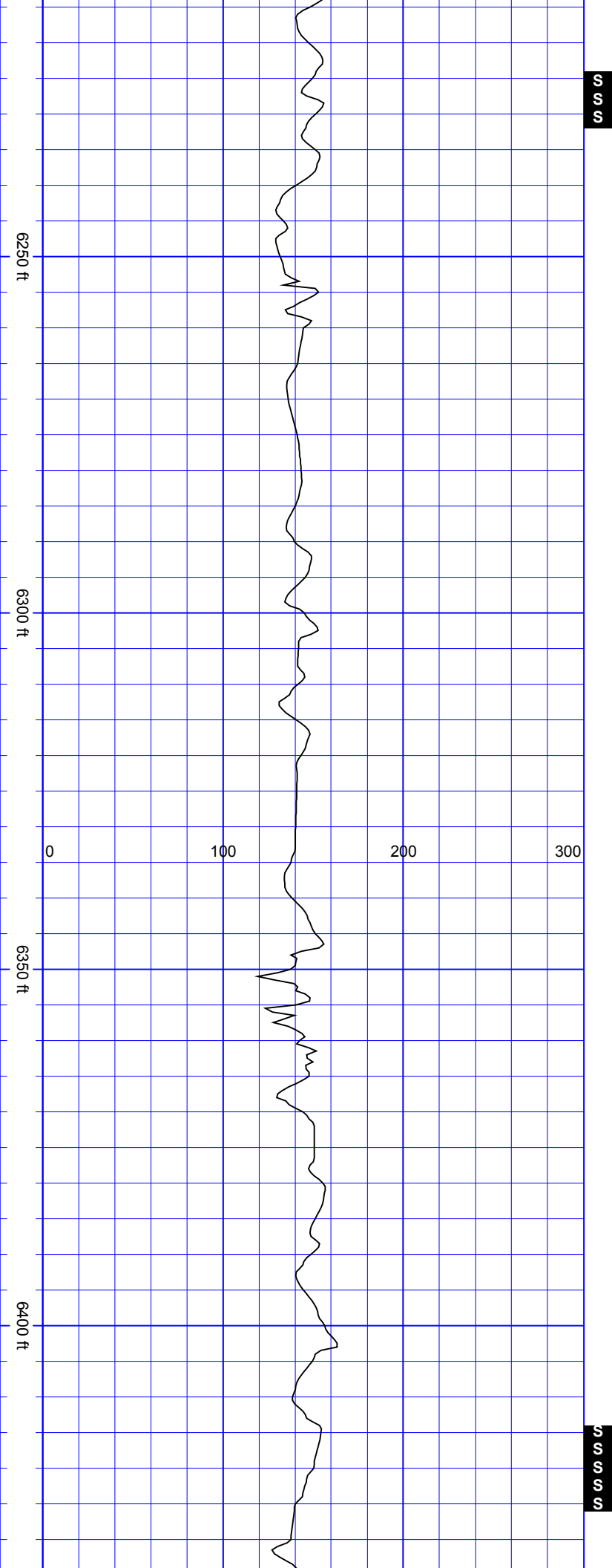




SurveyDepth:6065
TVD:6057.54 Inc:2.73
Azi:238.98 VertSec:-
248.86

SurveyDepth:6159
TVD:6151.46 Inc:1.89
Azi:243.29 VertSec:-
252.17



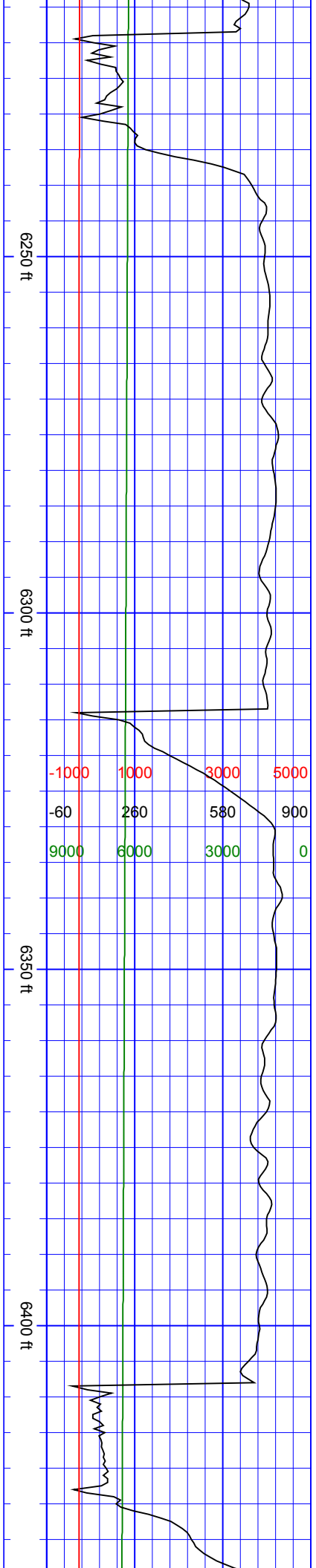


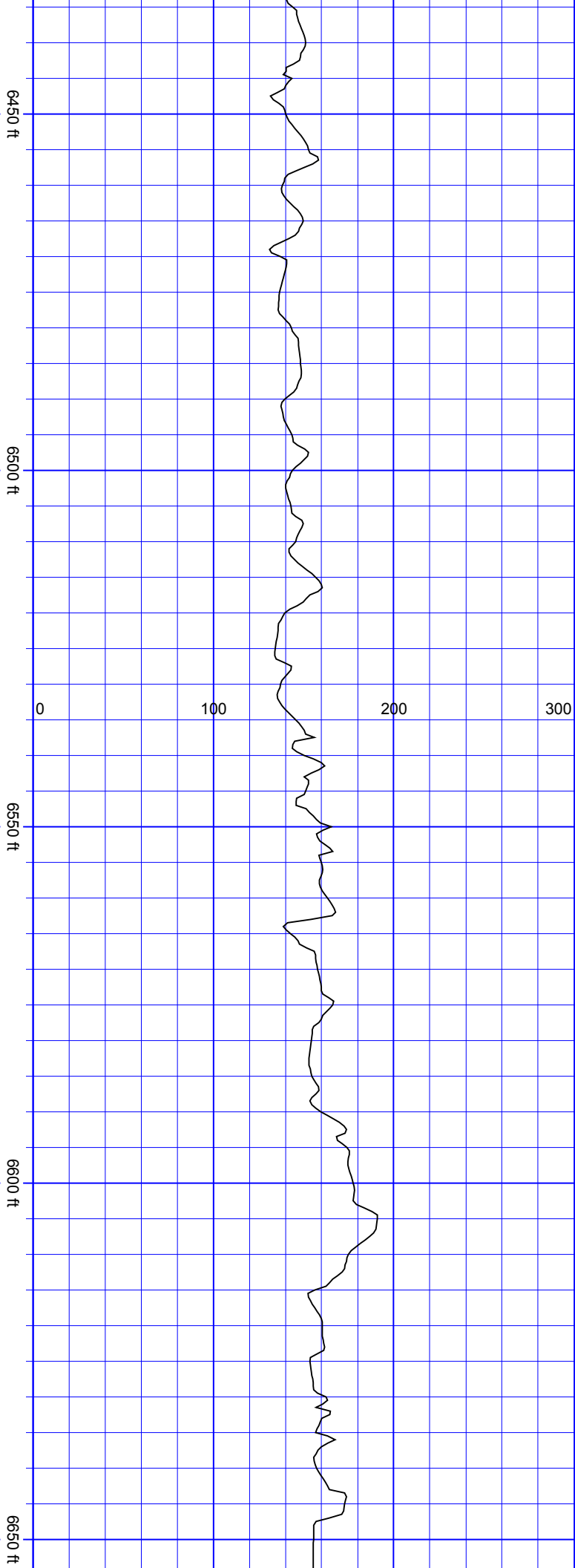
SurveyDepth:6254
TVD:6246.42 Inc:1.49
Azi:227.82 VertSec:-
254.48

SurveyDepth:6349
TVD:6341.39 Inc:1.67
Azi:198.38 VertSec:-
255.84

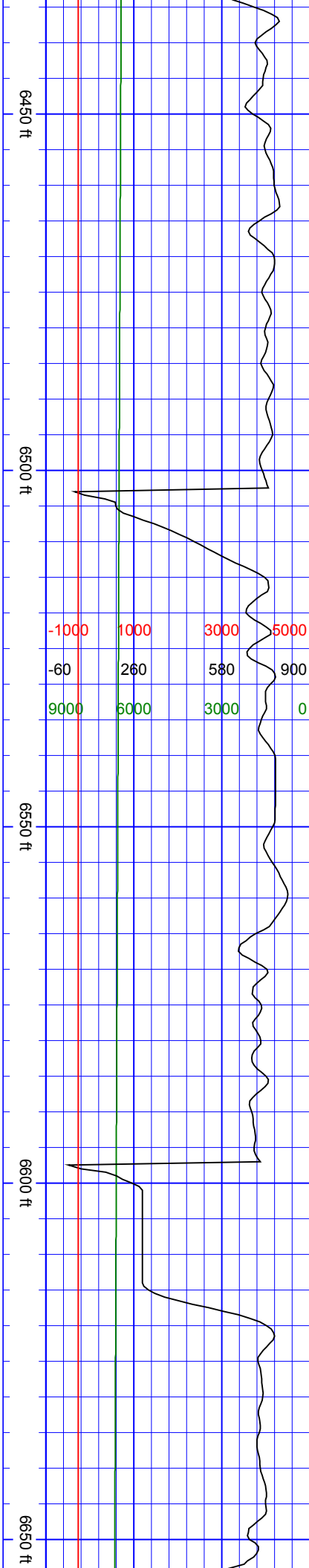
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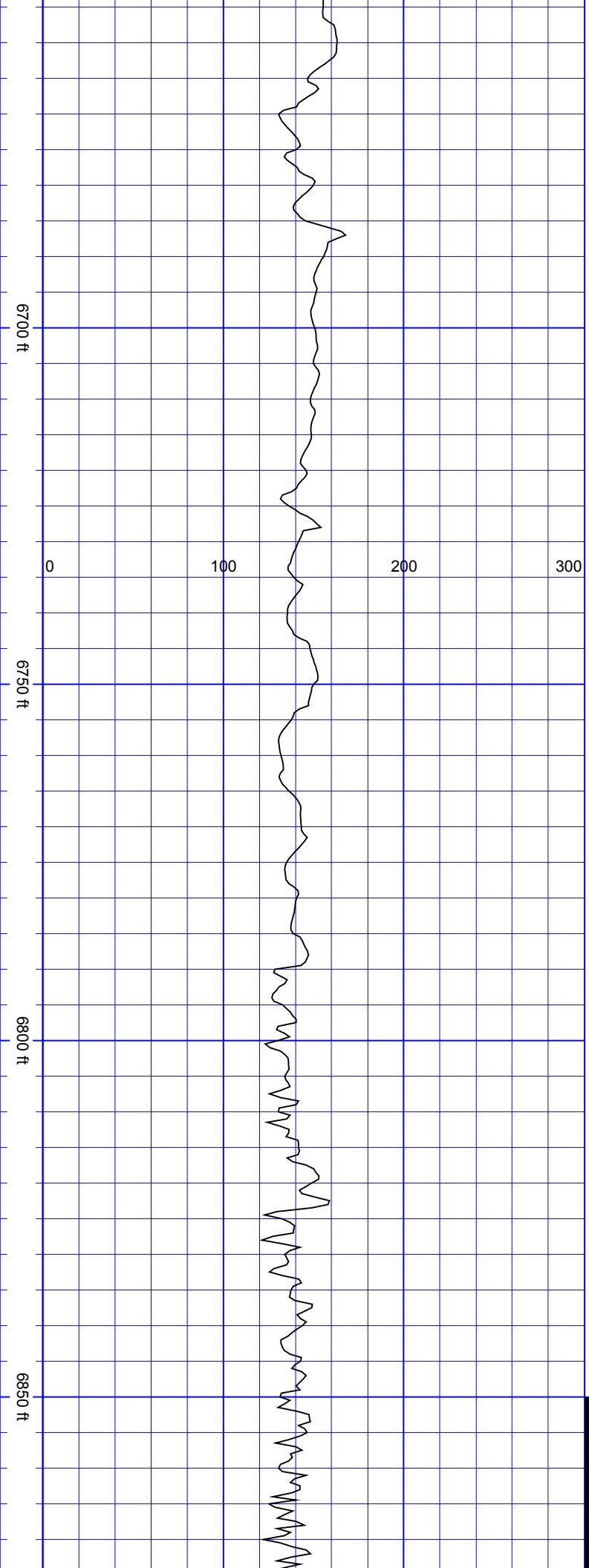
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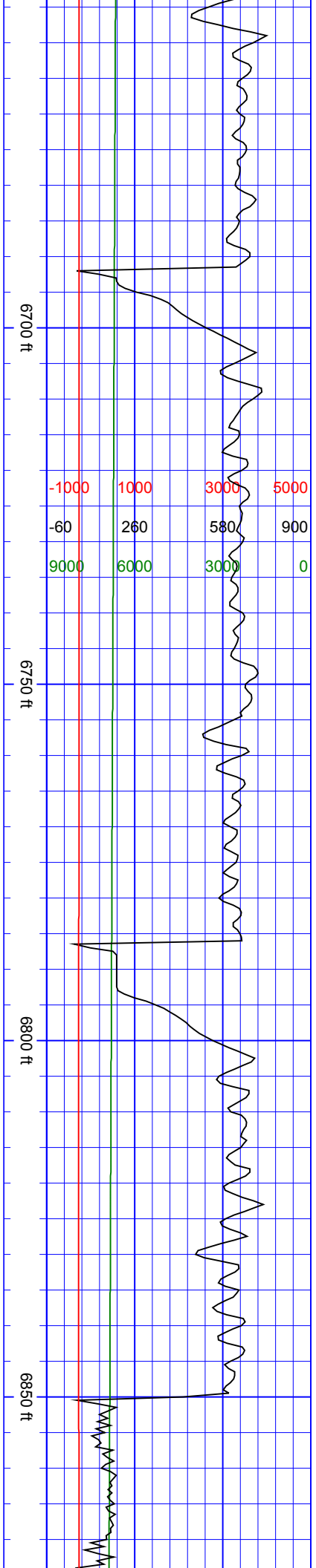
SurveyDepth:6443 TVD:6435.33 Inc:2.42 Azi:221.58 VertSec:-257.59
SurveyDepth:6537 TVD:6529.24 Inc:2.51 Azi:215.25 VertSec:-260.1
SurveyDepth:6632 TVD:6624.16 Inc:2.11 Azi:211.74 VertSec:-262.23





SurveyDepth:6727
TVD:6719.1 Inc:2.2
Azi:209.19 VertSec:-
264.04

SurveyDepth:6821
TVD:6813.03 Inc:1.98
Azi:198.29 VertSec:-
265.43



6900 ft

6950 ft

7000 ft

7050 ft

0 100 200 300

SurveyDepth:6916
TVD:6907.94 Inc:3.56
Azi:133.95 VertSec:-
263.83

SurveyDepth:7010
TVD:7000.79 Inc:13.62
Azi:104.51 VertSec:-
250.98

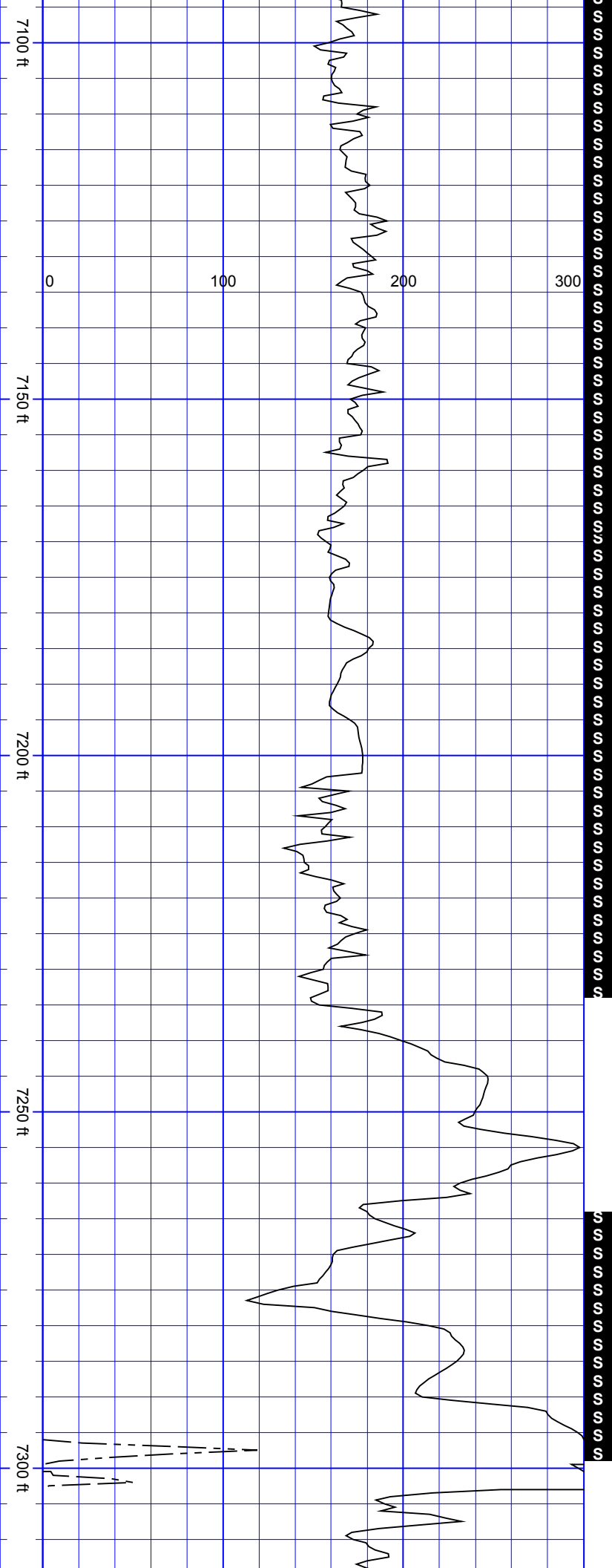
6900 ft

6950 ft

7000 ft

7050 ft

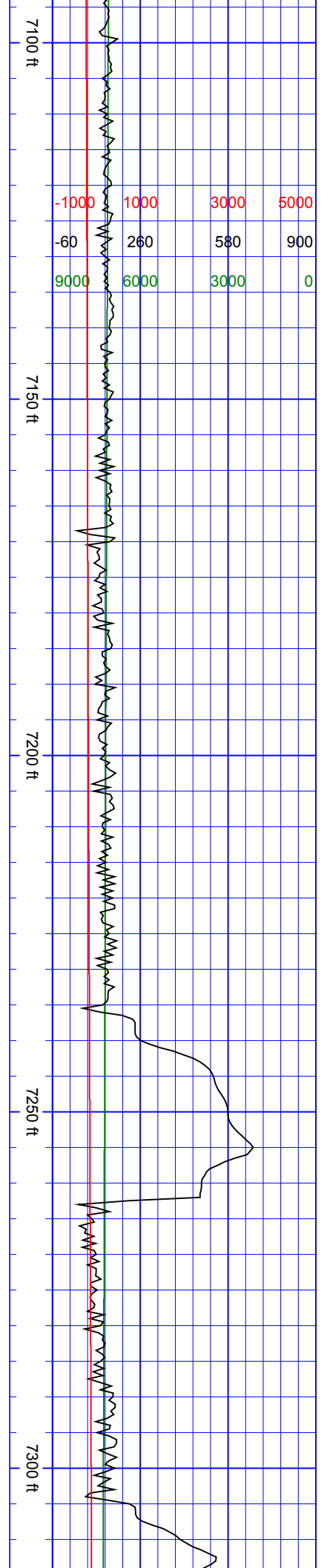
-1000	1000	3000	5000
-60	260	580	900
9000	6000	3000	0

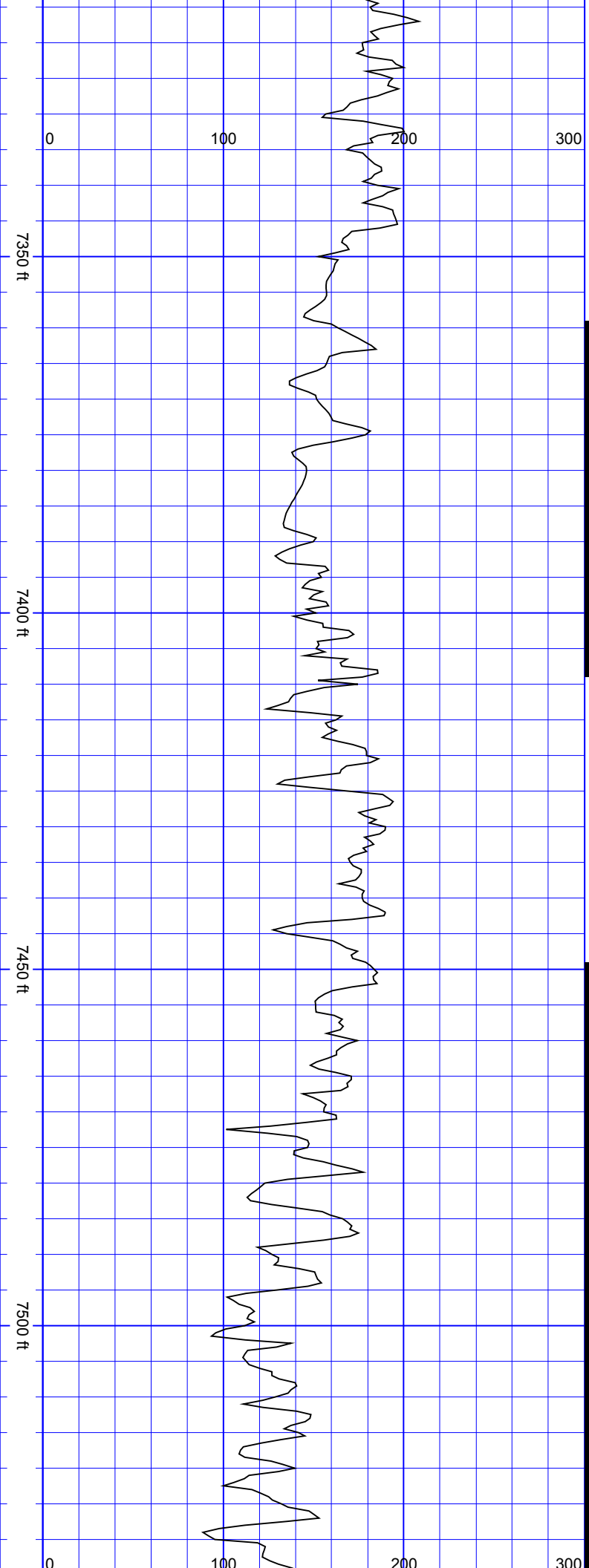


SurveyDepth:7104
TVD:7090.01 Inc:22.76
Azi:98.44 VertSec:-
222.23

SurveyDepth:7199
TVD:7172.49 Inc:36.3
Azi:103.01 VertSec:-
176.45

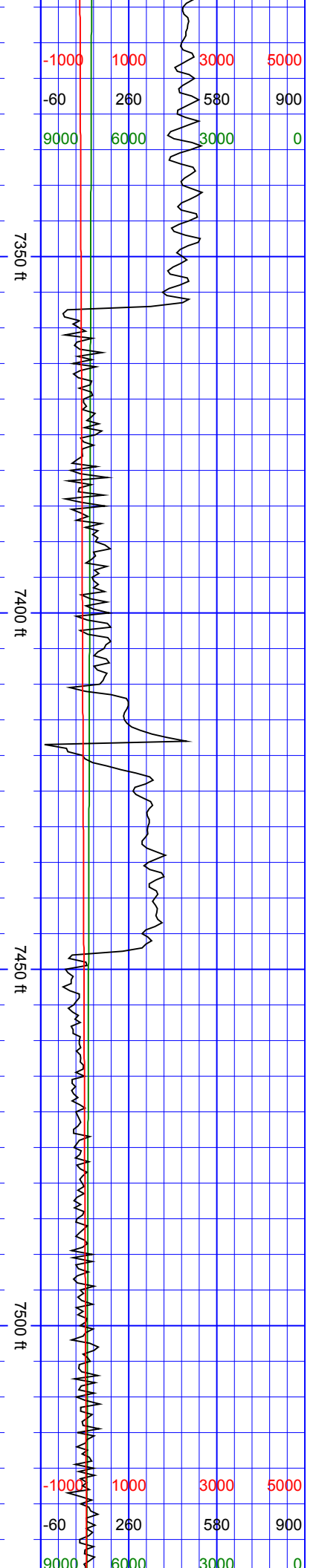
SurveyDepth:7294
TVD:7246.11 Inc:42.1
Azi:96.51 VertSec:-
117.34

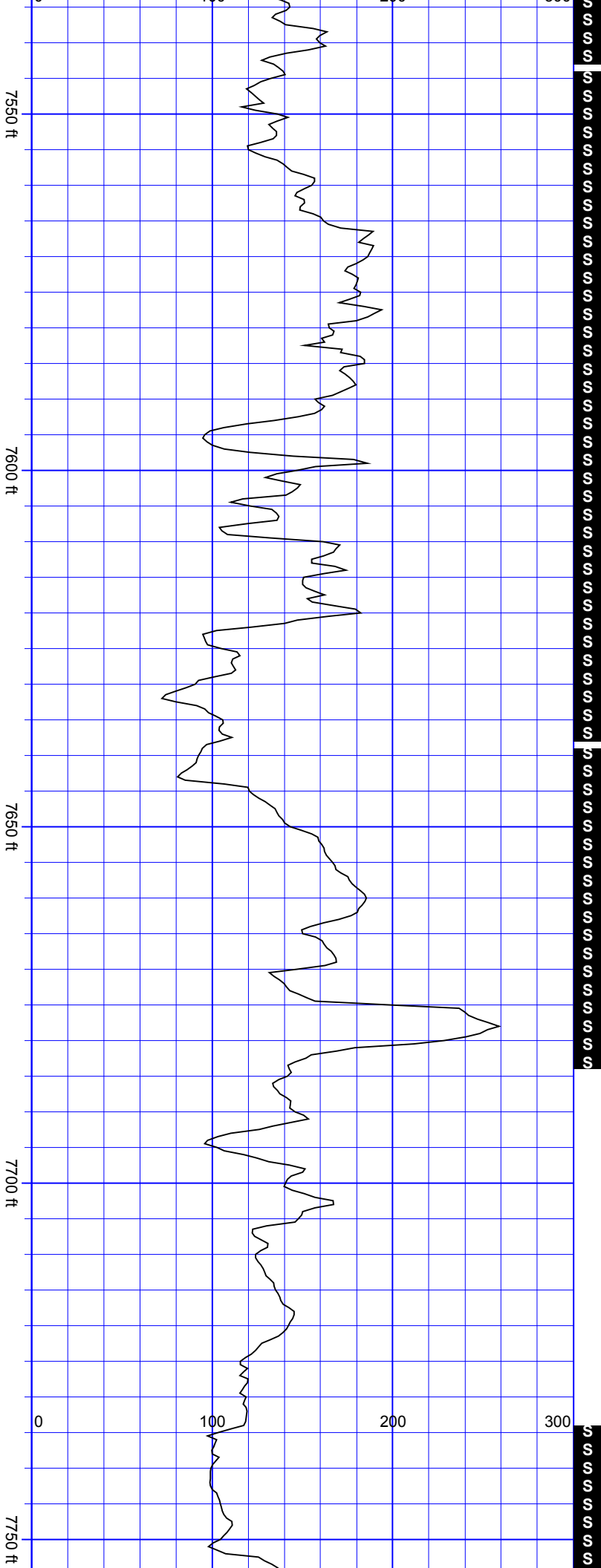




SurveyDepth:7387
TVD:7316.02 Inc:40.52
Azi:87.99 VertSec:-56.13

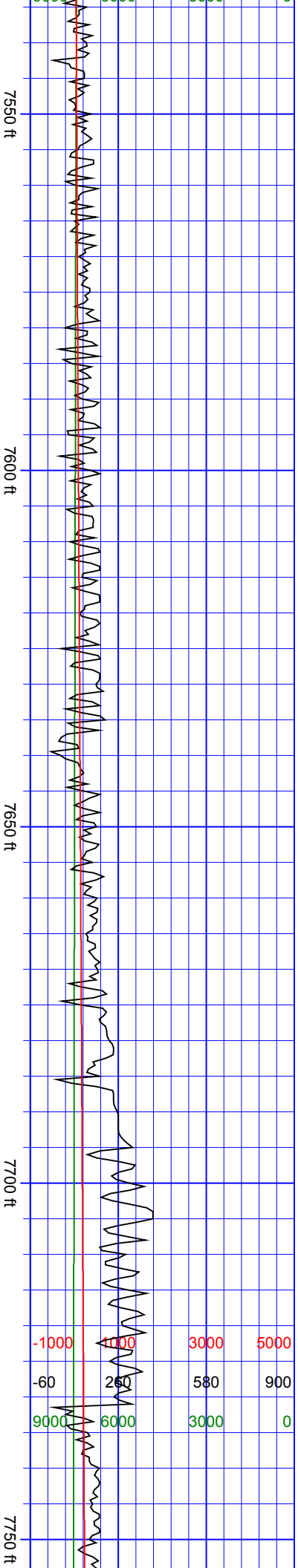
SurveyDepth:7482
TVD:7386.4 Inc:43.86
Azi:85.7 VertSec:7.56

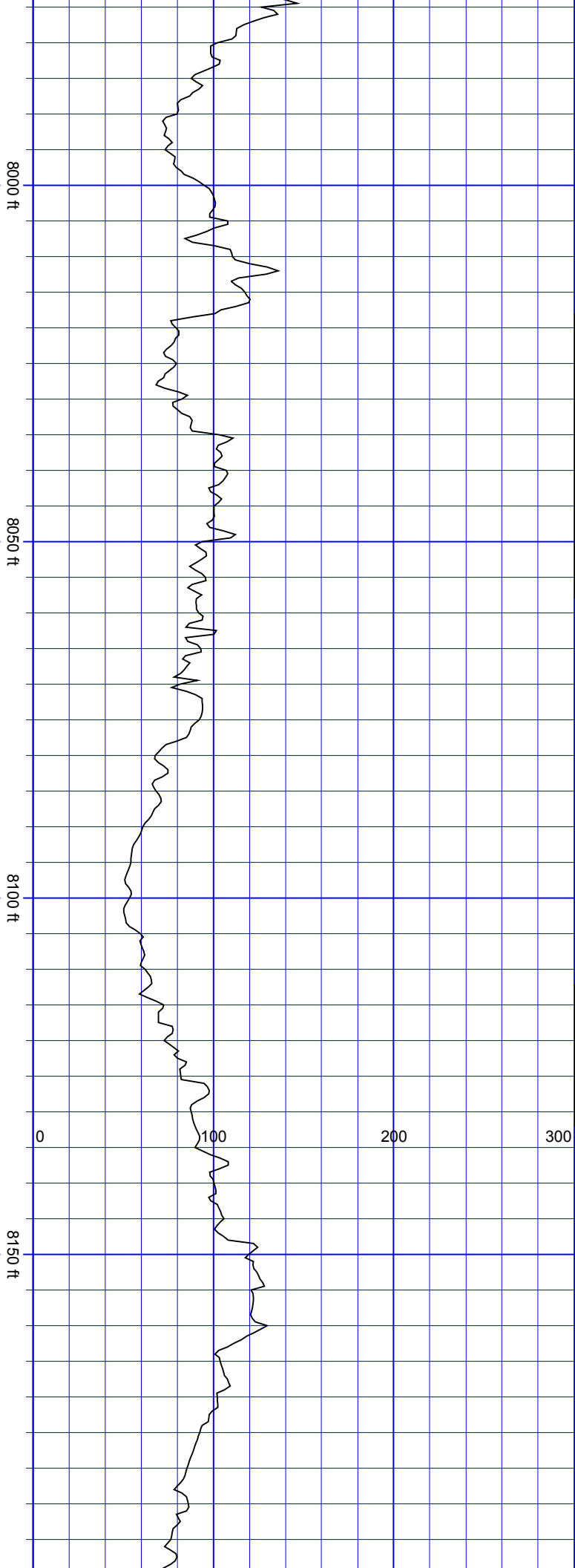




SurveyDepth:7577
TVD:7448 Inc:55.15
Azi:88.78 VertSec:79.6

SurveyDepth:7672
TVD:7494.1 Inc:66.71
Azi:93.87
VertSec:162.42

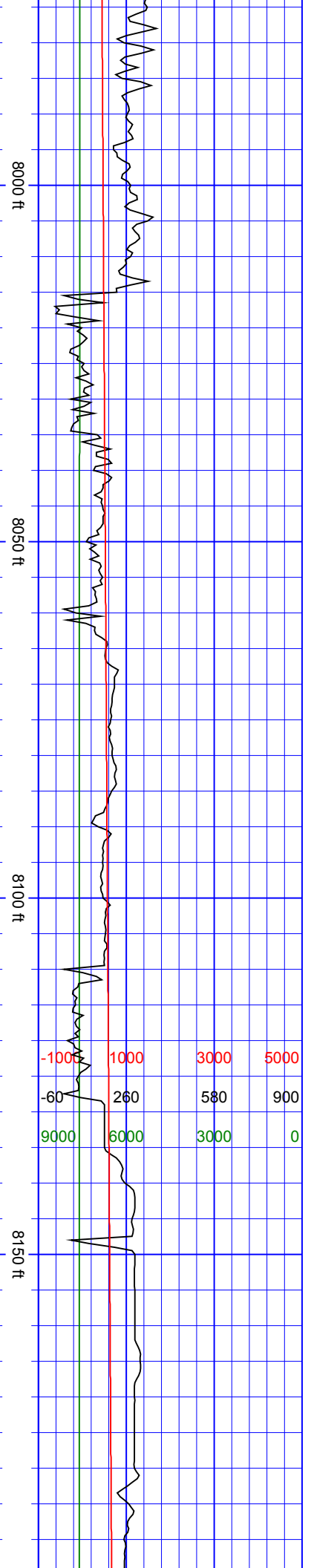




SurveyDepth:8050
TVD:7591.09 Inc:83.54
Azi:89.22 VertSec:526.3



SurveyDepth:8145
TVD:7599.09 Inc:86.79
Azi:88.51
VertSec:620.93

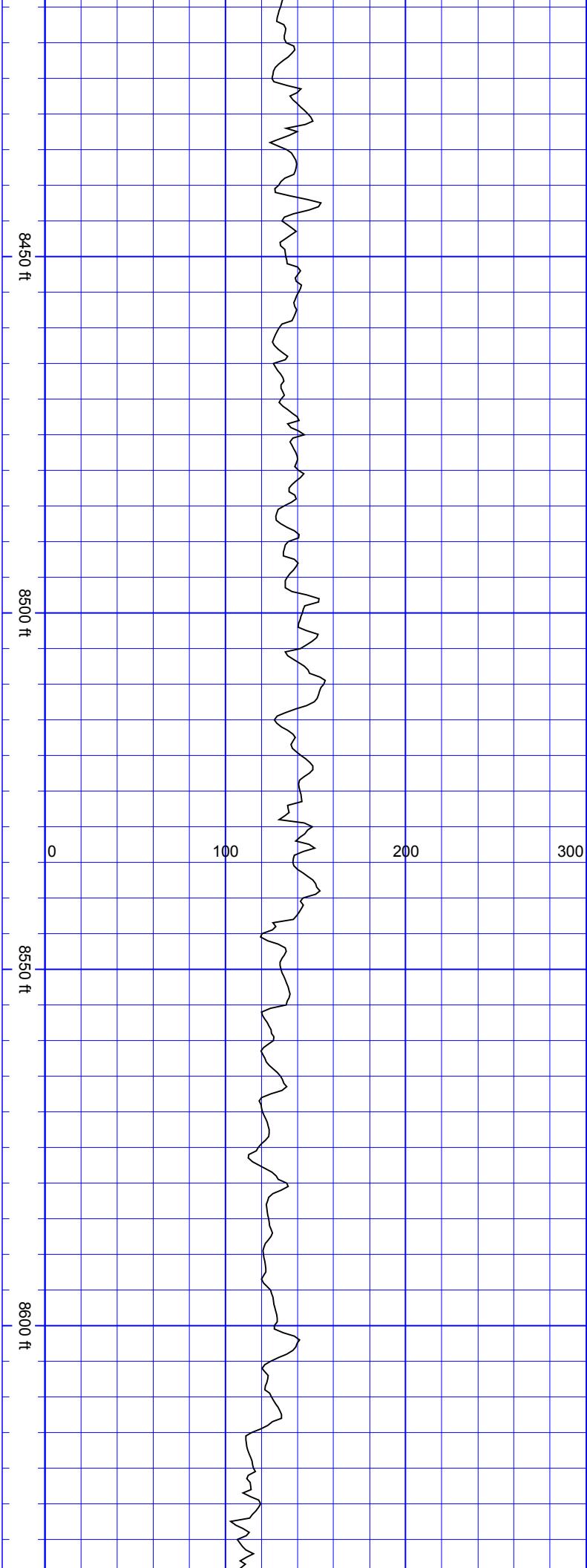


SurveyDepth:8239
TVD:7603.63 Inc:87.67
Azi:89.22 VertSec:714.8

SurveyDepth:8333
TVD:7607.2 Inc:87.98
Azi:88.25
VertSec:808.72

-1000	1000	3000	5000
-60	260	880	900
9000	6000	3000	0

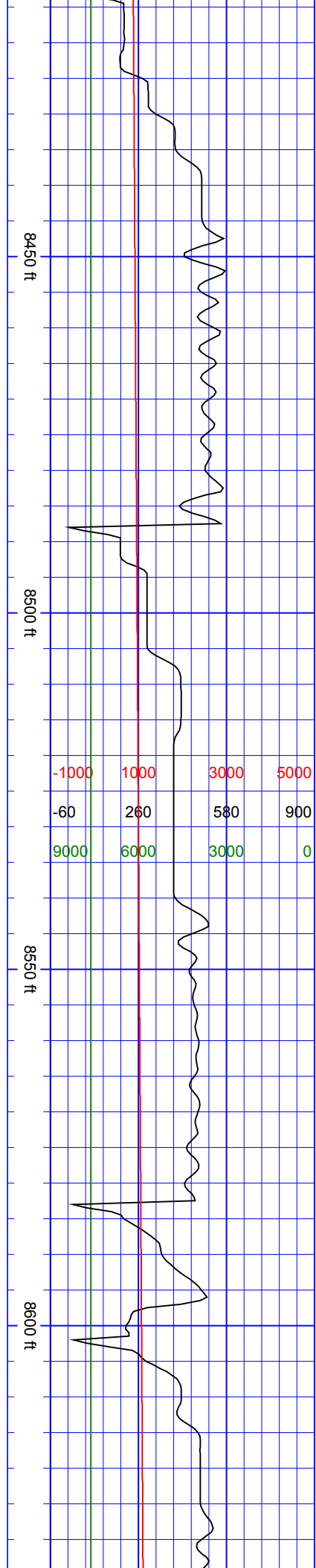
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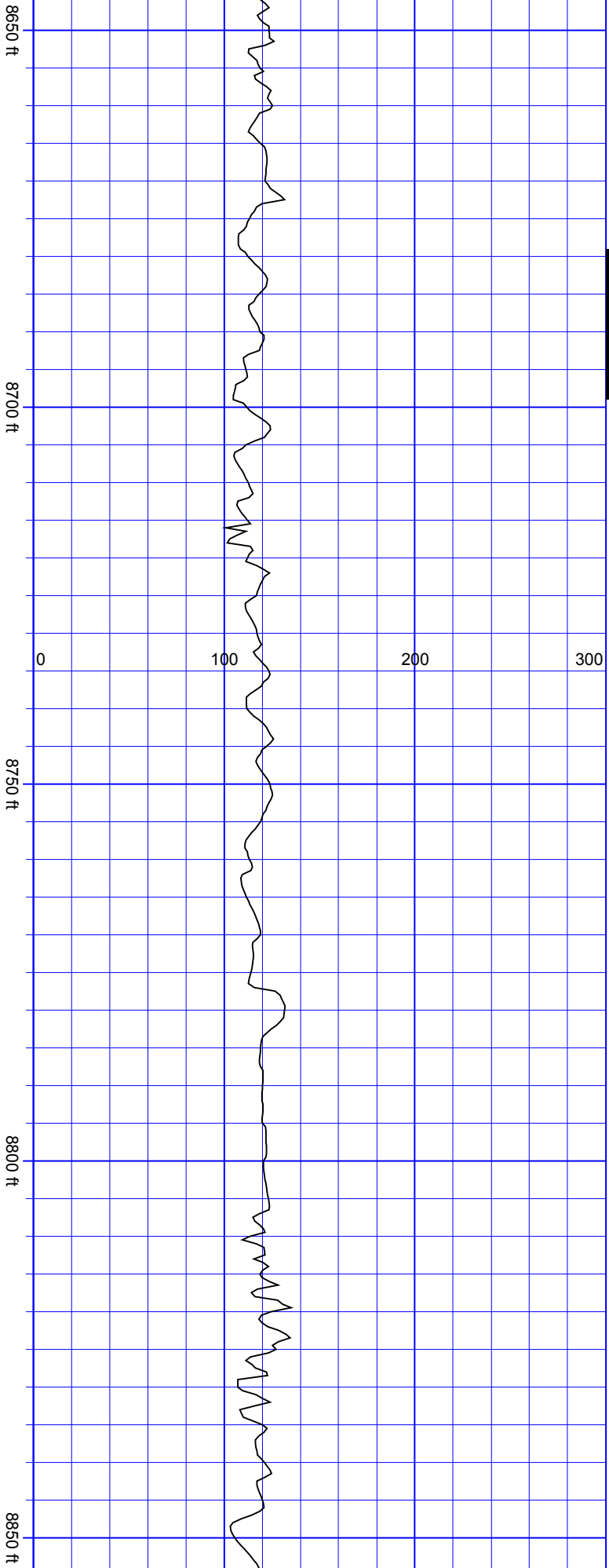


SurveyDepth:8428
TVD:7608.88 Inc:90
Azi:88.42
VertSec:903.66

SurveyDepth:8522
TVD:7608.12 Inc:90.92
Azi:88.42
VertSec:997.62

SurveyDepth:8617
TVD:7606.34 Inc:91.23
Azi:87.81
VertSec:1092.56

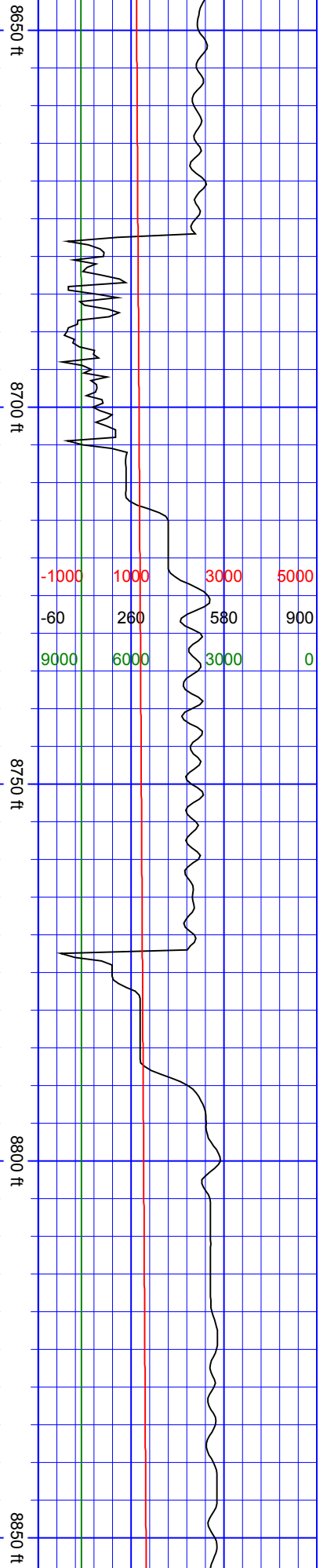




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SurveyDepth:8711
TVD:7605 Inc:90.4
Azi:87.55
VertSec:1186.48

SurveyDepth:8805
TVD:7603.92 Inc:90.92
Azi:87.19
VertSec:1280.38



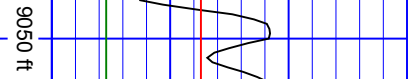
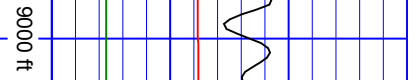
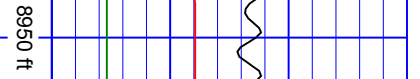
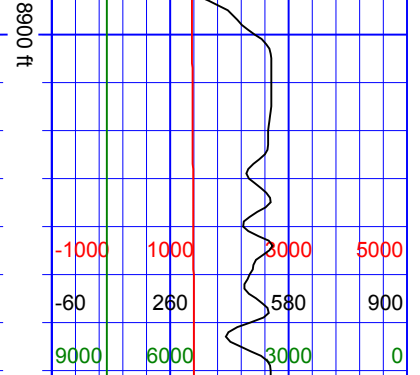


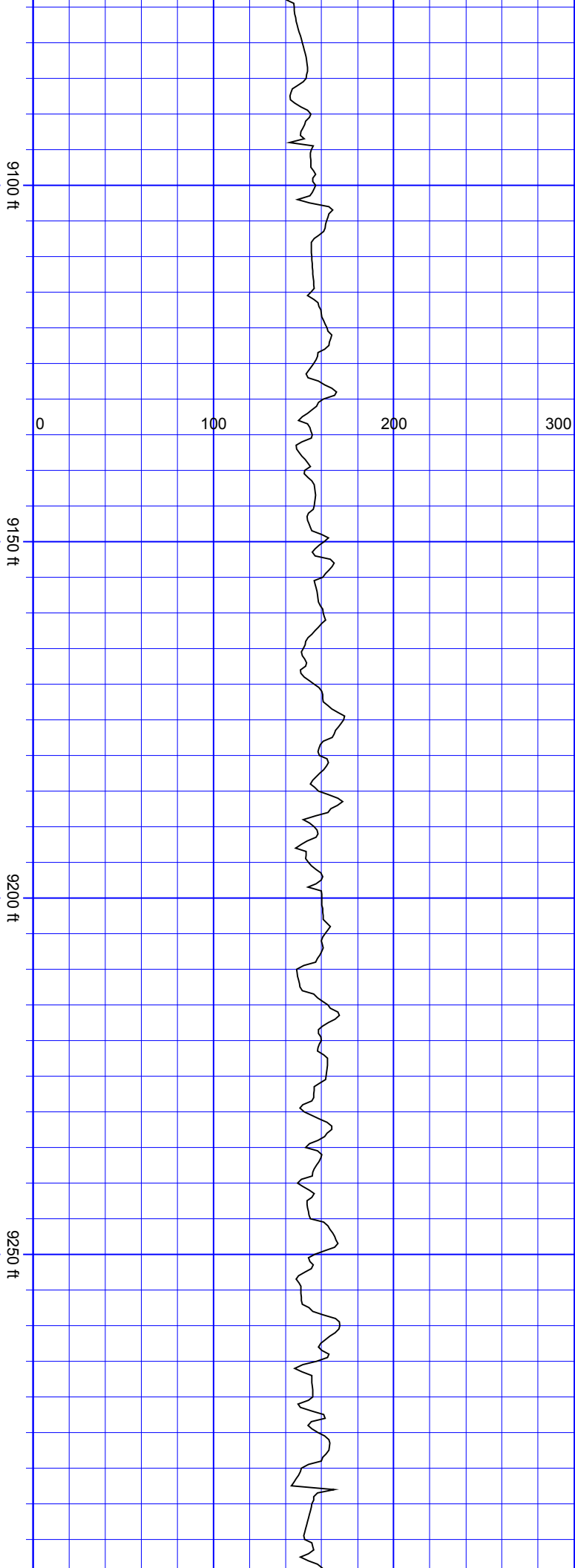
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SurveyDepth:8901
TVD:7603.89 Inc:89.12
Azi:87.37
VertSec:1376.27

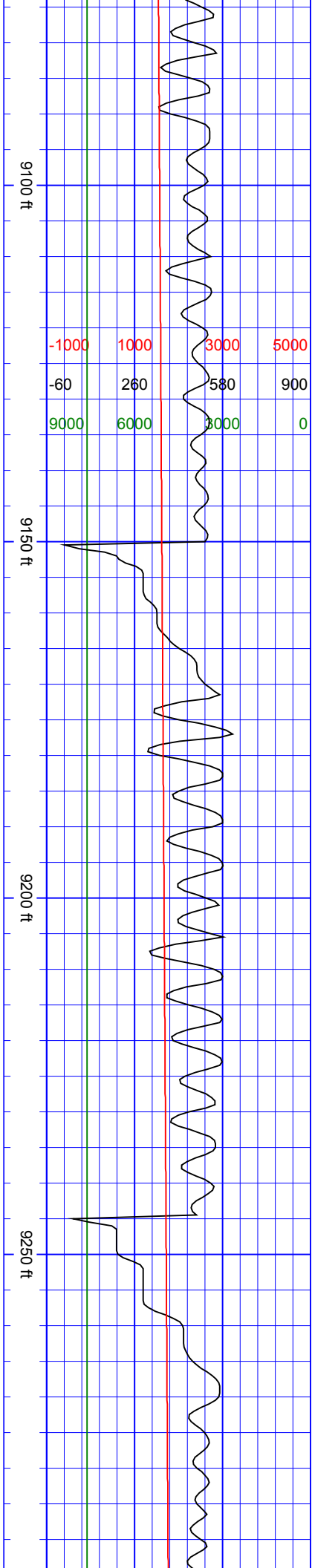
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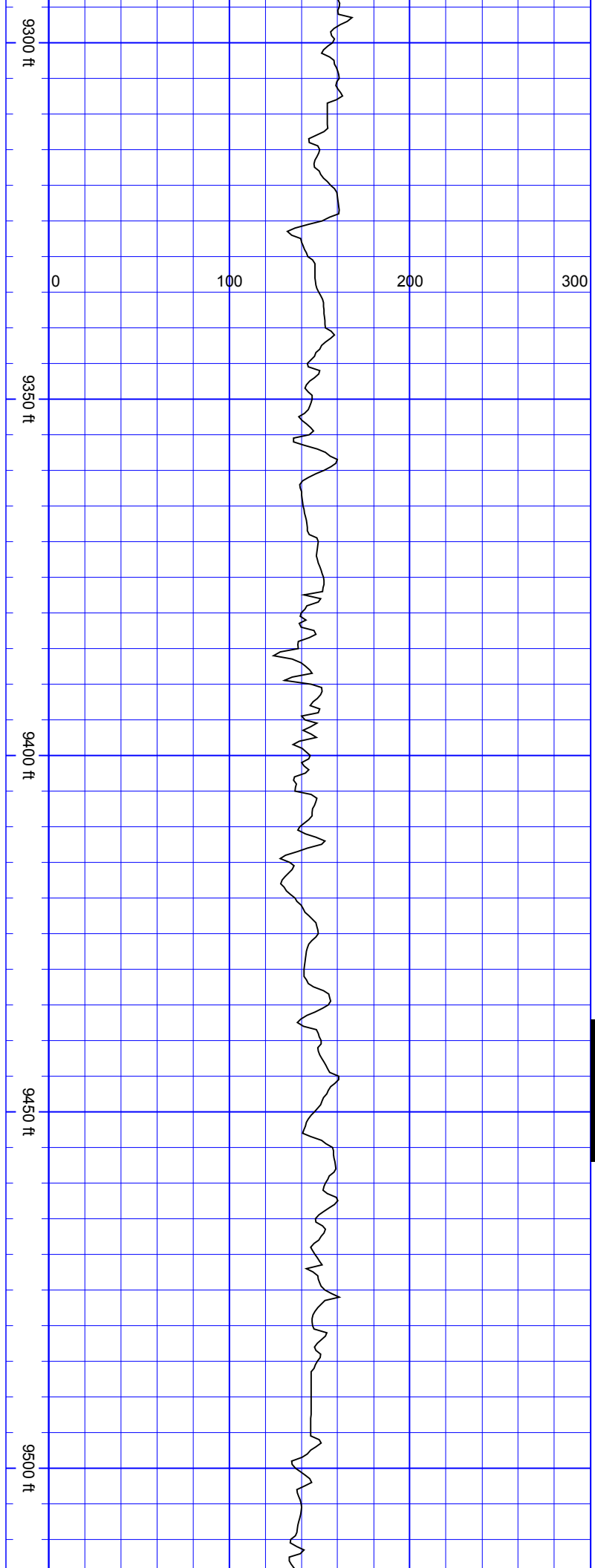
SurveyDepth:8995
TVD:7606.05 Inc:88.24
Azi:88.86
VertSec:1470.2





SurveyDepth:9090 TVD:7608.68 Inc:88.59 Azi:88.6 VertSec:1565.14
SurveyDepth:9185 TVD:7610.79 Inc:88.86 Azi:88.16 VertSec:1660.08
SurveyDepth:9279 TVD:7612.2 Inc:89.43 Azi:88.07 VertSec:1754.02

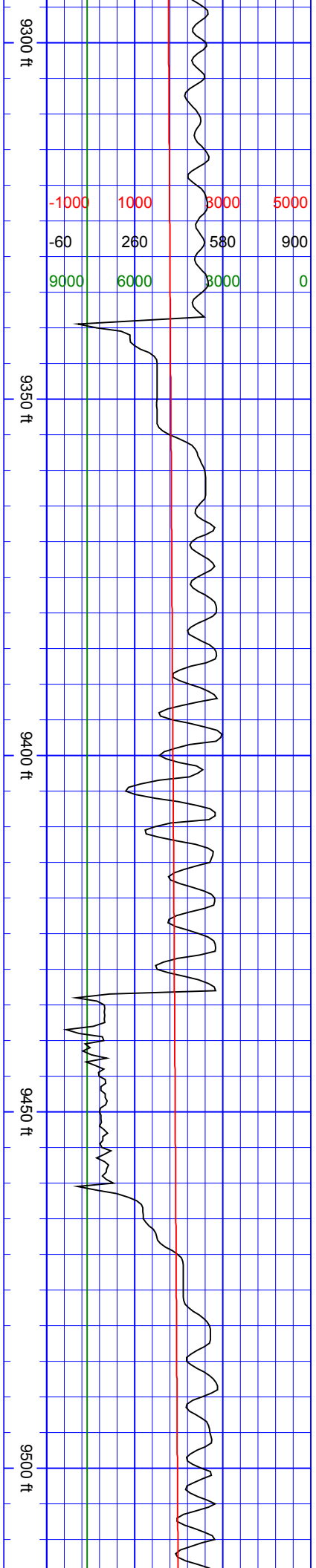


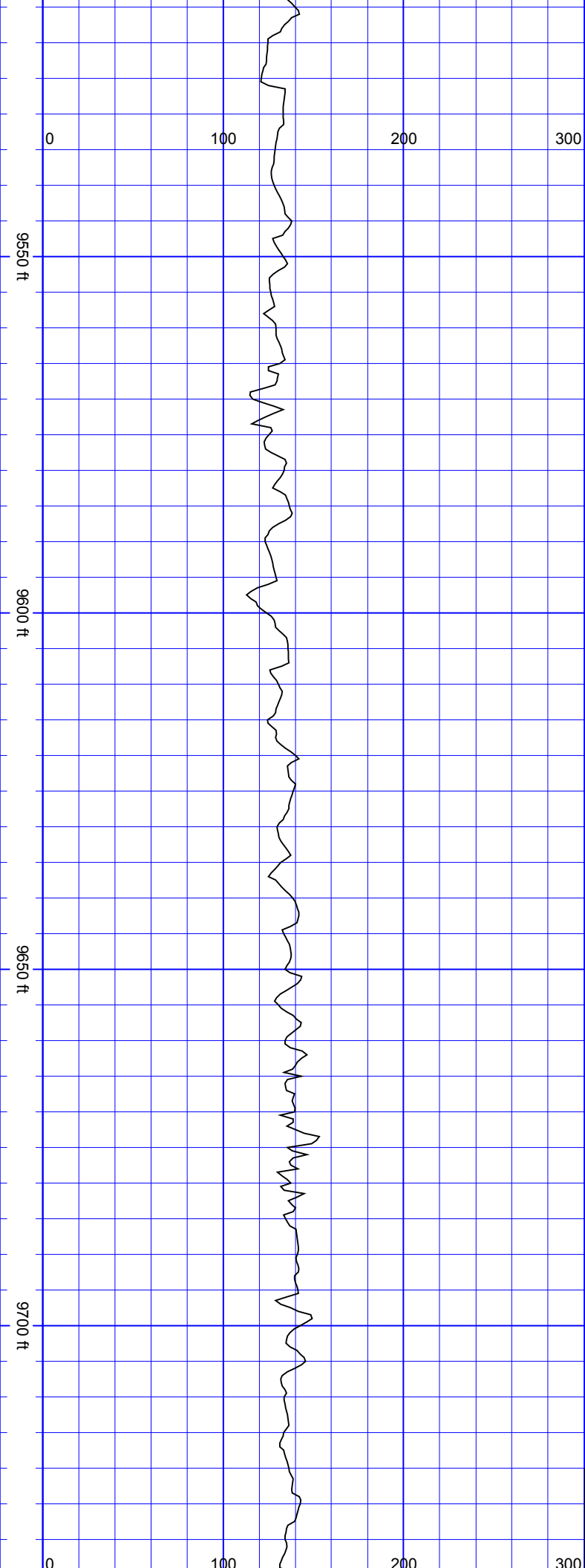


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SurveyDepth:9375
TVD:7612.93 Inc:89.69
Azi:87.99
VertSec:1849.97

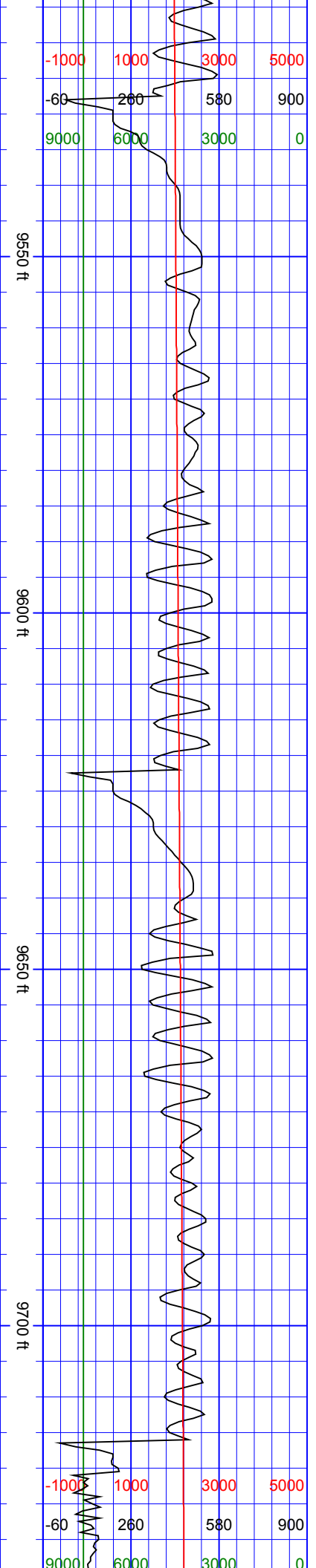
SurveyDepth:9469
TVD:7613.26 Inc:89.91
Azi:90.45
VertSec:1943.95

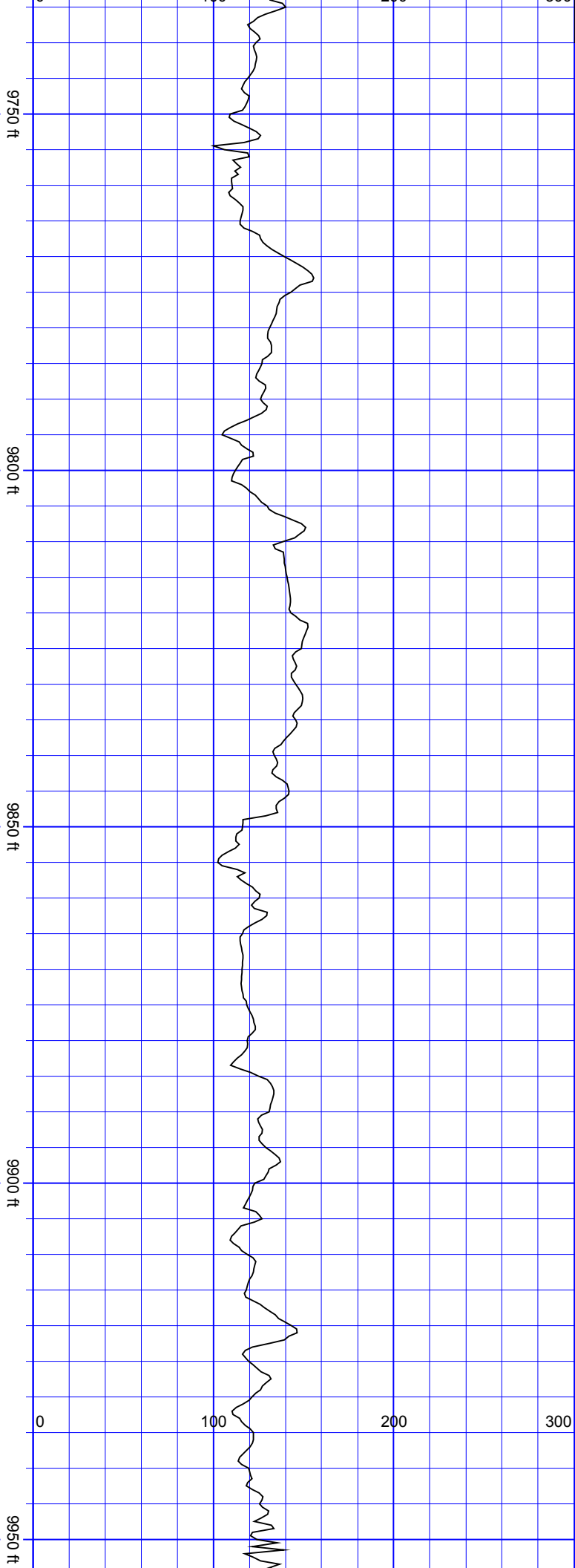




SurveyDepth:9564
TVD:7613.15 Inc:90.22
Azi:89.74
VertSec:2038.95

SurveyDepth:9658
TVD:7612.36 Inc:90.75
Azi:89.39
VertSec:2132.95

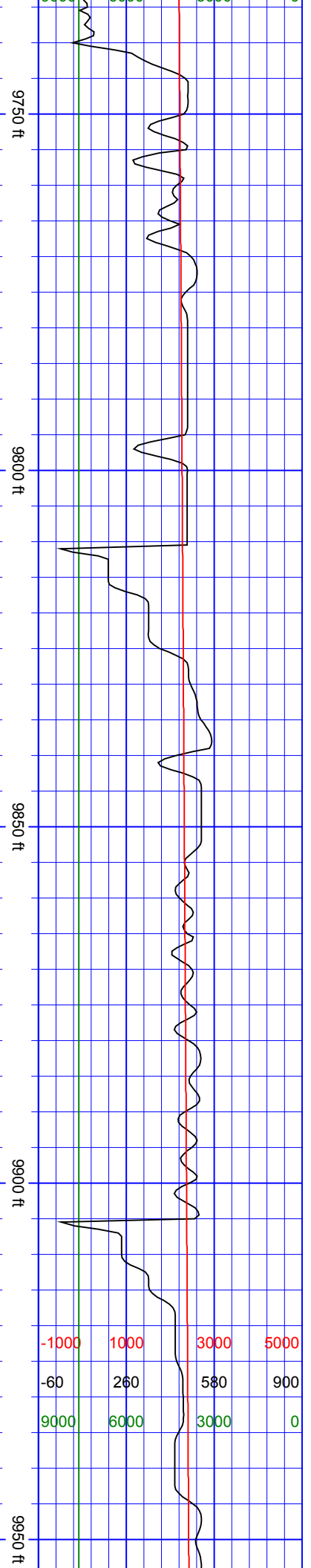


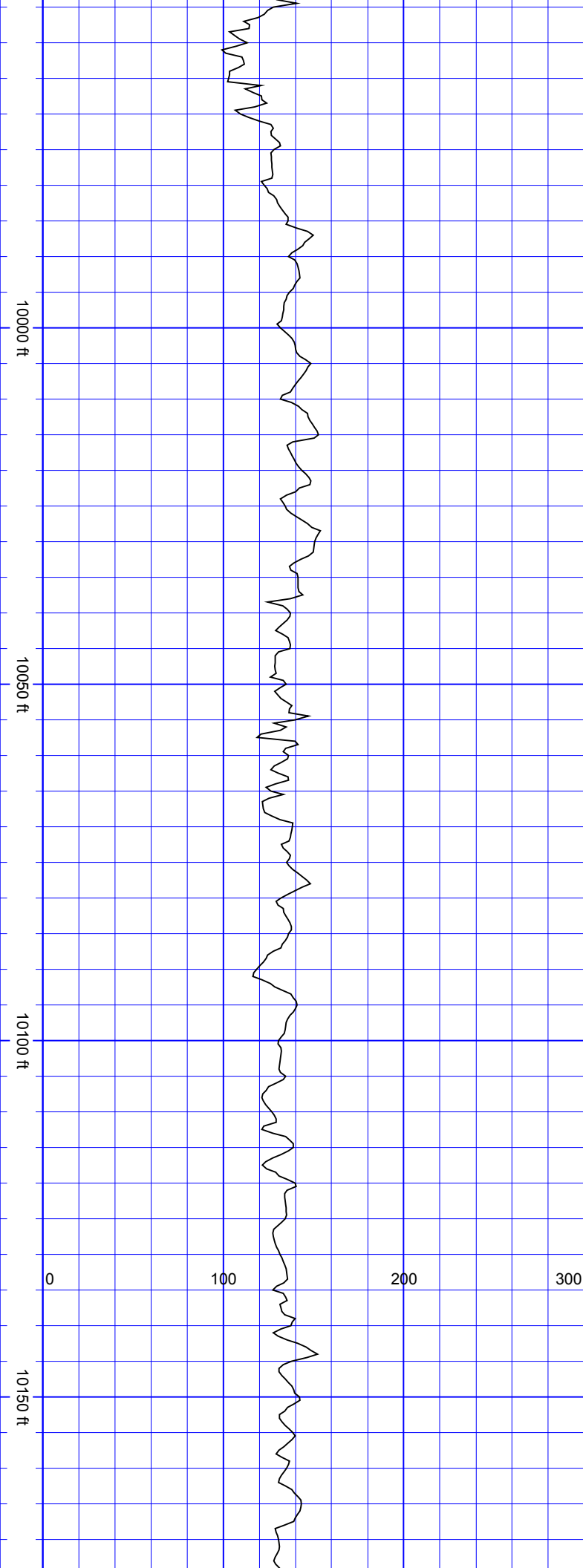


SurveyDepth:9752
TVD:7611.67 Inc:90.09
Azi:91.94
VertSec:2226.93

SurveyDepth:9846
TVD:7611.81 Inc:89.74
Azi:90.89
VertSec:2320.89

SurveyDepth:9941
TVD:7612.35 Inc:89.6
Azi:90.09
VertSec:2415.89



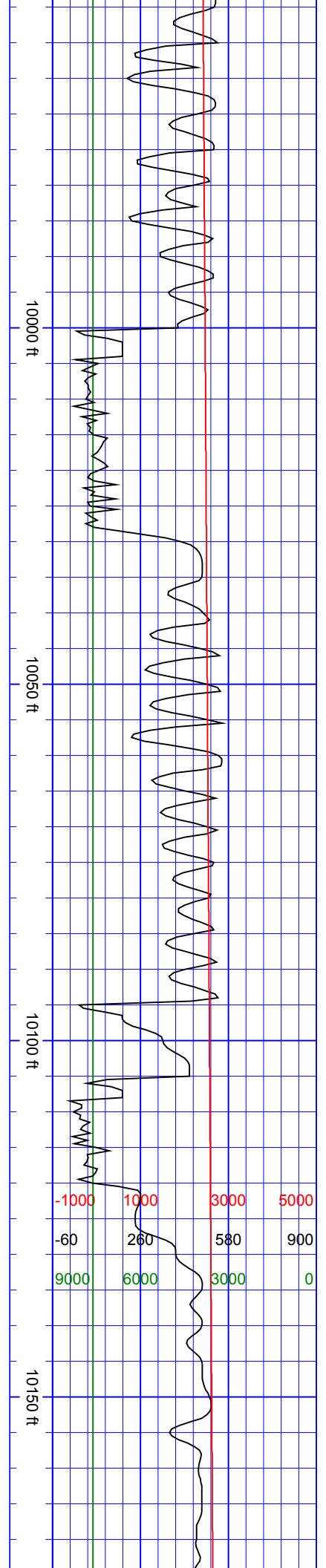


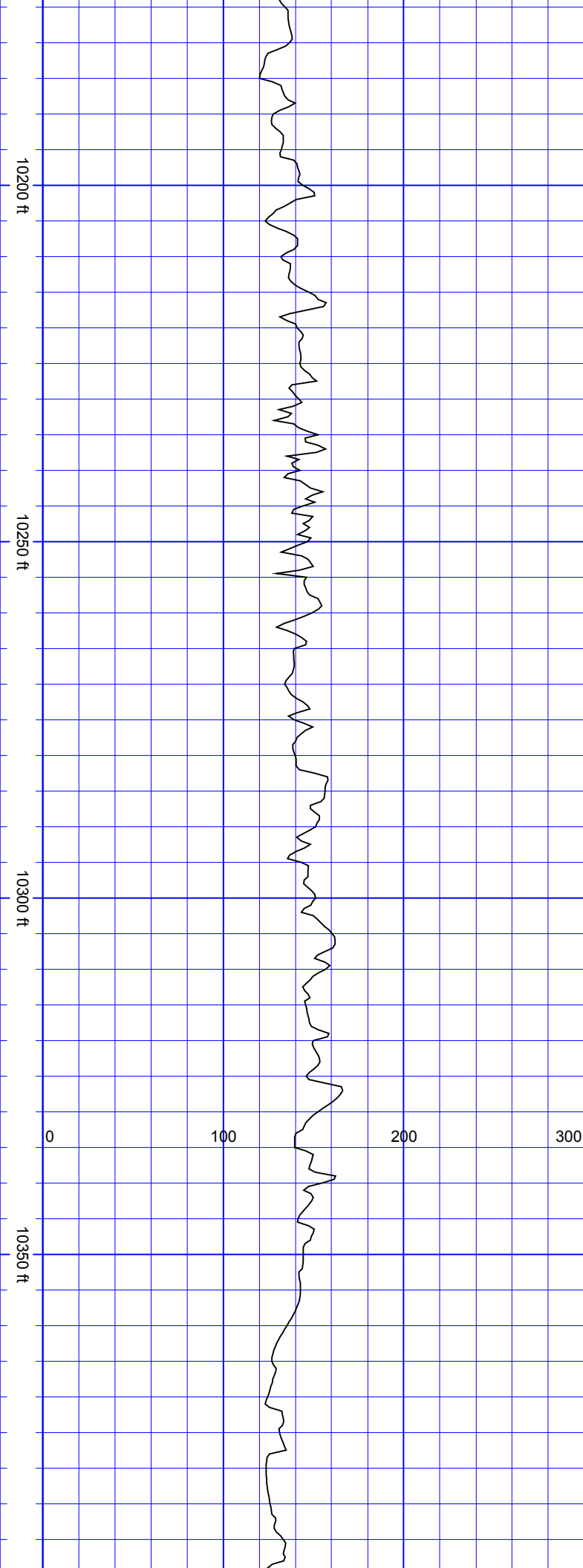
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SurveyDepth:10036
TVD:7612.94 Inc:89.69
Azi:92.29
VertSec:2510.86

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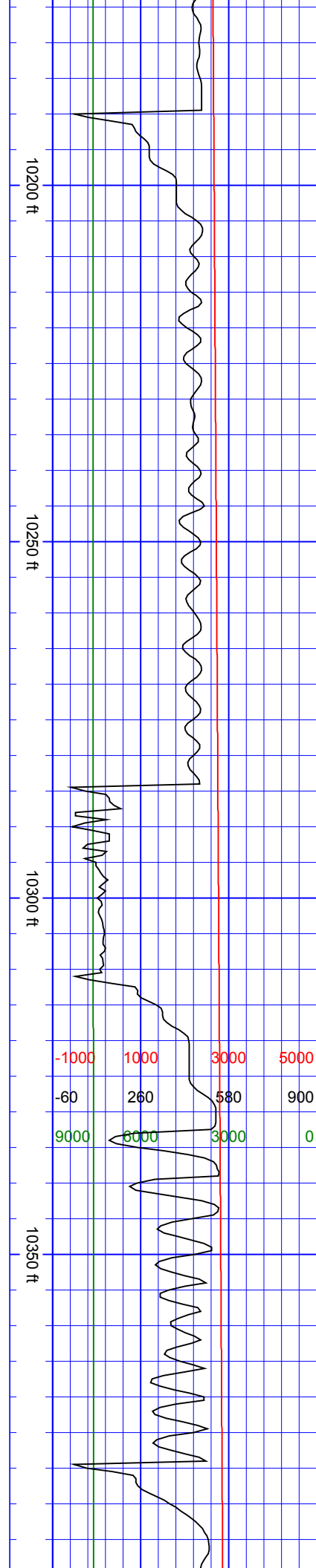
SurveyDepth:10130
TVD:7611.72 Inc:91.8
Azi:91.85
VertSec:2604.78

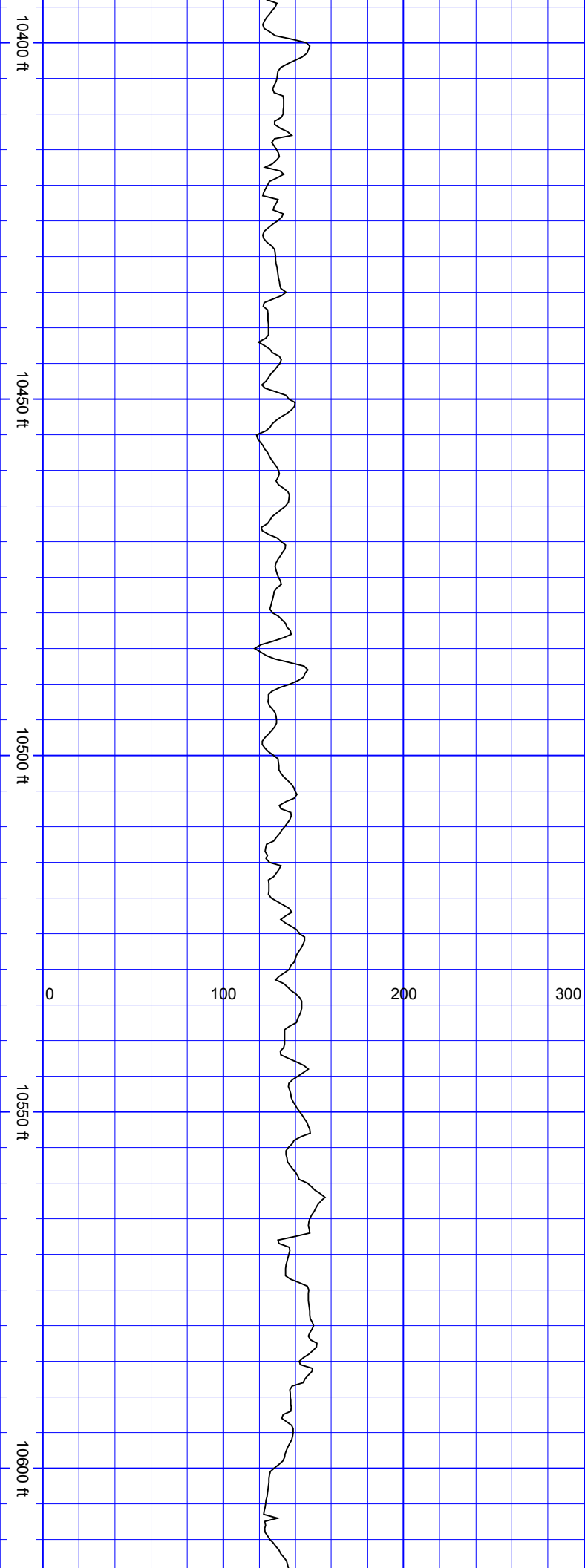




SurveyDepth:10225
TVD:7608.27 Inc:92.37
Azi:92.2
VertSec:2699.65

SurveyDepth:10320
TVD:7605.36 Inc:91.14
Azi:91.15
VertSec:2794.56

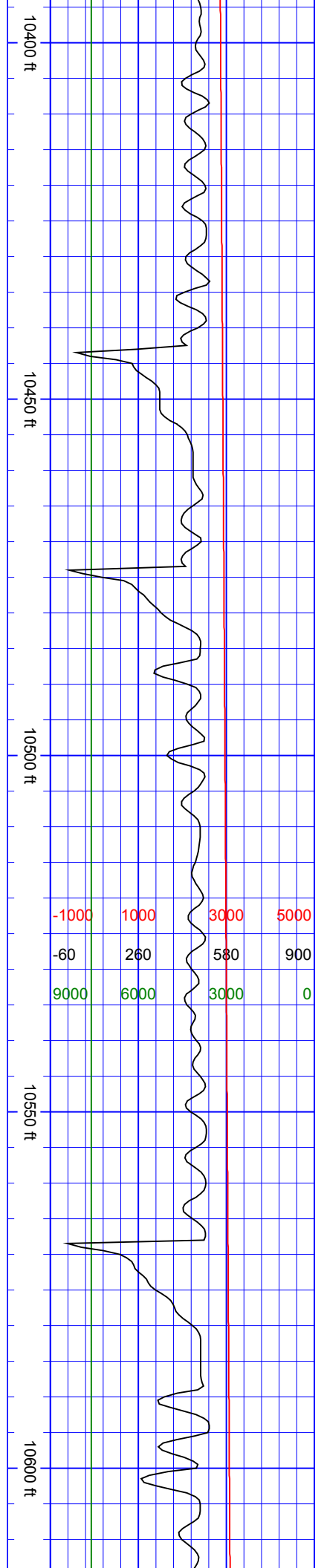


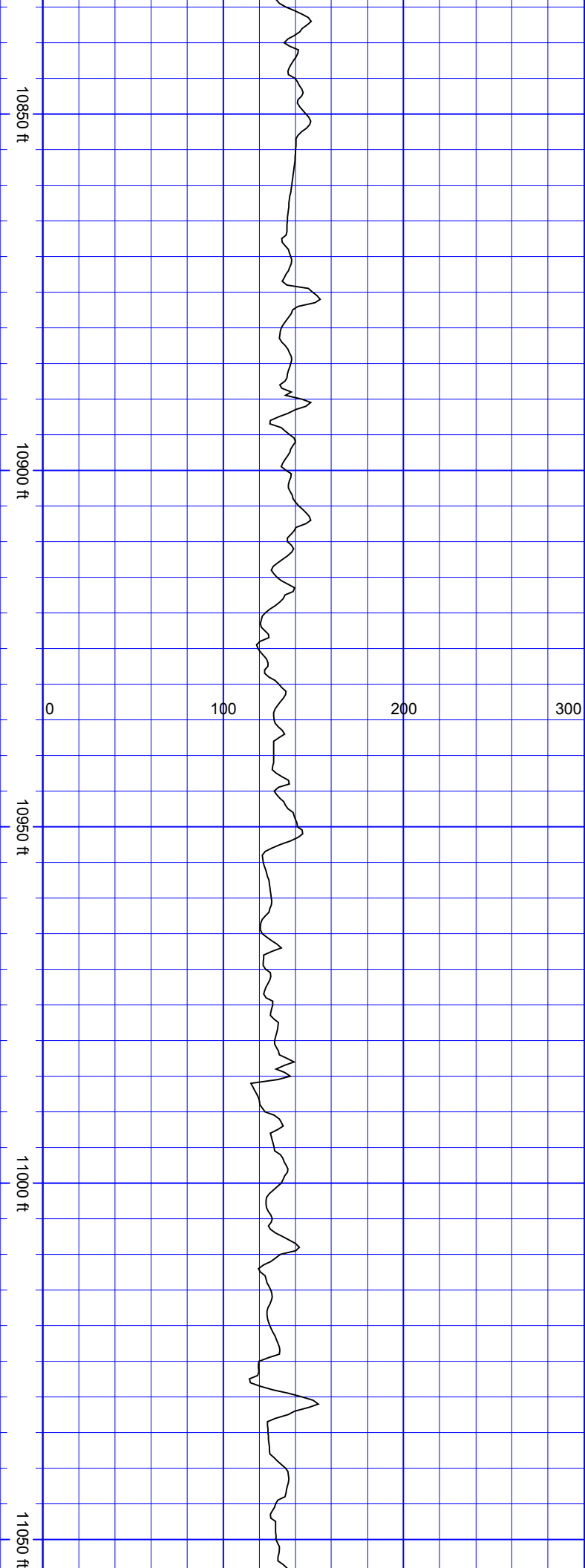


SurveyDepth:10415
TVD:7602.77 Inc:91.98
Azi:90.62
VertSec:2889.51

SurveyDepth:10509
TVD:7599.27 Inc:92.29
Azi:90.09
VertSec:2983.44

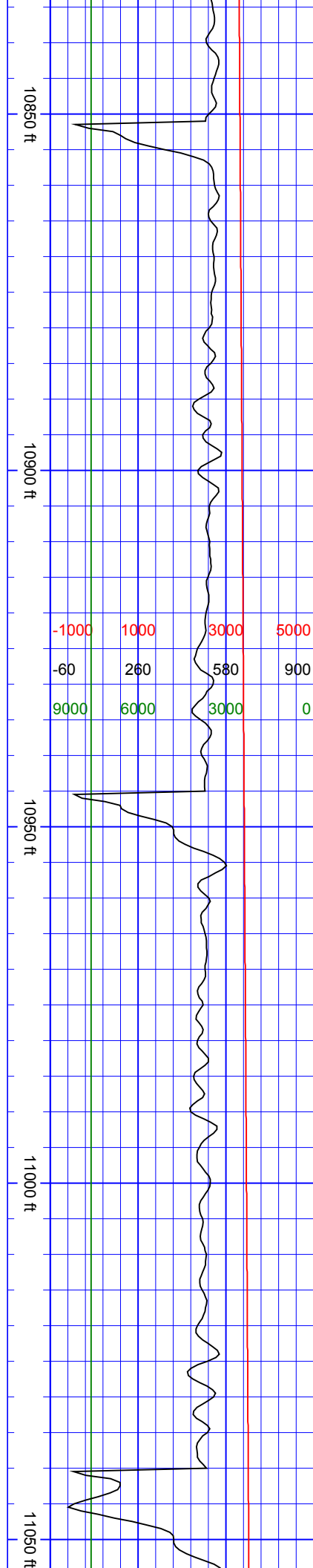
SurveyDepth:10604
TVD:7595.7 Inc:92.02
Azi:88.95
VertSec:3078.37

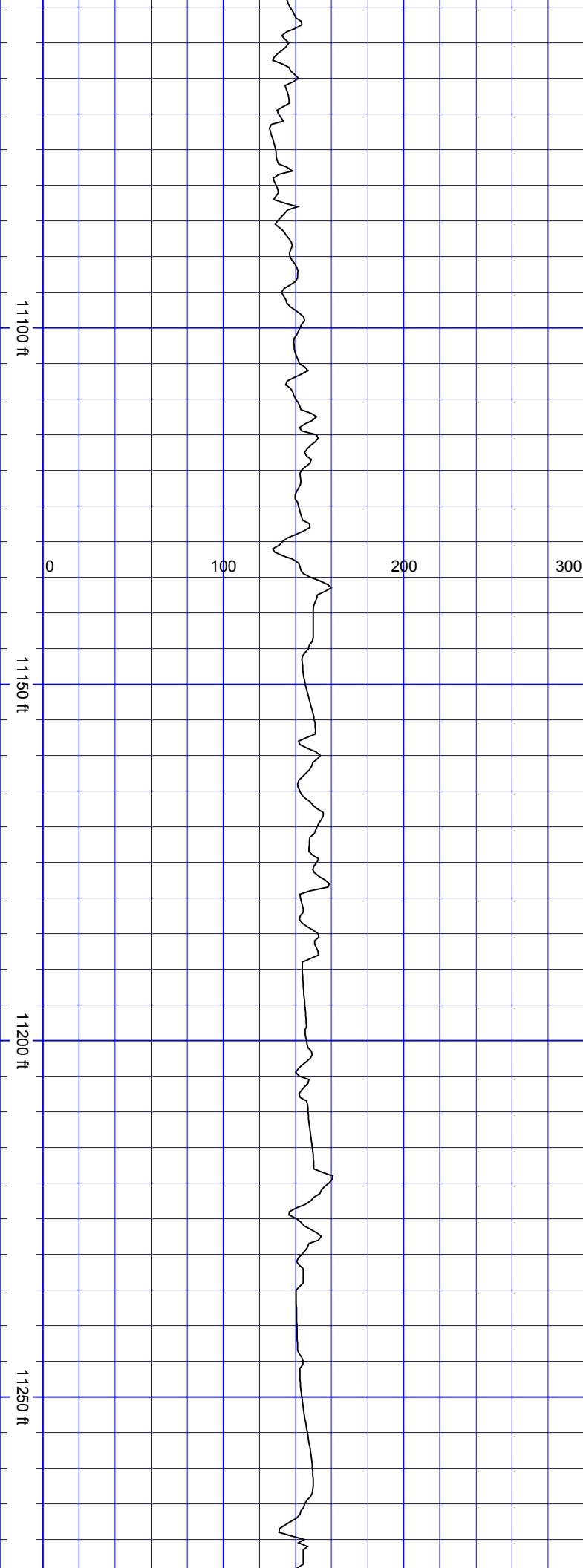




SurveyDepth:10888
TVD:7591.98 Inc:89.47
Azi:89.22
VertSec:3362.21

SurveyDepth:10983
TVD:7592.71 Inc:89.65
Azi:89.13
VertSec:3457.2

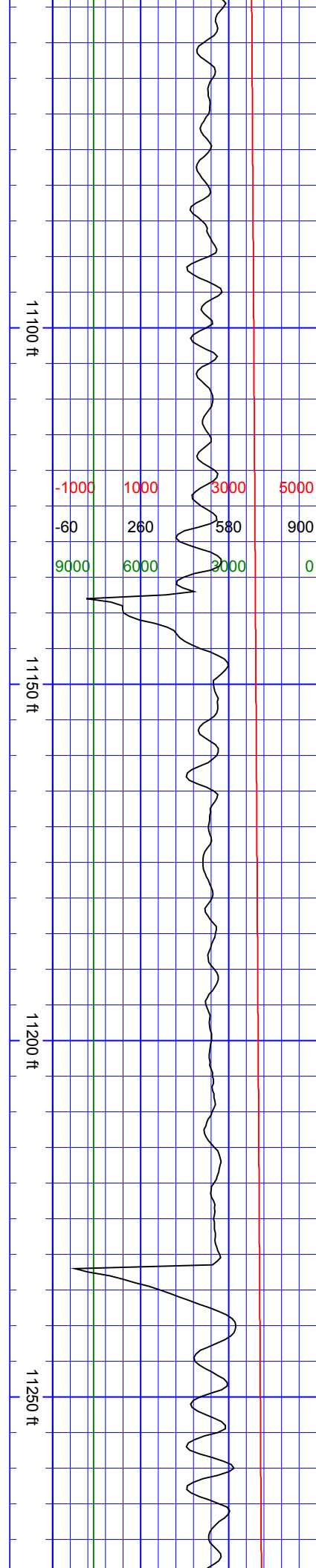


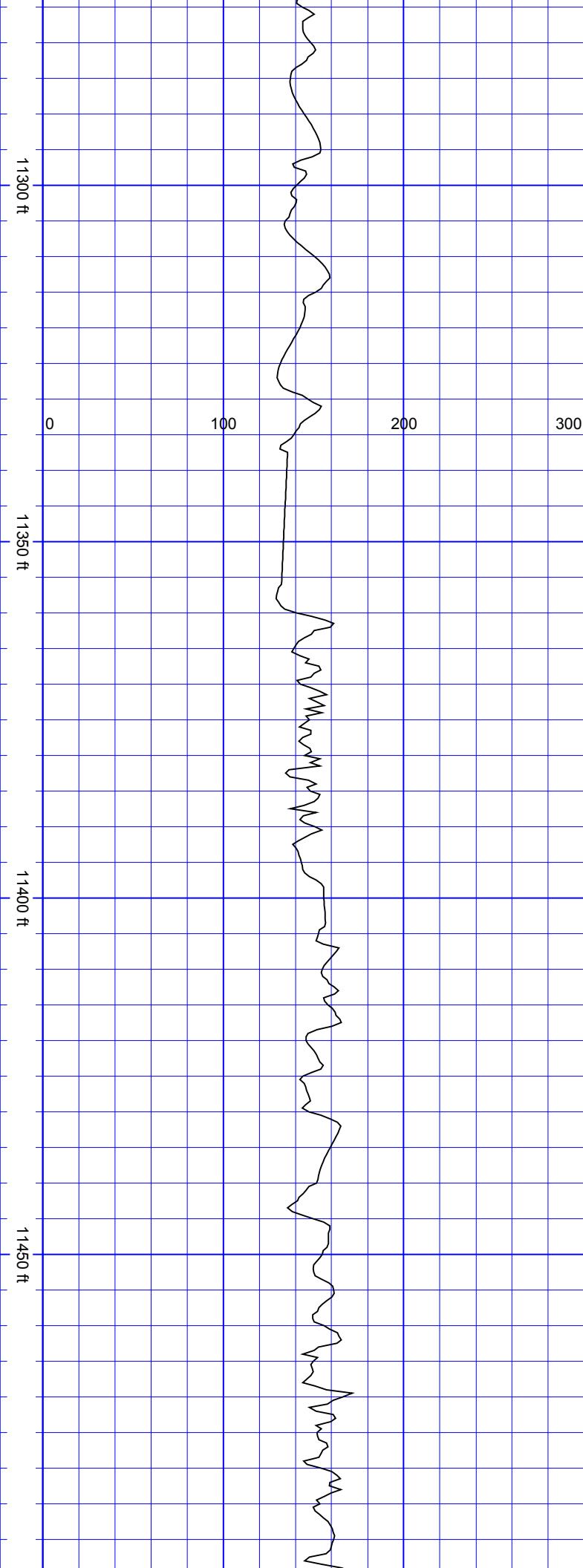


SurveyDepth:11077
TVD:7593.1 Inc:89.87
Azi:88.78
VertSec:3551.18

SurveyDepth:11172
TVD:7593.21 Inc:90
Azi:88.25
VertSec:3646.15

SurveyDepth:11267
TVD:7593.21 Inc:90
Azi:87.11



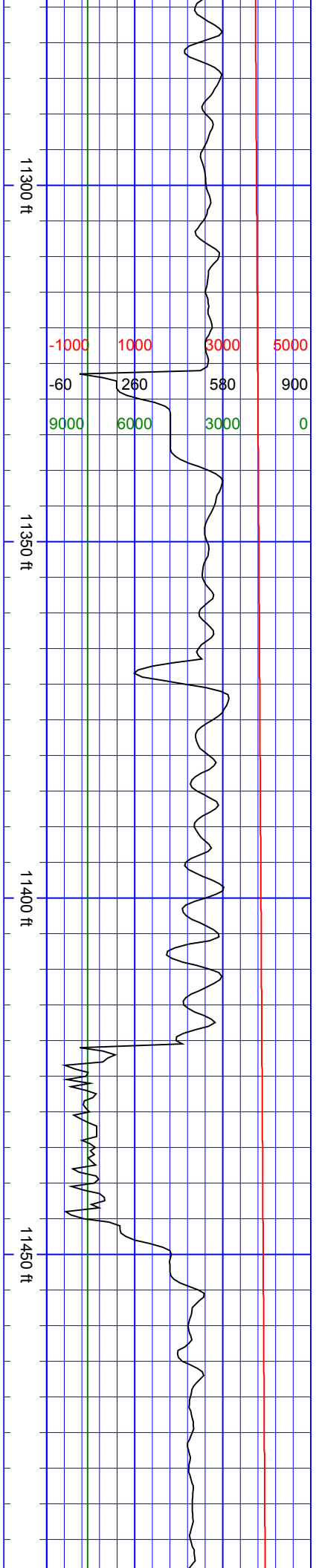


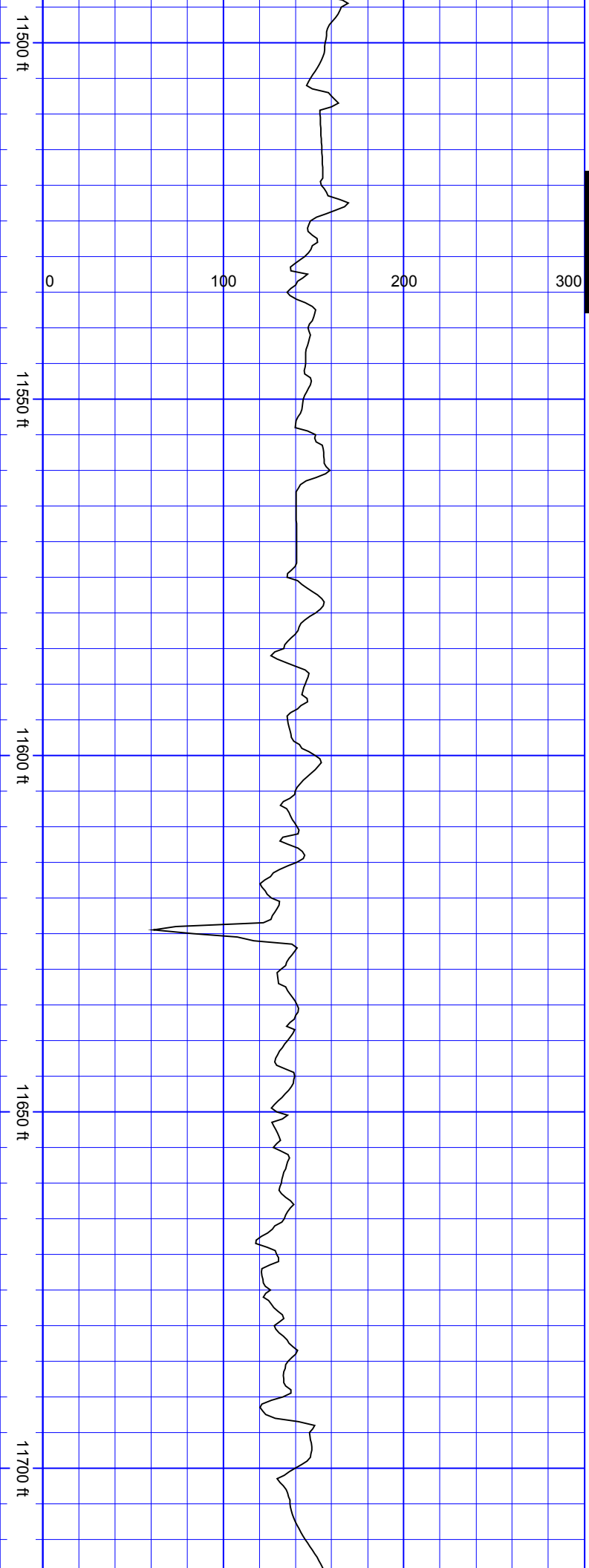
VertSec:3741.08

SurveyDepth:11361
TVD:7593.6 Inc:89.52
Azi:85.44
VertSec:3834.89

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SurveyDepth:11456
TVD:7593.97 Inc:90.04
Azi:88.16
VertSec:3929.73

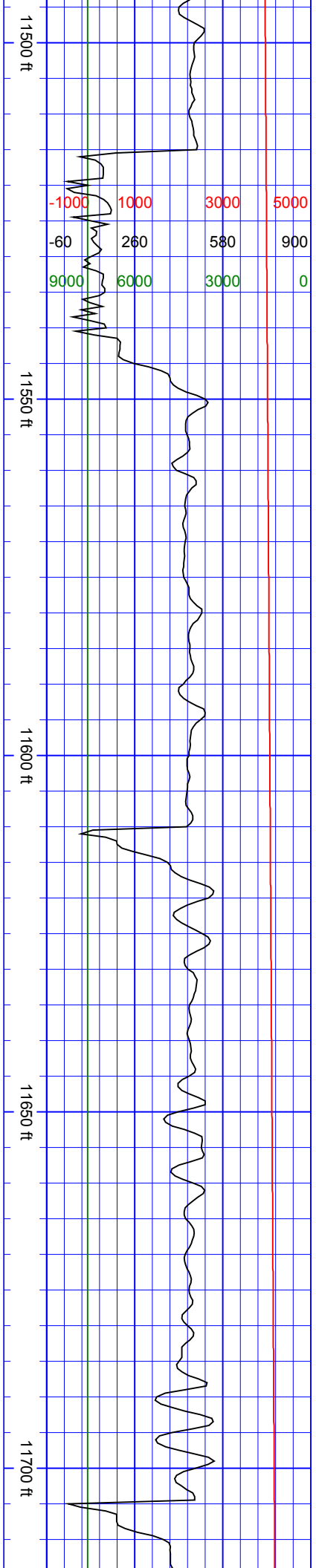


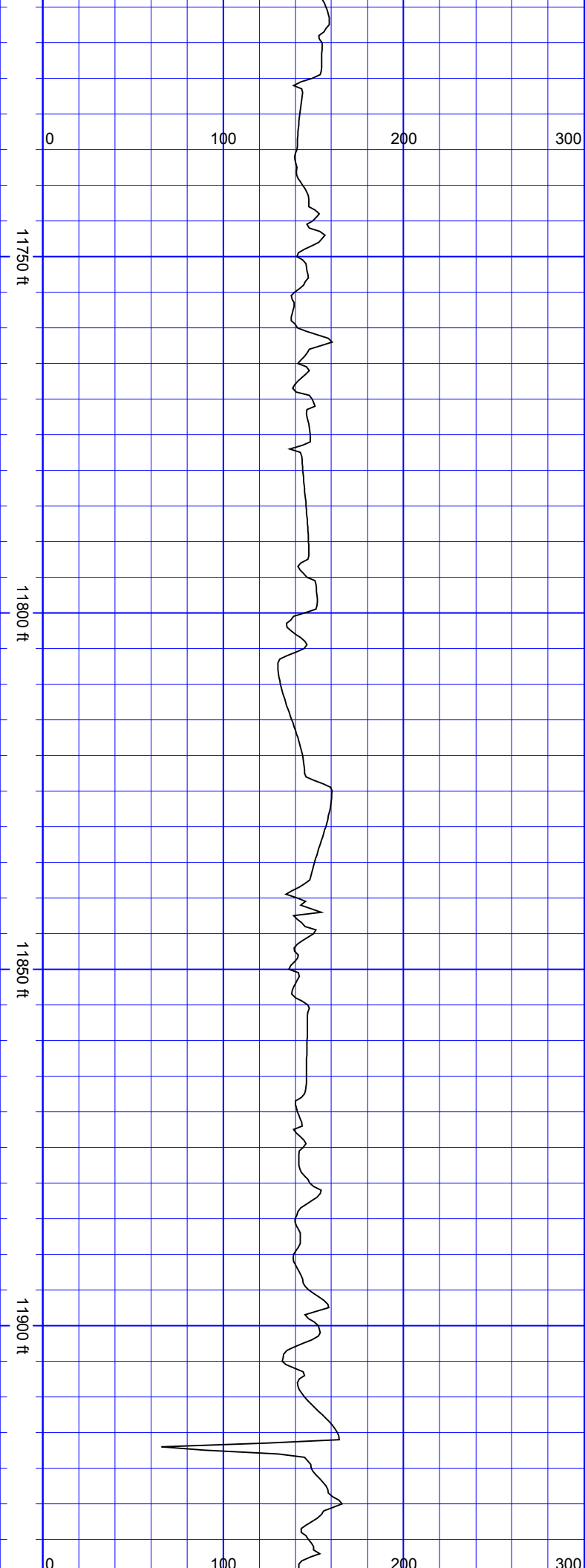


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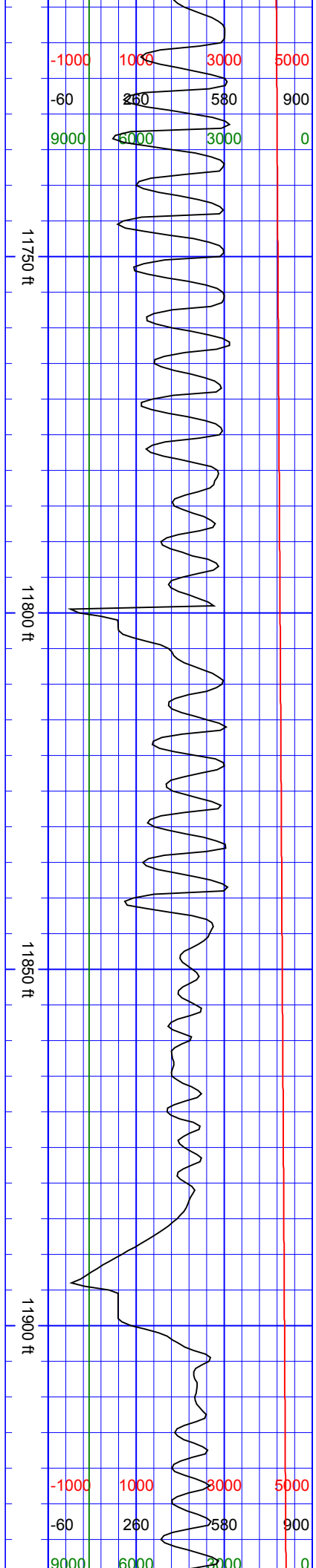
SurveyDepth:11551
TVD:7594.41 Inc:89.43
Azi:90.71
VertSec:4024.72

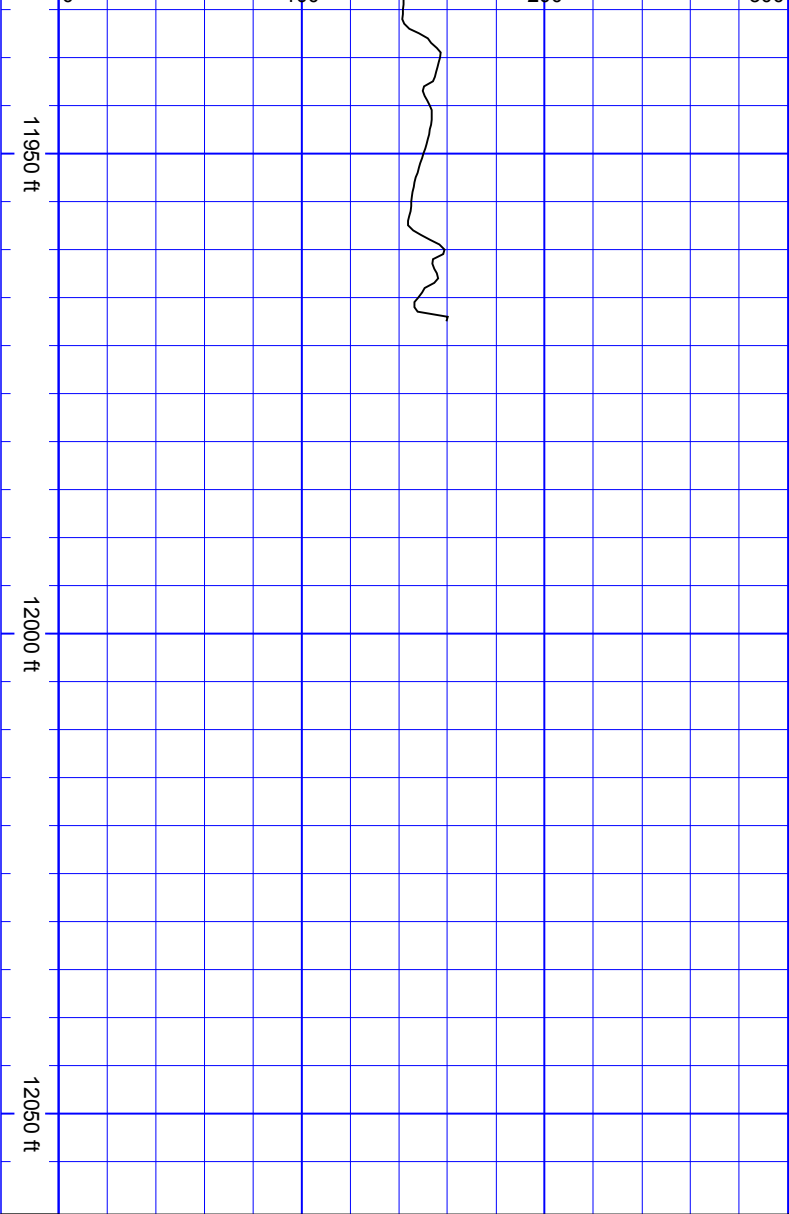
SurveyDepth:11646
TVD:7595.46 Inc:89.3
Azi:90.01
VertSec:4119.71





SurveyDepth:11740 TVD:7596.43 Inc:89.52 Azi:89.74 VertSec:4213.71	SurveyDepth:11834 TVD:7596.82 Inc:90 Azi:89.13 VertSec:4307.7	SurveyDepth:11929 TVD:7596.38 Inc:90.53
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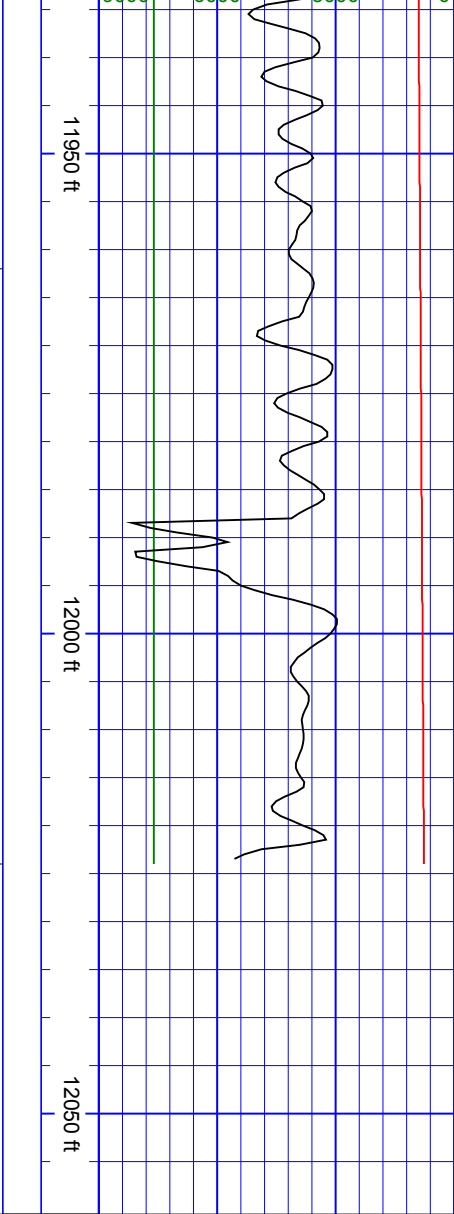




MD Depth "Scale 5" = 100 ft"	0	100	200	300
	Real Time Gamma (AAPI)			
	GAMMA RAY			

Slide - Rotate	Azi:88.95 VertSec:4402.69	
	SurveyDepth:11962 TVD:7595.97 Inc:90.92 Azi:89.04 VertSec:4435.68	
	Extrapolation to bit SurveyDepth:12024 TVD:7594.97 Inc:90.92 Azi:89.04 VertSec:4497.67	

Directional Survey	
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MD Depth "Scale 5" = 100	ft"	9000	6000	3000	0
		TVD Depth (ft)			
Date		-60	260	580	900
		Drill Rate (ft/hr)			
		-1000	1000	3000	5000
		Vertical Section (ft)			
ROP - VERT SEC - TVD					