


Comments

- 1
- Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
- 2
- Baker Hughes LWD Run 1 utilized 6 3/4 inch Navigamma services (Gamma Ray and Directional) behind an 8 1/2 inch bit and rotary steerable assembly from 1950 to 11064 feet MD (1949 to 6064 feet TVD).

Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	11064.00	8.500	1	The interval from 11051 to 11064 feet MD (6065 to 6064 feet TVD) has no gamma ray data due to sensor to bit offset at TD.



Company

Well

Interval

Created

Noble Energy

RILEY LD19-752

Date From:

2016-10-27 12:27:53

Date To:

2016-10-28 13:37:10

2016-11-02 05:19

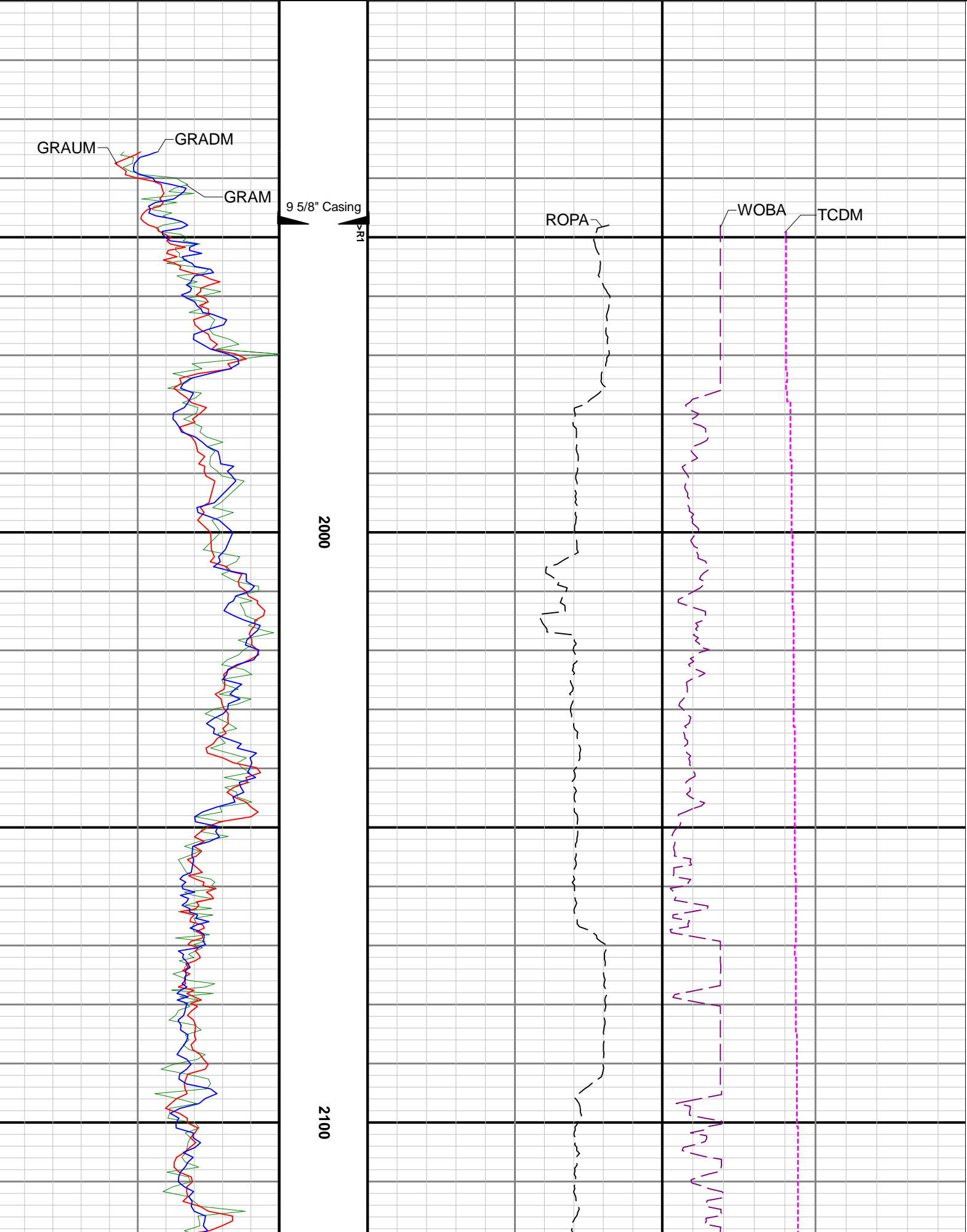
Top:

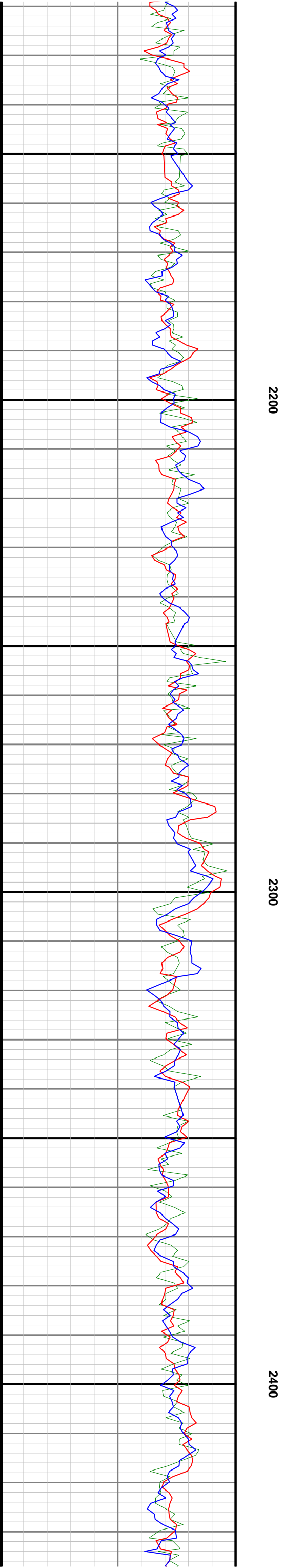
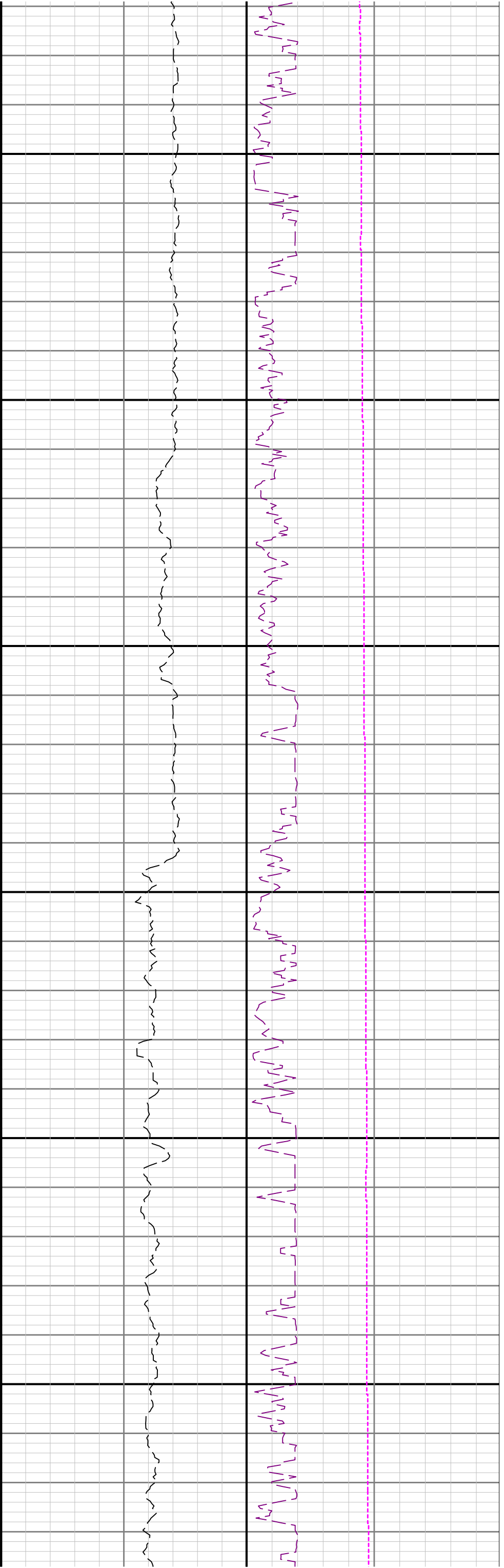
1935.50

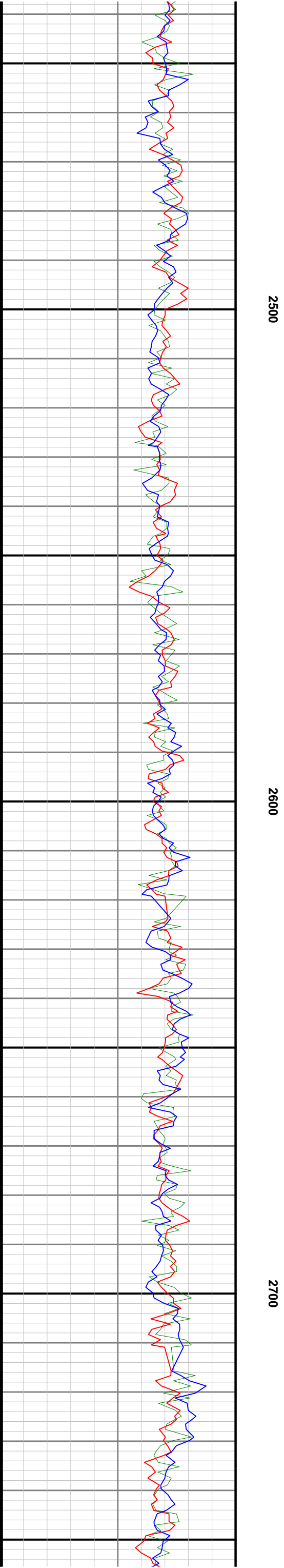
Bottom:

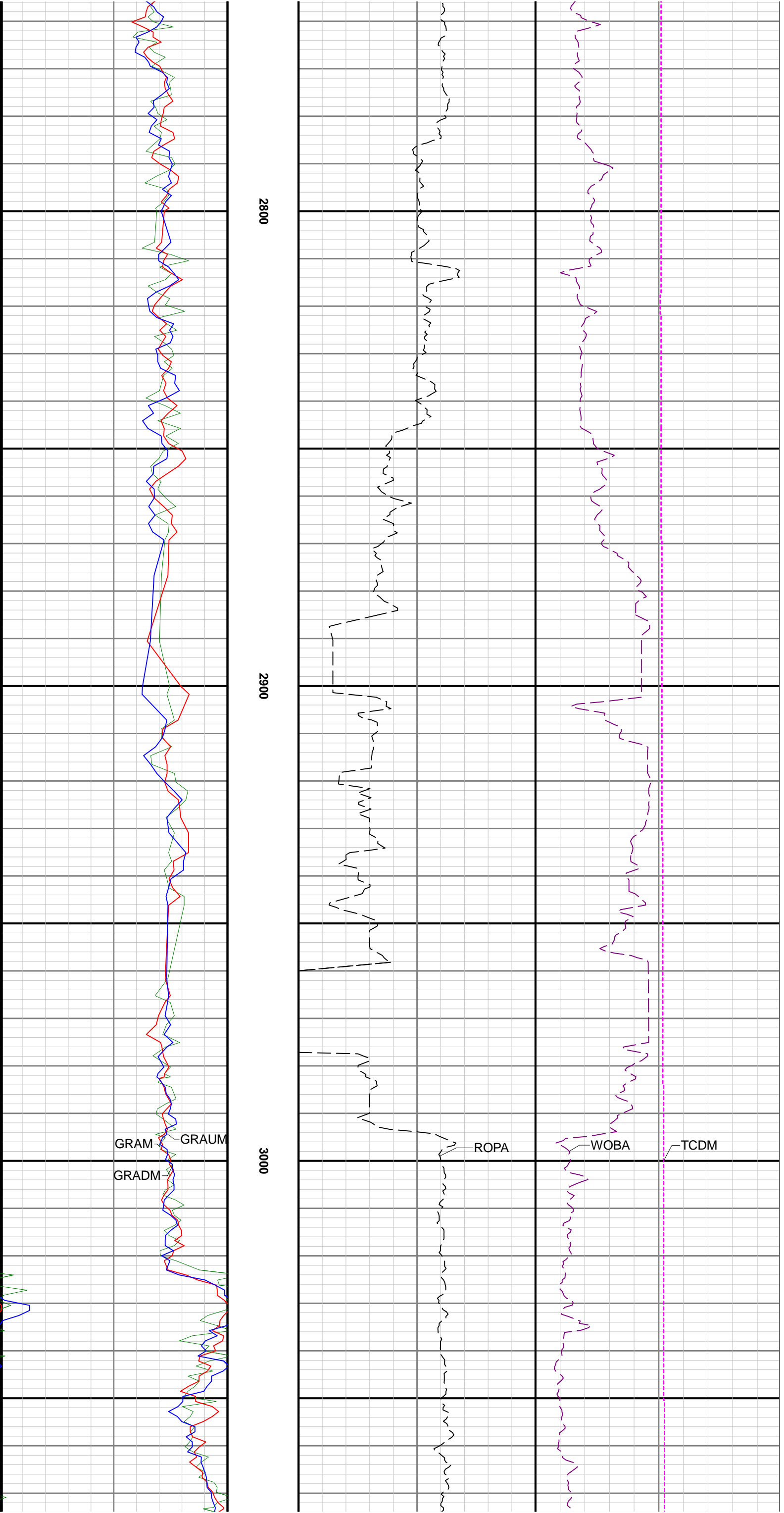
6071.00

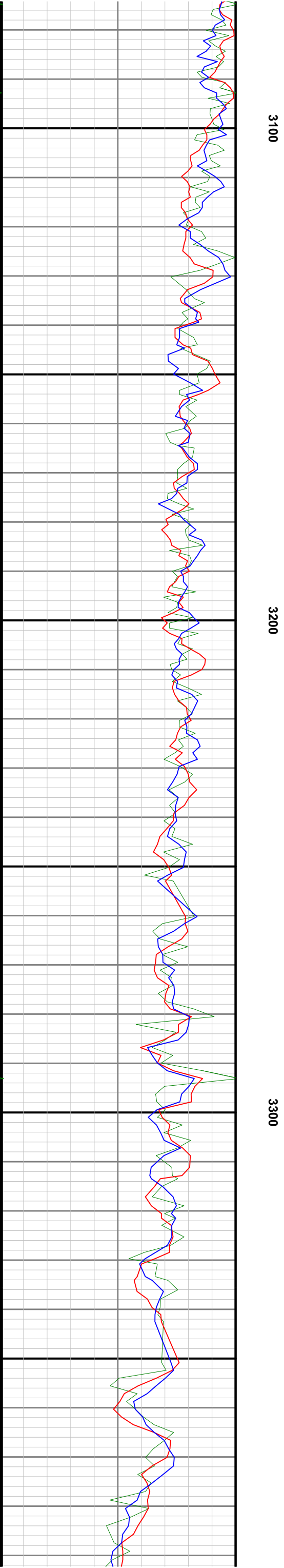
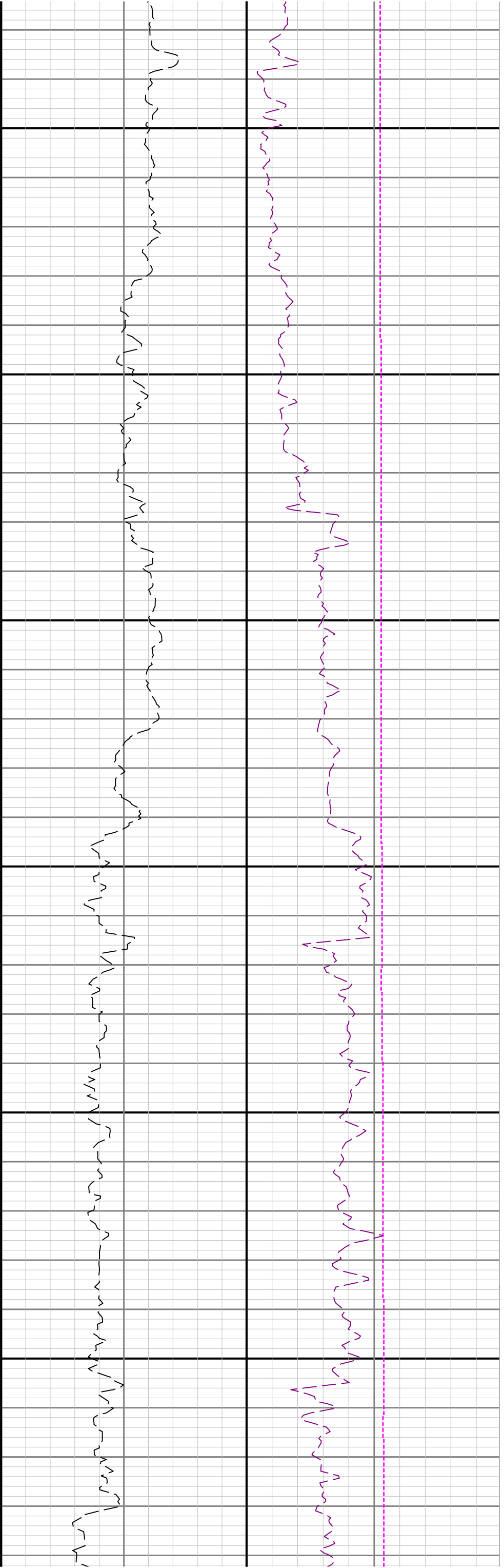
Gamma Ray - Apparent 0.5 ft Average GRAM	TVD 1:240 feet	Depth Averaged ROP 3 ft Average ROPA	Weight On Bit, Average 1 ft Average WOBA
0 150		1000 0	0 50
API		ft/h	klb
Azimuthal Gamma Ray - Apparent - Up Quadrant 0.5 ft Average GRAUM			Downhole Temperature TCDM
0 150			0 250
API			degF
Azimuthal Gamma Ray - Apparent - Down Quadrant 0.5 ft Average GRADM			
0 150			
API			

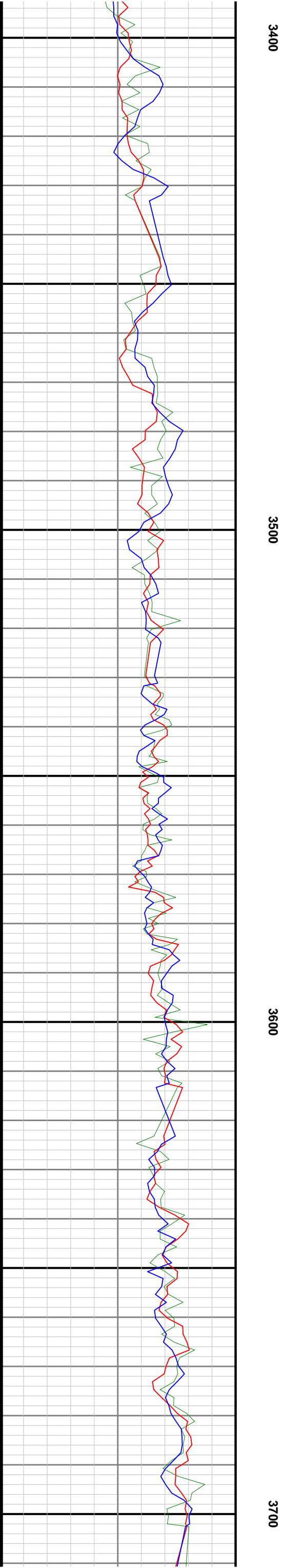
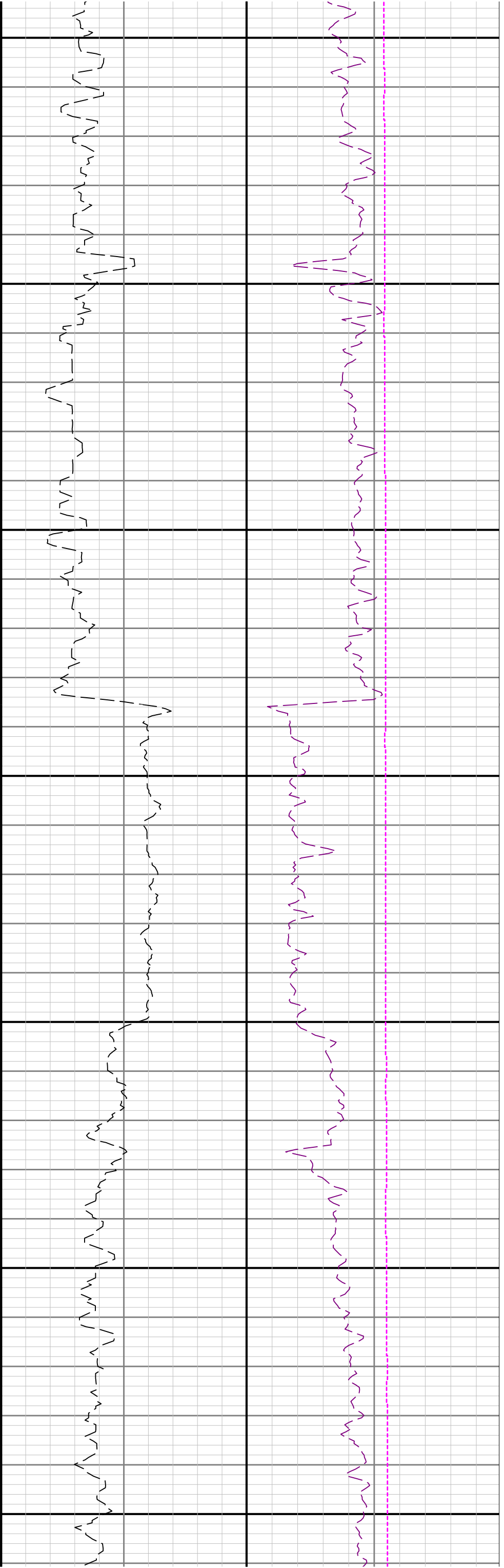


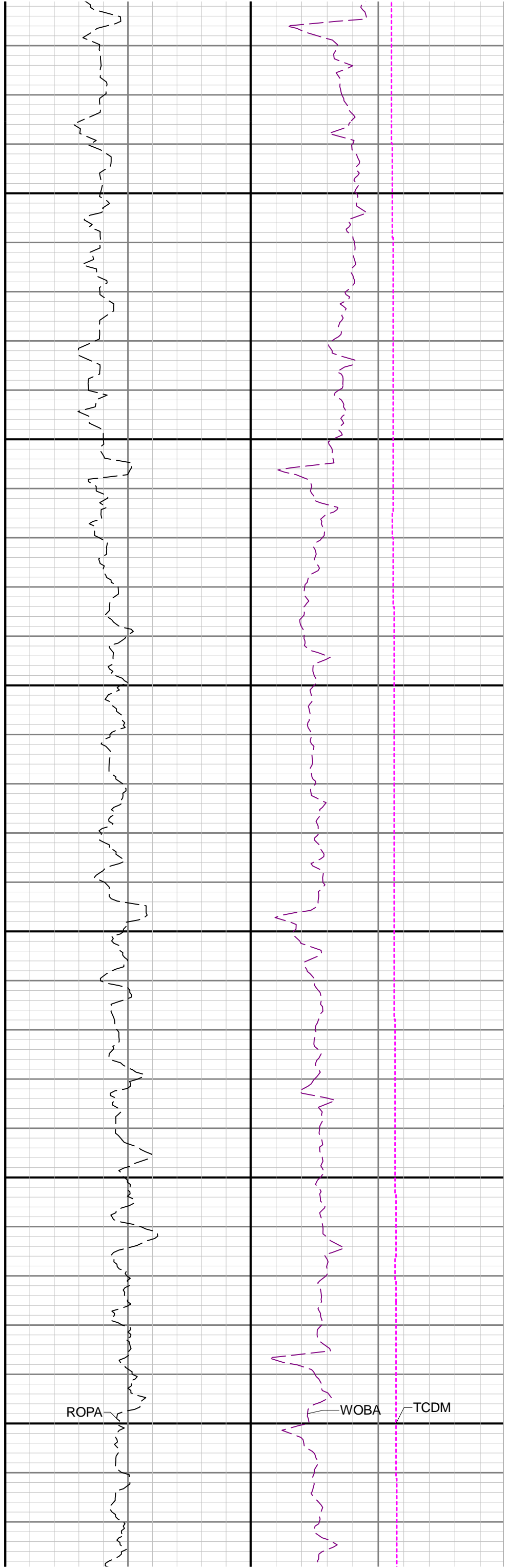
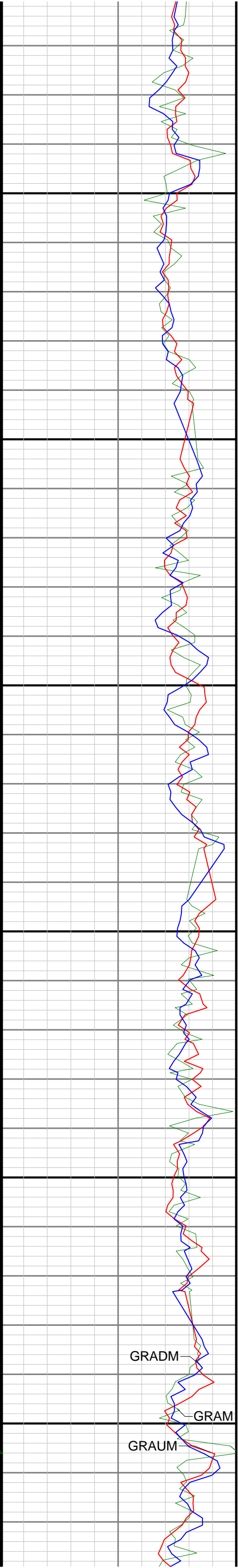


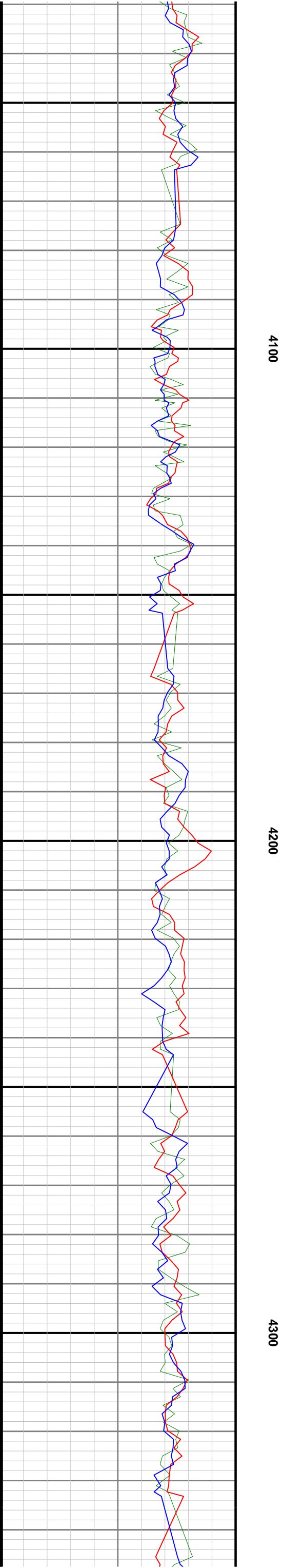
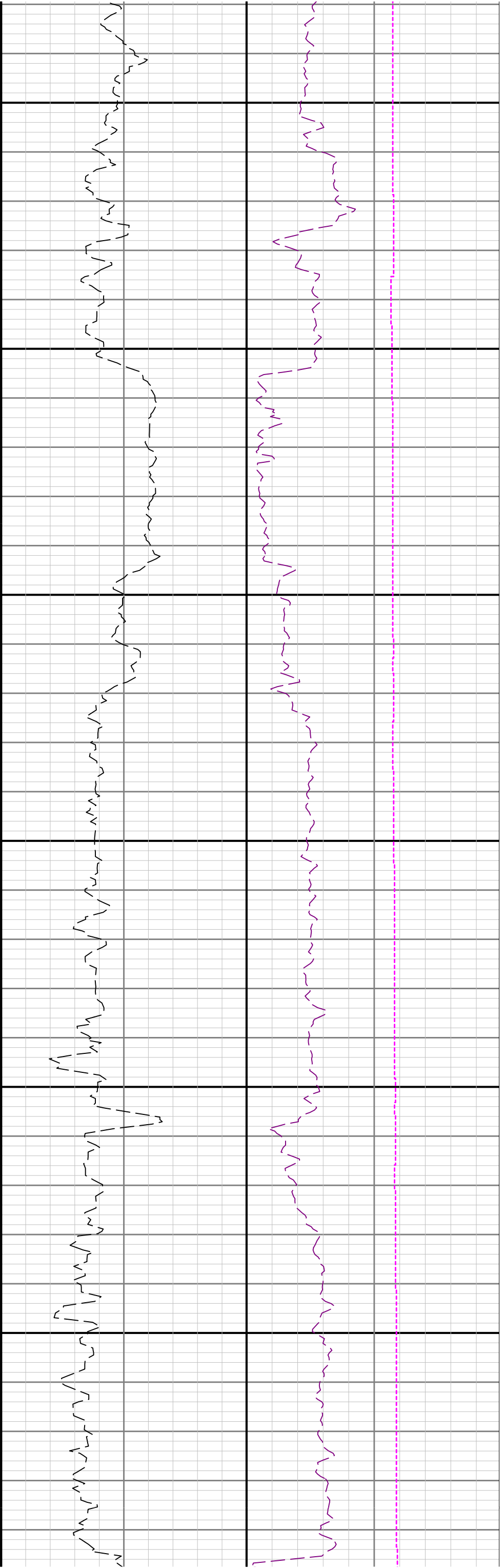


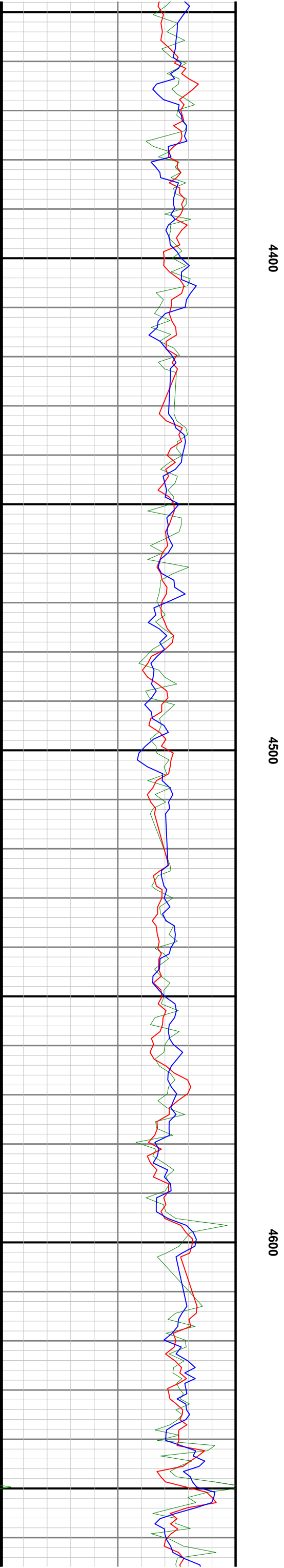
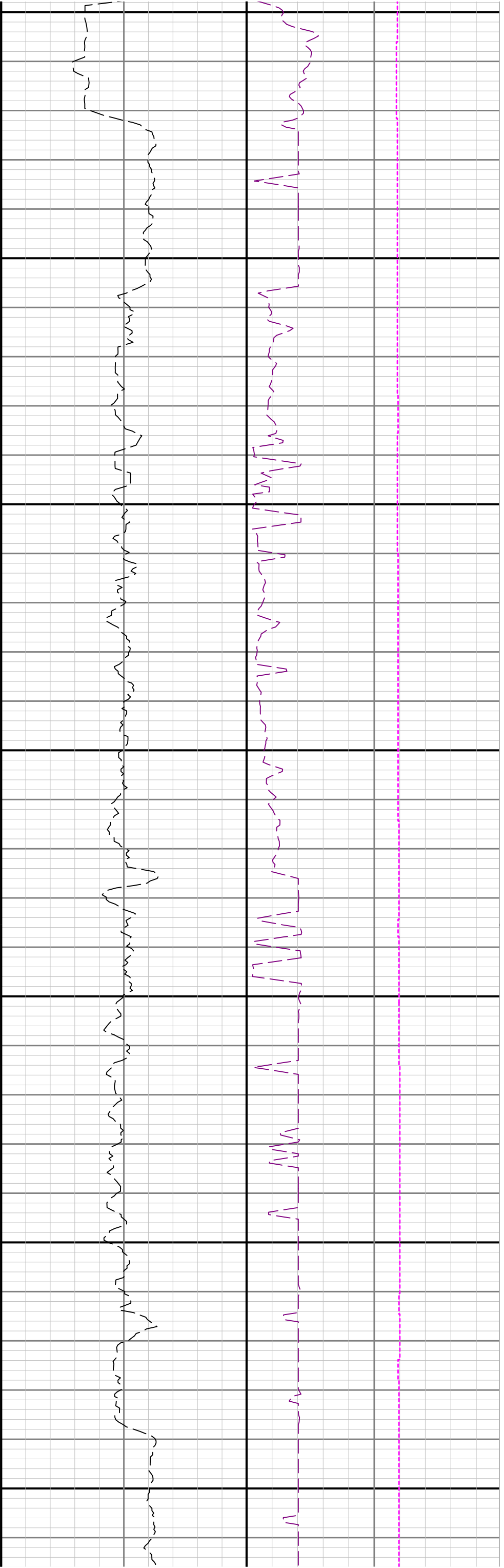


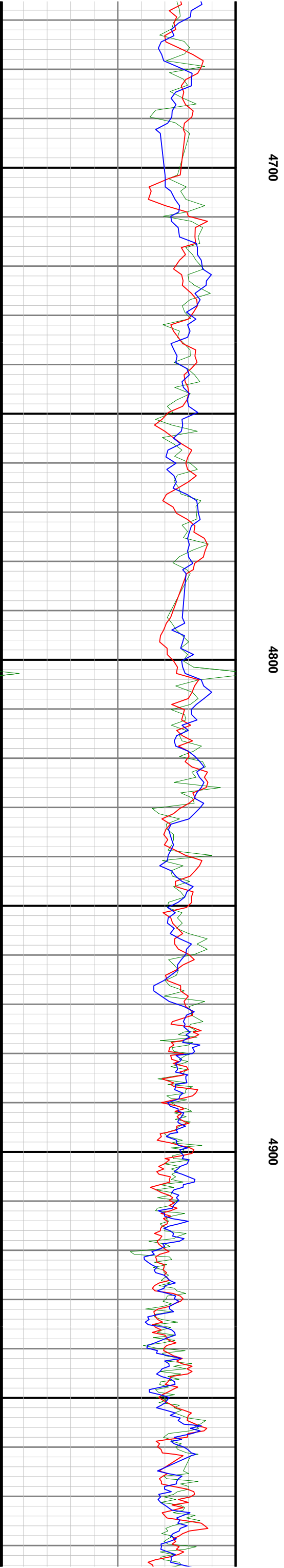
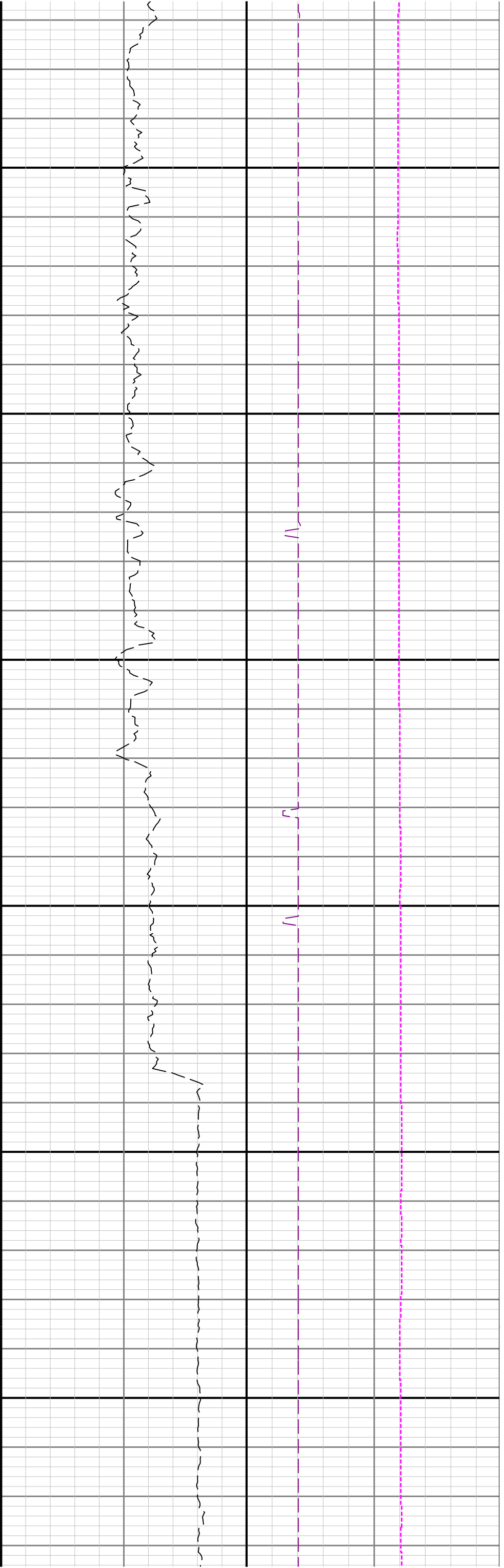


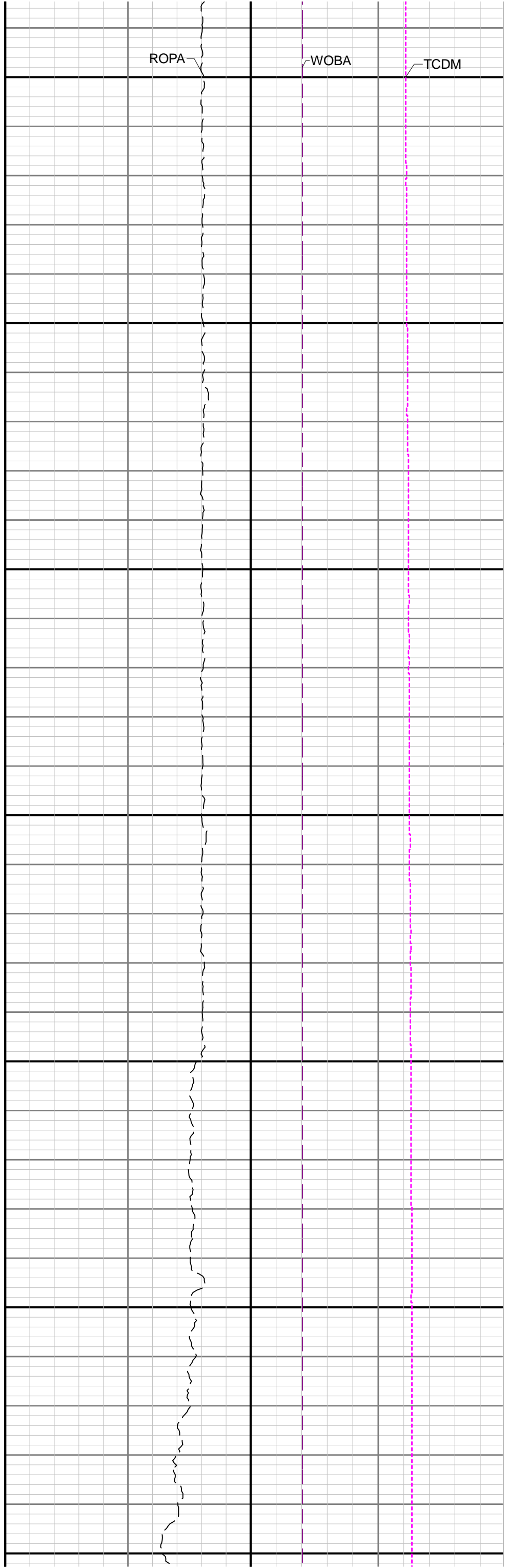
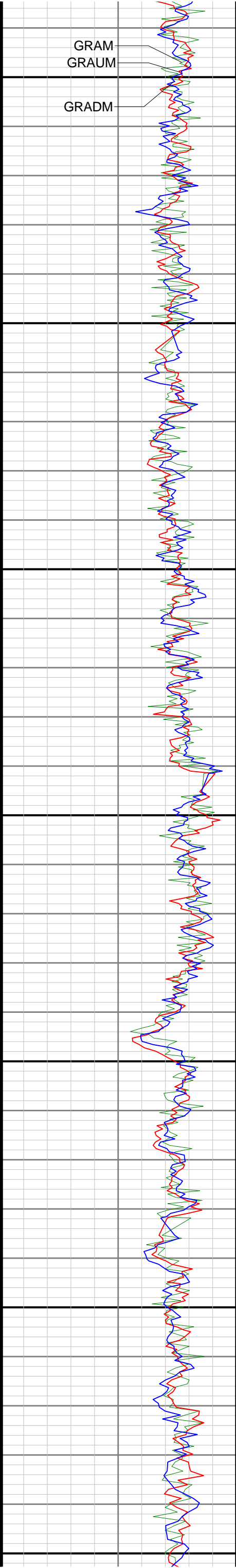


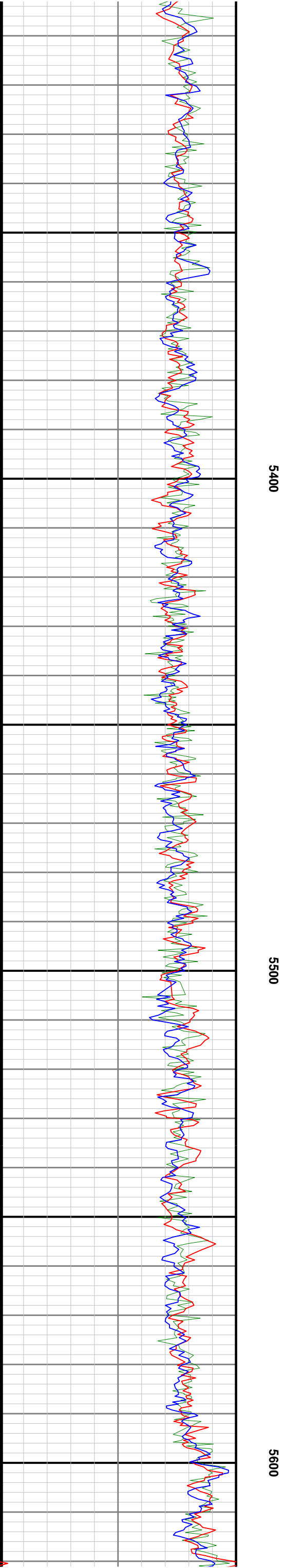
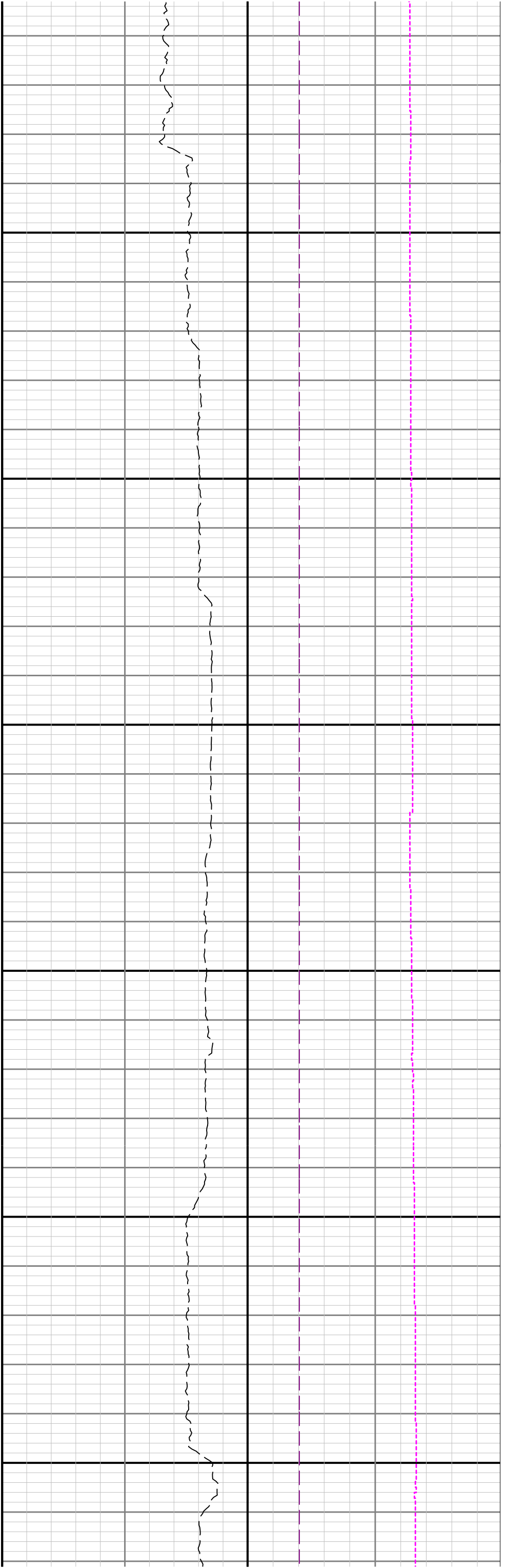


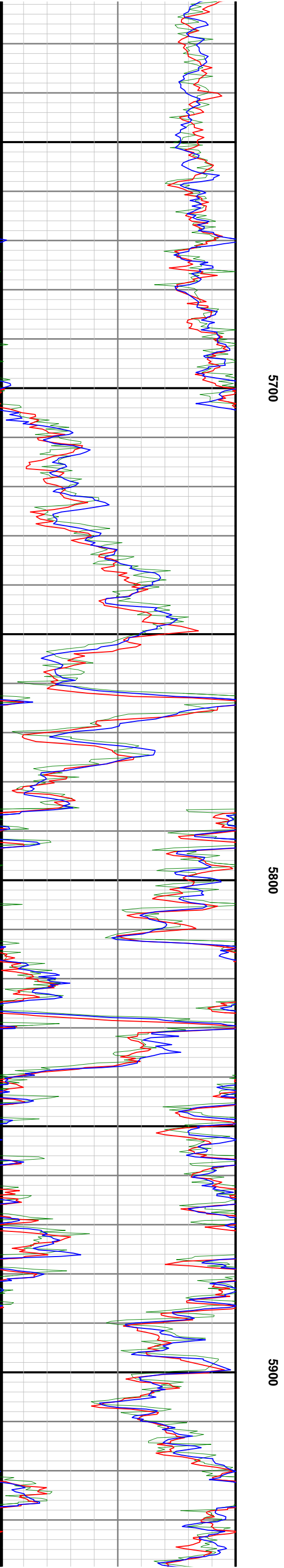
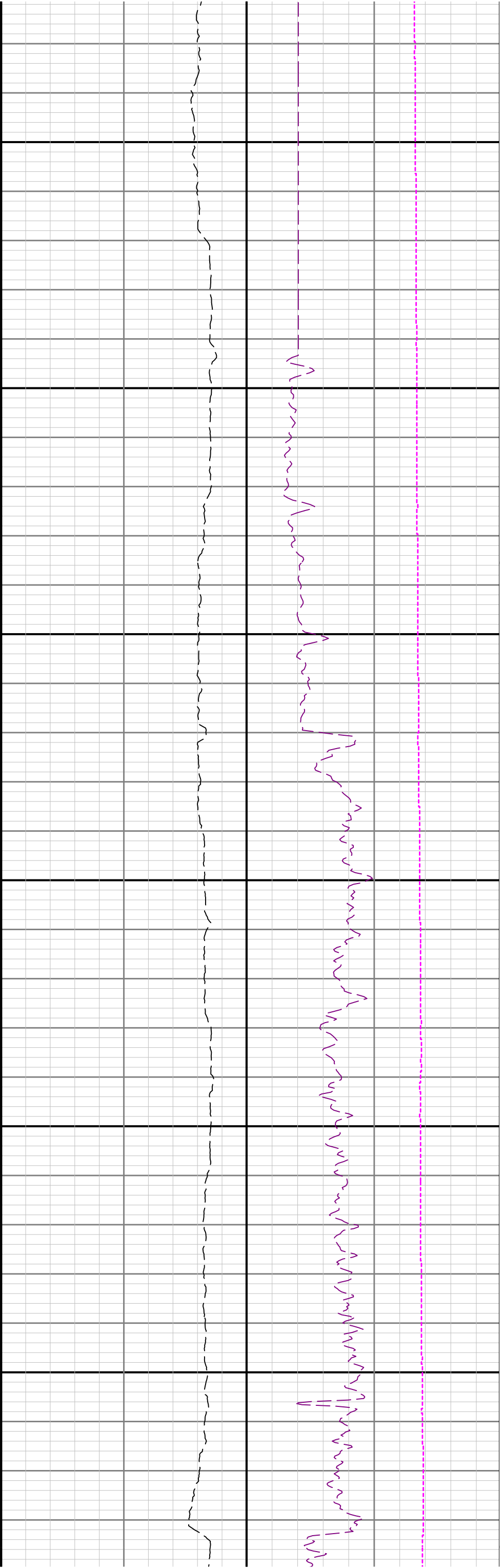












Tie-In / Projection	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Temperature (degF)	North (ft)	East (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Course Length (ft)	Dog Leg Severity (deg/100ft)	Build Rate (deg/100ft)	Turn Rate (deg/100ft)
Tie-In	0.00	0.00	0.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	79.00	0.37	325.08	N/A	0.21	-0.15	79.00	0.24	79.00	0.47	0.47	-44.20
	176.00	0.13	322.10	N/A	0.55	-0.39	176.00	0.64	97.00	0.25	-0.25	-3.07
	268.00	0.40	273.55	N/A	0.66	-0.78	268.00	0.83	92.00	0.36	0.29	-52.77
	363.00	0.37	281.37	N/A	0.74	-1.41	363.00	1.07	95.00	0.06	-0.03	8.23
	457.00	0.40	231.37	N/A	0.59	-1.96	456.99	1.08	94.00	0.35	0.03	-53.19
	552.00	0.23	177.01	N/A	0.19	-2.21	551.99	0.76	95.00	0.34	-0.18	-57.22
	646.00	0.04	270.73	N/A	0.01	-2.24	645.99	0.58	94.00	0.25	-0.20	99.70
	741.00	0.42	228.74	N/A	-0.22	-2.53	740.99	0.43	95.00	0.41	0.40	-44.20
	835.00	0.23	191.69	N/A	-0.64	-2.83	834.99	0.11	94.00	0.29	-0.20	-39.41
	929.00	0.11	46.57	N/A	-0.76	-2.80	928.99	-0.01	94.00	0.35	-0.13	-154.38
	1024.00	0.13	218.81	N/A	-0.78	-2.80	1023.99	-0.03	95.00	0.25	0.02	181.31
	1119.00	0.15	308.80	N/A	-0.79	-2.97	1118.99	0.00	95.00	0.21	0.02	94.73
	1213.00	0.58	199.41	N/A	-1.16	-3.22	1212.99	-0.29	94.00	0.69	0.46	-116.37
	1308.00	0.43	208.06	N/A	-1.93	-3.55	1307.98	-0.95	95.00	0.18	-0.16	9.11
	1402.00	0.45	214.55	N/A	-2.54	-3.92	1401.98	-1.45	94.00	0.06	0.02	6.90
	1497.00	0.17	87.73	N/A	-2.84	-3.99	1496.98	-1.72	95.00	0.60	-0.29	-133.49
	1592.00	0.10	137.74	N/A	-2.90	-3.80	1591.98	-1.82	95.00	0.14	-0.07	52.64
	1686.00	0.34	182.53	N/A	-3.24	-3.75	1685.98	-2.16	94.00	0.30	0.26	47.65
	1781.00	0.34	163.72	N/A	-3.79	-3.69	1780.98	-2.71	95.00	0.12	0.00	-19.80
	1875.00	0.87	158.72	N/A	-4.72	-3.35	1874.97	-3.70	94.00	0.57	0.56	-5.32
	1933.00	1.19	161.54	N/A	-5.70	-3.00	1932.96	-4.74	58.00	0.56	0.55	4.86

	1954.00	2.29	147.19	N/A	-6.26	-2.70	1953.95	-5.36	21.00	5.59	5.24	-68.33
	2048.00	3.34	188.93	N/A	-10.55	-2.11	2047.85	-9.65	94.00	2.37	1.12	44.40
	2142.00	3.69	236.73	N/A	-14.91	-5.07	2141.69	-13.11	94.00	3.05	0.37	50.85
	2237.00	5.37	263.69	N/A	-17.08	-12.04	2236.40	-13.41	95.00	2.81	1.77	28.38
	2332.00	7.36	268.83	N/A	-17.69	-22.54	2330.81	-11.30	95.00	2.18	2.09	5.41
	2426.00	9.63	274.55	N/A	-17.19	-36.40	2423.77	-7.25	94.00	2.57	2.41	6.09
	2521.00	12.78	276.82	N/A	-15.31	-54.76	2516.95	-0.71	95.00	3.35	3.32	2.39
	2616.00	15.39	271.16	N/A	-13.81	-77.80	2609.09	6.67	95.00	3.10	2.75	-5.96
	2710.00	17.08	249.81	N/A	-18.33	-103.25	2699.42	8.86	94.00	6.56	1.80	-22.71
	2805.00	16.35	240.44	N/A	-29.74	-127.98	2790.42	4.19	95.00	2.94	-0.77	-9.86
	2994.00	15.54	247.62	N/A	-52.50	-174.54	2972.17	-5.83	189.00	1.13	-0.43	3.80
	3088.00	16.41	252.35	N/A	-61.33	-198.84	3062.54	-8.10	94.00	1.66	0.93	5.03
	3183.00	17.83	256.23	N/A	-68.86	-225.75	3153.33	-8.45	95.00	1.92	1.49	4.08
	3278.00	18.66	252.05	N/A	-77.00	-254.34	3243.56	-8.97	95.00	1.63	0.87	-4.40
	3372.00	18.70	242.13	N/A	-88.68	-281.97	3332.63	-13.15	94.00	3.38	0.04	-10.55
	3467.00	18.60	232.62	N/A	-105.01	-307.48	3422.66	-22.35	95.00	3.20	-0.11	-10.01
	3562.00	18.74	222.67	N/A	-125.43	-329.87	3512.69	-36.33	95.00	3.35	0.15	-10.47
	3656.00	18.61	213.27	N/A	-149.08	-348.34	3601.76	-54.43	94.00	3.20	-0.14	-10.00
	3750.00	18.50	213.94	N/A	-173.99	-364.89	3690.87	-74.25	94.00	0.26	-0.12	0.71
	3845.00	18.23	220.45	N/A	-197.80	-382.95	3781.04	-92.61	95.00	2.18	-0.28	6.85
	3940.00	17.62	230.16	N/A	-218.33	-403.63	3871.45	-107.12	95.00	3.21	-0.64	10.22
	4034.00	17.95	240.49	N/A	-234.58	-427.17	3960.98	-116.77	94.00	3.37	0.35	10.99
	4129.00	18.50	247.51	N/A	-247.56	-453.84	4051.23	-122.45	95.00	2.38	0.58	7.39
	4223.00	18.86	251.15	N/A	-258.17	-482.00	4140.28	-125.46	94.00	1.30	0.38	3.87
	4318.00	19.06	253.60	N/A	-267.51	-511.41	4230.13	-126.92	95.00	0.86	0.21	2.58
	4413.00	18.18	257.02	N/A	-275.22	-540.73	4320.16	-126.83	95.00	1.48	-0.93	3.60
	4507.00	18.12	262.48	N/A	-280.43	-569.52	4409.48	-124.45	94.00	1.81	-0.06	5.81
	4601.00	18.94	268.09	N/A	-282.85	-599.26	4498.62	-119.14	94.00	2.09	0.87	5.97
	4696.00	18.38	277.16	N/A	-281.50	-629.53	4588.64	-110.04	95.00	3.11	-0.59	9.55
	4790.00	18.94	284.10	N/A	-275.93	-659.04	4677.71	-97.07	94.00	2.43	0.60	7.38
	4885.00	18.78	288.29	N/A	-267.38	-688.51	4767.62	-81.22	95.00	1.44	-0.17	4.41
	4979.00	17.74	288.78	N/A	-258.02	-716.44	4856.88	-64.99	94.00	1.12	-1.11	0.52
	5073.00	18.49	281.24	N/A	-250.50	-744.62	4946.23	-50.48	94.00	2.62	0.80	-8.02
	5168.00	18.51	269.99	N/A	-247.57	-774.48	5036.35	-39.96	95.00	3.75	0.02	-11.84
	5262.00	18.58	255.96	N/A	-251.21	-803.95	5125.52	-35.89	94.00	4.74	0.07	-14.93
	5357.00	18.40	241.57	N/A	-262.02	-831.83	5215.66	-39.17	95.00	4.80	-0.19	-15.15
	5451.00	18.25	237.72	N/A	-276.95	-857.32	5304.90	-47.03	94.00	1.30	-0.16	-4.10
	5546.00	17.86	243.48	N/A	-291.40	-882.94	5395.23	-54.40	95.00	1.92	-0.41	6.06
	5640.00	16.88	279.29	N/A	-295.64	-909.38	5485.19	-51.70	94.00	11.25	-1.04	38.10
	5735.00	18.69	316.92	N/A	-282.25	-933.46	5575.94	-32.57	95.00	12.04	1.91	39.61
	5829.00	23.86	327.62	N/A	-255.17	-953.95	5663.54	-1.12	94.00	6.86	5.50	11.38
	5924.00	32.81	332.75	N/A	-215.97	-976.08	5747.08	42.44	95.00	9.76	9.42	5.40
	6019.00	40.44	337.62	N/A	-164.52	-999.63	5823.29	98.23	95.00	8.59	8.03	5.13
	6113.00	49.13	339.43	N/A	-102.93	-1023.78	5889.94	163.96	94.00	9.34	9.24	1.93
	6208.00	57.24	340.26	N/A	-31.58	-1049.93	5946.82	239.63	95.00	8.57	8.54	0.87
	6302.00	65.15	341.69	N/A	46.24	-1076.72	5992.08	321.72	94.00	8.52	8.41	1.52
	6397.00	72.39	345.17	N/A	131.06	-1101.89	6026.47	410.16	95.00	8.35	7.62	3.66
	6492.00	80.50	348.47	N/A	220.90	-1122.88	6048.72	502.38	95.00	9.18	8.54	3.47
	6586.00	87.63	350.29	N/A	312.73	-1140.09	6058.44	595.55	94.00	7.83	7.59	1.94
	6681.00	87.66	354.54	N/A	406.80	-1152.62	6062.34	689.67	95.00	4.47	0.03	4.47
	6775.00	87.78	357.12	N/A	500.47	-1159.45	6066.08	781.95	94.00	2.75	0.13	2.74
	6870.00	87.97	357.22	N/A	595.29	-1164.14	6069.60	874.78	95.00	0.23	0.20	0.11
	6964.00	90.74	359.79	N/A	689.23	-1166.59	6070.66	966.19	94.00	4.02	2.95	2.73
	7059.00	91.57	1.34	N/A	784.21	-1165.65	6068.75	1057.73	95.00	1.85	0.87	1.63
	7154.00	91.66	1.18	N/A	879.14	-1163.56	6066.07	1148.93	95.00	0.19	0.09	-0.17
	7248.00	90.43	0.31	N/A	973.12	-1162.34	6064.36	1239.43	94.00	1.60	-1.31	-0.93
	7343.00	90.40	359.42	N/A	1068.11	-1162.56	6063.67	1331.28	95.00	0.94	-0.03	-0.94
	7437.00	91.88	357.28	N/A	1162.05	-1165.27	6061.80	1422.75	94.00	2.77	1.57	-2.28
	7532.00	92.31	357.14	N/A	1256.87	-1169.89	6058.32	1515.57	95.00	0.48	0.45	-0.15
	7627.00	92.19	356.86	N/A	1351.67	-1174.86	6054.59	1608.45	95.00	0.32	-0.13	-0.29
	7721.00	92.19	359.13	N/A	1445.54	-1178.15	6051.00	1700.01	94.00	2.41	0.00	2.41
	7816.00	92.37	3.26	N/A	1540.42	-1176.17	6047.22	1791.19	95.00	4.35	0.19	4.35
	7911.00	92.06	2.34	N/A	1635.23	-1171.53	6043.55	1881.61	95.00	1.02	-0.33	-0.97
	8005.00	92.22	2.21	N/A	1729.10	-1167.80	6040.04	1971.36	94.00	0.22	0.17	-0.14
	8100.00	90.77	359.45	N/A	1824.04	-1166.43	6037.56	2062.75	95.00	3.28	-1.53	-2.91
	8194.00	90.77	358.18	N/A	1918.01	-1168.37	6036.30	2154.06	94.00	1.35	0.00	-1.35
	8289.00	91.66	0.42	N/A	2012.98	-1169.53	6034.28	2246.12	95.00	2.54	0.94	2.36
	8384.00	90.68	359.54	N/A	2107.95	-1169.56	6032.34	2337.91	95.00	1.39	-1.03	-0.93
	8478.00	90.40	346.11	N/A	2201.00	-1181.28	6031.45	2430.84	94.00	14.29	-0.30	-14.29
	8573.00	89.51	330.94	N/A	2289.15	-1215.95	6031.53	2524.94	95.00	16.00	-0.94	-15.97
	8667.00	89.45	324.10	N/A	2368.39	-1266.40	6032.38	2614.50	94.00	7.28	-0.06	-7.28
	8762.00	87.81	328.60	N/A	2447.43	-1319.01	6034.65	2704.41	95.00	5.04	-1.73	4.74
	8857.00	88.46	337.34	N/A	2531.92	-1362.12	6037.75	2797.15	95.00	9.22	0.68	9.20
	8951.00	87.29	346.41	N/A	2621.10	-1391.31	6041.24	2890.84	94.00	9.72	-1.24	9.65
	9046.00	87.44	352.99	N/A	2714.42	-1408.27	6045.62	2985.38	95.00	6.92	0.16	6.93
	9141.00	87.20	358.56	N/A	2809.02	-1415.26	6050.06	3078.59	95.00	5.86	-0.25	5.86
	9236.00	87.44	2.70	N/A	2903.89	-1414.22	6054.51	3170.00	95.00	4.36	0.25	4.36
	9330.00	87.14	3.90	N/A	2997.63	-1408.81	6058.95	3259.19	94.00	1.31	-0.32	1.28
	9425.00	89.88	4.68	N/A	3092.32	-1401.71	6061.42	3348.87	95.00	3.00	2.88	0.82
	9520.00	89.75	4.36	N/A	3187.02	-1394.22	6061.73	3438.46	95.00	0.36	-0.14	-0.34
	9614.00	90.06	4.14	N/A	3280.76	-1387.26	6061.88	3527.25	94.00	0.40	0.33	-0.23
	9709.00	90.58	4.29	N/A	3375.51	-1380.27	6061.35	3617.00	95.00	0.57	0.55	0.16
	9804.00	90.80	3.97	N/A	3470.25	-1373.43	6060.21	3706.80	95.00	0.41	0.23	-0.34
	9899.00	90.83	6.55	N/A	3564.83	-1364.73	6058.86	3795.96	95.00	2.72	0.03	2.72
	9993.00	90.80	6.28	N/A	3658.24	-1354.22	6057.52	3883.51	94.00	0.29	-0.03	-0.29
	10088.00	89.57	3.97	N/A	3752.85	-1345.74	6057.21	3972.75	95.00	2.75	-1.29	-2.43
	10183.00	89.72	4.53	N/A	3847.58	-1338.70	6057.80	4062.49	95.00	0.61	0.16	0.59
	10277.00	88.55	4.38	N/A	3941.29	-1331.40	6059.22	4151.16	94.00	1.25	-1.24	-0.16
	10371.00	87.72	3.83	N/A	4035.00	-1324.67	6062.28	4239.98	94.00	1.06	-0.88	-0.59
	10466.00	88.92	4.59	N/A	4129.70	-1317.70	6065.07	4329.70	95.00	1.49	1.26	0.80
	10560.00	89.85	2.70	N/A	4223.50	-1311.73	6066.07	4418.80	94.00	2.24	0.99	-2.01
	10655.00	90.18	359.15	N/A	4318.47	-1310.19	6066.05	4510.18	95.00	3.75	0.35	-3.74
	10750.00	90.03	357.17	N/A	4413.41	-1313.24	6065.88	4602.72	95.00	2.09	-0.16	-2.08
	10844.00	89.88	358.36	N/A	4507.34	-1316.91	6065.95	4694.43	94.00	1.28	-0.16	1.27
	10939.00	90.58	359.78	N/A	4602.32	-1318.45	6065.57	4786.61	95.00	1.67	0.74	1.49
	11040.00	90.31	358.07	N/A	4703.30	-13						