



PROPAGATION RESISTIVITY
GAMMA RAY

2" = 100' TVD

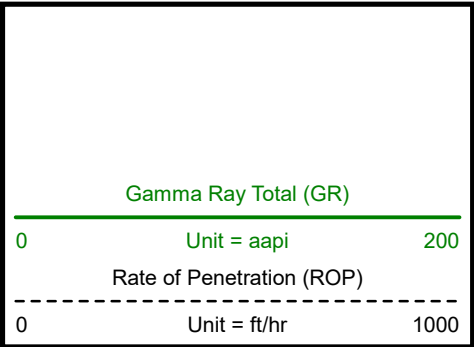
COMPANY : HIGHPOINT RESOURCES WELL : ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-48186										COMPANY : HIGHPOINT RESOURCES WELL : ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B FIELD : WATTENBERG COUNTY : WELD STATE : COLORADO COUNTRY : U.S.A. UWI : 05-123-48186									
WELL LOCATION LAT:40°21'17.020"N LONG:104°11'11.220"W N:1374779.27 ft E:3366068.19 ft SEC:34 TWP:5N RANGE:61W										OTHER SERVICES NAD83 DIRECTIONAL ROP CONDUCTIVITY FETR									
DEPTH REF. : RKB REF. HEIGHT : 16.500 ft GROUND LEVEL : 4479.600 ft										RKB to Ground Level G.I. to MEAN SEA LEVEL									
BOREHOLE RECORD						DEVIATION RECORD													
HOLE SIZE in	FROM ft	TO ft	INCLINATION deg			FROM ft	TO ft												
9.625	0	1019.95	0 - 5			0	1146												
6.5	1019.95	6429	5 - 22			1146	2145	2145			2145								
			22			2145	3738	3738			3738								
			22 - 0			3738	4867	4867			4867								
			0			4867	5434	5434			5434								
			0 - 90			5434	6373	6373			6373								
CASING RECORD																			
CASING SIZE in	FROM ft	TO ft																	
9.625	0	1019.95																	

Remarks
HIGHPOINT RESOURCES AFE# 20408D
SCIENTIFIC DRILLING INTERNATIONAL JOB# OP.017844
ALL REFERENCES IN THE DEPTH TRACK ARE AT BIT DEPTH.
ALL DATA IS MEMORY DATA UNLESS STATED OTHERWISE.
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO GAMMA RAY TOTAL CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO RATE OF PENETRATION CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO PHASE SHIFT RESISTIVITY, 33" CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO ATTENUATION RESISTIVITY, 33" CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO PHASE SHIFT RESISTIVITY, 23" CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO ATTENUATION RESISTIVITY, 23" CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO TOOL TEMPERATURE CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO PHASE SHIFT CONDUCTIVITY, 33" CURVE
FLAT AVERAGE FILTER OF 1.00 FT APPLIED TO FET OF RESISTIVITY CURVE
RUN #1: MWD / GAMMA RAY LOGGING RUN / PRT
SENSORS S/N: PULSER = 128-197 / CONT = 151 / MWD EYE = 1491 / PRT = 345 / GAMMA RAY = 1484
BIT TO SENSOR OFFSETS: SURVEY = 54.03 FT. / GAMMA RAY = 37.44 FT.
RUN #1: MWD / GAMMA RAY LOGGING RUN / PRT
SENSORS S/N: PULSER = 128-181 / CONT = 303 / MWD EYE = 1806 / PRT = 368 / GAMMA RAY = 1291
BIT TO SENSOR OFFSETS: SURVEY = 54.03 FT. / GAMMA RAY = 37.44 FT.
MNEMONICS LIST:
GR = GAMMA RAY TOTAL
AR23 = ATTENUATION RESISTIVITY, 23"

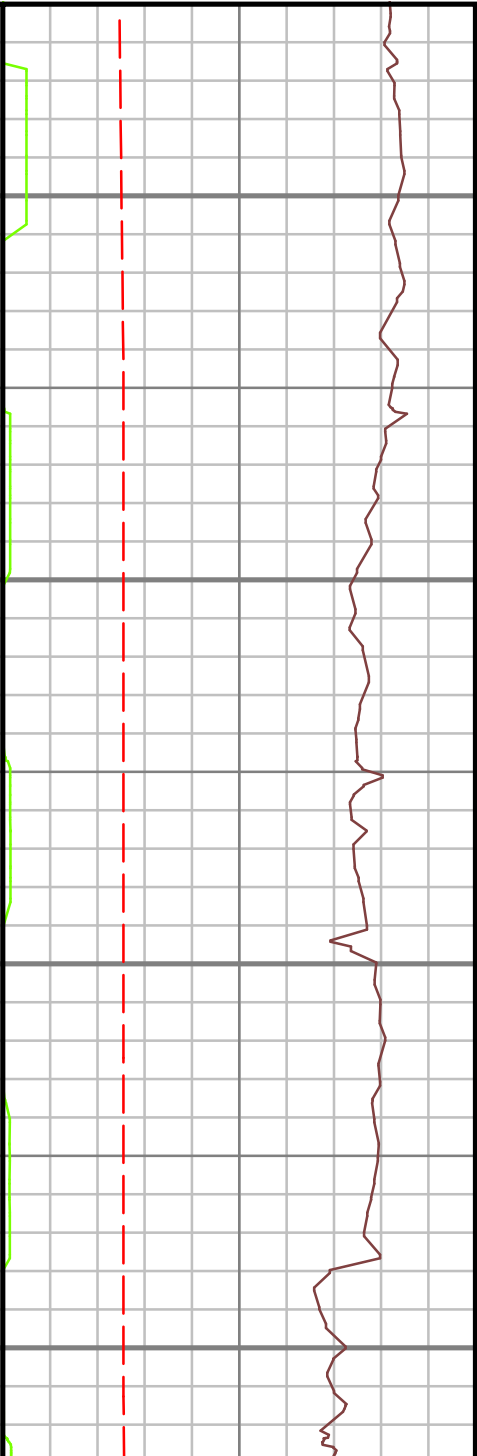
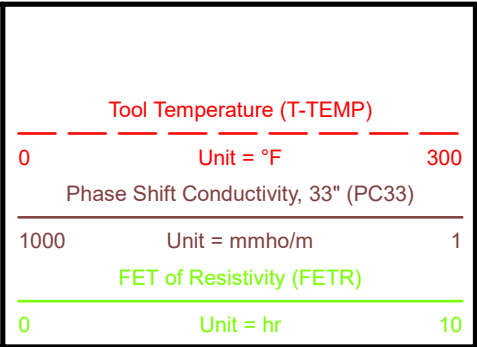
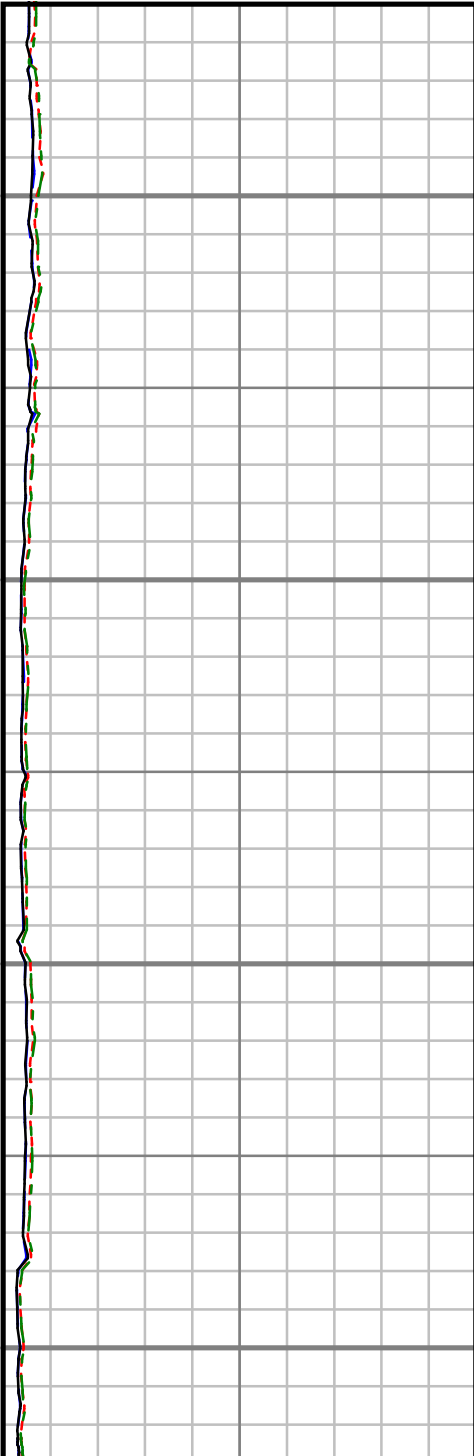
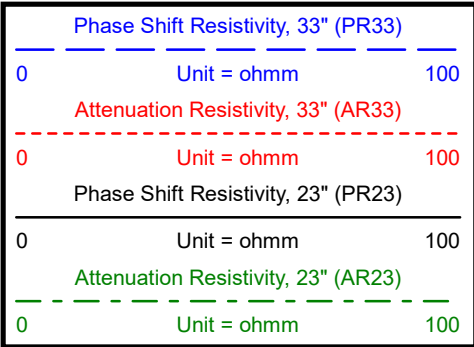
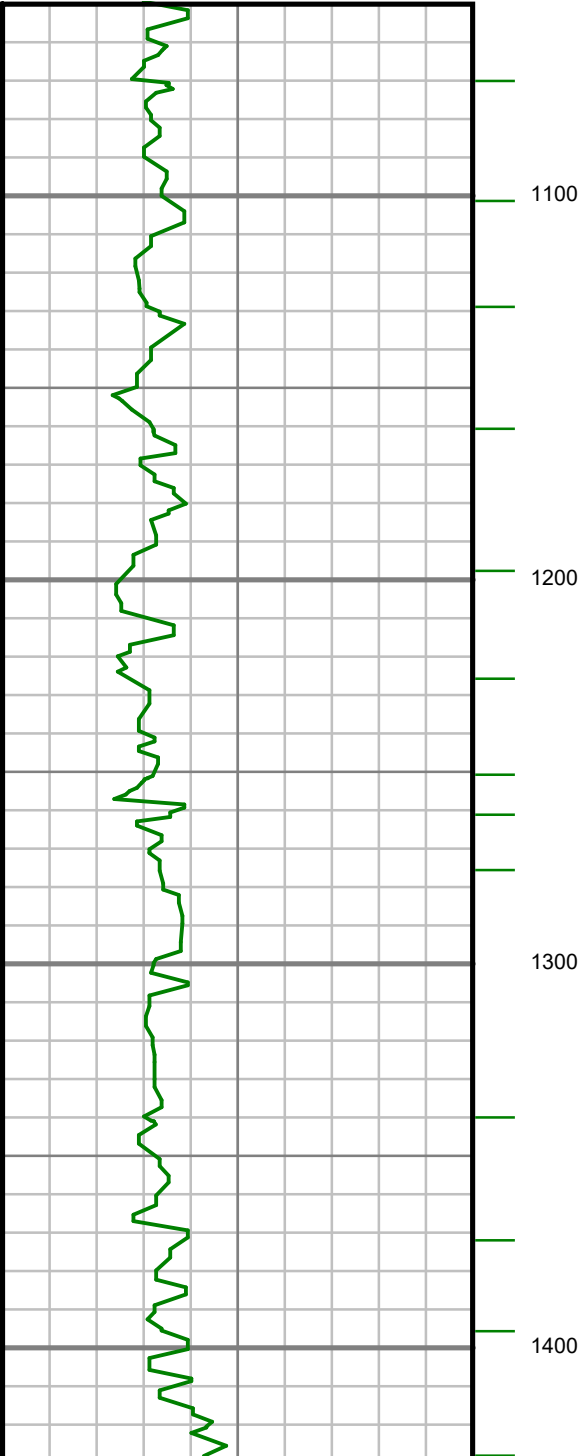
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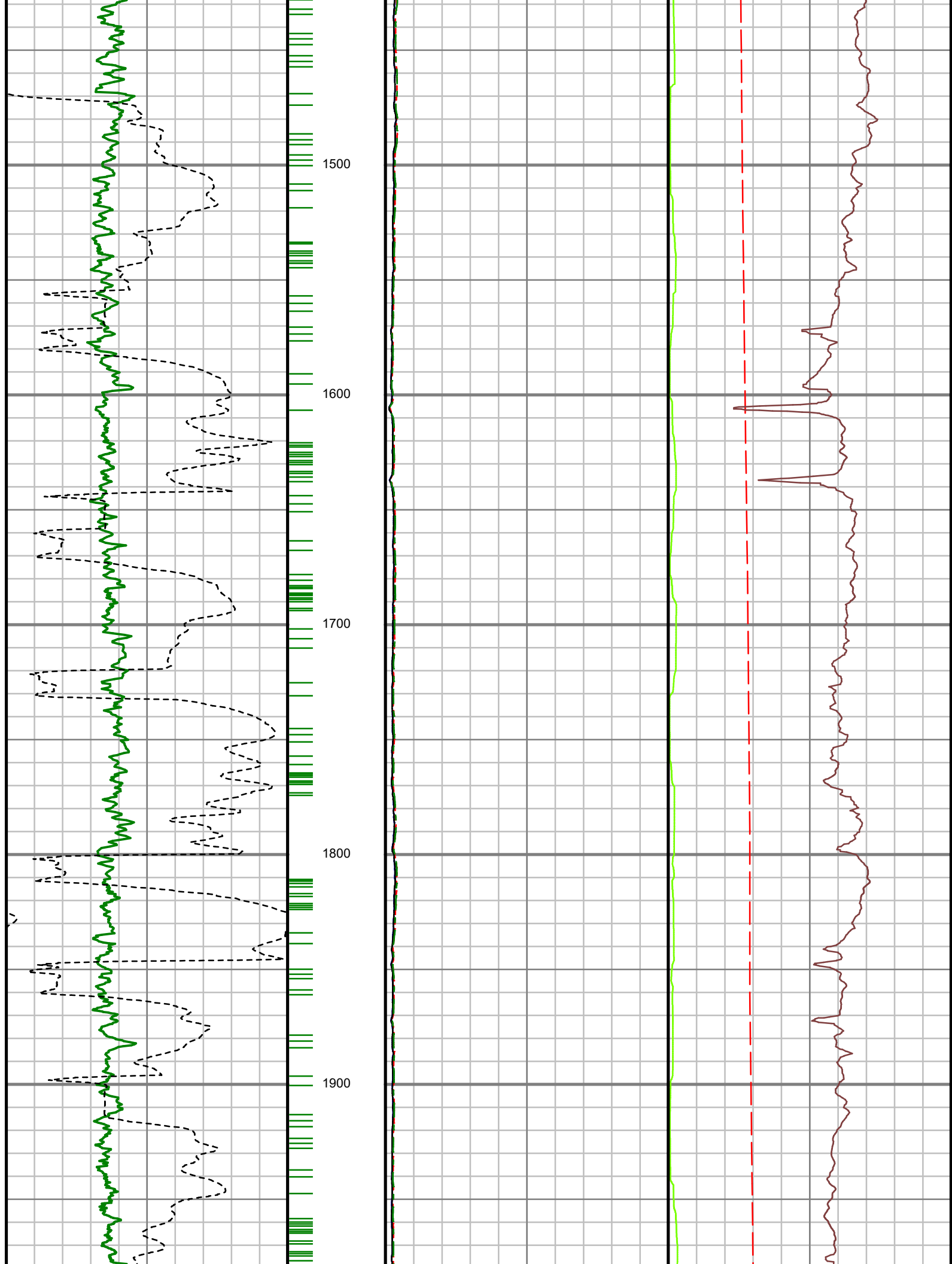
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions as set out in our current price schedule.

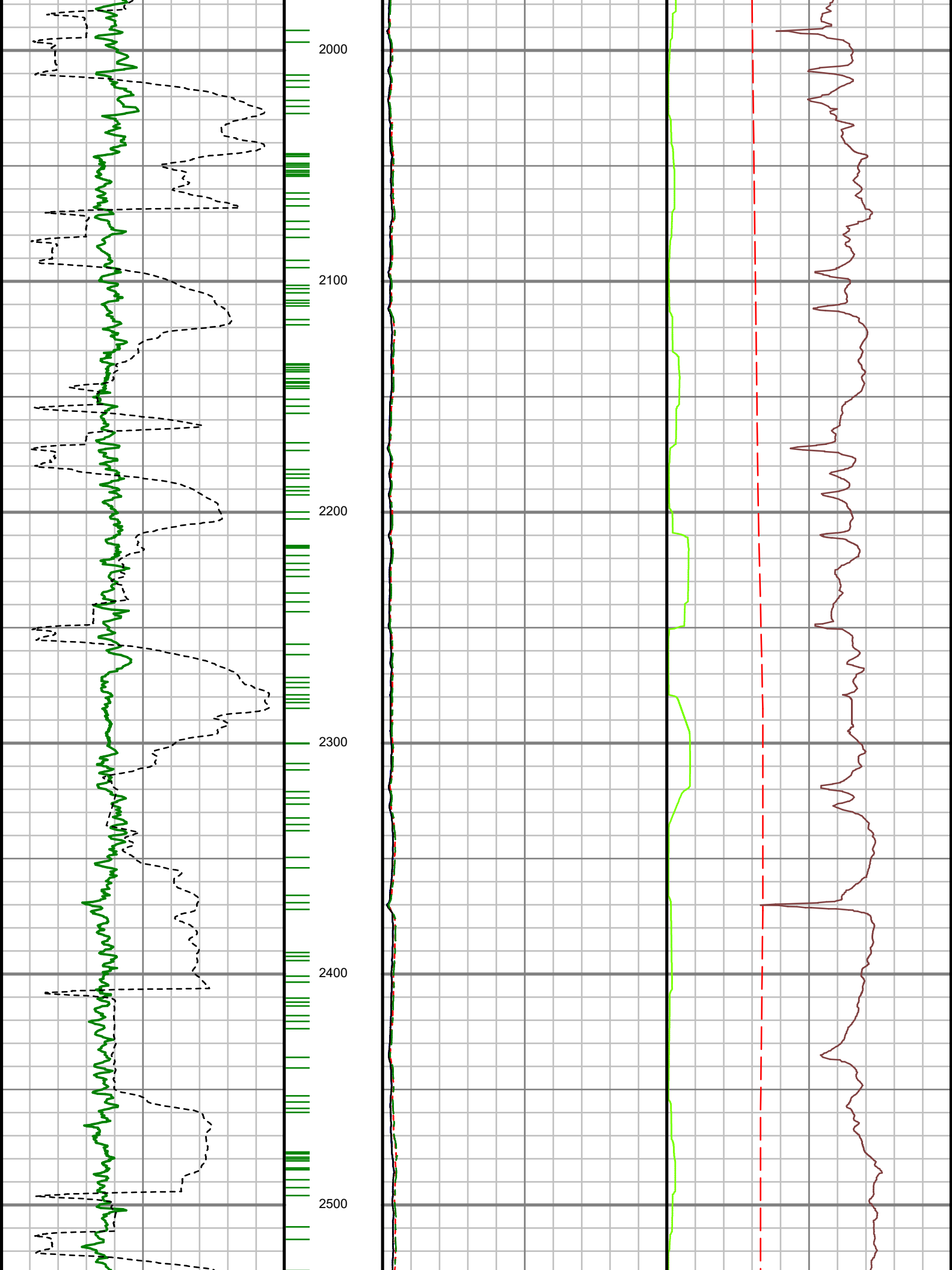
HIGHPOINT RESOURCES
ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B
WATTENBERG FIELD
WELD COUNTY, COLORADO
API # 05-123-48186

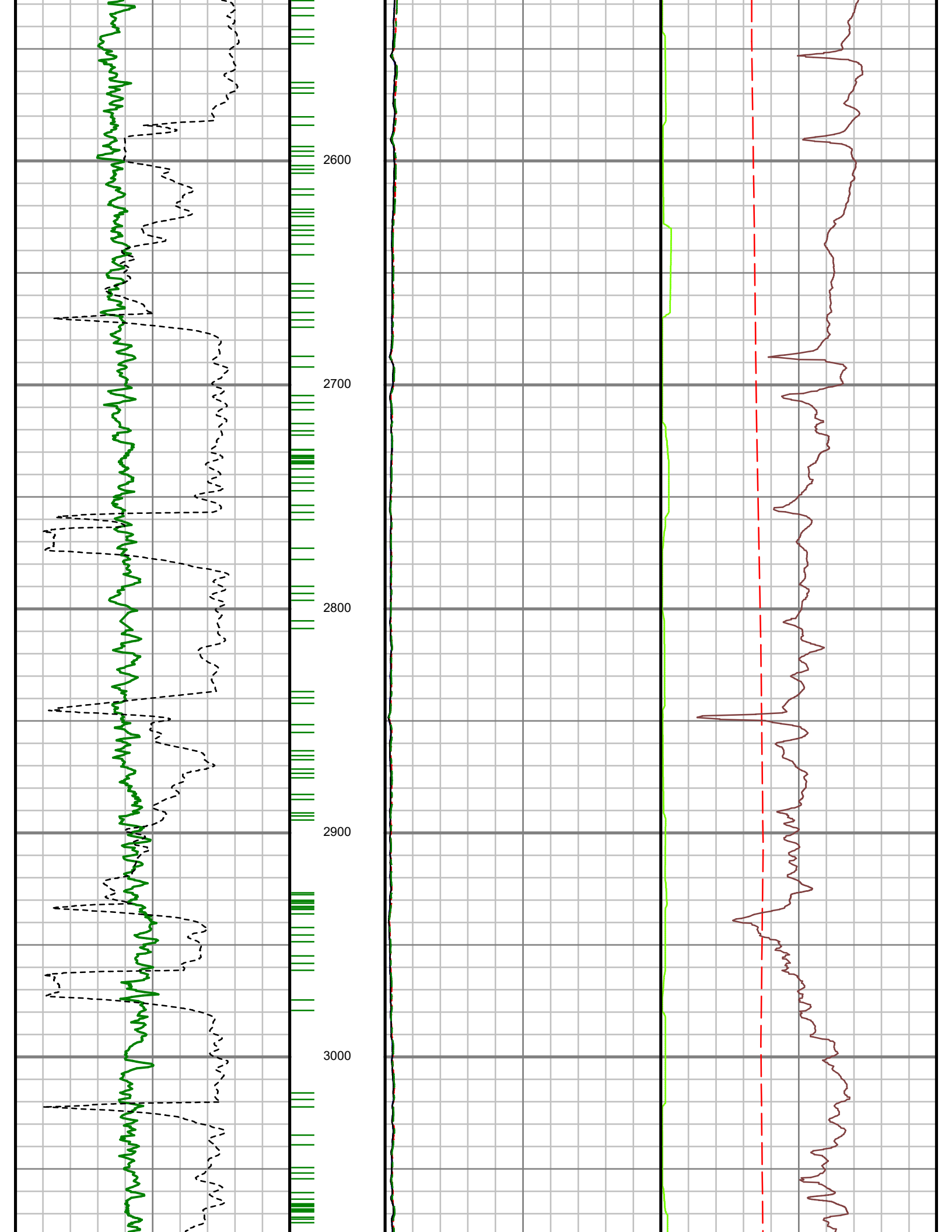


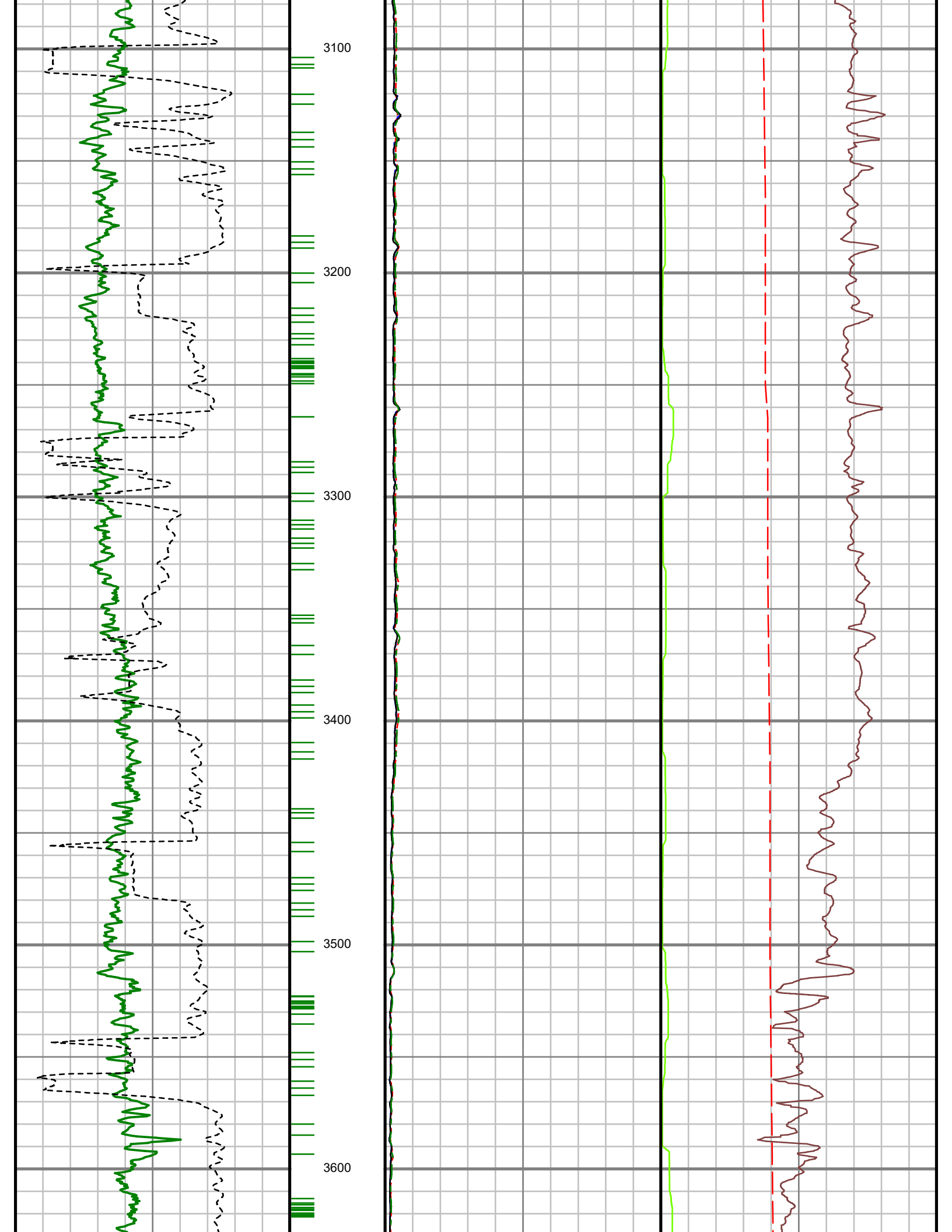
TRUE VERTICAL DEPTH
1:600 (ft)

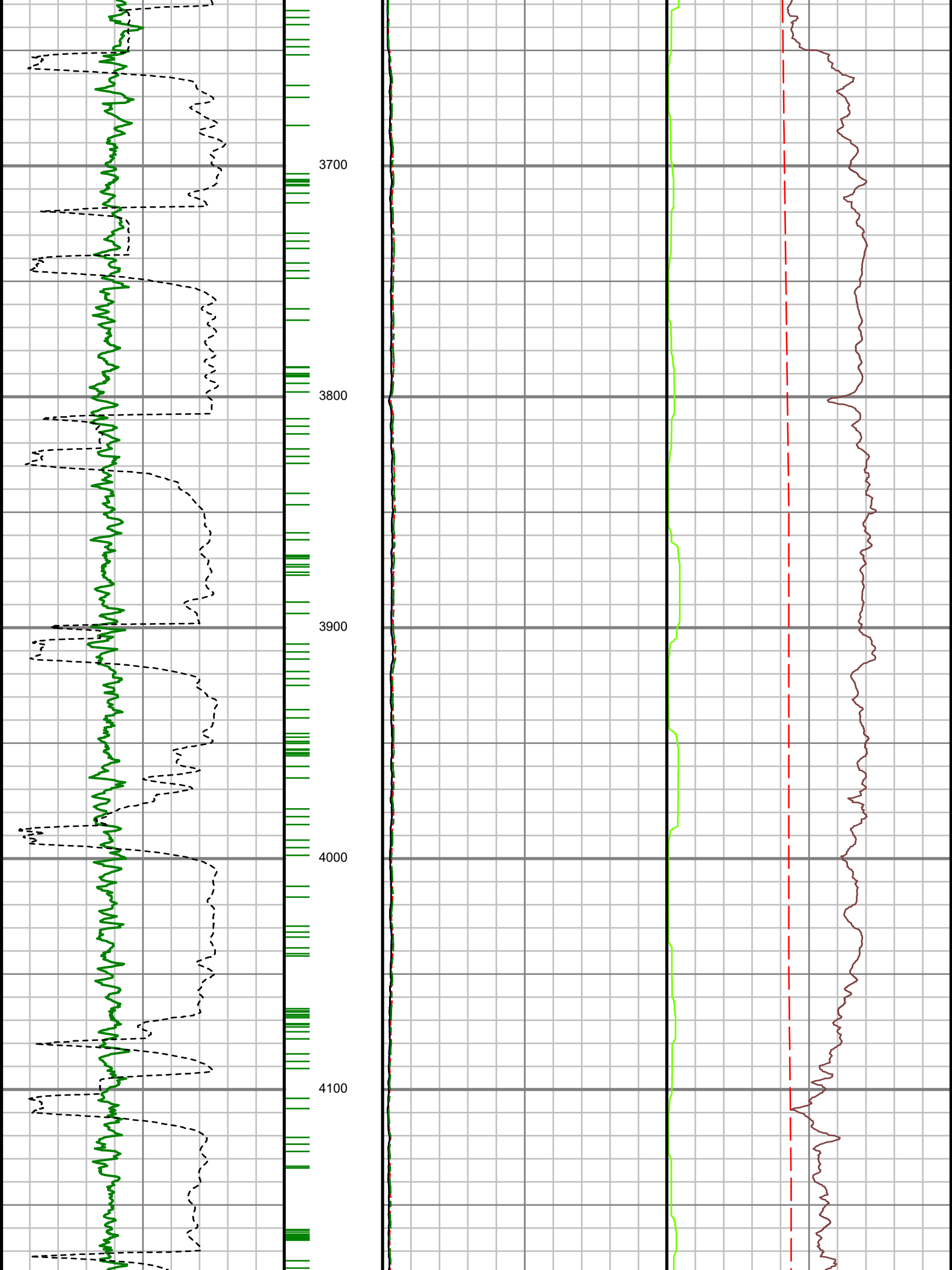


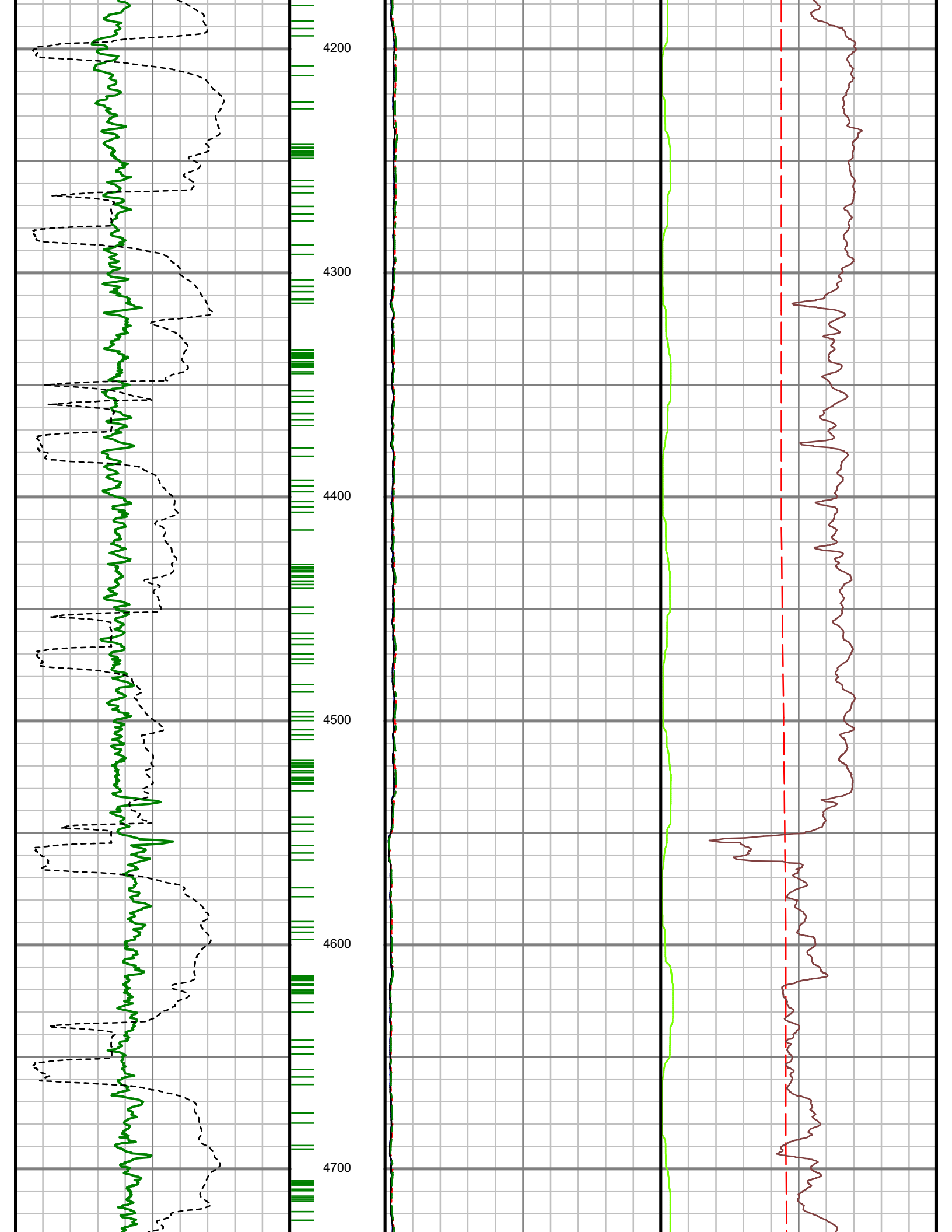


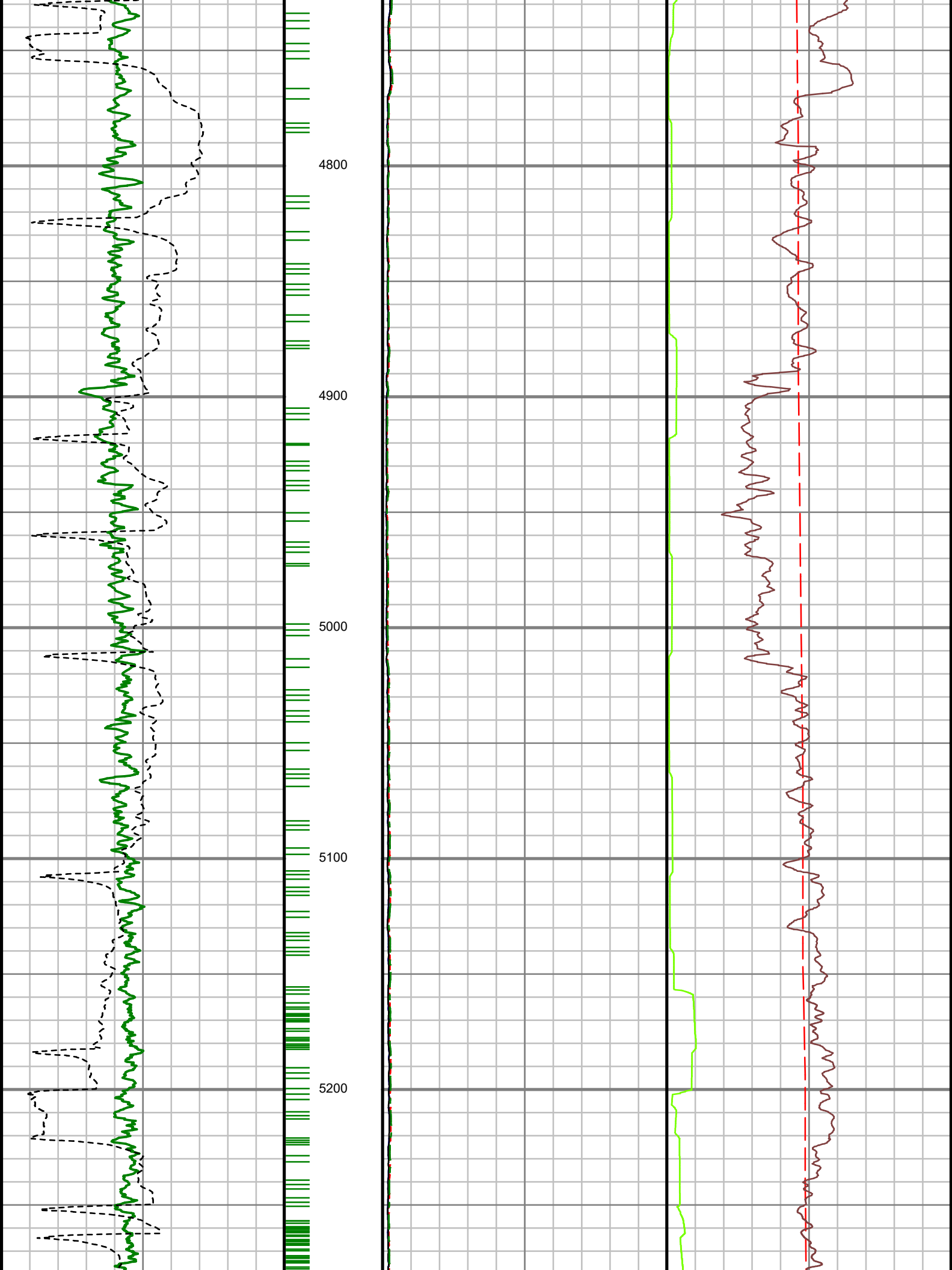


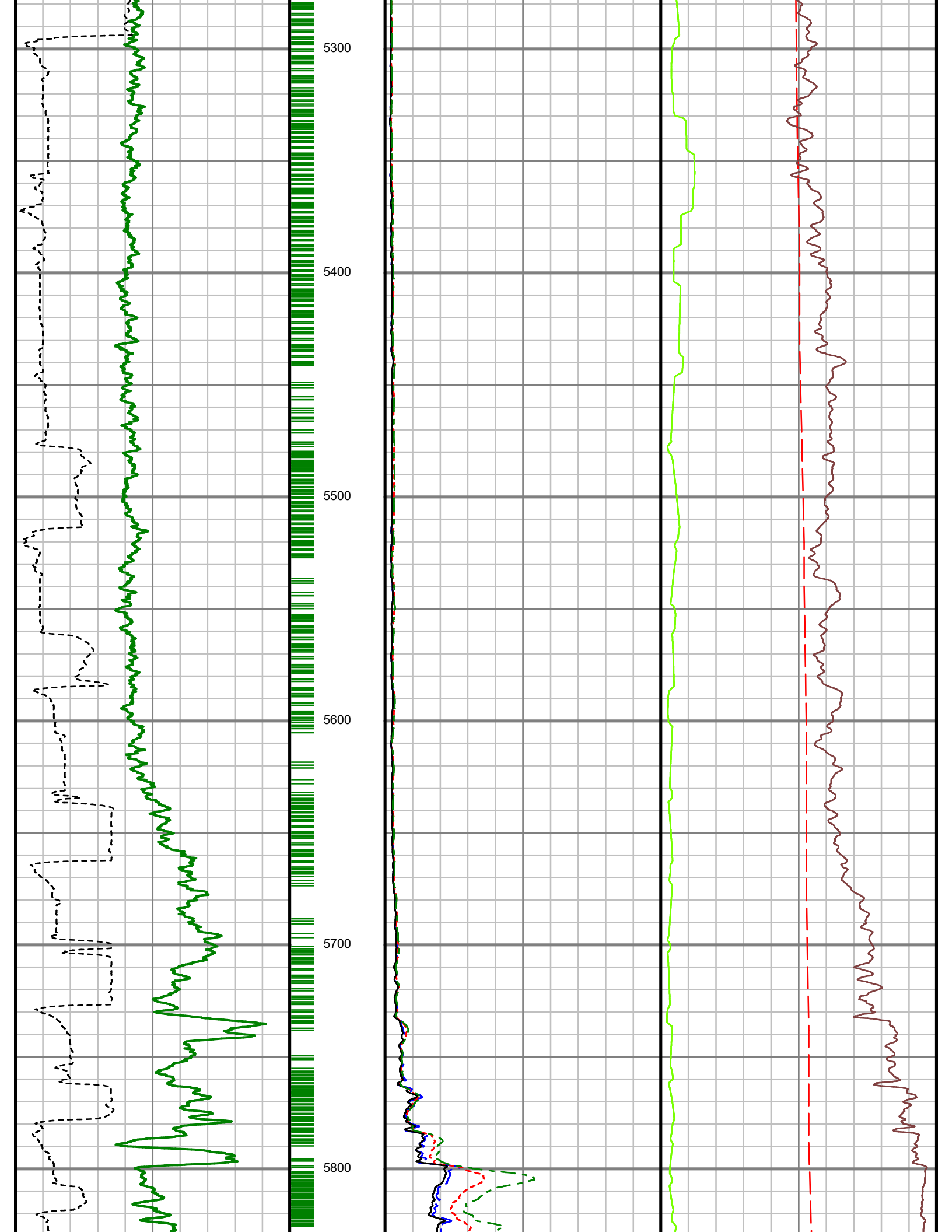


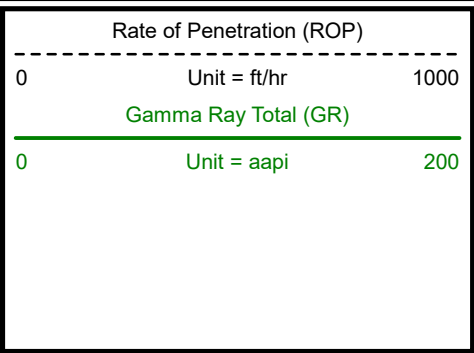




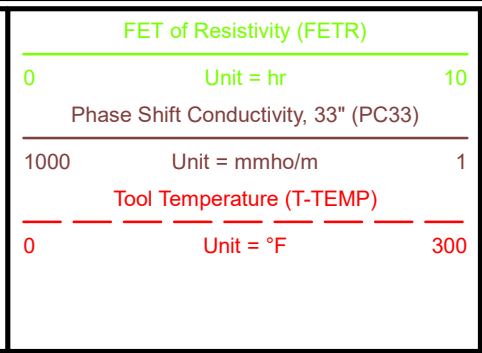
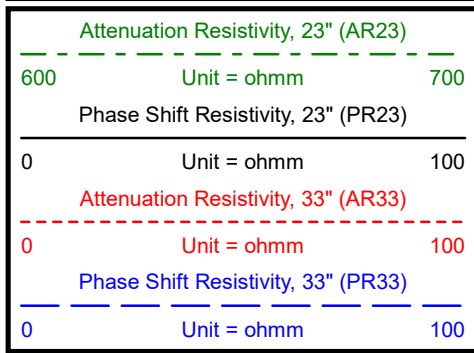
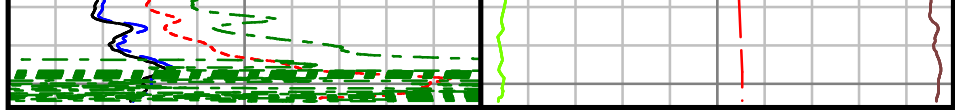








TRUE VERTICAL DEPTH
1-1600 (ft)



SURVEY REPORT

ANSCHUTZ EQUUS FARMS FED 05-61-34-5764B

COMPUTED SURVEYS

CUSTOMER HIGHPOINT RESOURCES
PROJECT ANSCHUTZ EQUUS FARMS FED
05-61-34-5764B
FIELD WATTENBERG

WELL INFORMATION

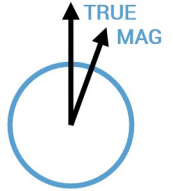
Lat/Long 40° 21' 17.02" N, 104° 11' 11.22" W
Northing 1,374,779.27 ft
Easting 3,366,068.19 ft
UWI 05-123-48186

MAP INFORMATION

North Reference True North
Grid Correction
System US State Plane 1983
Datum North American Datum 1983 (GRS 1980)
Map Zone Colorado North: 0501

VERTICAL SECTION REFERENCE

+N/-S 0 ft
+E/-W 0 ft
Proposal Direction 269.77°
Calculation Method Minimum Curvature



GEOMAGNETIC REFERENCE INFORMATION

Local Gravity: 999.110 mG [computed]

MD	MODEL	DATE	DECLINATION	MAG TO TRUE
970-6373 ft	HDGM2018	06 Apr 2019	8.10°	add 8.1°

WELL NOTES

OPERATORS

A. FARQUHAR, M. BAILY

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft
969.50	5.36	162.38	967.75	-19.52	-41.27	19.69	Invalid
1056.00	7.22	172.77	1053.73	-21.39	-50.51	21.60	2.51
1146.00	9.70	170.93	1142.74	-23.25	-63.61	23.50	2.78
1238.00	12.07	170.46	1233.08	-25.99	-80.76	26.32	2.57
1328.00	12.63	165.97	1321.00	-29.86	-99.58	30.27	1.24
1419.00	14.04	160.17	1409.55	-35.94	-119.62	36.42	2.14
1509.00	15.16	157.57	1496.64	-44.05	-140.77	44.62	1.43
1600.00	15.87	160.03	1584.33	-52.75	-163.46	53.41	1.07
1691.00	18.29	154.64	1671.31	-63.01	-188.06	63.78	3.17
1781.00	17.86	150.31	1756.87	-75.80	-212.81	76.66	1.57
1872.00	19.00	154.20	1843.21	-89.05	-238.27	90.02	1.84
1963.00	19.63	155.54	1929.09	-101.72	-265.52	102.79	0.84
2054.00	20.60	159.53	2014.54	-113.53	-294.43	114.72	1.85
2145.00	21.94	159.95	2099.34	-124.83	-325.39	126.15	1.49
2236.00	21.83	161.29	2183.78	-135.96	-357.39	137.41	0.56
2327.00	22.94	162.29	2267.93	-146.65	-390.31	148.23	1.29
2421.00	22.77	162.62	2354.55	-157.51	-425.12	159.23	0.23
2515.00	22.26	160.40	2441.38	-168.78	-459.26	170.64	1.05
2609.00	22.37	166.47	2528.35	-178.80	-493.43	180.80	2.45
2703.00	21.72	163.05	2615.49	-187.91	-527.46	190.05	1.53

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
2798.00	20.53	162.52	2704.10	-197.91	-560.16	200.18	1.27
2892.00	22.13	161.45	2791.66	-208.36	-592.68	210.77	1.75
2986.00	21.14	158.91	2879.03	-219.97	-625.28	222.50	1.45
3080.00	20.30	161.37	2966.95	-231.15	-656.55	233.81	1.29
3175.00	20.24	160.23	3056.07	-241.85	-687.63	244.64	0.42
3269.00	22.04	164.50	3143.75	-251.93	-719.93	254.85	2.52
3362.00	22.85	162.28	3229.70	-261.96	-753.94	265.01	1.26
3457.00	23.74	164.59	3316.96	-272.51	-789.95	275.71	1.34
3551.00	23.14	162.96	3403.21	-282.80	-825.84	286.15	0.94
3645.00	22.88	162.14	3489.73	-293.68	-860.90	297.16	0.44
3738.00	21.10	160.68	3575.96	-304.63	-893.91	308.25	2.00
3832.00	19.46	162.12	3664.13	-314.91	-924.79	318.66	1.82
3927.00	18.52	162.53	3753.95	-324.18	-954.24	328.05	1.01
4020.00	17.52	159.25	3842.40	-333.46	-981.41	337.44	1.53
4114.00	15.14	158.57	3932.60	-342.86	-1006.07	346.94	2.54
4208.00	14.77	159.18	4023.41	-351.51	-1028.70	355.68	0.43
4302.00	12.75	153.95	4114.71	-360.25	-1049.22	364.50	2.52
4396.00	11.61	156.66	4206.60	-368.48	-1067.23	372.80	1.36
4490.00	10.77	160.97	4298.81	-375.02	-1084.22	379.41	1.26
4585.00	8.93	166.50	4392.41	-379.57	-1099.78	384.03	2.18

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft
4679.00	7.61	163.20	4485.43	-383.02	-1112.83	387.53	1.49
4773.00	5.21	165.84	4578.84	-385.82	-1122.93	390.37	2.57
4867.00	3.69	171.87	4672.55	-387.27	-1130.07	391.85	1.69
4961.00	1.89	133.98	4766.44	-388.79	-1134.14	393.39	2.65
5055.00	1.74	138.27	4860.39	-390.84	-1136.27	395.45	0.21
5149.00	1.37	127.36	4954.36	-392.68	-1138.02	397.29	0.50
5244.00	1.81	124.88	5049.32	-394.80	-1139.56	399.42	0.47
5339.00	1.58	120.67	5144.28	-397.16	-1141.09	401.78	0.28
5434.00	1.75	288.50	5239.27	-396.90	-1141.30	401.53	3.49
5528.00	7.98	275.21	5332.88	-389.04	-1140.25	393.66	6.68
5622.00	20.58	278.78	5423.80	-366.14	-1137.12	370.75	13.43
5716.00	26.69	276.33	5509.88	-328.82	-1132.27	333.41	6.58
5811.00	35.03	270.53	5591.38	-280.26	-1129.66	284.84	9.31
5904.00	43.45	271.50	5663.34	-221.50	-1128.57	226.07	9.08
5998.00	50.23	268.07	5727.61	-152.99	-1128.94	157.57	7.68
6092.00	60.22	265.51	5781.16	-76.00	-1133.36	80.59	10.86
6186.00	70.48	268.84	5820.32	9.22	-1137.46	-4.62	11.37
6281.00	78.96	268.12	5845.34	100.76	-1139.91	-96.14	8.96
6373.00	89.66	267.75	5854.44	192.12	-1143.21	-187.50	11.64

2" = 100' TVD