



DGR Dual Gamma Ray Magnetic Wave Resistivity

1 : 500

[illegible]

WELL INFORMATION

MWD Run Number	100	200	300		
Date run completed	26-Dec-10	30-Dec-10	31-Dec-10		
Rig Bit Number	2	3	4		
Bit Size (in)	17.50	12.25	12.25		
Tool Nominal OD (in)	9.50	8.00	8.00		
Log Start Depth (MD, m)	157.00	745.00	1,311.00		
Log End Depth (MD, m)	745.00	1,311.00	1,800.00		
Drill or Wipe	Drill	Drill	Drill		
Drill/Wipe Start Date and Time	25-Dec-10 05:30	29-Dec-10 00:00	30-Dec-10 19:15		
Drill/Wipe End Date and Time	25-Dec-10 23:41	30-Dec-10 00:55	31-Dec-10 12:40		
Min Inc (deg) @ Depth (MD, m)	0 @ 100.000	.25 @ 763.590	1.05 @ 1,489.200		
Max Inc (deg) @ Depth (MD, m)	.50 @ 379.670	1.22 @ 1,168.430	1.48 @ 1,773.440		
Bit TFA(in2) / Bit Type	.98 / Smith XrVEJ3PS	1.20 / Reed RSR616M	1.05 / Reed RSR516S		
Flow Rate (gpm)	1,150.00	990.00	993.00		
Max AV (mps) / CV (mps) @ MWD	.7 / 5.2	1.5 / 2.3	1.5 / 2.3		
Fluid Type	Sea Water	Polymer	Polymer		
Density (ppg) / Viscosity (spqt)	8.70 / 188.00	9.90 / 57.00	10.00 / 50.00		
Filtrate CL (ppm)	36,000	49,000	53,000		
pH / Fluid Loss (mptm)	9.00 / 0	9.30 / 4	9.00 / 4		
PV (cP) / YP (lbf2)	6 / 59.00	20 / 23.00	18 / 22.00		
% Solids / % Sand	N/A / N/A	6.1 / N/A	5.8 / N/A		
% Oil / Oil:Water Ratio	0 / 0:99	0 / 0:90	0 / 0:90		
Rm @ Measured Temp (degC)	N/A @ N/A	.11 @ 20.00	.10 @ 20.00		
Rmf @ Measured Temp (degC)	N/A @ N/A	.10 @ 20.00	.19 @ 20.00		
Rmc @ Measured Temp (degC)	N/A @ N/A	.25 @ 20.00	.22 @ 20.00		
Max Tool Temp (degC) / Source	25.00 / PCG	52.94 / HCIM	60.78 / HCIM		

Rm @ Max Tool Temp (degC)	N/A @ 25.00	.0584 @ 52.94	.0505 @ 60.78		
Lead MWD Engineer	A. Ingram	S. Allan	A. Ingram		
Customer Representative	P. Jenkins	P. Jenkins	P. Jenkins		

SENSOR INFORMATION

Downhole Processor Information

Tool Type	PCG	HCIM	HCIM		
Software Version	8.11	88.47	88.47		
Sub Serial Number	11230619	11071380	11071380		
Insert Serial Number	11061956	11189095	11189095		
Date and Time Initialized	24-Dec-10 10:25	28-Dec-10 17:27	30-Dec-10 11:12		
Date and Time Read	26-Dec-10 05:55	30-Dec-10 10:49	31-Dec-10 20:01		
ECMB SW Version	N/A	N/A	N/A		

Directional Sensor Information

Tool Type	PCD	PCDC	PCDC		
Distance From Bit (m)	6.910	13.200	13.200		
Software Version	3.42	6.21	6.21		
Sub Serial Number	11230619	10544571	10544571		
Sonde Serial Number	10809465	11297502	11297502		
Sensor ID Number	N/A	N/A	N/A		
Toolface Offset (deg)	113.50	98.48	116.71		

Gamma Ray Sensor Information

Tool Type	PCG	DGR	DGR		
Distance From Bit (m)	8.590	16.160	16.160		
Recorded Sample Period (sec)	10	8	8		
Software Version	8.11	N/A	N/A		
Sub Serial Number	11230619	10907802	10907802		
Insert/Sonde Serial Number	11061956	11081495	11081495		

Resistivity Sensor Information

Tool Type		EWR-P4	EWR-P4		
Distance From Bit (m)		18.510	18.510		
Recorded Sample Period (sec)		8	8		
Software Version		1.50	1.50		
Sub Serial Number		10486171	10486171		
Receiver Insert Serial Number		11187515	11187515		
Transmitter Insert Serial Number		10436286	10436286		
Receiver Orientation		Down	Down		

DDSr-DGR Sensor Information

Tool Type		DDSr-DGR	DDSr-DGR		
Distance From Bit (m)		16.145	16.145		
Recorded Sample Period (sec)		12	12		
Software Version		10.49	10.49		
Sub Serial Number		10907802	10907802		
Insert Serial Number		10958929	10958929		
Sensor ID Number		5658	5658		

REMARKS

1. All depths are bit depths and referenced to drillers pipe tally
2. AV/CV is calculated at the MWD collar using the Power Law for water based mud.
3. All TVD are referenced to rotary table.

4. ROP spikes may be a result of pipe squat or rig heave and not necessarily representative of true lithological drill rate.

5. Temperature is electronic temperature of the EWR-P4

6. All data presented is recorded.

7. Data has been processed based on Limestone matrix and using the following parameters :

MW = 9.8-10.20 ppg

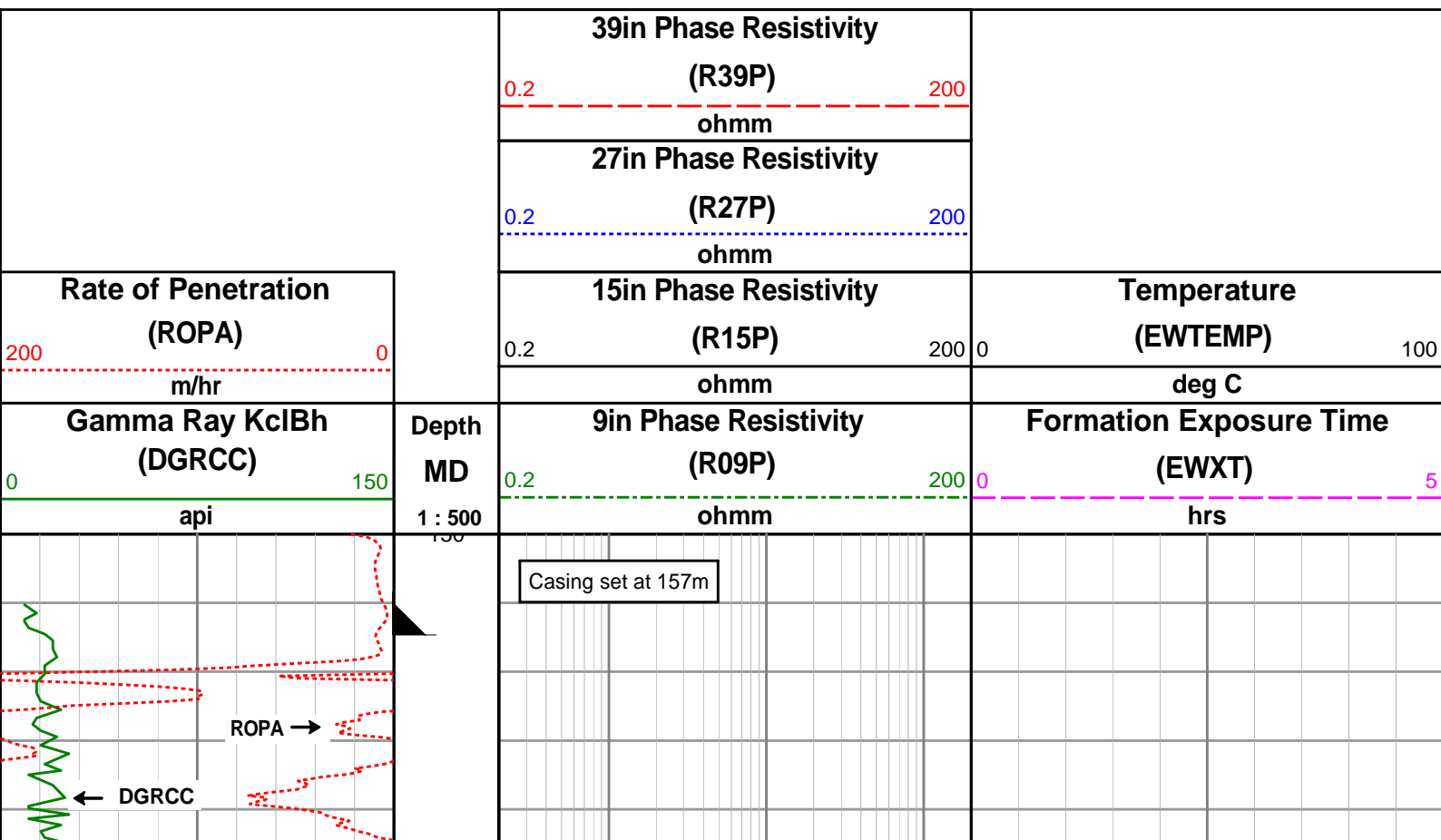
Kcl concentration = 8.0 - 8.2 %pw

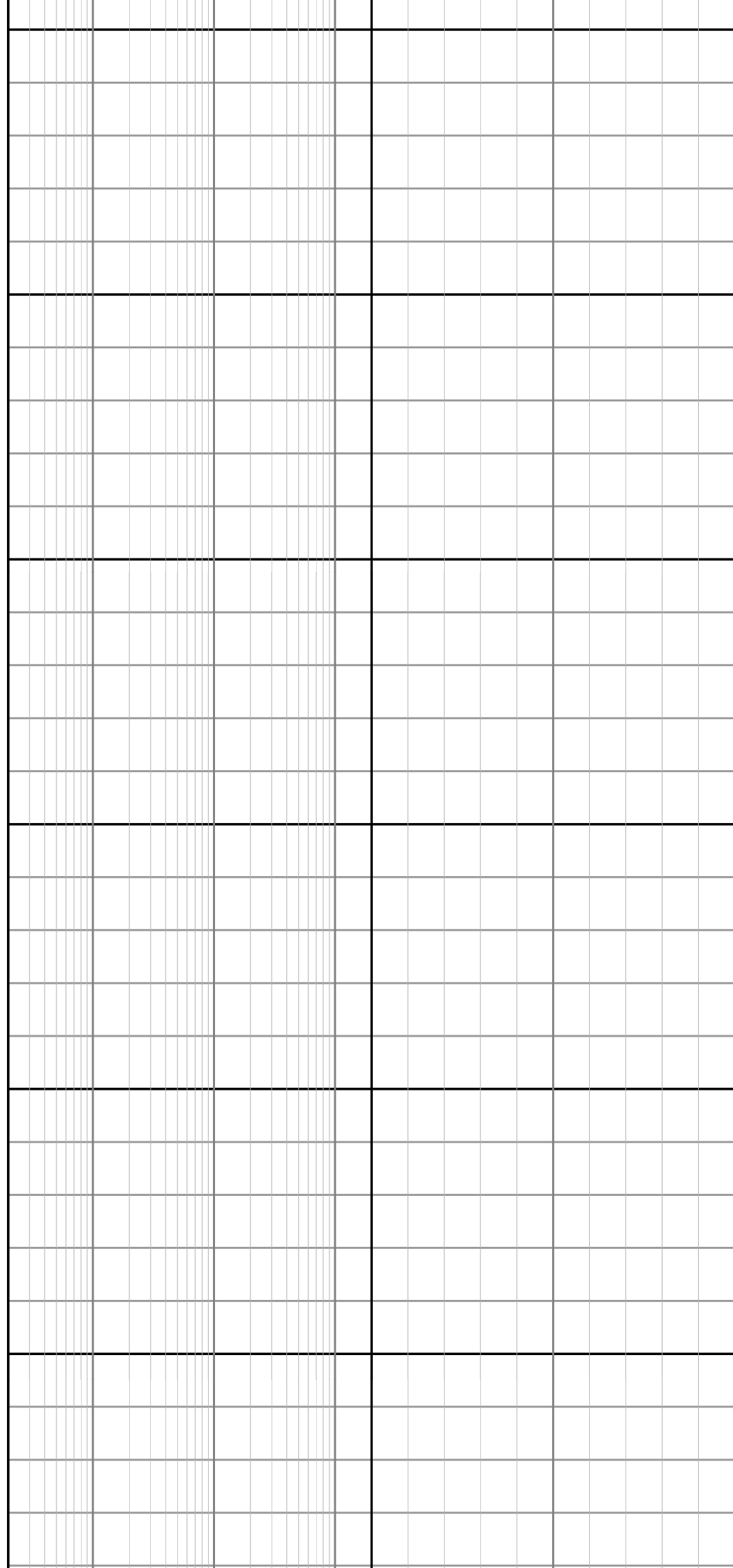
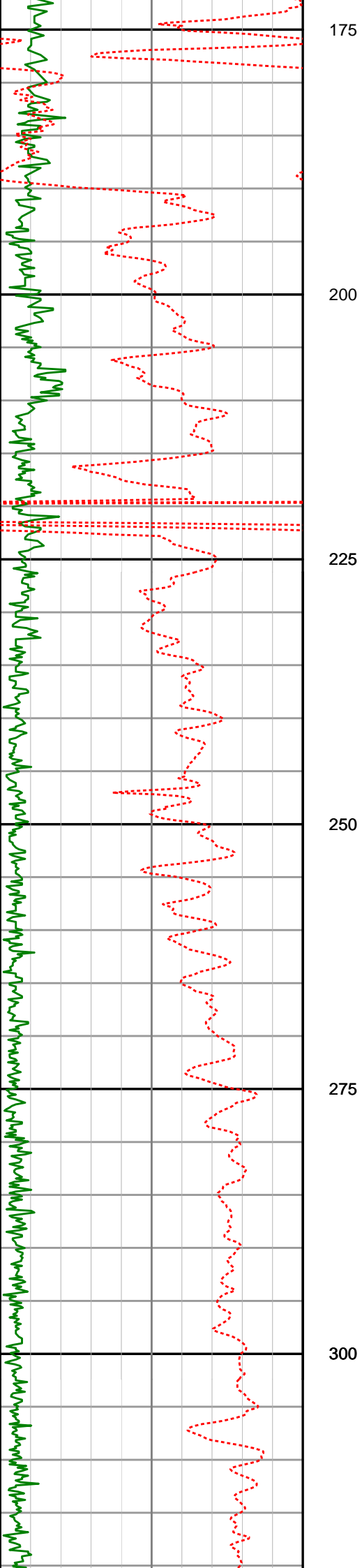
8. Curve Mnemonics used

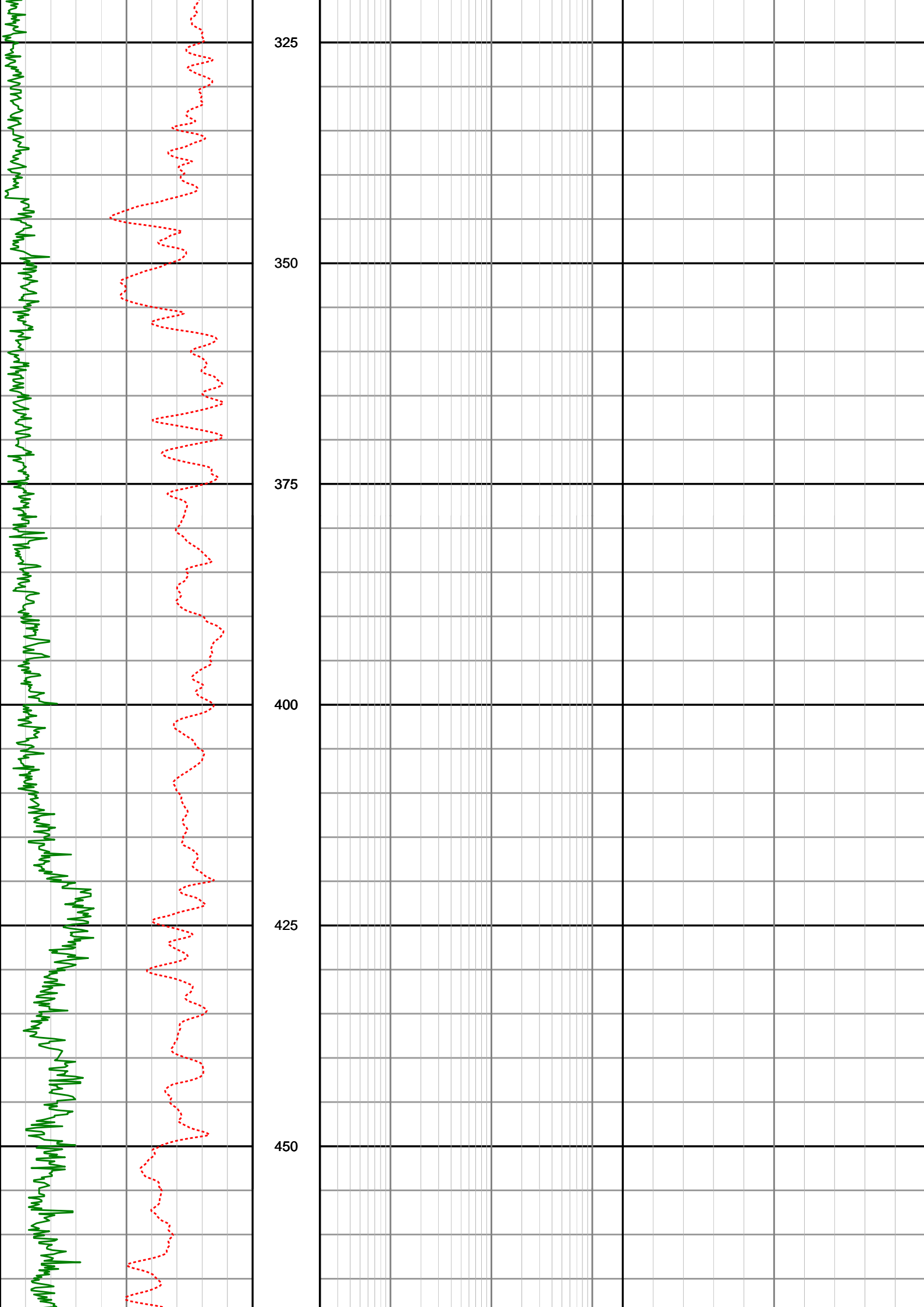
ROPA	Smoothed Average Rate of Penetration,	m/hr
DGRCC	Smoothed Gamma Ray KCL BH Corrected,	api
R09P	Smoothed EWR 9in Phase Resistivity,	ohmm
R15P	Smoothed EWR 15in Phase Resistivity,	ohmm
R27P	Smoothed EWR 27in Phase Resistivity,	ohmm
R39P	Smoothed EWR 39in Phase Resistivity,	ohmm
EWXT	Smoothed Resistivity Formation Exposure Time,	hr
EWTEMP	Smoothed EWR Temperature,	°C

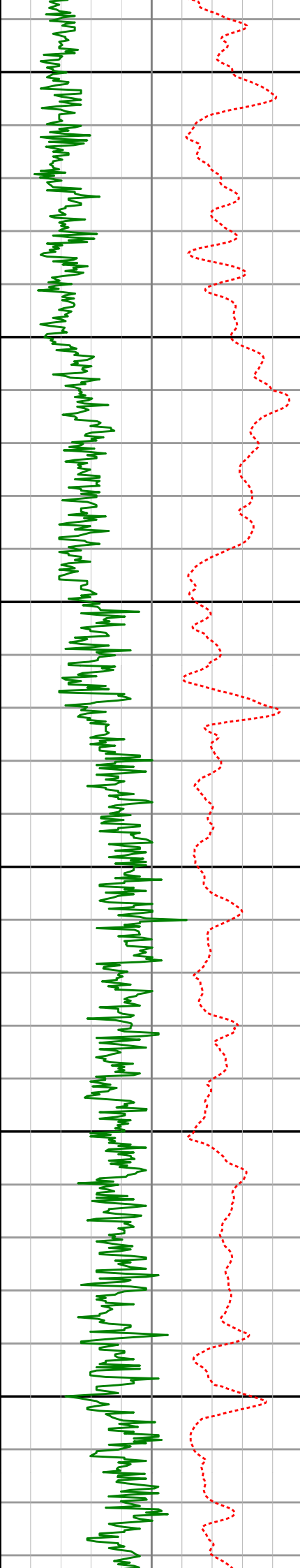
WARRANTY

HALLIBURTON WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HALLIBURTON CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY OTHER THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION AND PRODUCTION OPERATION. HALLIBURTON MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HALLIBURTON BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HALLIBURTON.









475

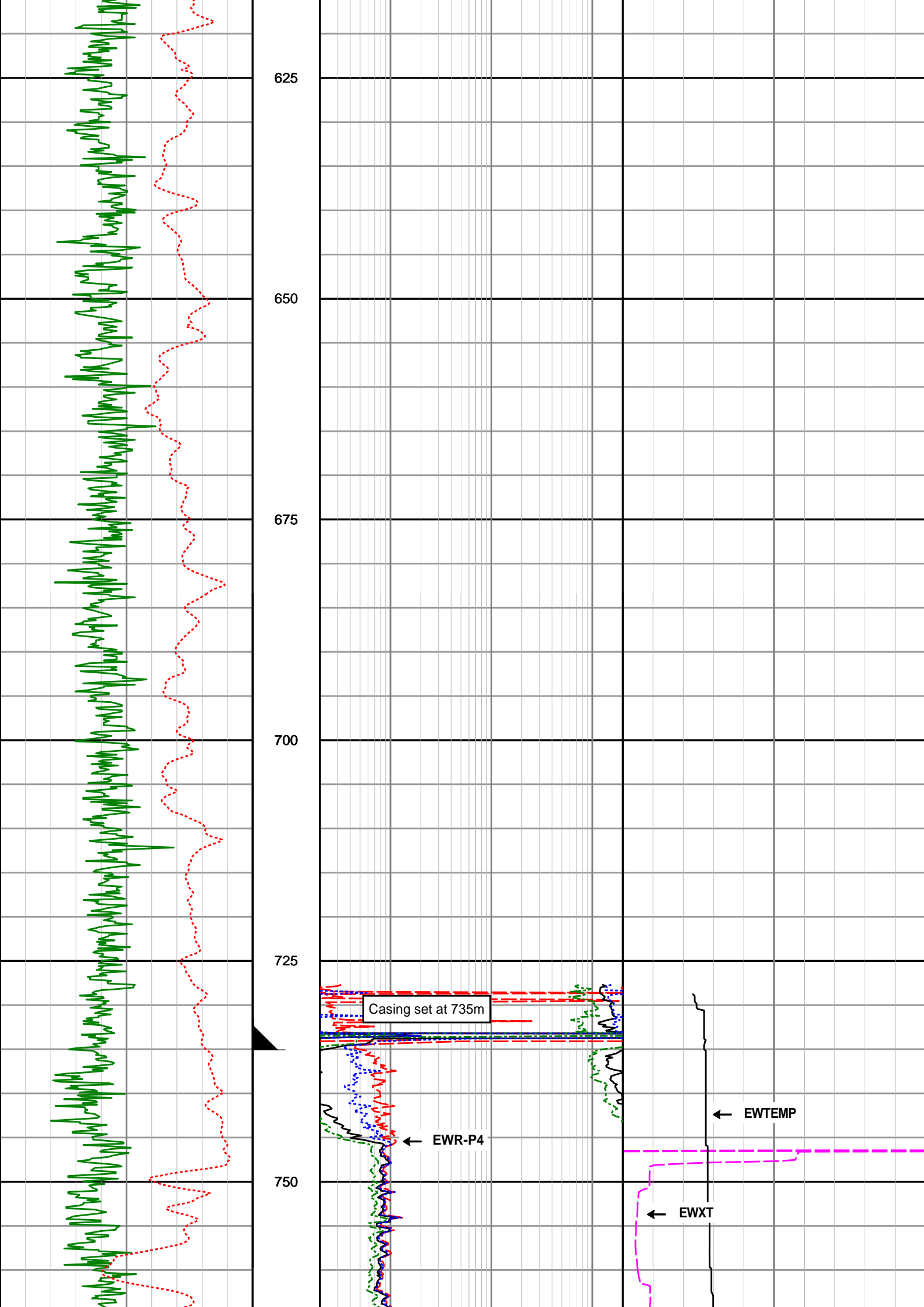
500

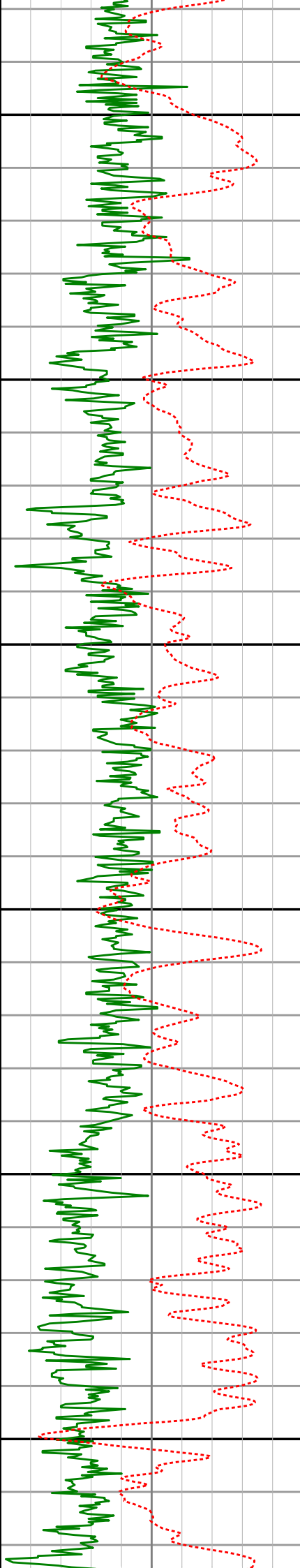
525

550

575

600





775

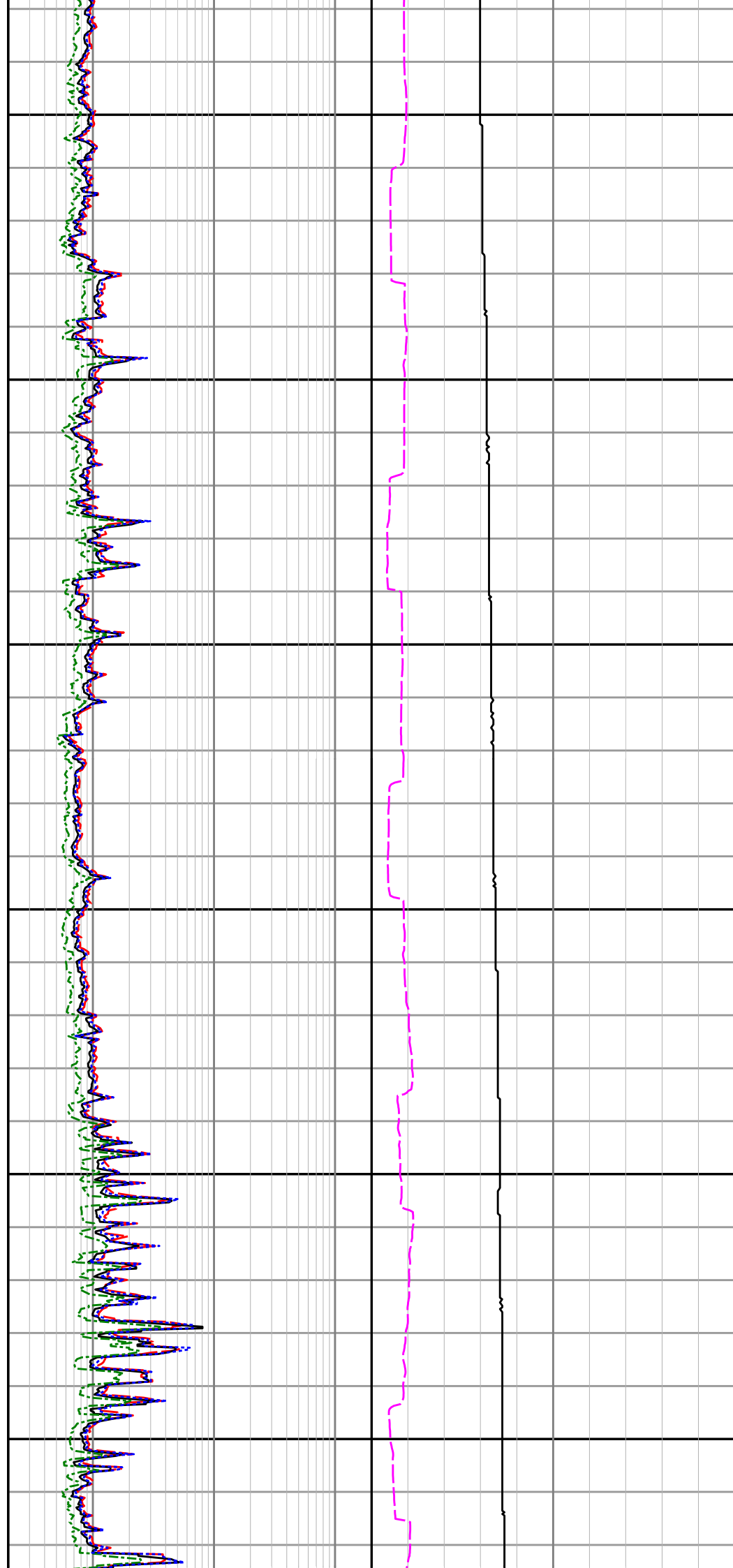
800

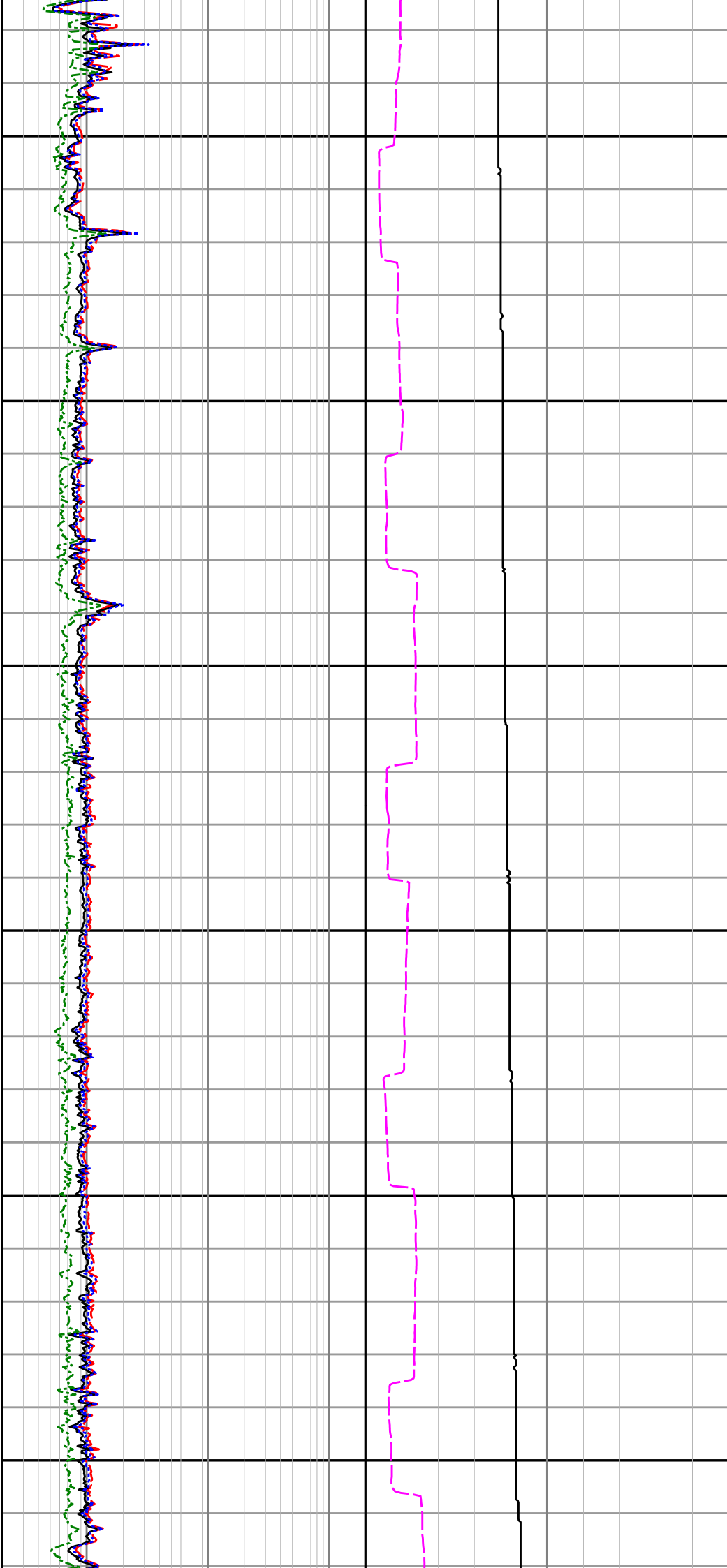
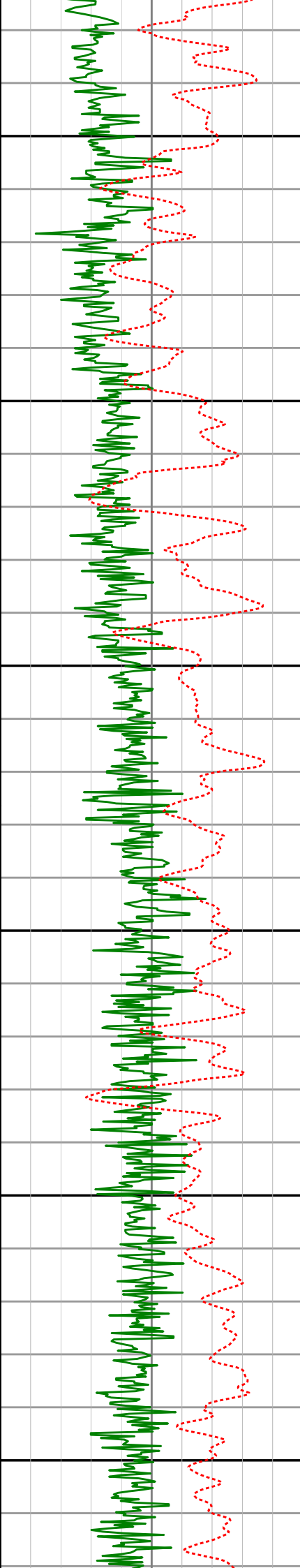
825

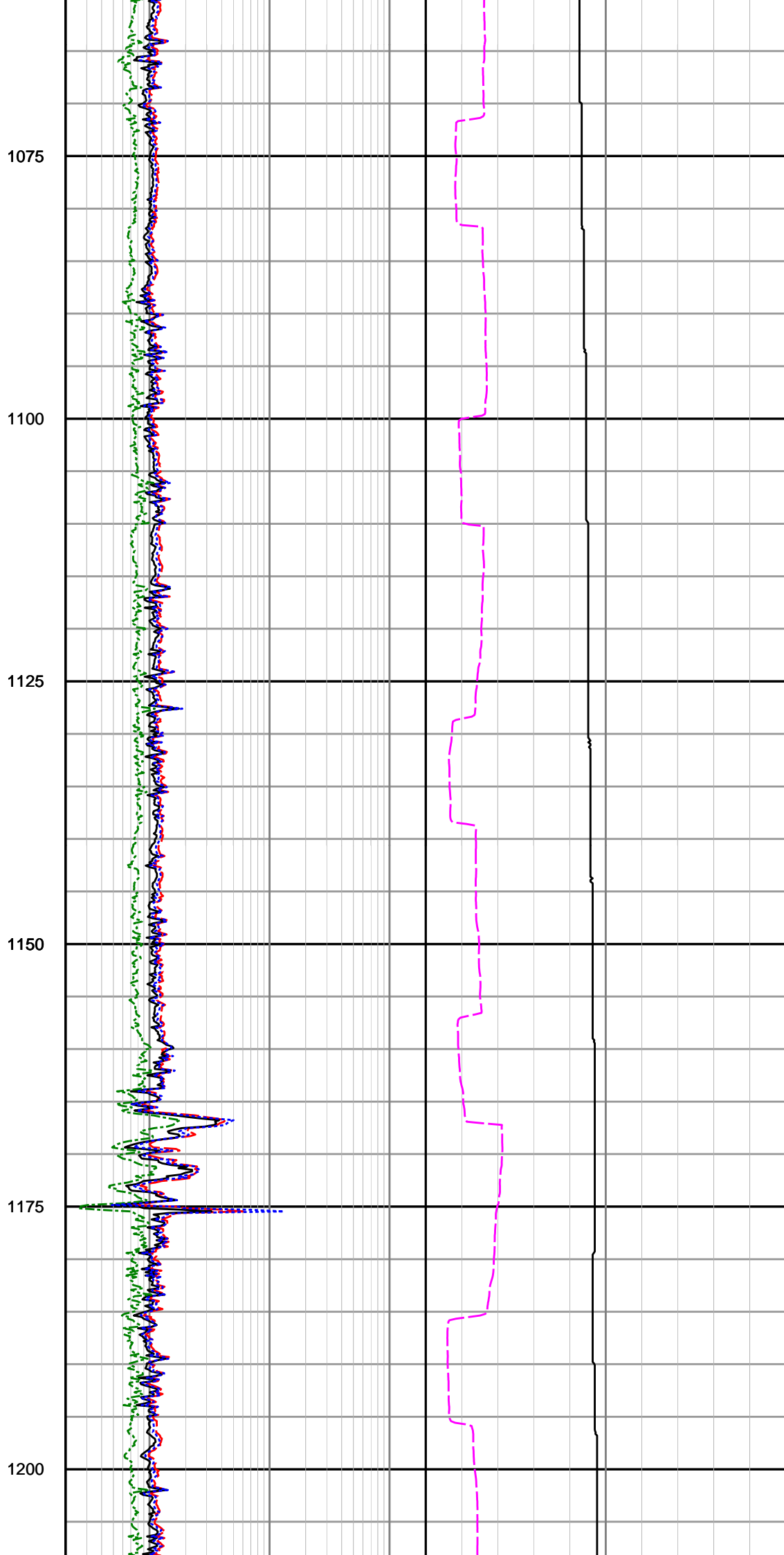
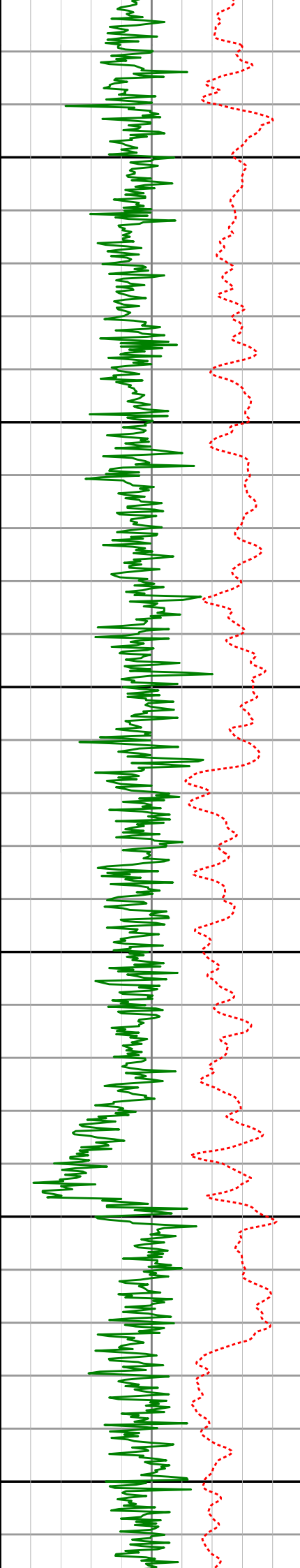
850

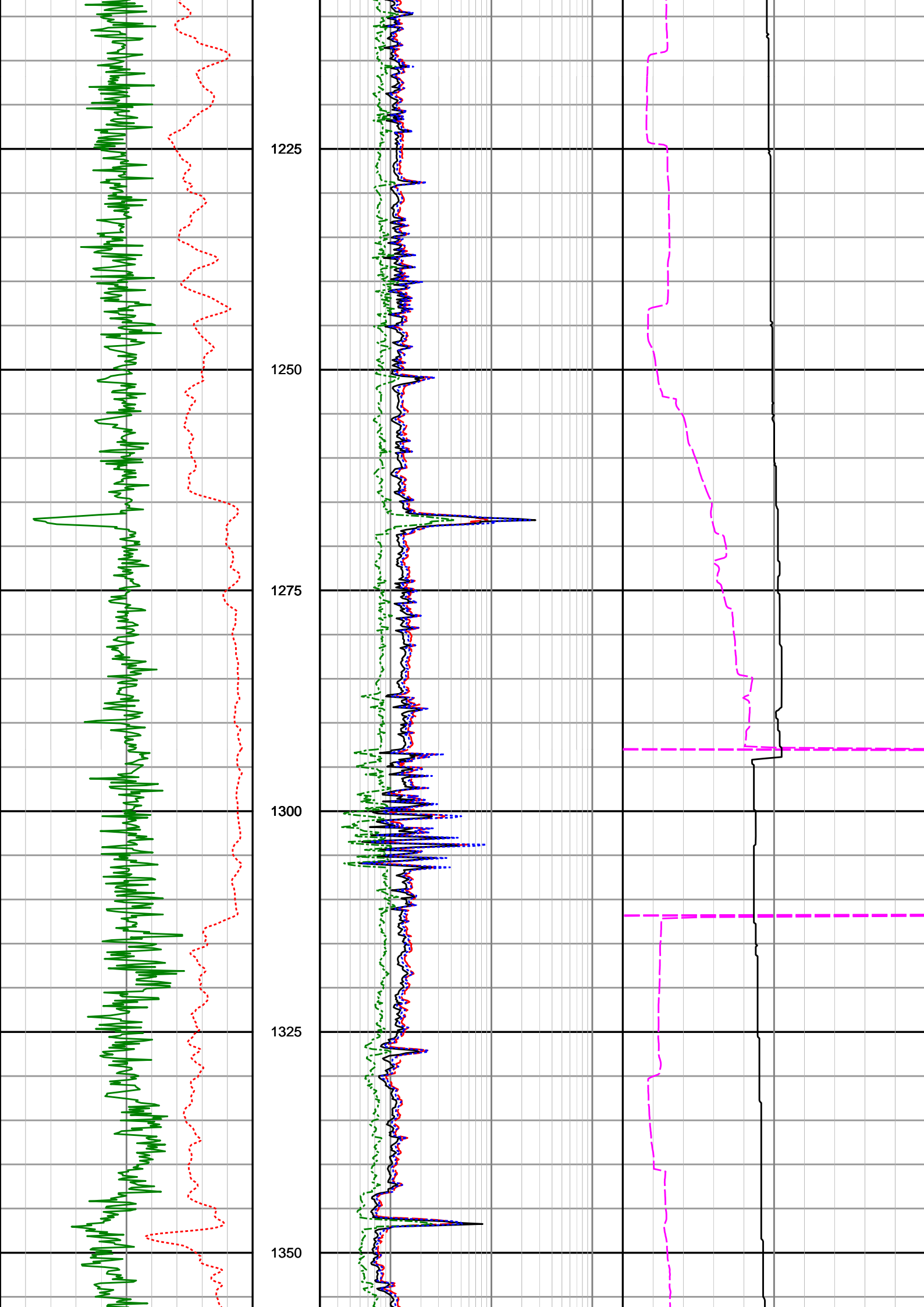
875

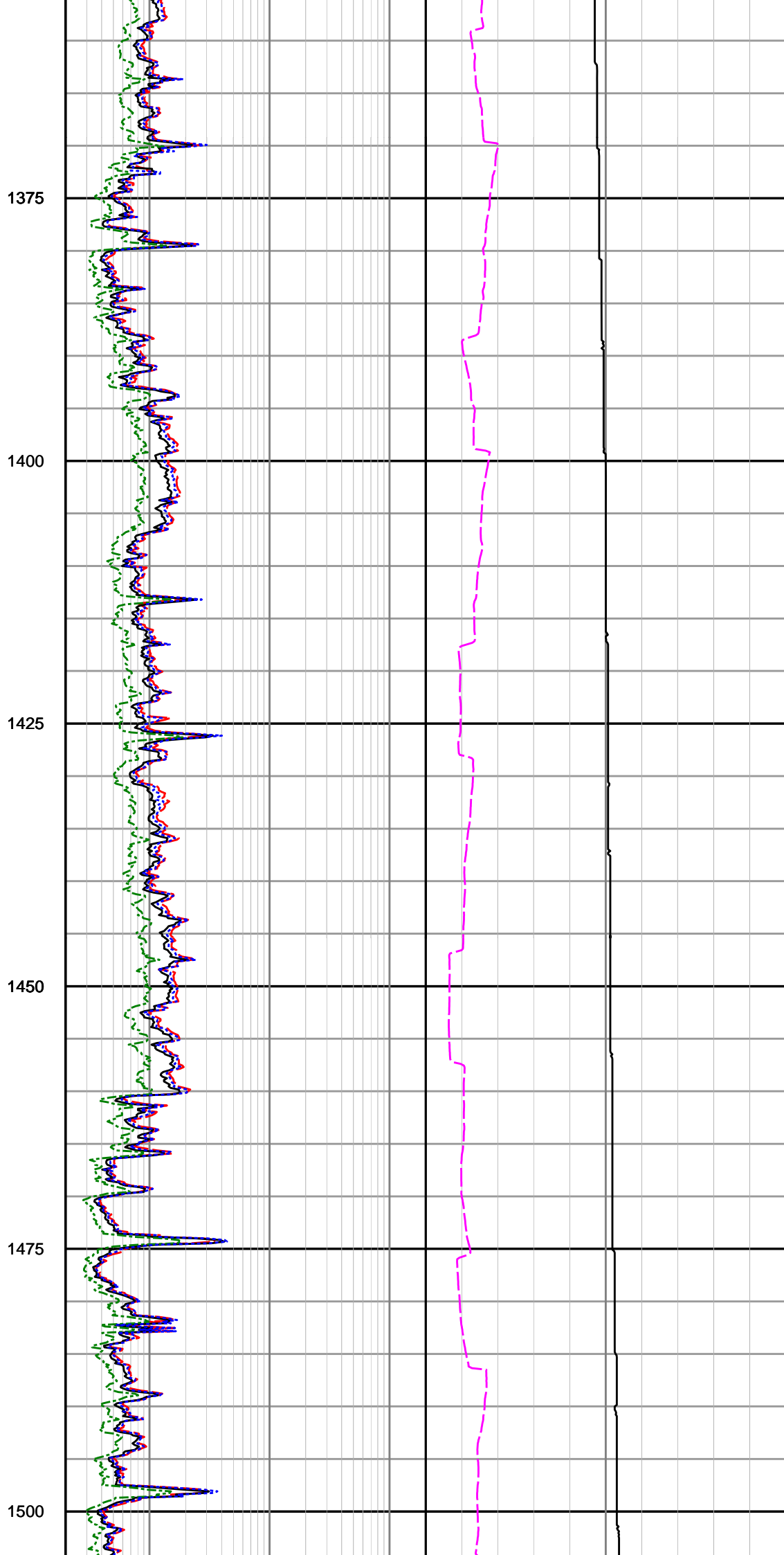
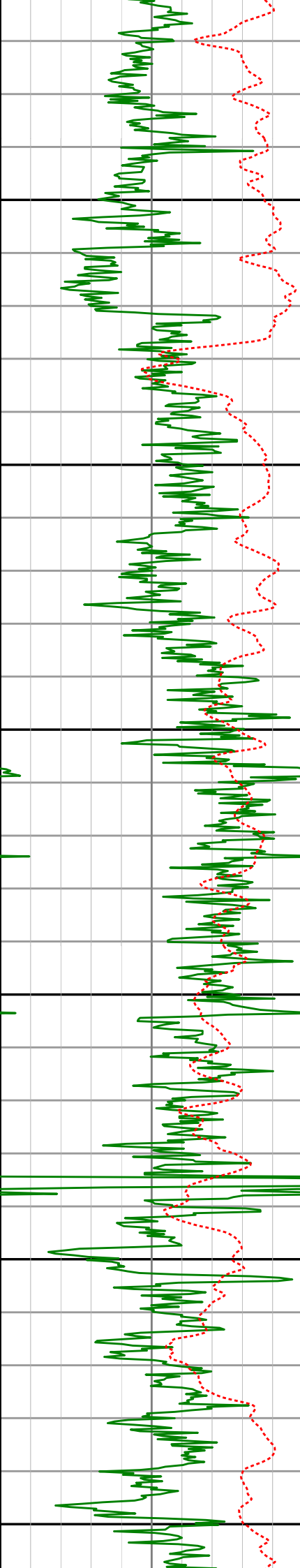
900

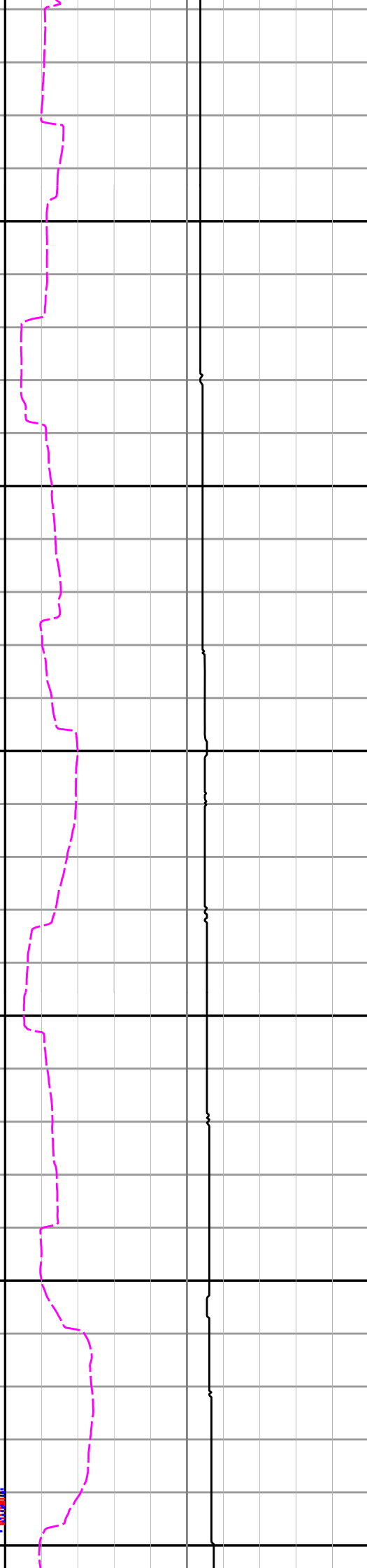
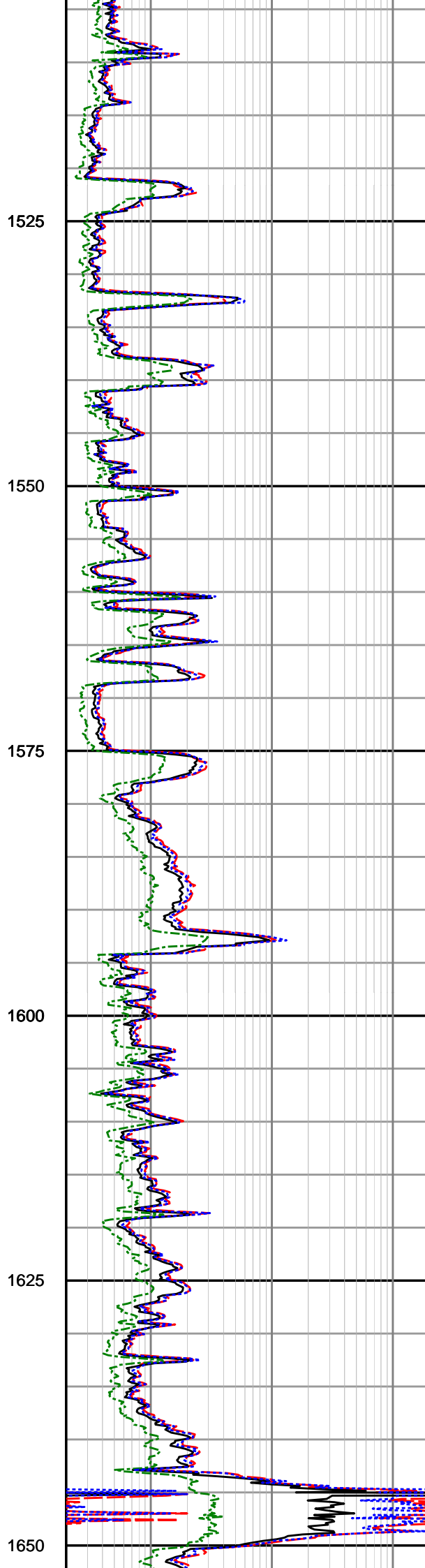
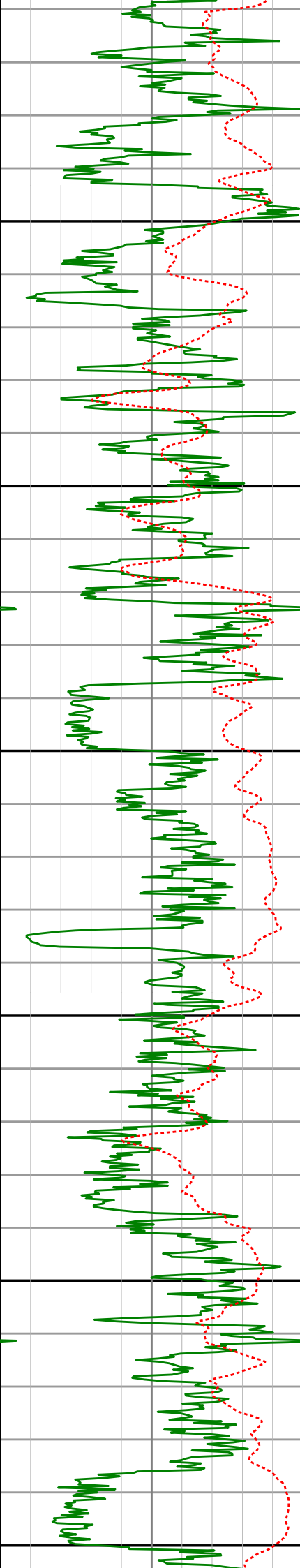


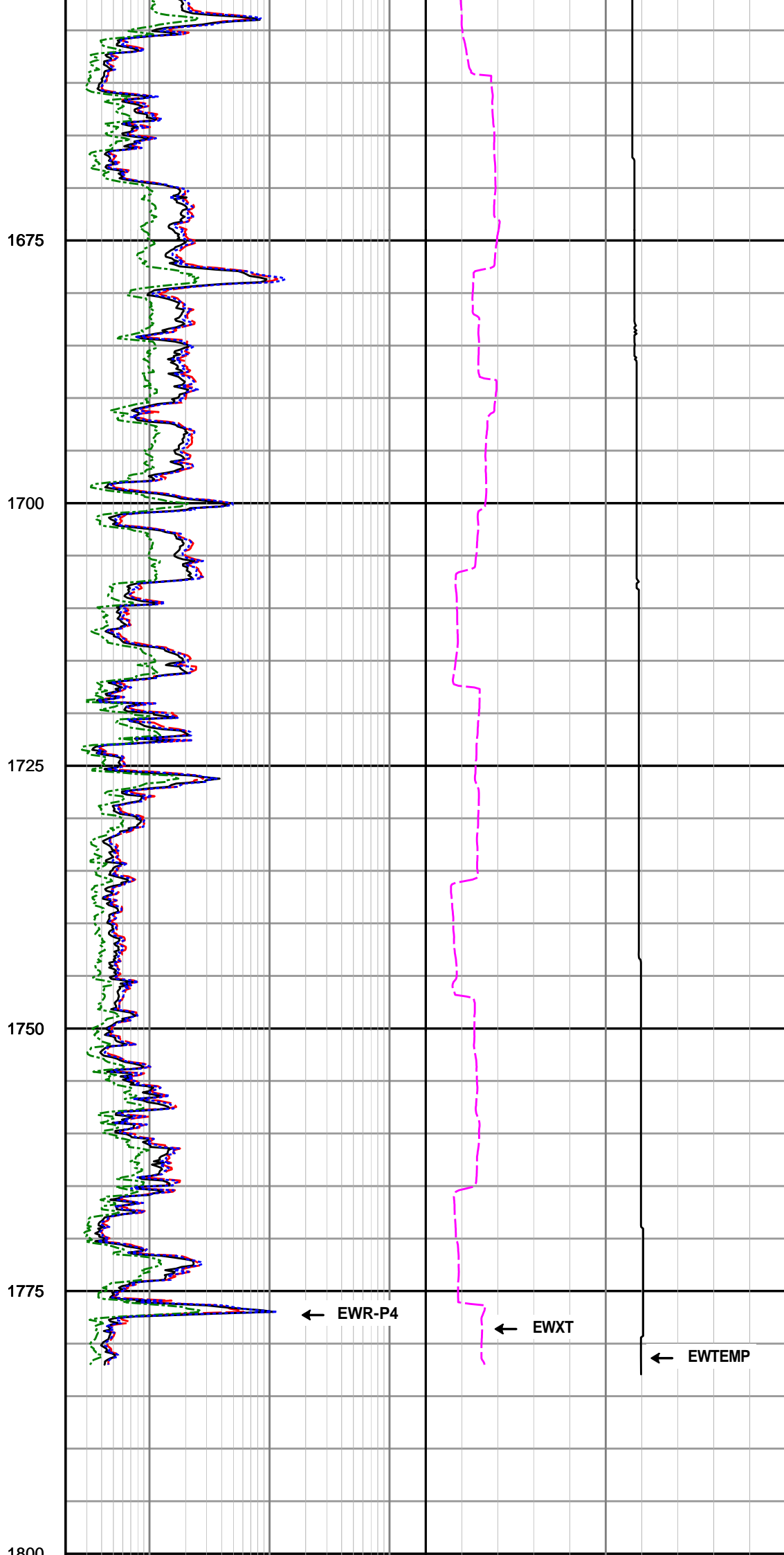
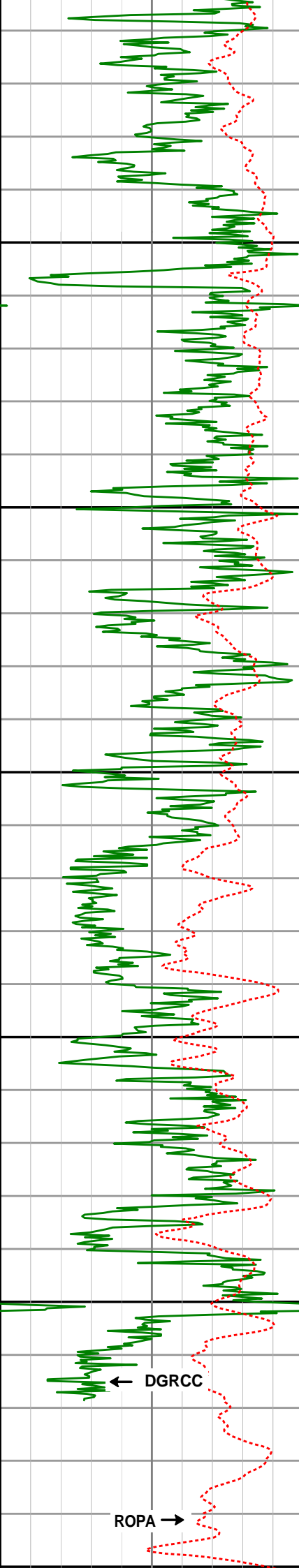


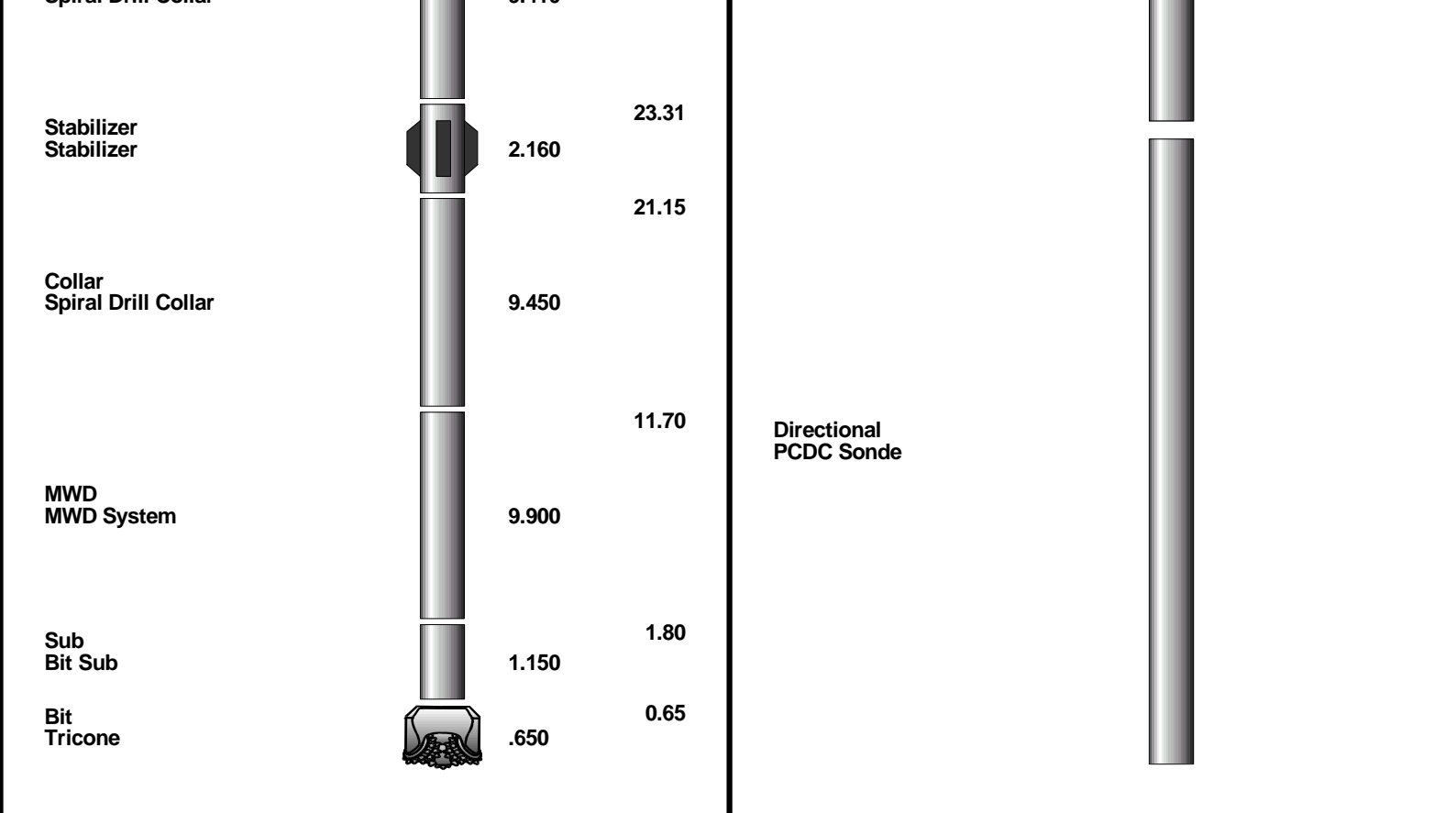






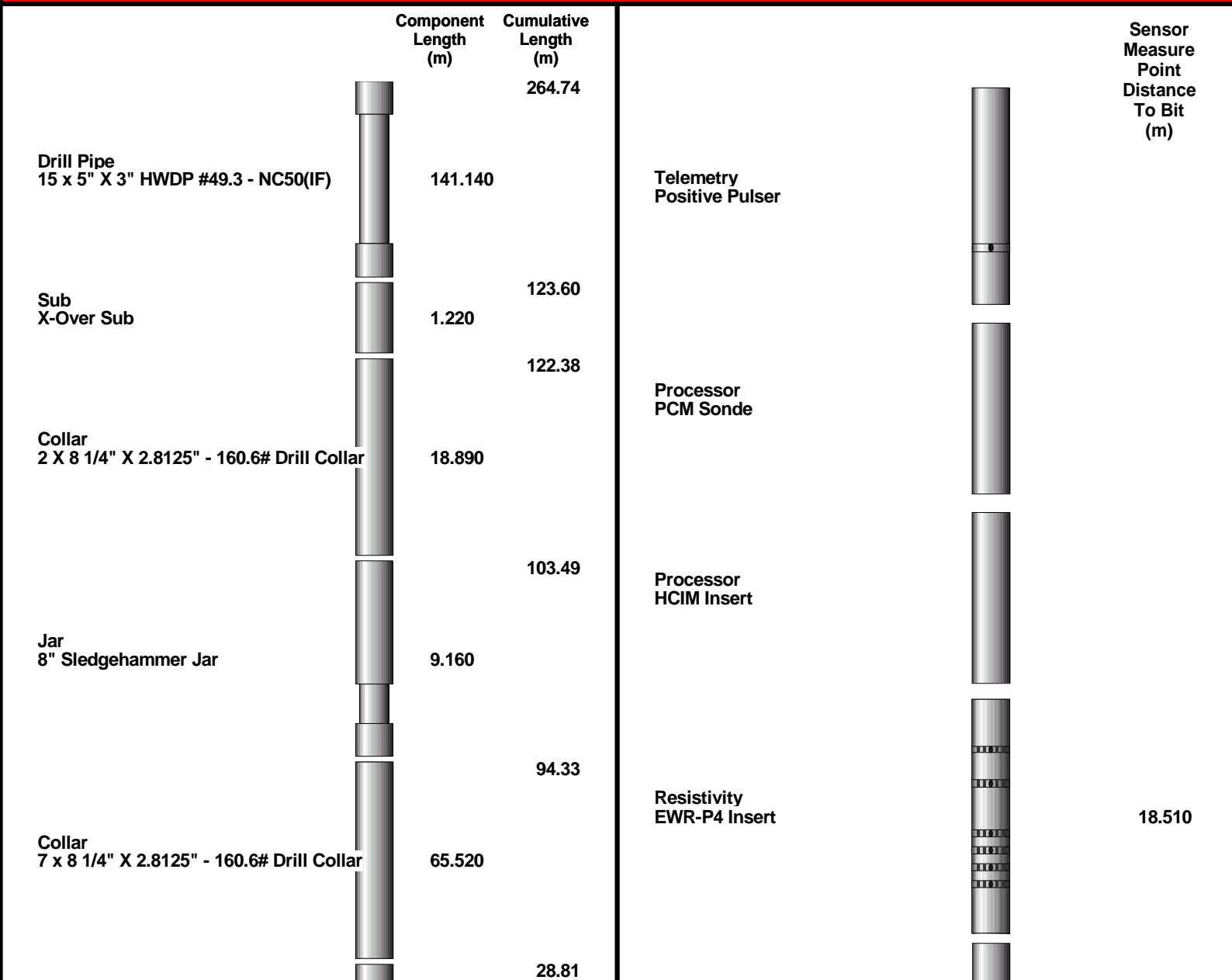






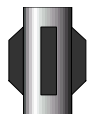
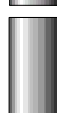











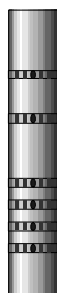
MWD RUN 200 - BHA

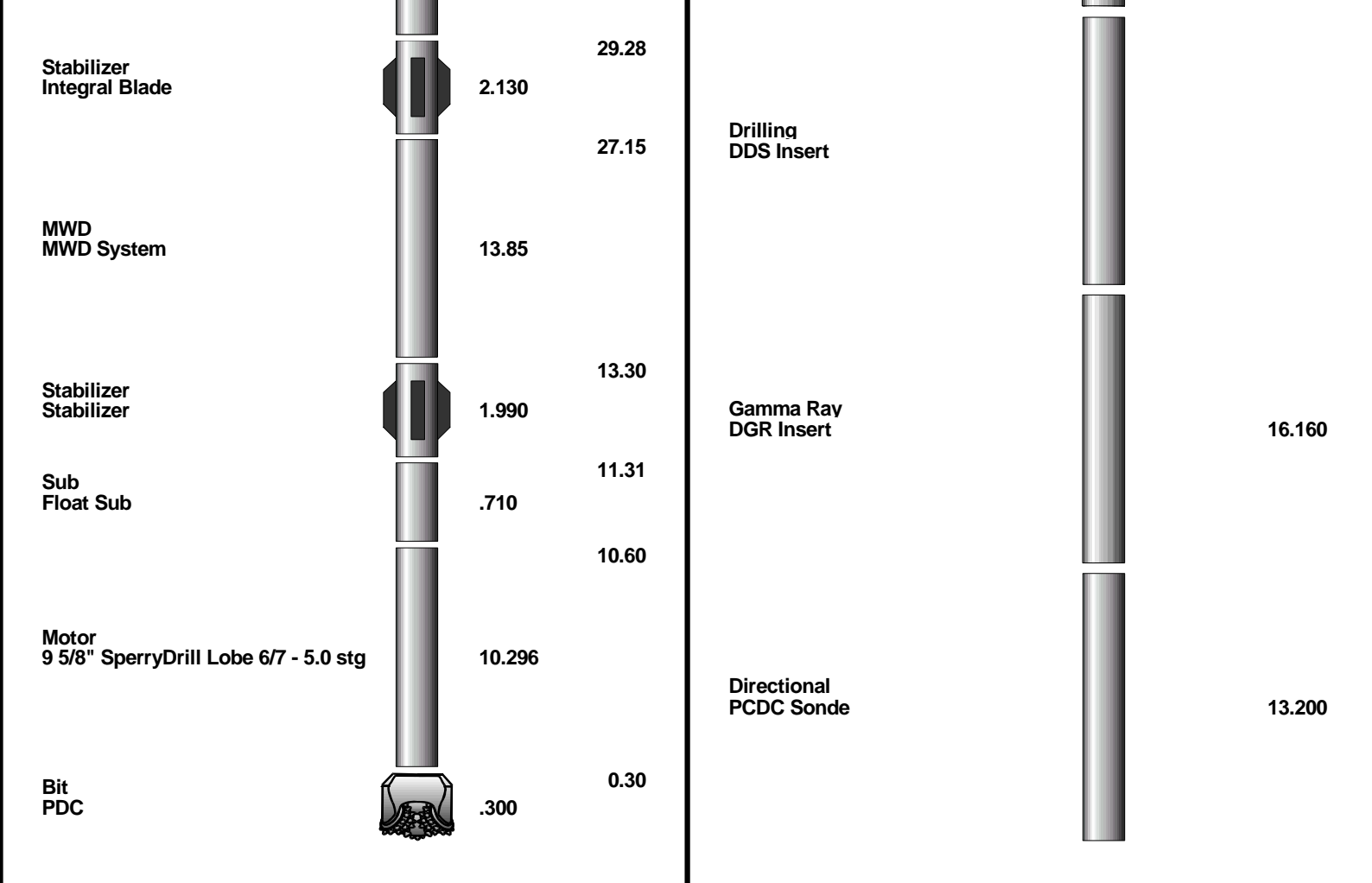
MWD RUN 200 - MWD



Stabilizer Integral Blade		2.130			
		26.68	Drilling DDS Insert		
MWD MWD System		14.43			
Stabilizer Stabilizer		1.990	12.25	Gamma Ray DGR Insert	
Sub Float Sub		.710	10.26		
		9.250	9.55		
Motor 9 5/8" SperryDrill Lobe 6/7 - 5.0 stg				Directional PCDC Sonde	
Bit PDC		.300	0.30		

MWD RUN 300 - BHA	MWD RUN 300 - MWD
--------------------------	--------------------------

	Component Length (m)	Cumulative Length (m)		Sensor Measure Point Distance To Bit (m)
		65.17		
Drill Pipe 5" X 3" HWDP #49.3 - NC50(IF)	9.601		Telemetry Positive Pulser	
Sub X-Over Sub	1.220	55.57		
		54.35	Processor PCM Sonde	
Collar 8 1/4" X 2.8125" - 160.6# Drill Collar	9.144			
		45.20	Processor HCIM Insert	
Jar 8" Sledgehammer Jar	6.782			
		38.42	Resistivity EWR-P4 Insert	
Collar 8 1/4" X 2.8125" - 160.6# Drill Collar	9.144			18.510



HALLIBURTON

DIRECTIONAL SURVEY REPORT

TAP Oil Ltd
 Craigow-1
 Craigow
 Victoria
 Australia
 AU-FE-0007779925

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
0.000	0.00	0.00	0.000	0.000 N	0.000 E	0.000	TIE-IN
100.000	0.00	0.00	100.000	0.000 N	0.000 E	0.000	0.00
176.220	0.15	218.73	176.220	0.080 S	0.060 W	0.050	0.06
204.250	0.32	233.37	204.250	0.150 S	0.150 W	0.130	0.19
235.960	0.33	219.33	235.960	0.280 S	0.280 W	0.240	0.08
297.000	0.40	91.96	297.000	0.420 S	0.180 W	0.130	0.32
323.330	0.18	99.51	323.330	0.430 S	0.040 W	-0.010	0.25
351.470	0.49	238.19	351.470	0.500 S	0.100 W	0.040	0.68
379.670	0.50	200.42	379.670	0.680 S	0.250 W	0.170	0.34
437.630	0.22	246.22	437.630	0.960 S	0.440 W	0.330	0.20
466.660	0.20	245.13	466.660	1.010 S	0.530 W	0.420	0.02
494.840	0.09	24.79	494.840	1.010 S	0.570 W	0.450	0.29
523.840	0.09	12.10	523.840	0.960 S	0.560 W	0.440	0.02
553.900	0.22	159.47	553.900	0.990 S	0.530 W	0.410	0.30
583.400	0.25	220.99	583.400	1.100 S	0.550 W	0.420	0.25
613.000	0.13	187.03	613.000	1.180 S	0.600 W	0.460	0.16
642.750	0.24	156.95	642.740	1.270 S	0.580 W	0.430	0.14
670.880	0.11	195.47	670.870	1.350 S	0.560 W	0.410	0.18
700.020	0.09	260.83	700.010	1.380 S	0.590 W	0.430	0.11
723.950	0.07	20.35	723.940	1.370 S	0.610 W	0.450	0.17
763.590	0.25	253.49	763.580	1.370 S	0.680 W	0.520	0.23
792.600	0.26	270.64	792.590	1.390 S	0.810 W	0.640	0.08
821.350	0.25	230.08	821.340	1.430 S	0.920 W	0.750	0.18

850.440	0.38	252.66	850.430	1.500 S	1.060 W	0.880	0.18
879.880	0.57	252.68	879.870	1.570 S	1.290 W	1.110	0.19
909.230	0.65	254.81	909.220	1.660 S	1.590 W	1.400	0.08
938.410	0.83	249.82	938.400	1.770 S	1.950 W	1.740	0.20
967.740	0.89	247.97	967.730	1.930 S	2.360 W	2.130	0.07
996.770	0.79	253.44	996.750	2.070 S	2.760 W	2.510	0.13
1025.870	0.94	263.63	1025.850	2.160 S	3.190 W	2.930	0.22
1054.700	0.88	263.07	1054.680	2.210 S	3.650 W	3.370	0.06
1083.470	0.88	259.60	1083.440	2.280 S	4.080 W	3.800	0.06
1111.870	0.91	254.98	1111.840	2.370 S	4.520 W	4.220	0.08
1140.070	0.94	262.34	1140.030	2.460 S	4.960 W	4.650	0.13
1197.980	1.20	275.42	1197.930	2.470 S	6.040 W	5.720	0.18
1226.830	1.18	286.27	1226.780	2.360 S	6.620 W	6.310	0.23
1255.820	1.22	283.77	1255.760	2.200 S	7.210 W	6.910	0.07
1287.020	1.11	285.68	1286.960	2.040 S	7.820 W	7.540	0.11
1313.560	1.27	284.73	1313.490	1.900 S	8.350 W	8.090	0.18
1342.870	1.22	279.60	1342.790	1.760 S	8.980 W	8.720	0.12
1371.530	1.08	282.39	1371.450	1.650 S	9.540 W	9.290	0.16
1401.260	1.20	284.21	1401.170	1.520 S	10.120 W	9.880	0.13
1430.650	1.15	282.94	1430.560	1.370 S	10.700 W	10.480	0.06
1489.200	1.05	289.05	1489.090	1.070 S	11.780 W	11.590	0.08
1517.010	1.18	285.80	1516.900	0.910 S	12.300 W	12.120	0.16
1547.040	1.29	286.90	1546.920	0.720 S	12.920 W	12.750	0.11
1603.820	1.27	287.88	1603.690	0.340 S	14.130 W	14.000	0.02
1632.100	1.33	283.81	1631.960	0.170 S	14.750 W	14.630	0.12
1661.120	1.22	294.79	1660.970	0.040 N	15.350 W	15.260	0.28
1690.110	1.35	286.89	1689.960	0.270 N	15.960 W	15.890	0.23
1773.440	1.48	292.66	1773.260	0.970 N	17.890 W	17.890	0.07
1800.000	1.54	292.16	1799.810	1.240 N	18.540 W	18.560	0.07

CALCULATION BASED ON MINIMUM CURVATURE METHOD

**SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT**

**VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 0.00 DEGREES (GRID)
A TOTAL CORRECTION OF 11.65 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED**

**HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 1800.000 METRES
IS 18.581 METRES ALONG 273.83 DEGREES (GRID)**