



**DGR Dual Gamma Ray**  
**EWR Electromagnetic Wave Resistivity**  
**SLD Stabilized Litho-Density**  
**CNP Compensated Neutron Porosity**

Country : Australia				Company : Origin Energy Resources	
Field : Exploration				Rig : ENSCO 102	
Location : Lat: 39° 51' 44.12" South Long: 145° 22' 30.73" East				Well : Trefoil-1	
Well : Trefoil-1				Field : Exploration	
Company : Origin Energy Resources				Country : Australia	
Rig : ENSCO 102				DOE Number :	
LOCATION		Latitude : 39° 51' 44.12" South Longitude : 145° 22' 30.73" East		Other Services Directional Drilling	
		UTM Easting = 361,026,158 m UTM Northing = 5,586,267,850 m			
Permanent Datum : Mean Sea Level		Elevation : 0.00 m		Elev. KB	
Log Measured From : Drill Floor		39.90 m Above Permanent Datum		DF 39.90 m	
Drilling Measured From : Drill Floor		MD LOG		GL WD 68.90 m	
Depth Logged : 215.00 m To 3,545.00 m		Unit No. : 040602		Job No. : AU-FE-0003279677	
Date Logged : 01-Nov-04 To 24-Nov-04		Plot Type : Final			
Total Depth MD : 3,545.00 m TVD: 3,544.95 m		Plot Date : 07-Dec-04			
Spud Date : 30-Oct-04					
Run No.	Borehole Record (MD)		Run No.	Borehole Record (MD)	
	Size	From To		Size	From To
100	16,000 in	215.00 m	666.00 m		
200	12,250 in	666.00 m	2,428.00 m		
300	8,500 in	2,428.00 m	2,735.00 m		
400	8,500 in	2,735.00 m	3,442.00 m		
500	8,500 in	3,442.00 m	3,545.00 m		
				Casing Record (MD)	
				Size	Weight
				13,375 in	68.00 lbpf
				9,625 in	47.00 lbpf

## WELL INFORMATION

MWD Run Number	100	200	300	400	500
Date run completed	03-Nov-04	11-Nov-04	17-Nov-04	22-Nov-04	24-Nov-04
Rig Bit Number	2	3	4	6	7
Bit Size (in)	16	12.25	8.5000	8.5000	8.5000
Tool Nominal OD (in)	9.5	8	6.75	6.75	6.75
Log Start Depth (MD, m)	215.00	666.00	2,428.00	2,735.00	3,442.00
Log End Depth (MD, m)	666.00	2,428.00	2,735.00	3,442.00	3,545.00
Drill or Wipe	Drilling	Drilling	Drilling	Drilling	Drilling
Drill/Wipe Start Date and Time	02-Nov-04 02:00	06-Nov-04 23:17	15-Nov-04 12:03	18-Nov-04 07:26	22-Nov-04 23:40
Drill/Wipe End Date and Time	02-Nov-04 20:00	09-Nov-04 21:38	16-Nov-04 11:59	21-Nov-04 14:46	23-Nov-04 20:50
Min Inc (deg) @ Depth (MD, m)	0.17 @ 300.92	0.01 @ 1,946.67	0.42 @ 2,493.19	0.25 @ 3,131.71	0.45 @ 3,508.66
Max Inc (deg) @ Depth (MD, m)	0.41 @ 504.18	0.43 @ 2,353.51	0.67 @ 2,638.47	0.73 @ 3,421.00	0.52 @ 3,478.23
Bit TFA(in2) / Bit Type	1.325 / Hughes MX-1	1.491 / Reed RSX 162	1.335 / Smith MA74EPX	1.3350 / Smith MA74EPX	0.746 / Hughes MX-20HDX
Flow Rate (gpm)	1000	850	550	540	530
Max AV (mpm) / CV (mpm) @ MWD	9.4 / N/A	23.6 / 250.0	154.2 / 252.0	164.0 / 245.0	148.2 / 292.2
Fluid Type	Seawater/Sweeps	Drispac/Soltex	Drispac/Soltex	Drispac/Soltex	Drispac/Soltex
Density (ppg) / Viscosity (spqt)	8.8 / 28	9.1 / 98	9.2 / 79	9.4 / 115	9.4 / 140
Filtrate CL (ppm)	N/A	18,000.00	18,000.00	18,000.00	18,000.00
pH / Fluid Loss (cptm)	N/A / N/A	8.8 / 8.8	9.0 / 4.6	8.8 / 4.0	9.0 / 9.0
PV (cp) / YP (pa)	N/A / N/A	35 / 43	41 / 23	46 / 34	51 / 40
% Solids / % Sand	N/A / N/A	4.2 / 0.10	4.5 / 0.05	6.0 / 0.05	5.8 / 0.05
% Oil / Oil:Water Ratio	N/A / N/A	0 / 0:94.8	0 / 0:94.5	0 / 0:93.0	0 / 0:93.2
Rm @ Measured Temp (degC)	N/A @ N/A	0.19 @ 19.00	0.20 @ 20.50	0.26 @ 19.40	0.23 @ 22.00
Rmf @ Measured Temp (degC)	N/A @ N/A	0.18 @ 19.00	0.16 @ 20.50	0.20 @ 19.40	0.16 @ 22.00
Rmc @ Measured Temp (degC)	N/A @ N/A	0.20 @ 19.00	0.30 @ 20.50	0.40 @ 19.40	0.30 @ 22.00
Max Tool Temp (degC) / Source	28.10 / PCD-R	92.00 / EWR-P4	96.00 / EWR-P4	96.00 / EWR-P4	120.00 / EWR-P4
Rm @ Max Tool Temp (degC)	N/A @ N/A	0.07 @ 92.00	0.07 @ 96.00	0.09 @ 96.00	0.07 @ 120.00
Lead MWD Engineer	M. Lee	M. Lee	M. Lee	M. Lee	M. Lee
Customer Representative	M. Jackson	W. Jakimczuk	W. Jakimczuk	W. Jakimczuk	W. Jakimczuk

## SENSOR INFORMATION

Downhole Processor Information					
Tool Type	PCD	HCIM	HCIM	HCIM	HCIM
Software Version	3.32	66.37	67.88	67.88	67.88
Sub Serial Number	10599306	182692	145273	145273	145273
Insert Serial Number	538	108149	76895	76895	76895
Logging String Serial Number	N/A	90047857H1GR8	90061810XH1NLGR6	90061810XH1NLGR6	90061810XH1NLGR6
Date and Time Initialized	01-Nov-04 21:30	06-Nov-04 17:19	14-Nov-04 23:19	18-Nov-04 00:58	22-Nov-04 14:45
Date and Time Read	03-Nov-04 14:00	11-Nov-04 17:13:00	17-Nov-04 00:18:00	22-Nov-04 08:35:00	24-Nov-04 09:17:00

Directional Sensor Information					
Tool Type	PCD	PM	PM	PM	PM
Distance From Bit (m)	20.49	20.83	16.07	16.07	24.47
Software Version	3.32	N/A	N/A	N/A	N/A
Sub Serial Number	10599306	61119	95764	95764	95764
Sonde Serial Number	538	97847	34827	34827	34827
Sensor ID Number	538	688	500	500	500
Survey String Serial Number	538	DM90047862M8	DM90047859M6	DM90047859M6	DM90047859M6
Toolface Offset (deg)	228	N/A	N/A	N/A	N/A

Gamma Ray Sensor Information					
Tool Type		DGR	DGR	DGR	DGR
Distance From Bit (m)		17.46	6.65	6.65	15.05
Recorded Sample Period (sec)		12	12	12	12
Software Version		N/A	N/A	N/A	N/A
Sub Serial Number		106149	176037	176037	176037
Insert/Sonde Serial Number		050437	77713	77713	77713

Resistivity Sensor Information					
Tool Type		EWR-P4	EWR-P4	EWR-P4	EWR-P4
Distance From Bit (m)		14.47	3.65	3.65	12.05
Recorded Sample Period (sec)		14	12	12	12
Software Version		1.38	1.38	1.38	1.38
Sub Serial Number		96508	65267	65267	65267
Receiver Insert Serial Number		77242	61101	61101	61101
Transmitter Insert Serial Number		135158	77011	77011	77011
Receiver Orientation		Down	Down	Down	Down

Neutron Sensor Information					
Tool Type			CNP	CNP	CNP
Distance From Bit (m)			11.73	11.73	20.13
Recorded Sample Period (sec)			14	14	14
Sub Serial Number			168841	168841	168841
Insert Serial Number			75464	75464	75464
Source Serial Number			1403NN	1403NN	1403NN
Source Factor			1.1890	1.1890	1.1890
Pin Orientation			Down	Down	Down

Density Sensor Information					
Tool Type			SLD	SLD	SLD
Distance From Bit (m)			8.46	8.46	16.86
Recorded Sample Period (sec)			14	14	14
Software Version			11.00	11.00	11.00
Sub Serial Number			H0351	H0351	H0351
Insert Serial Number			54290	54290	54290
Sensor ID Number			351	351	351
Source Serial Number			3139	3139	3139
Pin Orientation			Down	Down	Down
Stabilizer Blade O.D. (in)			8.250	8.250	8.250
DPA Offset			N/A	N/A	N/A

REMARKS					
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1. All depths are bit depths and referenced to the drillers pipe tally.

2. AV/CV is calculated at the MWD collar using the Power Law for water based muds and the Bingham's Plastic Law for oil based muds.

3. Curve mnemonics are :

SGRC - Smoothed Gamma Ray Combined, api

SEXP - Smoothed Extra Shallow Phase-Shift Derived Resistivity, ohm-m

SESP - Smoothed Shallow Phase-Shift Derived Resistivity, ohm-m

SEMP - Smoothed Medium Phase-Shift Derived Resistivity, ohm-m

SEDP - Smoothed Deep Phase-Shift Derived Resistivity, ohm-m

SROP - Smoothed Rate of Penetration, m/hr

SFXE - Smoothed Resistivity Formation Exposure Time, hr

STEM - Smoothed Temperature from Resistivity tool, degrees C

SBD2 - Smoothed Best Bin Bulk Density Compensated, g/cc

SCO2 - Smoothed Best Bin Stand-off Correction, g/cc

SNP2 - Smoothed Best Bin Near Photoelectric Effect, b/e

NUCL - Smoothed Porosity (Limestone Matrix) corrected for Salinity, Temperature and Pressure, v/v

SHSI - Smoothed SLD Rapid Sample Hole Size Indicator, in

4. CNP data processed using the CNP-E algorithm using the following parameters and is based on a Limestone Matrix:

MW = 9.20 - 9.40 ppg

Formation Salinity = 50,000 ppm Cl

Mud Salinity = 17,500 - 18,500 ppm Cl

Matrix Density = 2.71 g/cc

Fluid Density = 1.00 g/cc

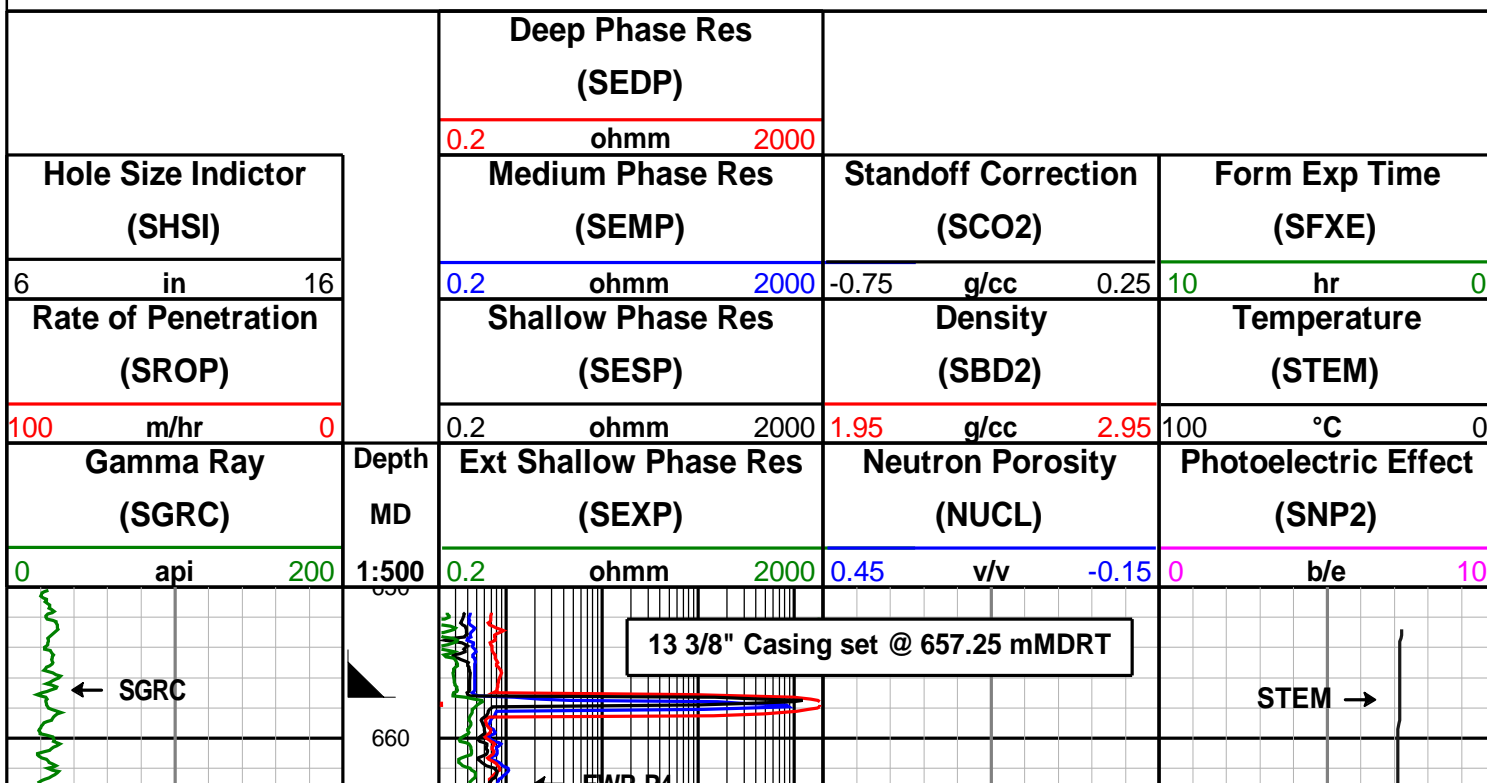
5. CNP data has been reprocessed using SHSI data from the Density tool for borehole diameter.

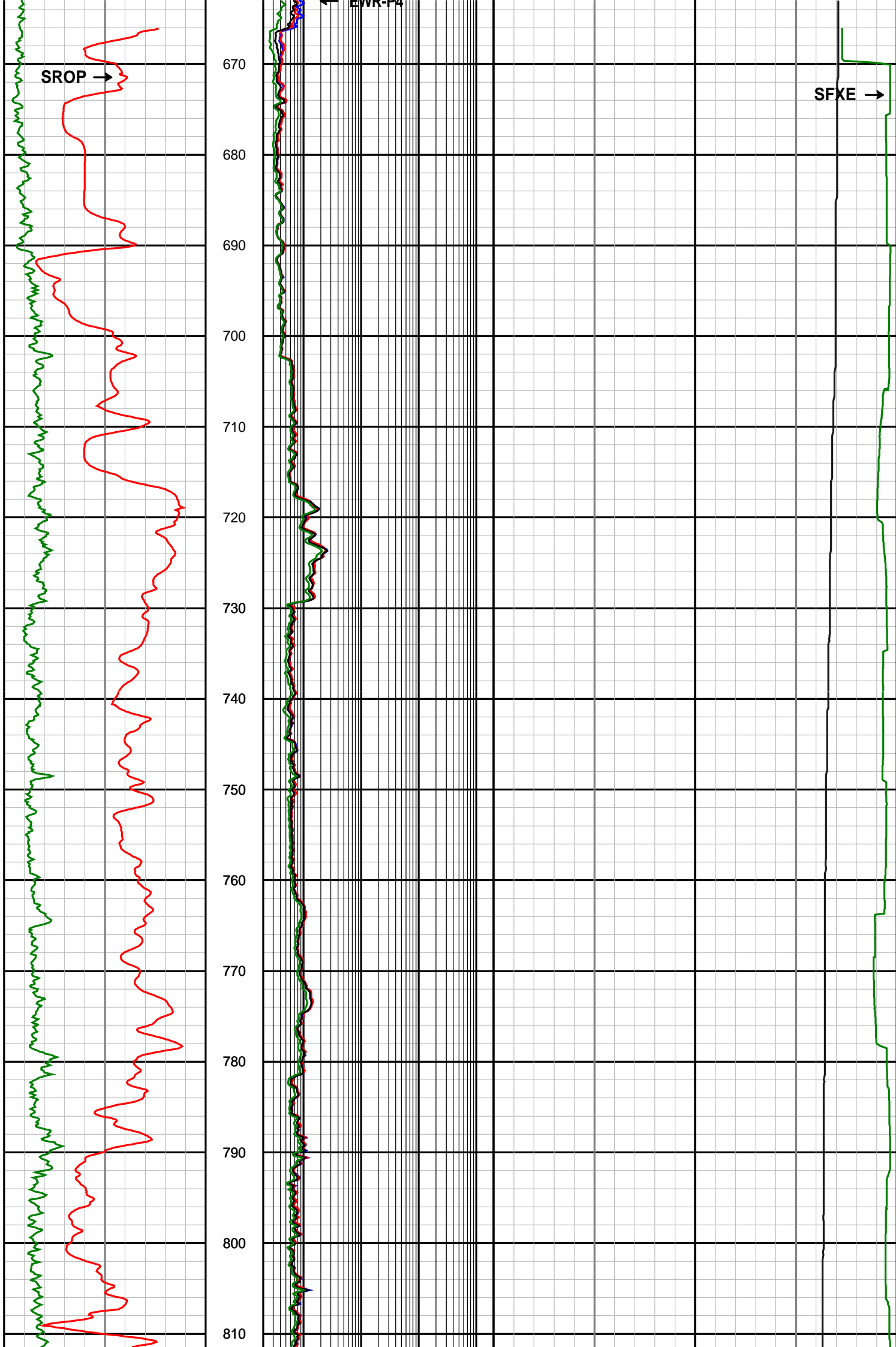
6. Interval 2410.0 to 2421.0 mMDRT logged after casing.

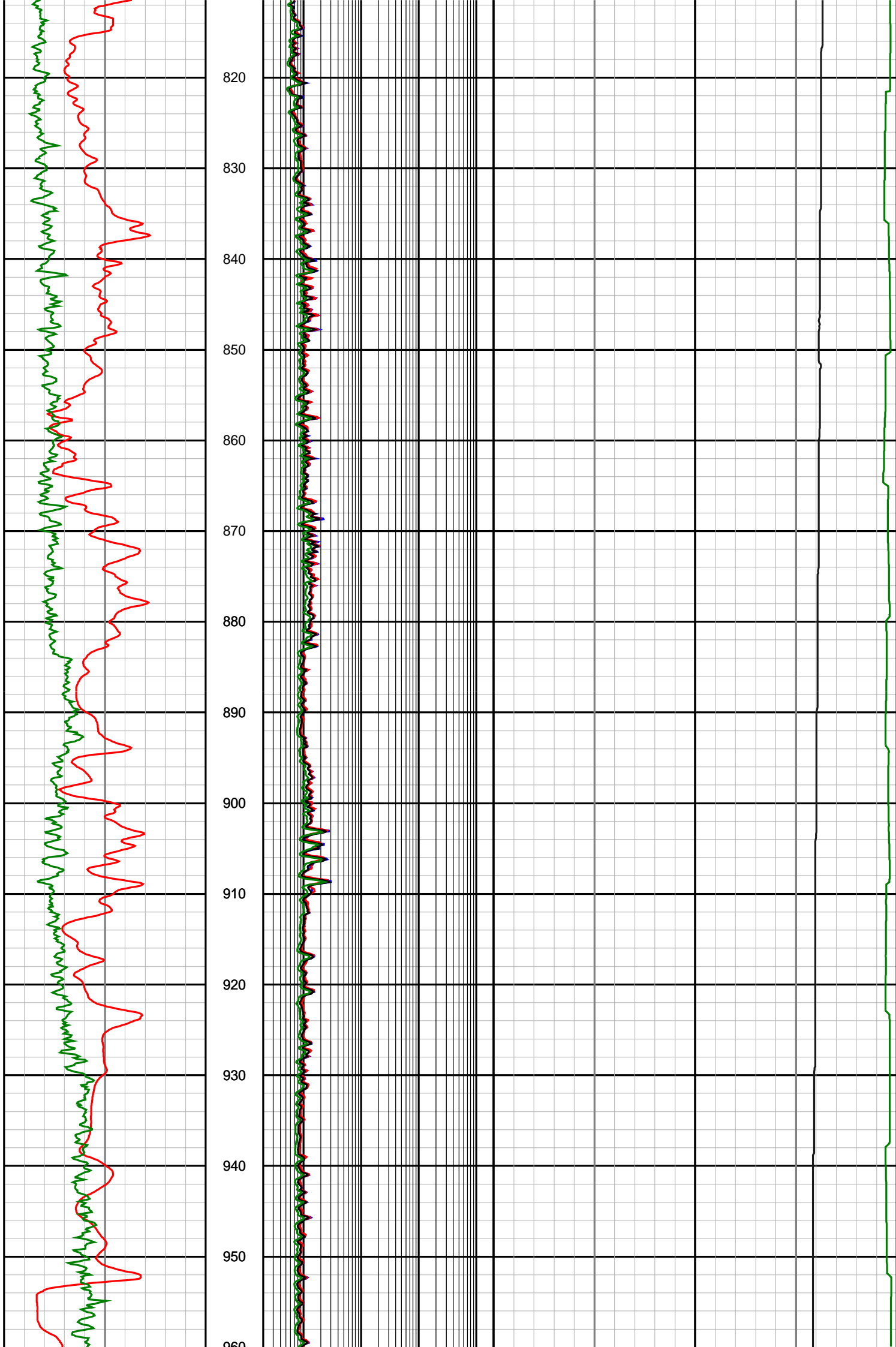
7. Run 400 wiped over the cored interval from 2735.0 to 2743.0 mMDRT before drilling ahead.

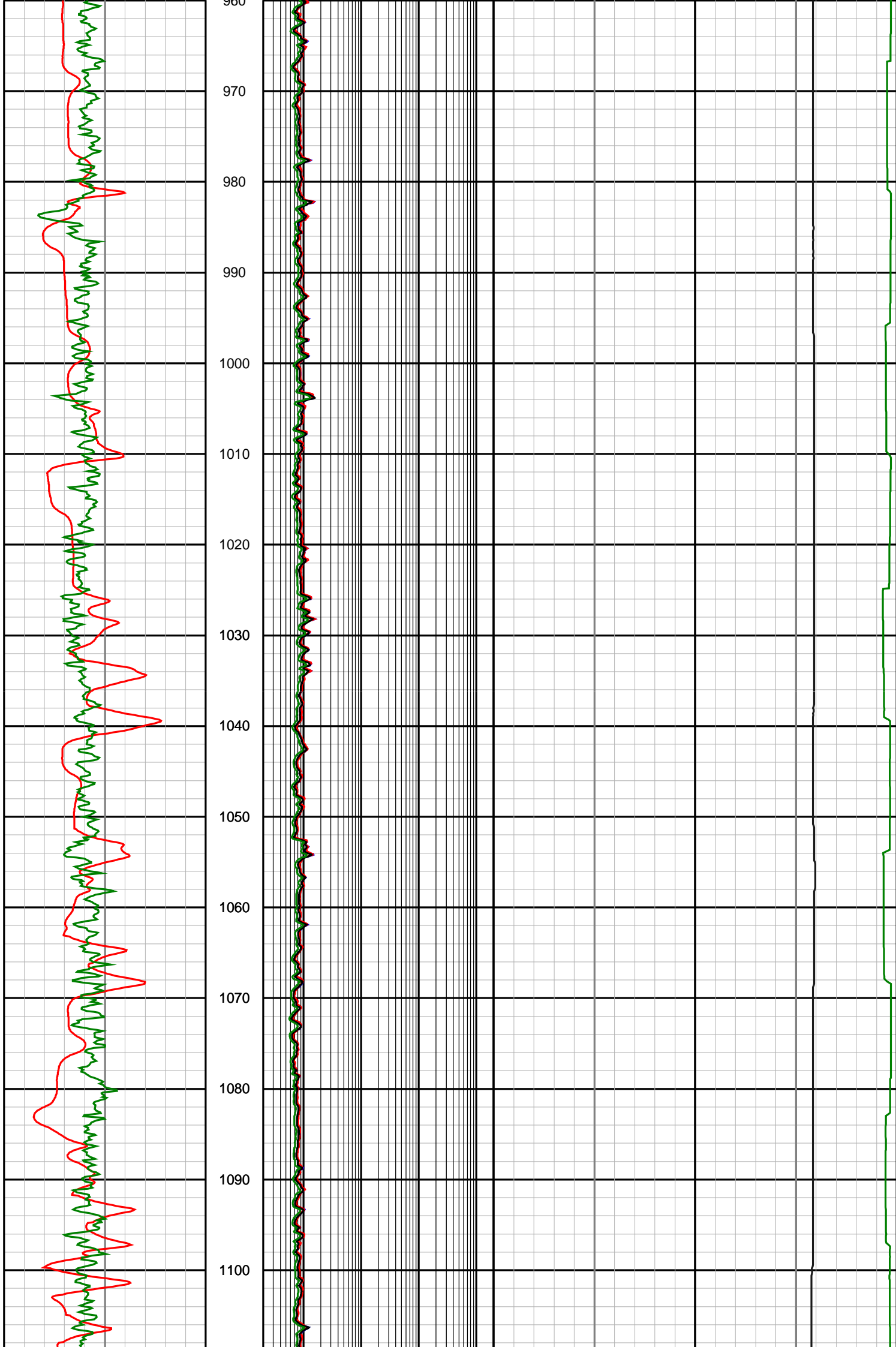
## WARRANTY

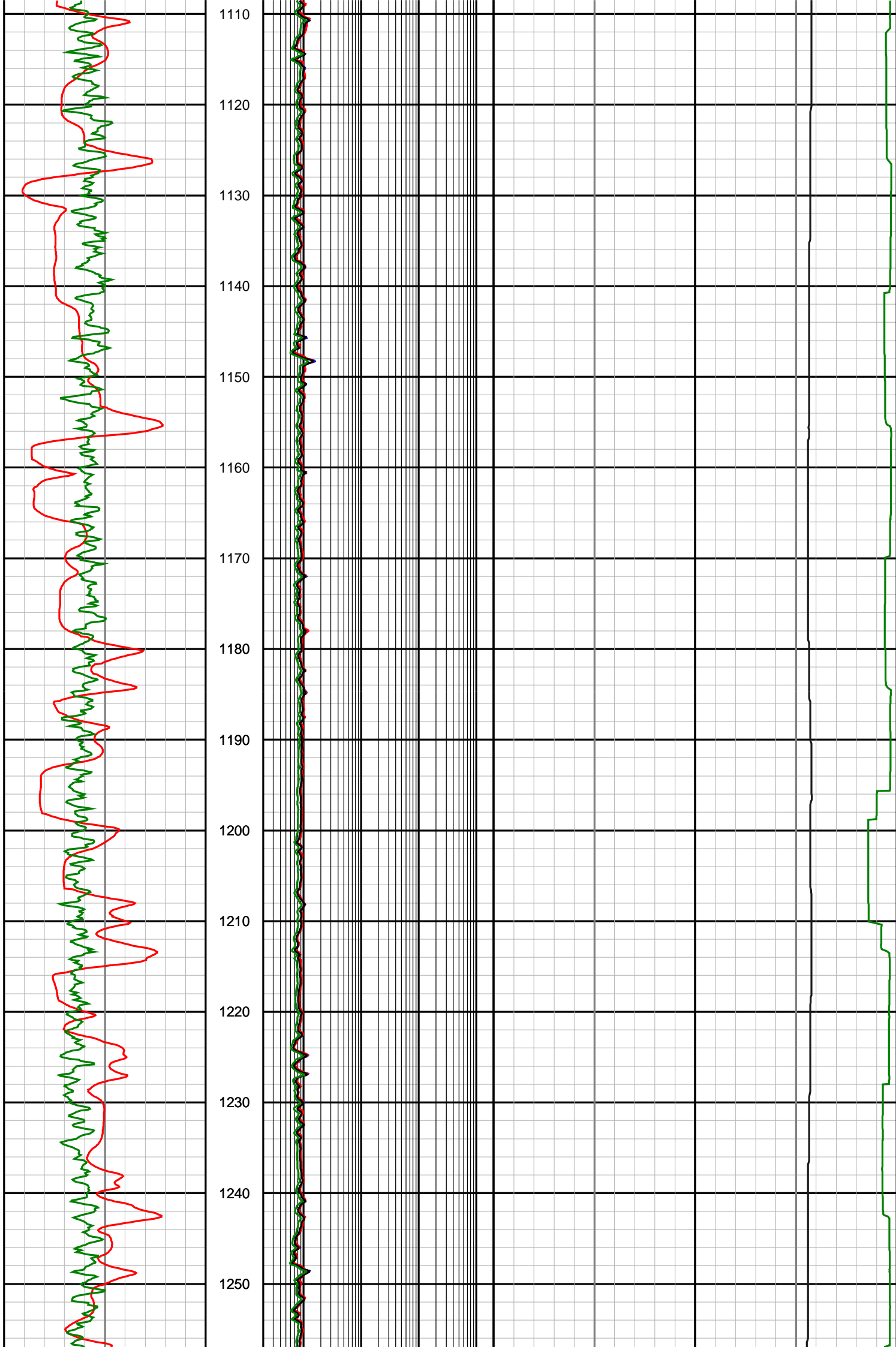
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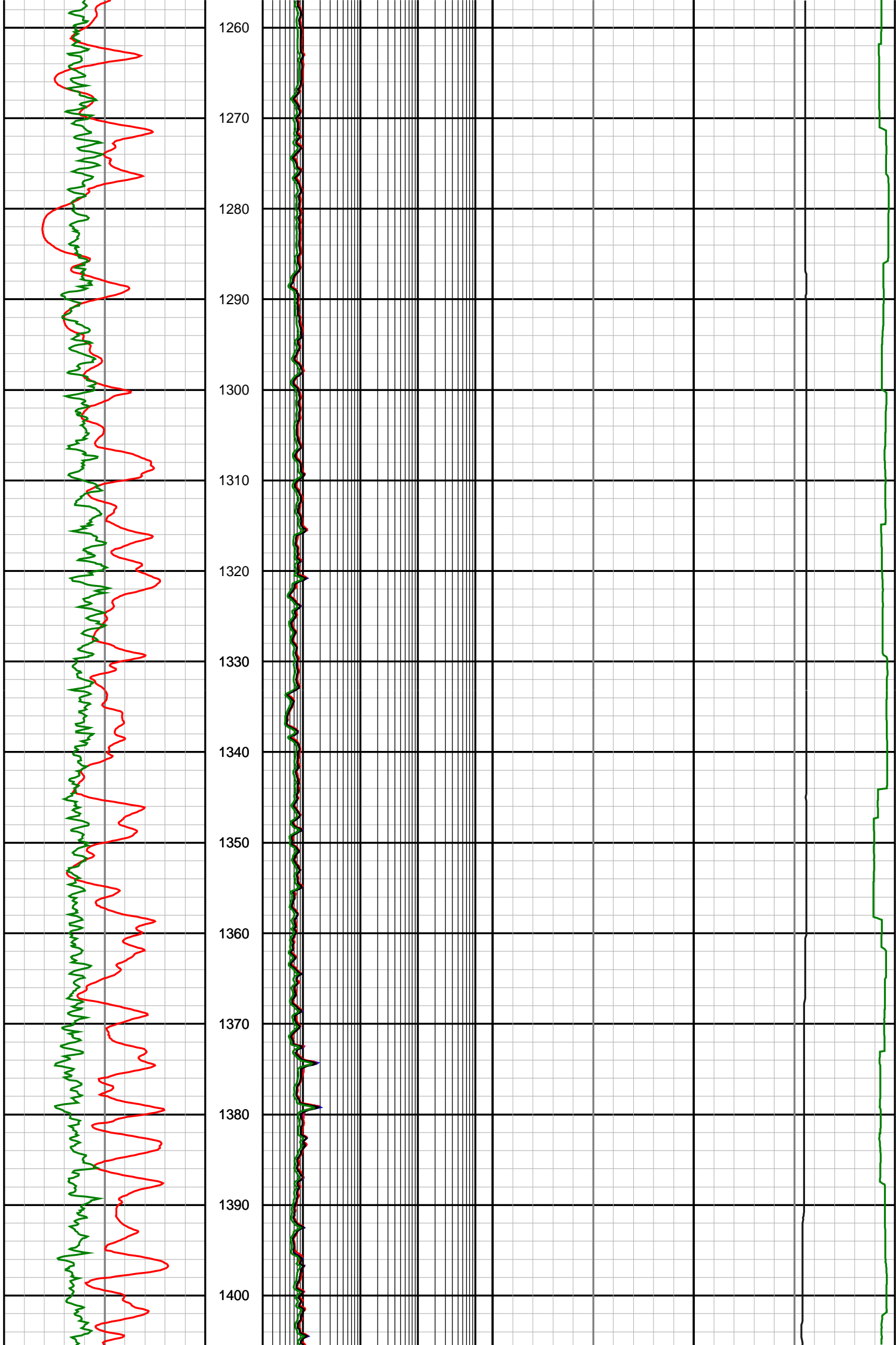




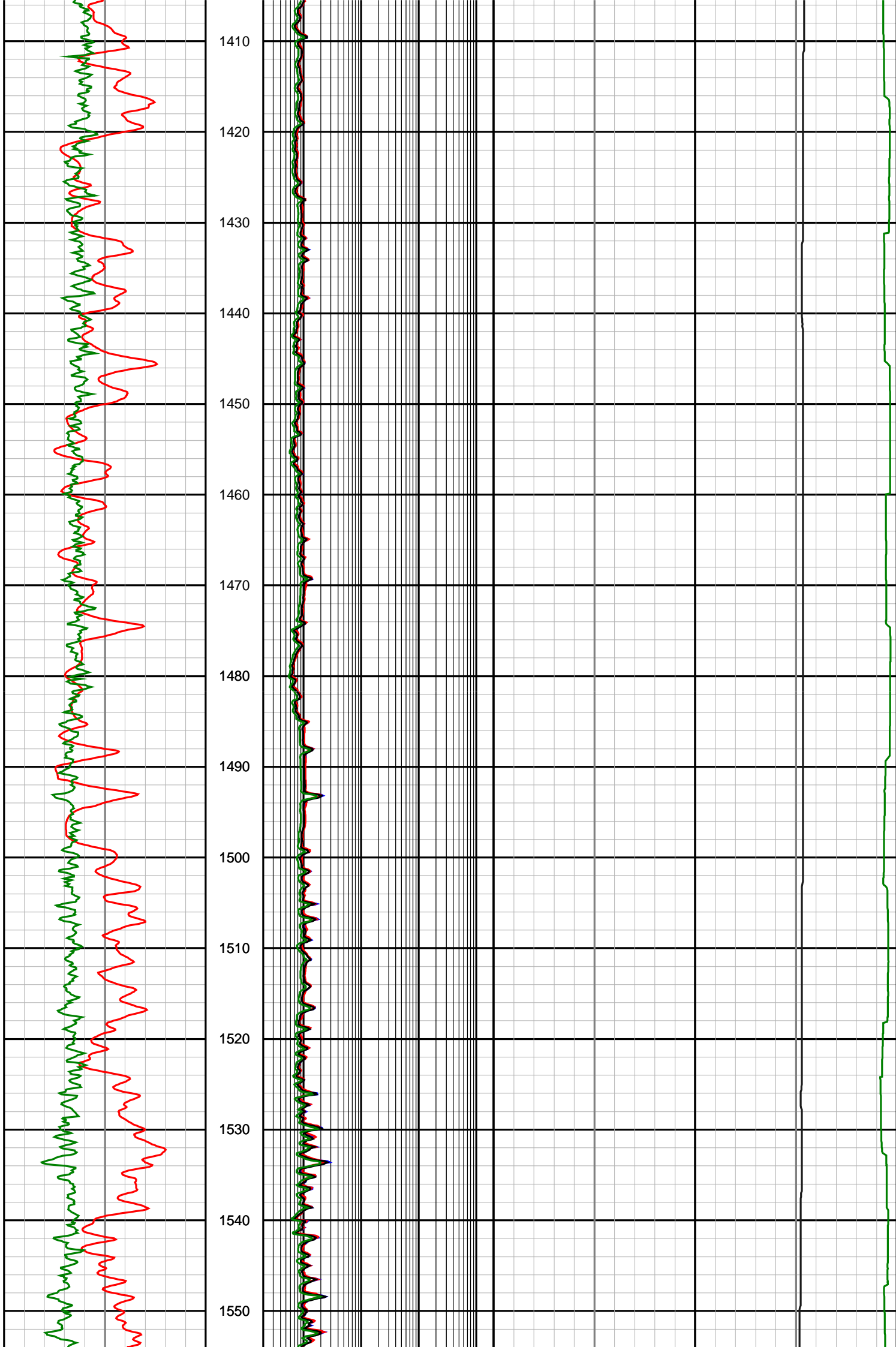


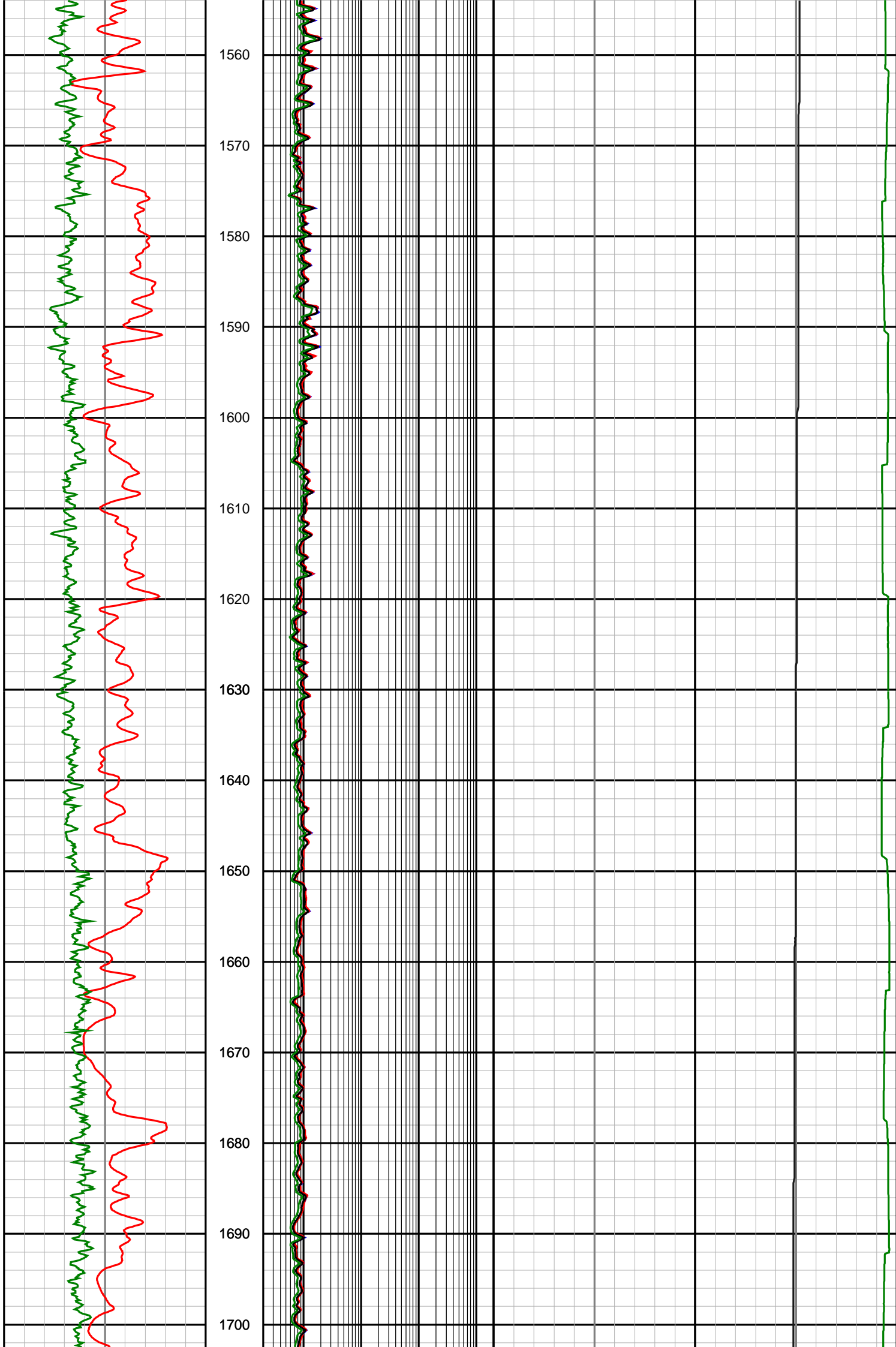


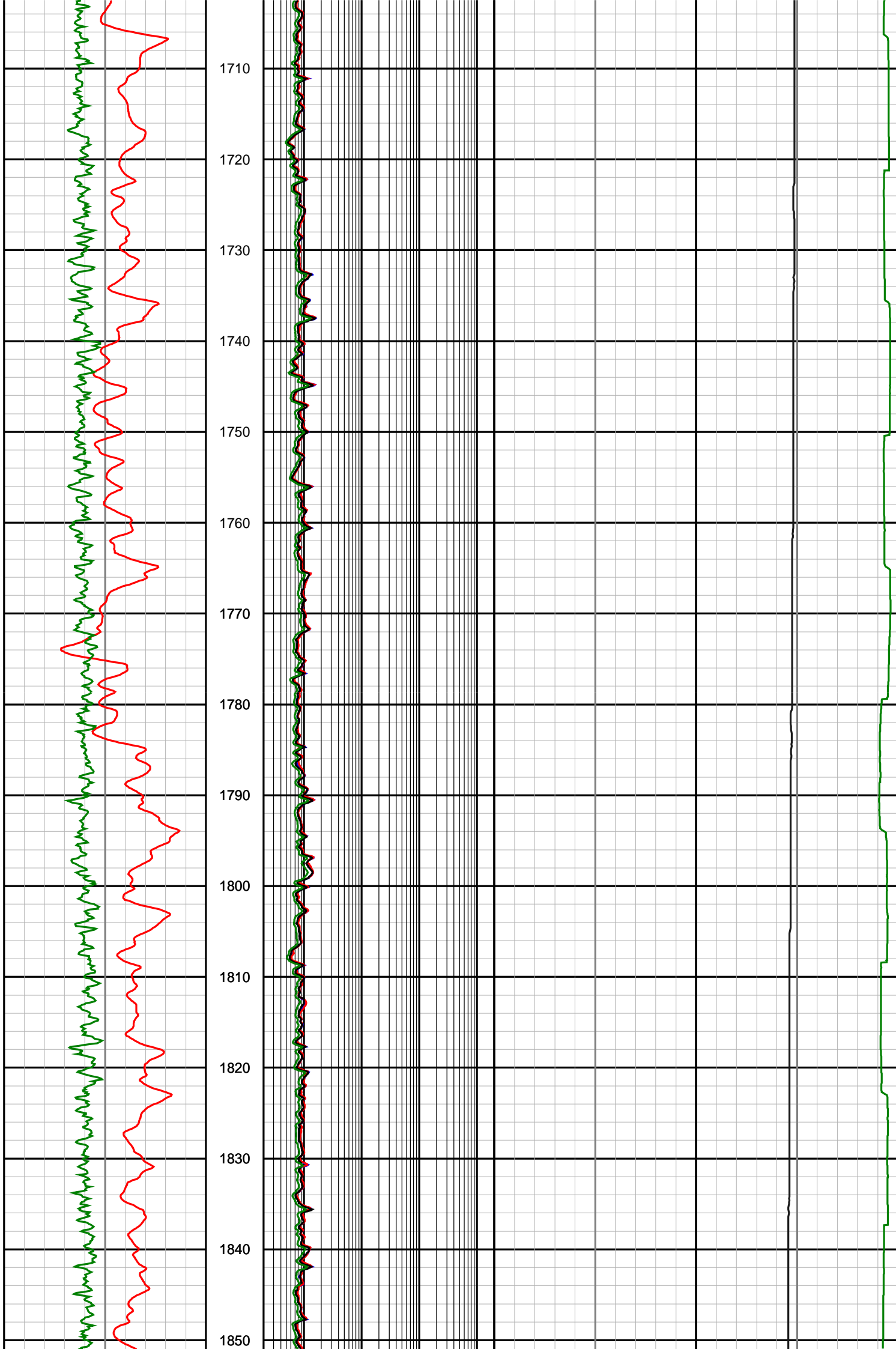


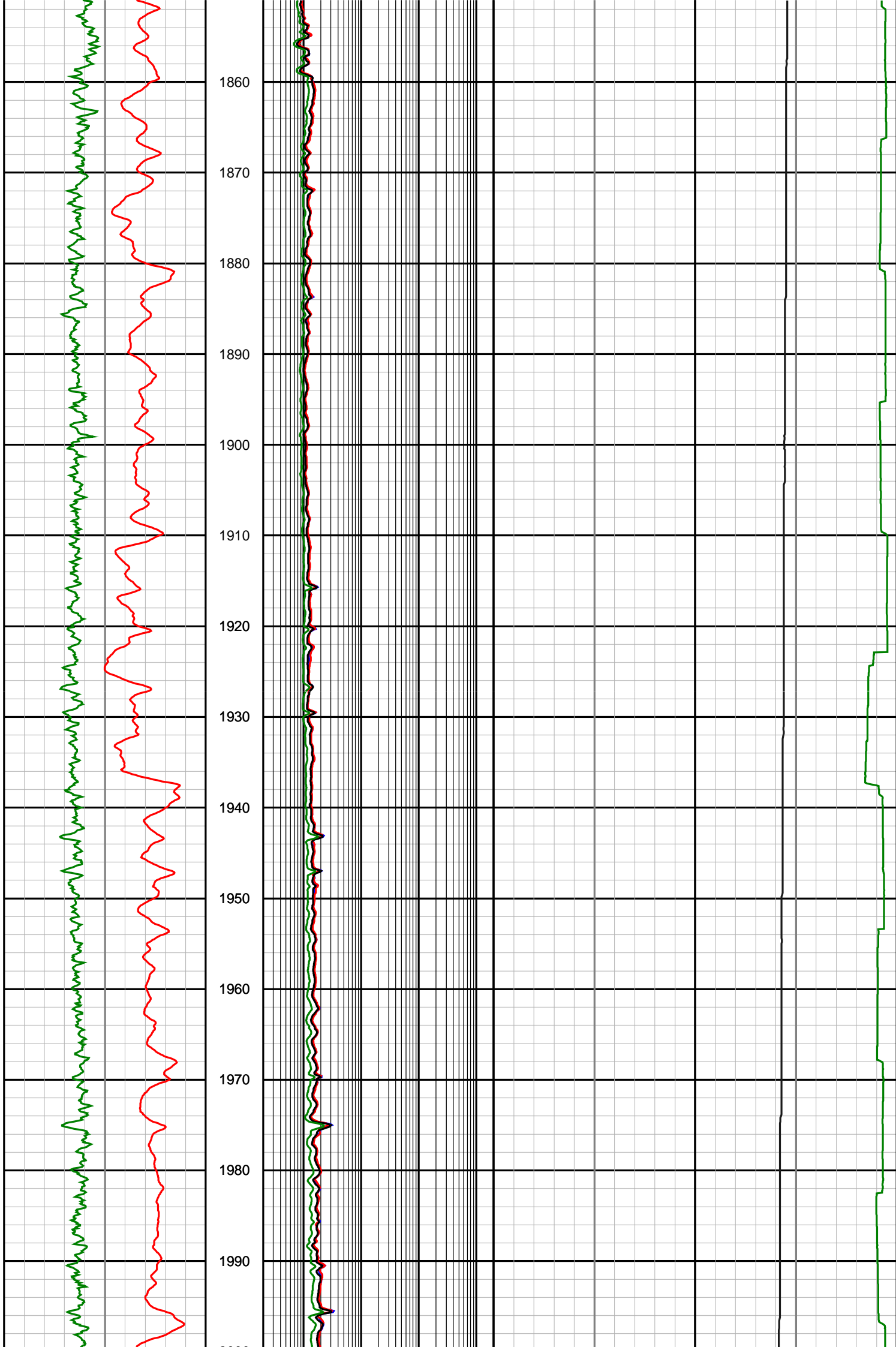


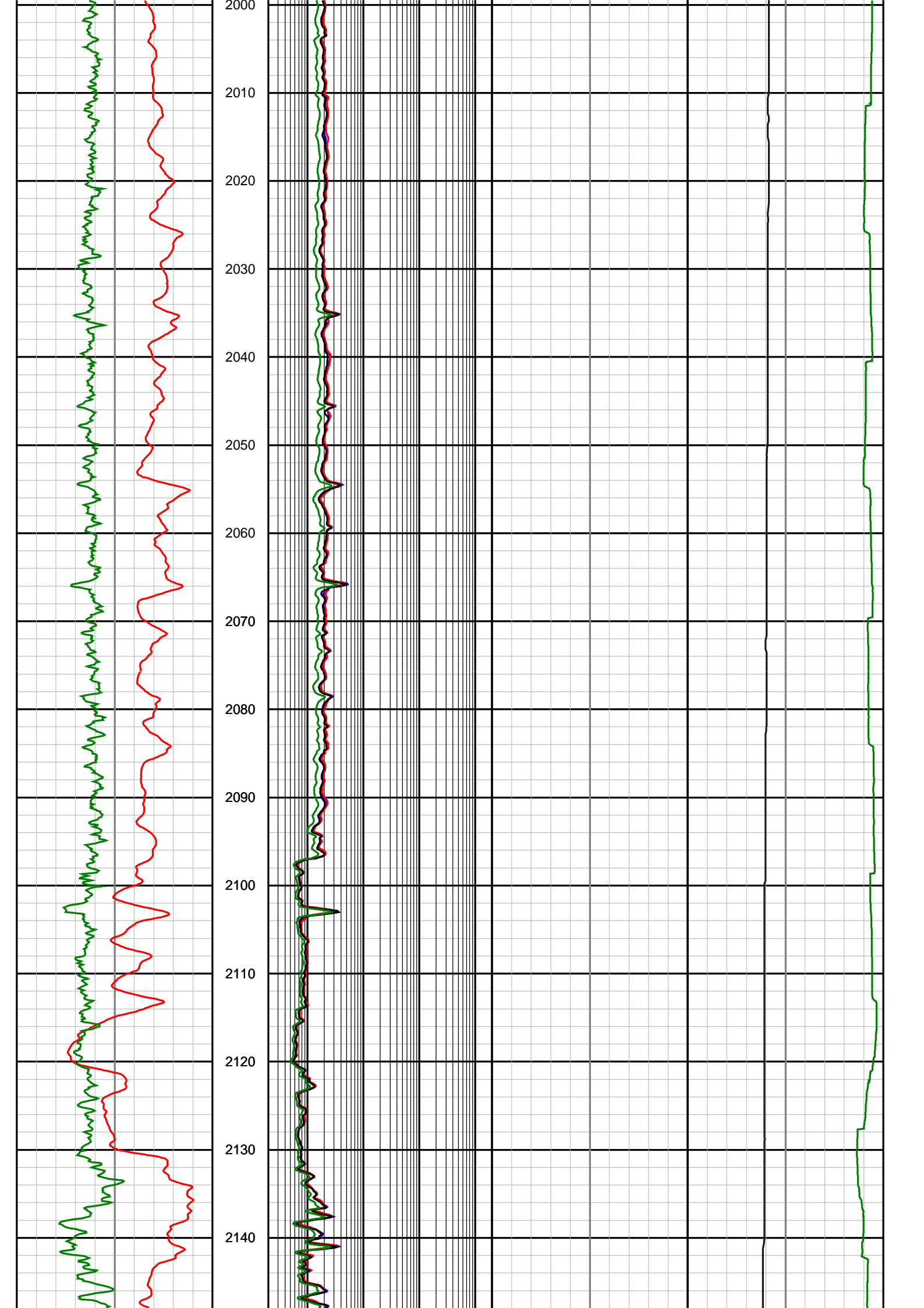


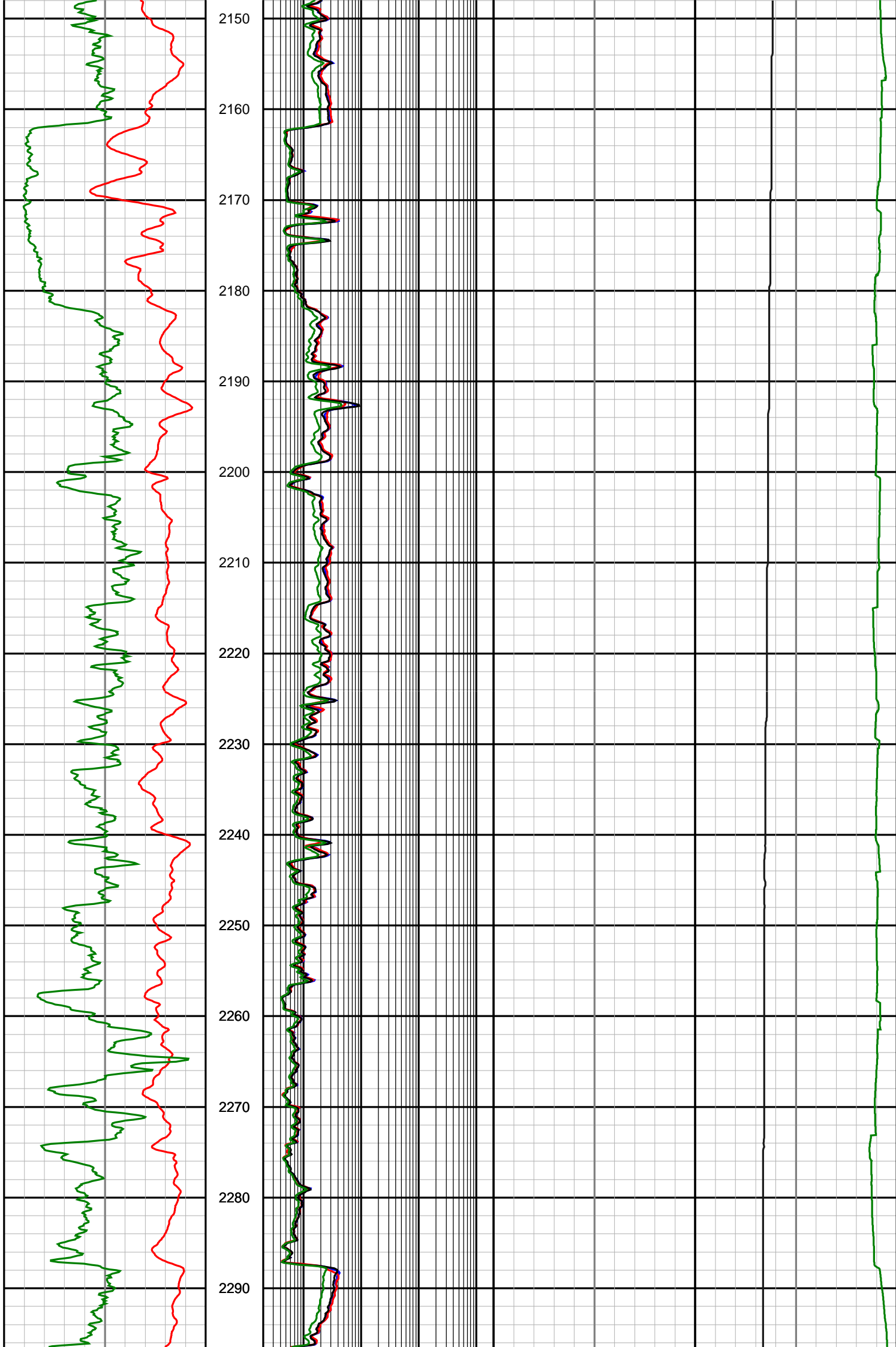


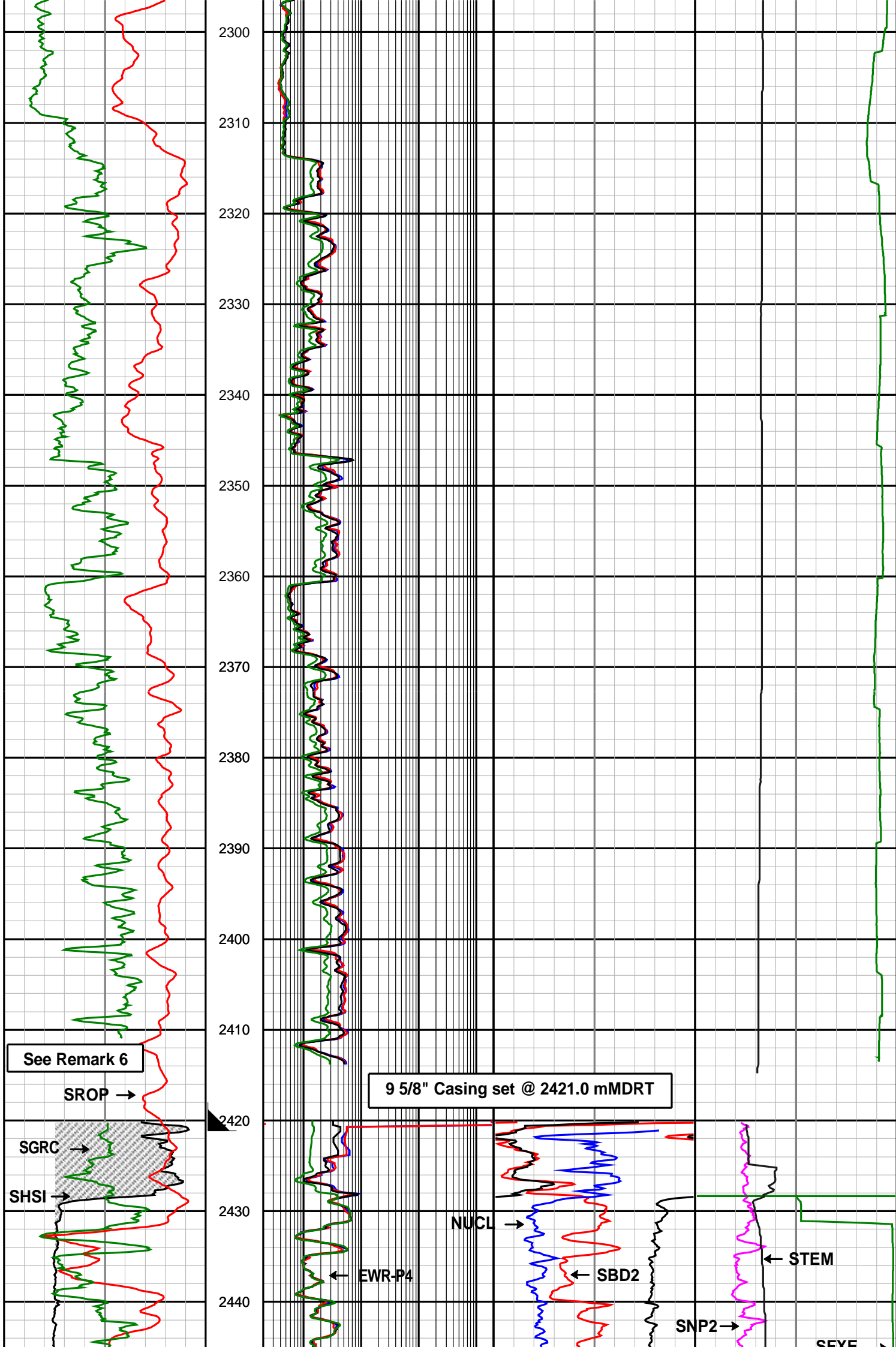


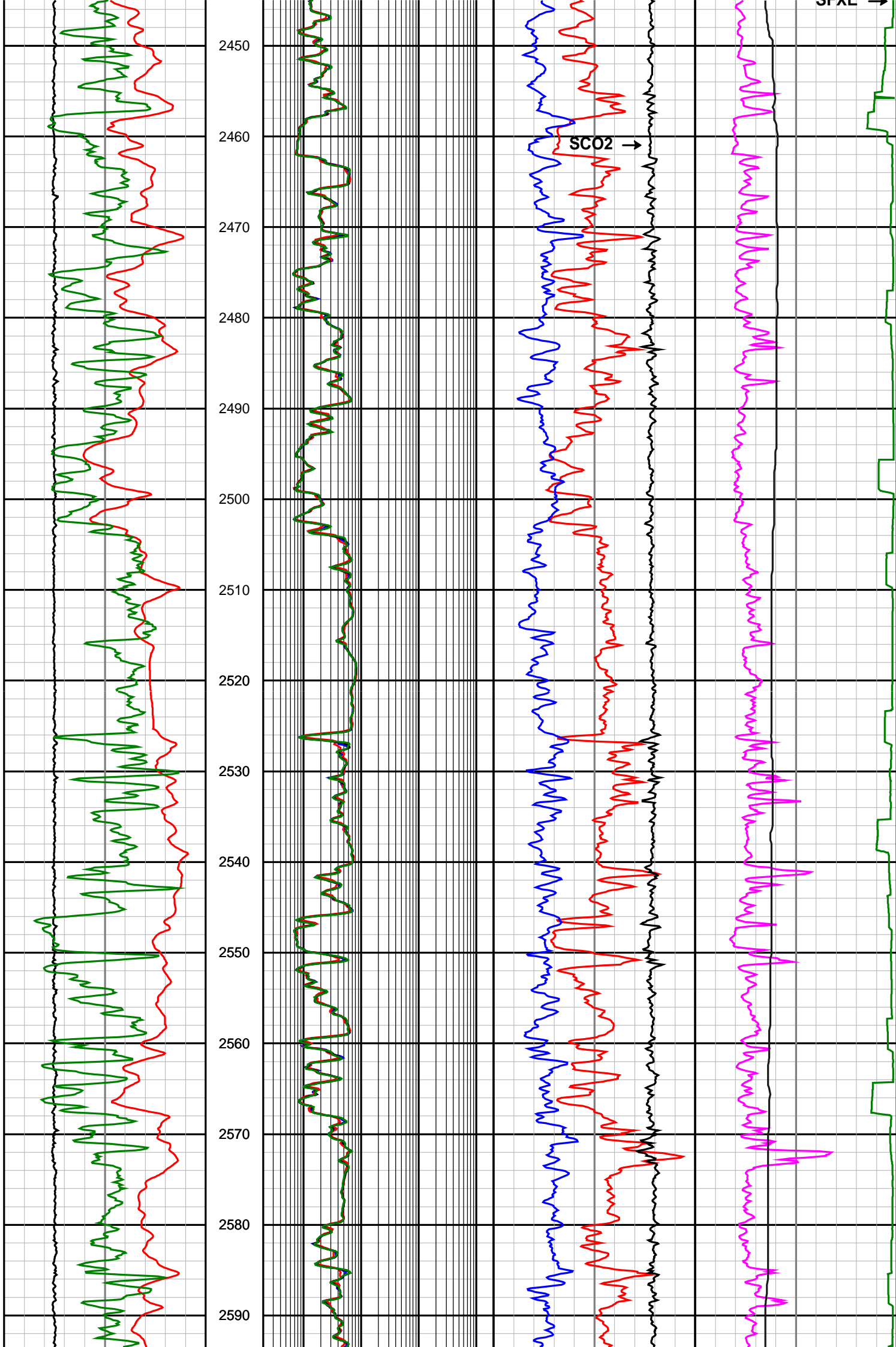




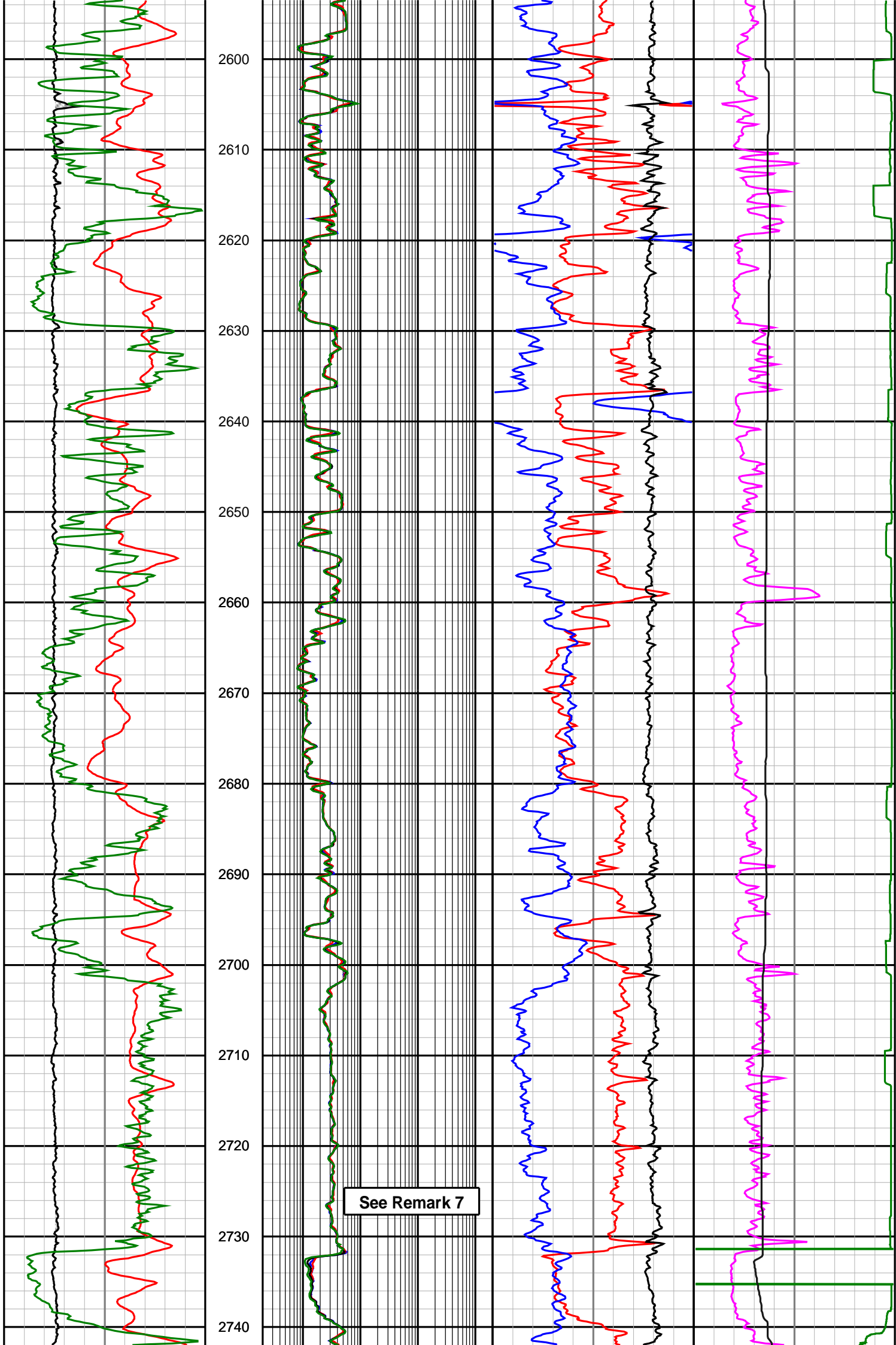


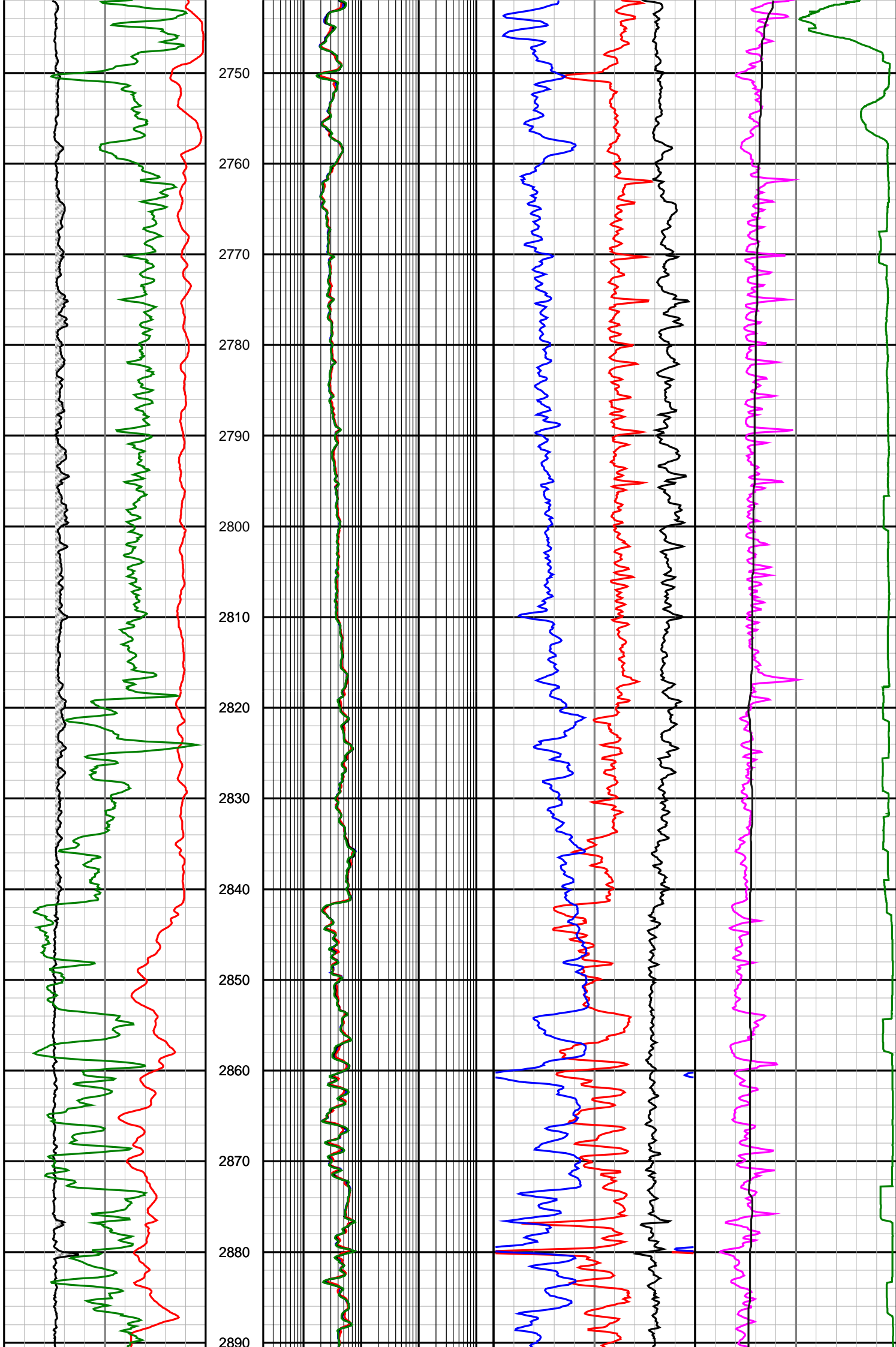


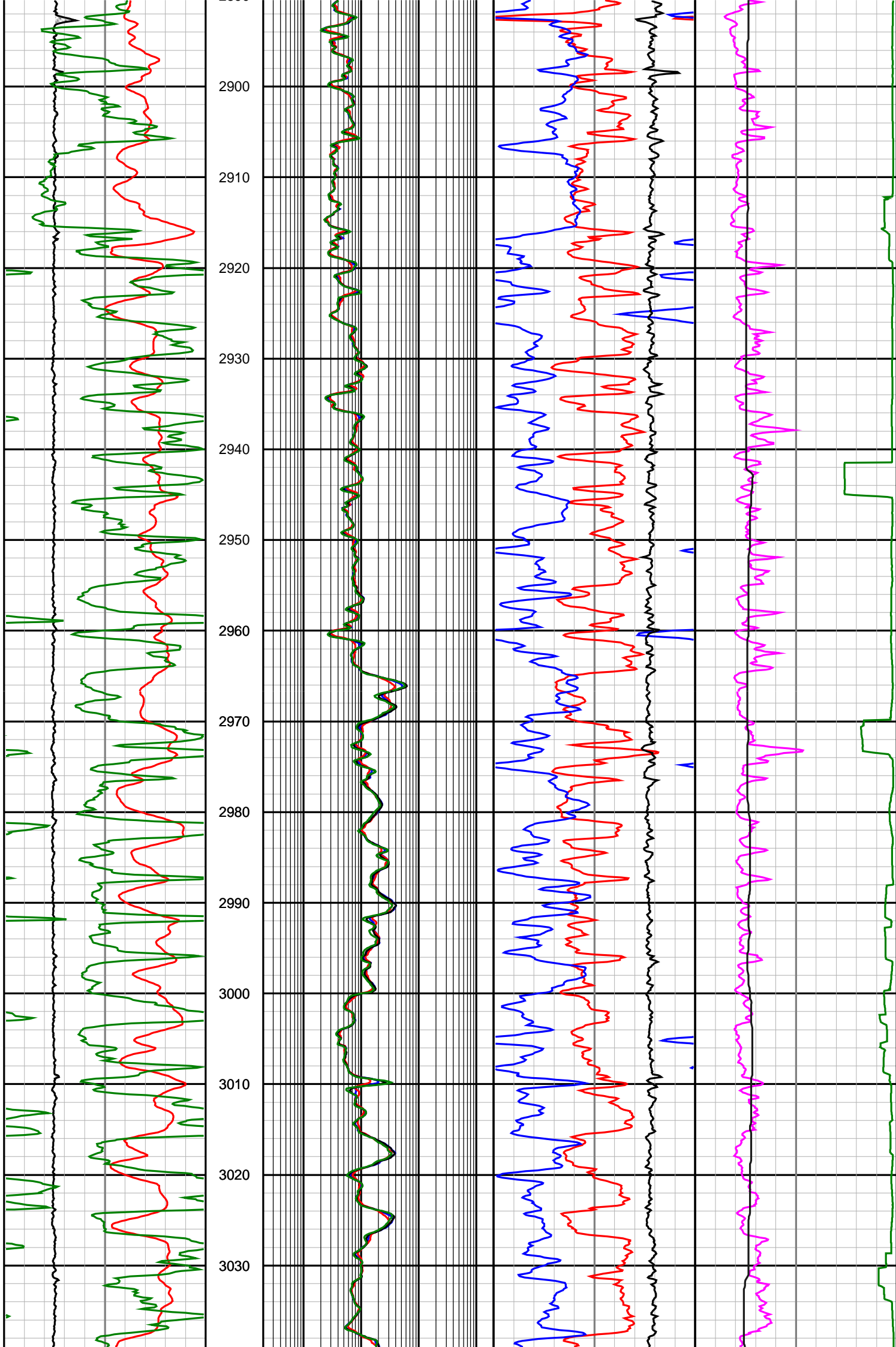


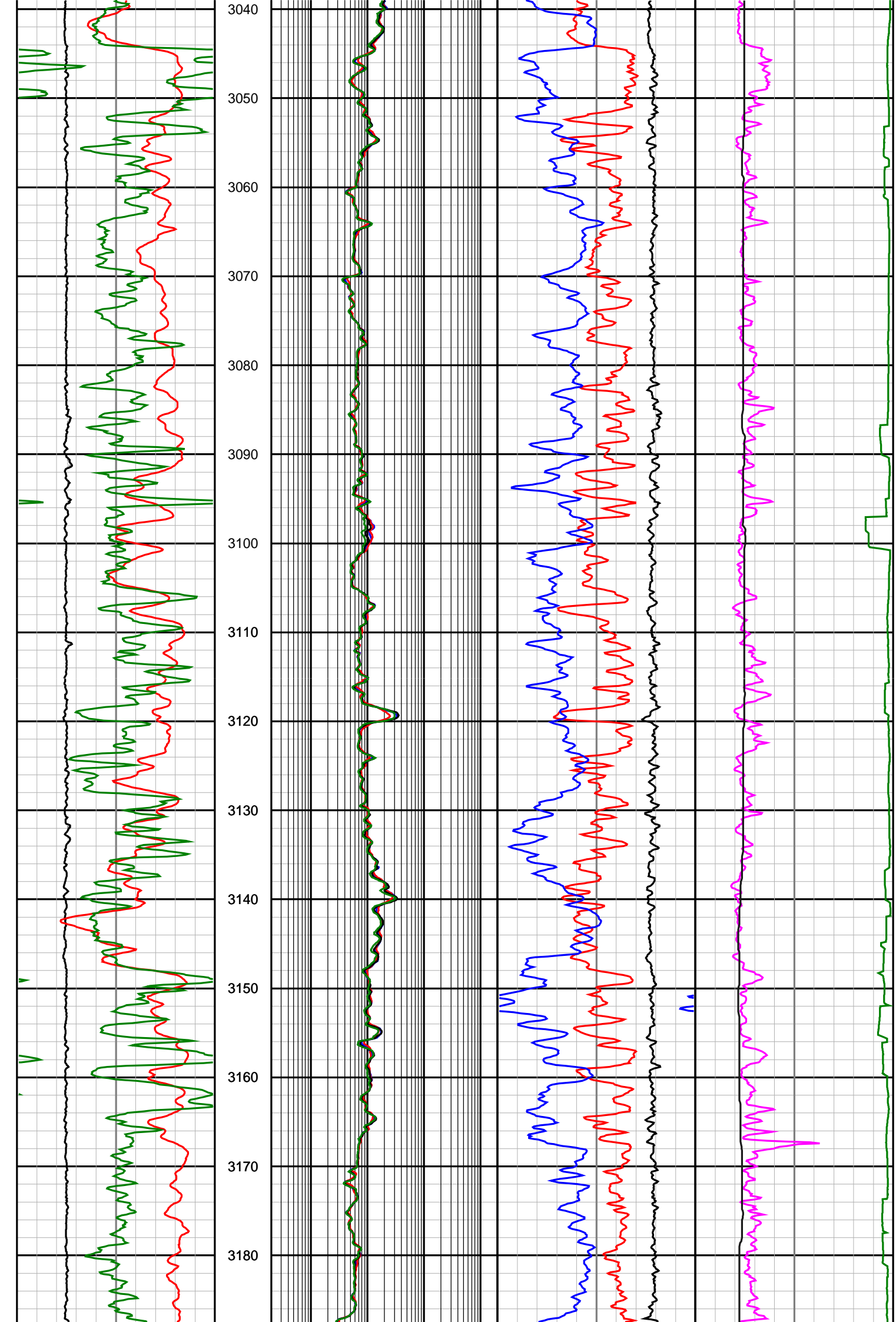


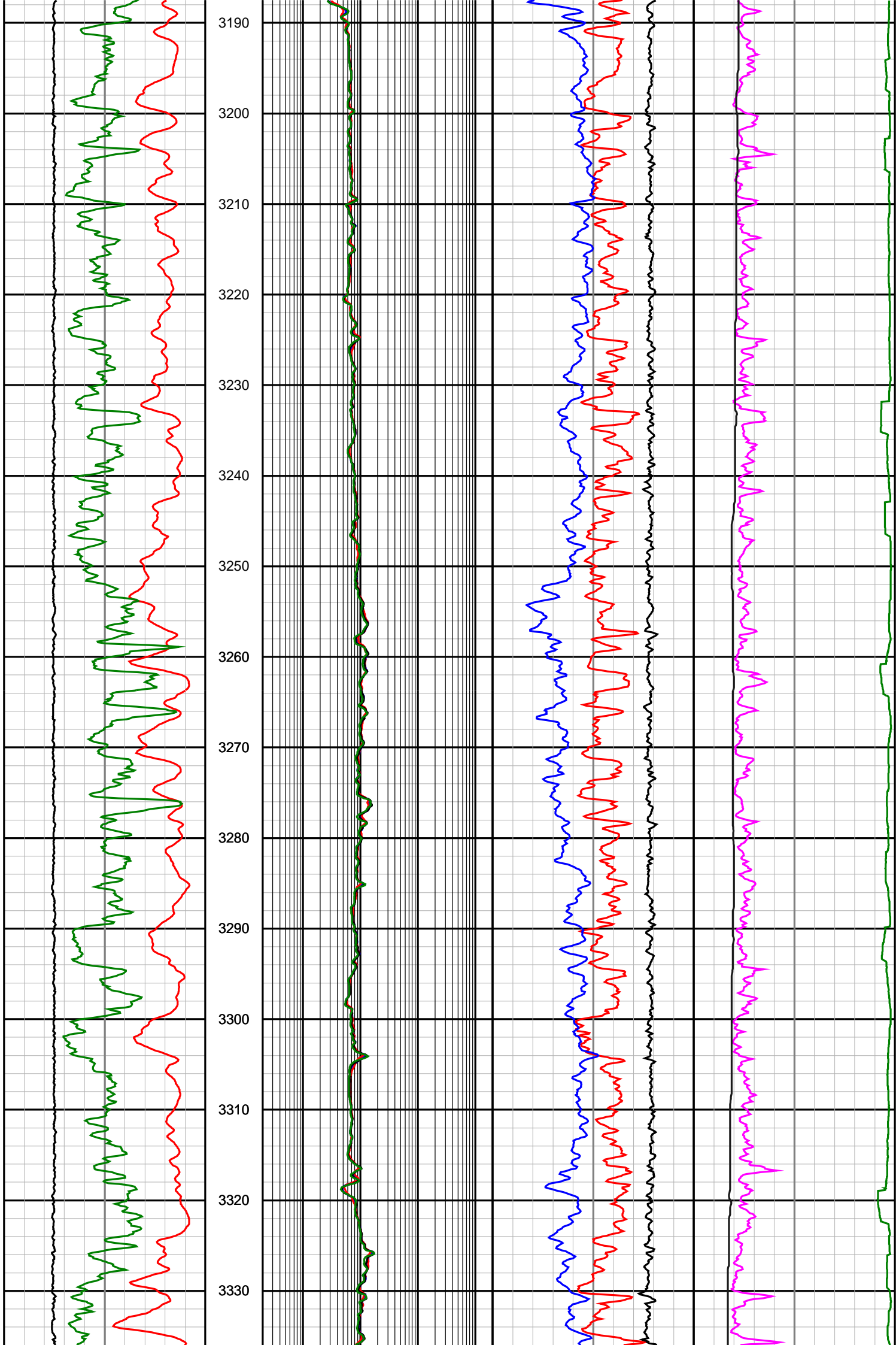


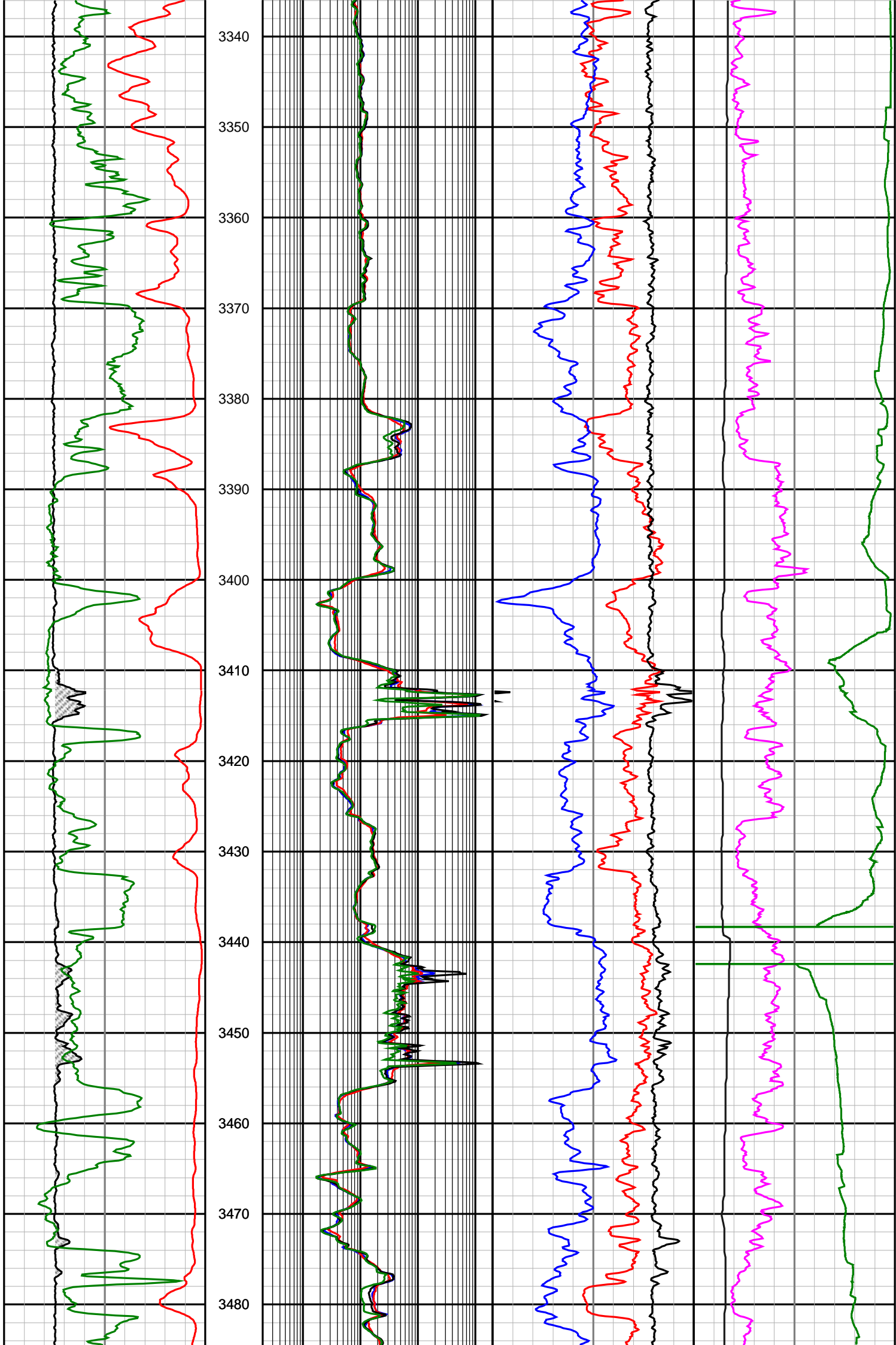




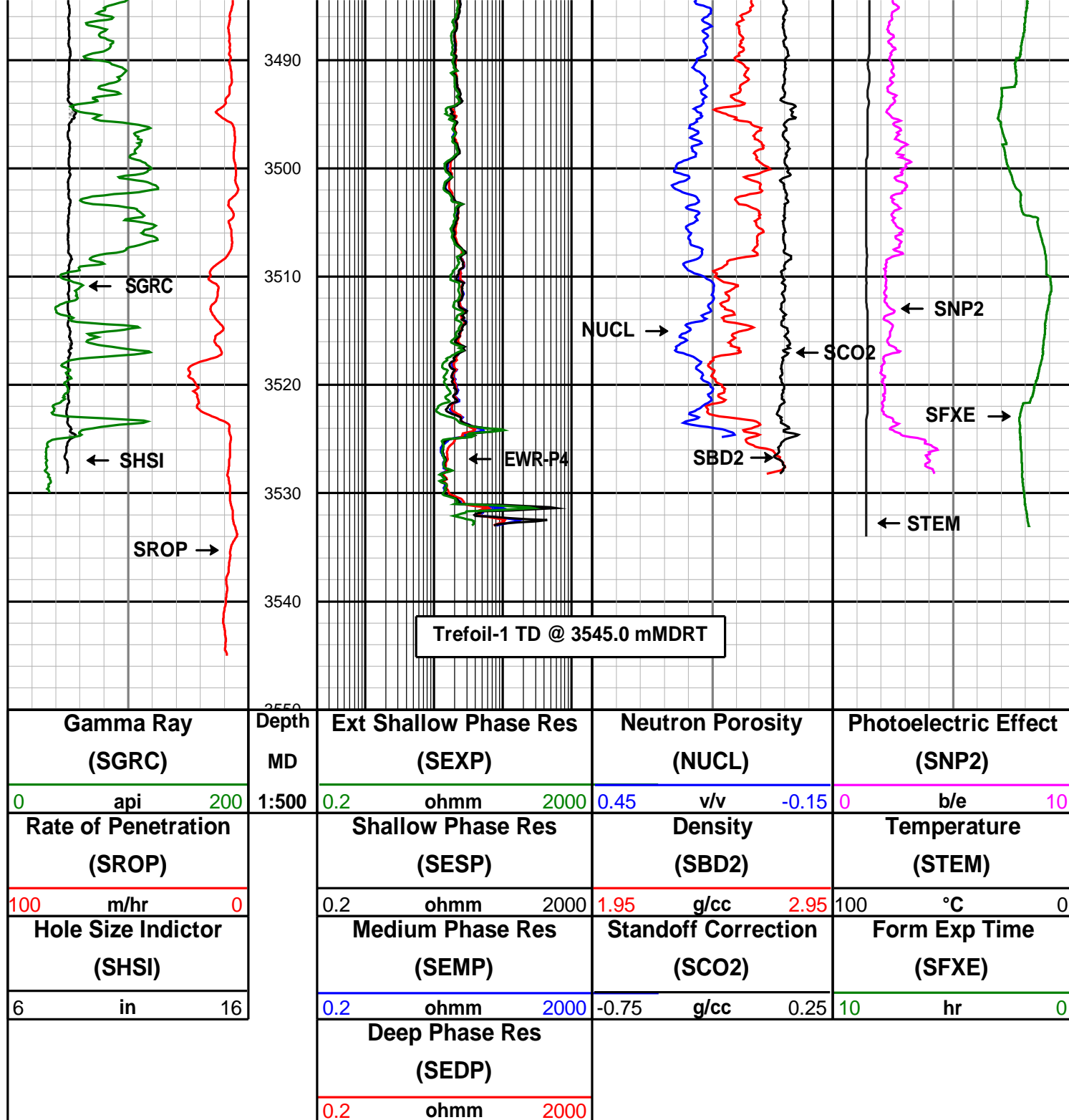












## DIRECTIONAL SURVEY REPORT

Origin Energy Resources

Trefoil-1

Exploration

Tasmania

Australia

AU-FE-0003279677

Final survey is projected to TD.

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
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**Trefoil-1**

<i>Measured Depth (metres)</i>	<i>Inclination (degrees)</i>	<i>Direction (degrees)</i>	<i>Vertical Depth (metres)</i>	<i>Latitude (metres)</i>	<i>Departure (metres)</i>	<i>Vertical Section (metres)</i>	<i>Dogleg (deg/30m)</i>
0.000	0.00	0.00	0.000	0.000 N	0.000 E	0.000	TIE-IN
14.930	0.28	227.56	14.930	0.025 S	0.027 W	-0.033	0.56
157.930	0.24	111.58	157.929	0.371 S	0.006 W	-0.110	0.09
242.920	0.31	216.07	242.919	0.619 S	0.026 E	-0.148	0.15
271.900	0.26	284.04	271.898	0.665 S	0.084 W	-0.267	0.33
300.920	0.17	201.71	300.918	0.688 S	0.165 W	-0.351	0.30
330.000	0.41	230.28	329.998	0.794 S	0.261 W	-0.473	0.29
359.060	0.41	266.92	359.057	0.867 S	0.446 W	-0.671	0.27
388.110	0.22	245.94	388.107	0.896 S	0.602 W	-0.828	0.22
417.140	0.34	274.84	417.136	0.912 S	0.741 W	-0.966	0.19
446.140	0.37	235.59	446.136	0.958 S	0.905 W	-1.137	0.25
475.160	0.40	278.80	475.155	0.995 S	1.083 W	-1.318	0.30
504.180	0.41	282.84	504.174	0.957 S	1.285 W	-1.501	0.03
533.180	0.31	240.27	533.174	0.973 S	1.454 W	-1.668	0.29
562.180	0.18	291.63	562.174	0.994 S	1.565 W	-1.781	0.25
591.140	0.22	204.81	591.134	1.027 S	1.632 W	-1.854	0.29
641.650	0.35	259.13	641.643	1.144 S	1.824 W	-2.070	0.17
669.830	0.22	257.56	669.823	1.172 S	1.961 W	-2.210	0.14
698.860	0.26	268.76	698.852	1.185 S	2.080 W	-2.328	0.06
728.560	0.19	269.22	728.552	1.187 S	2.194 W	-2.438	0.07
756.580	0.19	307.61	756.572	1.159 S	2.276 W	-2.510	0.13
786.170	0.16	314.47	786.162	1.100 S	2.346 W	-2.559	0.04
815.110	0.10	284.44	815.102	1.065 S	2.399 W	-2.601	0.09
844.160	0.12	314.77	844.152	1.038 S	2.444 W	-2.637	0.06
872.840	0.12	295.00	872.832	1.005 S	2.491 W	-2.673	0.04
902.160	0.18	266.56	902.152	0.995 S	2.564 W	-2.740	0.10
931.240	0.18	236.49	931.231	1.023 S	2.646 W	-2.827	0.10
960.310	0.14	220.66	960.301	1.074 S	2.707 W	-2.899	0.06
989.400	0.11	280.20	989.391	1.096 S	2.758 W	-2.954	0.13
1018.080	0.10	263.65	1018.071	1.093 S	2.811 W	-3.005	0.03
1046.970	0.04	218.89	1046.961	1.104 S	2.843 W	-3.038	0.08
1076.060	0.04	210.61	1076.051	1.121 S	2.855 W	-3.054	0.01
1105.000	0.11	202.29	1104.991	1.155 S	2.870 W	-3.079	0.07
1134.080	0.11	229.21	1134.071	1.198 S	2.901 W	-3.121	0.05
1163.210	0.04	91.07	1163.201	1.216 S	2.913 W	-3.136	0.14
1192.060	0.04	217.57	1192.051	1.225 S	2.910 W	-3.136	0.08
1221.260	0.04	44.16	1221.251	1.225 S	2.909 W	-3.135	0.09
1250.020	0.04	130.95	1250.011	1.224 S	2.894 W	-3.121	0.06
1278.990	0.04	15.22	1278.981	1.221 S	2.884 W	-3.110	0.07
1308.180	0.04	135.36	1308.171	1.220 S	2.874 W	-3.100	0.07
1337.260	0.10	149.36	1337.251	1.248 S	2.854 W	-3.089	0.06
1366.260	0.10	170.95	1366.251	1.295 S	2.837 W	-3.086	0.04
1395.170	0.09	144.86	1395.161	1.339 S	2.820 W	-3.082	0.05
1424.330	0.06	136.27	1424.321	1.370 S	2.795 W	-3.066	0.03
1453.350	0.05	88.56	1453.341	1.381 S	2.773 W	-3.048	0.05
1482.620	0.05	114.69	1482.611	1.386 S	2.750 W	-3.028	0.02
1511.650	0.13	148.50	1511.641	1.418 S	2.723 W	-3.011	0.09
1540.650	0.13	153.08	1540.641	1.473 S	2.692 W	-2.997	0.01
1569.660	0.07	139.36	1569.651	1.514 S	2.667 W	-2.984	0.07
1598.460	0.16	142.24	1598.451	1.559 S	2.631 W	-2.962	0.10
1656.390	0.18	132.60	1656.381	1.683 S	2.516 W	-2.886	0.02
1685.500	0.15	157.44	1685.490	1.750 S	2.468 W	-2.859	0.08
1714.590	0.02	350.18	1714.580	1.780 S	2.454 W	-2.854	0.18
1743.680	0.15	253.46	1743.670	1.785 S	2.491 W	-2.891	0.16
1772.720	0.09	271.90	1772.710	1.795 S	2.549 W	-2.949	0.07
1801.660	0.02	223.84	1801.650	1.798 S	2.574 W	-2.973	0.08
1830.560	0.15	316.18	1830.550	1.774 S	2.603 W	-2.995	0.16
1859.470	0.08	329.16	1859.460	1.729 S	2.640 W	-3.017	0.07
1888.510	0.08	300.76	1888.500	1.701 S	2.668 W	-3.037	0.04
1917.610	0.11	284.00	1917.600	1.683 S	2.713 W	-3.075	0.04
1946.670	0.01	141.29	1946.660	1.678 S	2.739 W	-3.099	0.12
1975.720	0.11	344.70	1975.710	1.654 S	2.744 W	-3.097	0.12
2004.820	0.07	333.35	2004.810	1.613 S	2.759 W	-3.100	0.04
2033.840	0.06	12.54	2033.830	1.581 S	2.764 W	-3.096	0.05
2062.960	0.10	354.28	2062.950	1.541 S	2.763 W	-3.084	0.05



**Trefoil-1**

<i>Measured Depth (metres)</i>	<i>Inclination (degrees)</i>	<i>Direction (degrees)</i>	<i>Vertical Depth (metres)</i>	<i>Latitude (metres)</i>	<i>Departure (metres)</i>	<i>Vertical Section (metres)</i>	<i>Dogleg (deg/30m)</i>
2091.930	0.09	5.90	2091.920	1.493 S	2.763 W	-3.070	0.02
2121.130	0.14	11.21	2121.120	1.436 S	2.754 W	-3.046	0.05
2150.140	0.09	37.57	2150.130	1.383 S	2.733 W	-3.010	0.07
2179.320	0.16	36.77	2179.310	1.332 S	2.694 W	-2.959	0.06
2208.290	0.19	58.16	2208.280	1.275 S	2.629 W	-2.880	0.08
2237.390	0.30	45.52	2237.379	1.196 S	2.534 W	-2.767	0.12
2266.430	0.38	58.15	2266.419	1.093 S	2.399 W	-2.608	0.12
2324.500	0.30	41.24	2324.488	0.878 S	2.136 W	-2.296	0.07
2353.510	0.43	63.46	2353.497	0.773 S	1.990 W	-2.126	0.20
2382.510	0.31	63.76	2382.497	0.690 S	1.823 W	-1.943	0.12
2493.190	0.42	64.03	2493.174	0.382 S	1.192 W	-1.251	0.03
2522.350	0.43	64.82	2522.334	0.289 S	0.998 W	-1.039	0.01
2551.470	0.45	74.18	2551.453	0.211 S	0.789 W	-0.817	0.08
2580.560	0.45	70.93	2580.542	0.142 S	0.571 W	-0.588	0.03
2609.650	0.60	70.66	2609.631	0.055 S	0.320 W	-0.322	0.15
2638.470	0.67	69.43	2638.449	0.054 N	0.021 W	-0.005	0.08
2696.630	0.54	66.62	2696.605	0.282 N	0.548 E	0.605	0.07
2725.430	0.56	70.87	2725.404	0.382 N	0.806 E	0.881	0.05
2754.410	0.42	60.49	2754.383	0.481 N	1.034 E	1.127	0.17
2783.570	0.34	64.20	2783.543	0.572 N	1.207 E	1.319	0.08
2811.730	0.34	63.34	2811.702	0.647 N	1.357 E	1.484	0.01
2841.410	0.44	69.81	2841.381	0.726 N	1.544 E	1.685	0.11
2899.470	0.28	70.57	2899.440	0.850 N	1.888 E	2.050	0.08
2928.590	0.38	81.57	2928.560	0.888 N	2.050 E	2.216	0.12
2957.610	0.45	75.30	2957.579	0.931 N	2.254 E	2.425	0.09
2983.900	0.39	63.39	2983.868	0.998 N	2.435 E	2.617	0.12
3015.370	0.34	80.22	3015.338	1.062 N	2.625 E	2.817	0.11
3044.330	0.38	92.33	3044.297	1.073 N	2.807 E	2.995	0.09
3069.850	0.38	83.94	3069.816	1.078 N	2.977 E	3.159	0.07
3102.610	0.31	89.57	3102.576	1.090 N	3.175 E	3.353	0.07
3131.710	0.25	91.08	3131.675	1.090 N	3.319 E	3.492	0.06
3160.750	0.32	87.86	3160.715	1.092 N	3.466 E	3.633	0.07
3189.890	0.28	92.69	3189.855	1.091 N	3.618 E	3.779	0.05
3218.900	0.33	85.93	3218.864	1.094 N	3.772 E	3.927	0.07
3247.890	0.28	78.16	3247.854	1.114 N	3.924 E	4.079	0.07
3276.890	0.41	87.73	3276.853	1.133 N	4.096 E	4.249	0.15
3302.140	0.39	69.02	3302.103	1.167 N	4.266 E	4.422	0.16
3334.870	0.45	62.58	3334.832	1.266 N	4.484 E	4.659	0.07
3363.860	0.53	53.76	3363.821	1.397 N	4.691 E	4.895	0.11
3421.000	0.73	77.25	3420.958	1.632 N	5.258 E	5.505	0.17
3478.230	0.52	74.50	3478.184	1.782 N	5.866 E	6.130	0.11
3508.660	0.45	83.89	3508.613	1.832 N	6.118 E	6.387	0.11
3545.000	0.45	83.89	3544.952	1.863 N	6.402 E	6.668	0.00

**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 CLOSURE OF 73.78 DEGREES (GRID)  
A TOTAL CORRECTION OF 11.51 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED**

**HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.  
HORIZONTAL DISPLACEMENT(CLOSURE) AT 3545.000 METRES  
IS 6.668 METRES ALONG 73.78 DEGREES (GRID)**

**MWD RUN 100 - BHA**
**MWD RUN 100 - MWD**

Date Printed: 07 December 2004

HWDP

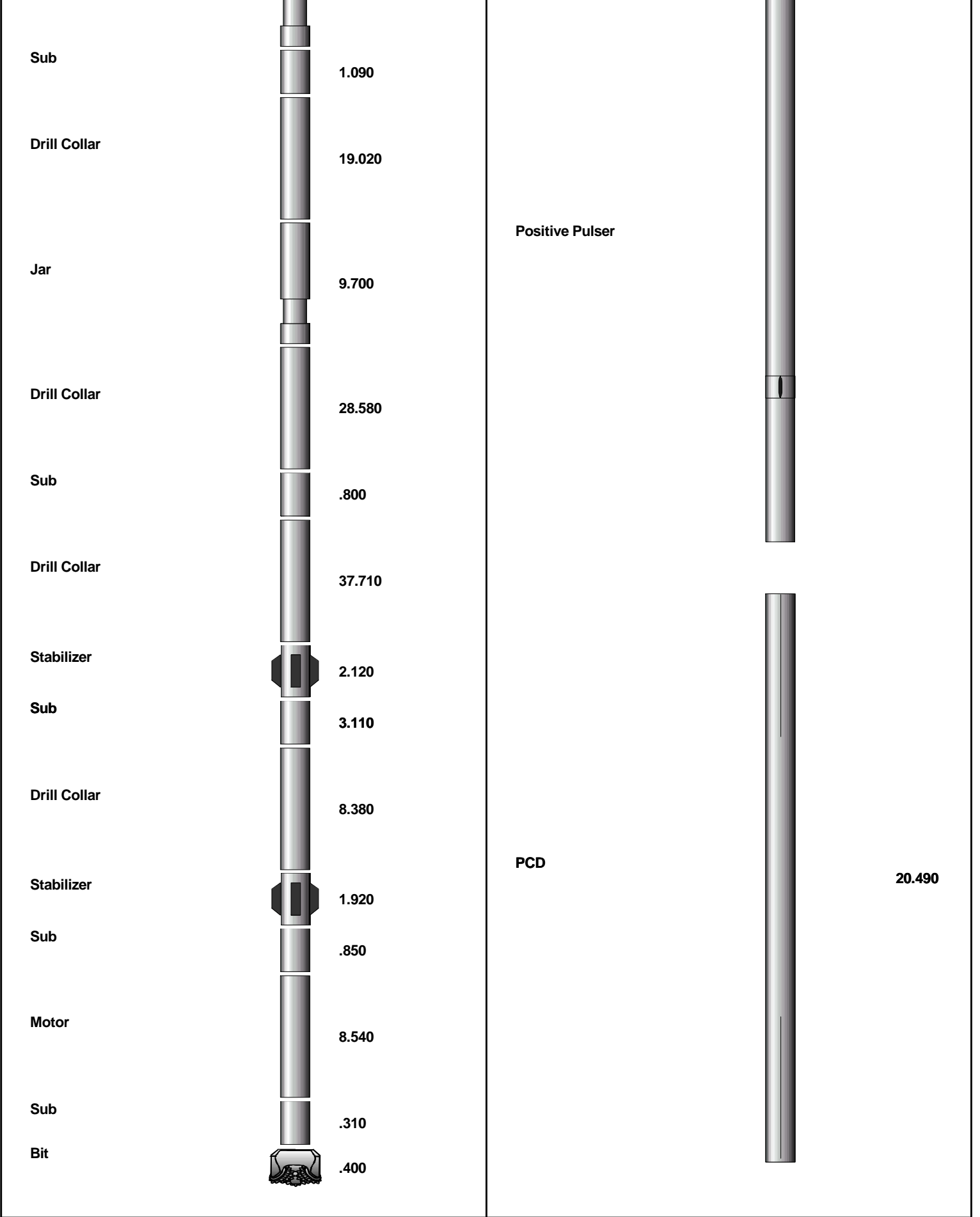


Component  
Length  
(m)

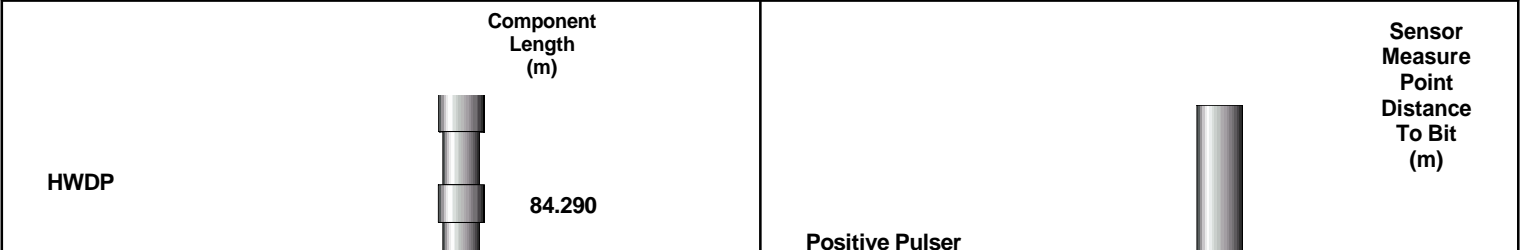
84.290

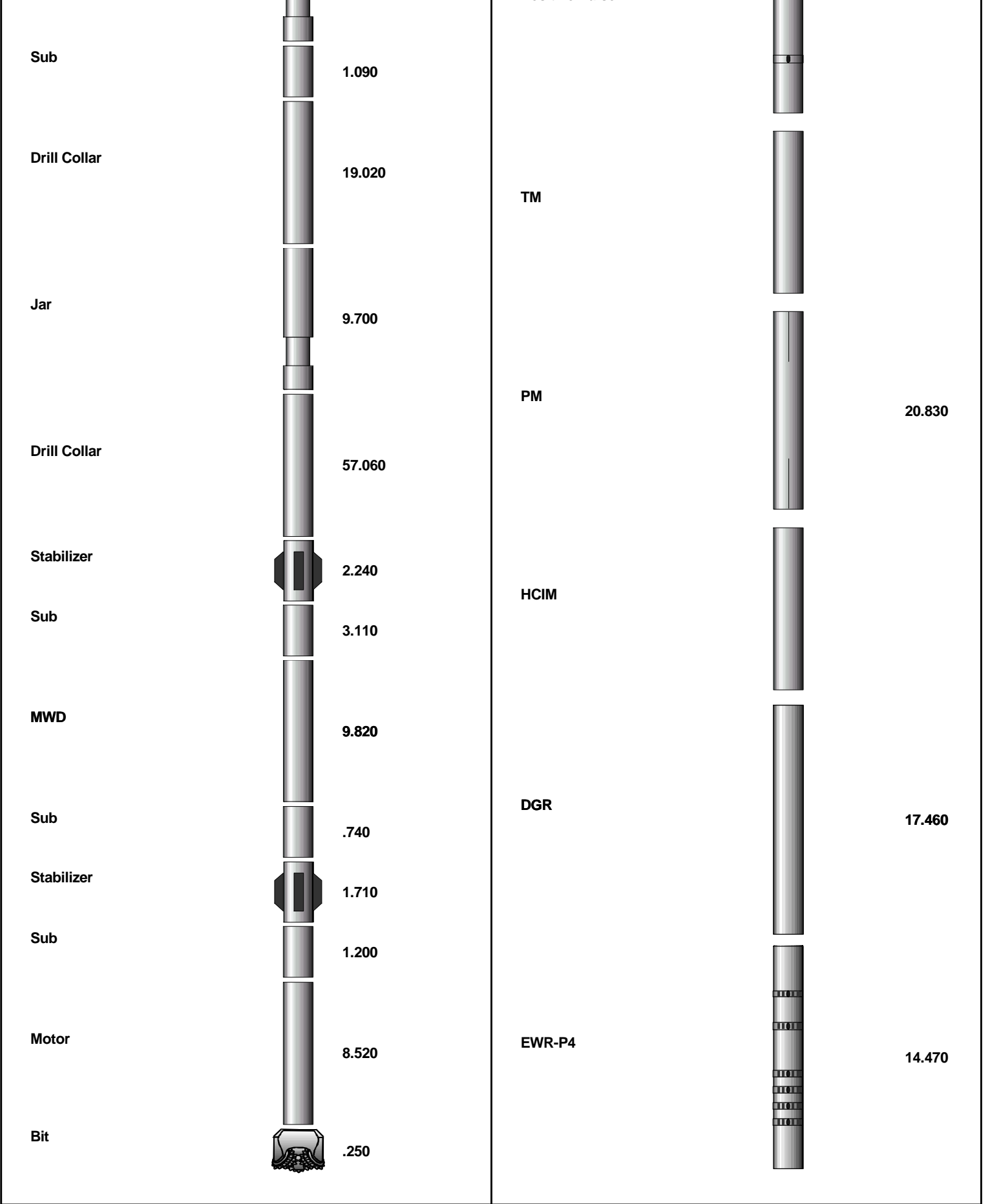
Sensor  
Measure  
Point  
Distance  
To Bit  
(m)

Page 3 of 4

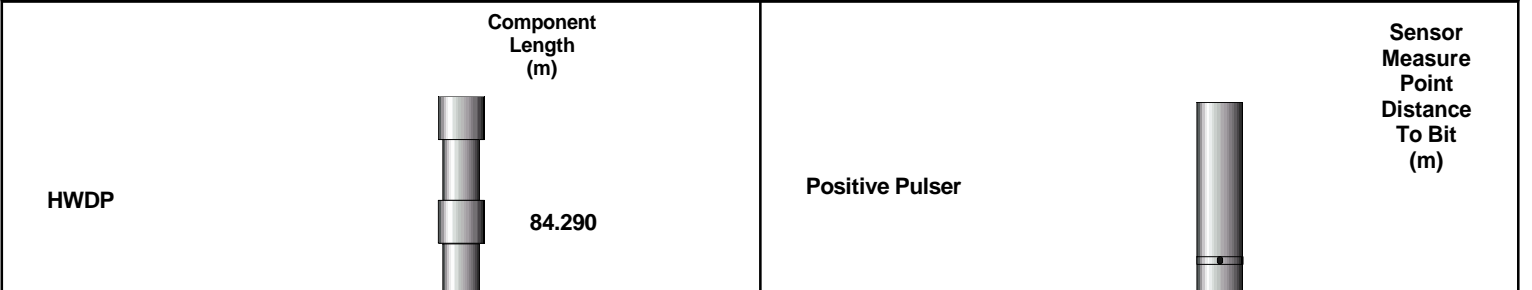


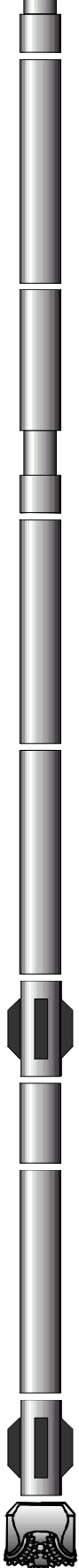

MWD RUN 200 - BHA	MWD RUN 200 - MWD
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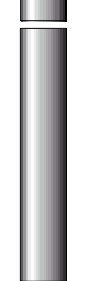





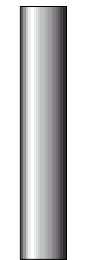

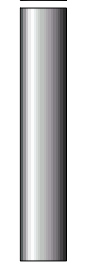

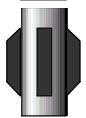




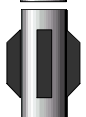


MWD RUN 300 - BHA	MWD RUN 300 - MWD
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
<div>  <div> <div>Drill Collar</div> <div>18.640</div> </div> <div> <div>Jar</div> <div>9.350</div> </div> <div> <div>Drill Collar</div> <div>74.870</div> </div> <div> <div>Drill Collar</div> <div>8.640</div> </div> <div> <div>Stabilizer</div> <div>1.310</div> </div> <div> <div>Sub</div> <div>3.060</div> </div> <div> <div>MWD</div> <div>15.890</div> </div> <div> <div>Stabilizer</div> <div>1.290</div> </div> <div> <div>Bit</div> <div>.310</div> </div> </div>	<div>  <div> <div>TM</div> <div>16.070</div> </div> <div> <div>HCIM</div> <div>11.730</div> </div> <div> <div>SLD</div> <div>8.460</div> </div> <div> <div>DDS</div> <div>0</div> </div> <div> <div>DGR</div> <div>6.650</div> </div> <div> <div>EWR-P4</div> <div>3.650</div> </div> </div>
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MWD RUN 400 - BHA	MWD RUN 400 - MWD
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<div> <div>Component Length (m)</div> <div>  <div> <div>HWDP</div> <div>84.290</div> </div> </div> </div>	<div> <div>Sensor Measure Point Distance To Bit (m)</div> <div>  <div> <div>Positive Pulser</div> </div> </div> </div>
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			TM		
Drill Collar		18.640			
			PM		16.070
Jar		9.350			
			HCIM		
			CNP		11.730
Drill Collar		74.870			
			SLD		8.460
Drill Collar		8.640			
			DDS		0
Stabilizer		1.310			
					
Sub		3.060			
			DGR		6.650
MWD		15.890			
			EWR-P4		3.650
Stabilizer		1.290			
					
Bit		.310			

MWD RUN 500 - BHA	MWD RUN 500 - MWD
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	Component Length (m)			Sensor Measure Point Distance To Bit (m)
Jar		9.350	Positive Pulser	
				

			TM		
Drill Collar		103.140	PM		24.470
			HCIM		
Drill Collar		8.640			
Stabilizer		1.320	CNP		20.130
Sub		3.160			
			SLD		16.860
MWD		15.890			
Sub		.770	DDS		0
Stabilizer		1.310	DGR		15.050
Motor		7.680			
Bit		.240	EWR-P4		12.050