

Schlumberger

VISION Service

1:200 Measured Depth

Real Time Log

Company:

Woodside Energy Ltd

Well:

Somerset-1

Field:

T34P

Rig Name:

Ocean Patriot

State:

Tasmania

Country:

Australia

Latitude: 39° 20' 36.76" S

UWID: n.a

Longitude: 142° 44' 56.14" E

Rig Name: Ocean Patriot

Block: n.a

Rig Type: Semi-Submersible

FL: Otway Basin

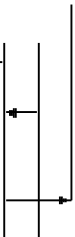
FL1:

FL2:

Log Measured From - Drill Floor: 21.5 m

Reference Datum - Mean Sea Level

Permanent Datum - Least Astronomic Tide: 0.6 m



Ground Level: 503.0 m

Acquisition Dates:

24 Oct 09

Other Services:

Print Interval:

1275.0(m) to 1817.5(m)

Directional Surveys

Index Types:

Measured Depth

Shock and Vibrations

Index Scales:

1:200

Annulus Temperature and Pressure

Depth Source:

Driller's Depth

Depth Sensor:

DES

Conveyance:

Drill Pipe

Print Type:

Field

Spud Date:

19-Oct-2009

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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 - Parameter Listing
- Tail

Survey Record

Survey Calculation			
Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	Grid North	Total Correction Formula :	Magnetic Dec - Grid Convergence
Grid Convergence :	-1.11 deg		

Rig Location			
Latitude :	39° 20' 36.76" S	Longitude :	142° 44' 56.14" E

Tie In Point					
Measured Depth:	0.00 m	Inclination:	0.00 deg	Azimuth:	0.00 deg
True Vertical Depth:	0.00 m	North Displacement:	0.00 m	East Displacement:	0.00 m
N/-S VSec Origin:	0.00 m	E/-W VSec Origin:	0.00 m	Vertical Section Azimuth:	0.00 deg

D&I Inits Computed and Values Used - Run 1			
Geomagnetic Model :	BGGM 2009	Geomagnetic Date :	20-Oct-2009
Computed Location B :	61074.75 nT +/- 300.00nT	Used Location B :	61074.75 nT +/- 300.00nT
Computed Location G :	999.45 mgn +/- 2.50mgn	Used Location G :	999.45 mgn +/- 2.50mgn
Computed Magnetic Dip :	-70.38 deg +/- 0.45deg	Used Magnetic Dip :	-70.38 deg +/- 0.45deg
Computed Magnetic Dec :	11.03 deg	Used Magnetic Dec :	11.03 deg
Computed Total Correction :	12.14 deg	Used Total Correction :	12.14 deg

D&I Inits Computed and Values Used - Run 2			
Geomagnetic Model :	BGGM 2009	Geomagnetic Date :	24-Oct-2009
Computed Location B :	61074.62 nT +/- 300.00nT	Used Location B :	61074.62 nT +/- 300.00nT
Computed Location G :	999.45 mgn +/- 2.50mgn	Used Location G :	999.45 mgn +/- 2.50mgn
Computed Magnetic Dip :	-70.38 deg +/- 0.45deg	Used Magnetic Dip :	-70.38 deg +/- 0.45deg
Computed Magnetic Dec :	11.03 deg	Used Magnetic Dec :	11.03 deg
Computed Total Correction :	12.14 deg	Used Total Correction :	12.14 deg

Survey Quality Index		
0 : Long, passed all criteria	2 : Long, failed mag criteria	10 : DMAG-Corrected

Survey Correction Index														
0 : No correction														

Seq	MD (m)	Incl (deg)	Azim (deg)	Course (m)	TVD (m)	V Sec (m)	N/ -S (m)	E/ -W (m)	Closure (m)	at Azi (deg)	DLS deg/30m	Tool Type	QI	CI
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP		
2	599.08	0.58	120.59	599.08	599.07	-1.54	-1.54	2.61	3.03	120.59	0.03	Manual	10	
3	684.35	0.43	120.90	85.27	684.34	-1.93	-1.93	3.26	3.78	120.62	0.05	Manual	10	
4	713.04	0.53	133.63	28.69	713.03	-2.07	-2.07	3.44	4.02	121.05	0.15	Manual	10	
5	972.34	0.91	95.08	259.30	972.31	-3.08	-3.08	6.36	7.07	115.85	0.07	Manual	10	
6	1001.37	0.91	84.18	29.03	1001.33	-3.08	-3.08	6.82	7.49	114.30	0.18	Manual	10	
7	1059.78	0.95	75.47	58.41	1059.73	-2.91	-2.91	7.75	8.28	110.59	0.08	Manual	10	
8	1090.08	0.78	51.04	30.30	1090.03	-2.72	-2.72	8.16	8.60	108.44	0.40	Manual	10	
9	1117.31	0.70	46.36	27.23	1117.26	-2.49	-2.49	8.42	8.78	106.46	0.11	Manual	10	
10	1203.66	0.94	59.46	86.35	1203.60	-1.76	-1.76	9.41	9.58	100.62	0.11	Manual	10	
11	1251.88	0.96	60.07	48.22	1251.81	-1.36	-1.36	10.10	10.19	97.68	0.01	Manual	10	

DTRA_DH - Delta-T at Compressional Peak for Receiver Array Computed Downhole	
GR - Gamma Ray	
P10H - Phase Shift Resistivity 10 inch Spacing at 2 MHz Environmentally Corrected	

—RHOB_A - Bulk Density, Computed Downhole

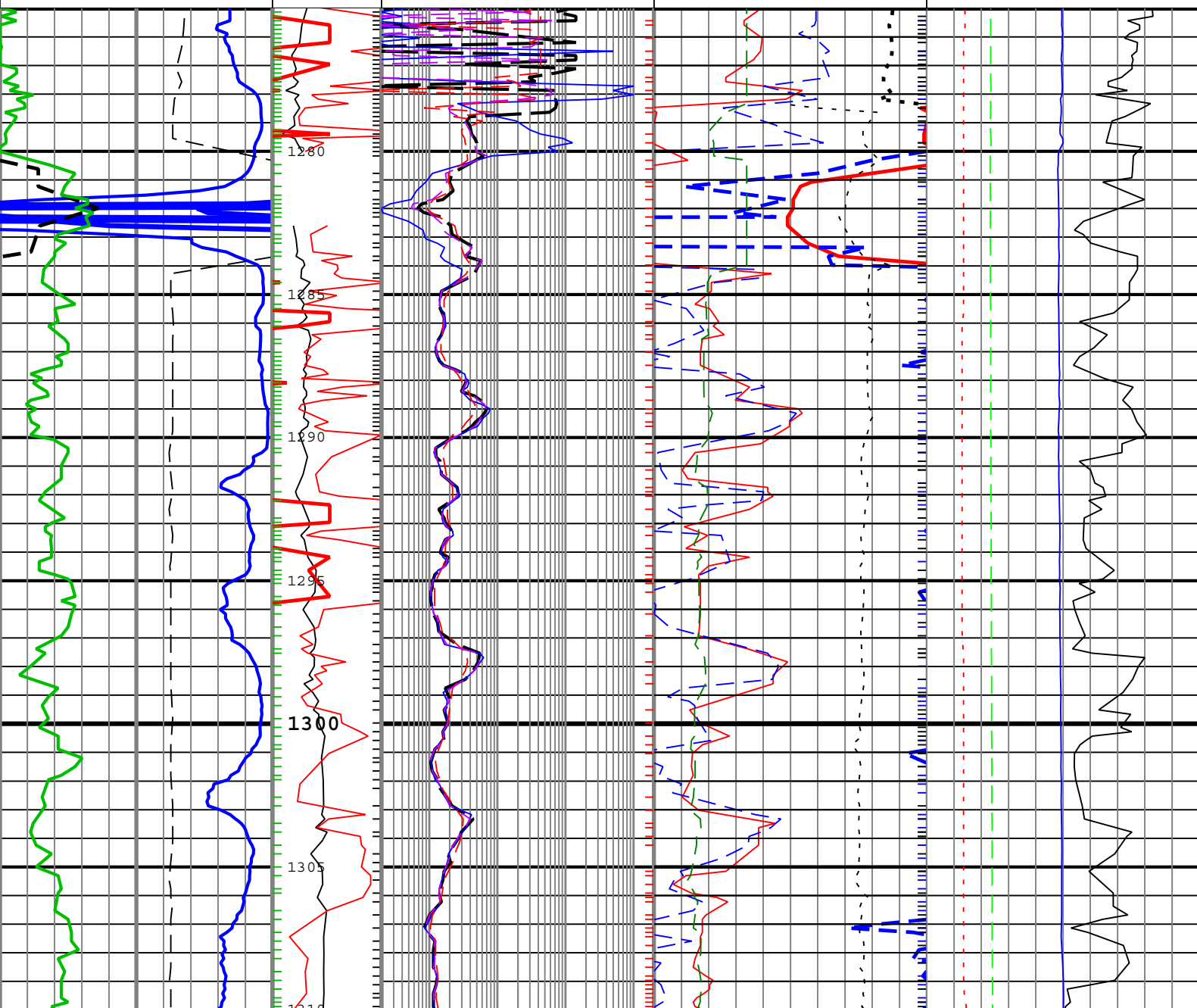
Phase Shift Resistivity 40 inch
Spacing at 2 MHz, Environmentally
Corrected. (P40H)

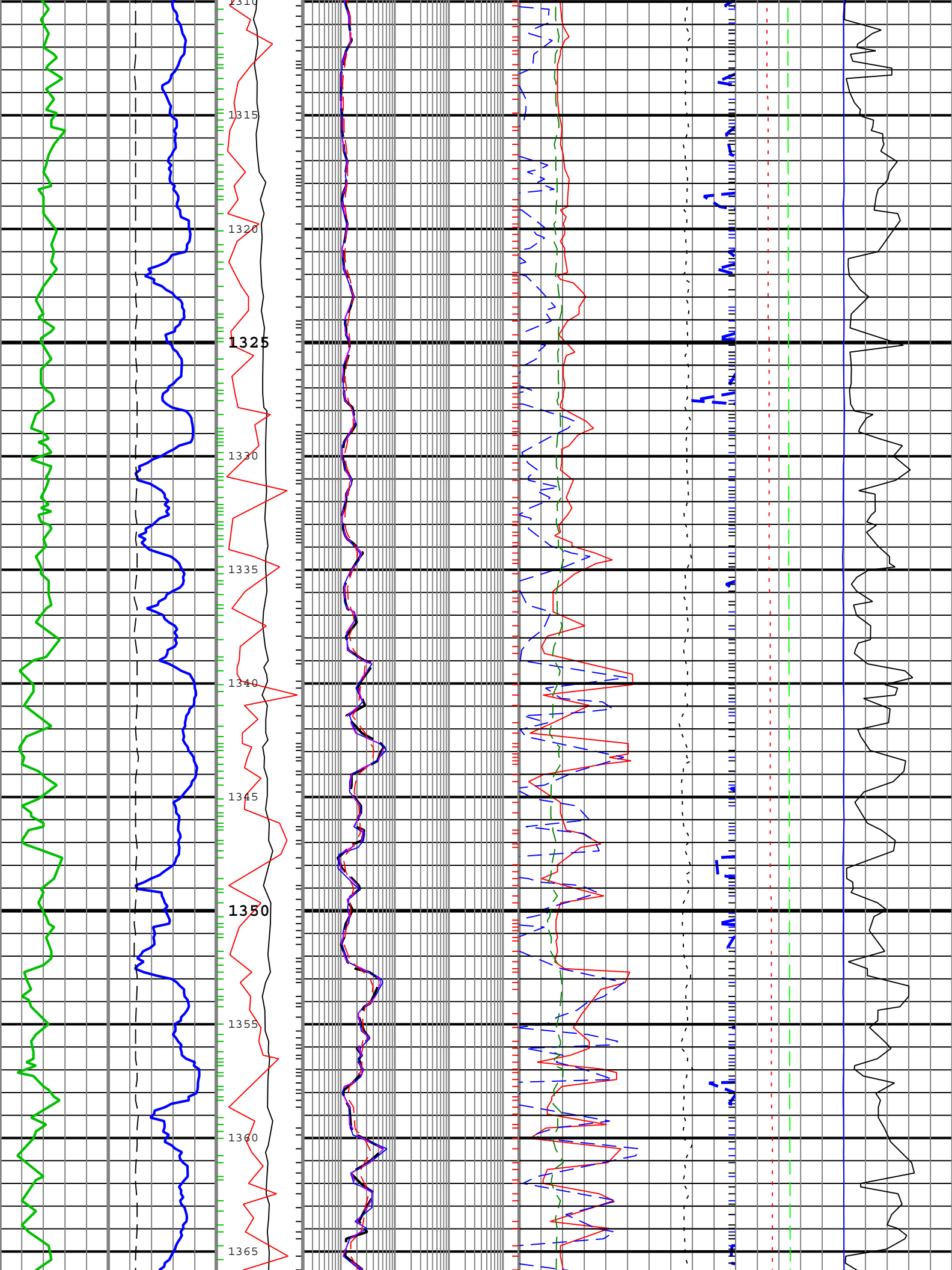
Phase Shift Resistivity 16 inch
Spacing at 2 MHz, Environmentally
Corrected. (P16H)

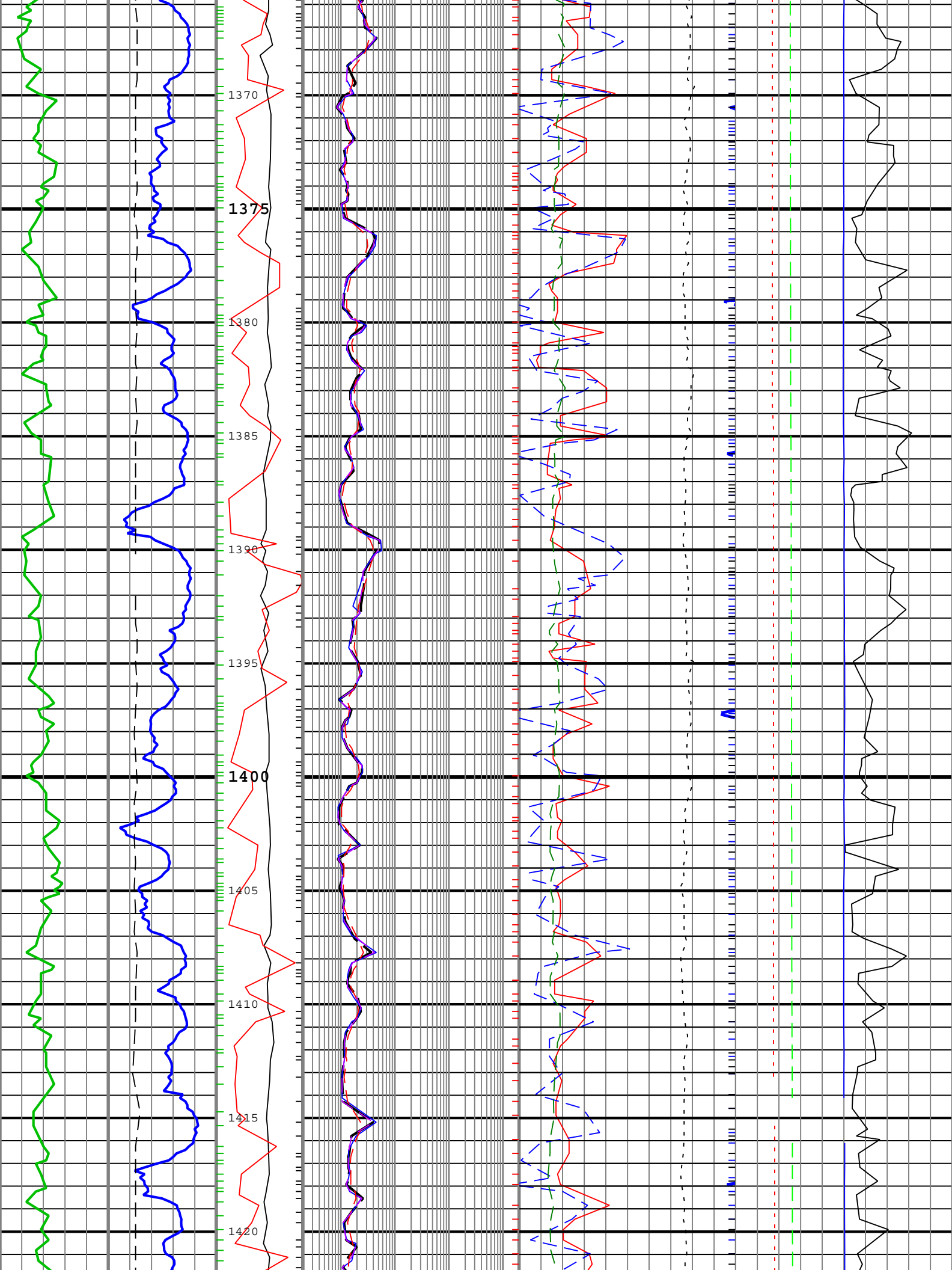
Bulk Density
Correction,
Computed
Downhole
(DRHO_A)

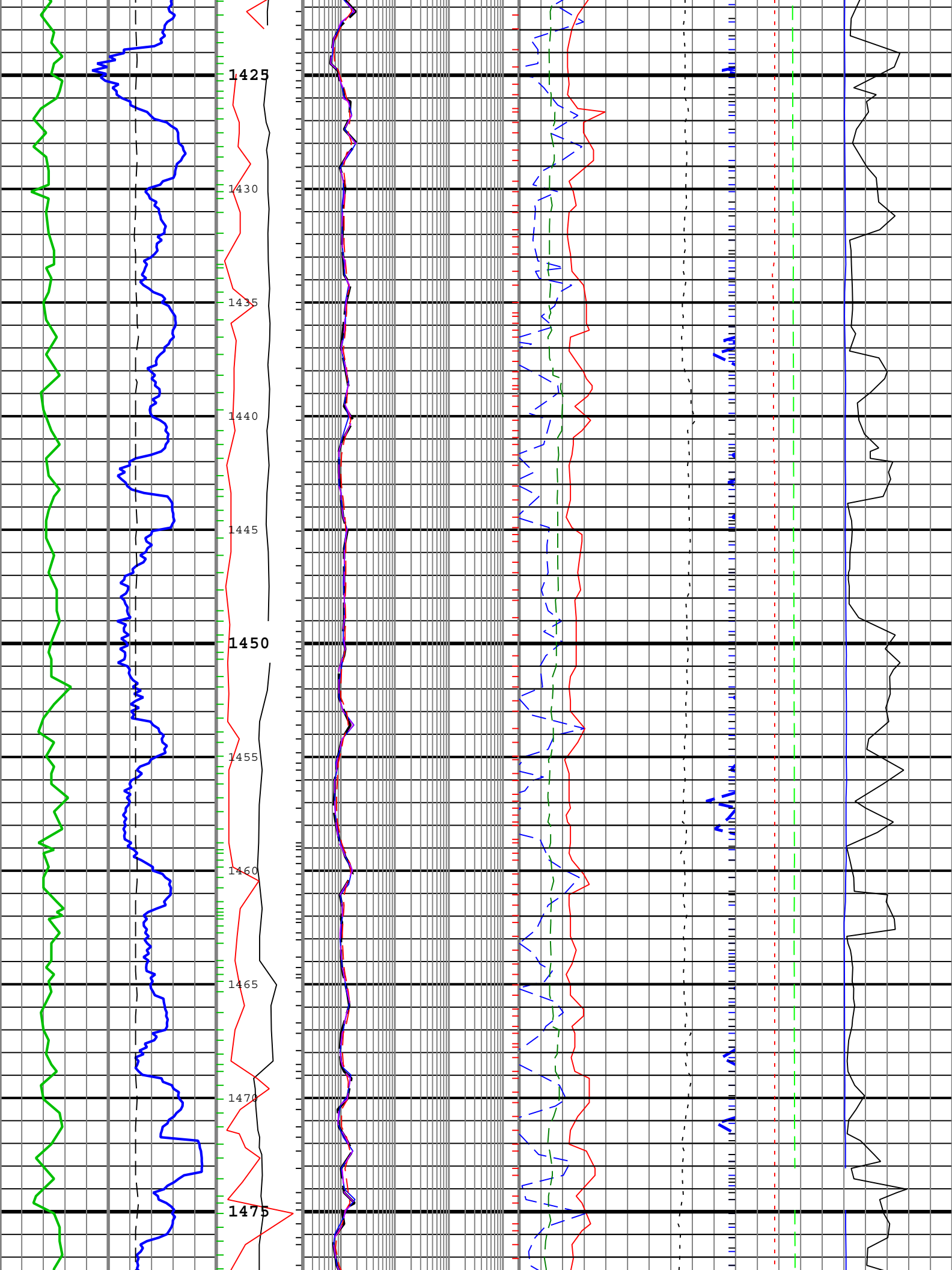
240	us/ft	40
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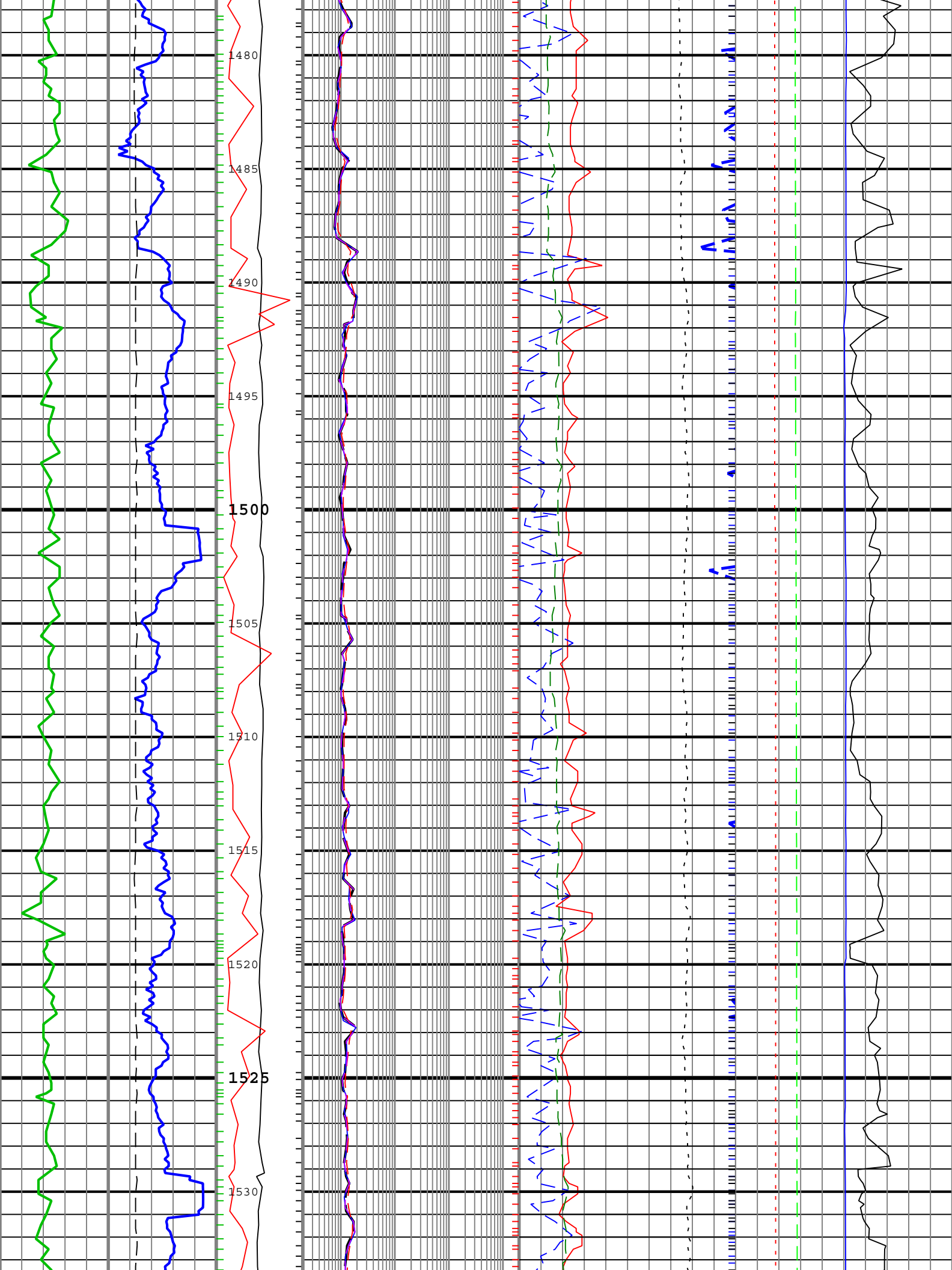
0.8	g/cm ³	1.8
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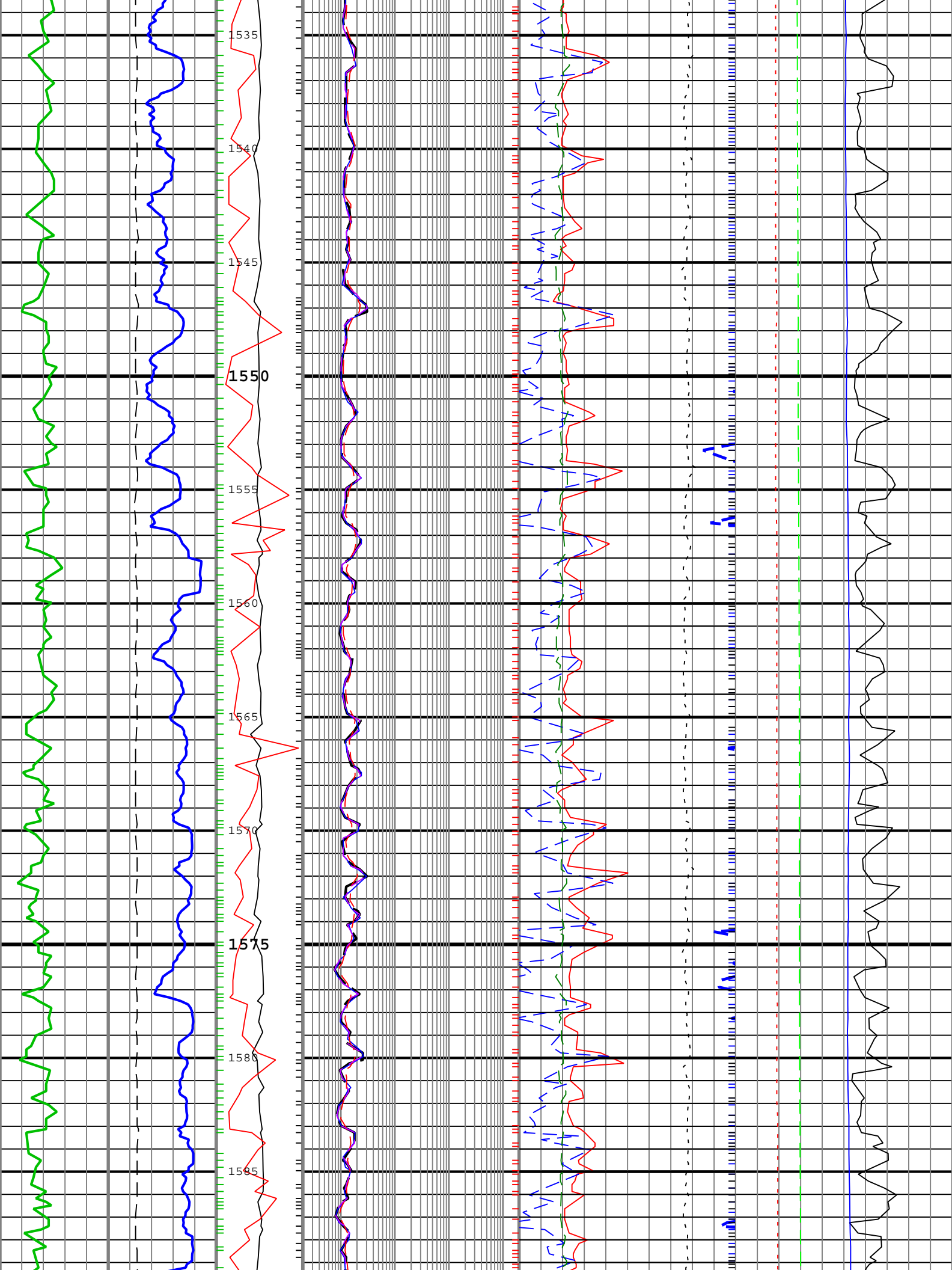


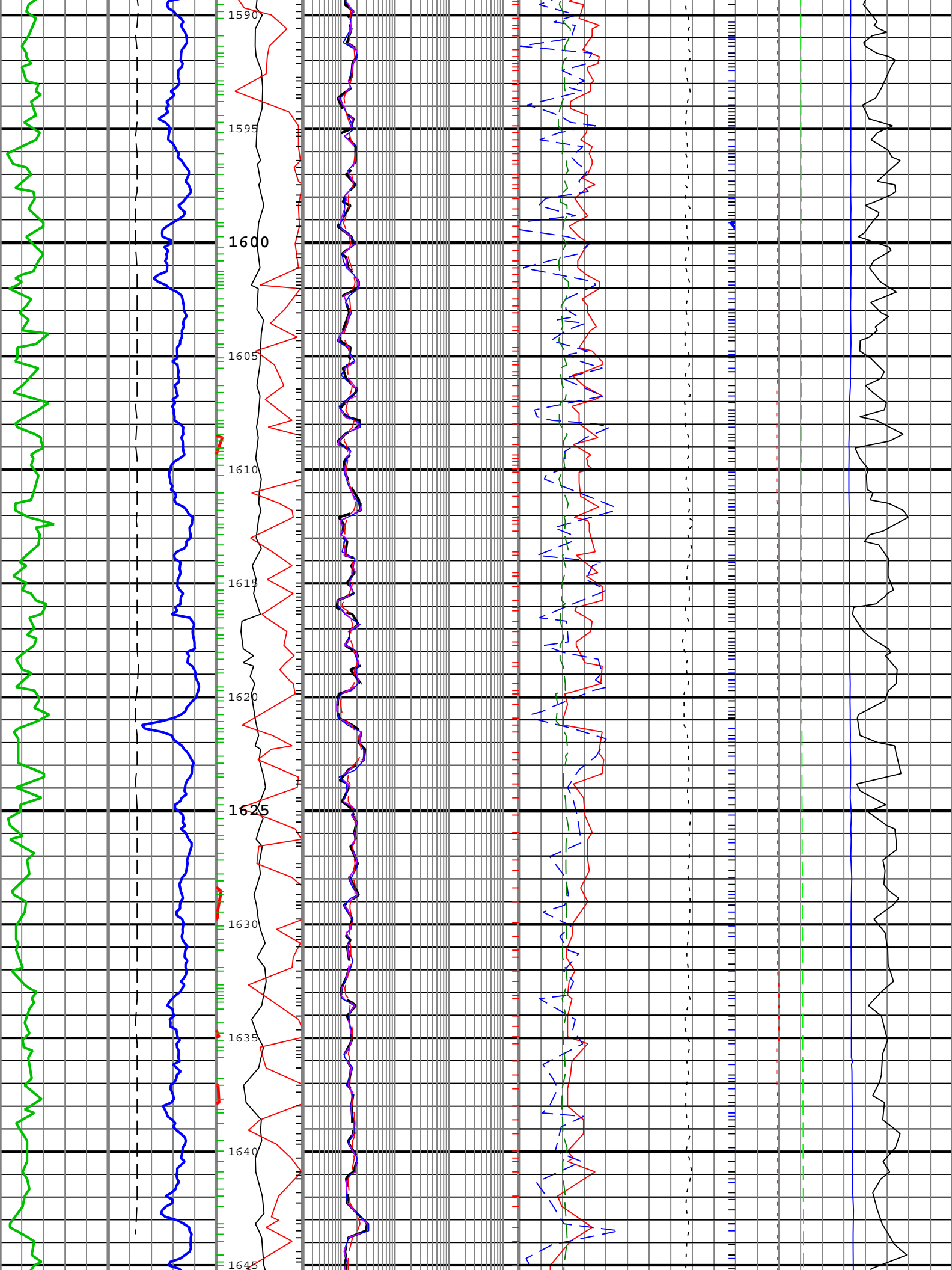


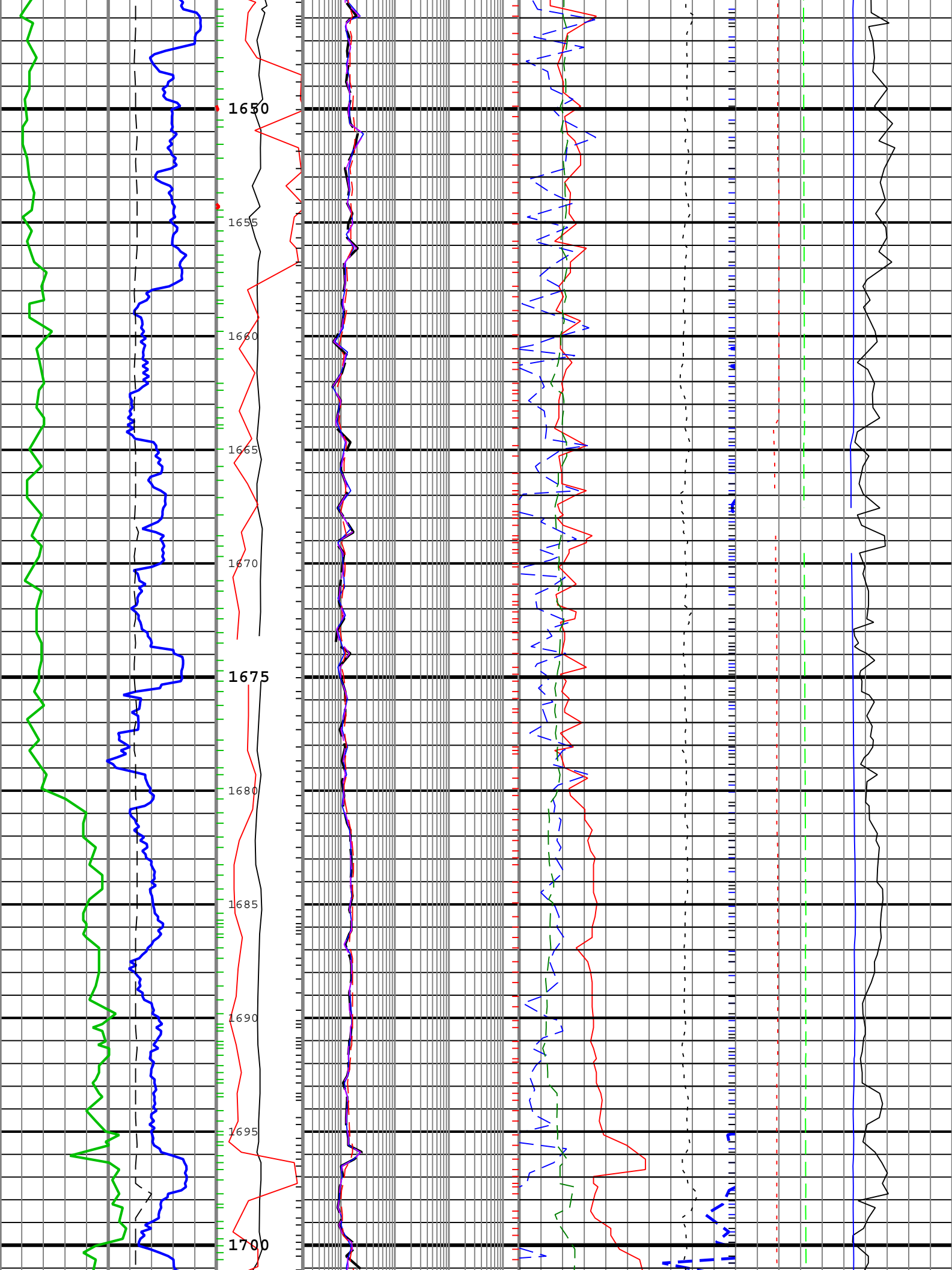


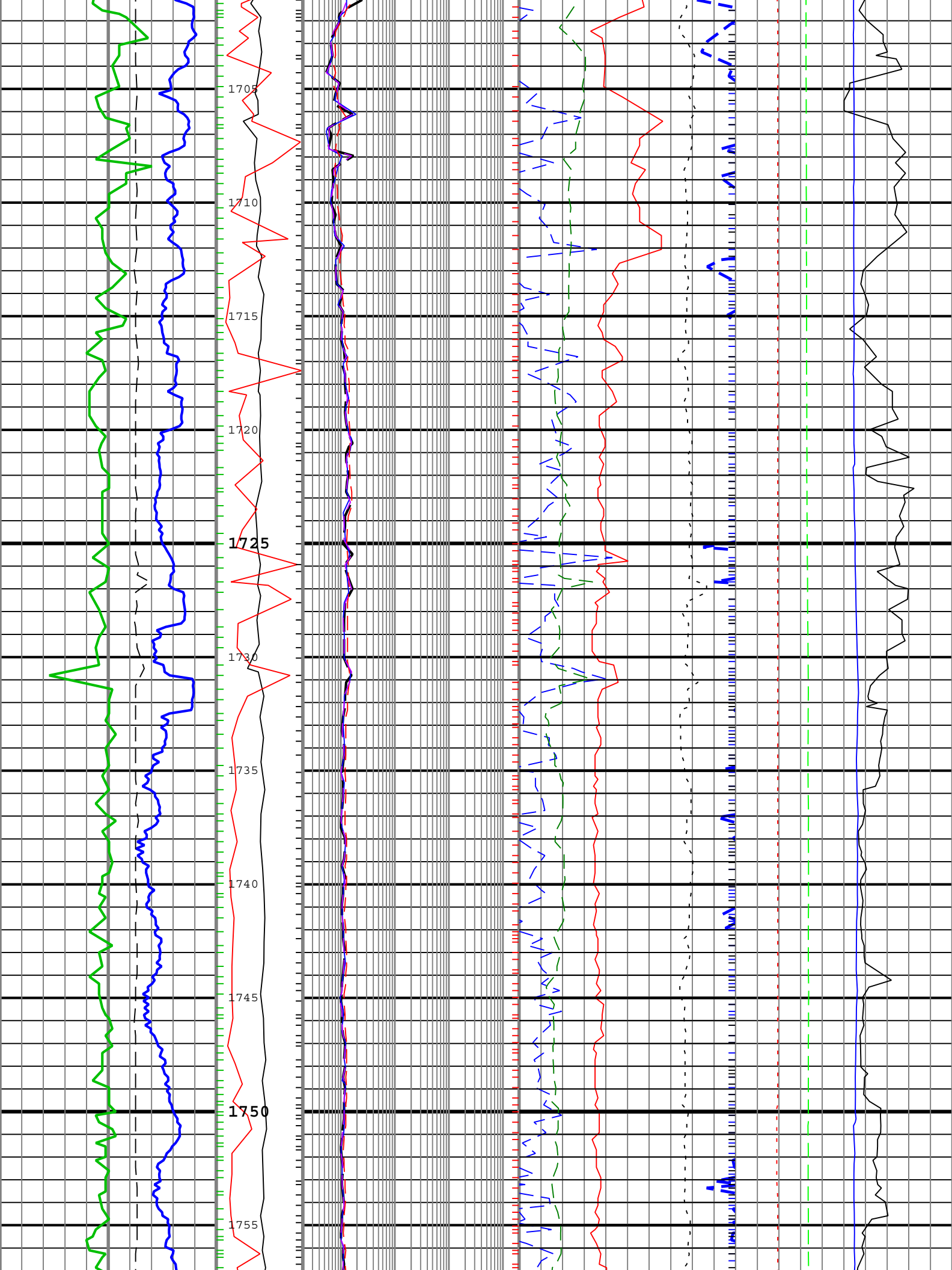


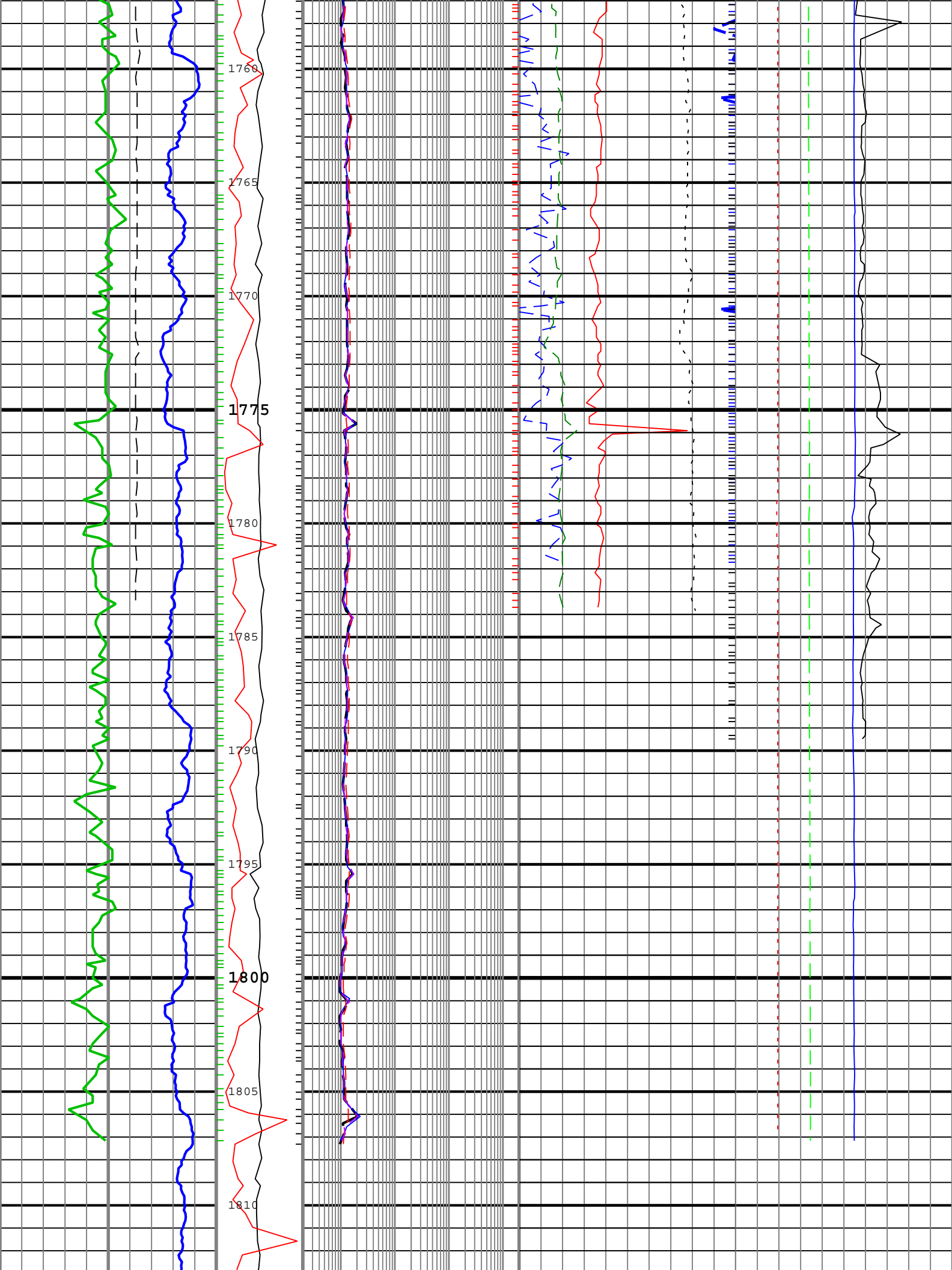


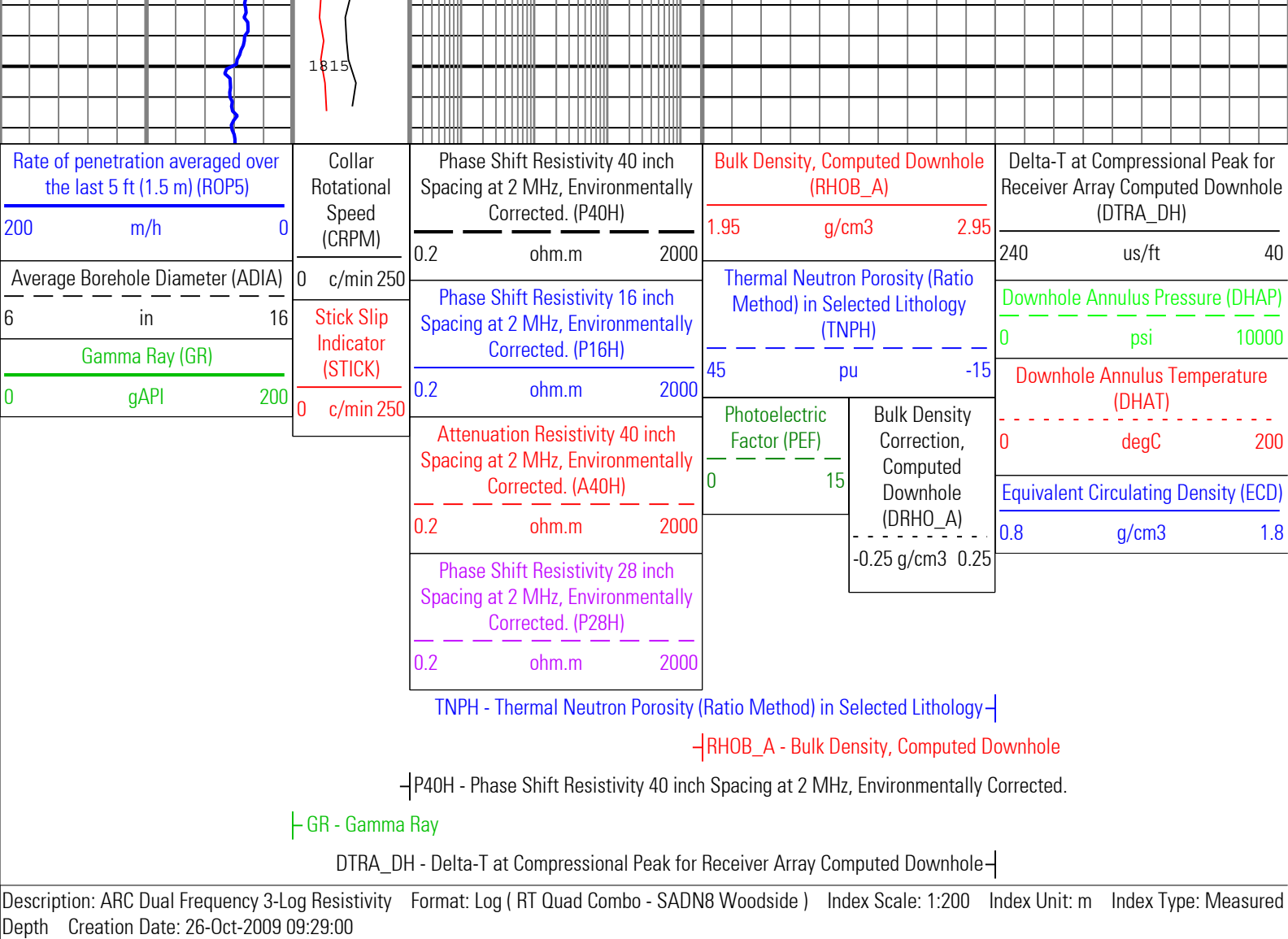












Channel Processing Parameters				
Parameter	Description	ToolPath	Value	Unit
BHK	Drilling Fluid Potassium Concentration	Borehole	Time Zoned	%
BHT	Bottom Hole Temperature	Borehole	39	degC
BS	Bit Size	COMPLETION	Depth Zoned	in
DFD	Drilling Fluid Density	Borehole	Time Zoned	g/cm3
DFT	Drilling Fluid Type	Borehole	Water	
FLEV	Depth of Drilling Fluid Level to LMF (Log Measured From)	Borehole	2.44	m
GGRD	Geothermal Gradient	Borehole	2	degF/100ft
GRSE	Generalized Mud Resistivity Selection	Borehole	Computed (GEN-9)	
GTSE	Generalized Temperature Selection	Borehole	Gradient From Surface	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MST	Mud Sample Temperature	Borehole	Time Zoned	degC
RHO_SEAWATER	Density of the Sea Water	Borehole	1.02	g/cm3
RMS	Resistivity of Mud Sample	Borehole	Time Zoned	ohm.m
SF_FLAG	Mud Return to Sea Floor (No Riser)?	Borehole	No	
SHT	Surface Hole Temperature	Borehole	10	degC

Depth Zone Parameters			
Parameter	Value	Start (m)	Stop (m)
BS	17.5	1275	1280
BS	12.25	1280	
All depth are actual			

Depth are lost.

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (m)	Stop Depth (m)
BHK	5.77	24-Oct-2009 19:34:49	26-Oct-2009 02:52:07	1274.72	1626.46
BHK	5.77	26-Oct-2009 02:52:07		1626.46	
DFD	1.29	24-Oct-2009 19:34:49	26-Oct-2009 02:52:31	1274.72	1626.54
DFD	1.26	26-Oct-2009 02:52:31		1626.54	
MST	19.4	24-Oct-2009 19:34:49	26-Oct-2009 04:24:53	1274.72	1673.78
MST	18.8	26-Oct-2009 04:24:53		1673.78	
RMS	0.08	24-Oct-2009 19:34:49	26-Oct-2009 04:24:53	1274.72	1673.78
RMS	0.09	26-Oct-2009 04:24:53		1673.78	

All depth are at tool zero.

Tool Control Parameters

Parameter	Description	ToolPath	Value	Unit
OFFBTM_TH	Threshold for deciding whether the bit is off bottom	DnMWorkflow	Time Zoned	m

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (m)	Stop Depth (m)
OFFBTM_TH	0.6	24-Oct-2009 19:34:49	25-Oct-2009 23:15:02	1274.72	1529.56
OFFBTM_TH	0.5	25-Oct-2009 23:15:02	26-Oct-2009 00:11:46	1529.56	1558.04
OFFBTM_TH	0.4	26-Oct-2009 00:11:46		1558.04	

All depth are at tool zero.

Company: Woodside Energy Ltd

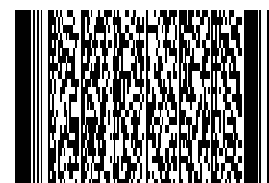
Well: Somerset-1

Field: T34P

Rig Name: Ocean Patriot

State: Tasmania

Country: Australia



Schlumberger

VISION Service

1:200 Measured Depth

Real Time Log