

Company: Woodside Energy Ltd

Well: Somerset-1
Field: T34P
Rig Name: Ocean Patriot
State: Tasmania
Country: Australia

Latitude: 39° 20' 36.76" S

Longitude: 142° 44' 56.14" E

Block: n.a

UWID: n.a

Rig Name: Ocean Patriot

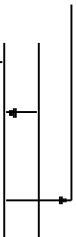
Rig Type: Semi-Submersible

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 2568.9(m)

Directional Surveys

Index Types:

Measured Depth

Shock and Vibrations

Index Scales:

1:500

Annulus Temperature and Pressure

Depth Source:

Driller's Depth

Depth Sensor:

DES

Conveyance:

Drill Pipe

Print Type:

Field

Spud Date:

19-Oct-2009

Disclaimer

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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

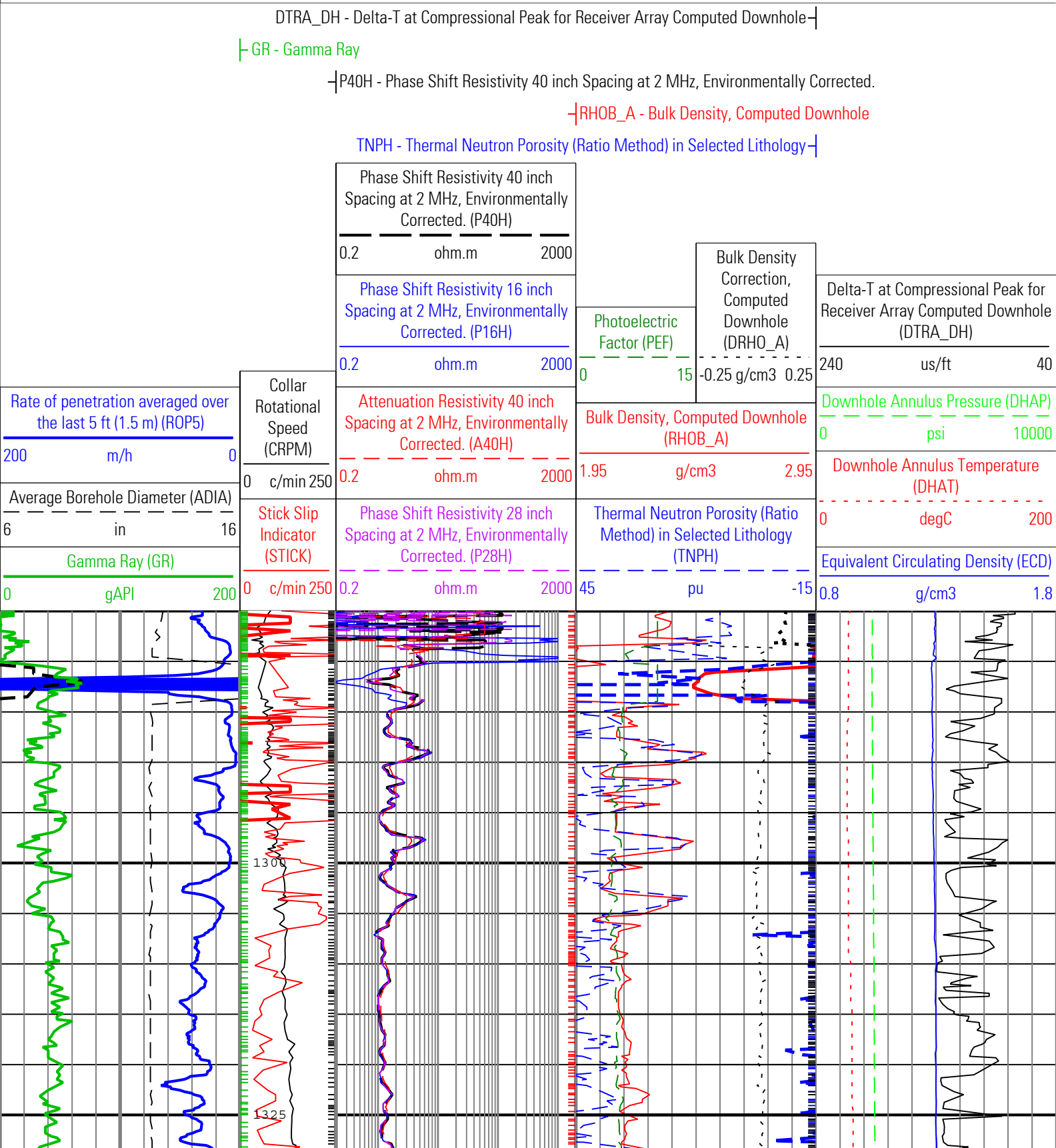
Survey Quality Index		
0 : Long, passed all criteria	2 : Long, failed mag criteria	10 : DMAG-Corrected

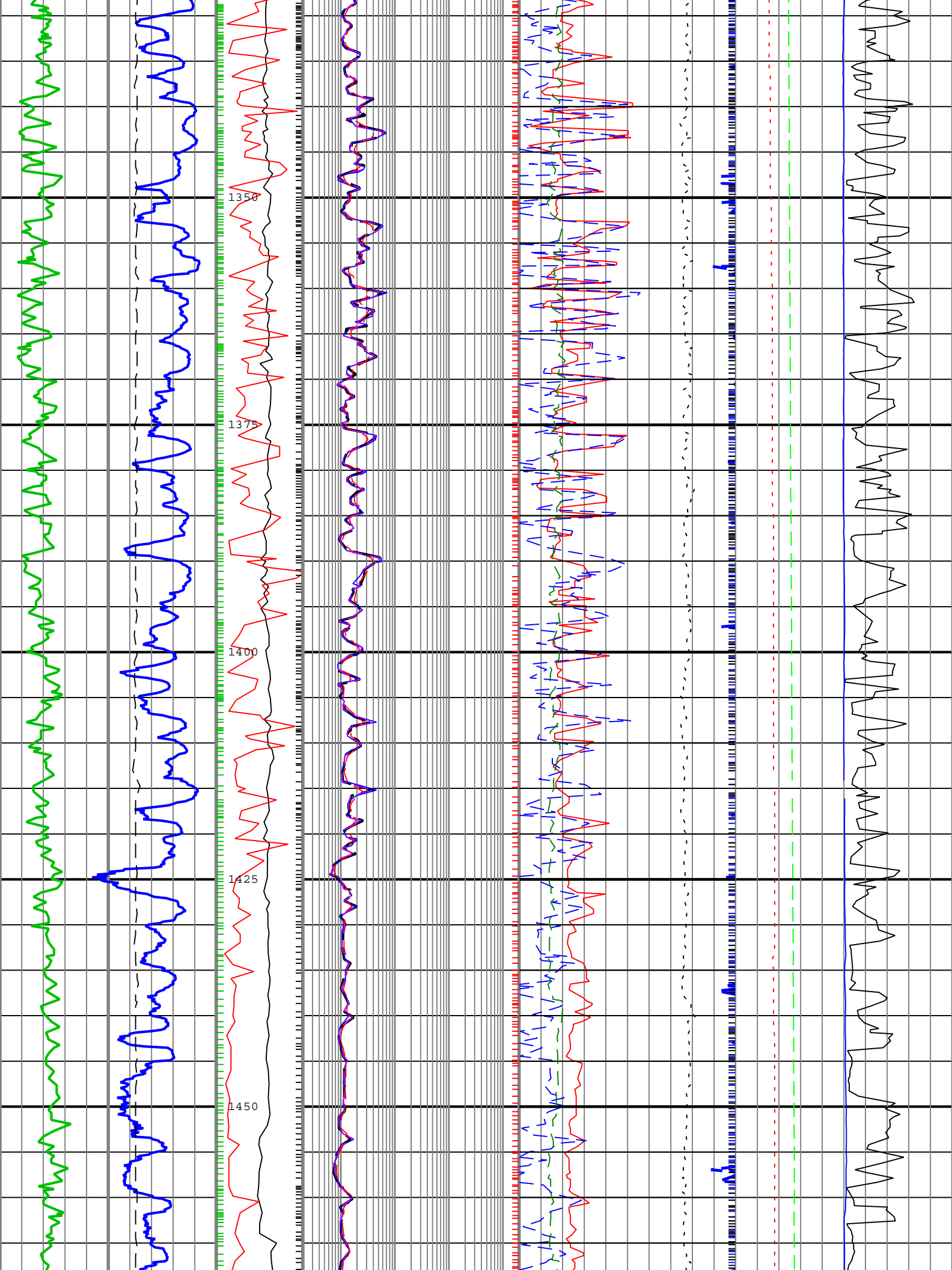
Survey Correction Index														
0 : No correction														

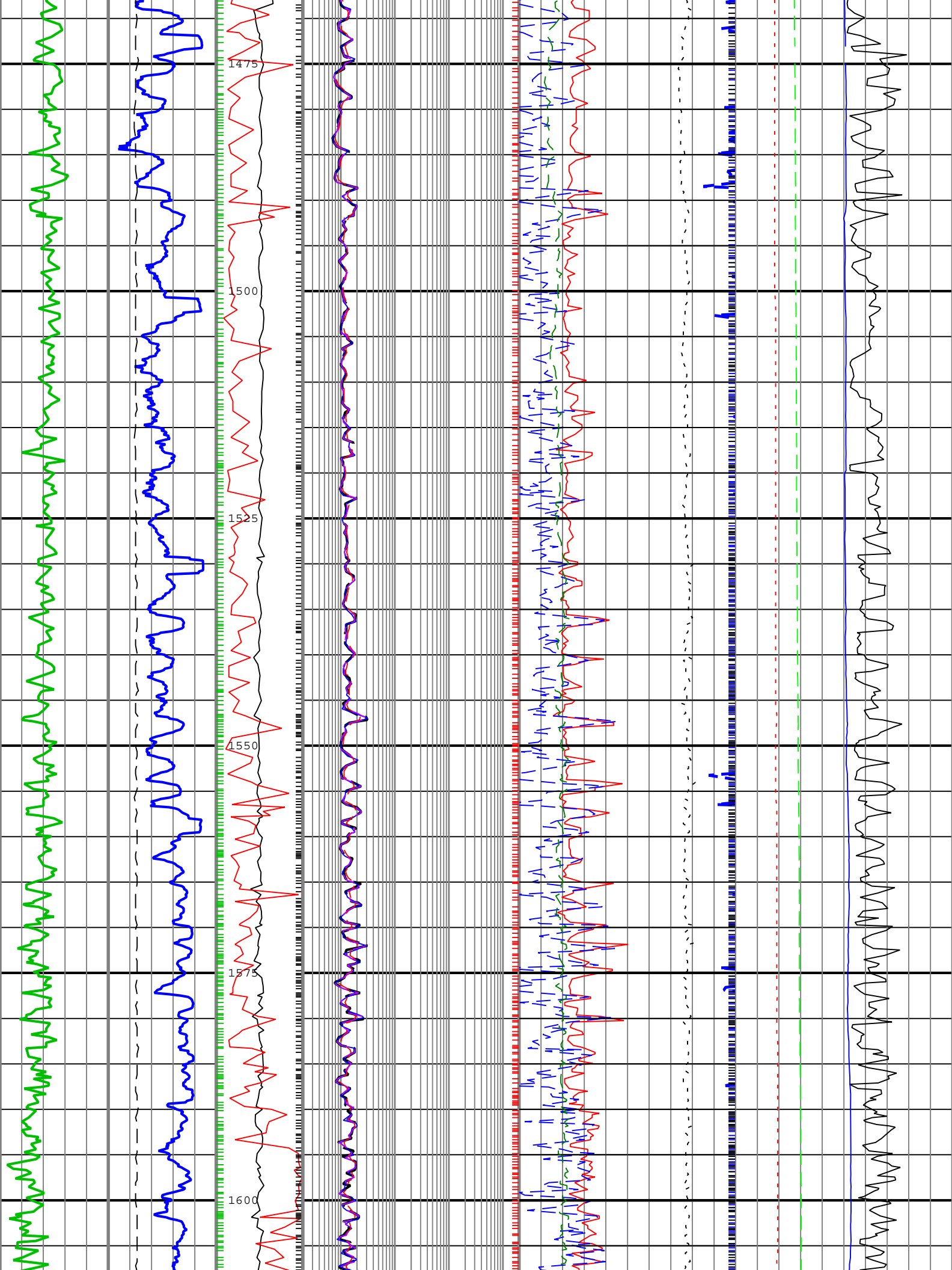
Seq	MD (m)	Incl (deg)	Azim (deg)	Course (m)	TVD (m)	V Sec (m)	N/ -S (m)	E/ -W (m)	Closure (m)	at Azi (deg)	DLS deg/30m	Tool Type	QI	CI
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP		
2	599.08	0.58	120.59	599.08	599.07	-1.54	-1.54	2.61	3.03	120.59	0.03	Manual	10	
3	684.35	0.43	120.90	85.27	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	

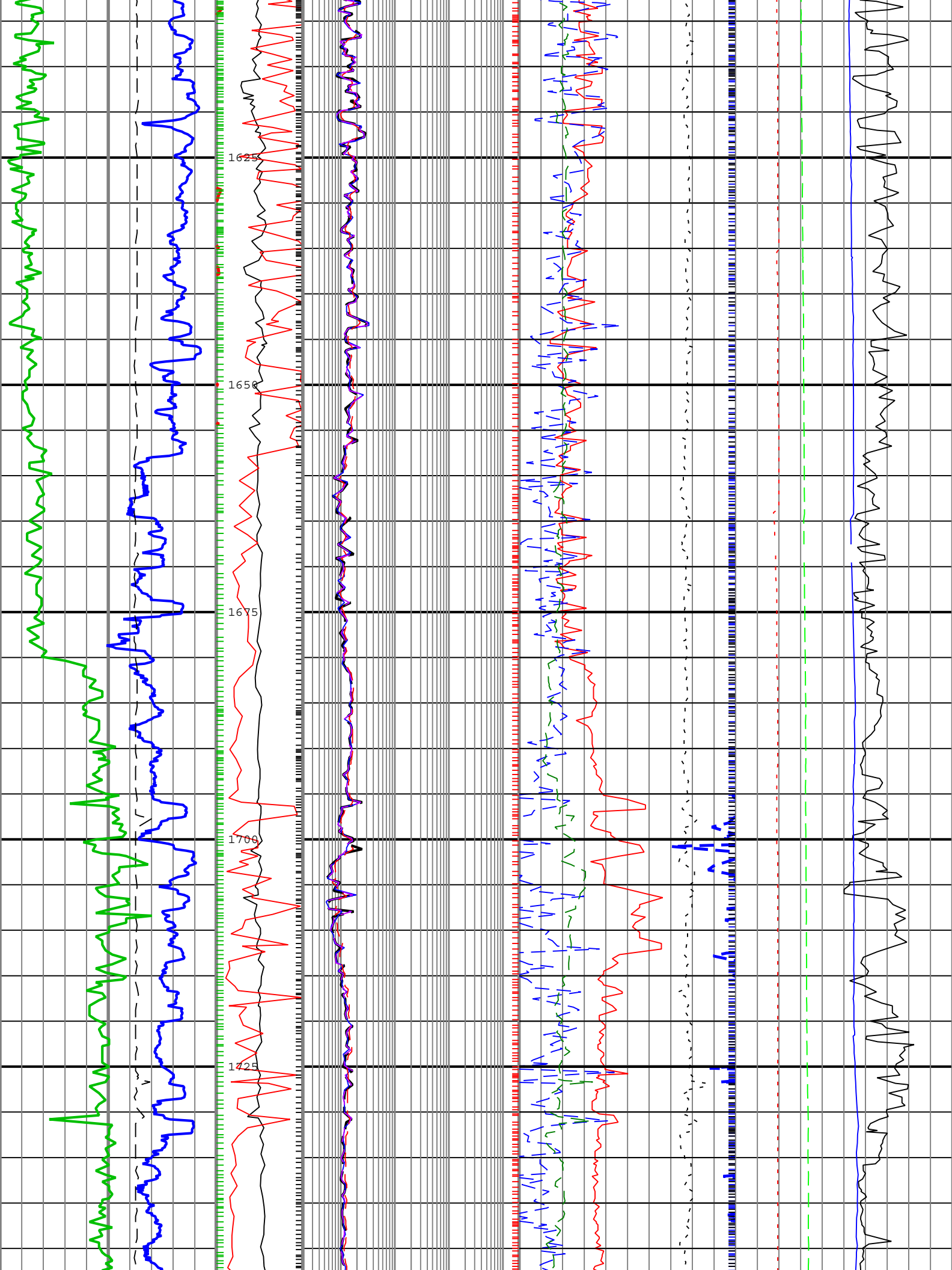
A40H	ARC8:ARC8:ARDC	6in - RT
ADIA	SADN8:SADN8	6in - RT
CRPM	TELE825:TELE825	6in - RT
DHAP	ARC8:ARC8	6in - RT
DHAT	ARC8:ARC8	6in - RT
DRHO_A	SADN8:SADN8	6in - RT
DTRA_DH	SONICVISION8:SONICVISION8	6in - RT
ECD	ARC8:ARC8:ARDC	6in - RT

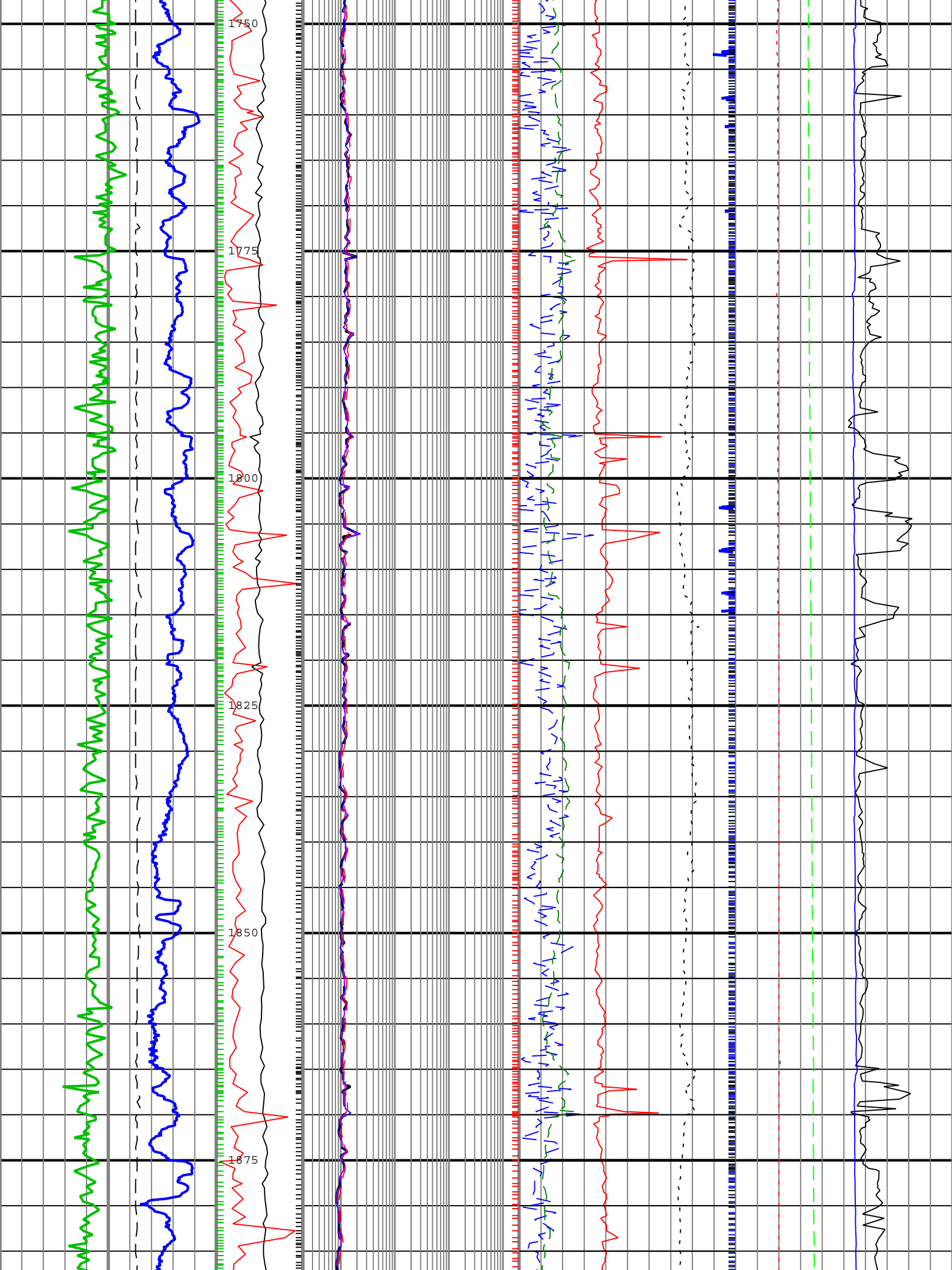
GR	ARC8:ARC8:ARDC	6in - RT
P16H	ARC8:ARC8:ARDC	6in - RT
P28H	ARC8:ARC8:ARDC	6in - RT
P40H	ARC8:ARC8:ARDC	6in - RT
PEF	SADN8:SADN8	6in - RT
RHOB_A	SADN8:SADN8	6in - RT
ROP5	DRILLING_SURFACE	6in - RT
STICK	TELE825:TELE825	6in - RT
TNPH	SADN8:SADN8:ADNP	6in - RT

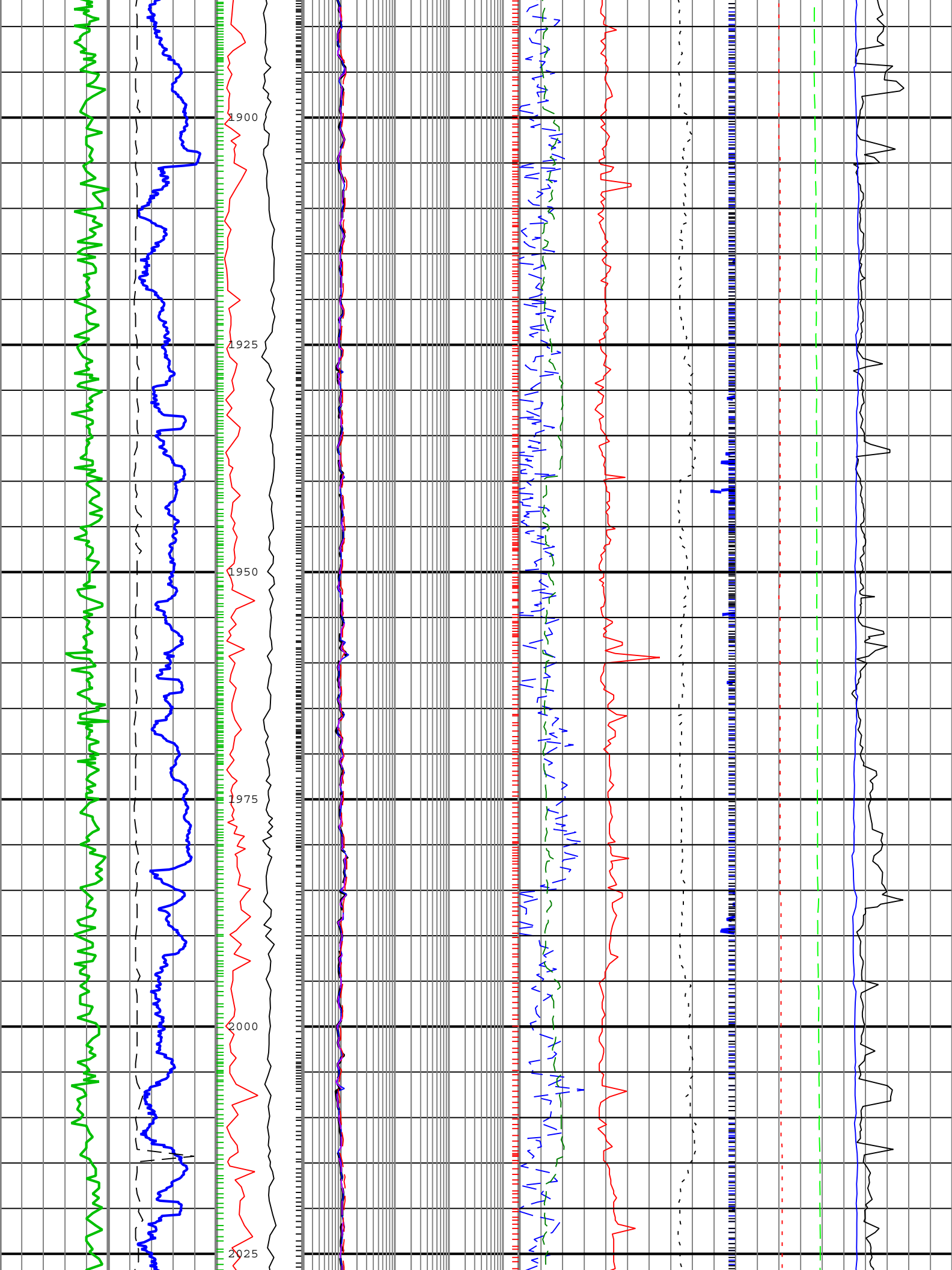


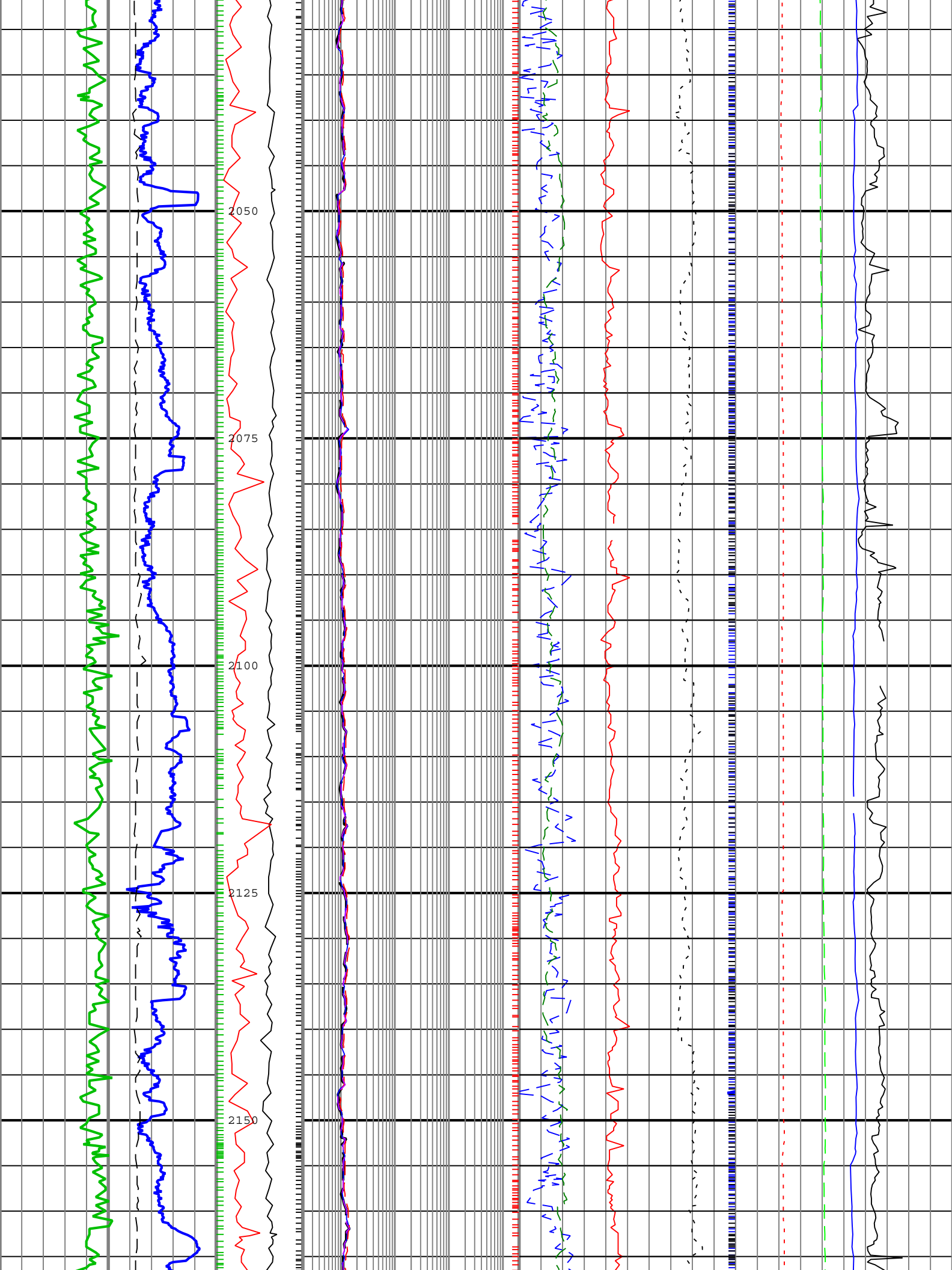


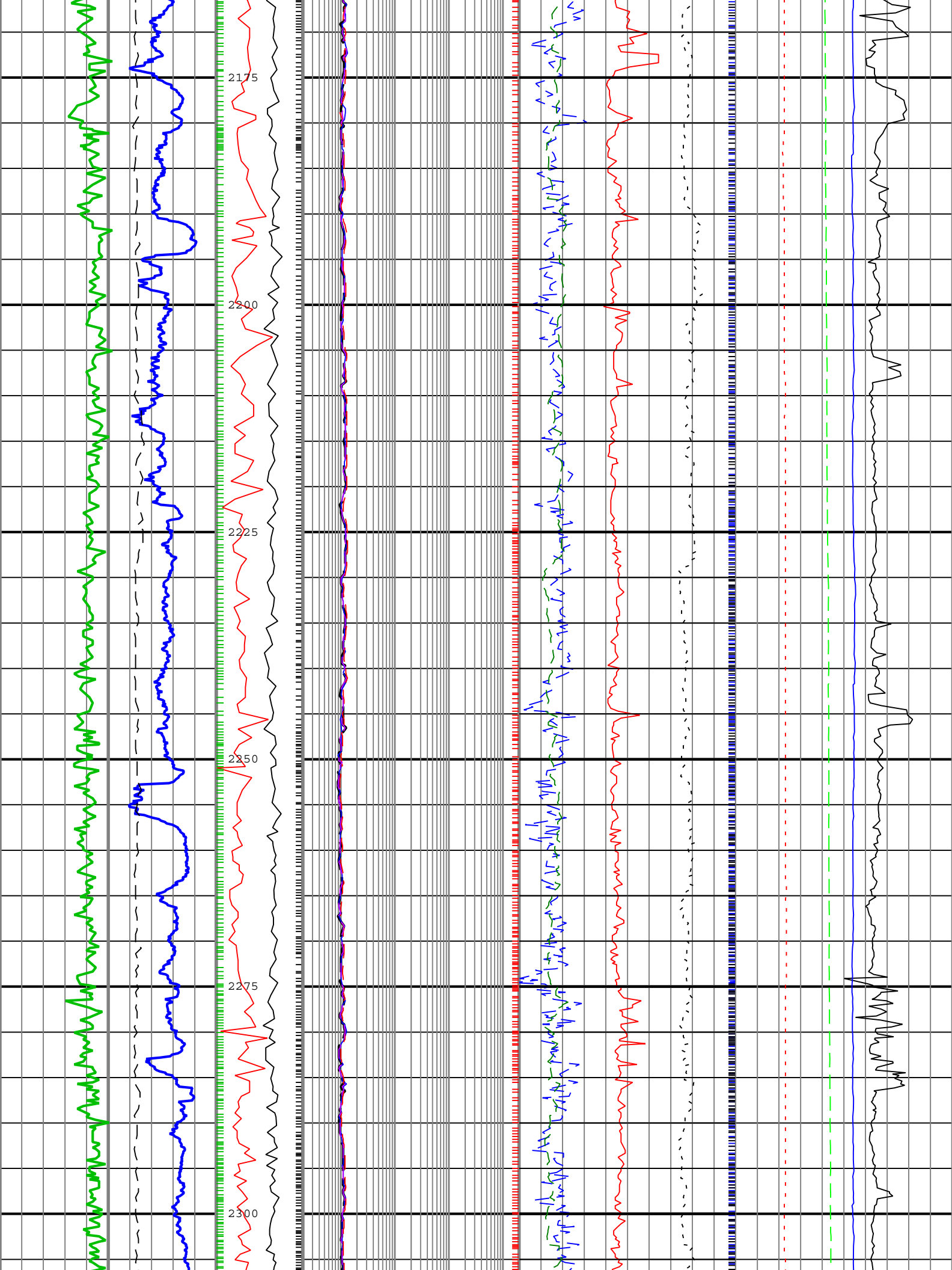


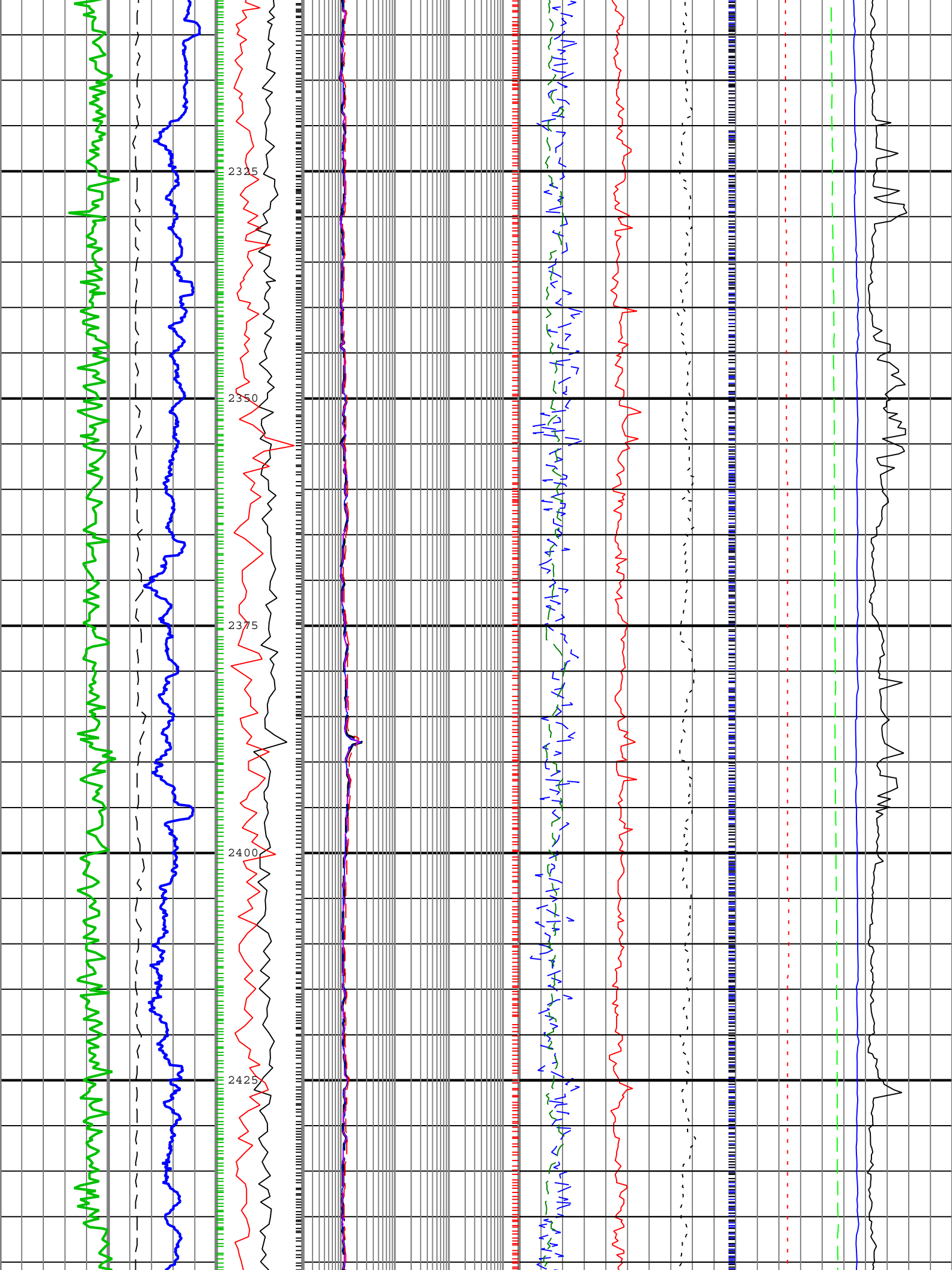


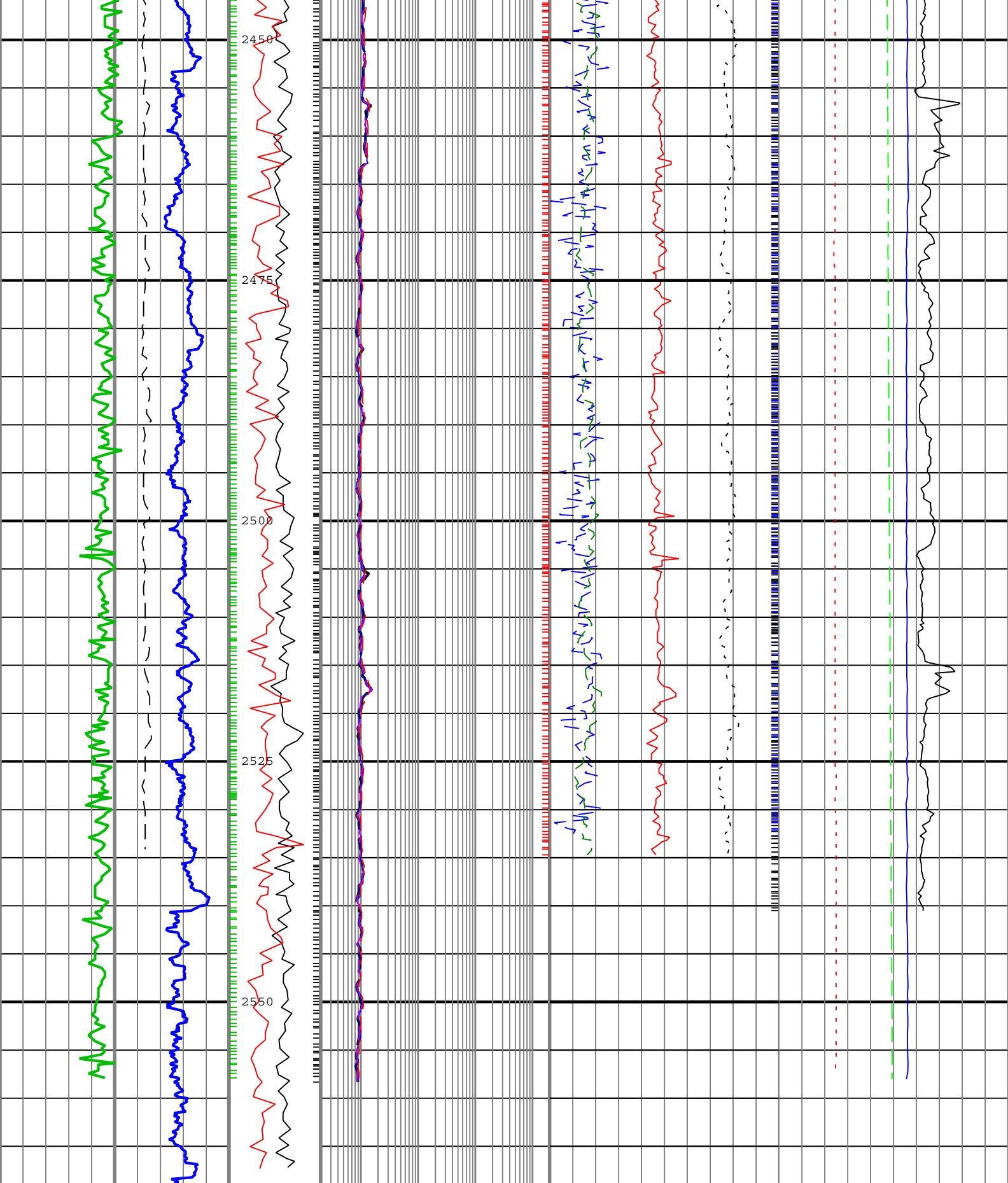












Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5)		Collar Rotational Speed (CRPM)	Phase Shift Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (P40H)		Bulk Density, Computed Downhole (RHOB_A)		Delta-T at Compressional Peak for Receiver Array Computed Downhole (DTRA_DH)						
200	m/h		0	0.2	ohm.m	2000	1.95	g/cm3	2.95	240	us/ft	40	
Average Borehole Diameter (ADIA)		0	c/min		250	Thermal Neutron Porosity (Ratio Method) in Selected Lithology (TNPH)		Downhole Annulus Pressure (DHAP)					
6	in	16	Stick Slip Indicator	Phase Shift Resistivity 16 inch Spacing at 2 MHz, Environmentally Corrected. (P16H)				0				psi	10000

Gamma Ray (GR)

0gAPI200

(STICK)

0c/min250

Corrected. (P10H)

0.2ohm.m2000

Attenuation Resistivity 40 inch Spacing at 2 MHz, Environmentally Corrected. (A40H)

0.2ohm.m2000

Phase Shift Resistivity 28 inch Spacing at 2 MHz, Environmentally Corrected. (P28H)

0.2ohm.m2000

45pu-15

Photoelectric Factor (PEF)

015

Bulk Density Correction, Computed Downhole (DRHO_A)

-0.25 g/cm30.25

Downhole Annulus Temperature (DHAT)

0degC200

Equivalent Circulating Density (ECD)

0.8g/cm31.8

TNPH - Thermal Neutron Porosity (Ratio Method) in Selected Lithology

RHOB_A - Bulk Density, Computed Downhole

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

GR - Gamma Ray

DTRA_DH - Delta-T at Compressional Peak for Receiver Array Computed Downhole

Description: ARC Dual Frequency 3-Log Resistivity Format: Log (RT Quad Combo - SADN8 Woodside) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth Creation Date: 27-Oct-2009 08:55:46

Channel Processing Parameters					
Parameter	Description	ToolPath	Value	Unit	
BHK	Drilling Fluid Potassium Concentration	Borehole	Time Zoned	%	
BHT	Bottom Hole Temperature	Borehole	40	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	1.1	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.					
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	27-Oct-2009 05:09:59	1626.46	2451.68
BHK	4.52	27-Oct-2009 05:09:59		2451.68	
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	27-Oct-2009 05:10:29	1626.54	2451.68
DFD	1.3	27-Oct-2009 05:10:29		2451.68	
MST	19.4	24-Oct-2009 19:34:49	26-Oct-2009 04:24:53	1274.72	1673.78

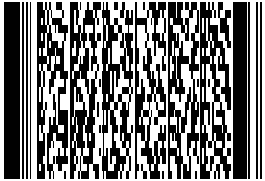
MST	18.8	26-Oct-2009 04:24:53	27-Oct-2009 01:55:15	1673.78	2342.67
MST	20	27-Oct-2009 01:55:15		2342.67	
RMS	0.08	24-Oct-2009 19:34:49	26-Oct-2009 04:24:53	1274.72	1673.78
RMS	0.09	26-Oct-2009 04:24:53	27-Oct-2009 01:55:15	1673.78	2342.67
RMS	0.1	27-Oct-2009 01:55:15		2342.67	

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	26-Oct-2009 18:26:10	1558.04	2126.79
OFFBTM_TH	0.5	26-Oct-2009 18:26:10	26-Oct-2009 18:26:39	2126.79	2127.1
OFFBTM_TH	0.6	26-Oct-2009 18:26:39	26-Oct-2009 18:36:19	2127.1	2132.63
OFFBTM_TH	0.4	26-Oct-2009 18:36:19		2132.63	

All depth are at tool zero.

Company:	Woodside Energy Ltd	
Well:	Somerset-1	
Field:	T34P	
Rig Name:	Ocean Patriot	
State:	Tasmania	
Country:	Australia	

	VISION Service
	1:500 Measured Depth
	Real Time Log