

# HALLIBURTON

## SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMPENSATED TRUE RESISTIVITY

**URSA OPERATING COMPANY**  
**TOMPKINS 41A-08-07-95**

**PARACHUTE**  
**GARFIELD**  
**COLORADO**

**COMPANY** URSA OPERATING COMPANY  
**WELL** TOMPKINS 41A-08-07-95  
**FIELD/BLOCK** PARACHUTE  
**COUNTY** GARFIELD  
**STATE** COLORADO

API No. 05045224800000  
Location SURFACE HOLE LOCATION:  
223' FSL & 596' FEL

Other Services:

COMPANY  
WELL  
FIELD/BLOCK  
COUNTY  
STATE

Sect. 11 Twp. 6S Rge. 92W  
Elev. 5532.00 ft  
D.F. 5548.00 ft  
G.L. 5532.00 ft

Permanent Datum Log measured from KB  
Drilling measured from KB  
Elev. 5532.00 ft  
D.F. 5548.00 ft  
G.L. 5532.00 ft

Date	01-Jul-16
Run No.	ONE
Depth - Driller	6900.00 ft
Depth - Logger	6854.0 ft
Bottom - Logged Interval	6854.0 ft
Top - Logged Interval	1736.0 ft
Casing - Driller	8.625 in @ 1732.0 ft
Casing - Logger	1736.0 ft
Bit Size	7.875 in @
Type Fluid in Hole	Water Based Mud
Density	10.2 ppg @ 45.00 s/qt
PH	9.60 pH N/A
Source of Sample	MUD TANK
Rm @ Meas. Temperature	1.210 ohmm @ 65.10 degF
Rmf @ Meas. Temperature	1.15 ohmm @ 64.00 degF
Rmc @ Meas. Temperature	1.370 ohmm @ 65.00 degF
Source Rmf	MEASURED
Rm @ BHT	0.49 ohmm @ 170.0 degF
Time Since Circulation	3.5300 hr
Time on Bottom	01-Jul-16 22:17:16.000
Max. Rec. Temperature	170.0 degF @ 6854.0 ft
Equipment Location	11335318 R.S. WY
Recorded By	B. HOYTAL
Witnessed By	N.GILL

Fold here

Service Ticket No.: 903395502		API Serial No.: 05045224800000		PGM Version: WL INSITE R4.6.7 (Build 8)				
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES				
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth-Driller								
Type Fluid in Hole								
Density	Viscosity							
Ph	Fluid Loss							
Source of Sample				RESISTIVITY EQUIPMENT DATA				
Rm @ Meas. Temp	@	@		Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
Rmf @ Meas. Temp.	@	@		ONE	SACRT	N/A	0.25 in S.O.	N/A
Rmc @ Meas. Temp.	@	@			12055741			
Source Rmf	Rmc				12055737			
Rm @ BHT	@	@						
Rmf @ BHT	@	@						
Rmc @ BHT	@	@						
EQUIPMENT DATA								
GAMMA		ACOUSTIC		DENSITY		NEUTRON		
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE	
Serial No.	11577721	Serial No.		Serial No.	11790681	Serial No.	11790665	
Model No.	S4TG	Model No.		Model No.	SSDL	Model No.	SDSN	
Diameter	2.35 in	No. of Cent.		Diameter	2.35 in	Diameter	2.35 in	
Detector Model No.	S4TG	Spacing		Log Type	GAMMA	Log Type	THERMAL	
Type	SCINT.			Source Type	Cs137	Source Type	Am241Be	
Length	8 in	LSA [Y/N]		Serial No.	5265GW	Serial No.	DSN-431	
Distance to Source	7 ft	FWDA [Y/N]		Strength	1.78 Ci	Strength	15 Ci	
LOGGING DATA								

GENERAL			GAMMA		ACOUSTIC		DENSITY			NEUTRON				
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	6854	1736	REC	0	200				0.3 decp	-0.1 decp	2.68 g/cc	0.3 decp	-0.1 decp	SAND

**DIRECTIONAL INFORMATION**

Maximum Deviation	@	KOP	@
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Remarks: TOOL STRING CONFIGURATION: SBLT-C/SBLT-S/SMCSA/SBLT-B/SBLT-I/S4TG/SDSN/SSDL/SACRT/SBN

ANNULAR HOLE VOLUME CALCULATED USING 4.5-INCH CASING

SDSN DECENTRALIZER AND SACRT STANDOFFS WERE NOT USED DUE TO CONVEYANCE METHOD

DEPTH BASED ON DRILLER'S DEPTH AQUIRED THROUGH PASON

ULTRASLIM SMART CONVEYANCE USED FOR LOGGING METHOD

LATITUDE: 40.22745° N

LONGITUDE: 108.014002° W

CREW: C. SIMONS, D.GAYLOR, & D. FLENDERS

\*\*\* THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, ROCK SPRINGS, WY (307) 352-8600 \*\*\*

RIG: CAPSTAR 321

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## PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	10.200	ppg
	SHARED	WAGT	Weighting Agent	Barite	
	SHARED	BSAL	Borehole salinity	140.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	1.210	ohmm
	SHARED	TRM	Temperature of Mud	65.1	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	6854.00	ft
	SHARED	BHT	Bottom Hole Temperature	170.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	S4TG	
	SHARED	TEMM	Temperature Master Tool	NONE	
	S4TG	GROK	Process Gamma Ray?	Yes	
	S4TG	GRSO	Gamma Tool Standoff	0.000	in
	S4TG	GEOK	Process Gamma Ray EVR?	No	
	S4TG	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	S4TG	BHSM	Borehole Size Source Tool	SSDL	

SDSN	DNOK	Process DSN?	Yes	
SDSN	DEOK	Process DSN EVR?	No	
SDSN	NLIT	Neutron Lithology	Sandstone	
SDSN	DNSO	DSNTool Standoff	0.000	in
SDSN	DNTP	Temperature Correction Type	None	
SDSN	DPRS	DSN Pressure Correction Type	None	
SDSN	SHCO	View More Correction Options	No	
SDSN	UTVD	Use TVD for Gradient Corrections?	No	
SDSN	LHWT	Logging Horizontal Water Tank?	No	
SDSN	USND	Use Var StandOff?	No	
SDSN	BHSM	Borehole Size Source Tool	SSDL	
SSDL	CLOK	Process Caliper Outputs?	Yes	
SSDL Pad	DNOK	Process Density?	Yes	
SSDL Pad	DNOK	Process Density EVR?	No	
SSDL Pad	CB	Logging Calibration Blocks?	No	
SSDL Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SSDL Pad	DTWN	Disable temperature warning	No	
SSDL Pad	MLPE	Mute Large Pe's? (Recommended Yes-Liquid, No-Air)	Yes	
SSDL Pad	DMA	Formation Density Matrix	2.680	g/cc
SSDL Pad	DFL	Formation Density Fluid	1.000	g/cc
SSDL Pad	BHSM	Borehole Size Source Tool	SSDL	
SACRT Sonde	RTOK	Process ACRT?	Yes	
SACRT Sonde	MNSO	Minimum Tool Standoff	0.25	in
SACRT Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
SACRT Sonde	TPOS	Tool Position	Eccentered	
SACRT Sonde	RMOP	Rmud Source	Mud Cell	
SACRT Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
SACRT Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
SACRT Sonde	THQY	Threshold Quality	0.50	
SACRT Sonde	MRFX	Fixed mud resistivity	2000	ohmm
SACRT Sonde	BHSM	Borehole Size Source Tool	SSDL	
SACRT Sonde	MBFL	Apply Corkscrew Effect?	No	

BOTTOM

Data: TOMPKINS\_USC\0001 US\_TRIPLE\004.02 02-Jul-16 05:35 Up

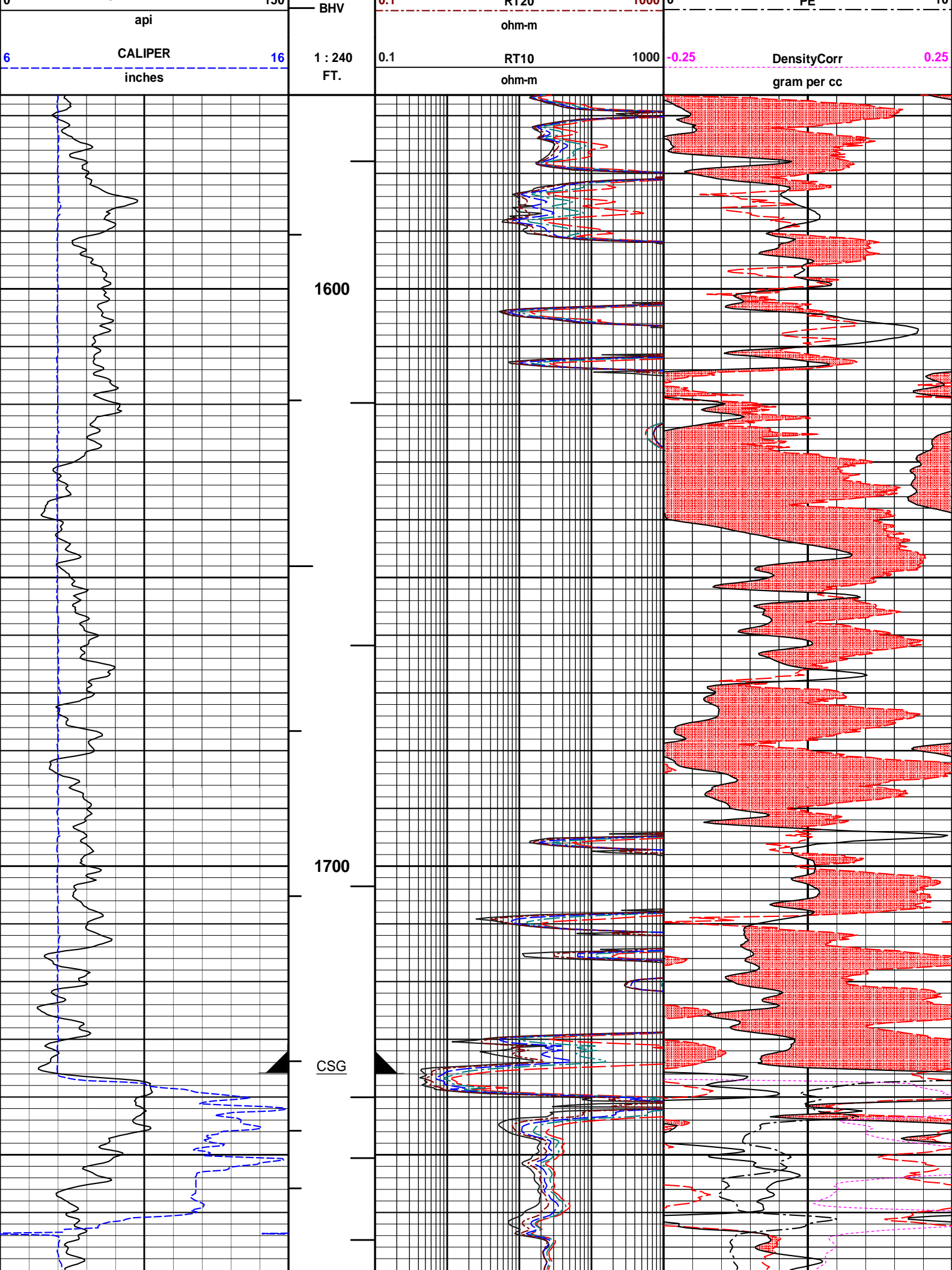
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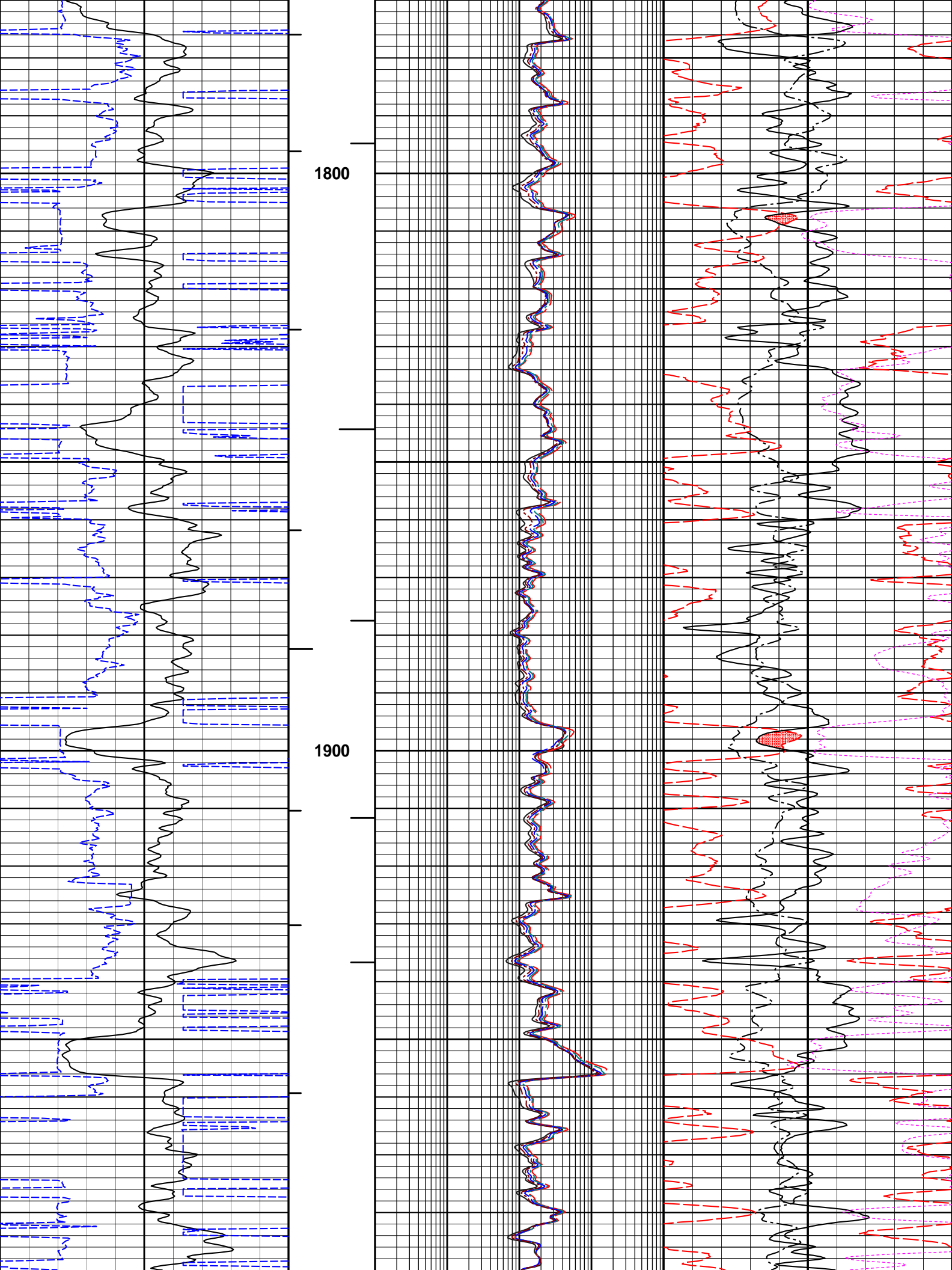


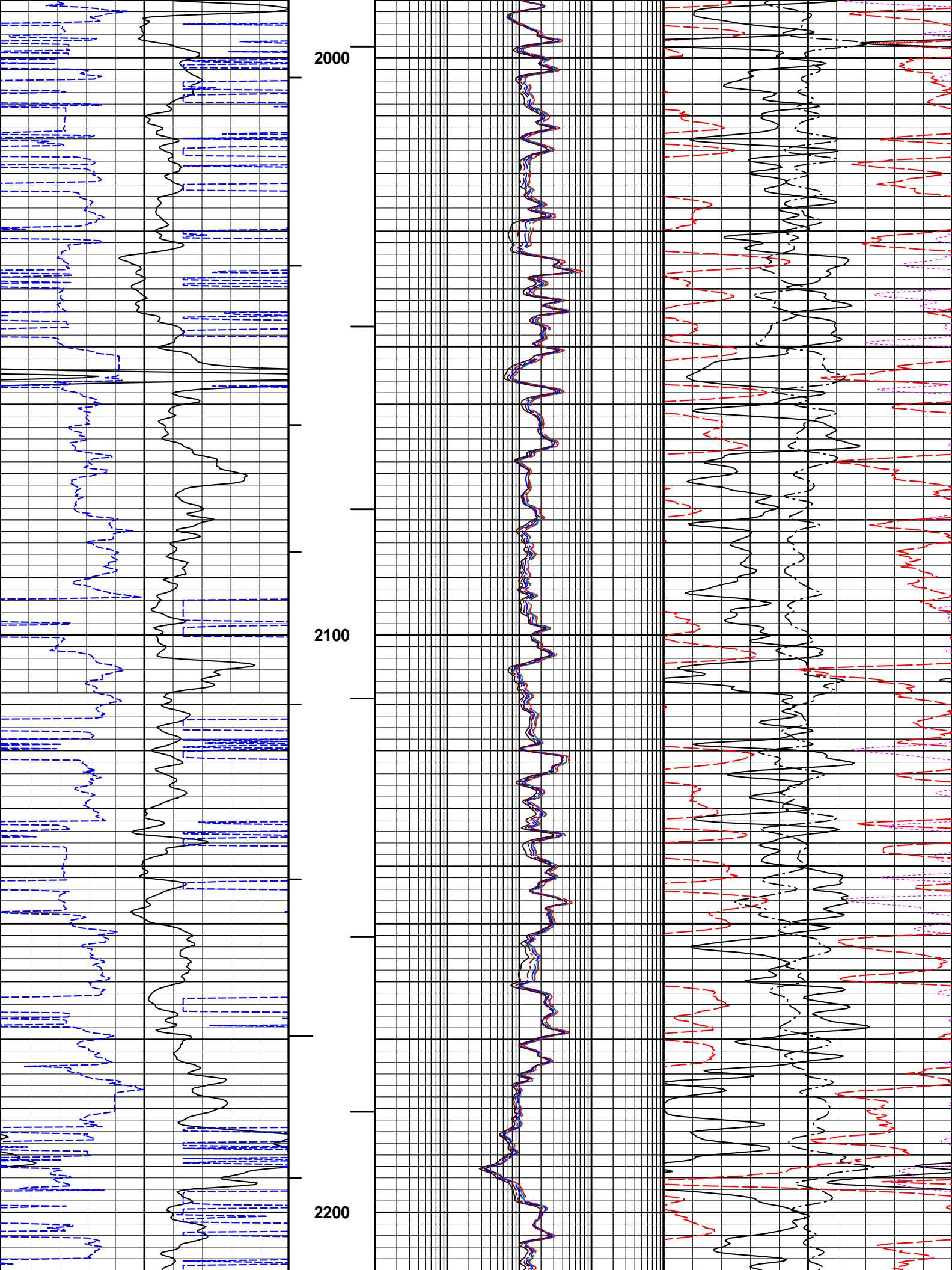
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 Plot File: \\COMP\TRIPLE

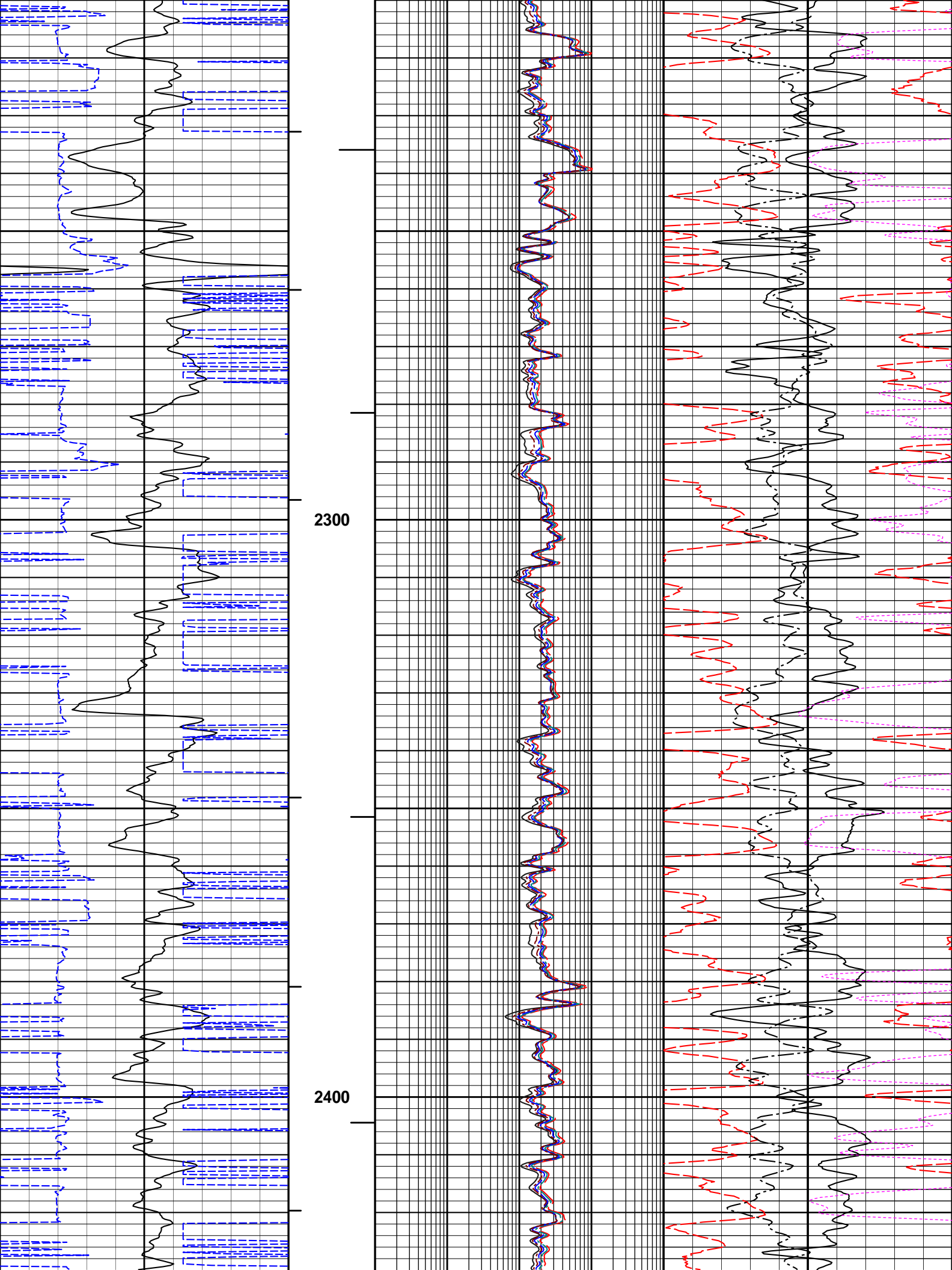
**REPEAT PASS 5" = 100'**

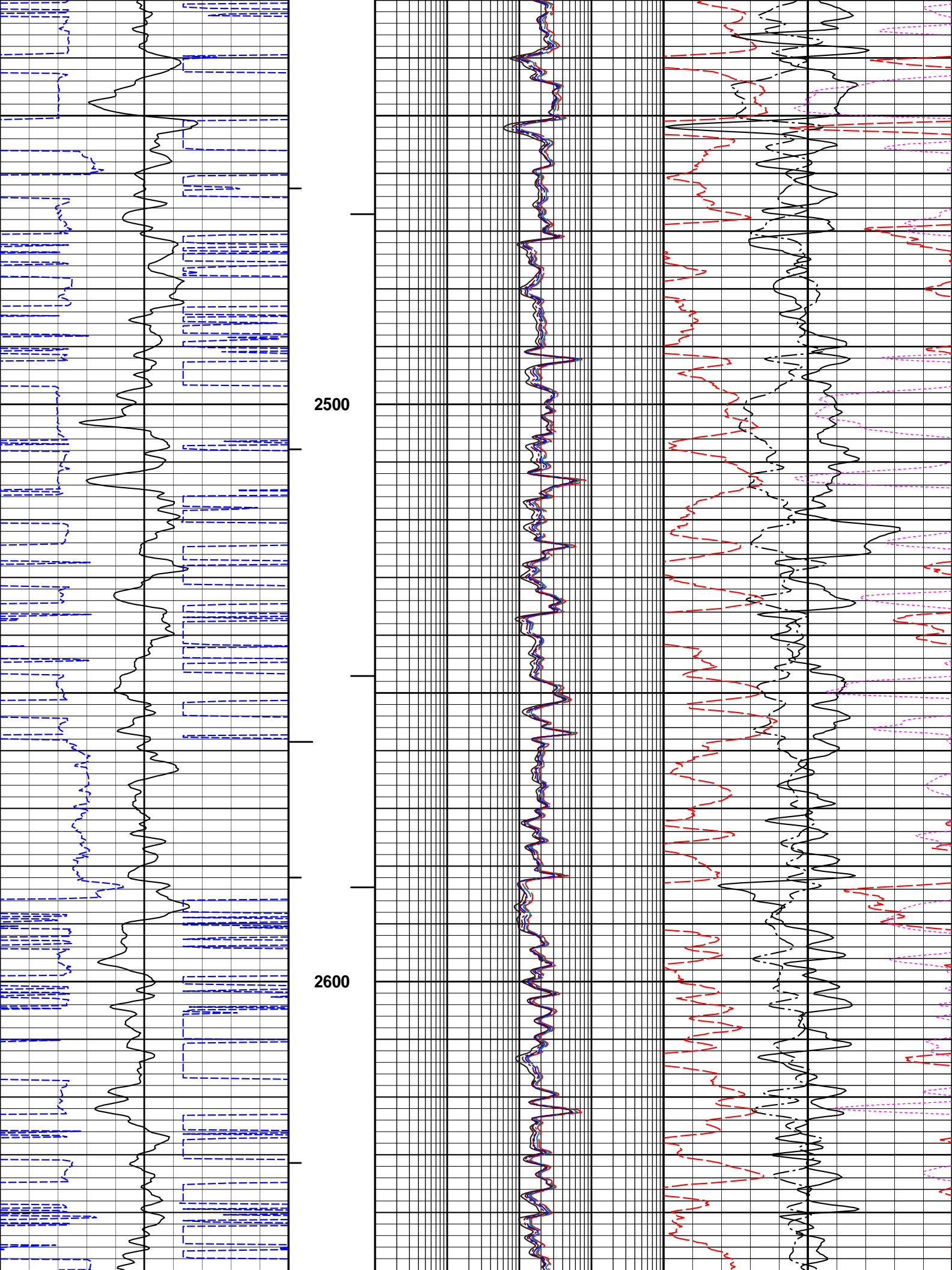
GAMMA RAY	150	0.1	RT90	1000	0.3	DEN POROSITY	-0.1
			ohm-m				
		0.1	RT60	1000			
			ohm-m				
GAMMA RAY	150	0.1	RT30	1000	0.3	NEU POROSITY	-0.1
			ohm-m				
		0.1	RT20	1000			
			ohm-m				

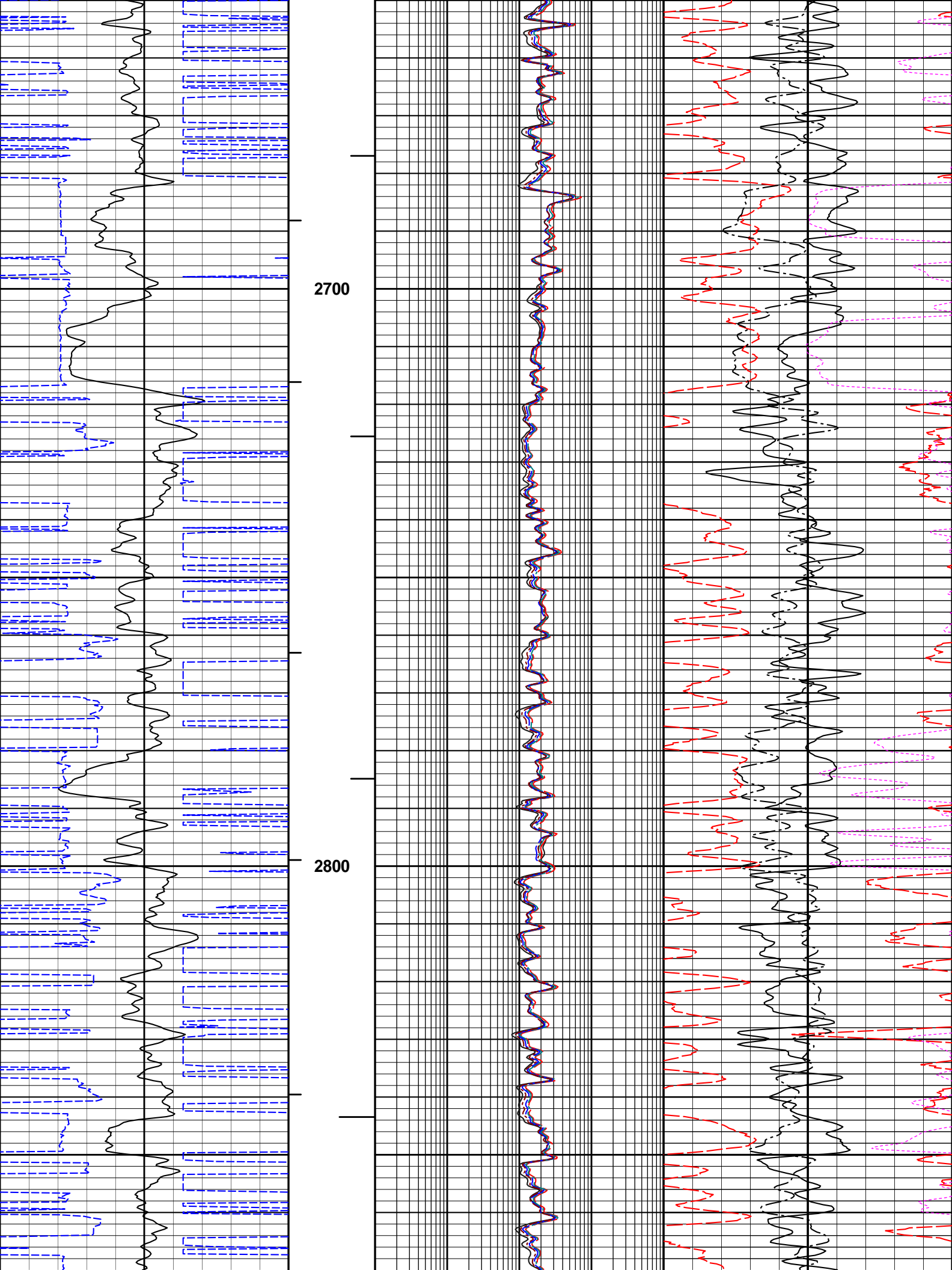




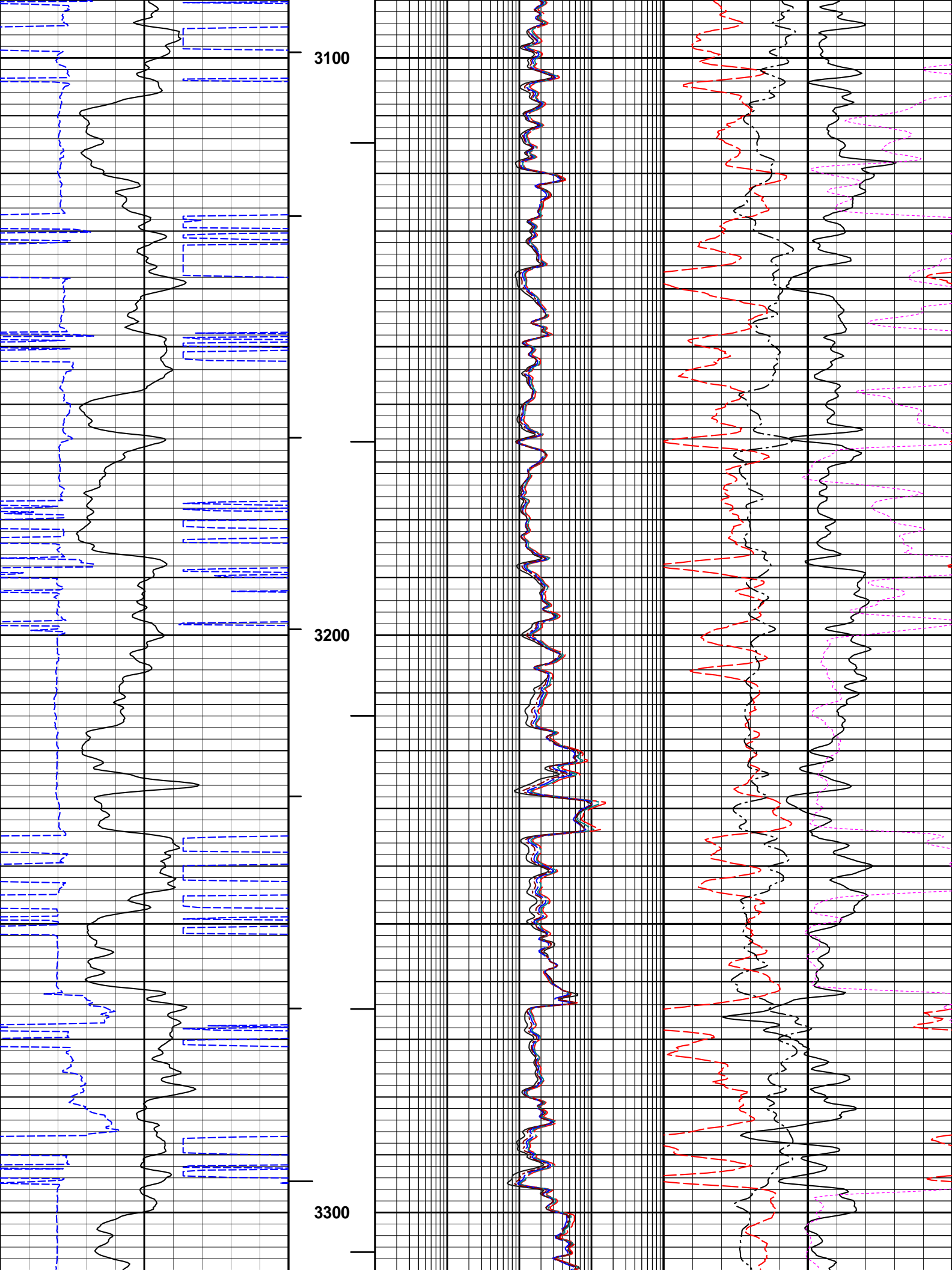


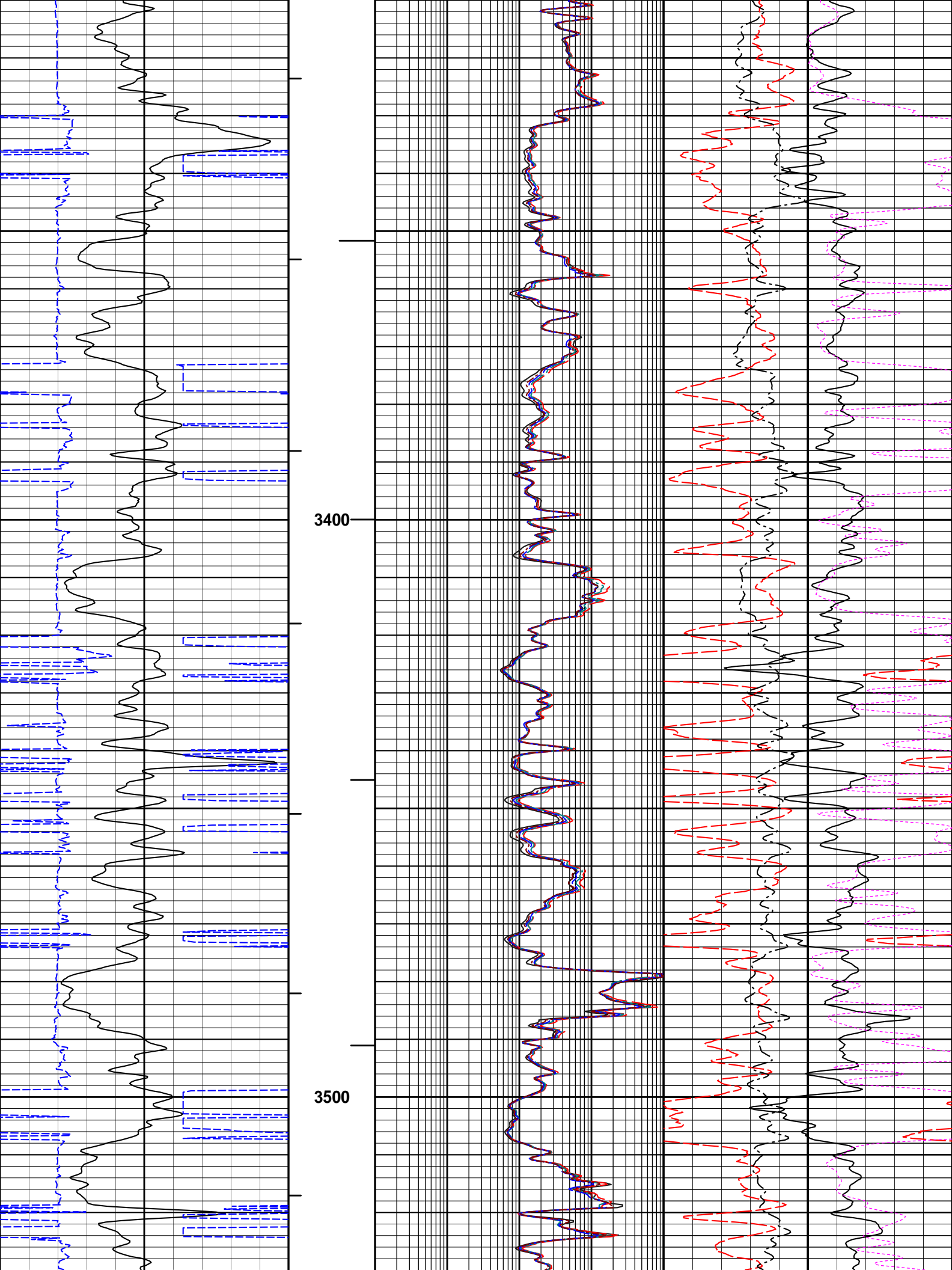


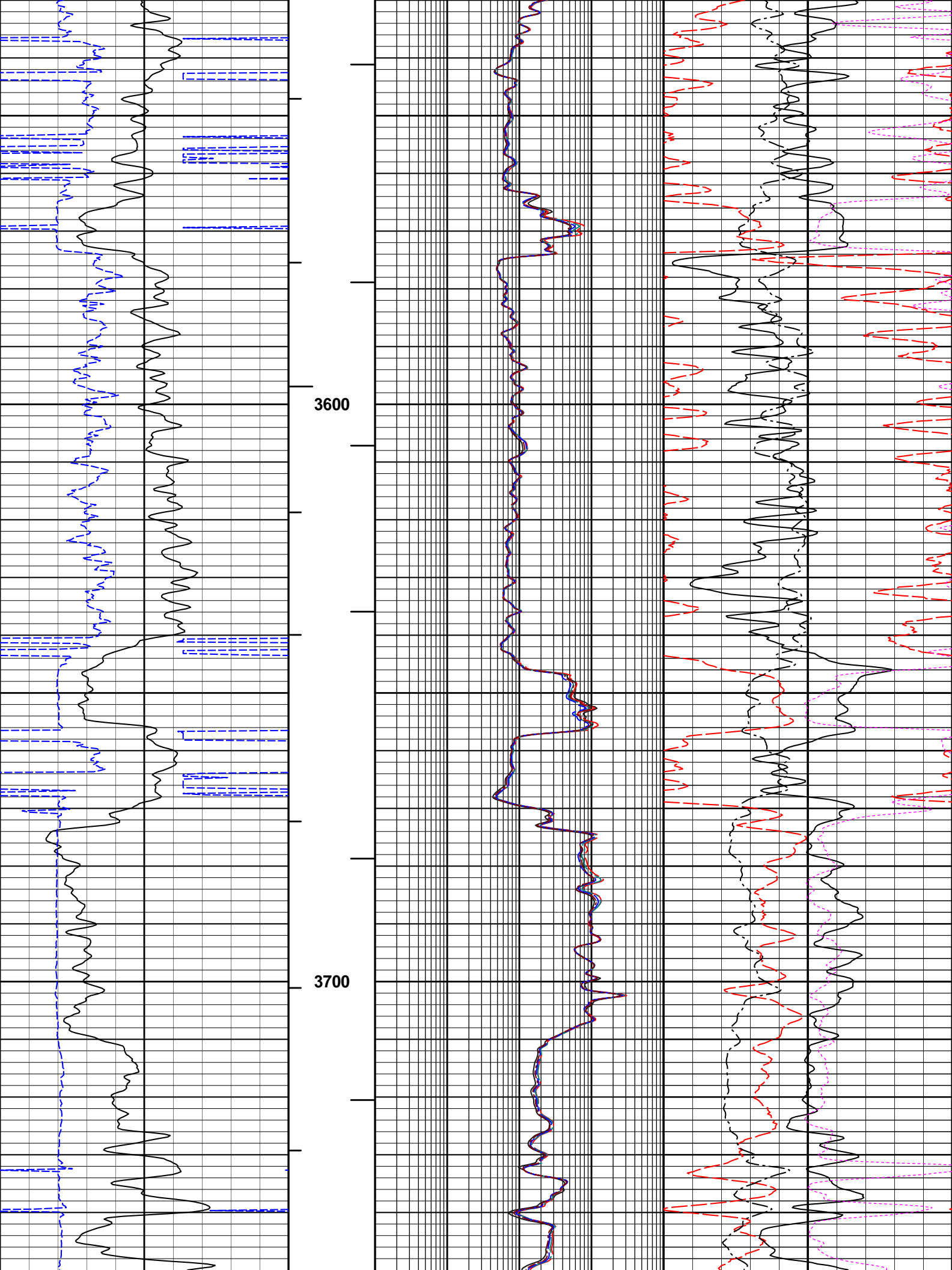


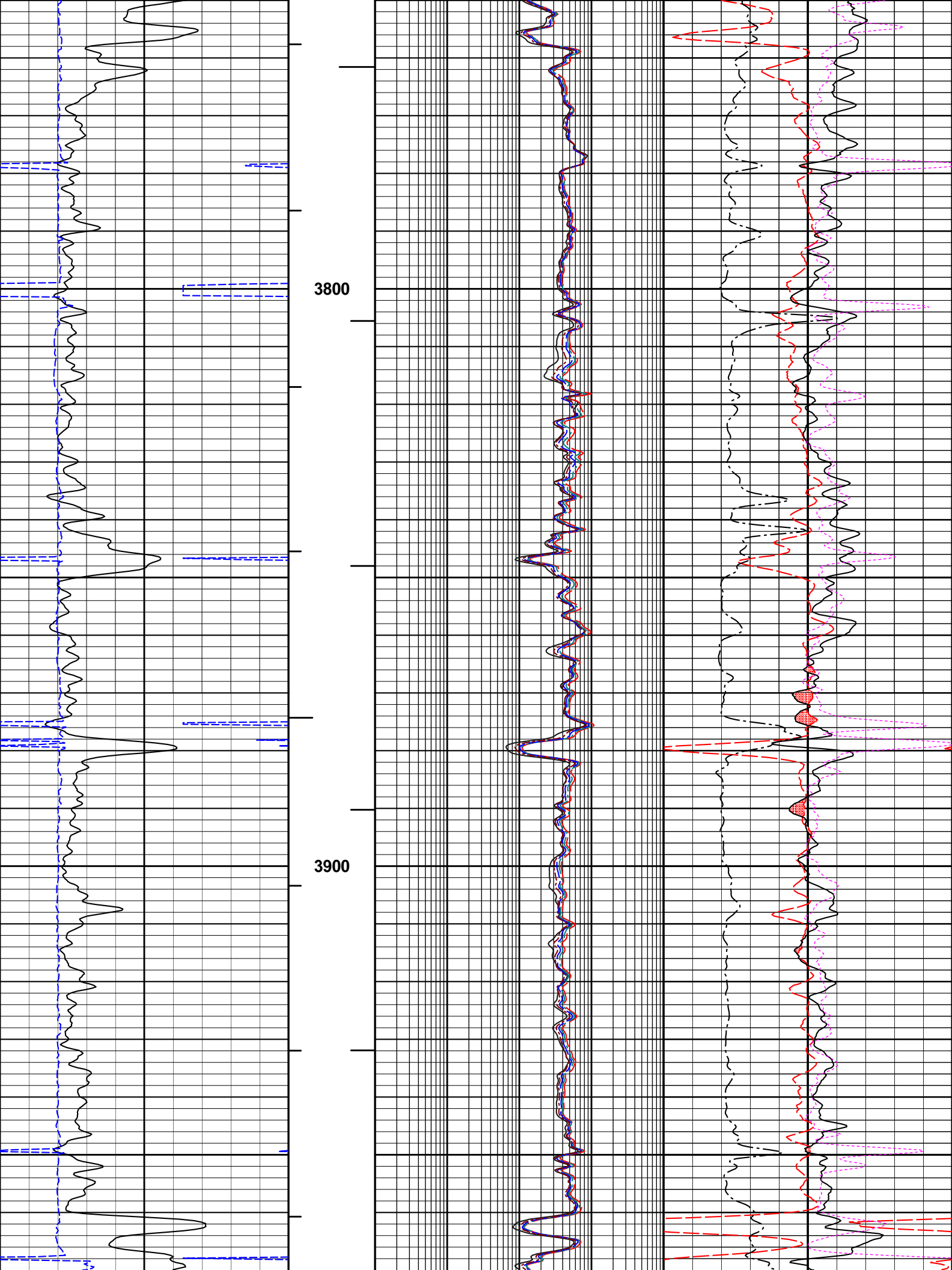


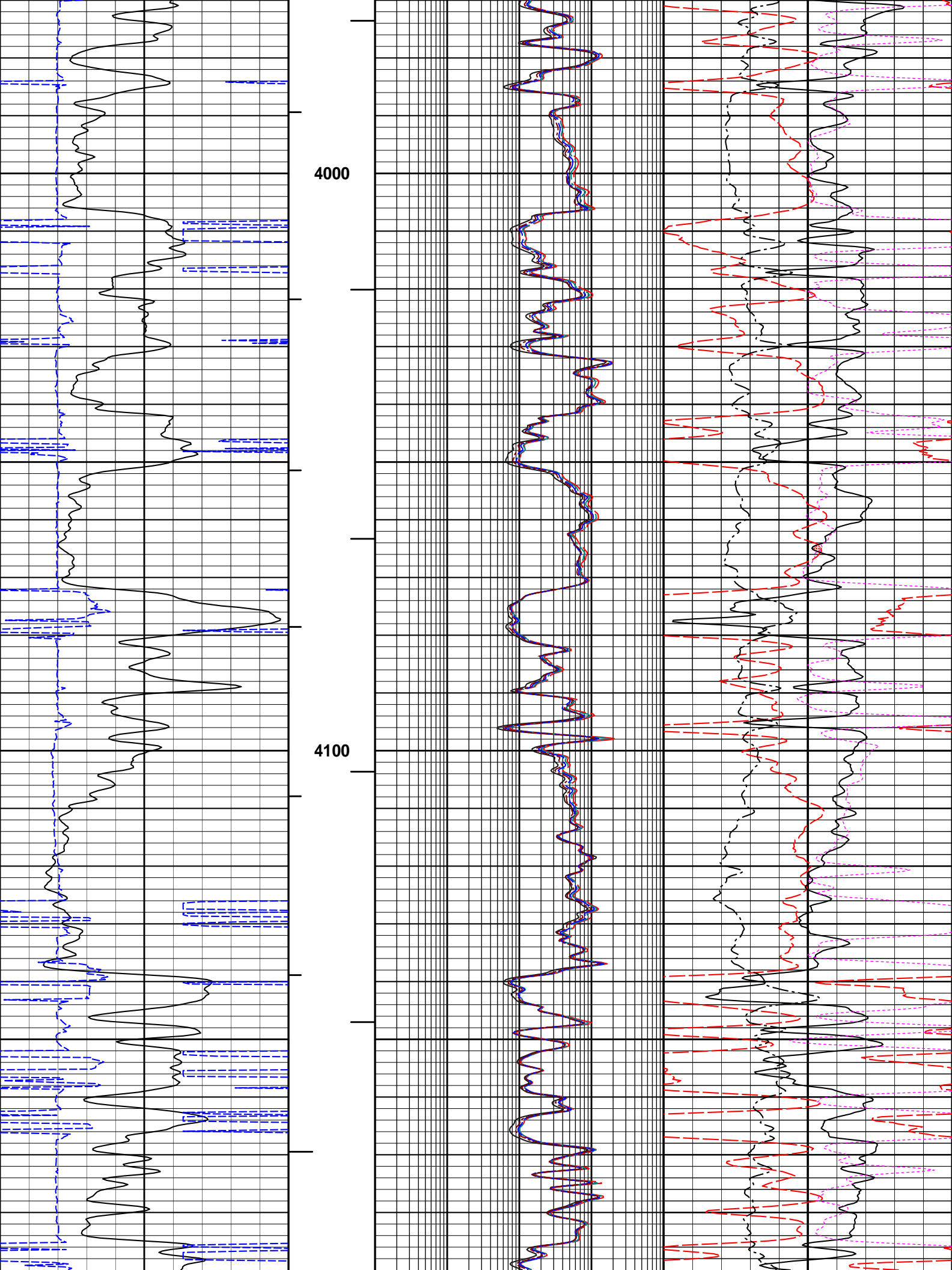


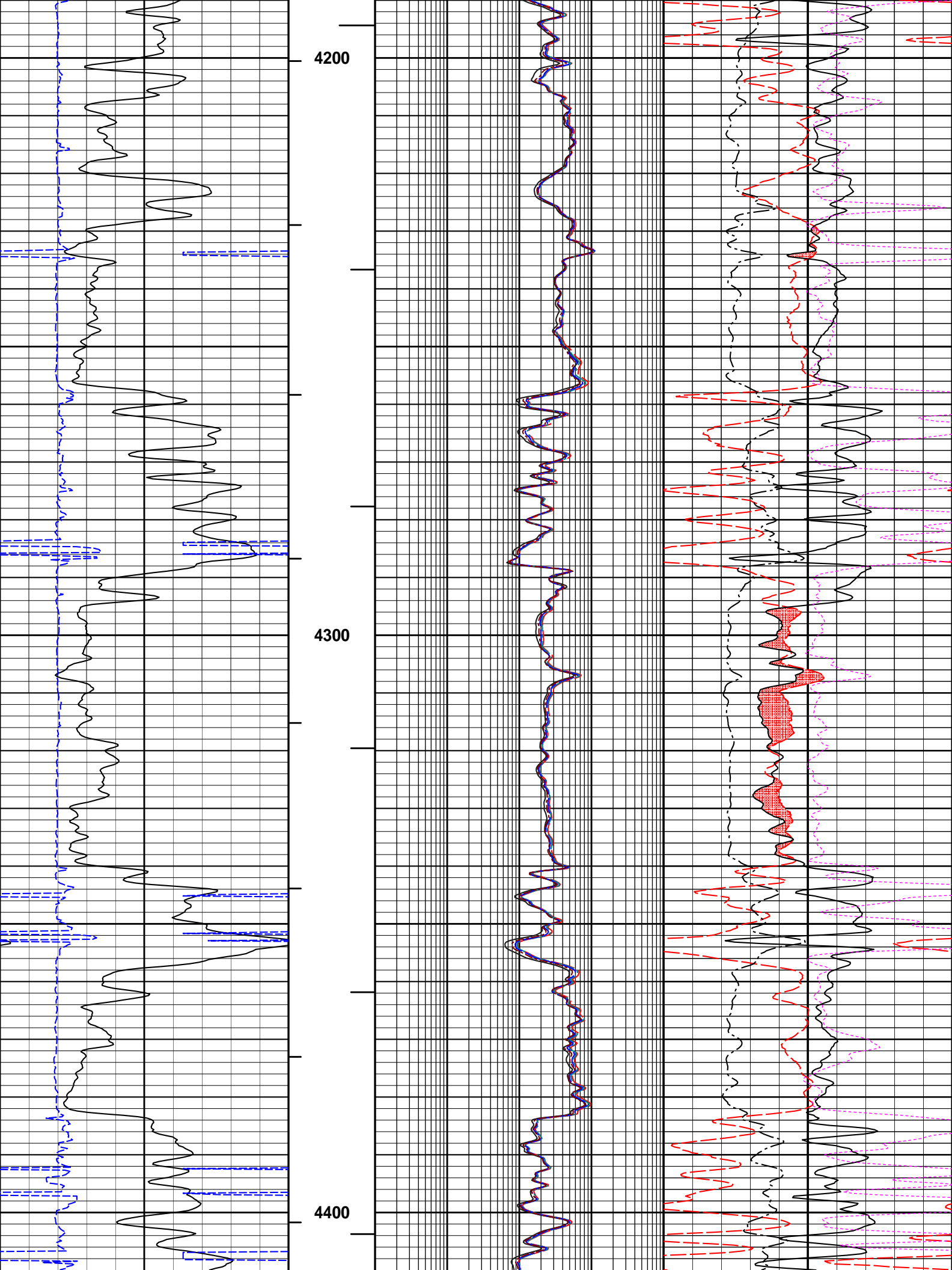


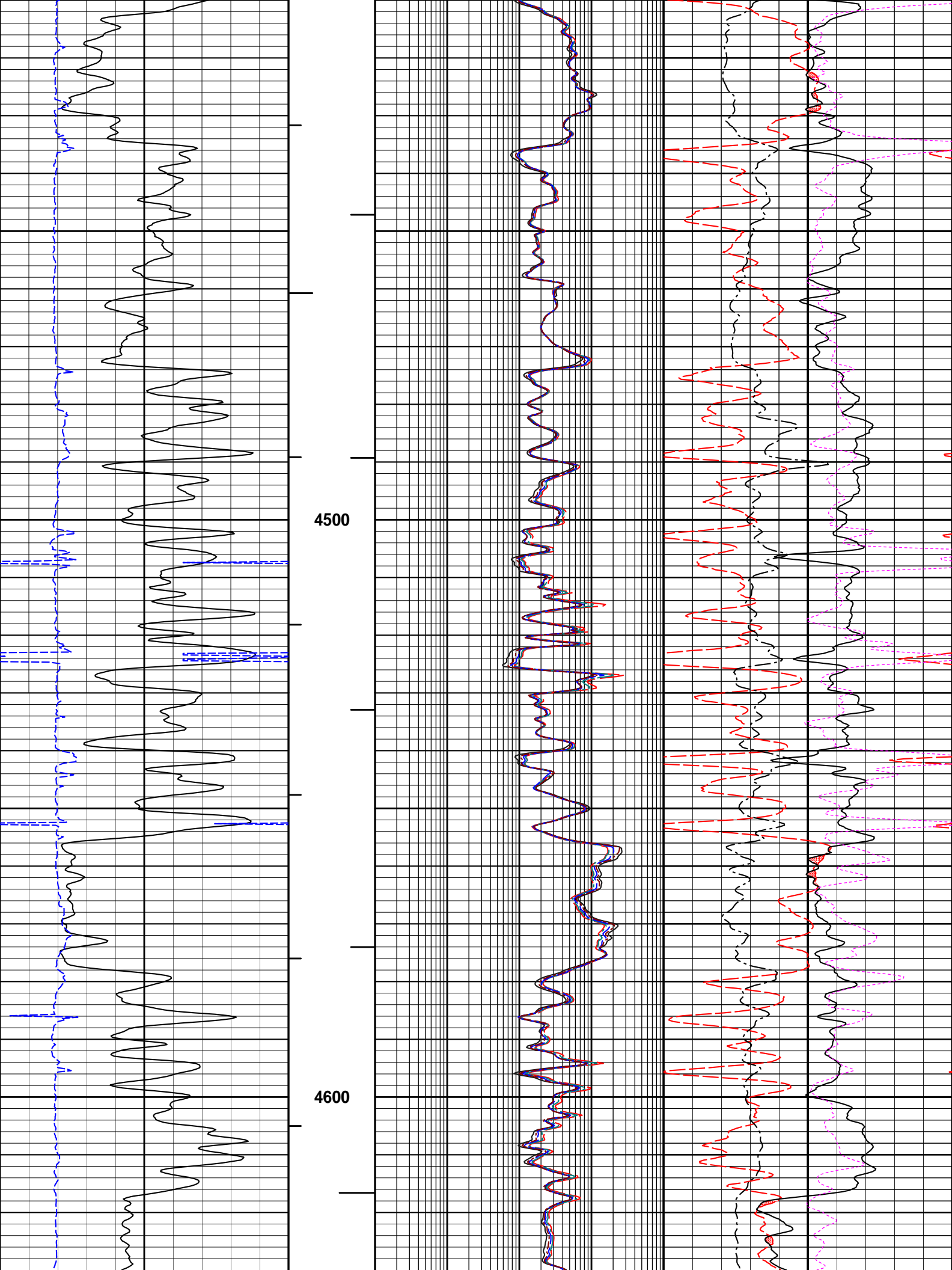


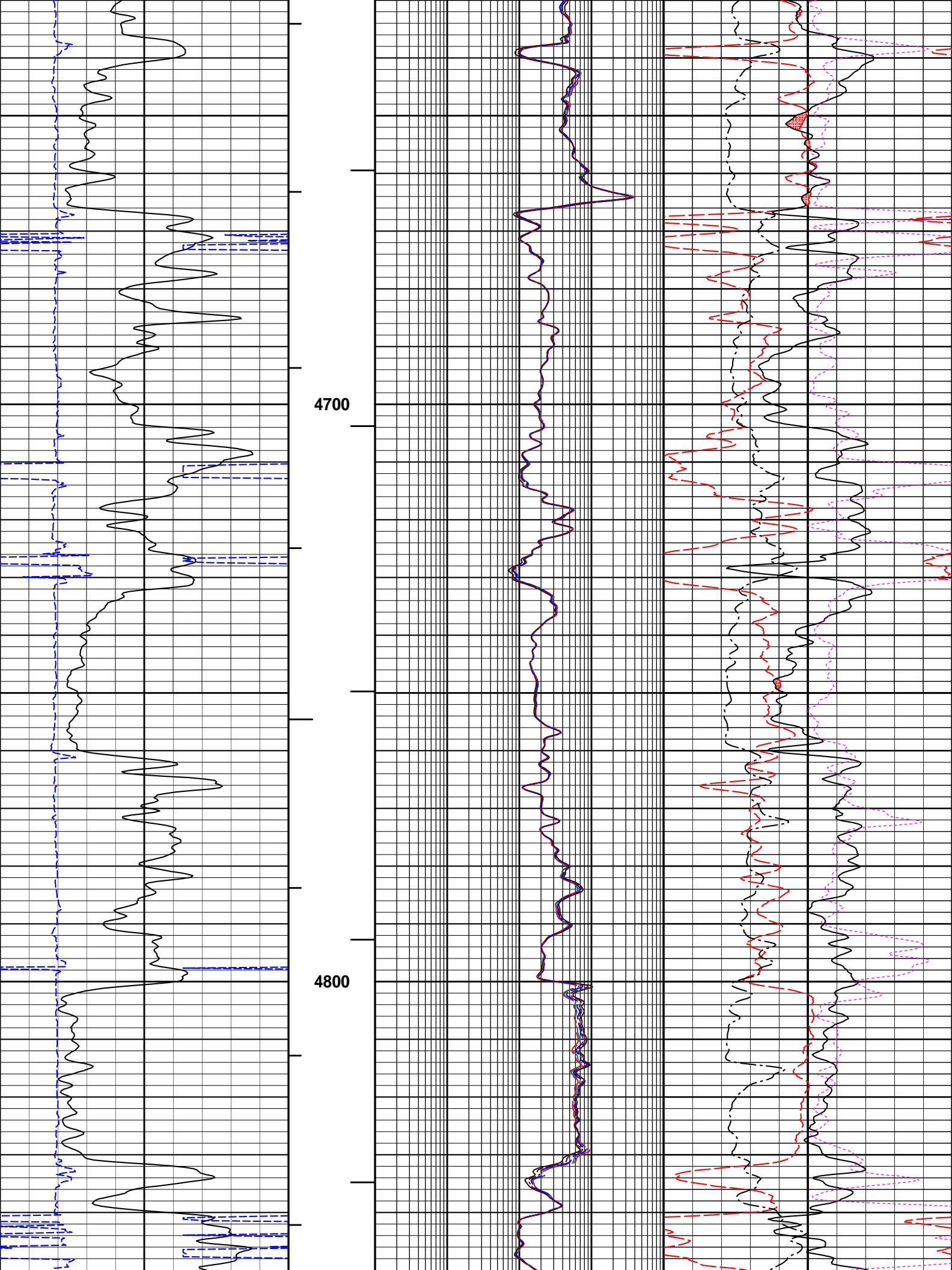


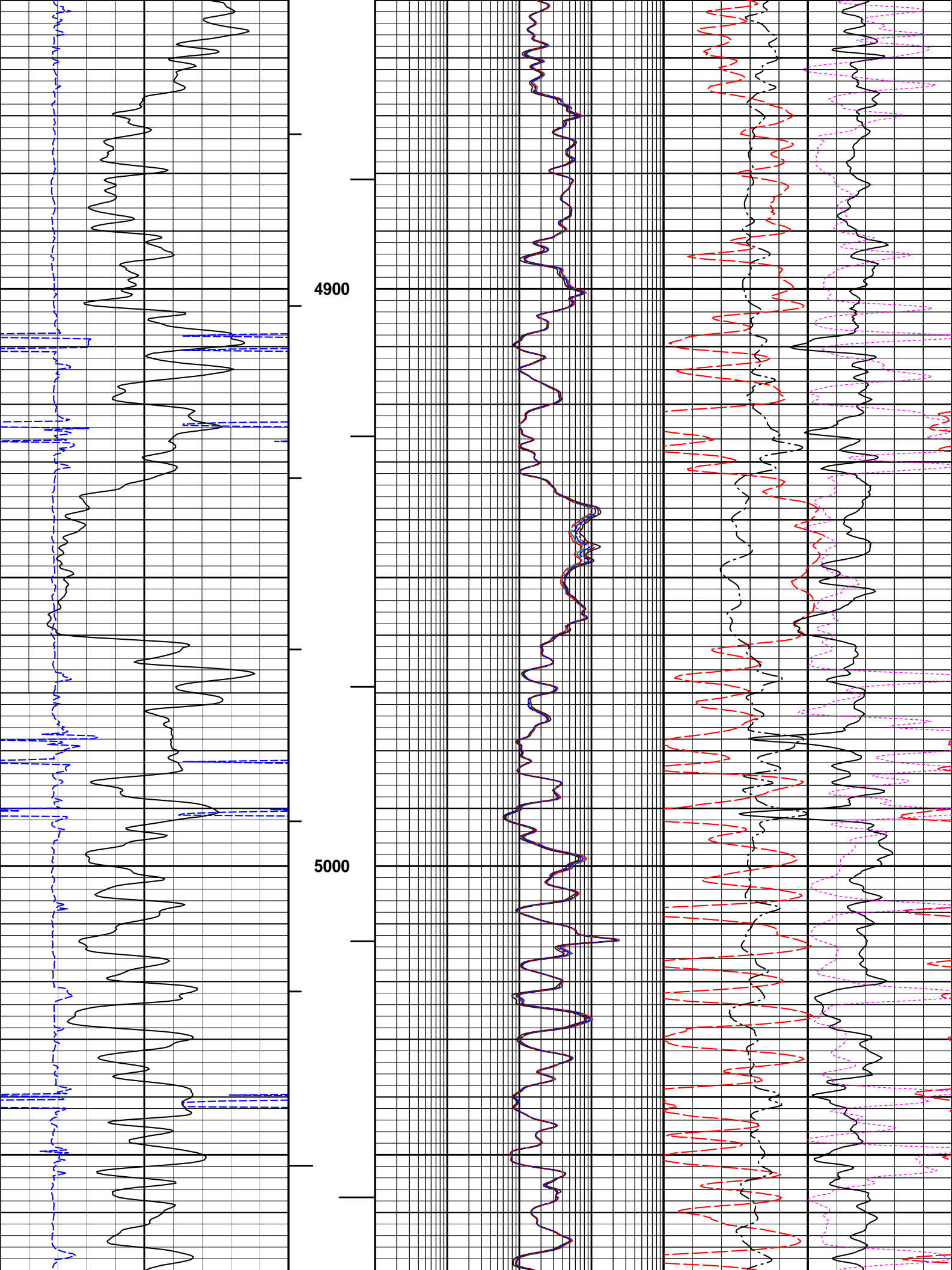


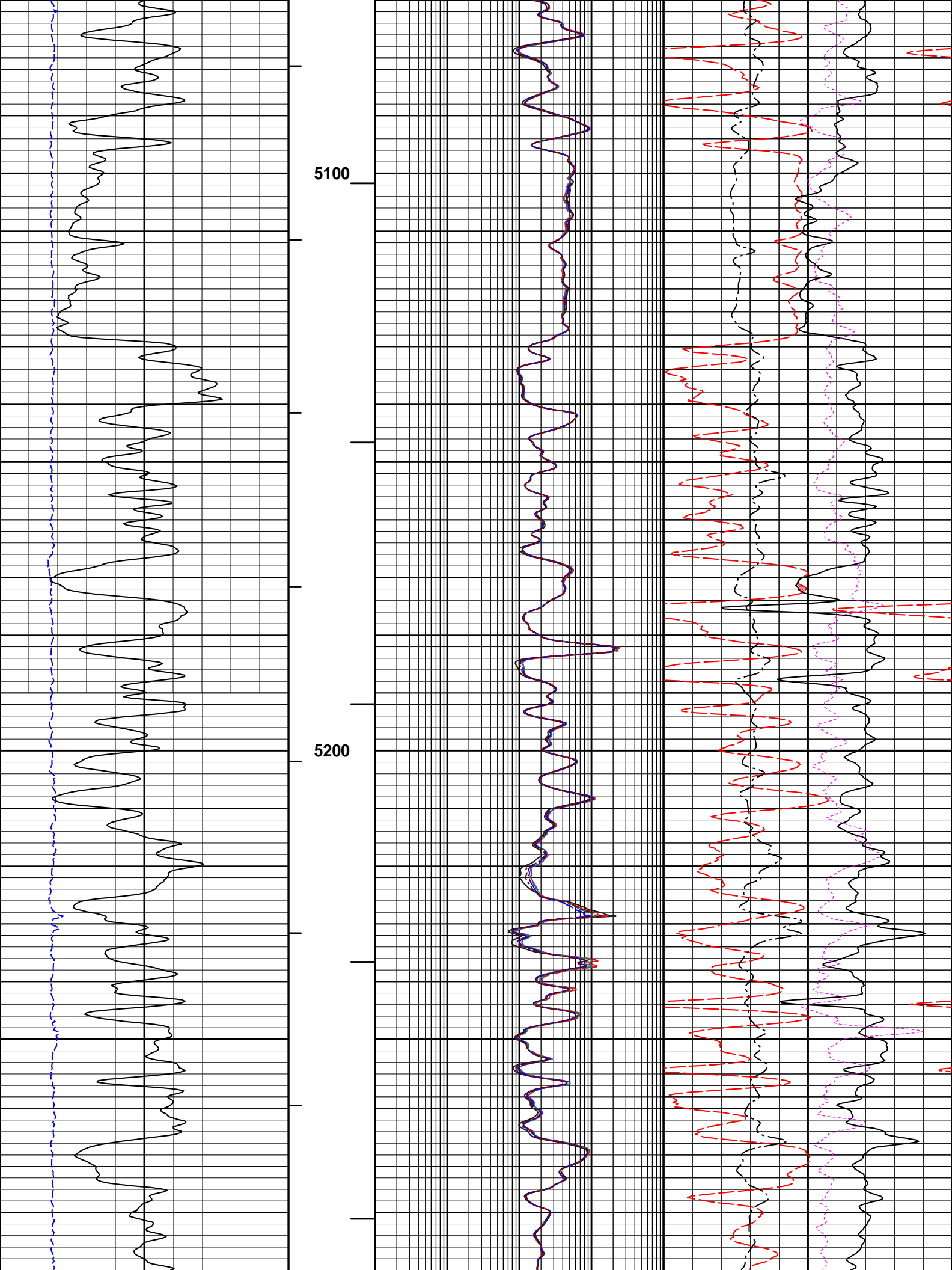


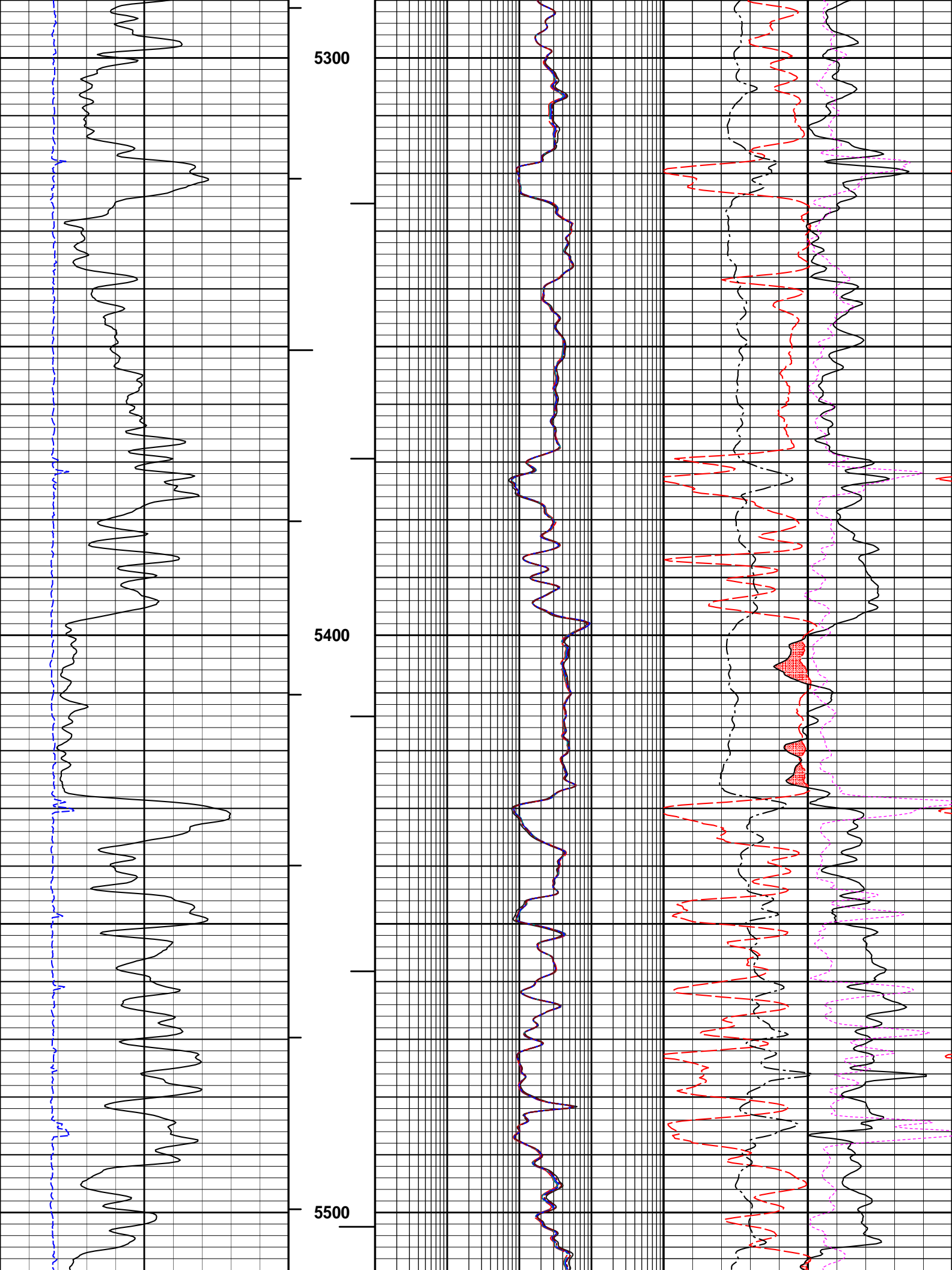


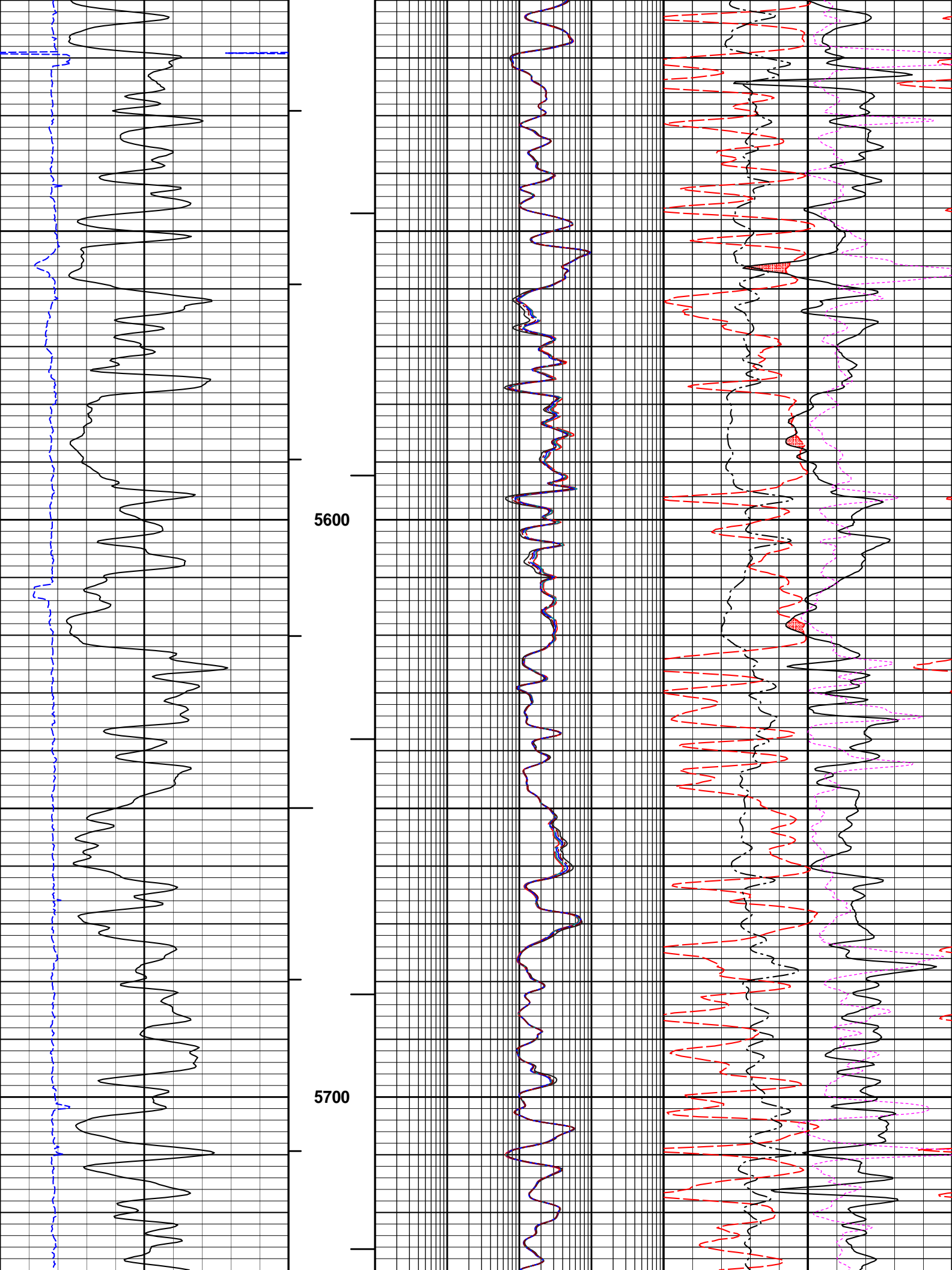


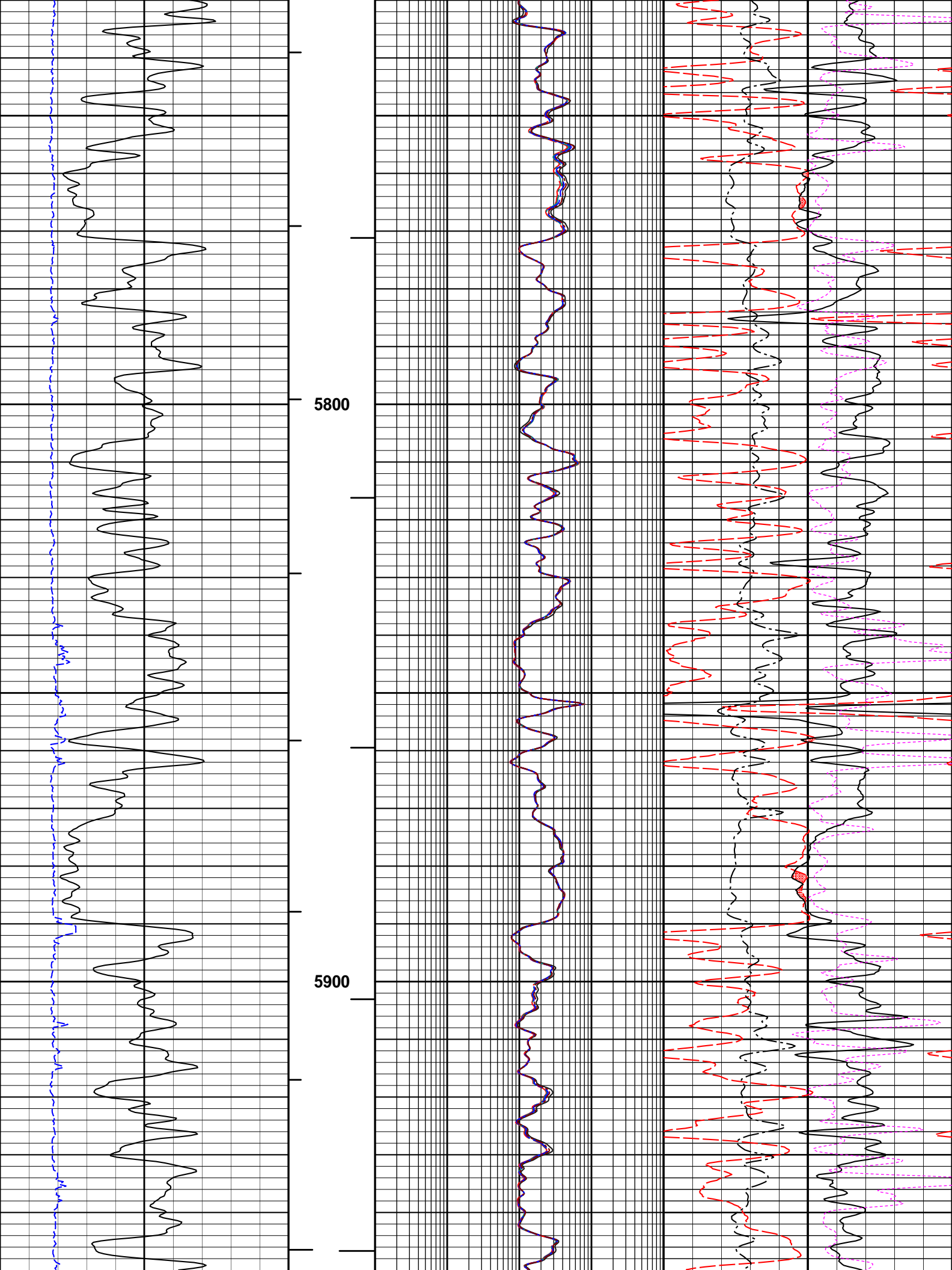


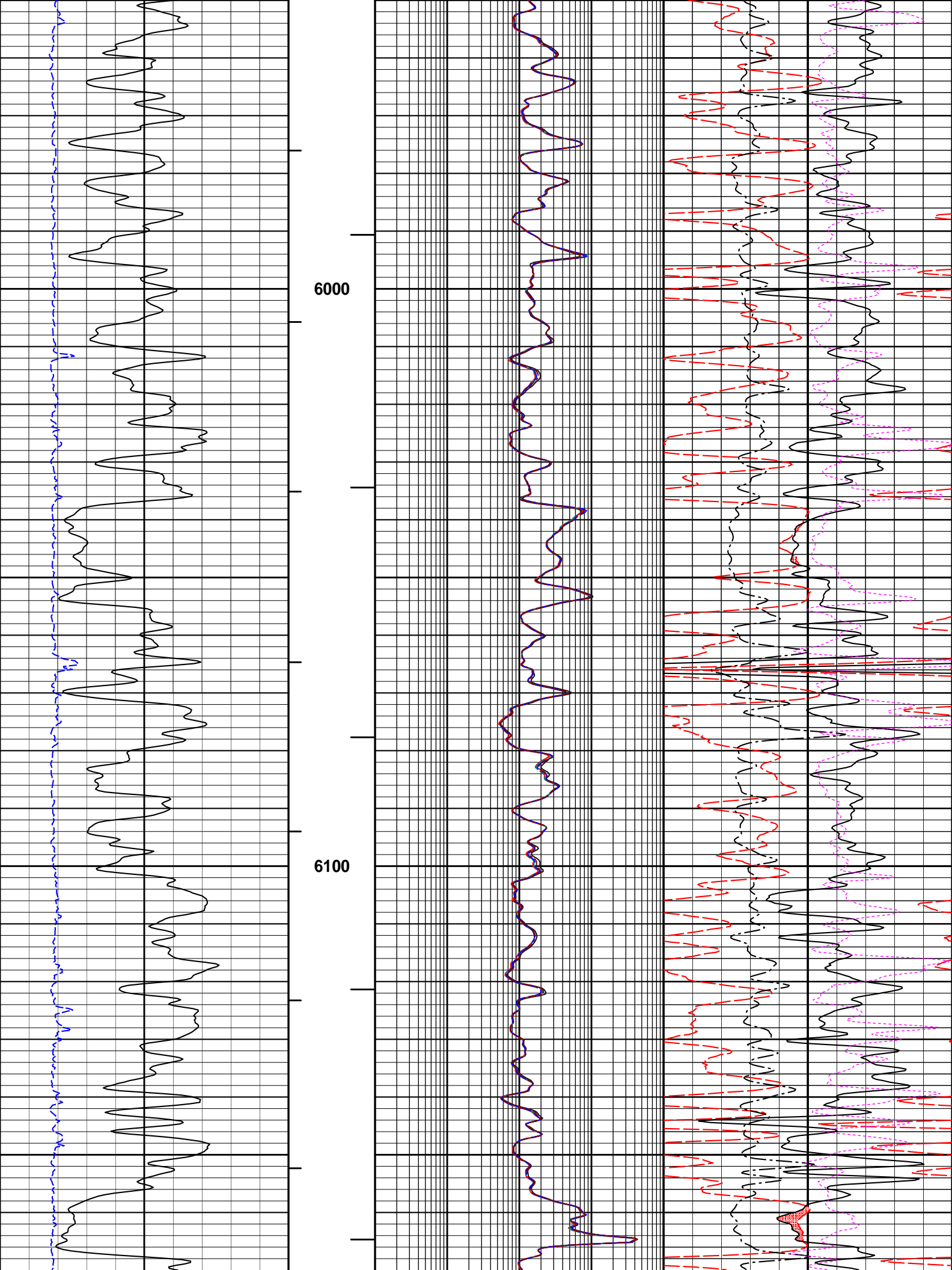


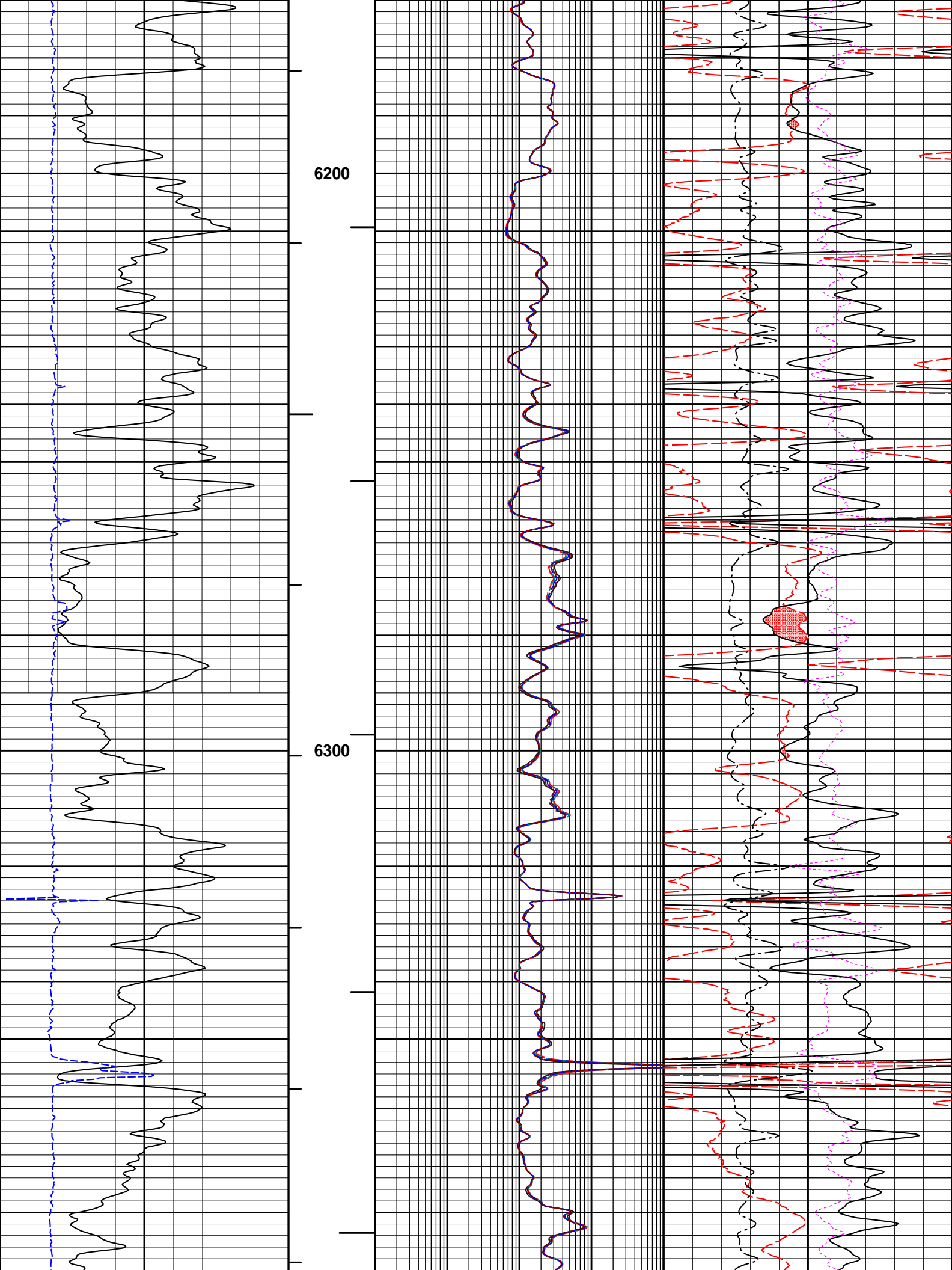


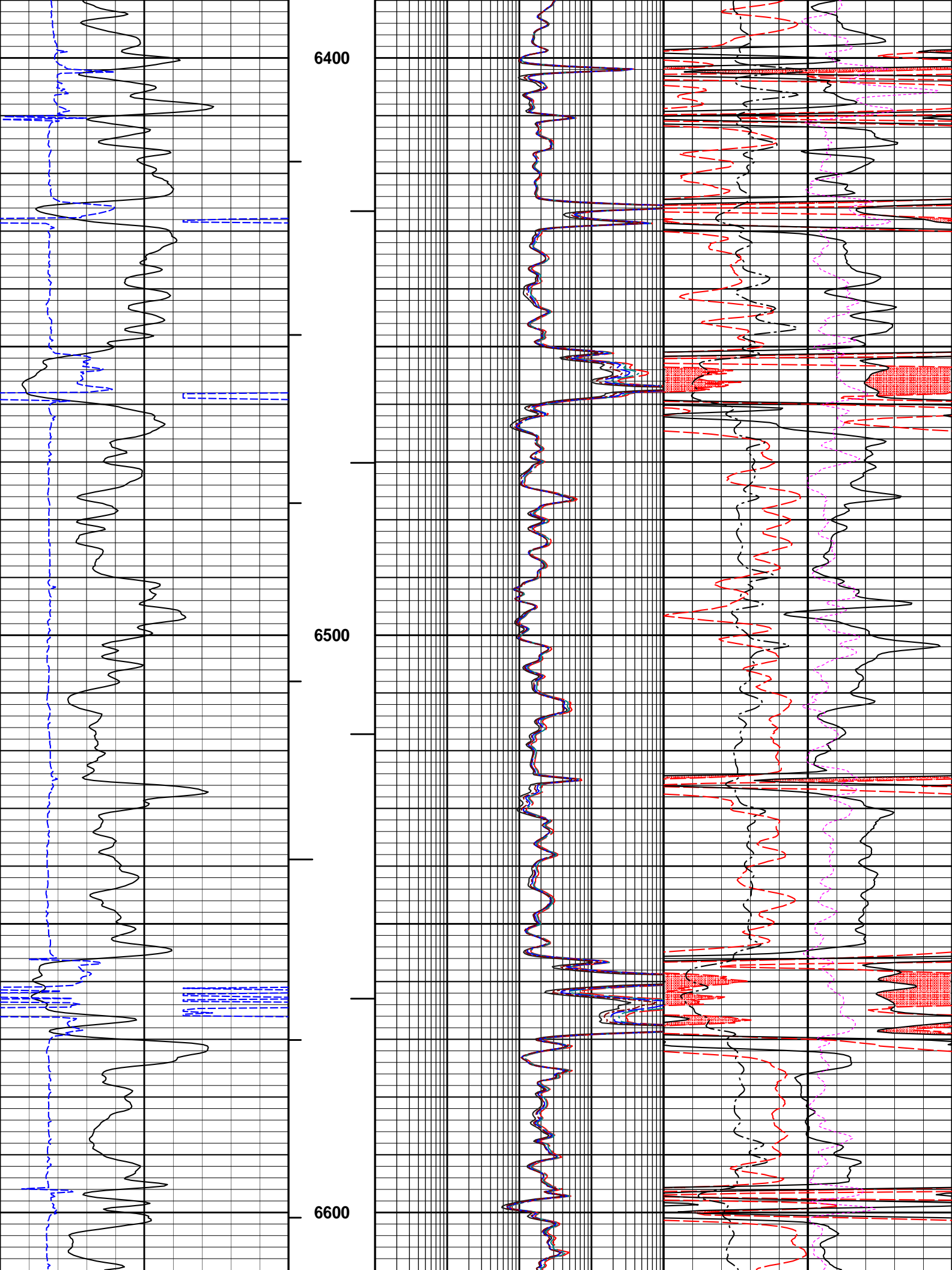


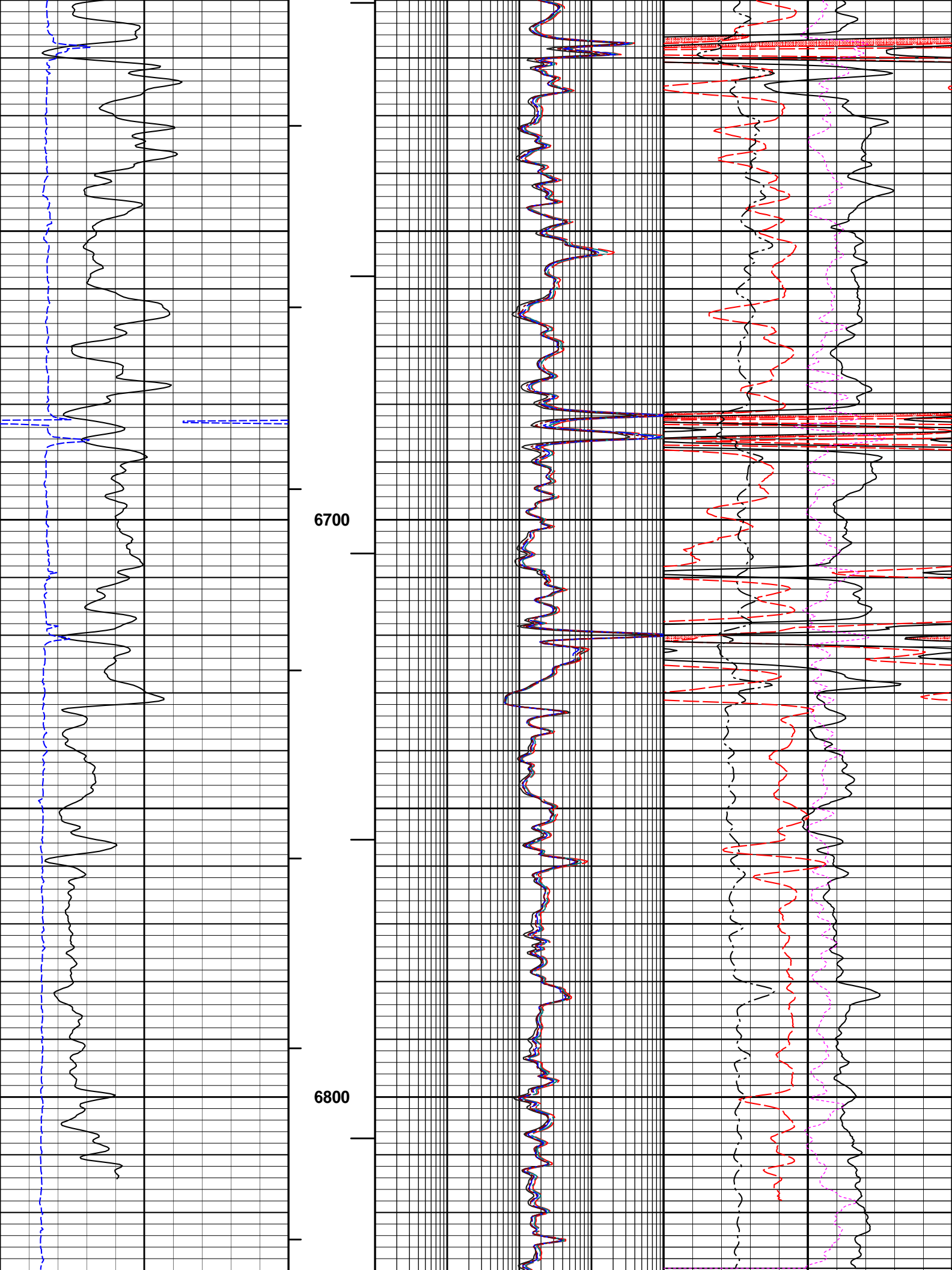


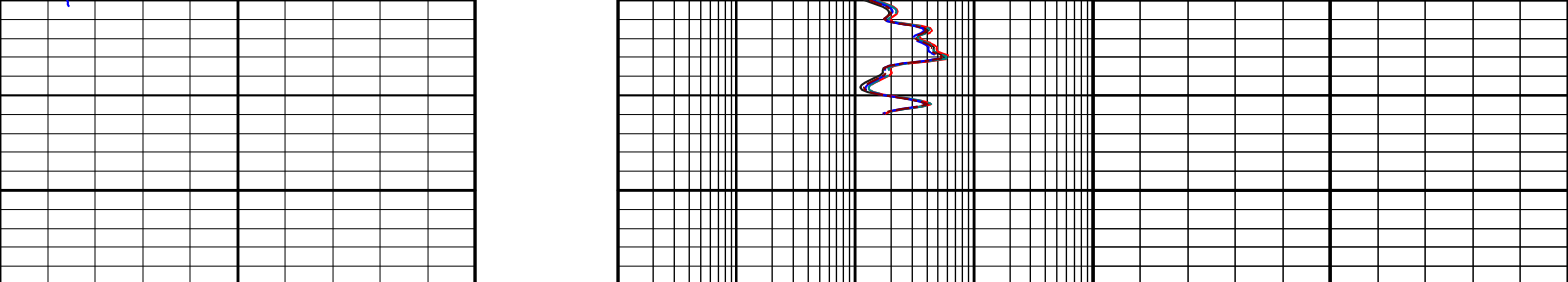












6	CALIPER	16	1 : 240	0.1	RT10	1000	-0.25	DensityCorr	0.25
	inches		FT.		ohm-m			gram per cc	
0	GAMMA RAY	150	BHV	0.1	RT20	1000	0	PE	10
	api				ohm-m				
			AHV	0.1	RT30	1000	0.3	NEU POROSITY	-0.1
					ohm-m			sand	
				0.1	RT60	1000	0.3	DEN POROSITY	-0.1
					ohm-m			2.68 g/cc	
				0.1	RT90	1000			
					ohm-m				

**HALLIBURTON** Plot Time: 02-Jul-16 06:19:24  
 Plot Range: 1566.41 ft to 6860 ft  
 Data: TOMPKINS\_USC\Well Based\MAIN\  
 Plot File: \\COMP\TRIPLE

**REPEAT PASS 5" = 100'**

**HALLIBURTON**

## CALIBRATION REPORT

**ULTRA-SLIM QUAD TELEMETRY GAMMA CARTRIDGE SHOP CALIBRATION**

Tool Name: S4TG - 11577721	Reference Calibration Date: 14-May-16 13:17:28
Engineer: B. HOYTAL	Calibration Date: 22-Jun-16 14:32:42
Software Version: WL INSITE R5.0.3 (Build 7)	Calibration Version: 1

Calibrator Source S/N: USC-003-CB  
 Calibrator API Reference: 155.00  
 Calibrator API Value: 151.4

Measurement	Measured	Calibrated	Units
Background	40.7	39.3	api
Background + Calibrator	197.6	190.7	api
Calibrator	156.9	151.4	api

**ULTRA-SLIM QUAD TELEMETRY GAMMA CARTRIDGE FIELD CALIBRATION**

Tool Name: S4TG - 11577721	Reference Calibration Date: 22-Jun-16 14:32:42
Engineer: B. HOYTAL	Calibration Date: 22-Jun-16 18:37:28
Software Version: WL INSITE R5.0.3 (Build 7)	Calibration Version: 1

Calibrator Source S/N: USC-003-CB

Field Verification	Shop	Field	Units

Background	39.3	40.6	api
Background + Calibrator	190.7	186.1	api
Calibrator	151.4	145.5	api

Shop	Field	Difference	Tolerance
151.4	145.5	5.9	+/- 9.00

### DUAL SPACED NEUTRON SHOP CALIBRATION

**Tool Name:** SDSN - 11790665      **Reference Calibration Date:** 14-May-16 15:08:26  
**Engineer:** B. HOYTAL      **Calibration Date:** 22-Jun-16 16:15:32  
**Software Version:** WL INSITE R5.0.3 (Build 7)      **Calibration Version:** 1

Logging Source S/N: 08-040  
 Reference value assigned to Bath: 22.284  
 Snow Block S/N: 11392047  
 Calibration Bath Water Temperature: 76 degF  
 Min. Tool Housing Outside Diameter: 2.350 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.986	0.988	0.900 - 1.100

WATER BATH SUMMARY (Vertical Water Bath)				
Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (decp):	0.9931	1.0000	0.0069	+/- 0.0280
Calibrated Ratio:	22.24	22.28	0.049	+/- 0.180

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0362	0.02000 - 0.09000

PASS/FAIL SUMMARY	
Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

### DUAL SPACED NEUTRON FIELD CALIBRATION

**Tool Name:** SDSN - 11790665      **Reference Calibration Date:** 22-Jun-16 16:15:32  
**Engineer:** B. HOYTAL      **Calibration Date:** 22-Jun-16 18:49:50  
**Software Version:** WL INSITE R5.0.3 (Build 7)      **Calibration Version:** 1

Logging Source S/N: 08-040  
 Snow Block S/N: 11392047

NEUTRON FIELD-CHECK SUMMARY				
	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0362	0.0420	0.0058	+/- 0.0150

PASS/FAIL SUMMARY	
Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

## DENSITY CALIPER SHOP CALIBRATION

**Tool Name:** SSDL - 11790674

**Reference Calibration Date:** 22-Jun-16 14:40:23

**Engineer:** B. HOYTAL

**Calibration Date:** 22-Jun-16 14:51:40

**Software Version:** WL INSITE R5.0.3 (Build 7)

**Calibration Version:** 1

The ring diameter is computed from:  $DIAMETER = PAD\ EXTENSION + ARM\ EXTENSION + TOOL\ DIAMETER$

Calibrator Small Ring Diameter: 4.100 in

Calibrator Medium Ring Diameter: 8.10 in

Calibrator Large Ring Diameter: 12.100 in

Tool Diameter: 2.35 in

### CALIBRATION COEFFICIENTS

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-16994.13	-17121.98	-33000.00 - -16000.00
Pad Gain	0.0000654	0.0000657	0.000052 - 0.000098
Arm Offset	-21660.87	-21687.88	-28000.00 - -7000.00
Arm Gain	0.0003065	0.0003082	0.000290 - 0.000330
Arm Power	-0.000003170	-0.000003170	-0.000004200 - -0.000001400

### CALIBRATION RINGS

Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value
<b>PAD EXTENSION:</b>				
Closed (in)	0.01	0.00	-0.01	+/- 0.20
Small Ring (in)	1.78	1.78	-0.00	+/- 0.20
Maximum (in)	2.2	2.2	-0.00	+/- 0.20
<b>RING DIAMETER:</b>				
Small Ring (in)	4.11	4.10	-0.01	+/- 0.20
Medium Ring (in)	5.84	8.10	-0.09	+/- 0.20
Large Ring (in)	12.06	12.10	0.04	+/- 0.20
Maximum (in)	16.09	16.15	0.06	+/- 0.20

### PASS/FAIL SUMMARY

Ring-Measurement Check: Passed

## DENSITY CALIPER FIELD CALIBRATION

**Tool Name:** SSDL - 11790674

**Reference Calibration Date:** 22-Jun-16 14:51:40

**Engineer:** B. HOYTAL

**Calibration Date:** 22-Jun-16 18:40:50

**Software Version:** WL INSITE R5.0.3 (Build 7)

**Calibration Version:** 1

The Caliper is computed from:  $CALIPER = PAD\ EXTENSION + ARM\ EXTENSION + TOOL\ DIAMETER$

Tool Diameter: 2.35 in

### MEASURED CALIPER VALUES

Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	11.64	11.64	0.00	+/- 0.20
Caliper	16.15	16.15	0.00	+/- 0.20

### PASS/FAIL SUMMARY

Pad Extension Check: Passed

Diameter Check: Passed

## SPECTRAL DENSITY SHOP CALIBRATION

**Tool Name:** SSDL Pad - 11790681

**Reference Calibration Date:** 19-May-16 10:39:41

**Engineer:** B. HOYTAL

**Calibration Date:** 22-Jun-16 15:39:48

Logging Source S/N: 5265GW

Aluminum Block S/N: ROCK SPRINGS

Density: 2.602g/cc

Pe: 3.110

Magnesium Block S/N: ROCK SPRINGS

Density: 1.690g/cc

Pe: 2.610

**DENSITY CALIBRATION SUMMARY**

Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	0.9444	0.9543	0.90 - 1.10
Near Dens Gain	1.0079	1.0137	0.90 - 1.10
Near Peak Gain	1.0146	1.0246	0.90 - 1.10
Near Lith Gain	1.0064	1.0118	0.90 - 1.10
Far Bar Gain	0.9927	0.9904	0.90 - 1.10
Far Dens Gain	0.9986	0.9984	0.90 - 1.10
Far Peak Gain	1.0051	1.0029	0.90 - 1.10
Far Lith Gain	1.0043	1.0017	0.90 - 1.10
<hr/>			
Near Bar Offset	0.5663	0.4922	NONE
Near Dens Offset	-0.0428	-0.0815	NONE
Near Peak Offset	-0.1398	-0.2247	NONE
Near Lith Offset	-0.0198	-0.0534	NONE
Far Bar Offset	0.1370	0.1774	NONE
Far Dens Offset	0.0639	0.0825	NONE
Far Peak Offset	-0.0147	0.0234	NONE
Far Lith Offset	0.0005	0.0376	NONE
<hr/>			
Near Bar Background	202.76	200.99	155 - 360
Near Dens Background	111.25	110.58	90 - 210
Near Peak Background	66.77	65.94	55 - 125
Near Lith Background	57.88	57.79	45 - 100
Far Bar Background	127.67	127.25	90 - 210
Far Dens Background	62.10	62.33	45 - 105
Far Peak Background	51.40	50.87	35 - 85
Far Lith Background	32.36	32.23	25 - 55

**CALIBRATION BLOCK SUMMARY**

Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
<b>MAGNESIUM</b>				
Density (g/cc)	1.682	1.691	0.009	+/- 0.015
Pe	2.377	2.396	0.019	+/- 0.150
<b>ALUMINUM</b>				
Density (g/cc)	2.586	2.594	0.008	+/- 0.01500
Pe	2.919	2.937	0.018	+/- 0.150

**TOOL SUMMARY**

Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
<b>QUALITY</b>				
Background	-0.0025	+/- 0.0110	-0.0090	+/- 0.0140
Magnesium Block	-0.0064	+/- 0.0110	-0.0044	+/- 0.0140
Aluminum Block	-0.0043	+/- 0.0110	-0.0012	+/- 0.0140
Resolution	9.38	6.00 - 11.50	9.47	6.00 - 11.50
Noise Edge	0	< 11	0	< 20

**PASS/FAIL SUMMARY**

Background Quality Check:	Passed
Background Range Check:	Passed
Background Resolution Check:	Passed
Background Verification Check:	Passed
Near Noise Edge:	Passed
Far Noise Edge:	Passed
Magnesium Quality Check:	Passed
Aluminum Quality Check:	Passed
Gains Check:	Passed
Changes in Calibration Blocks:	Passed

**SPECTRAL DENSITY FIELD CHECK**

Tool Name: SSDL Pad - 11790681

Reference Calibration Date: 22-Jun-16 15:39:48

Engineer: B. HOYTAL

Calibration Date: 22-Jun-16 18:46:32

Software Version: WL INSITE R5.0.3 (Build 7)

Calibration Version: 1

Pad Temperature: 101.4 degF

**DENSITY FIELD CALIBRATION SUMMARY**

Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	435.294	437.674	2.380	8.868
Far (B+D+P+L) cps	272.675	270.287	-2.388	11.227
Near Resolution	9.38	9.43	0.050	0.50
Far Resolution	9.47	9.60	0.130	1.00

**PASS/FAIL SUMMARY**

Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

**ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION**

Tool Name: SACRT Sonde - 12055737

Reference Calibration Date: 07-Apr-16 14:16:26

Engineer: B. HOYTAL

Calibration Date: 13-May-16 16:51:00

Software Version: WL INSITE R4.6.7 (Build 8)

Calibration Version: 1

Host Tool Name: SACRT Instrument - 12055741

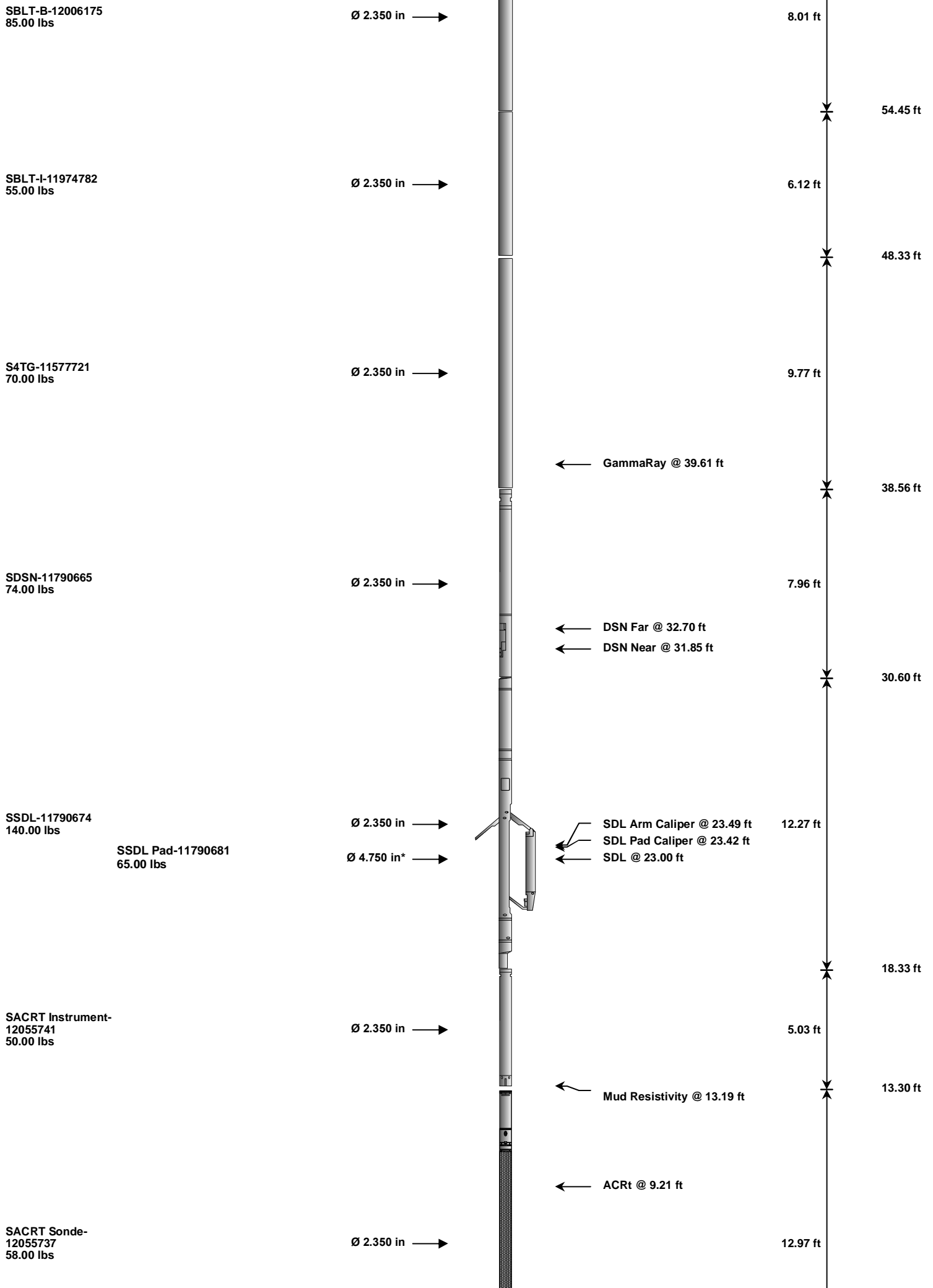
**TYPICAL GAIN RANGE**

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	0.9879	1.05	0.95	0.9953	1.05	0.95	1.0037	1.05
A2 (50")	0.95	0.9875	1.05	0.95	0.9953	1.05	0.95	1.0038	1.05
A3 (29")	0.95	0.9956	1.05	0.95	0.9988	1.05	0.95	1.0011	1.05
A4 (17")	0.95	1.0030	1.05	0.95	1.0018	1.05	0.95	1.0044	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.0199	1.05	0.95	1.0168	1.05
A6 (6")	N/A	N/A	N/A	0.95	1.0240	1.05	0.95	1.0258	1.05

**TYPICAL SONDE OFFSET RANGE**

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-40	11.222	40	-25	1.515	25	-15	-0.647	15





SP Ring-12055737  
0.00 lbs

Ø 3.625 in\* →

← SP @ 1.61 ft



0.33 ft  
0.33 ft  
0.00 ft

SBLNS-12345678  
5.00 lbs

Ø 2.350 in →

Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
SCHD	Ultra-Slim Cable Head	11572833	40.00	4.00	68.66	300.00
SBLT-C	Ultra-Slim Hole Motorized Releasable Sub	11974791	31.00	3.32	65.34	300.00
SBLT-S	Ultra-Slim Hole Shock Sub	11974792	42.00	2.88	62.46	300.00
SBLT-B	Ultra-Slim Hole Battery Sub	12006175	85.00	8.01	54.45	300.00
SBLT-I	Ultra-Slim Hole Sensor / Inverter Sub	11974782	55.00	6.12	48.33	300.00
S4TG	Ultra-Slim Quad Telemetry Gamma Cartridge	11577721	70.00	9.77	38.56	60.00
SDSN	Ultra-Slim Hole Dual Spaced Neutron	11790665	74.00	7.96	30.60	60.00
SSDL	Ultra-Slim Hole Spectral Density	11790674	140.00	12.27	18.33	60.00
SDLP	Slim Density Pad	11790681	65.00	2.55 *	21.72	60.00
SACRT	Array Compensated True Resistivity Instrument Section	12055741	50.00	5.03	13.30	120.00
SACRT	Array Compensated True Resistivity Sonde Section	12055737	58.00	12.97	0.33	120.00
SP	SP Ring	12055737	0.00	0.25 *	1.61	300.00
SBLNS	Ultra-Slim Bull Nose	12345678	5.00	0.33	0.00	300.00

<b>Total</b>			<b>715.00</b>	<b>72.66</b>		
* Not included in Total Length and Length Accumulation.						
<b>Data: TOMPKINS_USC\0001 US_TRIPLENDLE</b>					<b>Date: 02-Jul-16 05:47:45</b>	

COMPANY	URSA OPERATING COMPANY		
WELL	TOMPKINS 41A-08-07-95		
FIELD	PARACHUTE		
COUNTY	GARFIELD	STATE	COLORADO

**HALLIBURTON**

SPECTRAL DENSITY  
DUAL SPACED NEUTRON  
ARRAY COMPENSATED  
TRUE RESISTIVITY