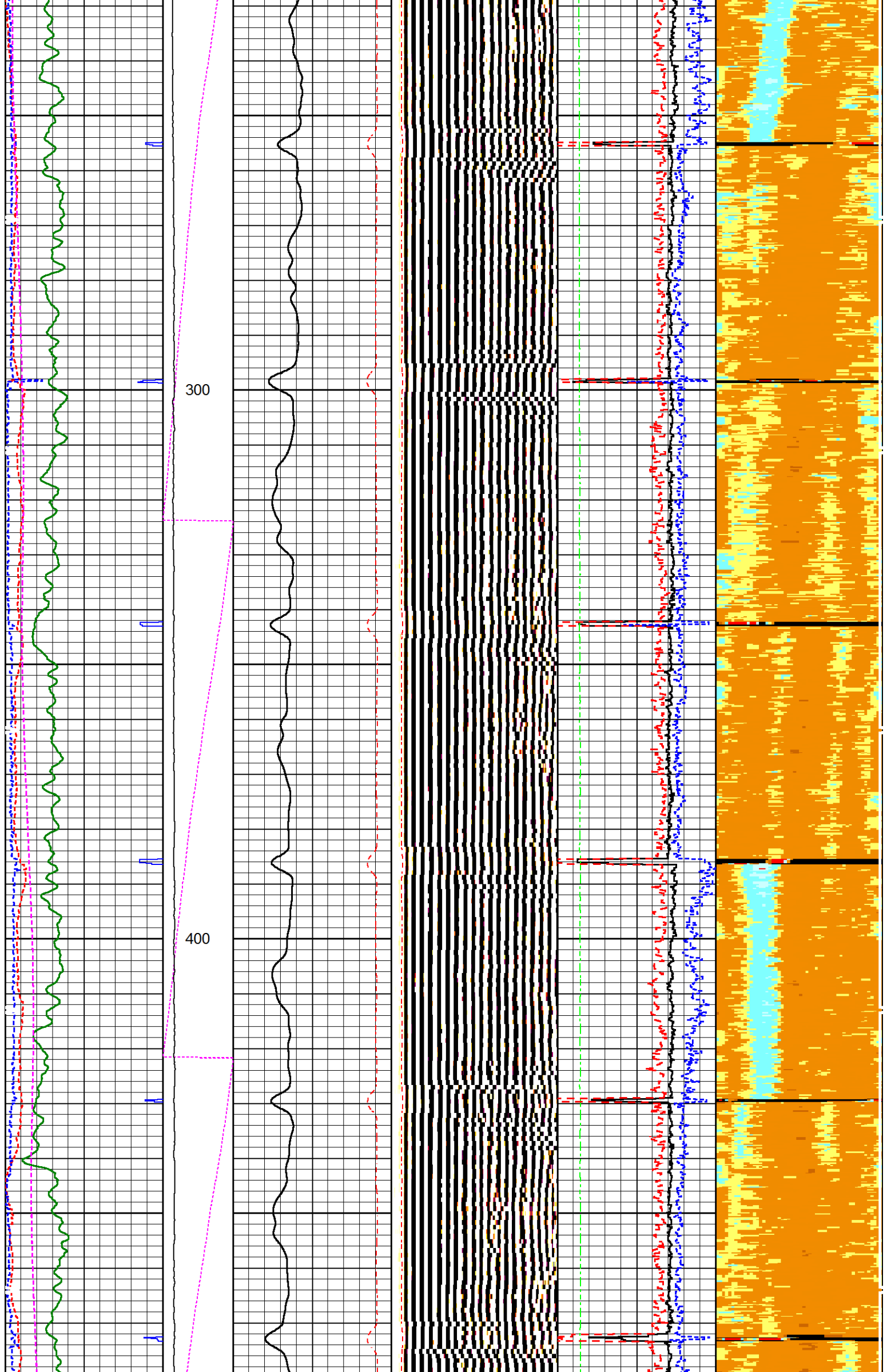
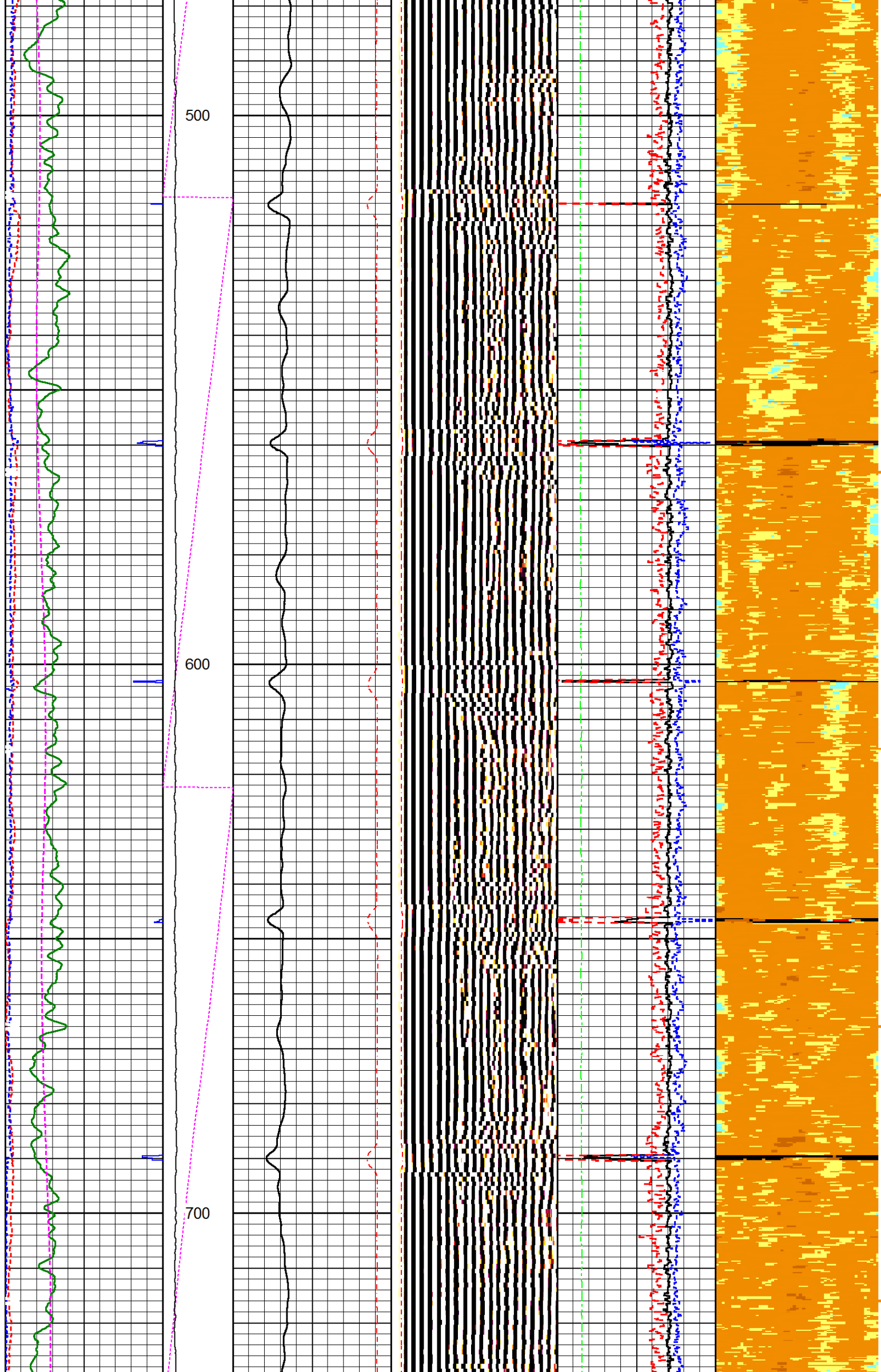
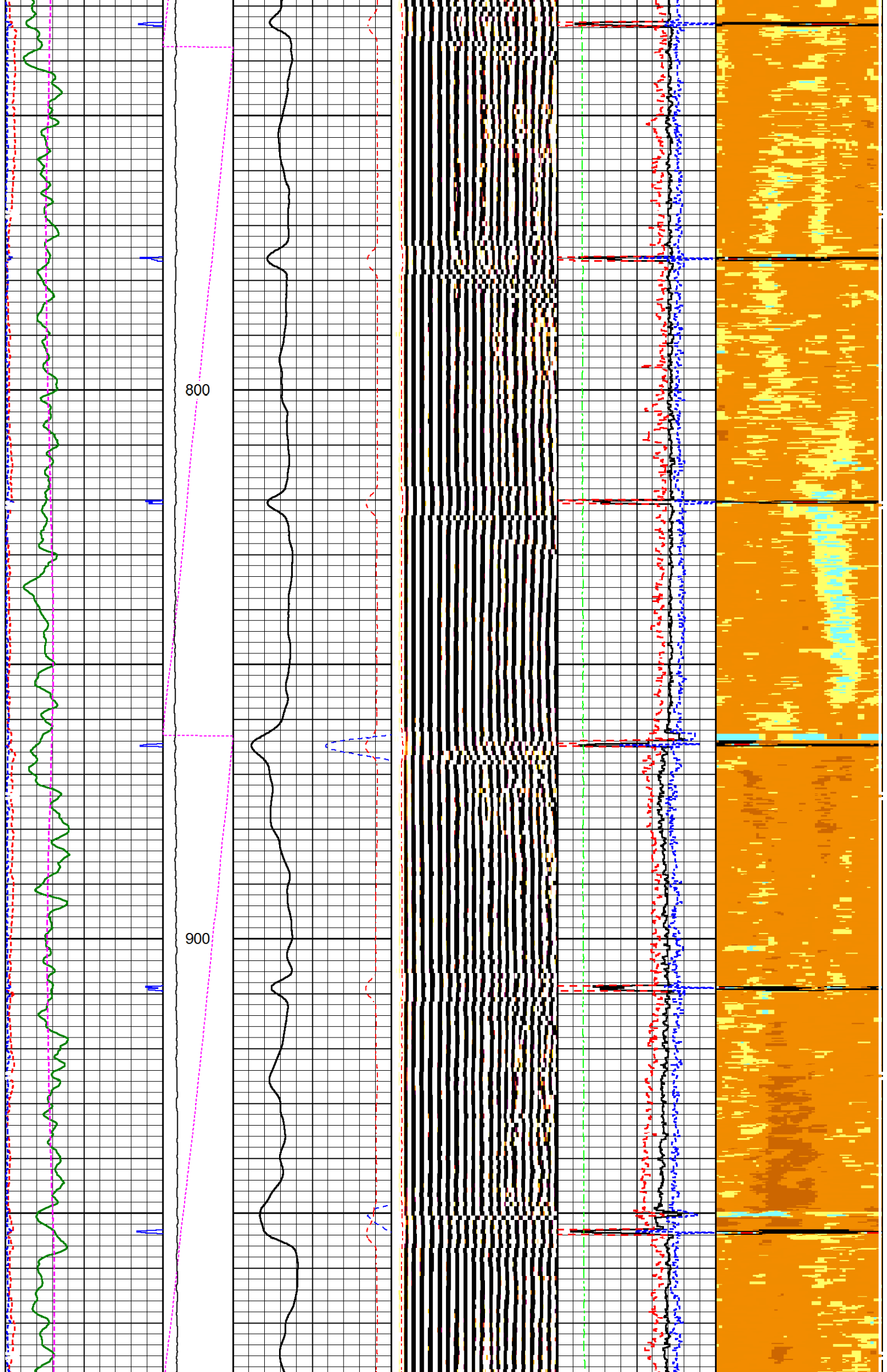


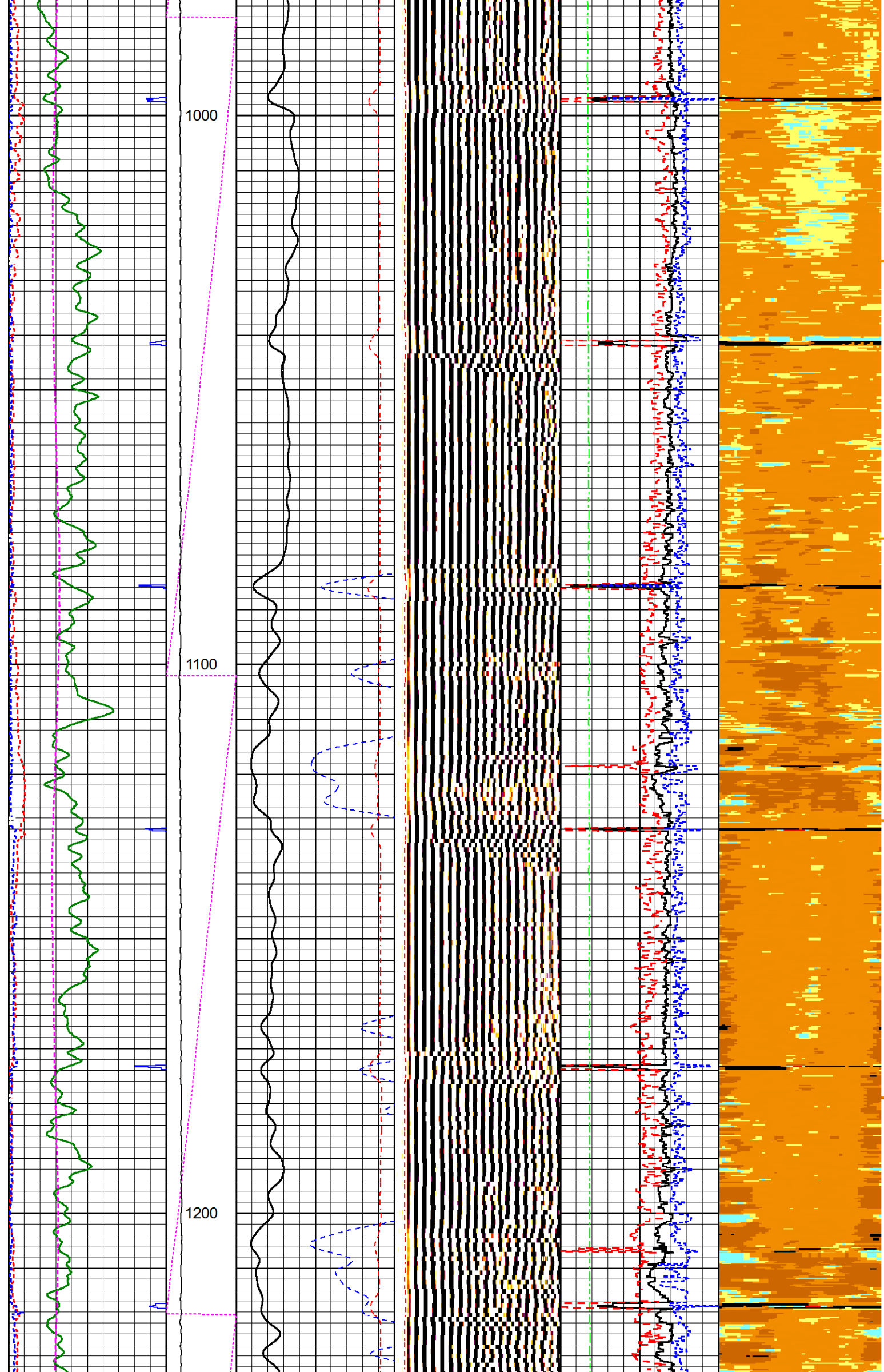
HALLIBURTON										ACOUSTIC CEMENT BOND LOG CAST-M																			
Company WPX ENERGY Well STATE OF COLORADO KP 32-9 Field KOKOPELLI County GARFIELD State CO										Company WPX ENERGY Well STATE OF COLORADO KP 32-9 Field KOKOPELLI County GARFIELD State CO																			
Permanent Datum Log Measured From KB Drilling Measured From KB										GROUND LEVEL Elevation 5762' KB , 21 Ft. above perm. datum KB										Elevation K.B. 5783' D.F. 5782' G.L. 5762'									
Date @ Time Logged 30 AUG 2014 Run No. ONE Depth - Driller 5900' Depth - Logger 5800' Bottom - Logged Interval 5800' Top - Log Interval 100' Max. Recorded Temp. 197 DEG F										Type Fluid in Hole Density of Fluid Fluid Level Cement Top Est. Logged Equipment / Location Recorded by Witnessed by										WATER 8.4# SURFACE SEE LOG 11726117 / G.J. D. SOLIS J. BRADY									
CEMENTING DATA Date / Time Cemented Primary / Squeeze Expected Compressive Strength Cement Volume Cement Type / Weight Formulation Mud Type / Mud Wgt.										Surface String Protection String String N/A N/A N/A N/A										Production String Liner N/A									
psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs										psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs										psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs psi@ hrs									
Borehole Record Run Number Bit From To Size Weight From To ONE 13.5" SURFACE 998' 9.625" 32.3# SURFACE 998' TWO 8.75" 998' 5900' 5.5" 17.0# SURFACE 5900'										Casing & Tubing Record Weight From To 32.3# SURFACE 998' 17.0# SURFACE 5900'																			
<<< Fold Here >>>																													
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.																													
Comments																													
CORRELATED ON BOTTOM TO BAKER RADIAL ANALYSIS LOG DATED: 14 AUG 2014.																													
GR-CBL-CAST RAN IN COMBINATION.																													
LOG INTERVALS PER CUSTOMER REQUEST.																													
CAST RAN AS FOLLOWS: 3-5/8" HEAD, BROWN TRANSDUCER, CIM MODE, 54 SHOTS, 4 SCANS																													
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES.																													

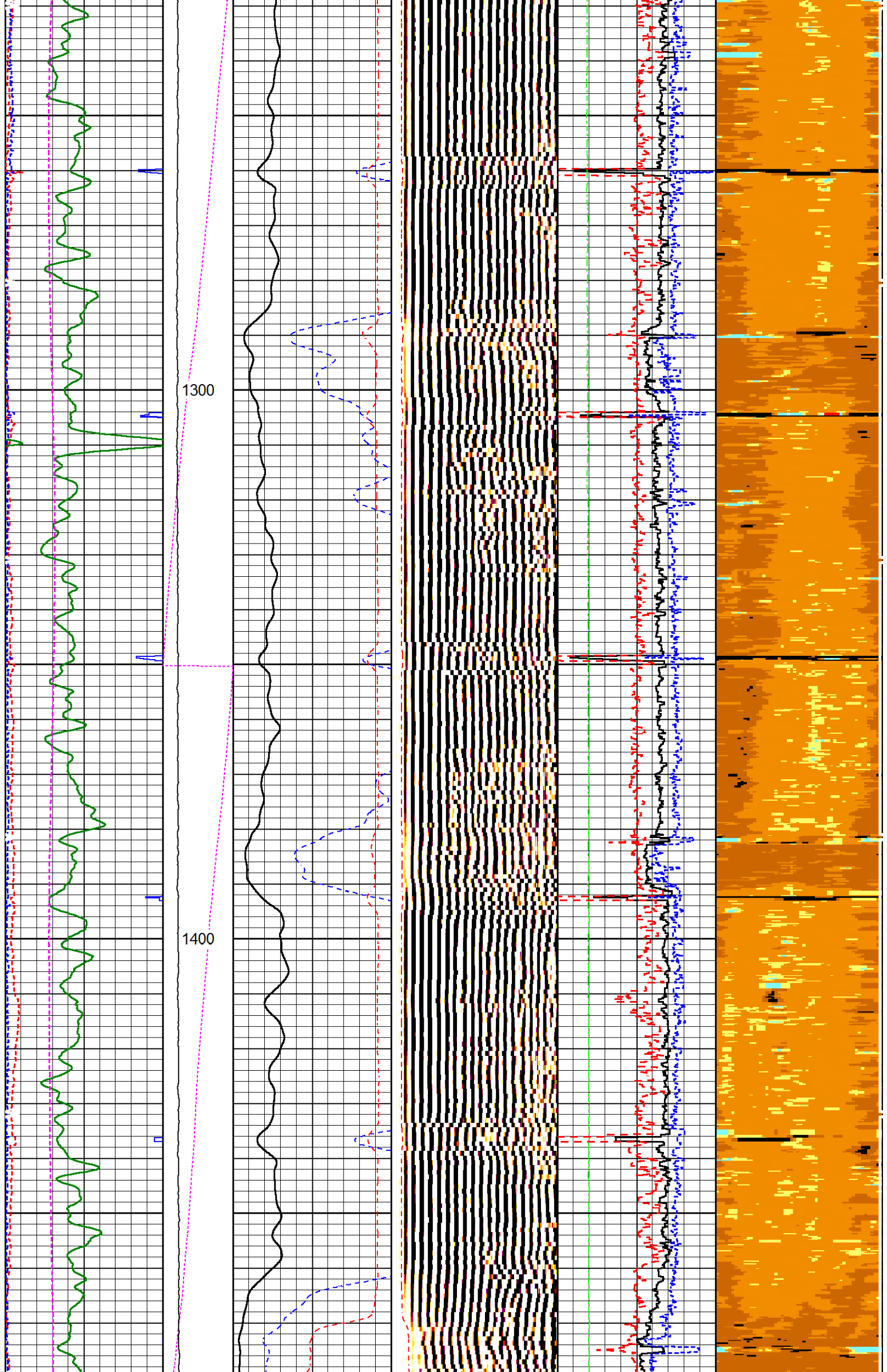
Service Ticket No.		901631767		API No.		05-045-22217-0000		PGM Ver		14.05.12001	
The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client											
EQUIPMENT DATA											
TELEMETRY			CEMENT BOND TOOL			CAST INSTRUMENT			CAST MANDREL		
Run No.	ONE		Run No.	ONE		Run No.	ONE		Run No.	ONE	
Serial No.	10998321		Serial No.	12386763		Serial No.	11521102		Serial No.	11510756	
Model No.	TTTC-U-002		Model No.	CBL-M		Model No.	CAST-M		Model No.	CAST-M	
Diameter	1.688"		Diameter	2.75"		Diameter	2.75"		Diameter	3.125"	
LOGGING DATA											
General Data											
Pass	Depths			Well Head		Speed		Logging Run Comments			
No	From		To		Pressure		Ft/Min				

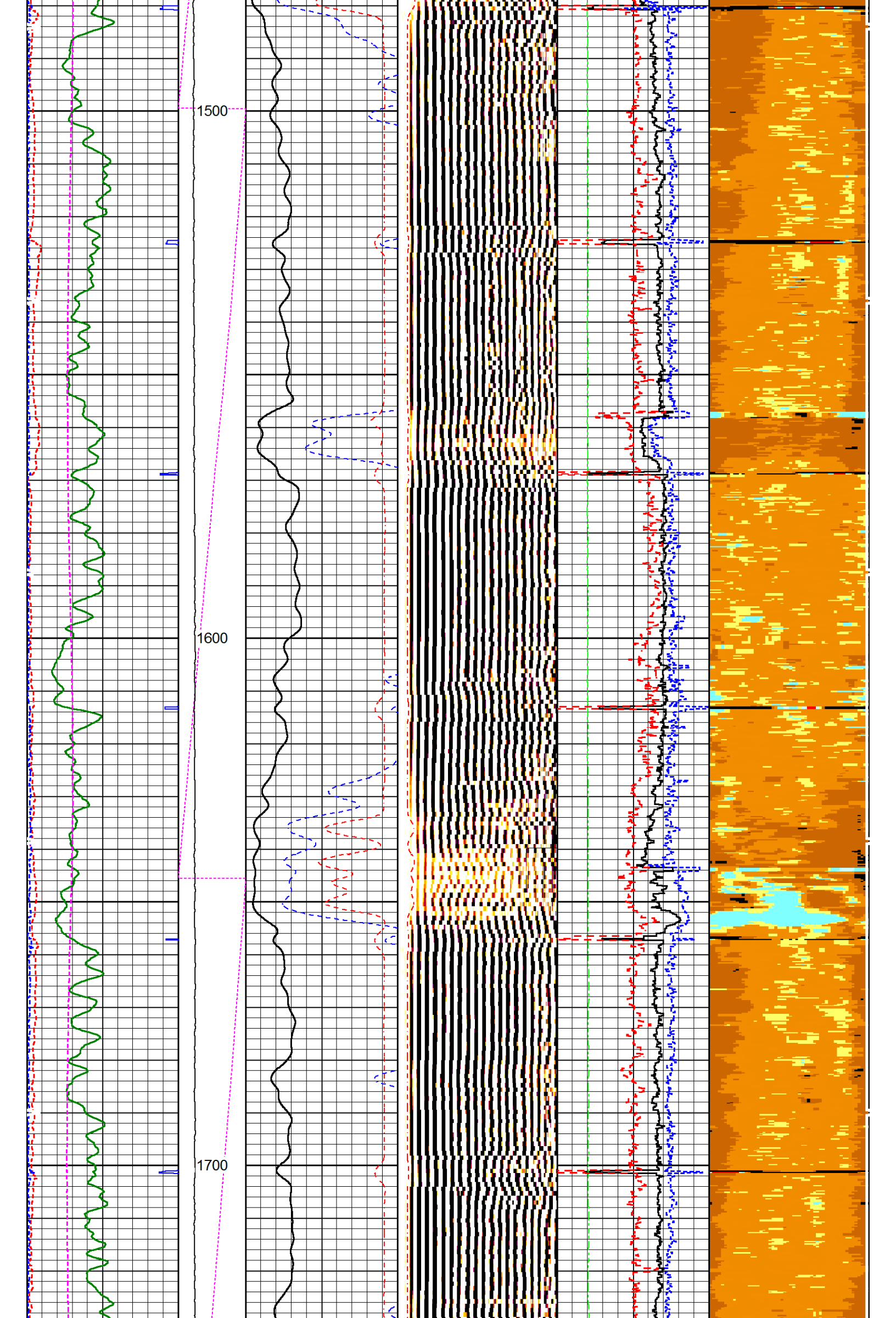


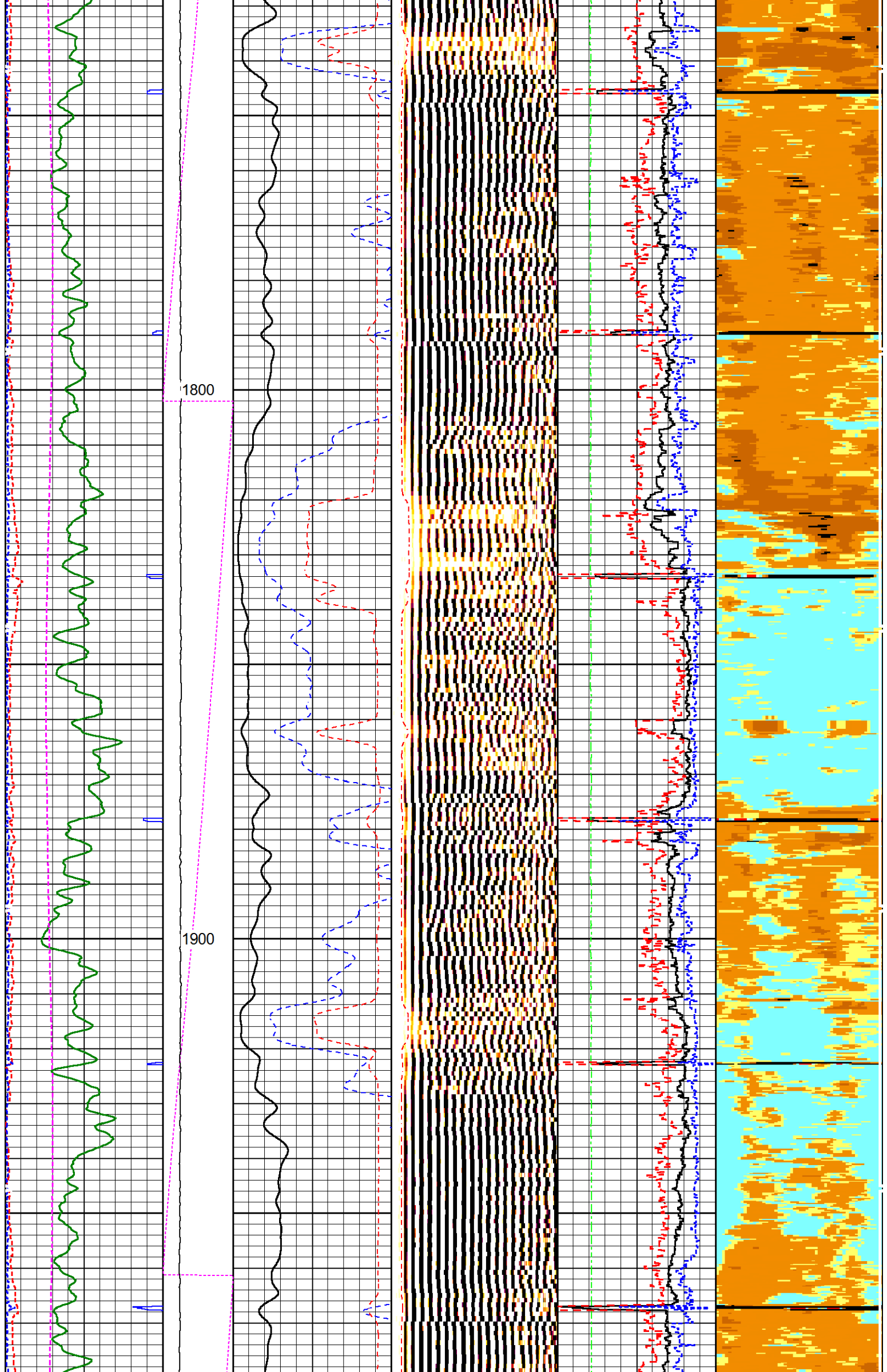


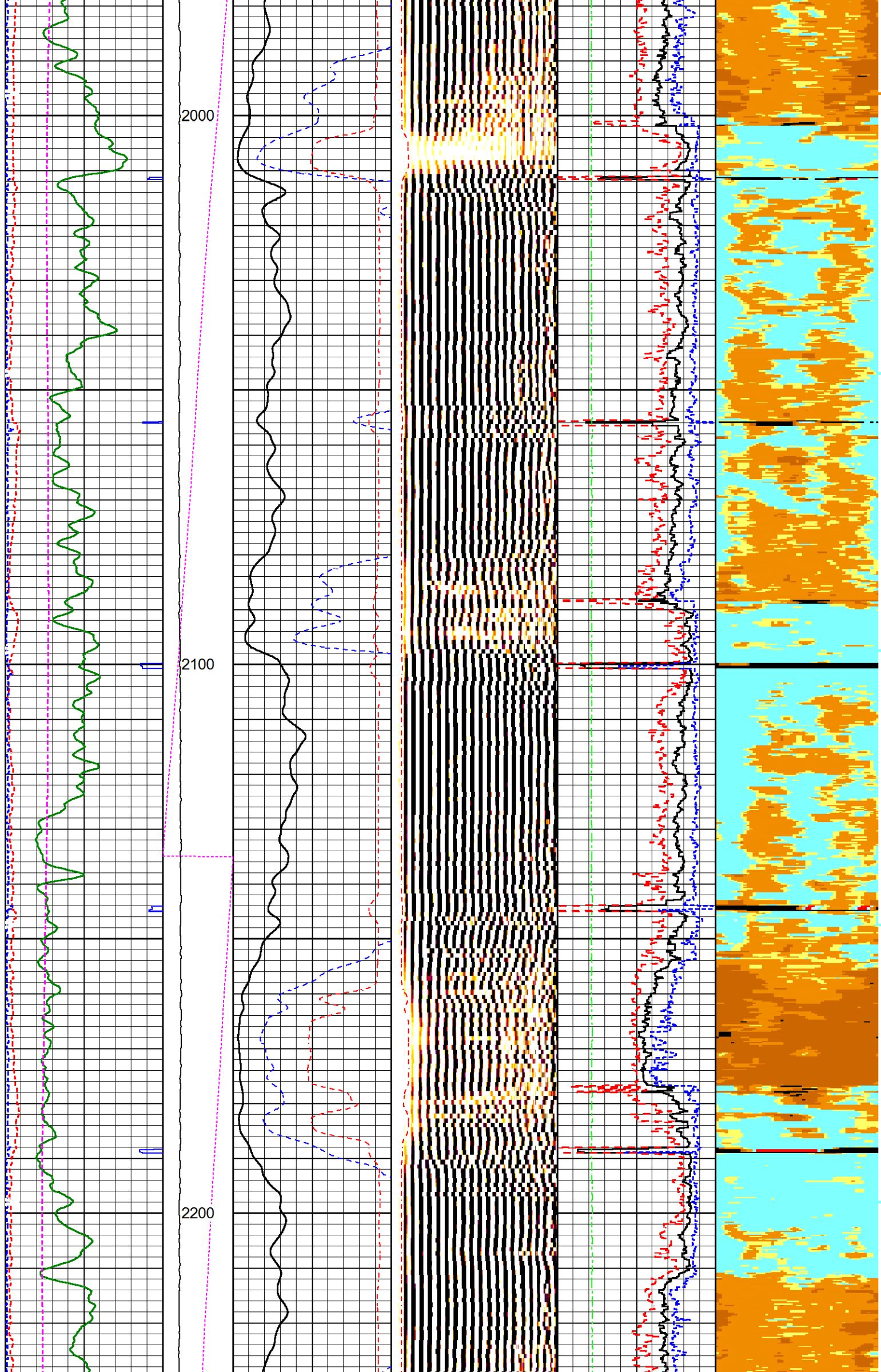


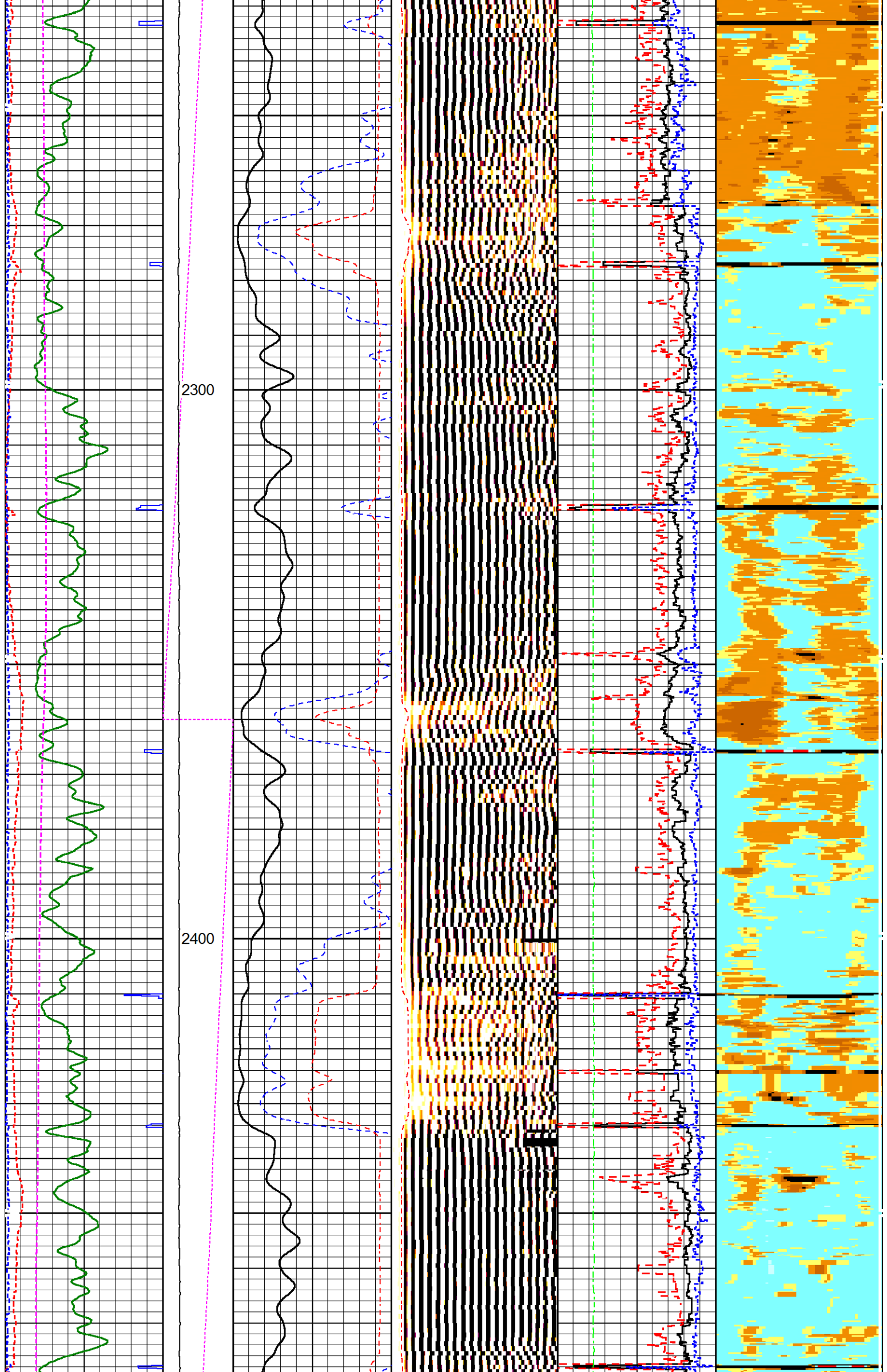


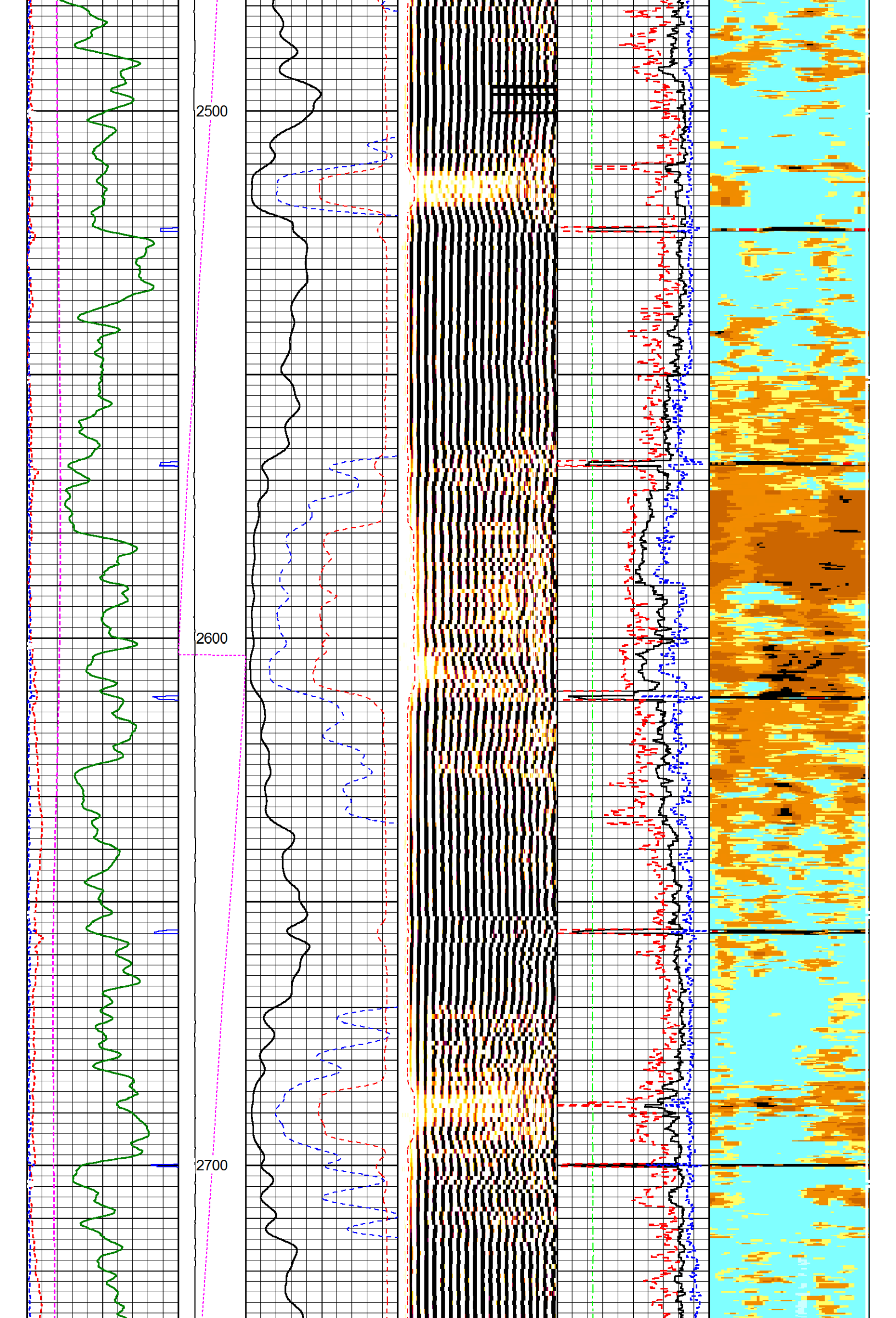


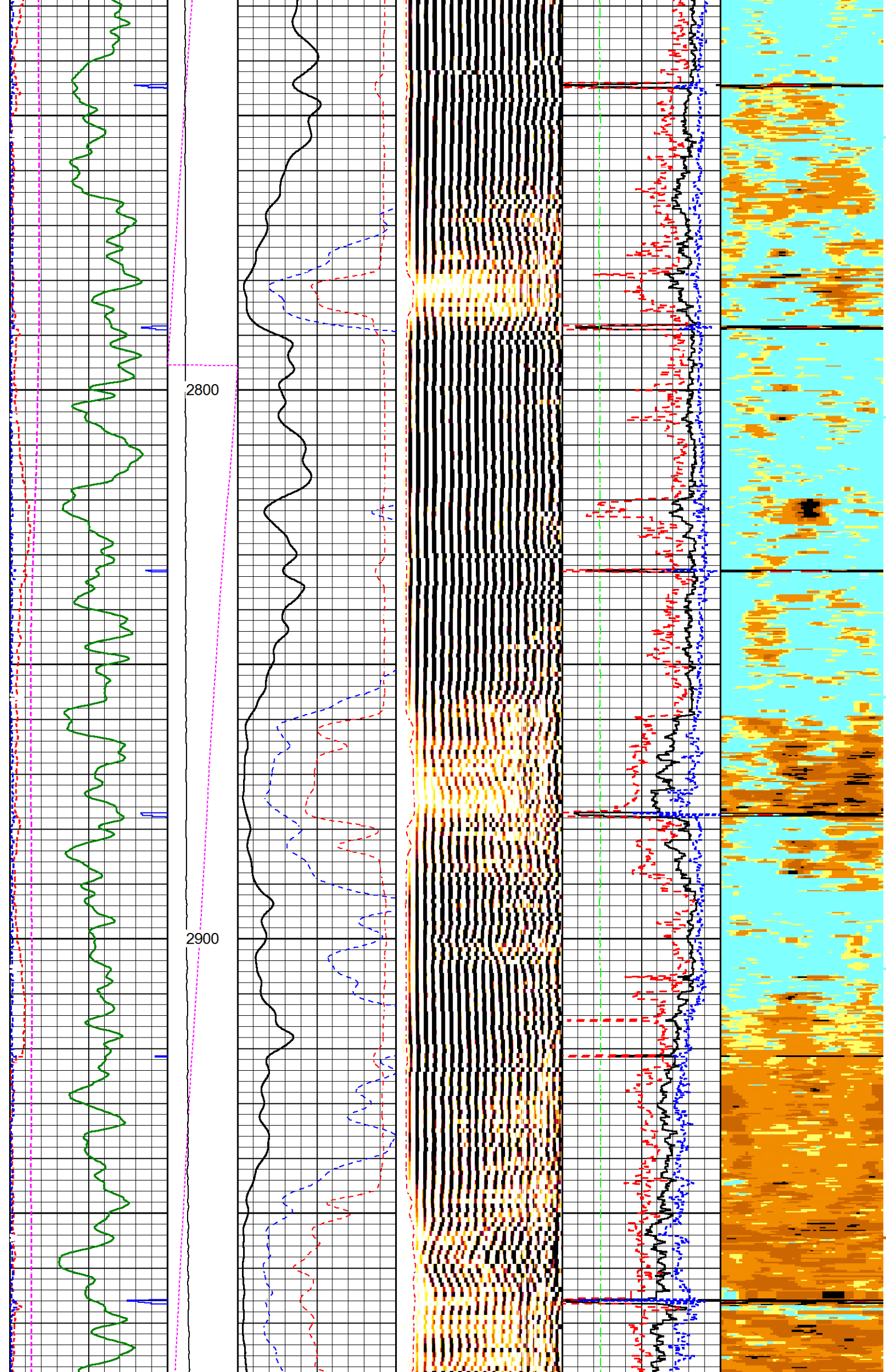


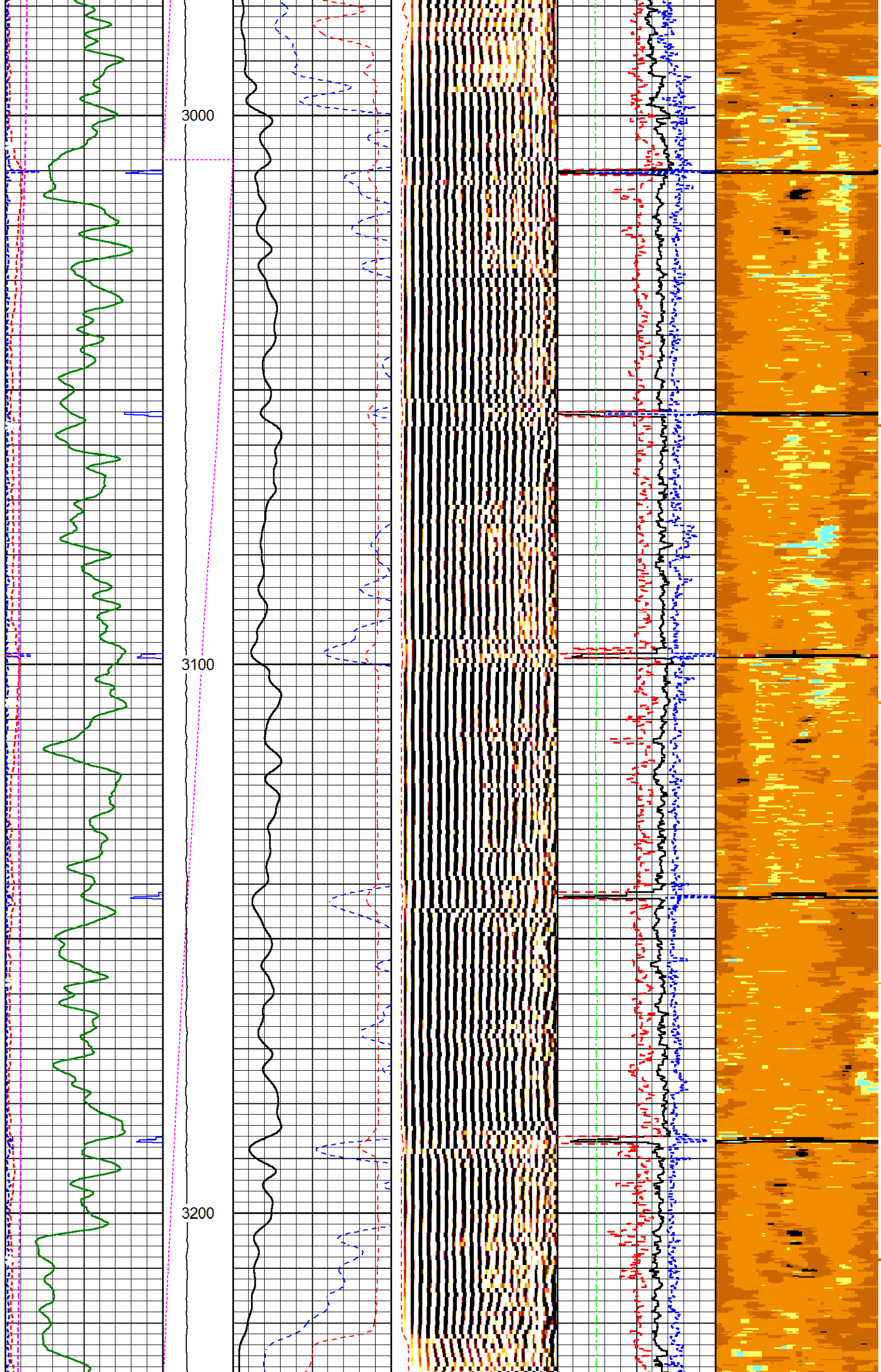


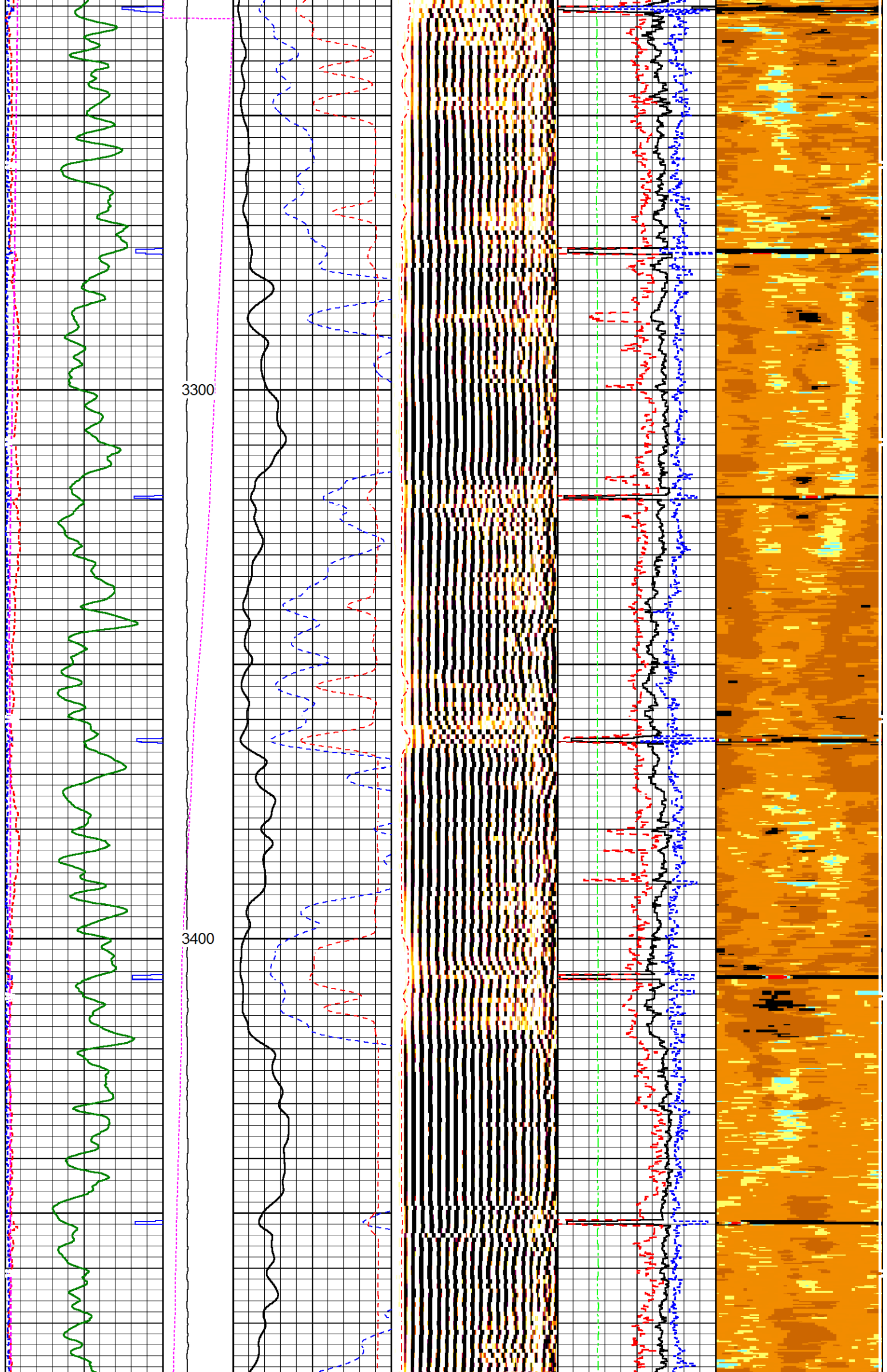


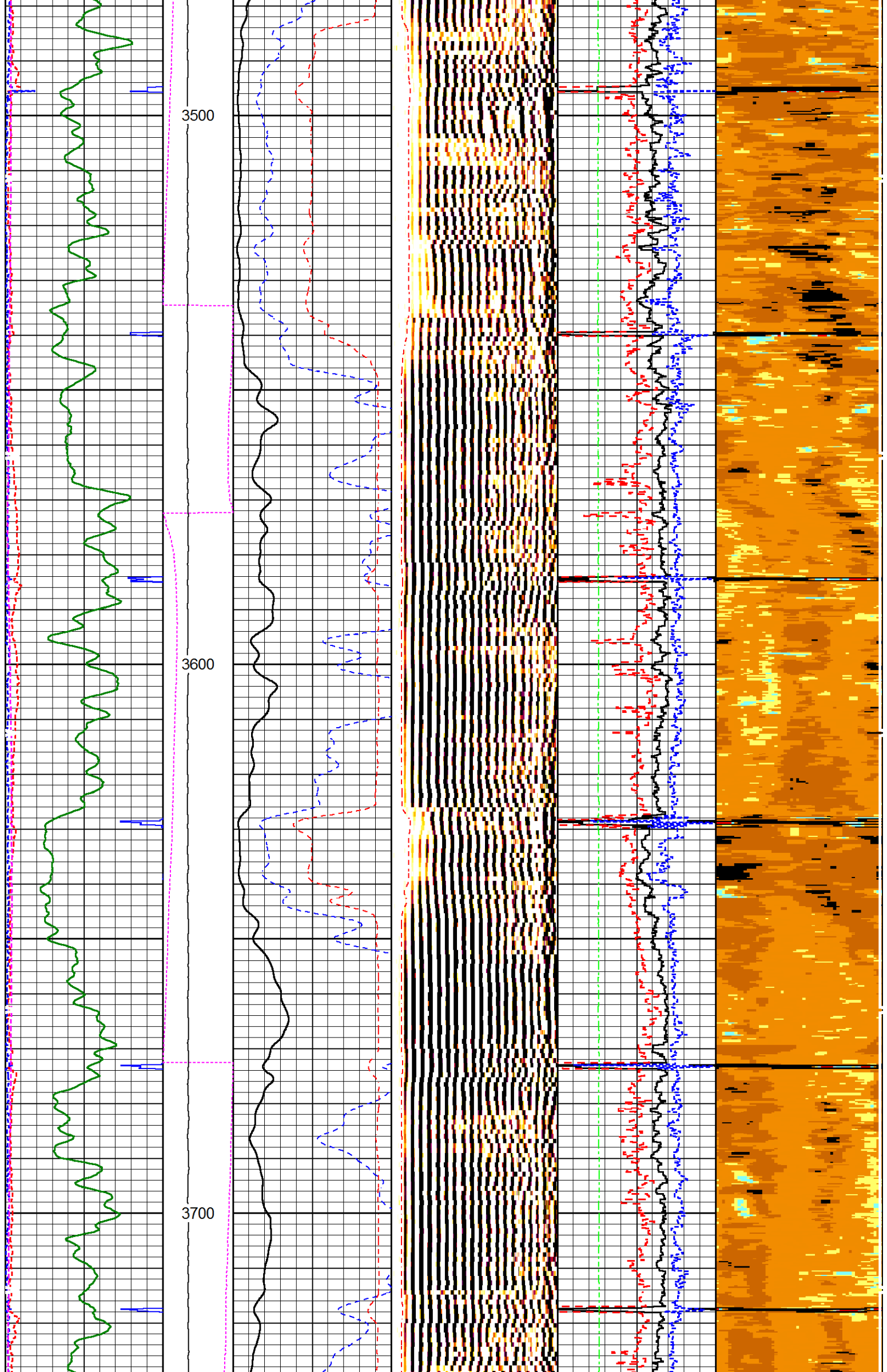


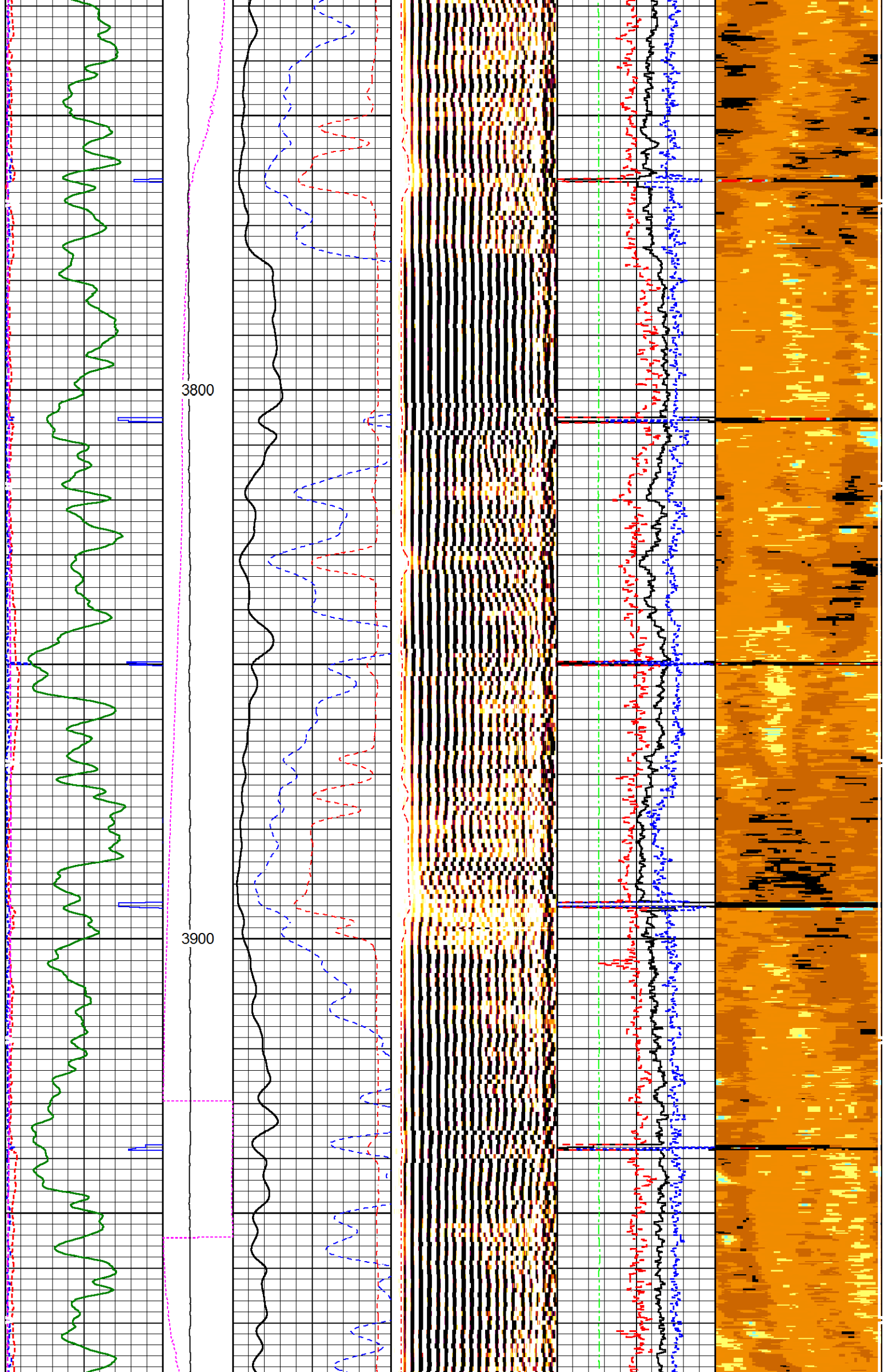


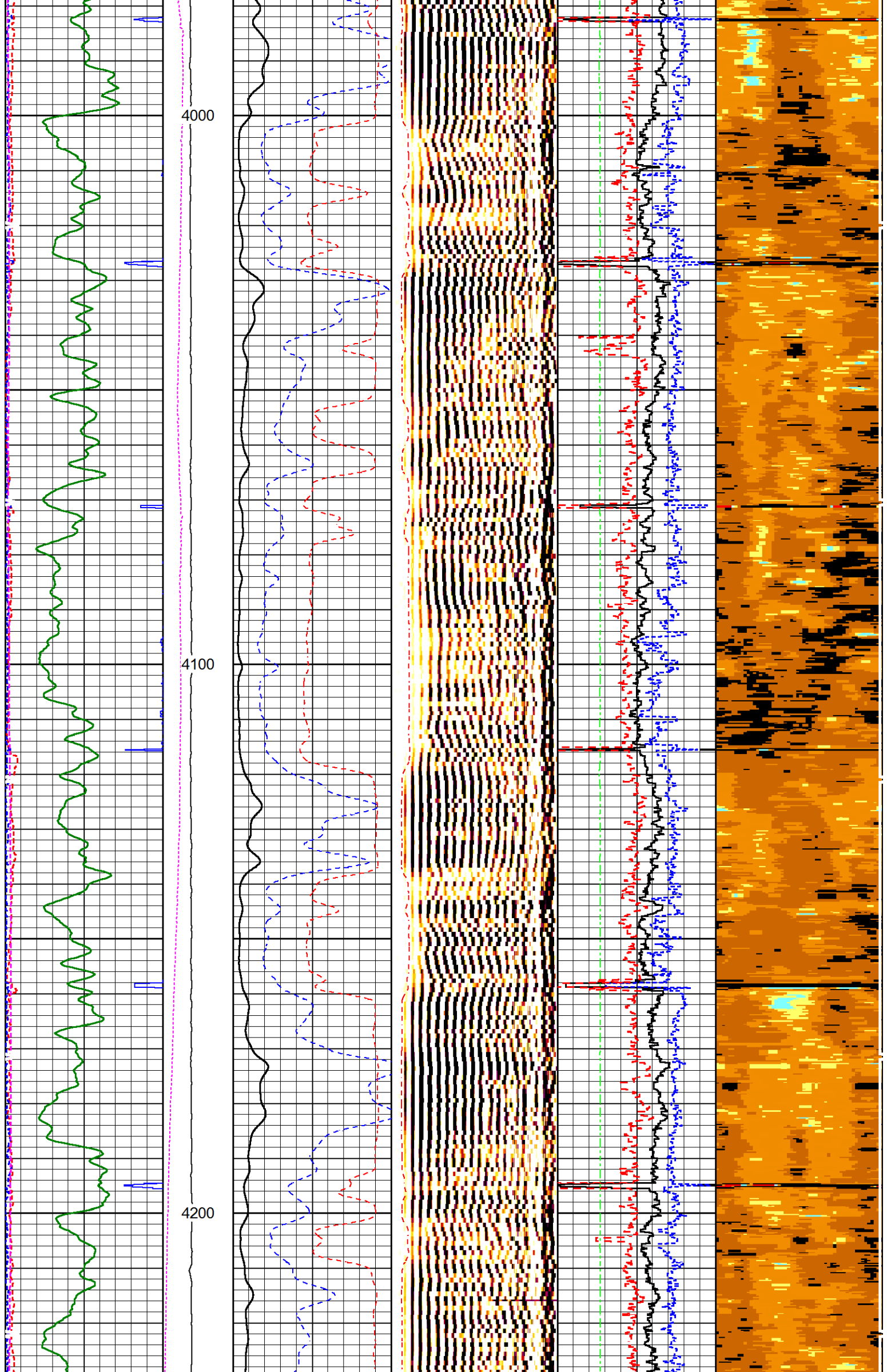


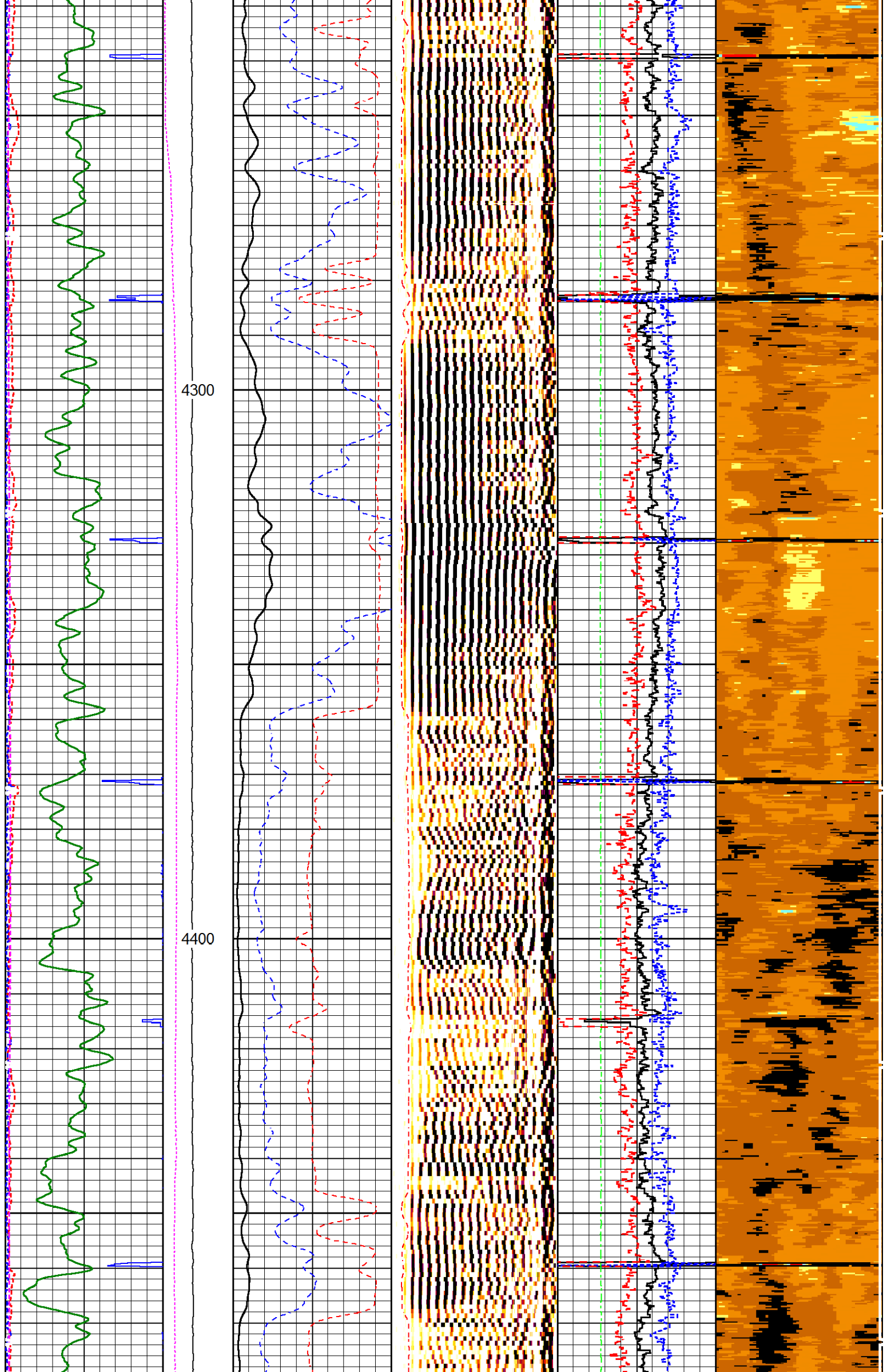


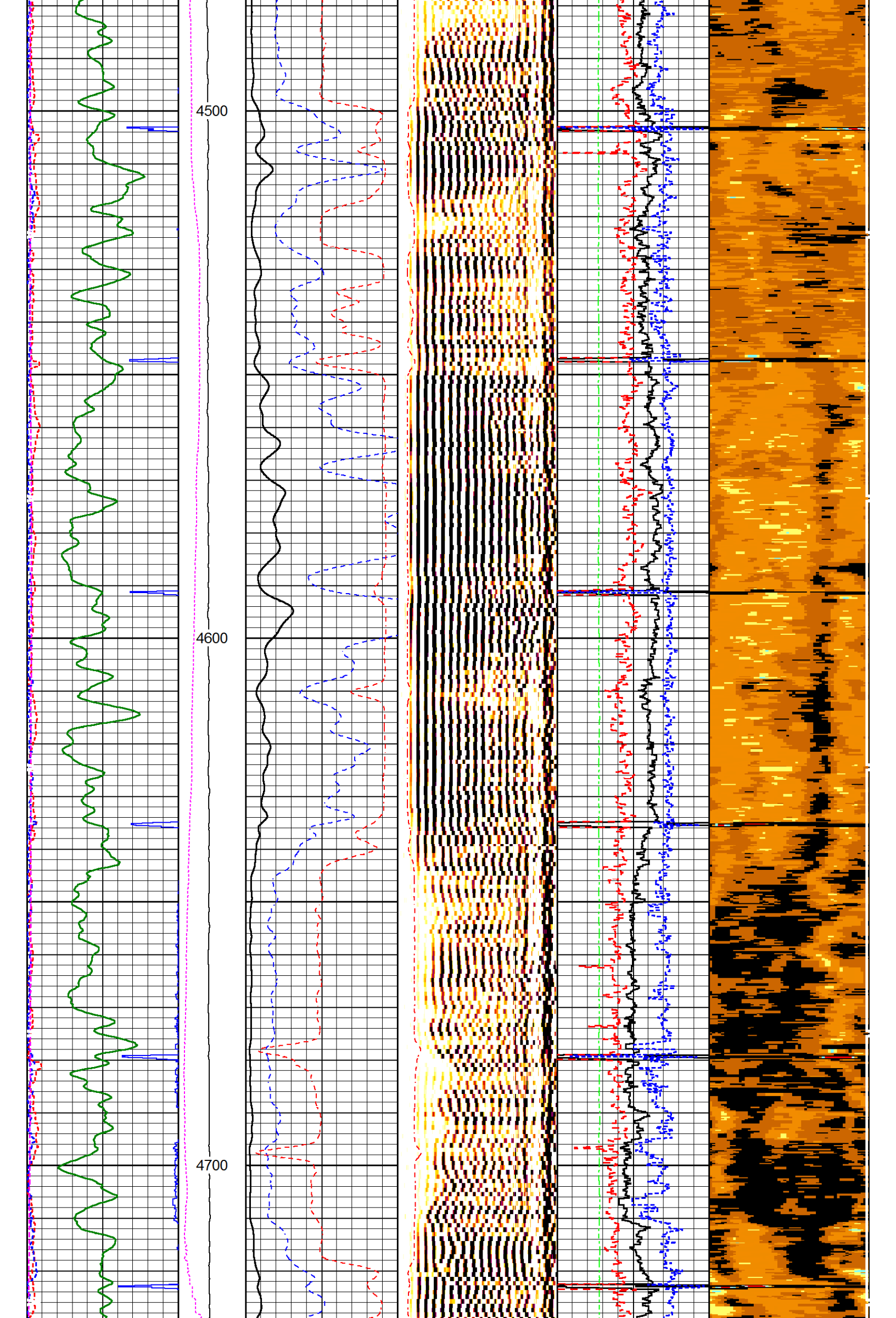


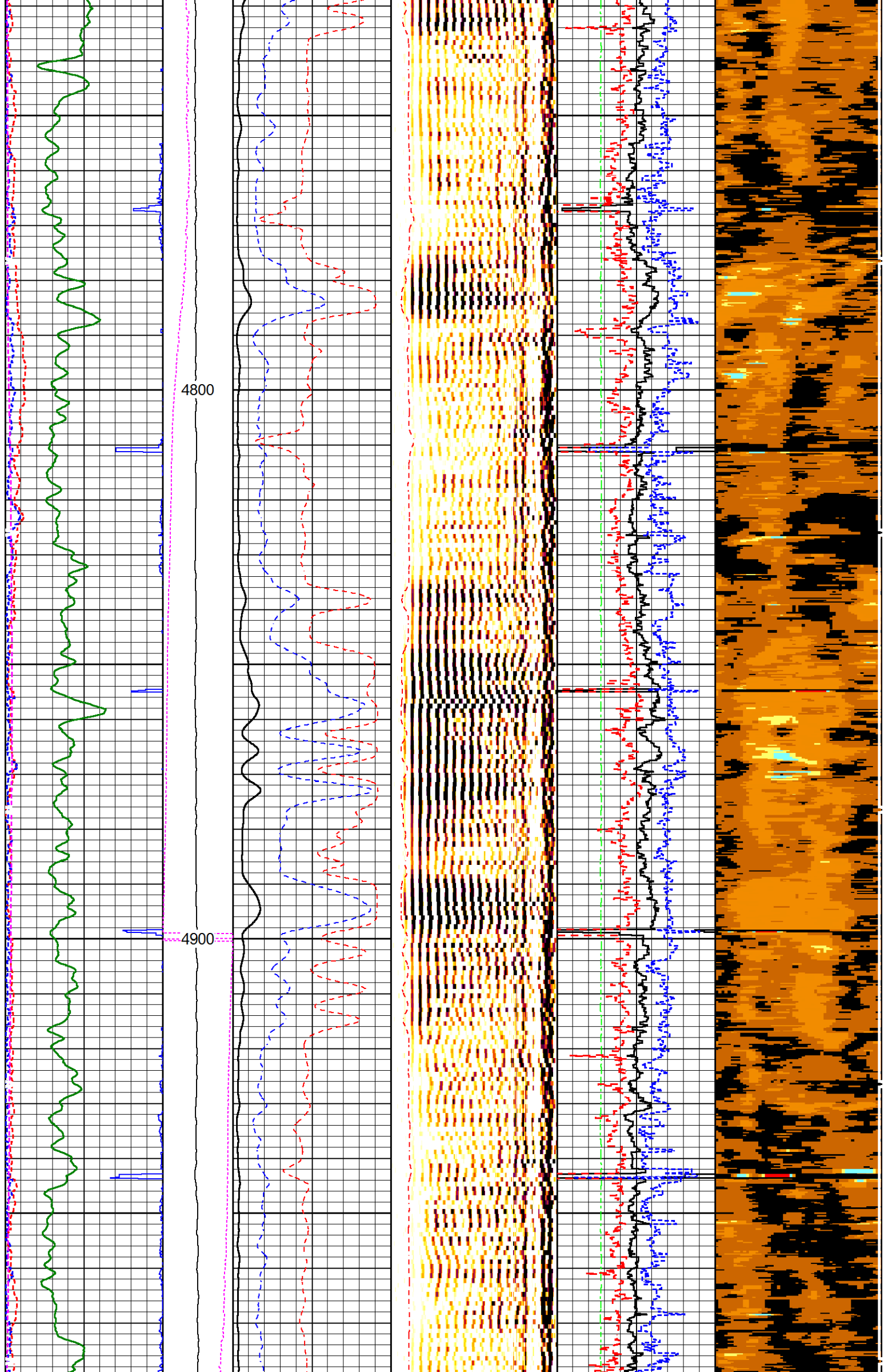


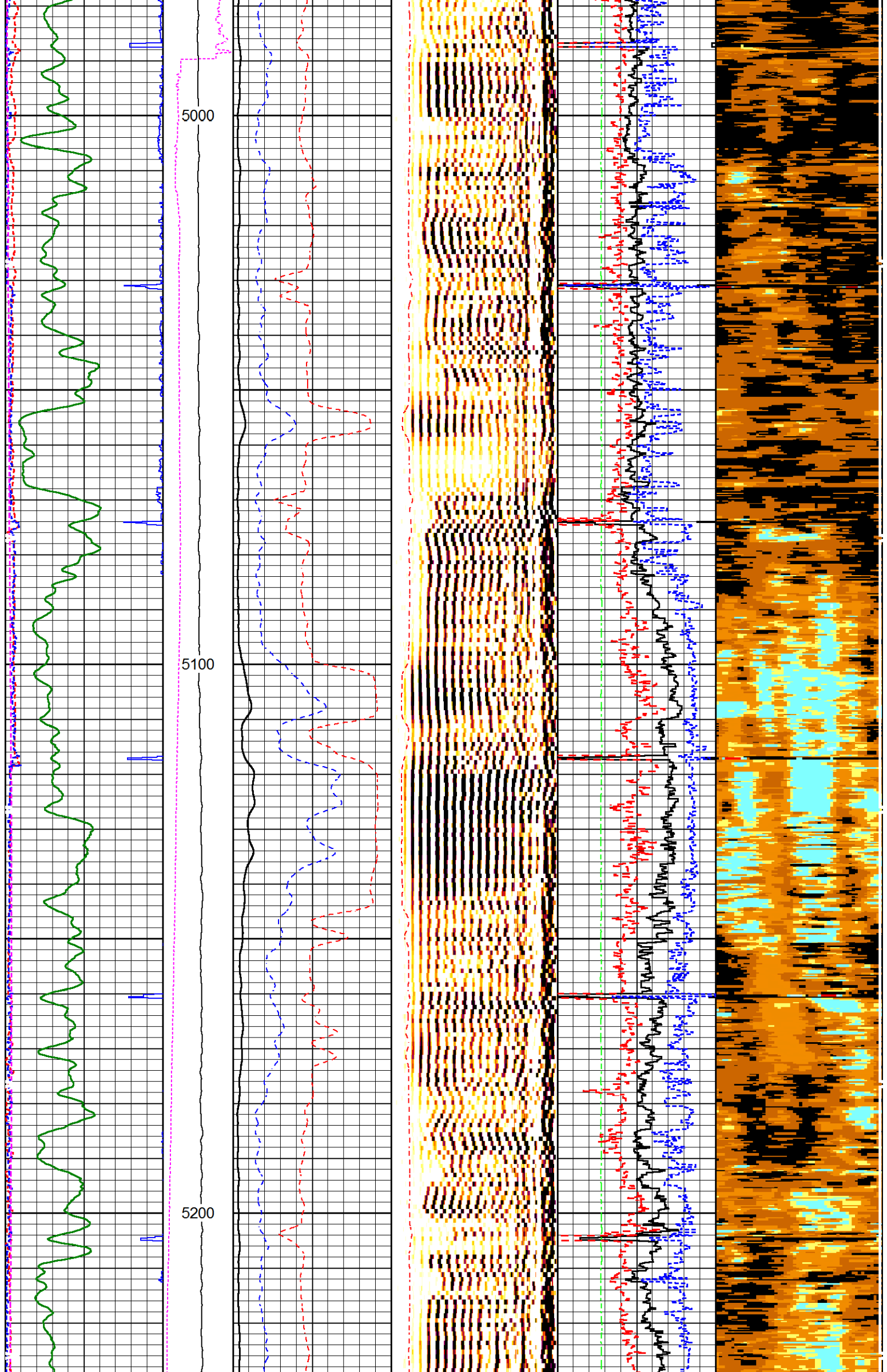


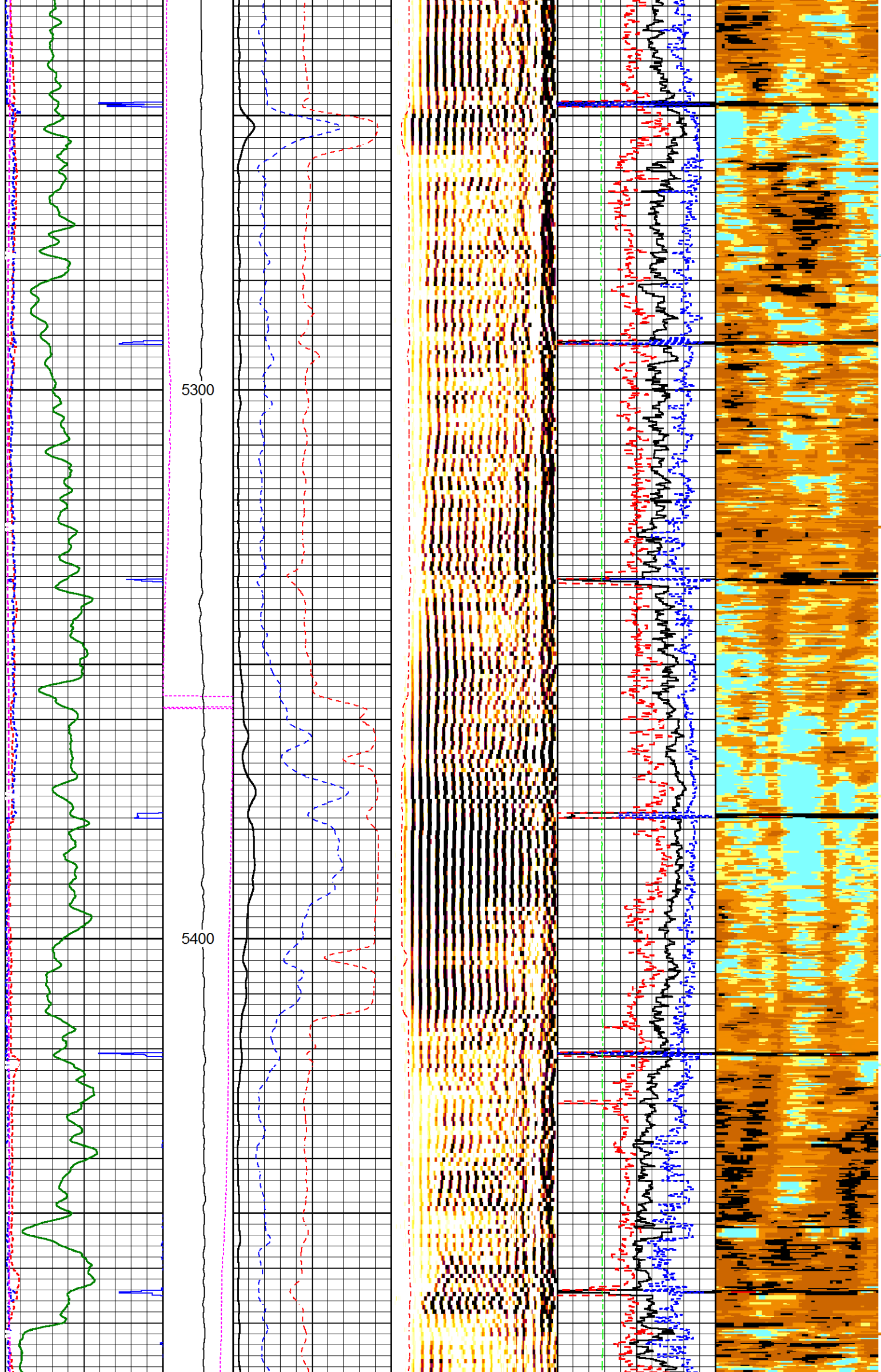


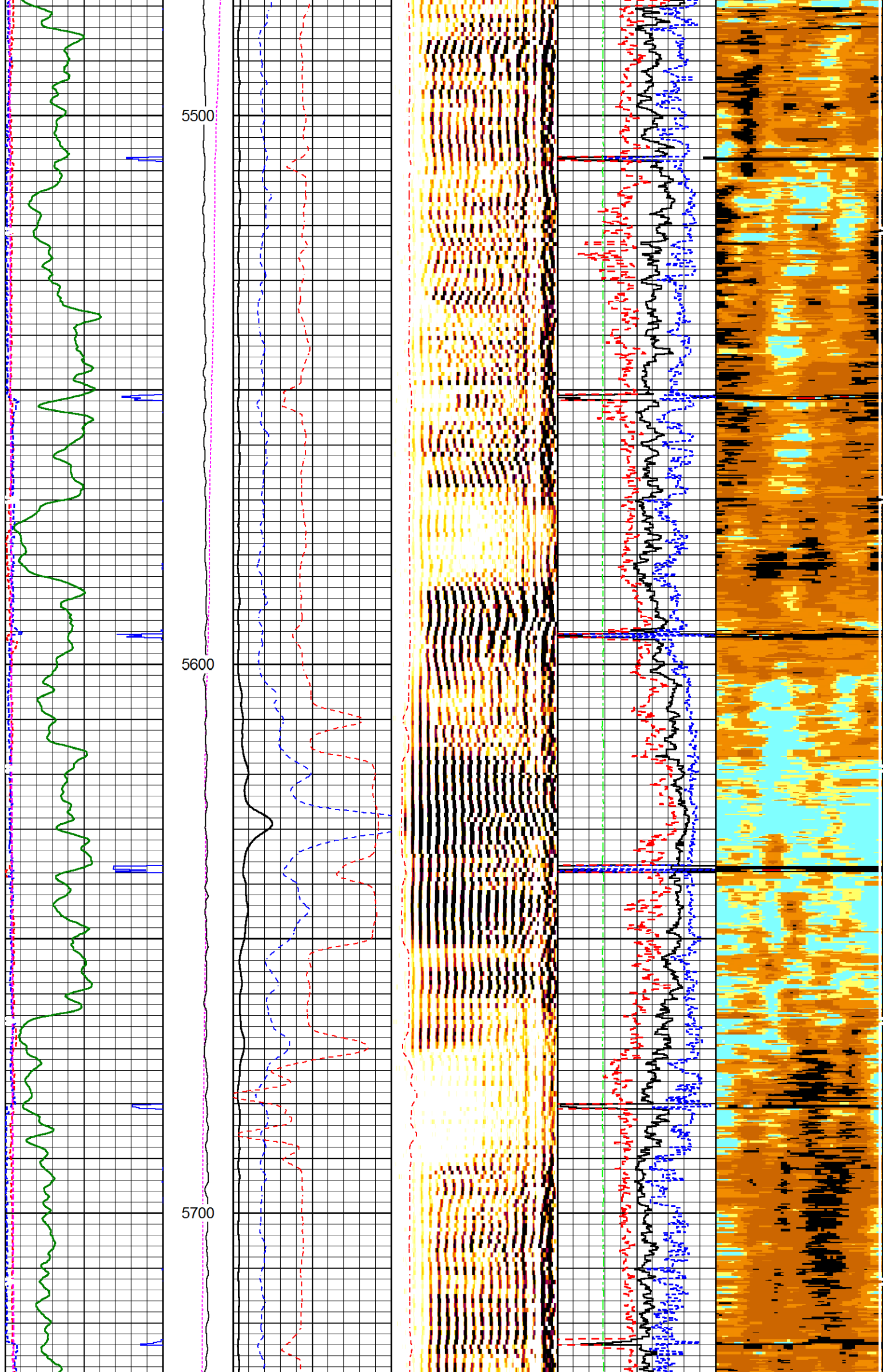


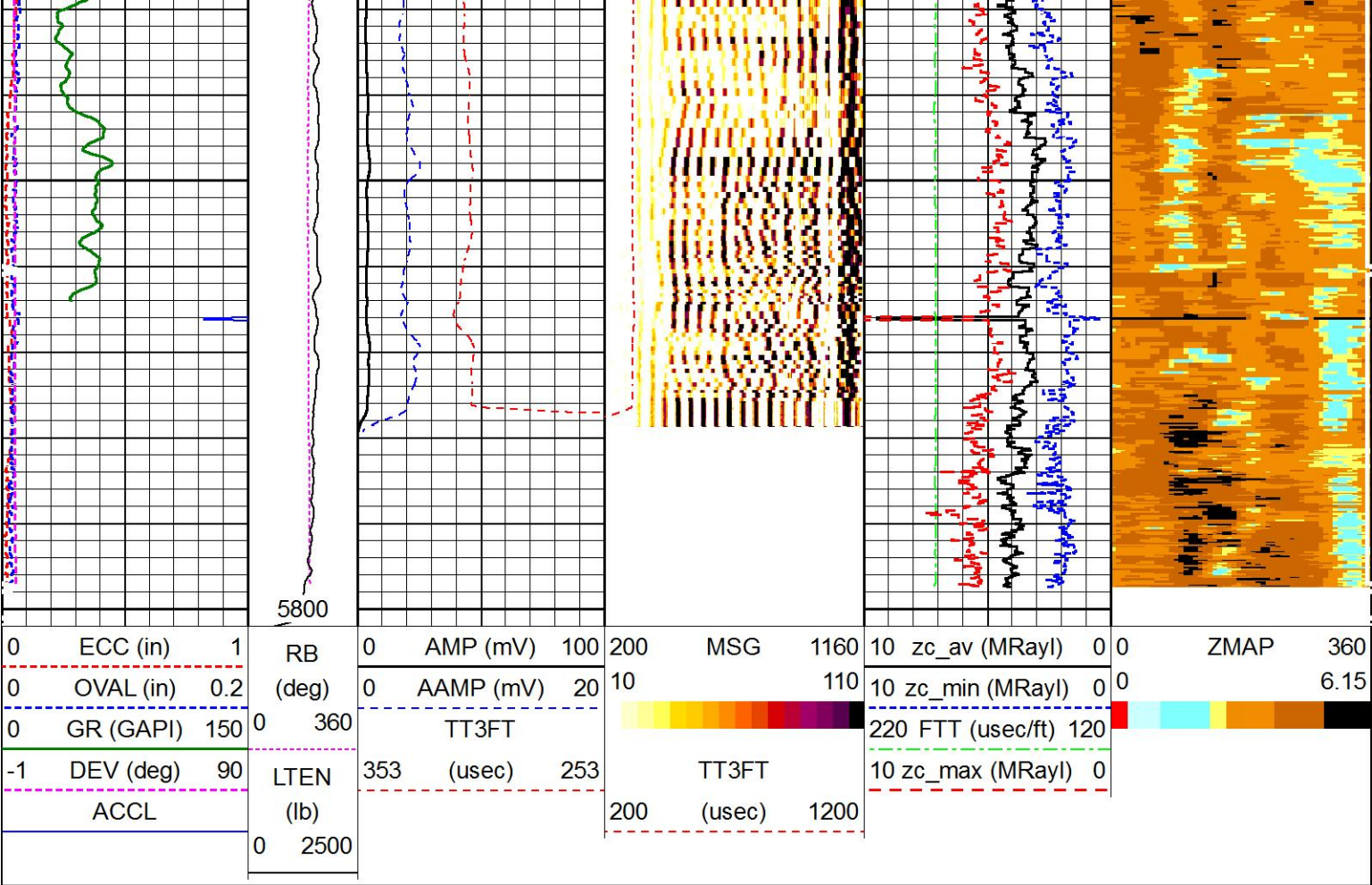












MAIN LOG SECTION

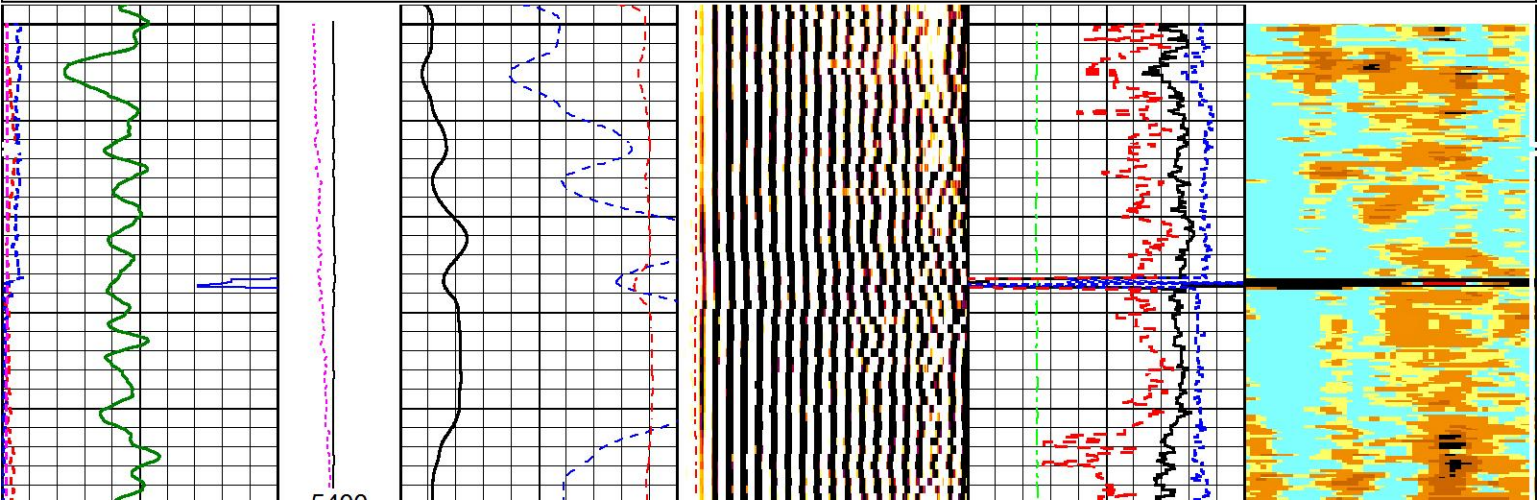
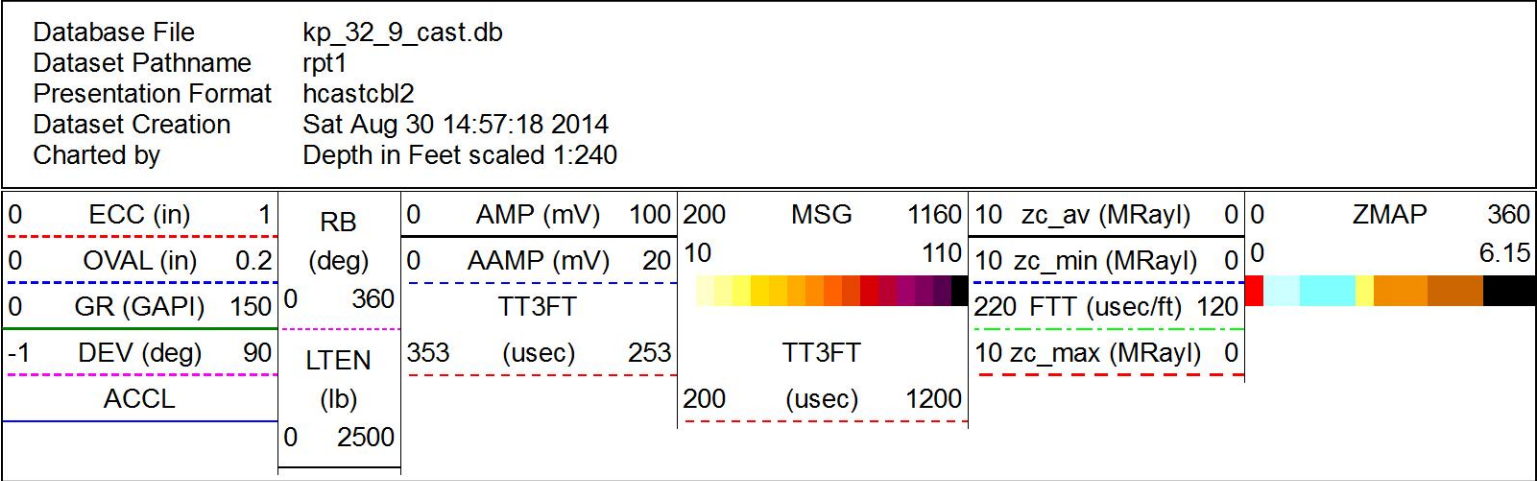
HALLIBURTON

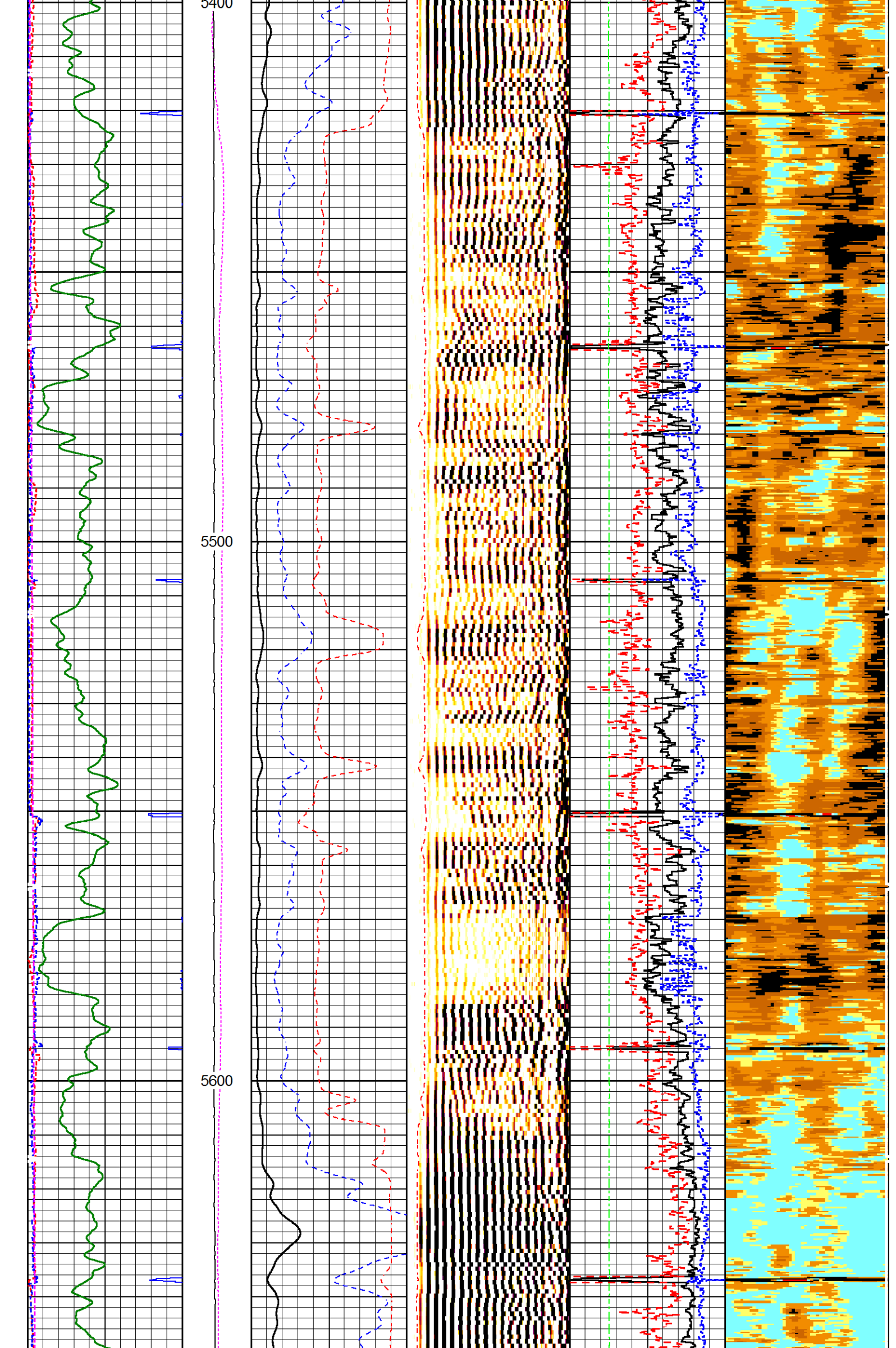
5" = 100'
2000 PSI

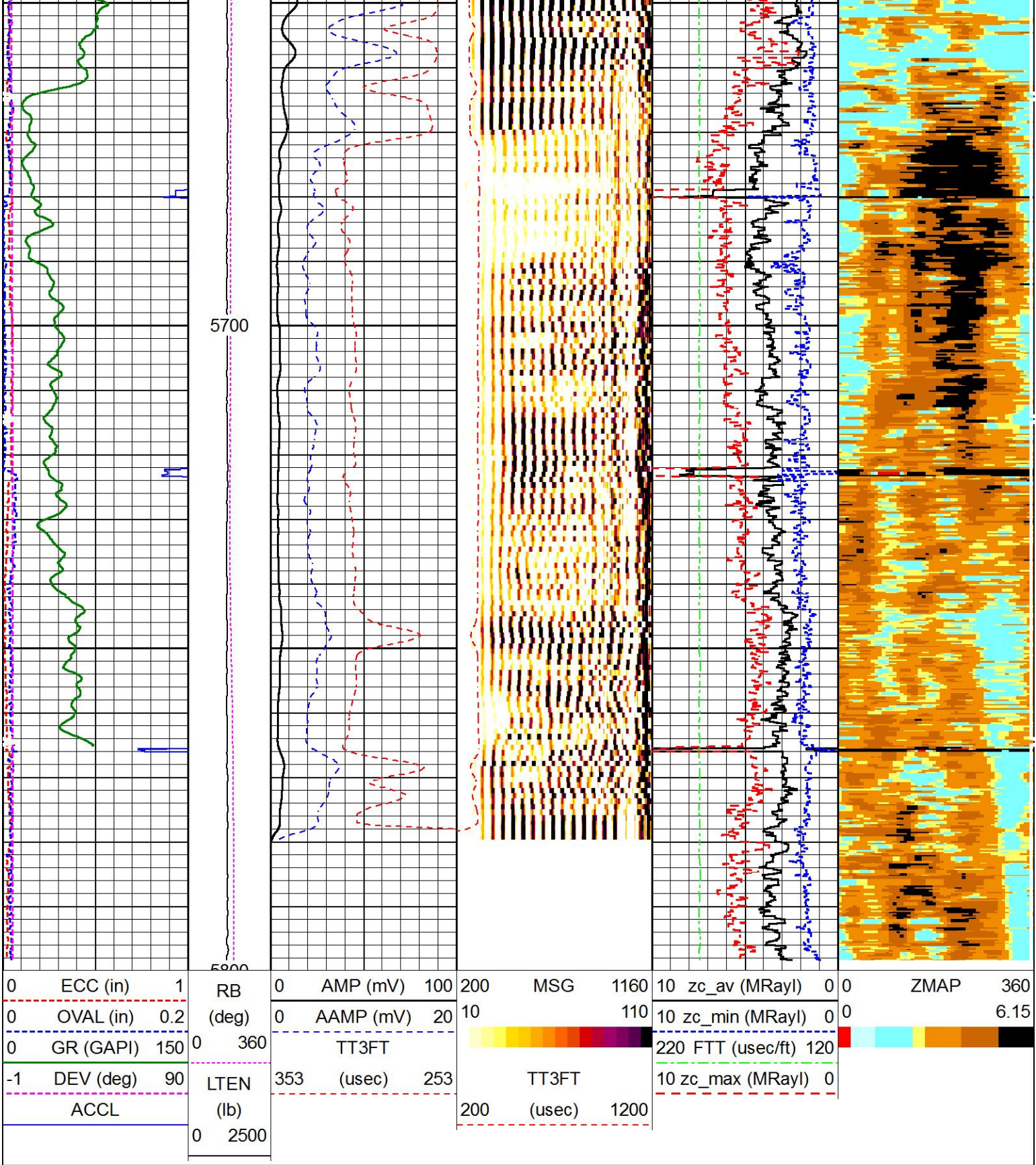
REPEAT LOG SECTION

HALLIBURTON

5" = 100'
0 PSI







REPEAT LOG SECTION

HALLIBURTON

5" = 100'
0 PSI

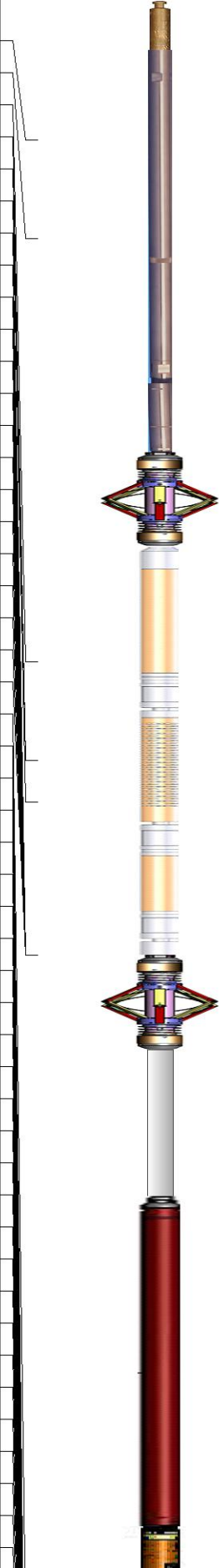
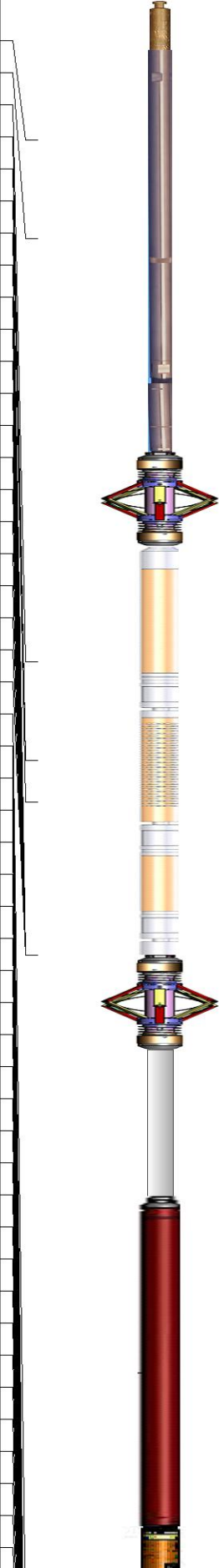
Log Variables DatabaseD:\Warrior_data\kp_32_9_cast.db
Dataset field\well\run1\MAIN1

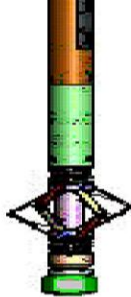
Top - Bottom

BHTEMP_Src	MSGGN	USERFTT	ZREF	CASEWGHT	SRFTEMP	MudWgt	CASETHCK
1	1	usec/ft 0	MRayl 1.7	lb/ft 17	degF 0	lb/gal 8.4	in 0.304
CASEOD	PERFS	TDEPTH	BOTTEMP	BITSIZE			
in 5.5	0	ft 0	degF 100	in 8.75			

Calibration Report						
Database File	kp_32_9_cast.db					
Dataset Pathname	MAIN1					
Dataset Creation	Sat Aug 30 15:19:45 2014					
Circumferential Acoustic Scanning Tool Shop Calibration Report						
Serial-Model:		358EXT_756-3 5/8 EXT SCAN				
Calibration Performed:		Fri Aug 29 13:14:13 2014				
Mudcell Transducer						
Measured		Expected		Main Transducer		
W/O Calibrator	47.80	44.00		Measured	Expected	Units
W Calibrator	39.20	35.00		N/A	N/A	usec
Calibrated Offsets						
Name		Value		Units		
TCAL		5.6923		usec		
MCAL		4.7997		usec		
XY Accelerometers Calibration Report						
Performed:		(Not Performed)				
		Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer		0.000	1.000	gee	0.000	1.000
						gee
Y Accelerometer		0.000	1.000	gee	0.000	1.000
						gee
Cement Bond Log Shop Calibration Report						
Serial-Model:		12386763-A				
Calibration Performed:		Fri Aug 08 16:48:55 2014				
Free Pipe Calibration						
Measured		Units				
TT	263.0	usec				
Amplitude	799.2	mV				
Log Base Line	-4.5	mV				
Calibration References and Gain						
Name		Value		Units		
Pipe O.D.		5.500		in		
Pipe Weight		17.0		lb/ft		
Pipe Ref. Amp.		71.9		mV		
Amp. Gain		0.089				
Gamma Ray Calibration Report						
Type / Serial:		002 / 10998321				
SHOP CALIBRATION		Fri Aug 29 17:13:43 2014				
Counts/Sec.		Gain	Offset	Jig	Units	
Background	39.1				cps	
Calibrator	321.6				cps	
		1.4441	GAPI/cps			
PRIMARY VERIFICATION						
Background		53.4		cps		
Calibrator	463.0			cps		

Calibrator	100.0	409.7	cps
Difference			GAPI
BEFORE SURVEY VERIFICATION			
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI
AFTER SURVEY VERIFICATION			
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	38.47		STNDCH-STND_CH 1.4375 IN CABLE HEAD	1.13	1.44	1.00
GR	36.21					
Temp	26.49					
TT3FT	24.24					
AMP3FT	24.24					
WVF5FT	23.28					
TLINITCNT	19.76		TTTCU-002 (10998321) Through Tubing Telemetry Cartridge - Ultrawire	7.65	1.69	100.00
CbICTT	19.76					
CbICCsgWgt	19.76					
CbICCsgOD	19.76					
CbICamp	19.76					
CbIBLine	19.76					
CbITTThresh	19.76		XHU-003 (11721044) Crossover Halliburton 1553 to Ultrawire	1.58	1.69	7.00
CbIAGate	19.76					
CbILWvCnt	19.76		CENT-CASTM-CENT CAST M INLINE CENTRALIZER	2.16	3.13	25.00
CbICStat	19.76					
CbIIVolt	19.76					
CbIITemp	19.76					
CbISeqNum	19.76					
CbITStat	19.76					
WVF3FT	19.76					
MCWV	4.54					
HVOLTX	0.00		HCBLM-A (12386763) Halliburton HCBLM Tool	9.38	2.75	116.00
ITEMPX	0.00					
TSTAMP	0.00					
XHUCUR4	0.00					
XHUCUR3	0.00					
XHUCUR2	0.00					
XHUCUR1	0.00					
XHUSTAT	0.00					
XHUTEMP	0.00		CENT-CASTM-CENT CAST M INLINE CENTRALIZER	2.16	3.13	25.00
XHUERR2	0.00					
XHUERR1	0.00					
TLINITCNT	0.00					
MSpd	0.00		TMDL_FLEX-FLEX TMDL FLEX	3.38	1.69	25.00
MCurr	0.00					
MSpd	0.00					
PsP400	0.00					
MTemp	0.00					
ITemp	0.00					
AccY2	0.00					
AccX2	0.00		HAL-CAST-M-ELECT-CAST-M-Elect (11527.572) CAST M ELECTRONIC		2.75	30.00
PsM15	0.00					
PsP15	0.00					
PsM5	0.00					
PsP5	0.00					
PsP3	0.00					
Ps0	0.00					

AccY1	0.00		HAL-CAST-M-3 5/8 EXT SCAN (358EXT_76.65 3 5/8 EXT SCAN CASTM		3.13	276.00
AccX1	0.00					
TStat	0.00					
LWV	0.00					
SCAN	0.00					
LOCTIM	0.00					
UTCTIM	0.00					
LLMTEN	0.00					
Dataset:		kp_32_9_cast.db: field/well/run1/MAIN1				
Total length:		41.67 ft				
Total weight:		605.00 lb				
O.D.:		3.13 in				

Company	WPX ENERGY				
Well	STATE OF COLORADO KP 32-9				
Field	KOKOPELLI				
County	GARFIELD		State	CO	
HALLIBURTON	ACOUSTIC CEMENT BOND LOG CAST-M				