

## WAVESONIC SEMBLANCE ANALYSIS

**COMPANY** CHAMA OIL & MINERALS LLC  
**WELL** SORS 1P  
**FIELD** WILDACT  
**COUNTY** WASHINGTON  
**STATE** WASHINGTON  
**CO**

**Location**  
 SHL: 650' FSL & 650' FWL SWSW  
 LAT: 40.279391°  
 LONG: -103.394436°  
 Elev.: K.B. 4434.50 ft  
 D.F. 4434.50 ft  
 G.L. 4412.50 ft

Date Processed 01/25/2013  
 Interval Processed 6380'-8242'  
 Processed At DENVER FRS  
 Processed By Adam Bobay

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Service Ticket No.: N/A PGM Version: WL INSITE R3.8.0 (Build 2)

Logs Processed: SEMBLANCE Date Logged: 01/20/2013 Type Fluid In Hole: WBM

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: RWCH/GTET/WS TT/XRMI RAN IN COMBINATION

TENSION PULLS, WASHOUTS, AND BOREHOLE RUGOSITY CAN AFFECT TOOL RESPONSE

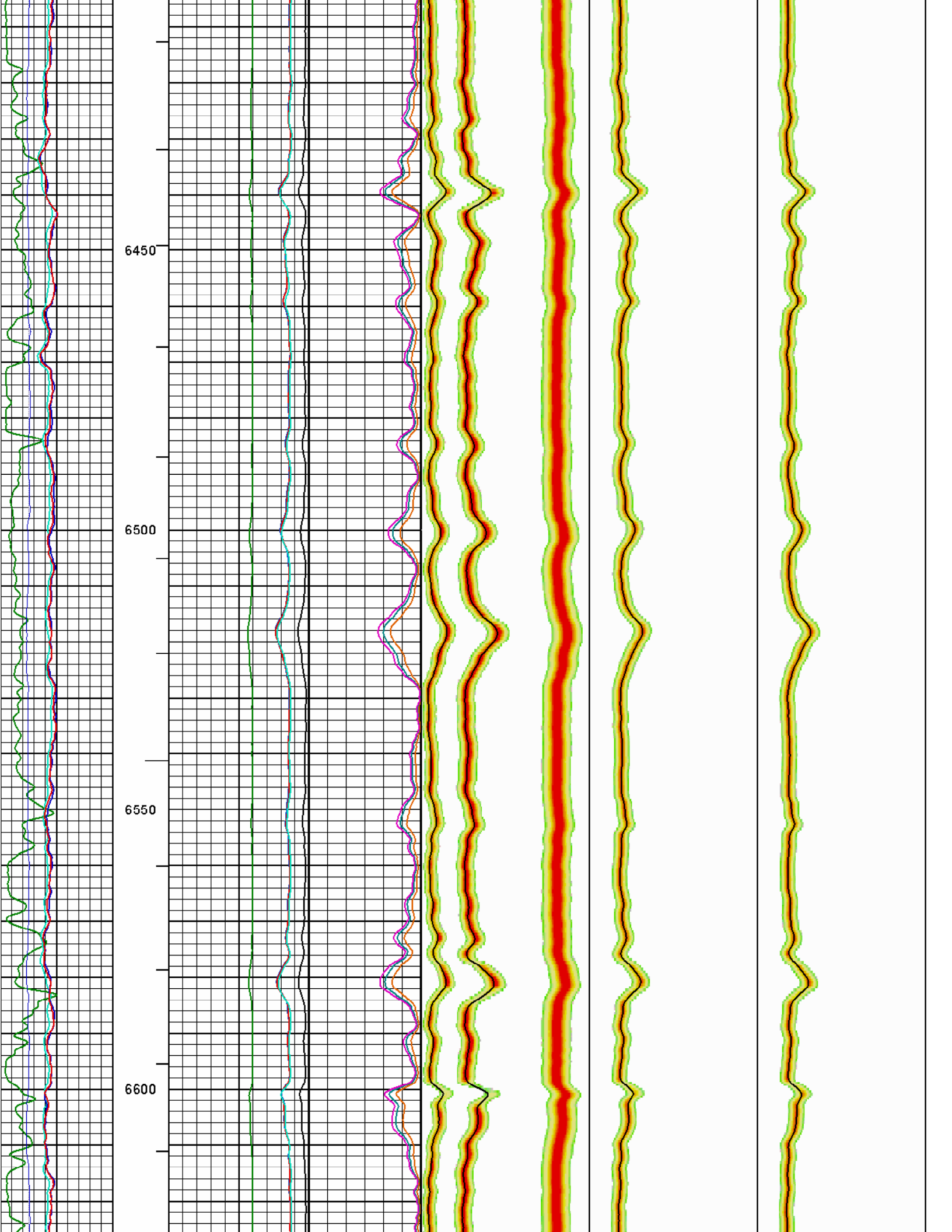
ANNULAR HOLE VOLUME CALCULATED FOR 7.0-INCH CASING

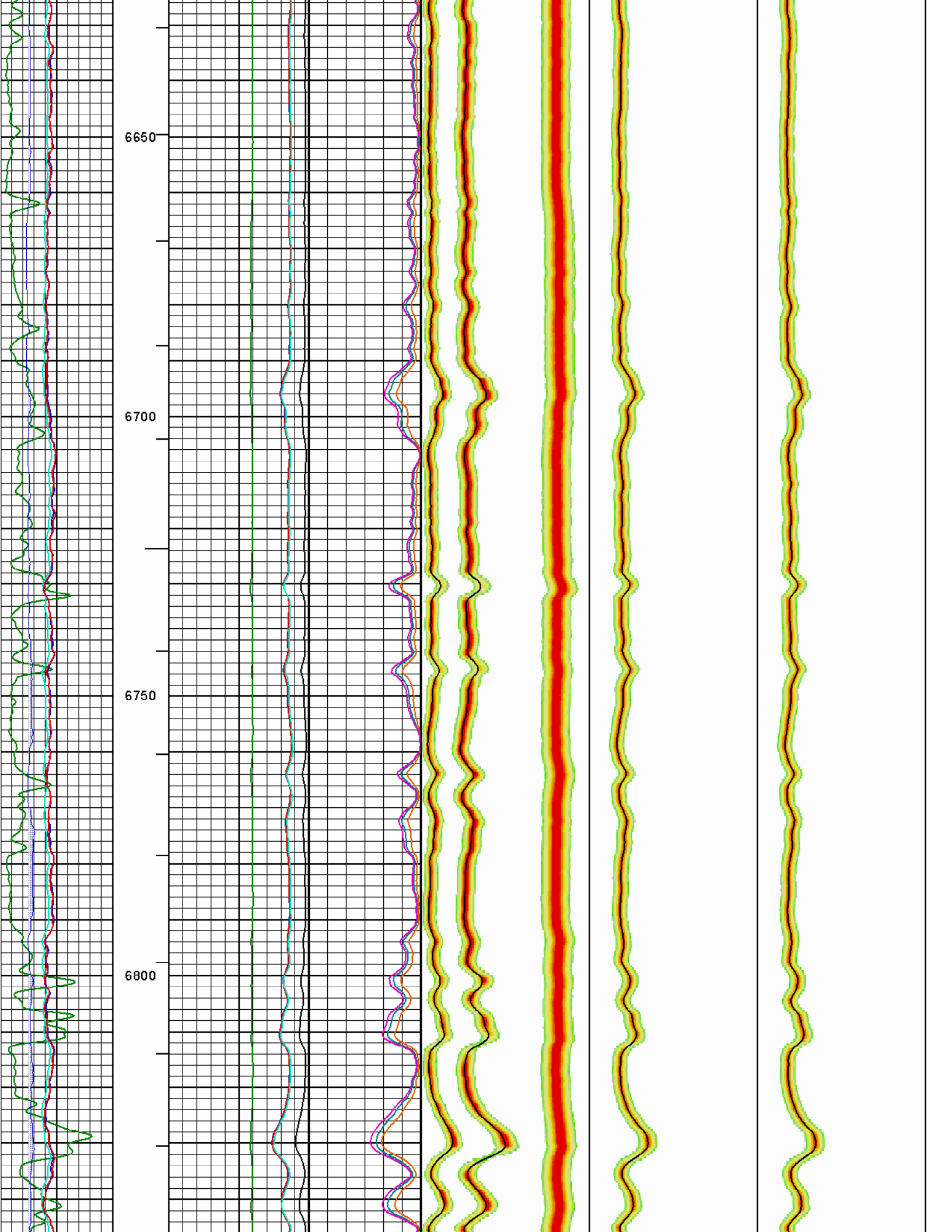
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES.

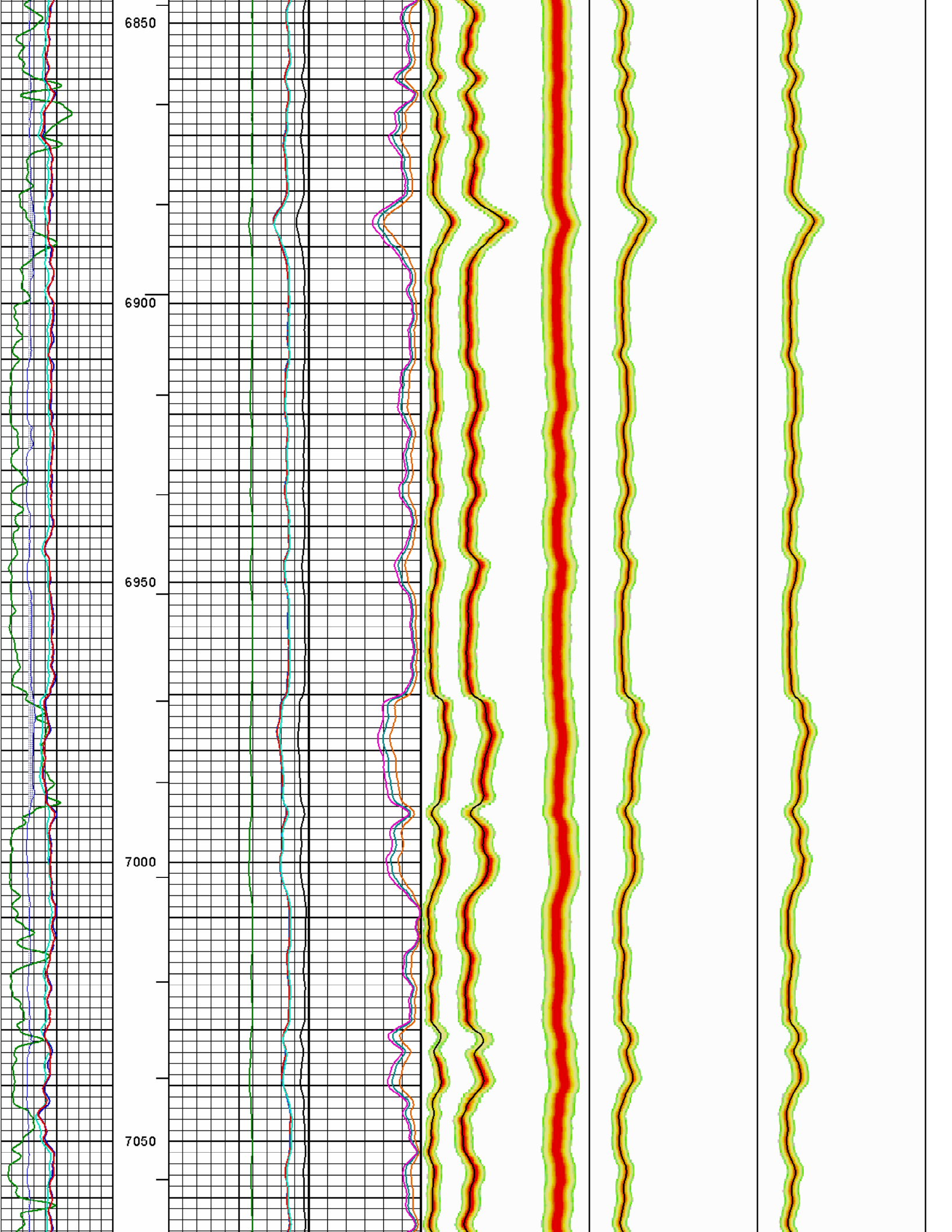
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR 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.

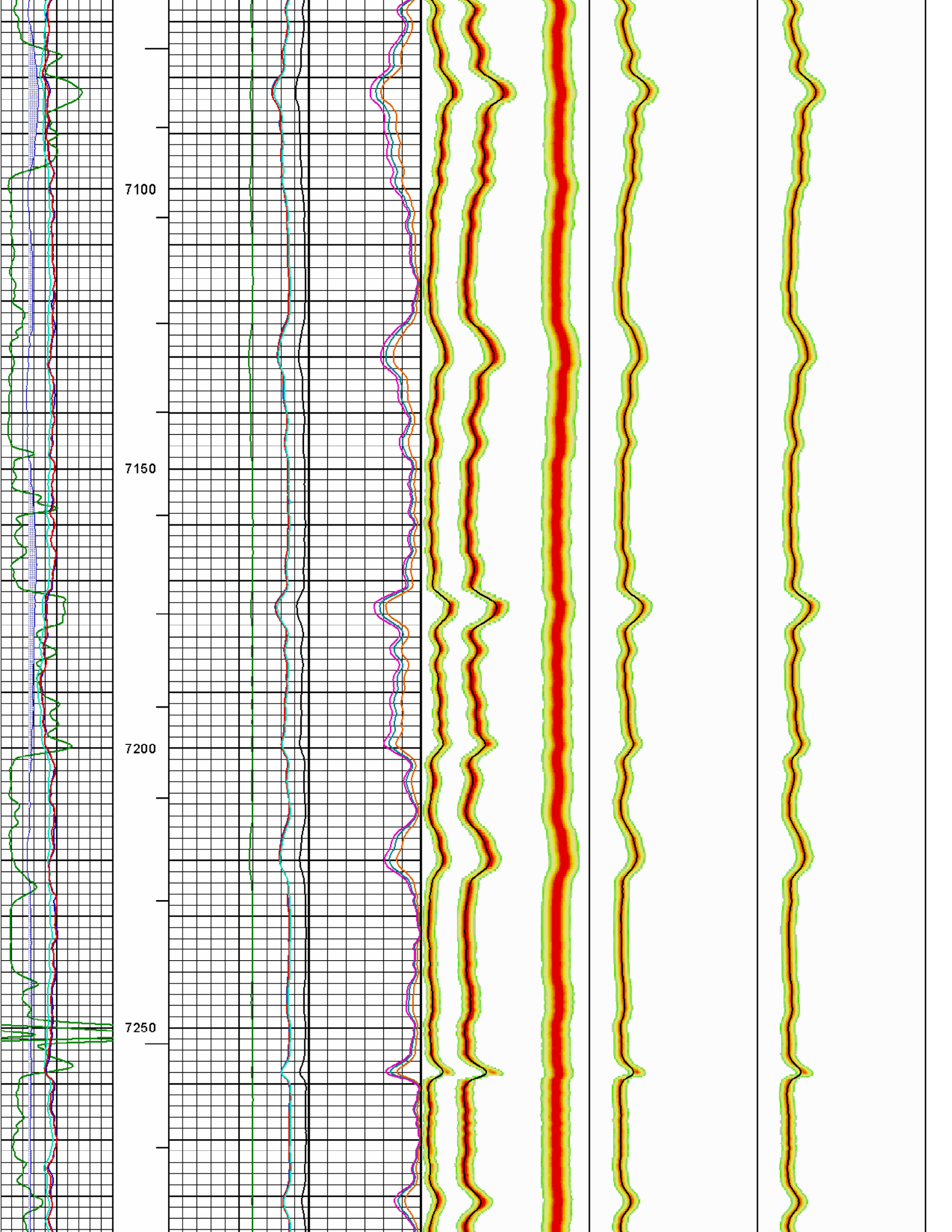
HALLIBURTON

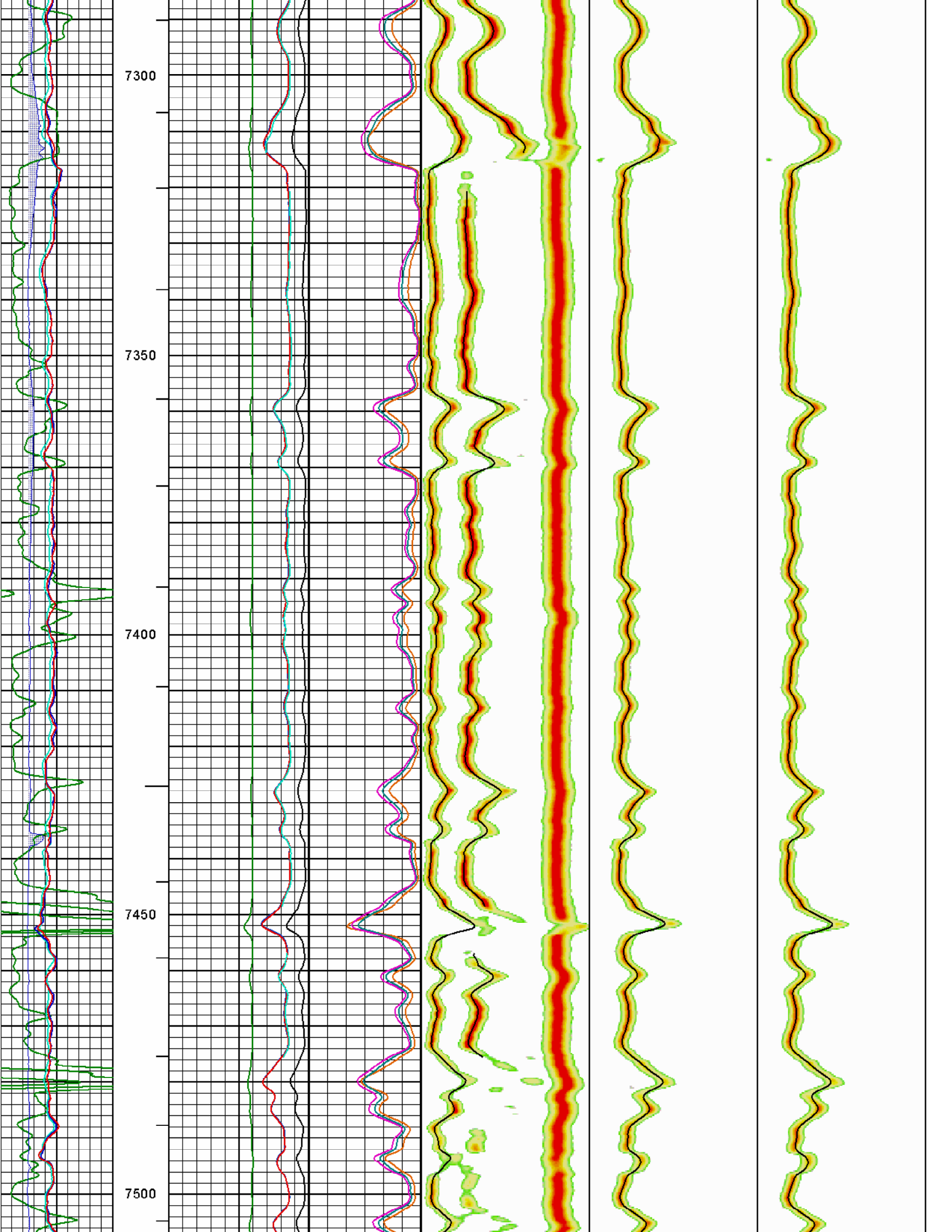


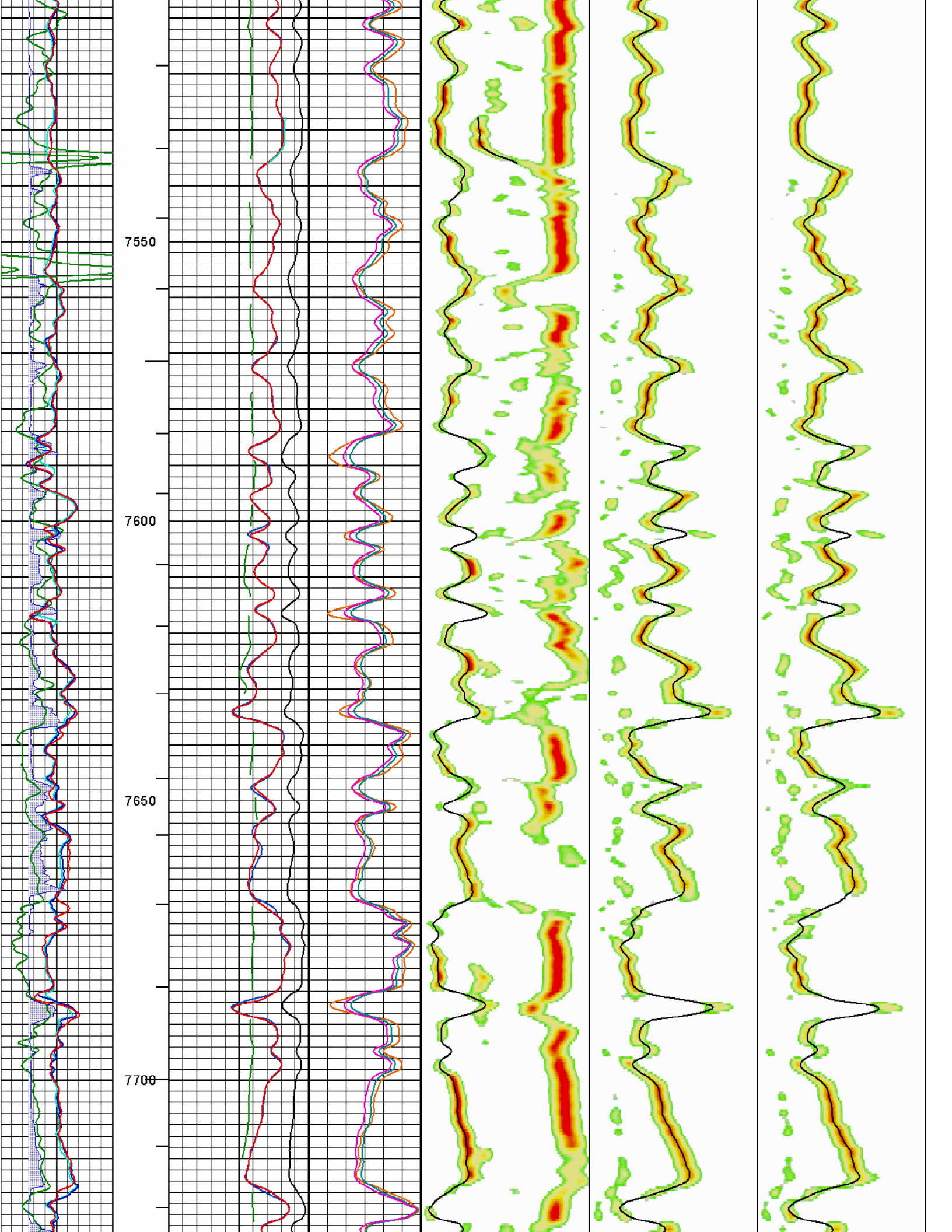


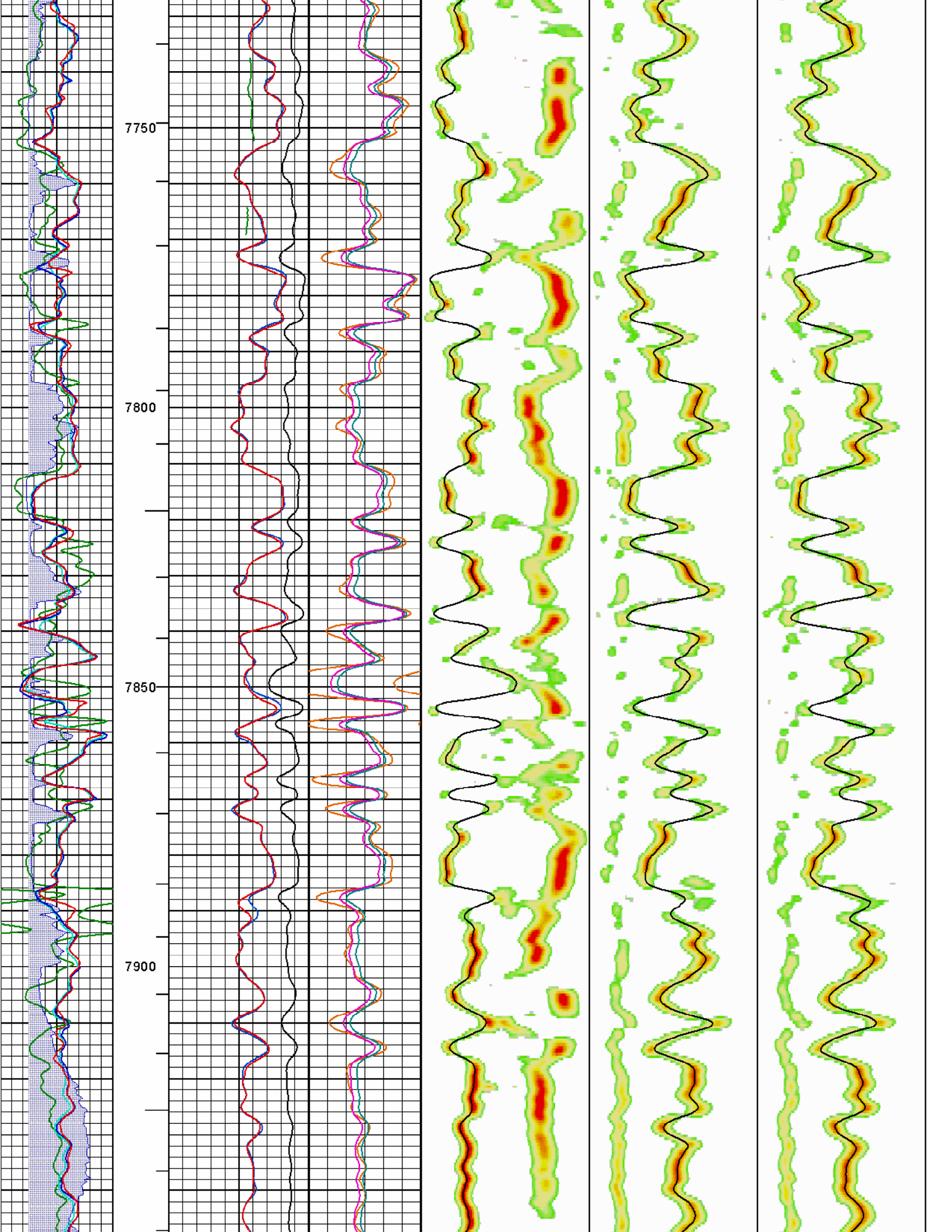


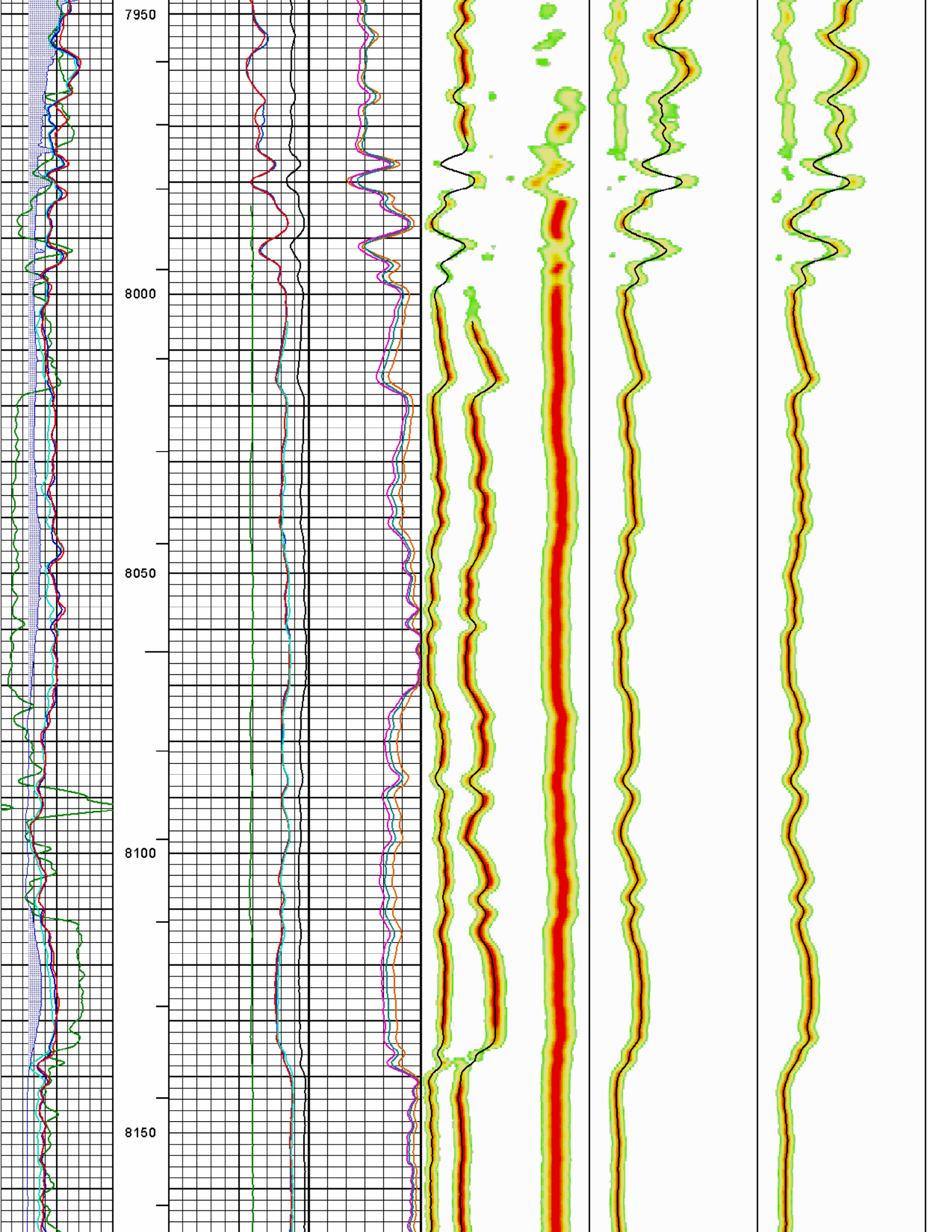


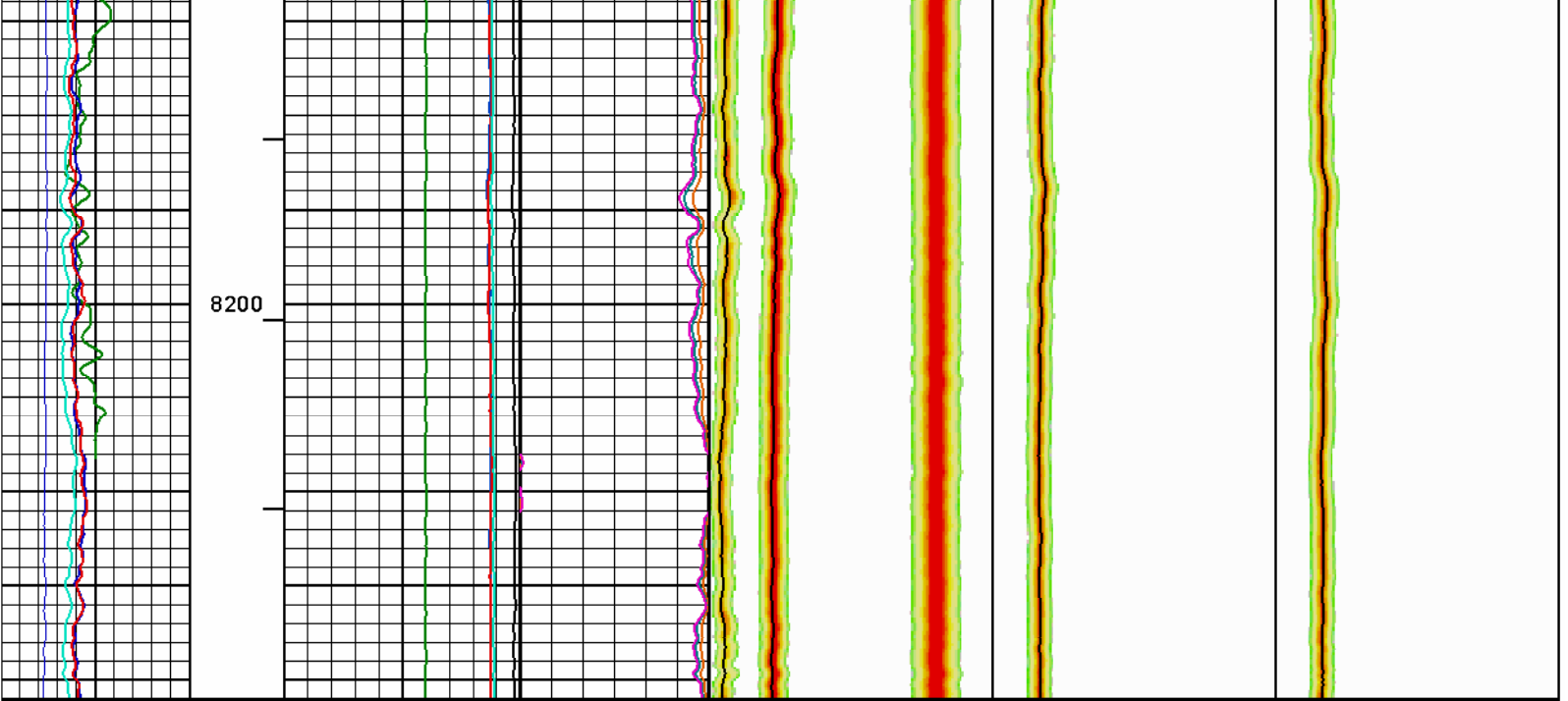












	MD 1: 240 ft	Compressional DT 440 40 microsec per ft	AcouPorWylie 60 0 pu	40 WAVE MP STC 240 40	40 WAVE XX STC 340 40	40 WAVE YY STC 340 40
WASHOUT						
	ITTTotal	Refracted Shear 440 40 microsec per ft	AcouPorRHG 60 0 pu	Compressional DT 40 240 microsec per ft	XX Flexural 40 340 microsec per ft	YY Flexural 40 340 microsec per ft
0 Gamma API 200 api		XX Flexural 440 40 microsec per ft	AcouPorMChap 60 0 pu	Refracted Shear 40 240 microsec per ft		
6 Caliper inches 16		YY Flexural 440 40 microsec per ft				
1 VPVS 3		Stoneley 440 40 microsec per ft				
1 VPVSYY 3						
1 VPVSXX 3						

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