



## PULSED NEUTRON DECAY LOG (QUICK LOOK)

COMPANY URSA OPERATING COMPANY	
WELL	BAT 34C-24-07-96
FIELD	BATTLEMENT MESA
COUNTY	GARFIELD
LOCATION:	
SHL: 1816'	FSL & 2073' FWL
BHL: 0743'	FSL & 1954' FEL
SEC.24	TWP.7S RGE96W

LOCATION:		
SHL: 1816'	FSL & 2073'	FWL
BHL: 0743'	FSL & 1954'	FEL
SEC.24	TWP.7S	RGE.

**OTHER SERVICES:**  
GR/JB  
SBT

PERM. DATUM GROUND LEVEL ELEV. 5182.5'  
LOG MEASURED FROM K.B. 17 FT. ABOVE PERMANENT DATUM  
DRILLING MEASURED FROM K.B.

ELEV.:K.B.	5199.5
D.F.	5199.5
G.L.	5182.5

DATE	08-MAR-2015
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**RUN NO.**

## DEPTH DRILLER

## DEPTH LOGGER

BIM. LOG INTERVAL

10P LOG INTERVAL

### OPEN HOLE SIZE

### TYPE FLOID

**DENS. VLSC.**

MAX. REC. TEMP.:

**EST. CEMENT 10P**

**TIME WELL SPENT**

## FILE LOGGERS ON BIPOLAR

EQUIP. NO.

RECAPTURED BY

**WITNESSED BY**

**BOREHO**

BLIN NO	BITT
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## CASING RECORD

SURFACE STRING	8
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PROT. STRING

PROD. STRING	4
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LINER

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# 1

All interpretations of log data are opinions based on inferences from electrical or other measurements. We do not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

REMARKS	Rig: WFT CRANE #14045	Service Order # 113040938
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THIS IS THE PRIMARY LOG FOR THIS WELL

## ALL LOGGED INTERVALS PER CUSTOMER REQUEST

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**Prints: 2**

**THANK YOU FOR CHOOSING WEATHERFORD WIRELINE SERVICES**

## EQUIPMENT DATA

[illegible]

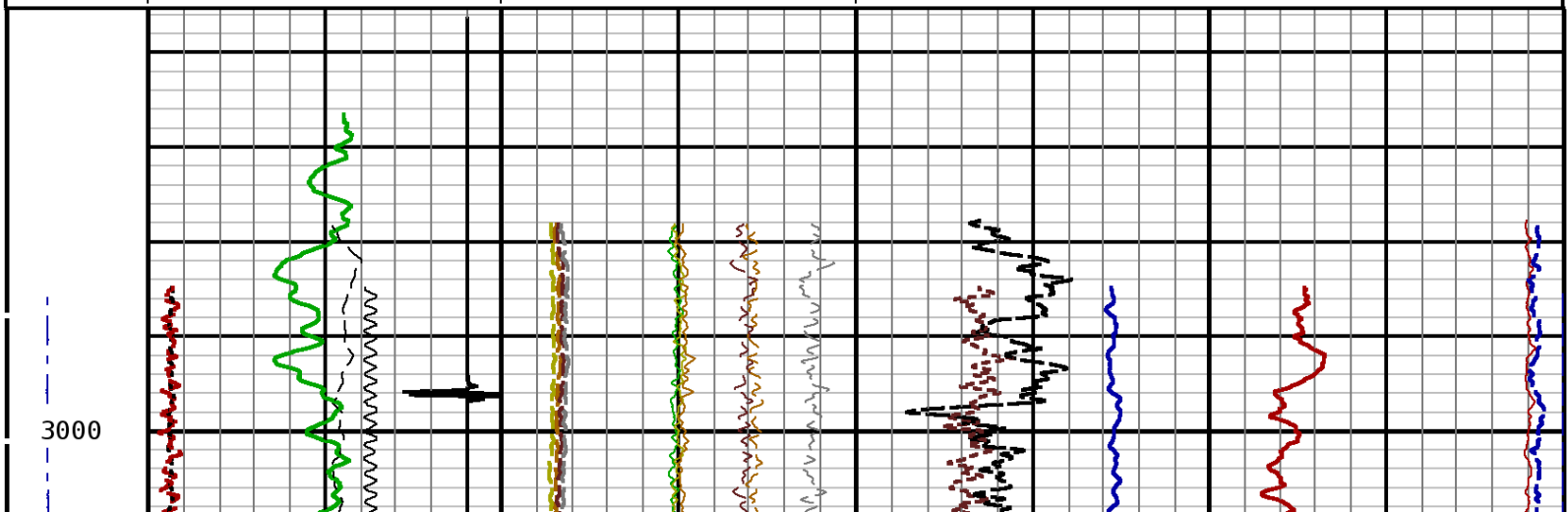
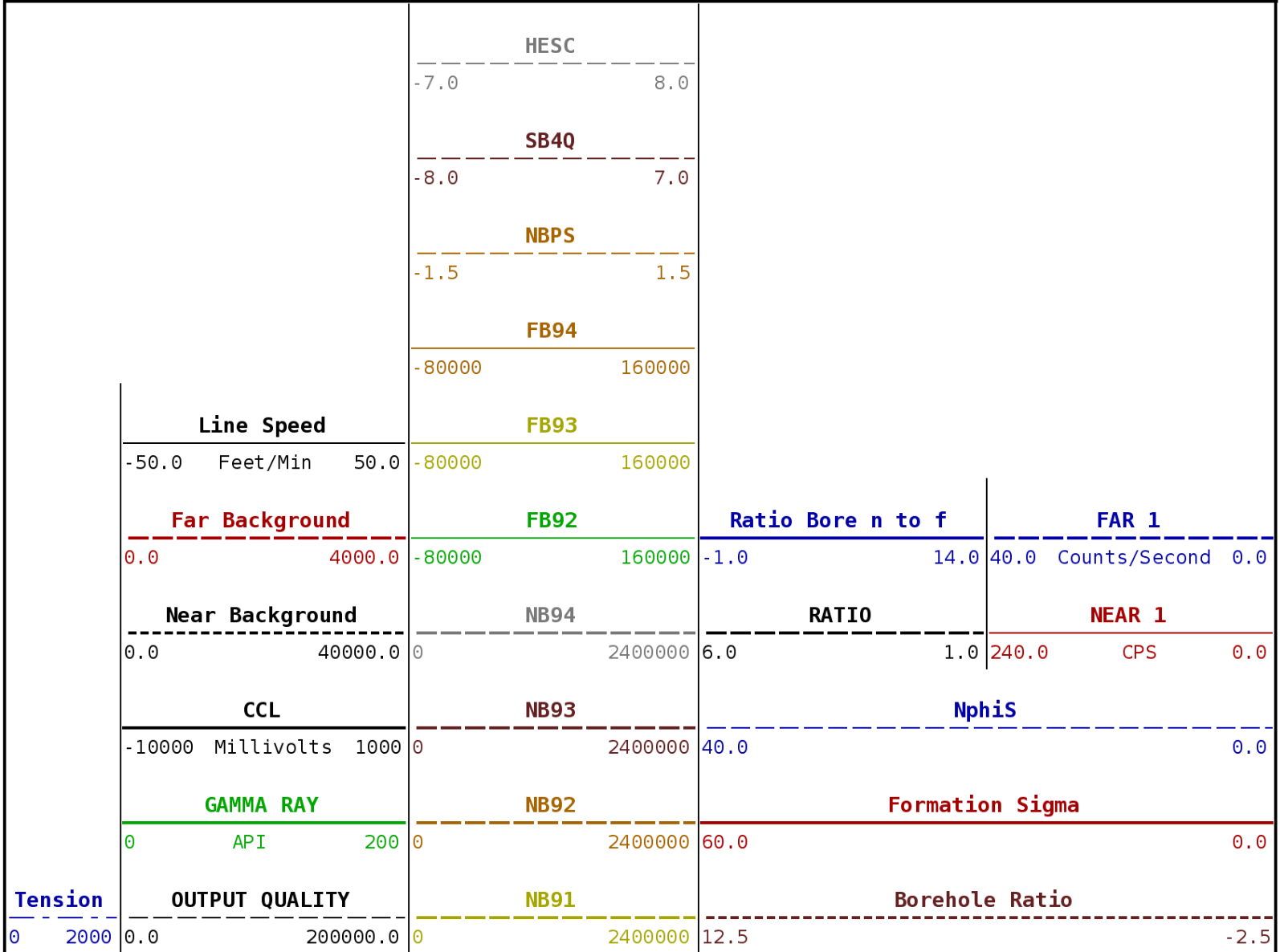
DEPTH SCALE: 5":100'

PROCESSED VERSION: 2012.07.18.162"

MAIN PASS

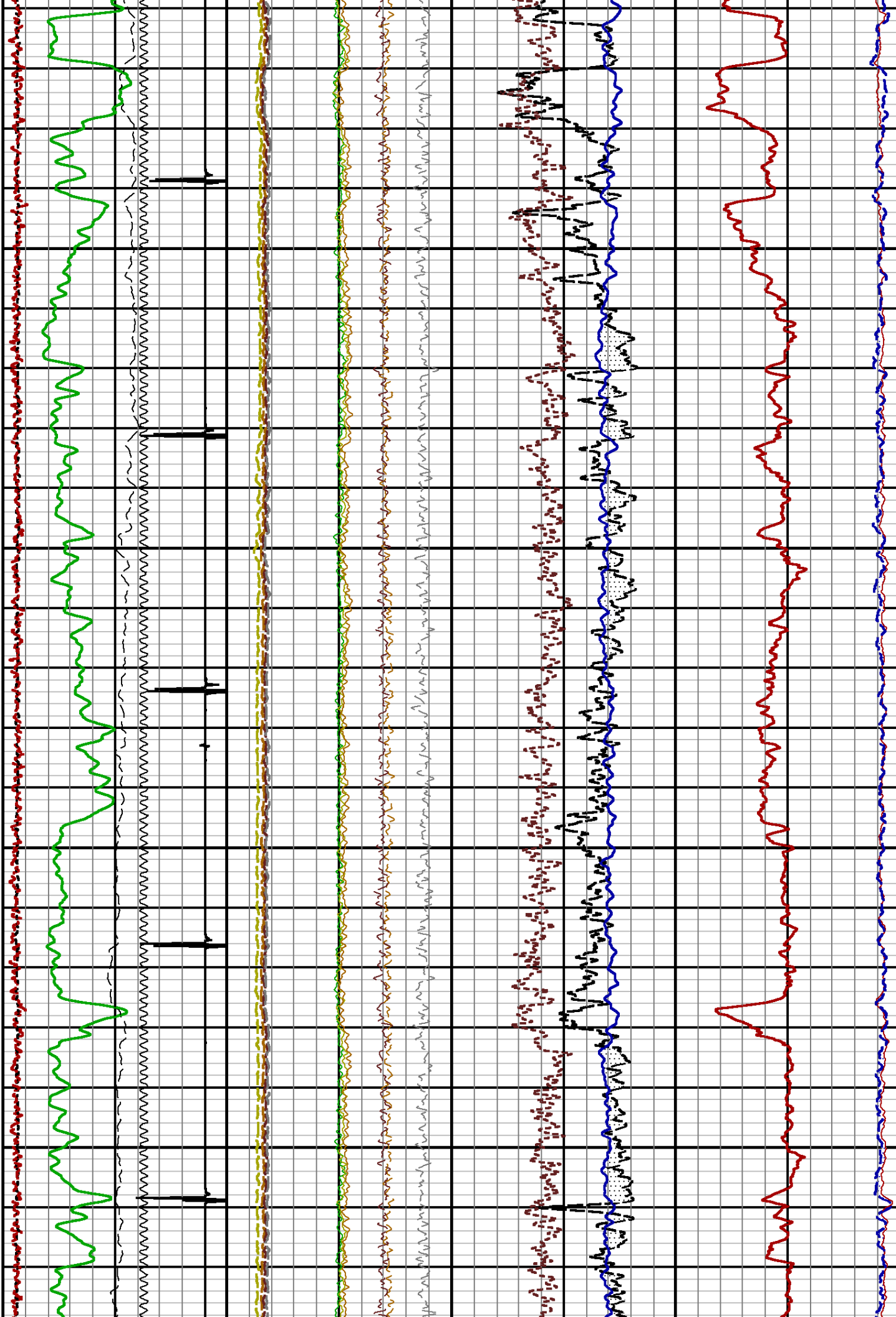
113040938 PNDMAIN

FINISH DEPTH: 2956.5 Feet DIRECTION: UP DATE: 03/09/2015 TIME: 23:51 MODE: ORIGINAL



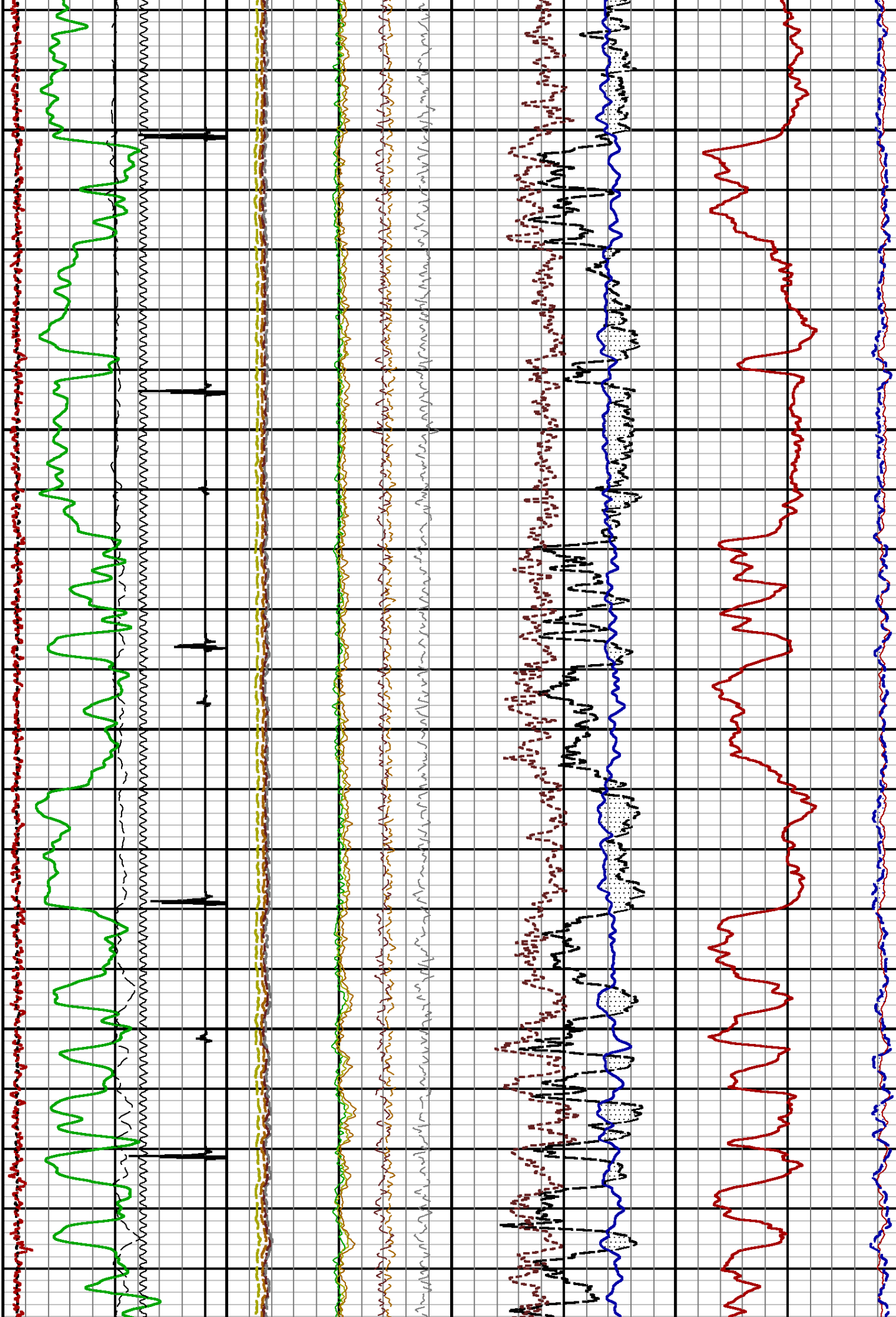
3100

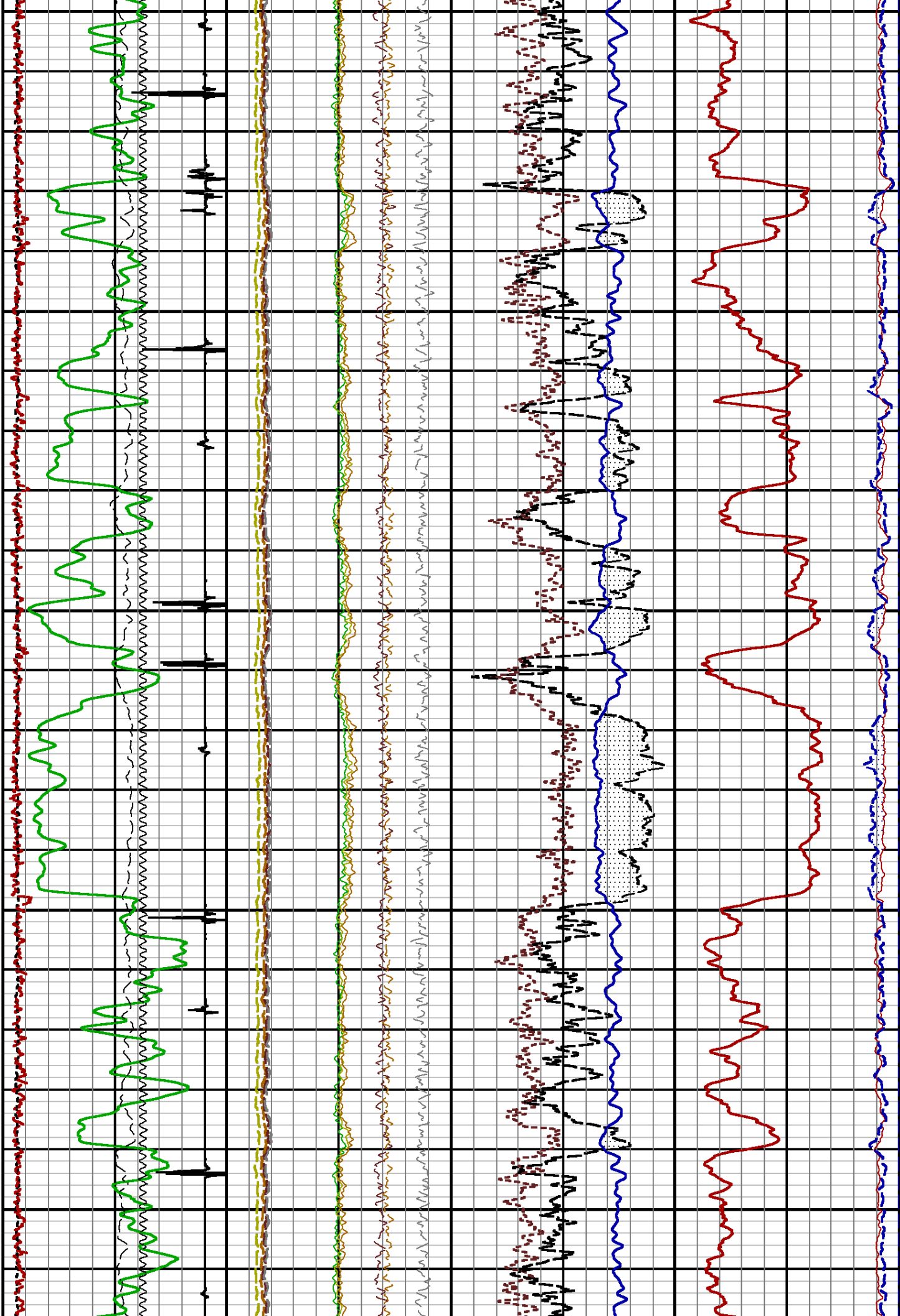
3200



3300

3400



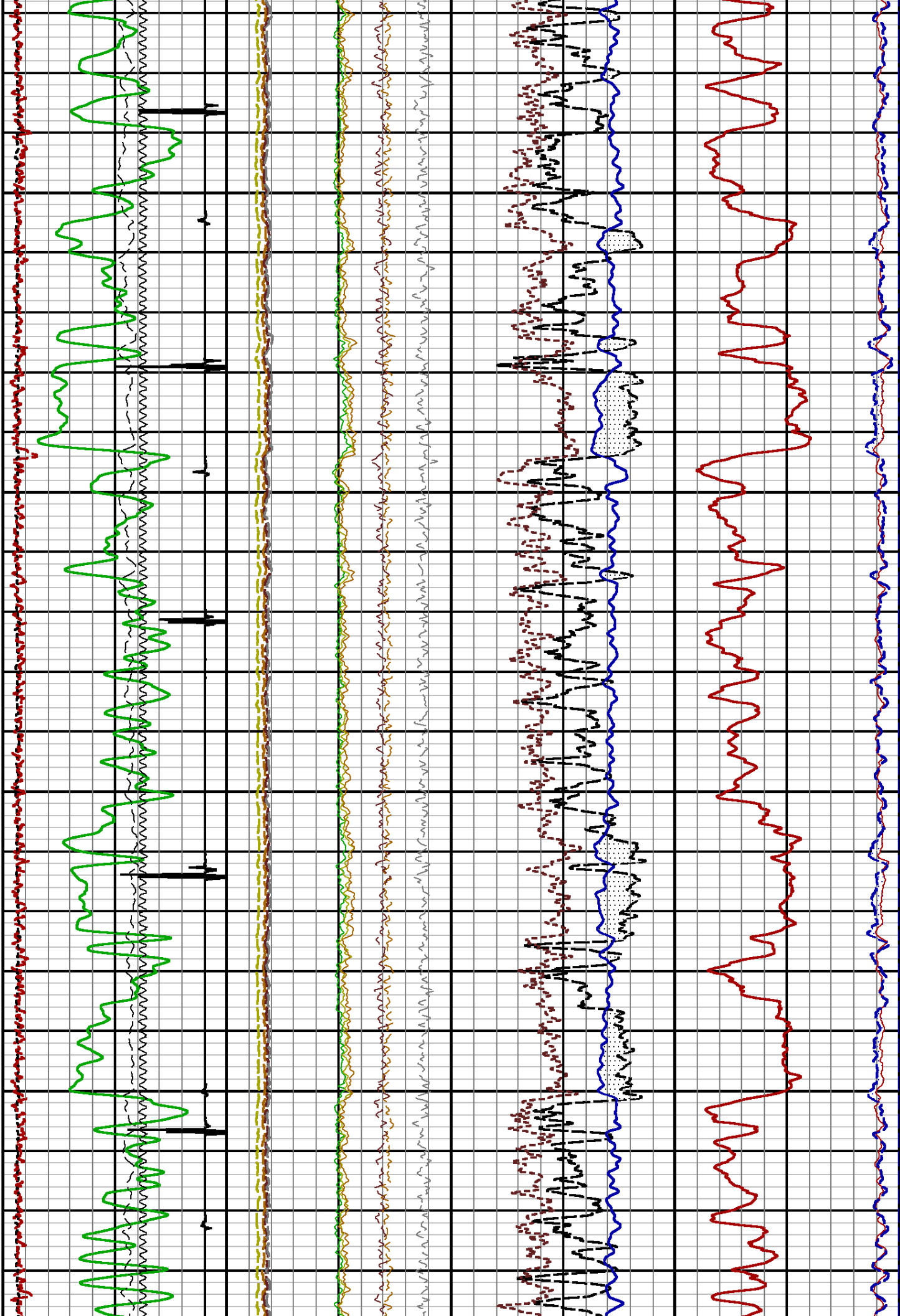


3500

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3800

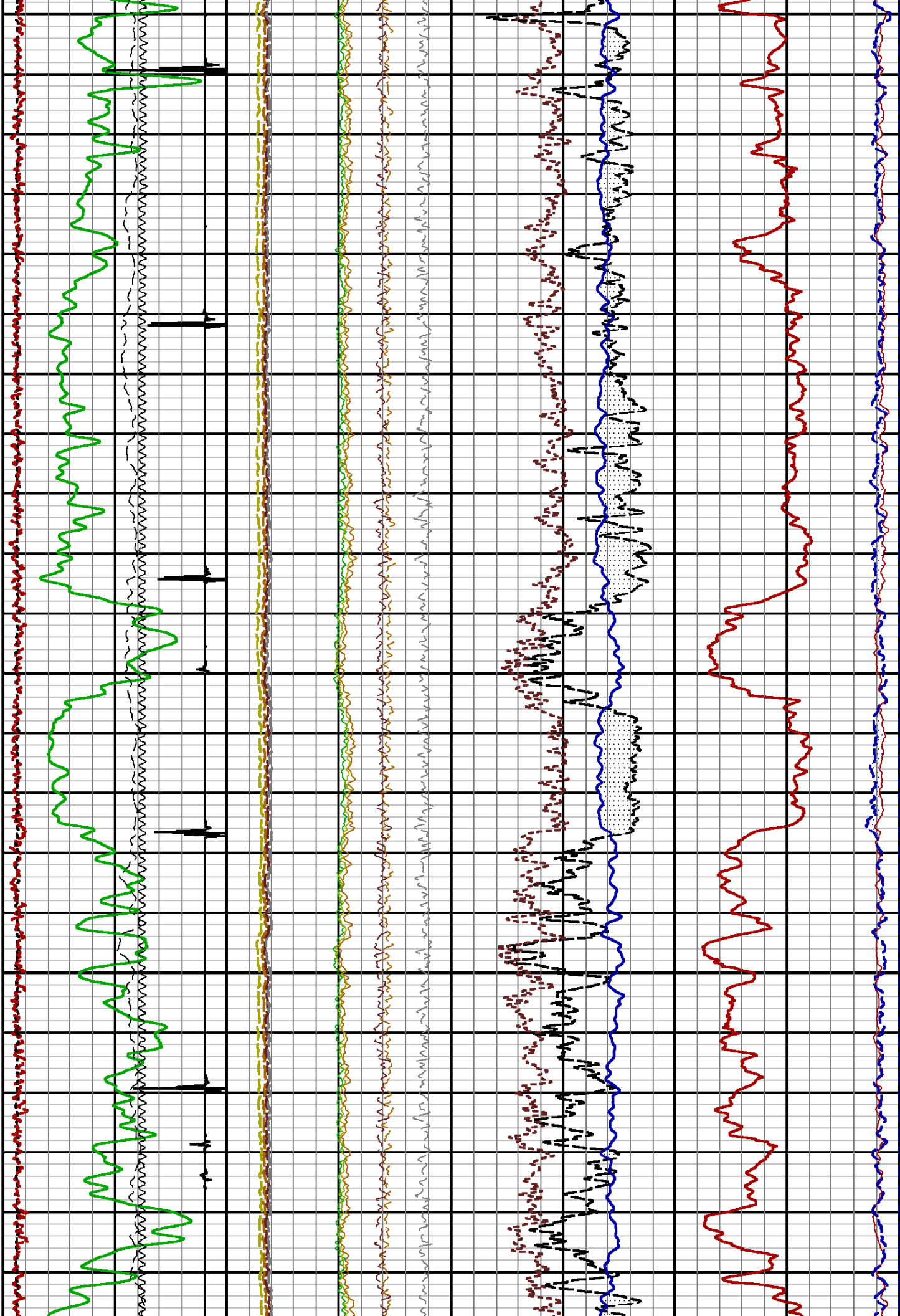




3900

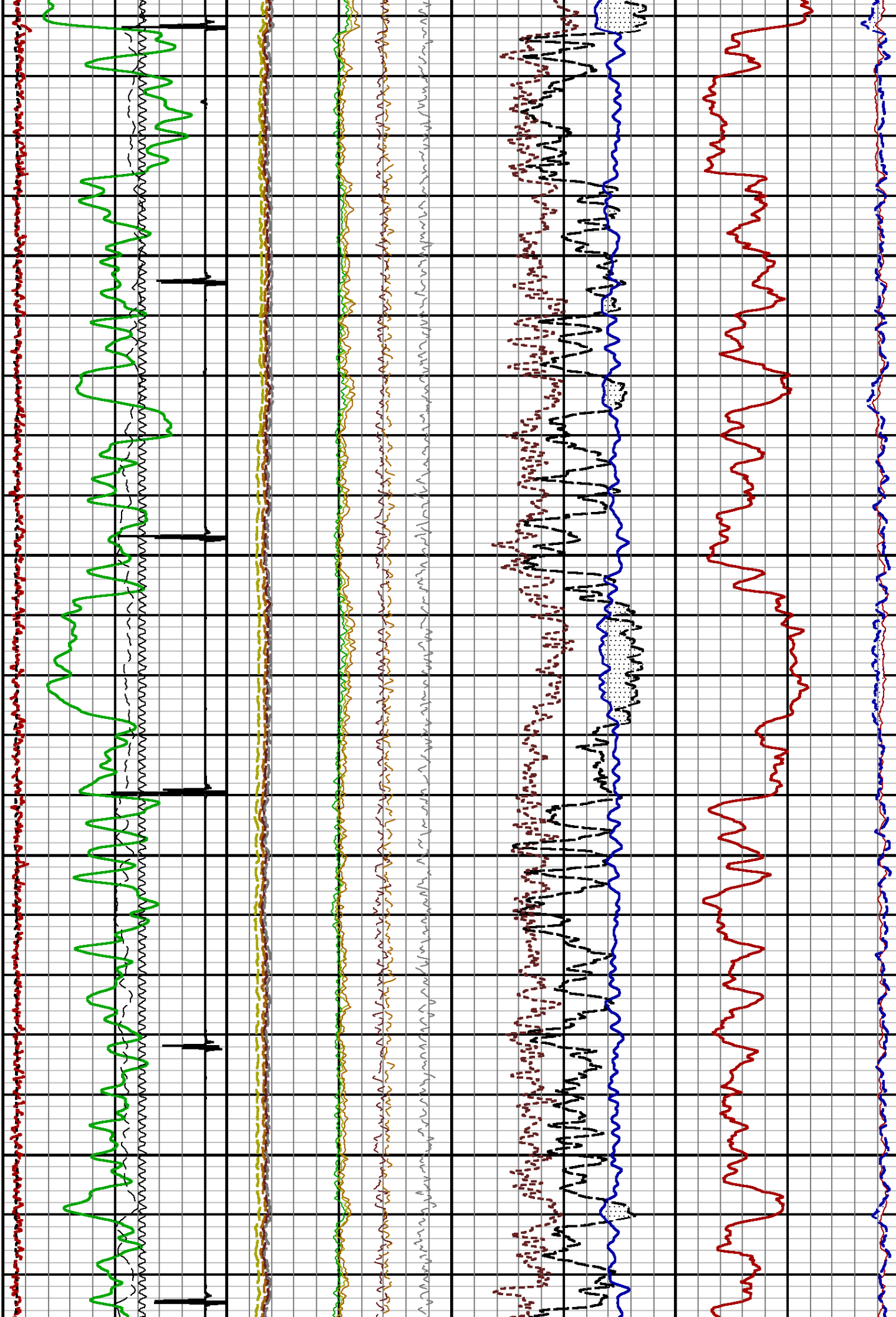
4000

4100



4200

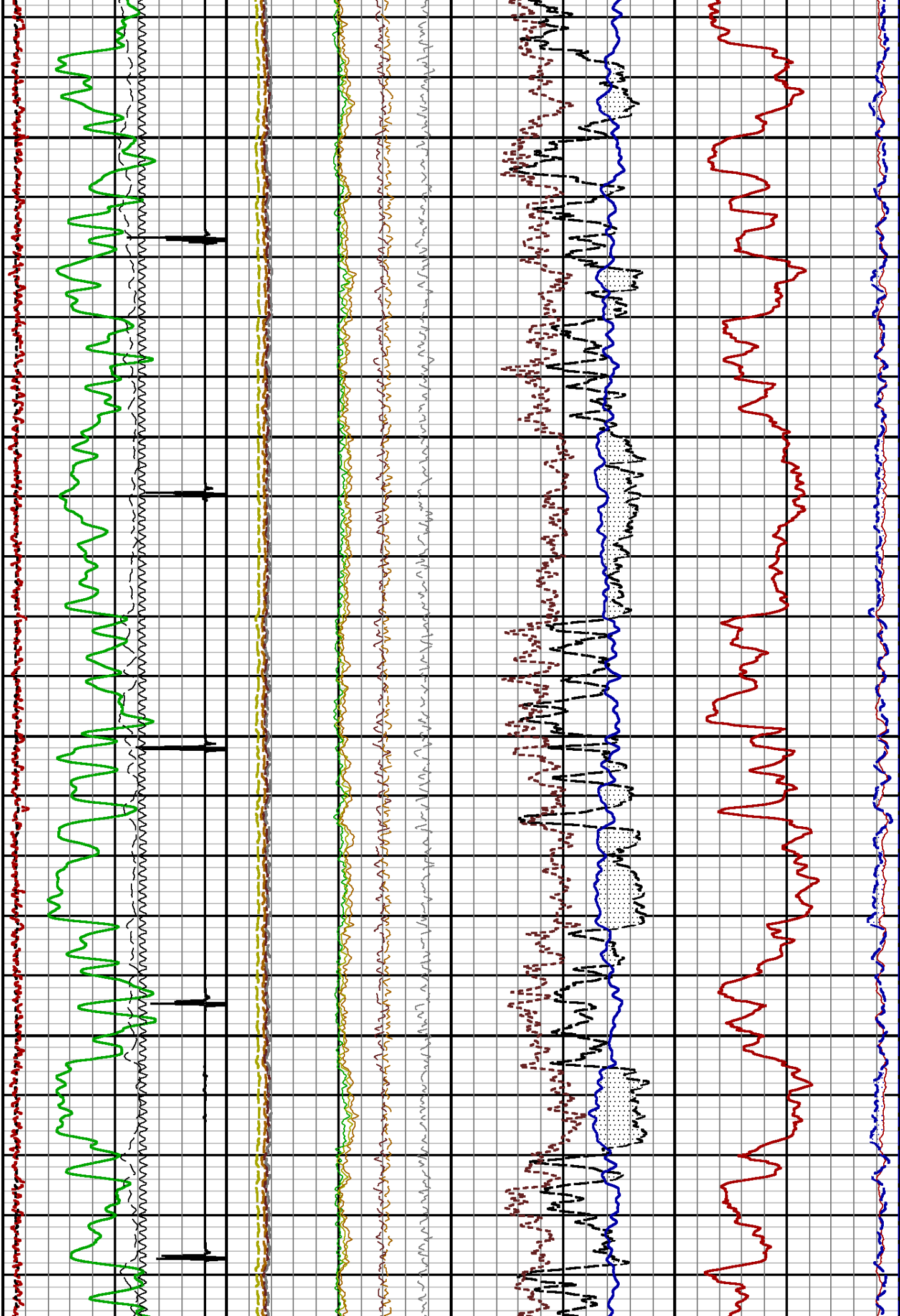
4300





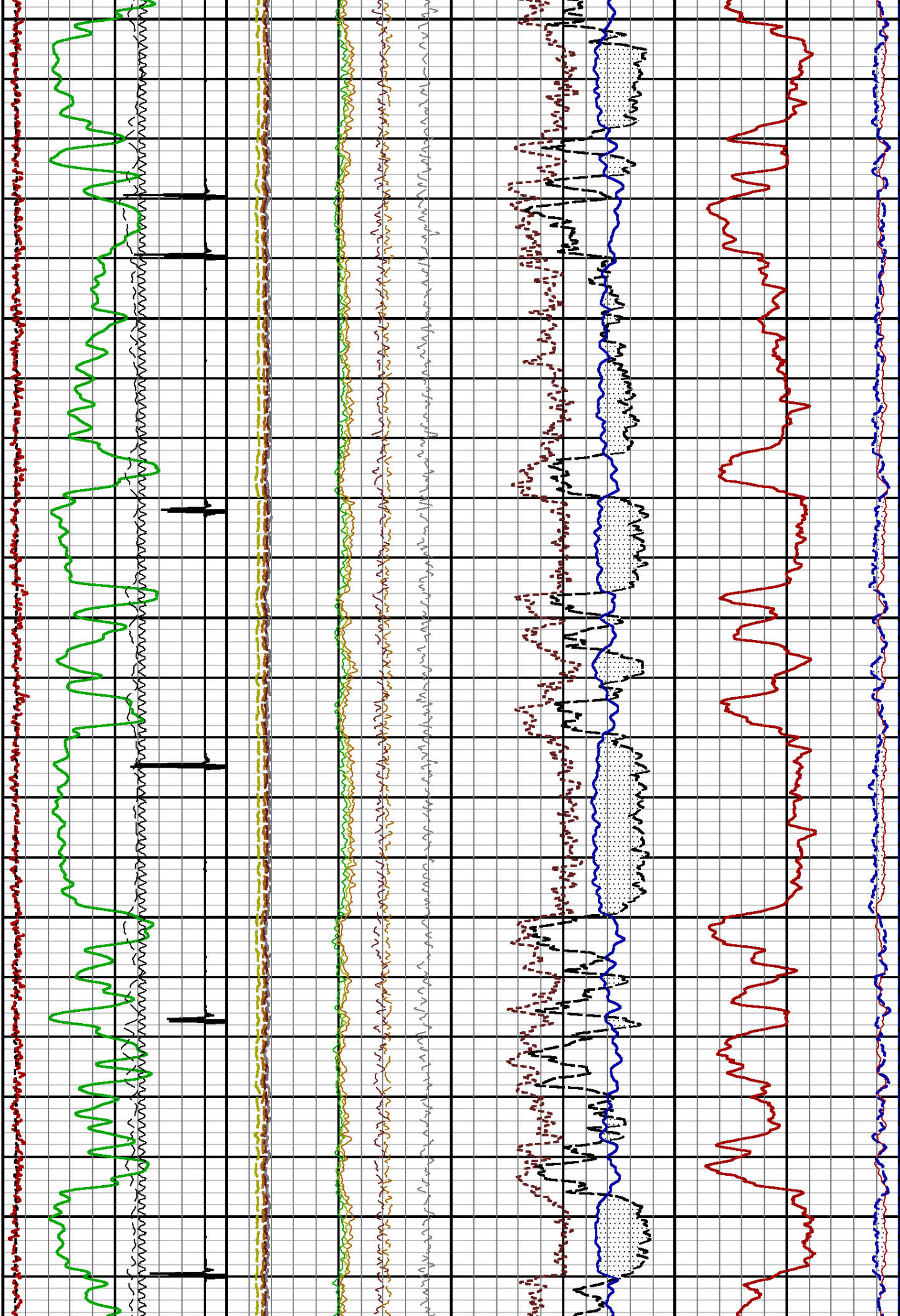
4400

4500



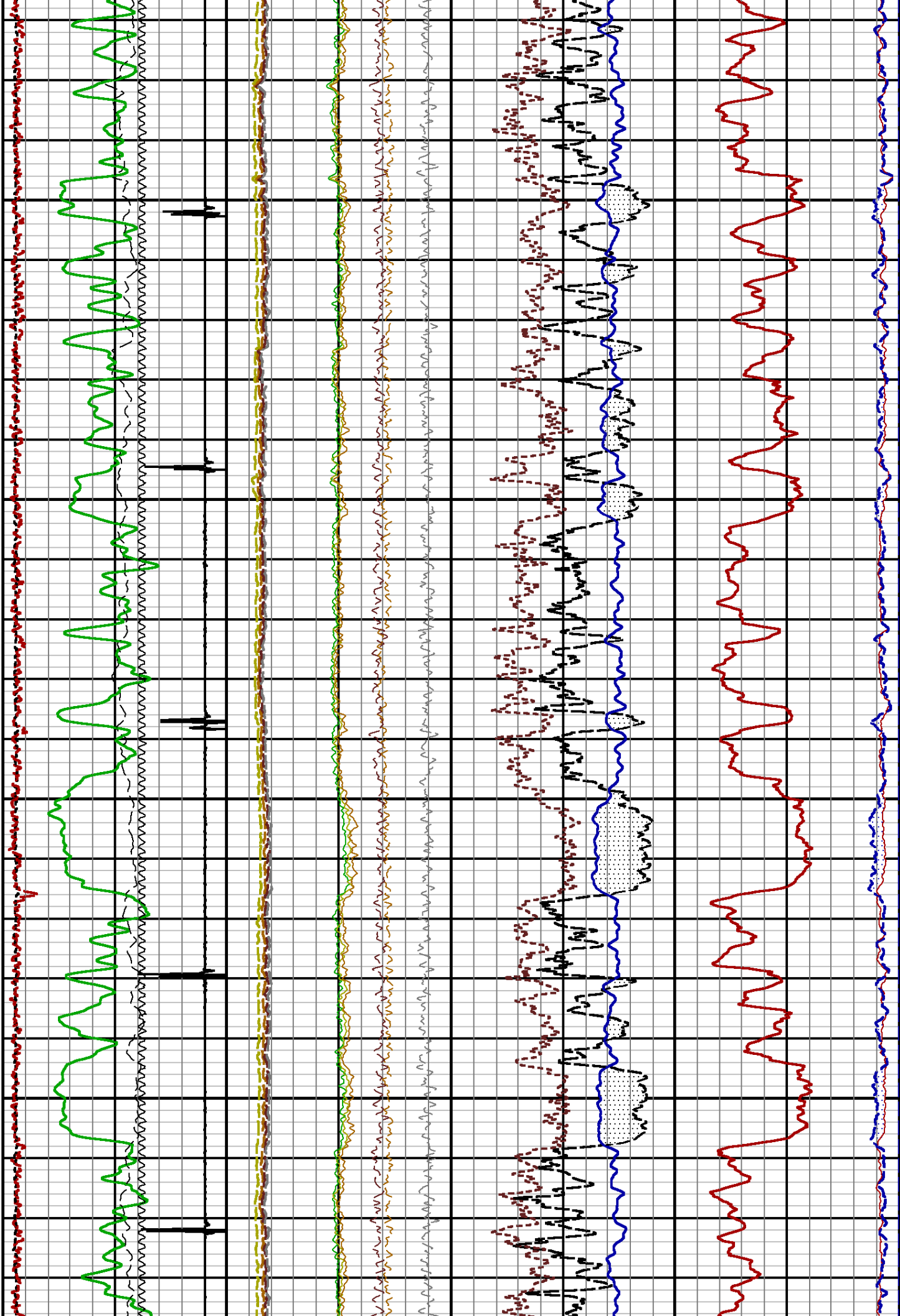
4600

4700



4800

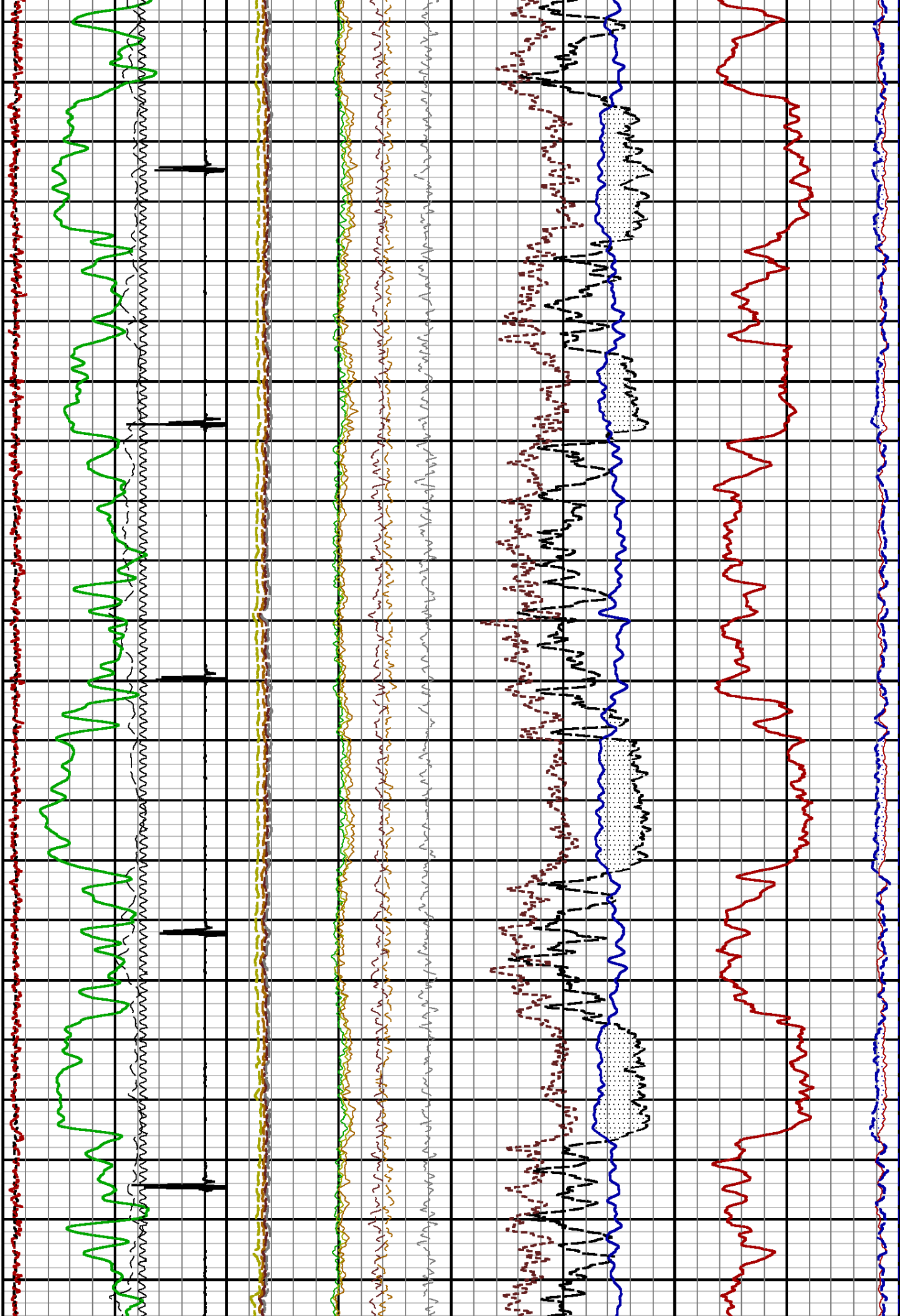
4900



5000

5100

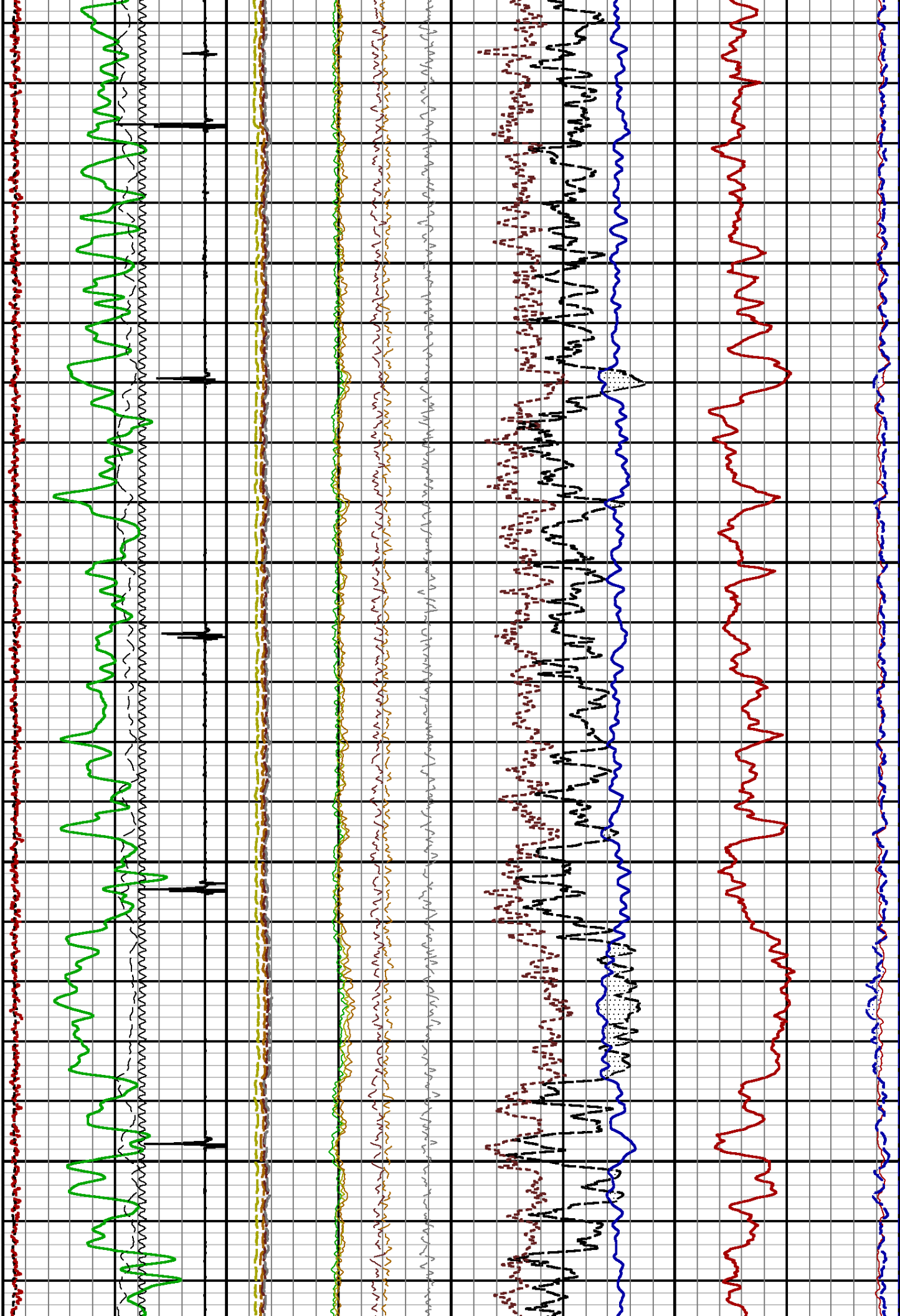
5200





5300

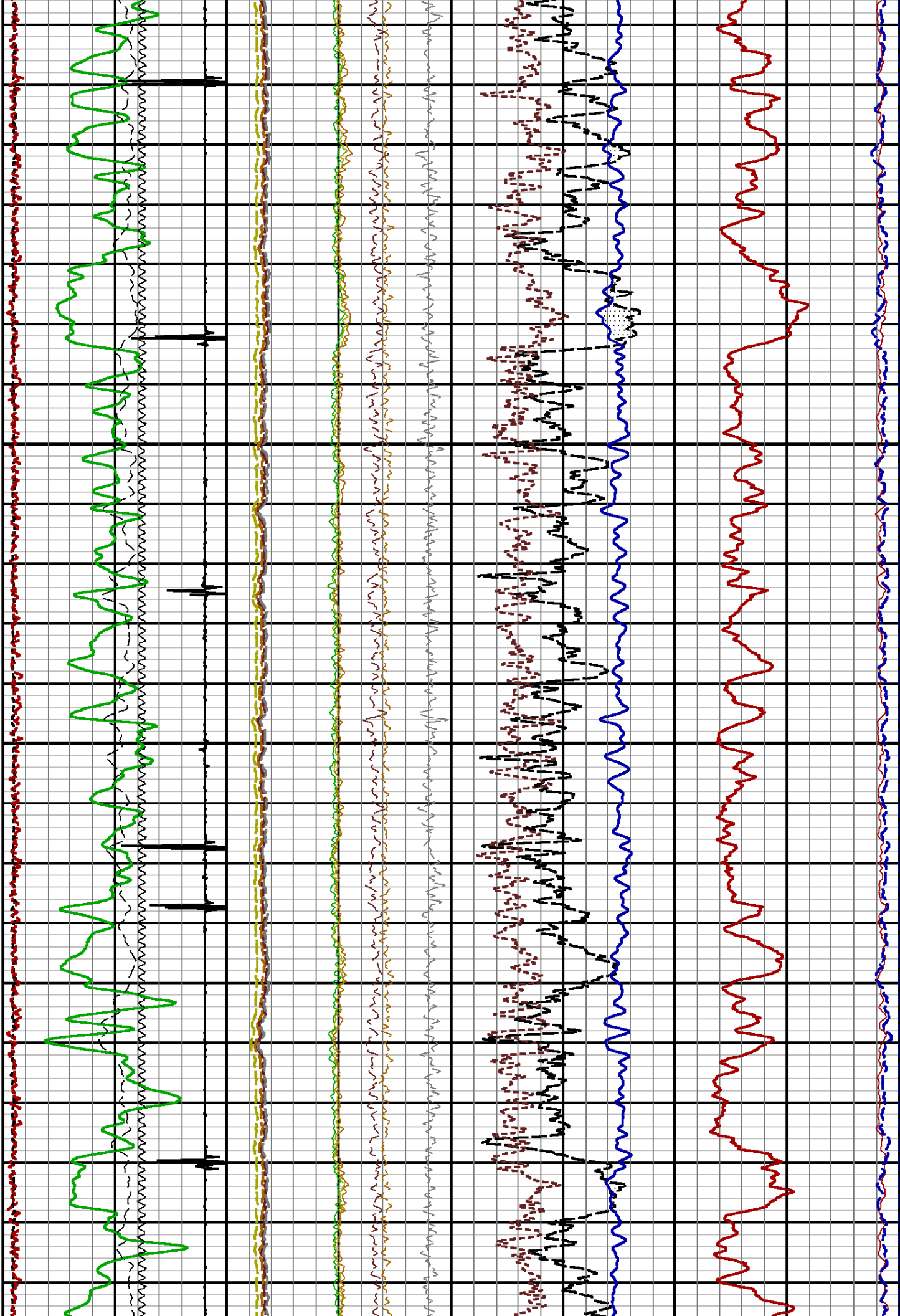
5400





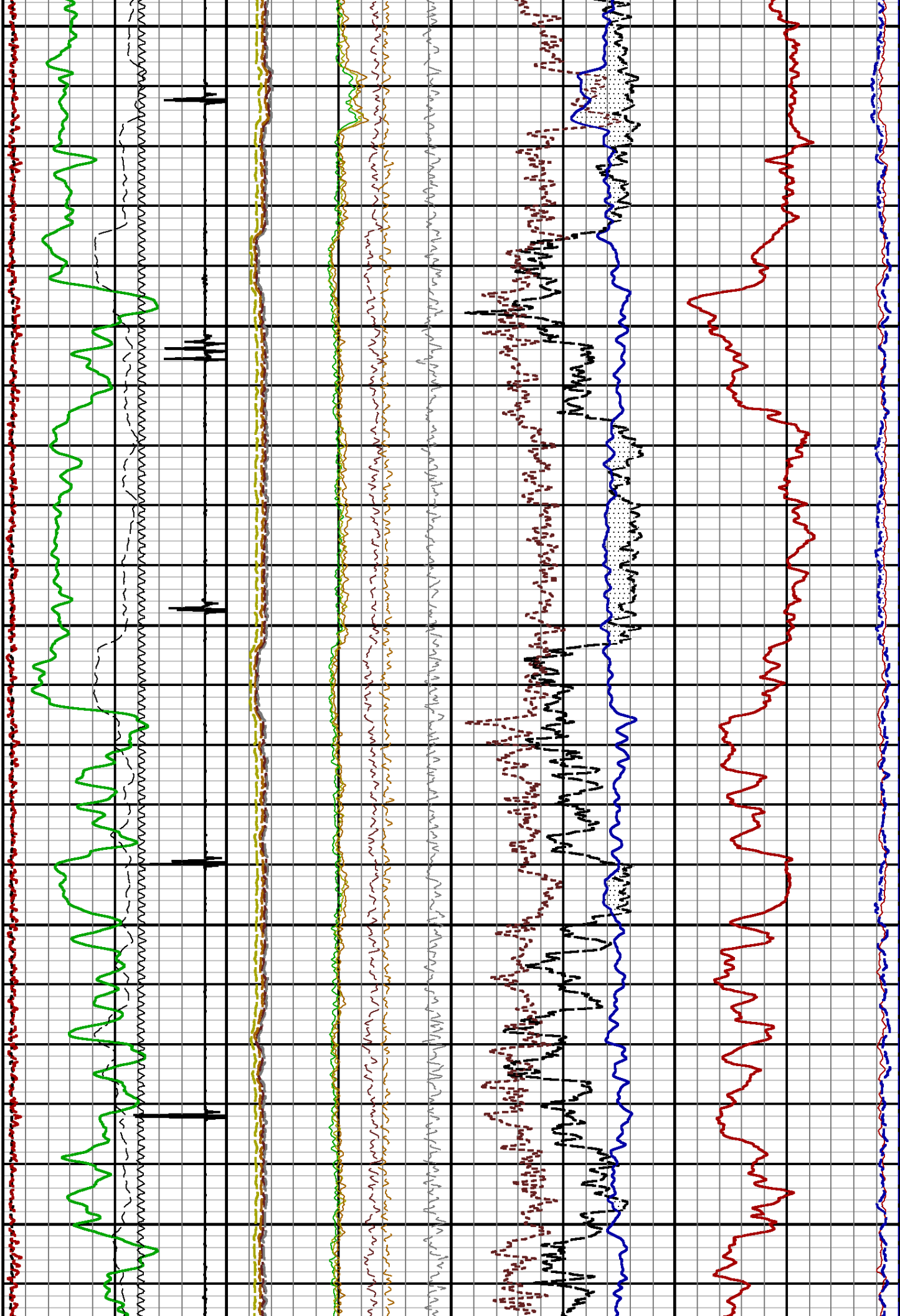
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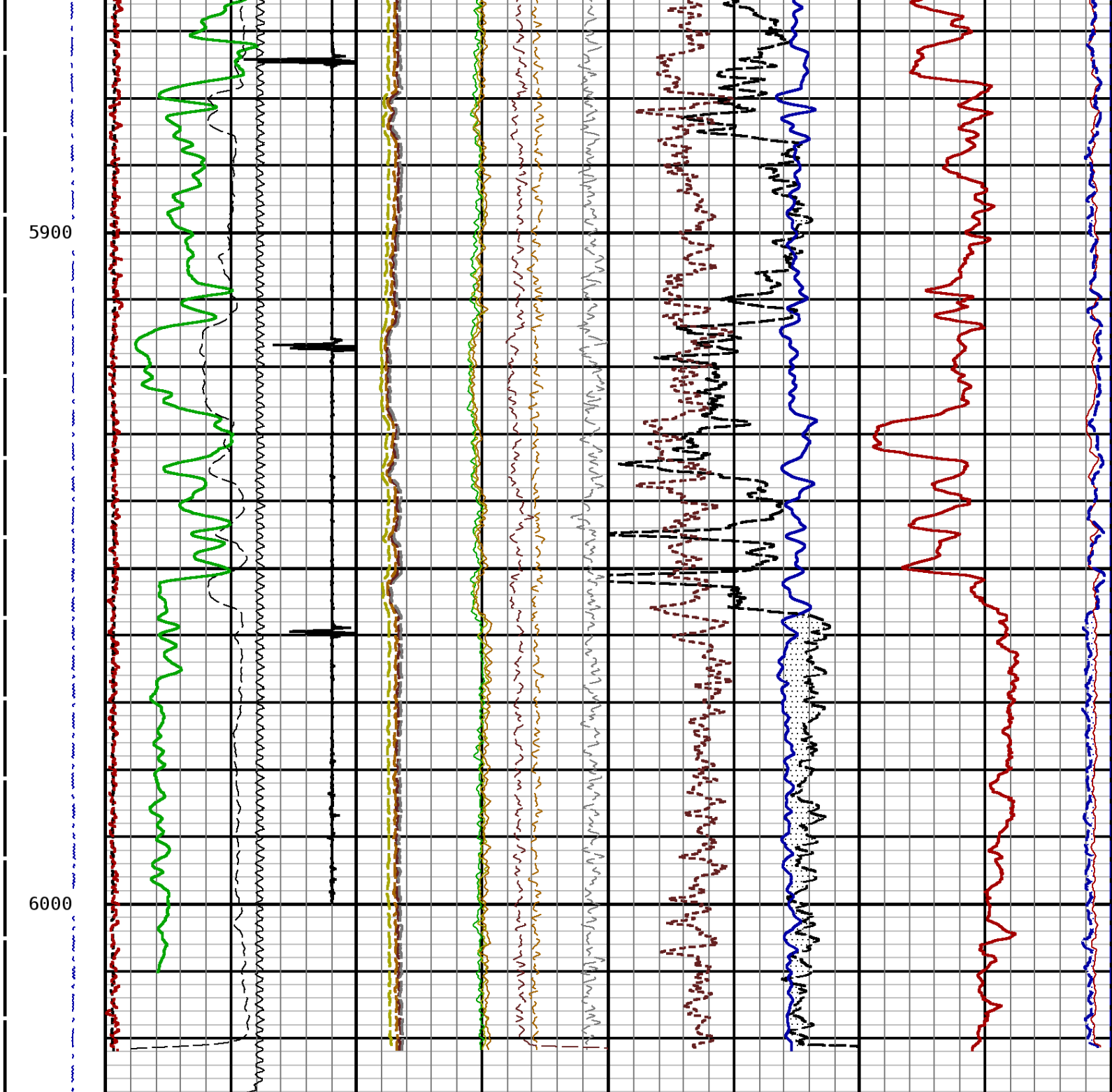
5600



5700

5800

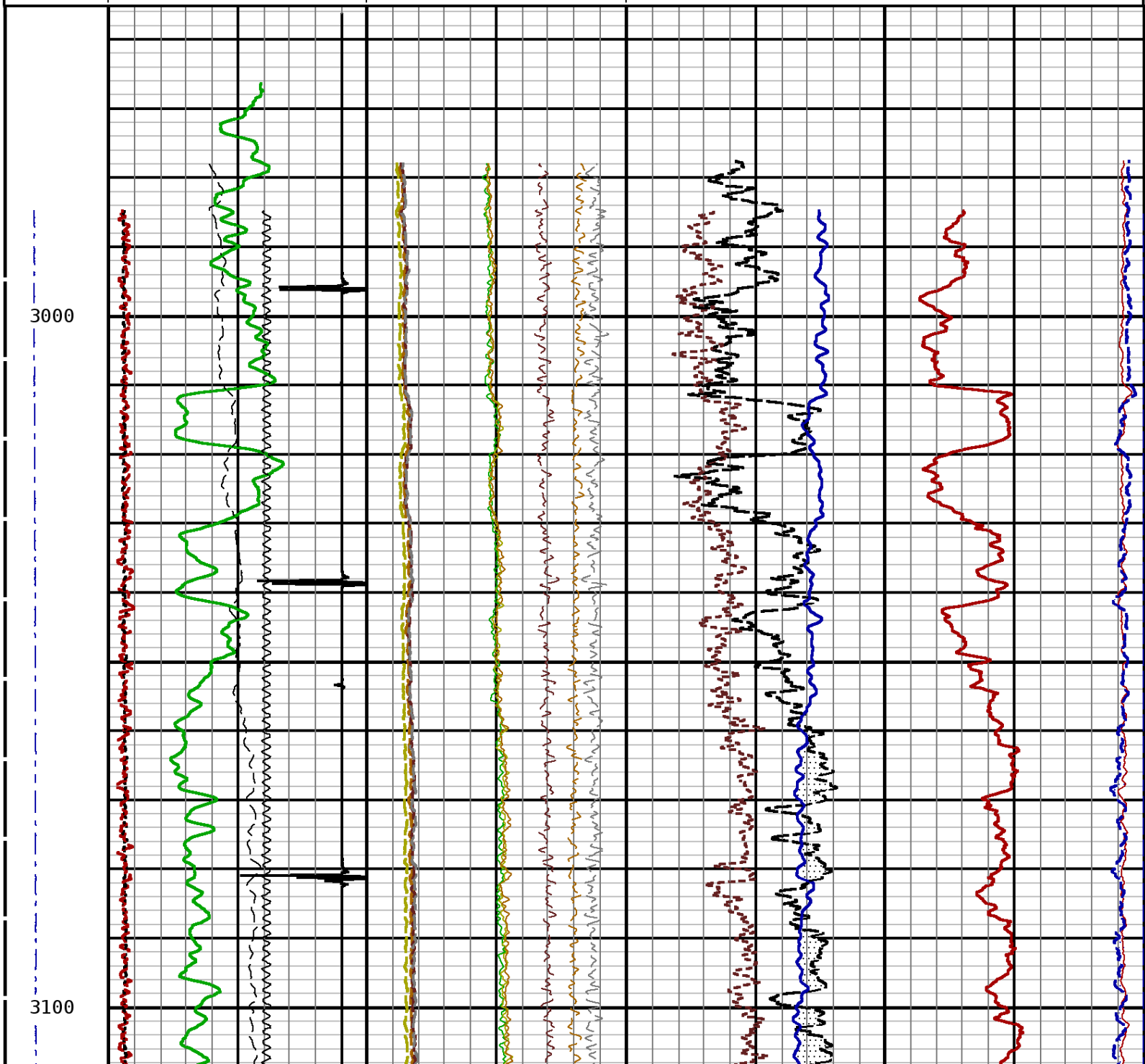
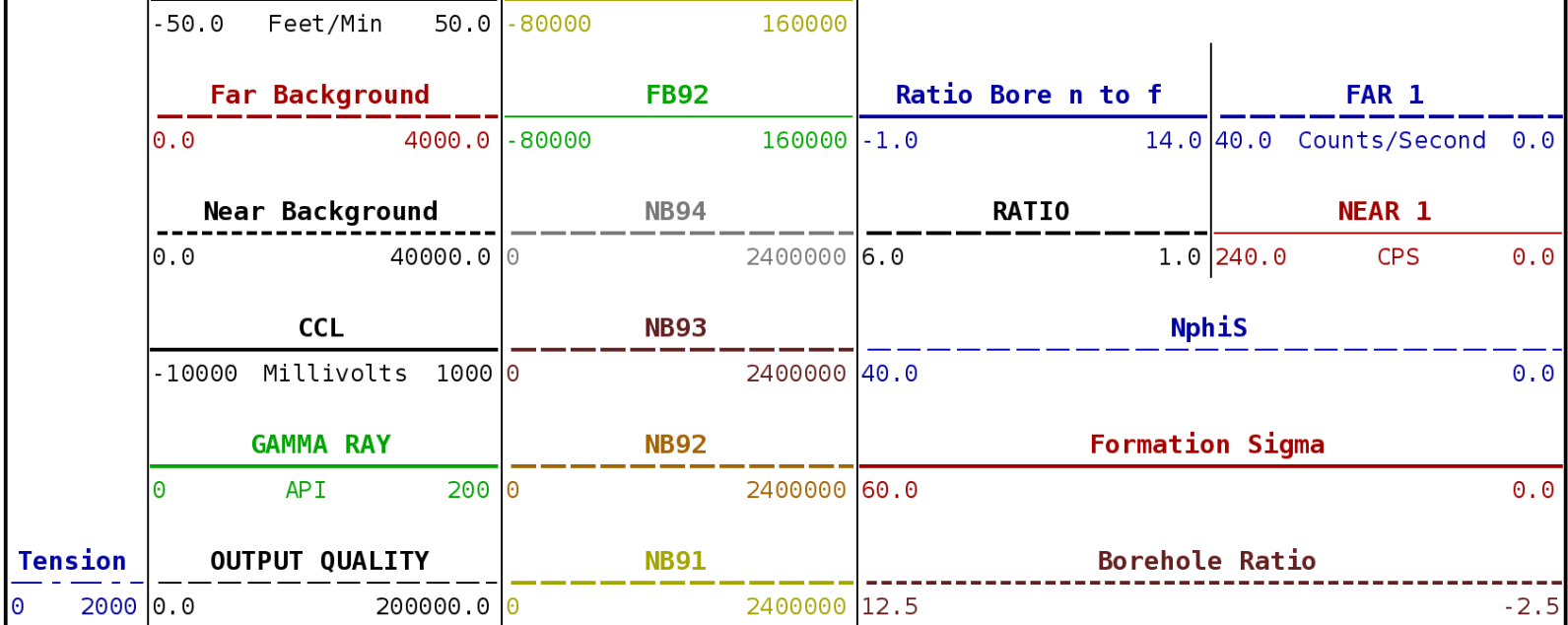




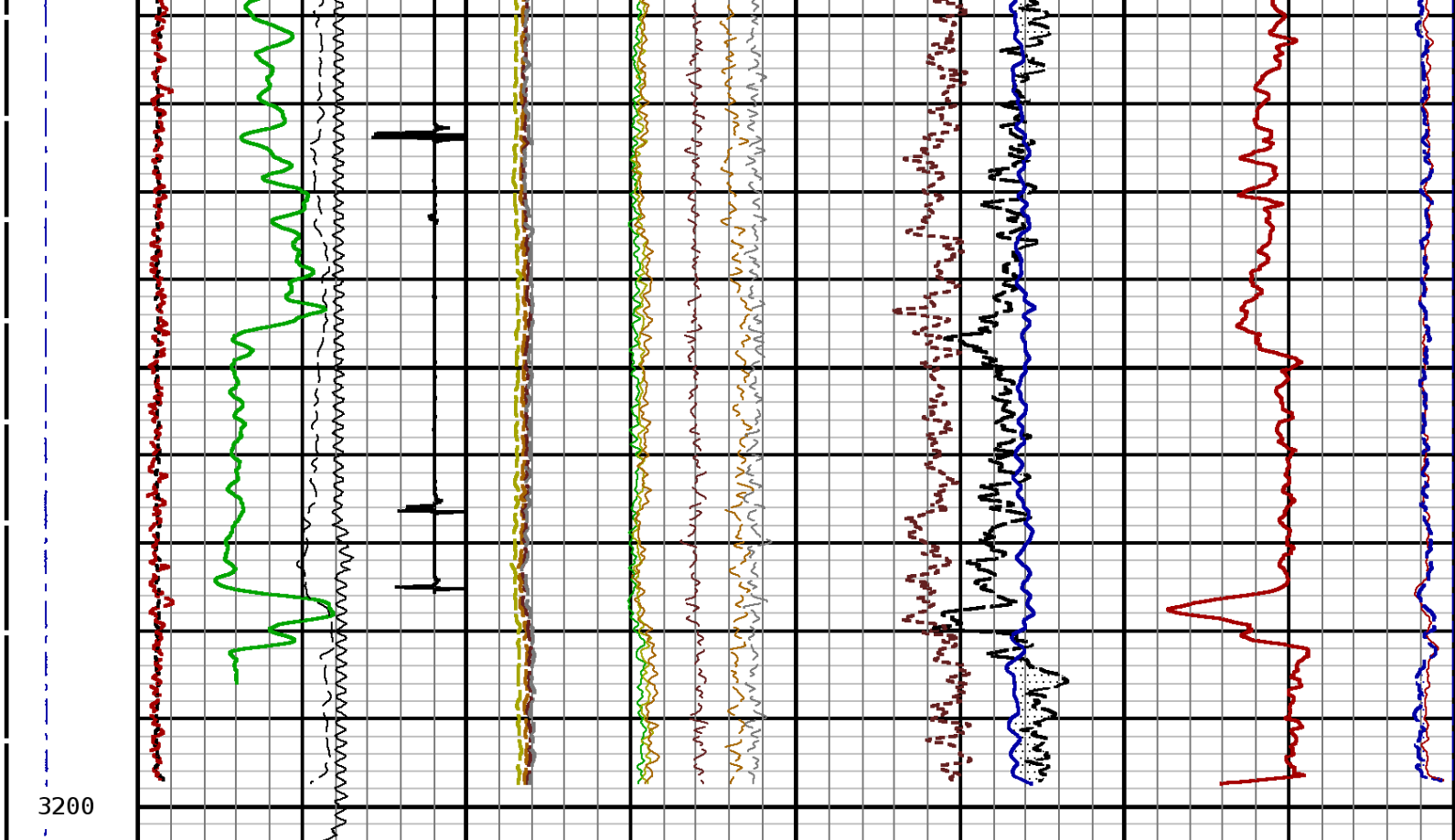
<div>Tension</div> <div>02000</div>	OUTPUT QUALITY		NB91		Borehole Ratio			
	0.0200000.0	02400000	12.5-2.5					
	GAMMA RAY		NB92		Formation Sigma			
	0API200	02400000	60.00.0					
	CCL		NB93		NphiS			
	-10000 Millivolts 1000	02400000	40.00.0					
	Near Background		NB94		RATIO		NEAR 1	
	0.040000.0	02400000	6.01.0	240.0CPS0.0				
	Far Background		FB92		Ratio Bore n to f		FAR 1	

<div>0.04000.0</div>			<div>-80000160000</div>		<div>-1.014.0</div>		<div>40.0Counts/Second0.0</div>				
Line Speed			FB93								
<div>-50.0Feet/Min50.0</div>			<div>-80000160000</div>								
			FB94								
			<div>-80000160000</div>								
			NBPS								
			<div>-1.51.5</div>								
			SB4Q								
			<div>-8.07.0</div>								
			HESC								
			<div>-7.08.0</div>								
START DEPTH: 6028.4DIRECTION: UPDATE: 03/09/2015TIME: 23:51MODE: ORIGINAL											
113040938 PNDMAIN											
MAIN PASS											
DEPTH SCALE: 5":100'LOGGED VERSION: 2012.07.18.162"											

DEPTH SCALE: 5":100'		PROCESSED VERSION: 2012.07.18.162"	
REPEAT PASS			
113040938 PNDREPEAT			
FINISH DEPTH: 2956.3 Feet		DIRECTION: UP	DATE: 03/09/2015
		TIME: 23:54	MODE: ORIGINAL
Line Speed	HESC		
	-7.0	8.0	
	SB4Q		
	-8.0	7.0	
	NBPS		
	-1.5	1.5	
	FB94		
	-80000	160000	
	FB93		







Tension 02000	OUTPUT QUALITY		NB91		Borehole Ratio			
	0.0200000.0	02400000	12.5-2.5					
	GAMMA RAY		NB92		Formation Sigma			
	0API200	02400000	60.00.0					
	CCL		NB93		NphiS			
	-10000 Millivolts 1000	02400000	40.00.0					
	Near Background		NB94		RATIO		NEAR 1	
	0.040000.0	02400000	6.01.0	240.0CPS	0.0			
	Far Background		FB92		Ratio Bore n to f		FAR 1	
	0.04000.0	-80000160000	-1.014.0	40.0 Counts/Second	0.0			
Line Speed		FB93						
-50.0 Feet/Min 50.0		-80000160000						
		FB94						
		-80000160000						
		NBPS						
		-1.51.5						
		SB4Q						
		-8.07.0						
		HESC						
		-7.08.0						

START DEPTH: 3204.2    DIRECTION: UP    DATE: 03/09/2015    TIME: 23:54    MODE: ORIGINAL

113040938 PNDREPEAT

## REPEAT PASS

DEPTH SCALE: 5":100'

LOGGED VERSION: 2012.07.18.162"

### 1 7/16 Adapter Head

Weight 2.2 LBS.  
Length 12 IN.  
Max. Diameter

Total Stack Weight in air  
Total Stack Length 32.0 FT.

### Pulsed Neutron Processor

Weight 49 LBS.  
Length 12.9 FT.  
Max. Diameter 1.69 IN.

### Pulsed Neutron Detectors

Weight 29.9 LBS  
Length 19.0 FT.  
Max. Diameter 1.69 IN.

### Pulsed Neutron Generator

Weight 26 LBS.  
Length 8.7 FT.  
Max. Diameter 1.69 IN.

CCL 28.51 FT.

GR 19.15 FT.

FAR DETECTOR 7.66 FT

From Target ( )

NEAR DETECTOR 7.02 FT

From Target ( )

TARGET 7.10 FT.

1.00 in. dia.

( cm)

1.44 in. dia.

( cm)

1.69 in. dia.

1.69 in. dia.

1.69 in. dia.

**COMPANY**   **URSA OPERATING COMPANY**

**WELL**   **BAT 34C-24-07-96**

**FIELD**   **BATTLEMENT MESA**

**COUNTY**   **GARFIELD**                      **STATE**   **COLORADO**

