

Company URSA OPERATING CO., LLC.  
Well TOMPKINS 41A-08-07-95  
Field PARACHUTE  
County GARFIELD State CO

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Well TOMPKINS 41A-08-07-95  
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County GARFIELD State CO

API No.: 05 045 22480 0000 Serv. #: 903426614  
Location: LAT: 39.460026 LONG: -108.014002  
SHL: 223 FSL, 596 FEL  
BHL: 110 FNL, 660 FEL  
Other Services

Sec: 11 Twp: 6S Rge: 92W

CBL-M

Permanent Datum GL Elevation 5532  
Log Measured From KB 17 Ft. above perm. datum  
Drilling Measured From KB

Date @ Time Logged 17-JUL-16@1000 Type Fluid in Hole FRESH WATER  
Run No. ONE Density of Fluid 8.33  
Depth - Driller 7010 Fluid Level SURFACE  
Depth - Logger 6822 Cement Top Est. Logged N/A  
Bottom - Logged Interval 6822 Equipment / Location RS06 / US RK  
Top - Log Interval 3158 Recorded by SULLIVAN  
Max. Recorded Temp. 214 Witnessed by RICHARD

CEMENTING DATA  
Surface Protection String  
String String  
Date / Time Cemented  
Primary / Squeeze  
Expected  
Compressive Strength  
Cement Volume  
Cement Type / Weight  
Formulation  
Mud Type / Mud Wgt.

Borehole Record		Casing & Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
24				16		SURFACE	60
12.25				8.625		SURFACE	1702.7
7.875				4.5		SURFACE	7010.8

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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

LOG CORRELATED TO HALLIBURTON SPECTRAL DENSITY DUAL SPACED NEUTRON ARRAY COMENSATED TRUE RESISTIVITY LOG DATED: 01-JUL-16

LOG INTERVAL PER CUSTOMER REQUEST

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES

### Log Variables Database: C:\ProgramData\Warrior\Data\ursa\_tom\_41a.db Dataset: field/well/run1/MAIN1/\_vars\_

Top - Bottom

BHTEMP_Src	BHSAL2	BHSAL1	POROS2	POROS1	LTH	UHSGC	RHOFC
TEMP	0	1	0	1	Sandstone	NONE	0.25
SO in 0	BORSAL kppm 150	CASED? Yes	MSGGN 1	USERFTT usec/ft 0	ZREF MRayl 1.7	CASEWGHT lb/ft 11.6	SRFTEMP degF 0
MudWgt lb/gal	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BITSIZE in	

8.33

0.5

4.5

0

0

215

7.875

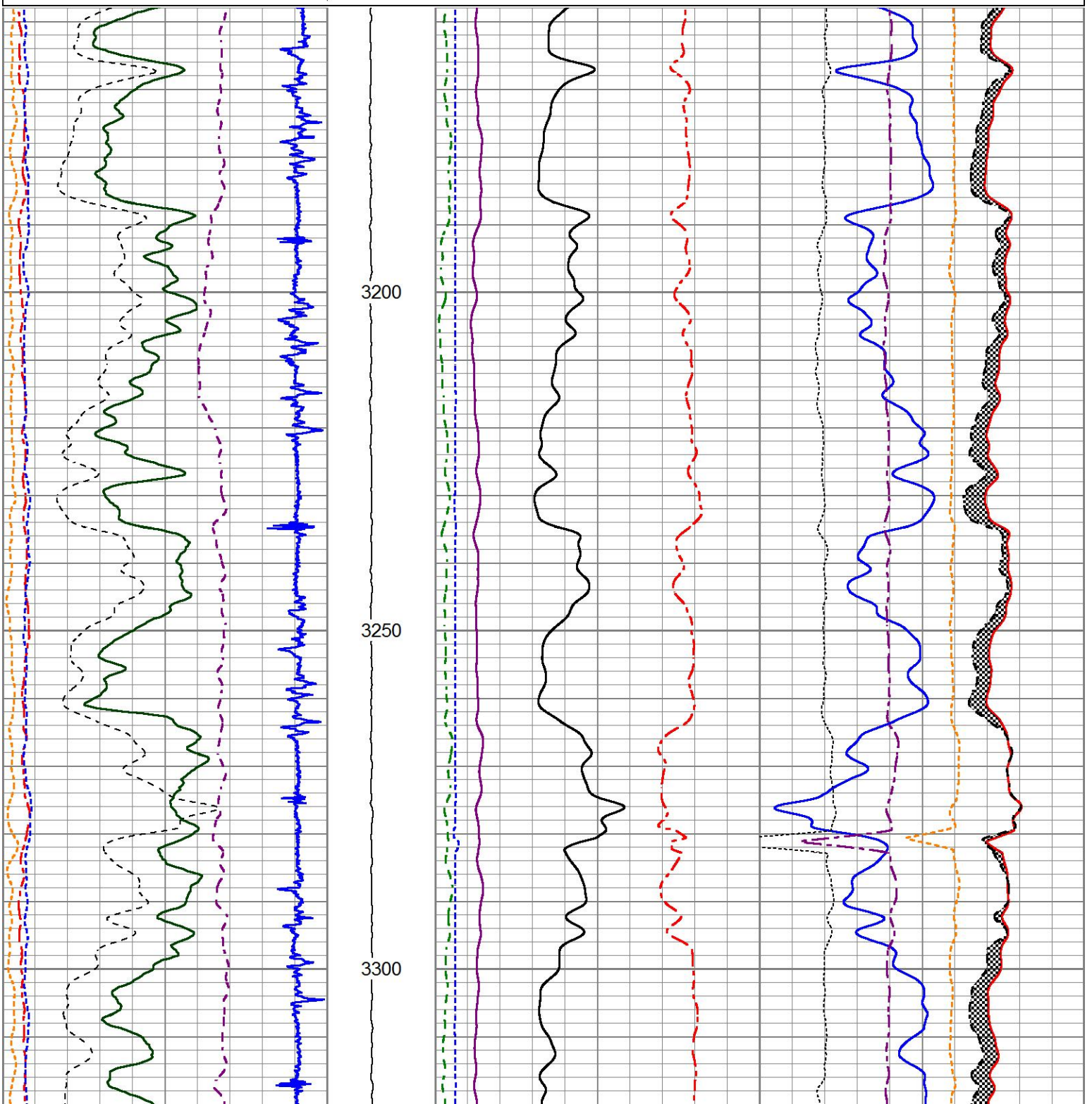
## MAIN LOG

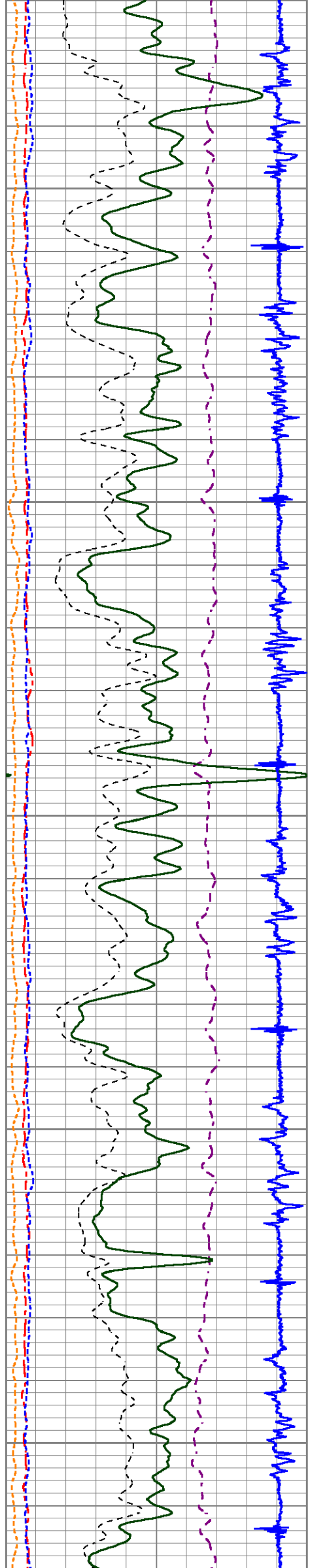
HALLIBURTON

5"=100'

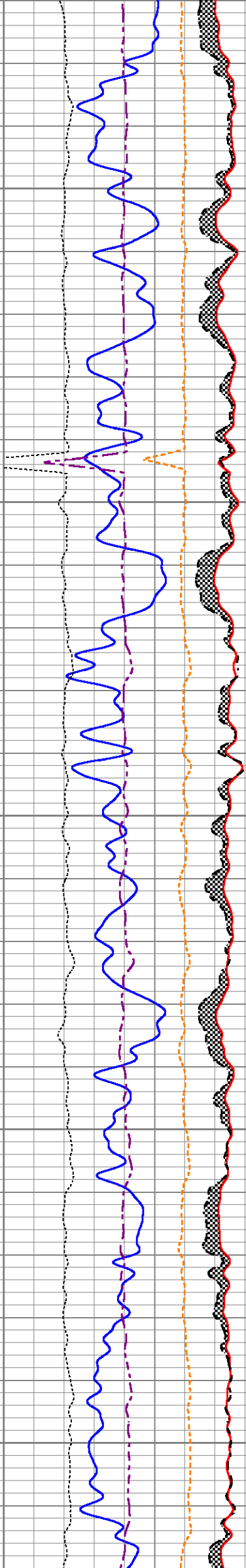
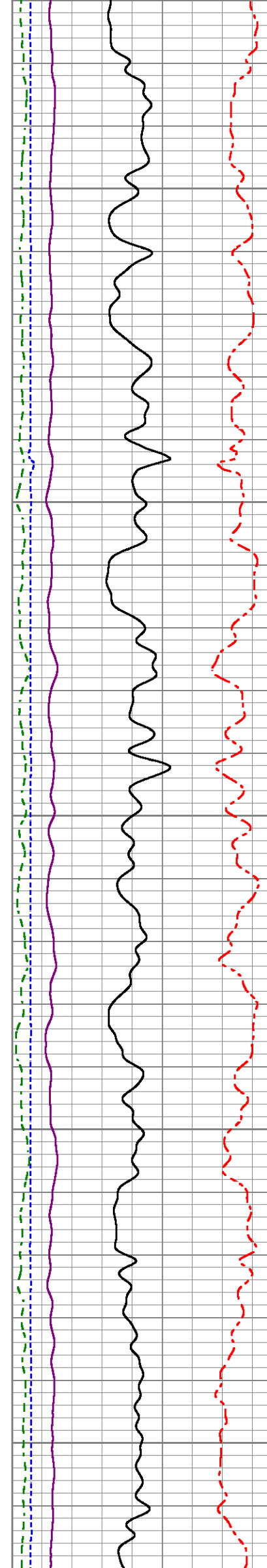
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 Dataset Pathname   MAIN1  
 Presentation Format  1\_ss\_rmti  
 Dataset Creation    Sun Jul 17 10:14:12 2016  
 Charted by         Depth in Feet scaled 1:240

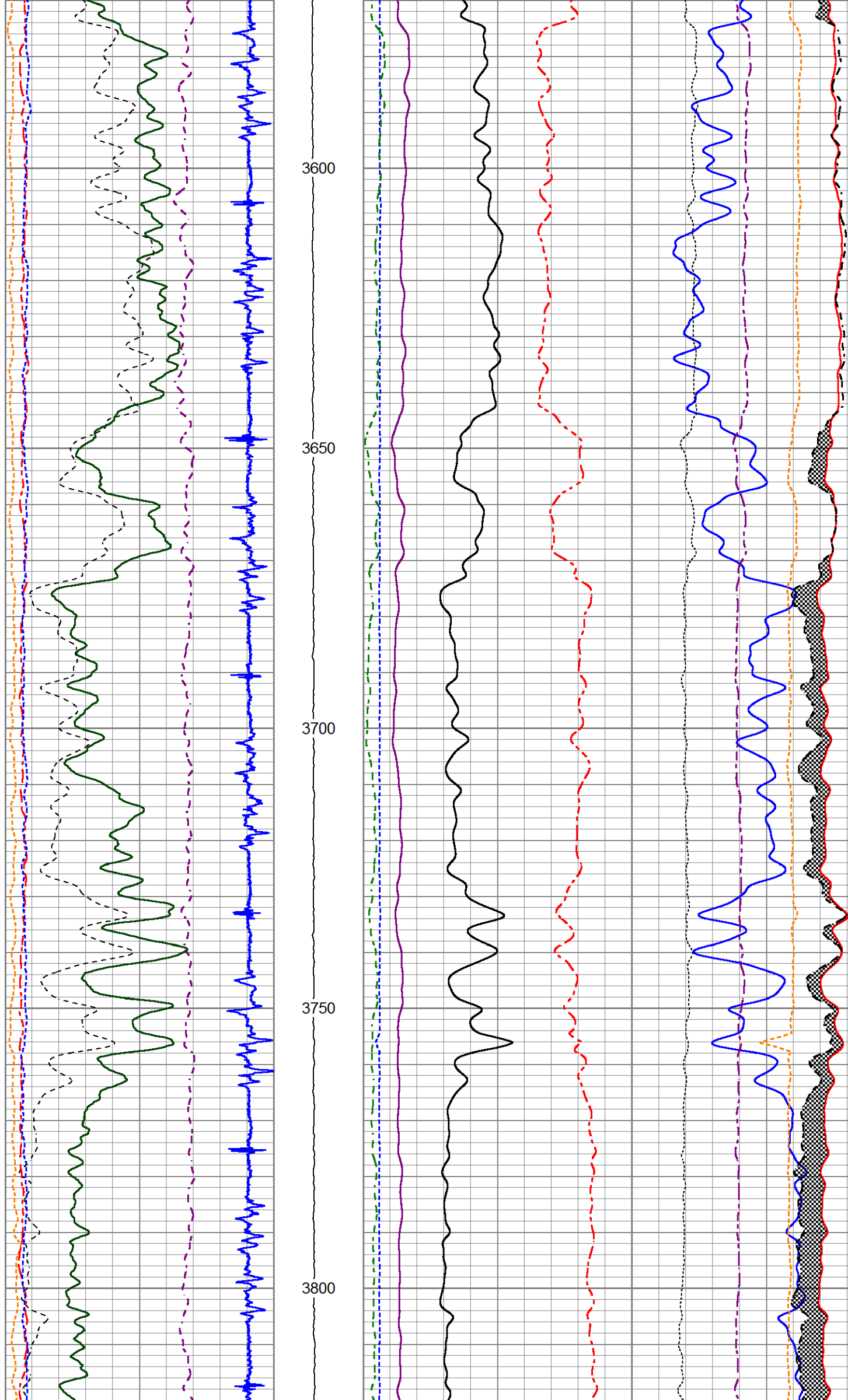
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0	OAI	100	0 (lb.1500)	2	RATIO (RNF)	0.5
10	FAR FIT ERR (SGFF)	40		0	RIN	15
0	GR (GAPI)	150		0.1	H YIELD (YH2)	1
0	IN FIT ERR (CFTR1) NEAR	1		0	RICF	6
0	IN FIT ERR (CFTR2) FAR	1		0	H YIELD (YH2)	1
-1000	CCL	100				
					60000 NEAR COUNTS (NCAP)	0
					60000 FAR COUNTS (FCAP)	0
					100000 FAR INTEL CT (FSIN)	0
					10000(NEAR INTEL CT (NSIN)	0
					50000            NNIN	-1000

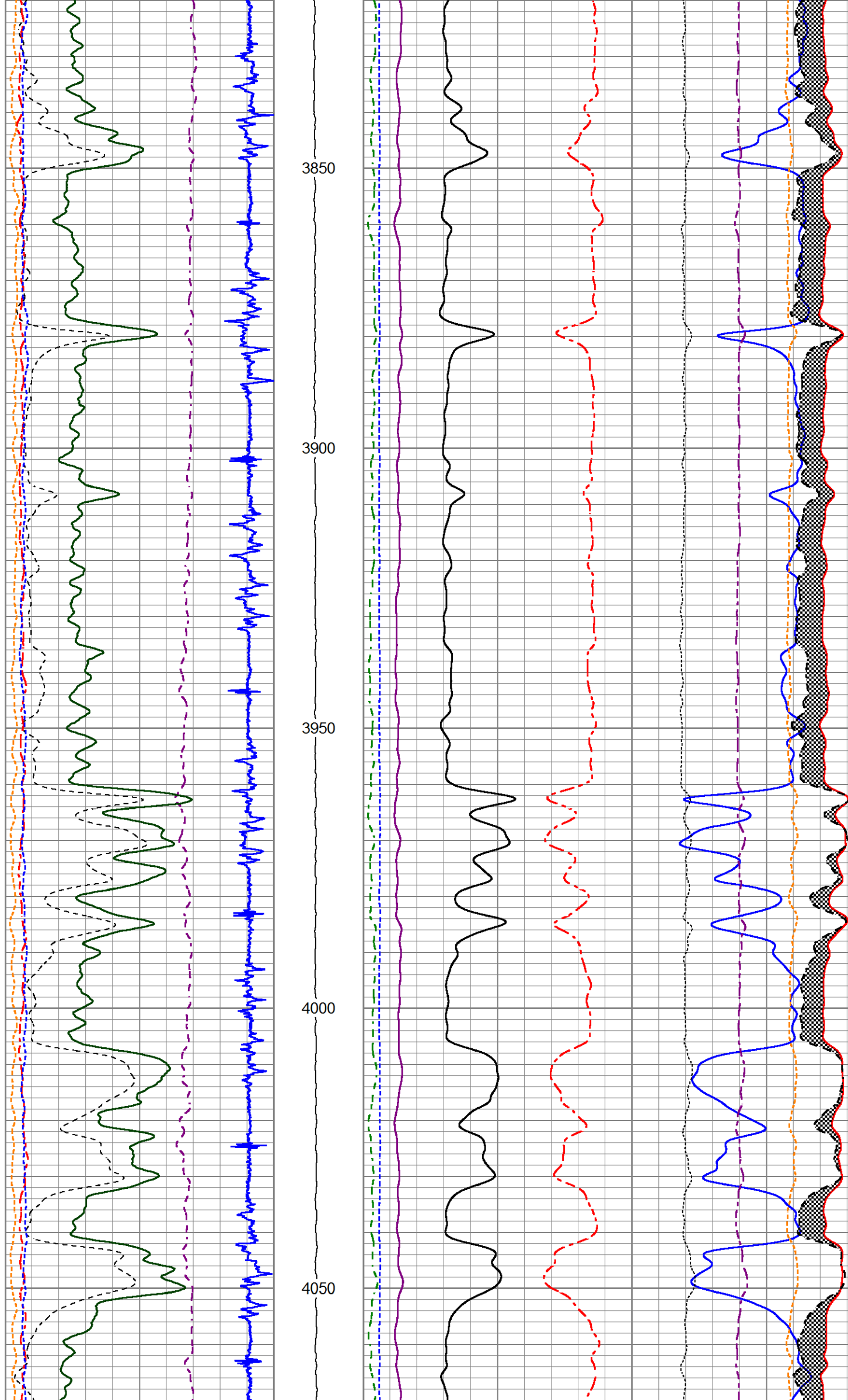


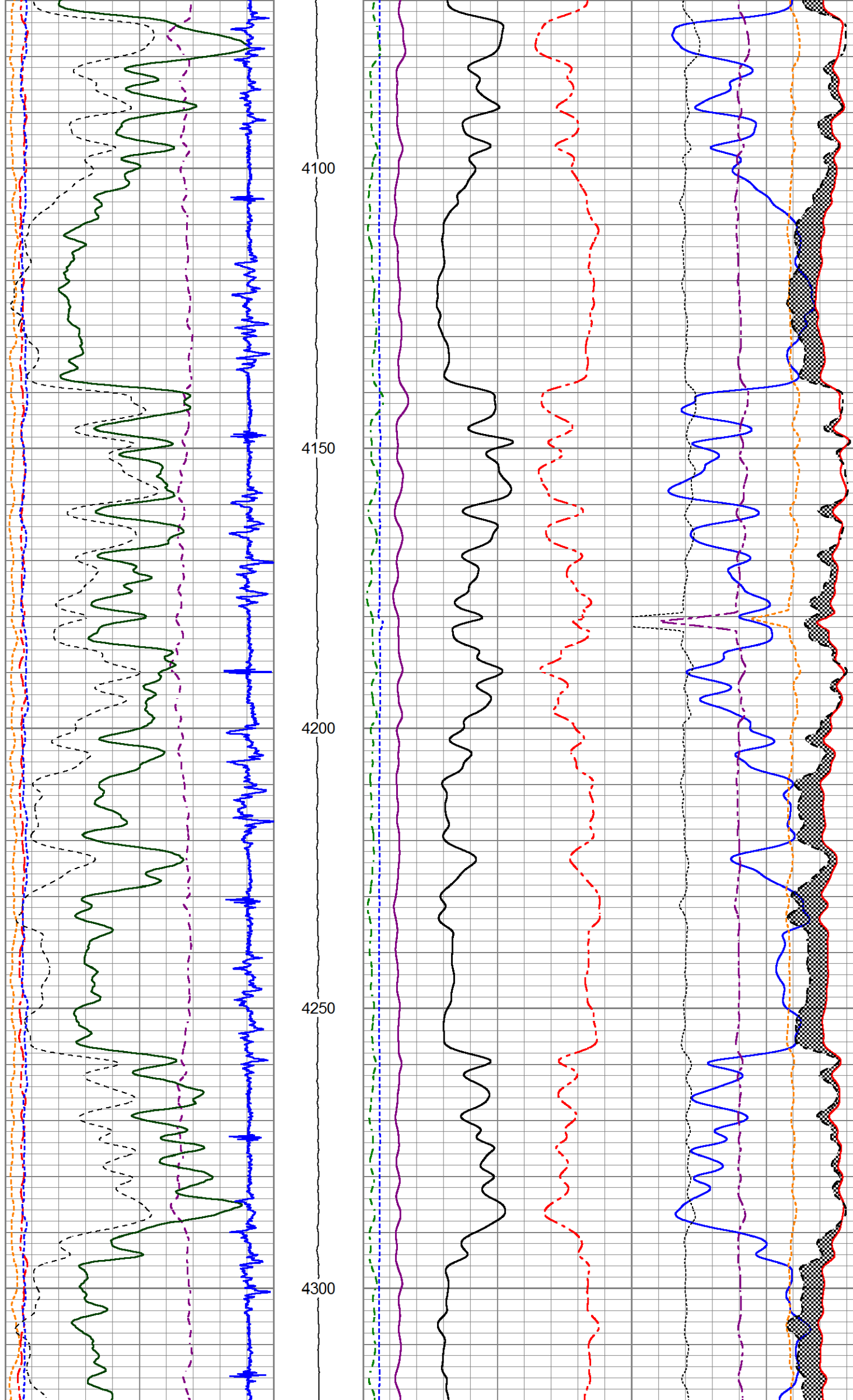


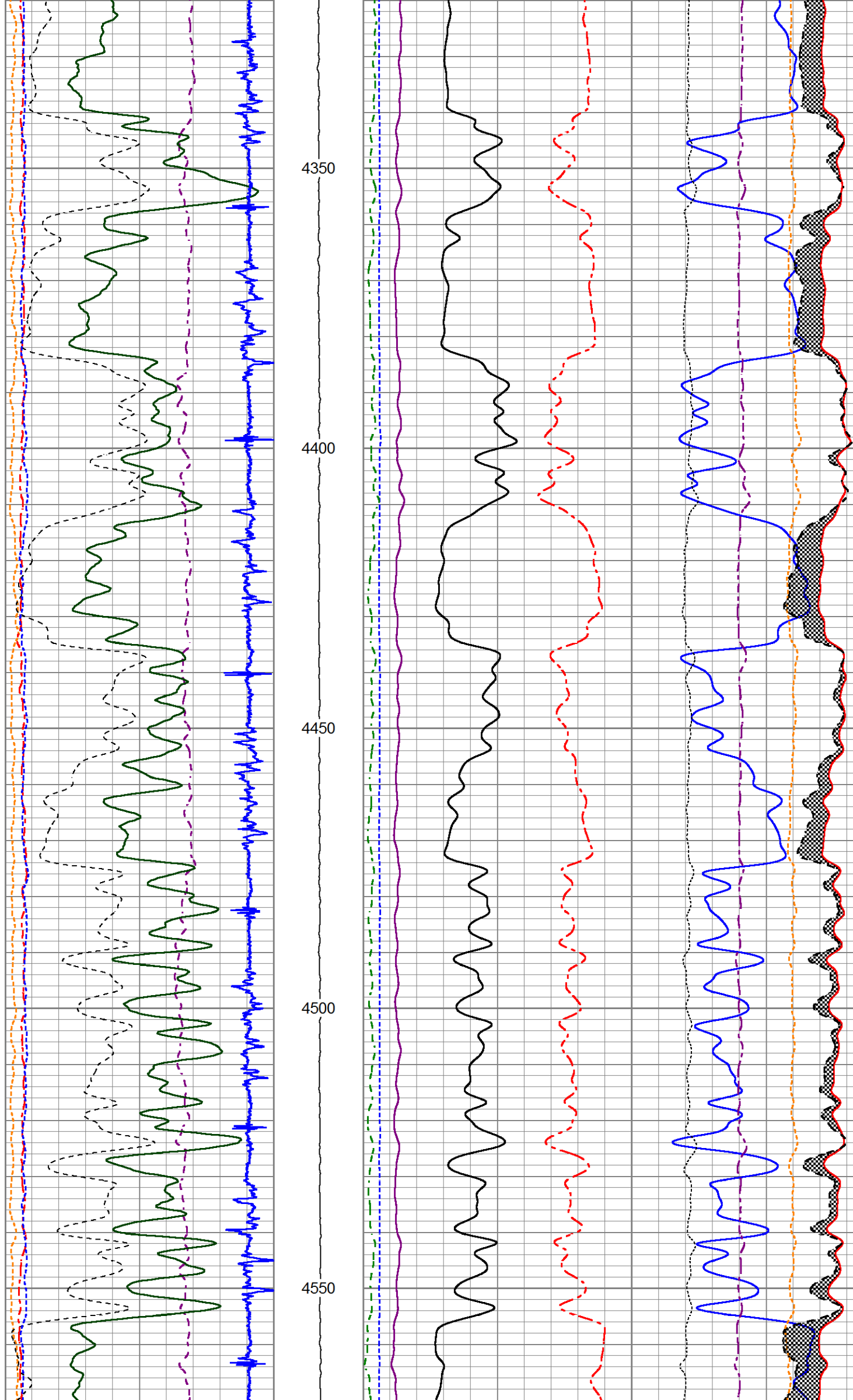
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3400  
3450  
3500  
3550

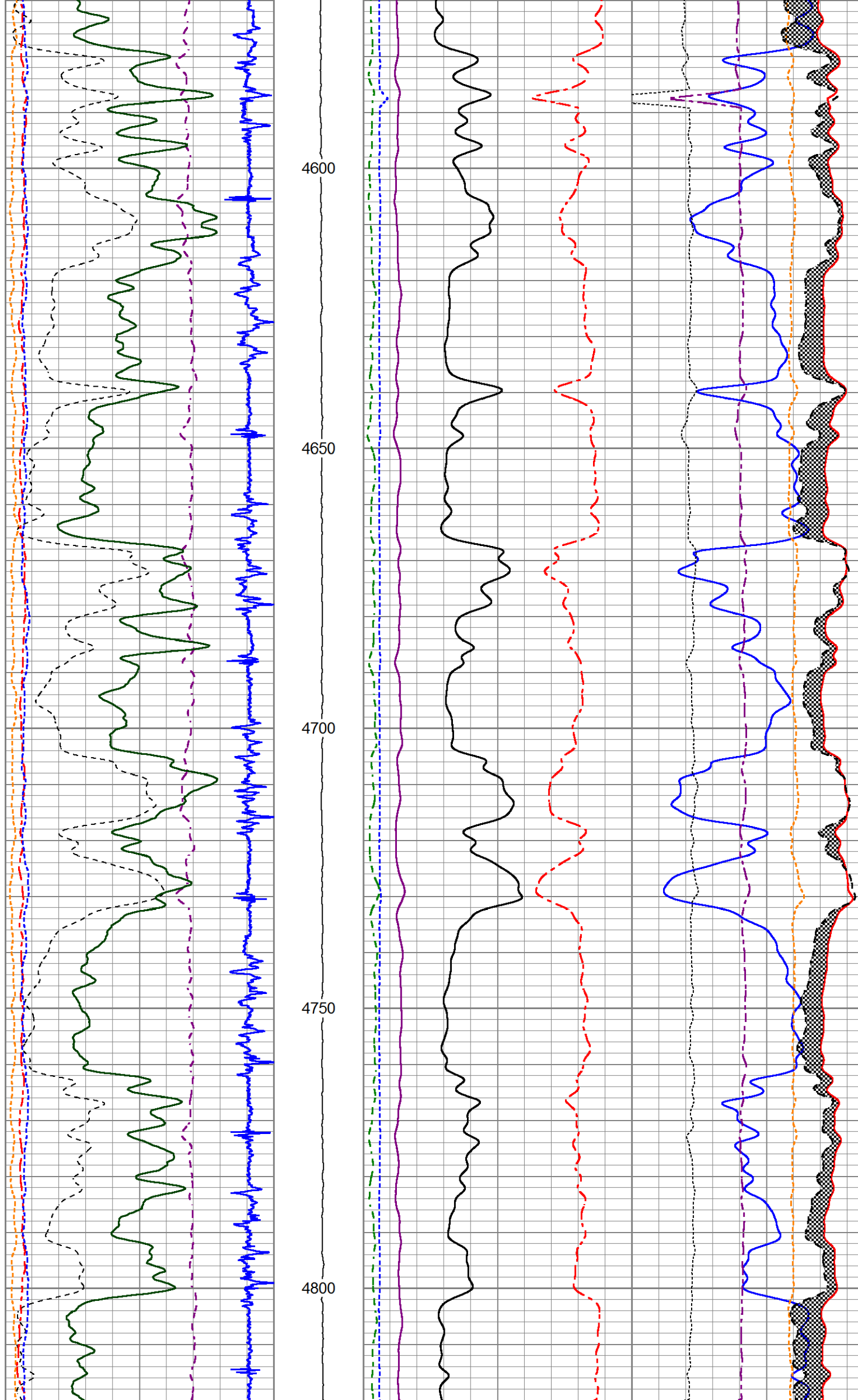


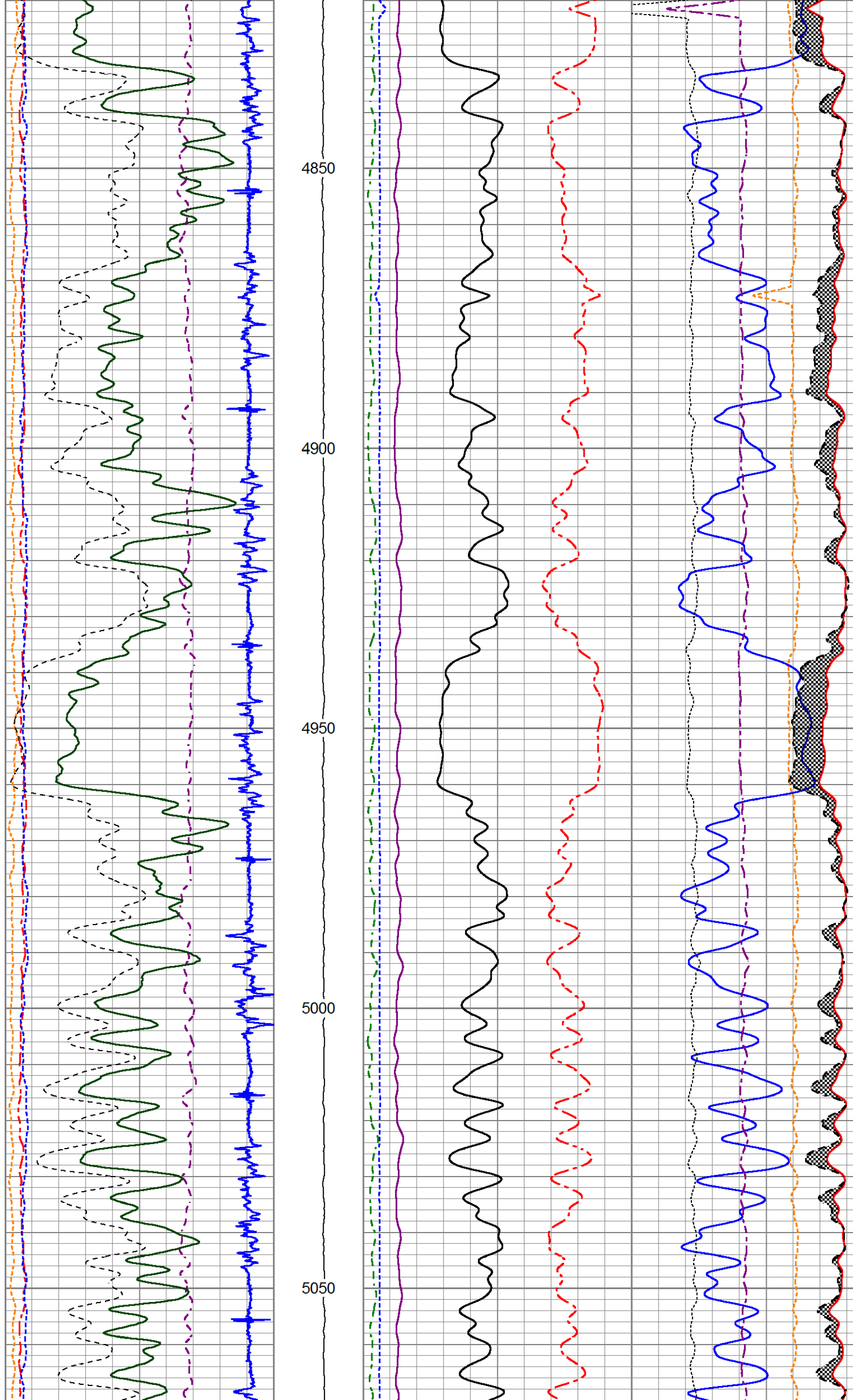


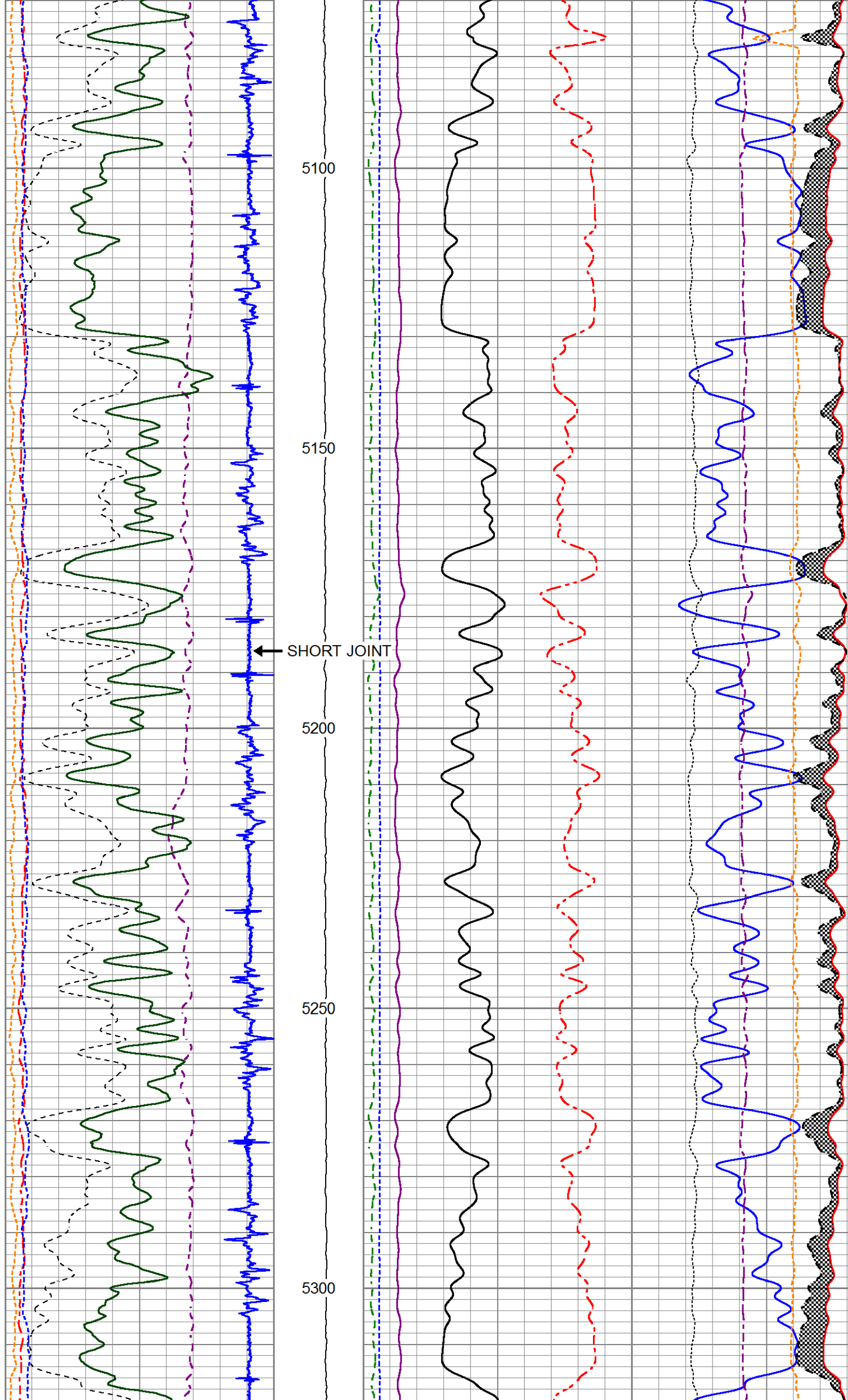


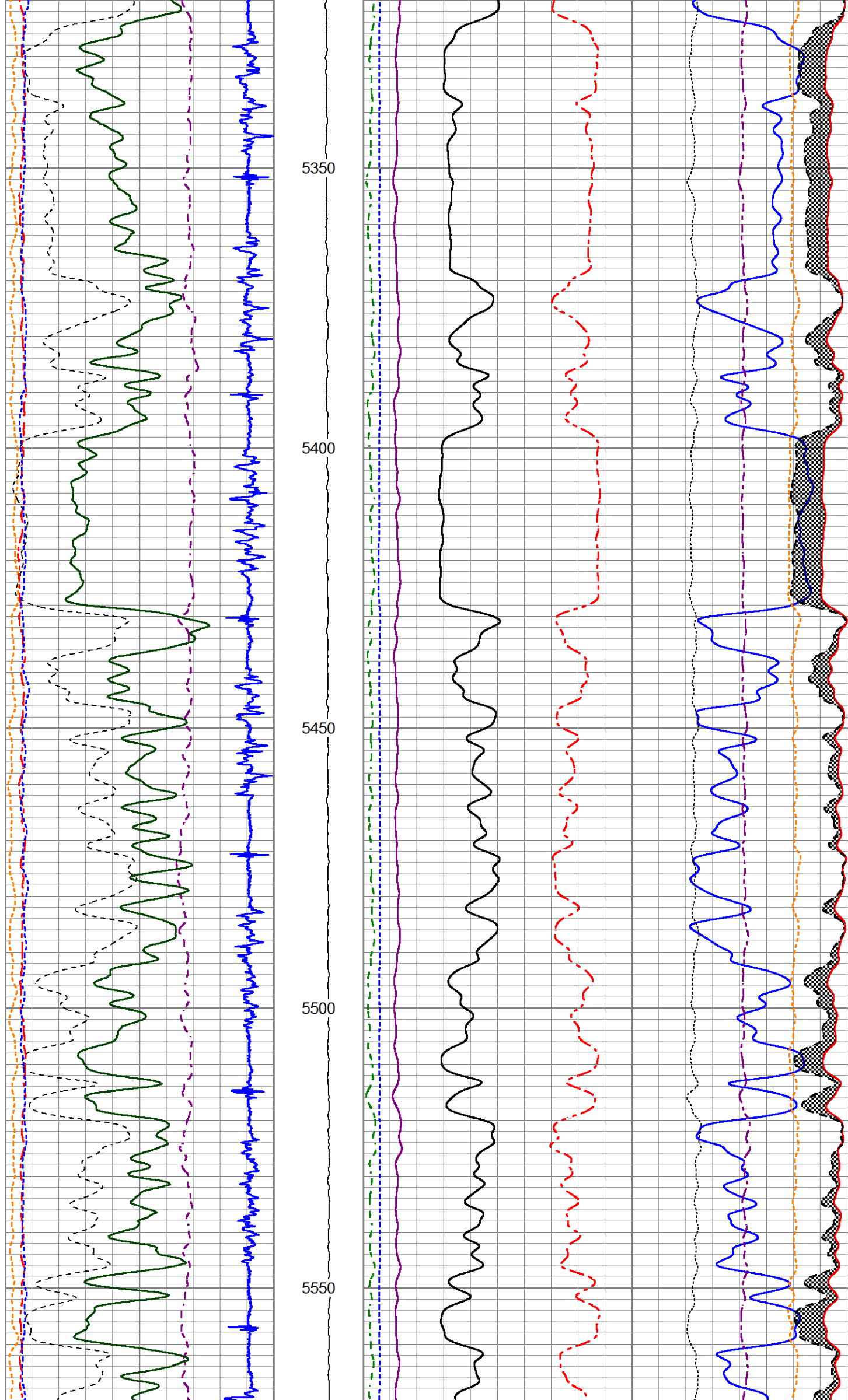


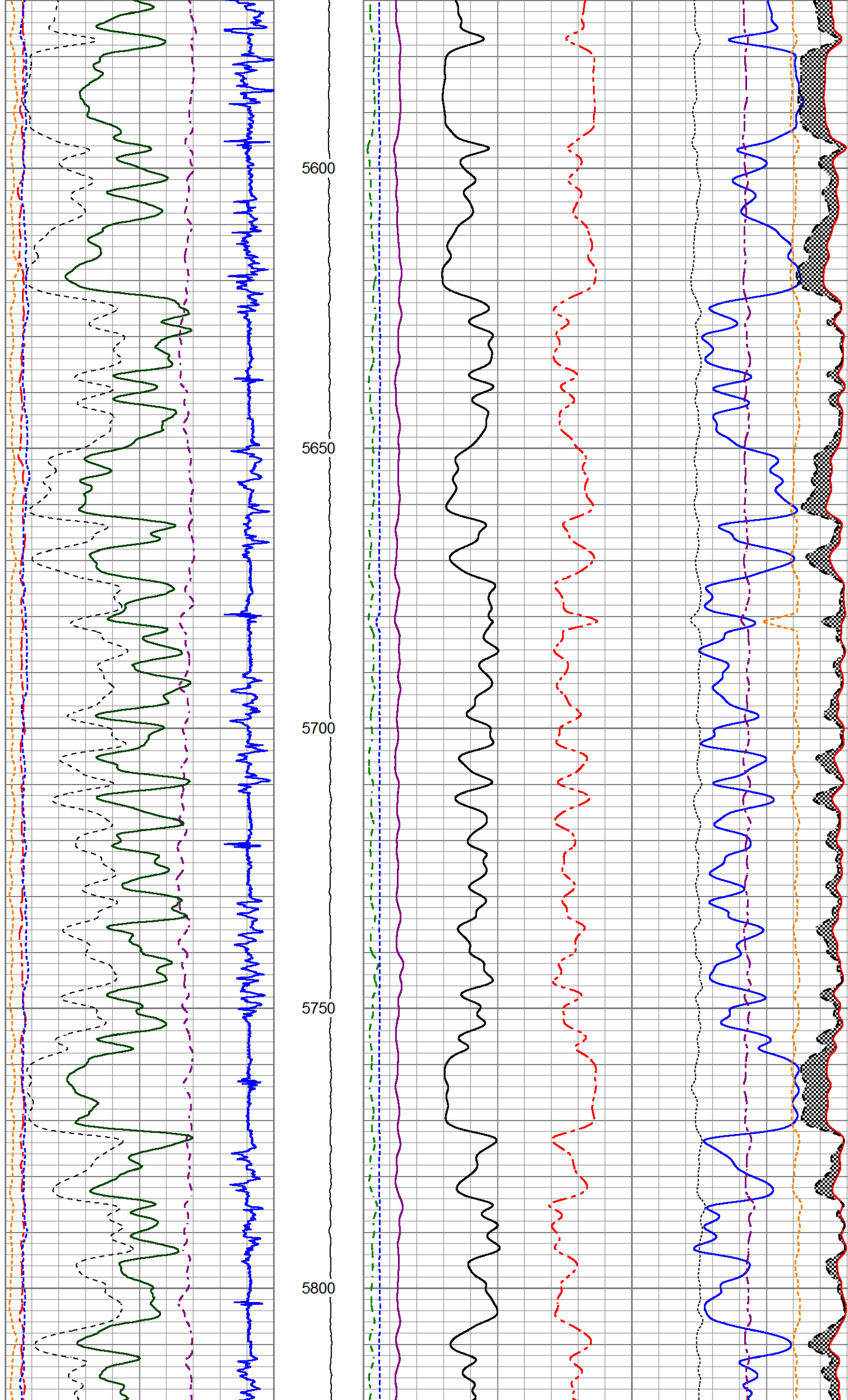


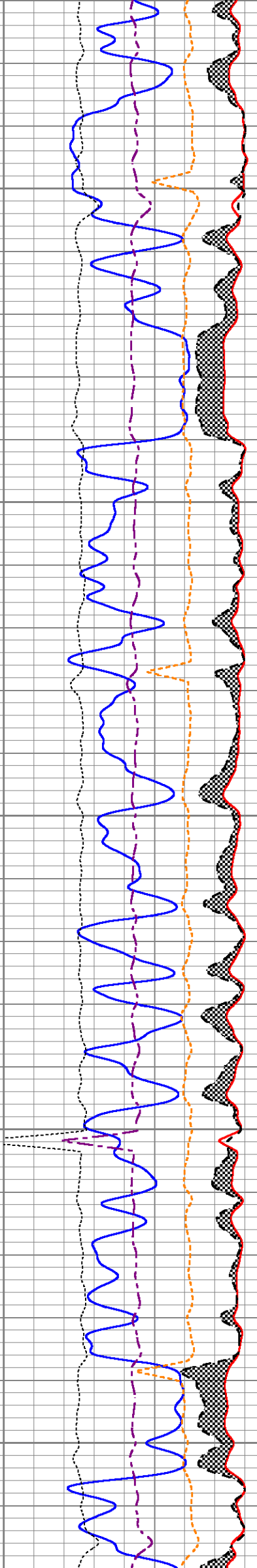
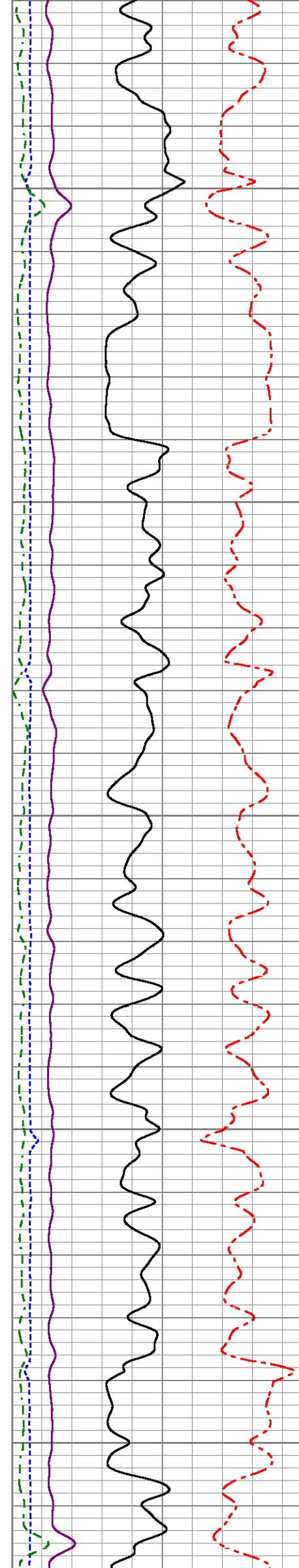
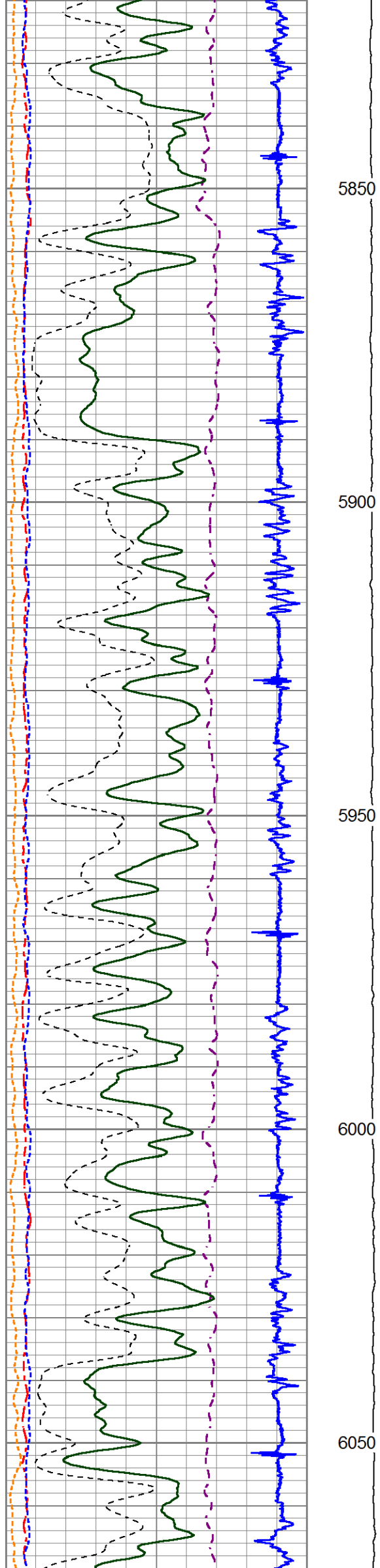


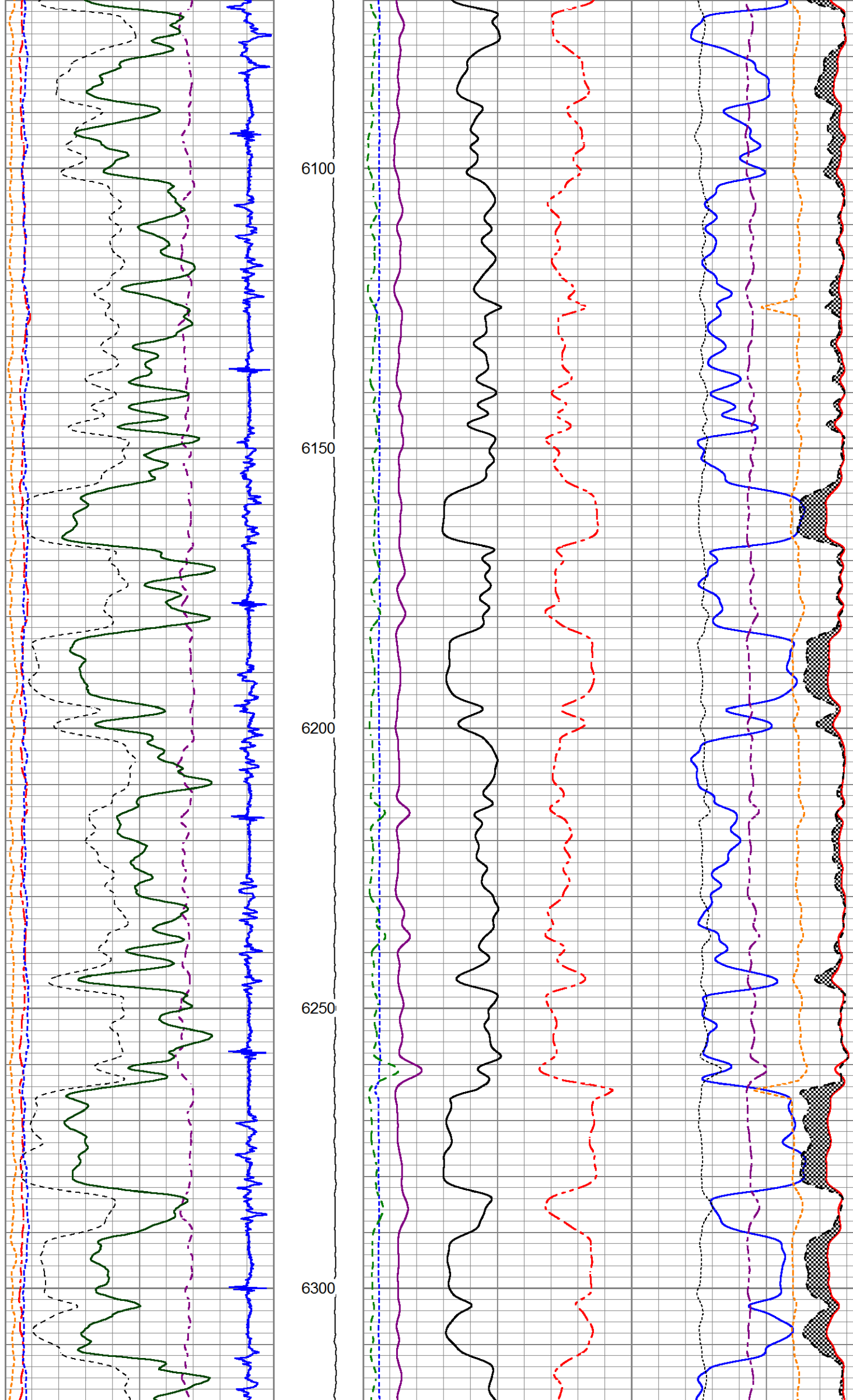


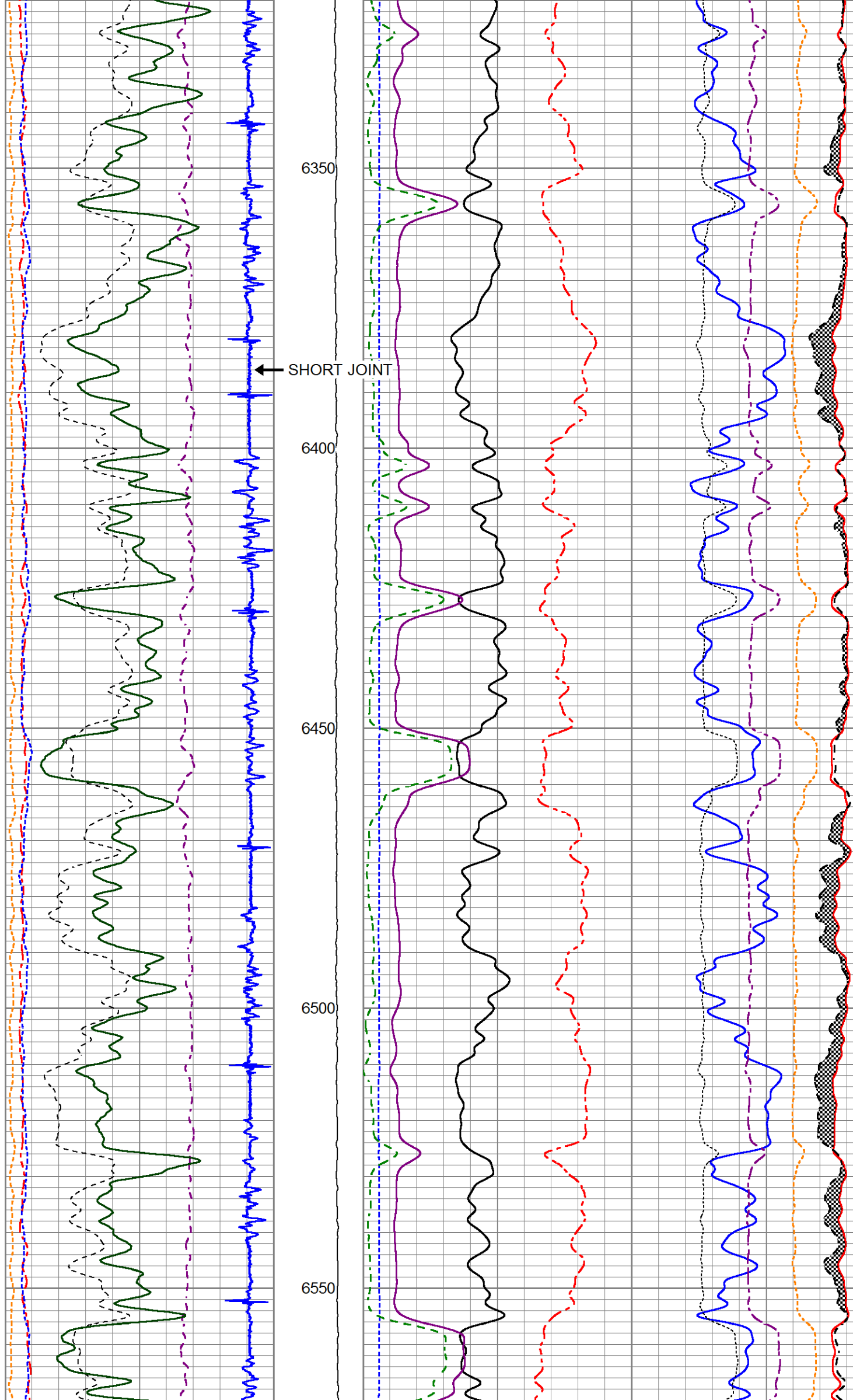


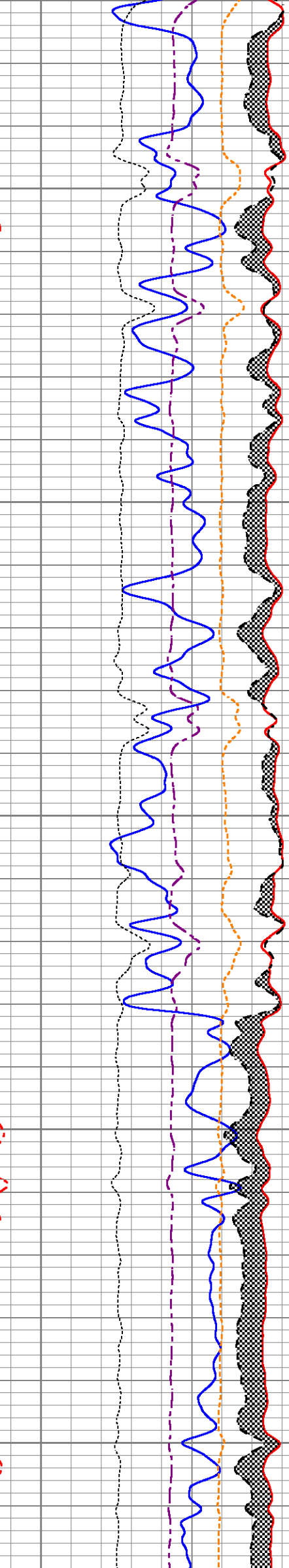
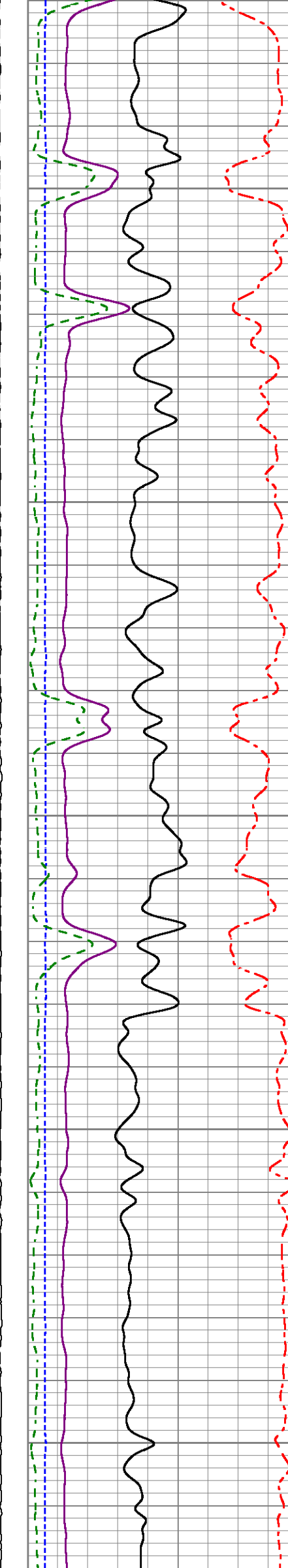
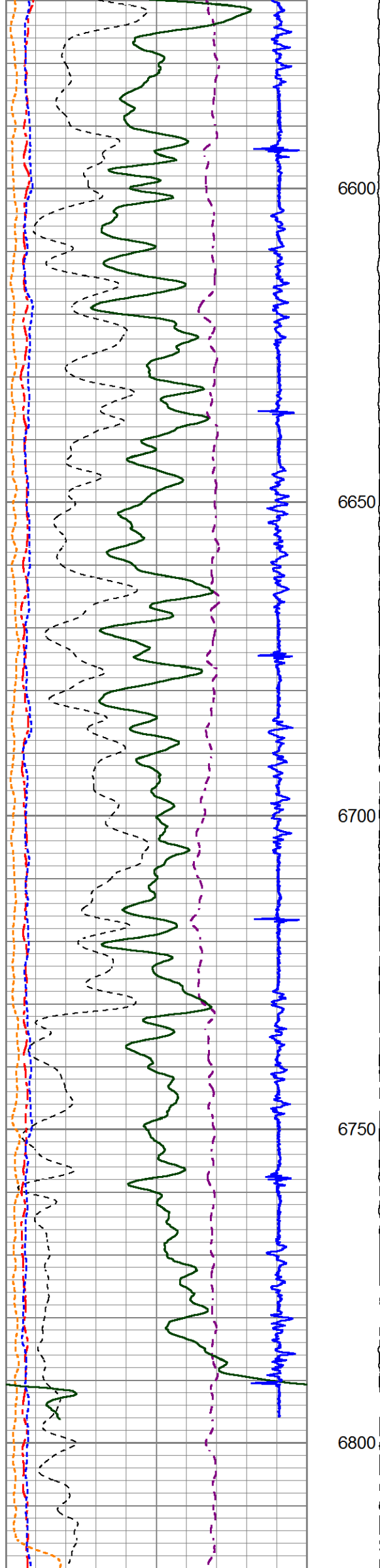












200	NEAR BORE SI (SGBN)	0	TENSION	60	SGIN	0
0	OAI	100	(lb.1500)	2	RATIO (RNF)	0.5
10	FAR FIT ERR (SGFF)	40		0	RIN	15
0	GR (GAPI)	150		0.1	H YIELD (YH2)	1
0	IN FIT ERR (CFTR1) NEAR	1		0	RICF	6
0	IN FIT ERR (CFTR2) FAR	1		0	H YIELD (YH2)	1
-1000	CCL	100				
					60000 NEAR COUNTS (NCAP)	0
					60000 FAR COUNTS (FCAP)	0
					100000 FAR INTEL CT (FSIN)	0
					10000(NEAR INTEL CT (NSIN)	0
					50000 NNIN	-1000

## MAIN LOG

**HALLIBURTON**

5"=100'

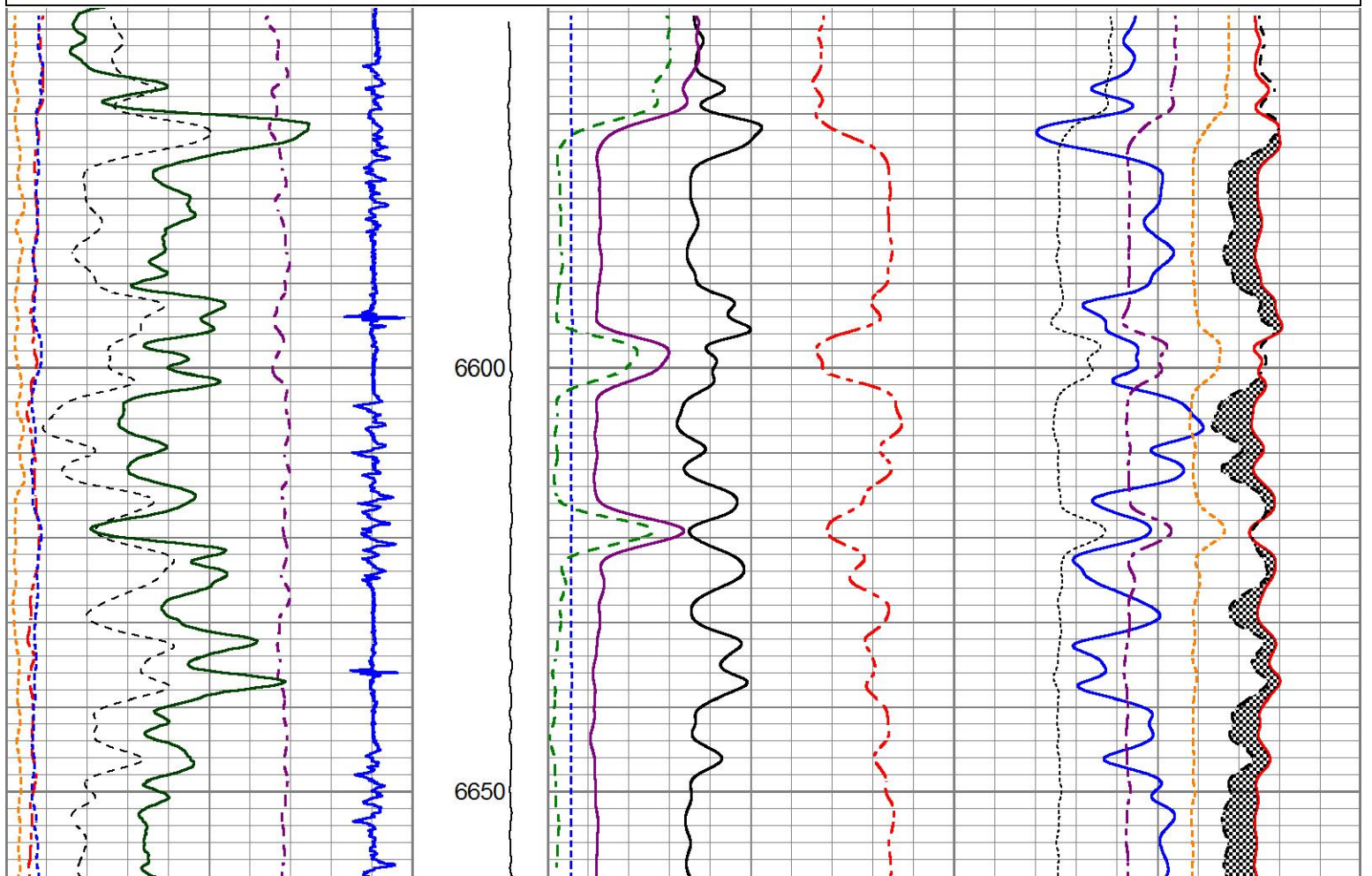
## REPEAT PASS

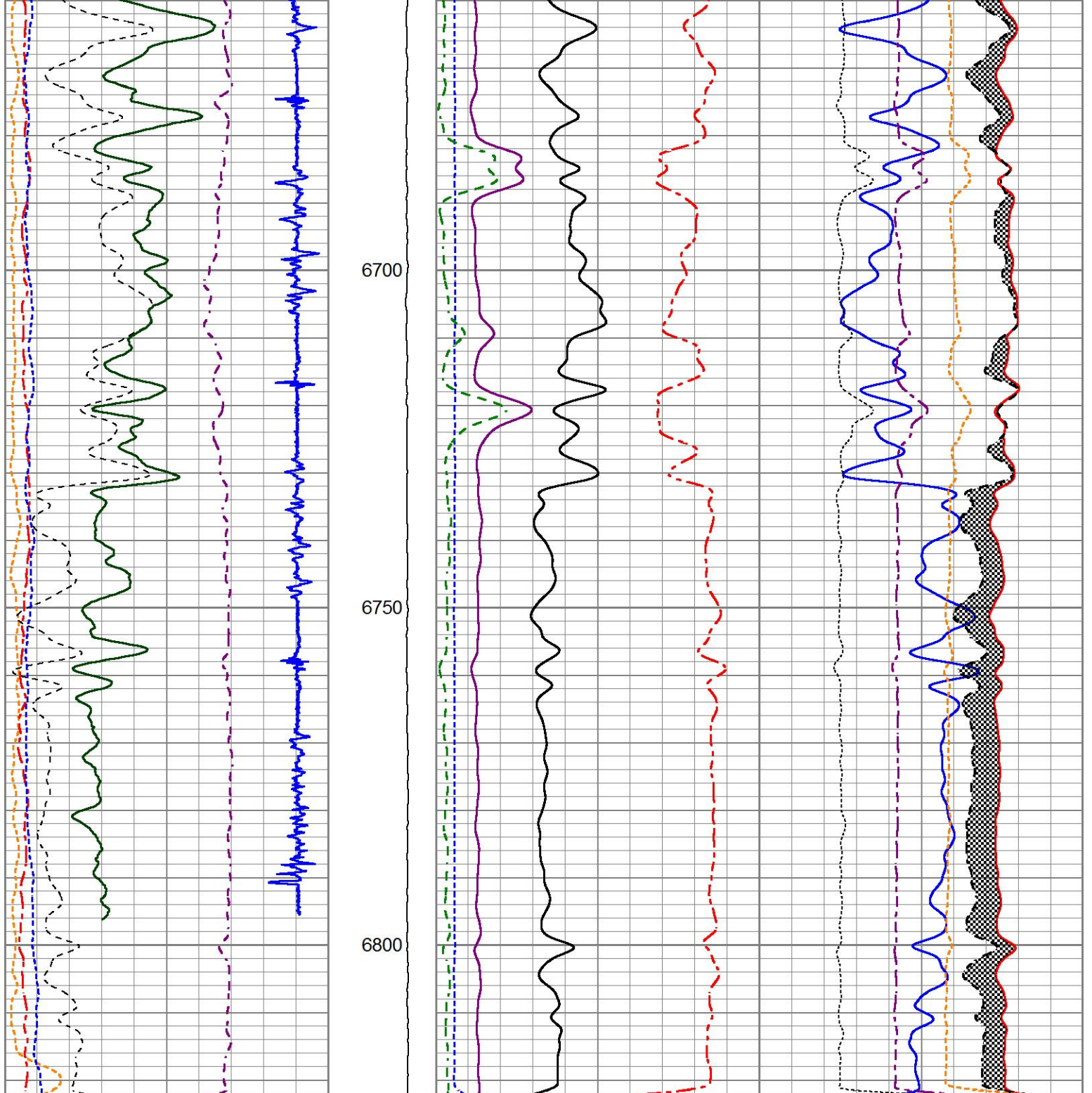
**HALLIBURTON**

5"=100'

Database File      ursa\_tom\_41a.db  
Dataset Pathname   REPEAT1  
Presentation Format  1\_ss\_rmti  
Dataset Creation    Sun Jul 17 09:55:00 2016  
Charted by          Depth in Feet scaled 1:240

200	NEAR BORE SI (SGBN)	0	TENSION	60	SGIN	0
0	OAI	100	(lb.1500)	2	RATIO (RNF)	0.5
10	FAR FIT ERR (SGFF)	40		0	RIN	15
0	GR (GAPI)	150		0.1	H YIELD (YH2)	1
0	IN FIT ERR (CFTR1) NEAR	1		0	RICF	6
0	IN FIT ERR (CFTR2) FAR	1		0	H YIELD (YH2)	1
-1000	CCL	100				
					60000 NEAR COUNTS (NCAP)	0
					60000 FAR COUNTS (FCAP)	0
					100000 FAR INTEL CT (FSIN)	0
					10000(NEAR INTEL CT (NSIN)	0
					50000 NNIN	-1000





200	NEAR BORE SI (SGBN)	0	TENSION	60	SGIN	0
0	OAI	100	(lb 1500)	2	RATIO (RNF)	0.5
10	FAR FIT ERR (SGFF)	40		0	RIN	15
0	GR (GAPI)	150		0.1	H YIELD (YH2)	1
0	IN FIT ERR (CFTR1) NEAR	1		0	RICF	6
0	IN FIT ERR (CFTR2) FAR	1		0	H YIELD (YH2)	1
-1000	CCL	100				
					60000 NEAR COUNTS (NCAP)	0
					60000 FAR COUNTS (FCAP)	0
					100000 FAR INTEL CT (FSIN)	0
					10000(NEAR INTEL CT (NSIN)	0
					50000 NNIN	-1000

**HALLIBURTON**

REPEAT PASS

5"=100'

Calibration Report

Database File      ursa\_tom\_41a.db  
 Dataset Pathname    REPEAT1  
 Dataset Creation    Sun Jul 17 09:55:00 2016

Reservoir Monitor Tool | Calibration Report

Serial-Model:

11680605-A

## Carbon/Oxygen Mode

## Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	95.00	80.00	15.00	+/-15.00	V
ITCR2	3142	3250	-108	+/-250	cps

## Near Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0246	5.58	<6.00
Fe	207	206 +/-2	0.0940	----	----
NGAIN = 0.994		NZOFF = 0.6			

## Far Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60	60 +/-2	0.0388	5.12	<6.50
Fe	209	208 +/-2	0.0914	----	----
FGAIN = 0.992		FZOFF = 0.3			

Flask Temperature 73.0 degF

Result	Logged	Expected Value	Diff.	Tol.	Units
COIR2	0.44	0.45	-0.01	+/-0.02	
LIRI2	1.36	1.36	0.00	+/-0.05	
TCCR2	5240	5000	240	+/-1000	cps
ITCR2	3133	3200	-67	+/-250	cps

## Sigma Mode

## Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	95.00	80.00	15.00	+/-15.00	V
FCAP	10378	10000	378	+/-500	cps

## Horizontal Water Tank

Result	Logged	Expected Value	Diff.	Tol.	Units
N/F Normalizer	0.94	0.95	-0.01		
N/F Inel Norm	0.62	0.61	0.01		
RNF	1.06	1.07	-0.01	+/-0.12	
RINC	1.61	1.64	-0.03	+/-0.18	
SGFN	24.09	24.00	0.09	+/-0.50	cu
SGFF	22.90	22.85	0.05	+/-0.50	cu
FSIN	24969	24000	969	+/-2000	cps
FCAP	10530	10000	530	+/-1000	cps
NFTR	0.83			<5.00	
FFTR	0.89			<5.00	
NBKG	133			<500	cps
FBKG	102			<500	cps
RTN	0.41	0.40	0.01	+/-0.10	usec
RTF	0.44	0.40	0.04	+/-0.10	usec

## Calibration Software Modules

HRMTI Module 2015.5.4.0  
RMTI Module 2015.5.15.1

## Log Data Acquisition Software Modules

HRMTI Module 2015.5.4.0

## Cement Bond Log Shop Calibration Report

Serial-Model: 11794522-A

Calibration Performed: Sun Jul 17 09:08:18 2016

## Free Pipe Calibration

	Measured	Units
TT	248.7	usec
Amplitude	262.5	mV
Log Base Line	9.4	mV

## Calibration References and Gain

Name	Value	Units
Pipe O.D.	4.500	in
Pipe Weight	11.6	lb/ft
Pipe Ref. Amp.	81.2	mV
Amp. Gain	0.321	

## Gamma Ray Calibration Report

Type / Serial: 002 / 12105787

## SHOP CALIBRATION

Wed Jul 13 14:17:13 2016

	Counts/Sec.	Gain	Offset	Jig	Units
Background	27.9				cps
Calibrator	197.3	1.4165			cps GAPI/cps

## PRIMARY VERIFICATION

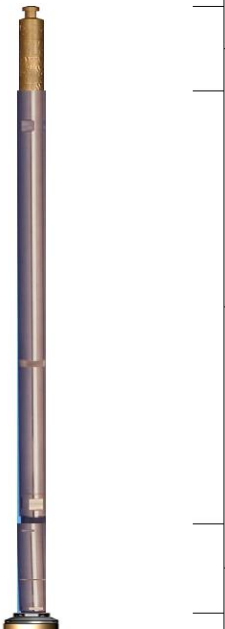
Background	39.6				cps
Calibrator	280.8				cps
Difference			241.2		GAPI

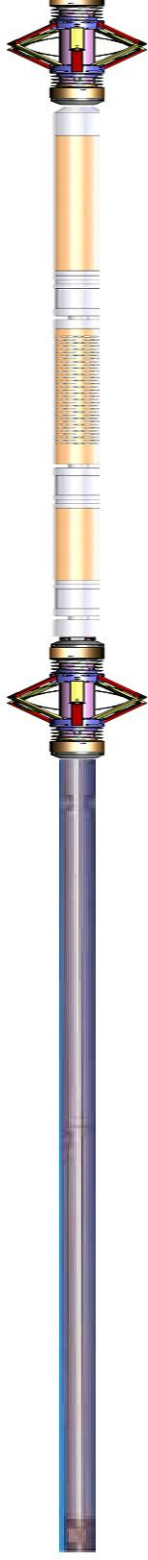
## BEFORE SURVEY VERIFICATION

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)
			STNDCH-STND_CH 1.4375 IN CABLE HEAD	1.50	1.44	1.00
CCL	34.87		TTTCU-002 (12105787) Through Tubing Telemetry Cartridge - Ultrawire	7.65	1.69	100.00
GR	32.61		XHU-003 (11983708) Crossover Halliburton 1553 to Ultrawire	1.58	1.69	7.00

			CENT-CASTM-CENT (00002) CAST M INLINE CENTRALIZER	2.16	3.13	25.00
Temp	22.89					
TT3FT	20.64		HCBLM-A (11794522) Halliburton HCBLM Tool	9.38	2.75	116.00
AMP3FT	20.64					
WVF5FT	19.68					
WVF3FT	16.16		CENT-CASTM-CENT (00003) CAST M INLINE CENTRALIZER	2.16	3.13	25.00
RmtTFGT	8.25					
RmtTNGT	7.75		RMTI-A (11680605) Halliburton RMTI Tool	14.00	2.13	77.00
LLMTEN	0.00					
RmtFP5V	0.00					
RmtNFwwMcsPr	0.00					
RmtCommFWar	0.00					

Dataset: ursa\_tom\_41a.db: field/well/run1/MAIN1  
Total length: 38.44 ft  
Total weight: 351.00 lb  
O.D.: 3.13 in

Company	URSA OPERATING CO., LLC.		
Well	TOMPKINS 41A-08-07-95		
Field	PARACHUTE		
County	GARFIELD	State	CO
<b>HALLIBURTON</b>	RESERVOIR MONITOR TOOL FIELD COPY		