

HALLIBURTON

RESERVOIR MONITOR  
TOOL

FIELD COPY

Company	URSA OPERATING CO., LLC.		
Well	TOMPKINS 41D-08-07-95		
Field	PARACHUTE		
County	GARFIELD	State	CO
Company URSA OPERATING CO., LLC. Well TOMPKINS 41D-08-07-95 Field PARACHUTE County GARFIELD State CO			
API No.:	05 045 22476 0000	Serv #:	903422674
Location:	LAT: 39.460023 LONG: -108.013870		
SHL: 233 FSL, 558 FEL BHL: 1100 FNL, 660 FEL			CBL-M
Sec: 08 Twp: 7S Rge: 95W			

Permanent Datum	GL	Elevation	5532	Elevation	
Log Measured From	KB	17 Ft. above perm. datum		K.B. 5549 D.F. 5548 G.L. 5532	
Drilling Measured From	KB				
Date @ Time Logged	15-JUL-16 @1200	Type Fluid in Hole	FRESH WATER		
Run No.	ONE	Density of Fluid	8.33		
Depth - Driller	7166	Fluid Level	SURFACE		
Depth - Logger	7001	Cement Top Est. Logged	N/A		
Bottom - Logged Interval	7001	Equipment / Location	RS06 / SULLIVAN		US RK
Top - Log Interval	3158	Recorded by			
Max. Recorded Temp.	213	Witnessed by	RICHARD		
CEMENTING DATA	Surface String	Protection String	Production String	Liner	
Date / Time Cemented					
Primary / Squeeze Expected					
Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs	
Cement Volume					
Cement Type / Weight	/	/	/	/	
Formulation					
Mud Type / Mud Wgt.	/	/	/	/	
Borehole Record					
Run Number	Bit	From	To	Size	Weight
	24			16	60
	12.25			8.625	1745.2
	7.875			4.5	7166

<<< 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

LOG INTERVAL PER CUSTOMER REQUEST

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ursa\_tom\_41d.db  
Dataset field/well/run1/MAIN1/\_vars\_

Top - Bottom

BHSAL2	BHSAL1	POROS2	POROS1	LTH	UHSGC	RHOCF	SO in
0	1	0	1	Sandstone	NONE	0.25	0
BORSAL kppm 150	CASED? Yes	BHTEMP_Src TEMP	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	



9.5	0.5	4.5	0	0	170	7.875
-----	-----	-----	---	---	-----	-------

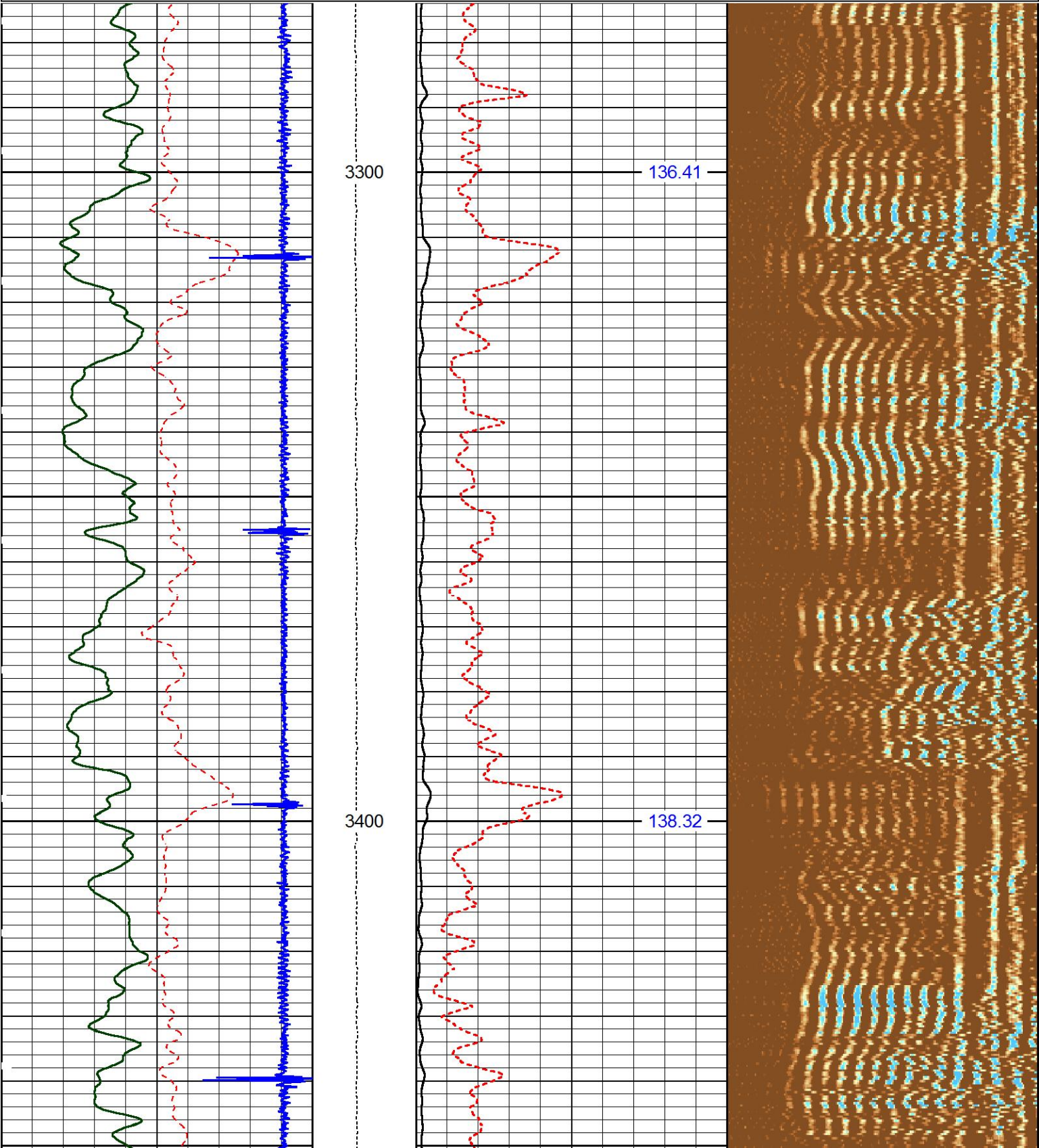
MAIN LOG

HALLIBURTON

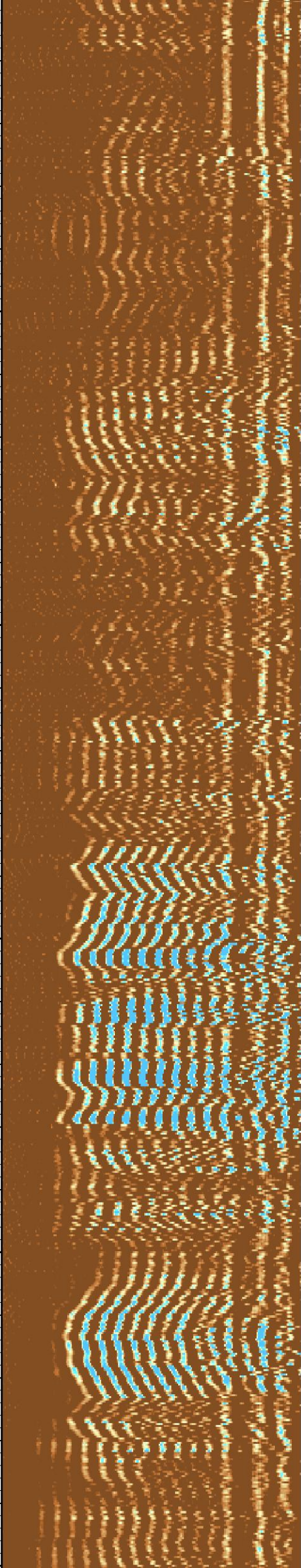
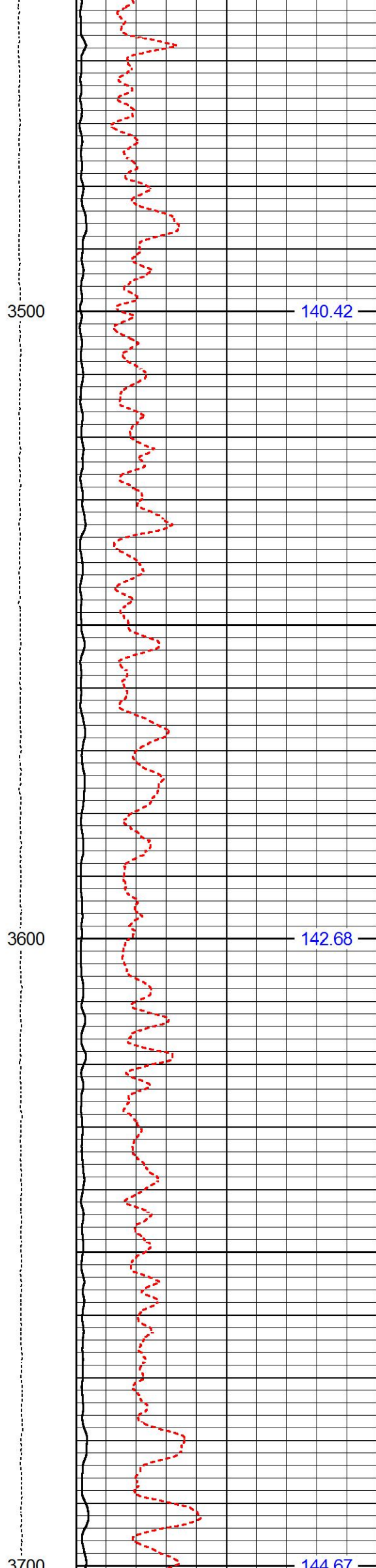
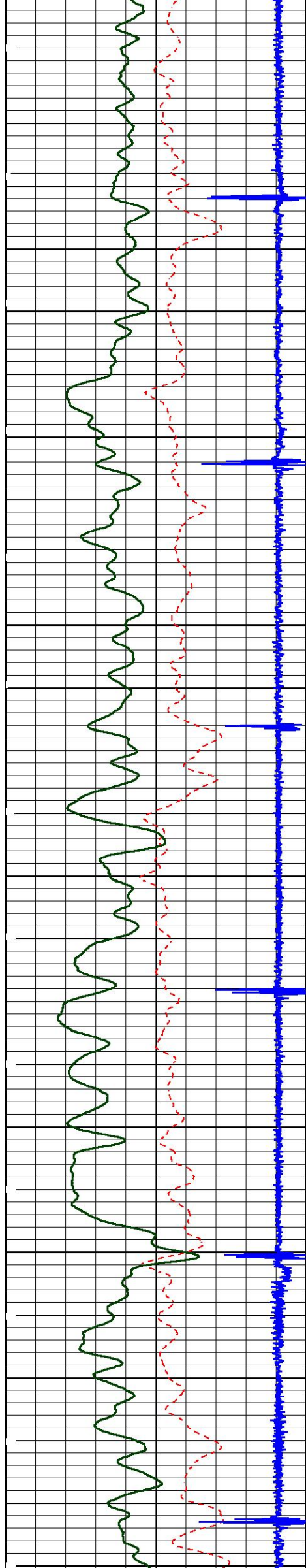
5"=100'

Database File	ursa_tom_41d.db
Dataset Pathname	MAIN1
Presentation Format	1_ss_cblm
Dataset Creation	Fri Jul 15 13:56:58 2016
Charted by	Depth in Feet scaled 1:240

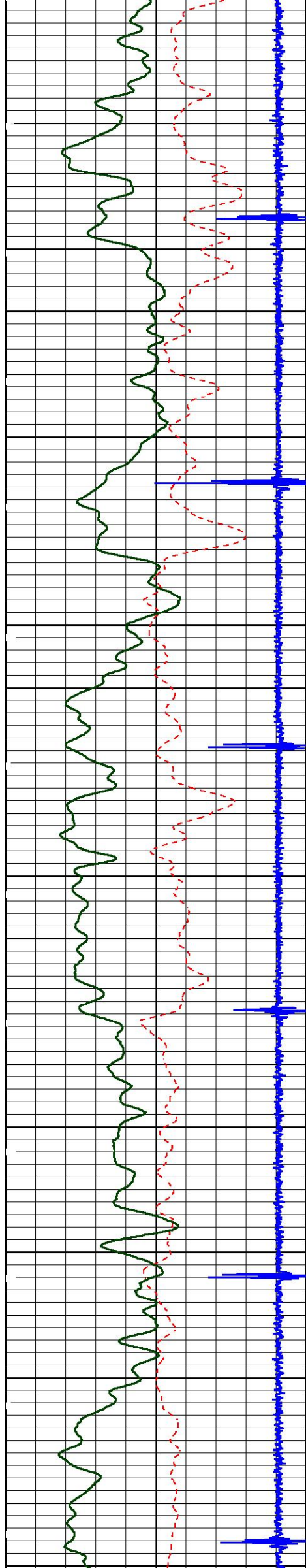
370	3' Travel Time (usec)	220	LTEN	0	3' Amplitude (mV)	100	200	MSG	1060
-1000	CCL	100	0 (lb.1500	0	3' Amplitude X5 (mV)	10	20		150
0	Gamma Ray (GAPI)	200							
					CblTemp				
					(degF)				





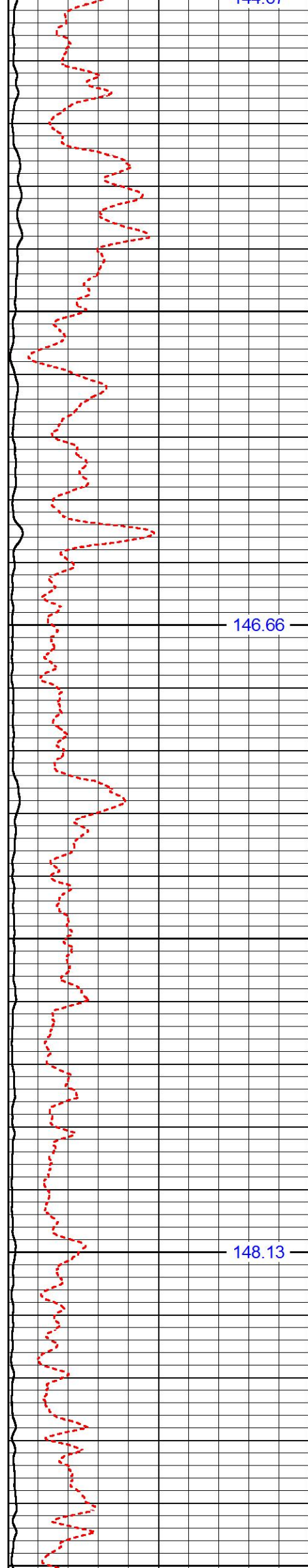






3800

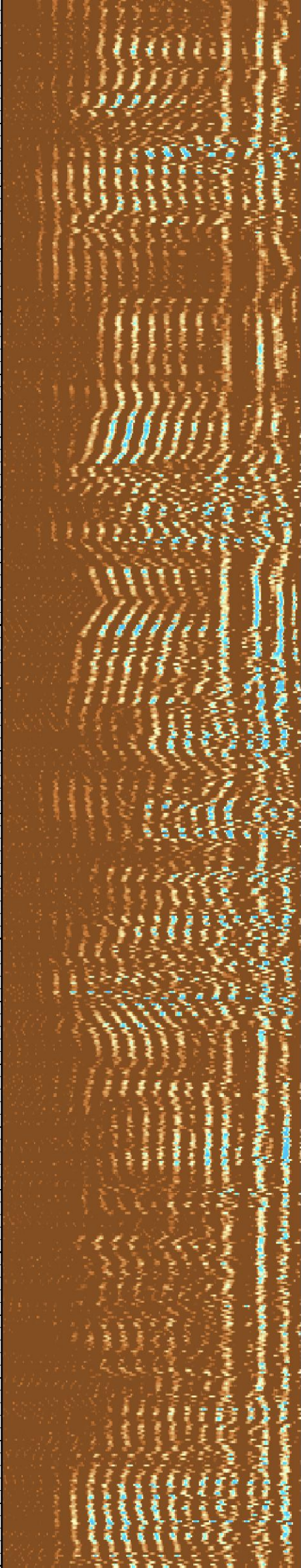
3900



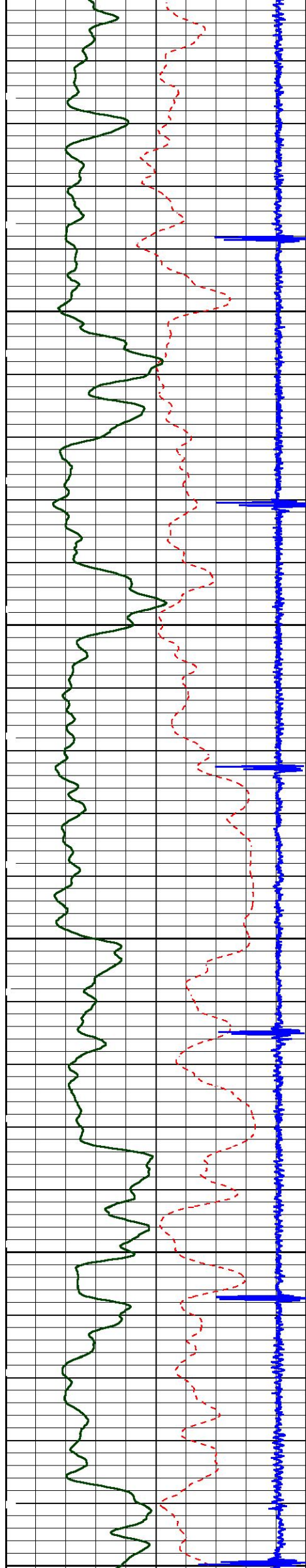
144.87

146.66

148.13



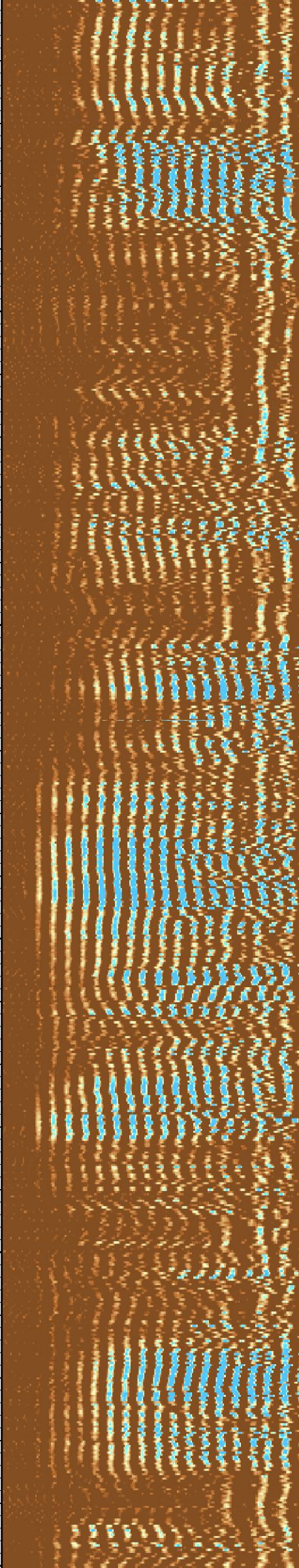
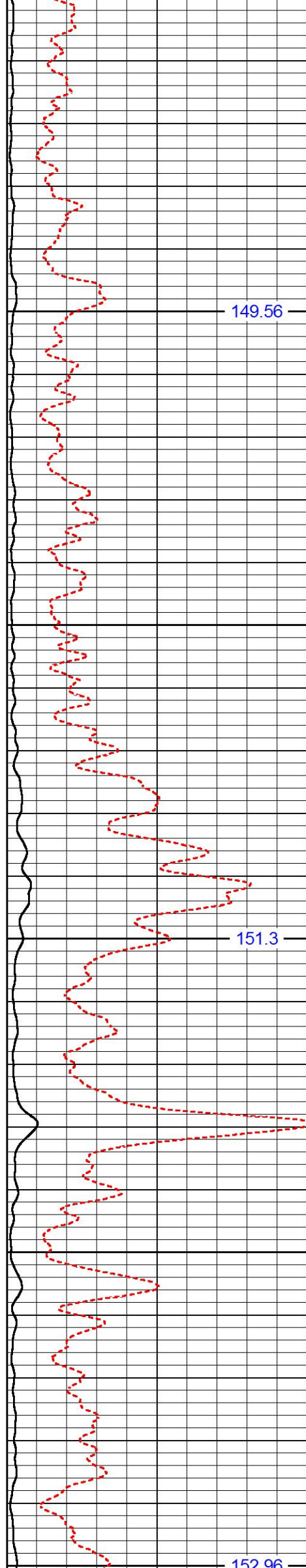




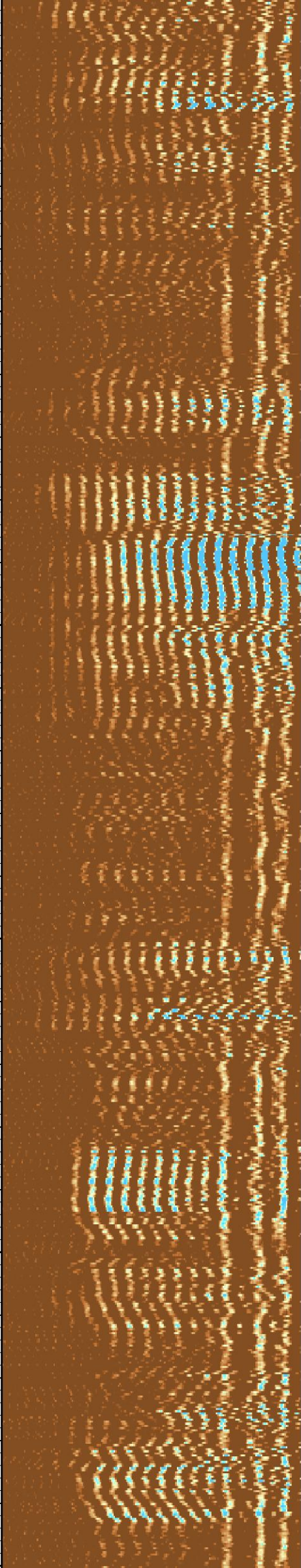
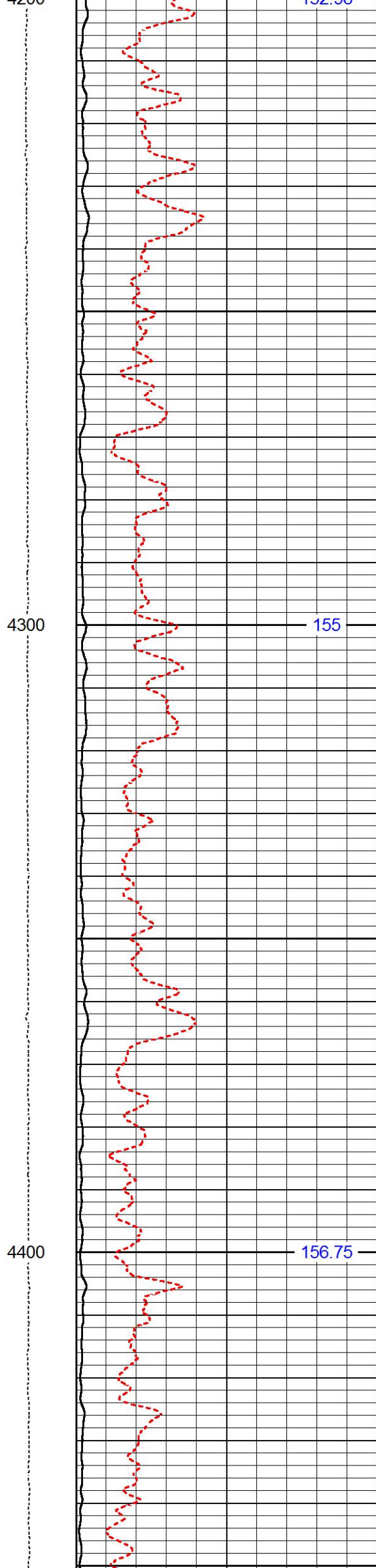
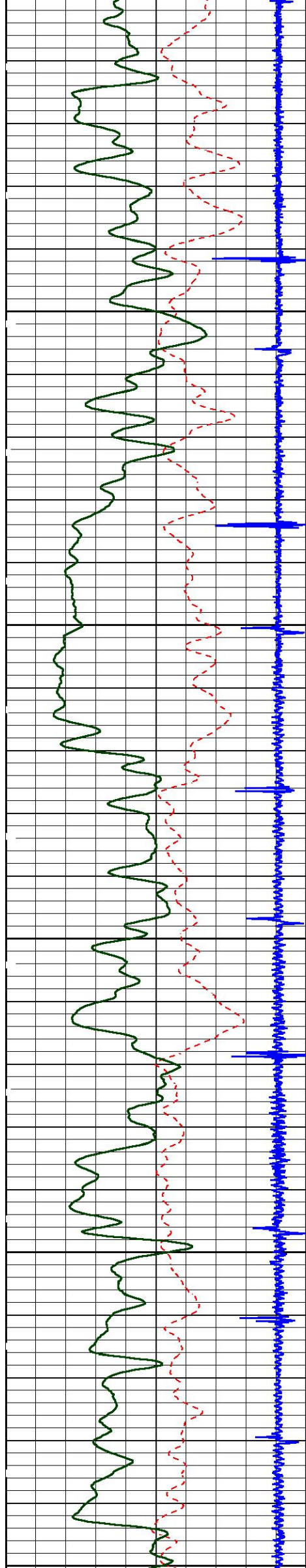
4000

4100

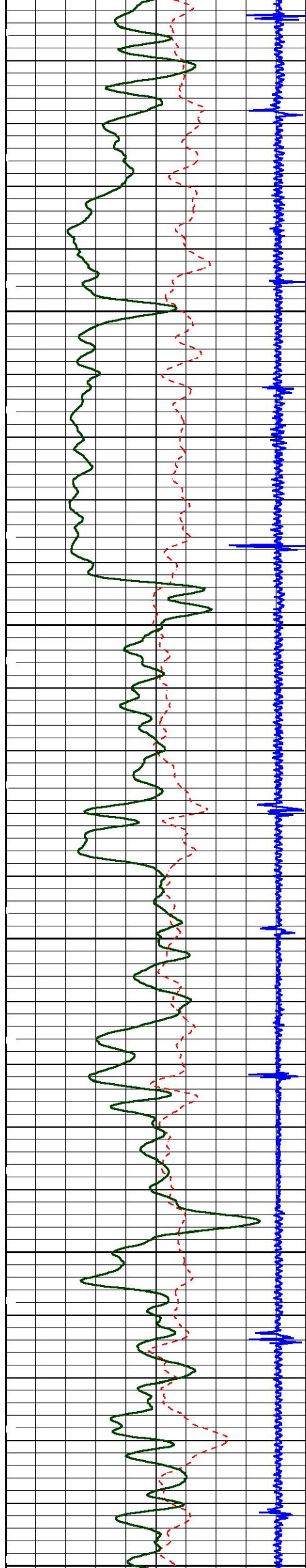
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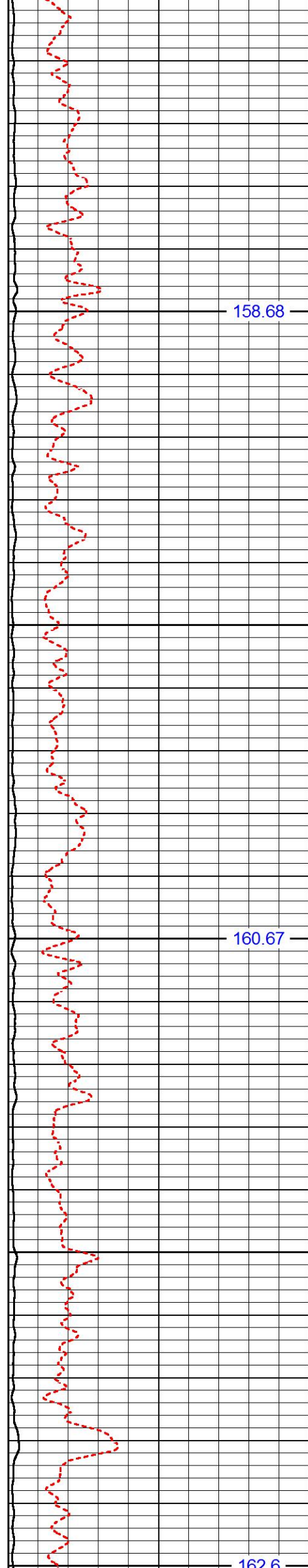




4500

4600

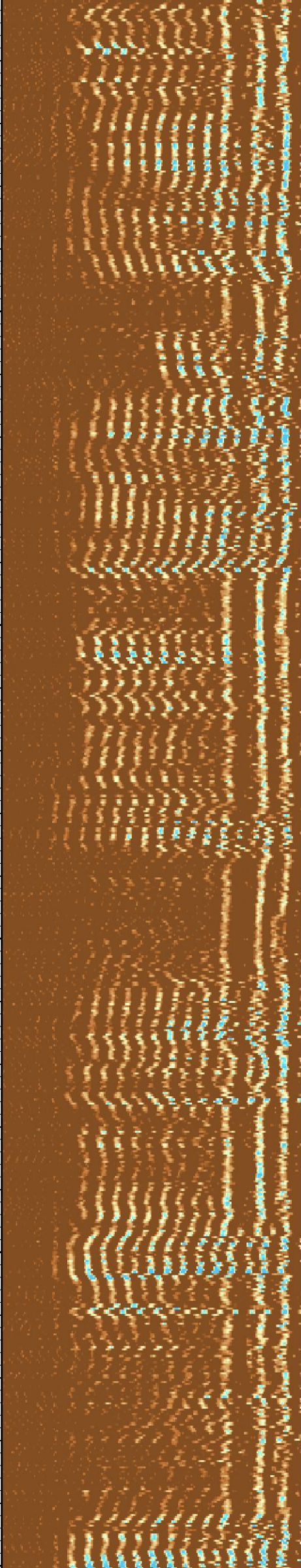
4700



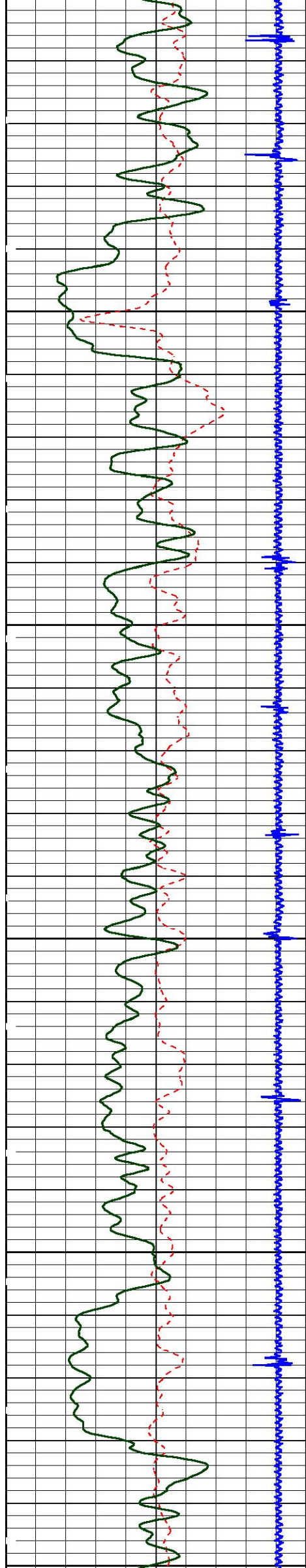
158.68

160.67

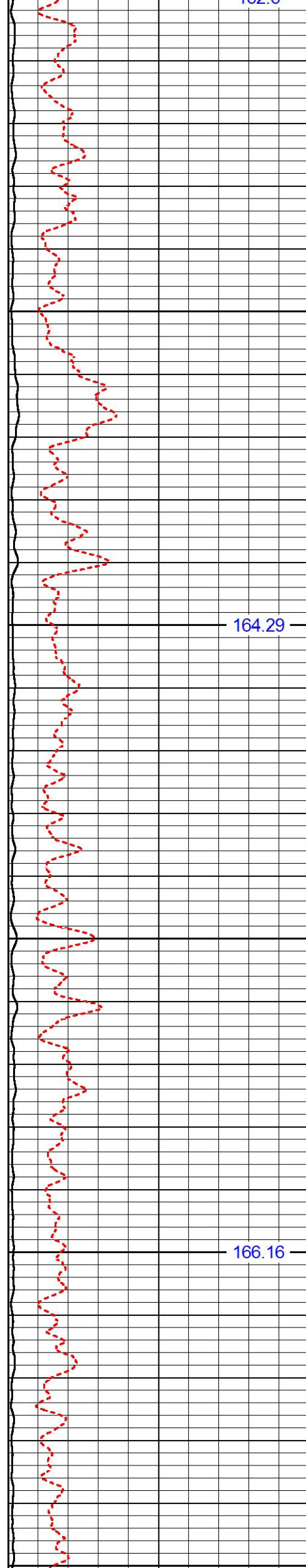
162.6





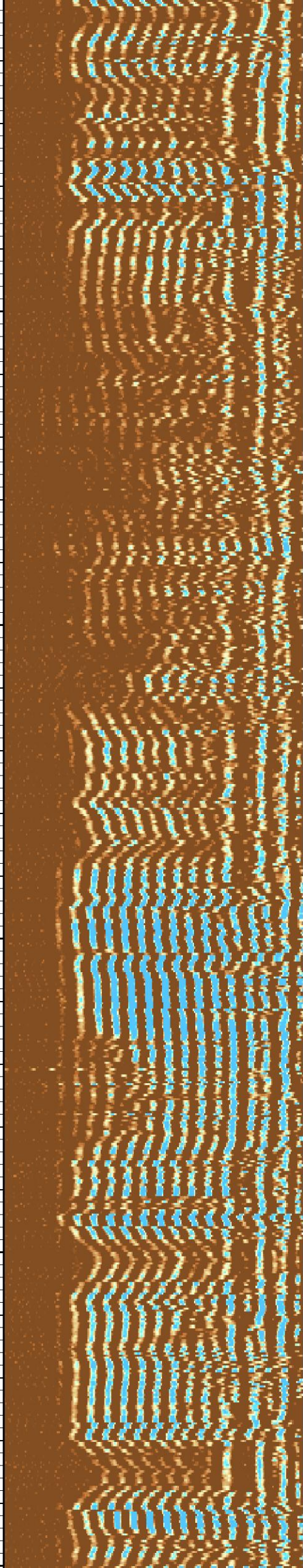


4700  
4800  
4900

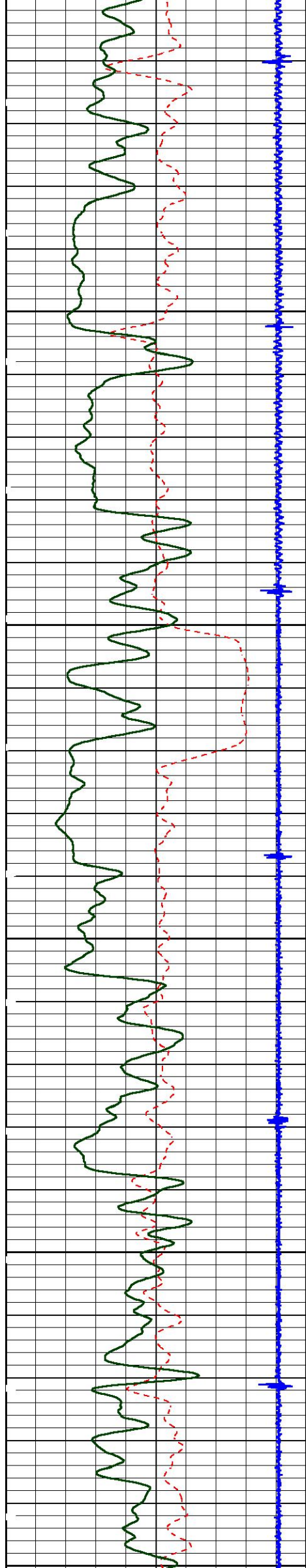


164.29

166.16



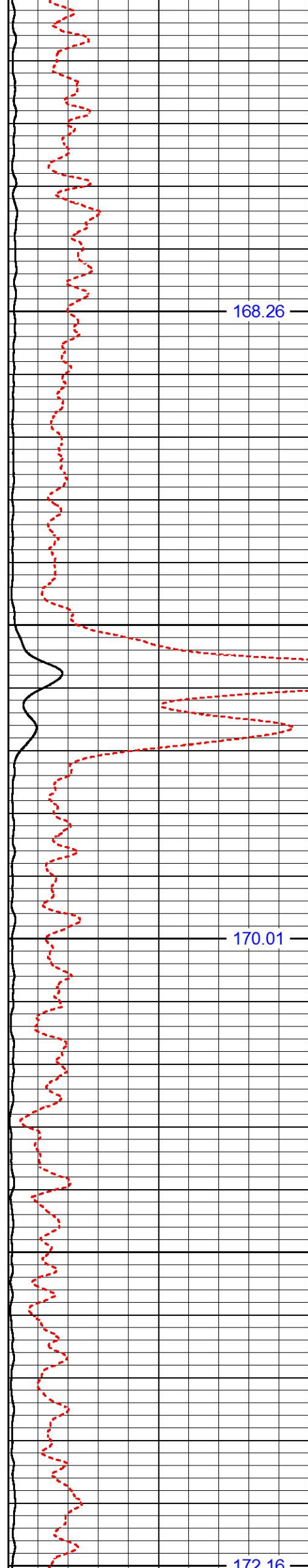




5000

5100

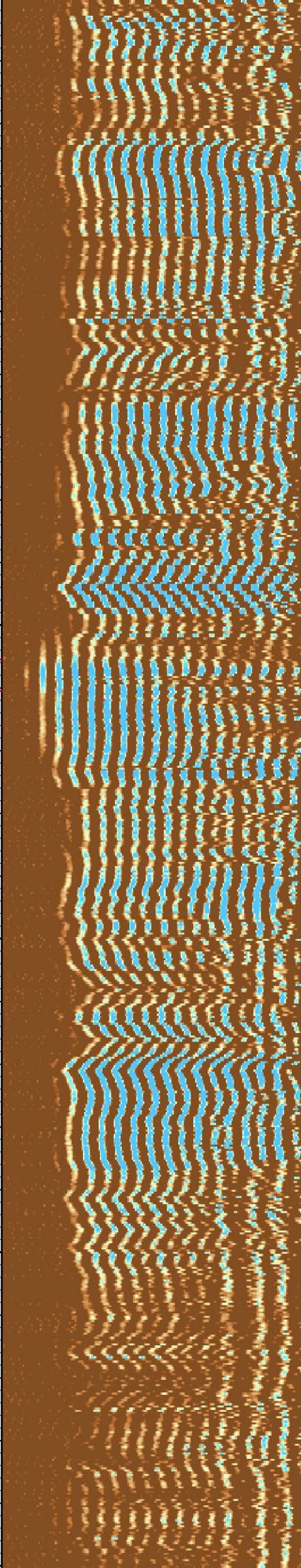
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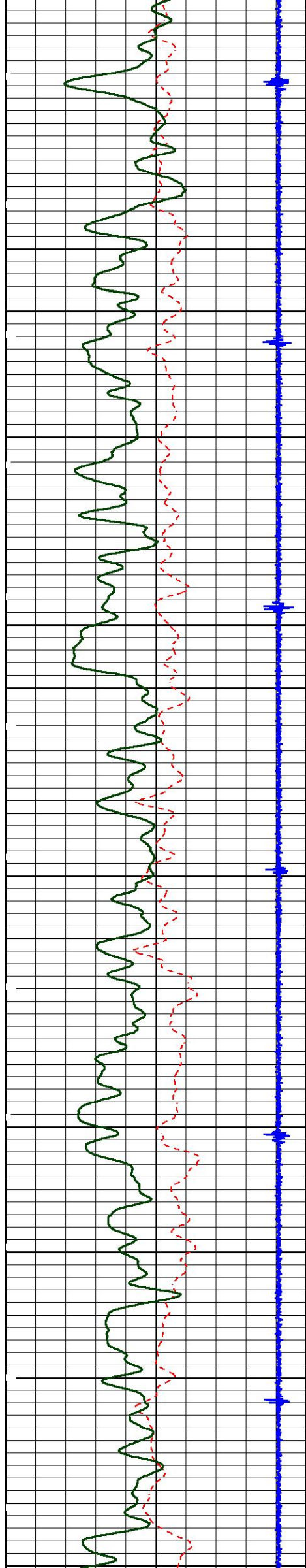
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170.01

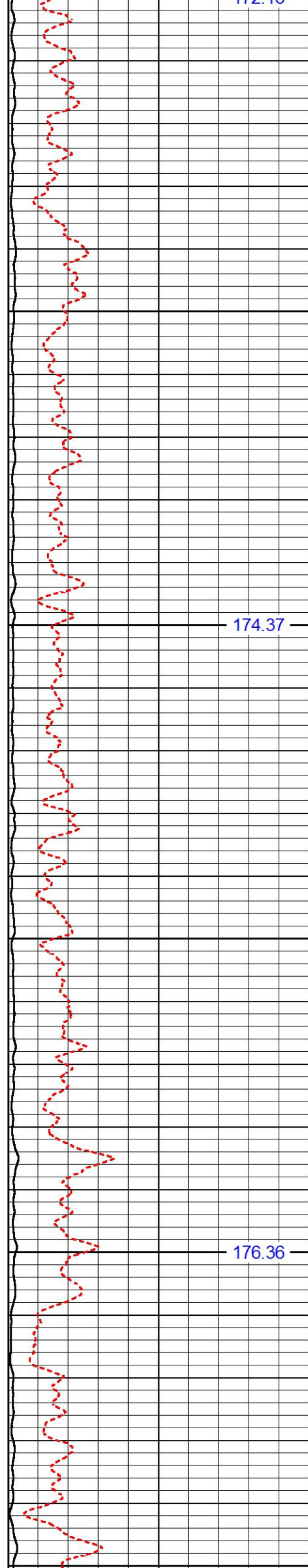
172.16



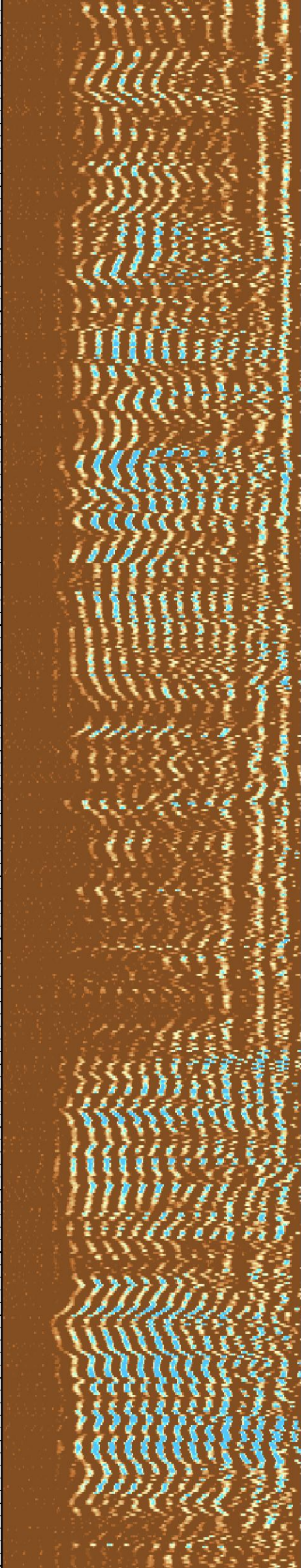




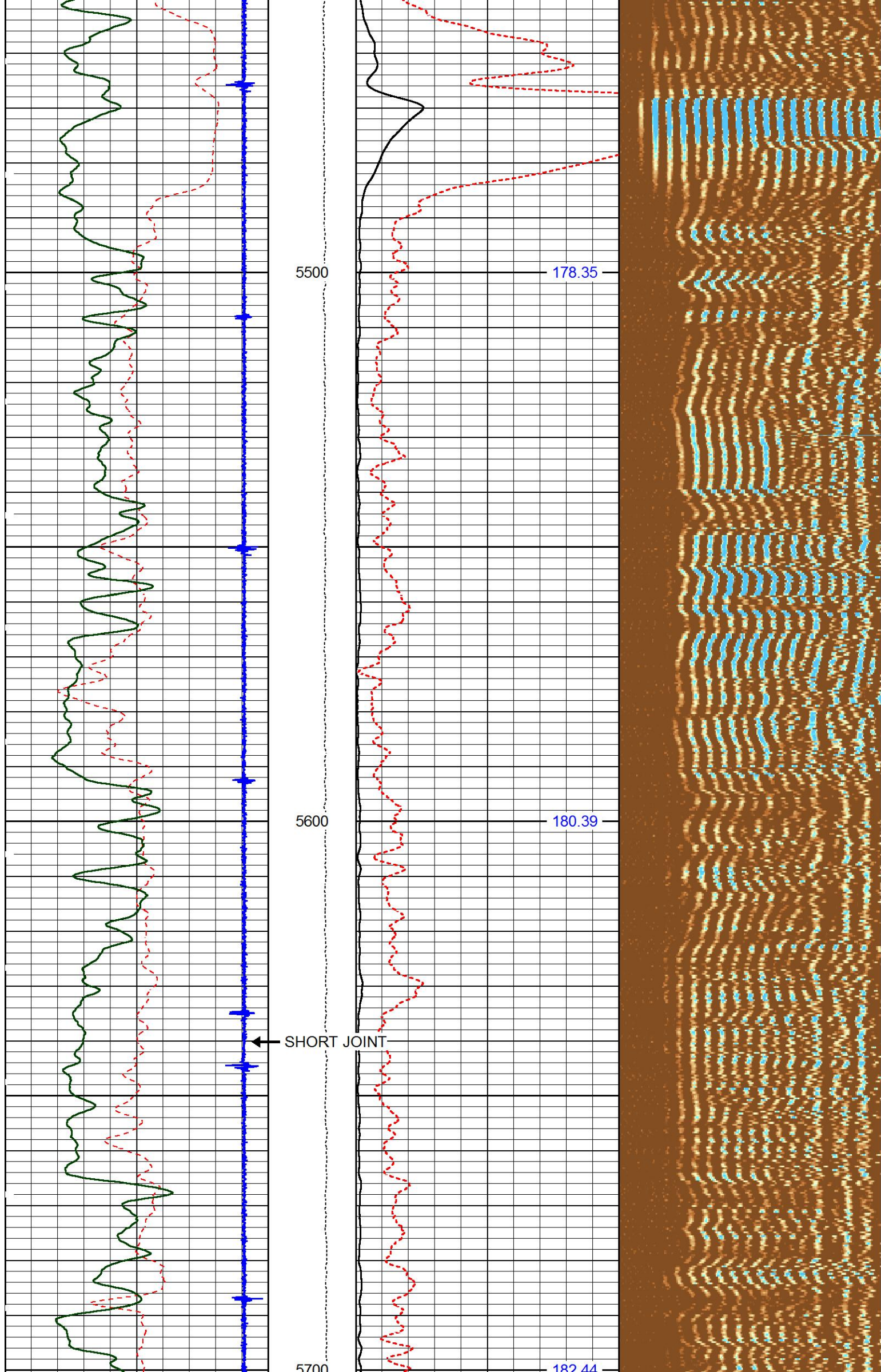
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5300  
5400



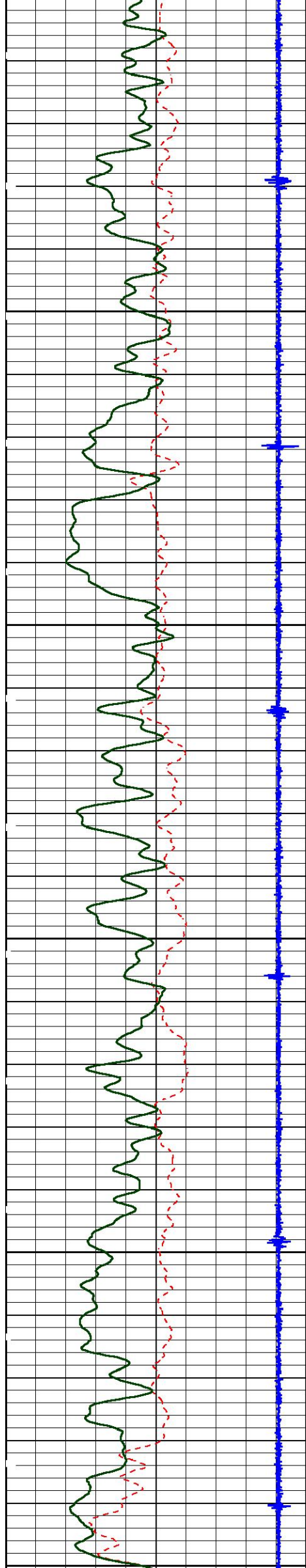
172.10  
174.37  
176.36





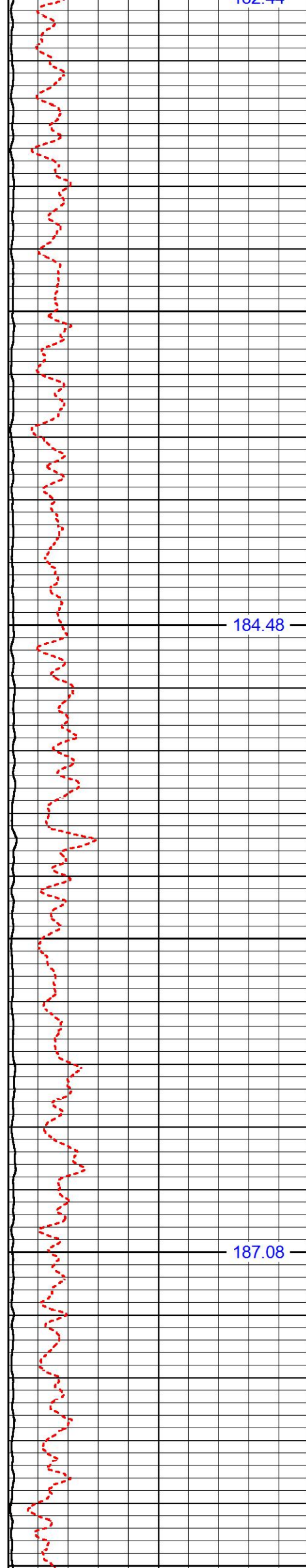






5800

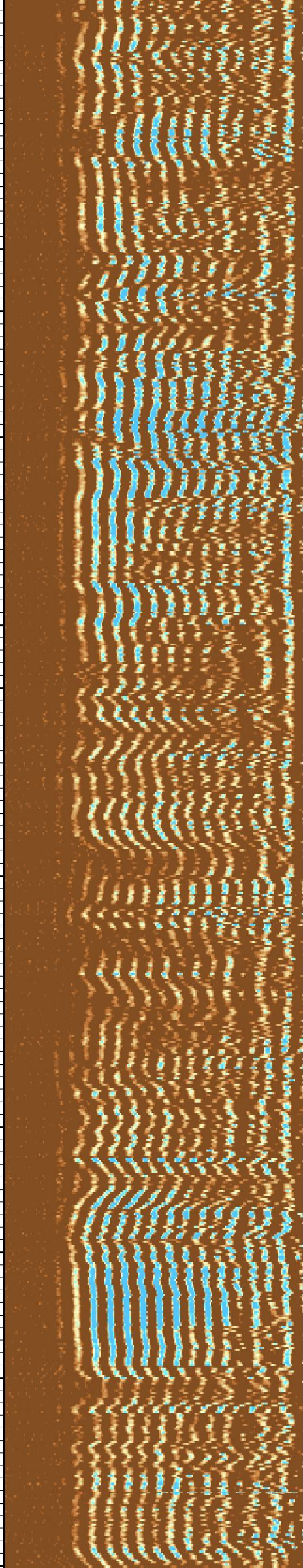
5900



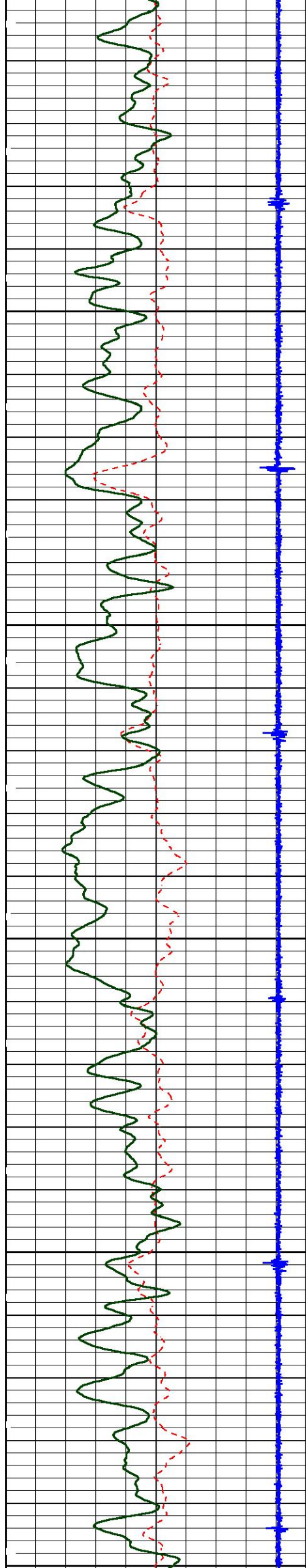
182.47

184.48

187.08



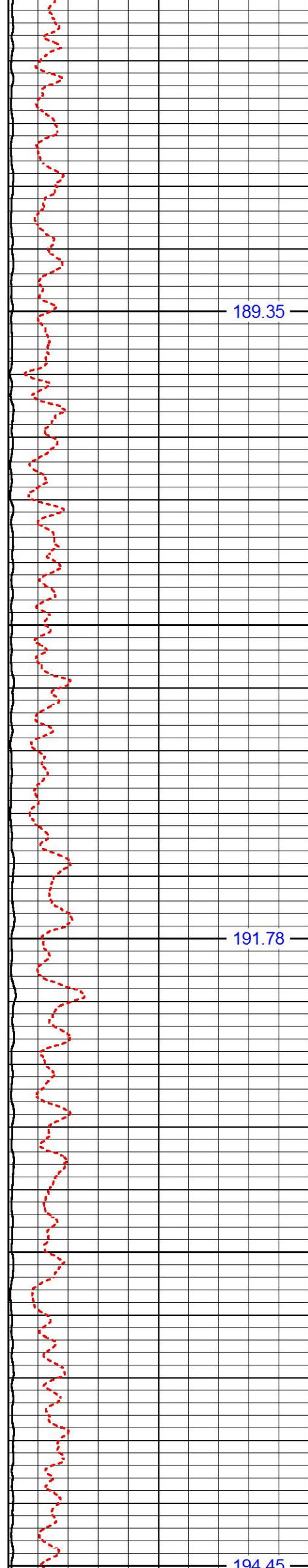




6000

6100

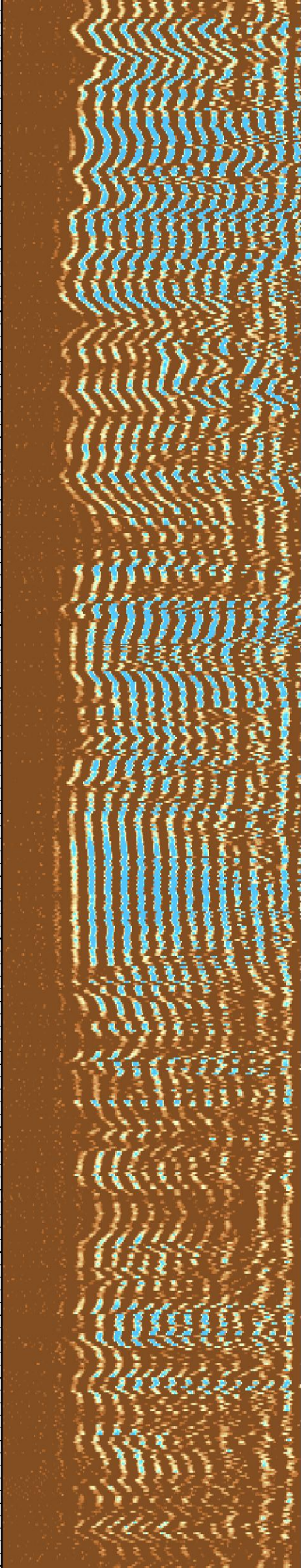
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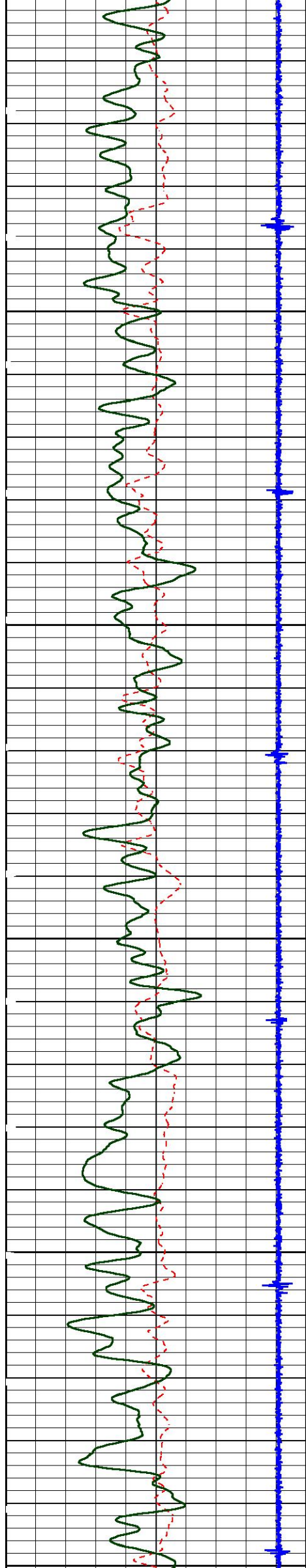
189.35

191.78

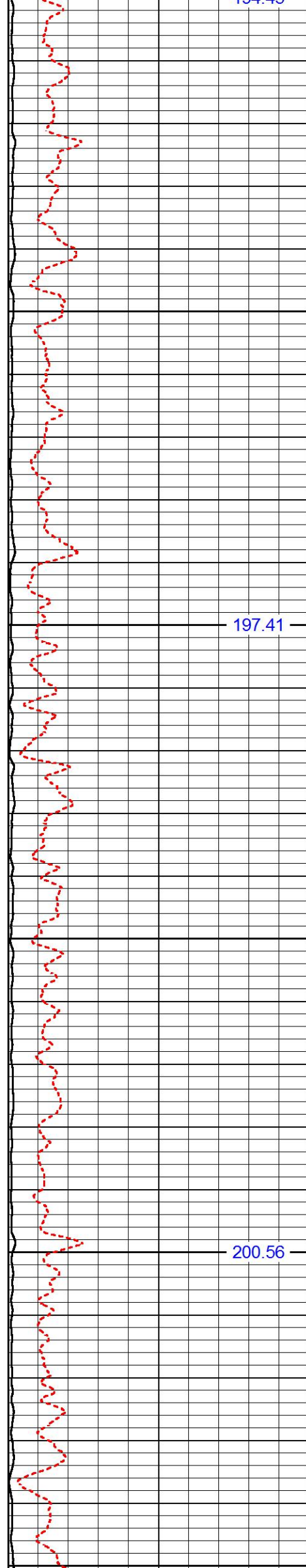
194.45



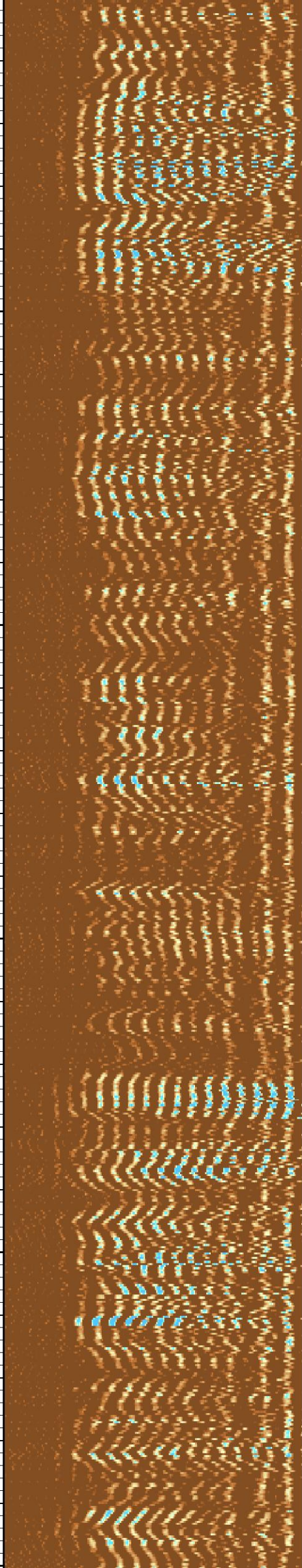




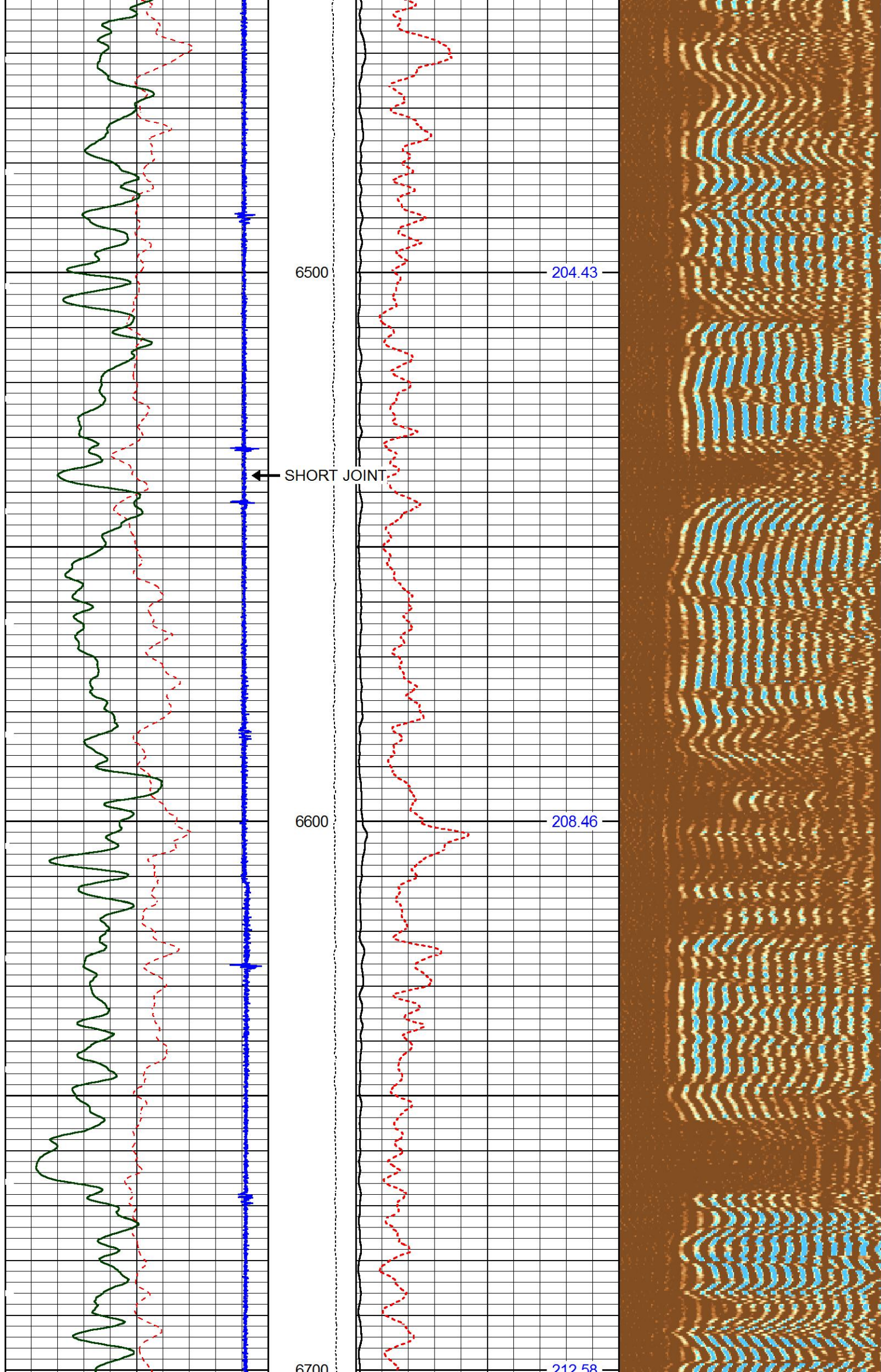
6200  
6300  
6400



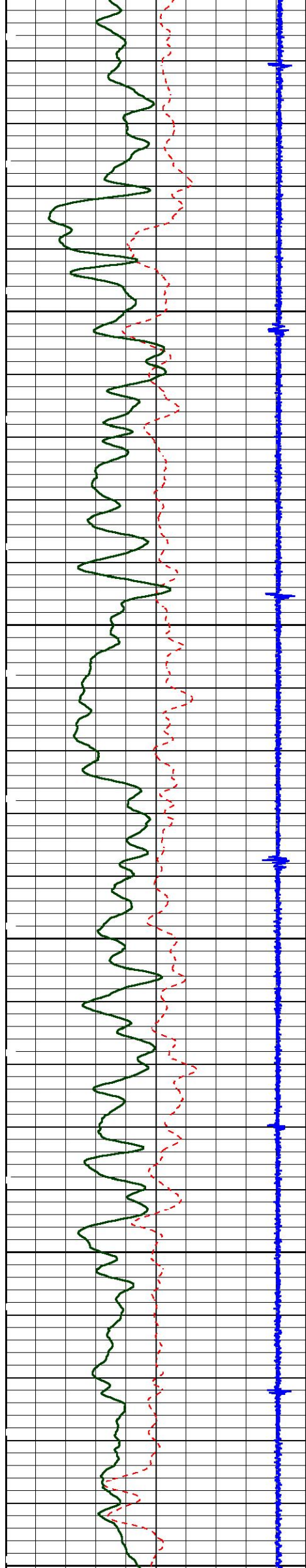
194.45  
197.41  
200.56





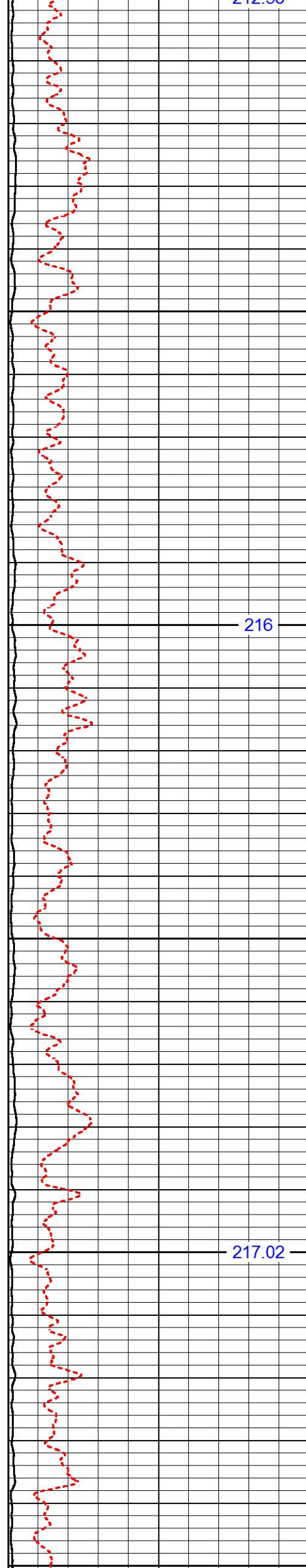






6800

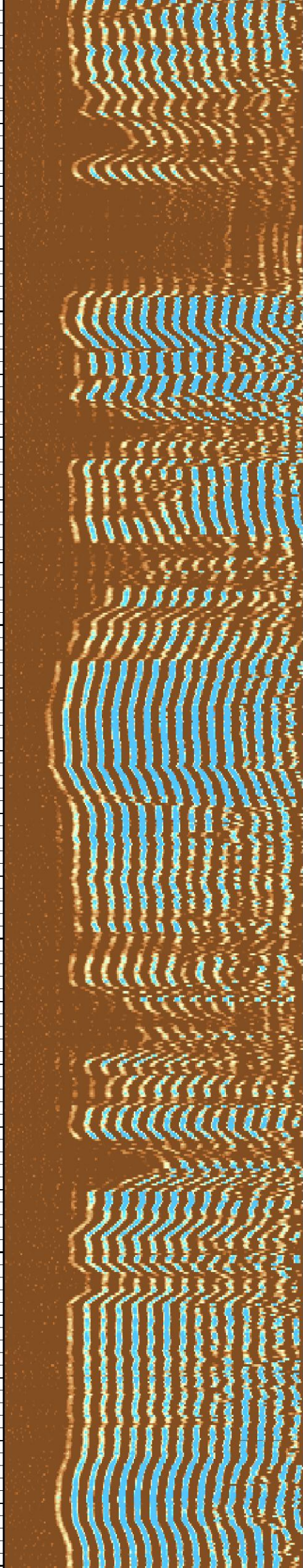
6900



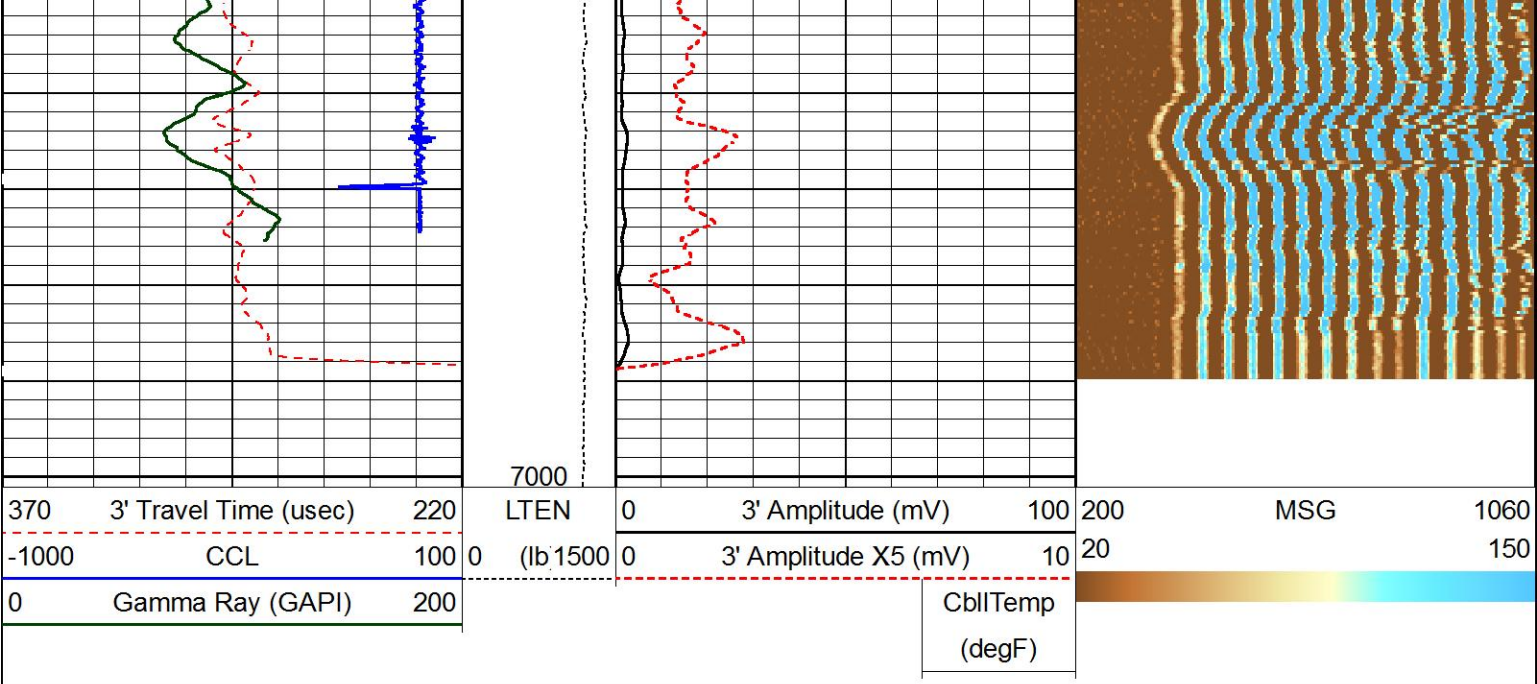
212.50

216

217.02

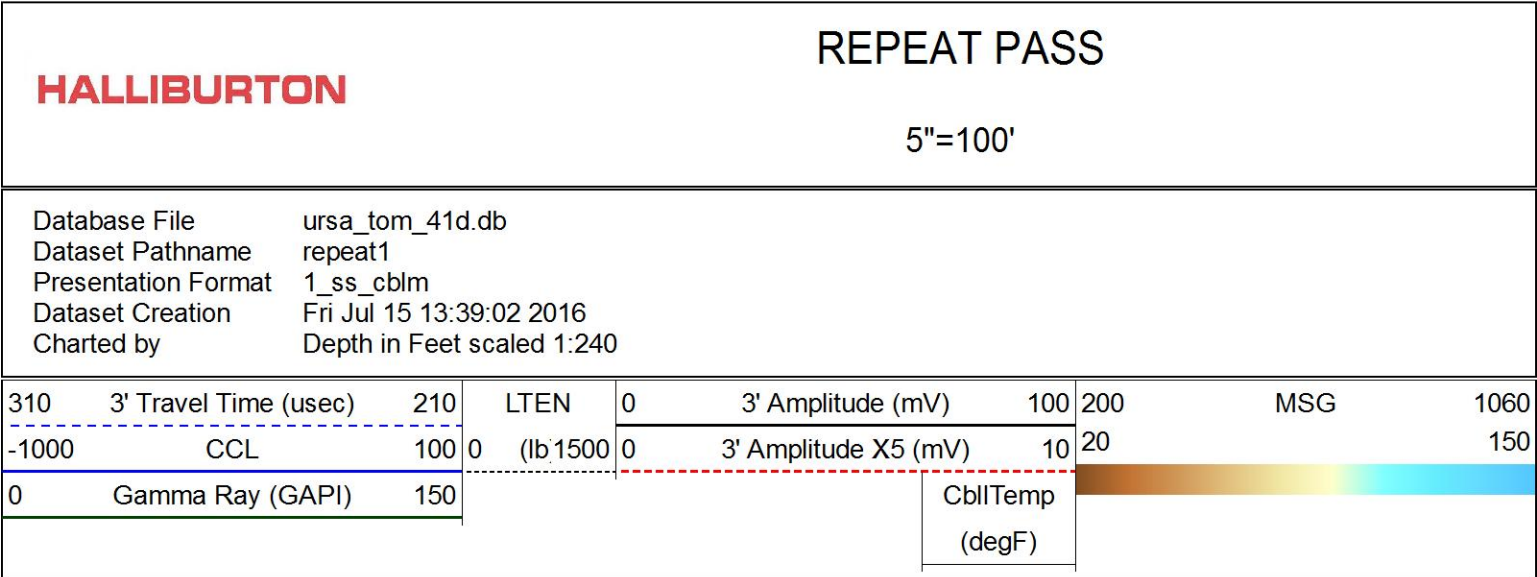






MAIN LOG

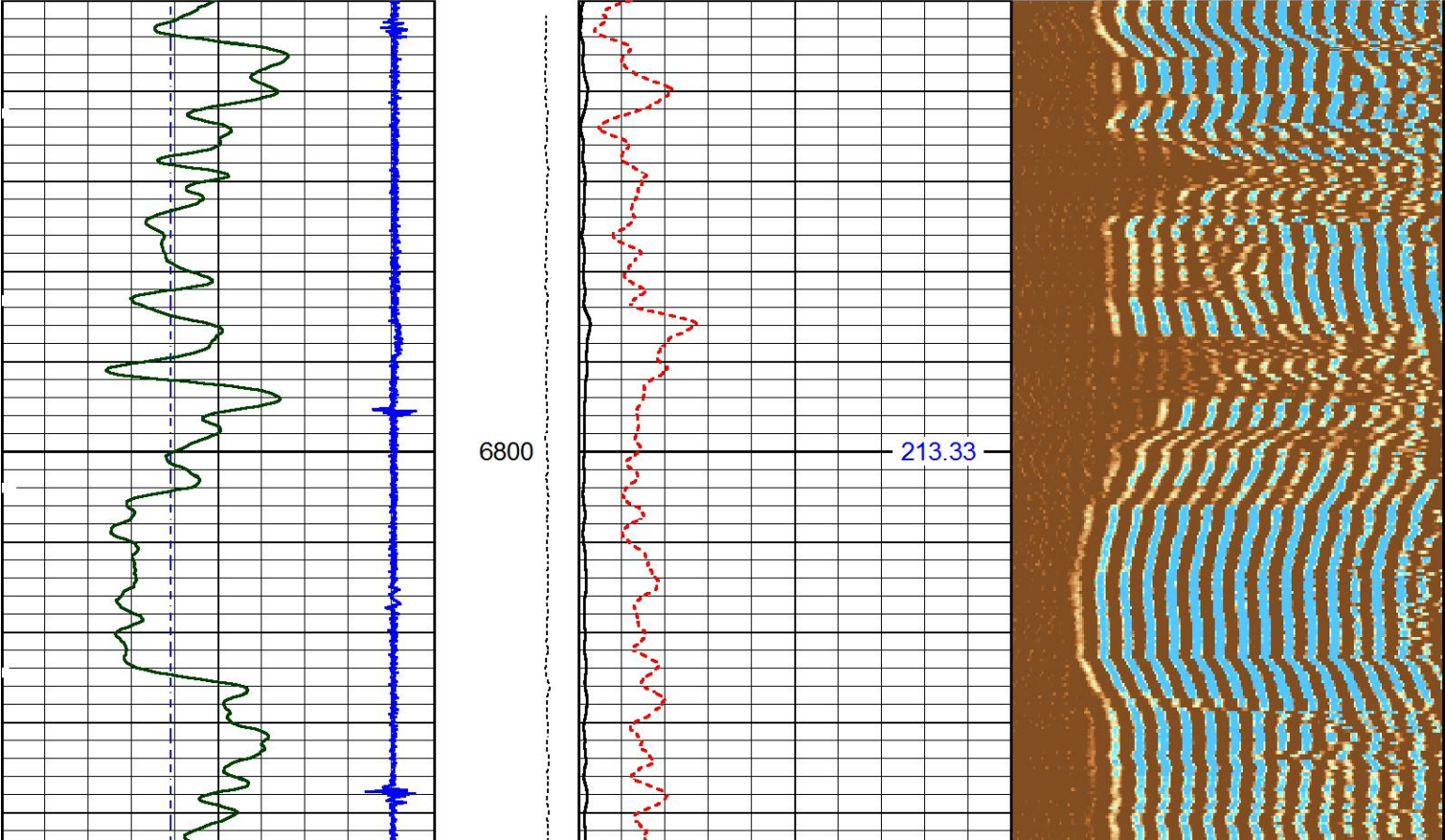
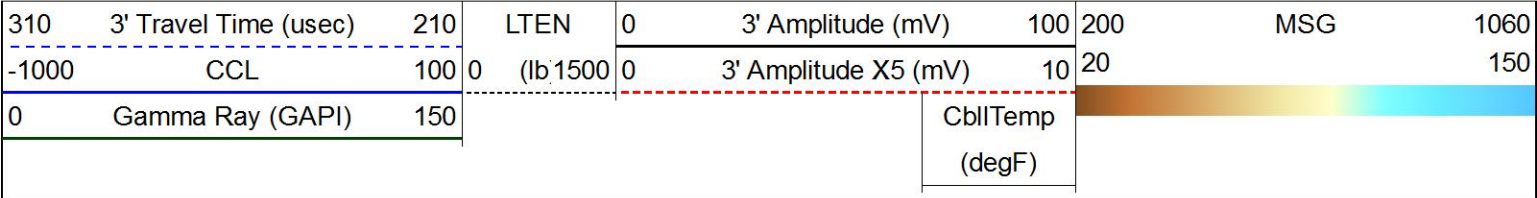
5"=100'



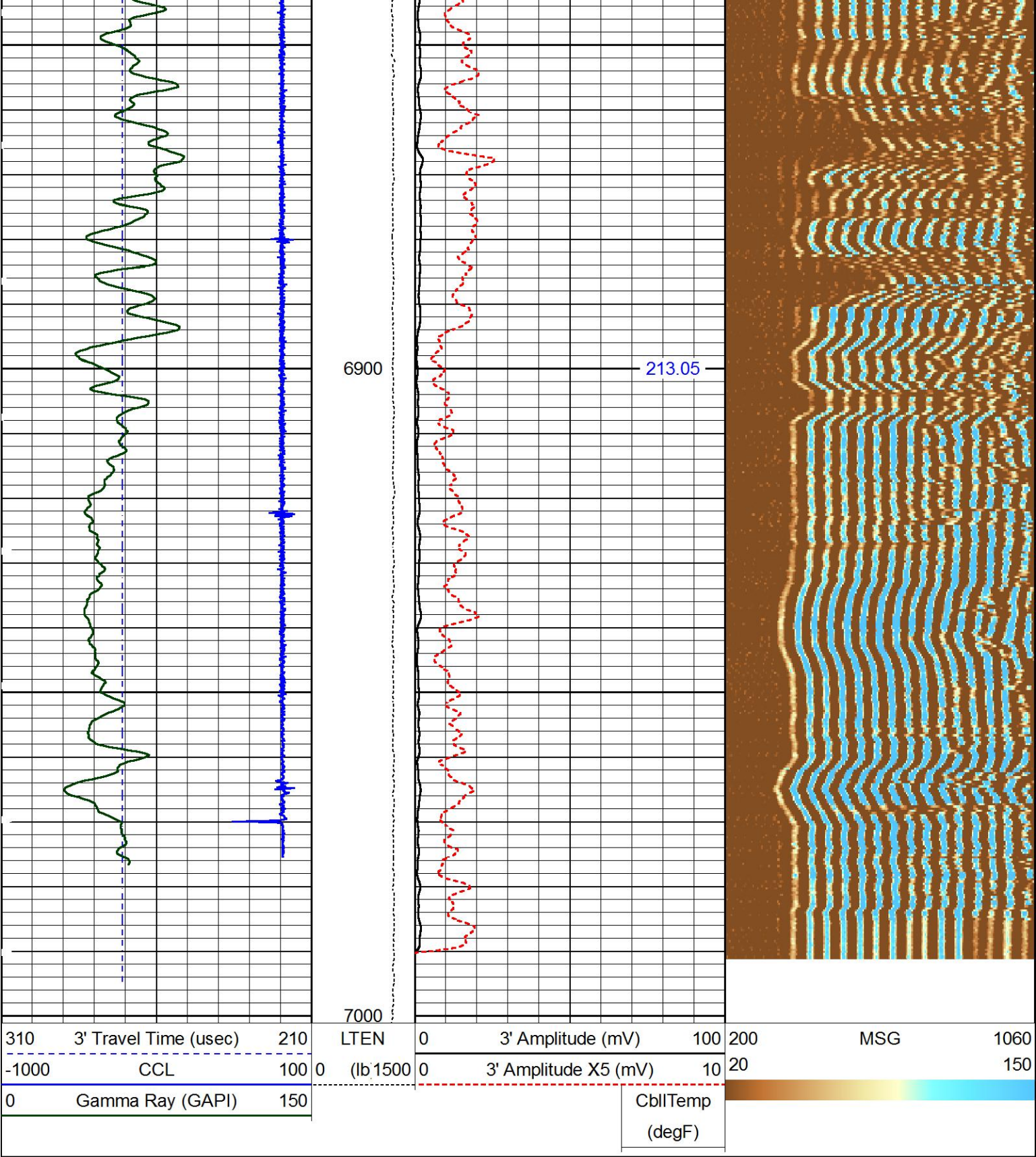
REPEAT PASS

5"=100'

Database File	ursa_tom_41d.db
Dataset Pathname	repeat1
Presentation Format	1_ss_cblm
Dataset Creation	Fri Jul 15 13:39:02 2016
Charted by	Depth in Feet scaled 1:240







REPEAT PASS

5"=100'

HALLIBURTON

Database File		ursa_tom_41d.db		Calibration Report	
Dataset Pathname		MAIN1			
Dataset Creation		Fri Jul 15 13:56:58 2016			
Reservoir Monitor Tool I Calibration Report					
Serial-Model:		11680605-A			
Shop Calibration Performed:		Wed Jul 13 15:33:10 2016			



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					
H	Channel 60	Expected Value 60 +/-2	Amplitude 0.0246	FWHM 5.58	Tol. <6.00
Fe	207	206 +/-2	0.0940	-----	-----
NGAIN = 0.994	NZOFF = 0.6				
Far Detector					
H	Channel 60	Expected Value 60 +/-2	Amplitude 0.0388	FWHM 5.12	Tol. <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				
RMTI Module	2015.5.15.1				
Cement Bond Log Shop Calibration Report					
Serial-Model:		11794522-A			



Free Pipe Calibration

TT	Measured	Units
Amplitude	246.9	usec
Log Base Line	451.5	mV
	9.6	mV

Calibration References and Gain

Name	Value	Units
Pipe O.D.	4.500	in
Pipe Weight	11.6	lb/ft
Pipe Ref. Amp.	82.0	mV
Amp. Gain	0.186	

Gamma Ray Calibration Report

Type / Serial: 002 / 12105787

SHOP CALIBRATION

Wed Jul 13 14:17:13 2016

Background	Counts/Sec.	Gain	Offset	Jig	Units
Calibrator	27.9				cps
	197.3				cps
		1.4165			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					
GR	32.61		TTTCU-002 (12105787) Through Tubing Telemetry Cartridge - Ultrawire	7.65	1.69	100.00
			XHU-003 (12461938) 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					
AMP3FT	20.64					
WVF5FT	19.68					
WVF3FT	16.16					
RmtTFGT	8.25					
RmtTNGT	7.75					
LLMTEN	0.00					
RmtFP5V	0.00					
RmtNFwwMcsPh	0.00					
RmtCommFWar	0.00					
<div><div></div><div>Temp</div><div>22.89</div><div>TT3FT</div><div>20.64</div><div>AMP3FT</div><div>20.64</div><div>WVF5FT</div><div>19.68</div><div>WVF3FT</div><div>16.16</div><div>RmtTFGT</div><div>8.25</div><div>RmtTNGT</div><div>7.75</div><div>LLMTEN</div><div>0.00</div><div>RmtFP5V</div><div>0.00</div><div>RmtNFwwMcsPh</div><div>0.00</div><div>RmtCommFWar</div><div>0.00</div></div> <div><div>HCBLM-A (11794522)</div><div>Halliburton HCBLM Tool</div><div>CENT-CASTM-CENT (00003)</div><div>CAST M INLINE CENTRALIZER</div><div>RMTI-A (11680605)</div><div>Halliburton RMTI Tool</div></div> <div><div>9.38</div><div>2.16</div><div>14.00</div><div>2.13</div><div>77.00</div><div>2.75</div><div>3.13</div><div>25.00</div><div>116.00</div></div>						
<div><div>Dataset:</div><div>ursa_tom_41d.db: field/well/run1/MAIN1</div><div>Total length:</div><div>38.44 ft</div><div>Total weight:</div><div>351.00 lb</div><div>O.D.:</div><div>3.13 in</div></div>						

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