Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

HOBBS OCD
JUN 20 2016
RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM116575

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
REBEL 20 FED 5H

2. Name of Operator
DEVON ENERGY PRODUCTION CO EMail: REBECCA.DEAL@DVN.COM
Contact: REBECCA DEAL

9. API Well No.
30-025-42769-00-X1

3a. Address
333 WEST SHERIDAN AVE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-228-8429

10. Field and Pool, or Exploratory
COTTON DRAW

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 20 T24S R32E NWNW 314FNL 472FWL

11. County or Parish, and State
LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Attn: Charles Nimmer

Actual procedure for Bradenhead squeeze on the Rebel 20 Fed 5H: Pumped down the annulus of out 5-1/2? x 9-5/8? casings to provide adequate isolation and coverage of cement on the backside of the 5-1/2? production casing. Original production cement job achieved a top of cement of ~5,450? MD which was below the immediate 9-5/8? casing shoe(4,551?). The cement squeeze was 200 sxs (67 bbls) of 12.9 ppg EconoCem HLC cement. This was displaced with 150 bbls of freshwater to displace the cement to cover the 9-5/8? shoe. The bond log run after the job showed cement coverage from the squeeze from 3,200? to 4,630? covering the intermediate shoe and providing the needed isolation. Please see attached post job report and logs.

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #341975 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO LP, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 06/15/2016 (16PP0786SE)

Name *(Printed/Typed)* REBECCA DEAL — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 06/14/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED — Title CHARLES NIMMER PETROLEUM ENGINEER — Date 06/15/2016

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #341975 that would not fit on the form

32. Additional remarks, continued

API Perforating

RADIAL CEMENT BOND GAMMA RAY / COLLAR LOG

Company DEVON
Well REBEL 20 FEDERAL 5H
Field PADUCA
County LEA
State NEW MEXICO

Company DEVON
Well REBEL 20 FEDERAL 5H
Field PADUCA
County LEA
State NEW MEXICO

Location: API # : 30-025-42769
314' FNL & 472' FWL
SEC. 20 T24S R32E

Other Services

	SEC	TWP	RGE		
Permanent Datum		GL		Elevation	3571.40'
Log Measured From		KB 25' APD			
Drilling Measured From		KB			

Elevation
K.B. 3596.40'
D.F. NA
G.L. 3571.40'

Date	6/10/2016		
Run Number	ONE		
Depth Driller	15,303'		
Depth Logger	6010'		
Bottom Logged Interval	6000'		
Top Log Interval	2700'		
Open Hole Size	8.75"		
Type Fluid	WATER		
Density / Viscosity	NA		
Max. Recorded Temp.	NA		
Estimated Cement Top	3200'		
Time Well Ready	9:00 AM		
Time Logger on Bottom	10:00 AM		
Equipment Number	119		
Location	ALBANY		
Recorded By	BRIT HUDSON		
Witnessed By	MIKE BRASWELL		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	13.375"	54.50#	SURFACE	860'
Prot. String	9.625"	40.00#	SURFACE	4,551"
Production String	5.5"	17.00#	SURFACE	15,259'
Liner				

<< Fold Here >>

Comments

THANK YOU FOR USING API PERFORATING

MAIN PASS

1,000 PSI

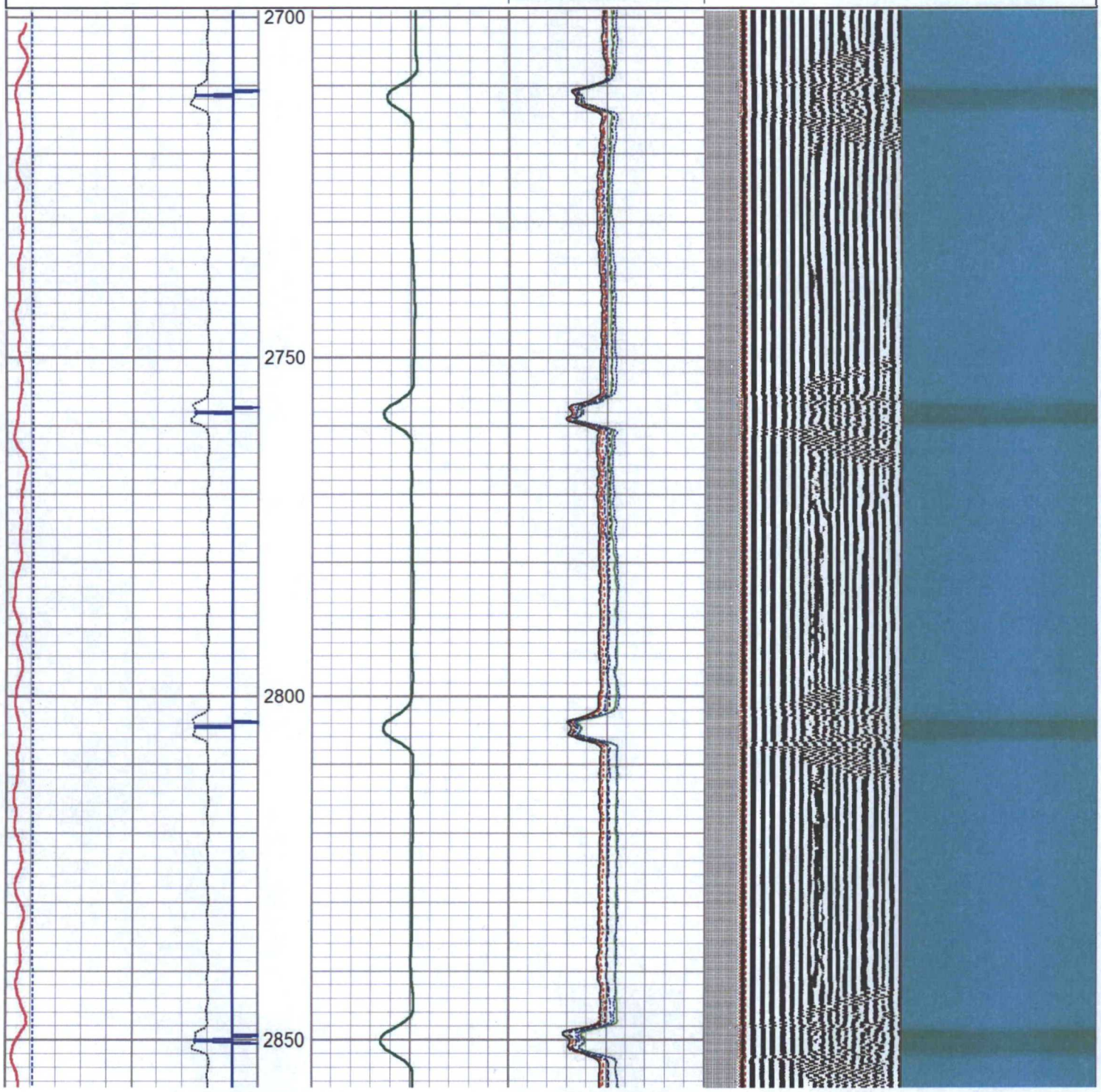
API

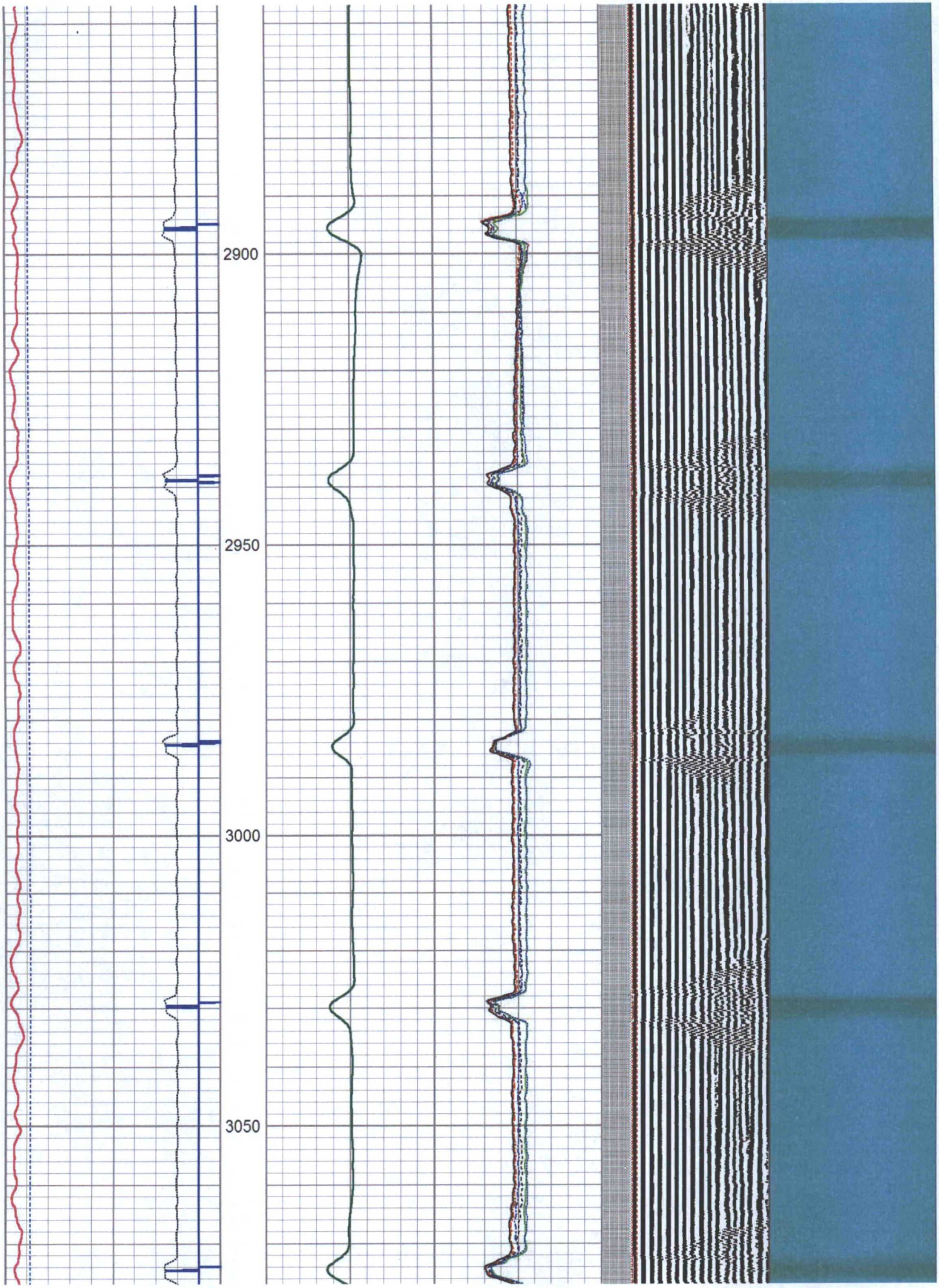
Perforating

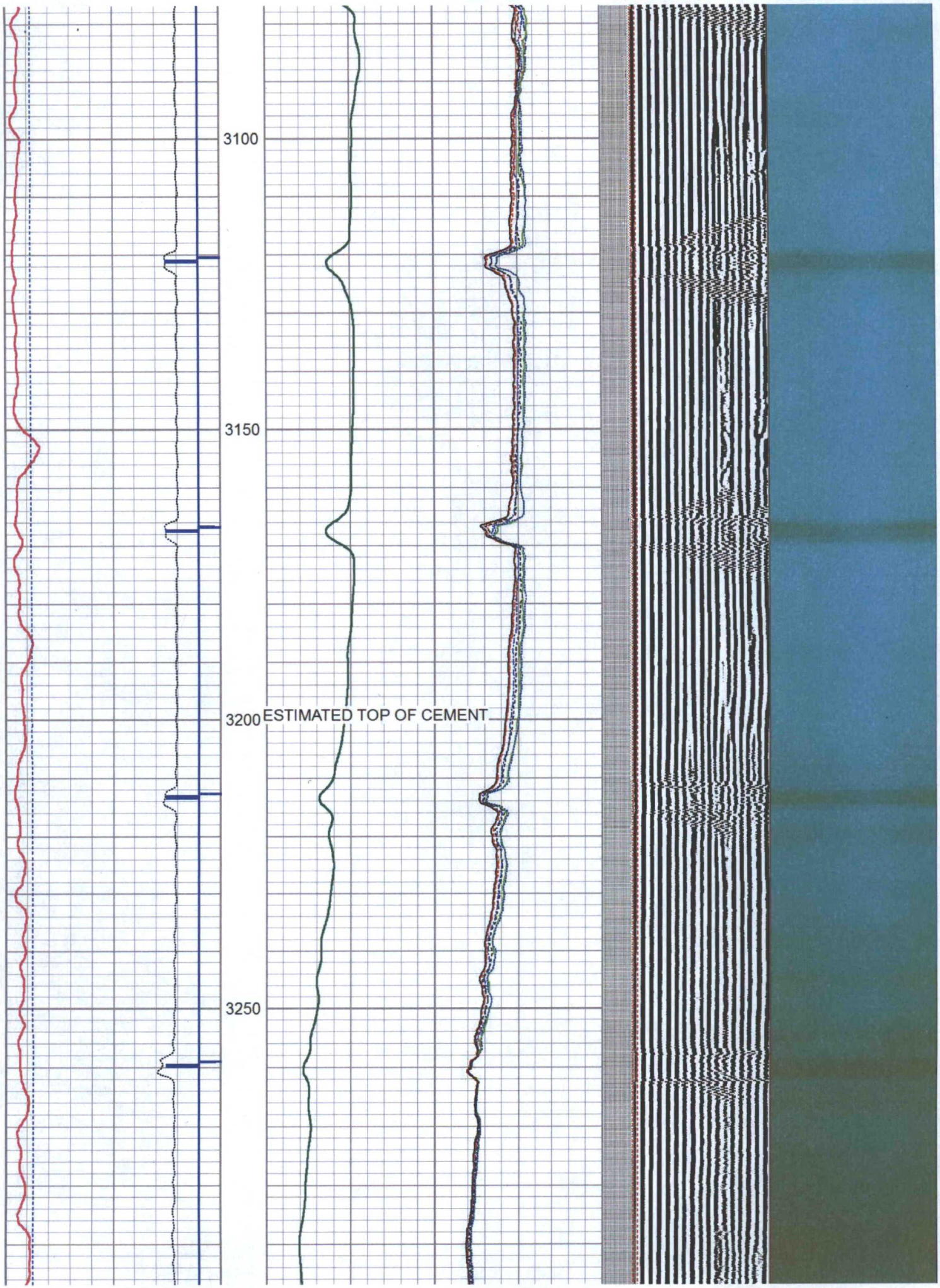
Database File:	devon_rebel20_federal_5h.db
Dataset Pathname:	pass4
Presentation Format:	scbl5_5
Dataset Creation:	Fri Jun 10 10:22:39 2016 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

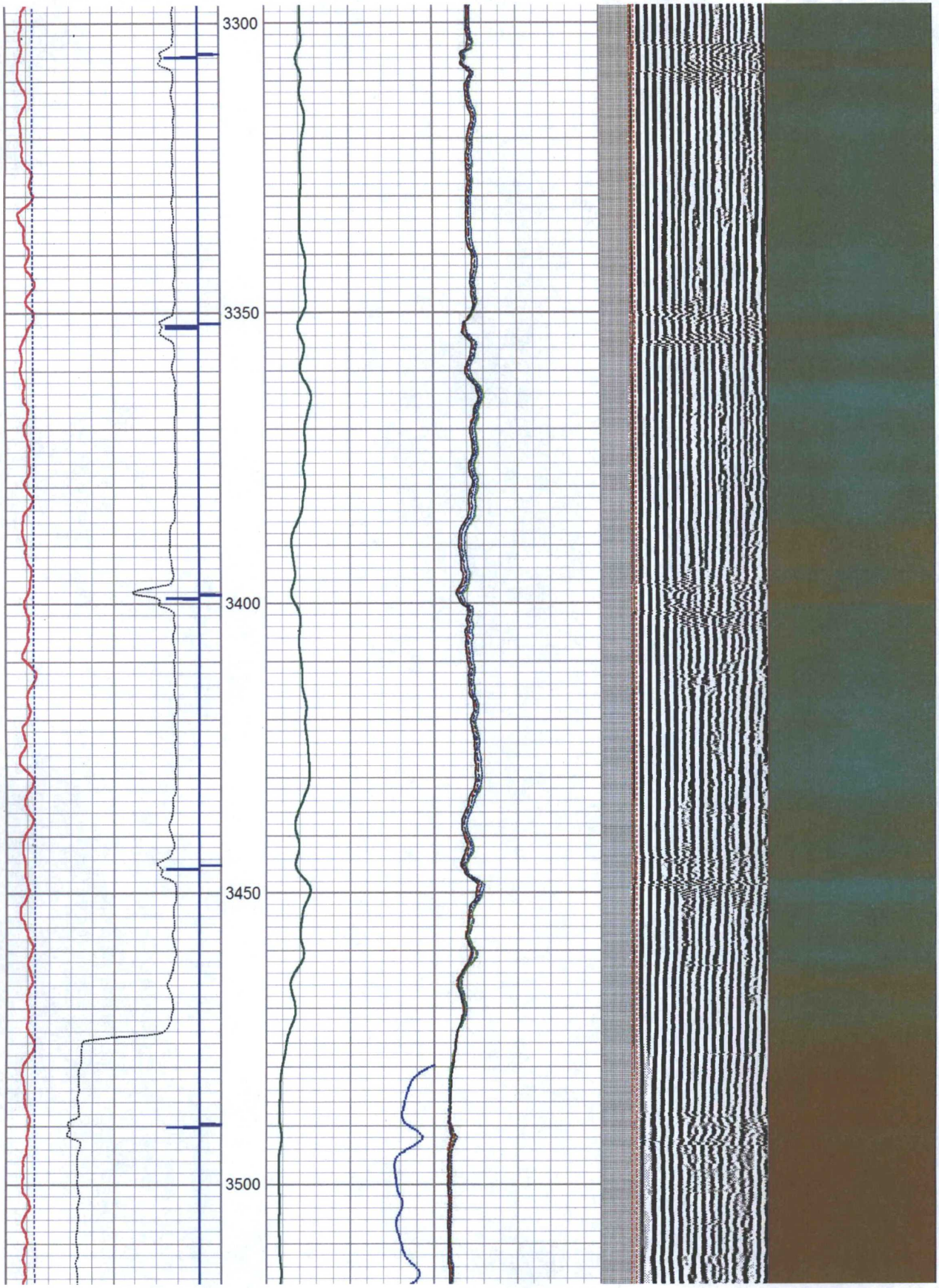
343	TT (usec)	243	0	Amplitude (mV)	100	-5	AMPS2	150	200	VDL	1200
-9	CCL	1		Amplified Amplitude		-5	AMPS3	150			
0	GR (GAPI)	150	0	(mV)	10	-5	AMPS4	150		Free Pipe Gate	
0	LTEN (lb)	4000				-5	AMPS5	150			
						-5	AMPS6	150			
						-5	AMPS7	150			
						-5	AMPS8	150			
						-5	AMPS1	150			

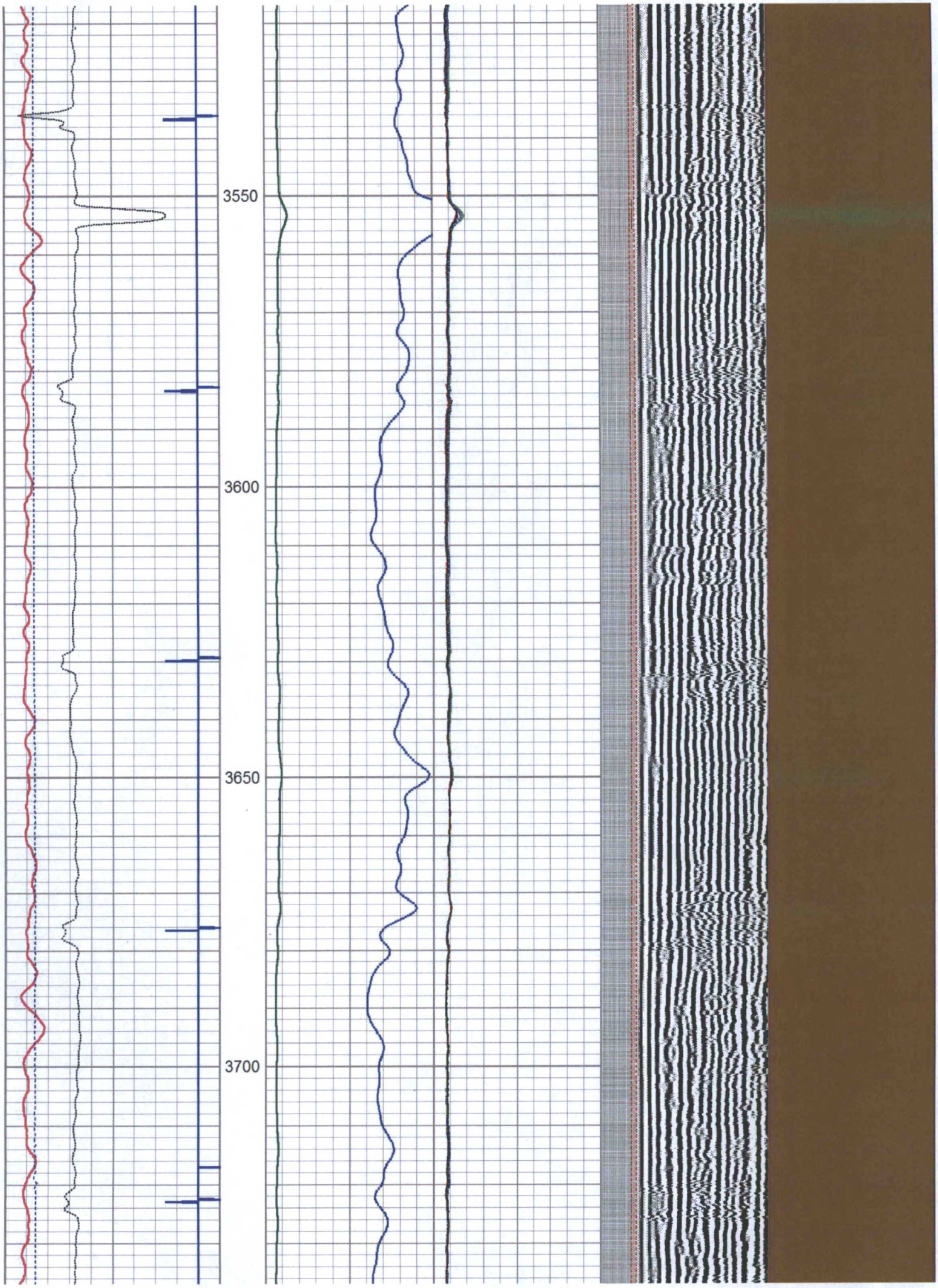
Cement Map 1 80

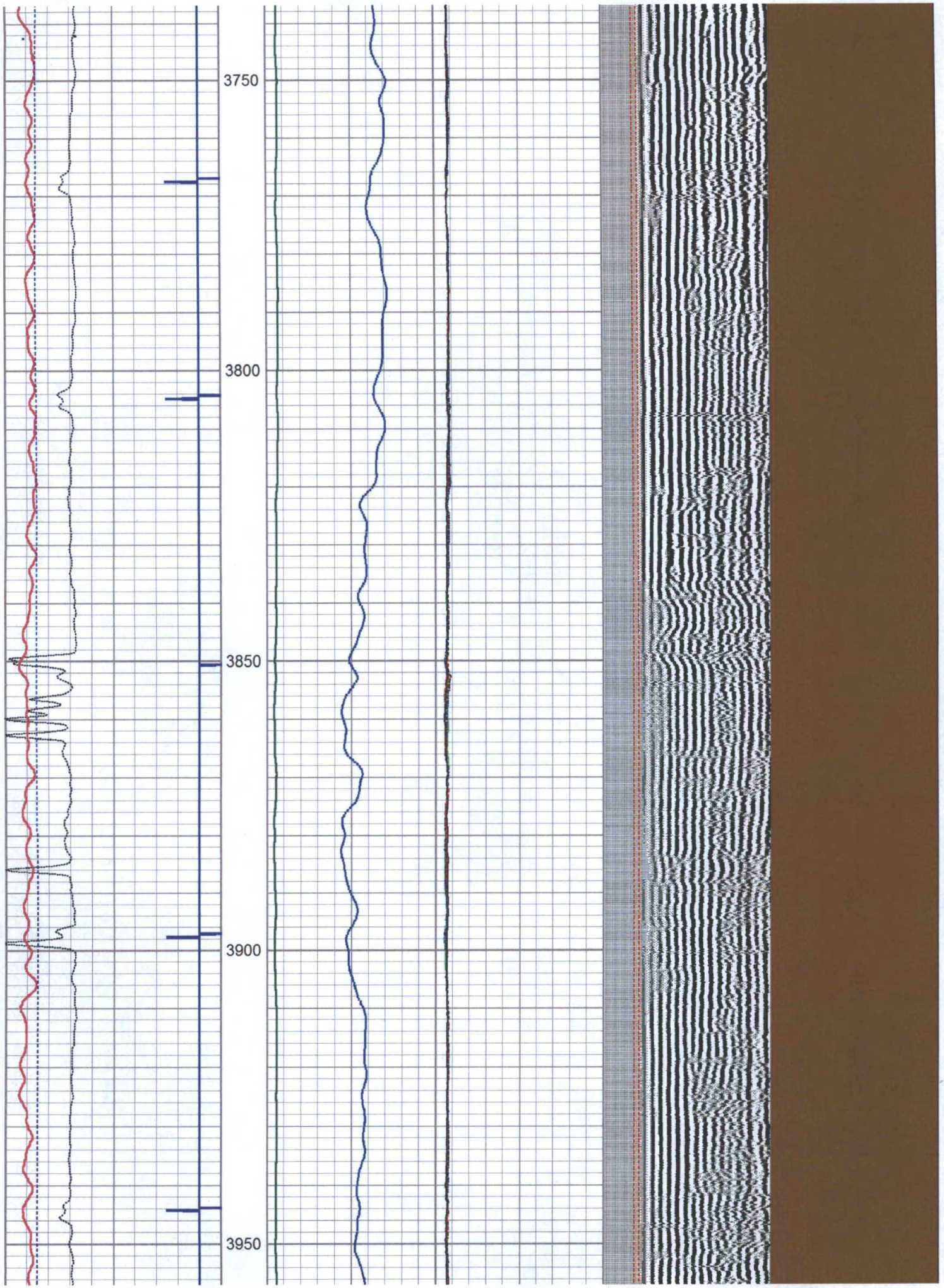


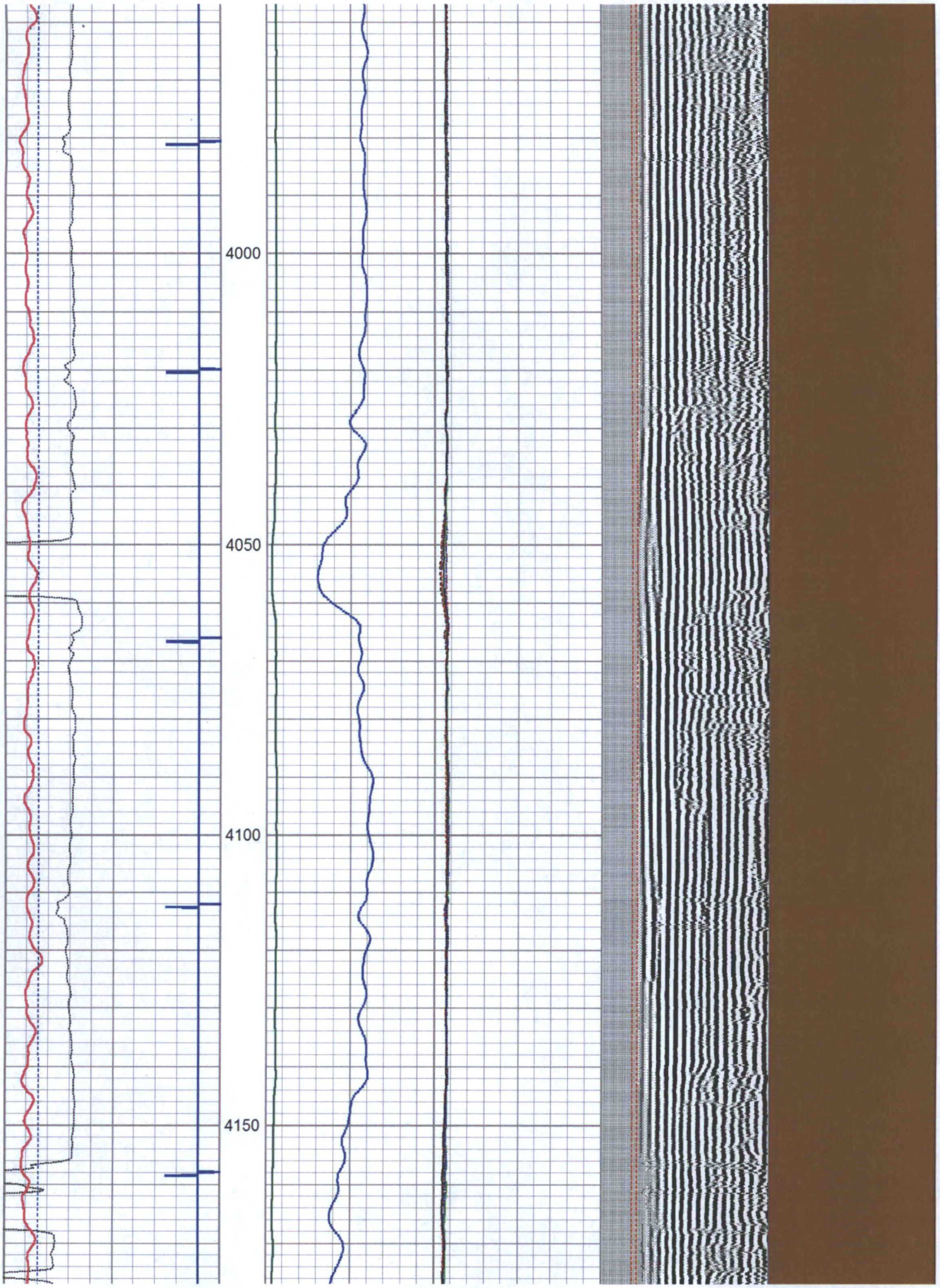

2900
2950
3000
3050

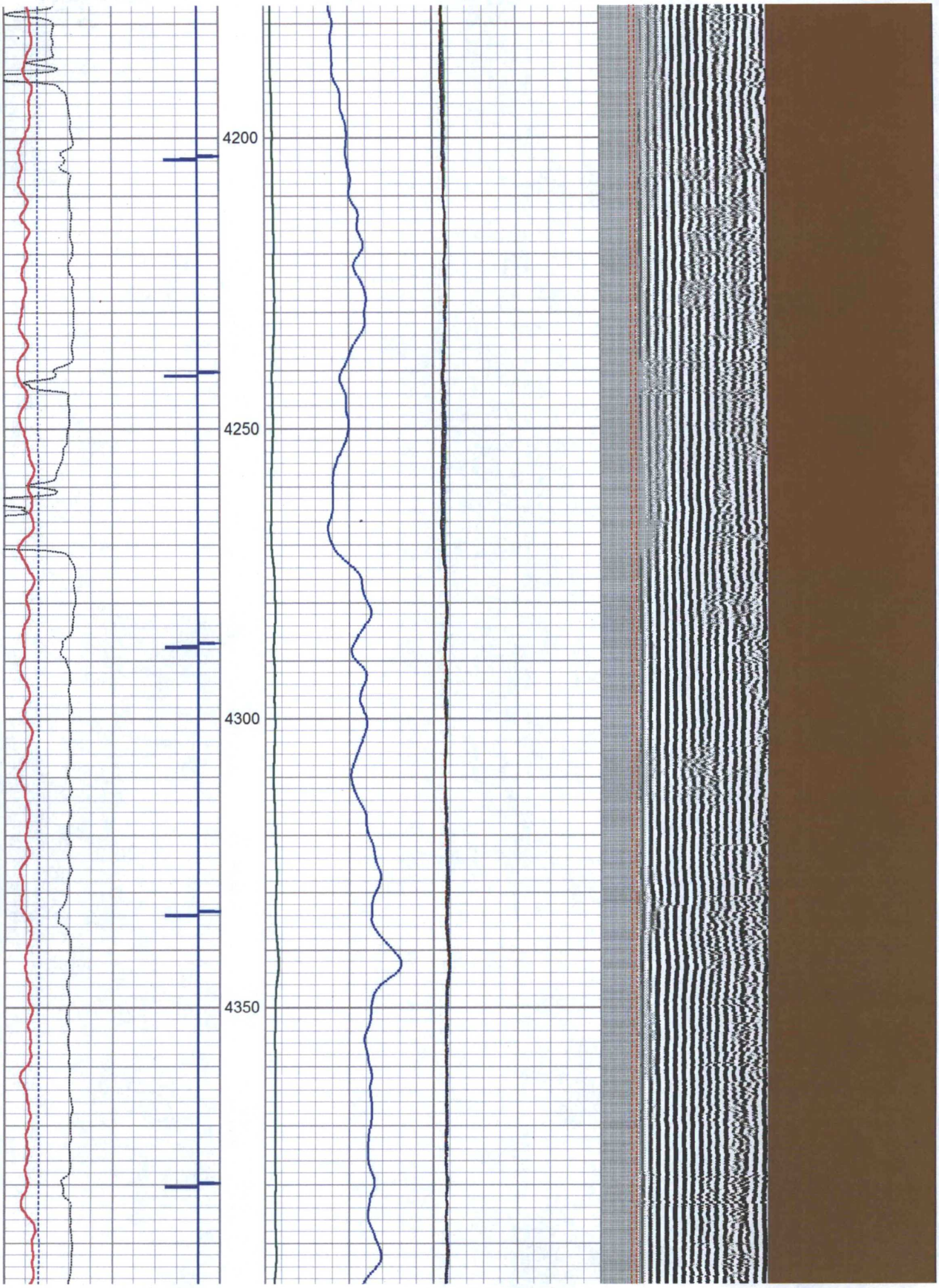

3100
3150
3200
ESTIMATED TOP OF CEMENT
3250

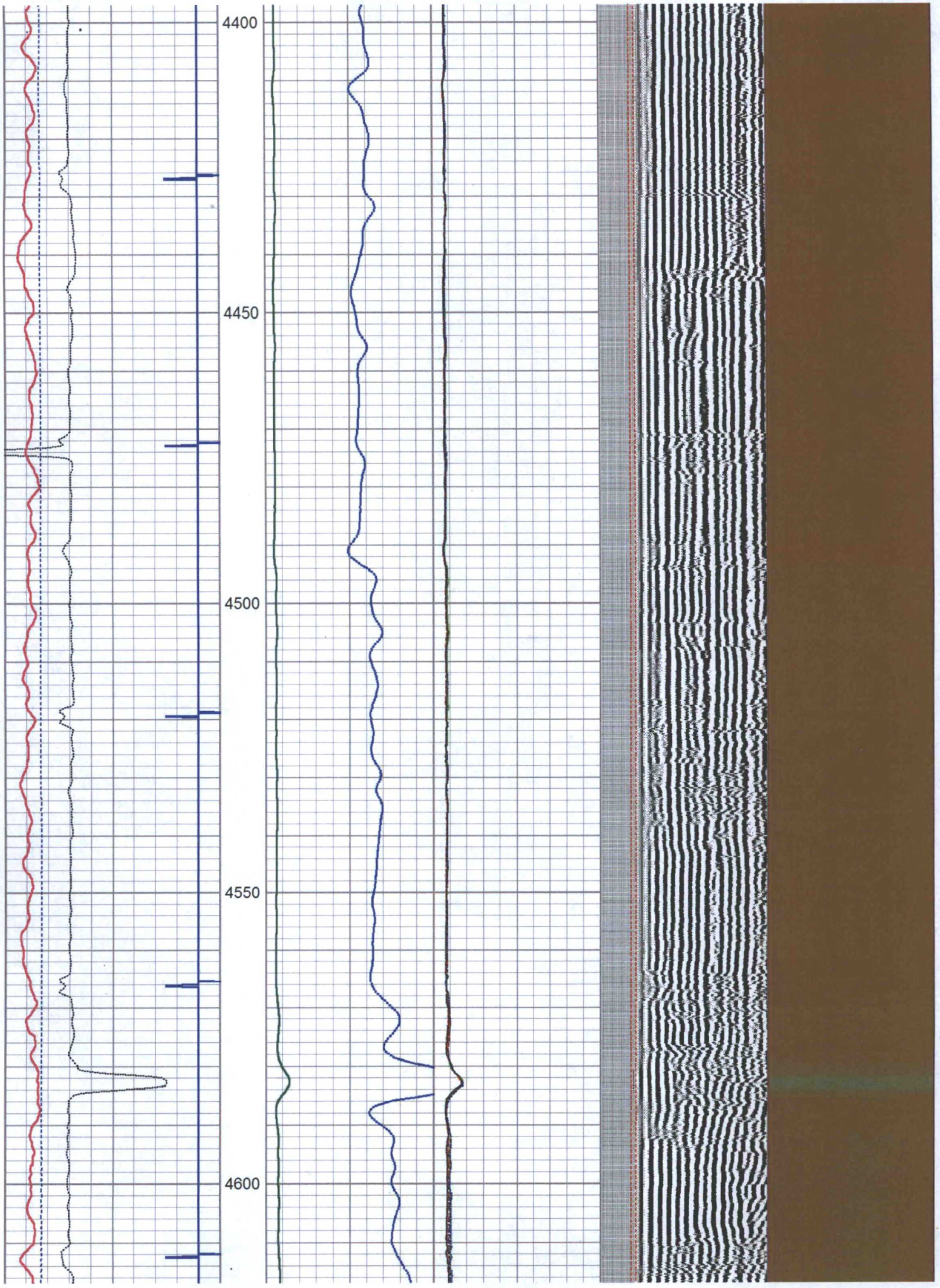

3300
3350
3400
3450
3500

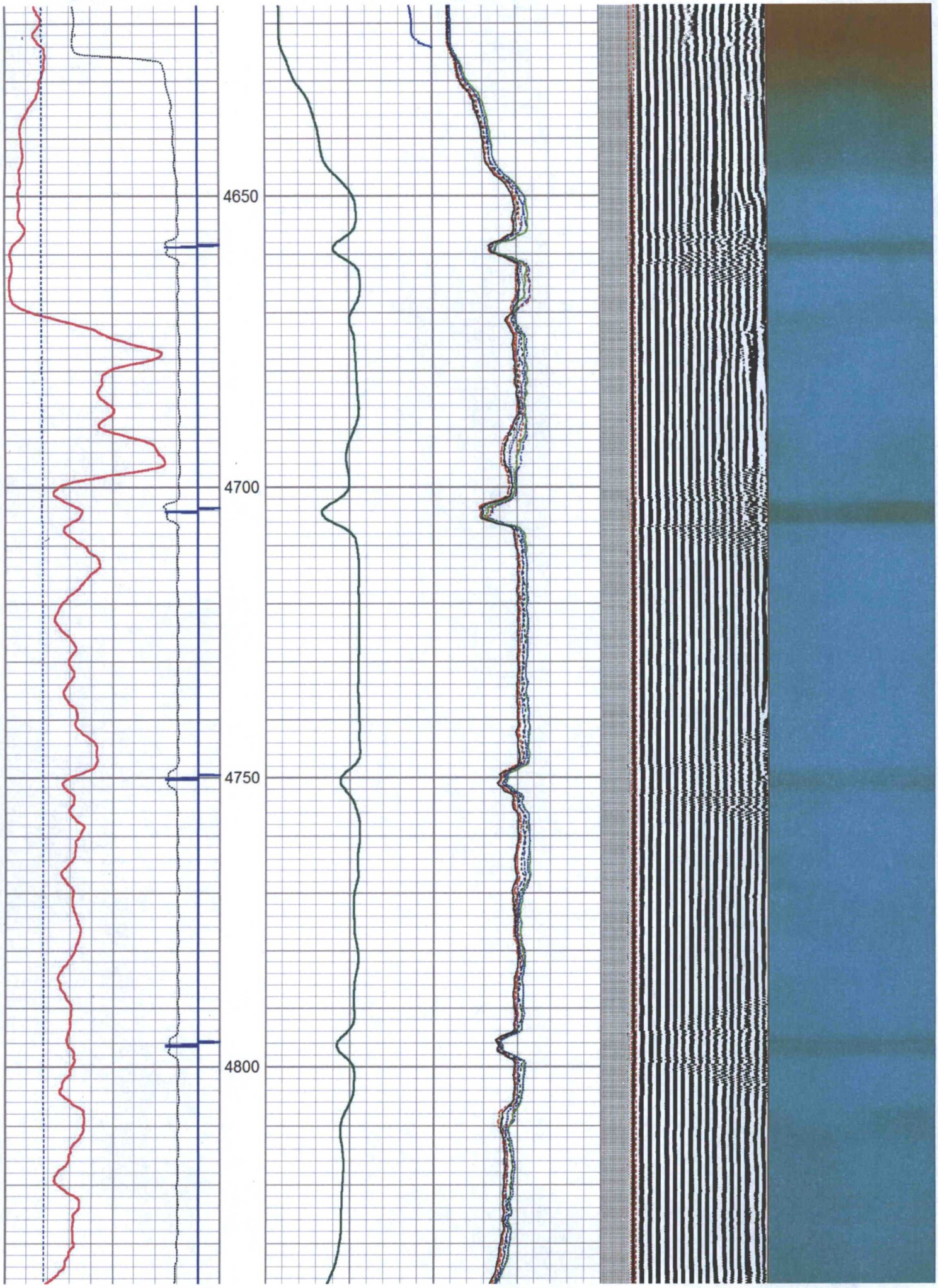

3550
3600
3650
3700

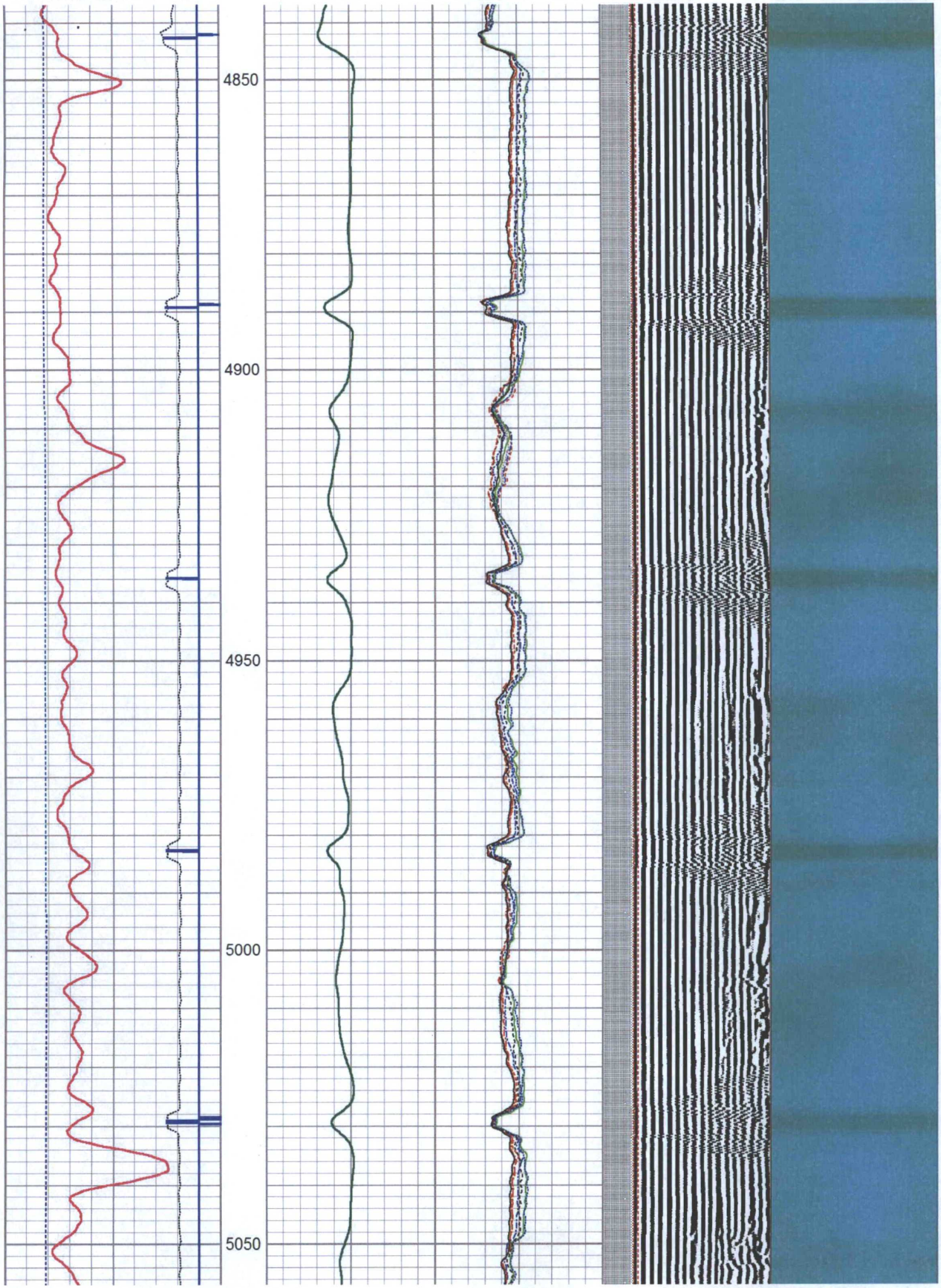

3750
3800
3850
3900
3950

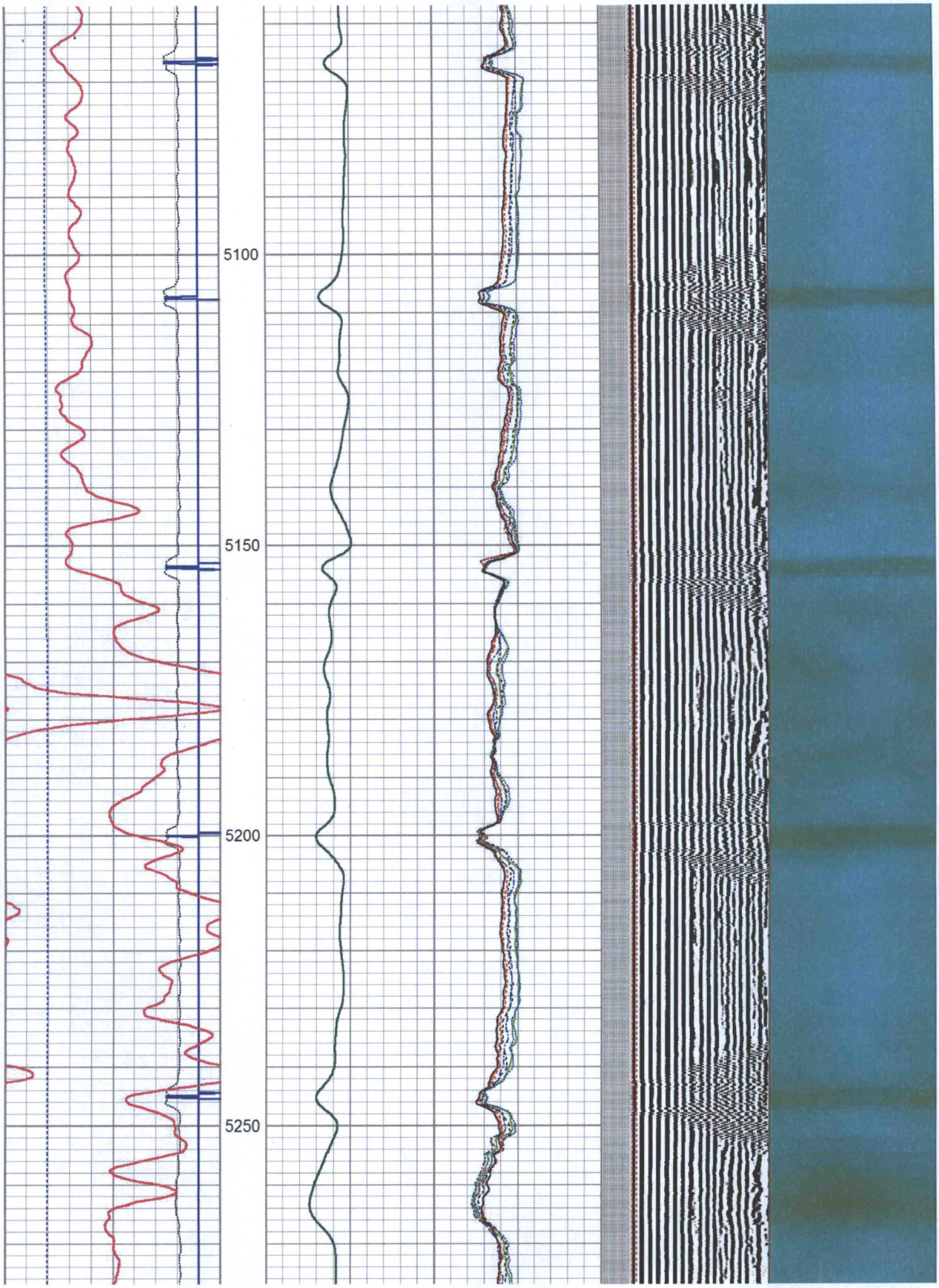

4000
4050
4100
4150

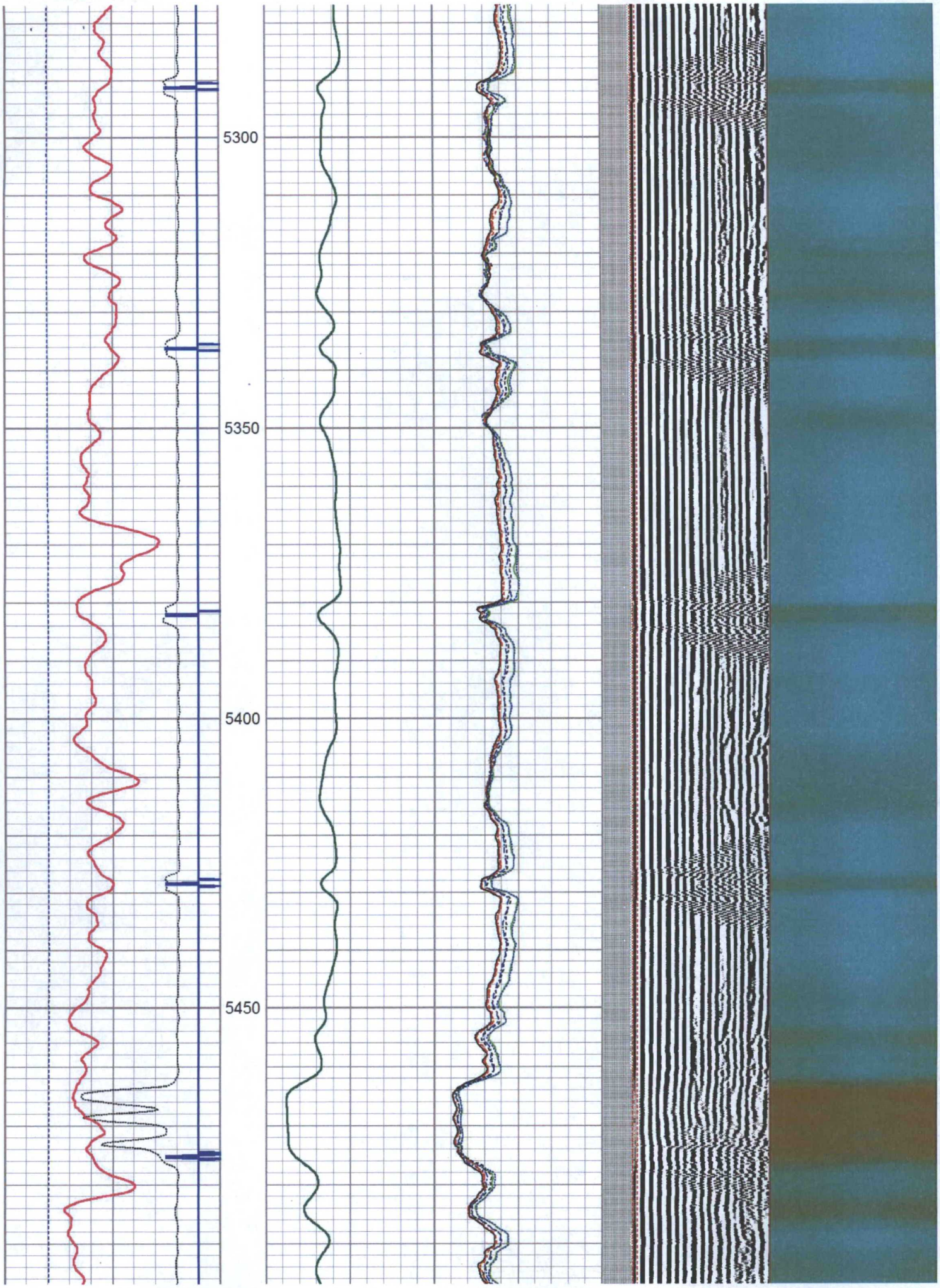

4200
4250
4300
4350

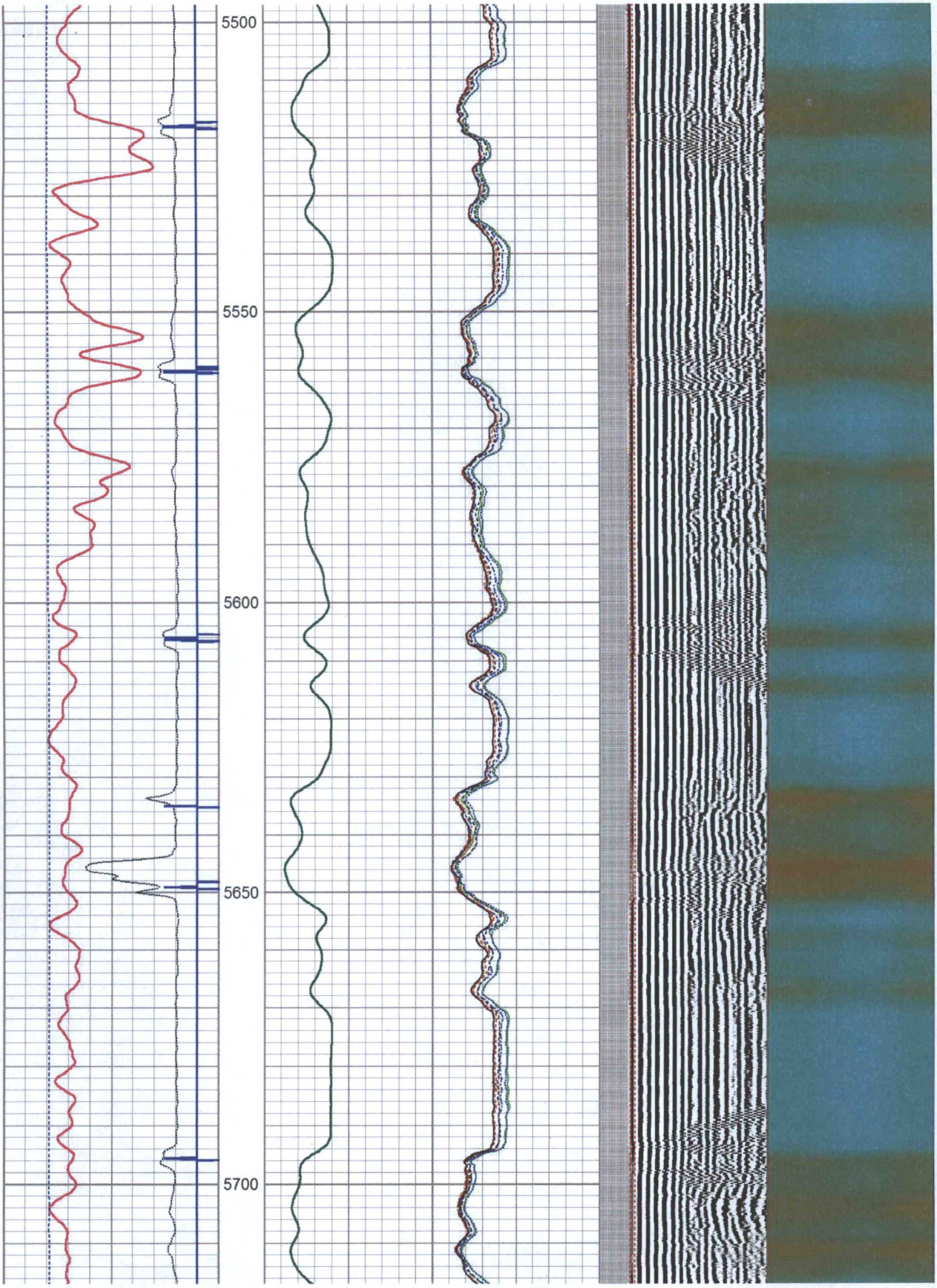

4400
4450
4500
4550
4600

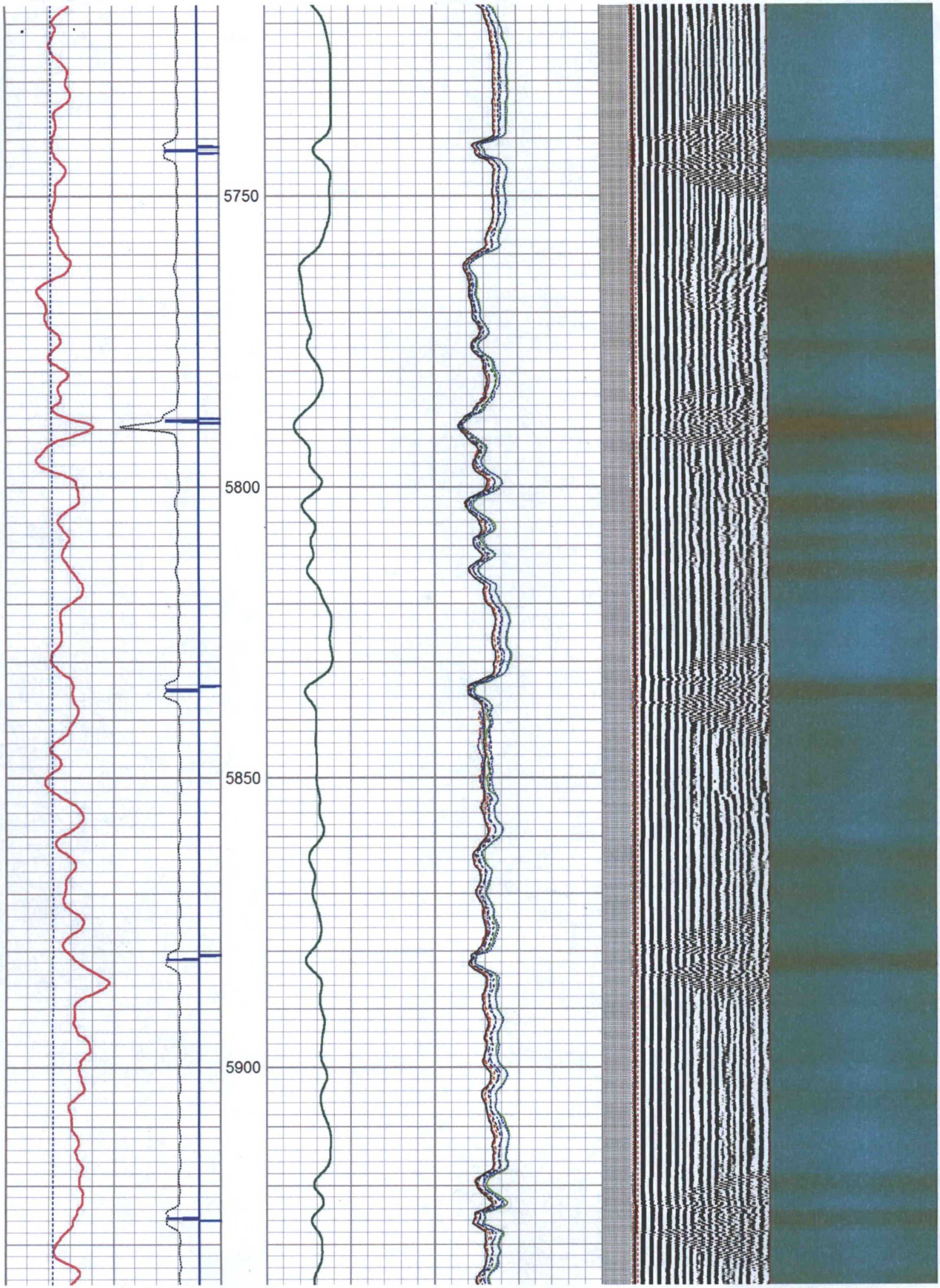

4650
4700
4750
4800

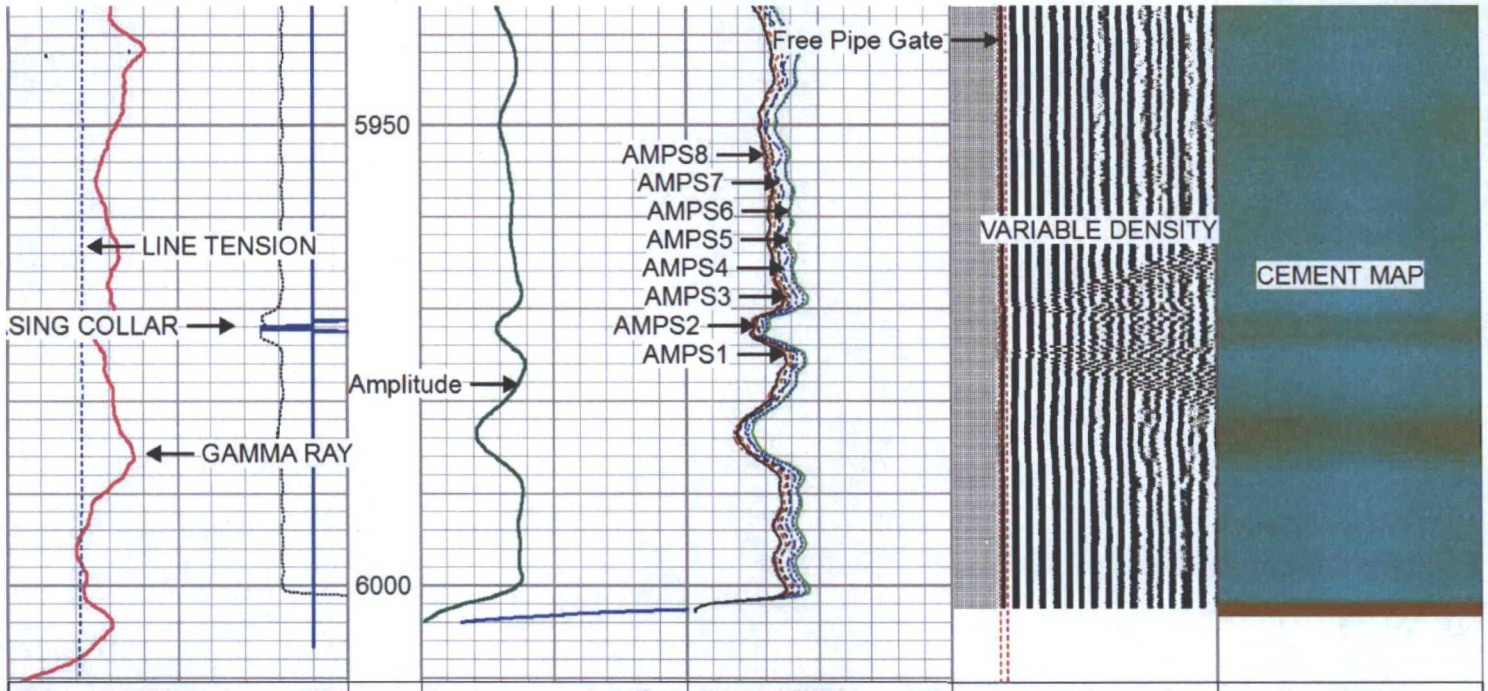

4850
4900
4950
5000
5050


5100
5150
5200
5250


5300
5350
5400
5450


5500
5550
5600
5650
5700


5750
5800
5850
5900



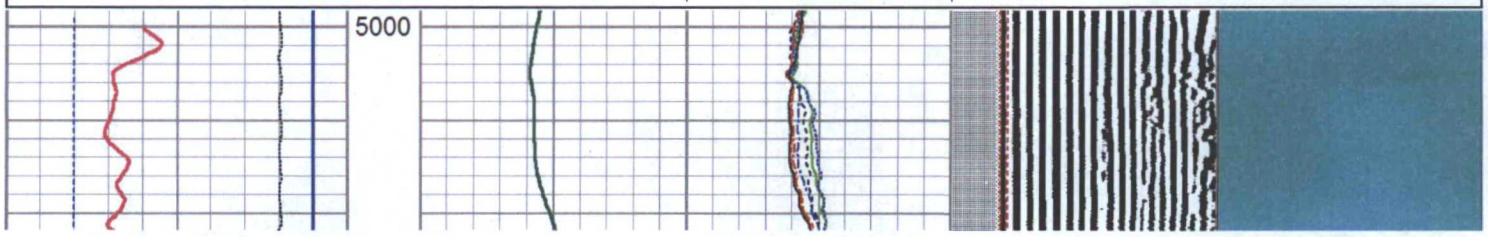
343	TT (usec)	243	0	Amplitude (mV)	100	-5	AMPS2	150	200	VDL	1200	Cement Map		
-9	CCL	1		Amplified Amplitude		-5	AMPS3	150				1		80
0	GR (GAPI)	150	0	(mV)	10	-5	AMPS4	150		Free Pipe Gate				
0	LTEN (lb)	4000				-5	AMPS5	150						
						-5	AMPS6	150						
						-5	AMPS7	150						
						-5	AMPS8	150						
						-5	AMPS1	150						

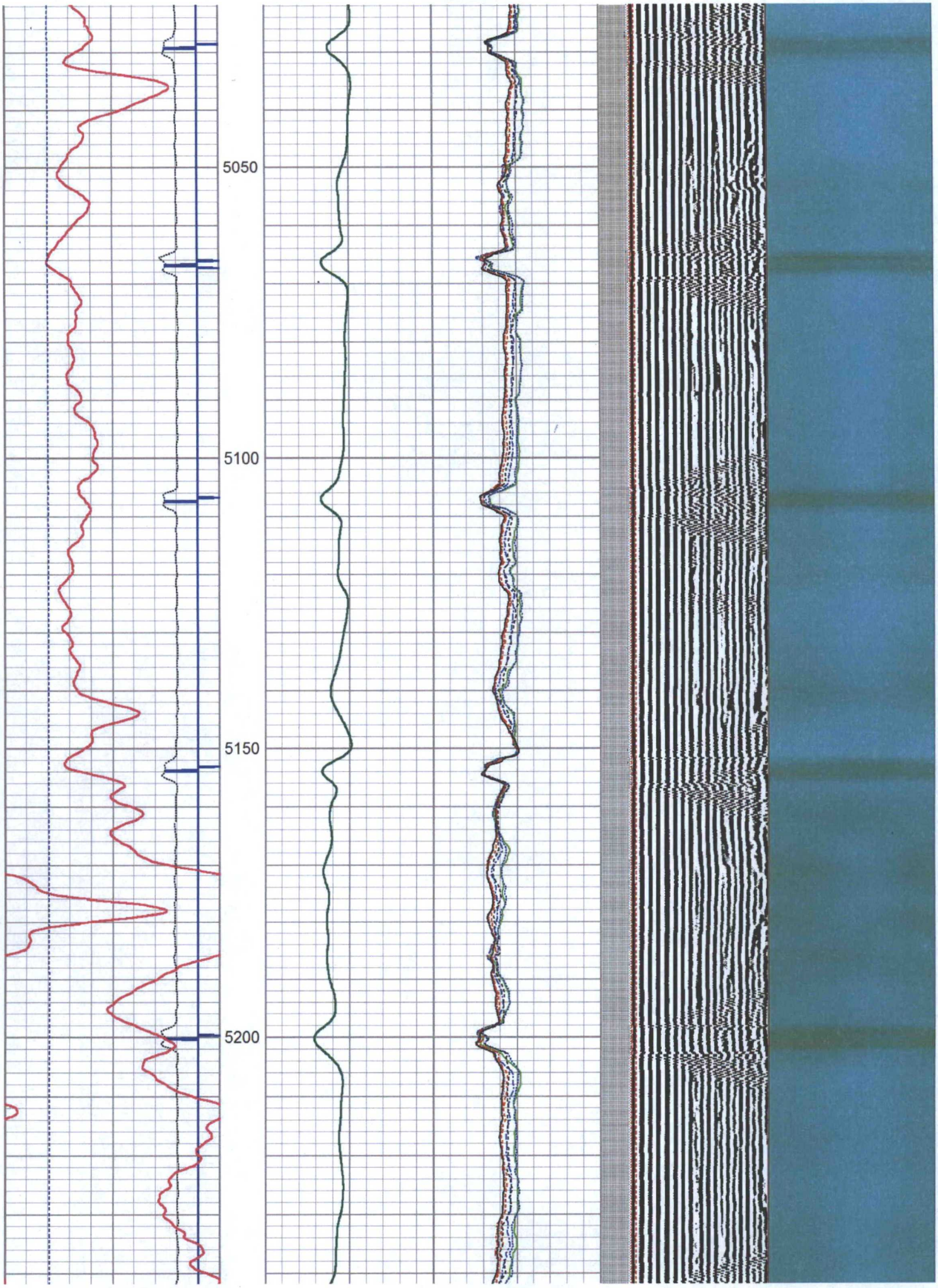
REPEAT PASS

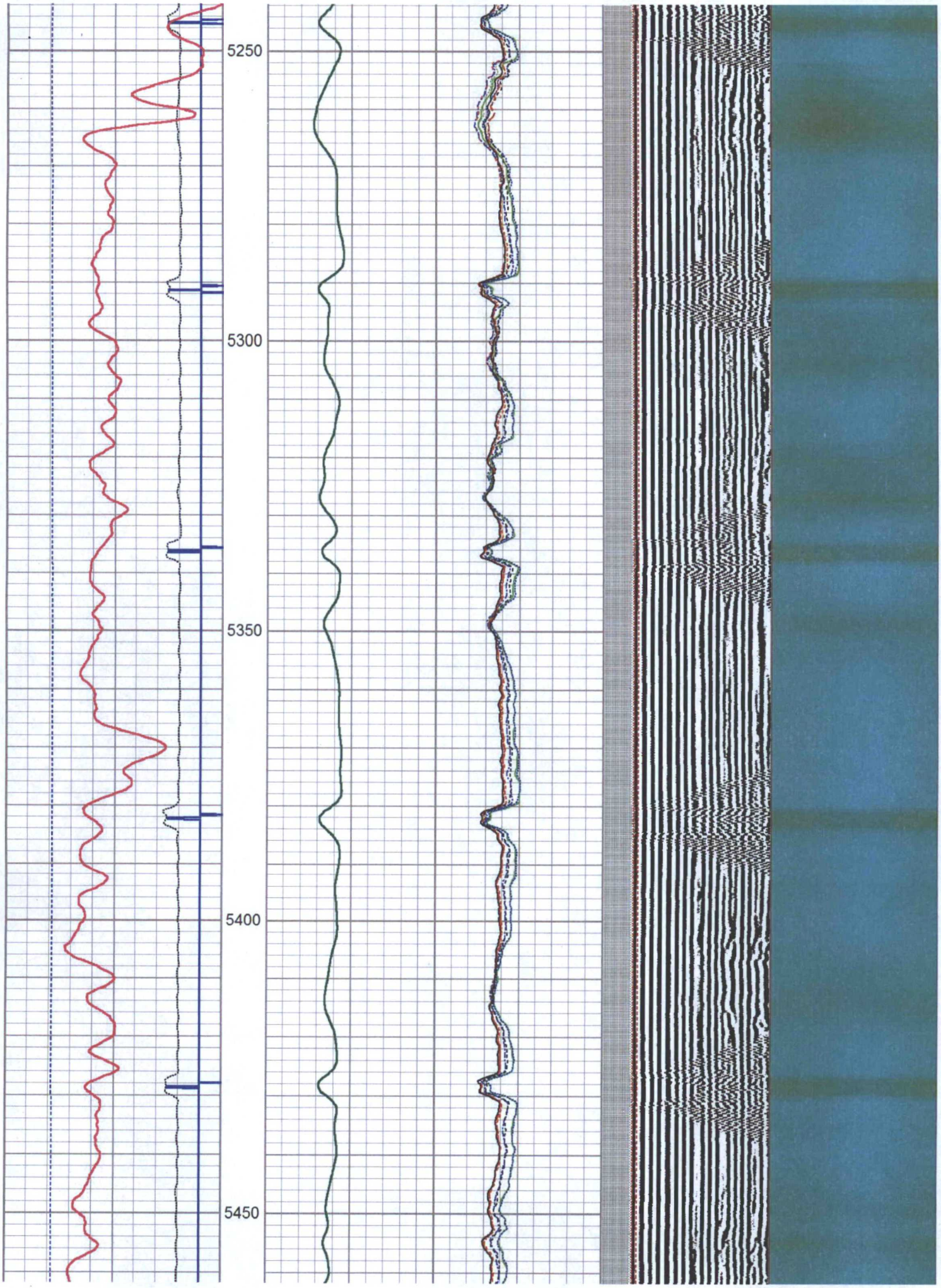
0 PSI

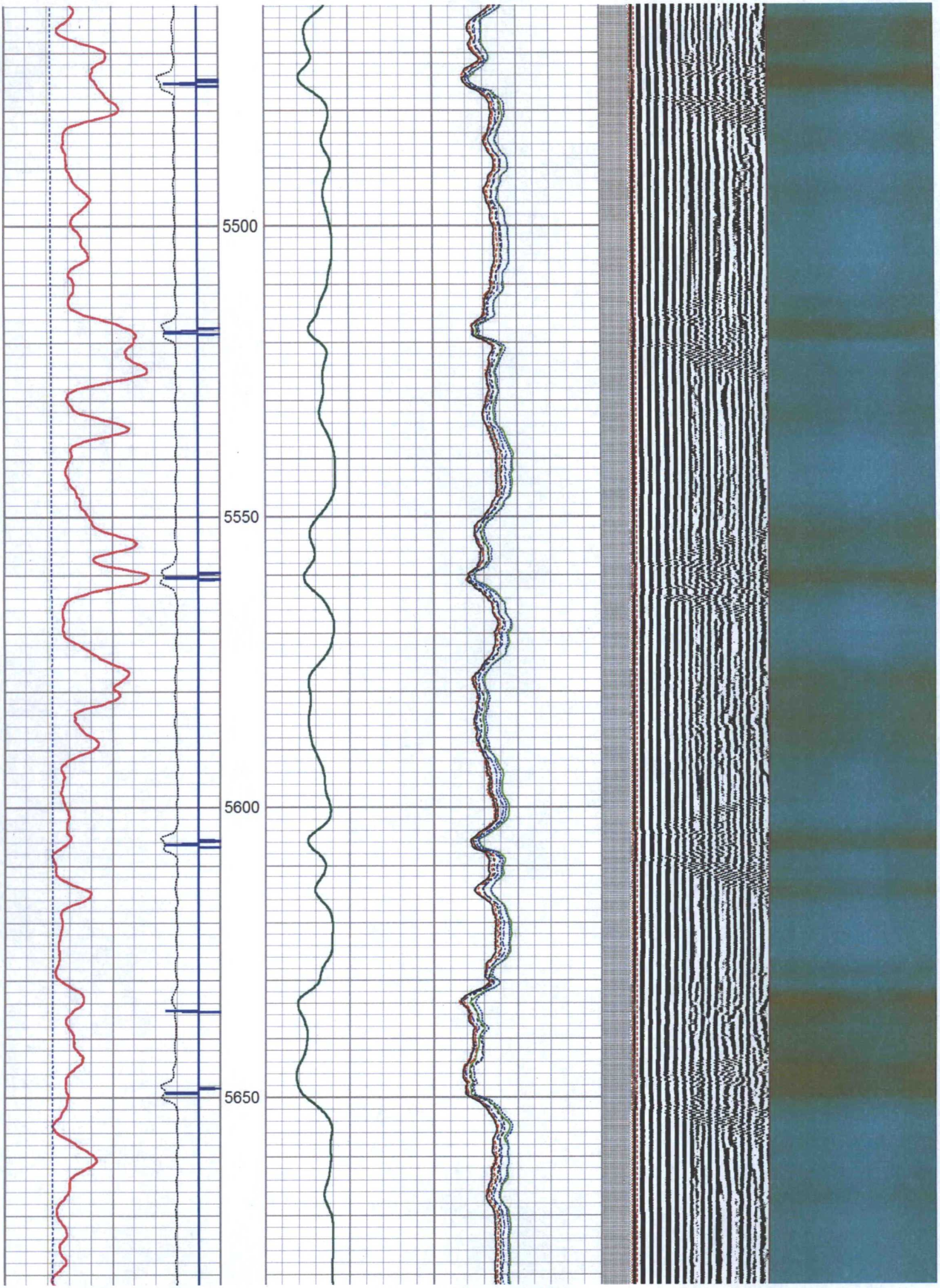
Database File:	devon_rebel20_federal_5h.db
Dataset Pathname:	pass3
Presentation Format:	scbl5_5
Dataset Creation:	Fri Jun 10 09:54:48 2016 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

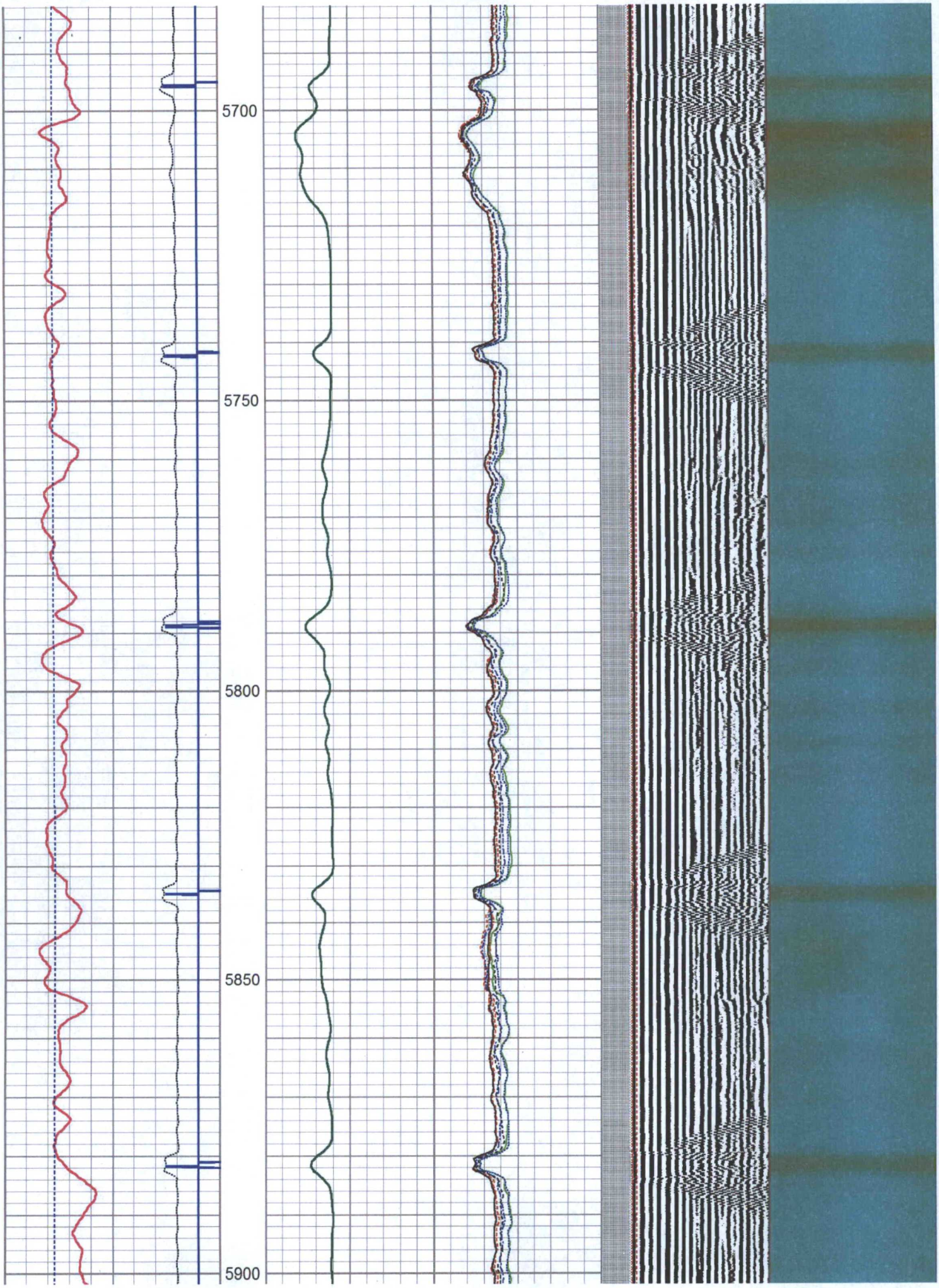
343	TT (usec)	243	0	Amplitude (mV)	100	-5	AMPS2	150	200	VDL	1200	Cement Map		
-9	CCL	1		Amplified Amplitude		-5	AMPS3	150				1		80
0	GR (GAPI)	150	0	(mV)	10	-5	AMPS4	150		Free Pipe Gate				
0	LTEN (lb)	4000				-5	AMPS5	150						
						-5	AMPS6	150						
						-5	AMPS7	150						
						-5	AMPS8	150						
						-5	AMPS1	150						

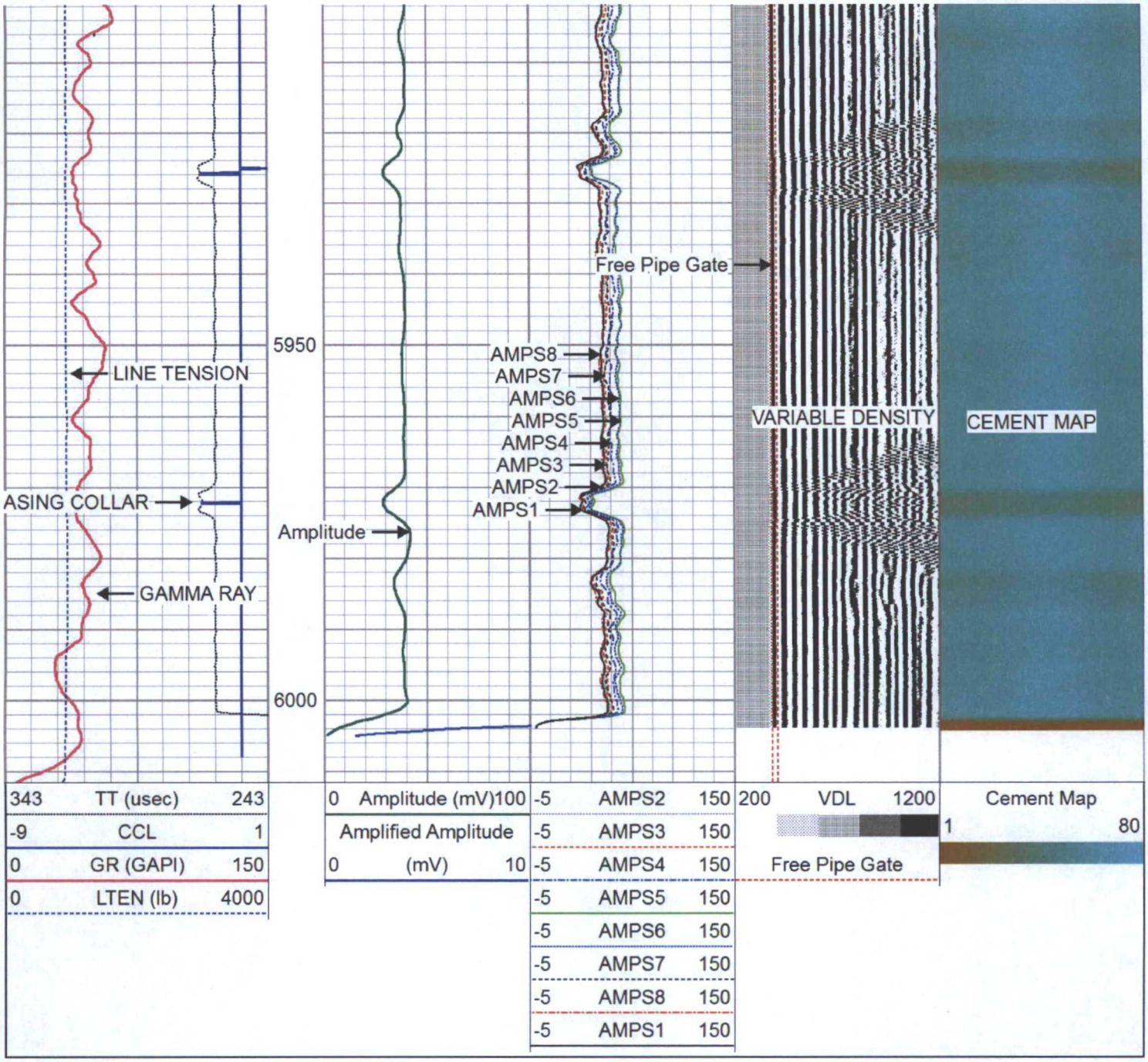



5050
5100
5150
5200


5250
5300
5350
5400
5450


5500
5550
5600
5650


5700
5750
5800
5850
5900



Log Variables

Database:C:\Warrior\Data\devon_rebel20_federal_5h.db
Dataset: field/well/run1/pass4

Top - Bottom

PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft
0	11.5	0	1	0.8	5.5	0	0

BOTTEMP degF	BOREID in
100	7.875

Calibration Report

Database File: devon_rebel20_federal_5h.db
Dataset Pathname: pass4
Dataset Creation: Fri Jun 10 10:22:39 2016 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	110414_gr	
Tool Model:	Probe	
Performed:	Tue Jan 07 13:00:47 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	090629_45	
Tool Model:	Probe	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	0.000	ft

Master Calibration, performed Fri Jun 10 09:12:44 2016:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.002	0.805	1.000	71.921	87.820	1.205
CAL	0.000	0.820				
5'	-0.001	0.722	1.000	71.921	98.038	1.115
SUM						
S1	-0.004	0.804	0.000	100.000	123.825	0.496
S2	-0.002	0.800	0.000	100.000	124.730	0.203
S3	-0.002	0.796	0.000	100.000	125.383	0.230
S4	0.001	0.806	0.000	100.000	124.193	-0.065
S5	-0.000	0.805	0.000	100.000	124.129	0.048
S6	-0.001	0.803	0.000	100.000	124.308	0.162
S7	-0.001	0.796	0.000	100.000	125.456	0.178
S8	-0.003	0.798	0.000	100.000	124.827	0.360

Internal Reference Calibration, performed Wed Dec 31 18:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	0.820	1.000	0.000

Air Zero Calibration, performed Fri Jun 10 09:14:27 2016:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	-0.002	0.000	0.000
5'	-0.000	0.000	-0.001
SUM			
S1	-0.004	0.000	0.000
S2	-0.002	0.000	0.000
S3	-0.002	0.000	0.000
S4	0.001	0.000	-0.000
S5	-0.001	0.000	0.000
S6	-0.001	0.000	-0.000
S7	-0.002	0.000	0.000
S8	-0.003	0.000	-0.000

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HEADVOLT	13.46					
IntTemp	12.04					
WVF3FT	8.88		RBT-Probe (090629_45) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	8.88					
WVFS1	8.88					
WVFS2	8.88					
WVFS3	8.88					
WVFS4	8.88					
WVFS5	8.88					
WVFS6	8.88					
WVFS7	8.88					
WVFS8	8.88					
WVF5FT	7.79					
CCL	3.63					
			GR-Probe (110414_gr) Probe 2.75" 4 Channel Pulse	4.54	2.75	30.00
GR	0.90					

Dataset: devon_rebel20_federal_5h.db: field/well/run1/pass4
Total Length: 13.46 ft
Total Weight: 120.00 lb
O.D. 2.75 in

Company	DEVON
Well	REBEL 20 FEDERAL 5H
Field	PADUCA
County	LEA
State	NEW MEXICO

DEVON ENERGY PROD CO LP-EBUSINESS

Rebel 20 Fed 5H

Lea, NM

Sales Order: 903354990

Bradenhead Squeeze

Cementing Post Job Report

HALLIBURTON

Halliburton Energy Services appreciates the opportunity to perform the cementing service.

Below you will find job details and real time graph for this job. (Based on cement supervisor report who executed this job)

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton Energy Services again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

David Rosby

Principle Technical Professional – In House Devon

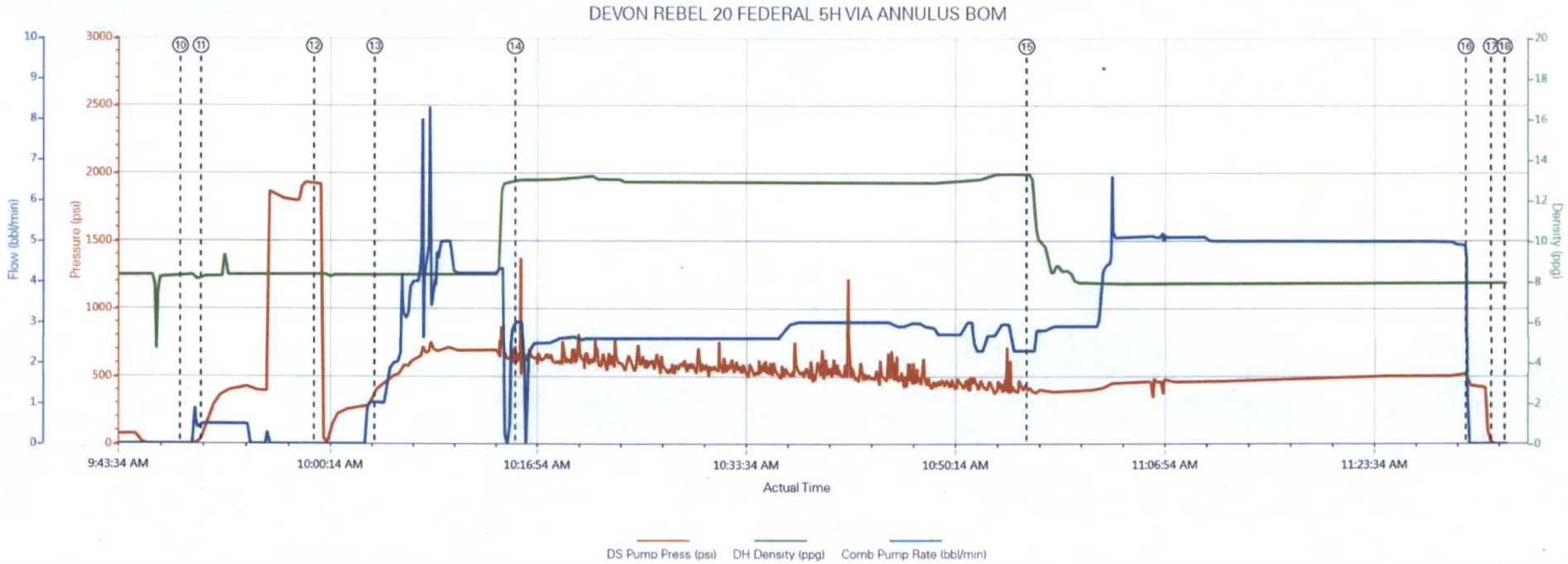
(479) 221-4609

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	6/8/2016	01:00:09	USER				CALLED OUT FOR DEVON REBEL 20 FEDERAL 5H, SQUEEZE (VIA ANNULUS)
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/8/2016	01:30:09	USER				GATHERED CREW TO GO OVER JSA AND ROUTE TO LOCATION
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/8/2016	03:01:04	USER				
Event	4	Arrive At Loc	Arrive At Loc	6/8/2016	06:40:08	USER				ARRIVED ON LOCATION, WERE EARLY, VERIFIED SPOTTING EQUIPMENT
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/8/2016	06:50:06	USER				GATHERED CREW TO GO OVER JSA AND RIG UP PROCEURES
Event	6	Rig-Up Equipment	Rig-Up Equipment	6/8/2016	07:03:09	USER				
Event	7	Rig-Up Completed	Rig-Up Completed	6/8/2016	08:00:04	USER				COMPLETED RIG UP SAFELY
Event	8	Waiting - Arrived Early to Location - Start Time	Waiting - Arrived Early to Location	6/8/2016	08:05:06	USER				WAITING ON BLM TO SHOW UP TO LOCATION
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/8/2016	08:30:09	USER				BLM ARRIVED ON LOCATION AND GATHERED EVERYONE TO GO OVER JSA AND JOB PROCEDURES, VERIFIED ALL CALCULATIONS WITH COMPANY REP. MIKE BRASWELL
Event	10	Start Job	Start Job	6/8/2016	08:48:37	COM6				

Event	11	Pump Spacer 1	Pump Spacer 1	6/8/2016	08:50:14	COM6	422.00	8.26	0.50	PUMPED 2 BBL WATER SPACER TO FILL LINES
Event	12	Test Lines	Test Lines	6/8/2016	08:59:08	COM6	1926.00	8.36	0.00	TESTED LINES TO MAKE SURE THEY WERE SAFE AND HAD NO LEAKS
Event	13	Pump Spacer 1	Pump Spacer 1	6/8/2016	09:03:58	COM6	680.00	8.33	5.00	PUMPED ABOUT 15 BBL WATER SPACER TO ESTABLISH RATE
Event	14	Pump Lead Cement	Pump Lead Cement	6/8/2016	09:15:22	COM6	654.00	12.98	2.50	PUMPED 200 SKS OR 67 BBLS OF ECONOCEM HLC LEAD CEMENT AT 12.9 LB, 1.887 YIELD, 9.94 GAL/SK
Event	15	Pump Displacement	Pump Displacement	6/8/2016	09:56:04	COM6	460.00	8.33	5.00	PUMPED 151 BBLS PER COMPANY REP. MIKE BRASWELL TO SPOT TOP OF CEMENT AT ABOUT 3254' AND BOTTOM AT 4687
Event	16	Shutdown	Shutdown	6/8/2016	10:31:06	USER	426.00	7.93	0.00	
Event	17	Shut In Well	Shut In Well	6/8/2016	10:33:08	USER				SHUT IN WELL, HAD ABOUT 426 PSI
Event	18	End Job	End Job	6/8/2016	10:34:12	COM6				
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/8/2016	10:45:09	USER				GATHERED CREW TO GO OVER JSA AND RIG DOWN PROCEDURES
Event	20	Rig-Down Equipment	Rig-Down Equipment	6/8/2016	11:00:03	USER				
Event	21	Rig-Down Completed	Rig-Down Completed	6/8/2016	13:00:03	USER				COMPLETED RIG DOWN SAFELY
Event	22	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/8/2016	13:15:06	USER				GATHERED CREW TO GO OVER JSA AND ROUTE BACK TO THE YARD
Event	23	Depart Location	Depart Location	6/8/2016	13:30:06	USER				THANK YOU



① Call Out n/a;n/a;n/a
② Pre-Convoy Safety Meeting n/a;n/a;n/a
③ Depart from Service Center or Other Site n/a;n/a;n/a
④ Arrive At Loc 72;8.36;0
⑤ Pre-Rig Up Safety Meeting 73;8.35;0
⑥ Rig-Up Equipment 74;8.34;0
⑦ Rig-Up Completed 18.83;2.12;0
⑧ Waiting - Arrived Early to Location 25.25;2.84;0
⑨ Pre-Job Safety Meeting 57.19;6.43;0
⑩ Start Job 1;8.31;0
⑪ Pump Spacer 1 88;8.26;0.5
⑫ Test Lines 1926;8.36;0
⑬ Pump Spacer 1 410;8.3
⑭ Pump Lead Cement 65

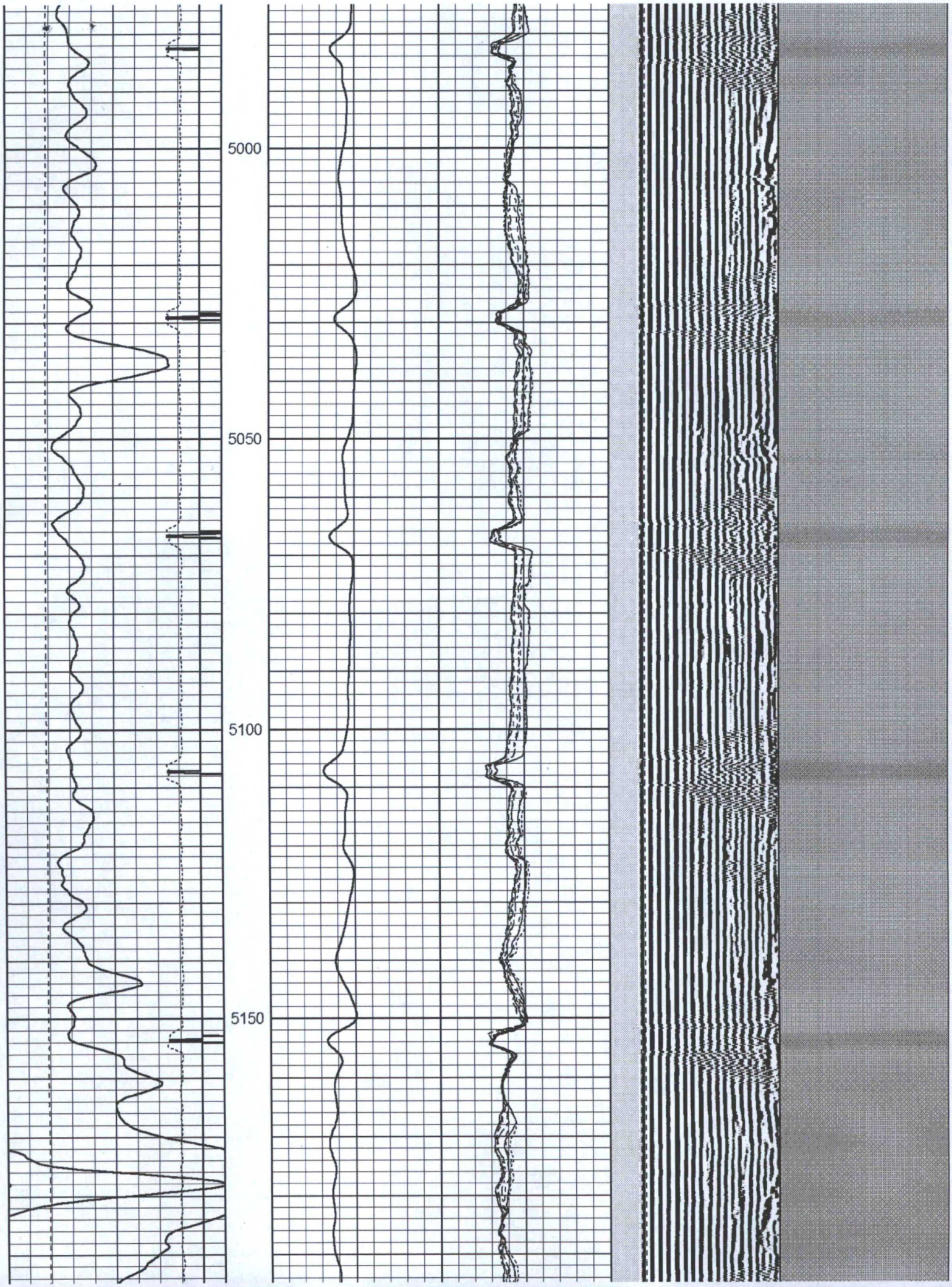
HALLIBURTON | iCem® Service

Created: 2016-06-08 05:01:52, Version: 4.2.393 Edit

Customer: DEVON ENERGY PRODUCTION
Representative:

Job Date: 6/8/2016 6:28:35 AM
Sales Order #:

Well: FEBEL 20 FEDERAL


5000
5050
5100
5150