



**RADIAL BOND GAMMA RAY-CCL
TEMP**

Company ANTERO RESOURCES
Well WASHINGTON 2H
Field WEST UNION
County DODDRIDGE
State WV.

Country USA.

Country USA.

Location: API #: 47017063710000

Other Services

SEC	TWP	RGE	Elevation
Permanent Datum	G.L.	Elevation	1040'
Log Measured From	G.L.		K.B. 1064'
Drilling Measured From	K.B.		D.F. 1063'
			G.L. 1040'

Company ANTERO RESOURCES
Well WASHINGTON 2H
Field WEST UNION
County DODDRIDGE
State WV.

Date	9-27-14							
Run Number	ONE							
Depth Driller								
Depth Logger	6690'							
Bottom Logged Interval	6689'							
Top Log Interval	SURFACE							
Open Hole Size								
Type Fluid	WATER							
Density / Viscosity								
Max. Recorded Temp.	135							
Estimated Cement Top	1812'							
Time Well Ready	20:10							
Time Logger on Bottom	20:40							
Equipment Number	5982							
Location	CLARKSBURG WV.							
Recorded By	E.BUTCHER							
Witnessed By	SHANE TEEL							
Borehole Record		Tubing Record						
Run Number	Bit	From	To	Size	Weight	From	To	
Casing Record	Size		Wdth		Top		Bottom	
Surface String								
Prot String								
Production String	5.5"		23LBS.		SURFACE		15,211.6'	
Liner								

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING STRC OILFIELD TECHNOLOGIES
LOG MEASURED FROM K.B.24'

Calibration Report

Database File: washington 2h.db
Dataset Pathname: pass5
Dataset Creation: Sat Sep 27 08:40:17 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number: 275
Tool Model: Probe
Performed: Wed Aug 27 17:14:40 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1404-143_5.5INCH
Tool Model: Probe275T

Calibration Casing Diameter: 5.500 in
Calibration Depth: 2787.000 ft

Master Calibration, performed Sat Sep 27 03:51:07 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.974	1.000	71.921	73.795	0.046
CAL	0.011	0.010				
5'	0.012	0.927	1.000	71.921	77.469	0.099
SUM						
S1	0.016	1.074	0.000	100.000	94.518	-1.556
S2	0.010	1.067	0.000	100.000	94.644	-0.980
S3	0.010	0.246	0.000	100.000	423.534	-4.100
S4	0.010	1.021	0.000	100.000	98.977	-1.028
S5	0.009	1.079	0.000	100.000	93.485	-0.839
S6	0.009	1.148	0.000	100.000	87.753	-0.762
S7	0.008	1.193	0.000	100.000	84.445	-0.709
S8	0.010	1.174	0.000	100.000	85.926	-0.892

Internal Reference Calibration, performed Fri Aug 15 18:12:35 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.011	0.010	1.000	0.000

Air Zero Calibration, performed Wed Aug 27 17:44:29 2014:

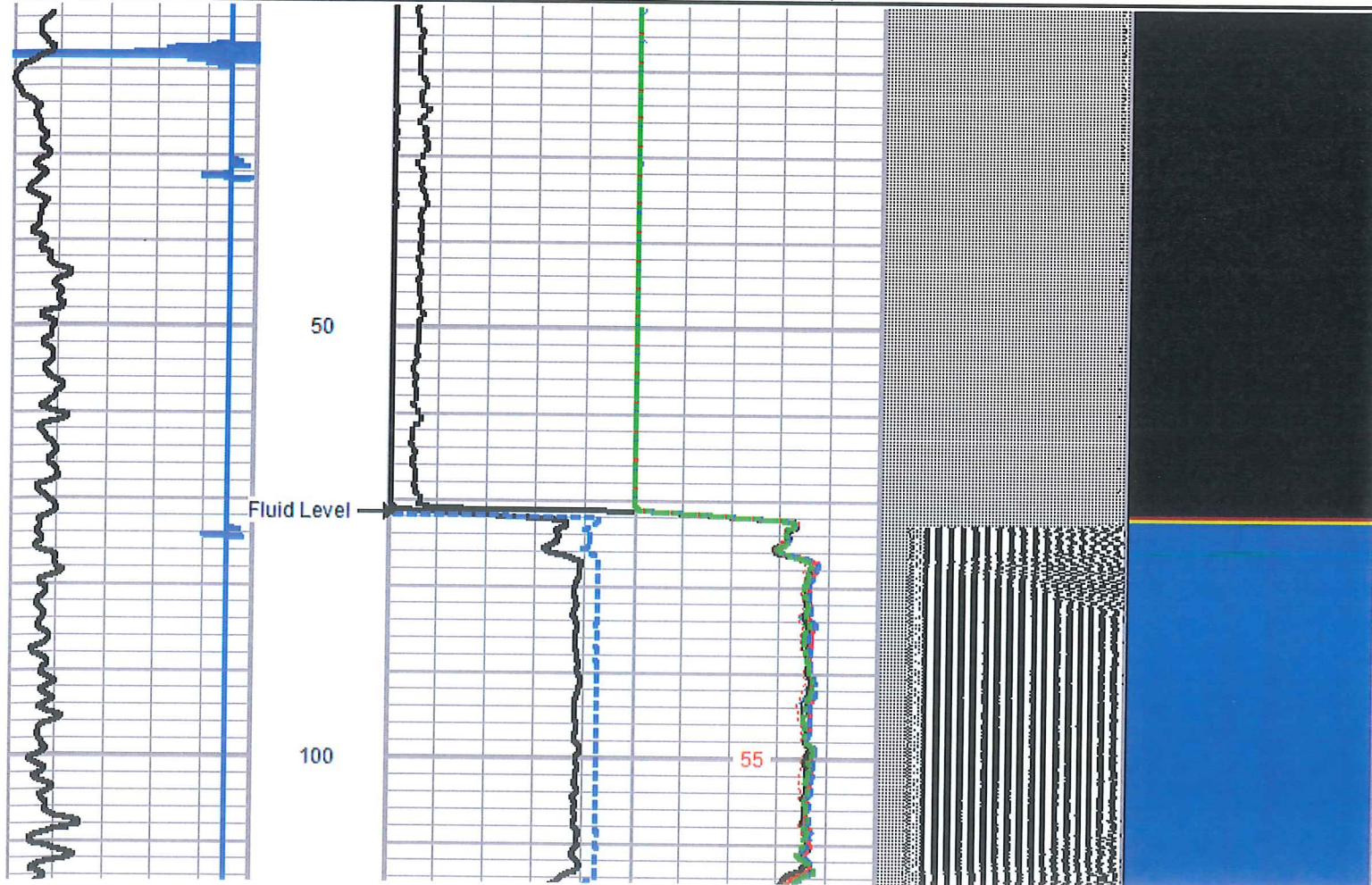
	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000			0.000
5'	0.000		0.000			0.000
SUM						
S1	0.000		0.000			0.000
S2	0.000		0.000			0.000
S3	0.000		0.000			0.000
S4	0.000		0.000			0.000
S5	0.000		0.000			0.000
S6	0.000		0.000			0.000
S7	0.000		0.000			0.000
S8	0.000		0.000			0.000

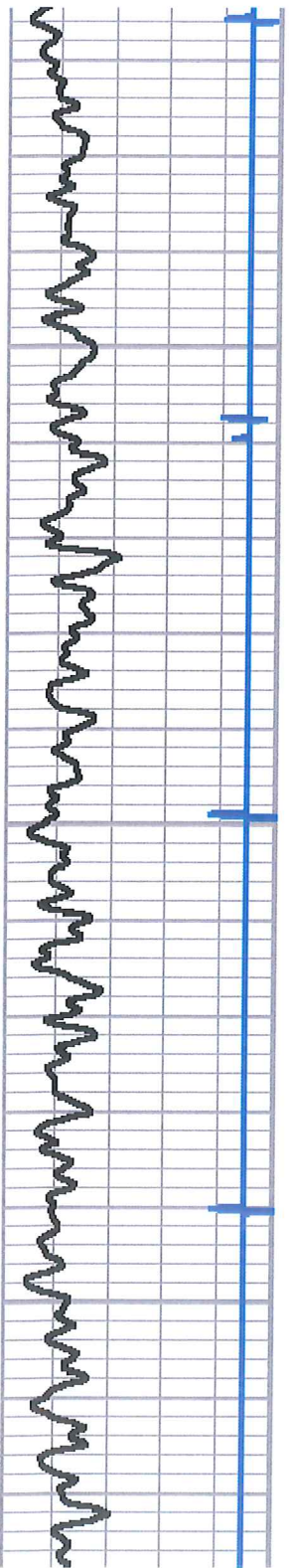


MAIN LOG

Database File: washington 2h.db
 Dataset Pathname: pass5
 Presentation Format: scl02
 Dataset Creation: Sat Sep 27 08:40:17 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

-9	CCL	1	0	AMP (mV)	100	0	AMPS1	150	200	VDL	1200	1	Cement Map	8
0	GR (GAPI)	200	0	AMPx10 (mV)	10	0	AMPS2	150				3		95
200	GR (GAPI)	400	350	TT (usec)	250	0	AMPS3	150						
						0	AMPS4	150						
						0	AMPS5	150						
						0	AMPS6	150						
						0	AMPS7	150						
						0	AMPS8	150						
							TEMP							
							(degF)							

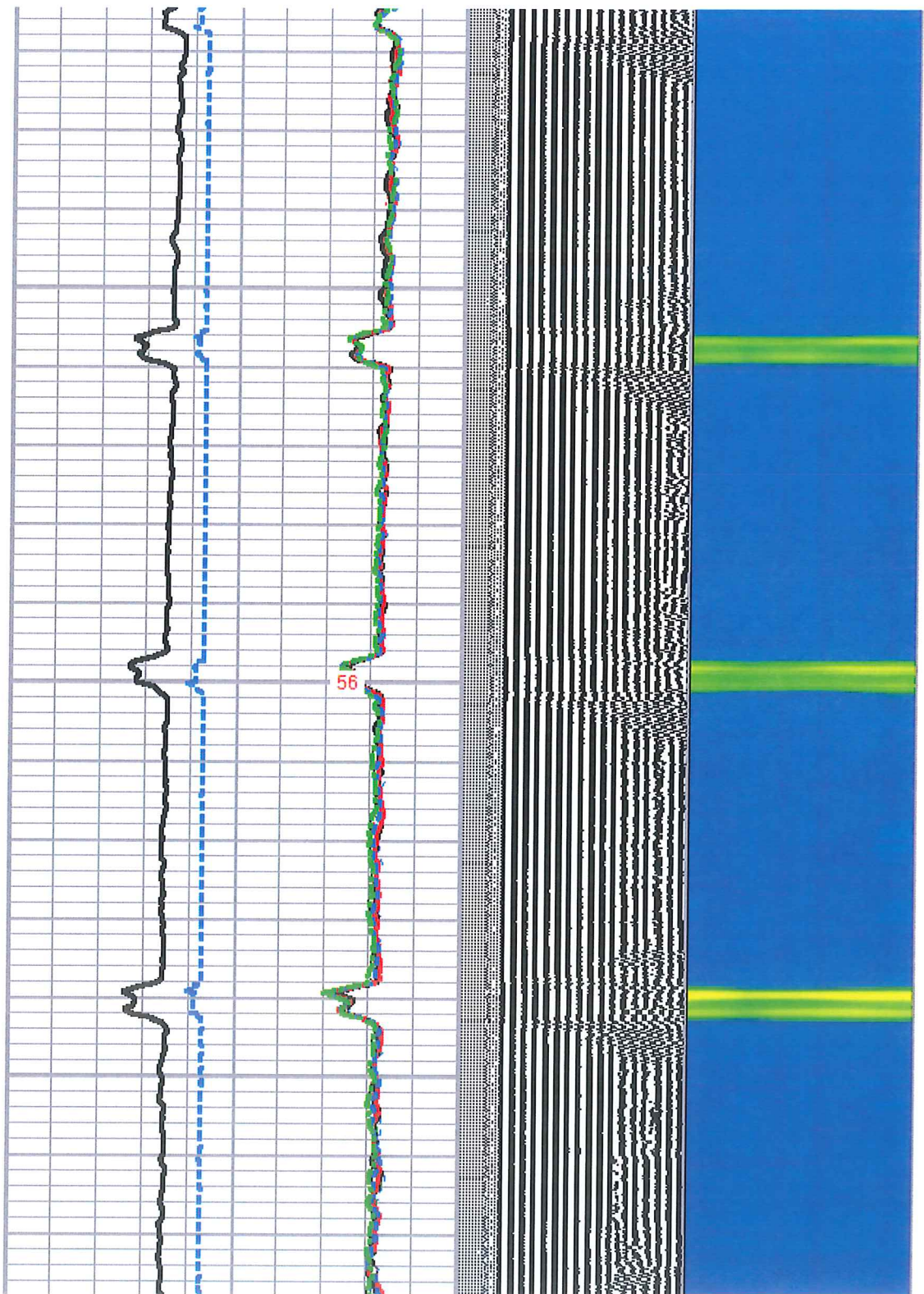




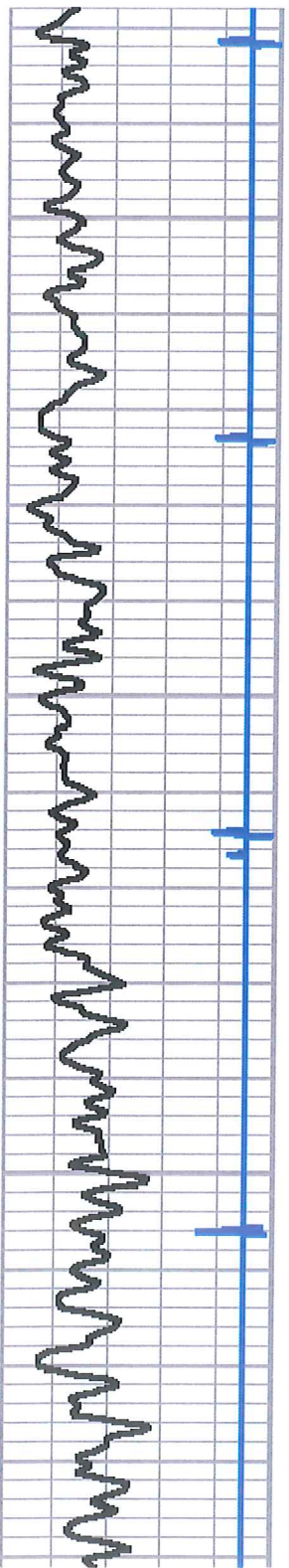
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200

250



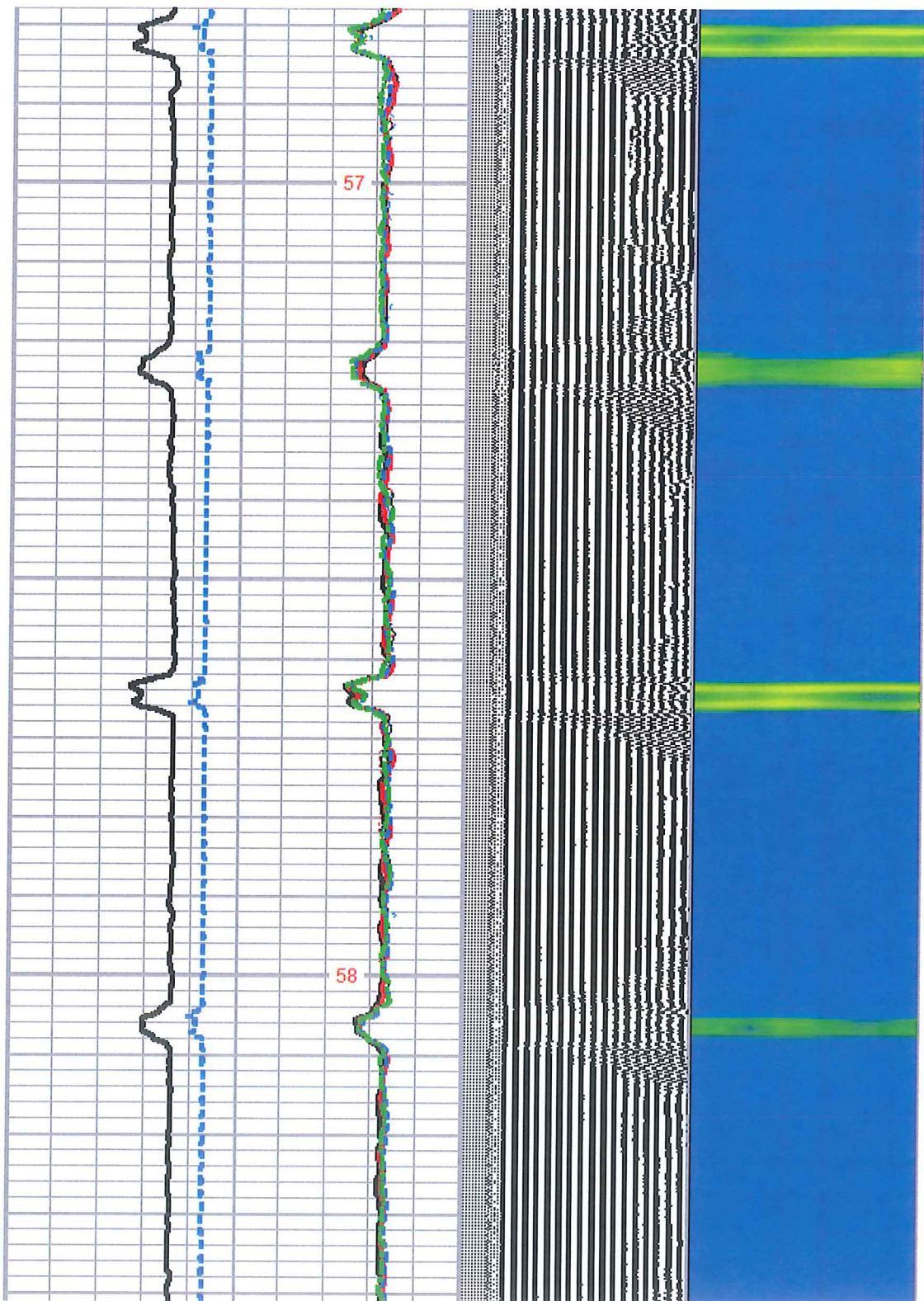
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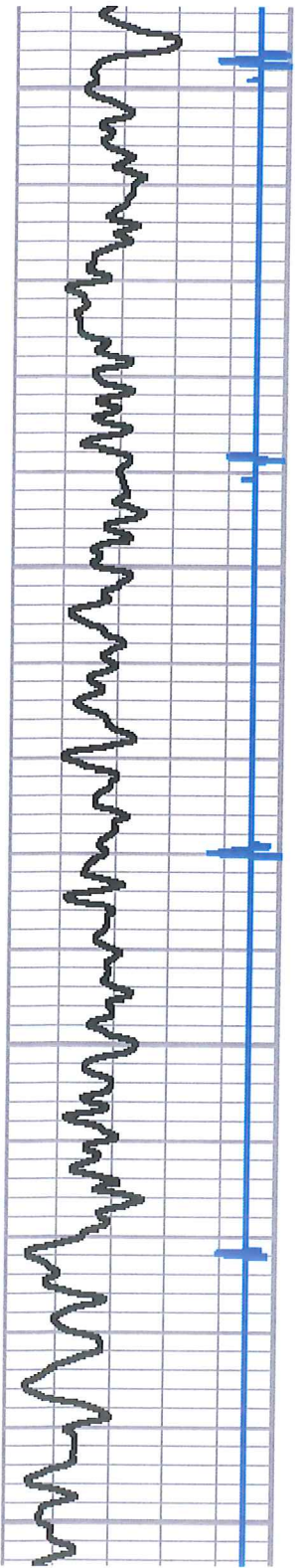


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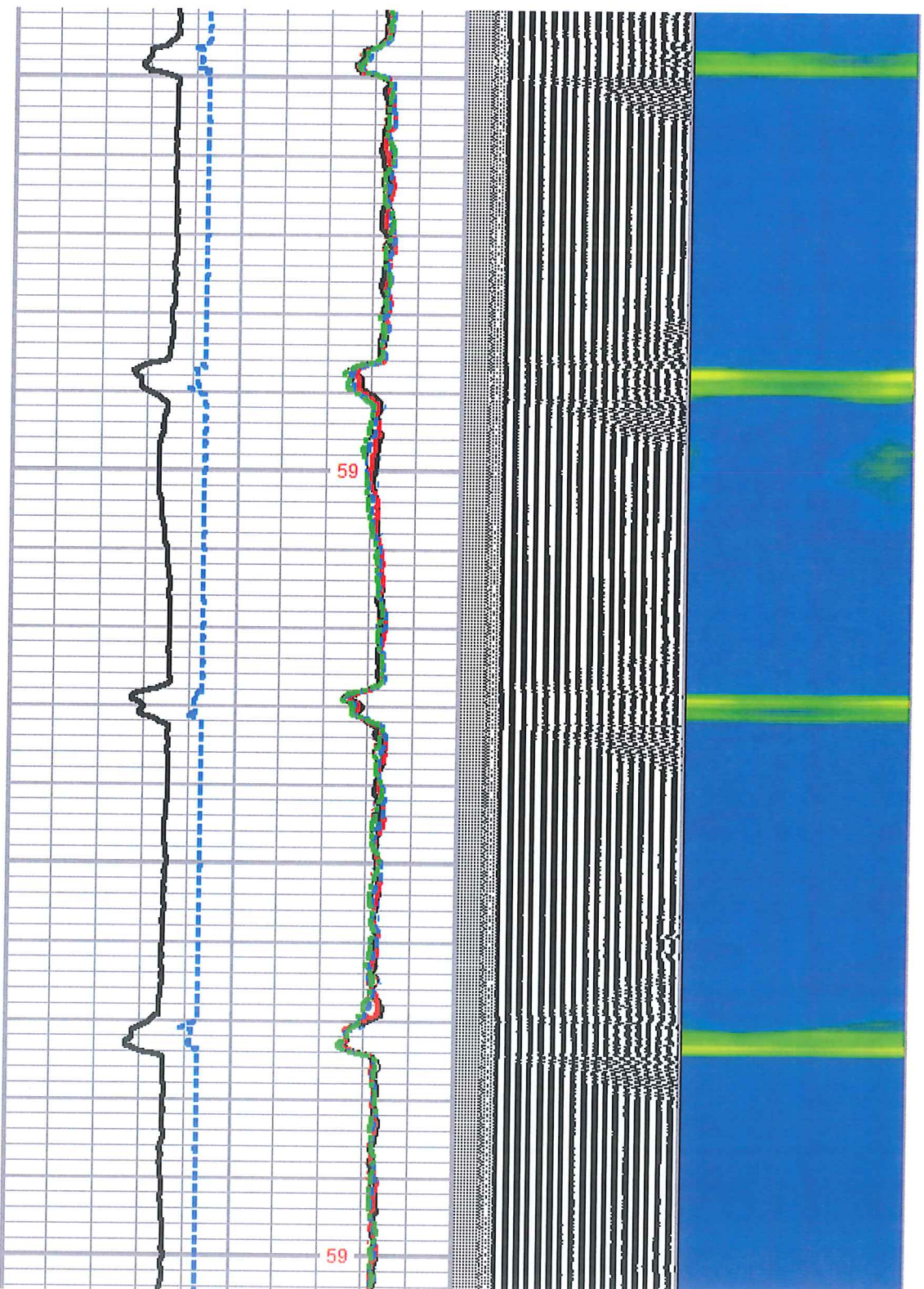
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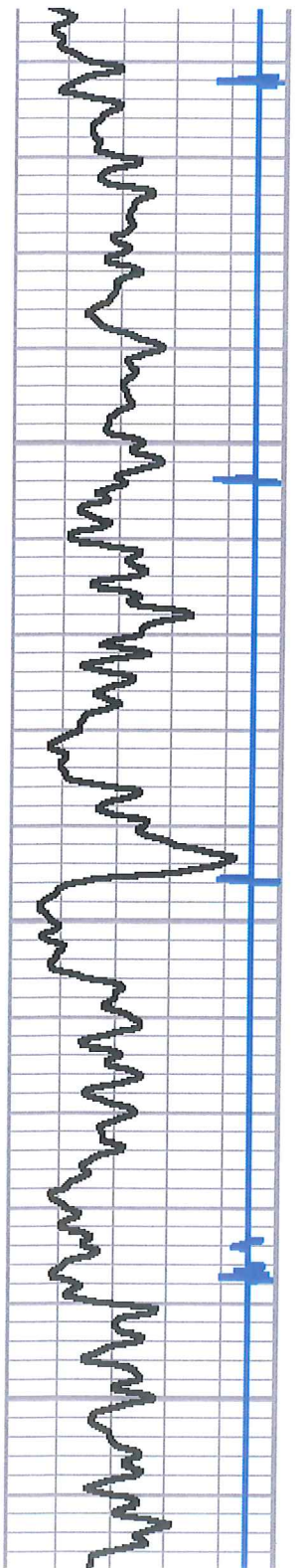
400





450
500
550
600

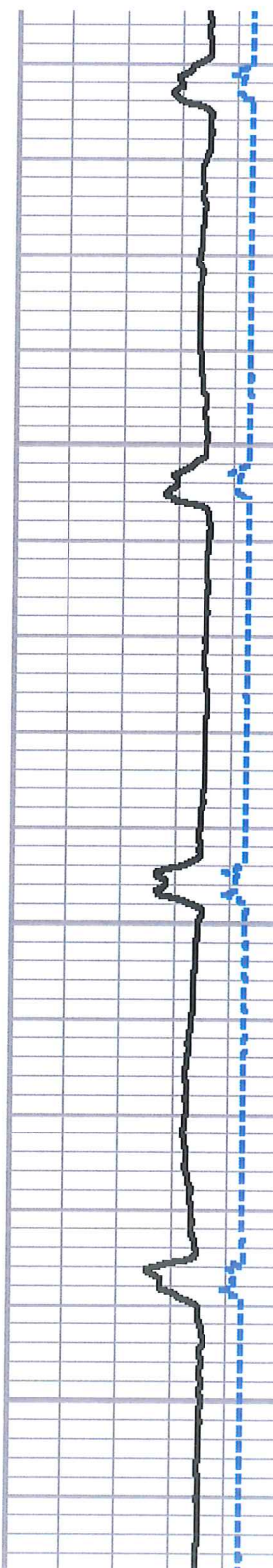




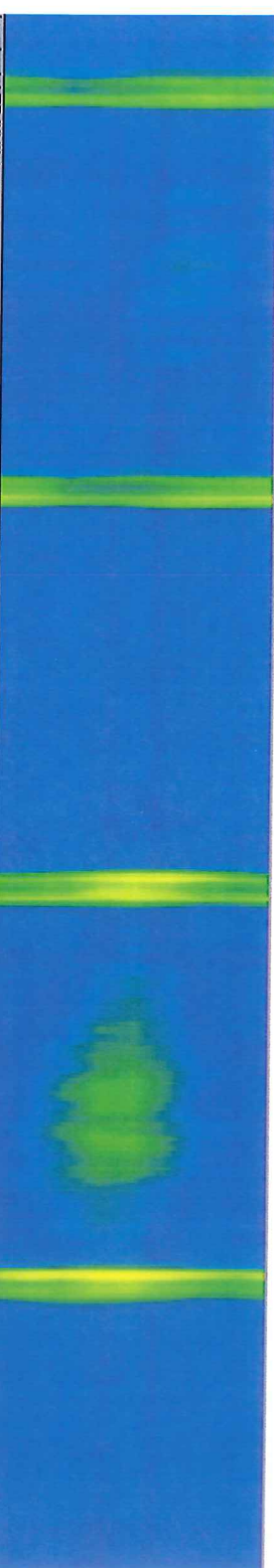
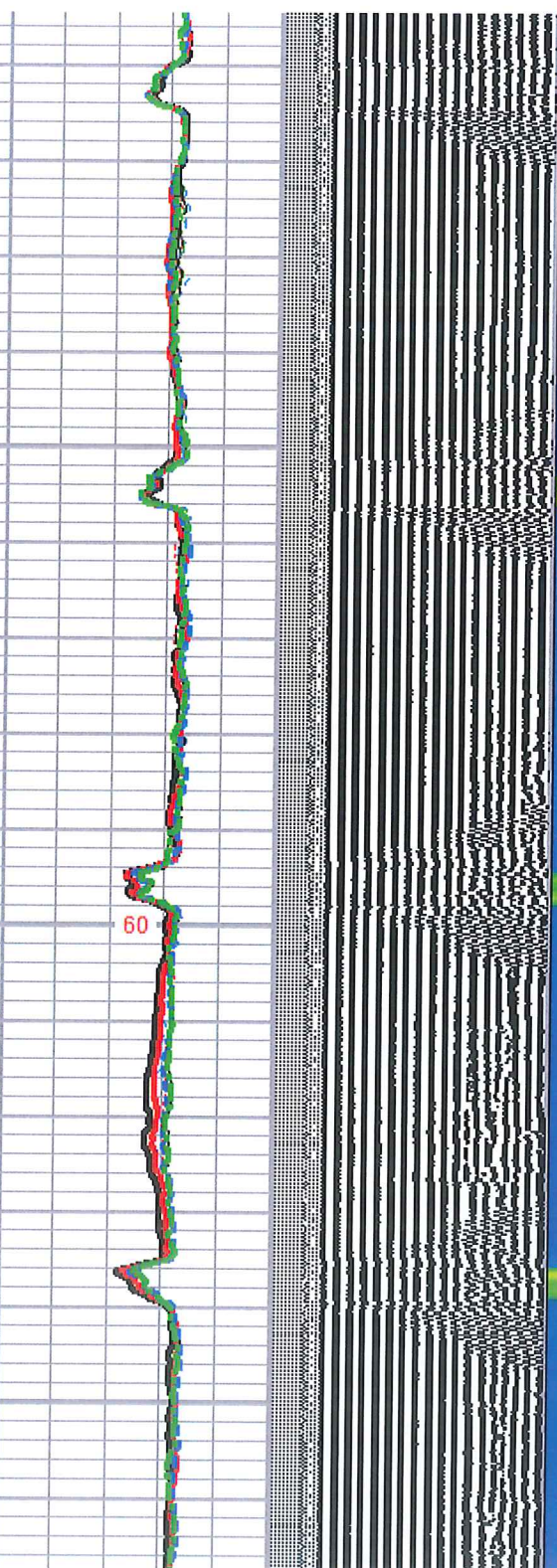
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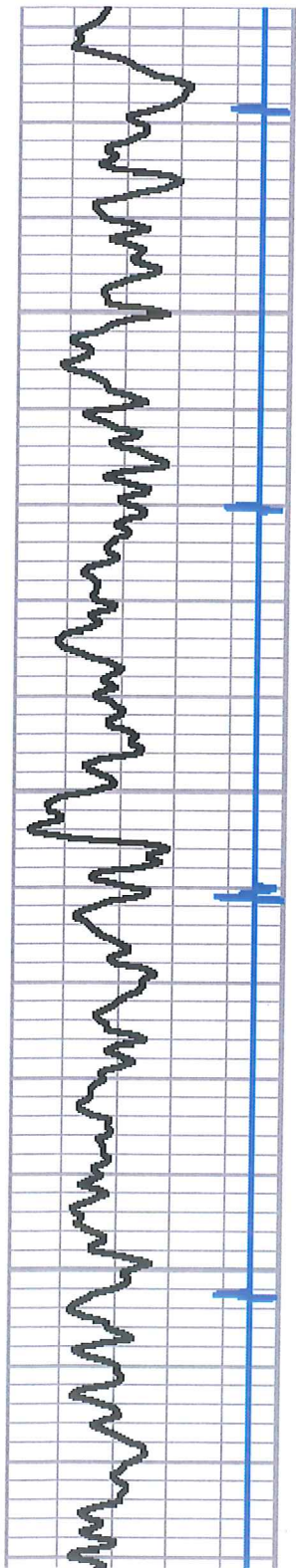
700

750



60

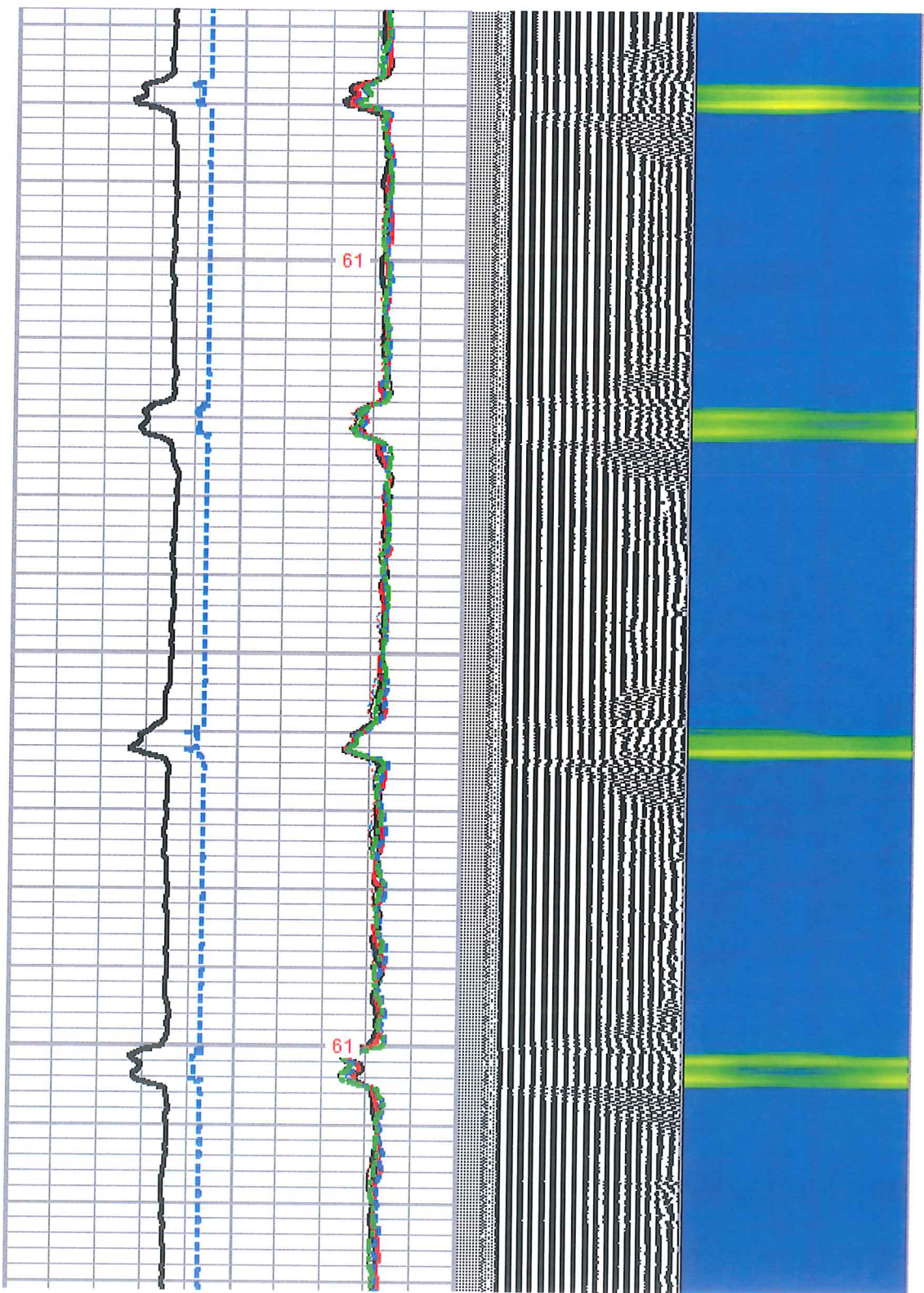




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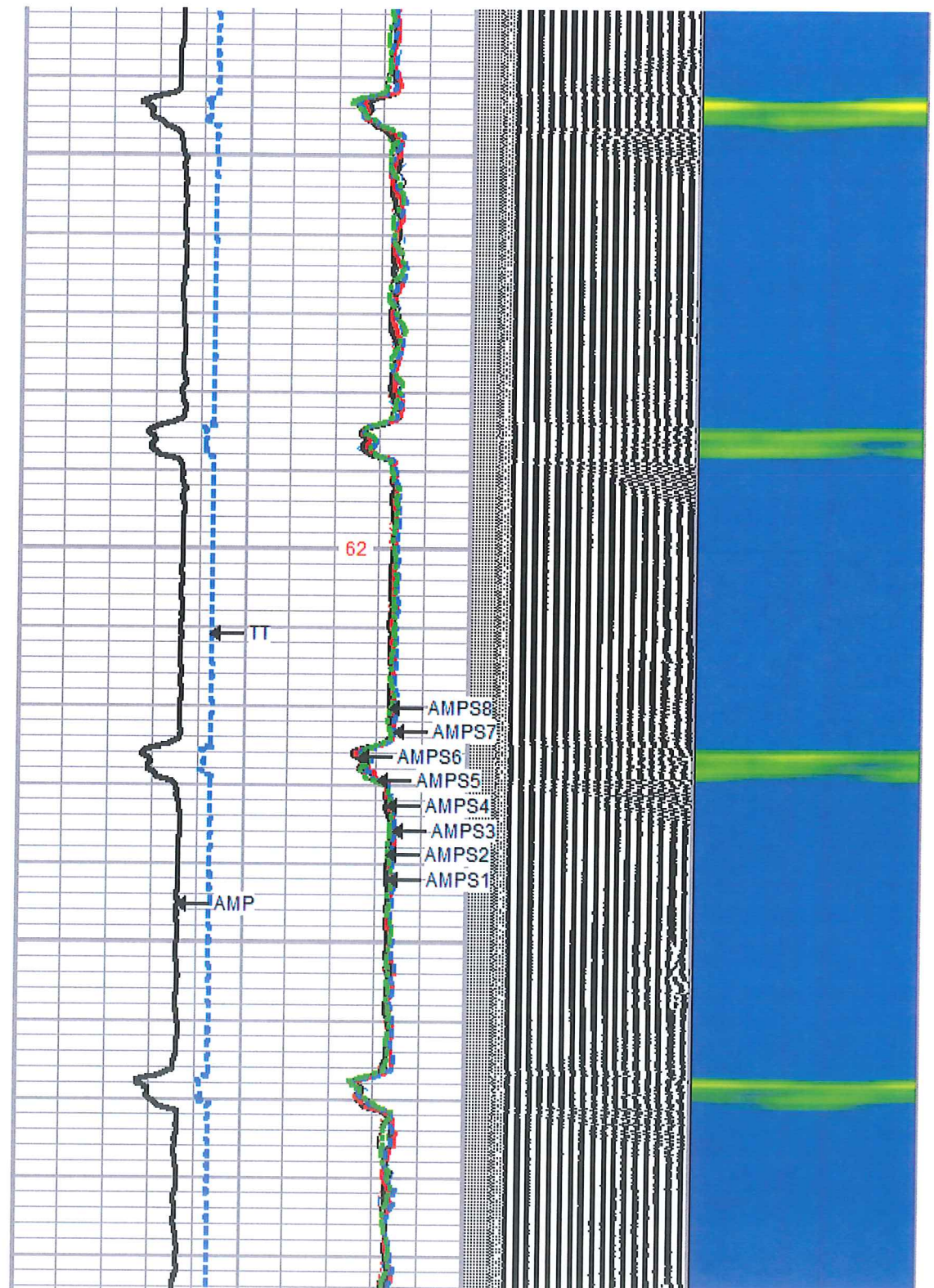
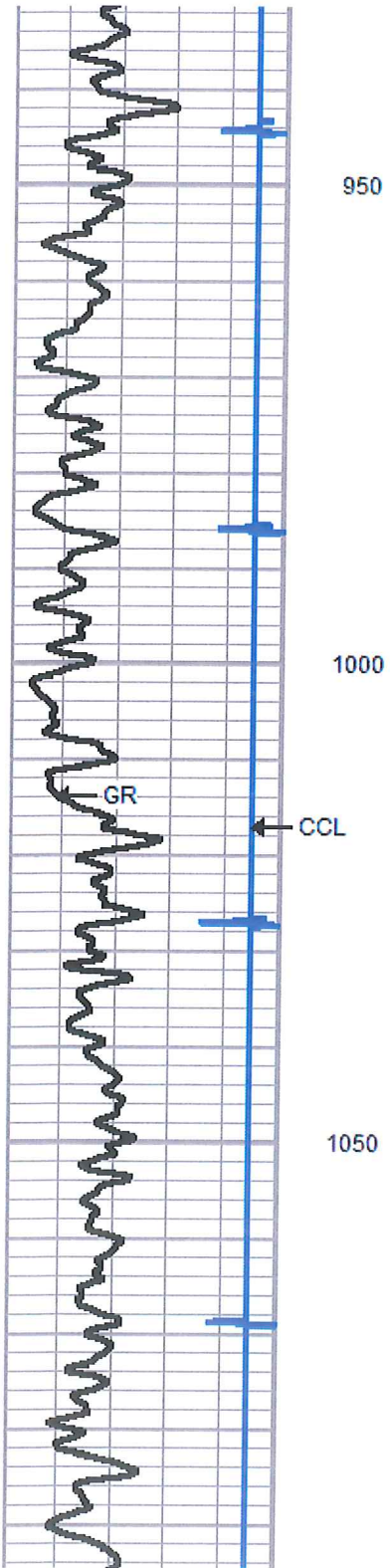
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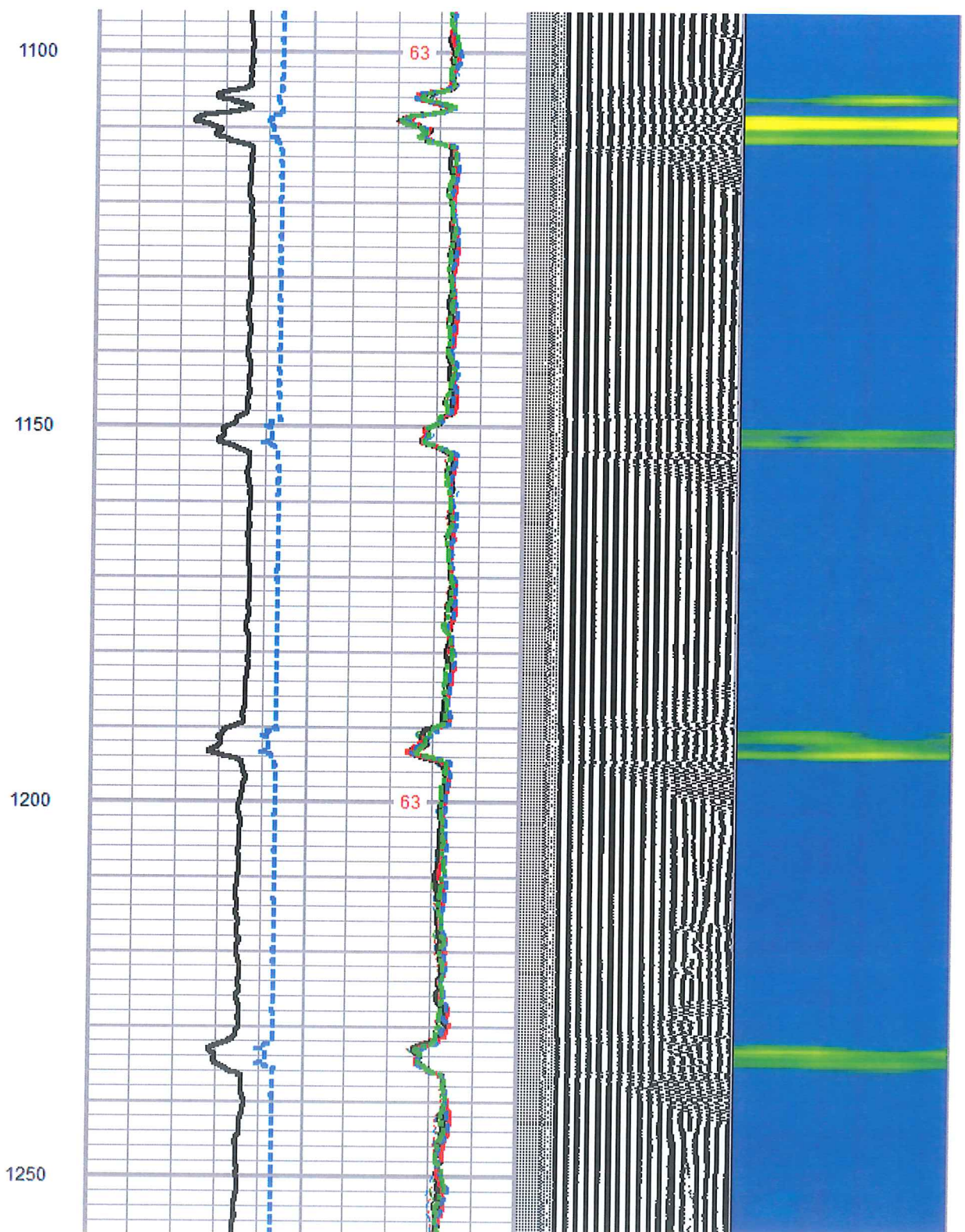
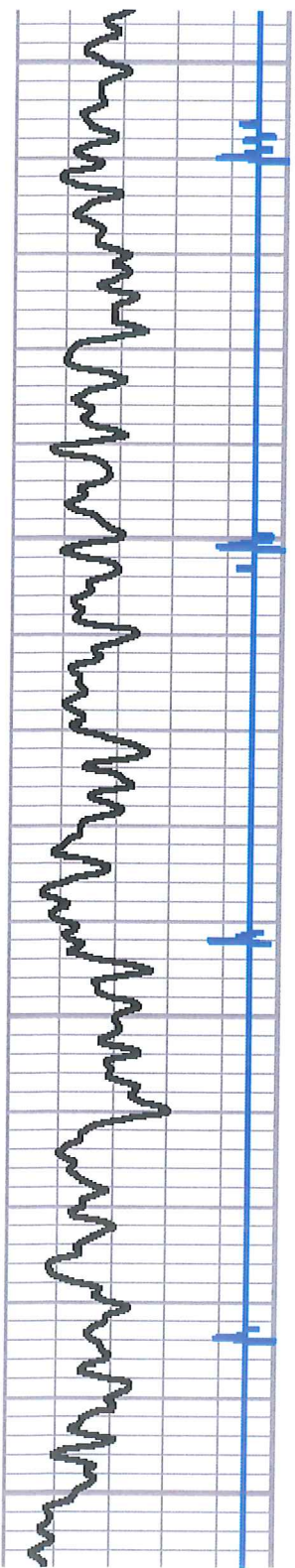
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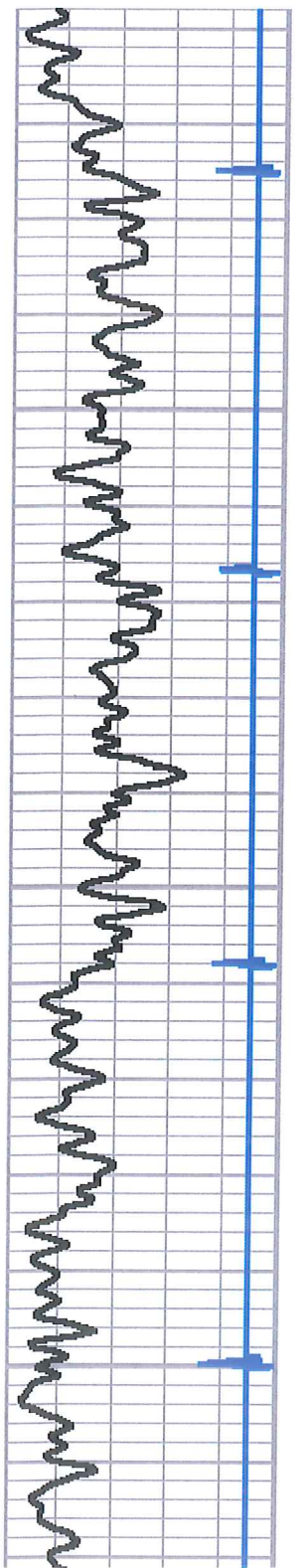


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61



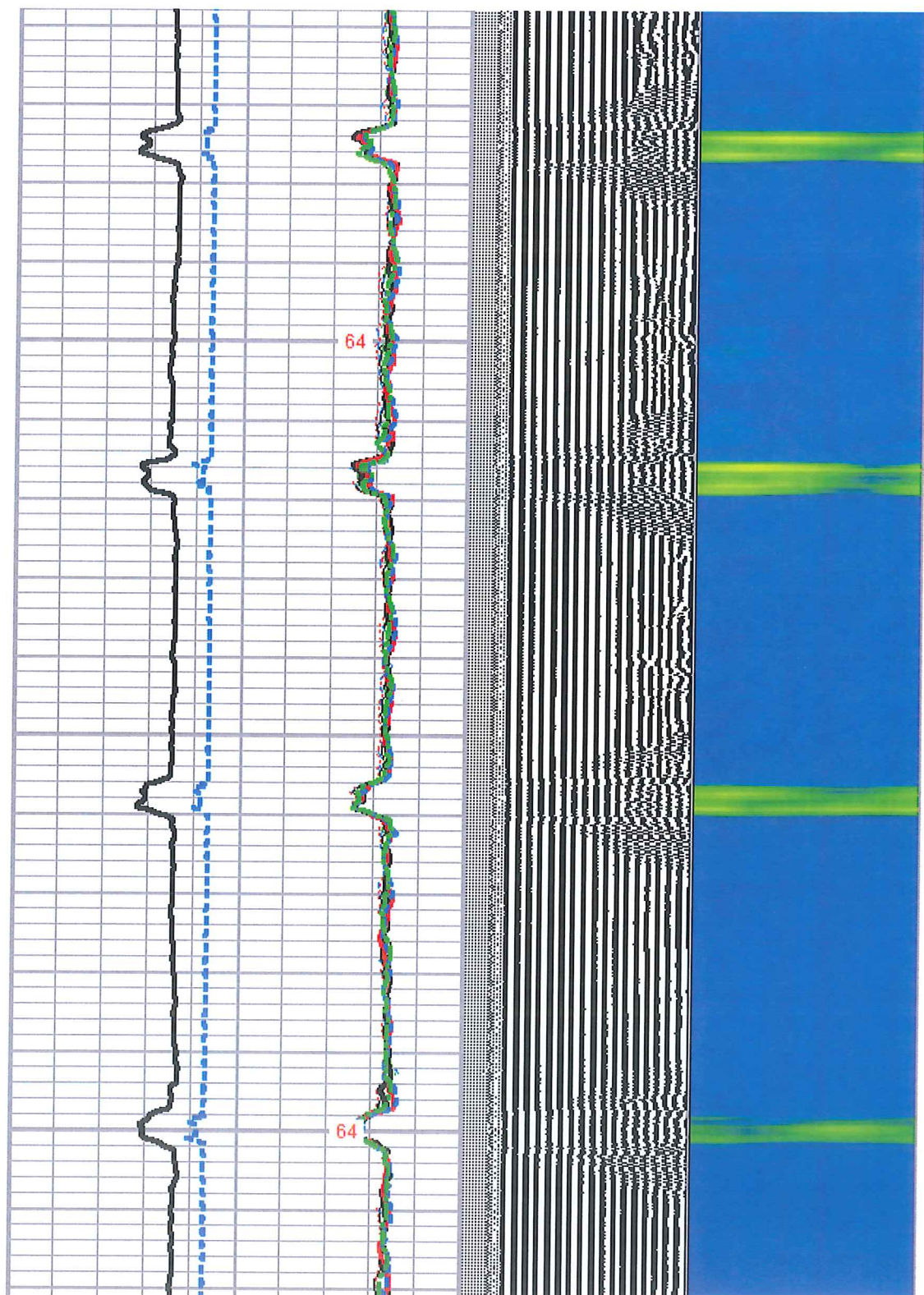




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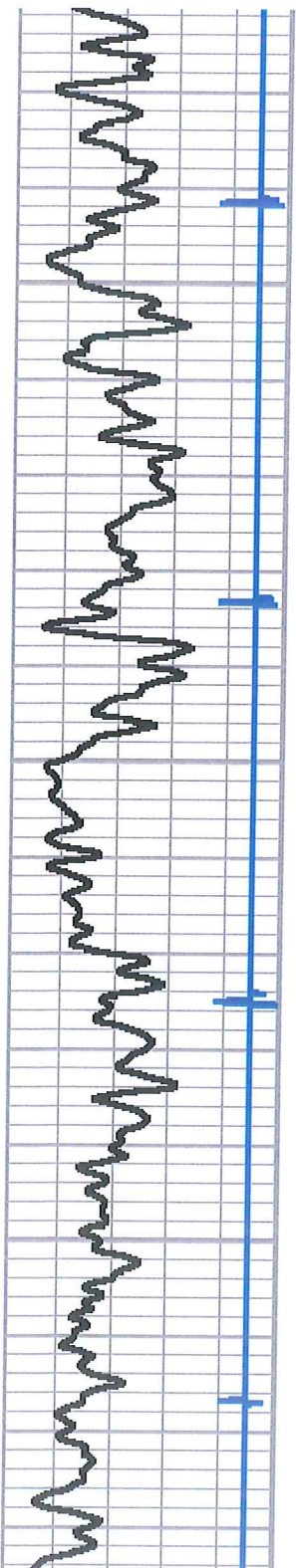
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1400



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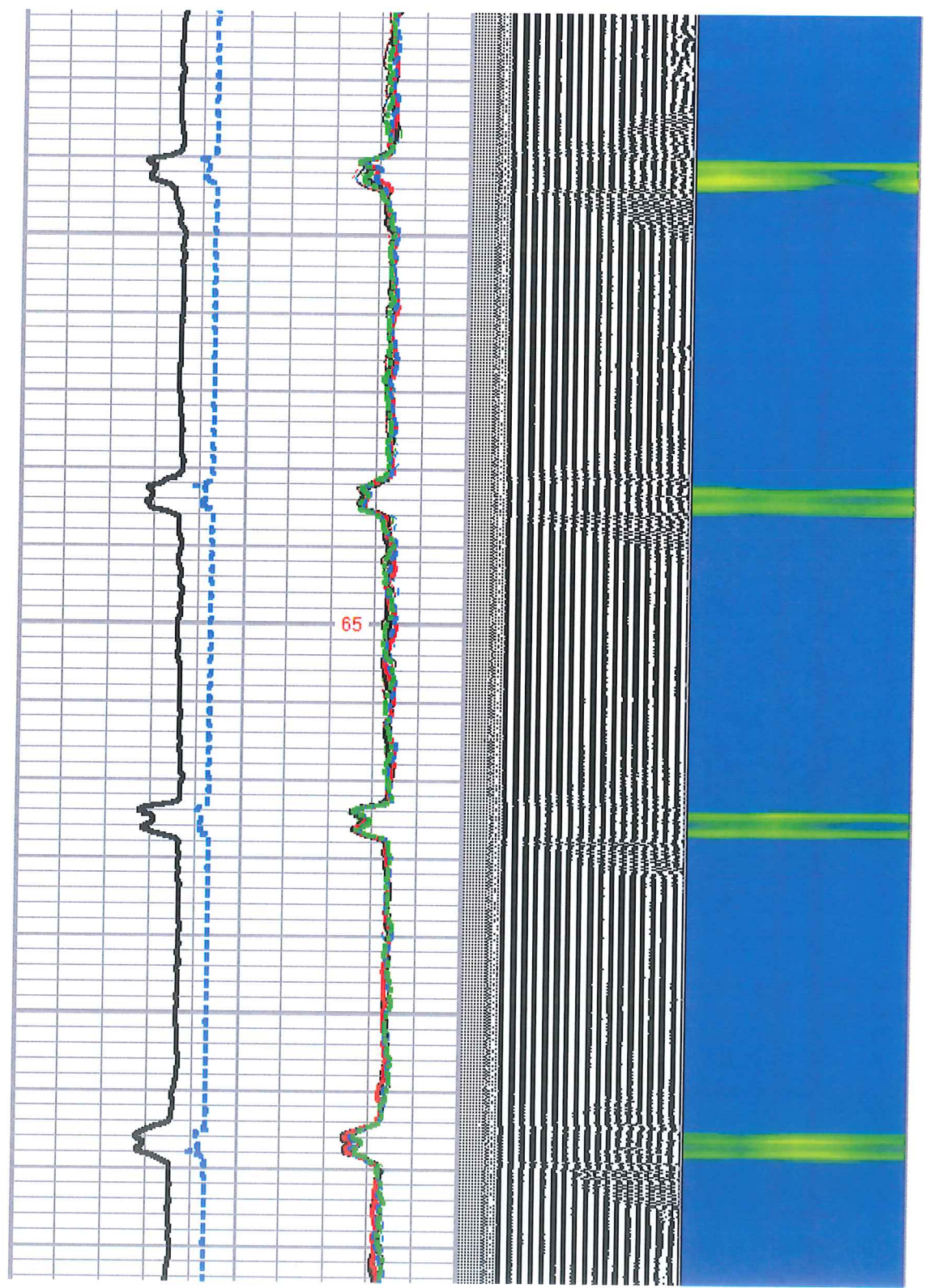
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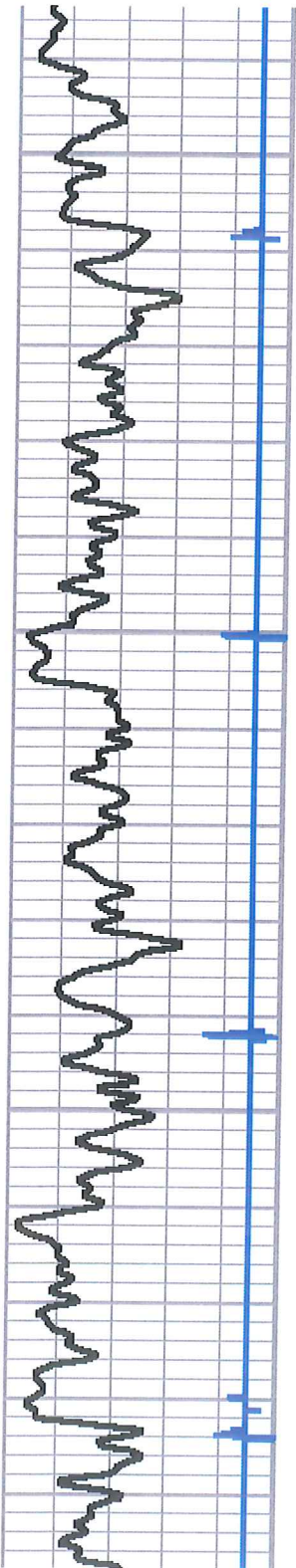


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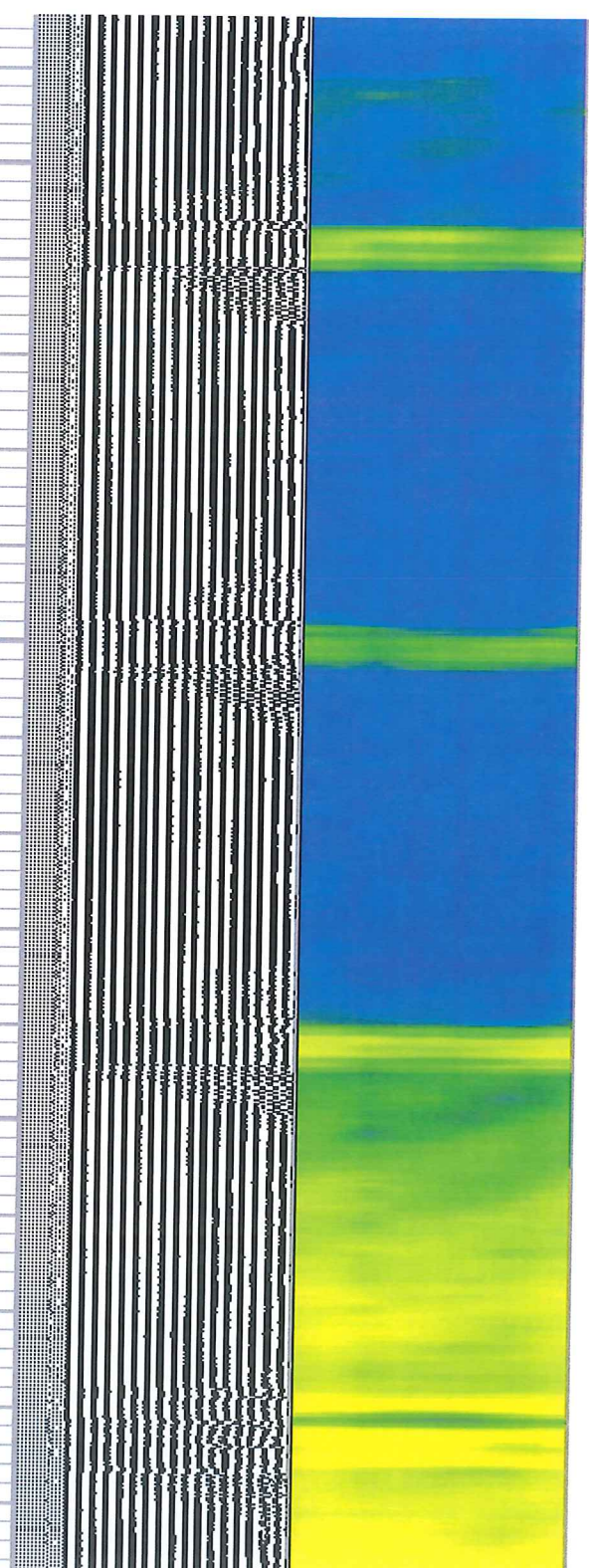
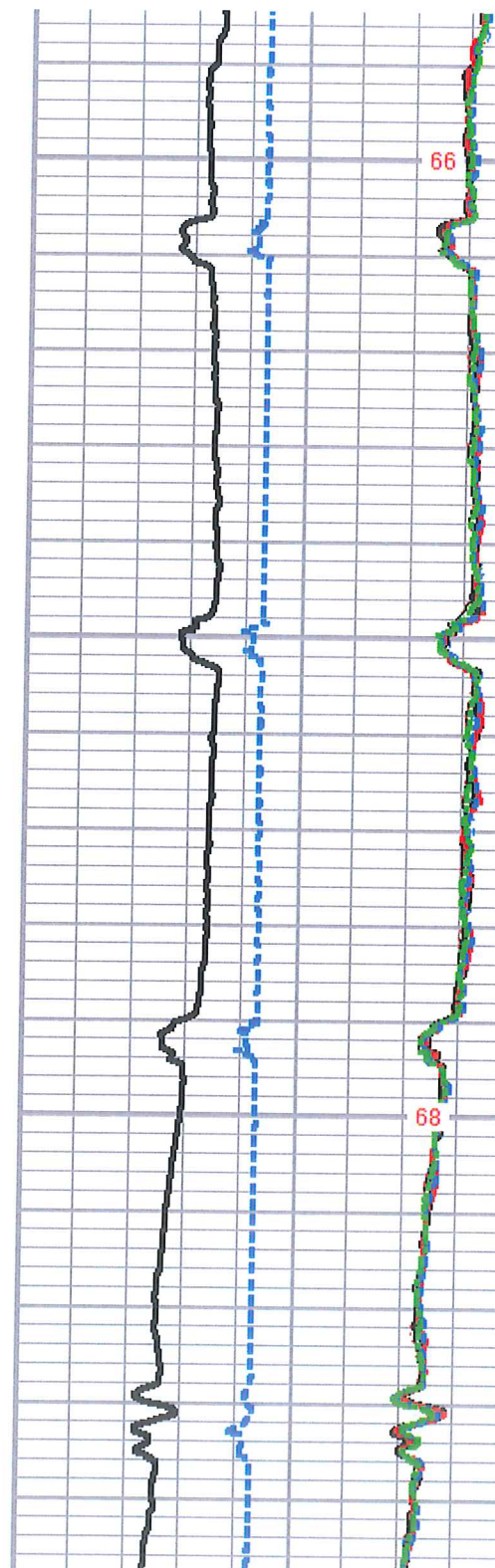
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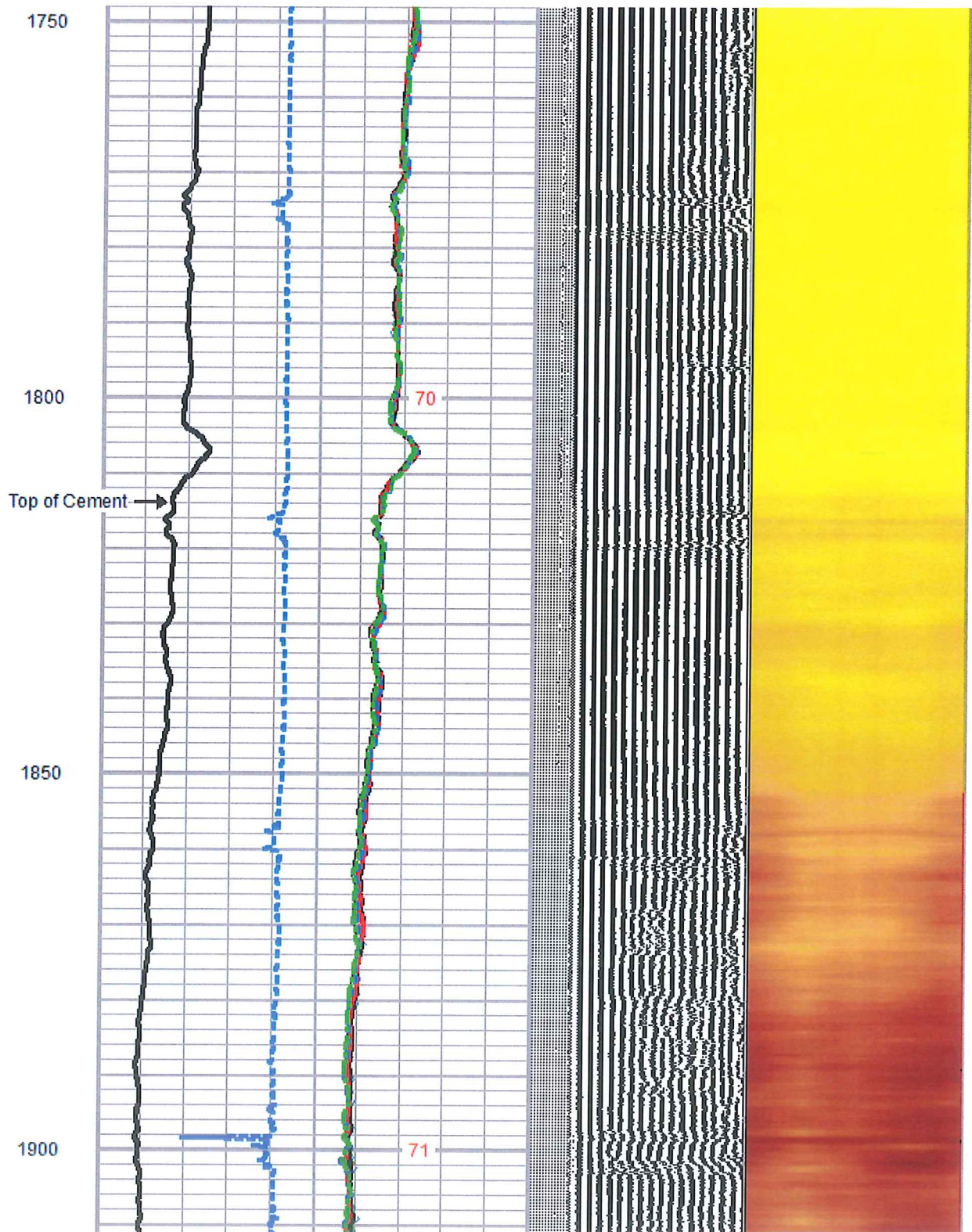
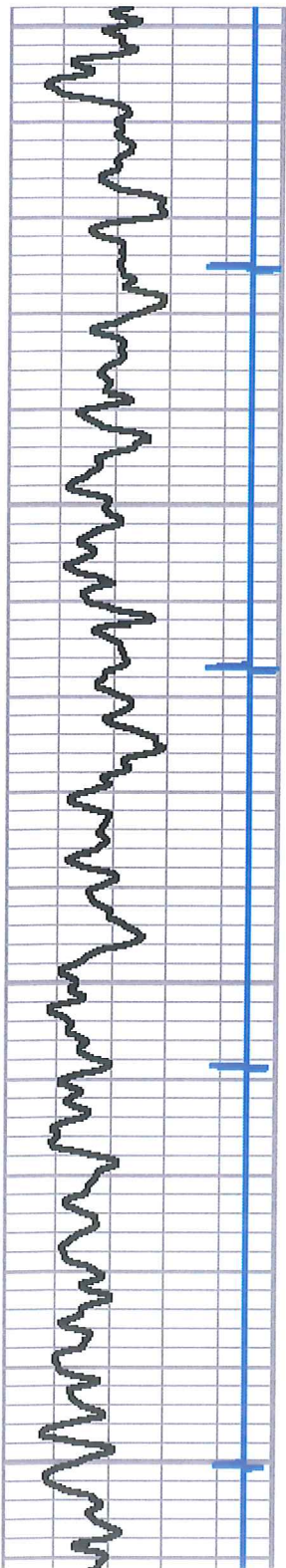
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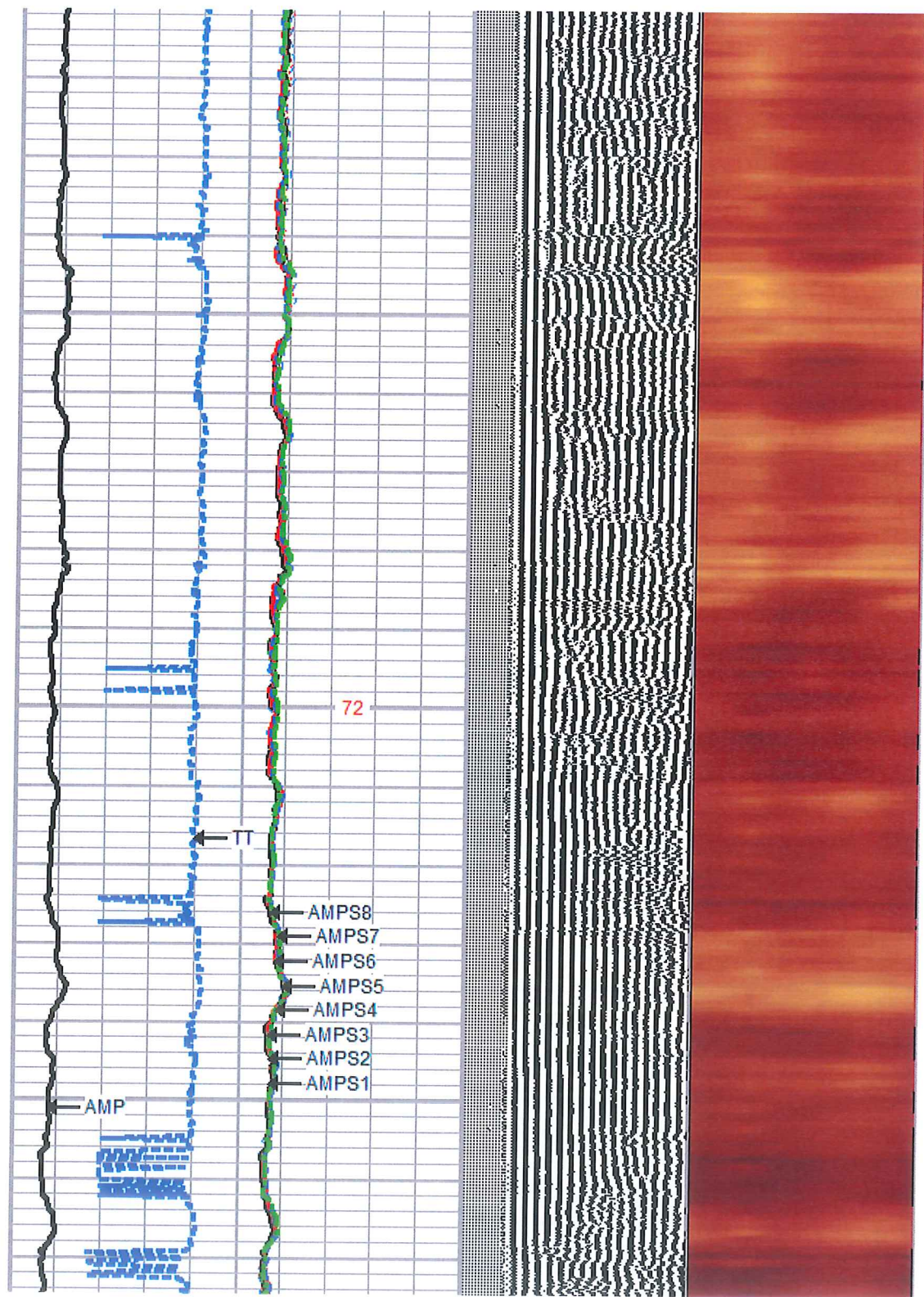
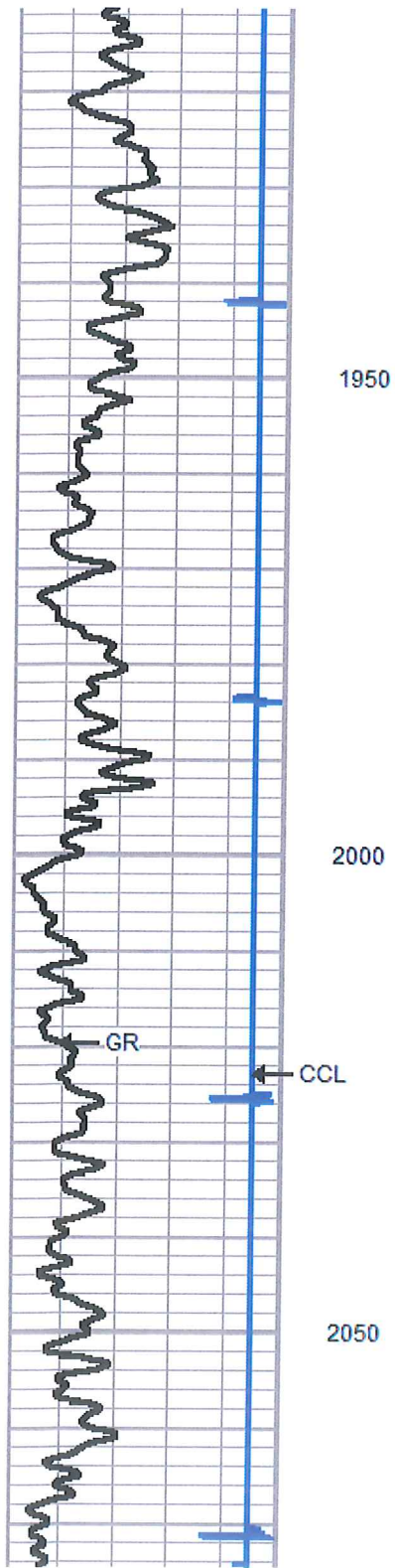


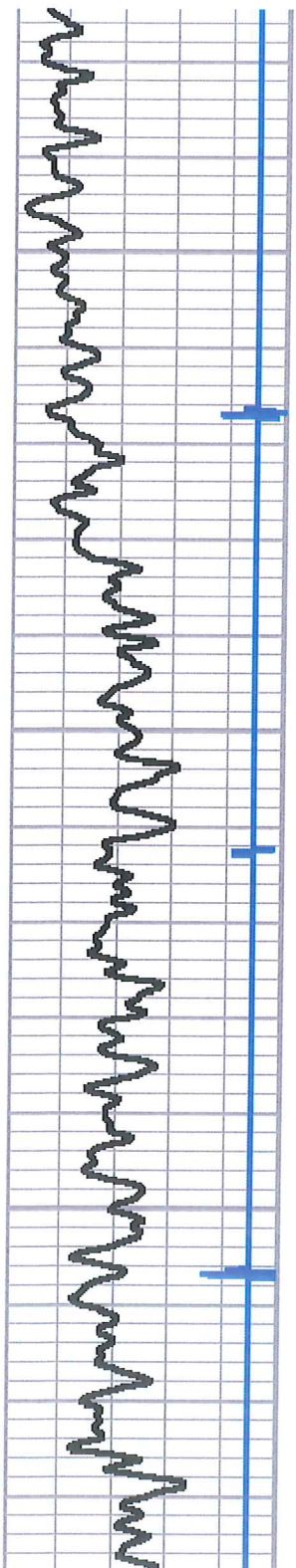


1600
1650
1700





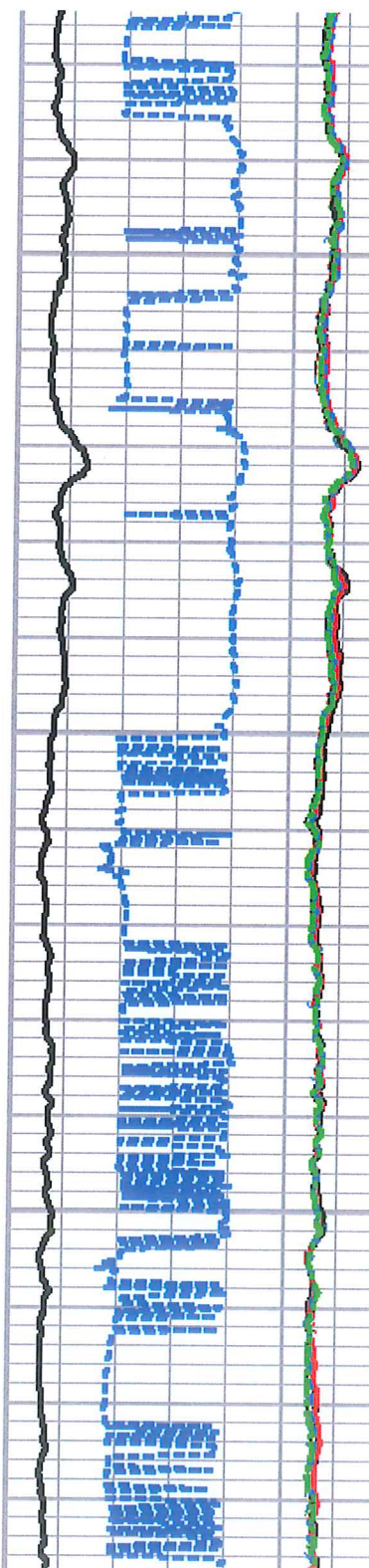




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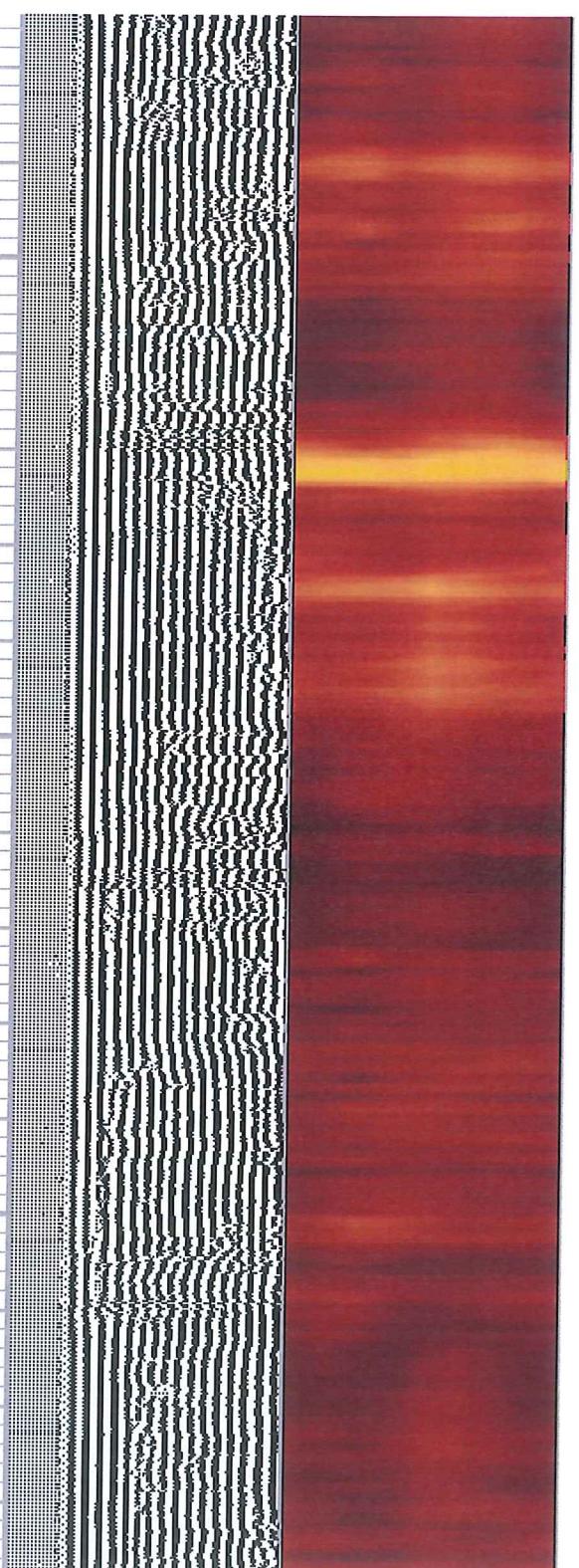
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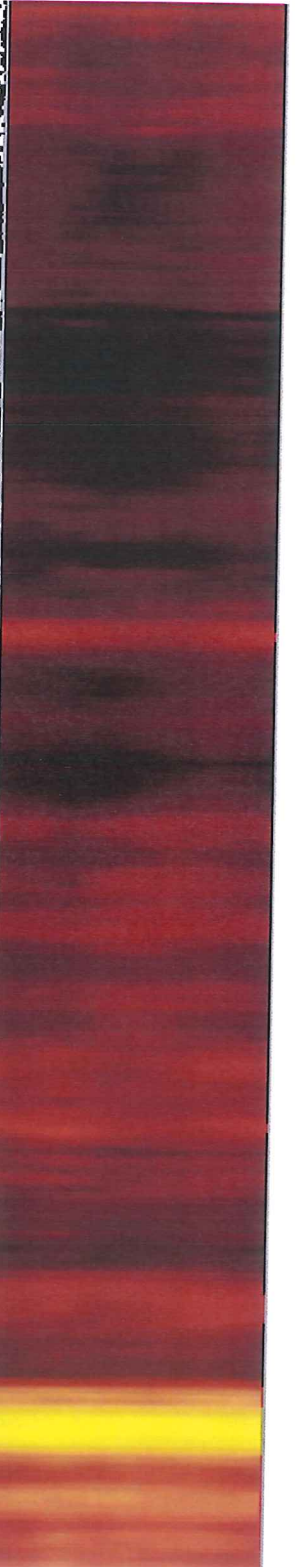
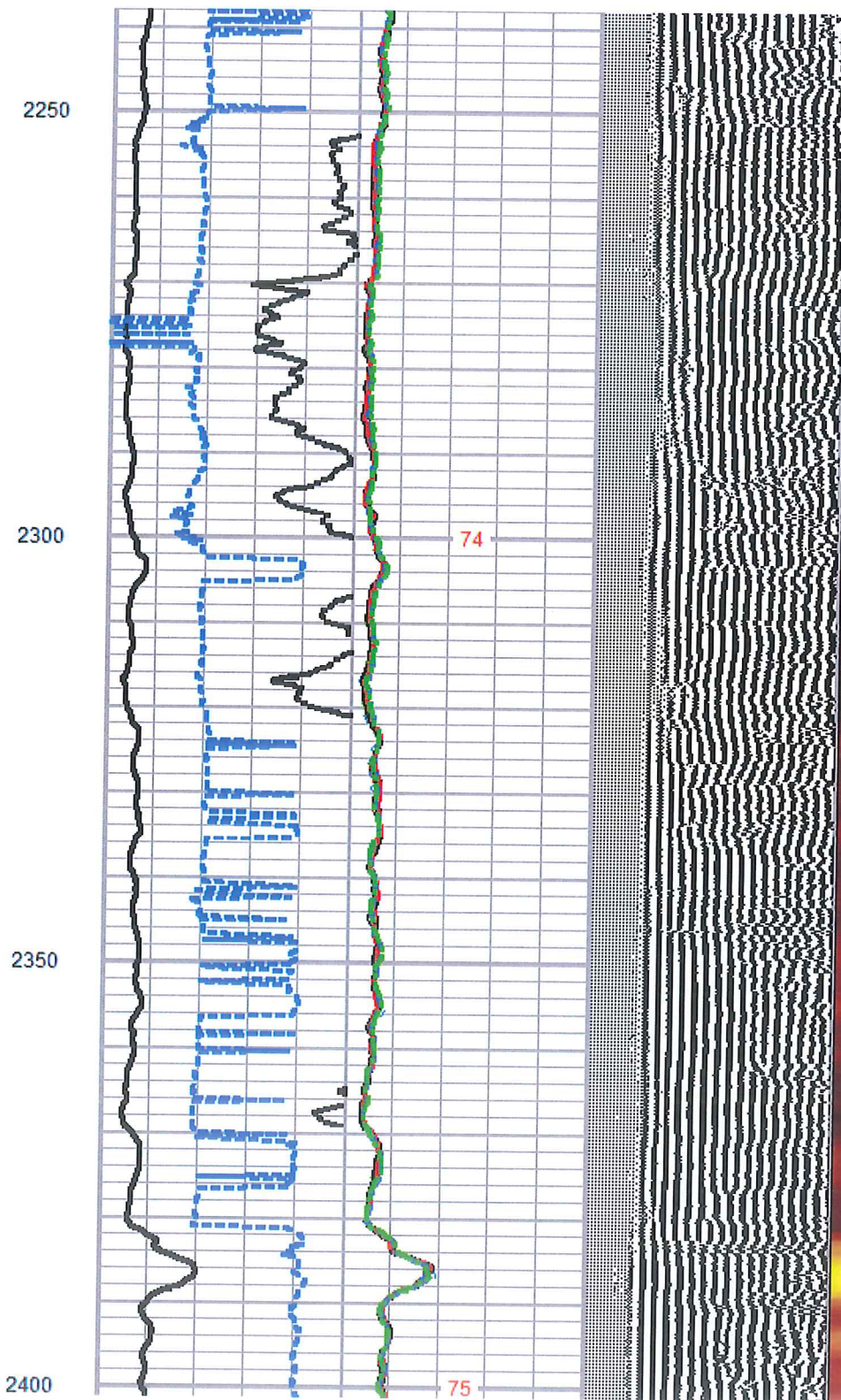
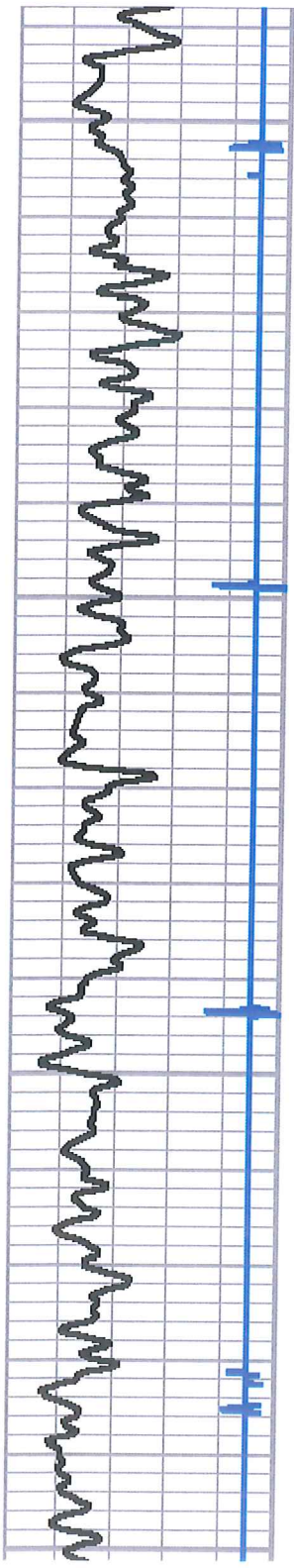
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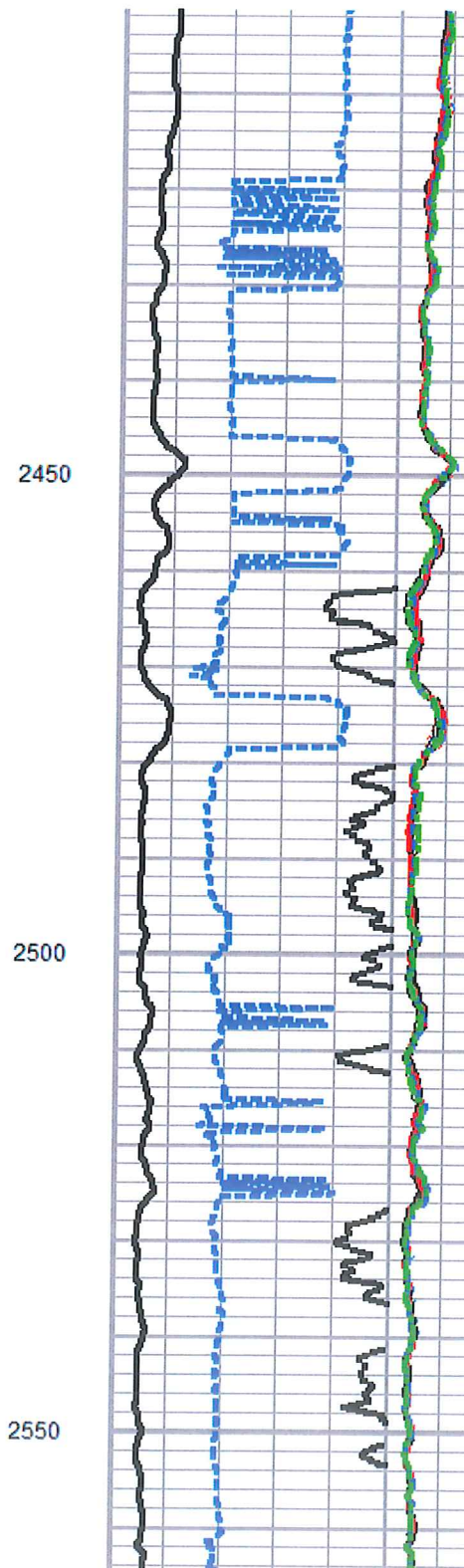
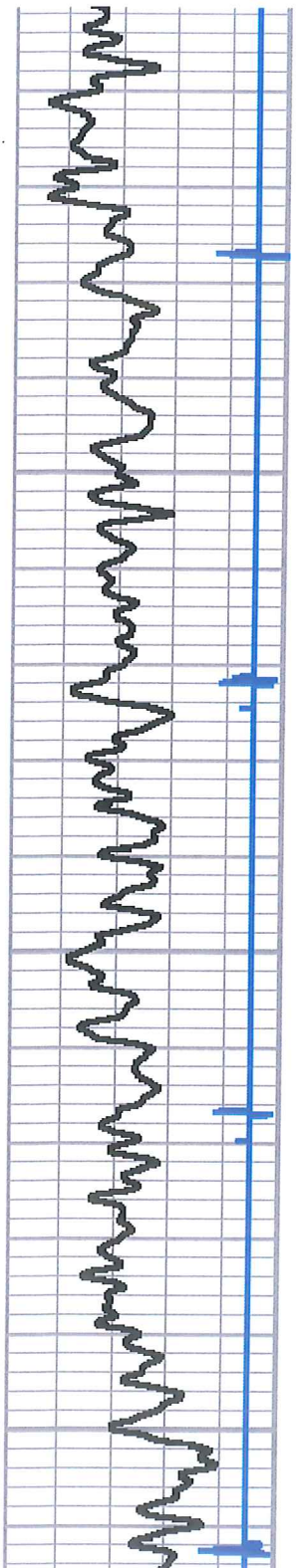


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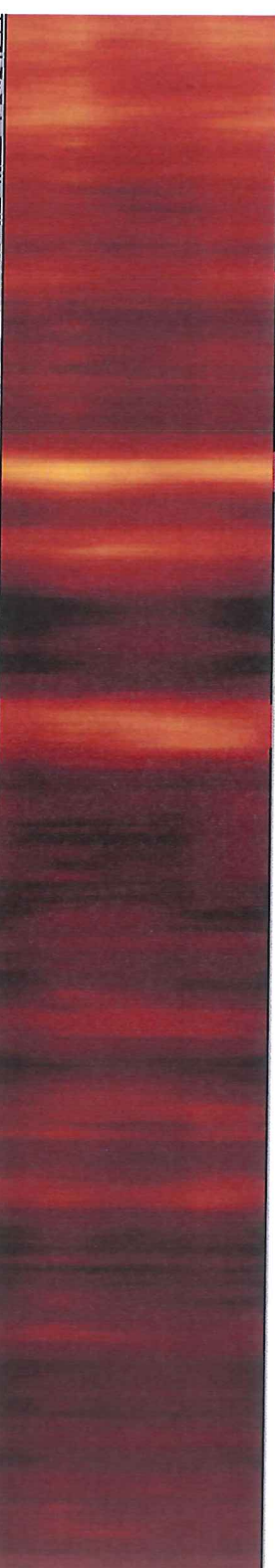
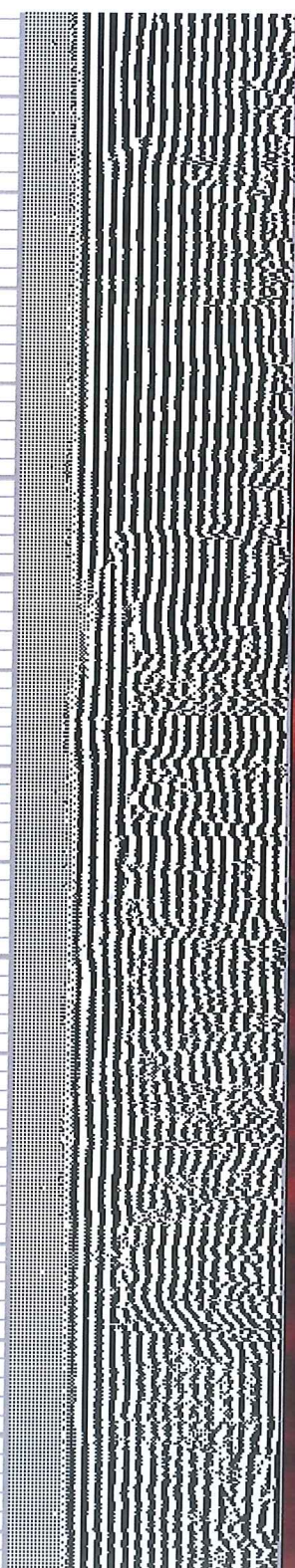
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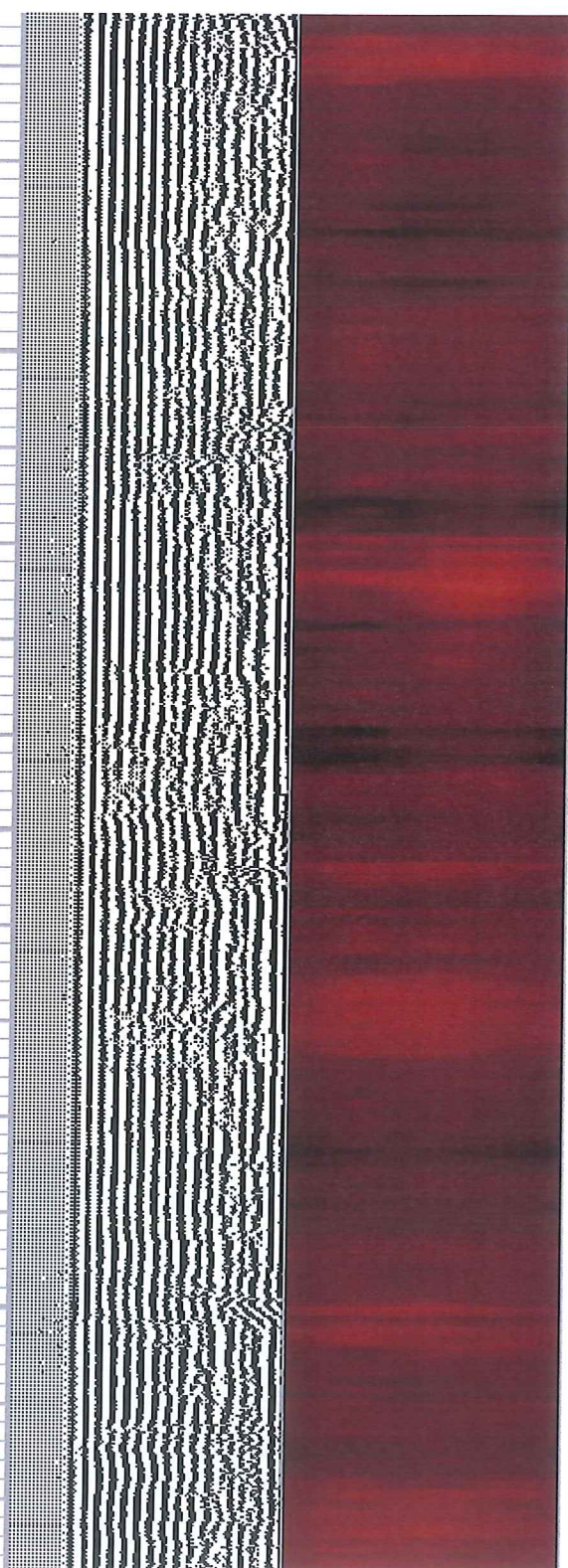
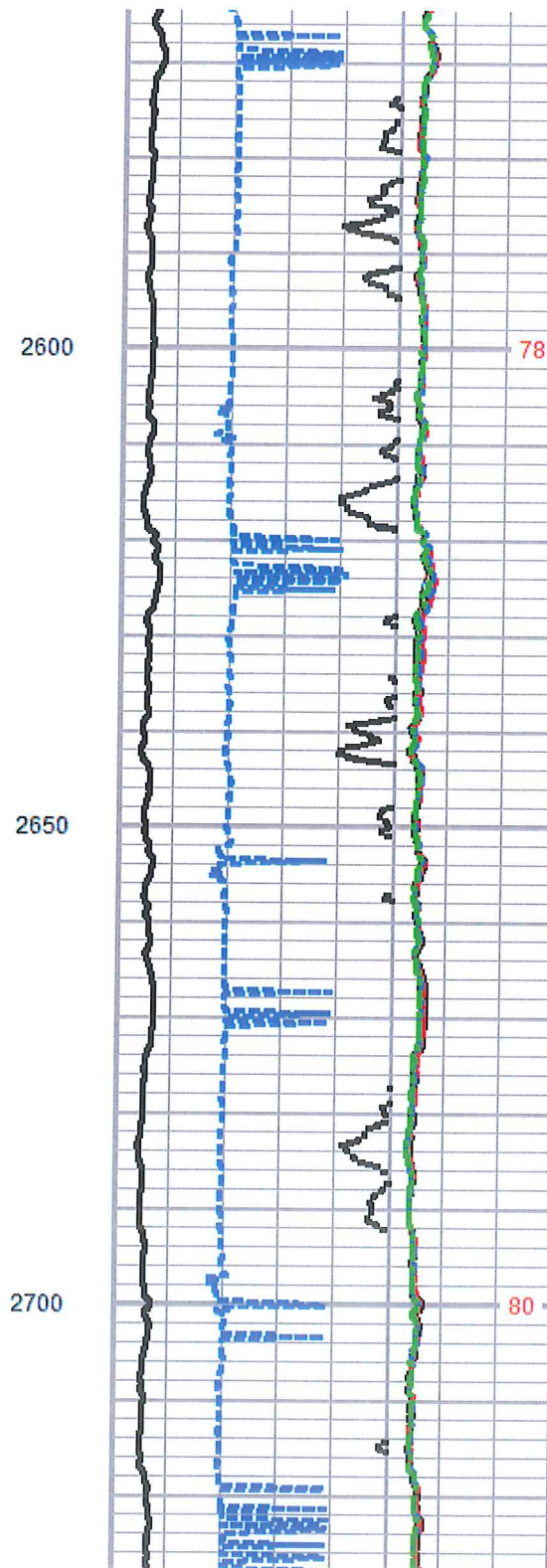
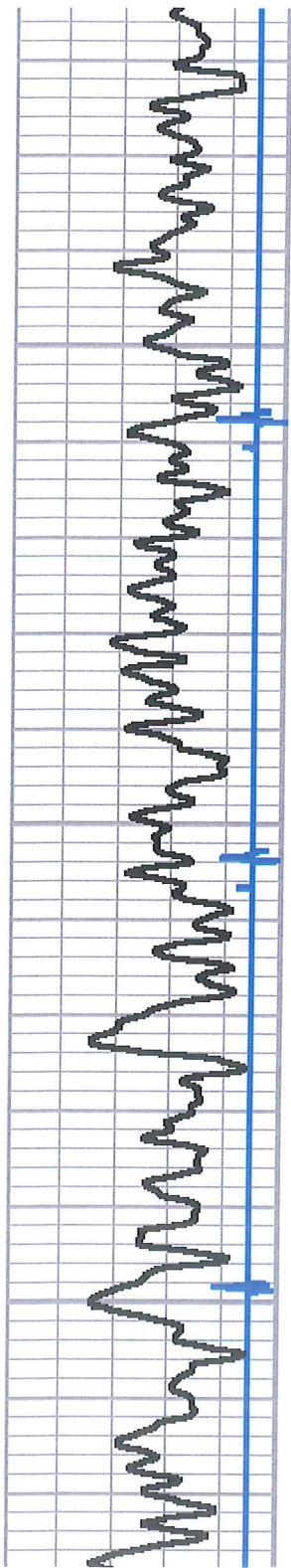


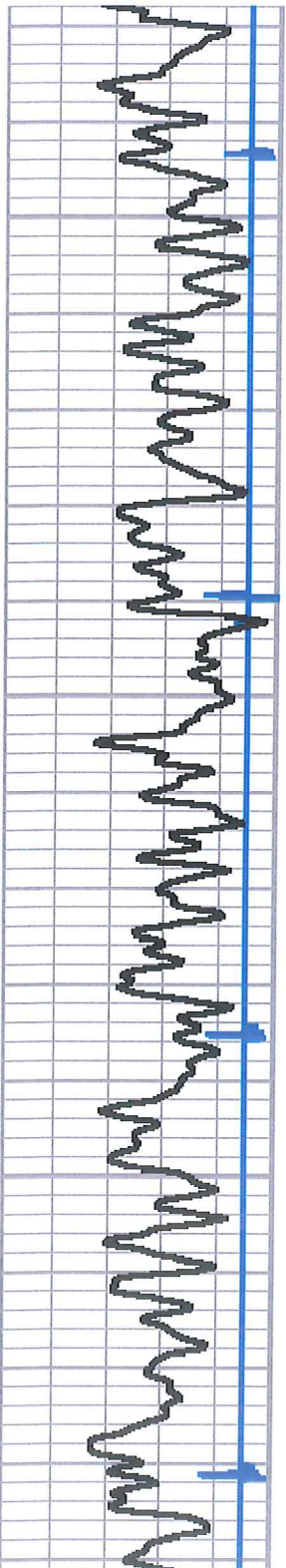




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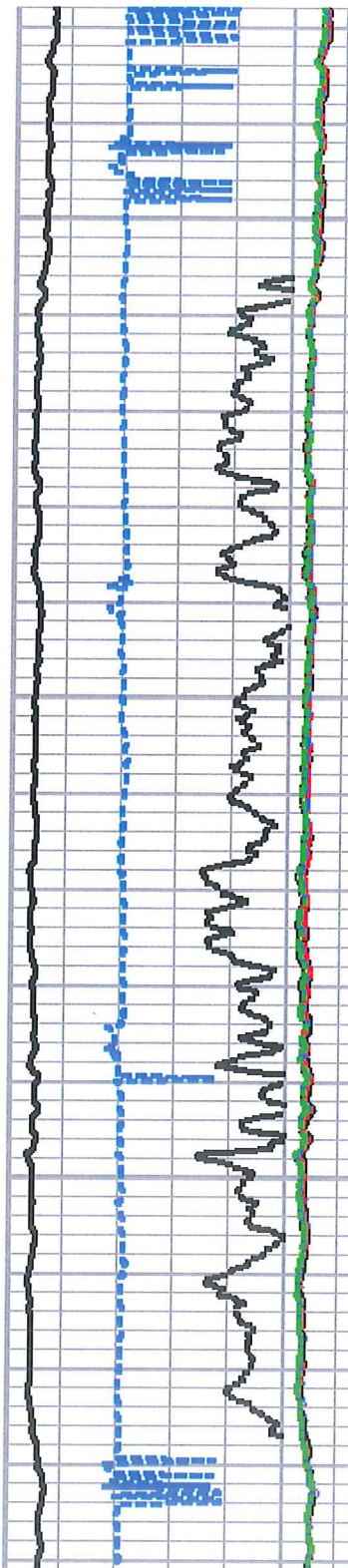




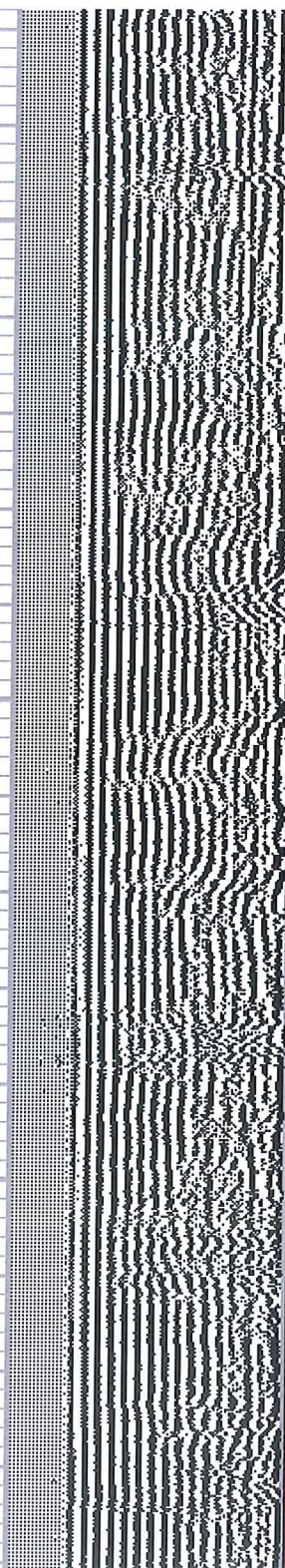
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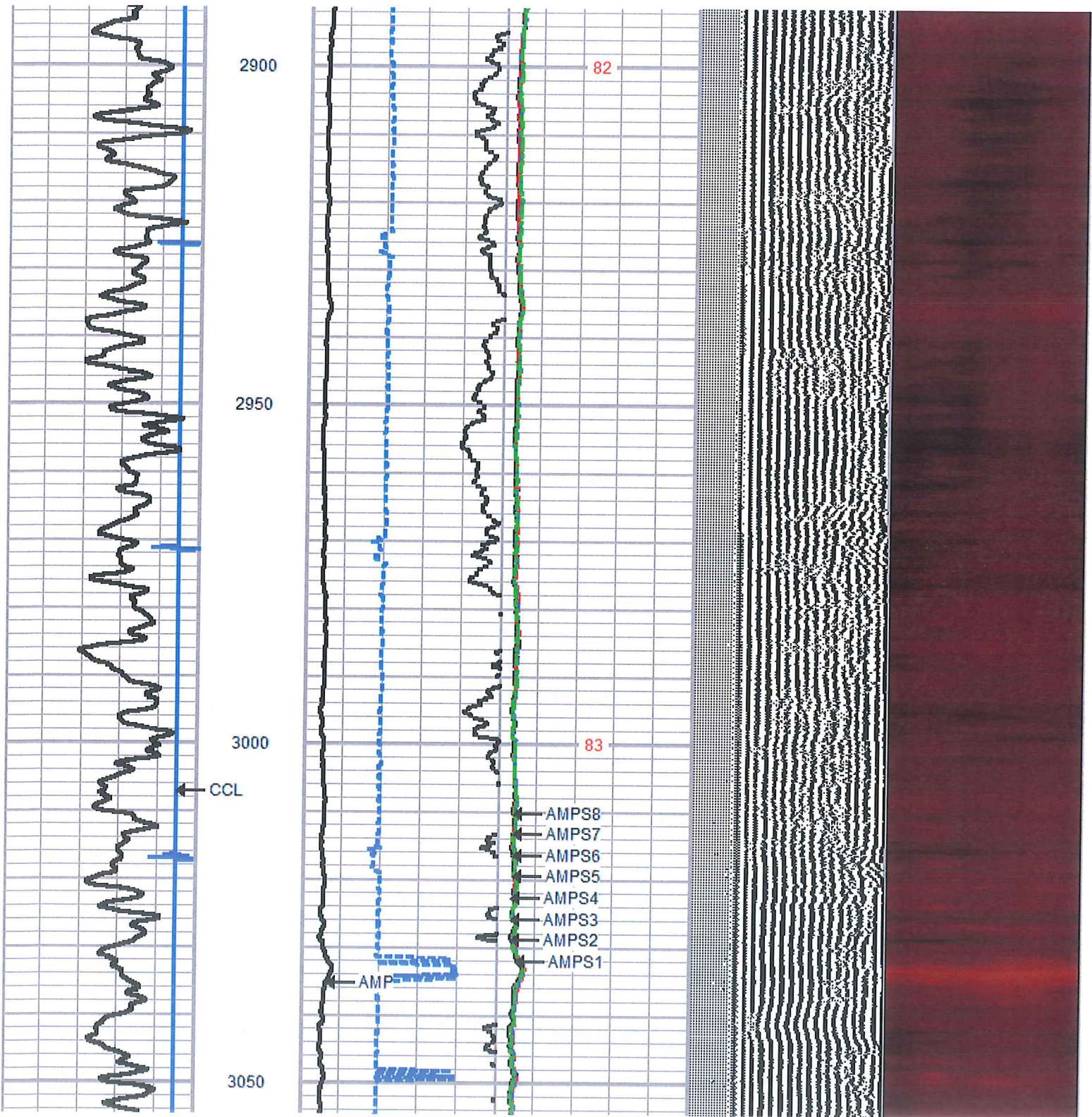
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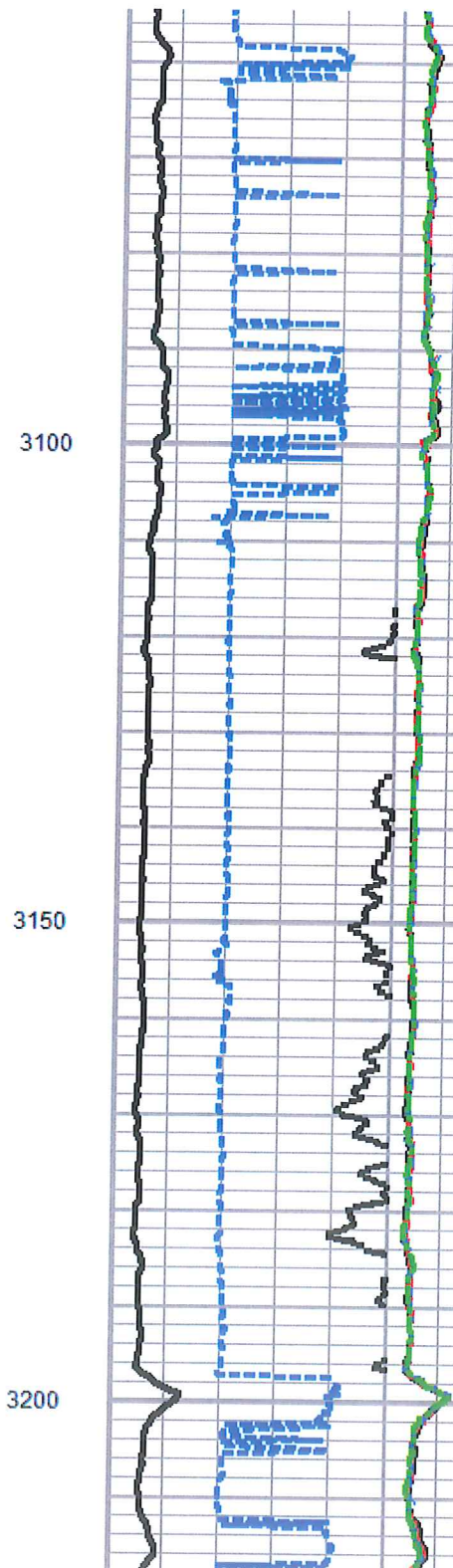
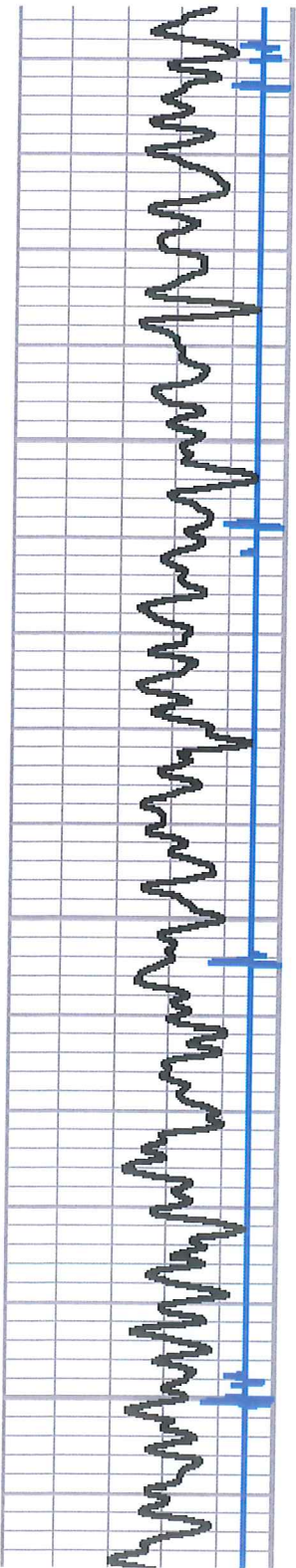
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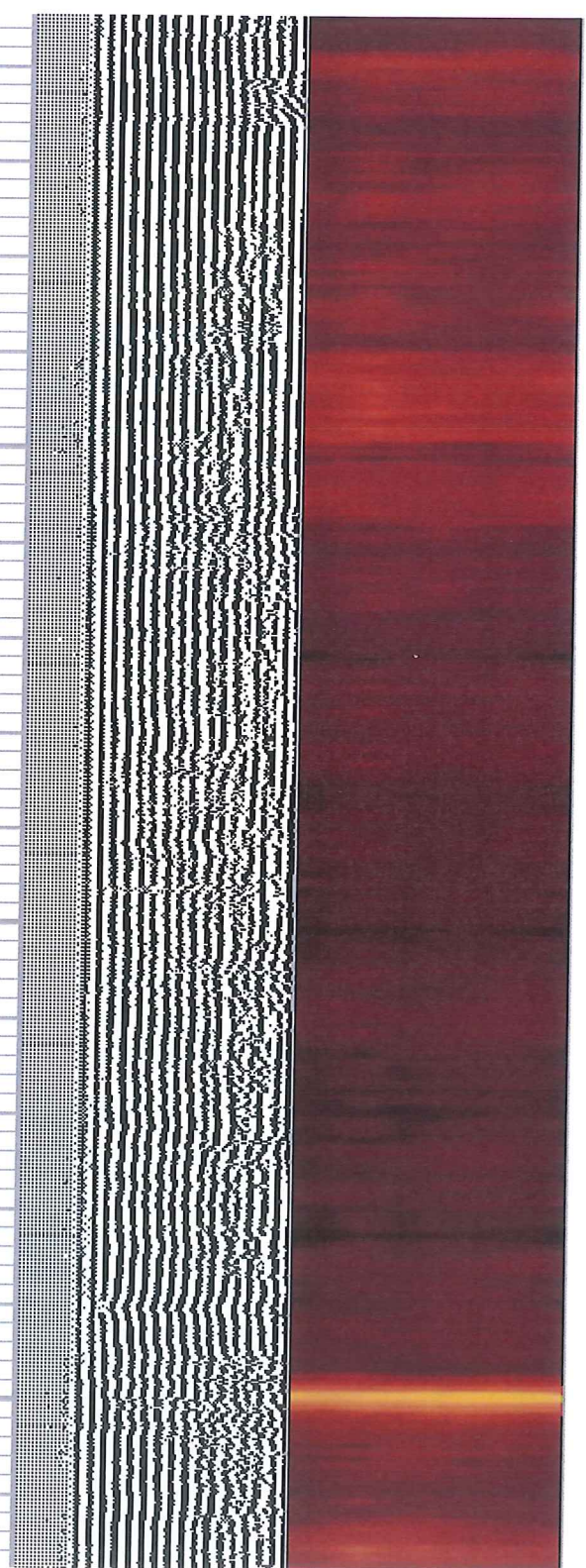
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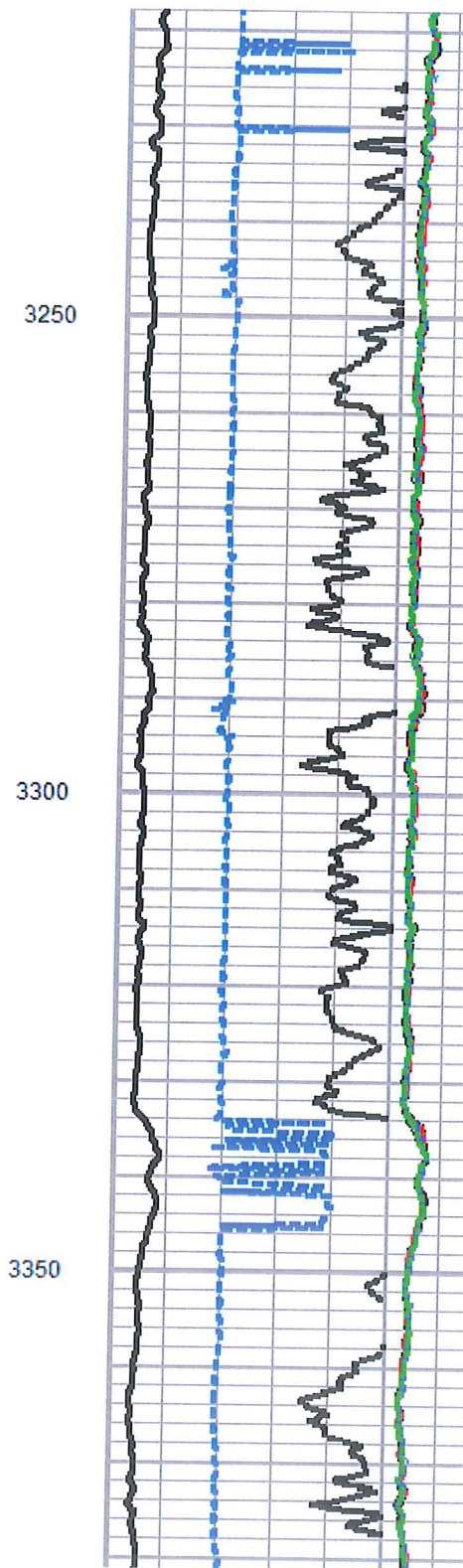
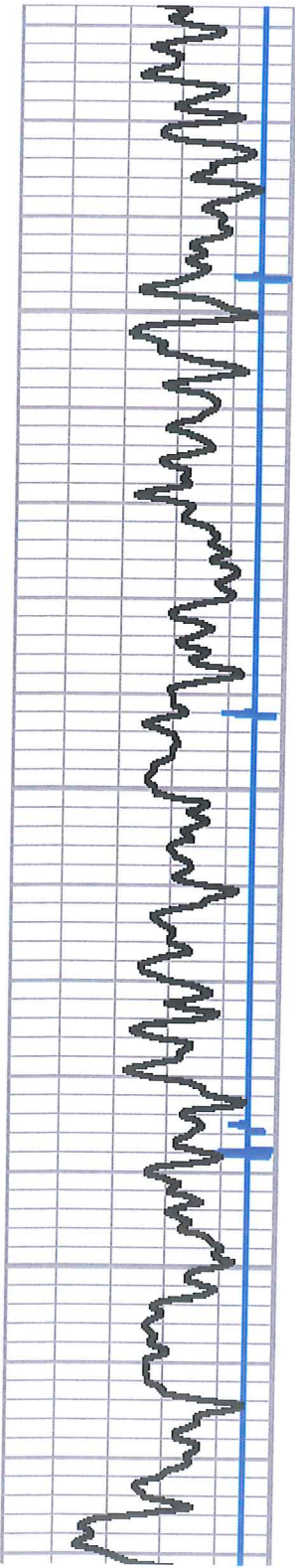
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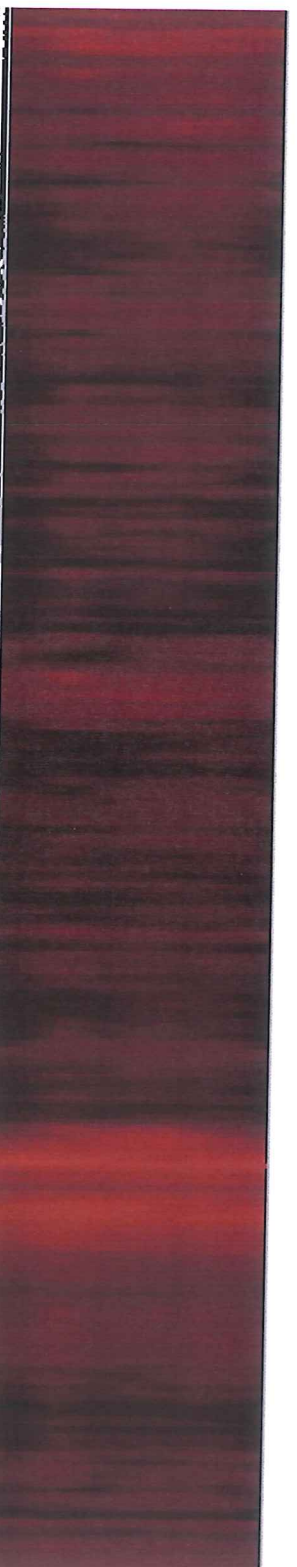
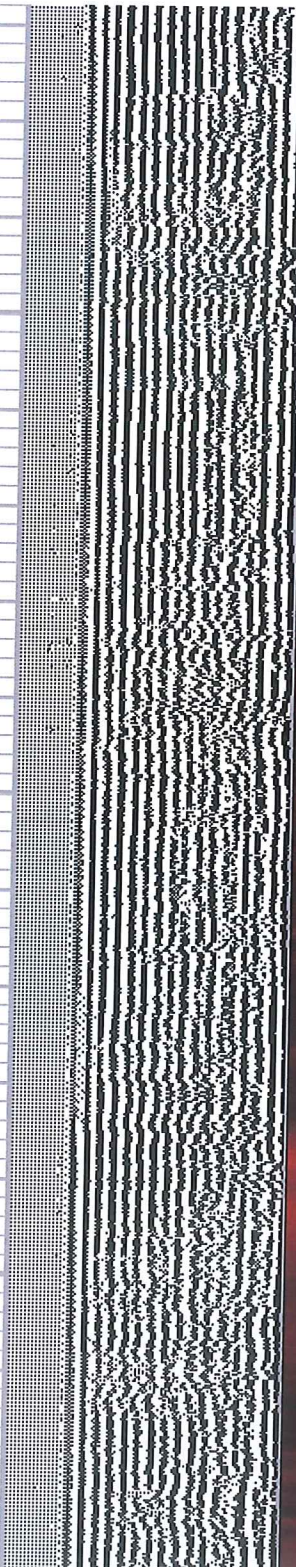
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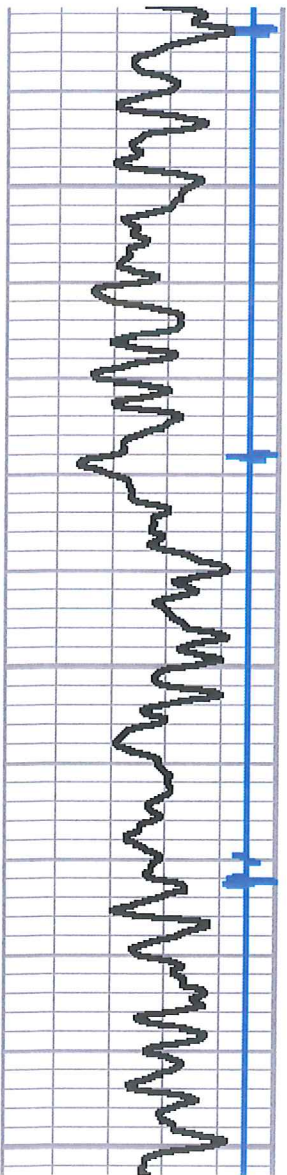
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86

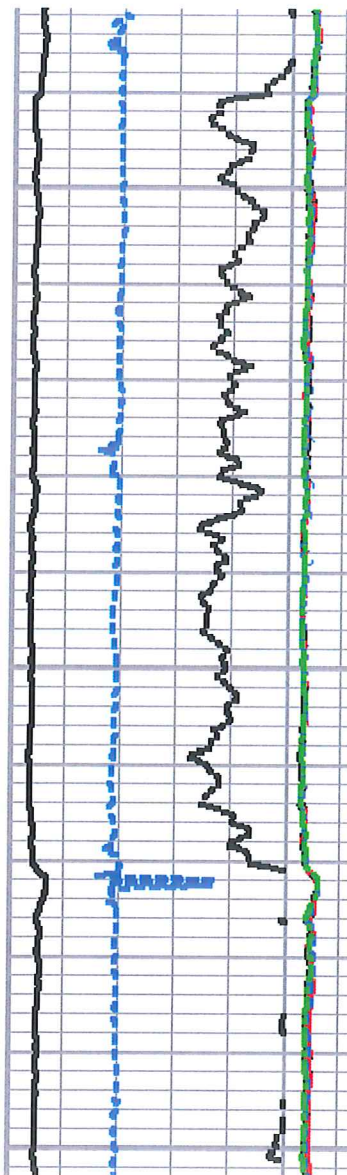




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3450

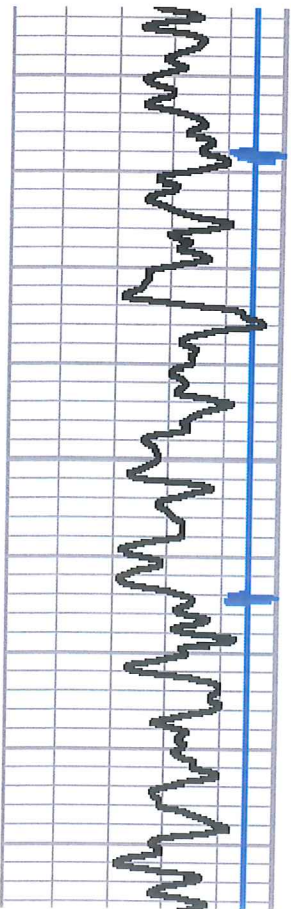
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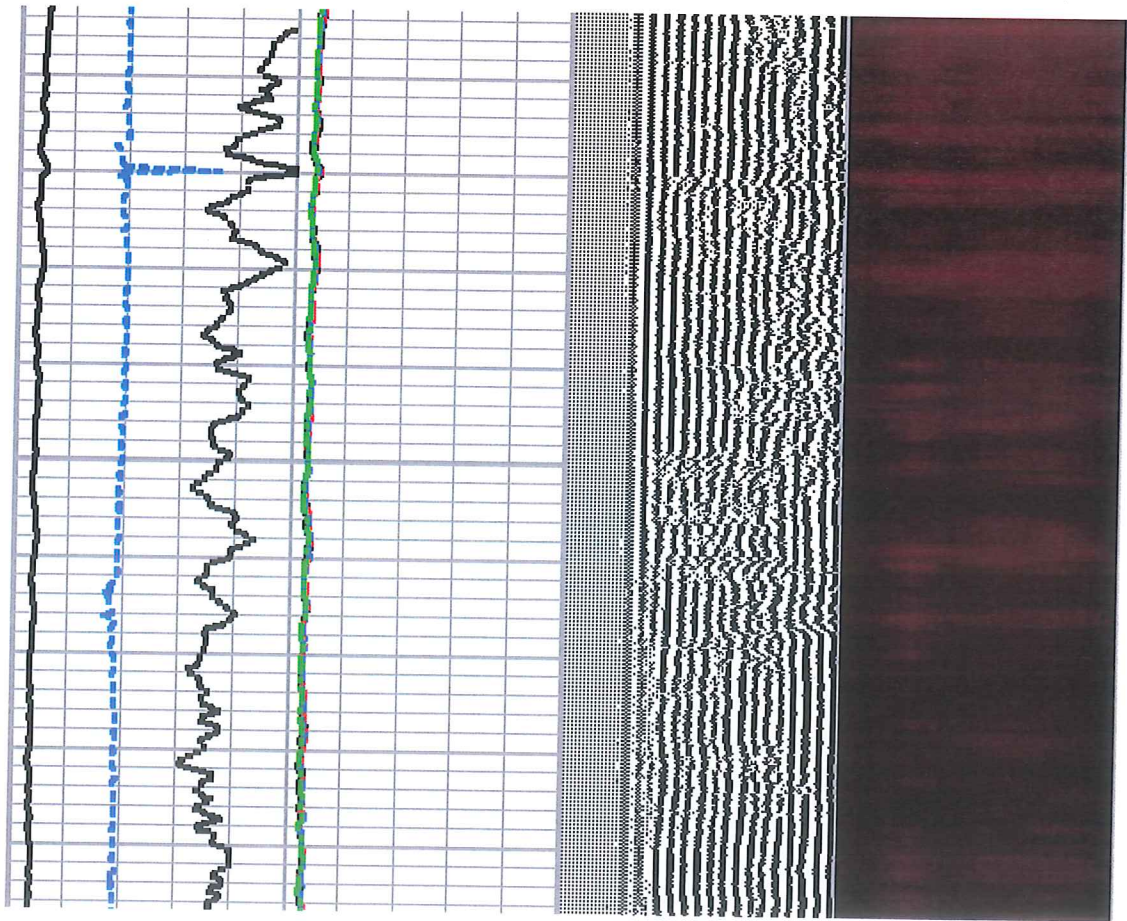
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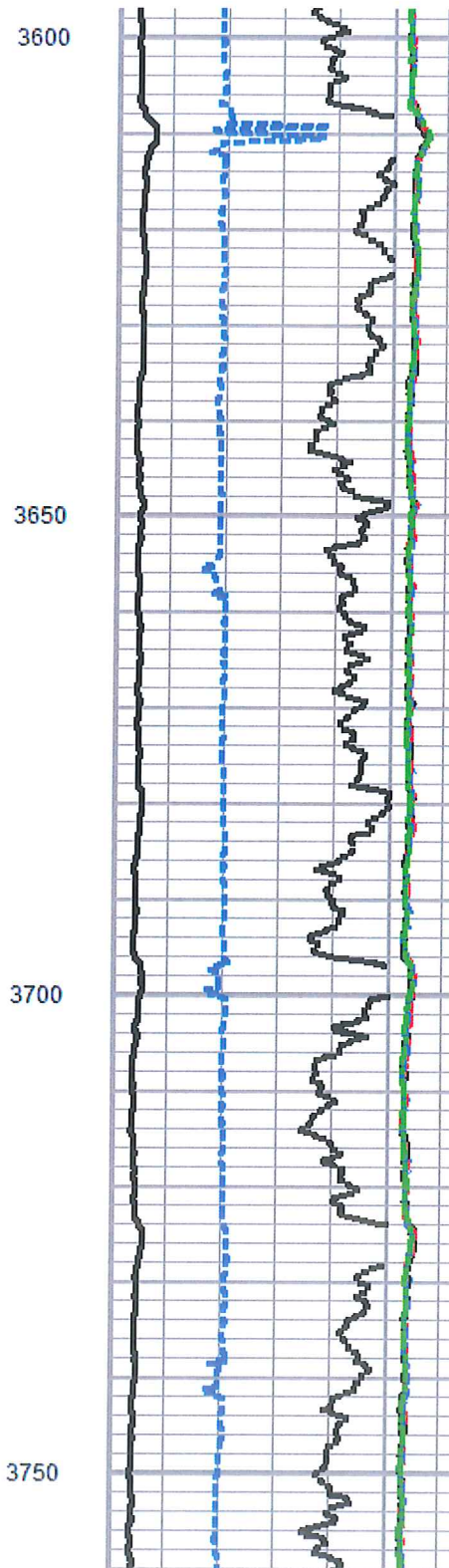
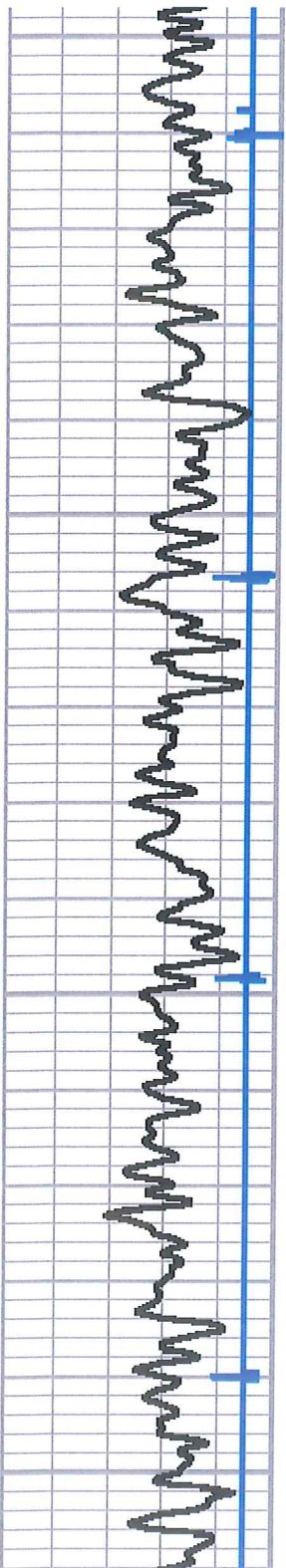
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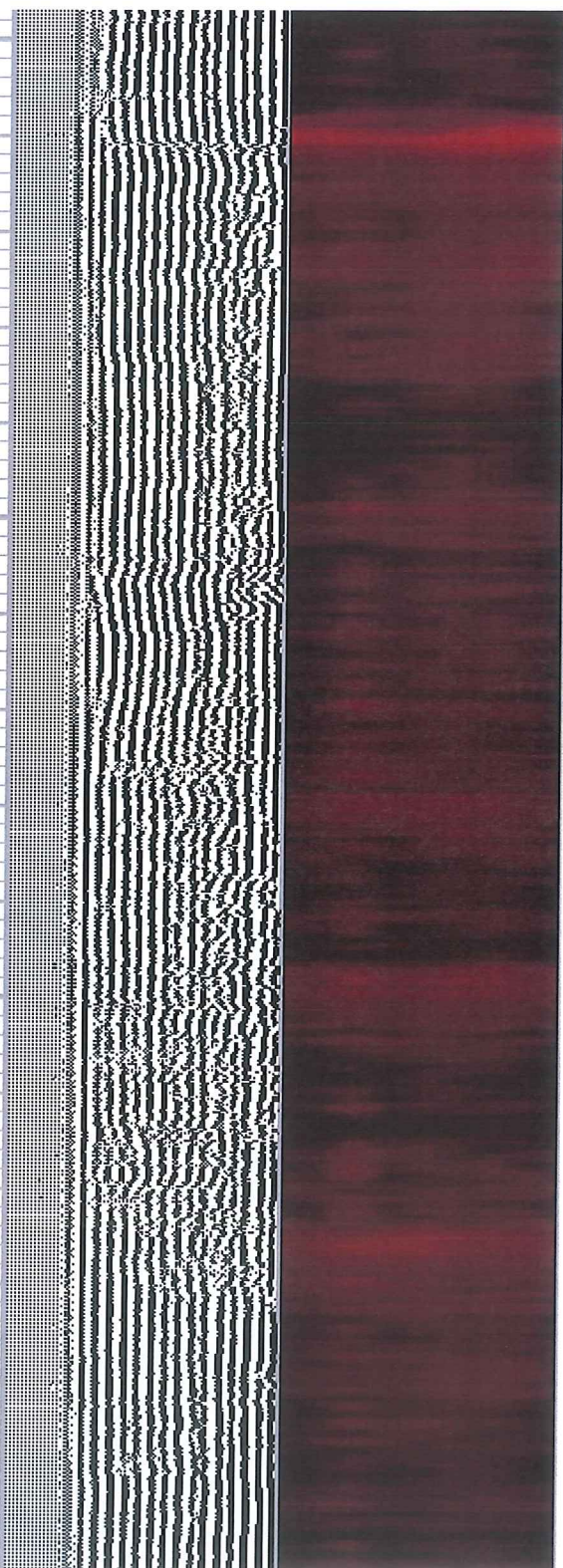
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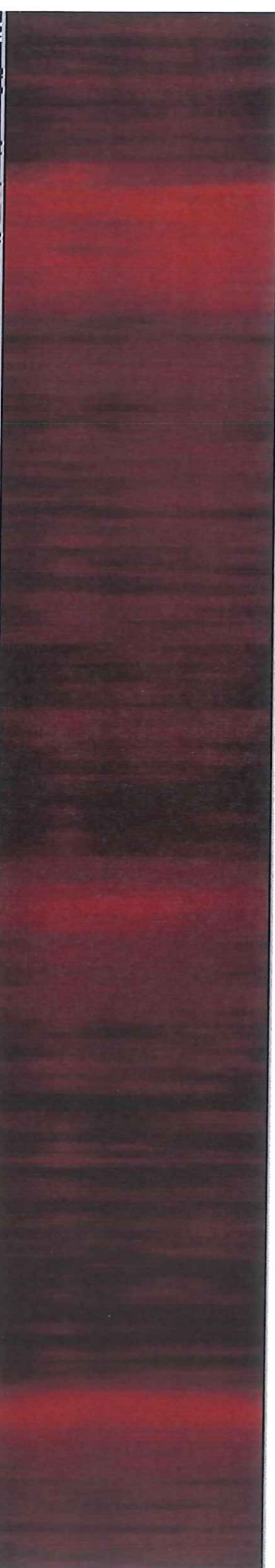
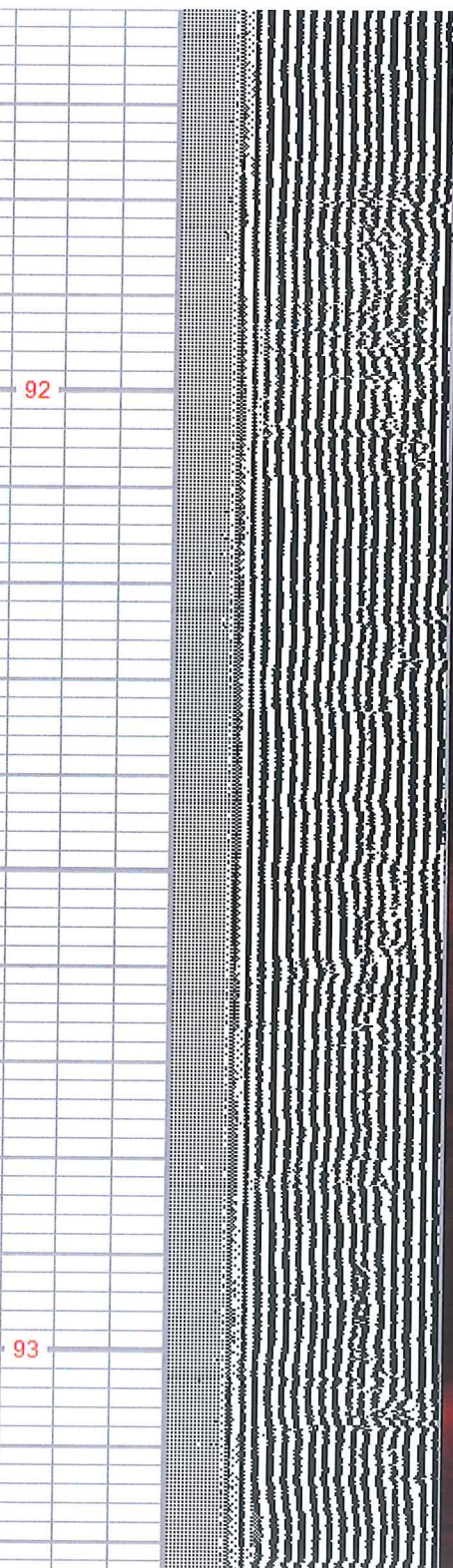
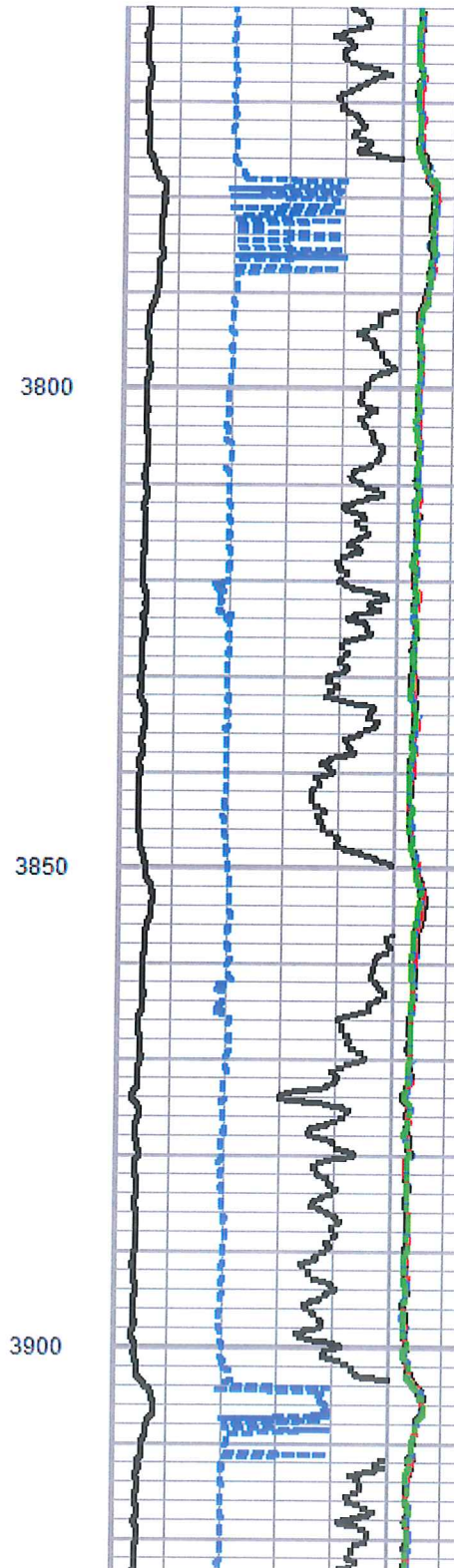
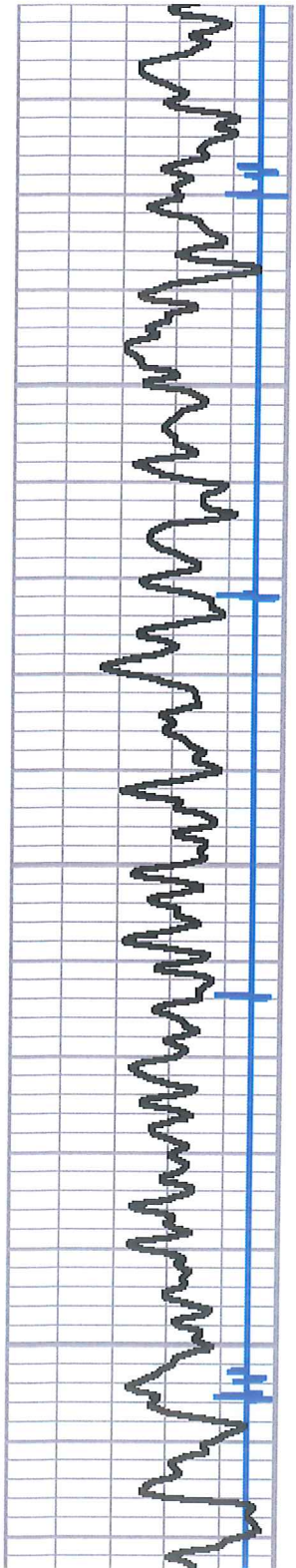




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91





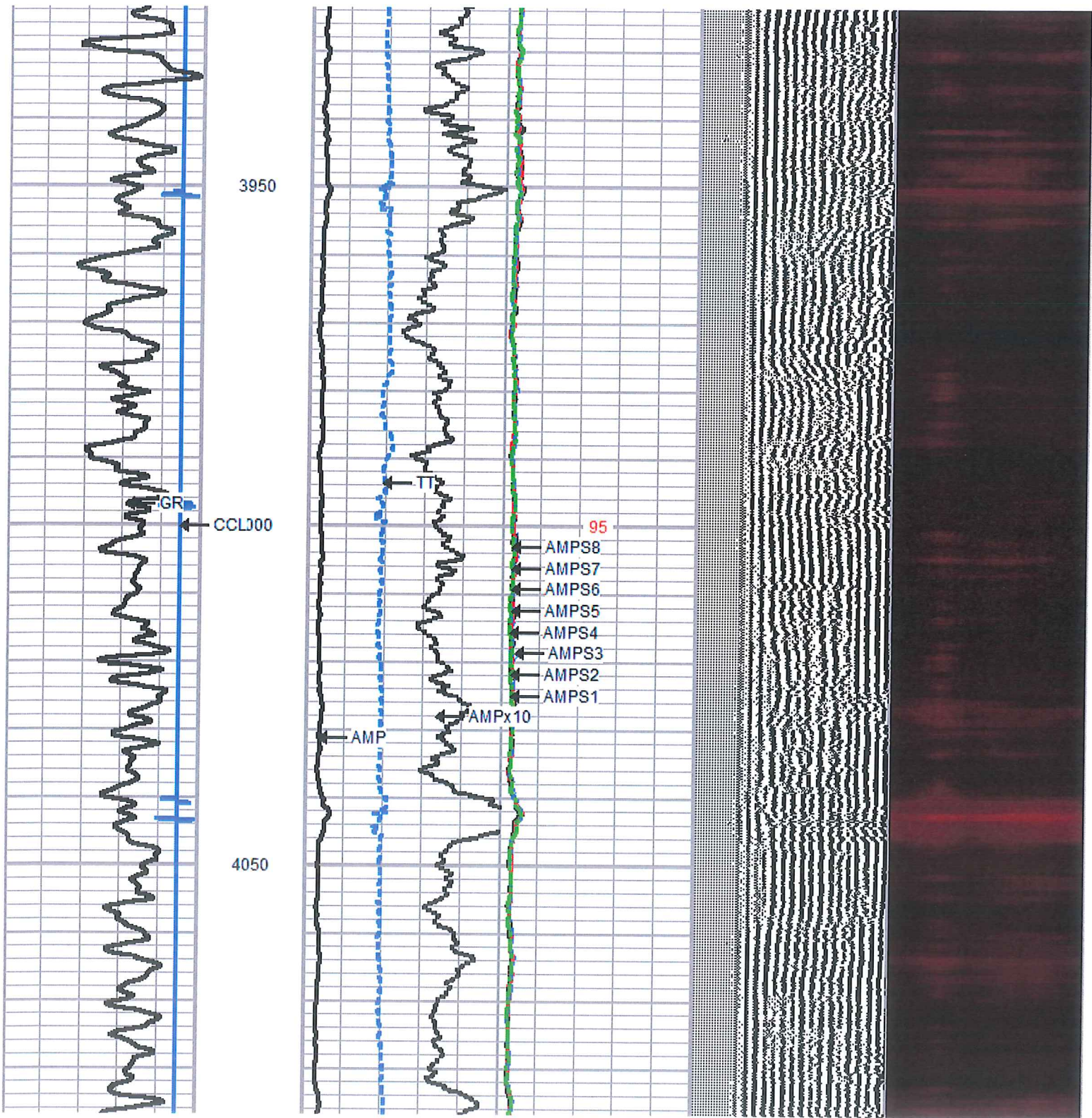
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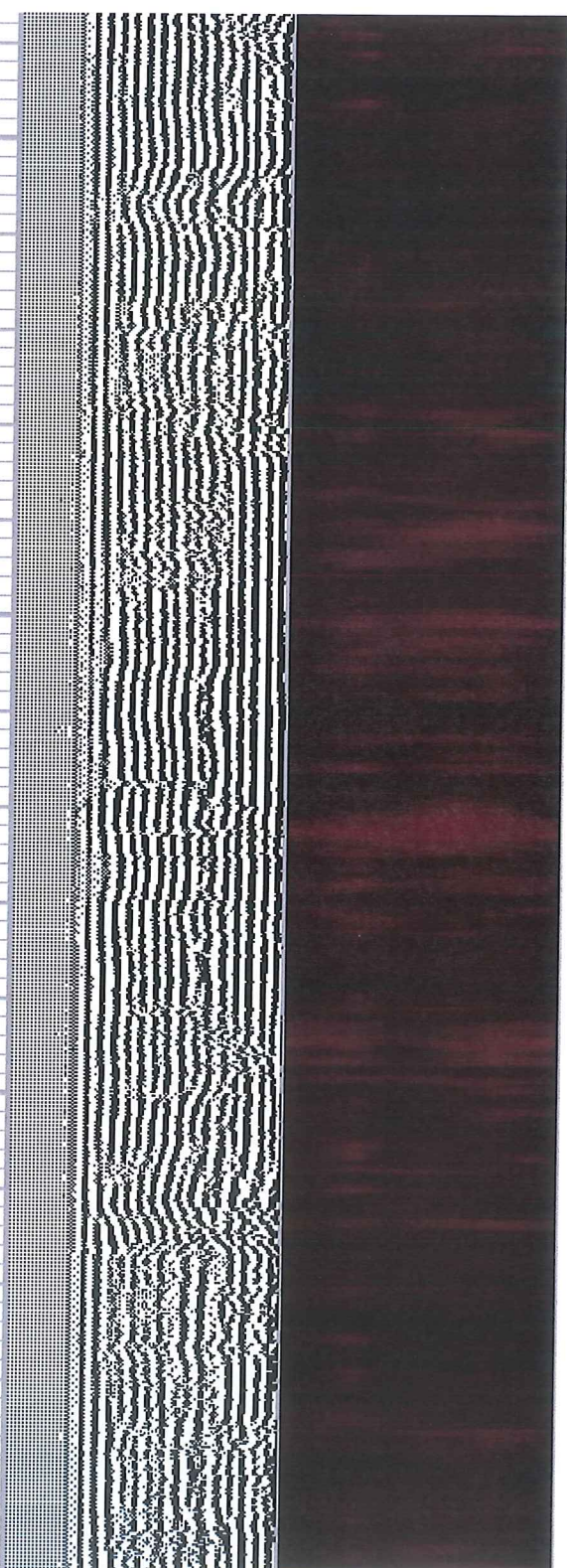
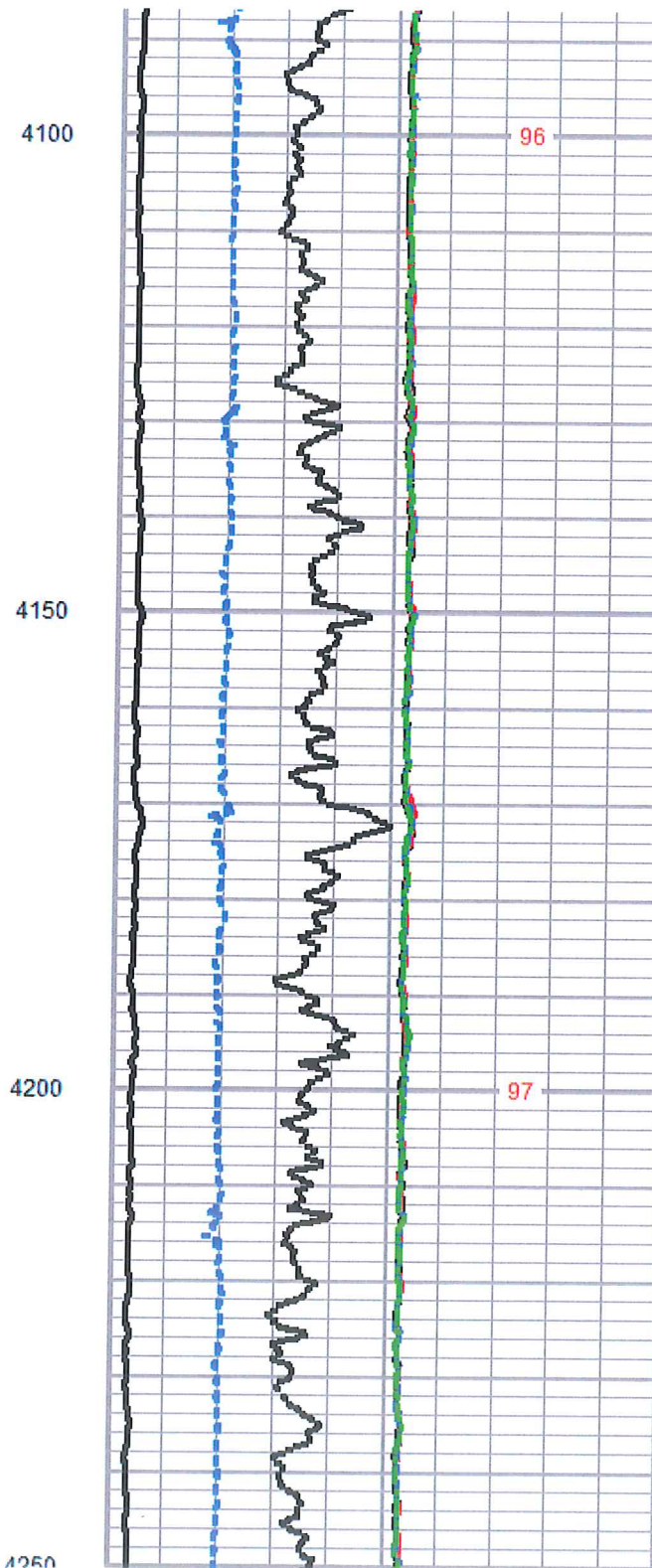
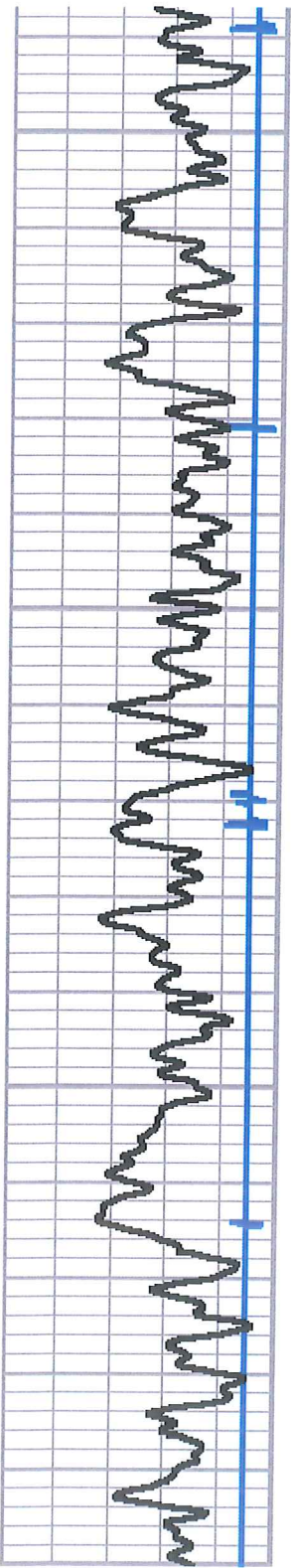
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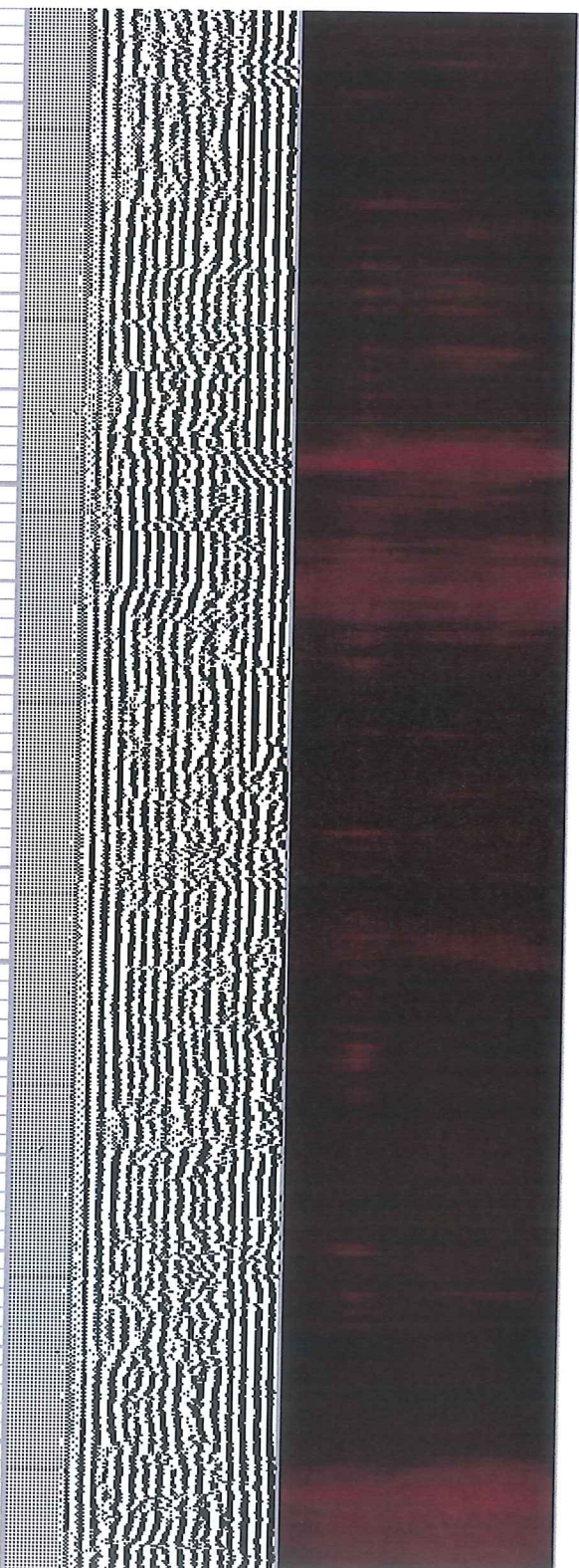
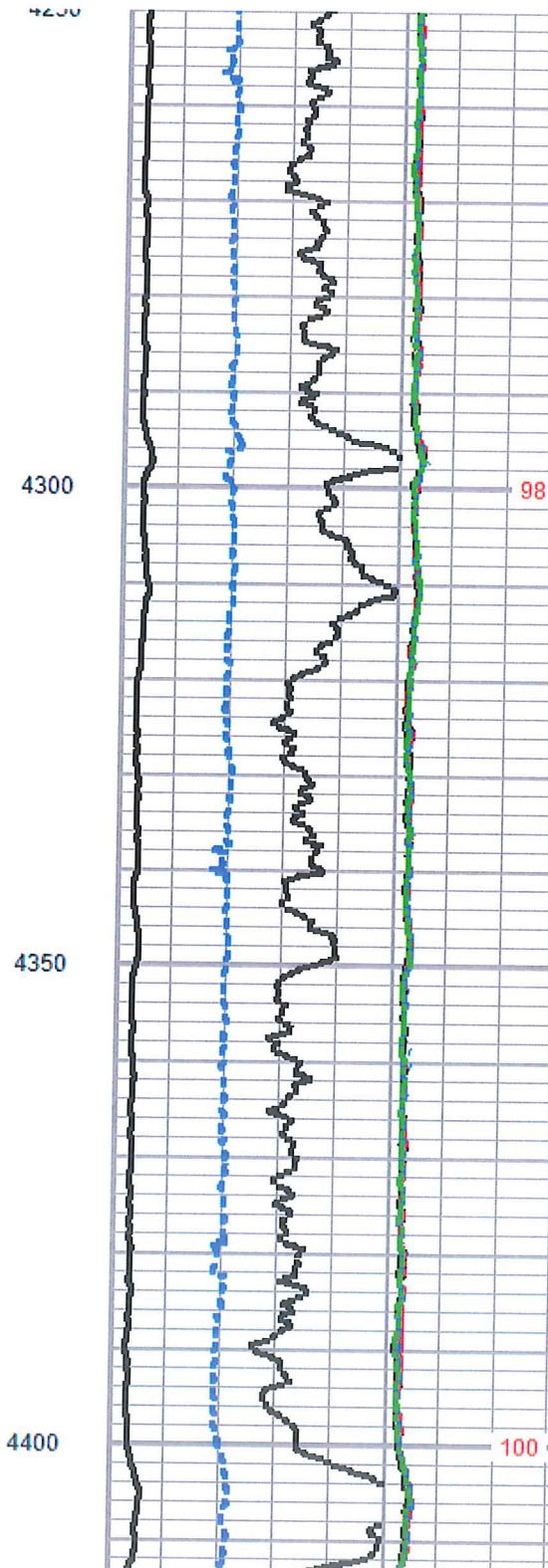
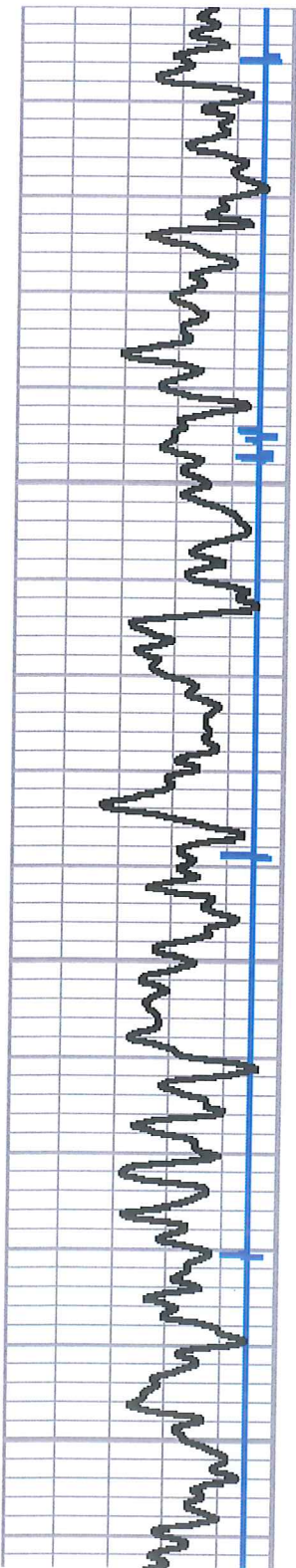
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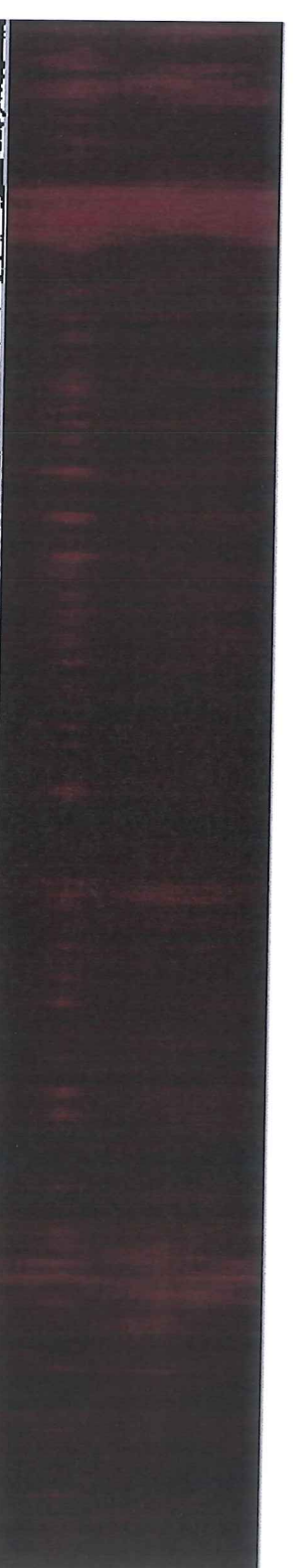
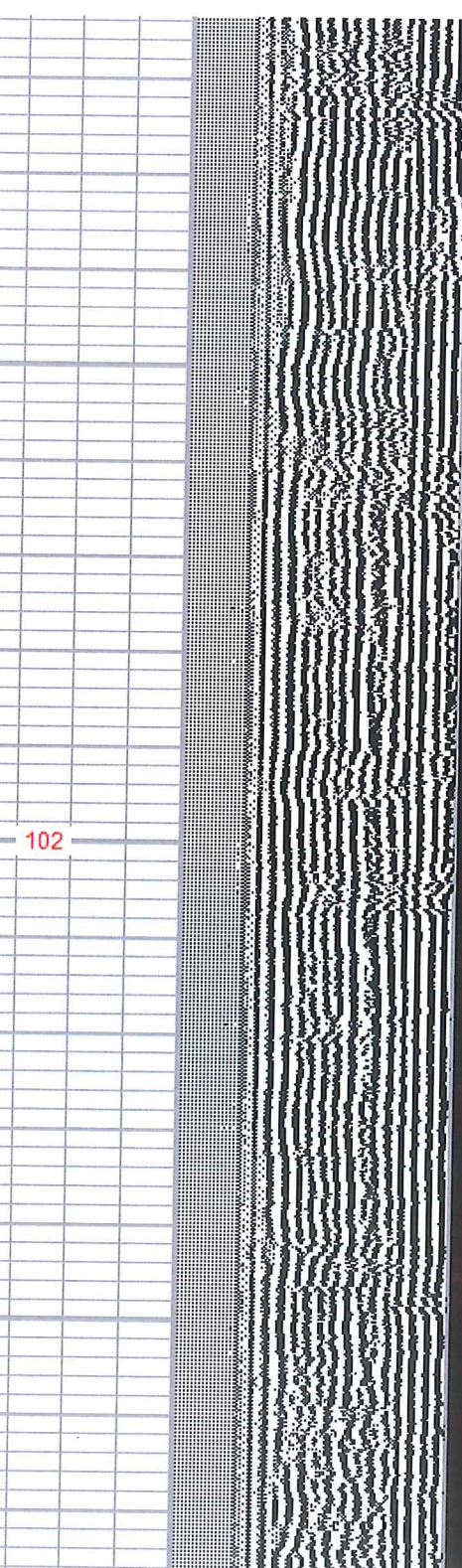
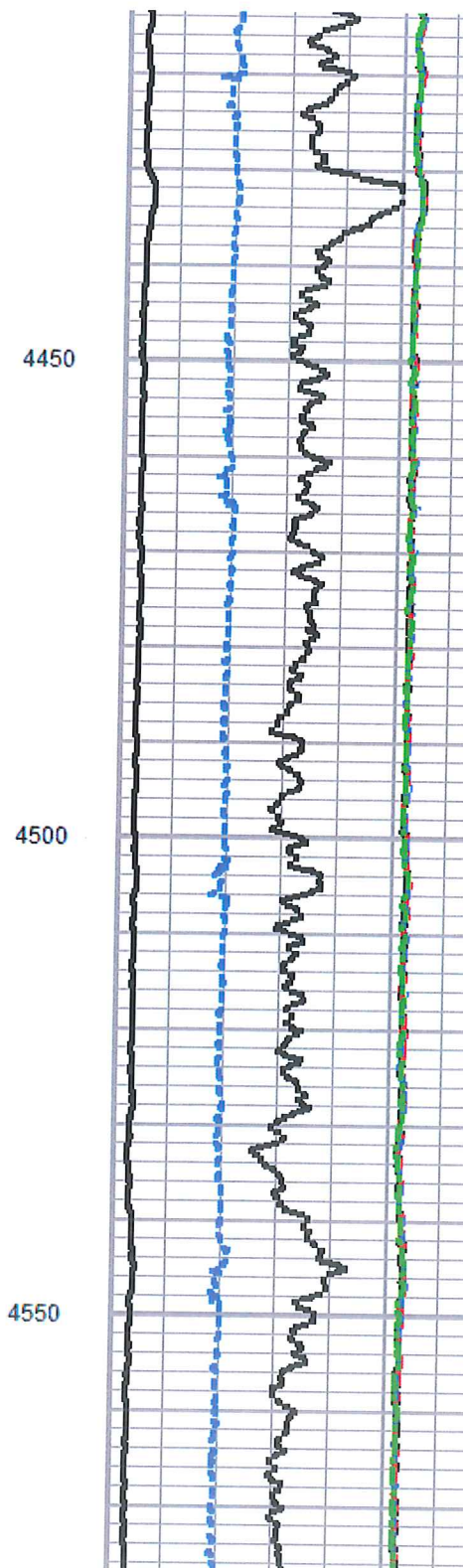
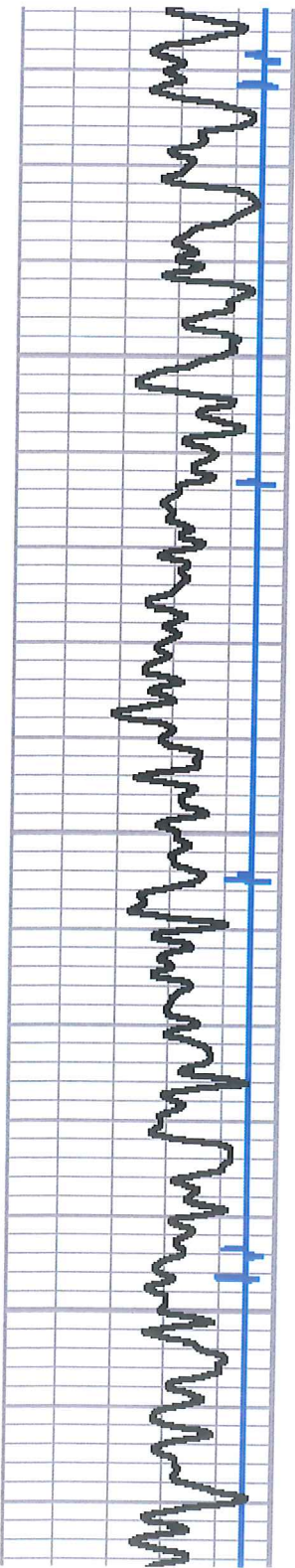
92

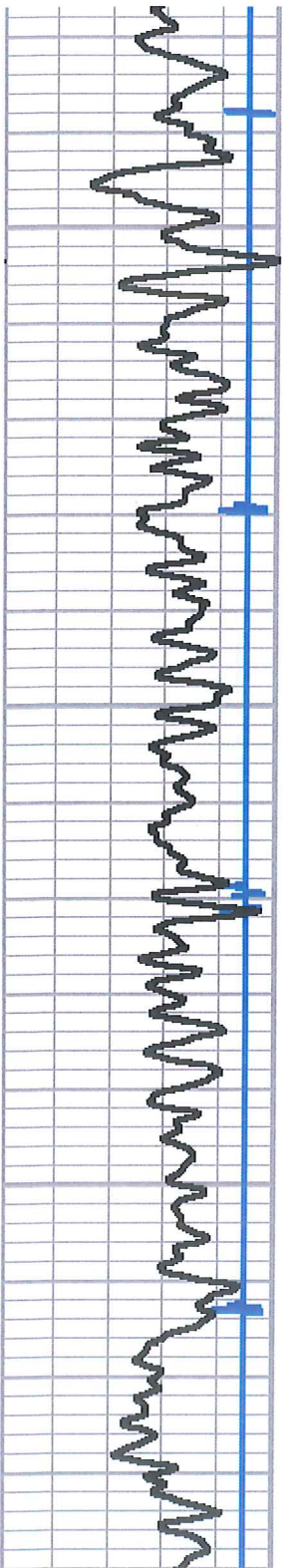
93







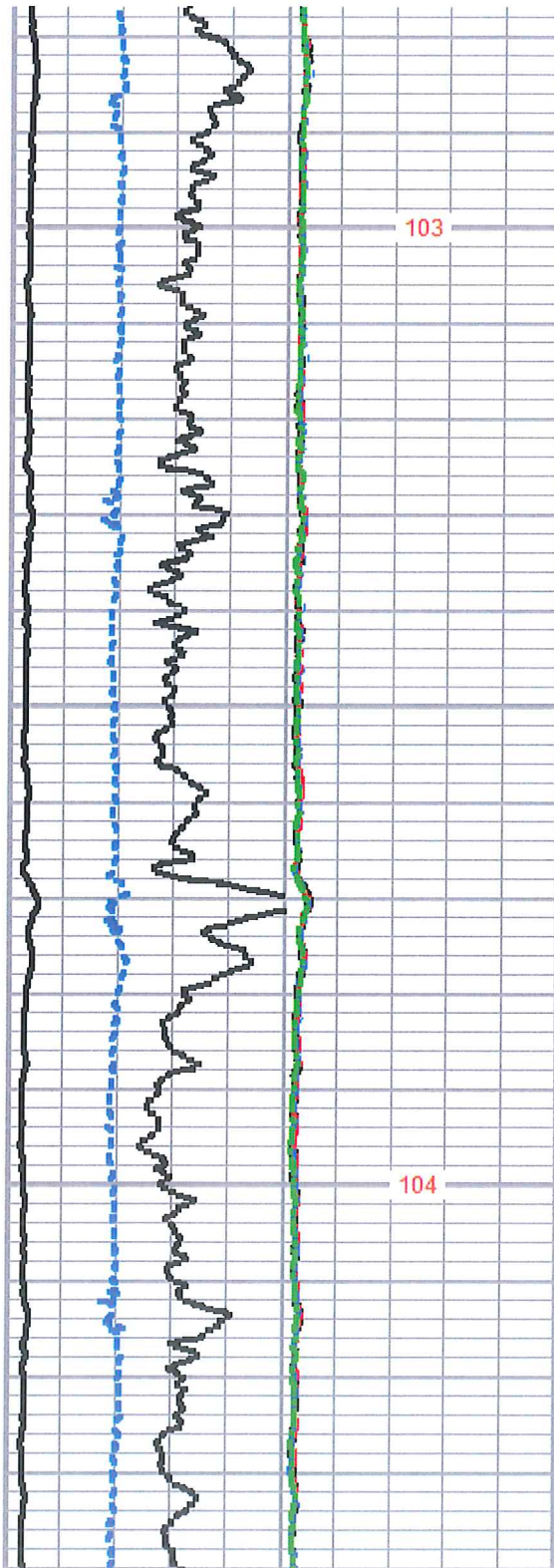




4600

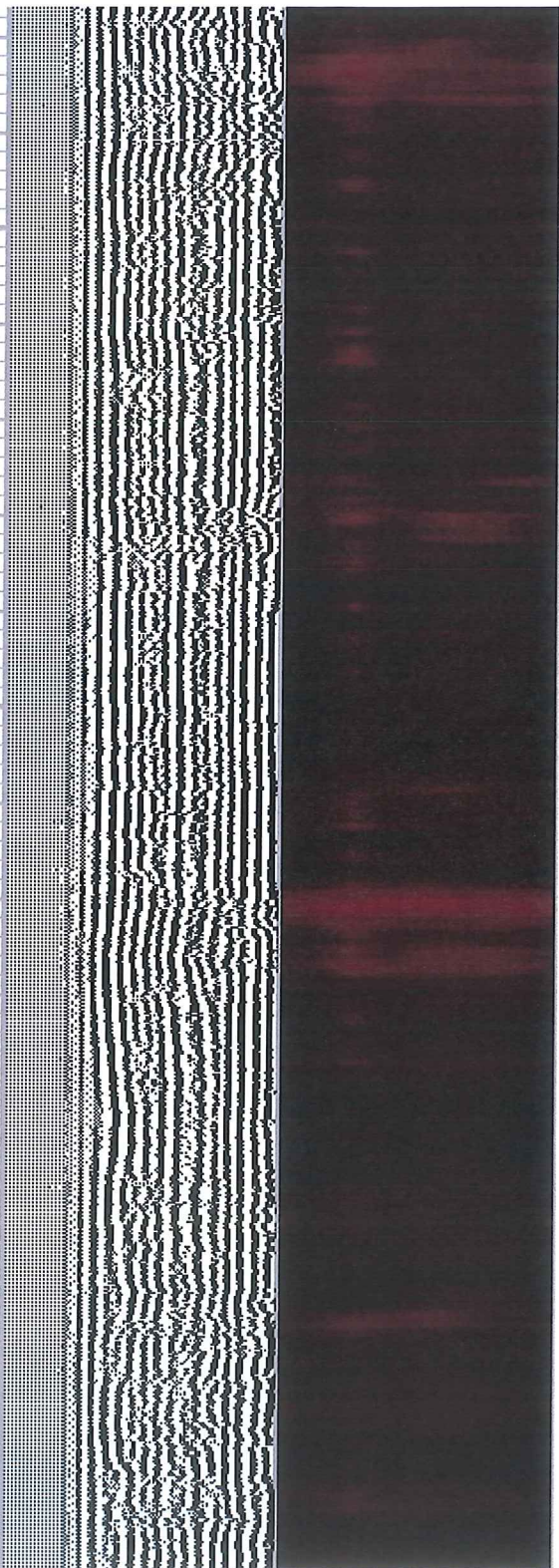
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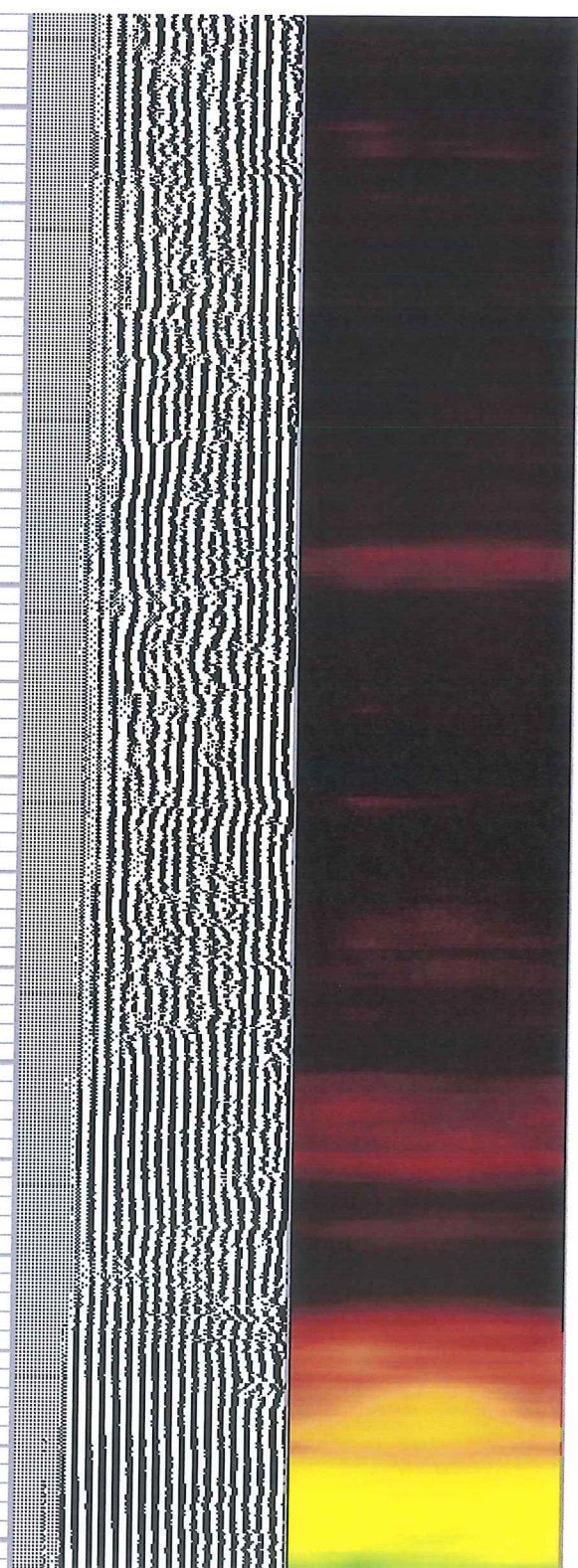
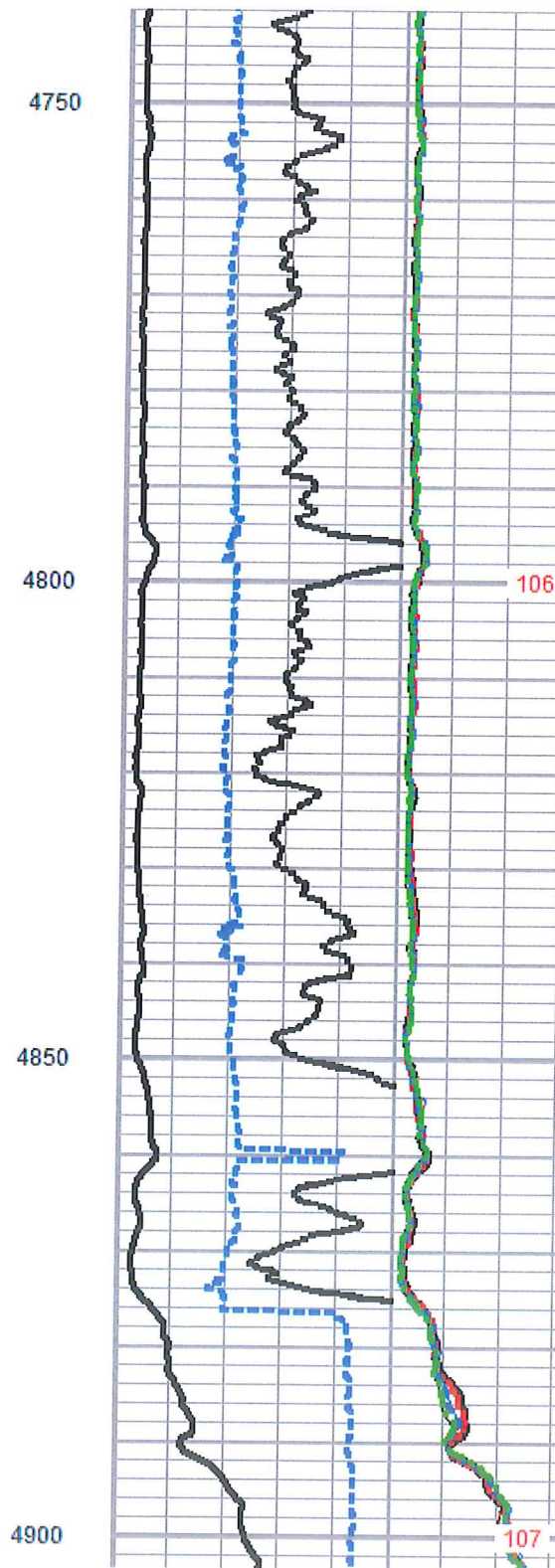
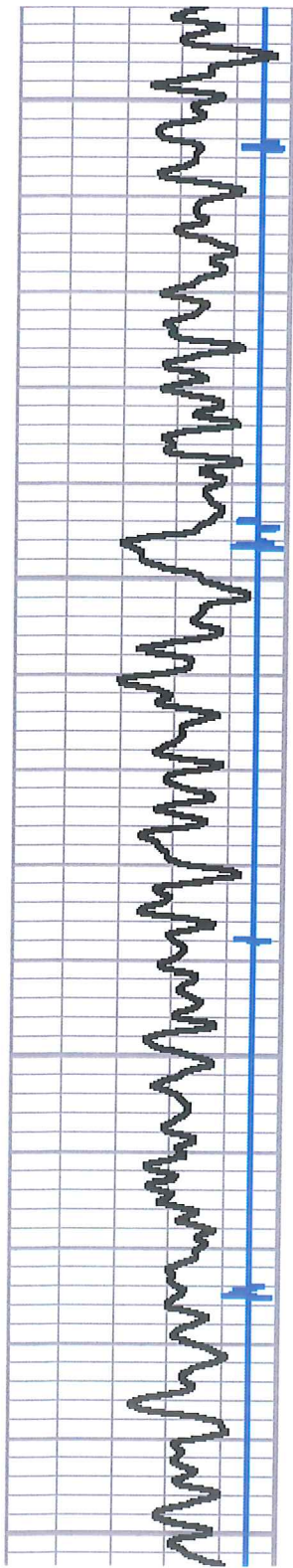
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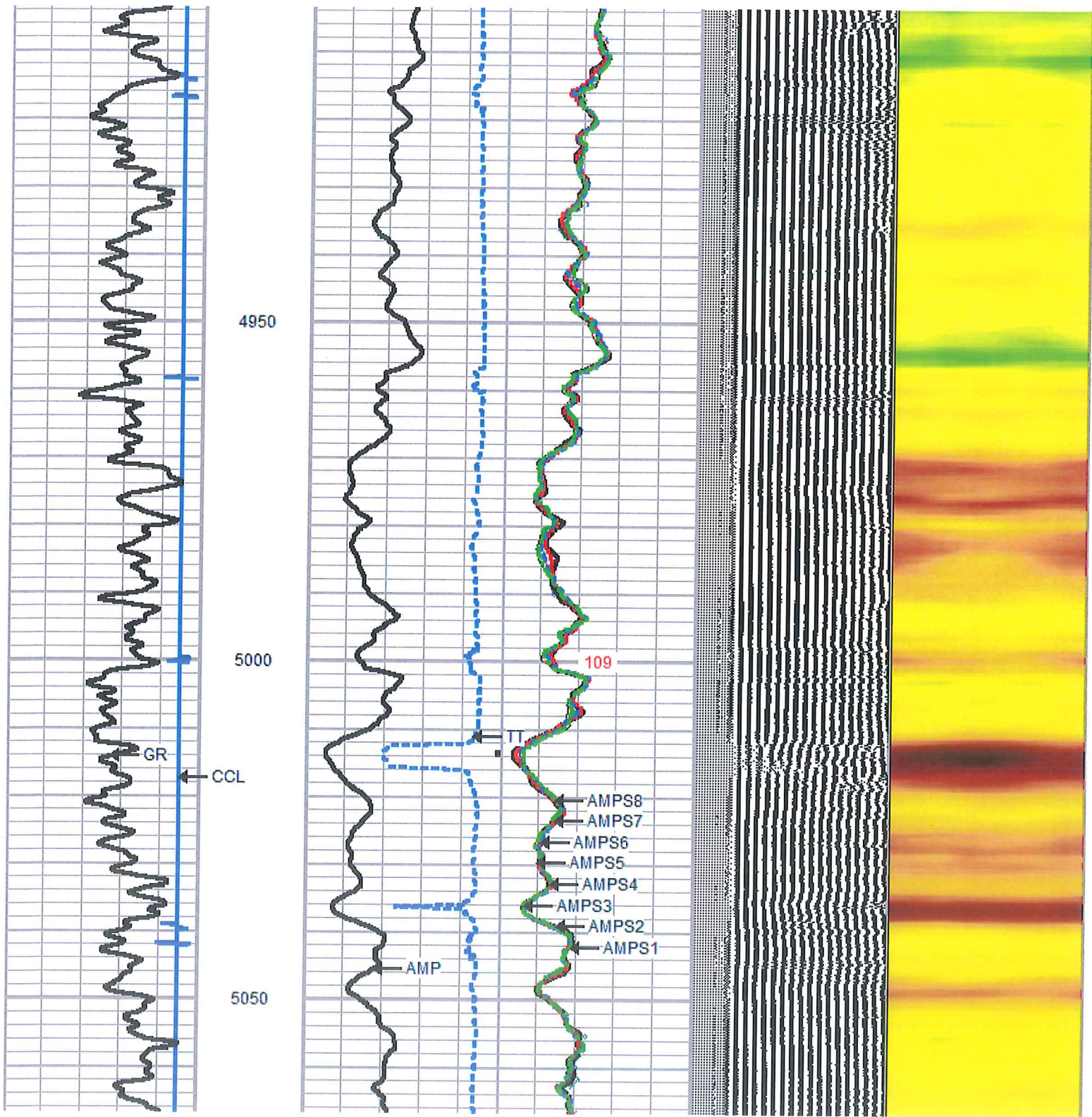


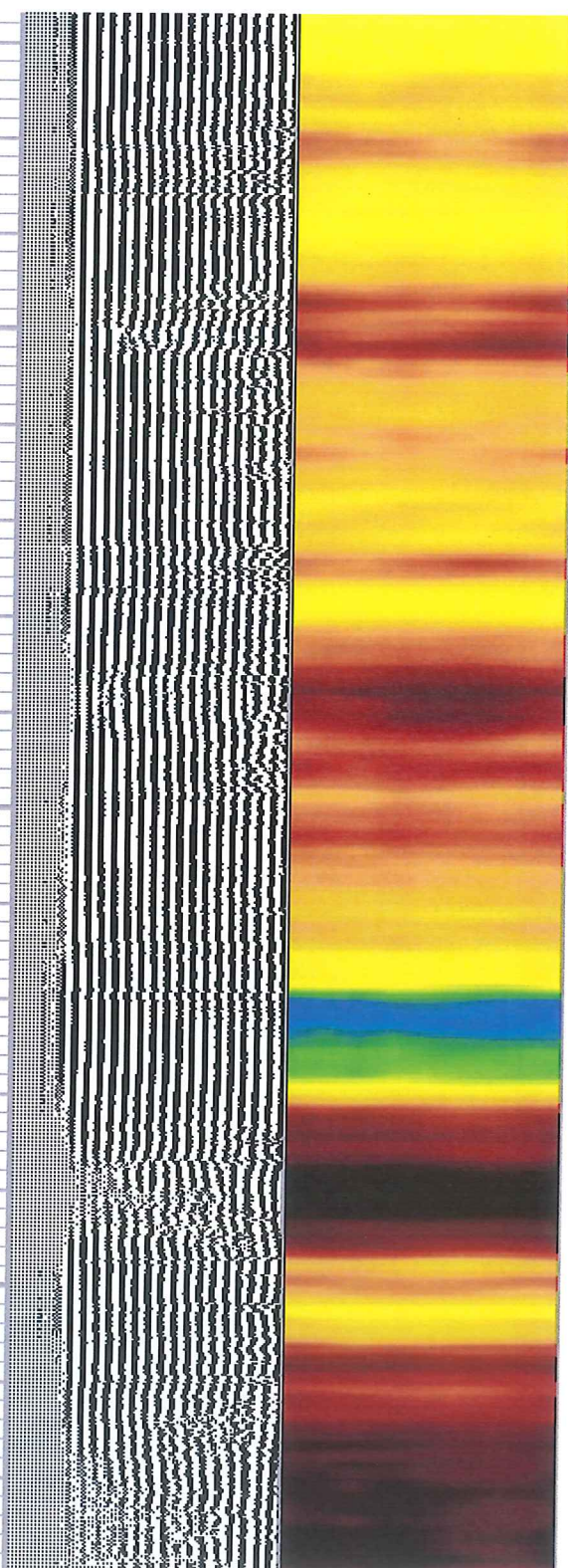
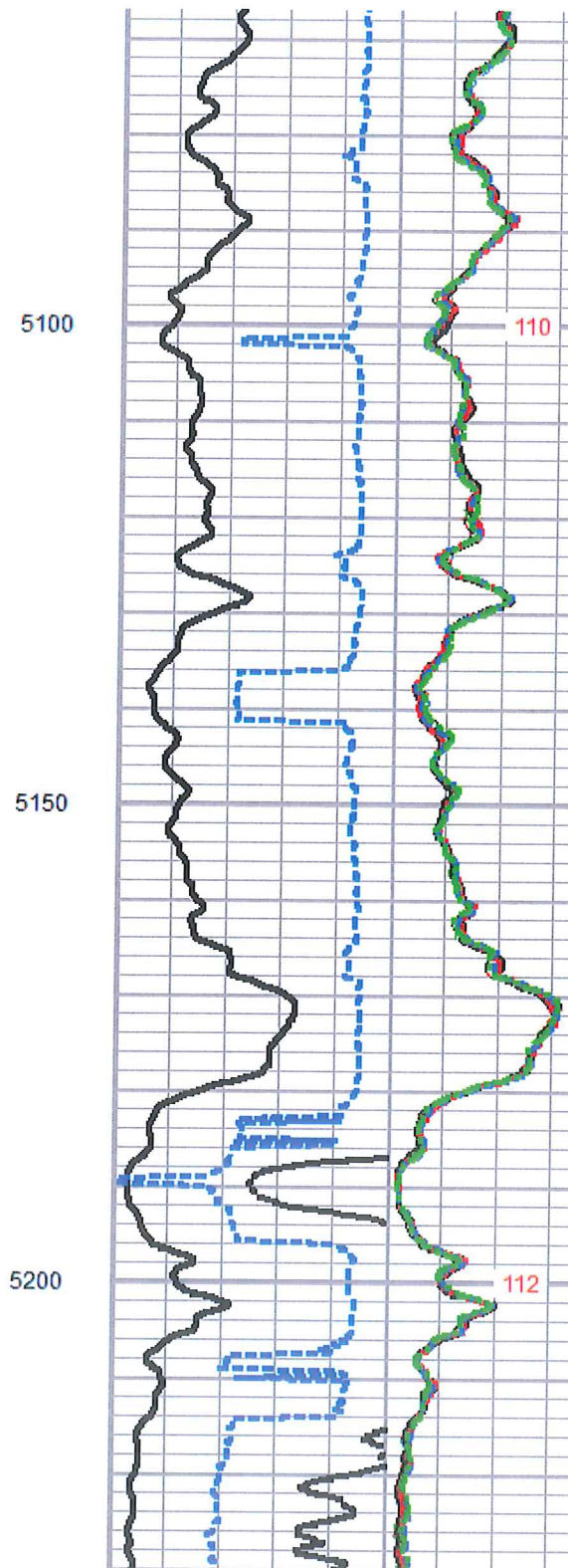
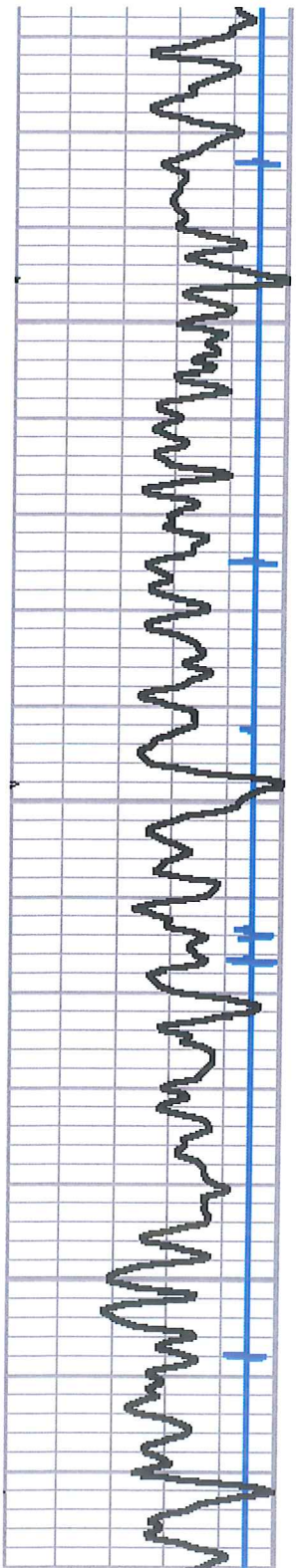
103

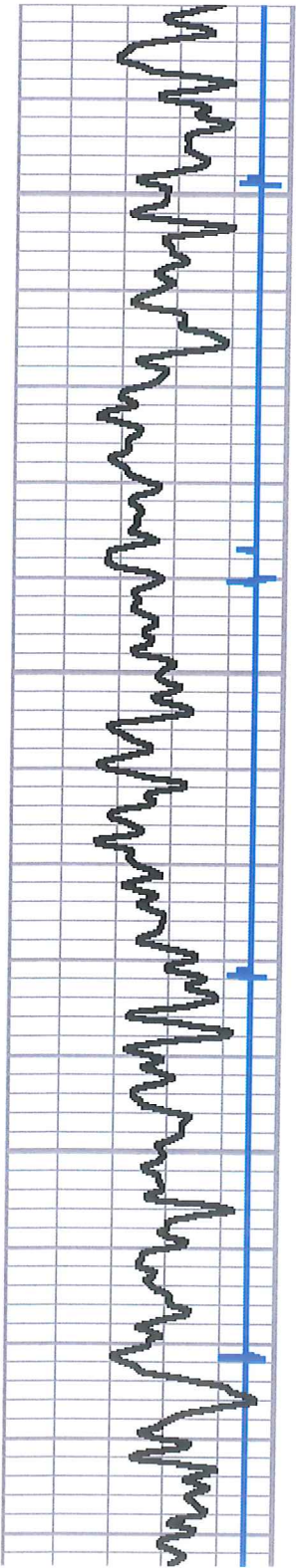
104







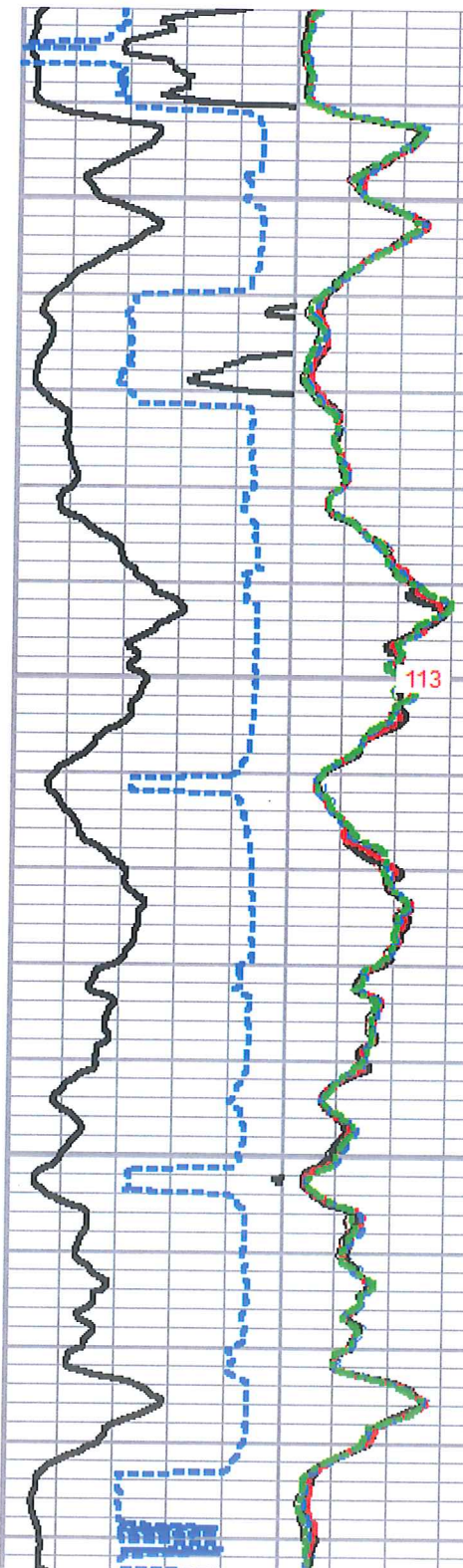




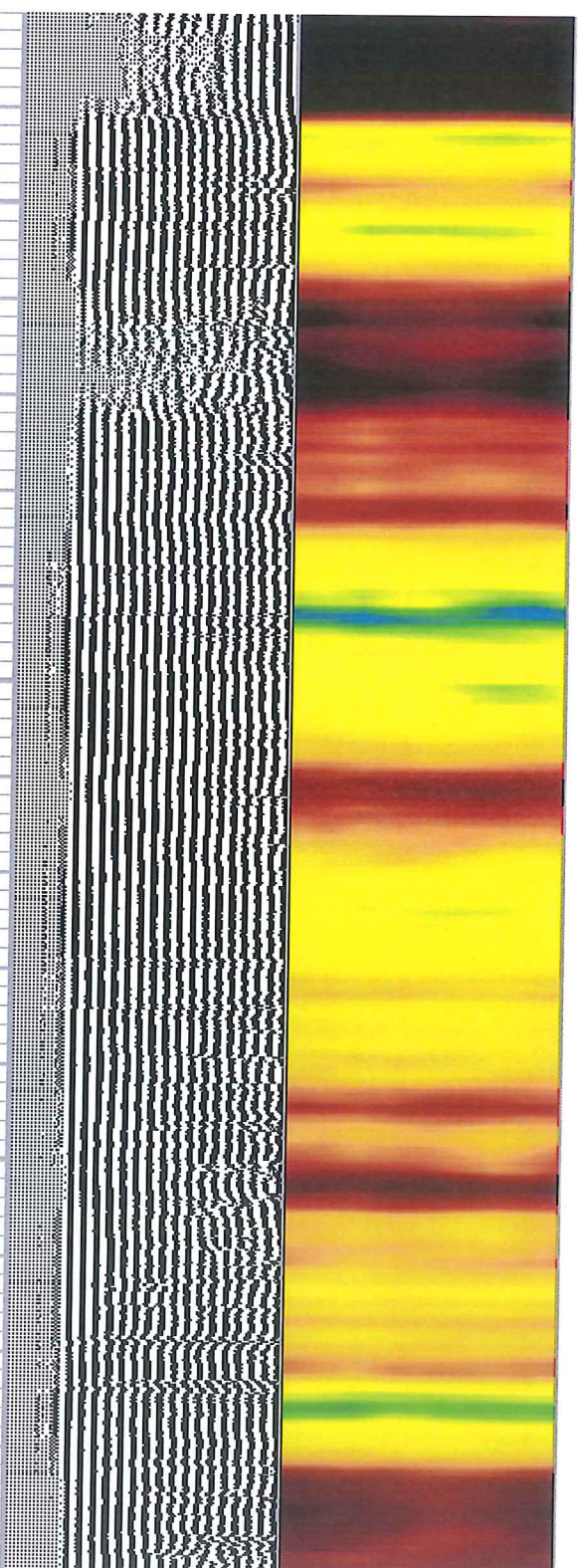
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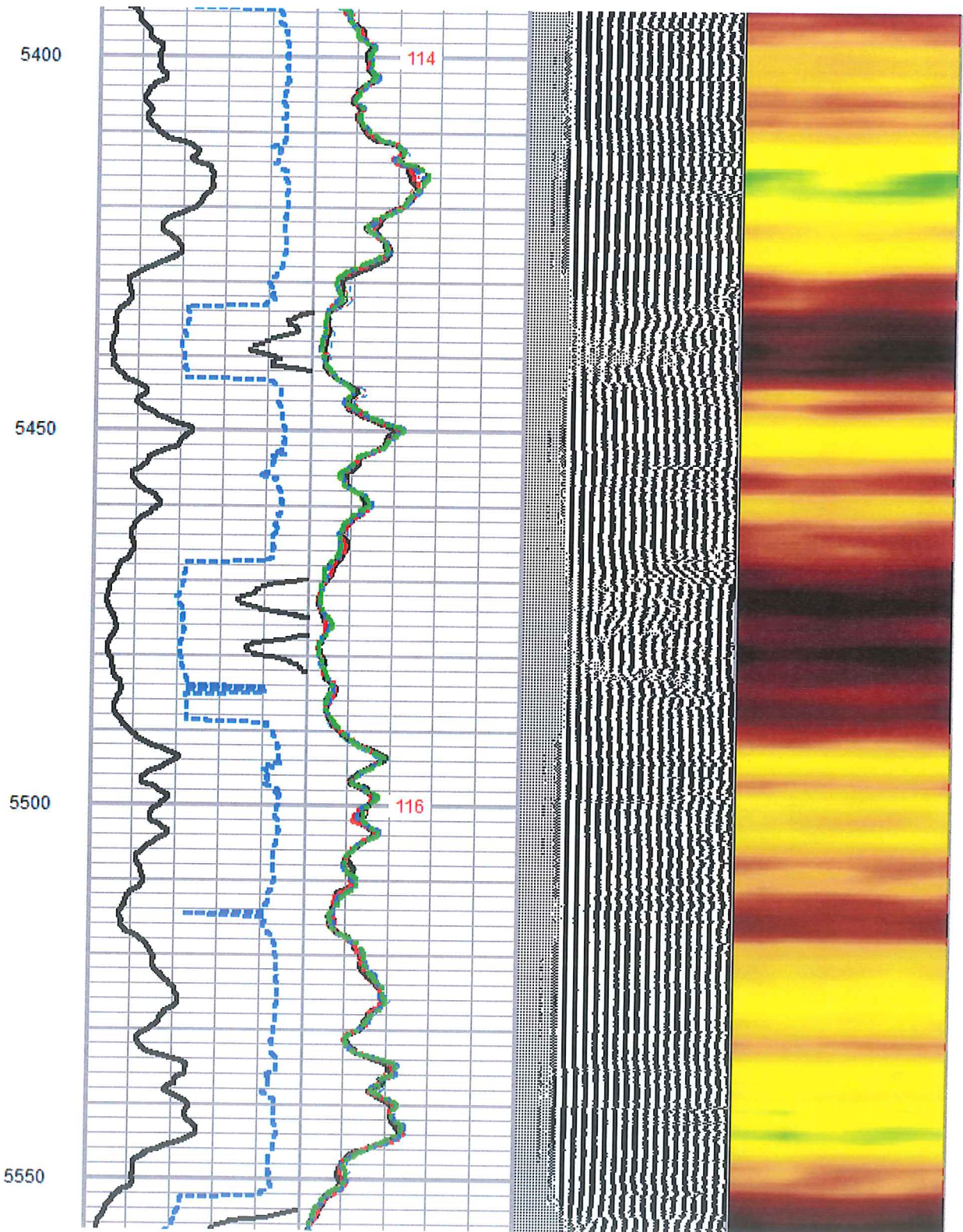
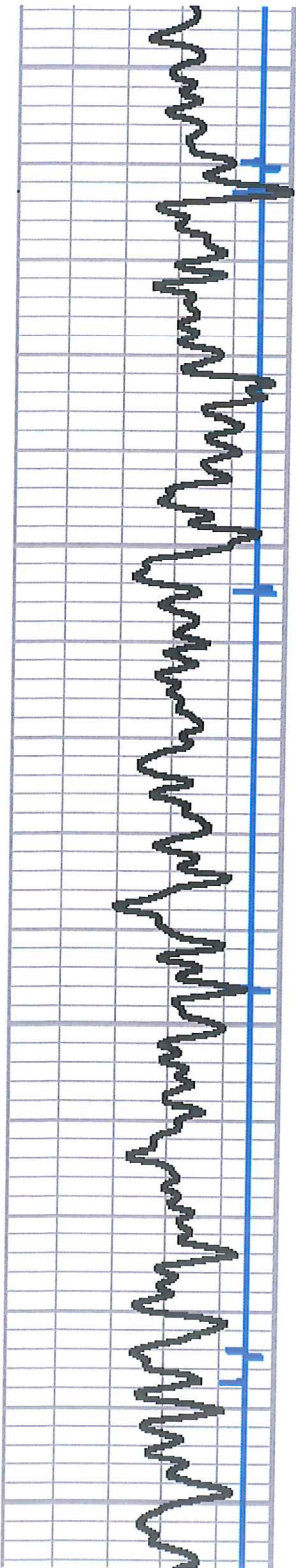
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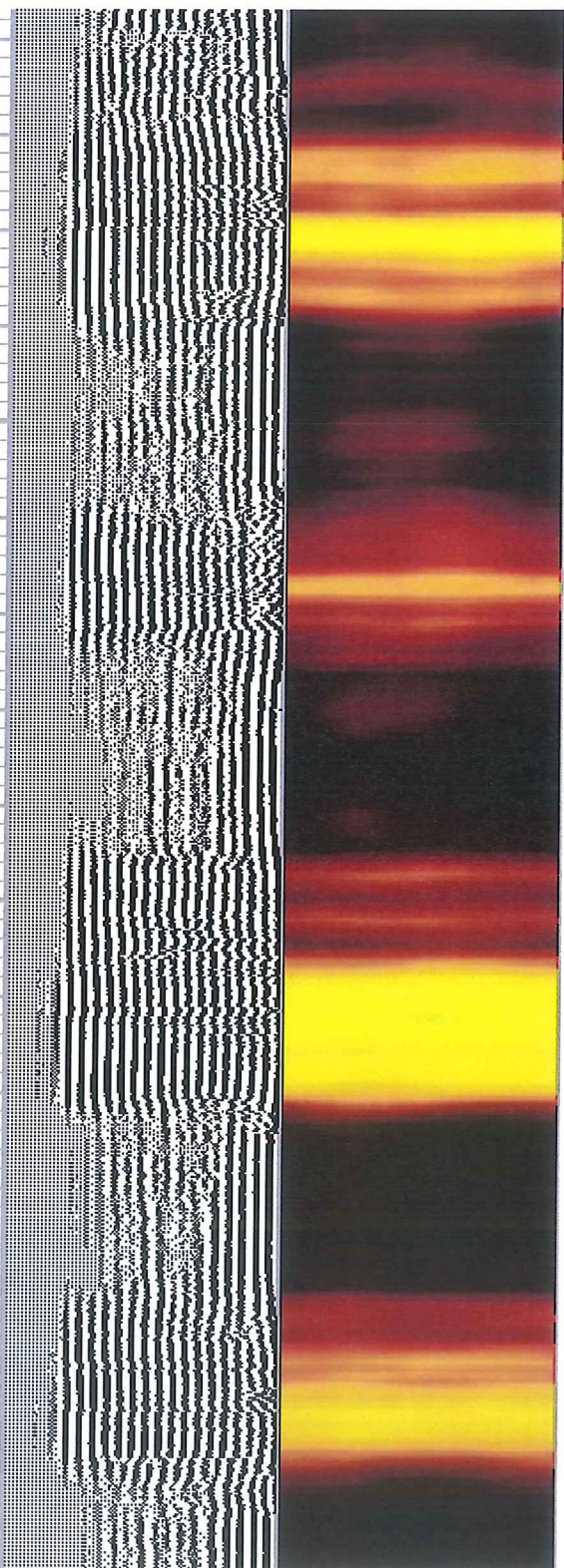
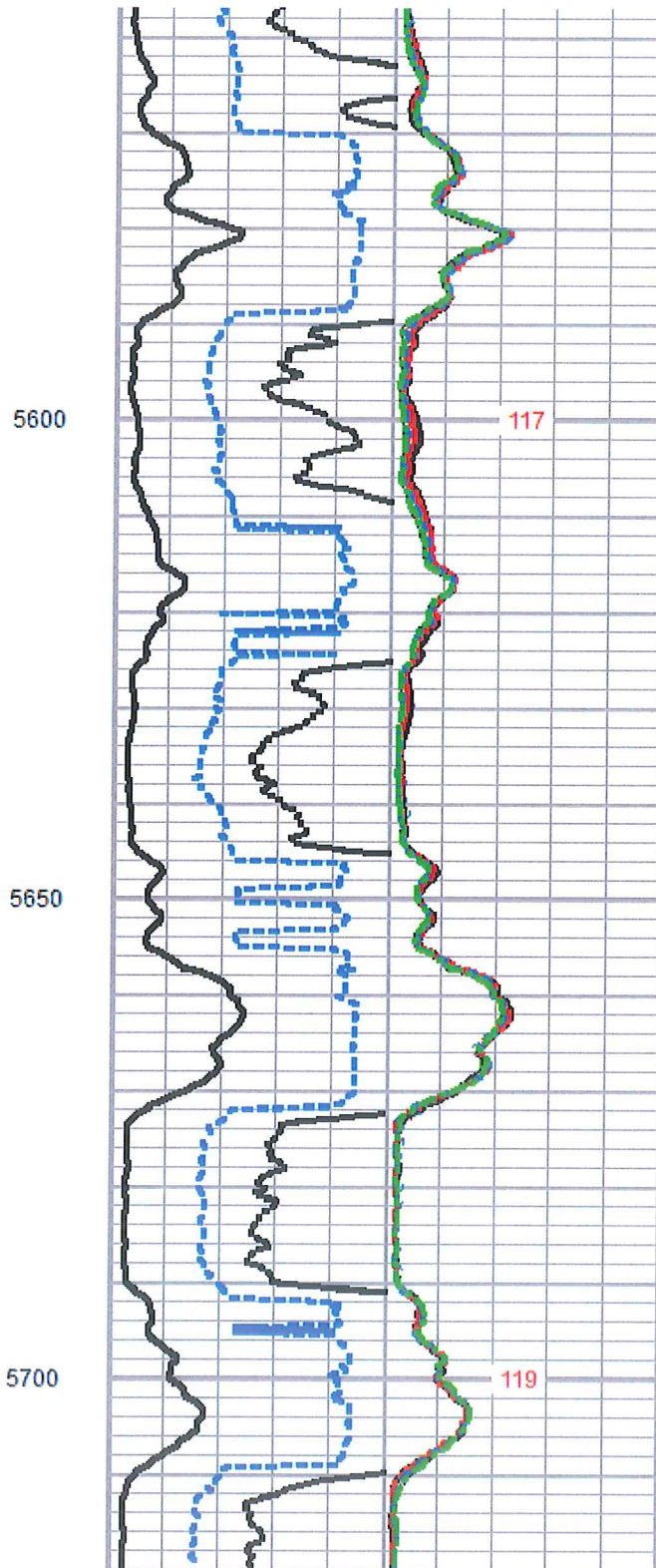
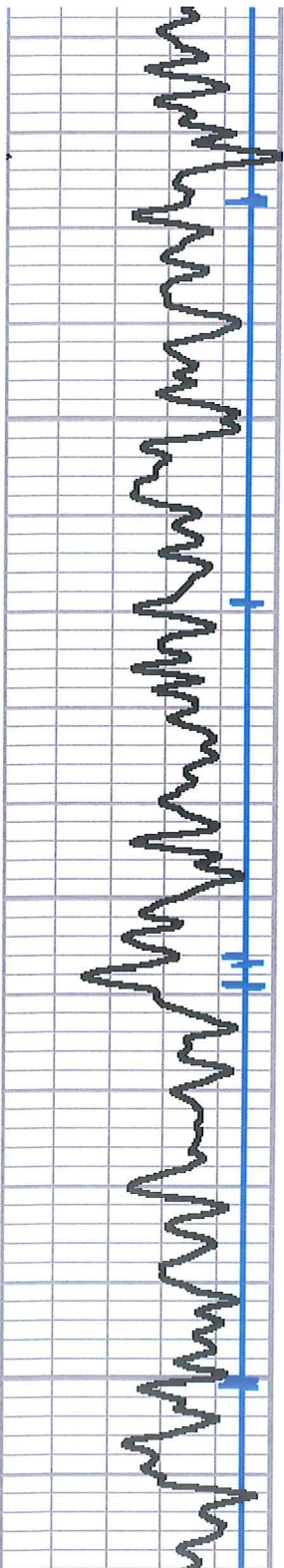
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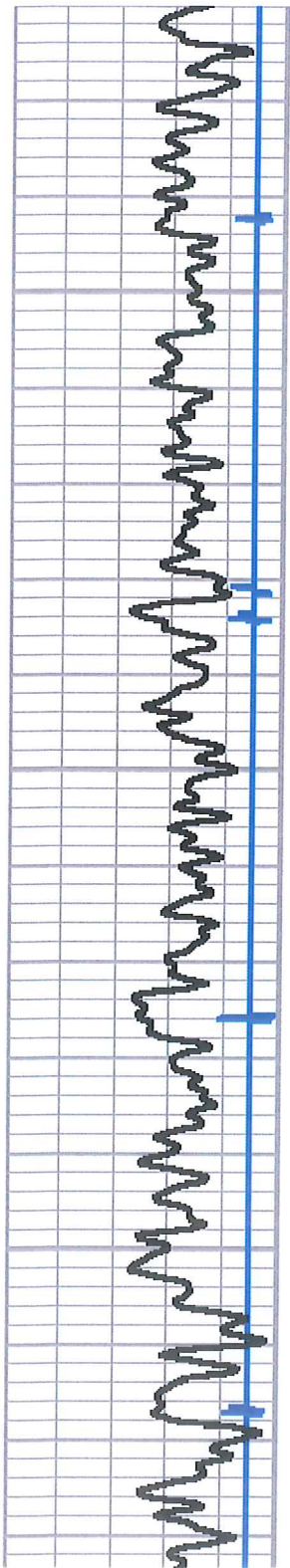


113





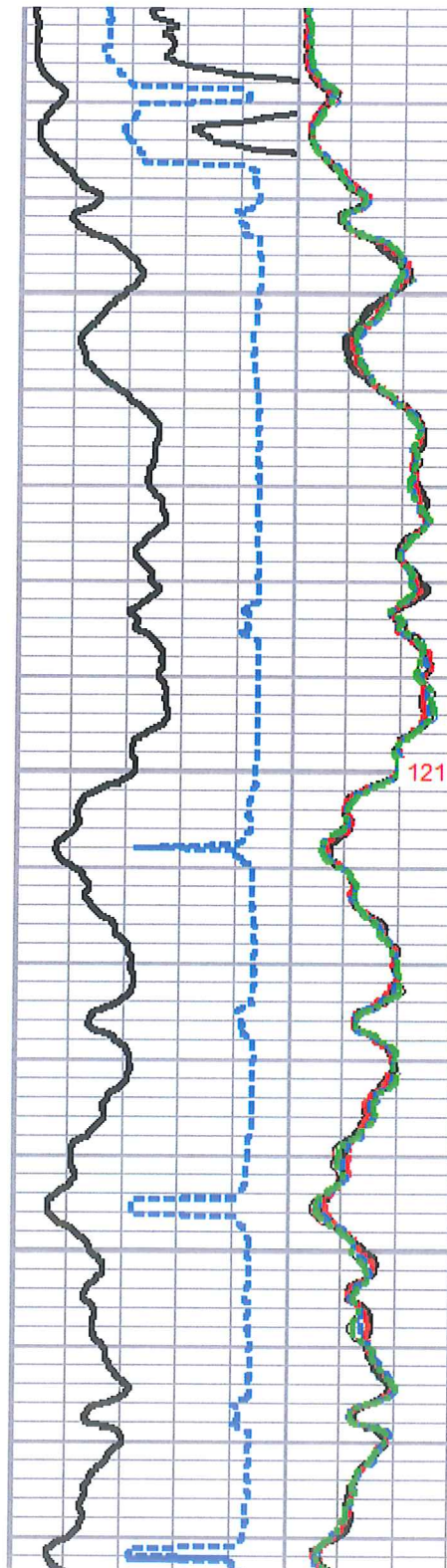




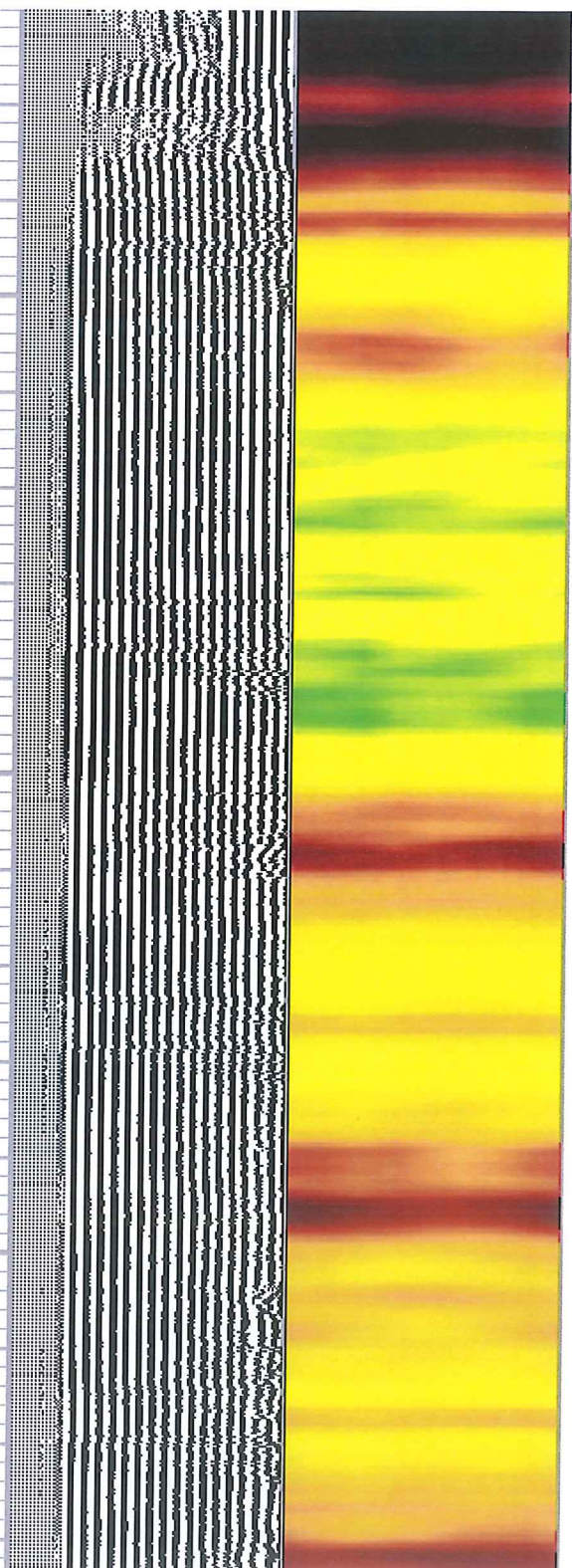
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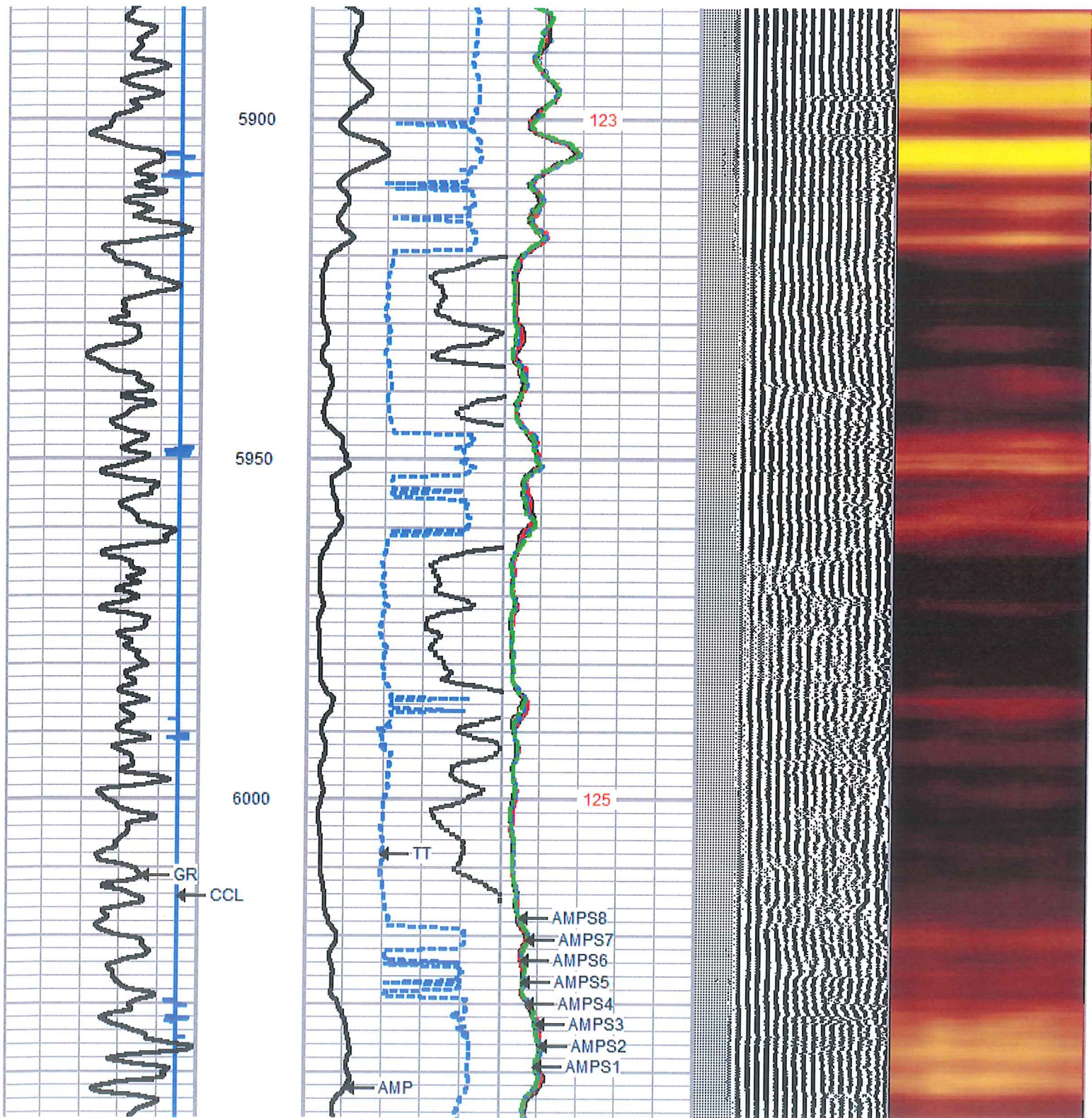
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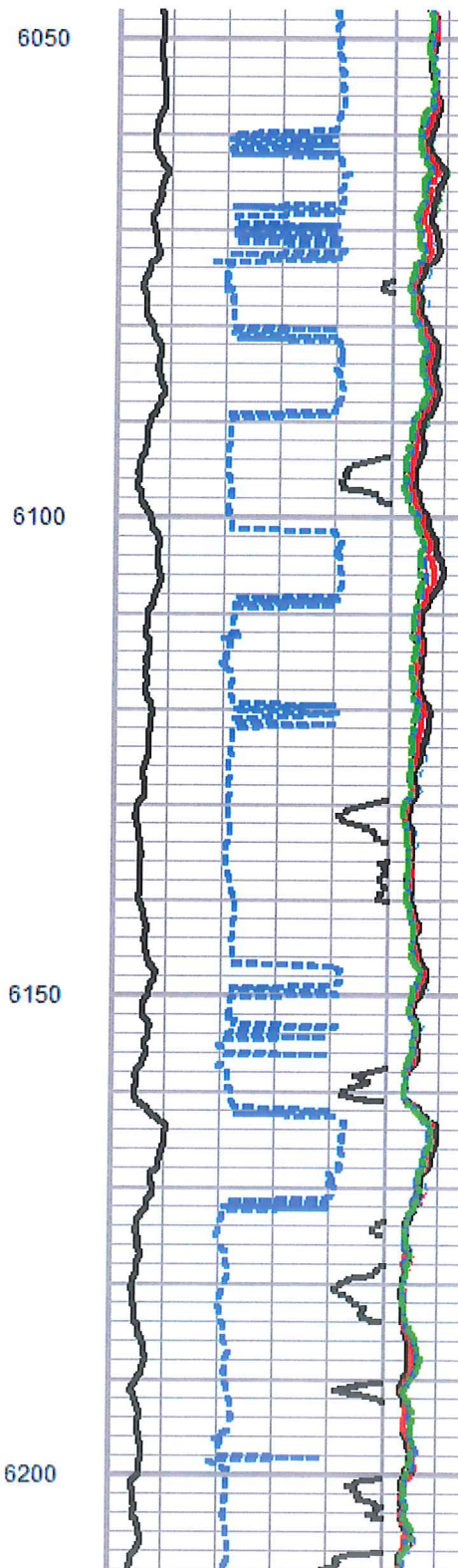
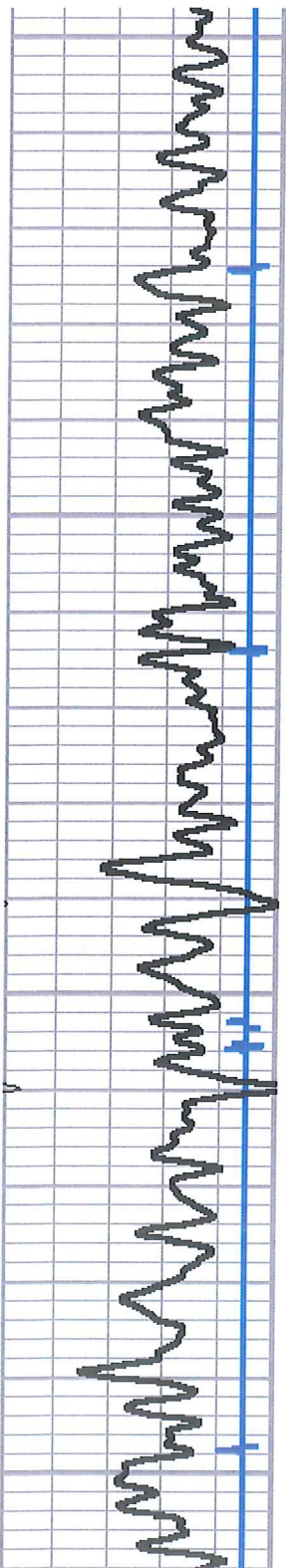
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121

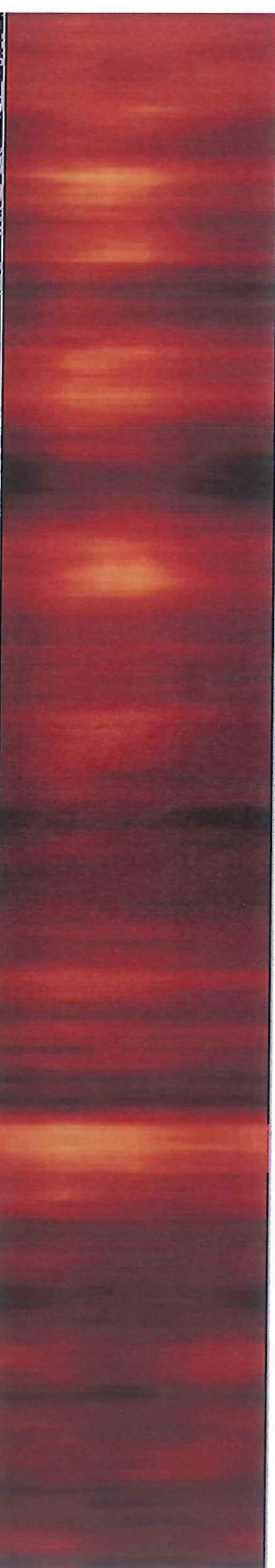
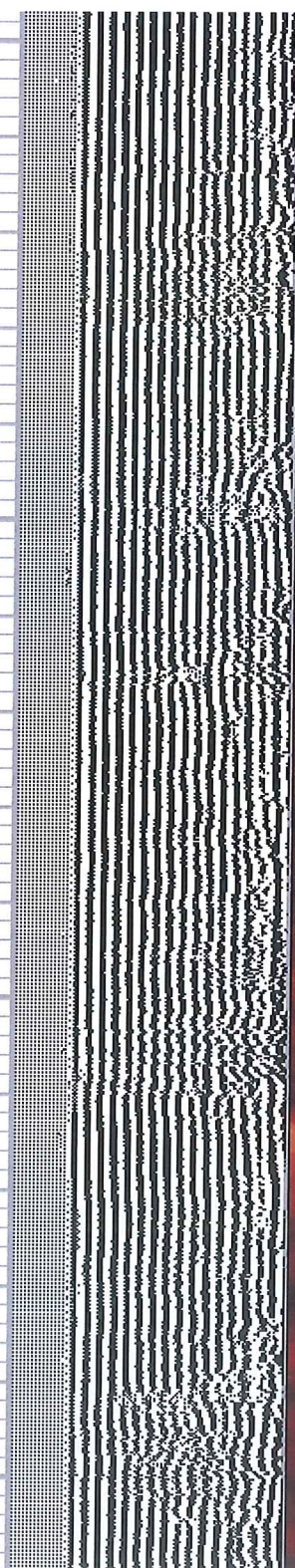


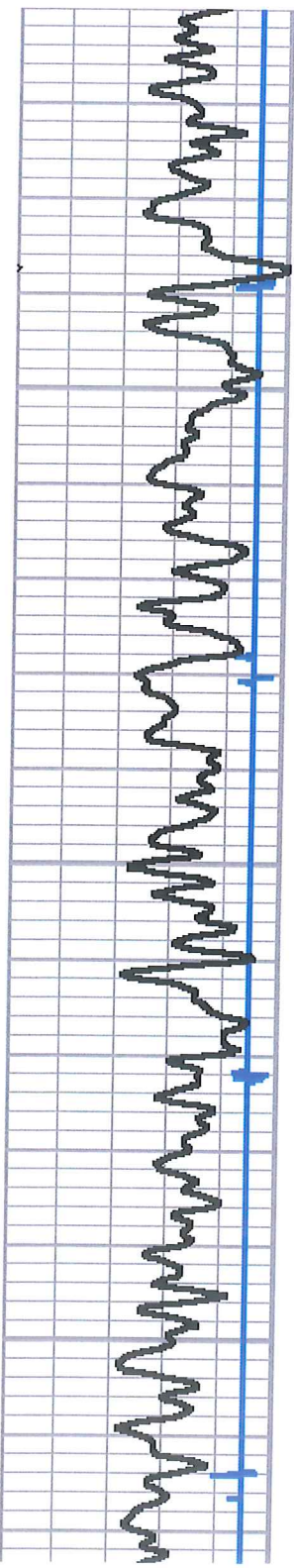




126

128

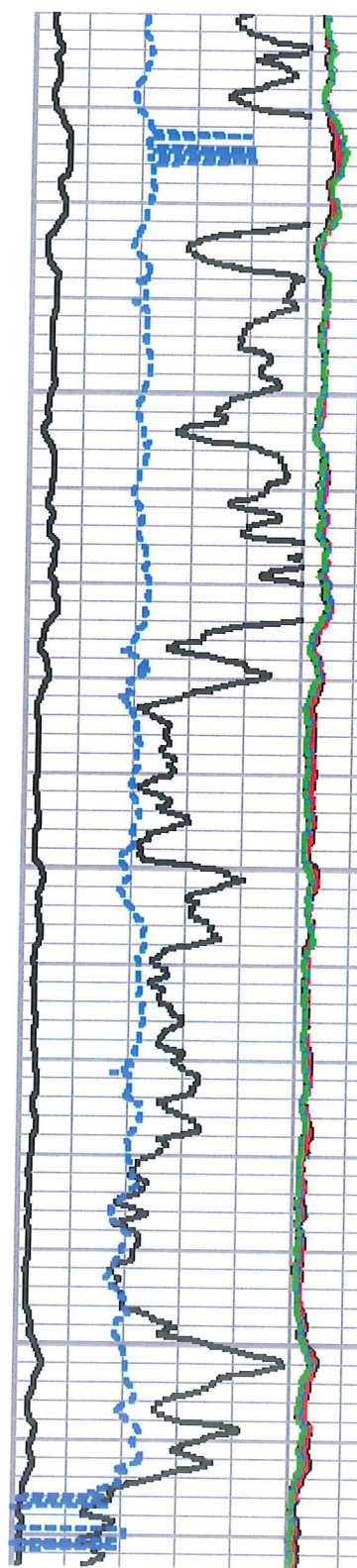




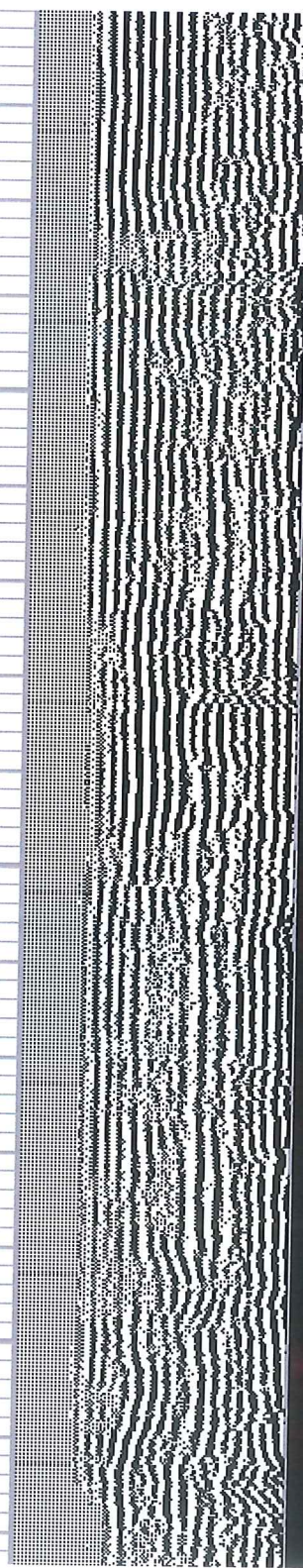
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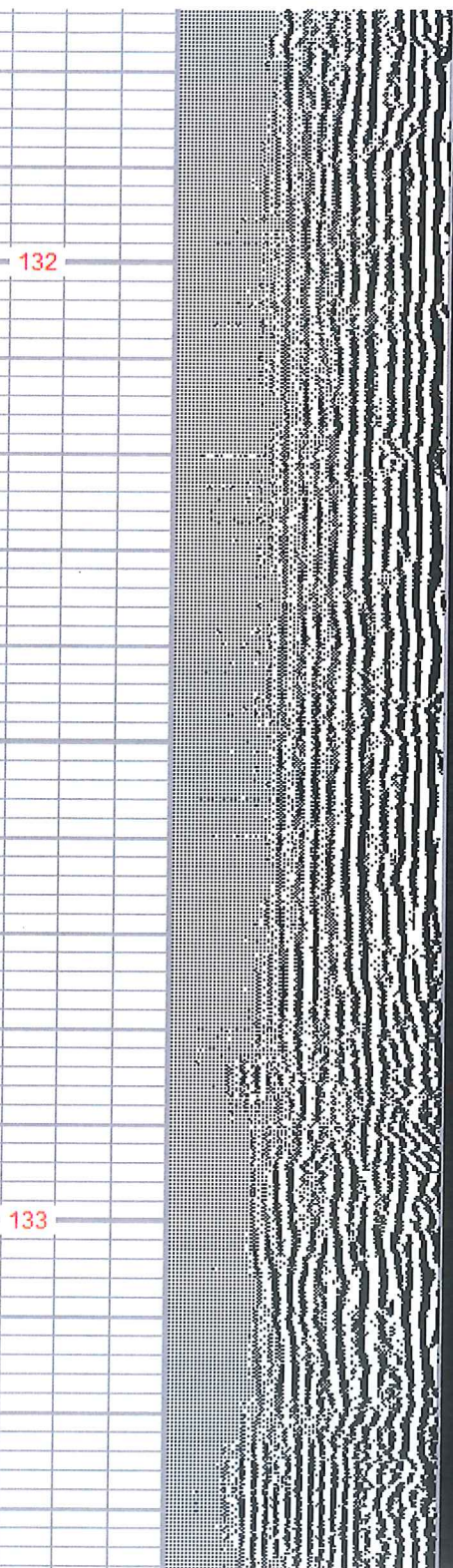
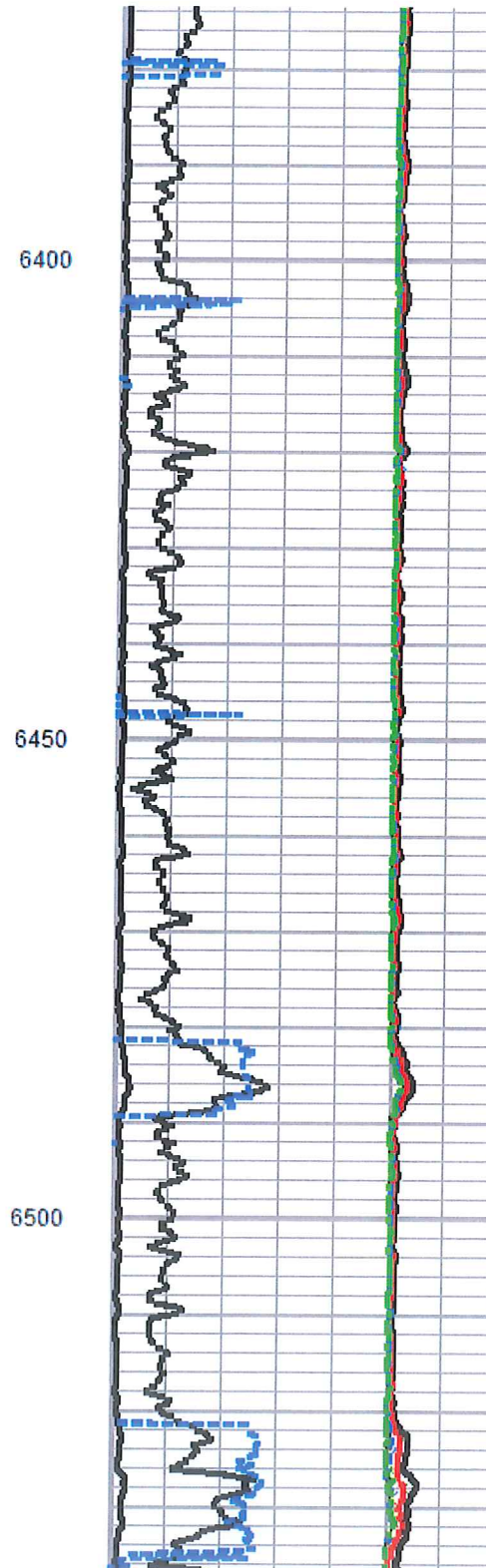
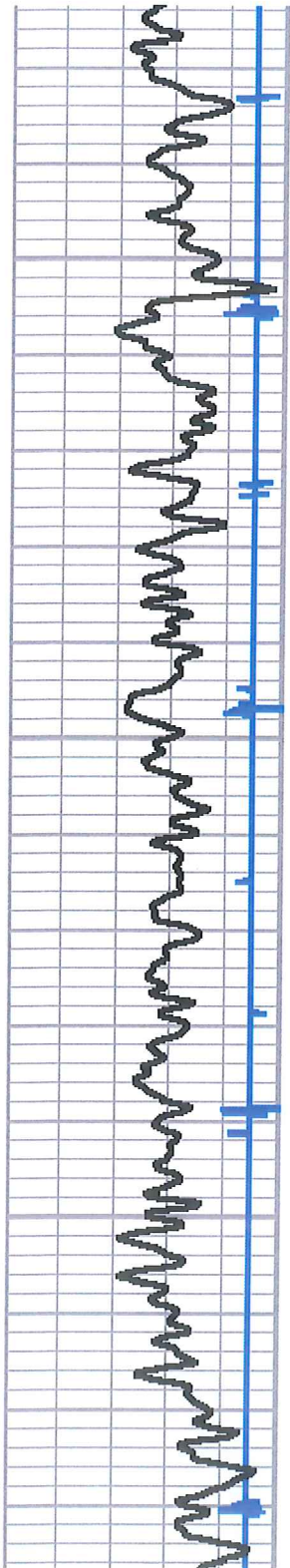
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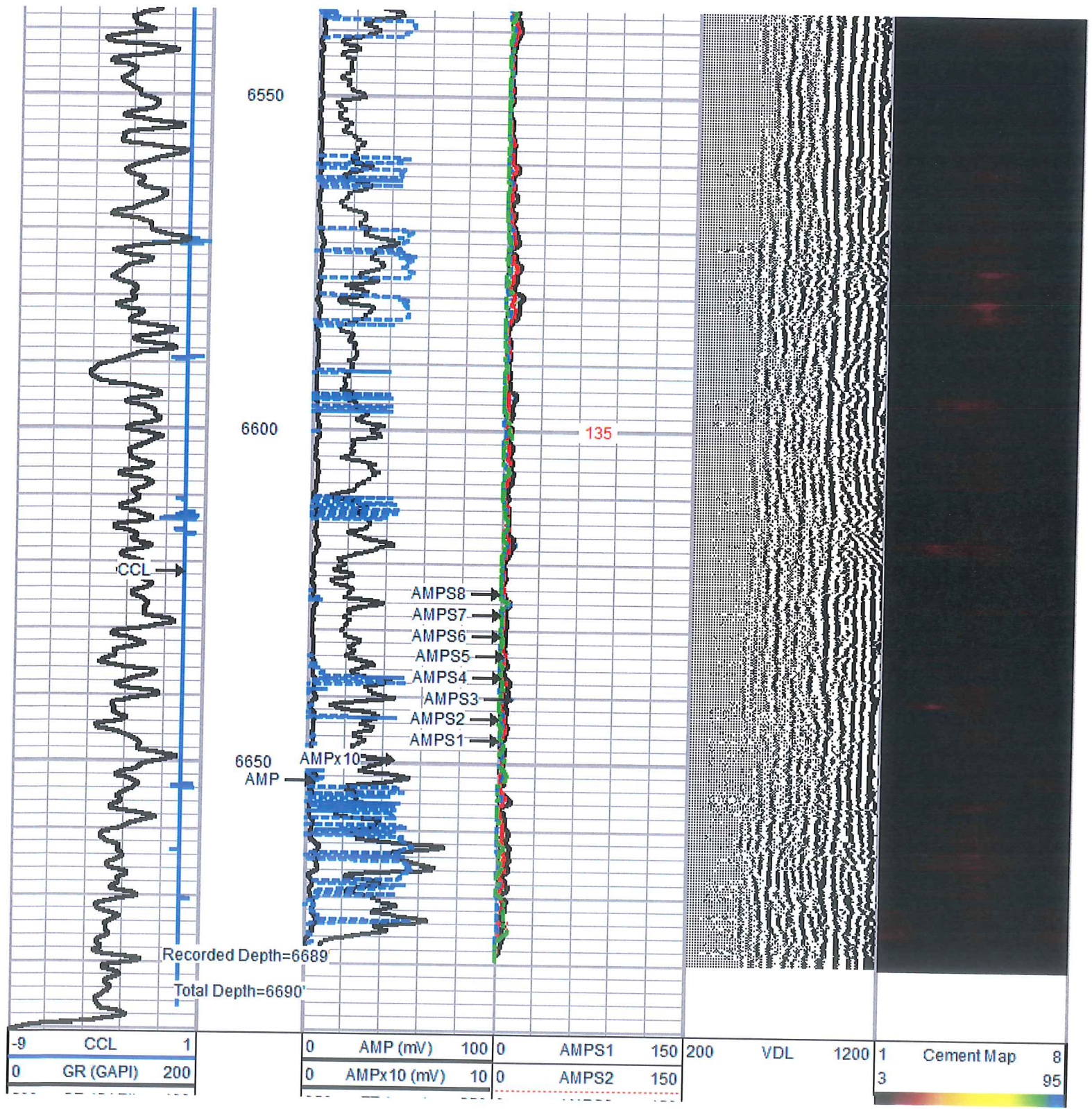
6350



130







200 GR (GAPI) 400

350	TT (usec)	250	0	AMPS3	150
0				AMPS4	150
0				AMPS5	150
0				AMPS6	150
0				AMPS7	150
0				AMPS8	150

TEMP
(degF)



REPEAT SECTION

Database File: washington 2h.db
 Dataset Pathname: pass4
 Presentation Format: scbl02
 Dataset Creation: Sat Sep 27 08:36:06 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

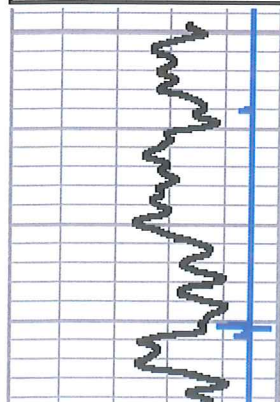
-9	CCL	1
0	GR (GAPI)	200
200	GR (GAPI)	400

0	AMP (mV)	100
0	AMPx10 (mV)	10
350	TT (usec)	250

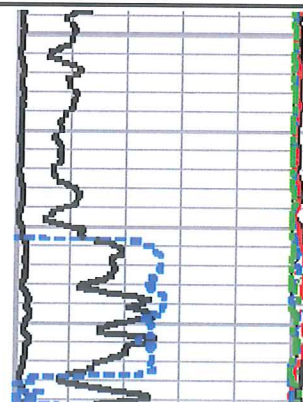
0	AMPS1	150
0	AMPS2	150
0	AMPS3	150
0	AMPS4	150
0	AMPS5	150
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150

TEMP
(degF)

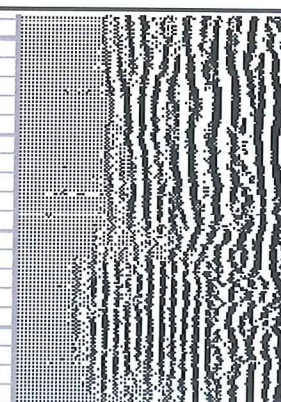
200	VDL	1200	1	Cement Map	8
			3		95

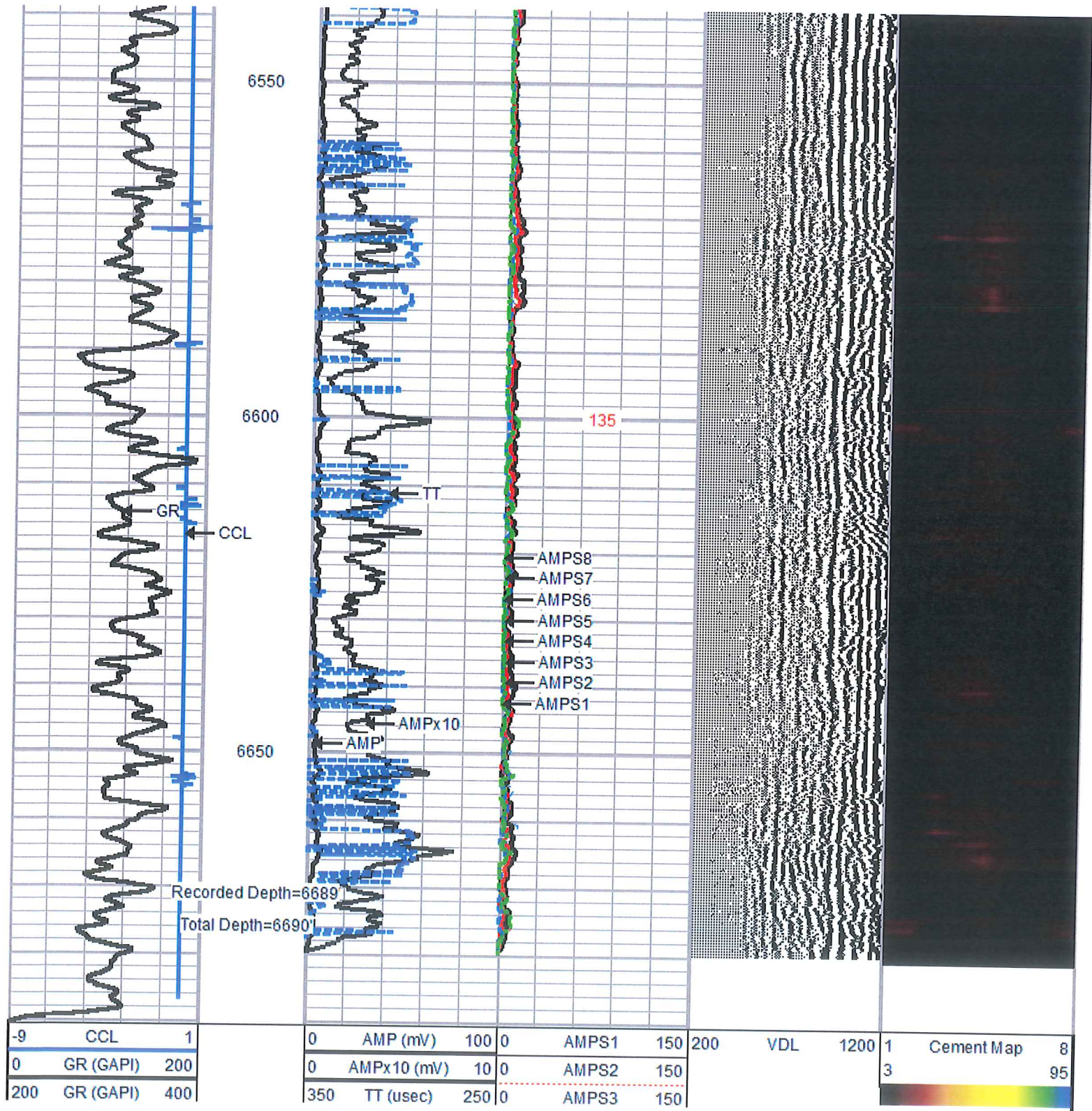


6500



133





-9	CCL	1
0	GR (GAPI)	200
200	GR (GAPI)	400

0	AMP (mV)	100	0	AMPS1	150
0	AMPx10 (mV)	10	0	AMPS2	150
350	TT (usec)	250	0	AMPS3	150

1	Cement Map	8
3		95

0	AMPS4	150
0	AMPS5	150
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150
TEMP		
(degF)		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
HeadVolt	16.76		PTS275	2.88	2.75	24.00	
Temp	13.91						
WVFS3FT	11.68			RBT-Probe275T (FW1404-143_5.5INCH) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	100.00
WVFS1	11.68						
WVFS2	11.68						
WVFS3	11.68						
WVFS4	11.68						
WVFS5	11.68						
WVFS6	11.68						
WVFS7	11.68						
WVFS8	11.68						
WVFS5FT	10.68						

WVFCAL	7.42		2.88	2.75	24.00
CCL	3.63		4.54	2.75	30.00
GR	0.89				

Dataset: washington 2h.db: field/well/run1/pass5
 Total Length: 19.70 ft
 Total Weight: 178.00 lb
 O.D.: 2.75 in