



**RADIAL BOND-GAMMA RAY
CCL-TEMP**

Company ANTERO RESOURCES
Well MANSER 3H
Field CANTON
County DODDRIDGE
State WV.

Country USA

Country USA

Location:

API #: 470177064870000

Other Services

SEC	TWP	RGE	Elevation
Permanent Datum	GL	Elevation	1141'
Log Measured From	K.B.24'	K.B.	1165'
Drilling Measured From	K.B.24'	D.F.	1164'
		G.L.	1141'

Company ANTERO RESOURCES
 Well MANSER 3H
 Field CANTON
 County DODDRIDGE
 State WV.

Date	11-29-14						
Run Number	ONE						
Depth Driller							
Depth Logger	7200'						
Bottom Logged Interval	7199'						
Top Log Interval	SURFACE						
Open Hole Size							
Type Fluid	WATER						
Density / Viscosity							
Max. Recorded Temp.	125						
Estimated Cement Top							
Time Well Ready	8:00AM						
Time Logger on Bottom	9:00AM						
Equipment Number	5982						
Location	CLARKSBURG WV.						
Recorded By	E.BUTCHER						
Witnessed By	GLENN SPEC						
Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wd/Ft	Top	Bottom			
Surface String							
Prod. String							
Production String	5.5"	20 LBS.	SURFACE	7200'			
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: manser 3h.db
Dataset Pathname: pass4
Dataset Creation: Sat Nov 29 09:04:45 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 Nov 08 10:01:57 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.974	1.000	71.921	71.795	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: manser 3h.db
 Dataset Pathname: pass4
 Presentation Format: scbl02
 Dataset Creation: Sat Nov 29 09:04:45 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

-2	CCL	2
0	GR (GAPI)	200
200	GR (GAPI)	400

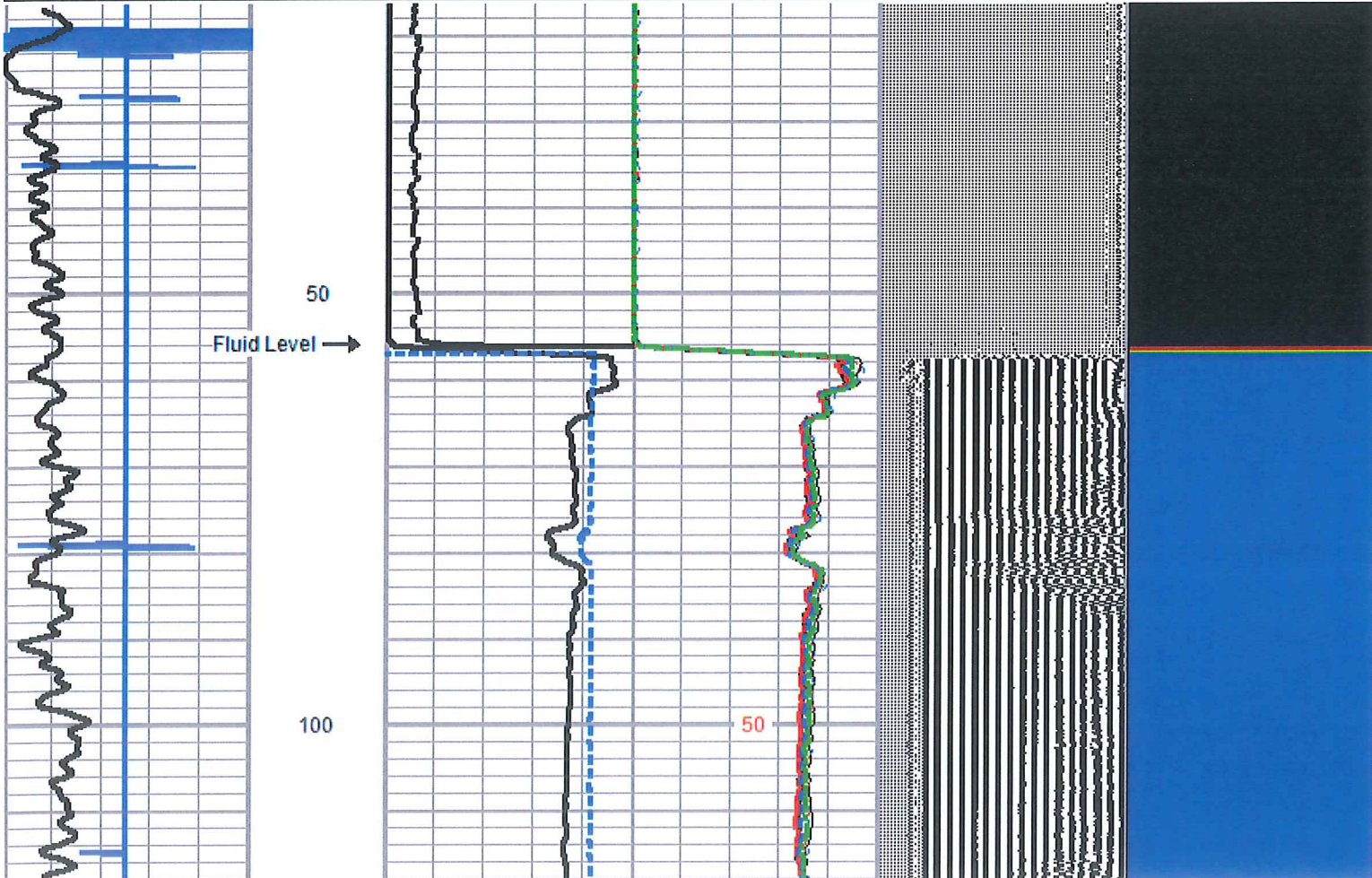
0	AMP (mV)	100
0	AMPx10 (mV)	10
350	TT (usec)	250

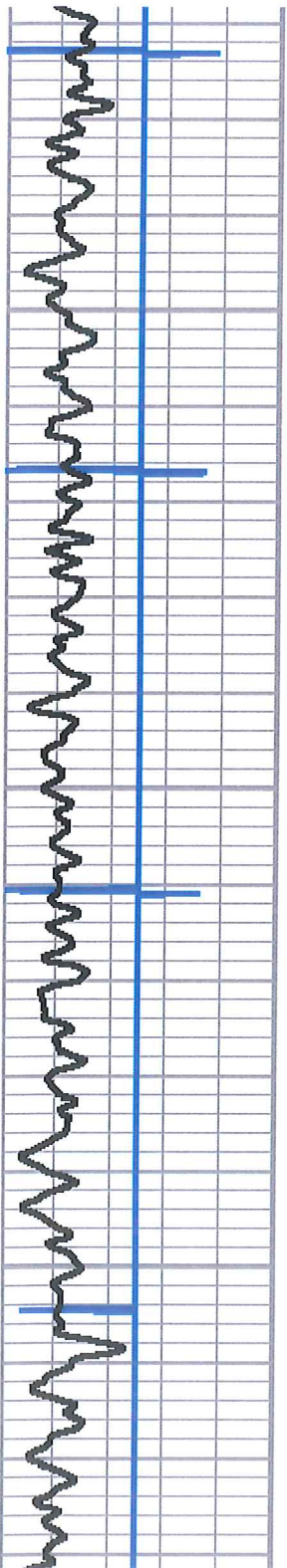
0	AMPS1	150
0	AMPS2	150
0	AMPS3	150
0	AMPS4	150
0	AMPS5	150
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150

200 VDL 1200



TEMP
(degF)

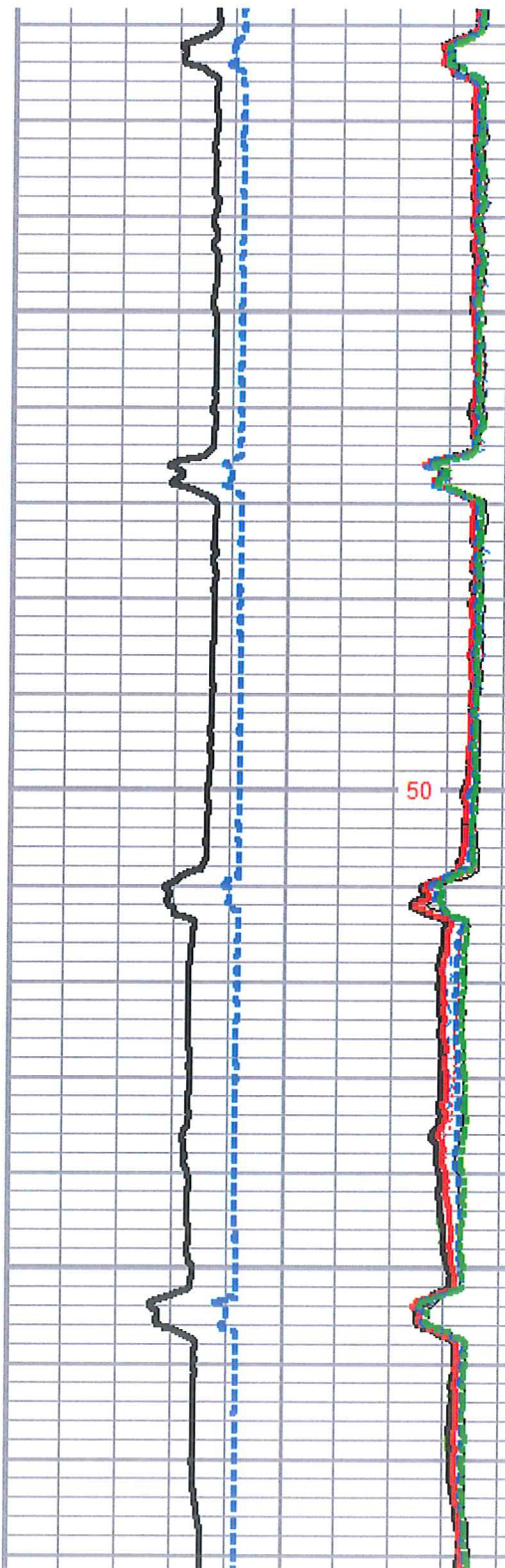




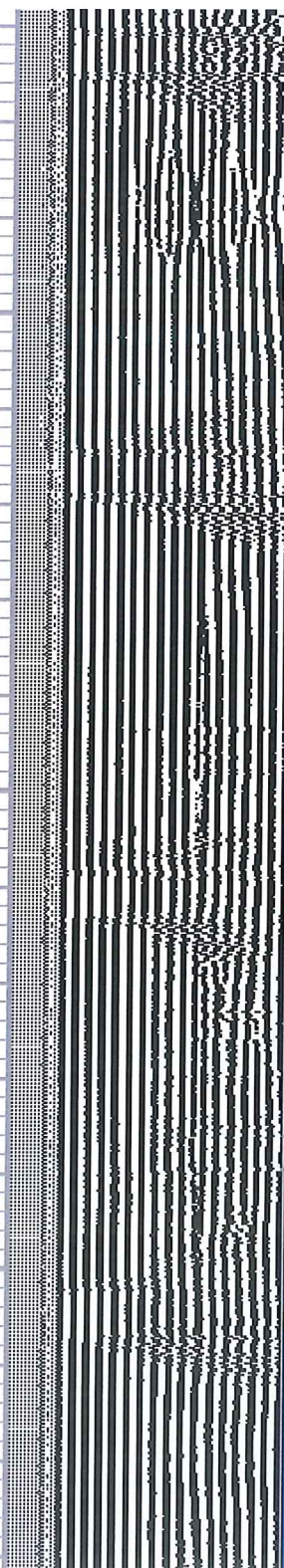
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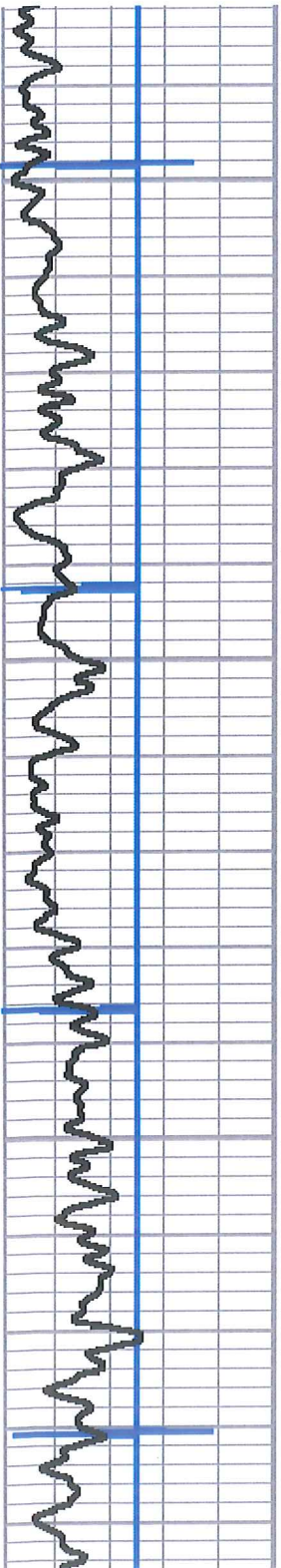
200

250



50

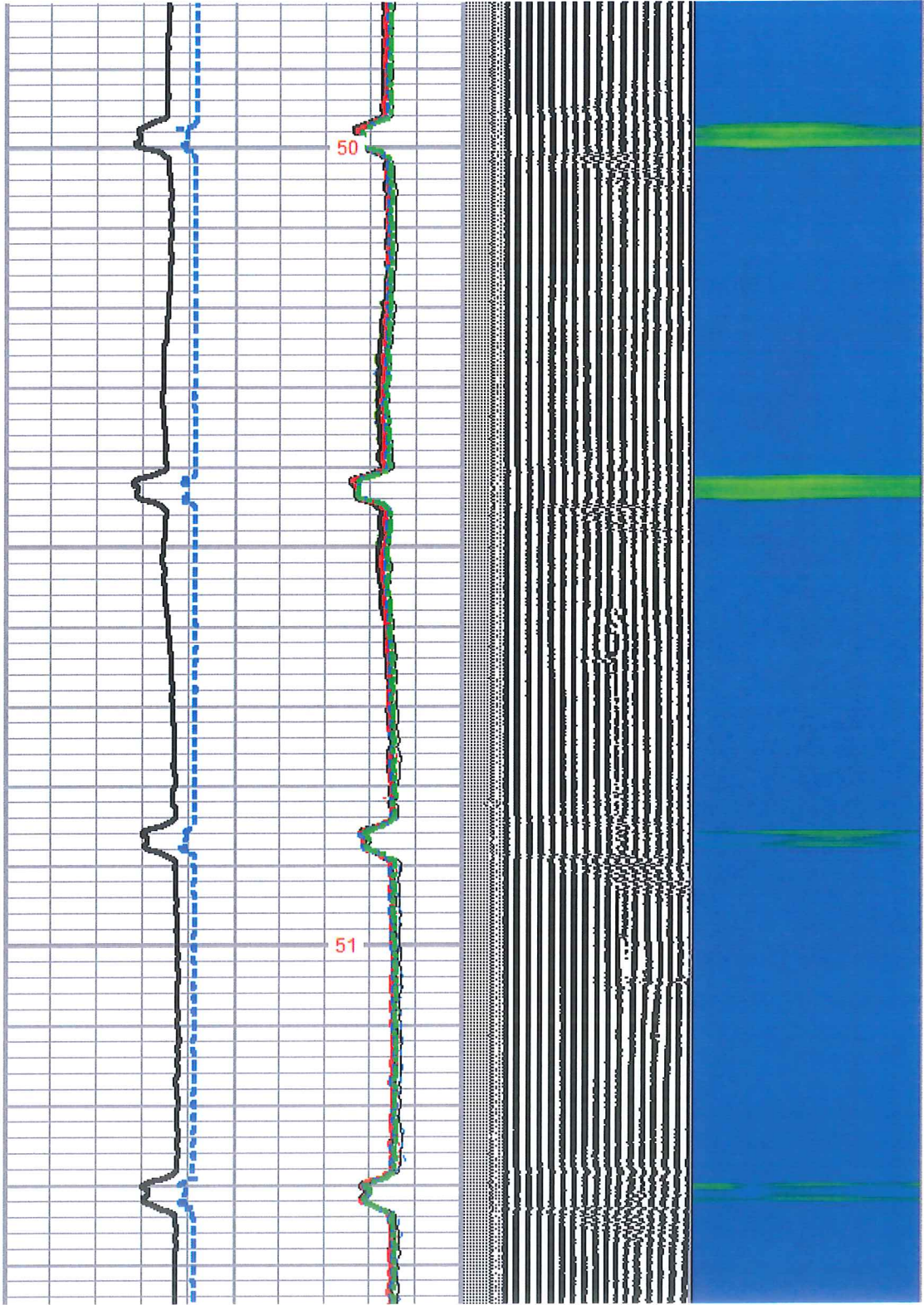


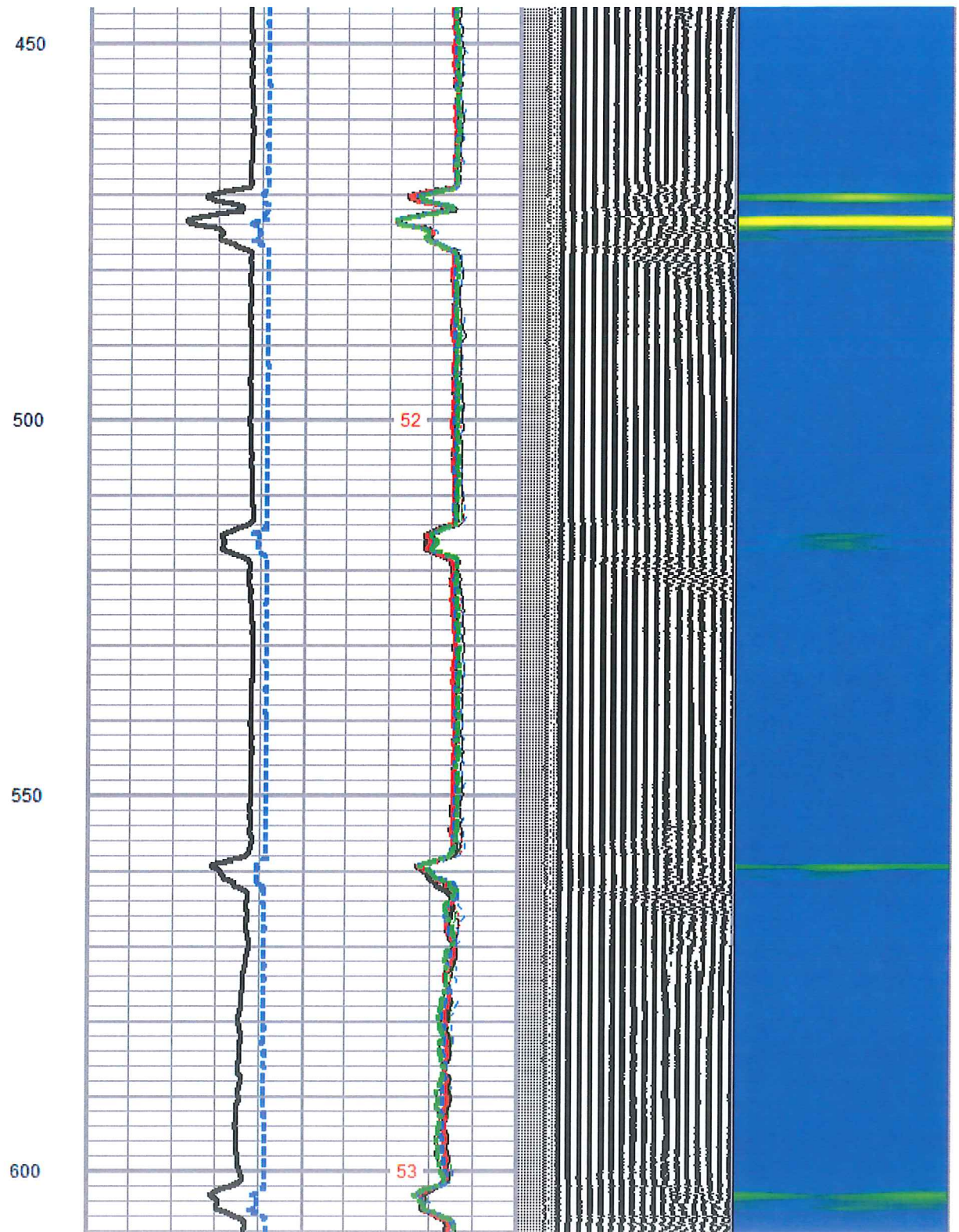
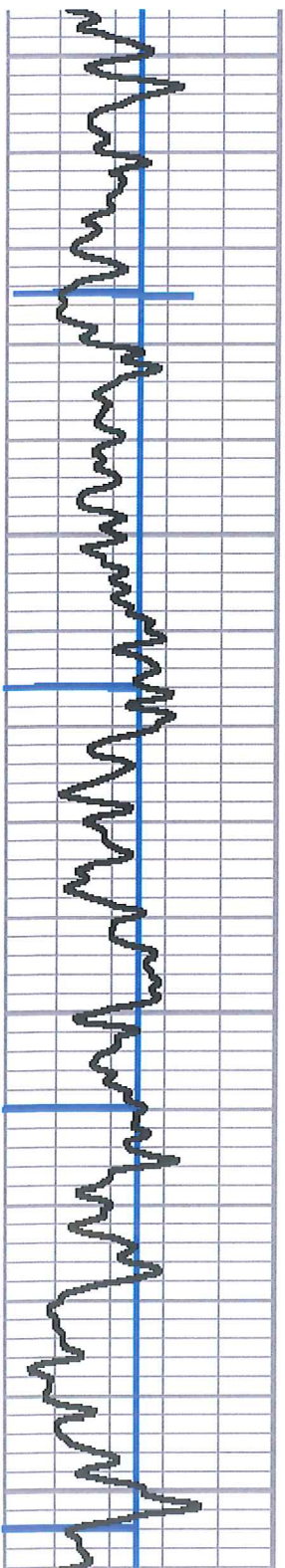


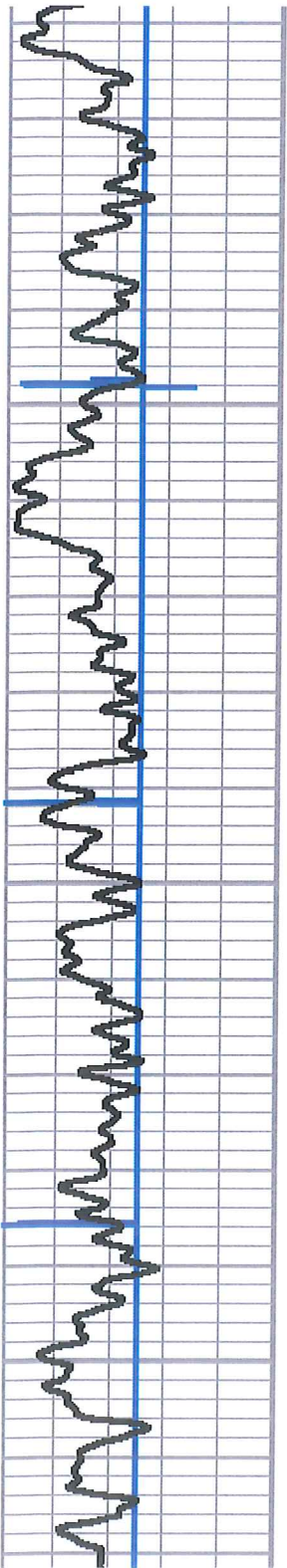
300

350

400



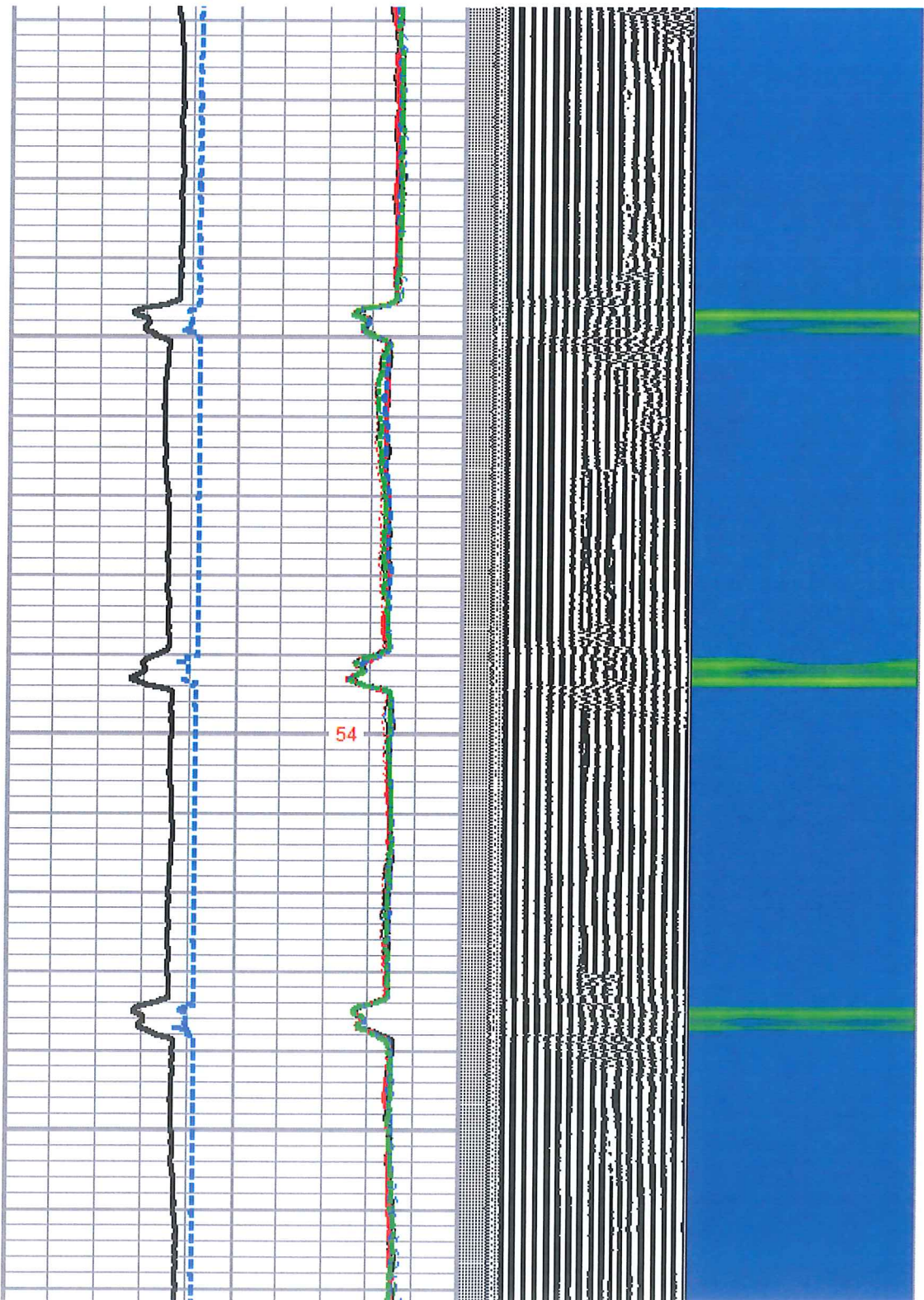




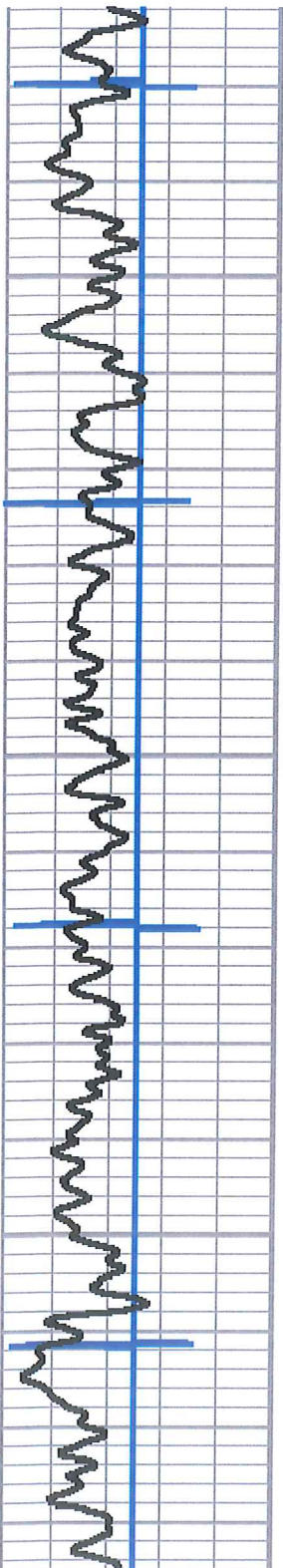
650

700

750



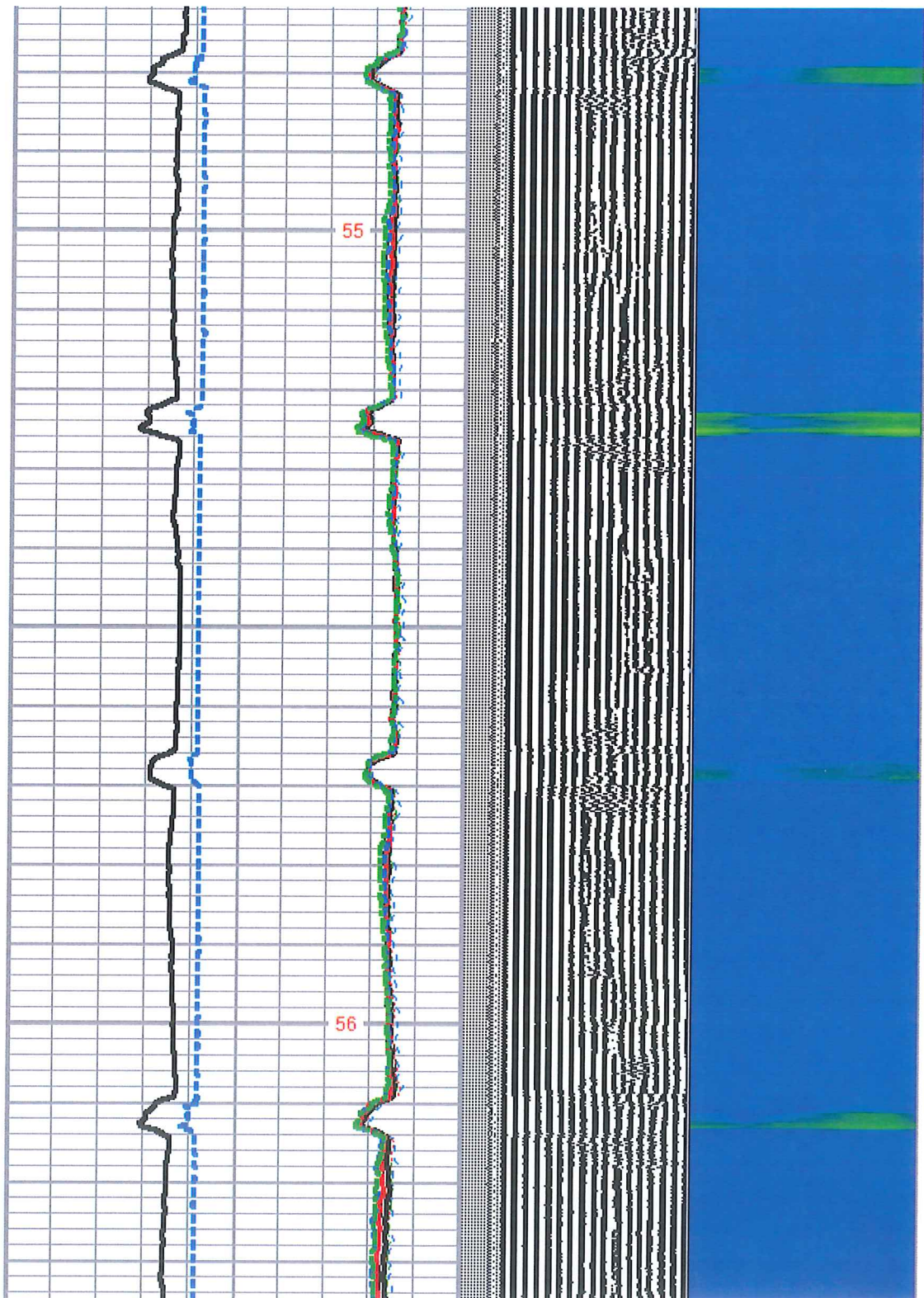
54



800

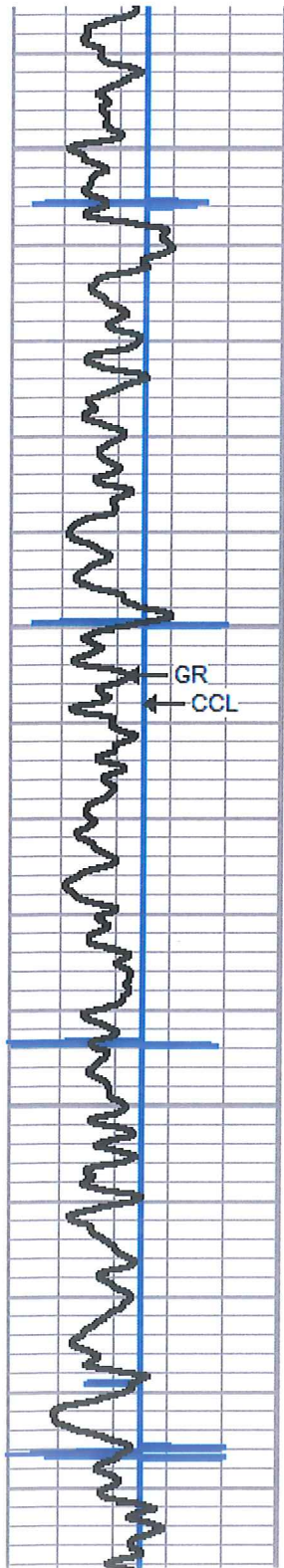
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900



55

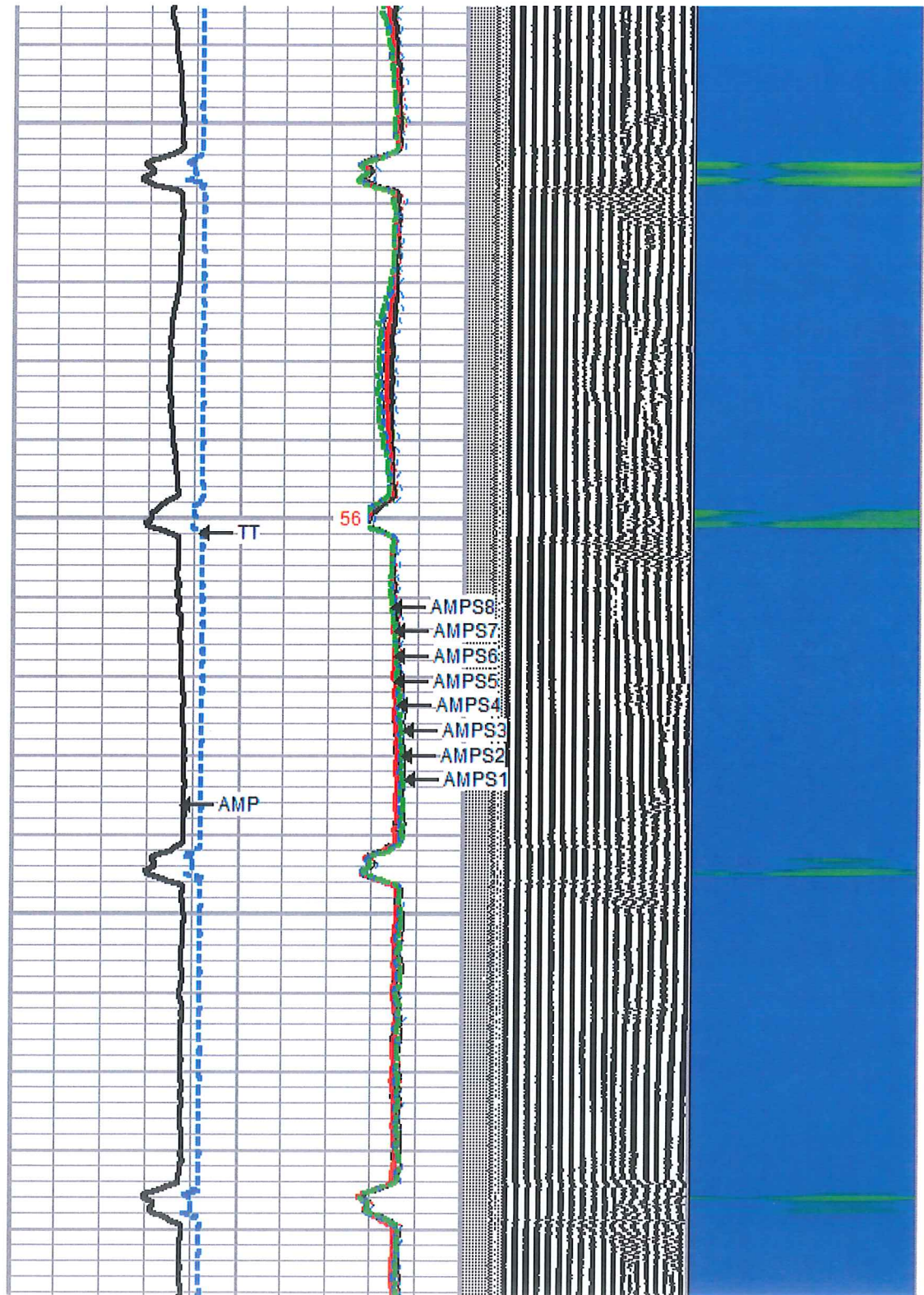
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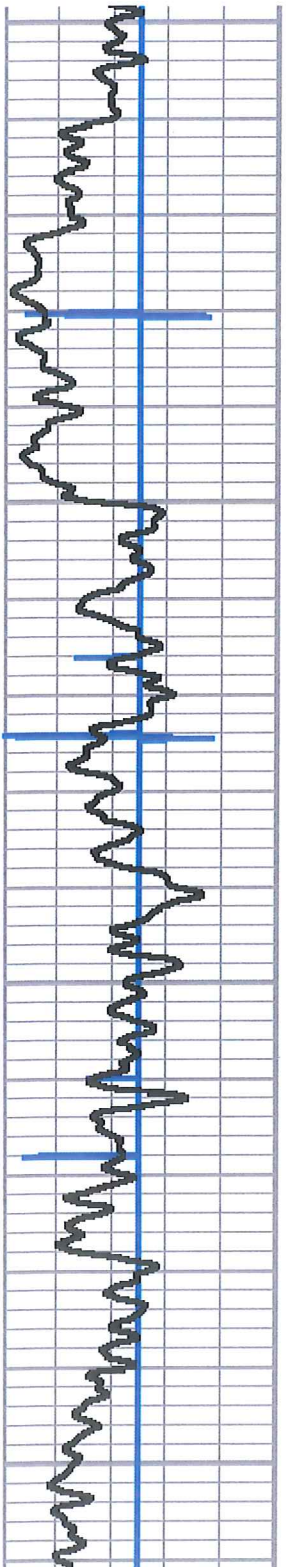


950

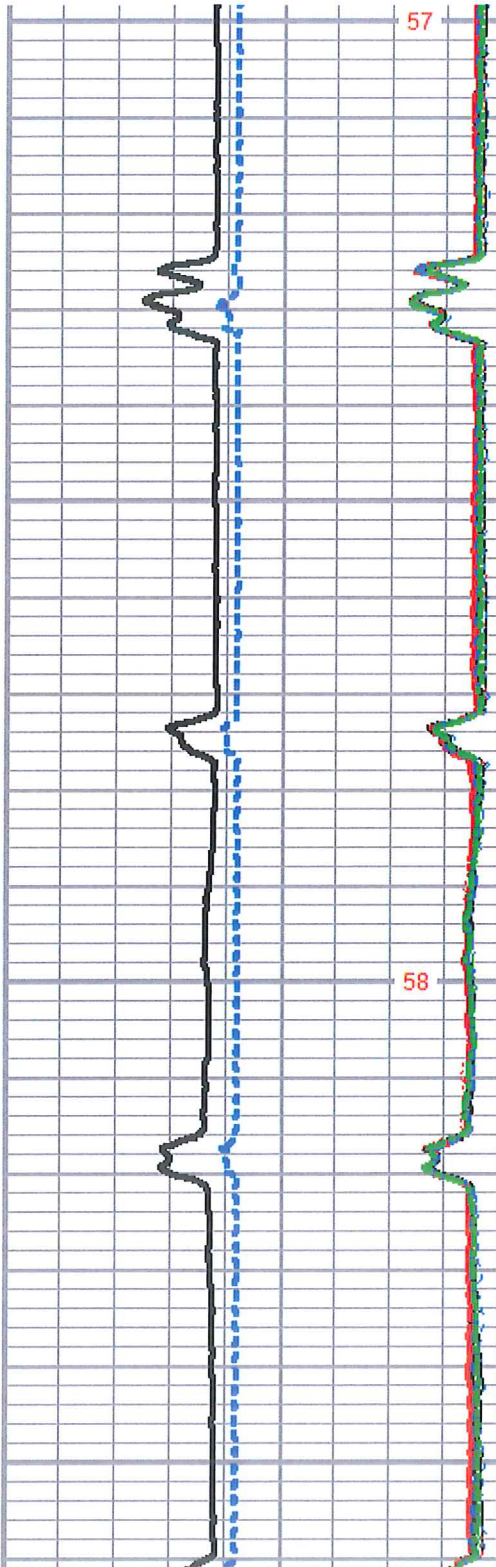
1000

1050

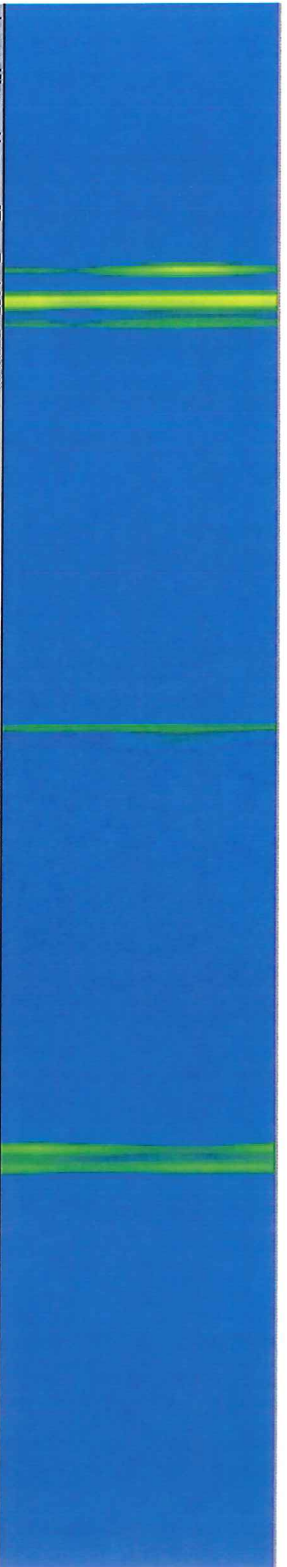
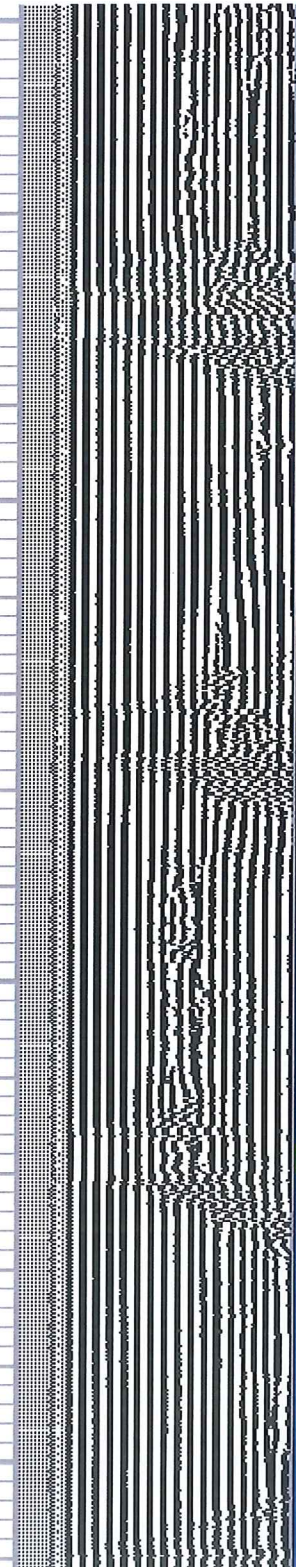


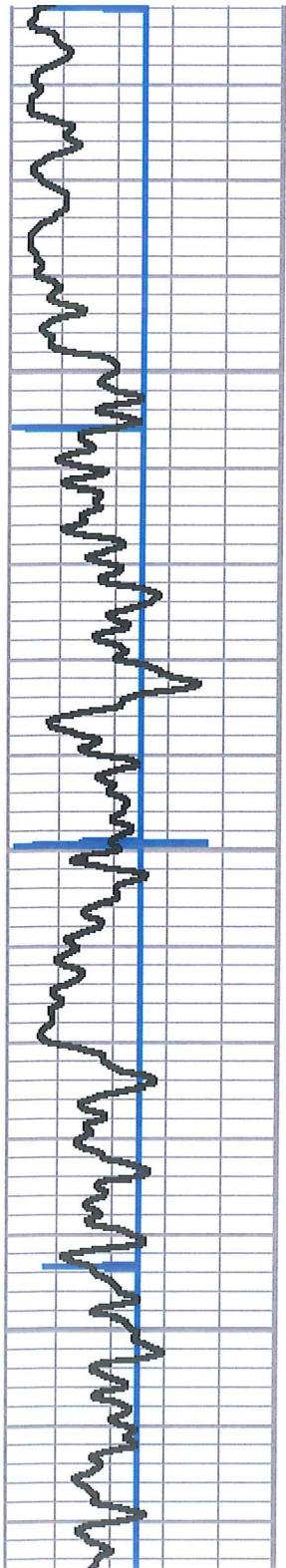


1100
1150
1200
1250



57
58

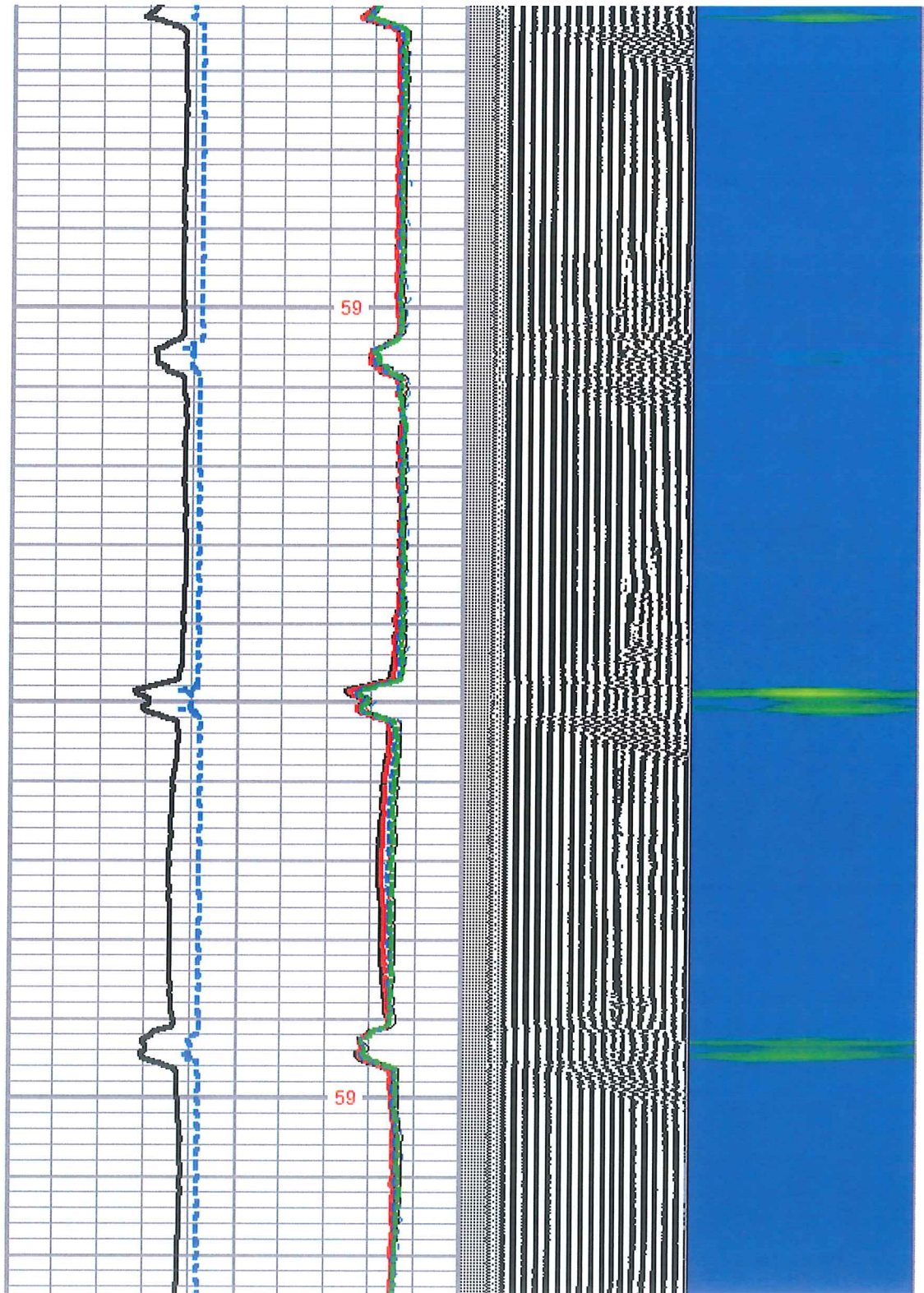


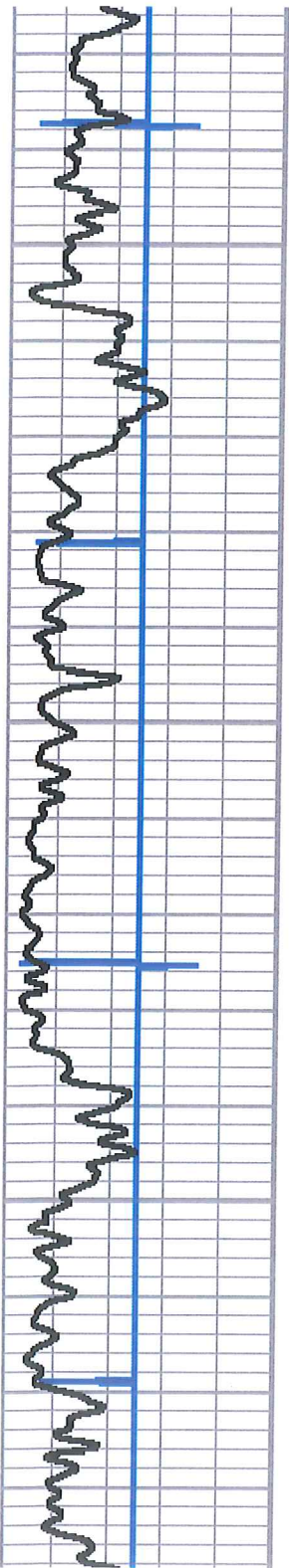


1300

1350

1400

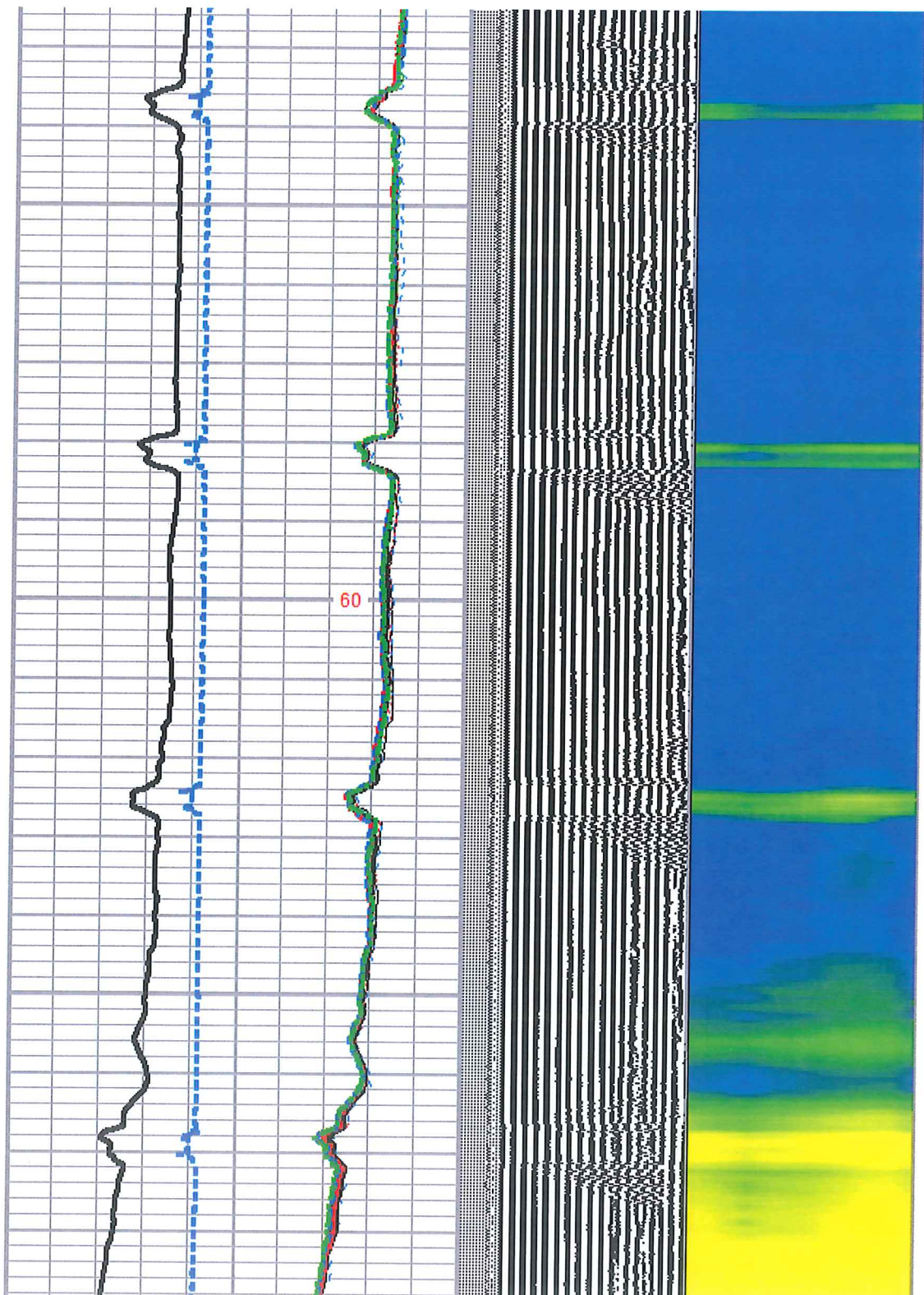


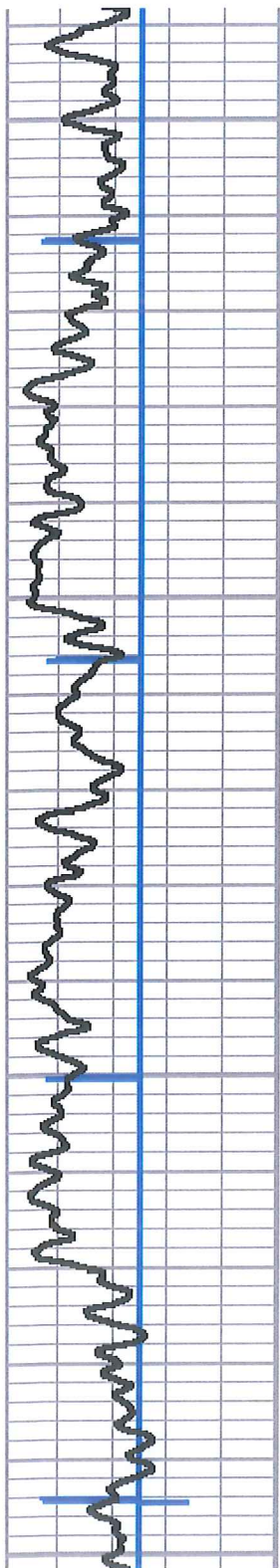


1450

1500

1550



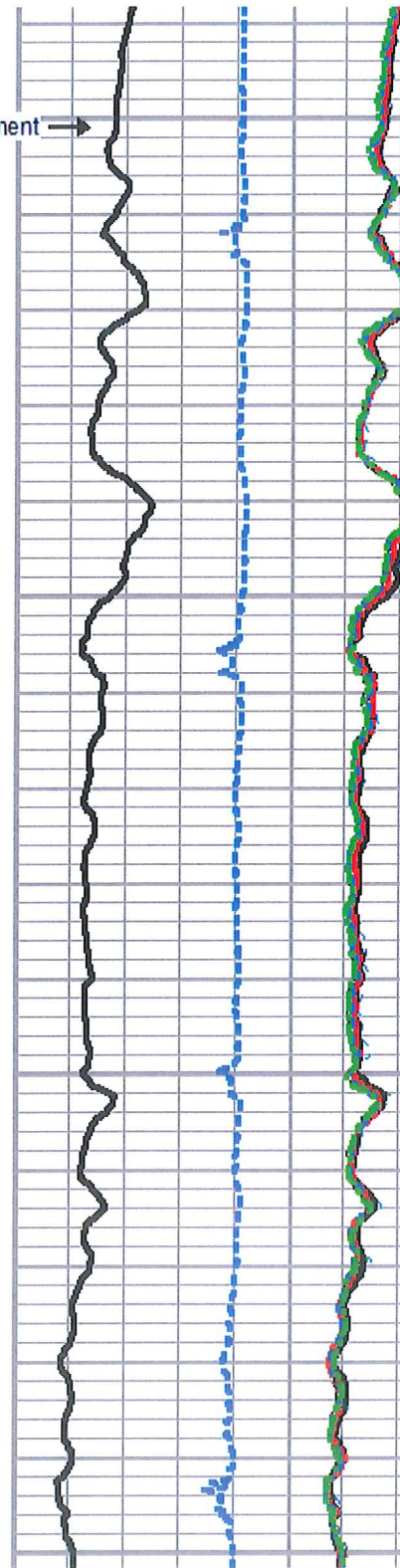


Top of Cement →

1650

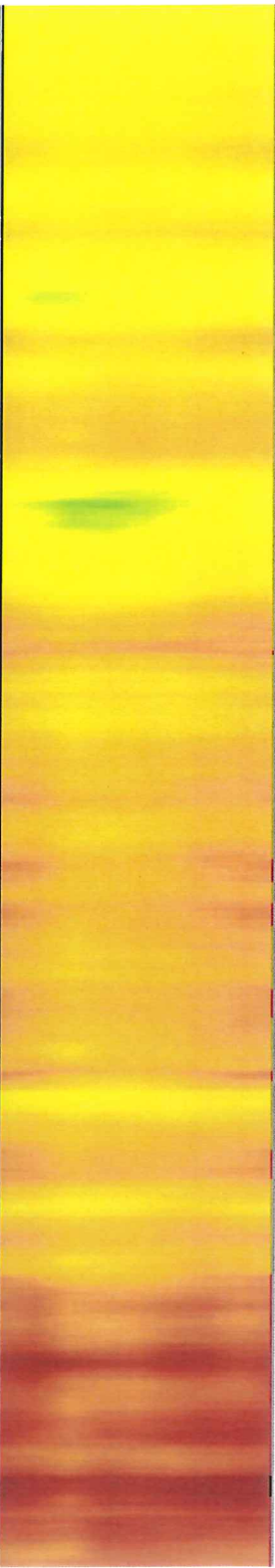
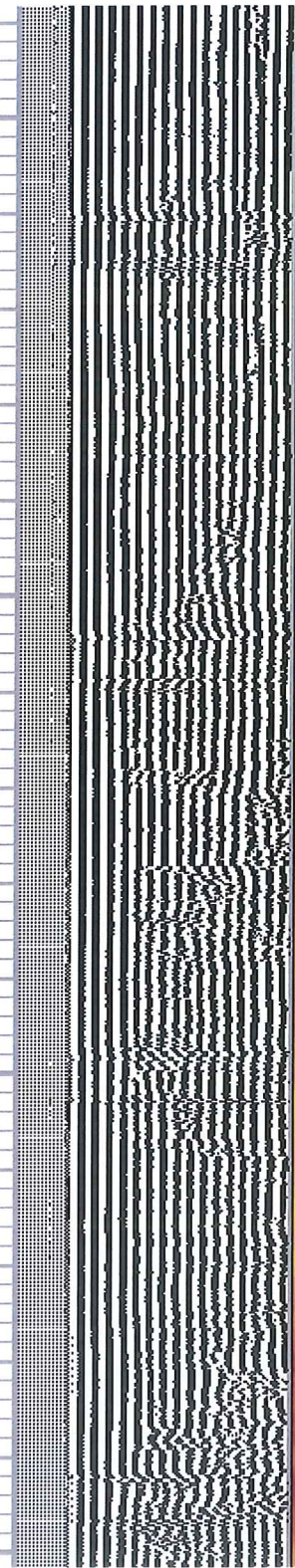
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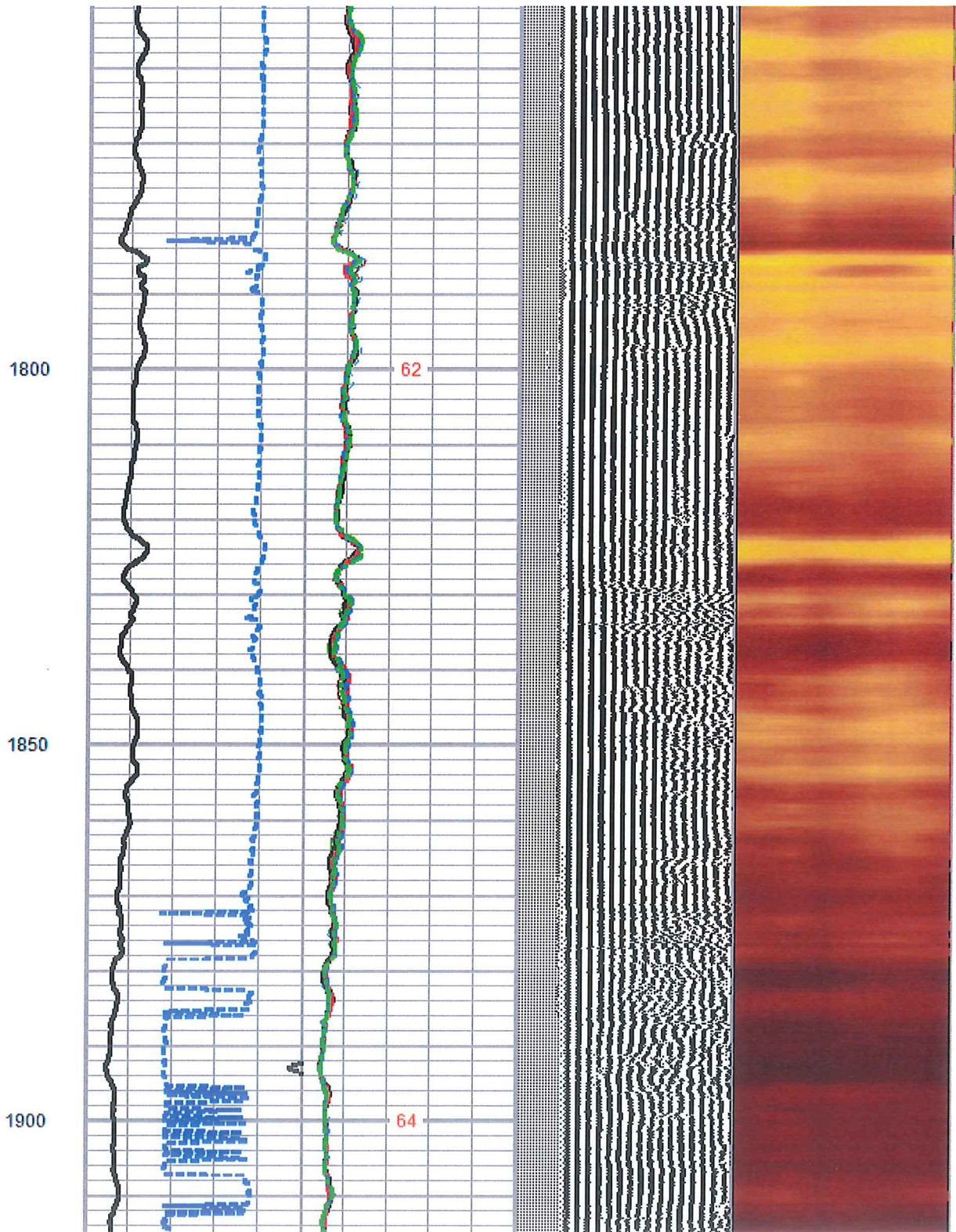
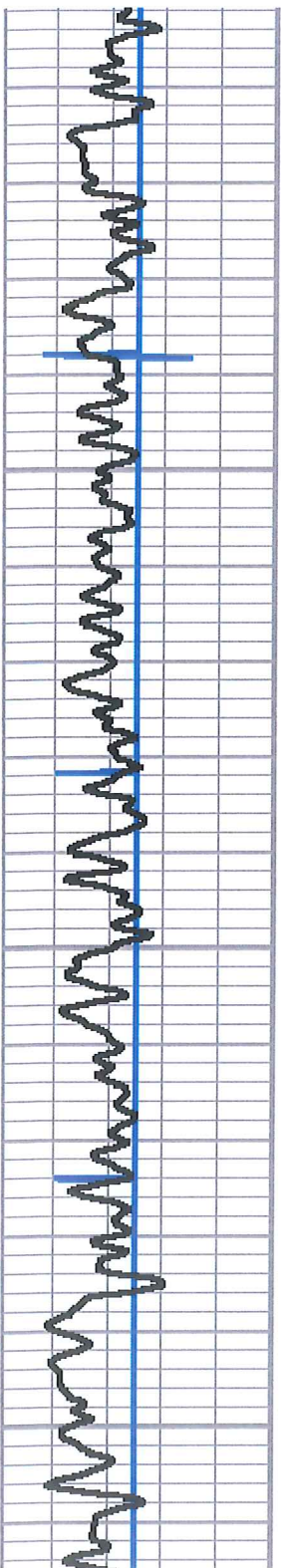
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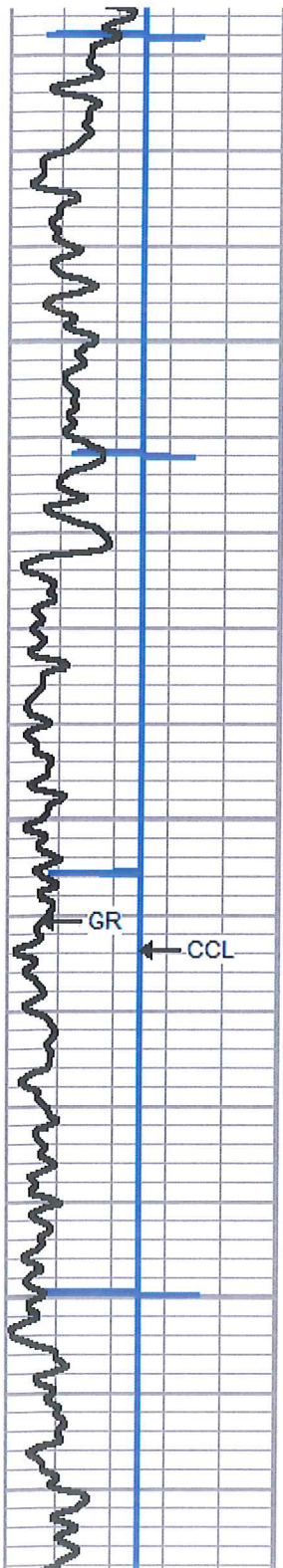


60

61



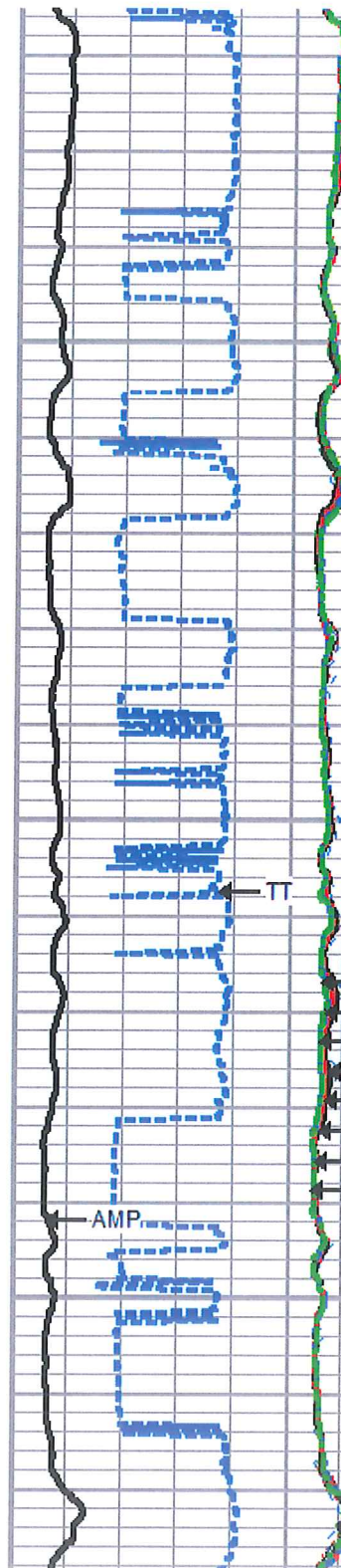




1950

2000

2050

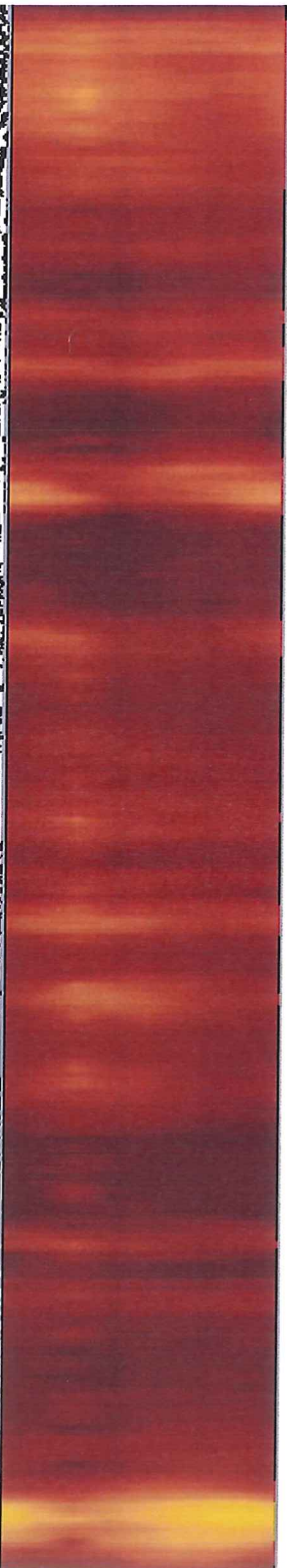
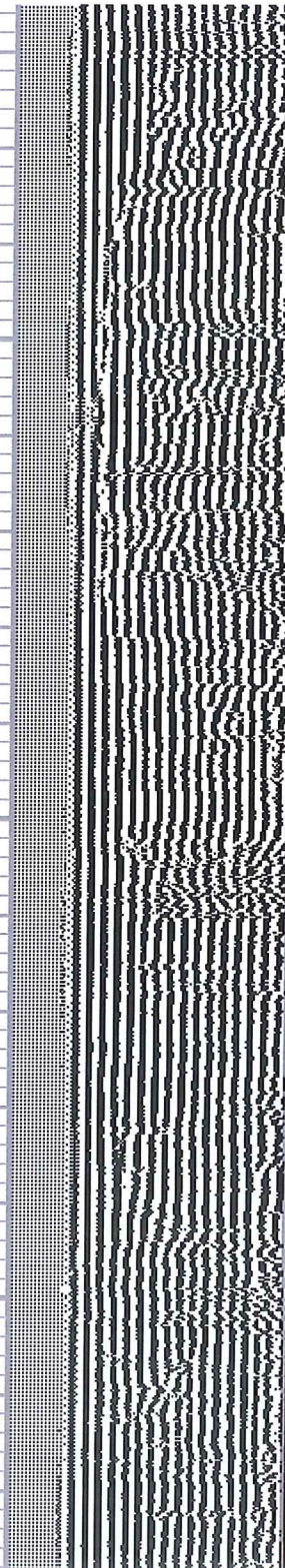


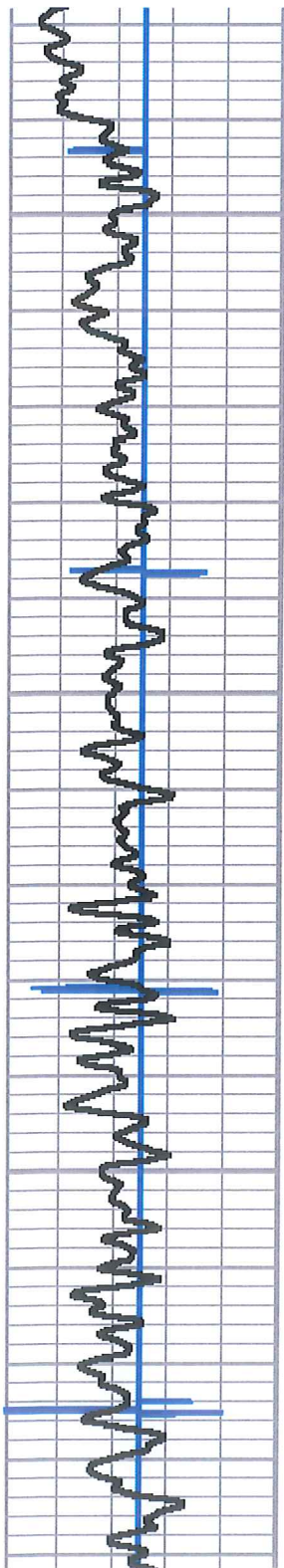
64

- AMPS8
- AMPS7
- AMPS6
- AMPS5
- AMPS4
- AMPS3
- AMPS2
- AMPS1

TT

AMP

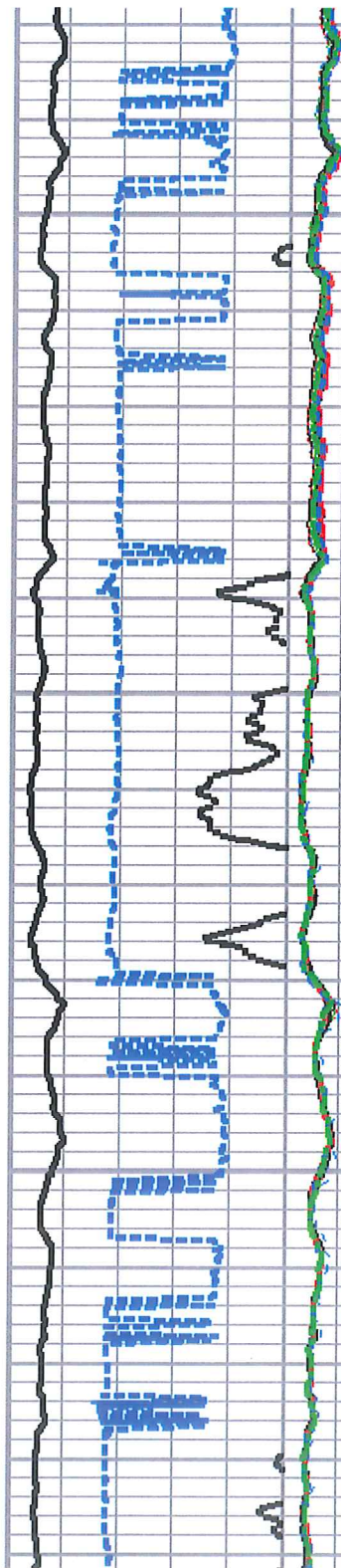




2100

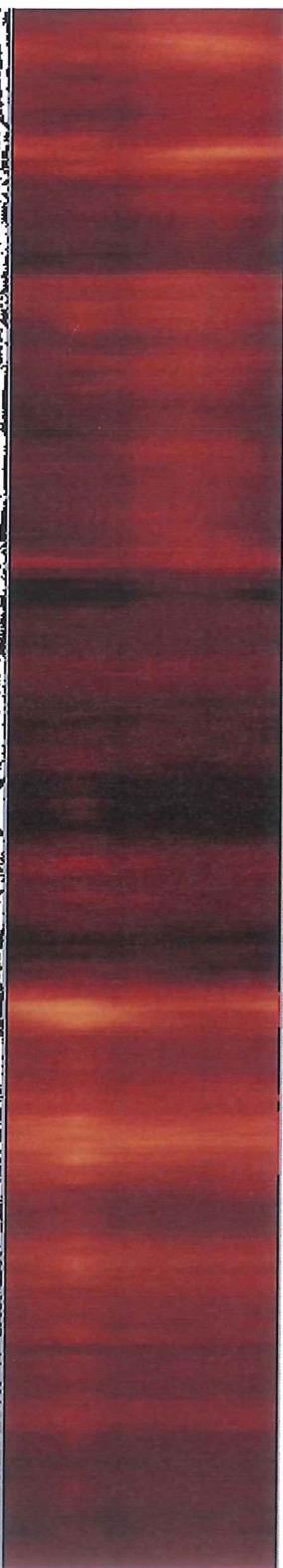
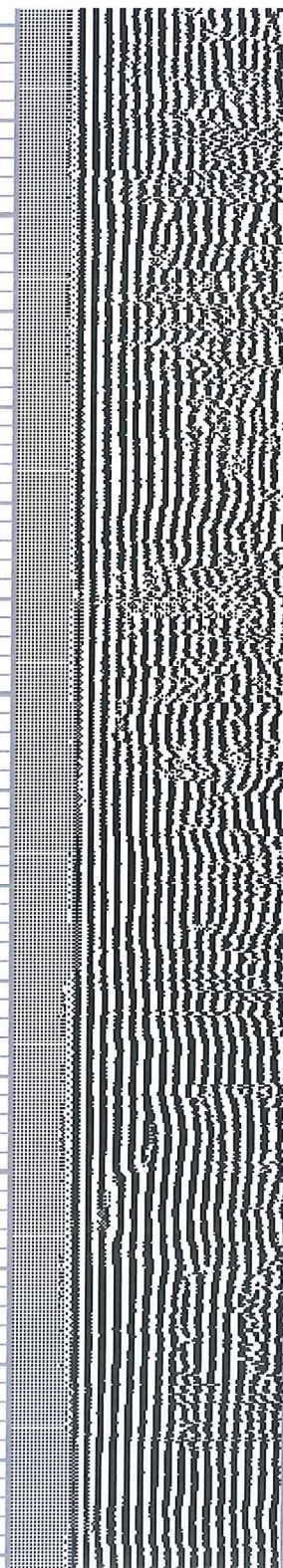
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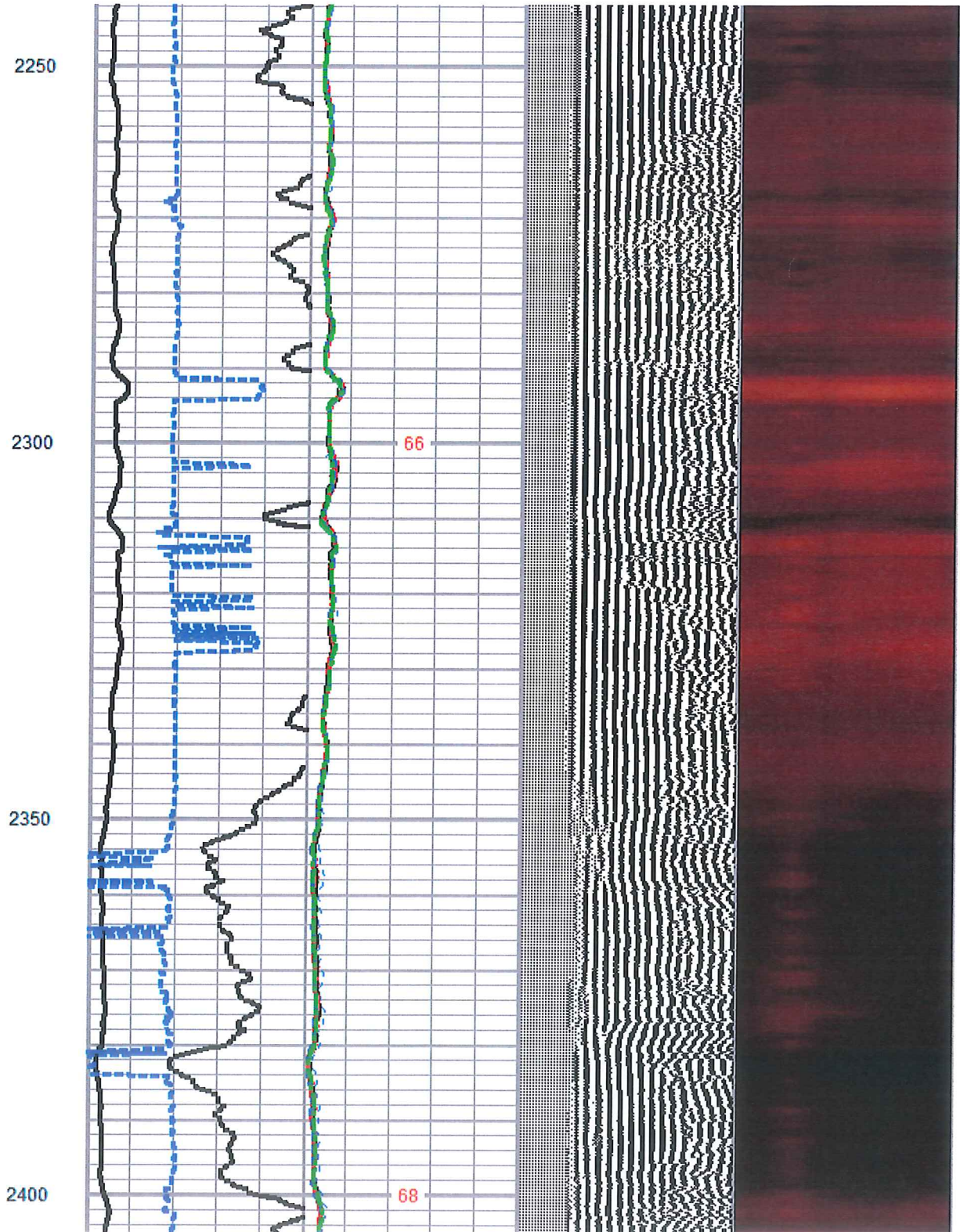
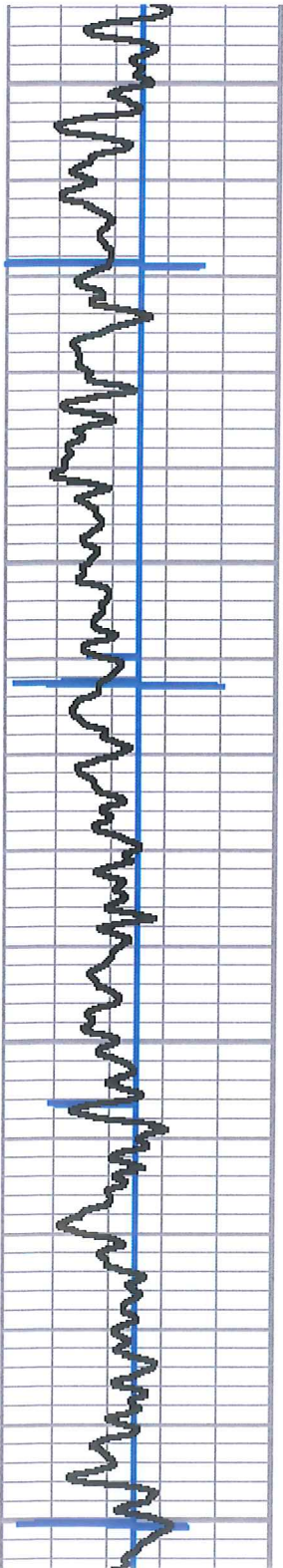
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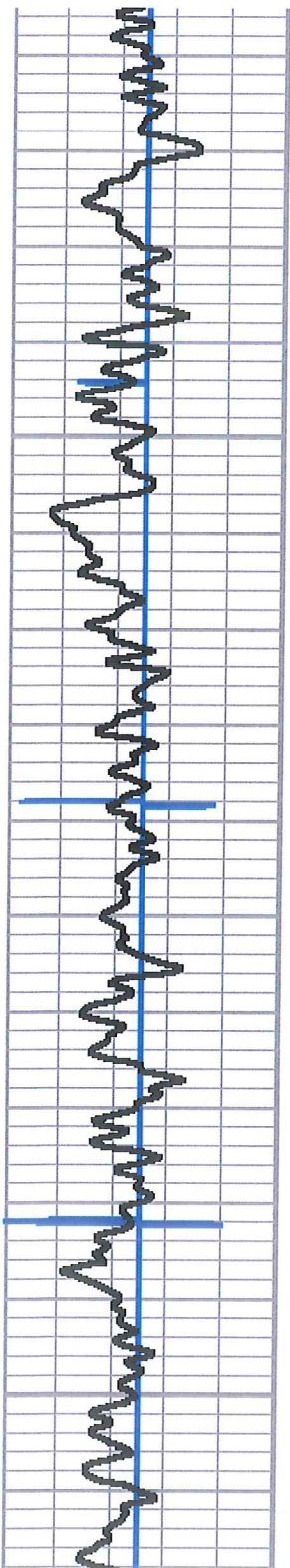


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66



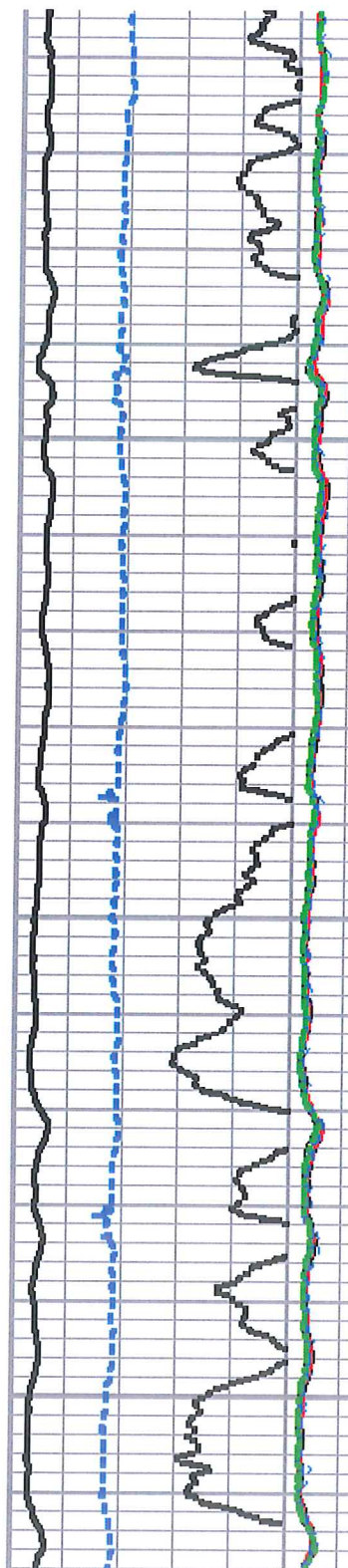




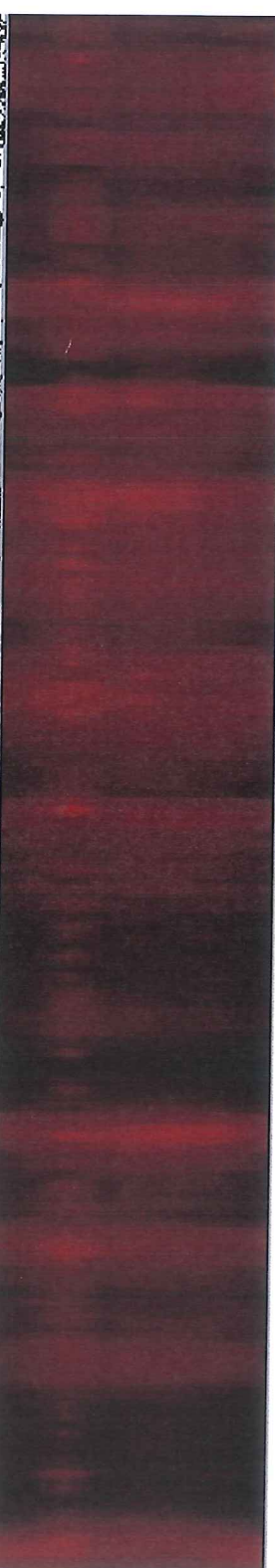
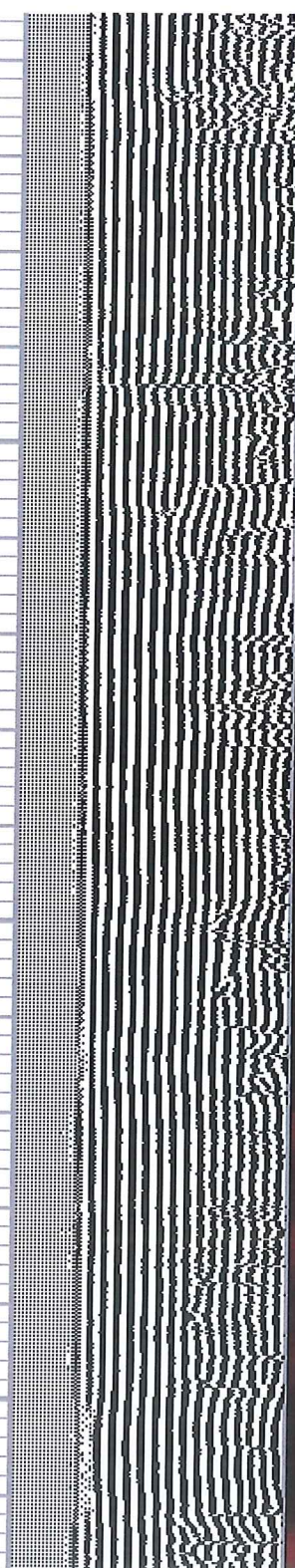
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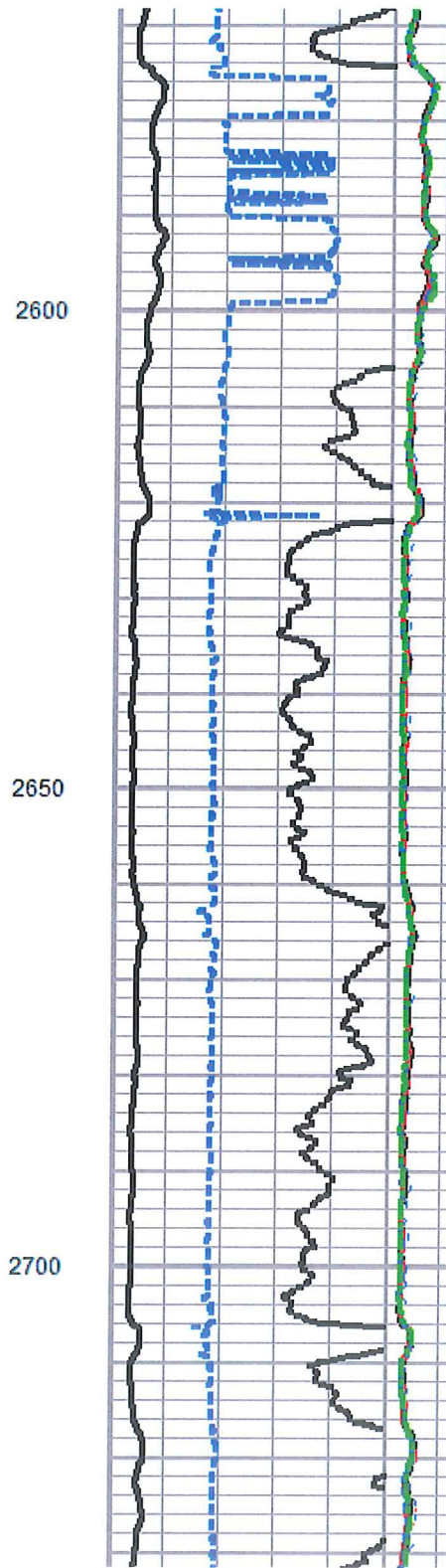
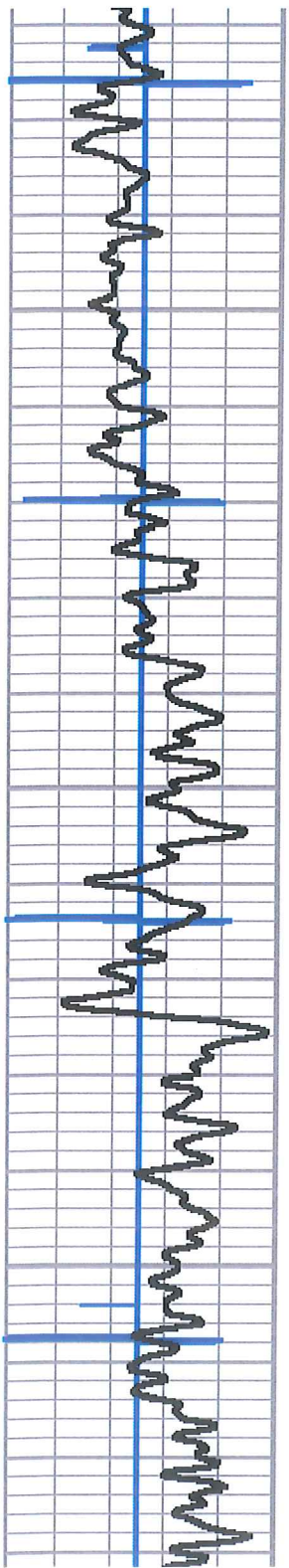
2500

2550



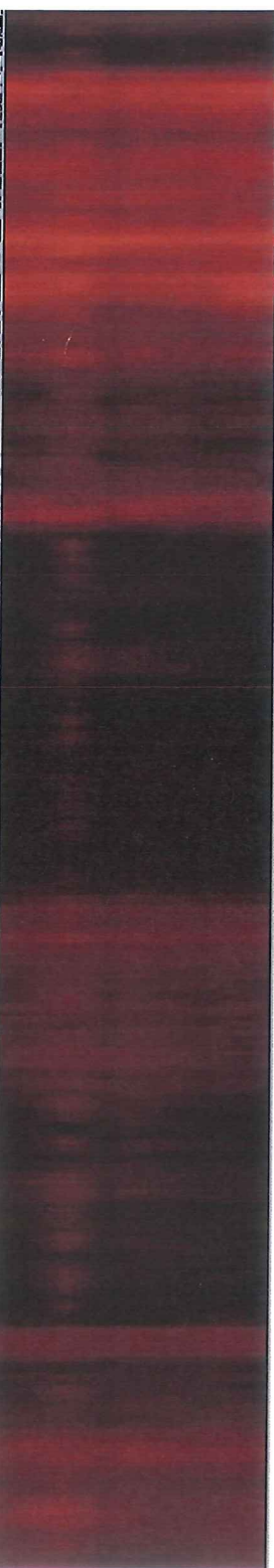
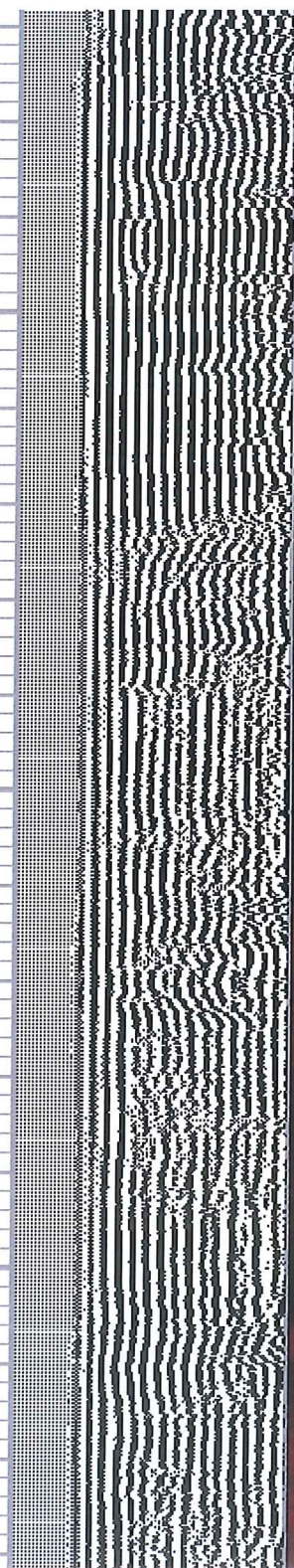
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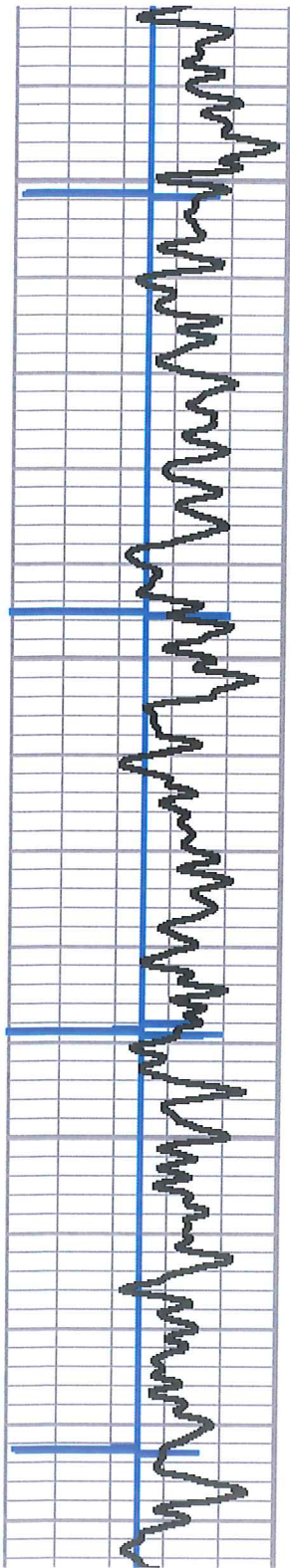




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71

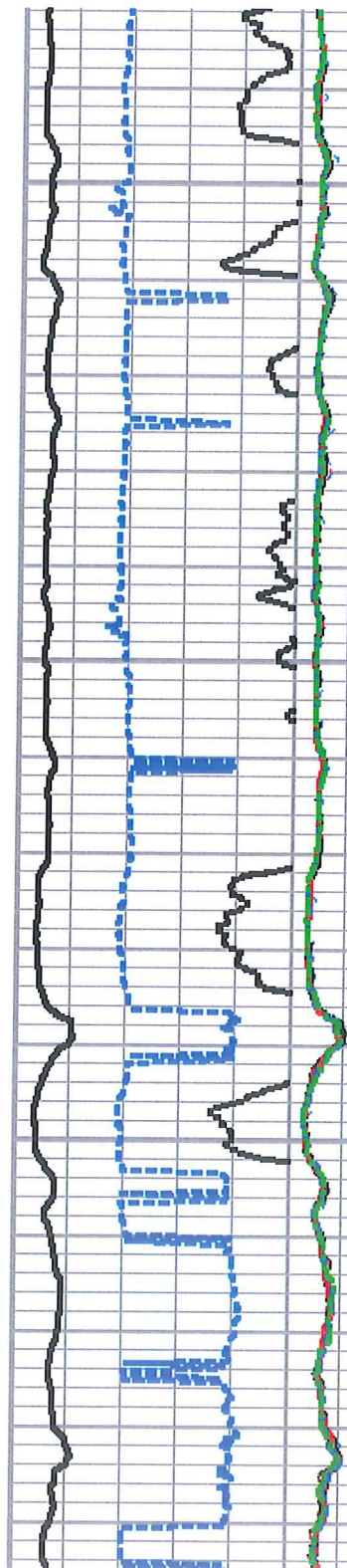




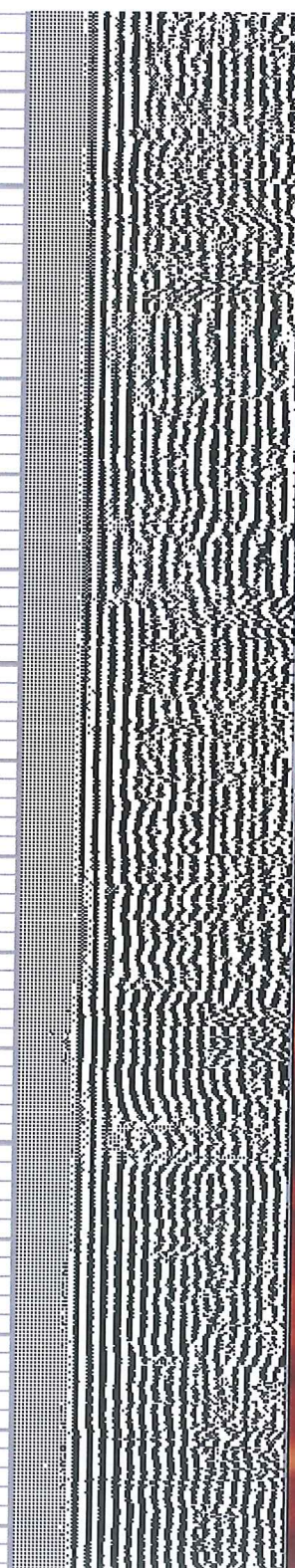
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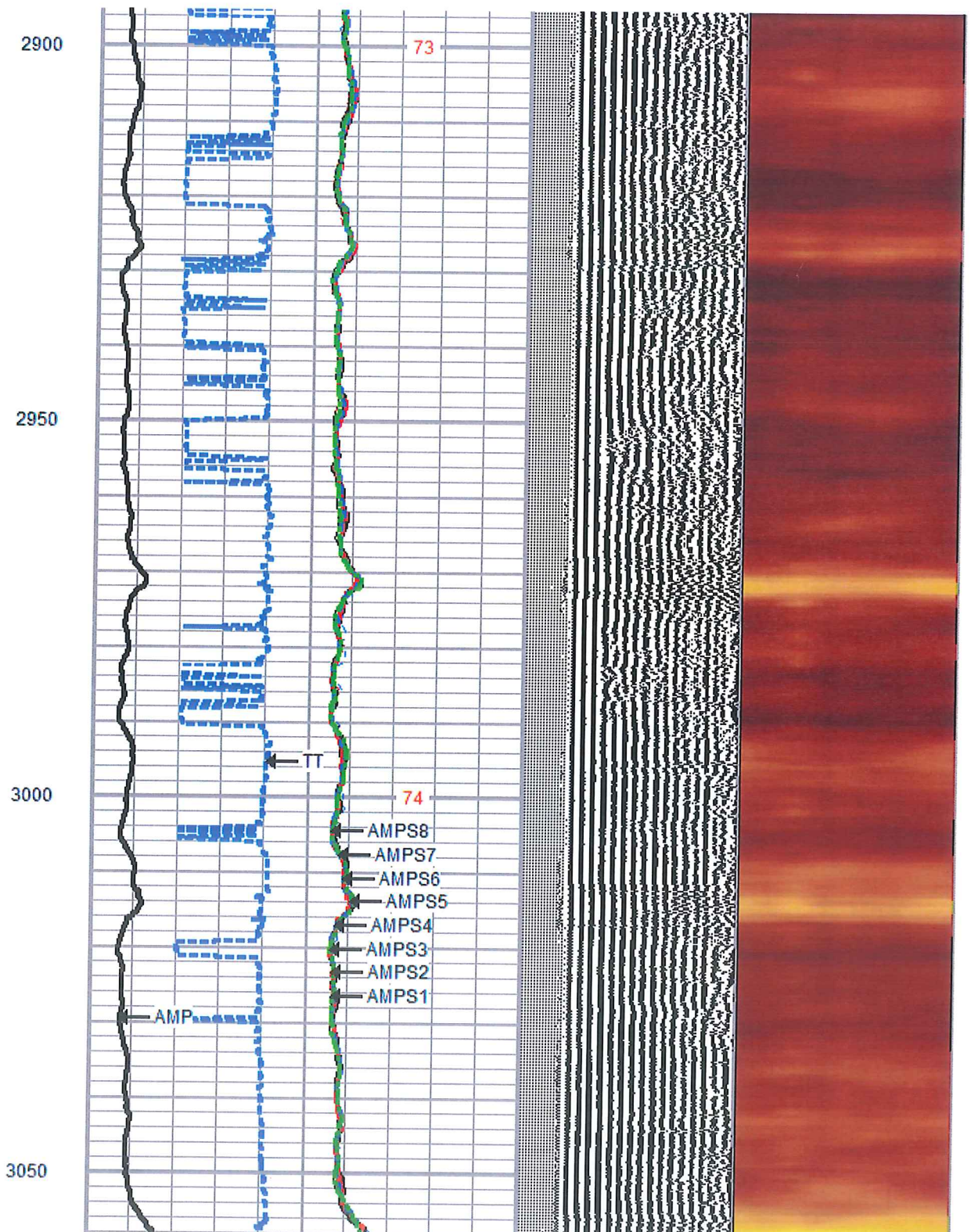
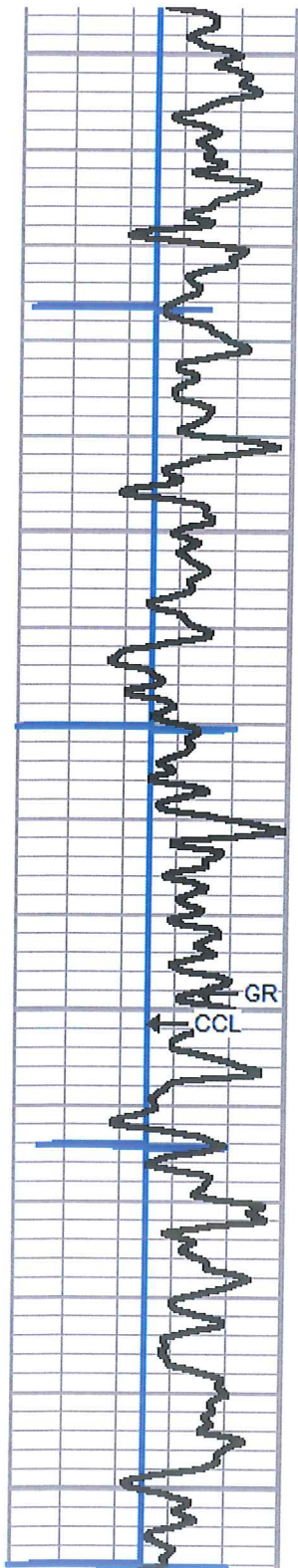
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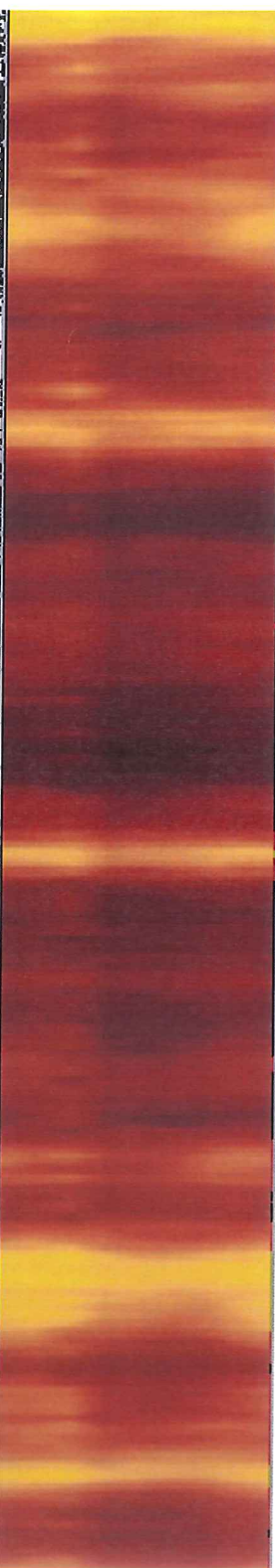
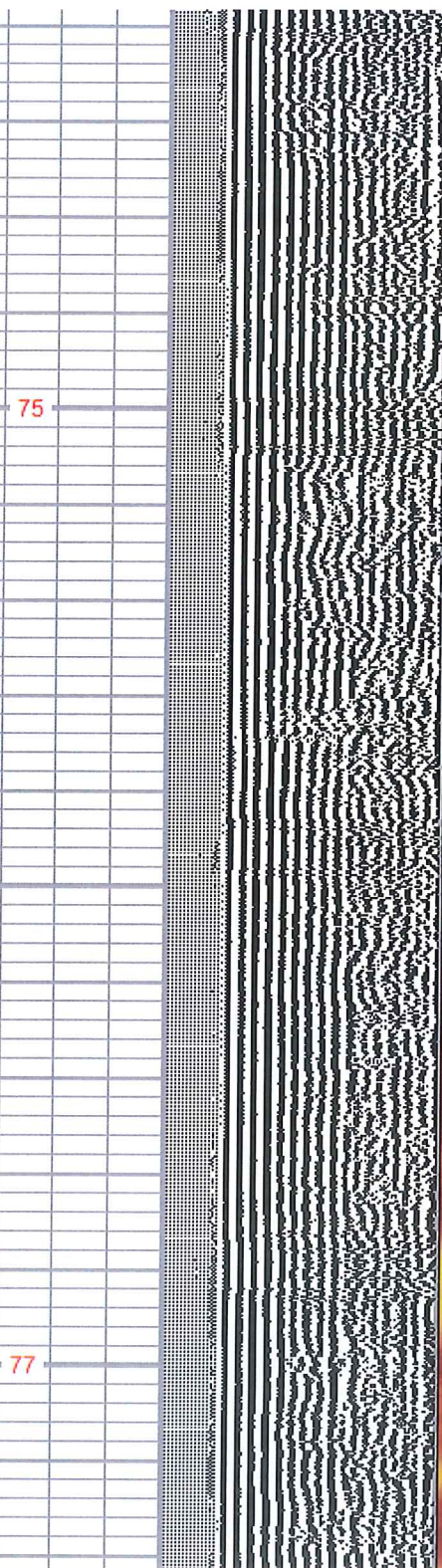
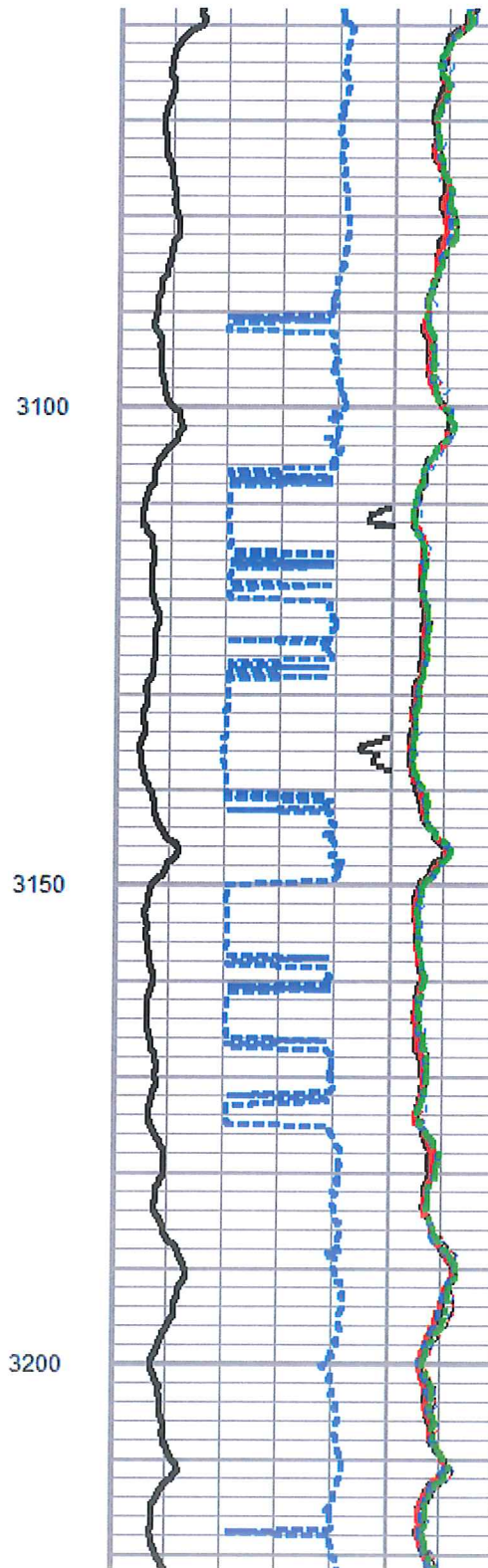
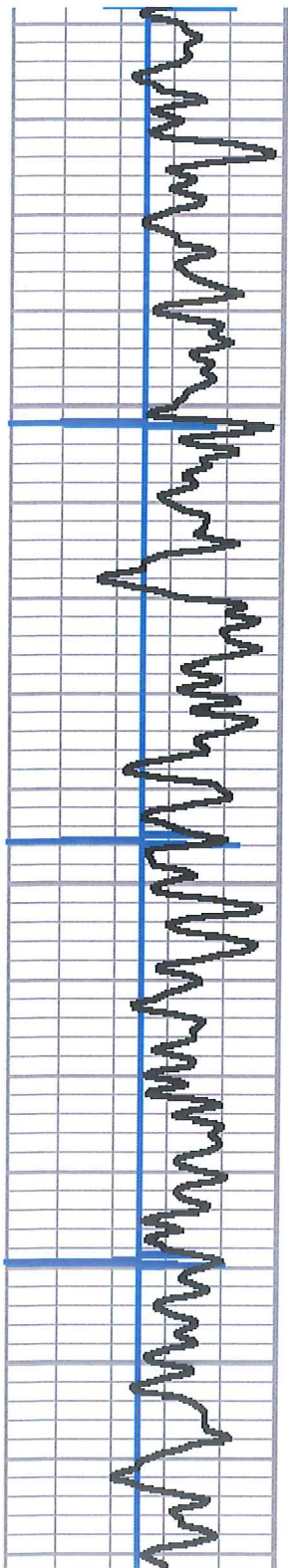
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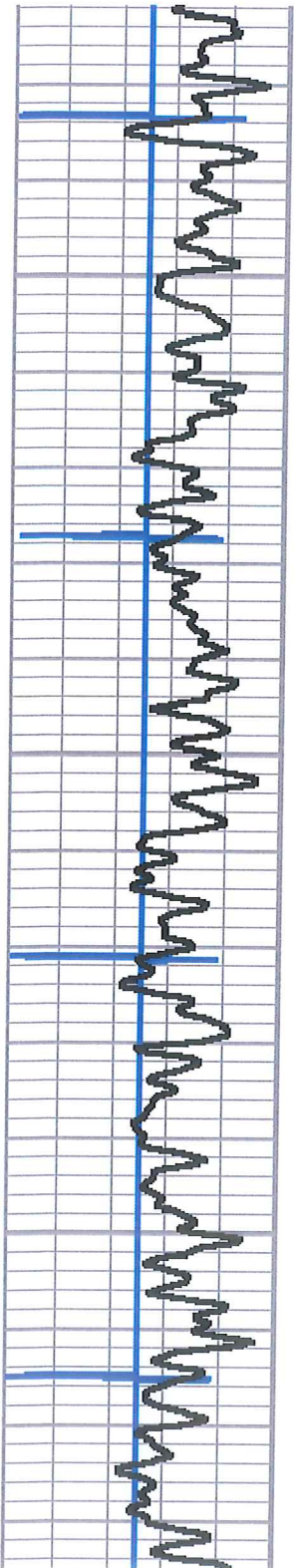


73





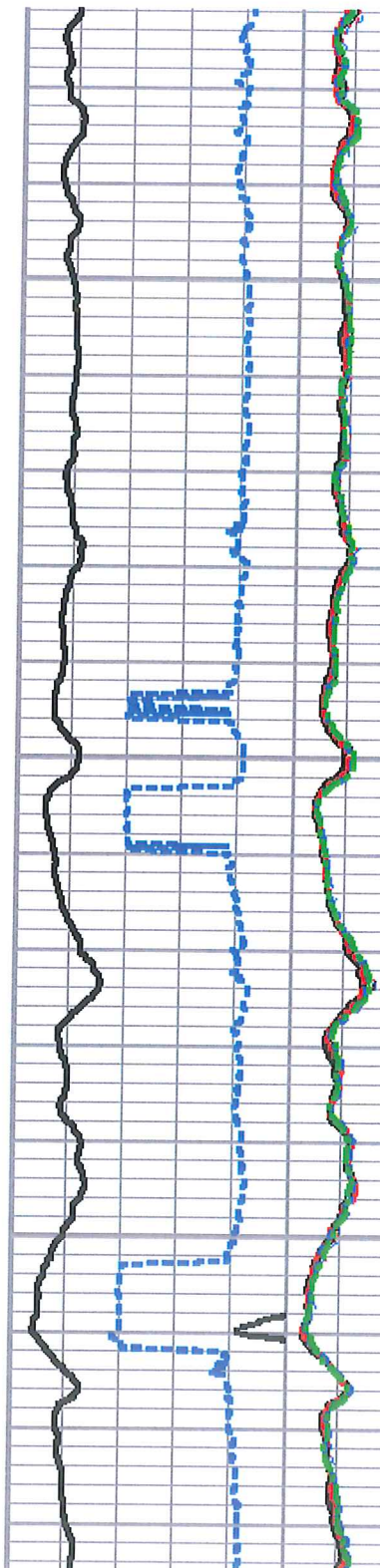




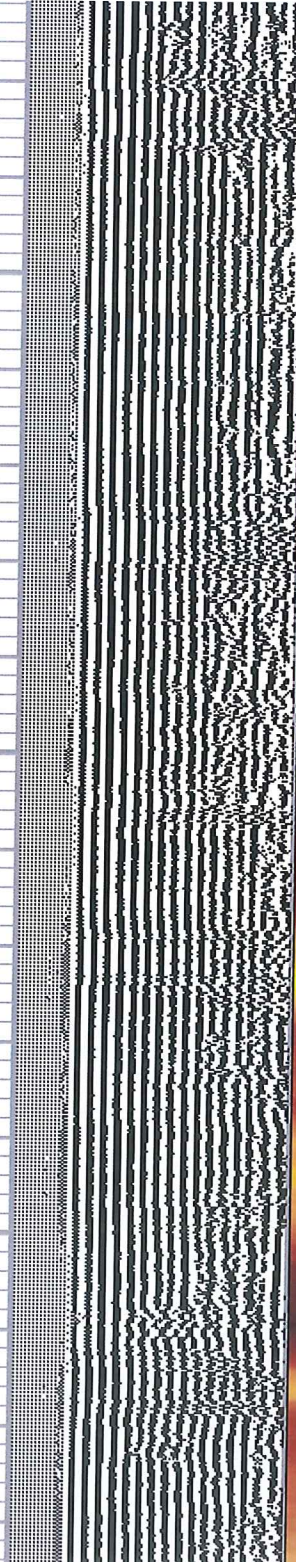
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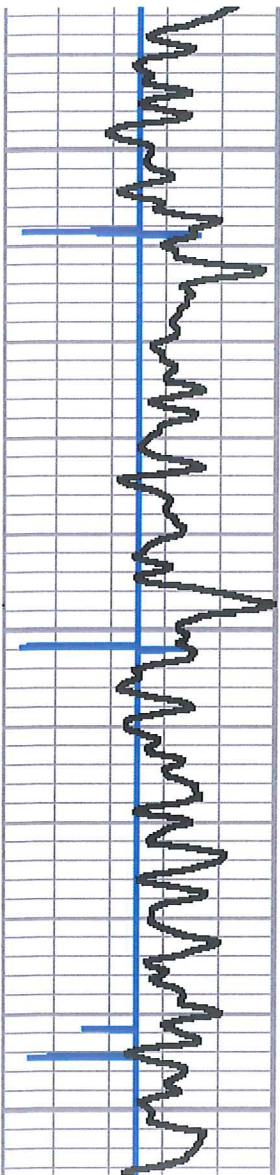
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3350



78

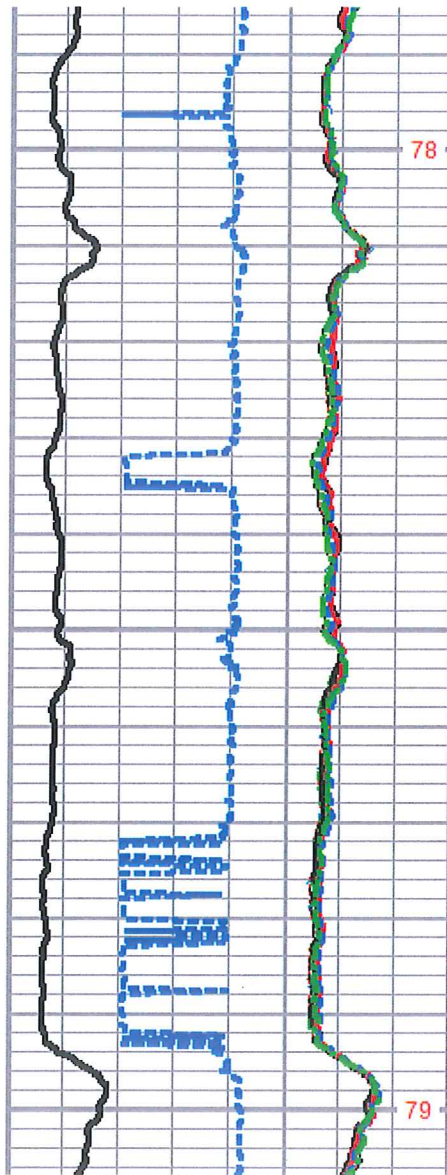




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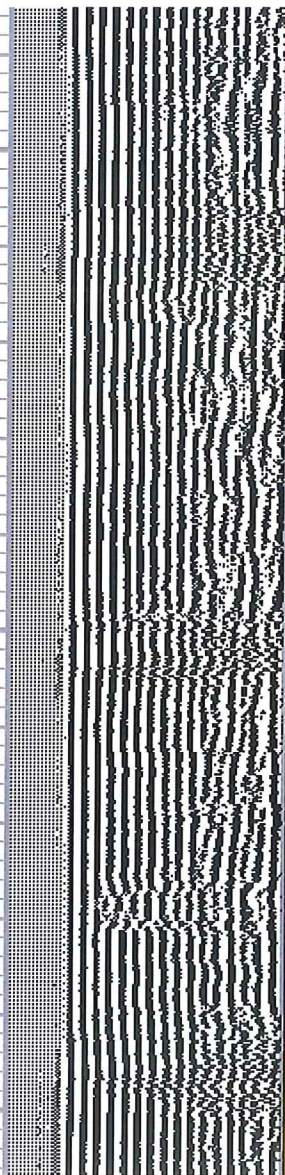
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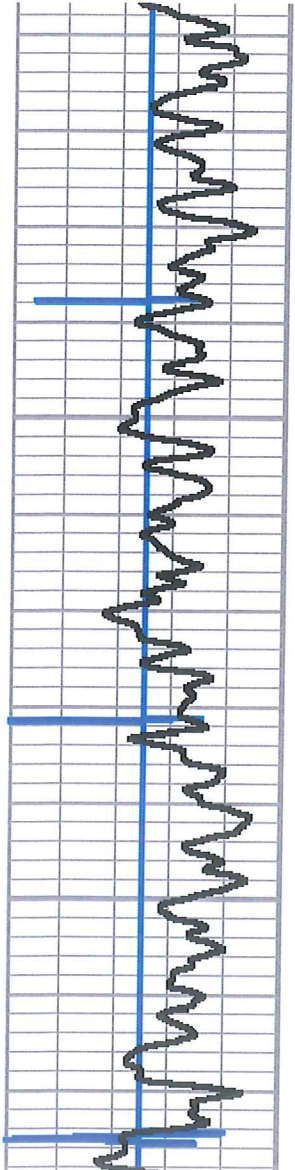
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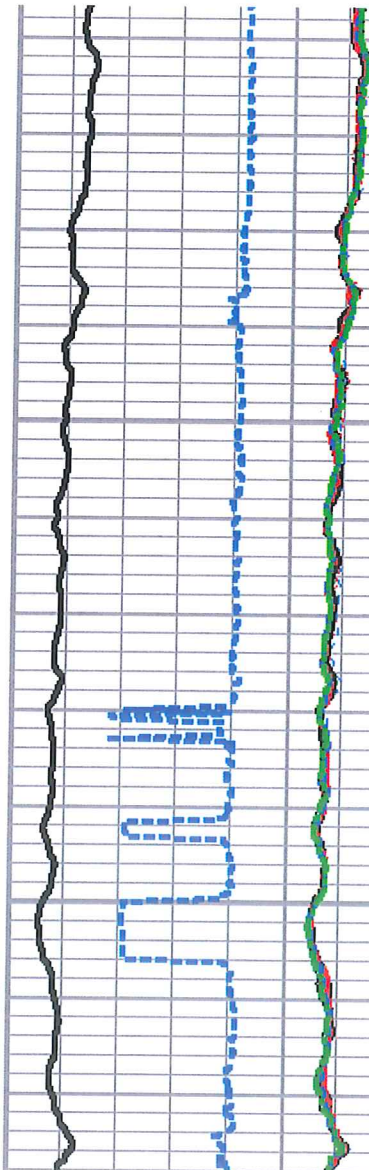
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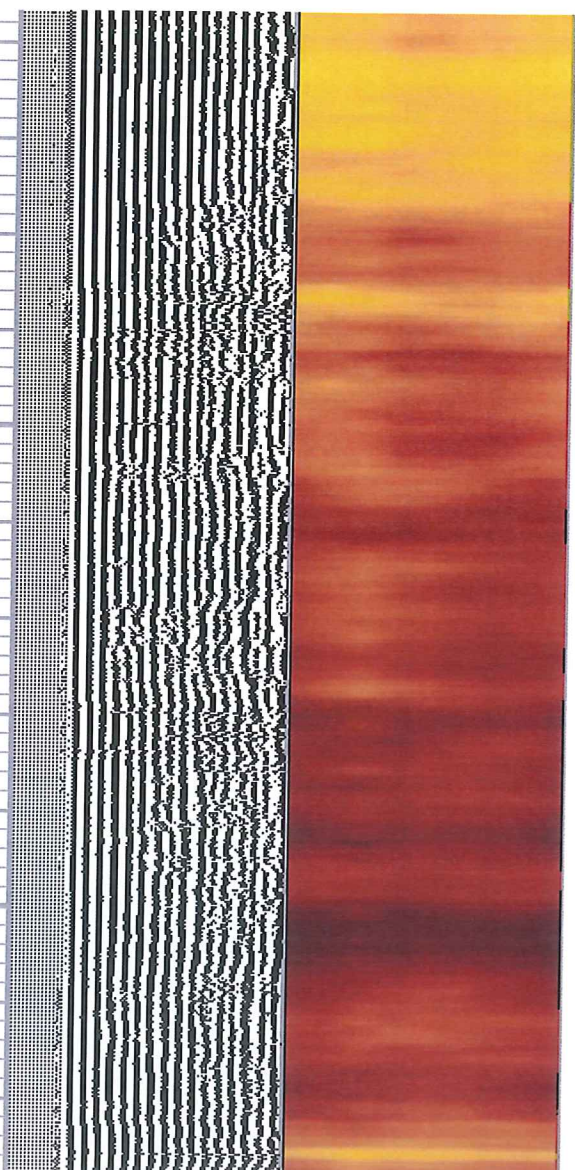


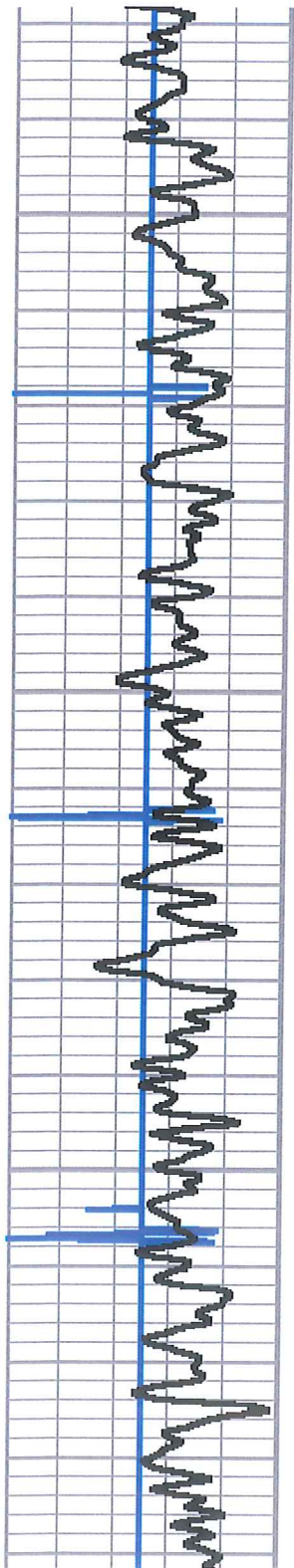
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3600



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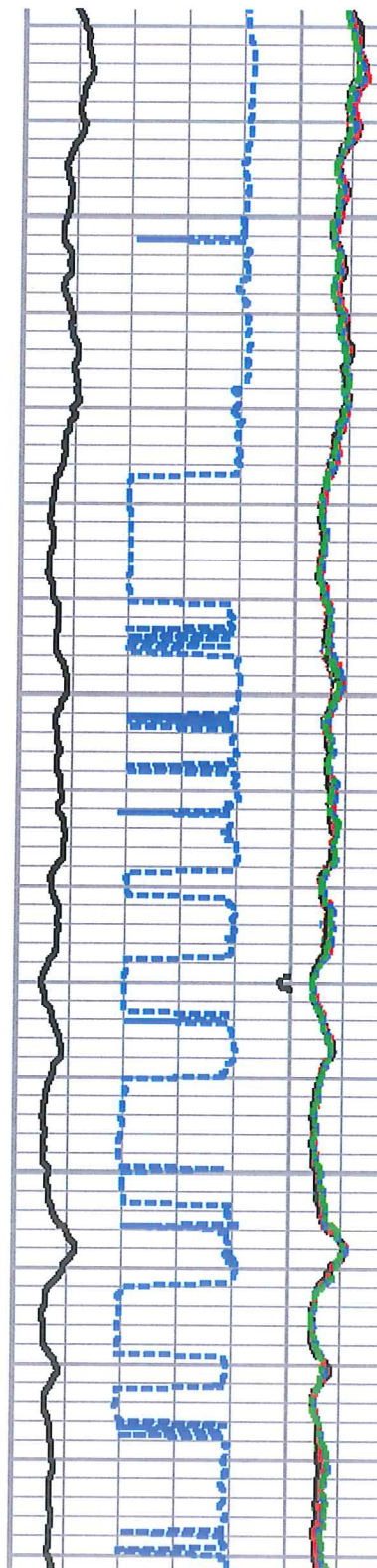




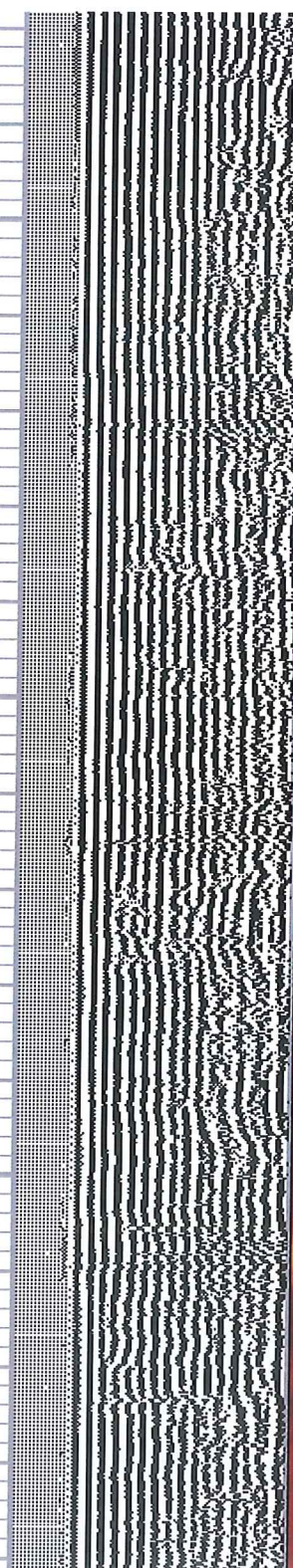
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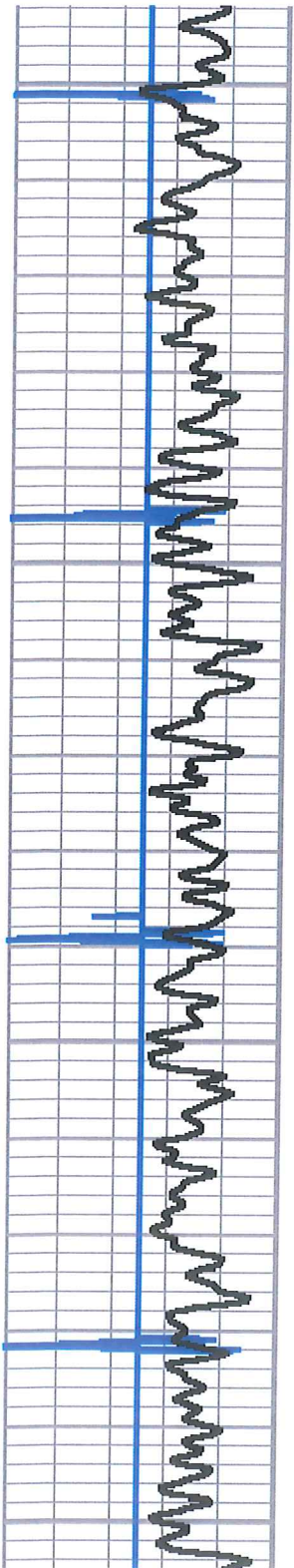
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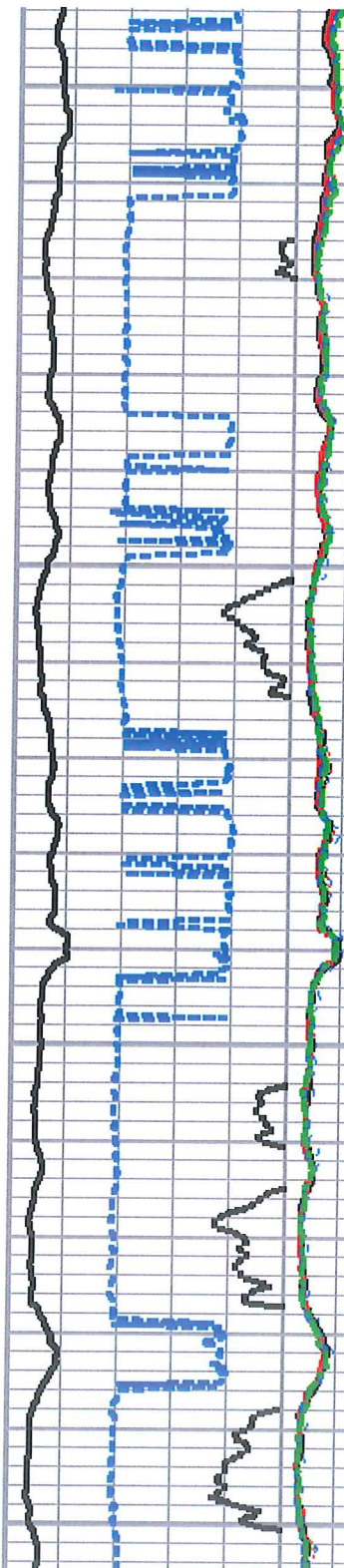


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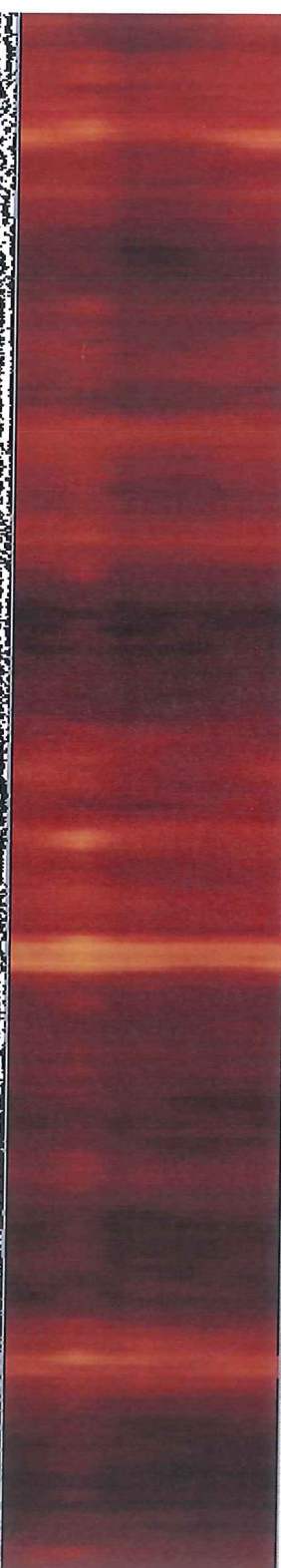
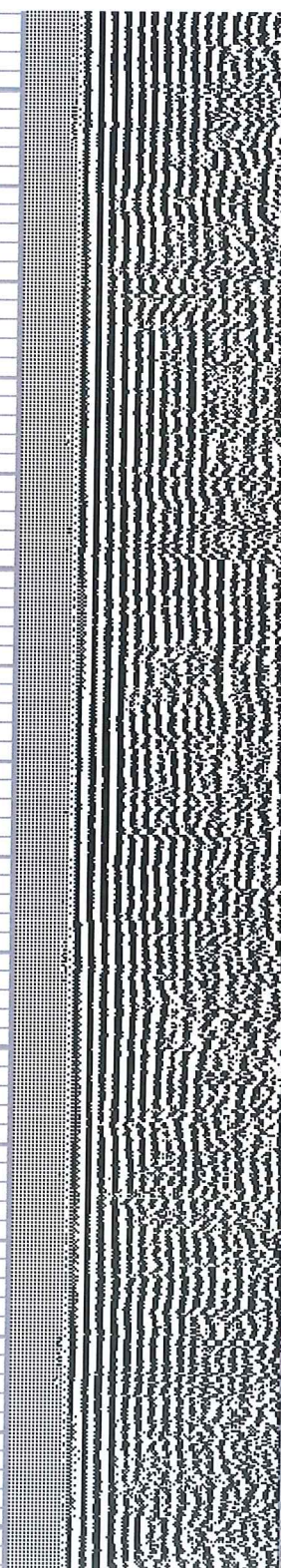


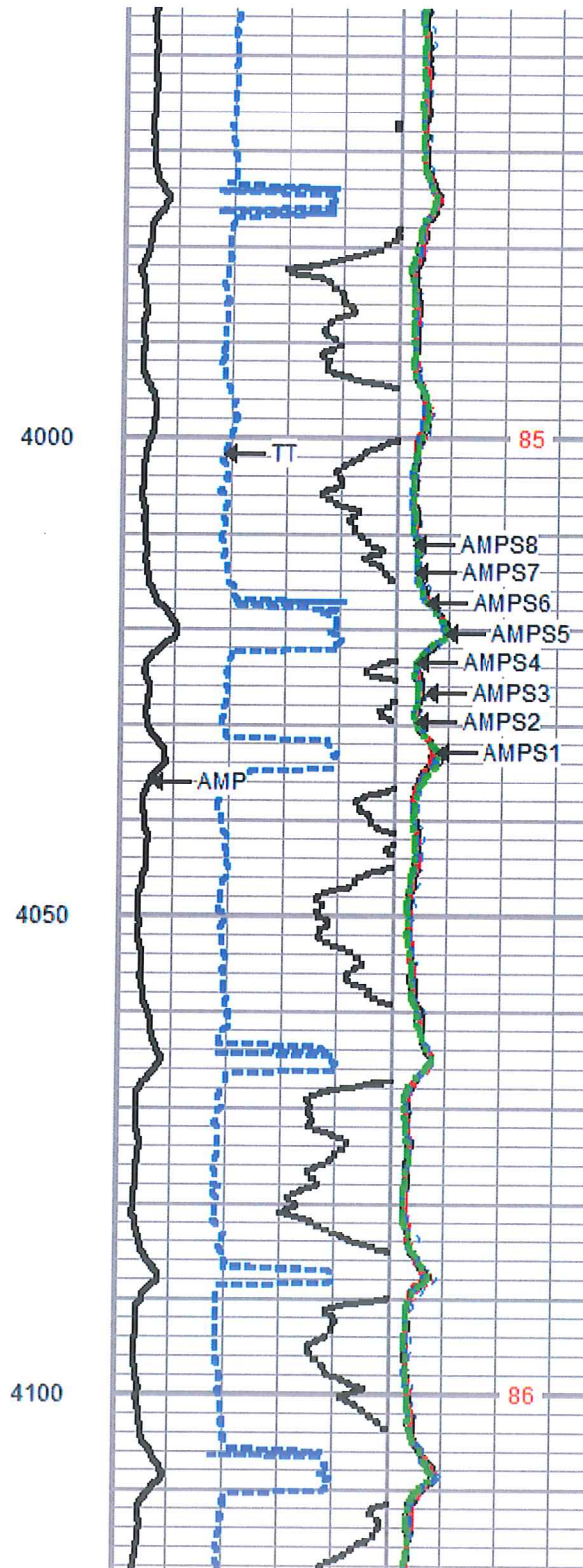
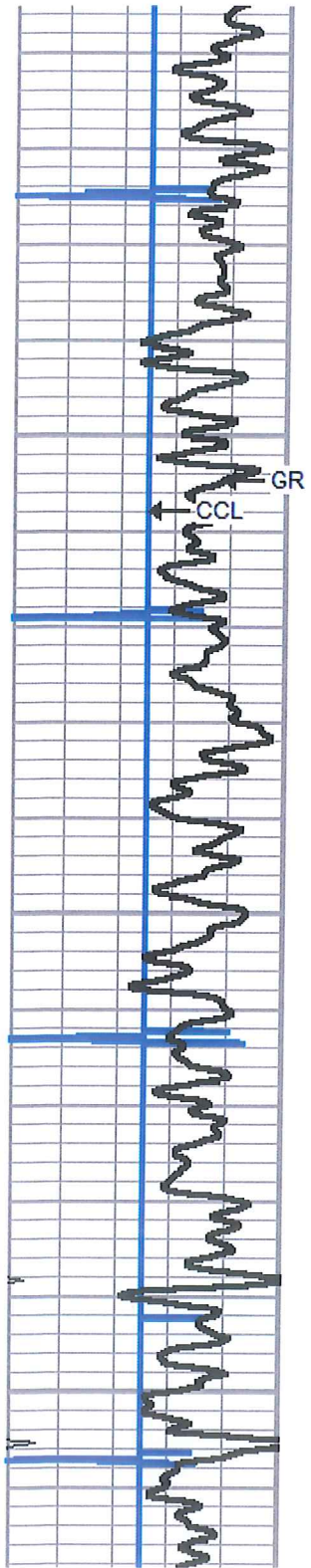
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3950



82

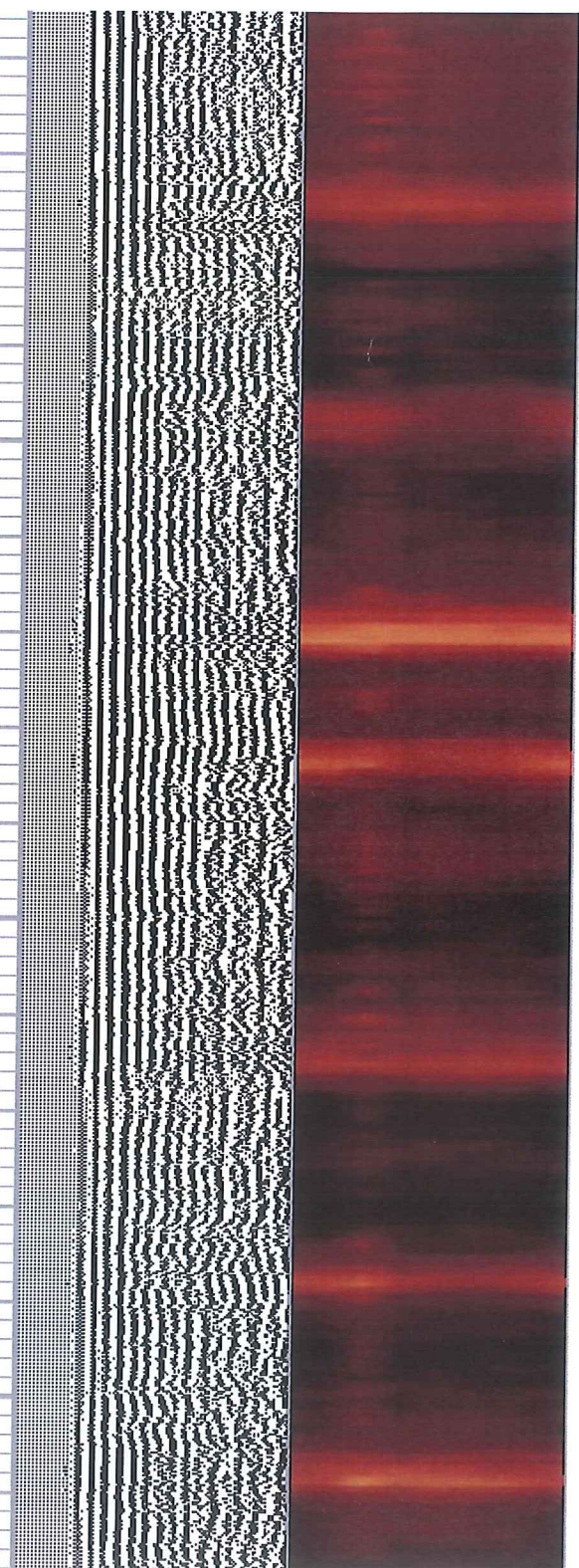
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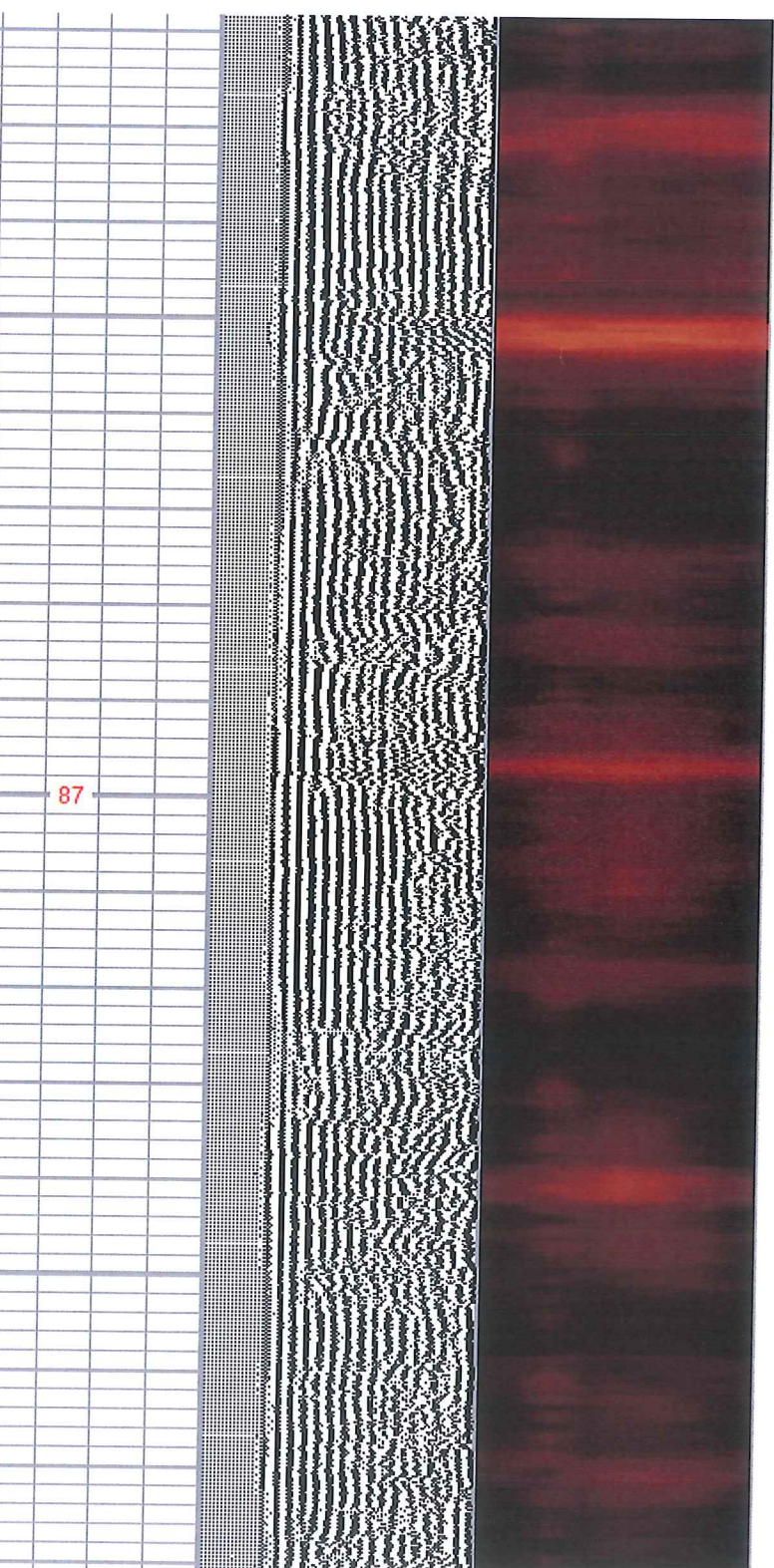
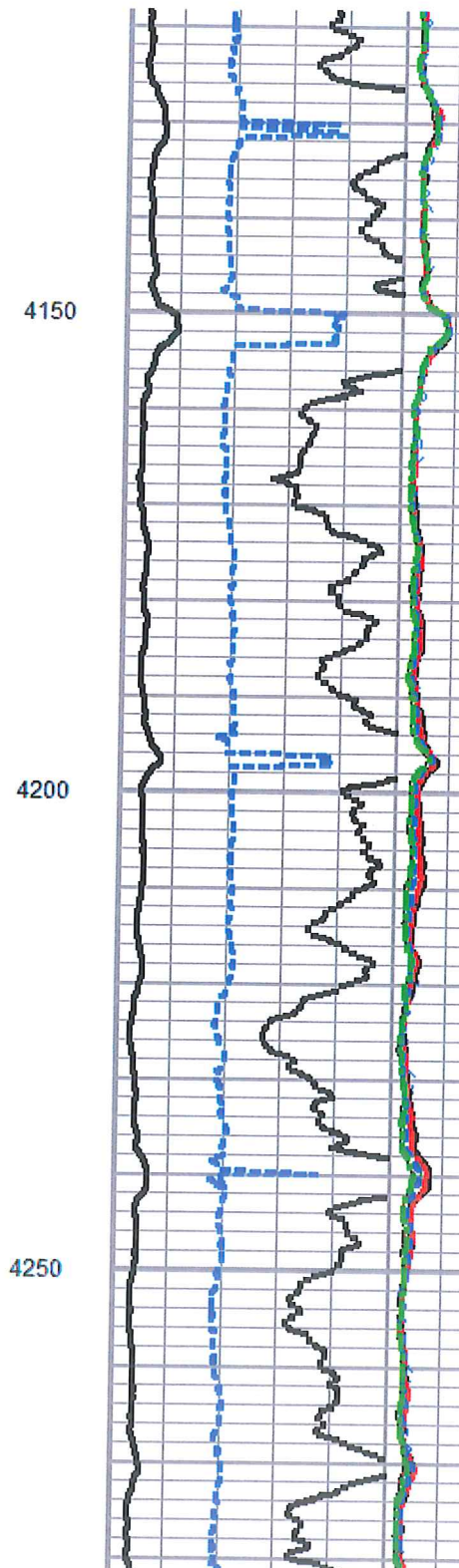
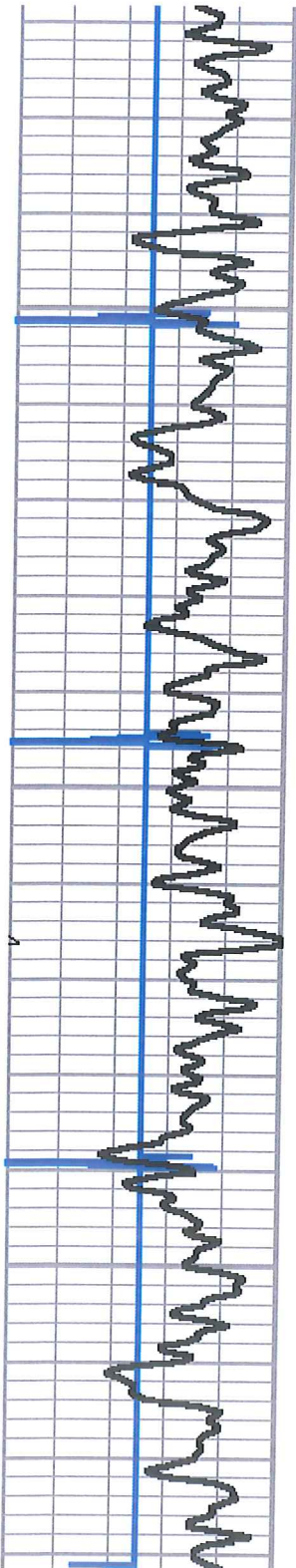


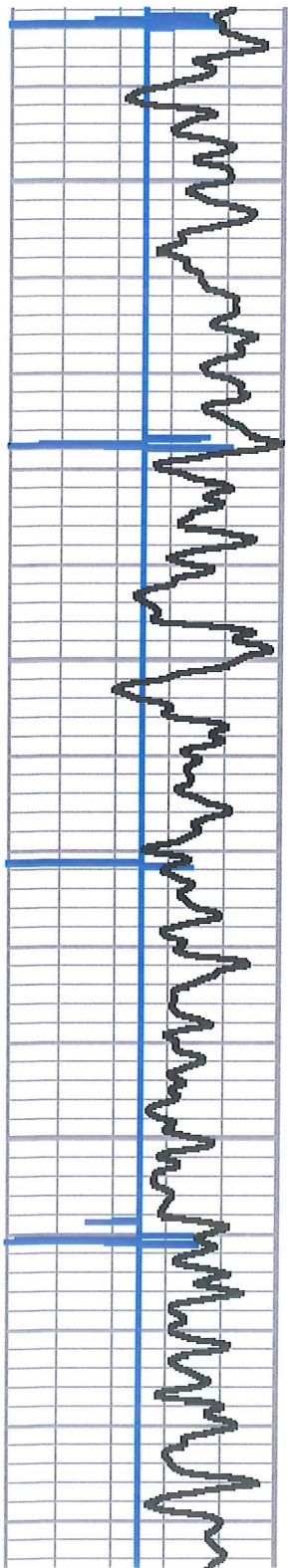


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86



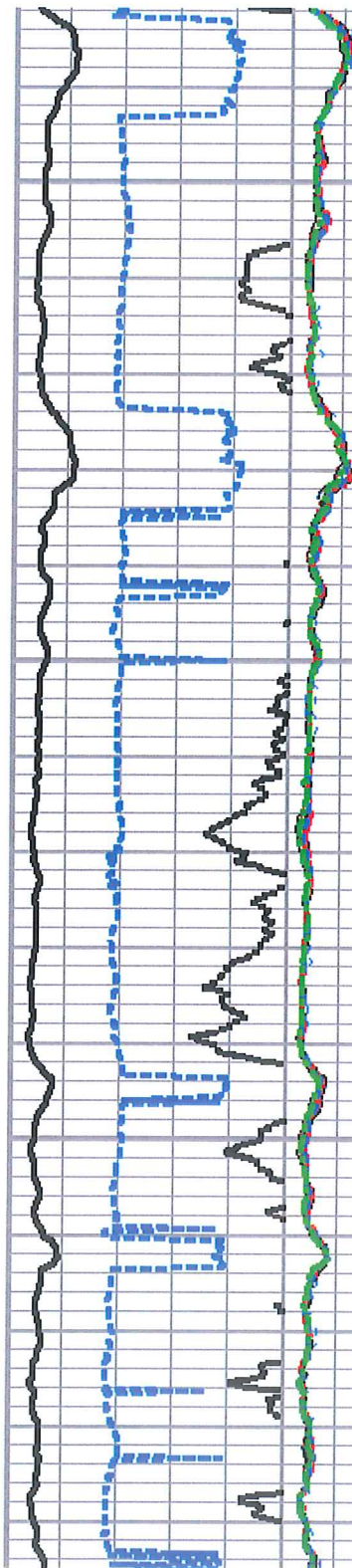




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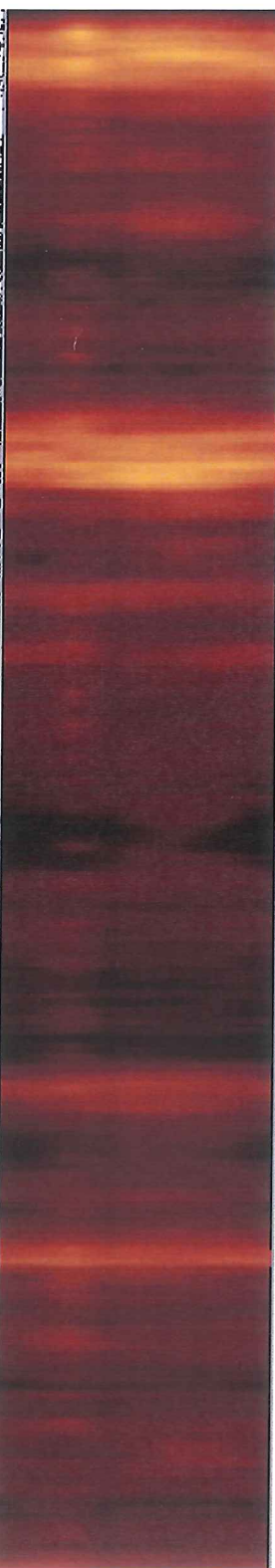
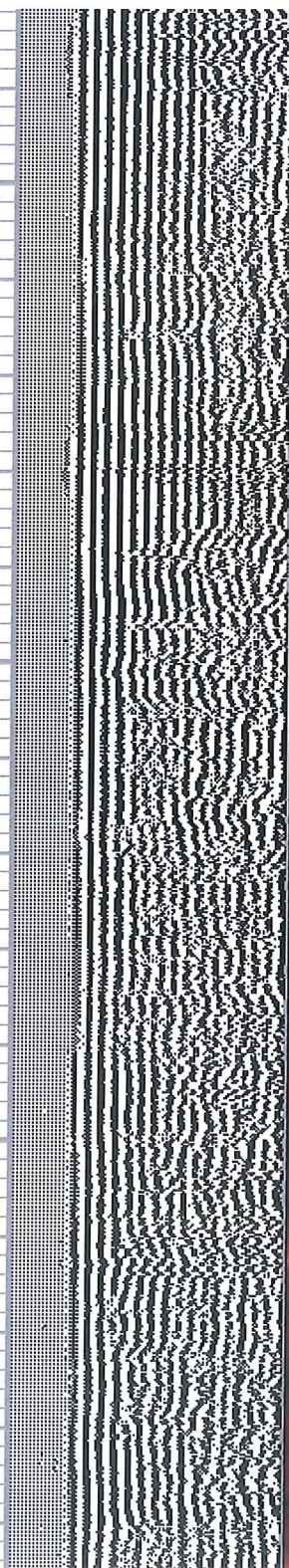
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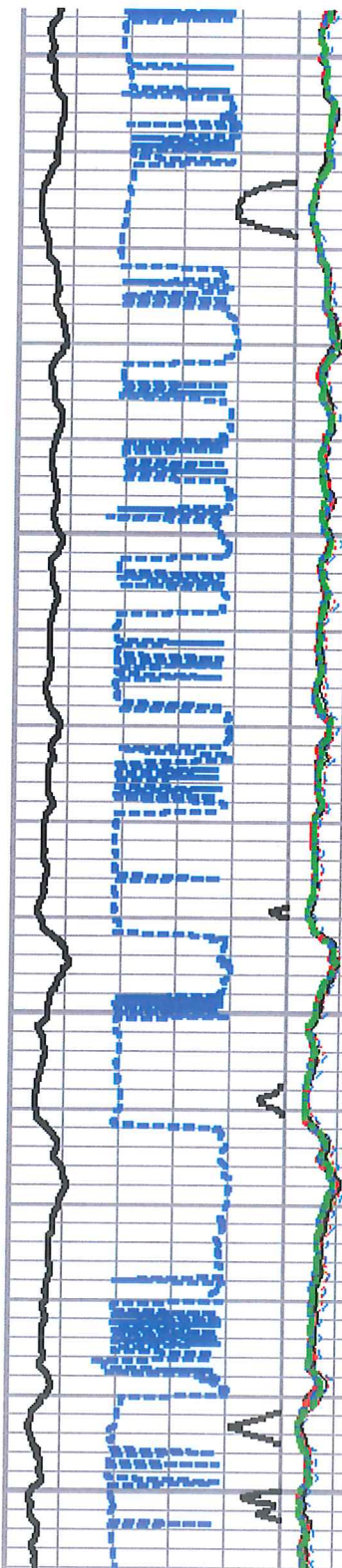
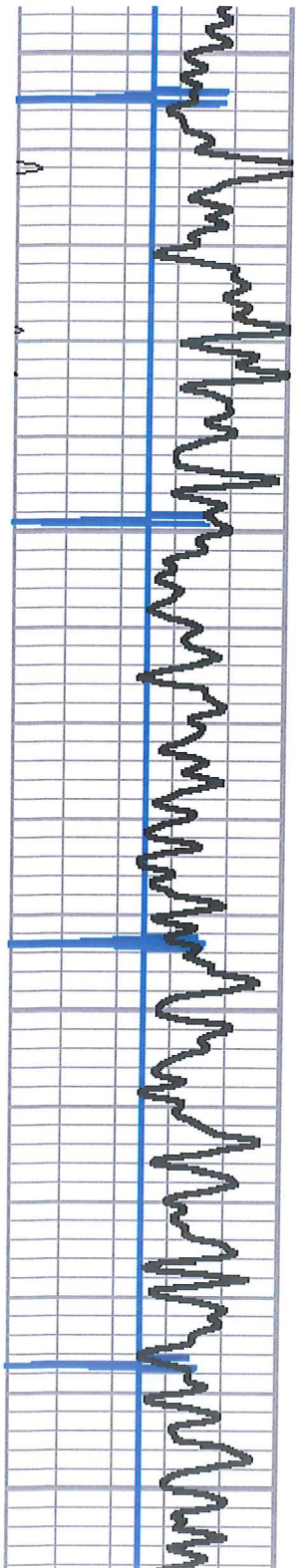
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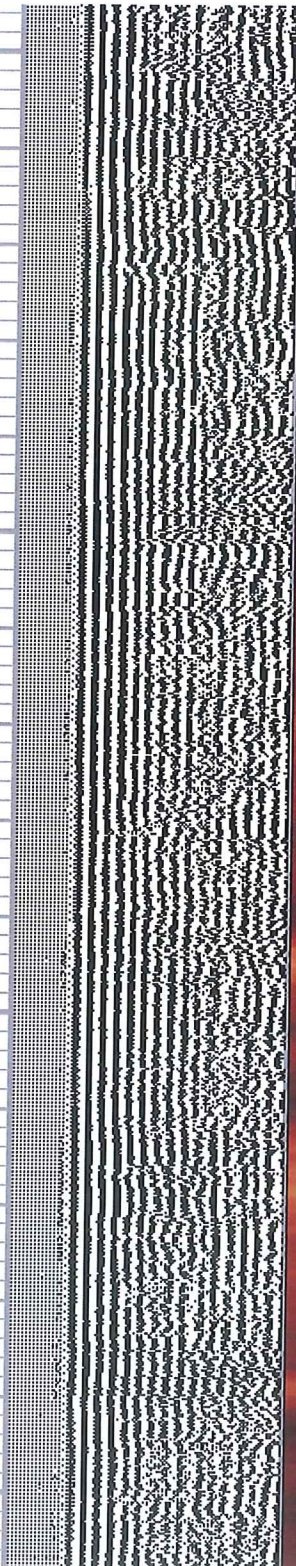
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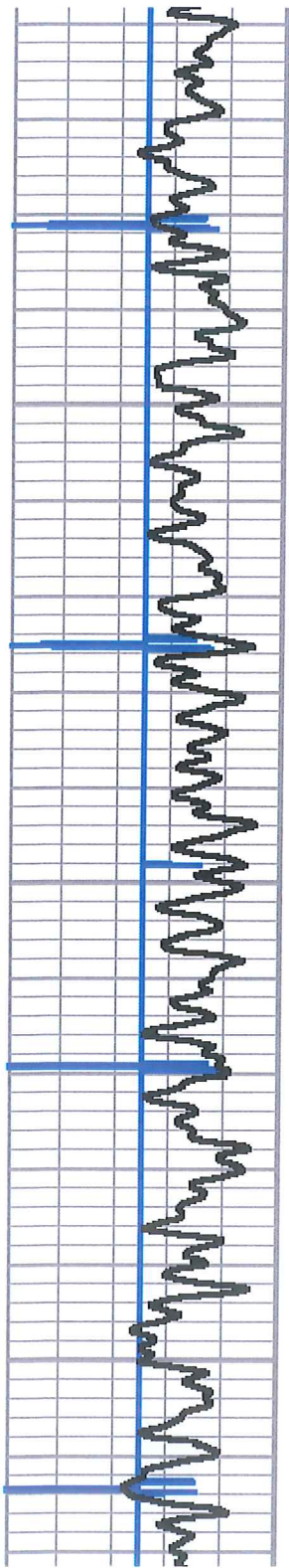




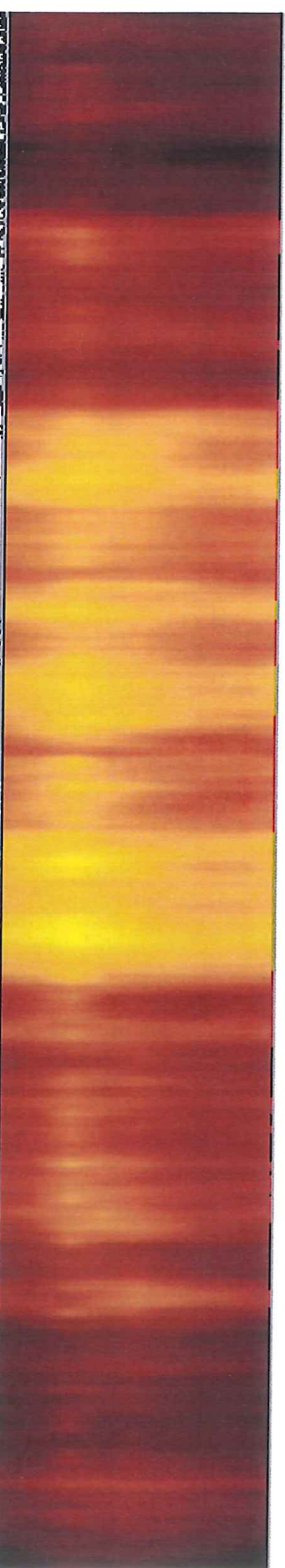
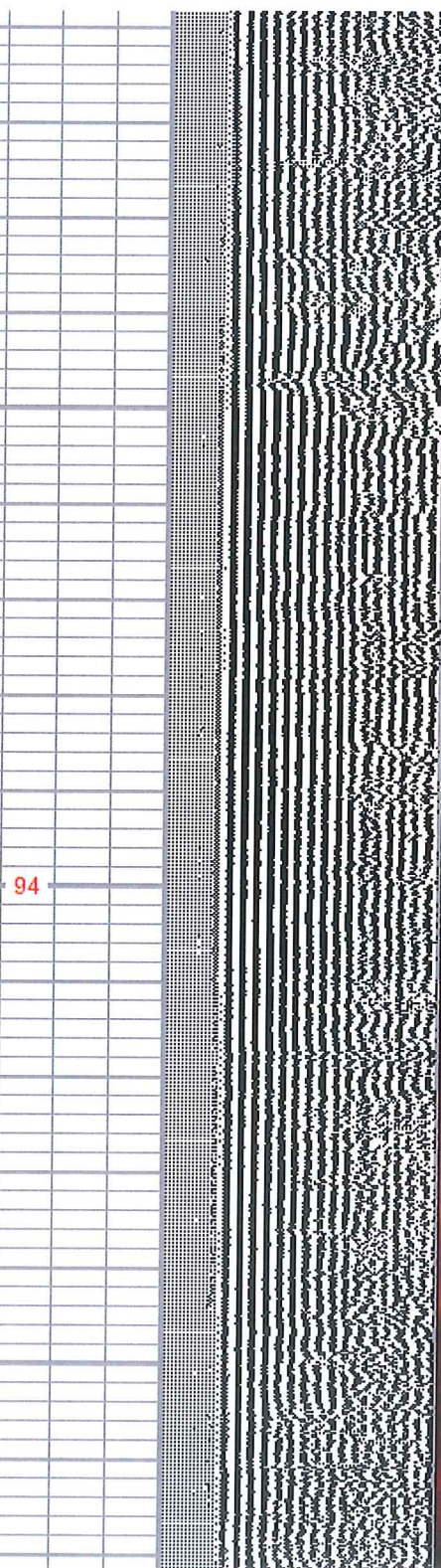
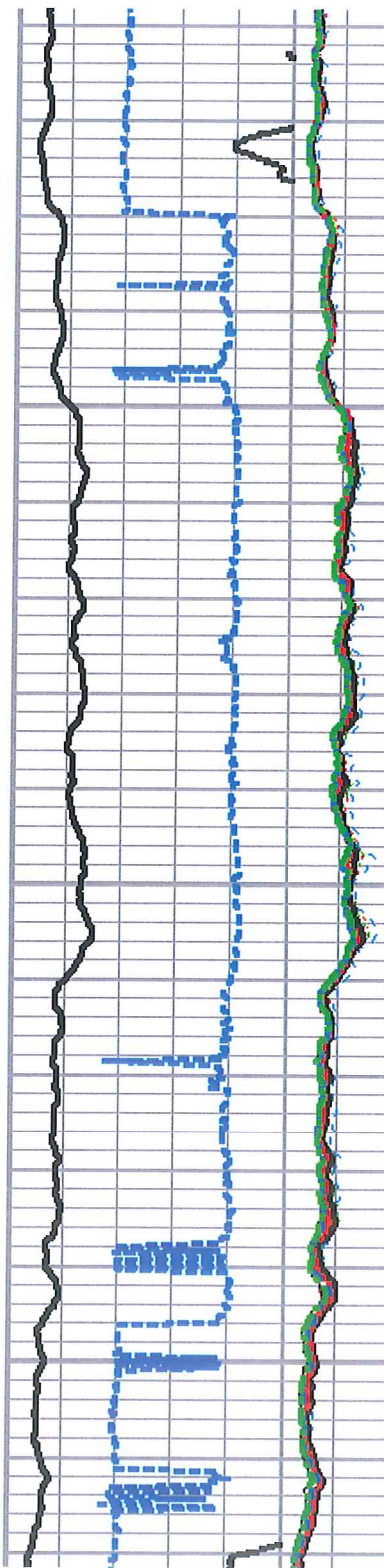
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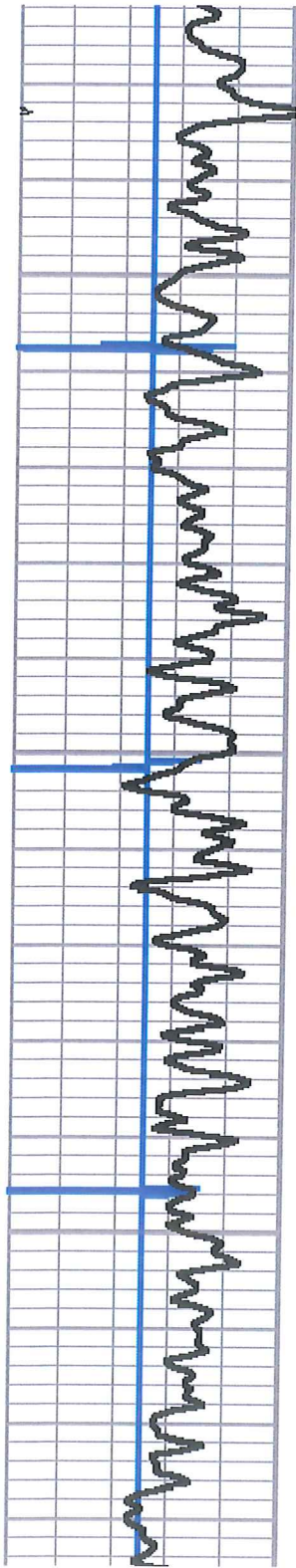
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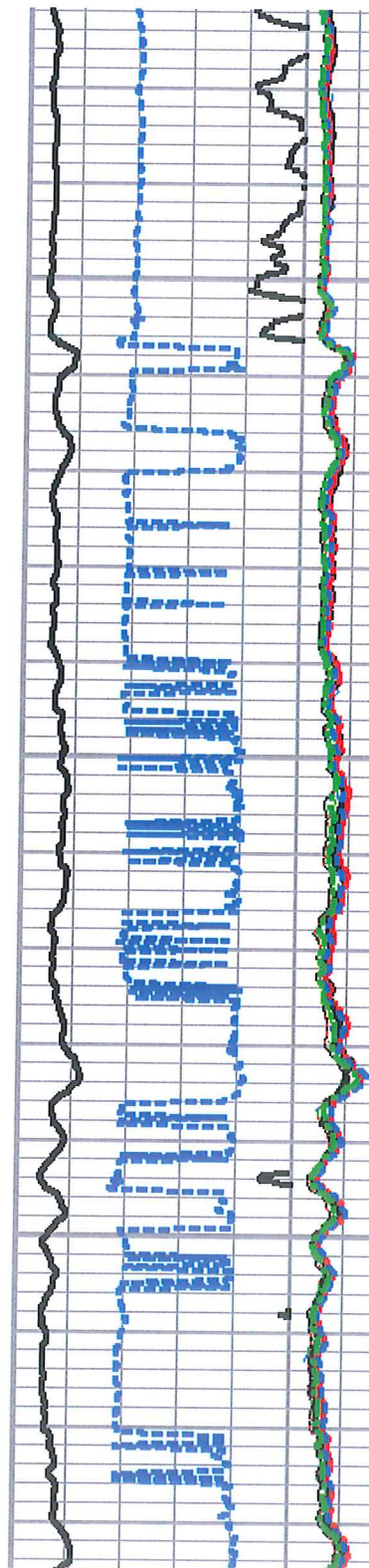




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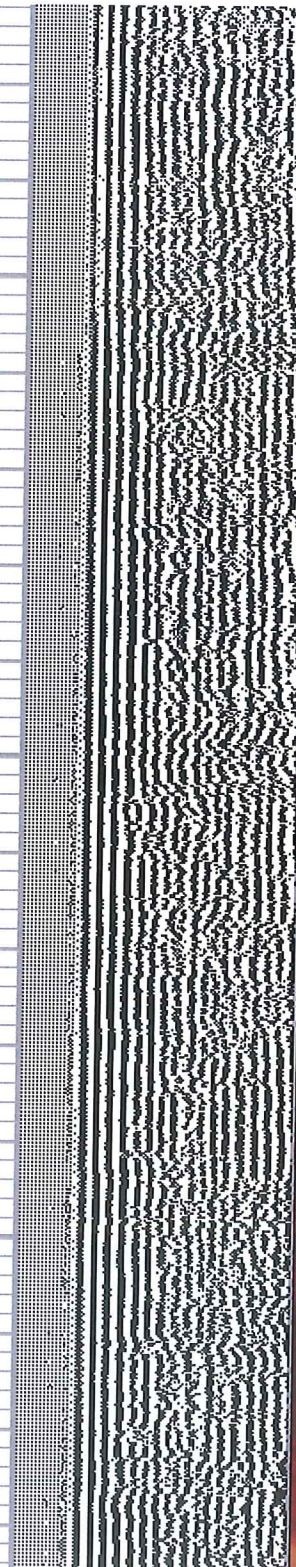
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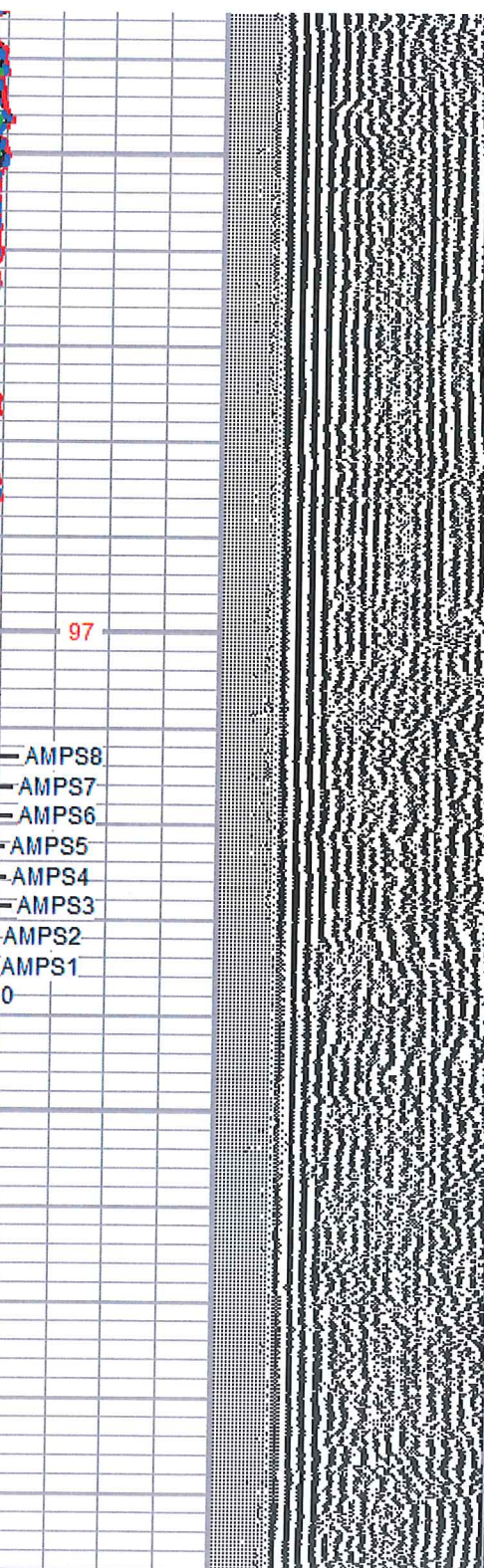
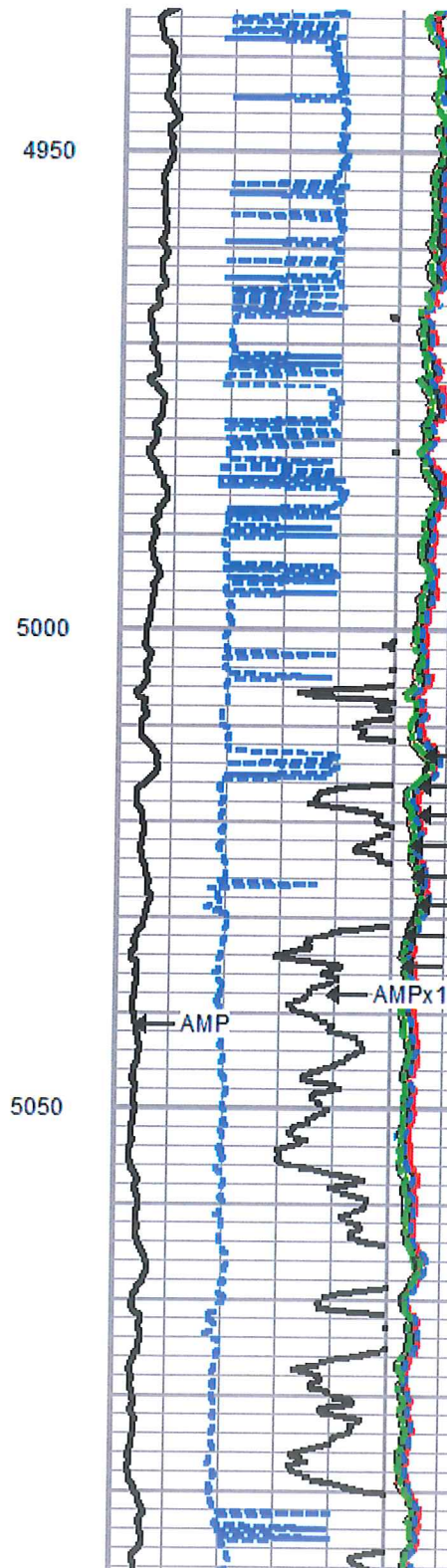
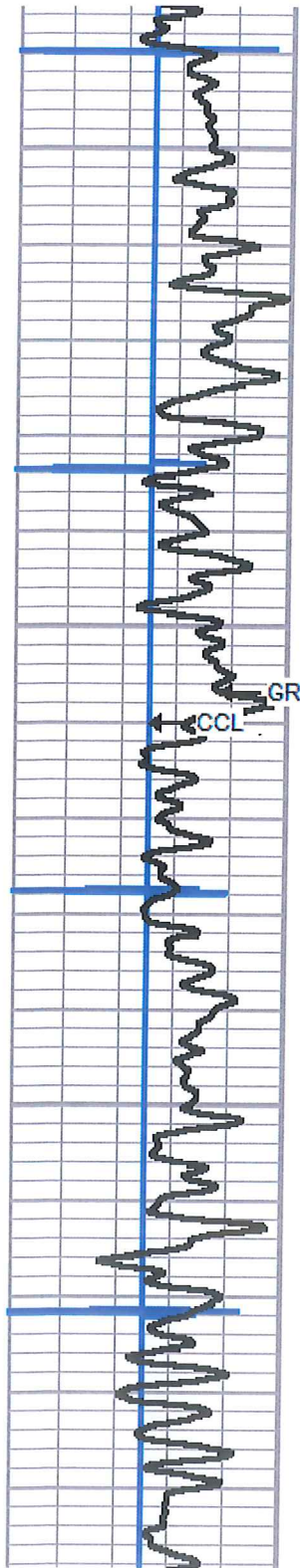
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95

96





97

CCL GR

AMP

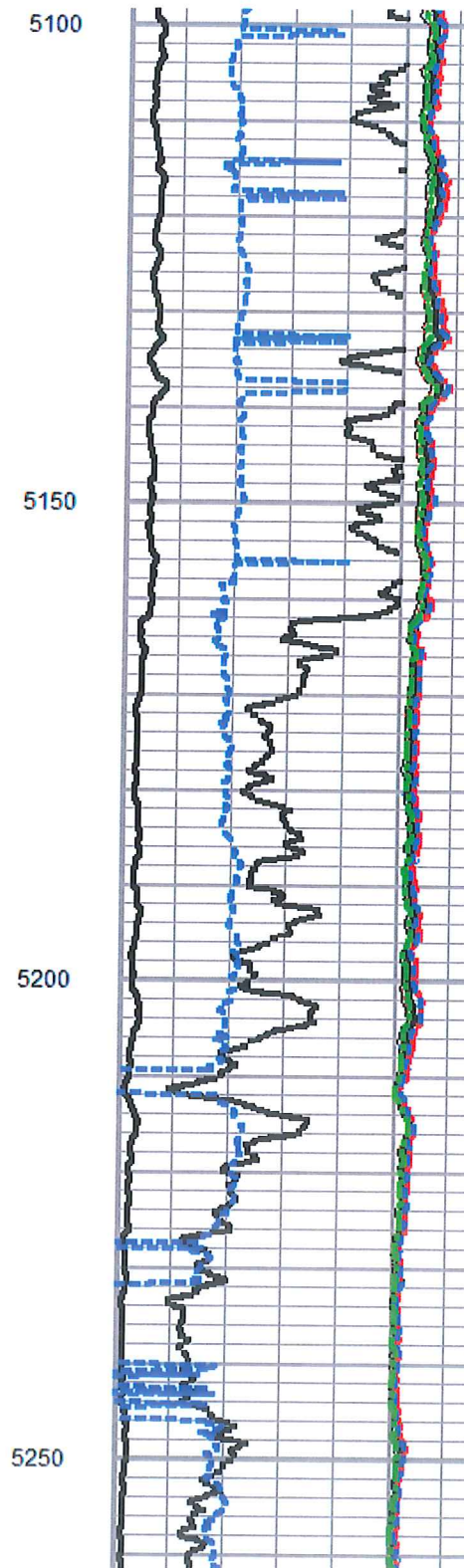
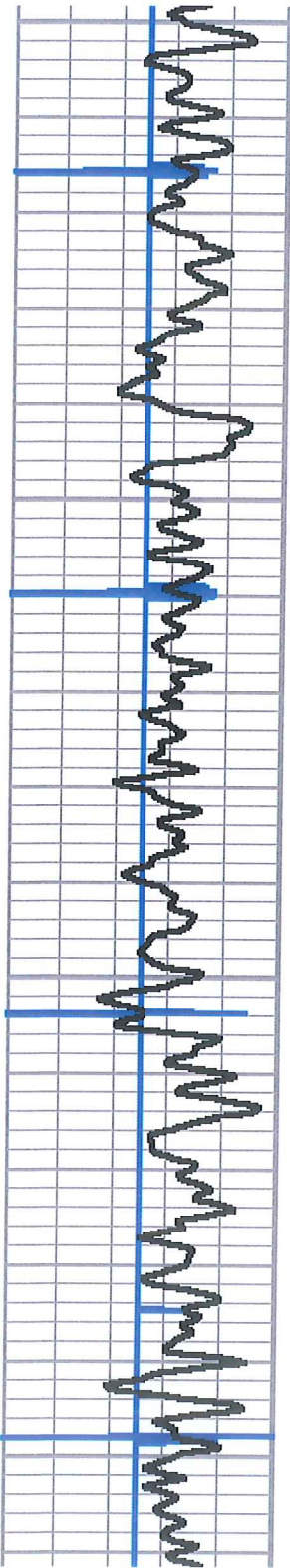
AMPx 10

AMPS8
AMPS7
AMPS6
AMPS5
AMPS4
AMPS3
AMPS2
AMPS1

4950

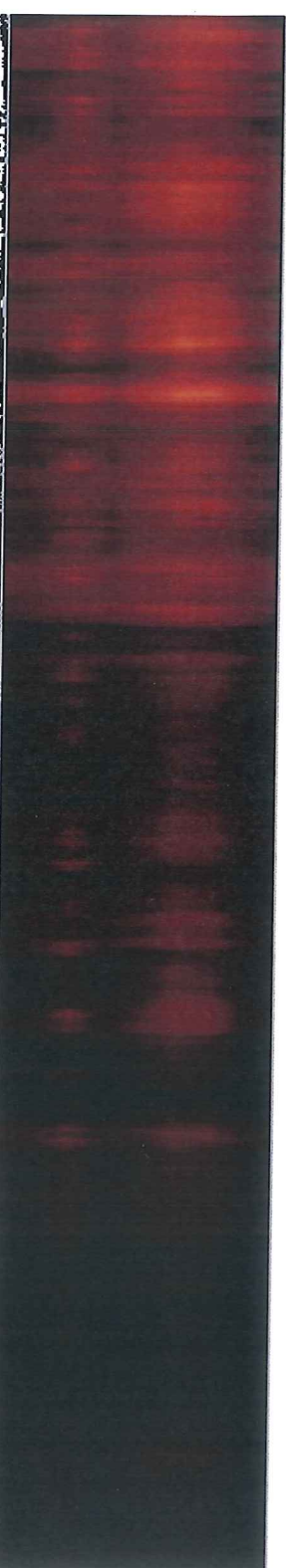
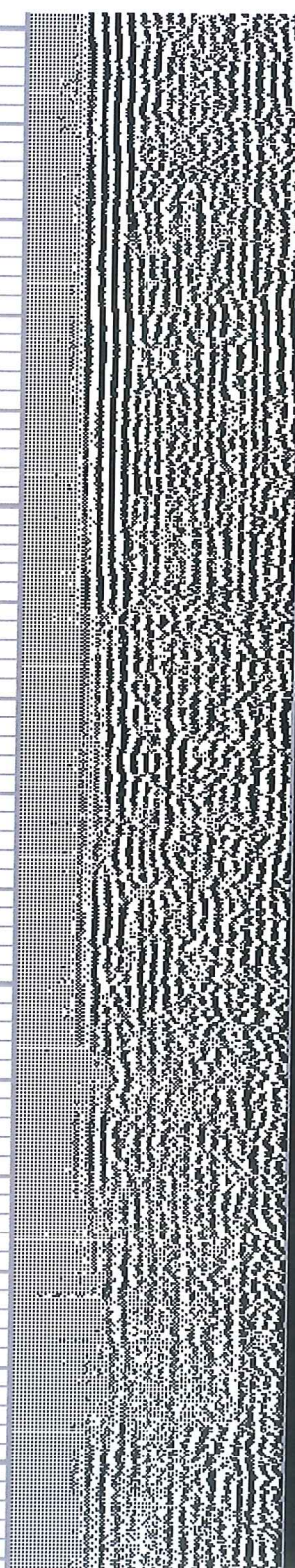
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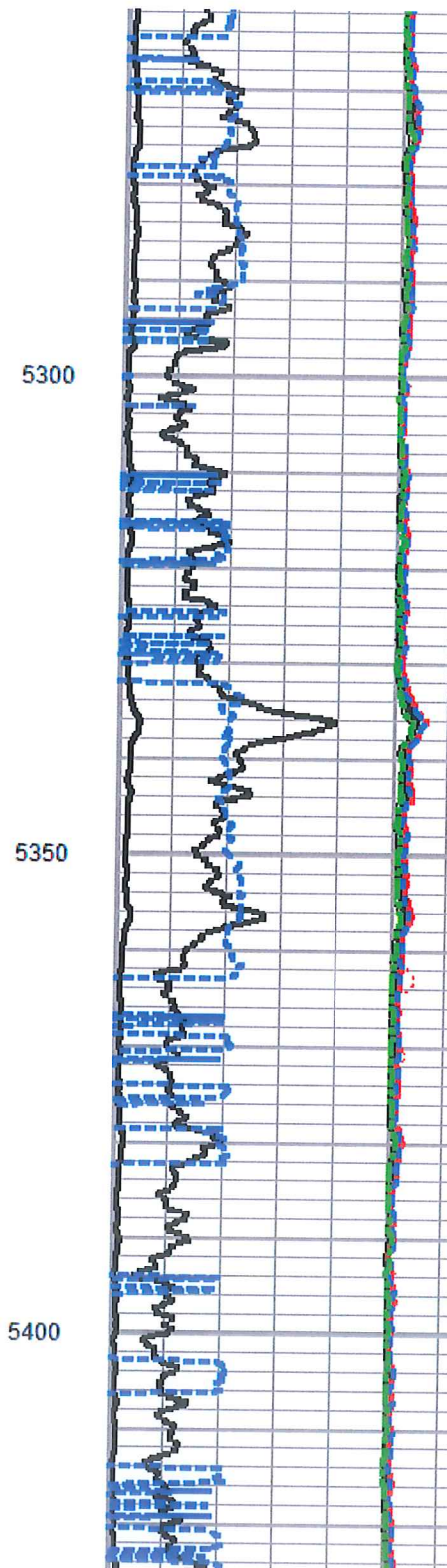
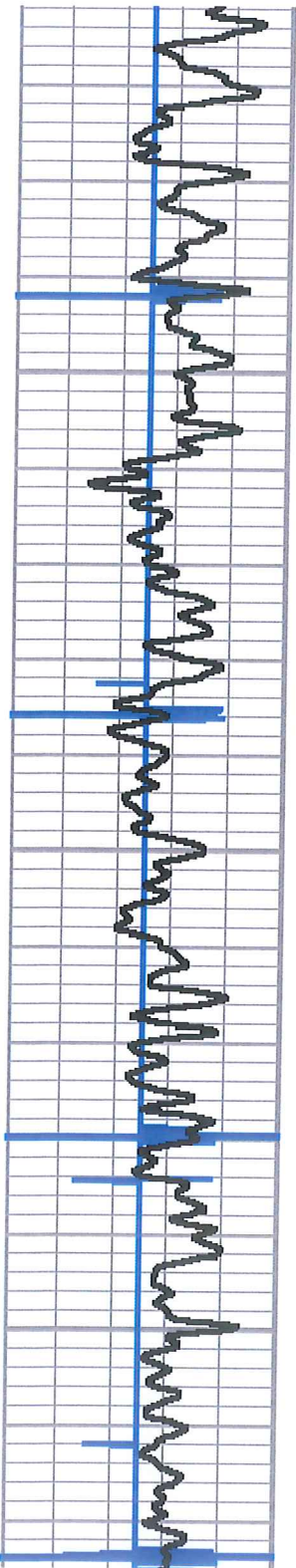
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98

100





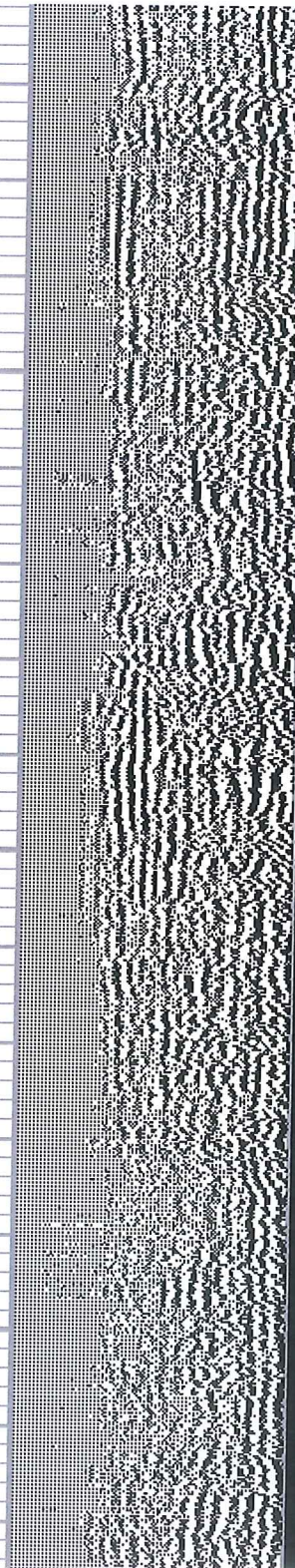
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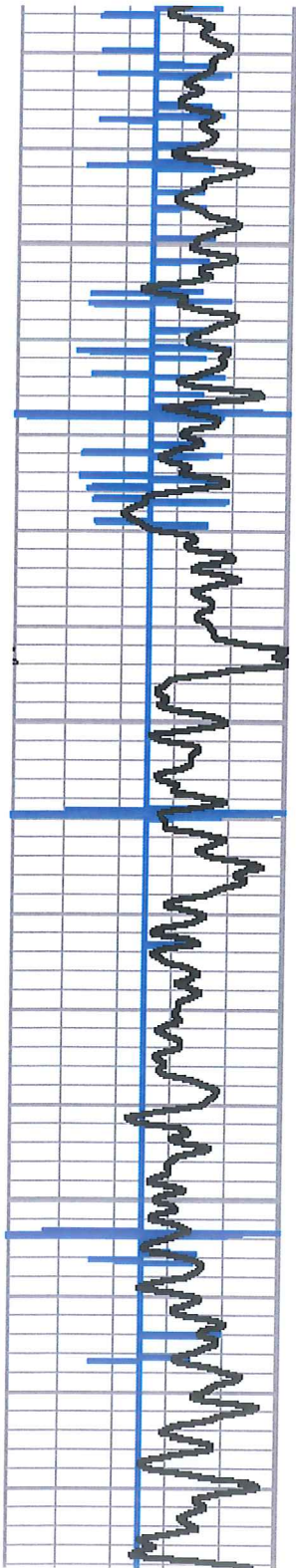
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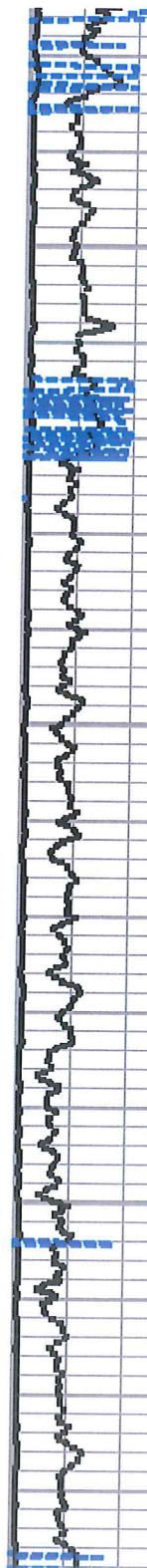




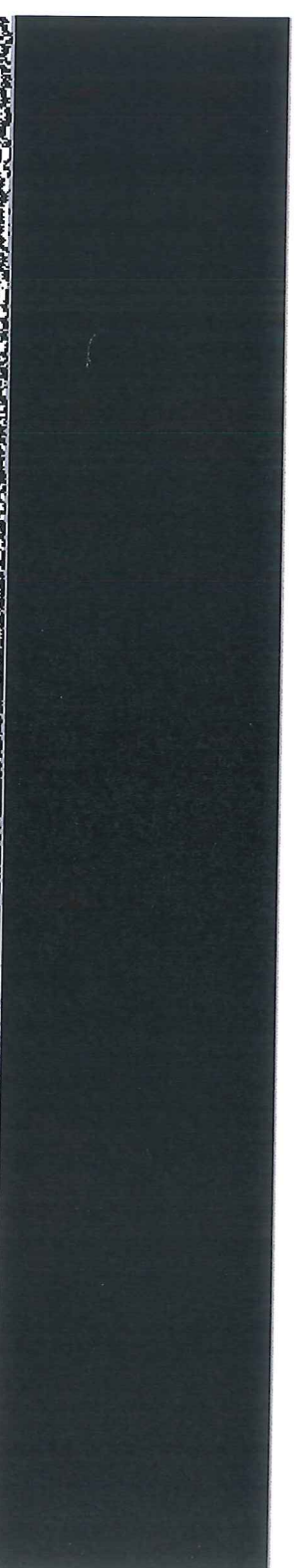
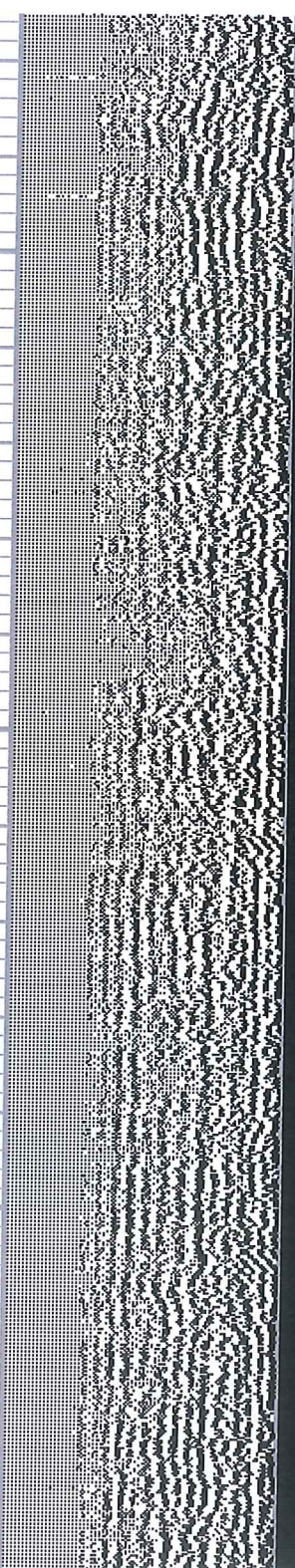
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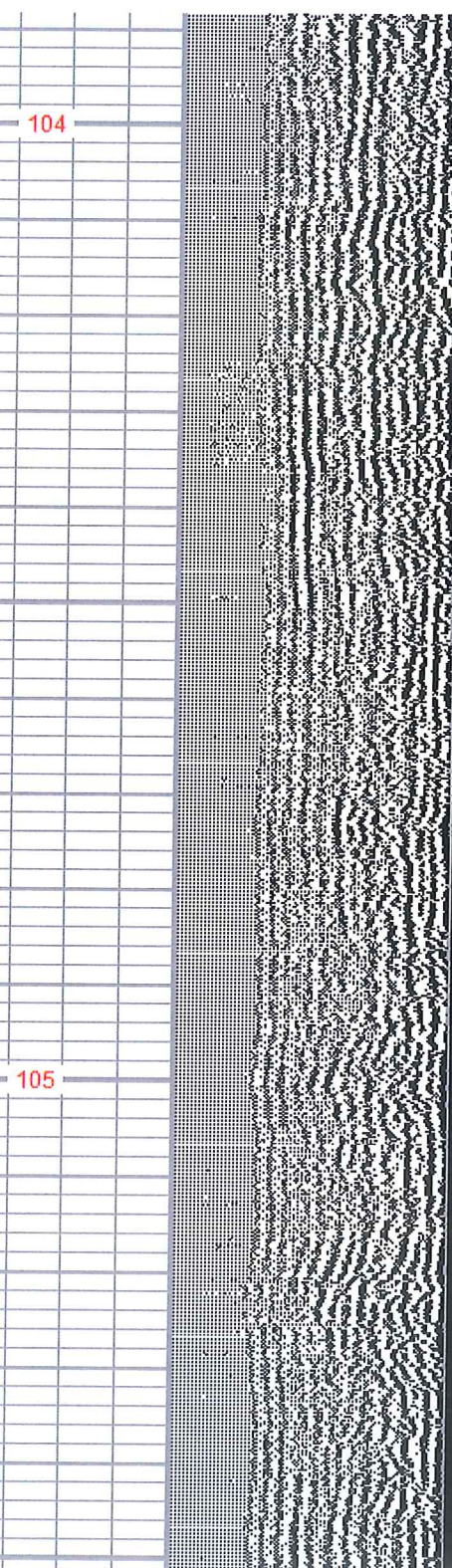
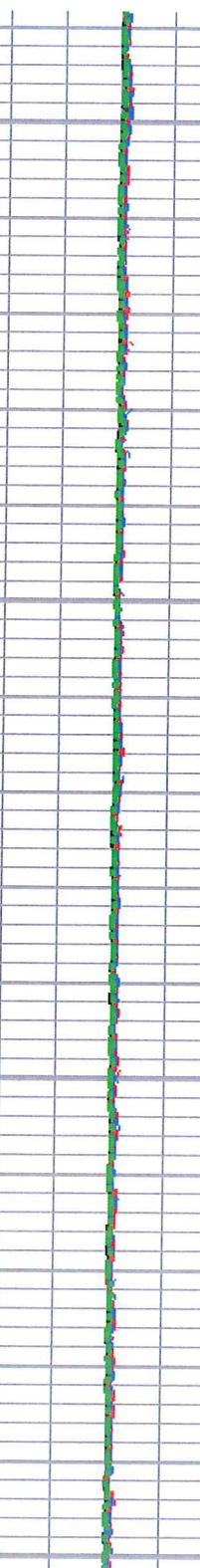
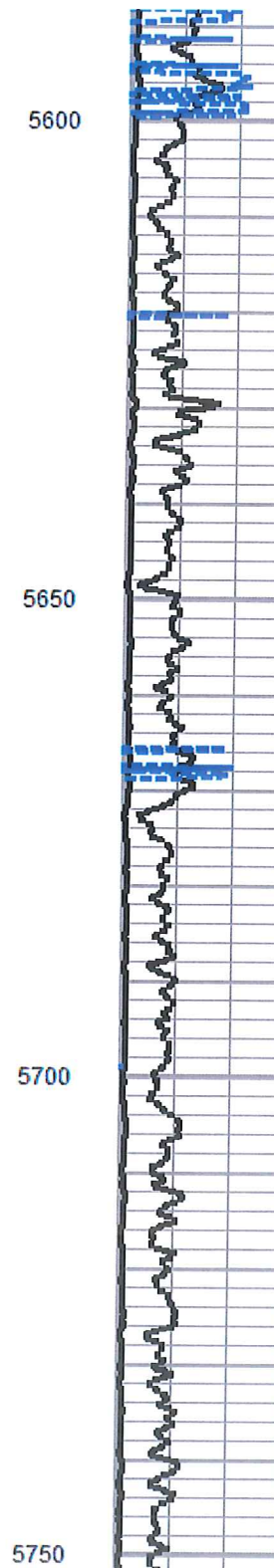
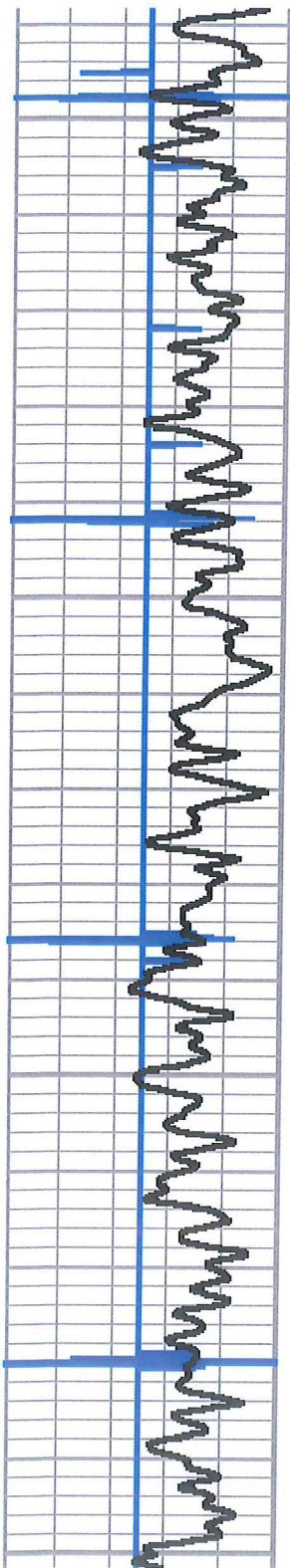
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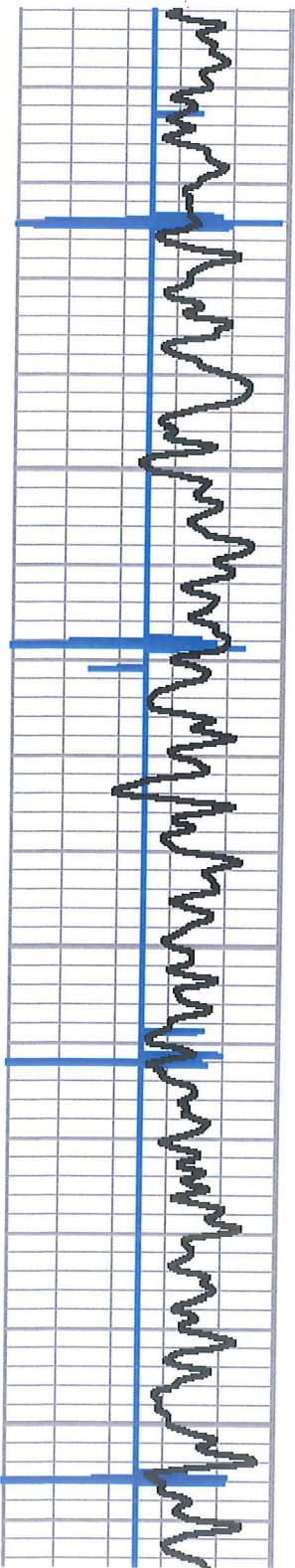
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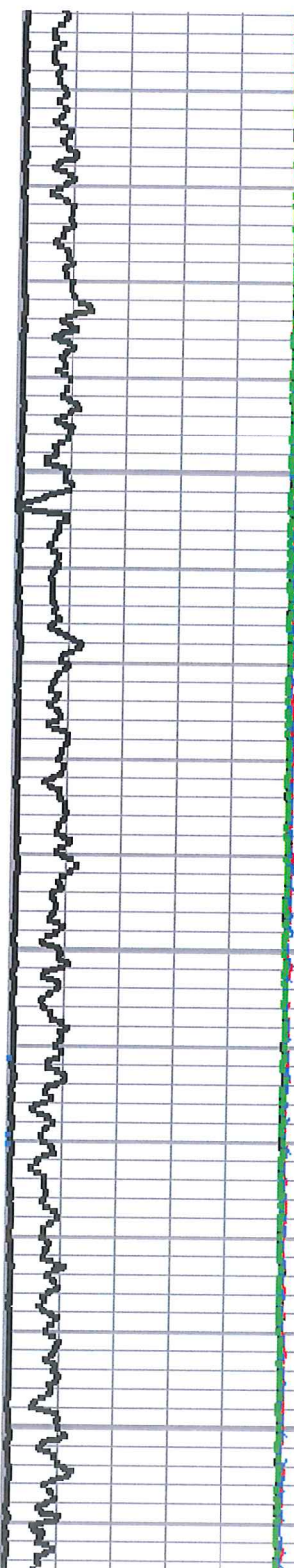
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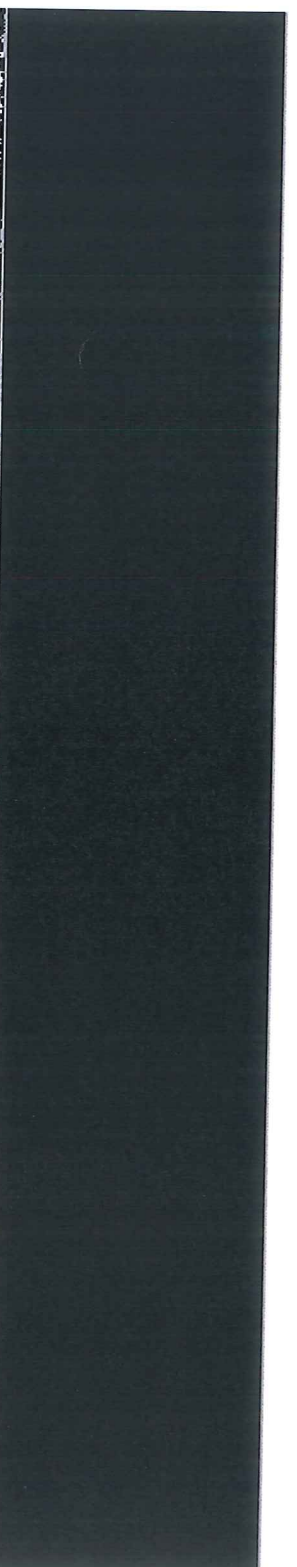
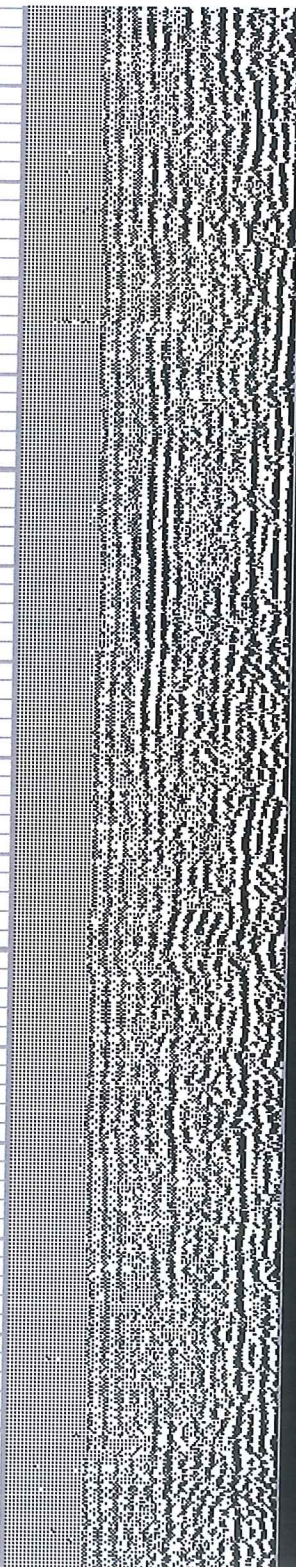


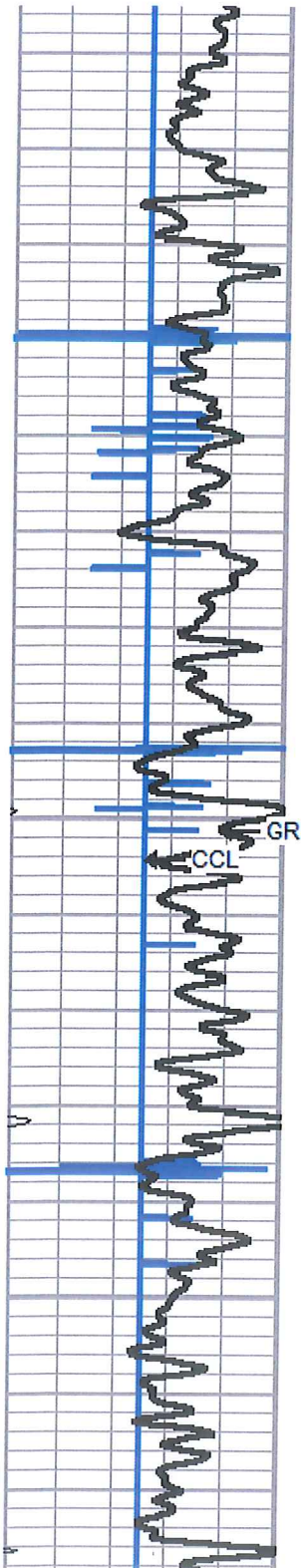


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5850
5900

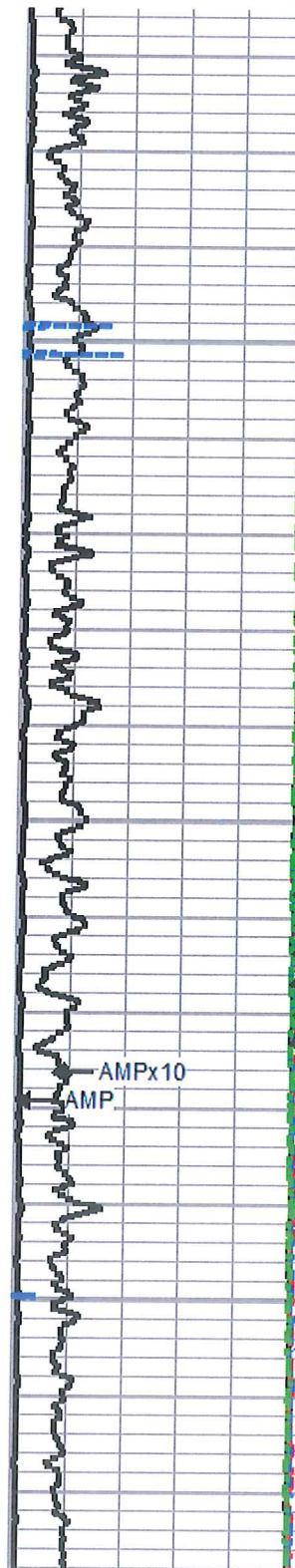


107
108



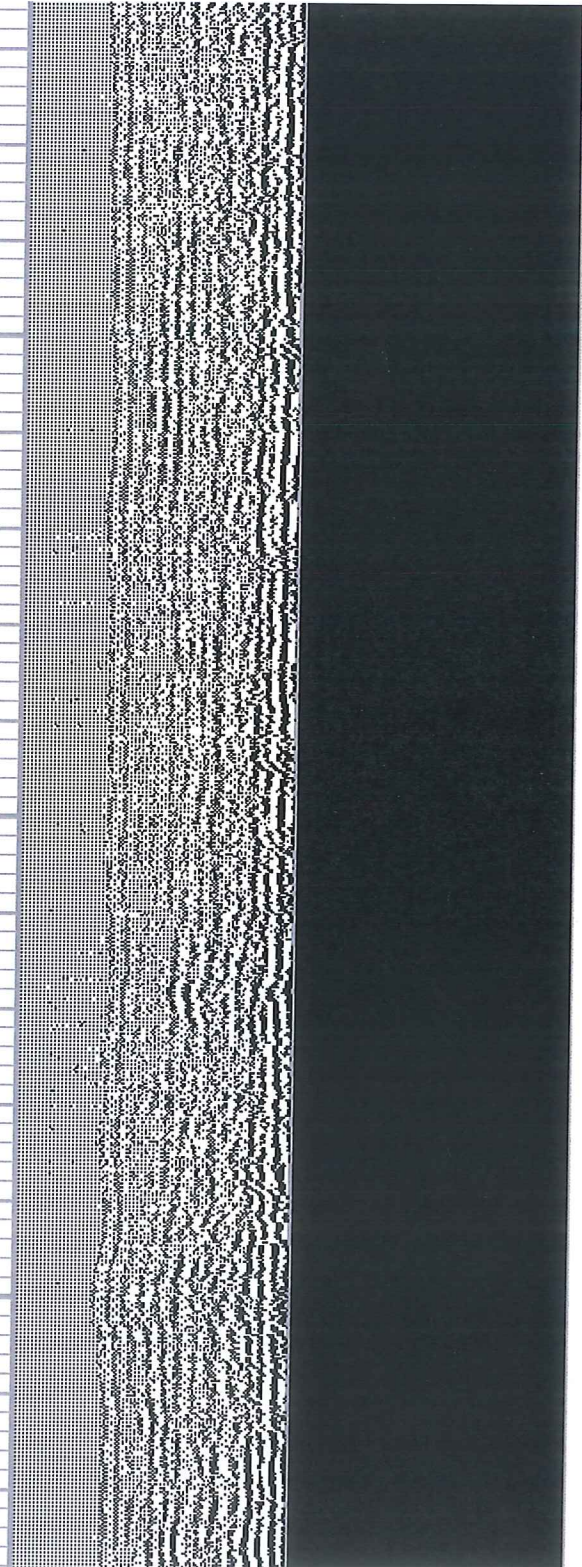


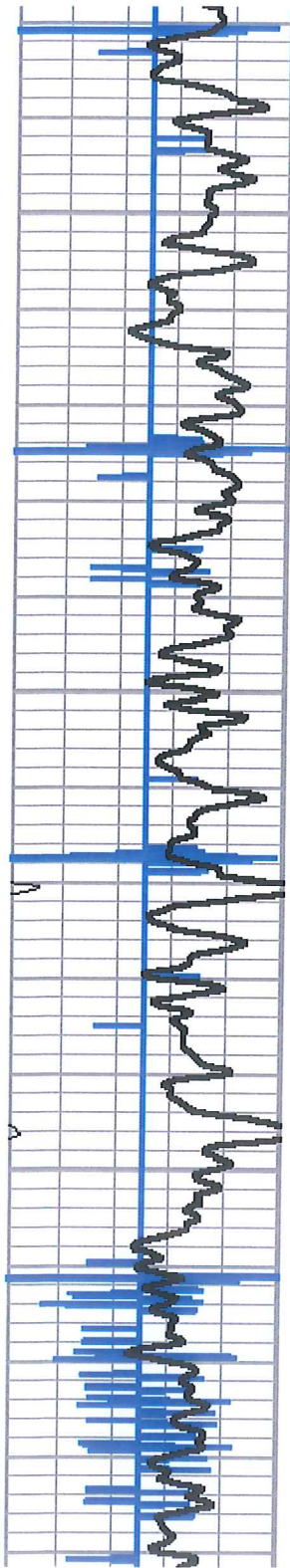
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6000
6050



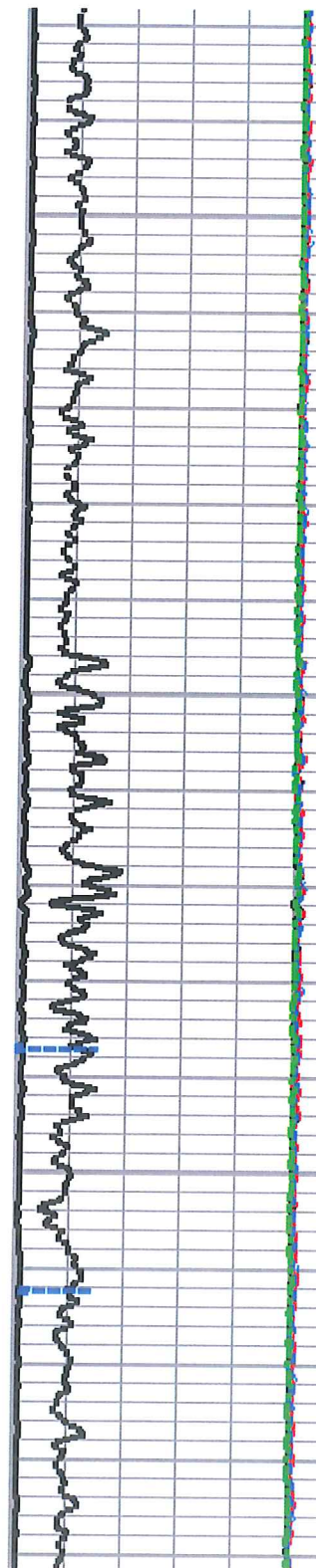
- AMPx10
- AMP
- AMPS7
- AMPS6
- AMPS5
- AMPS4
- AMPS3
- AMPS2

110

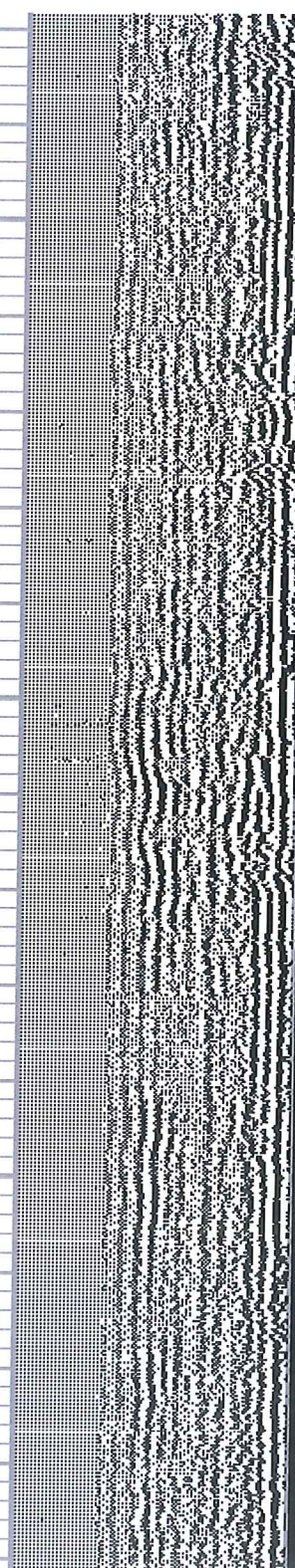


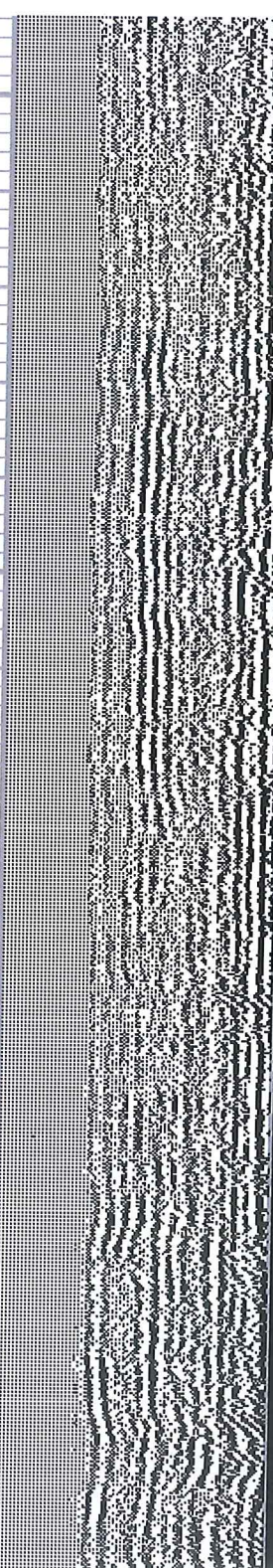
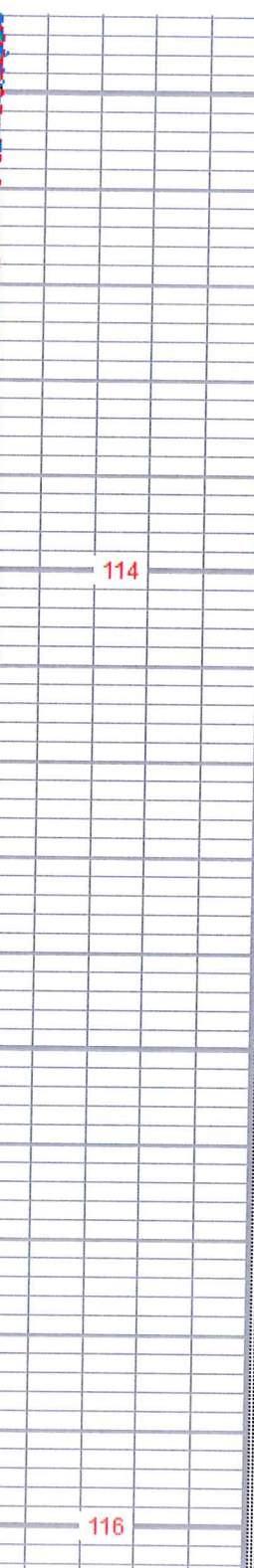
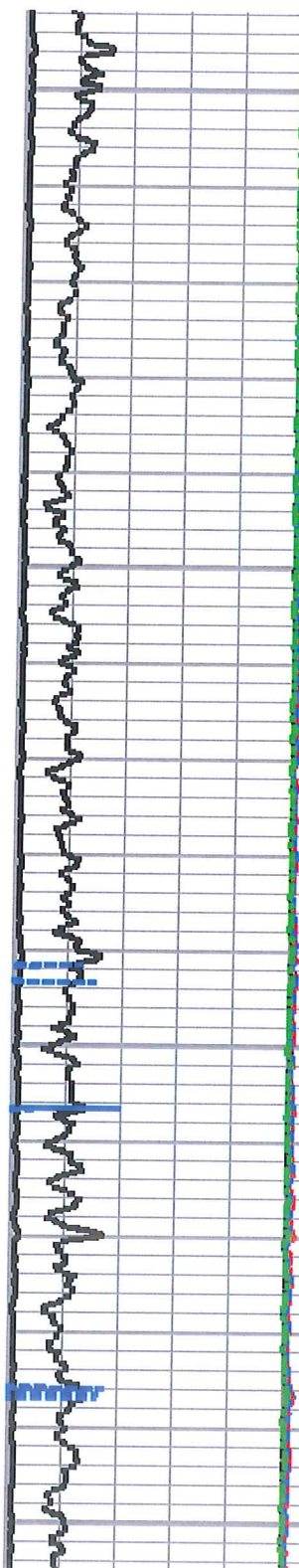
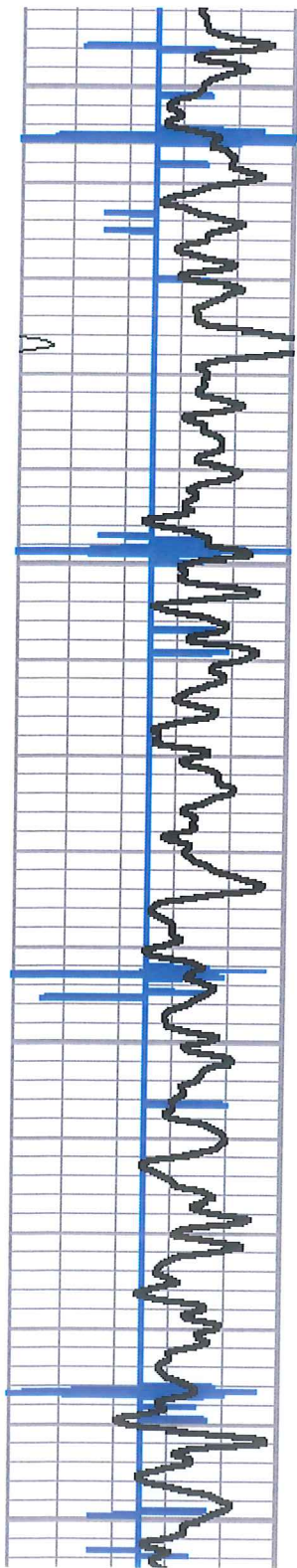


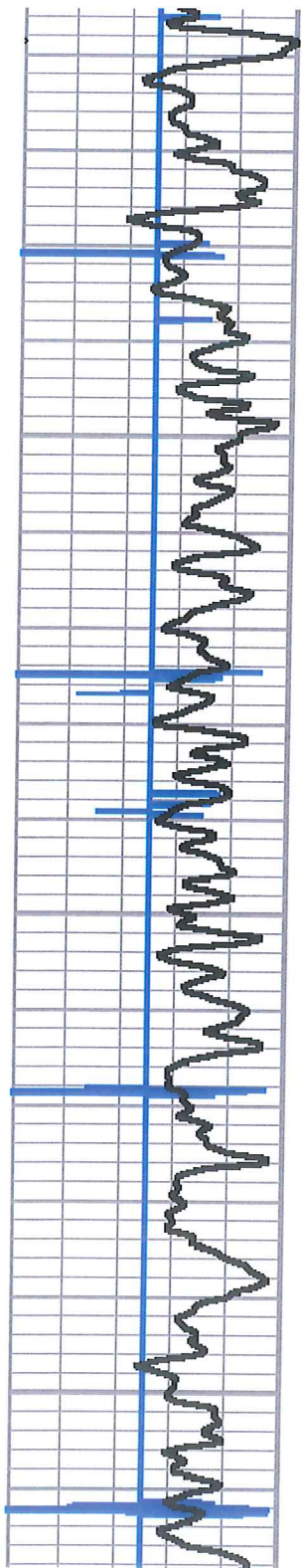
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6150
6200



111
112



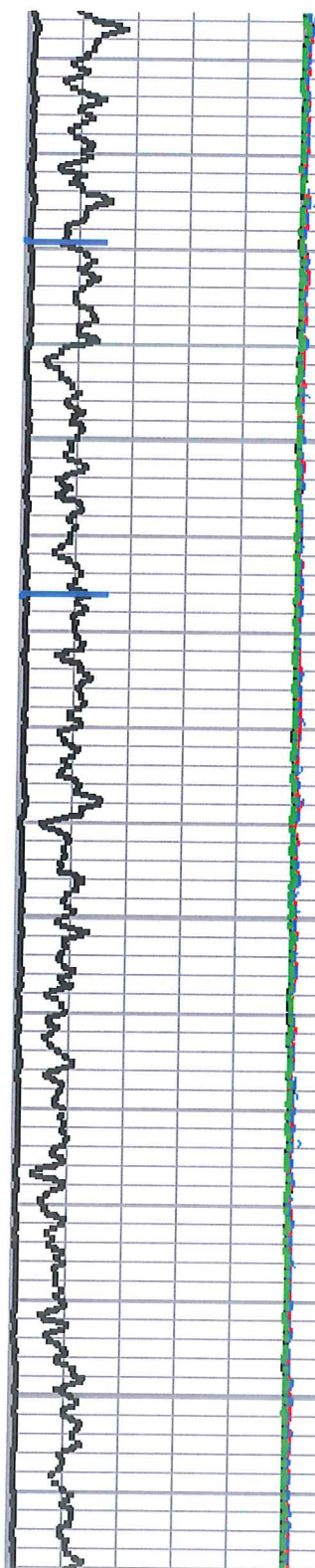




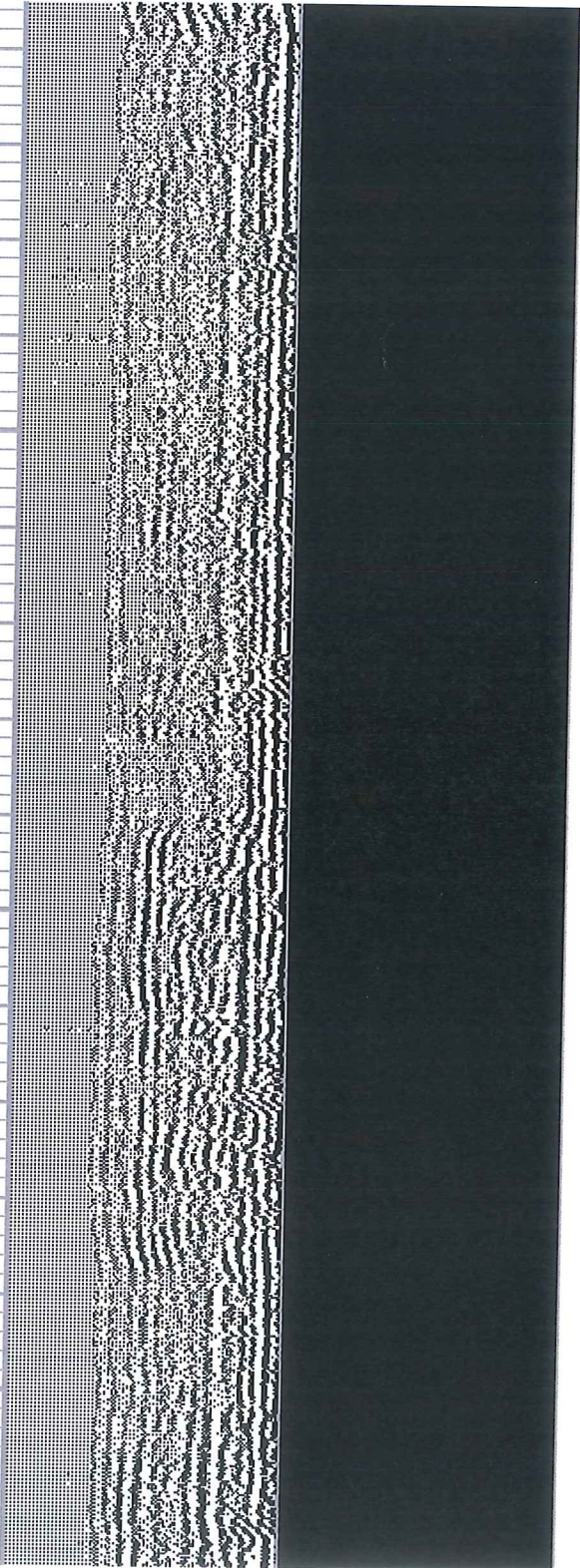
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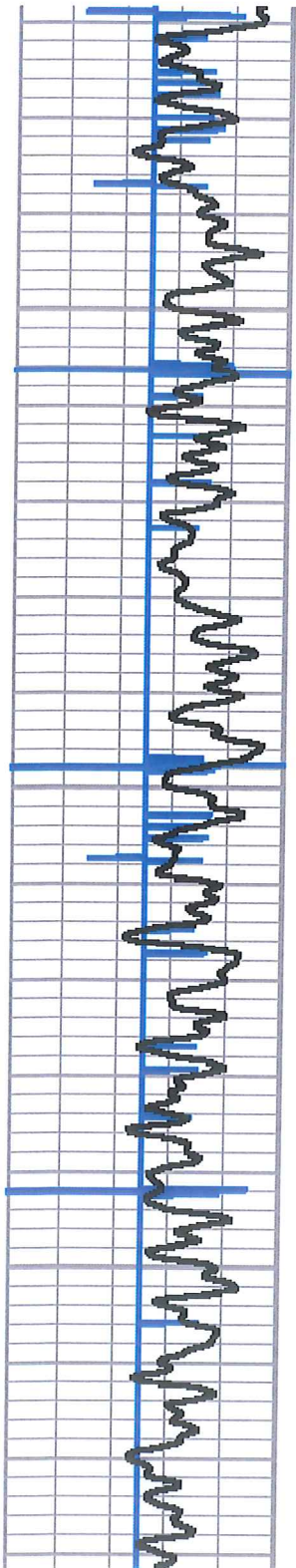
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6550



117

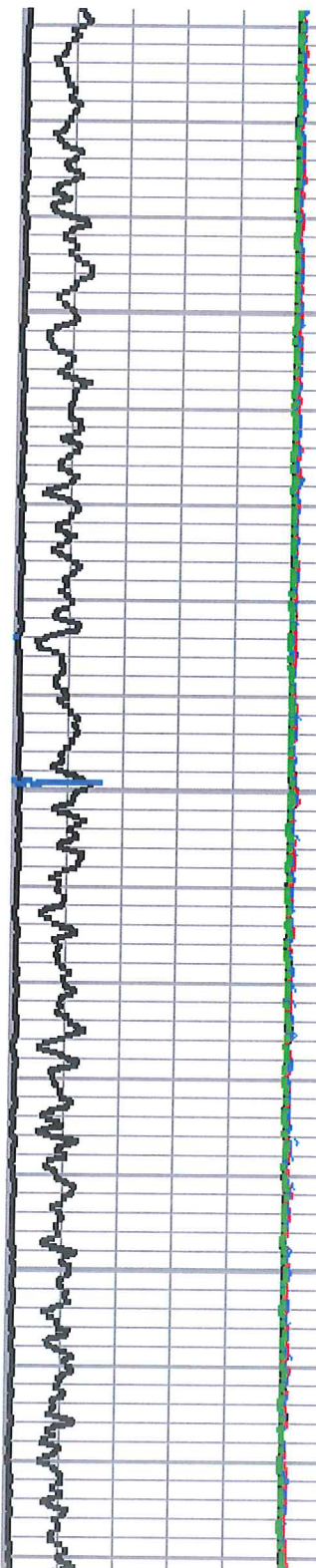




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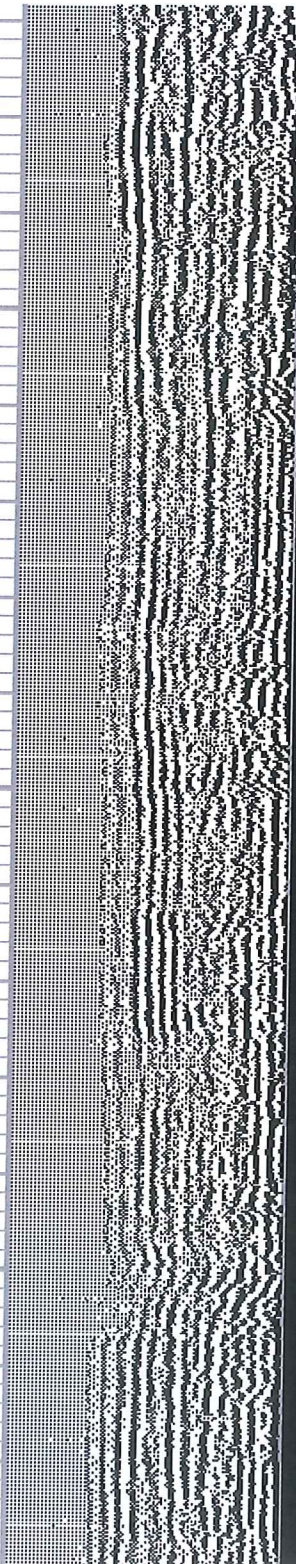
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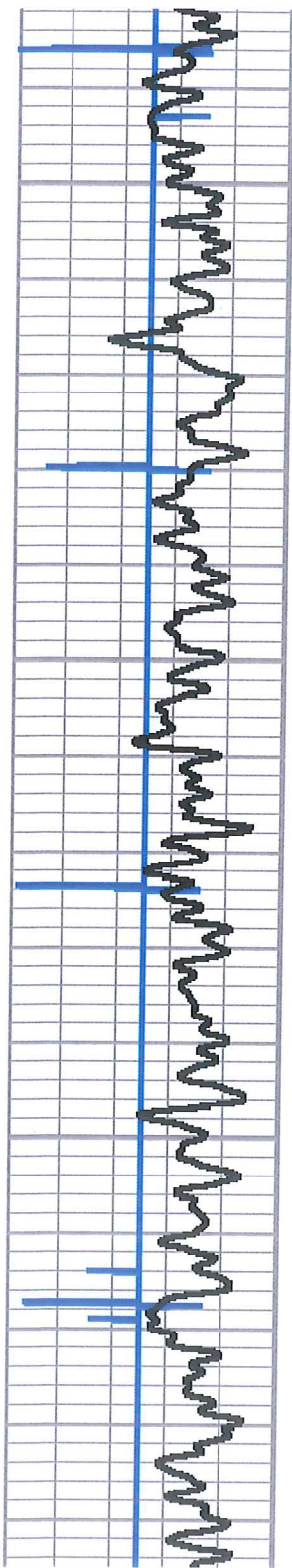
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119

120

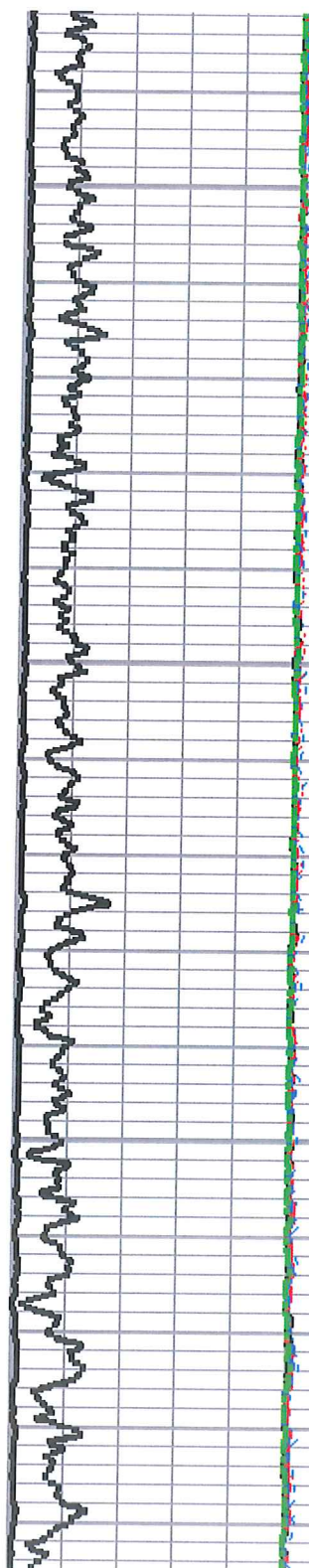




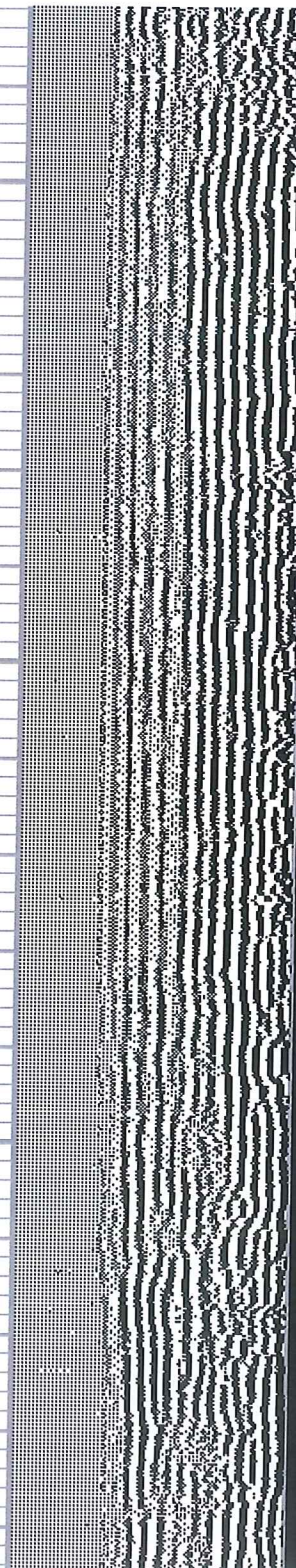
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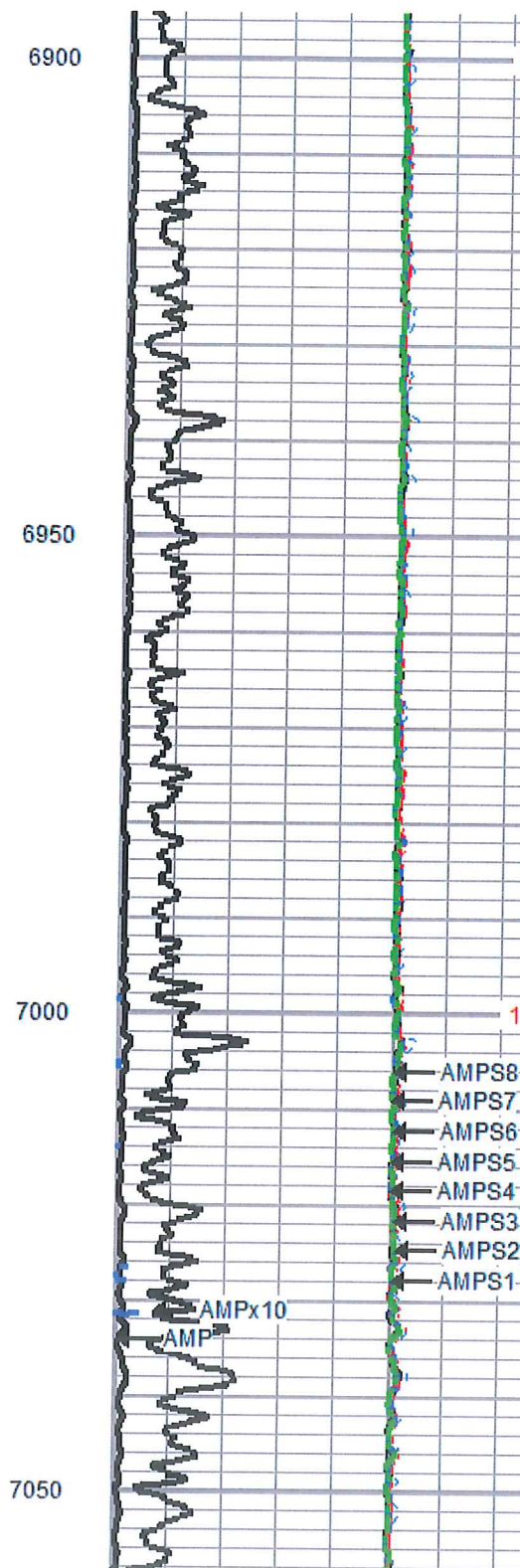
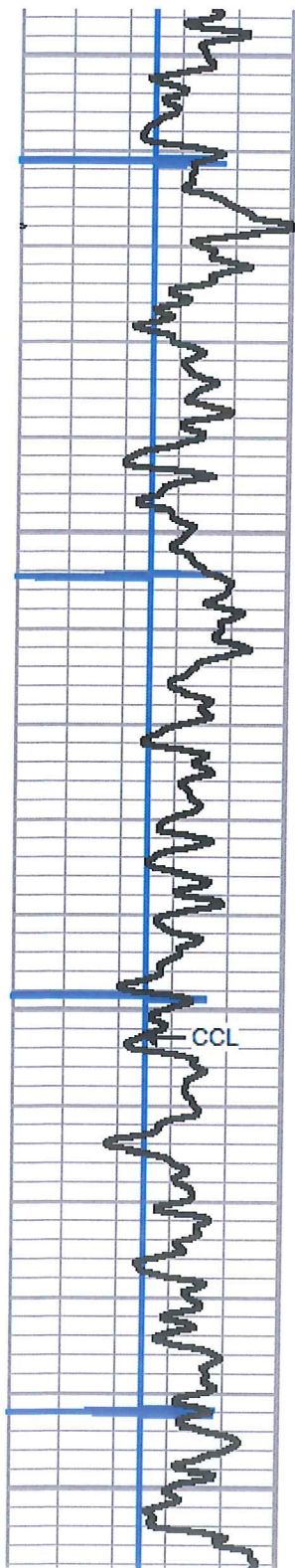
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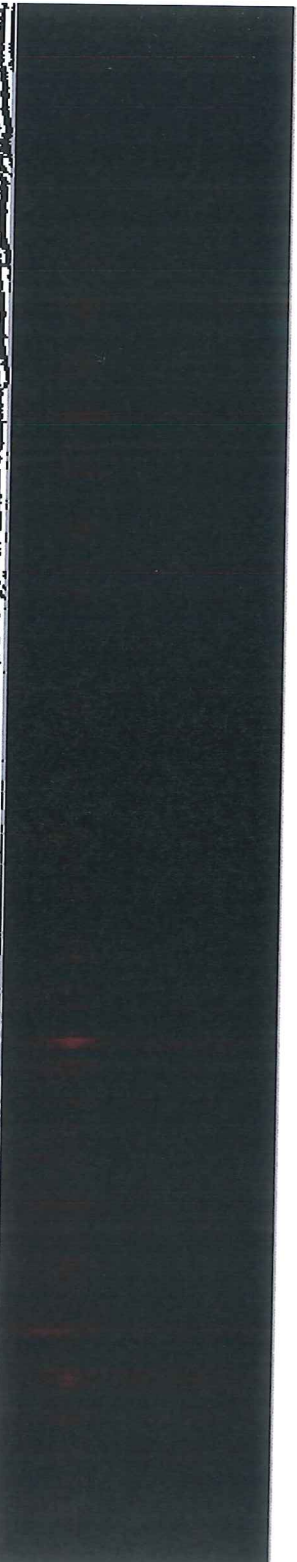
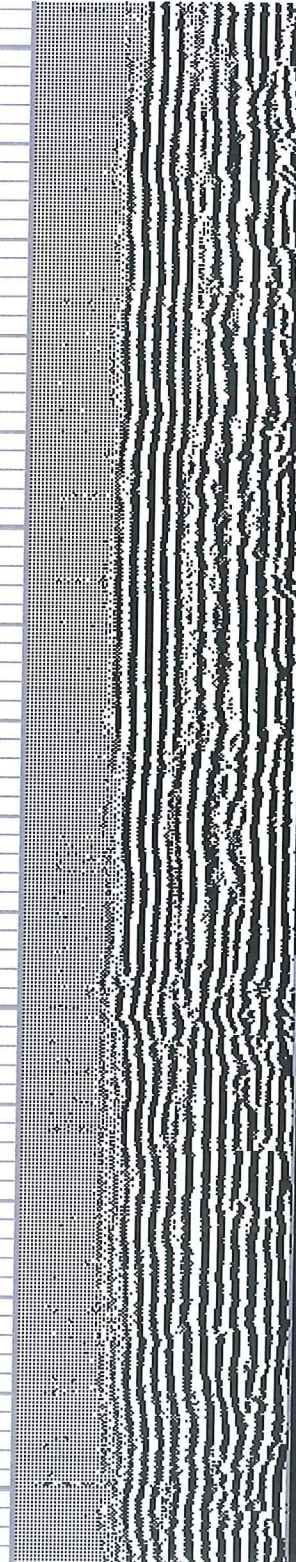


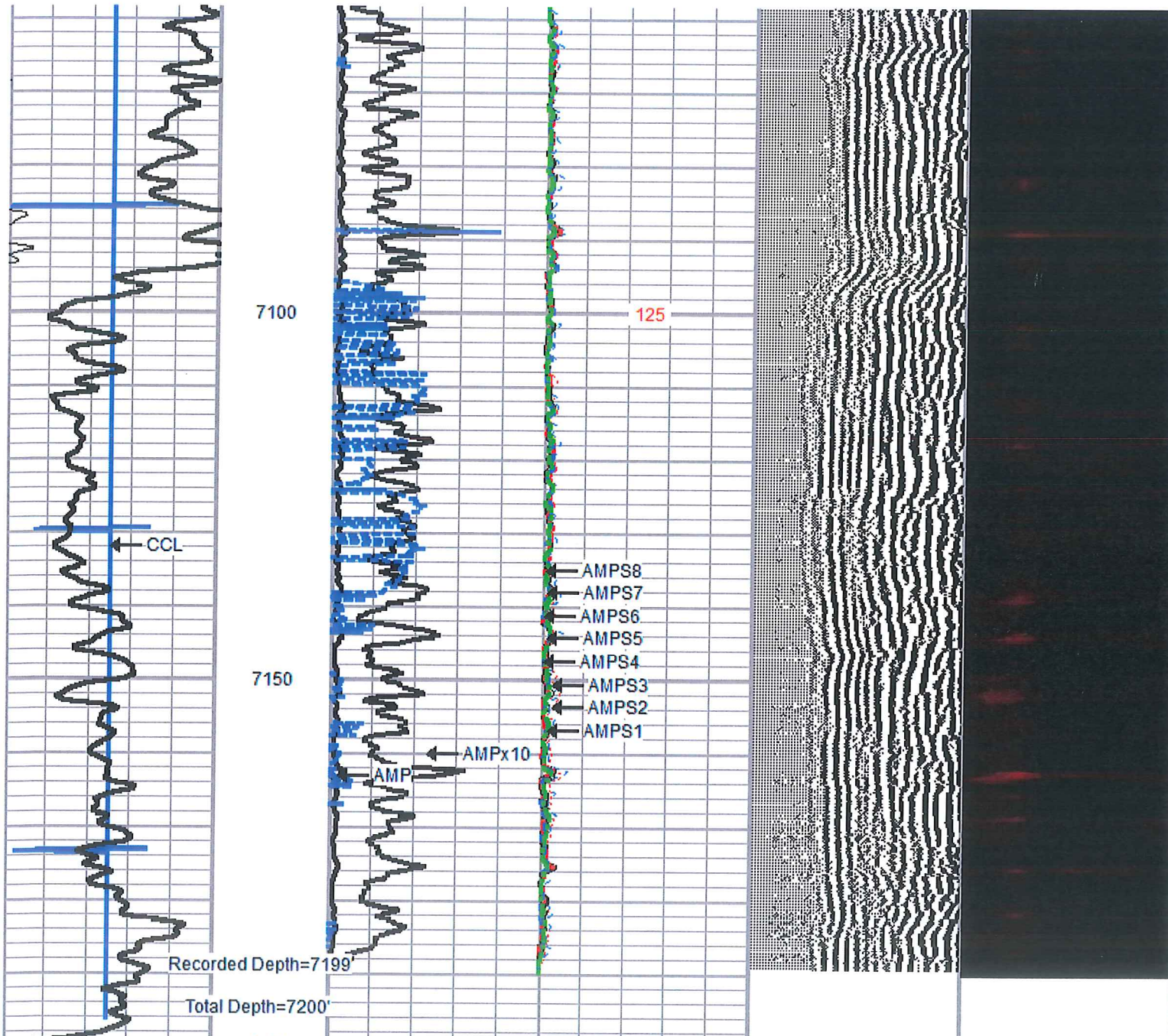
121





- AMPS8
- AMPS7
- AMPS6
- AMPS5
- AMPS4
- AMPS3
- AMPS2
- AMPS1





-2	CCL	2
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

1	Cement Map	8
3		95

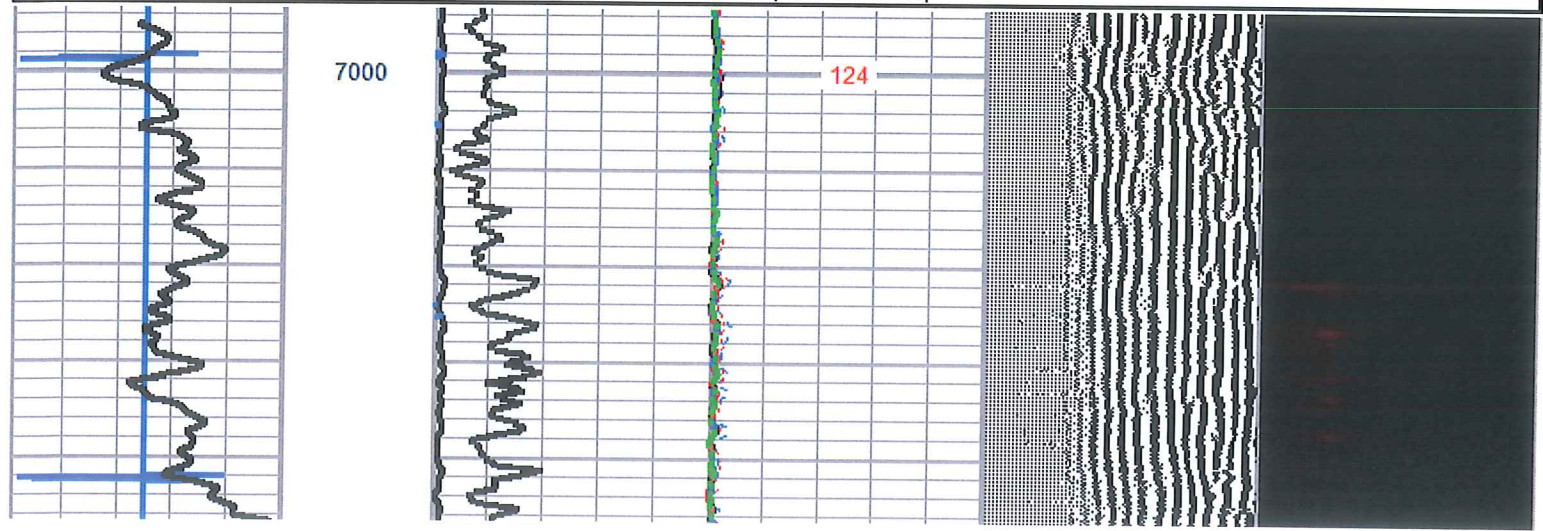
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150
TEMP		
(degF)		

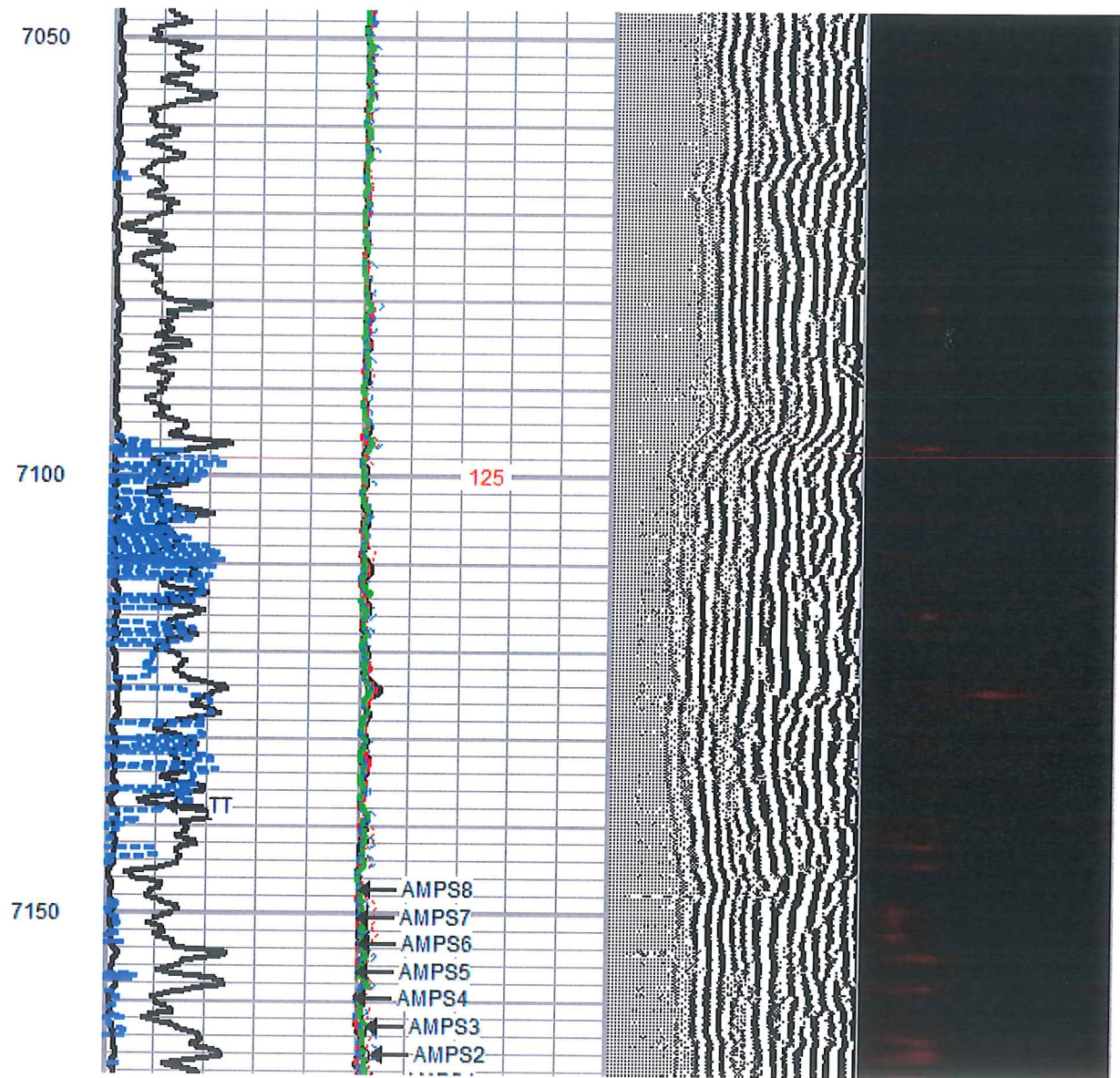
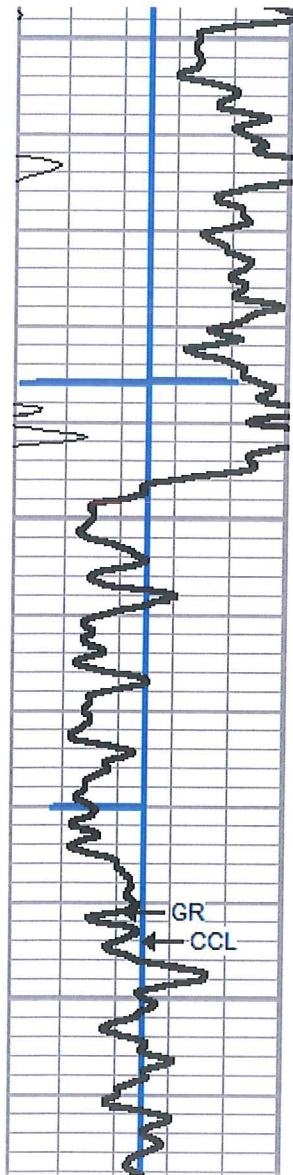


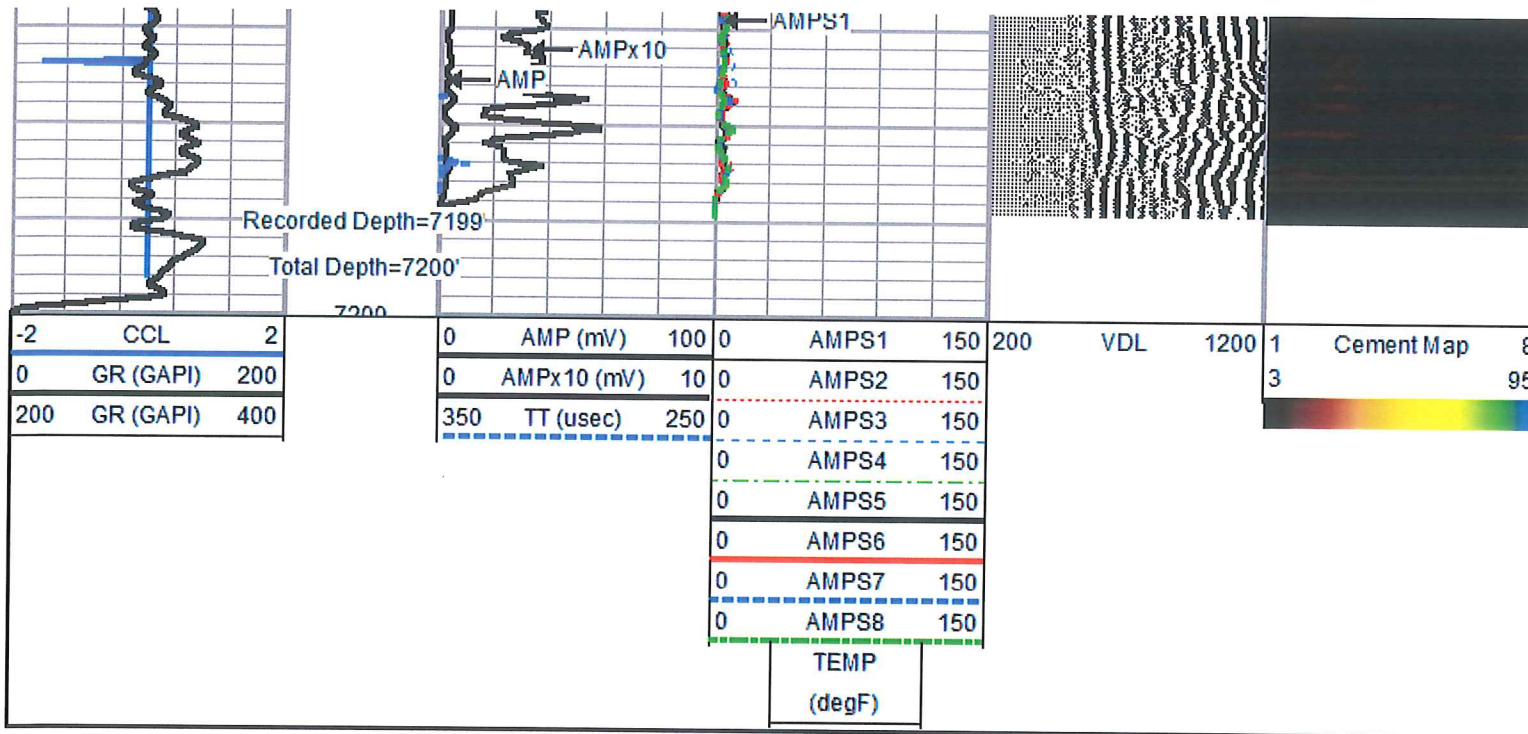
REPEAT SECTION

Database File: manser 3h.db
 Dataset Pathname: pass3
 Presentation Format: scbl02
 Dataset Creation: Sat Nov 29 08:59:30 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

-2	CCL	2	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)								







Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HeadVolt	16.76		PTS275	2.88	2.75	24.00
Temp	13.91					

WVF3FT	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					
WVF5FT	10.68					
WVFCAL	7.42	PTS275	2.88	2.75	24.00	
CCL	3.63	GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.54	2.75	30.00	
GR	0.89					
Dataset: manser 3h.db: field/well/run1/pass4 Total Length: 19.70 ft Total Weight: 178.00 lb O.D.: 2.75 in						