



# RADIAL BOND GAMMA RAY CCL-TEMP

**Company** ANTERO RESOURCES  
**Well** GAINS 1H  
**Field** CANTON  
**County** DODDRIDGE  
**State** WV. **Country** USA.

**Company** ANTERO RESOURCES  
**Well** GAINS 1H  
**Field** CANTON  
**County** DODDRIDGE  
**State** WV. **Country** USA.

**Location:** API #: 47017063950000 **Other Services**  
**SEC** **TWP** **RGE** **Elevation**  
 Permanent Datum G.L. Elevation 1306'  
 Log Measured From K.B.23' K.B.1329'  
 Drilling Measured From K.B.23' D.F. 1328'  
 G.L. 1308

Date	11-8-14										
Run Number	ONE										
Depth Driller											
Depth Logger	7350'										
Bottom Logged Interval	7349'										
Top Log Interval	SURFACE										
Open Hole Size											
Type Fluid	WATER										
Density / Viscosity											
Max. Recorded Temp.	126										
Estimated Cement Top	1592'										
Time Well Ready	10:30										
Time Logger on Bottom	11:10										
Equipment Number	5982										
Location	CLARKSBURG WV.										
Recorded By	E.BUTCHER										
Witnessed By	W.MARTINEZ										
<b>Borehole Record</b>						<b>Tubing Record</b>					
Run Number	Bit	From	To	Size	Weight	From	To	From	To	From	To
Casing Record	Size	Wdth Ft		Top	Bottom						
Surface String											
Prot String											
Production String	5.5"	20 LBS.		SURFACE	13,968'						
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. 23'

Calibration Report

Database File: gains 1h.db  
Dataset Pathname: pass3  
Dataset Creation: Sat Nov 08 11:02:29 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: gains 1h.db  
 Dataset Pathname: pass3  
 Presentation Format: scbl02  
 Dataset Creation: Sat Nov 08 11:02:29 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

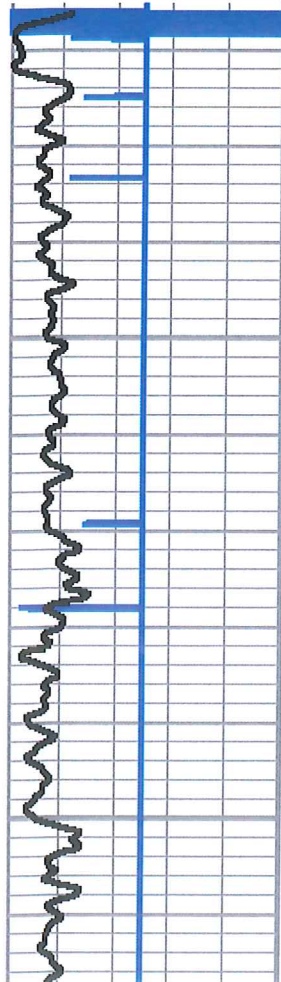
0	AMP (mV)	100
0	AMPx10 (mV)	10
350	TT (usec)	250

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

TEMP  
(degF)

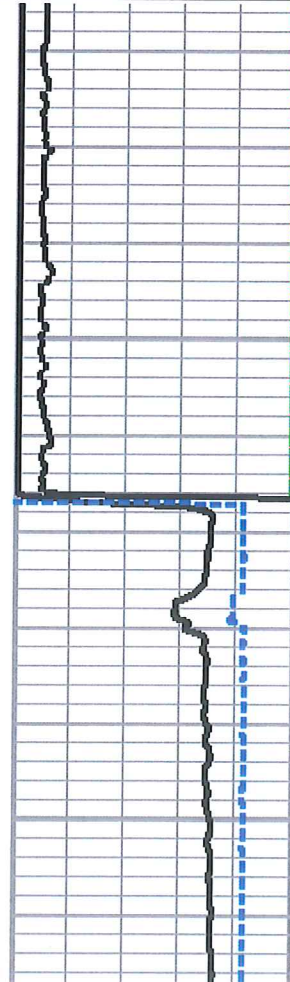
200 VDL 1200

1 Cement Map 8  
3 95

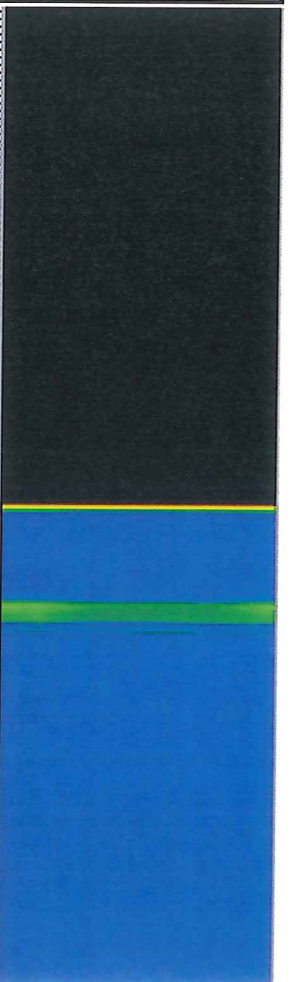
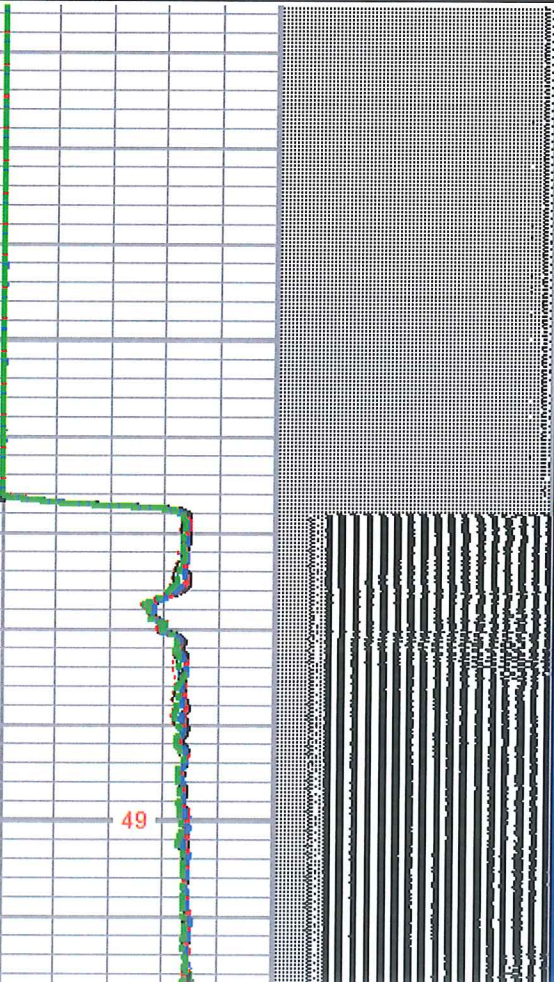


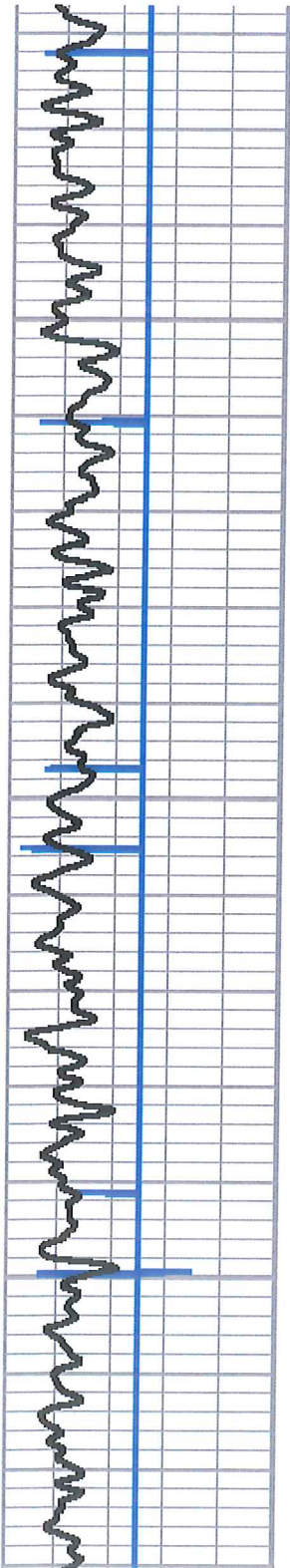
50

100



49

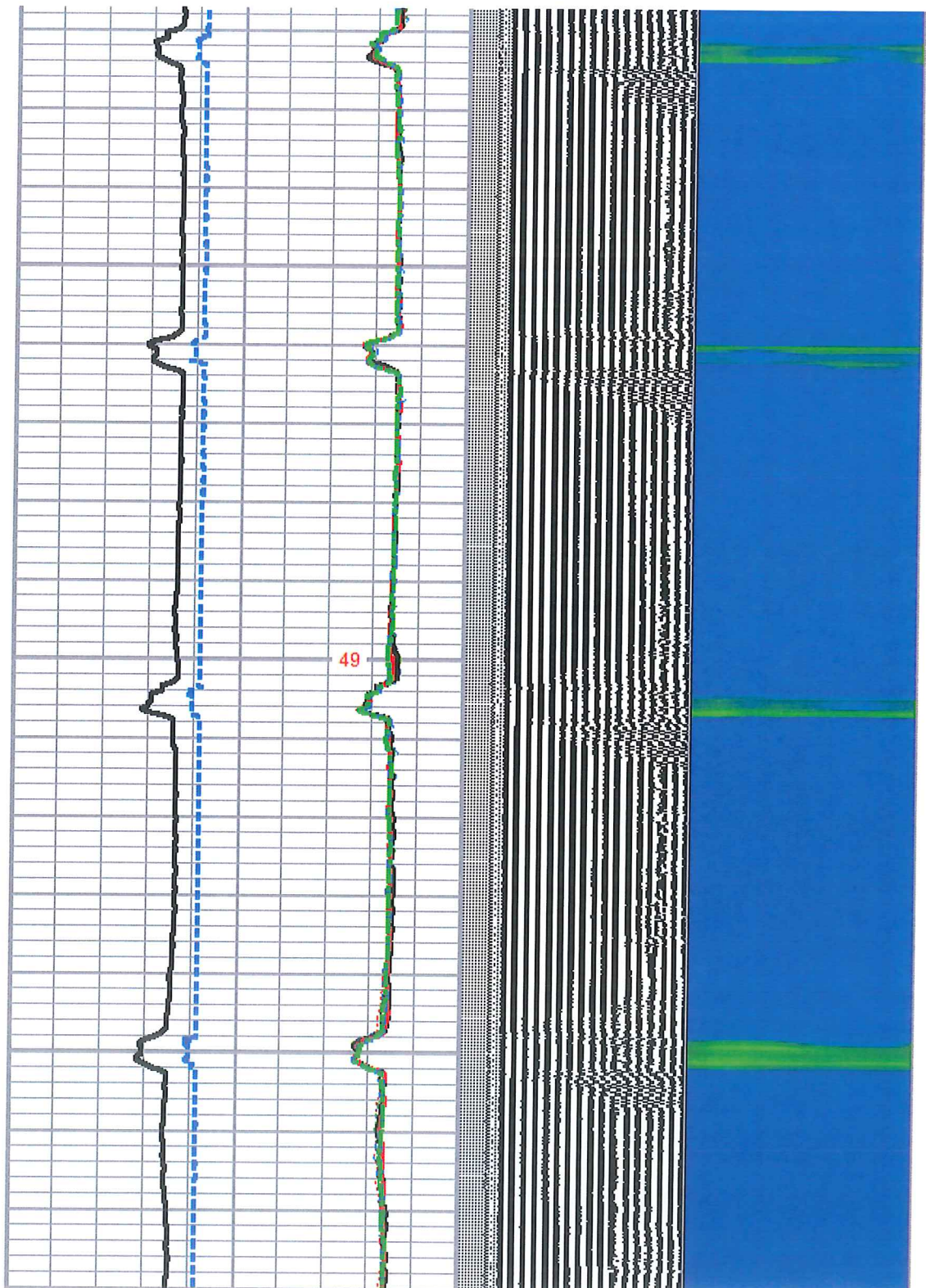


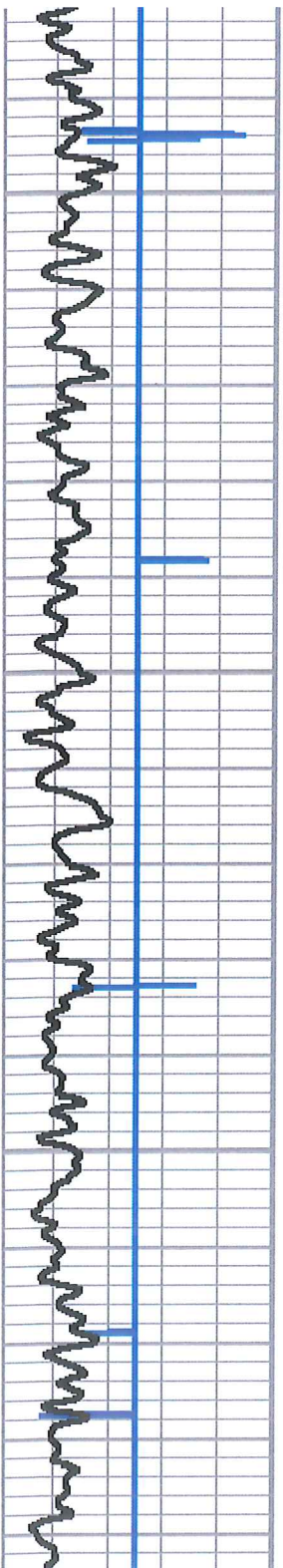


150

200

250

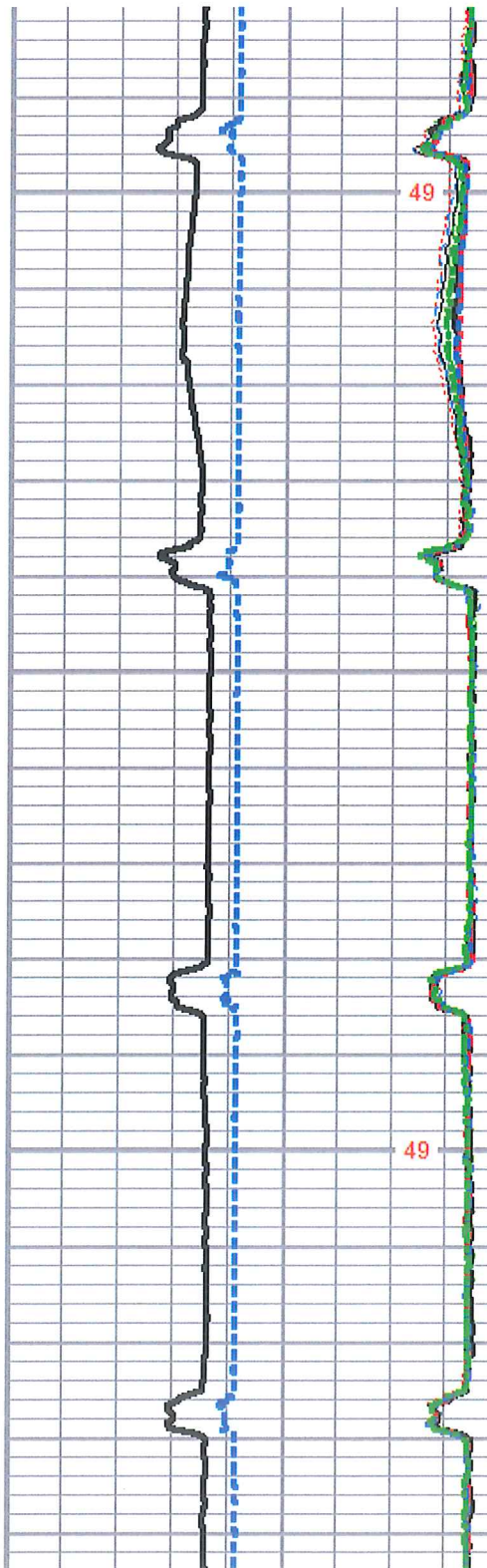




300

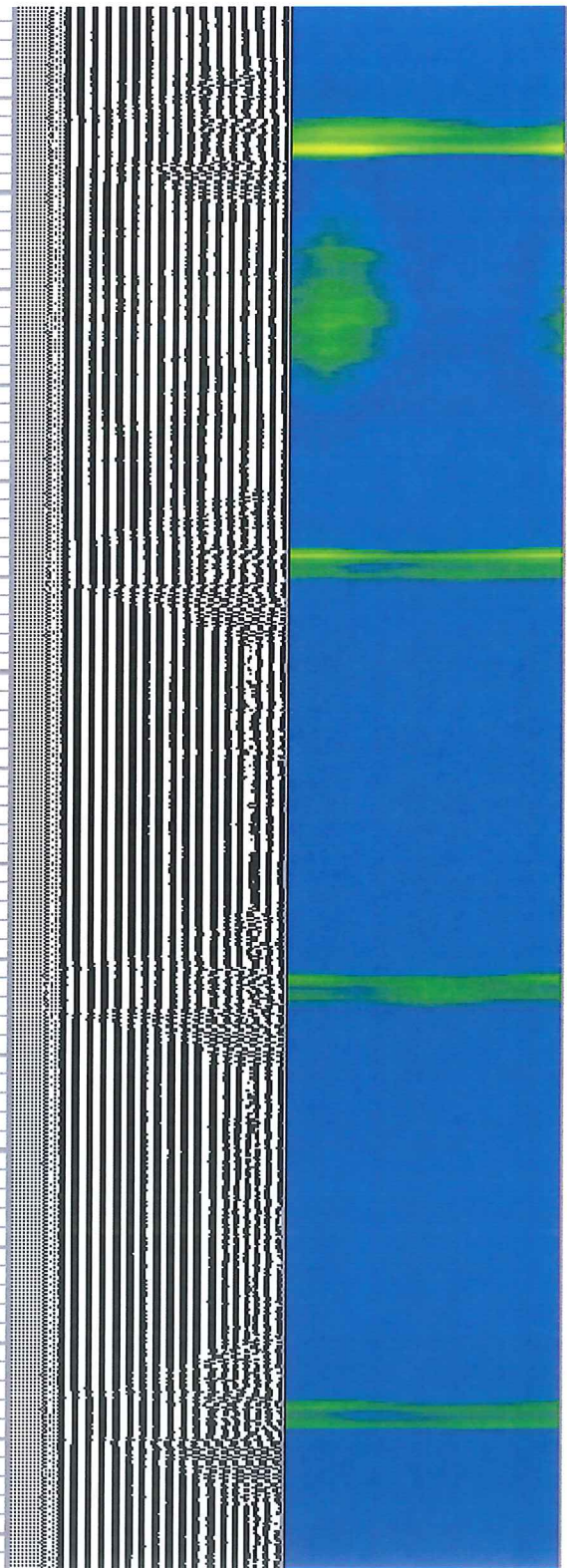
350

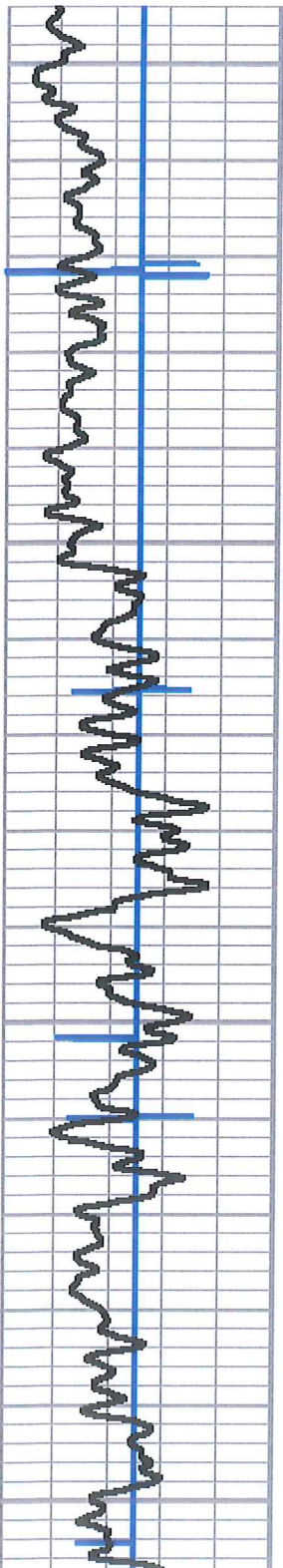
400



49

49



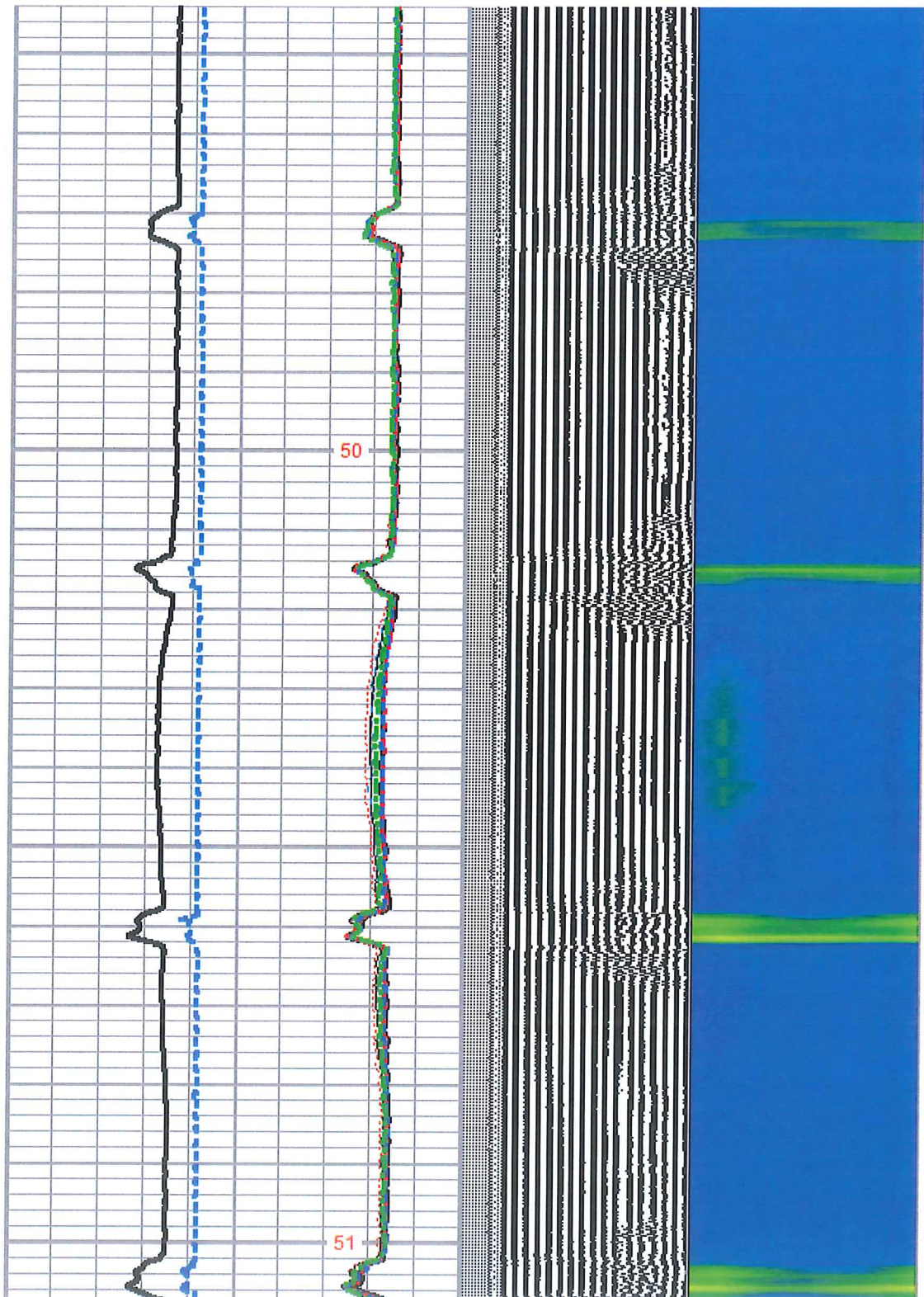


450

500

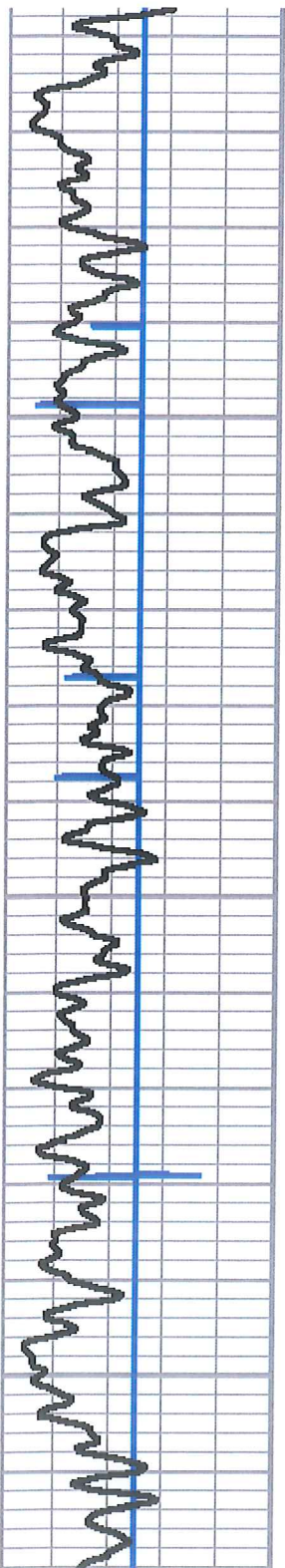
550

600



50

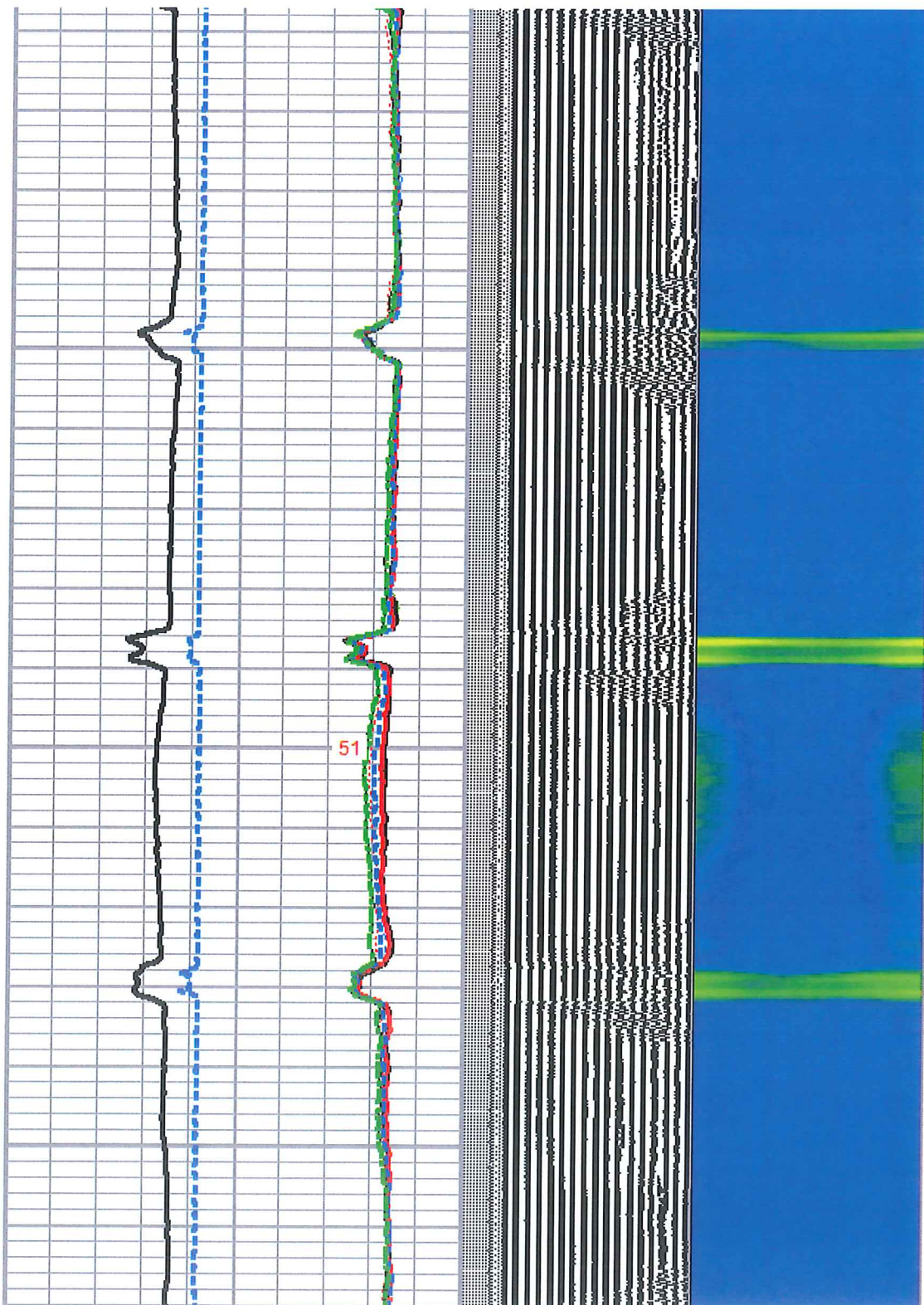
51



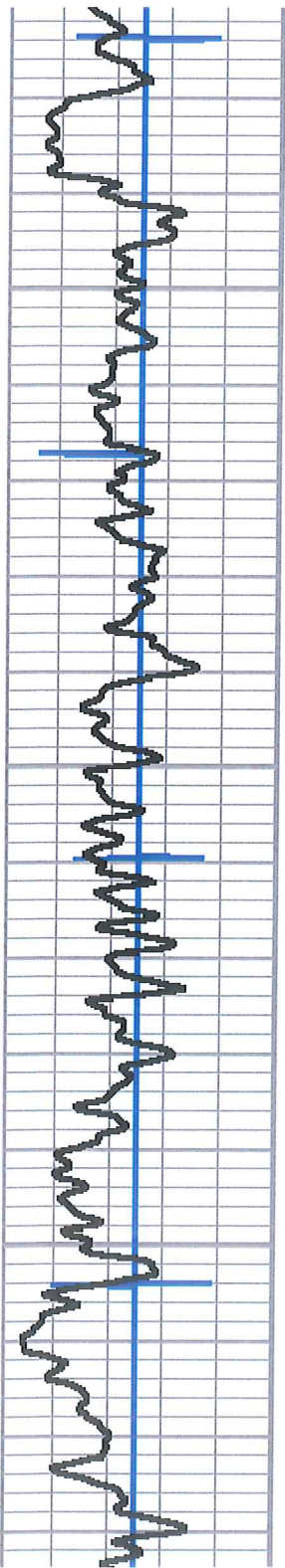
650

700

750



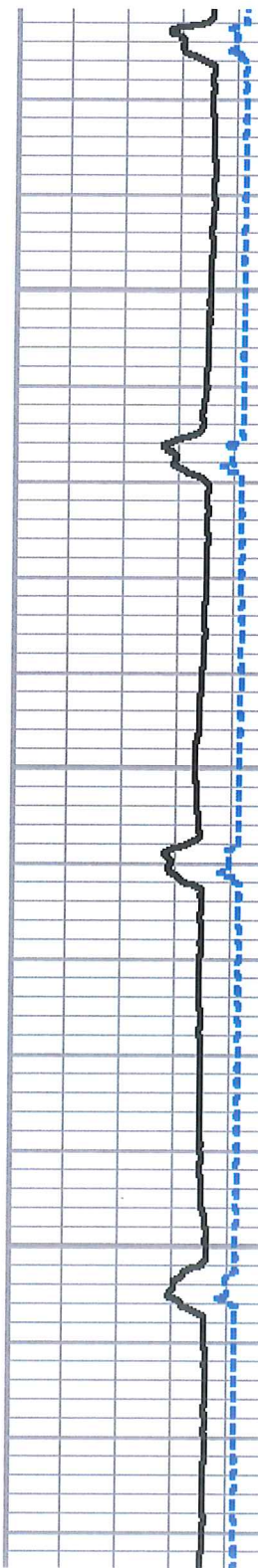




800

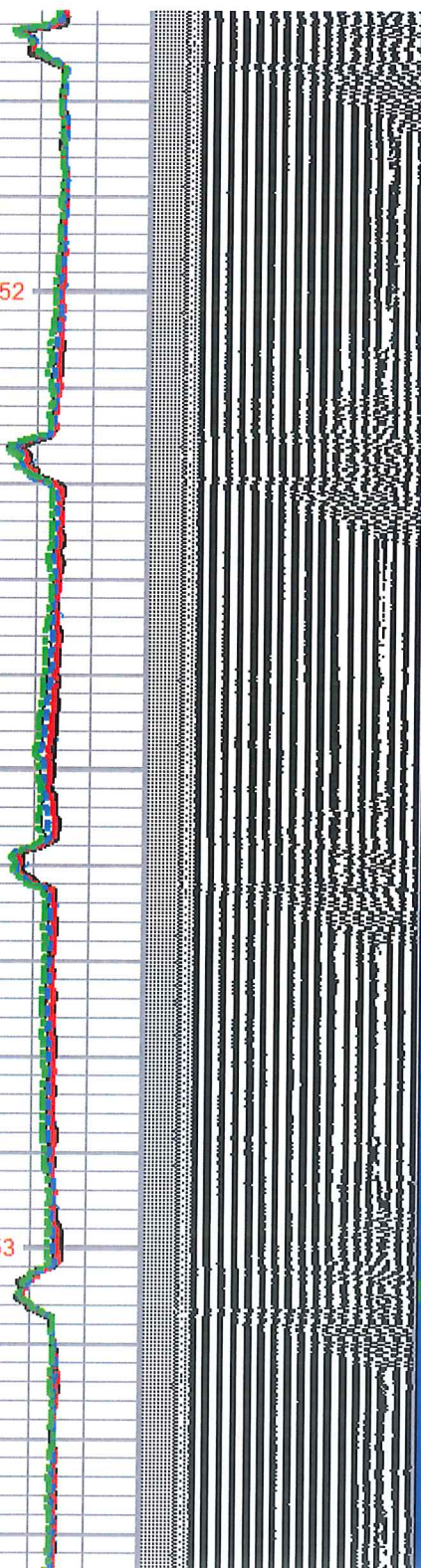
850

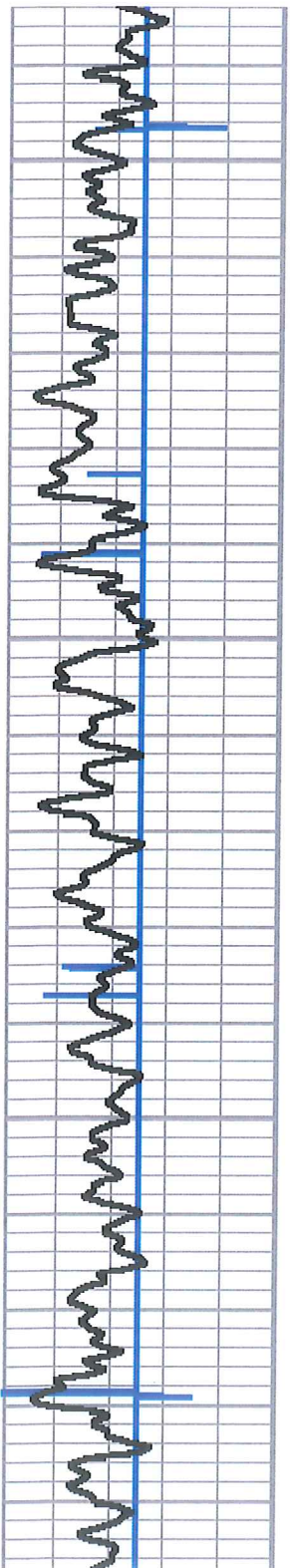
900



52

53

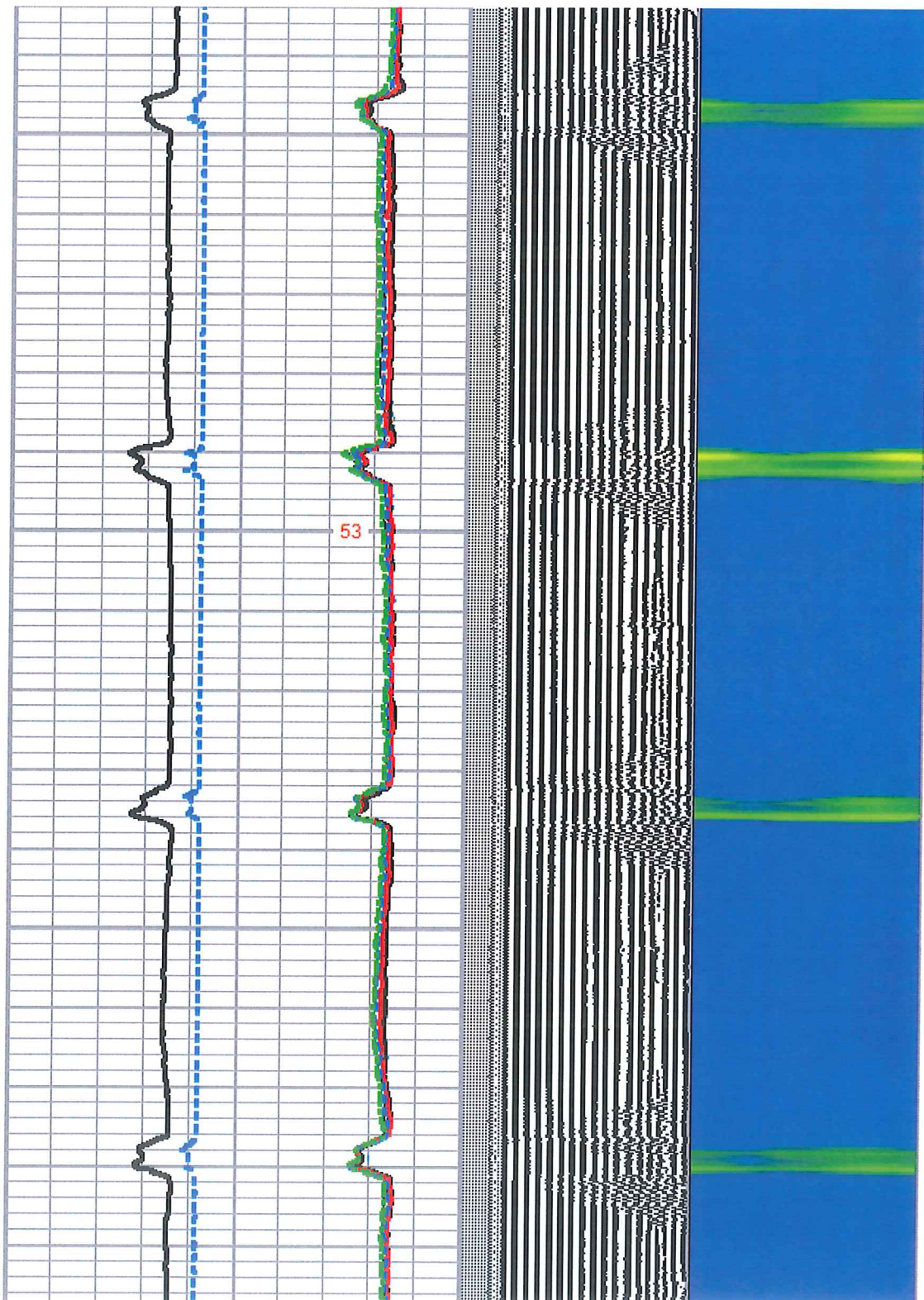


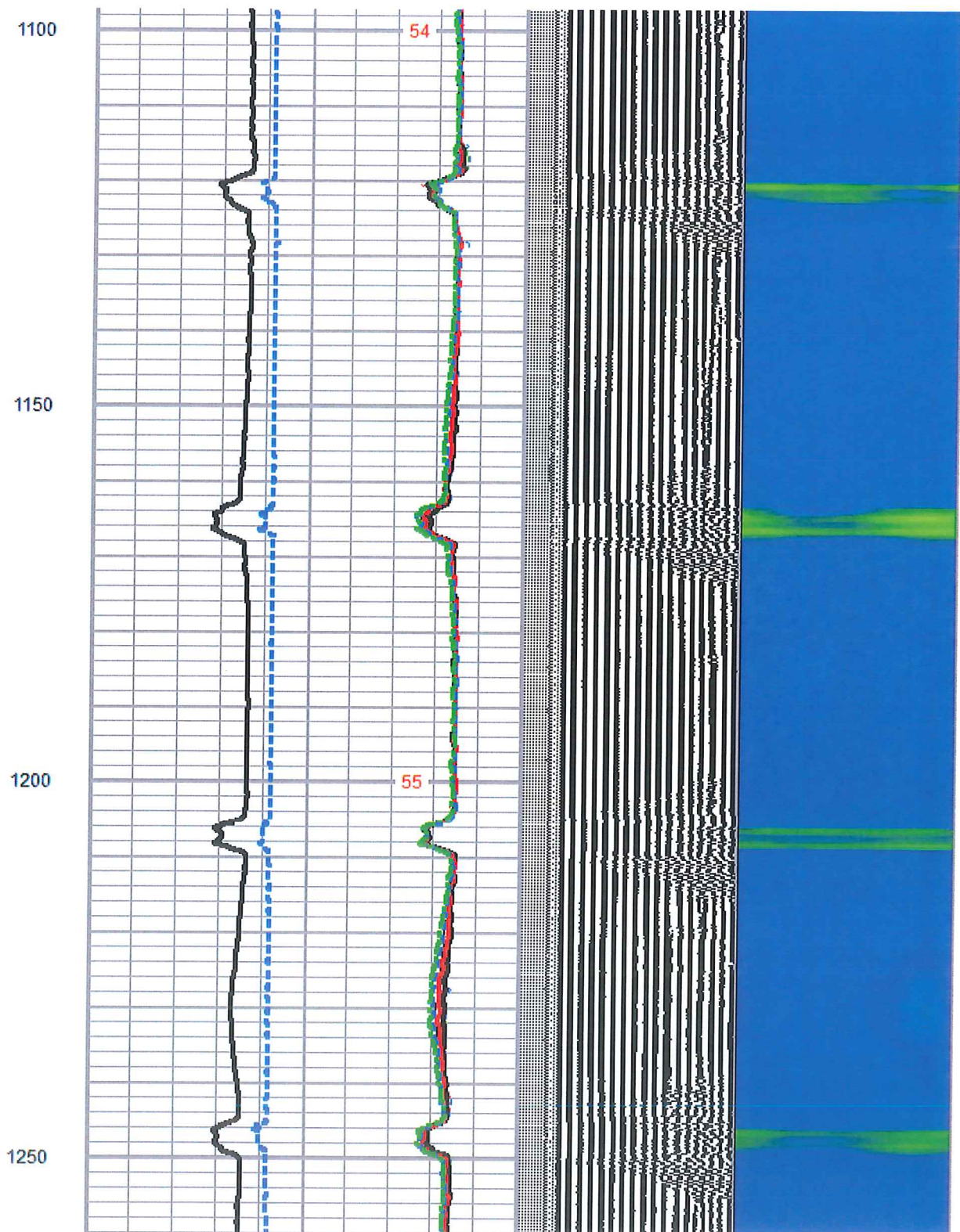
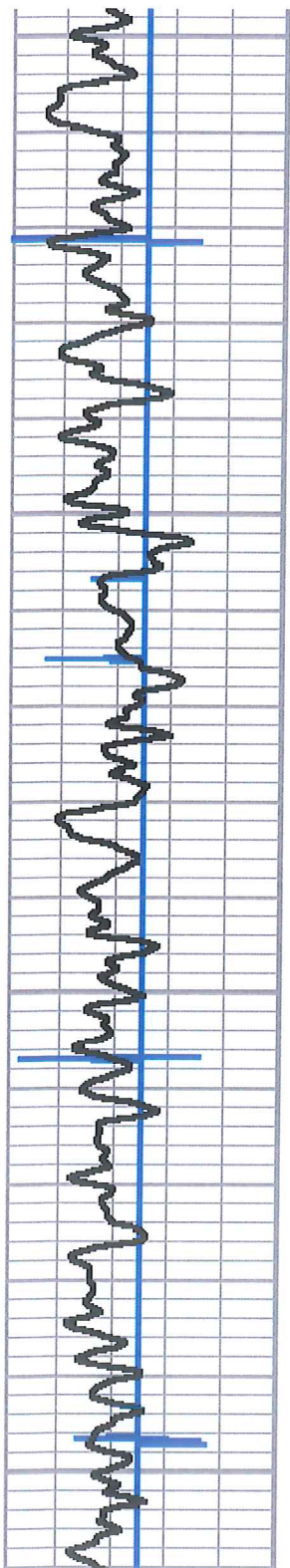


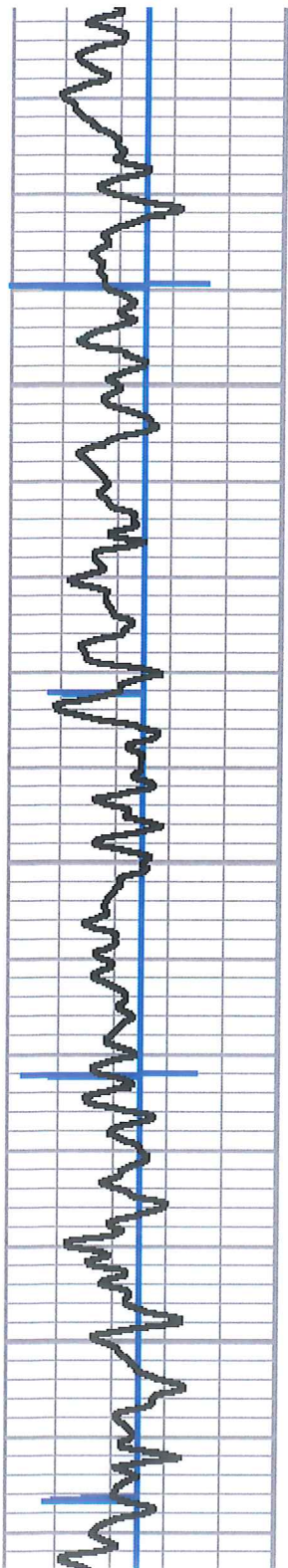
950

1000

1050



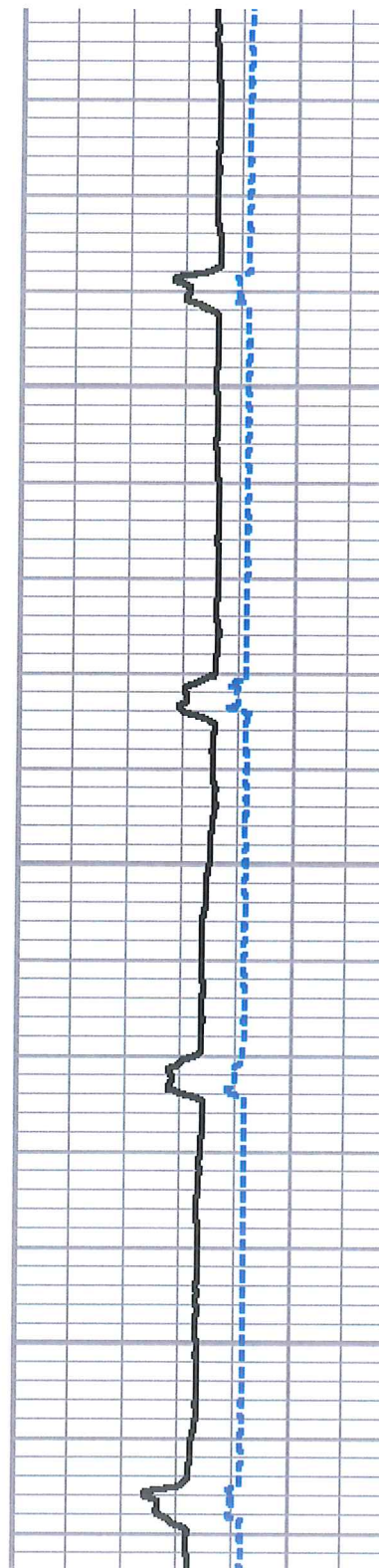




1300

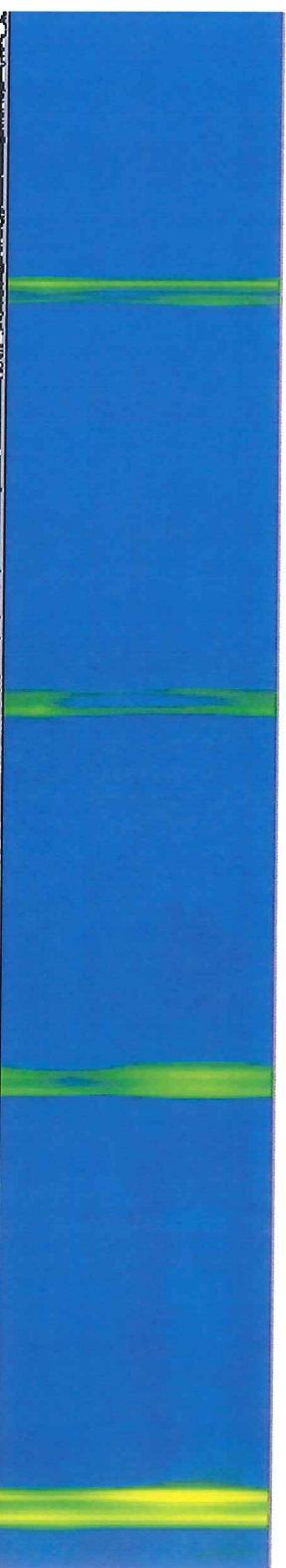
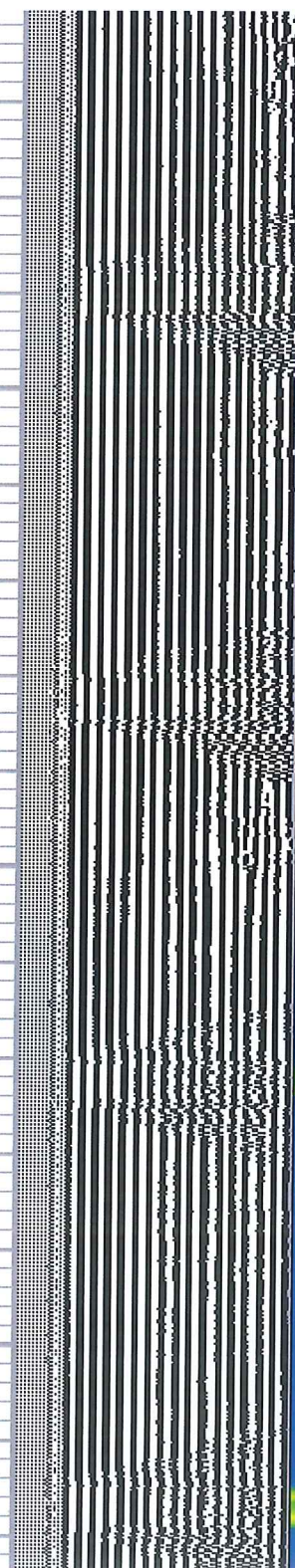
1350

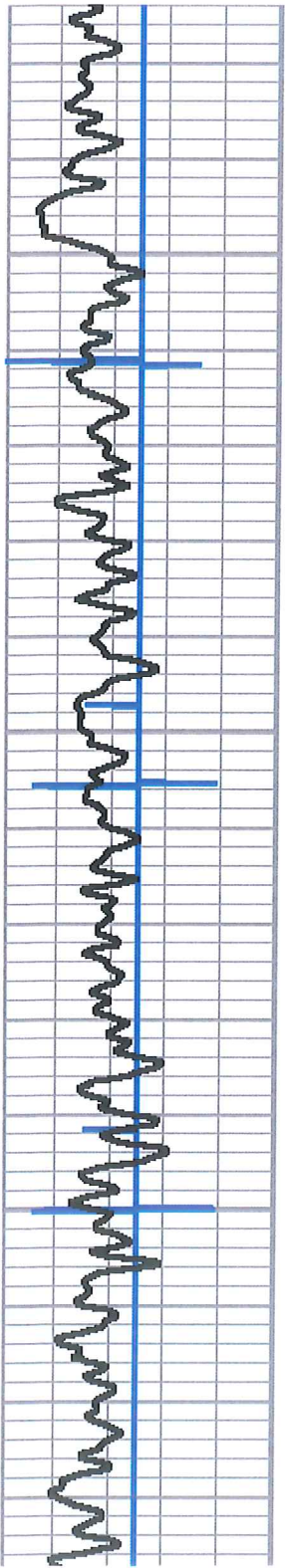
1400



56

57

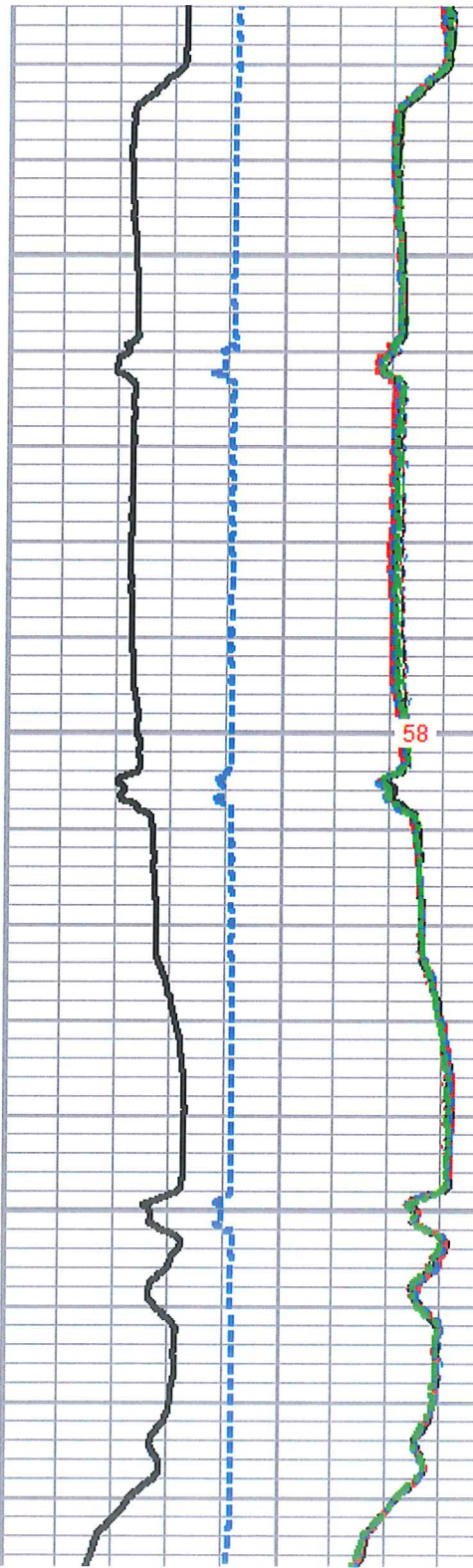




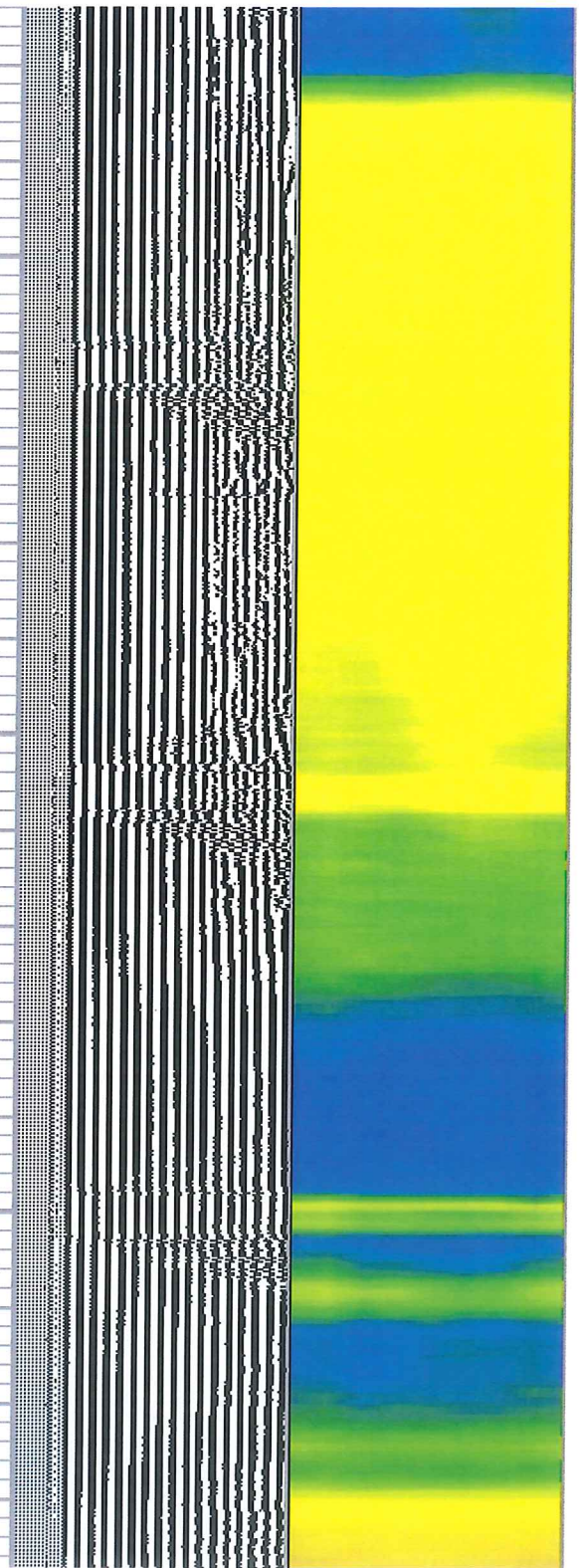
1450

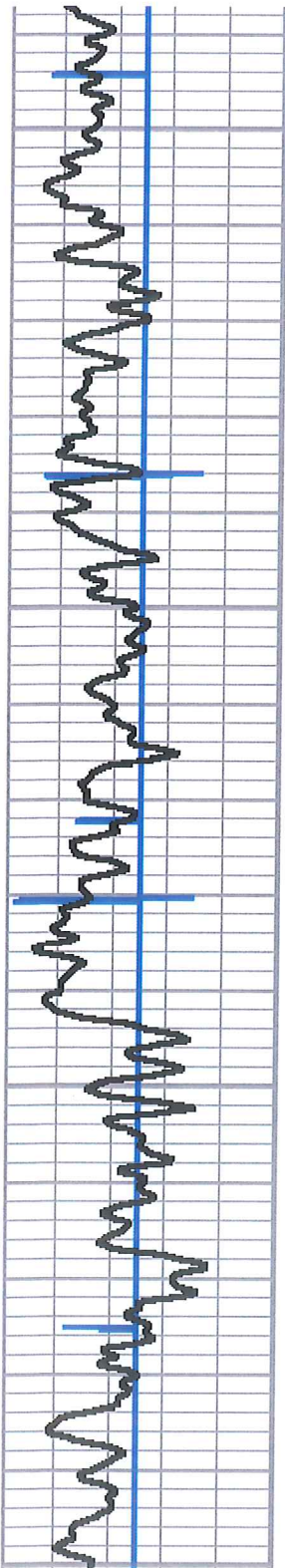
1500

1550



58



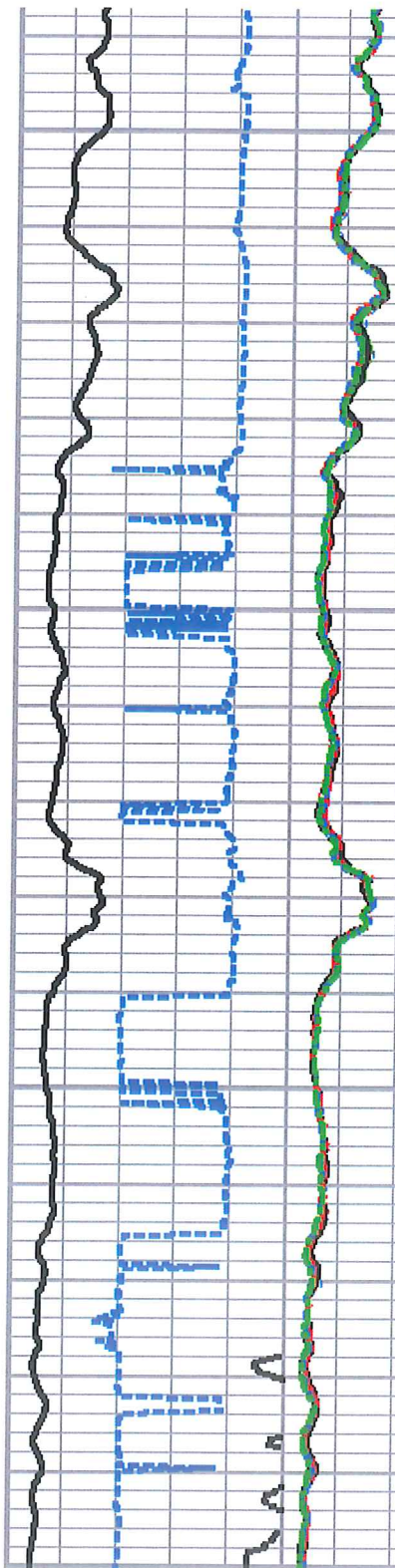


1600

1650

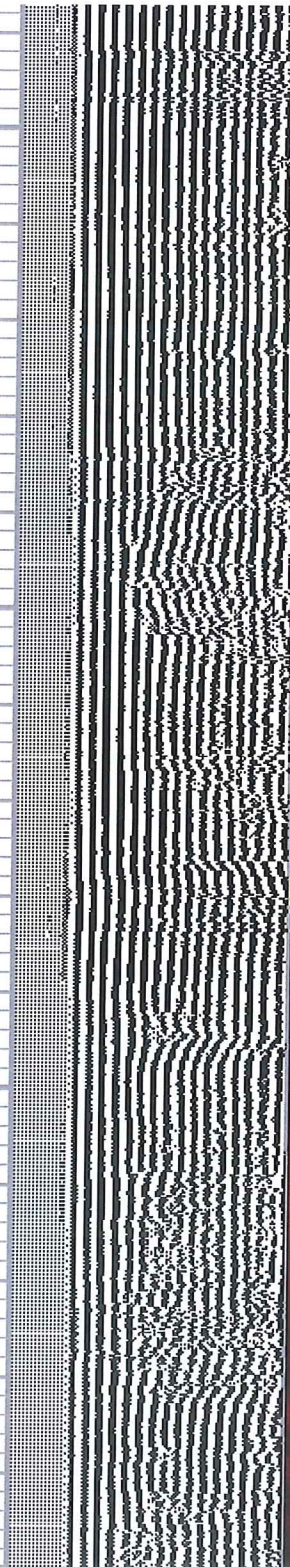
1700

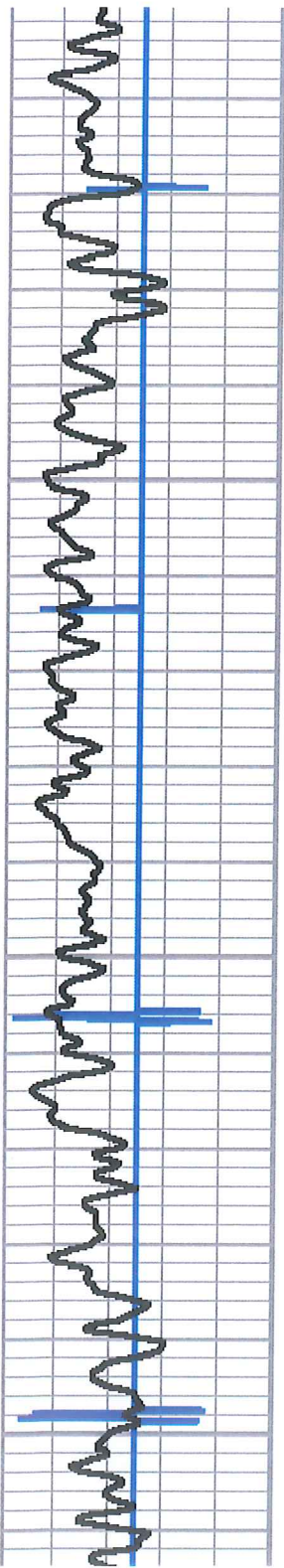
1750



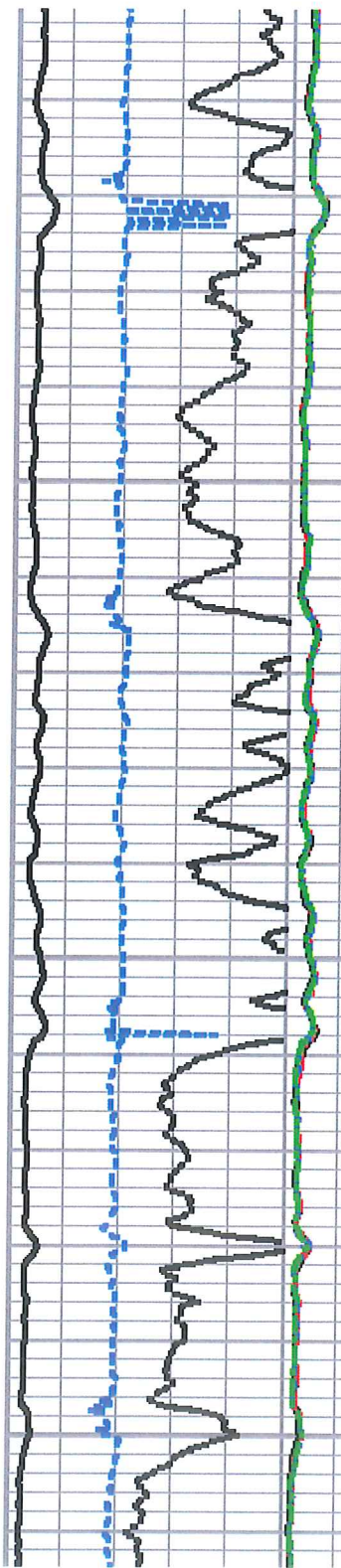
59

60

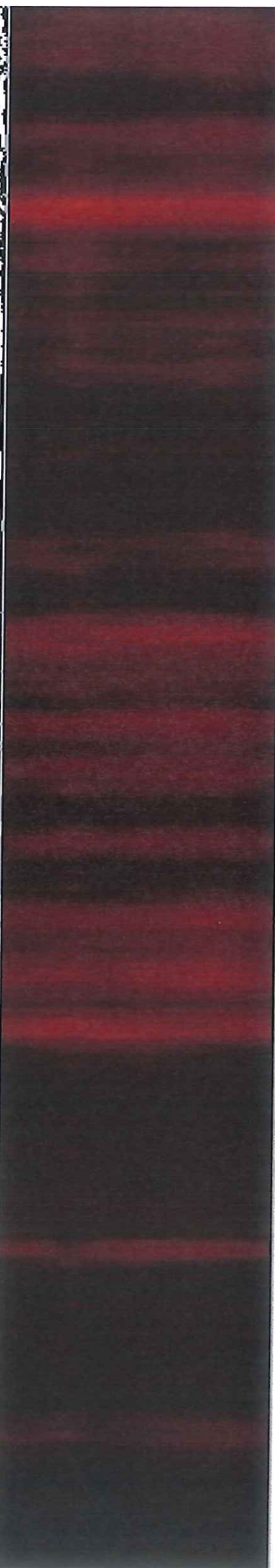
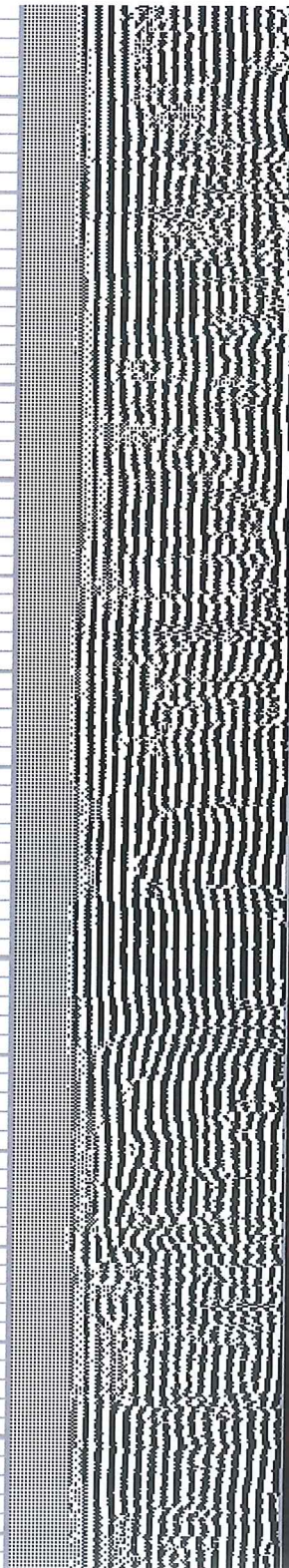


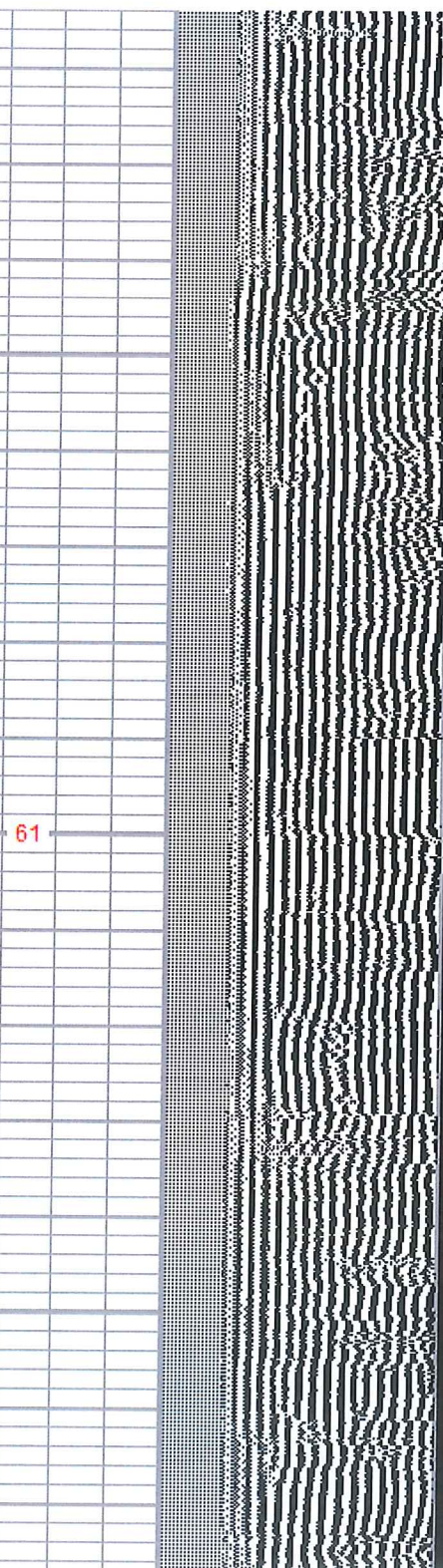
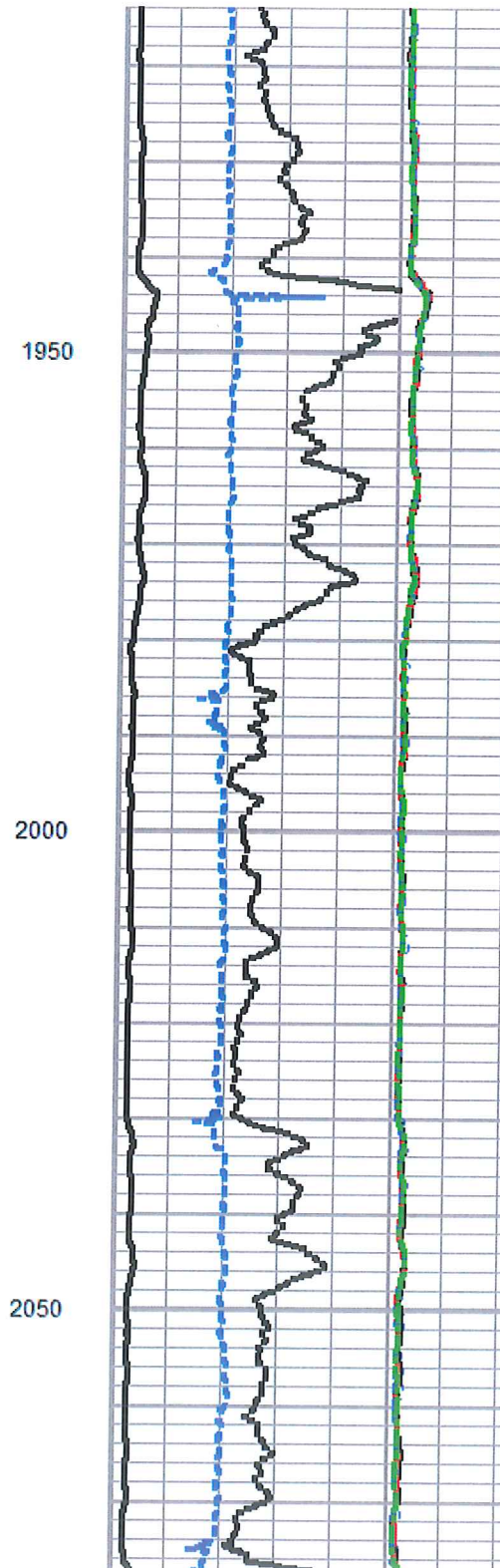
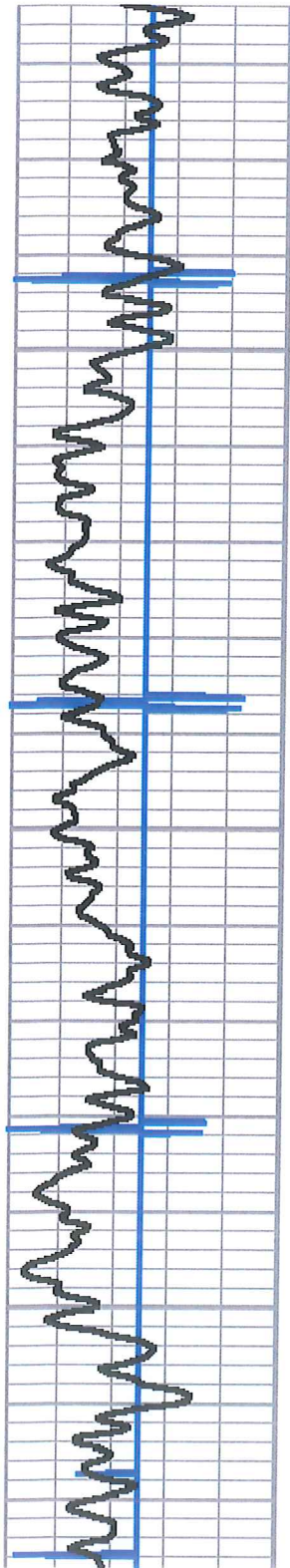


1800  
1850  
1900

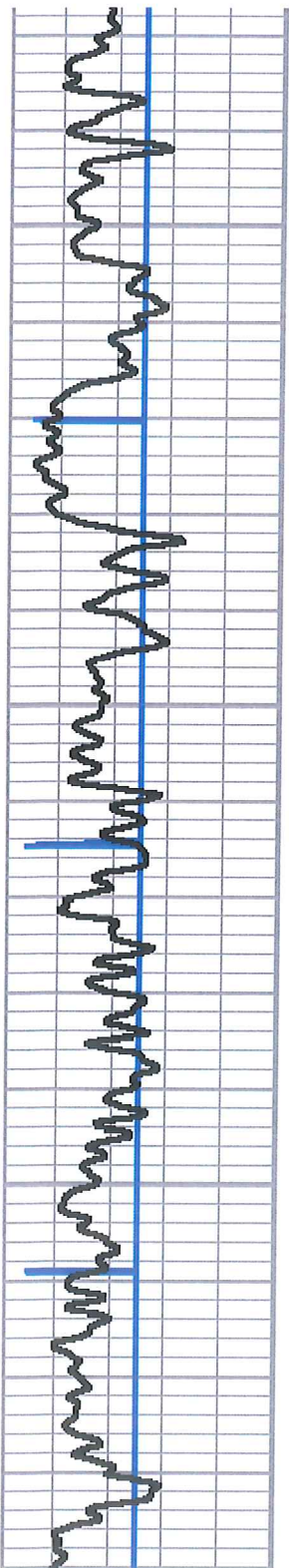


60  
61





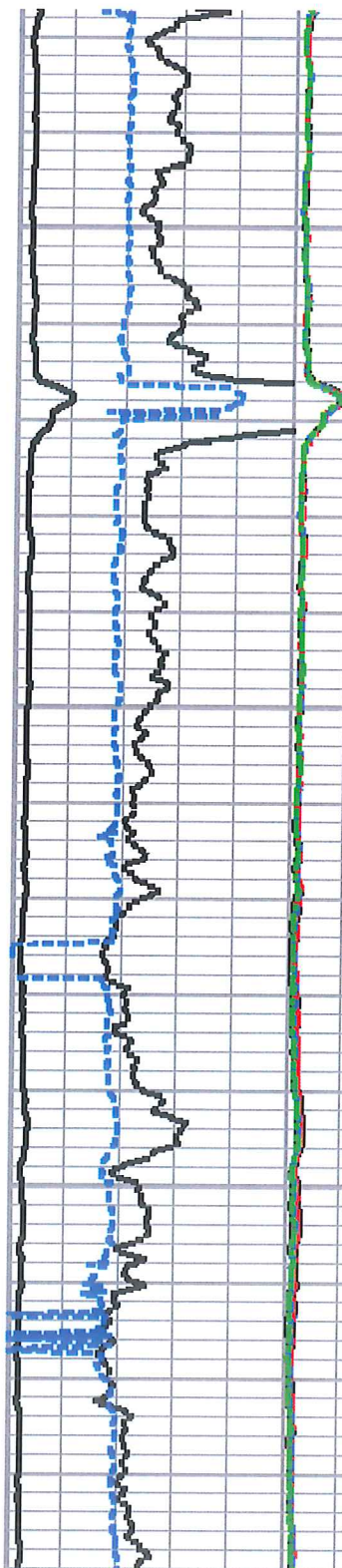




2100

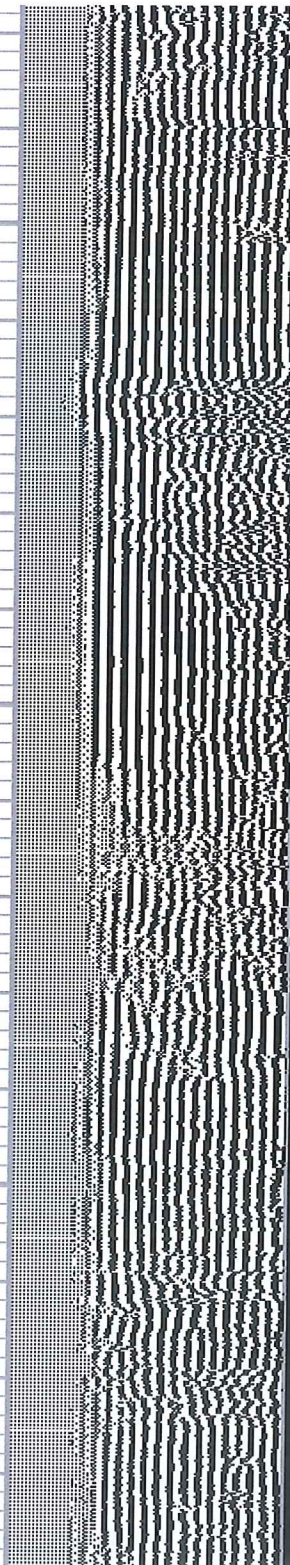
2150

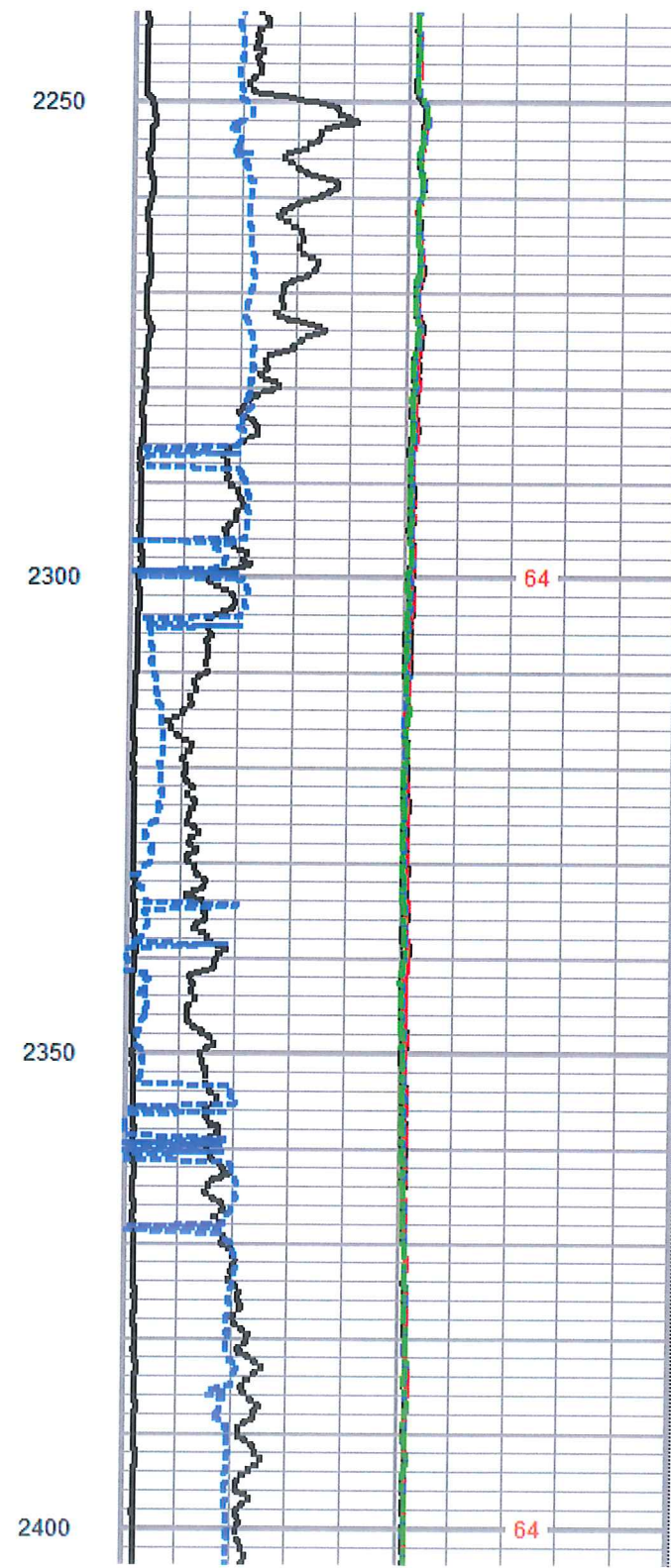
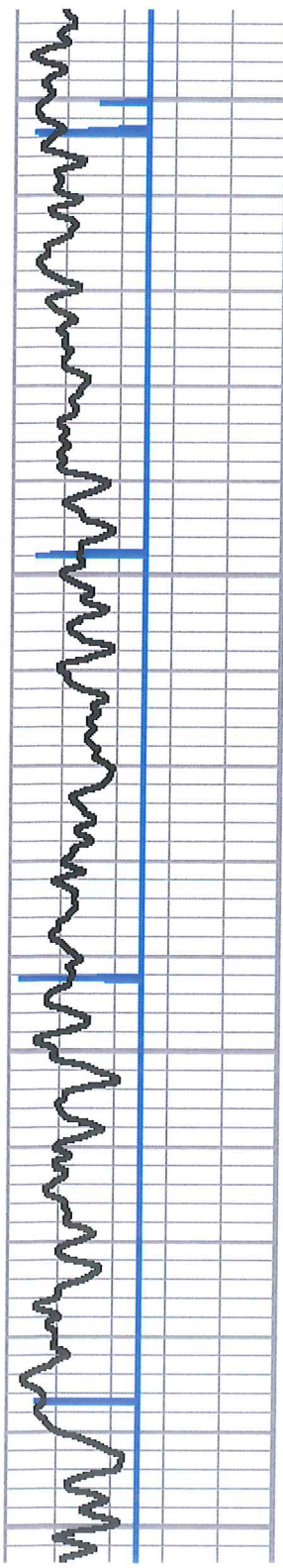
2200

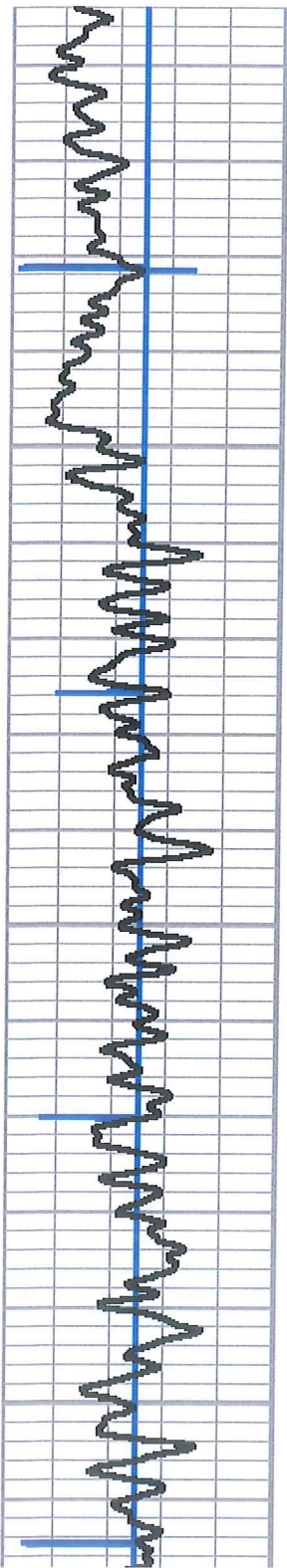


62

63



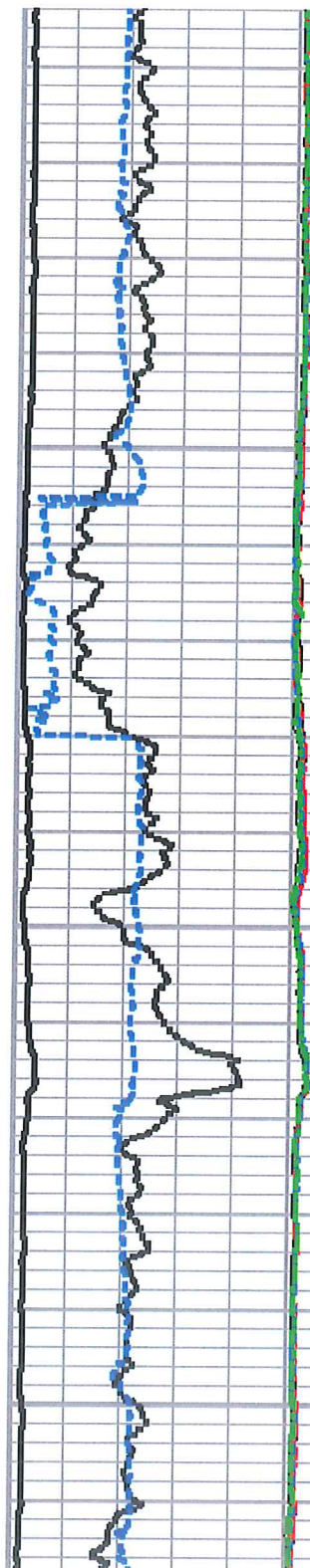




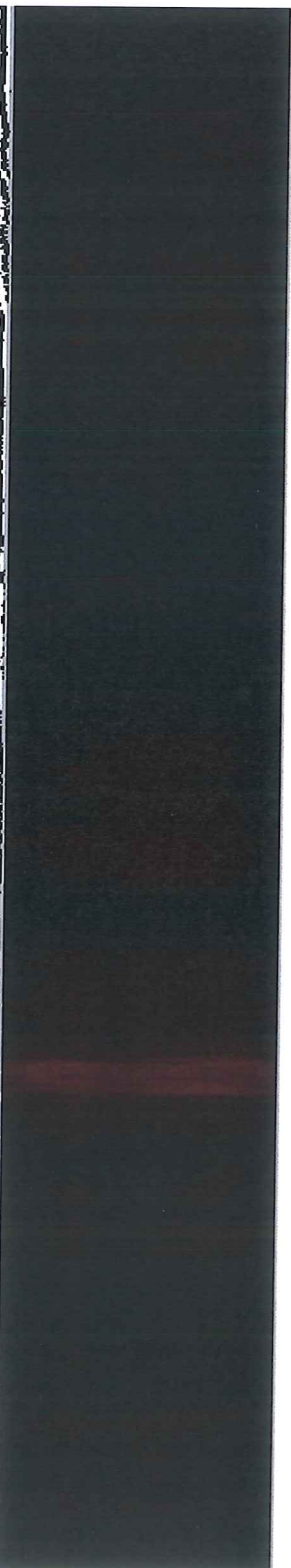
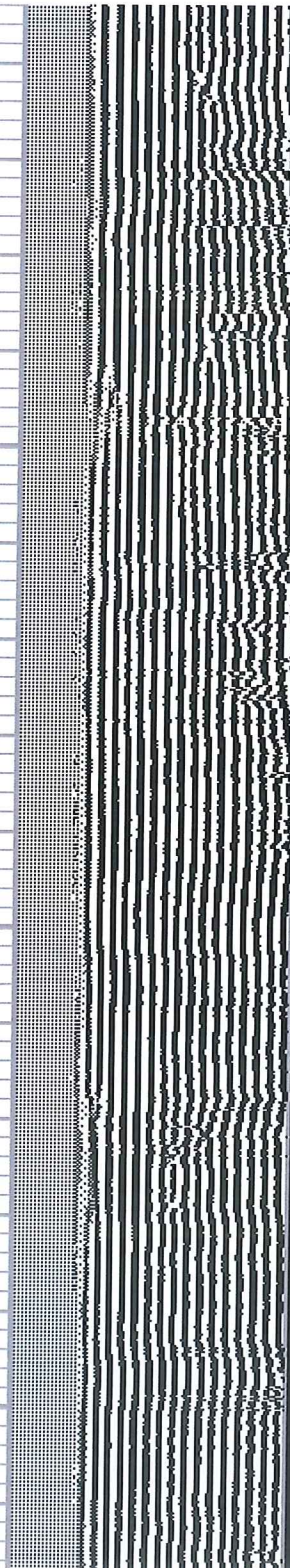
2450

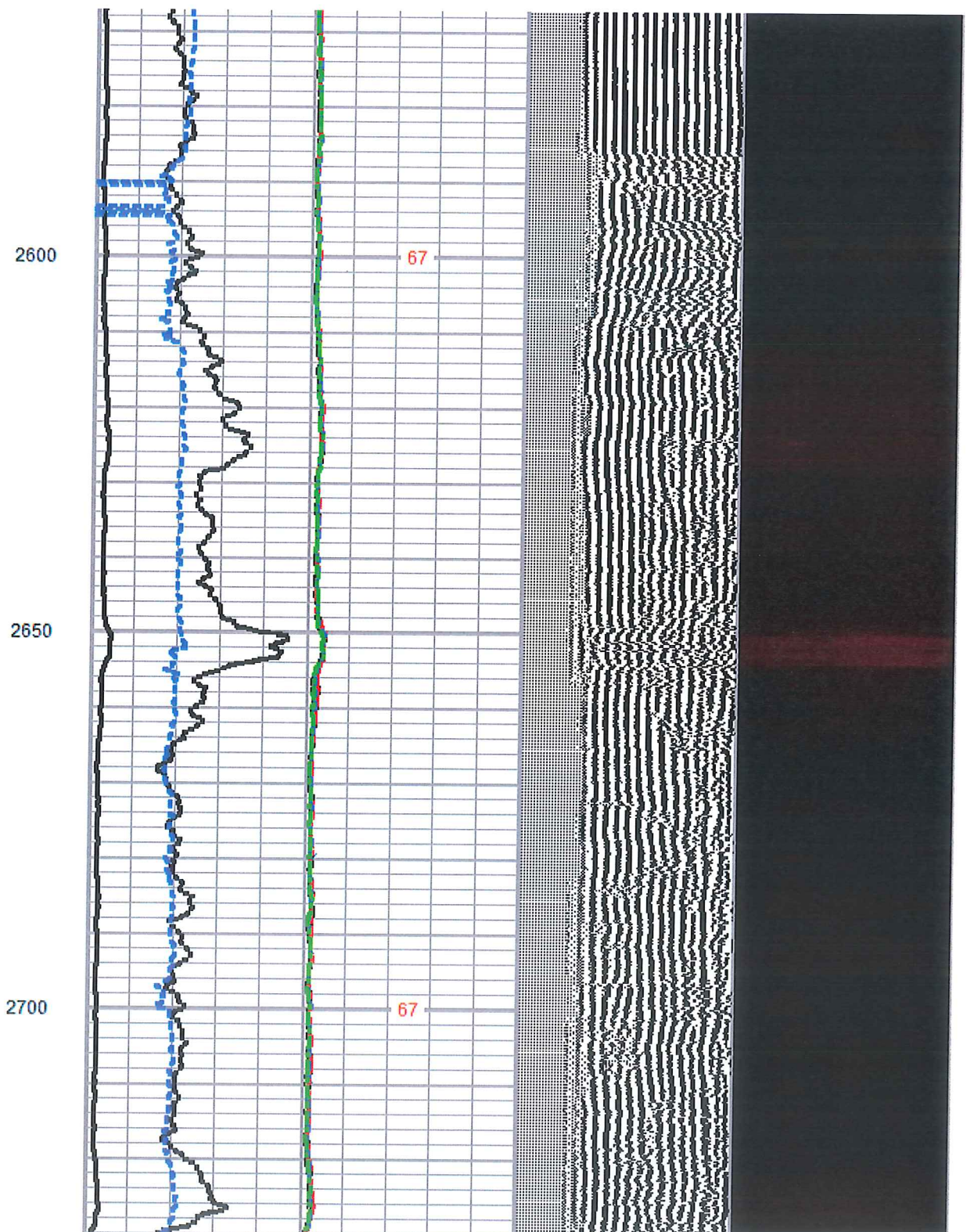
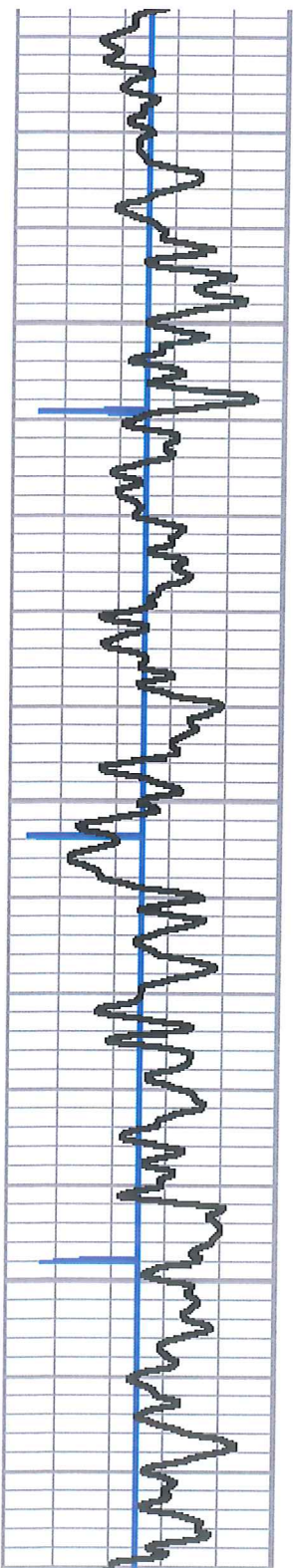
2500

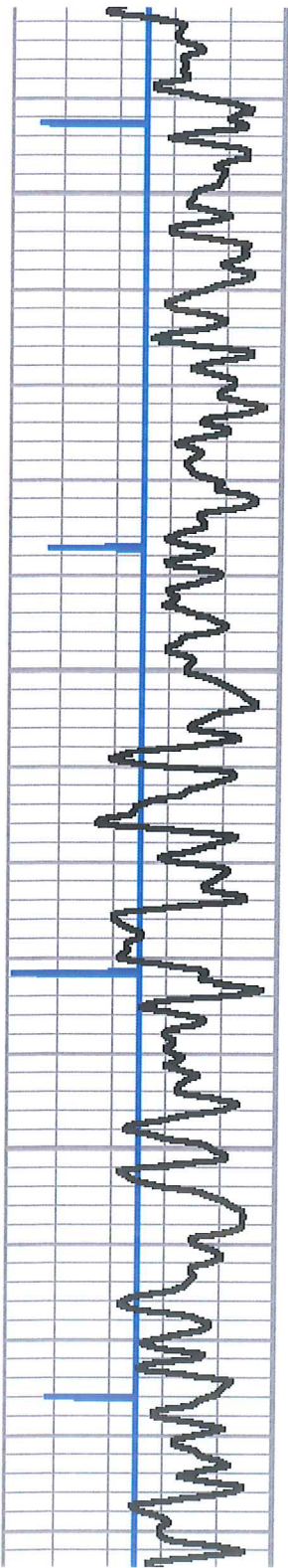
2550



65



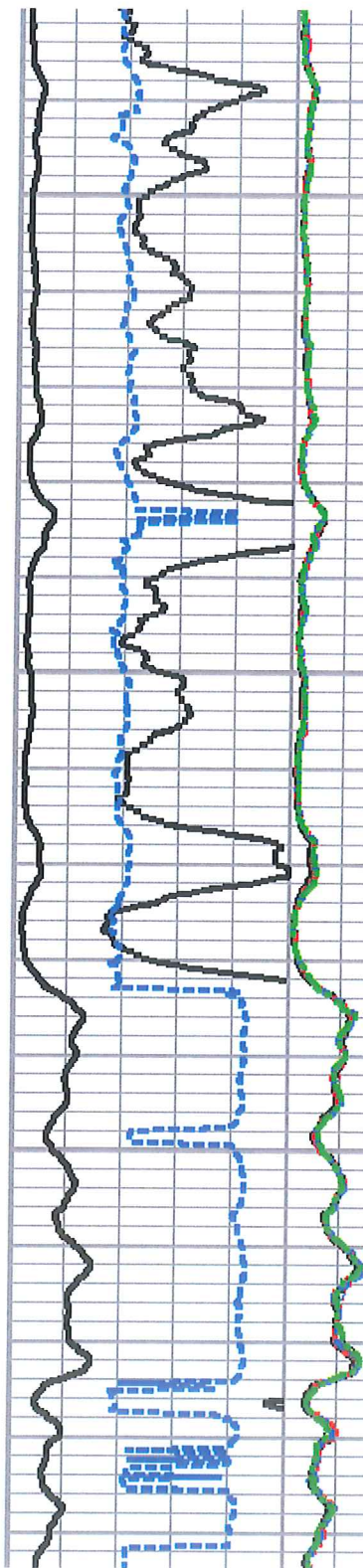




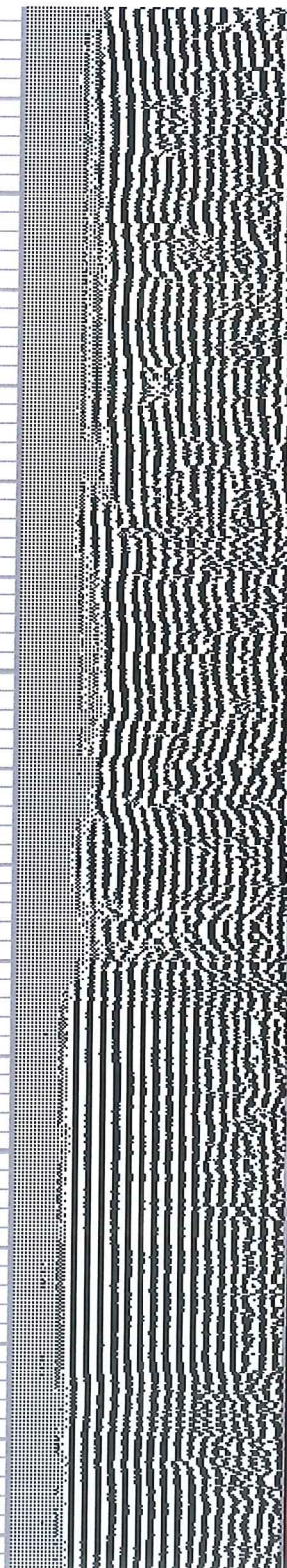
2750

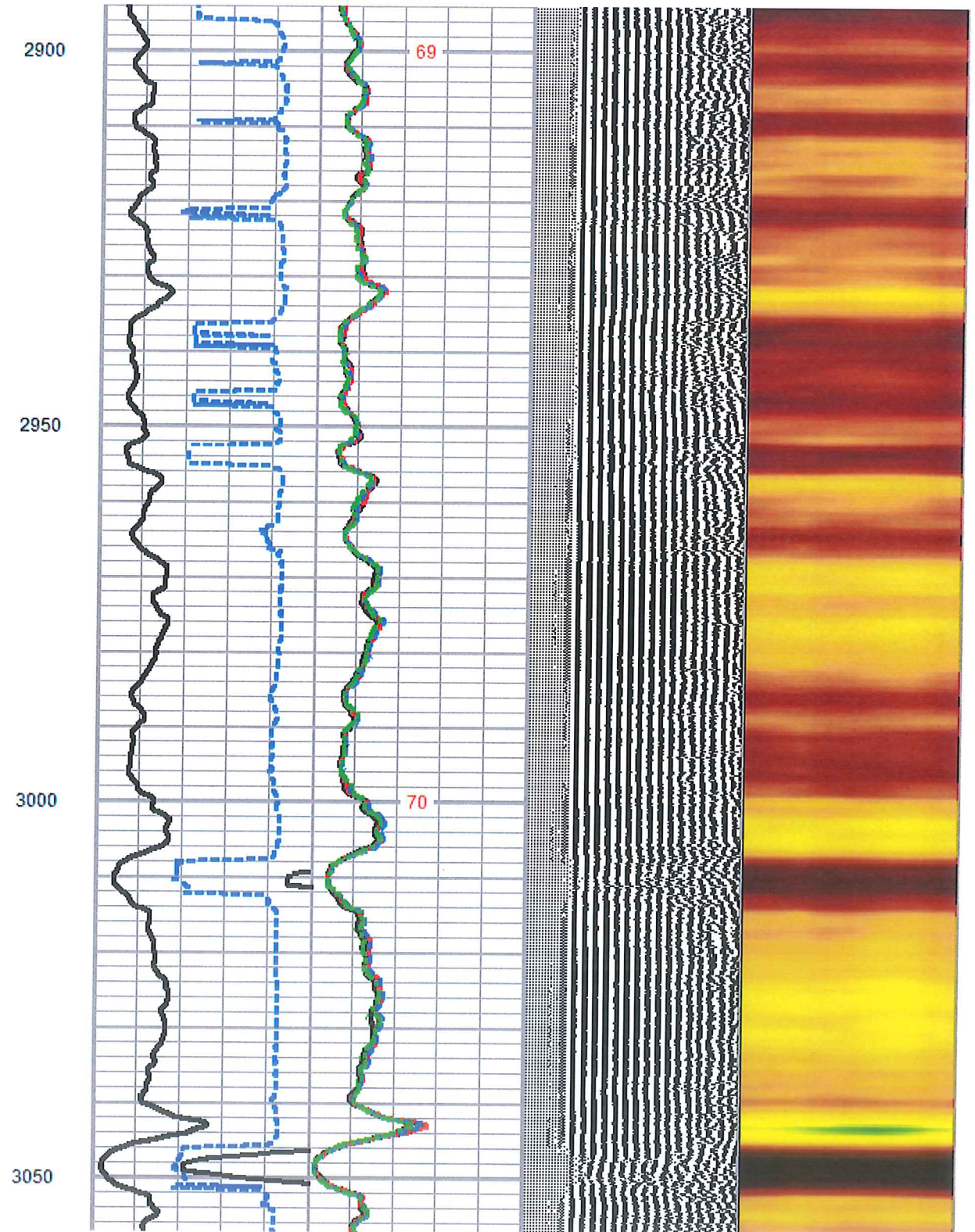
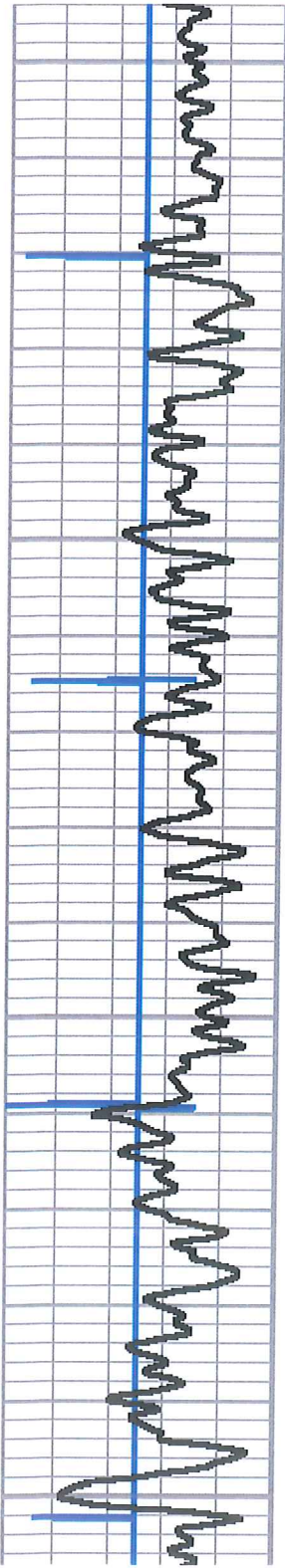
2800

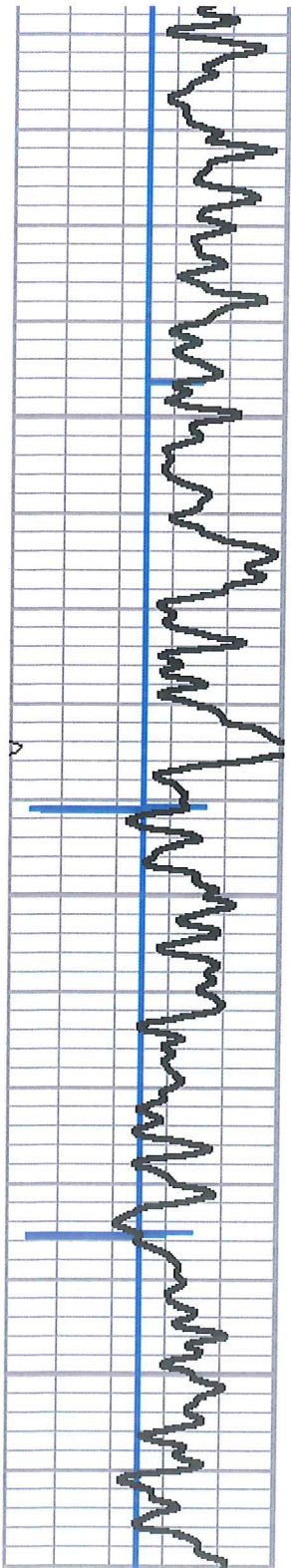
2850



68



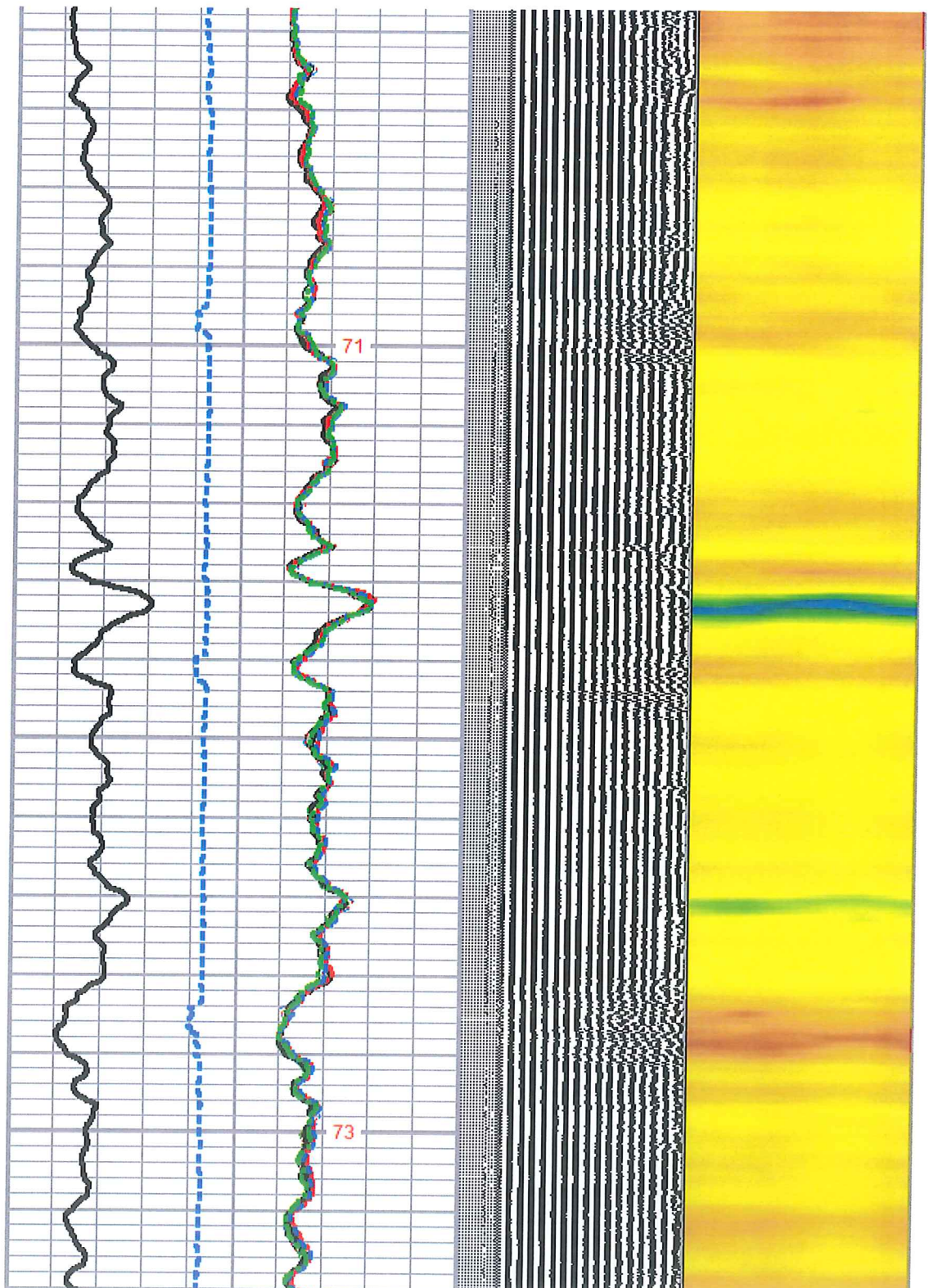




3100

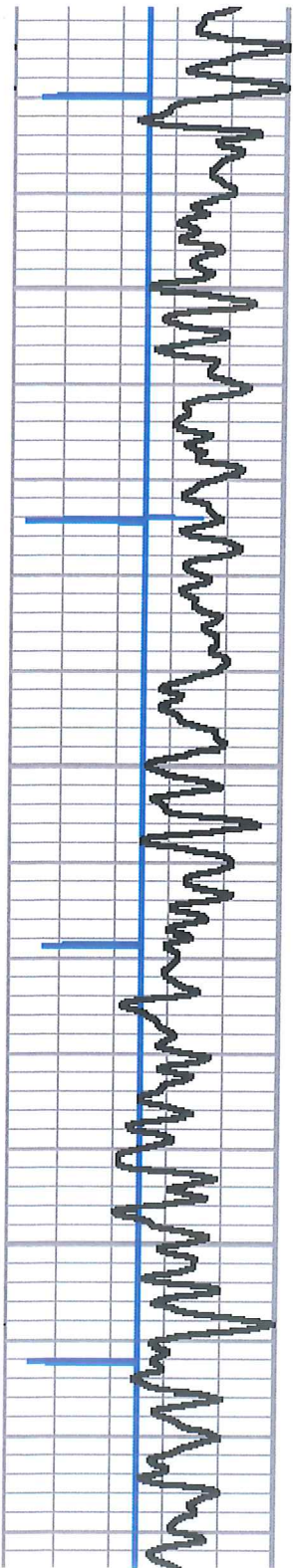
3150

3200



71

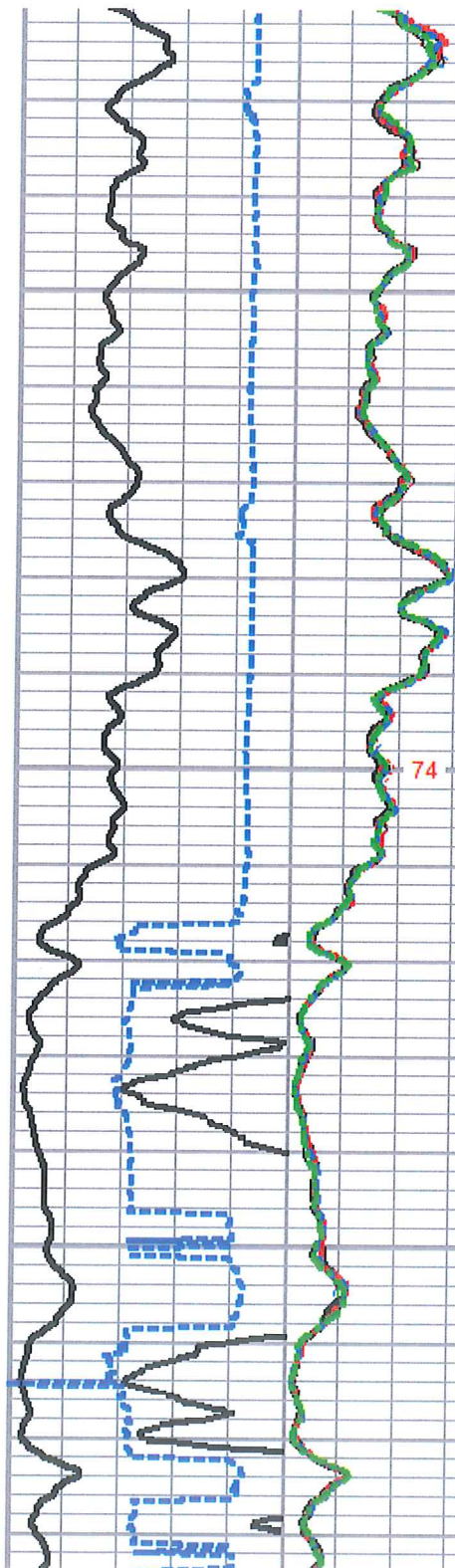
73



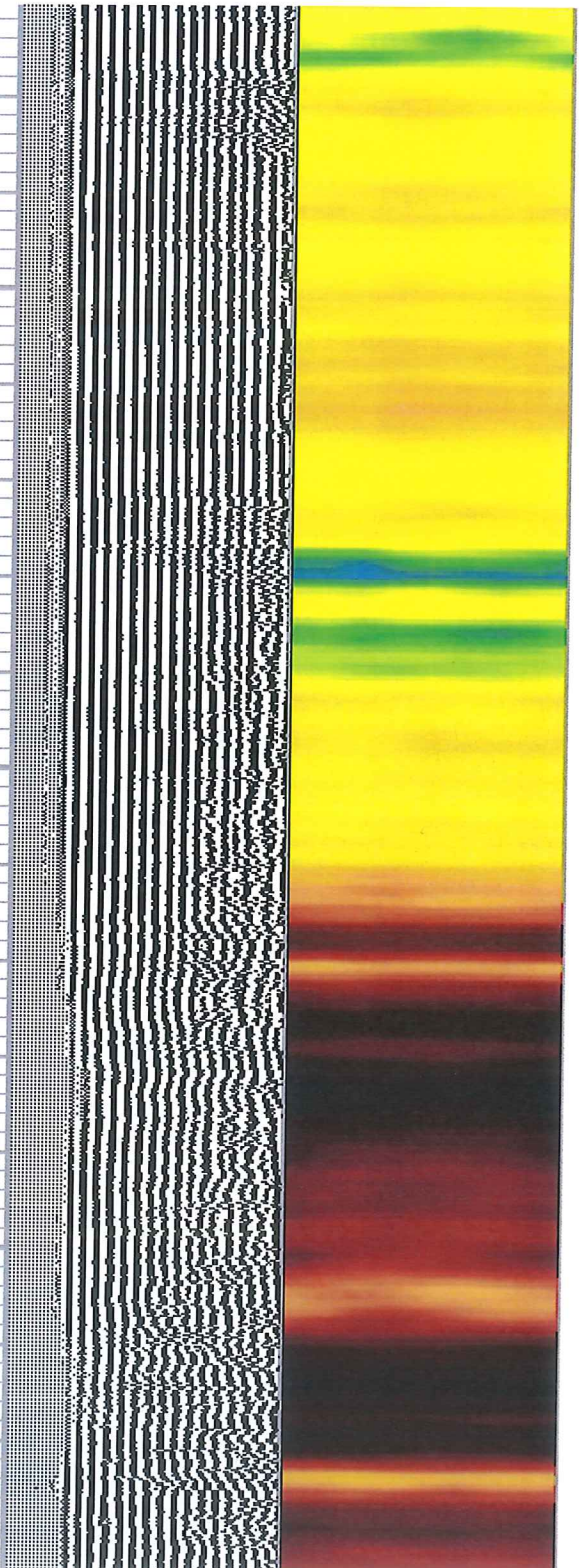
3250

3300

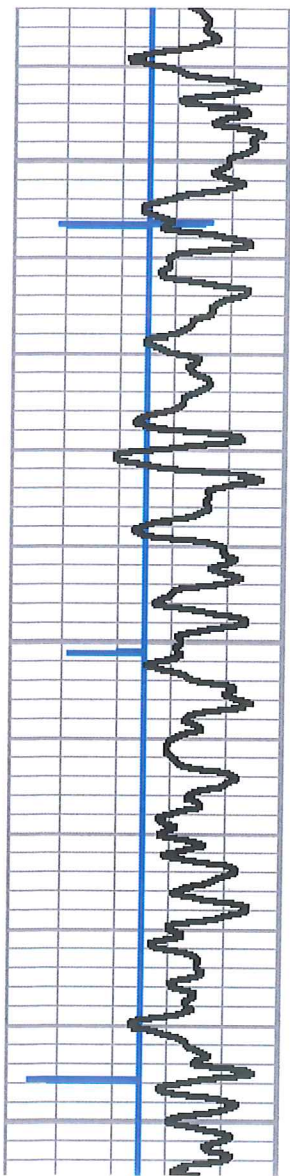
3350



74



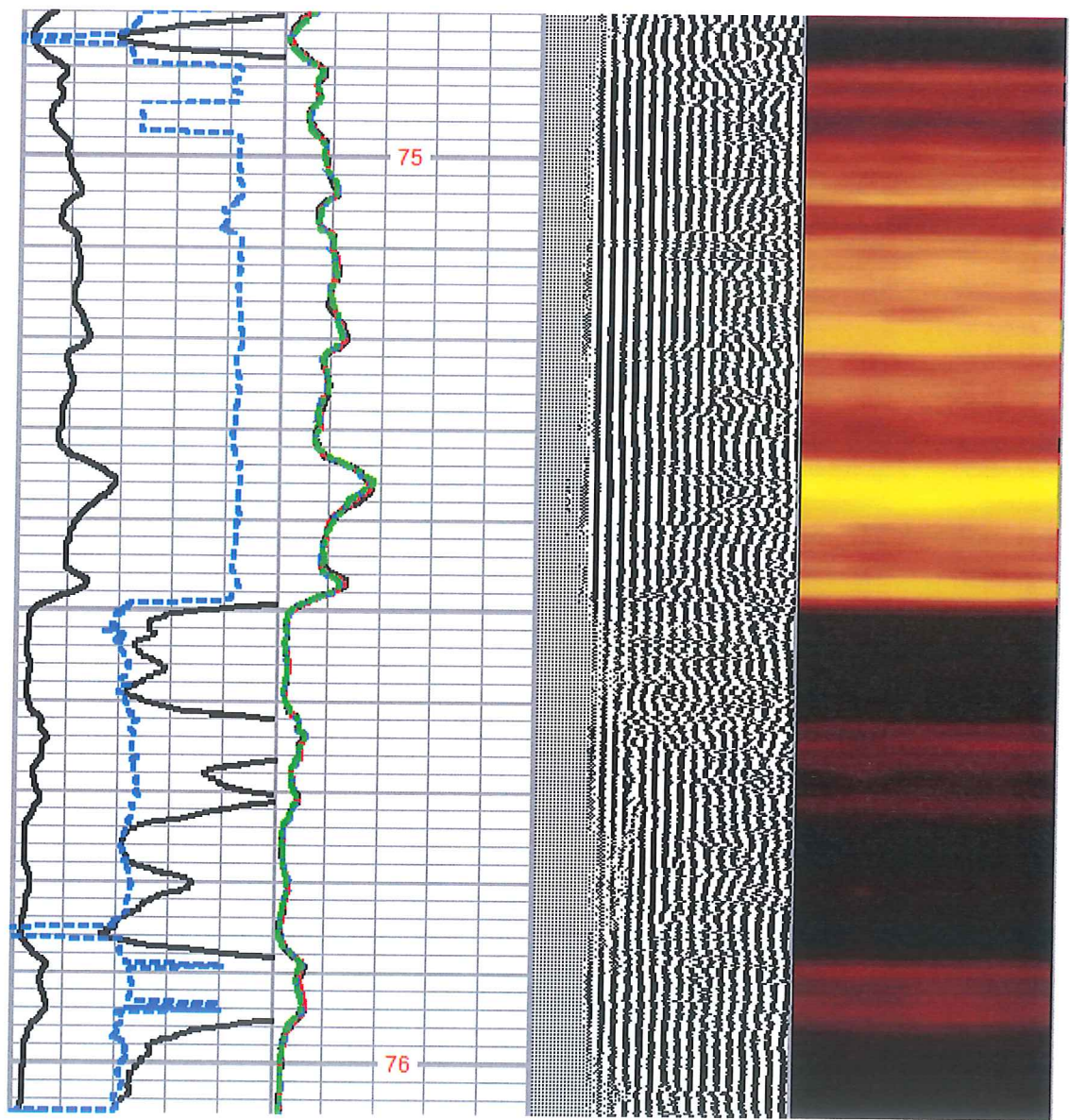


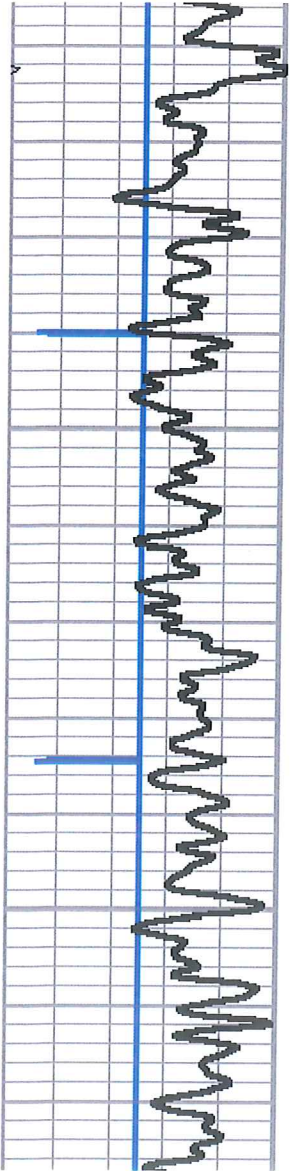


3400

3450

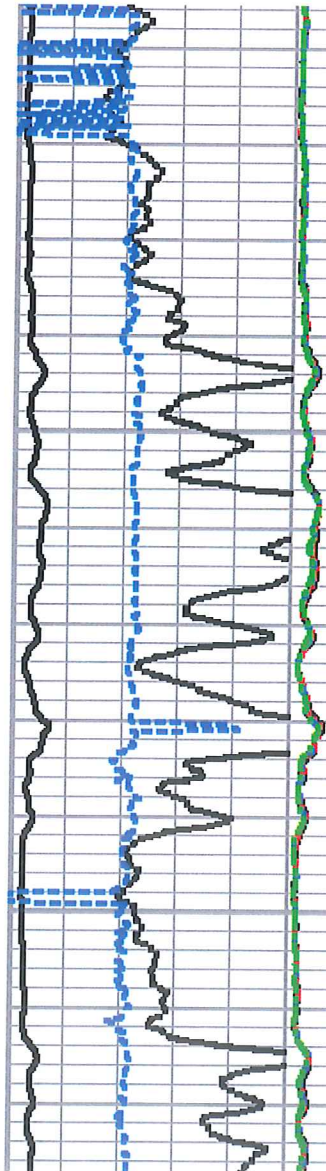
3500



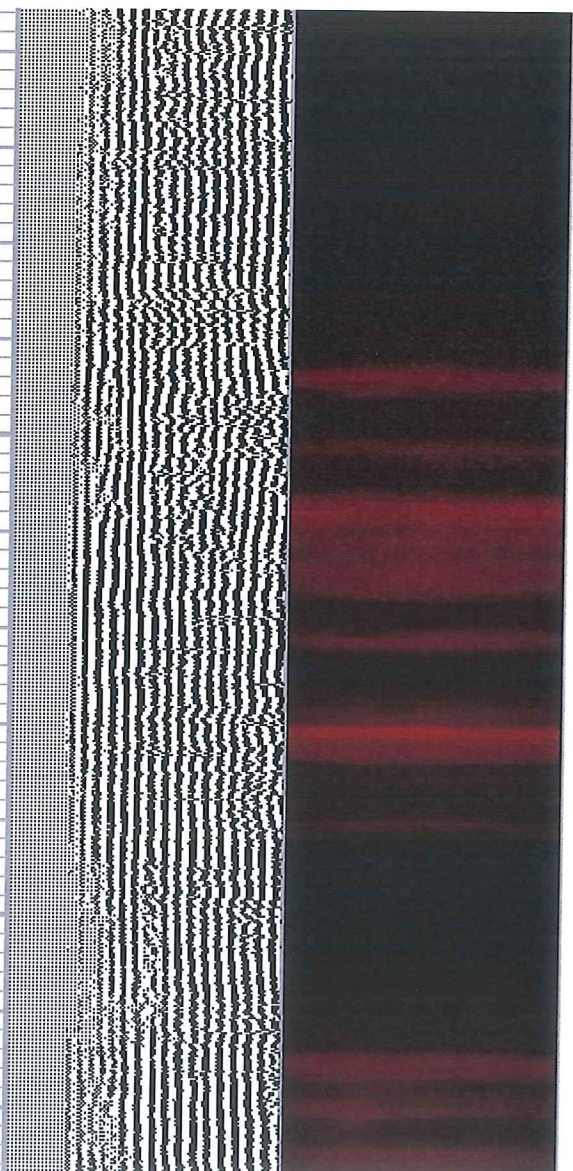


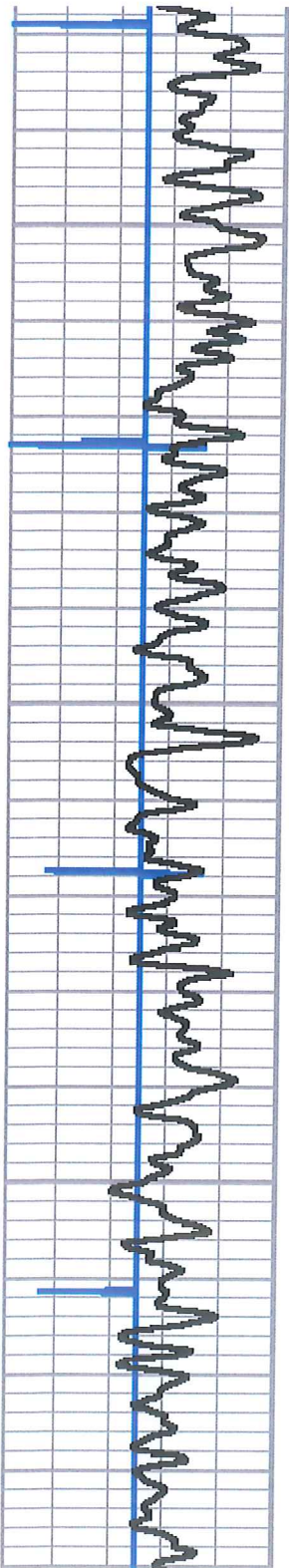
3550

3600



77

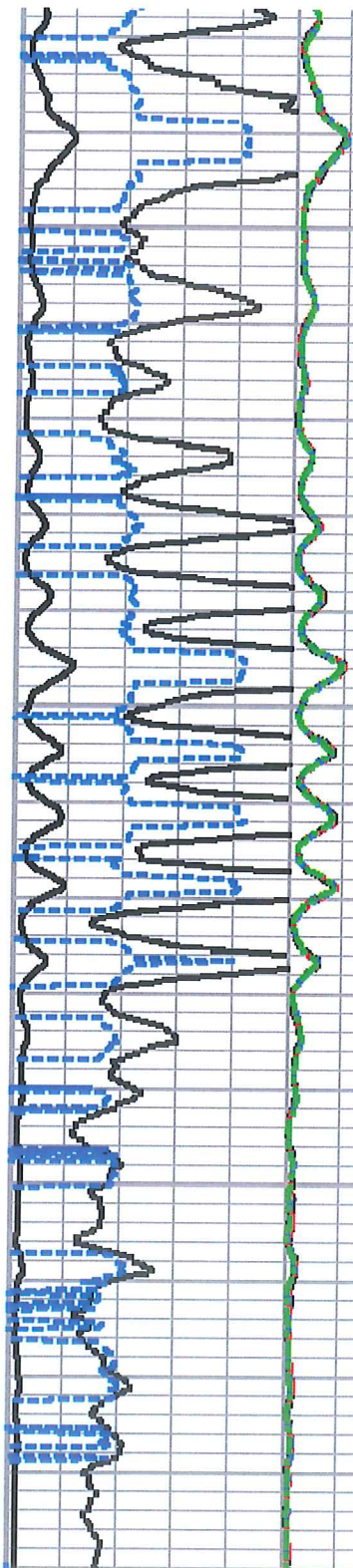




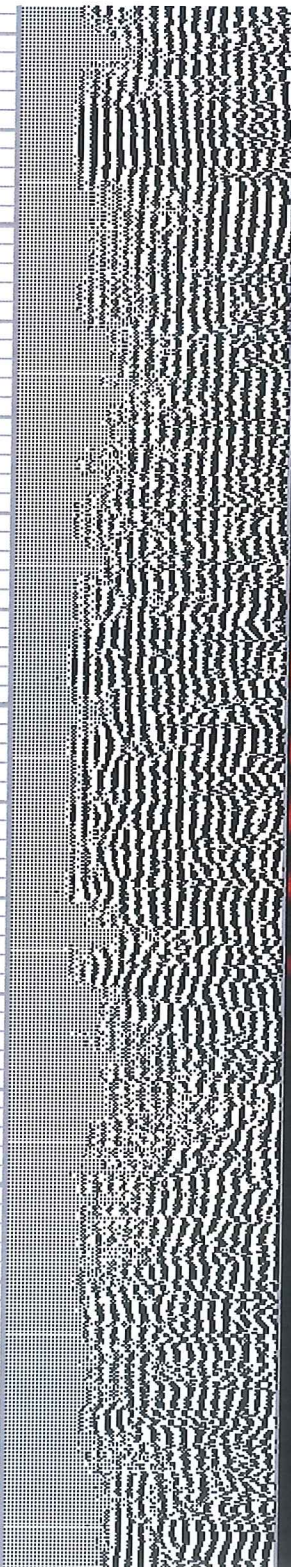
3650

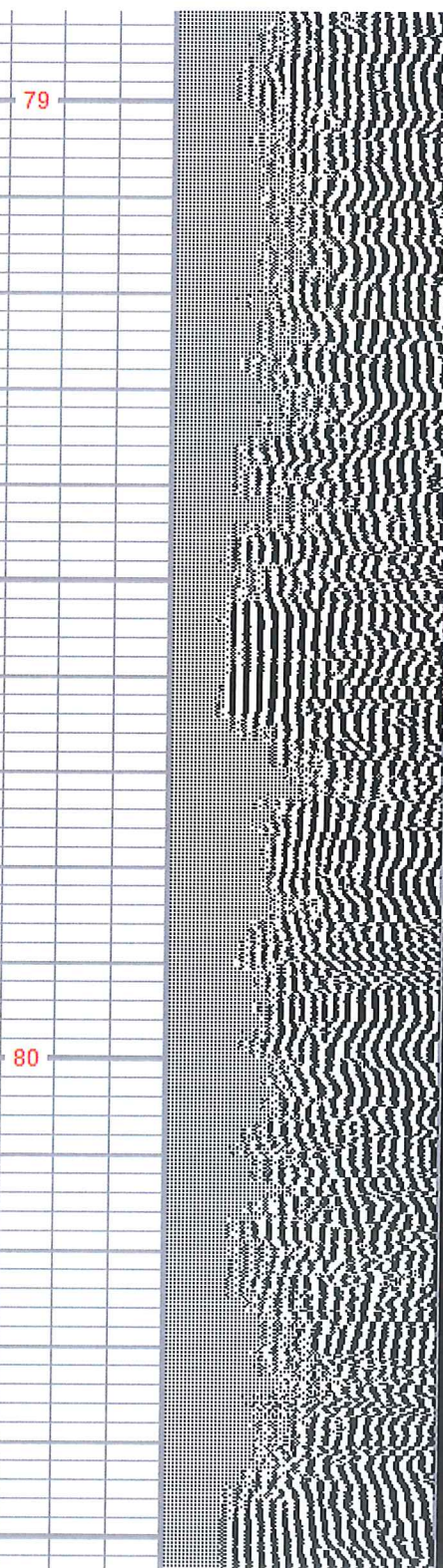
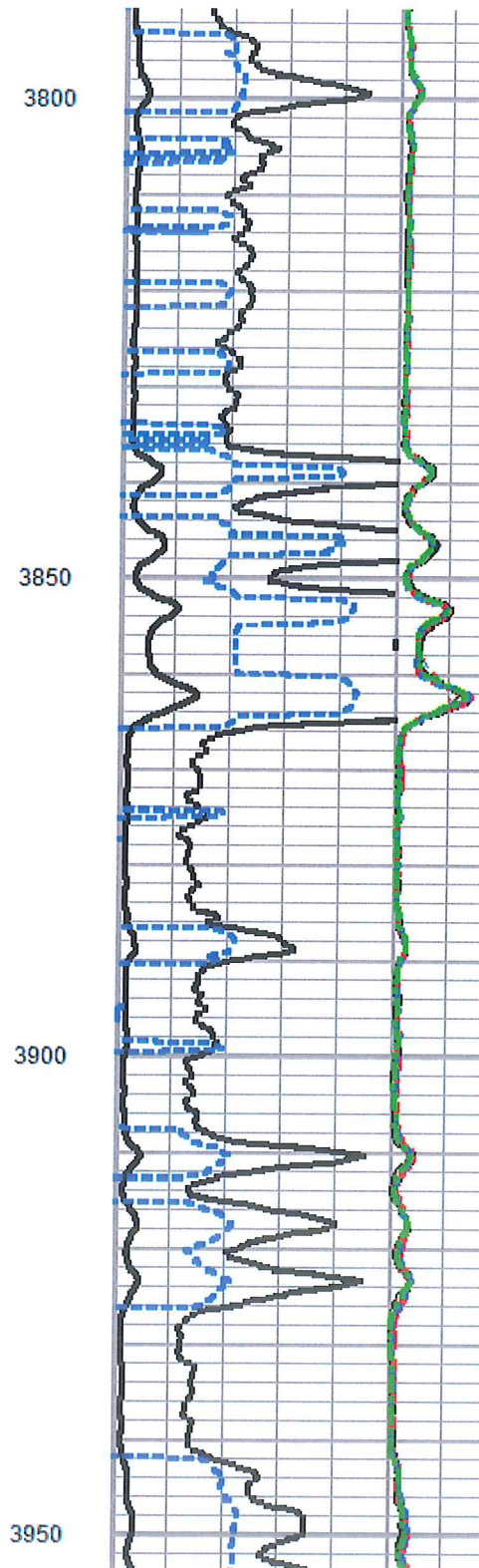
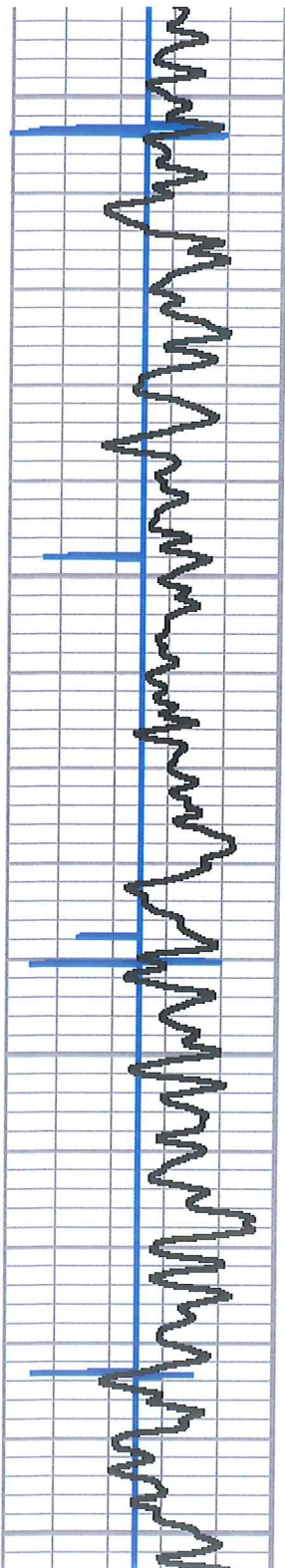
3700

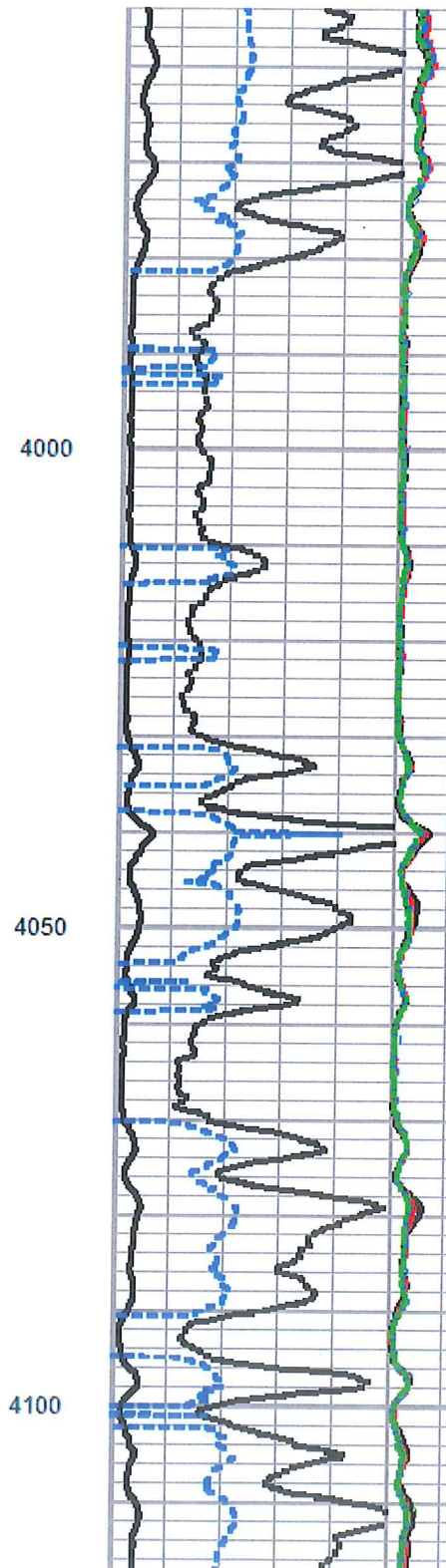
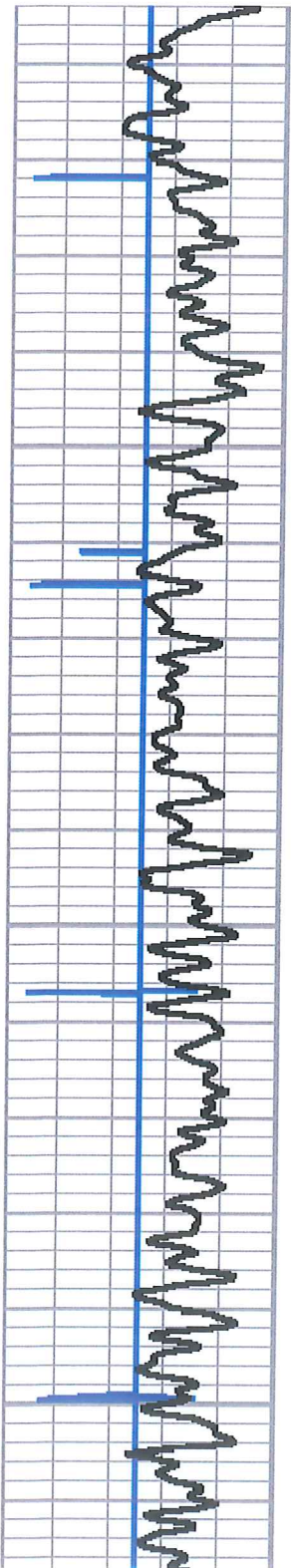
3750



78

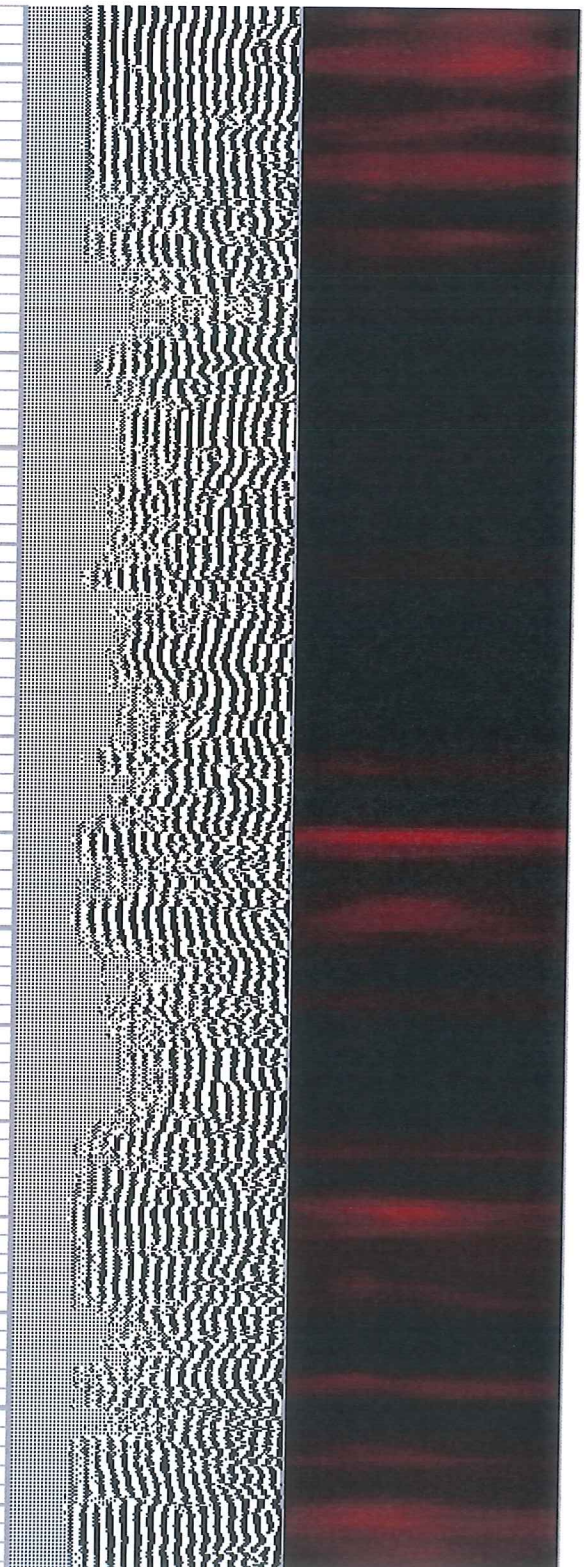


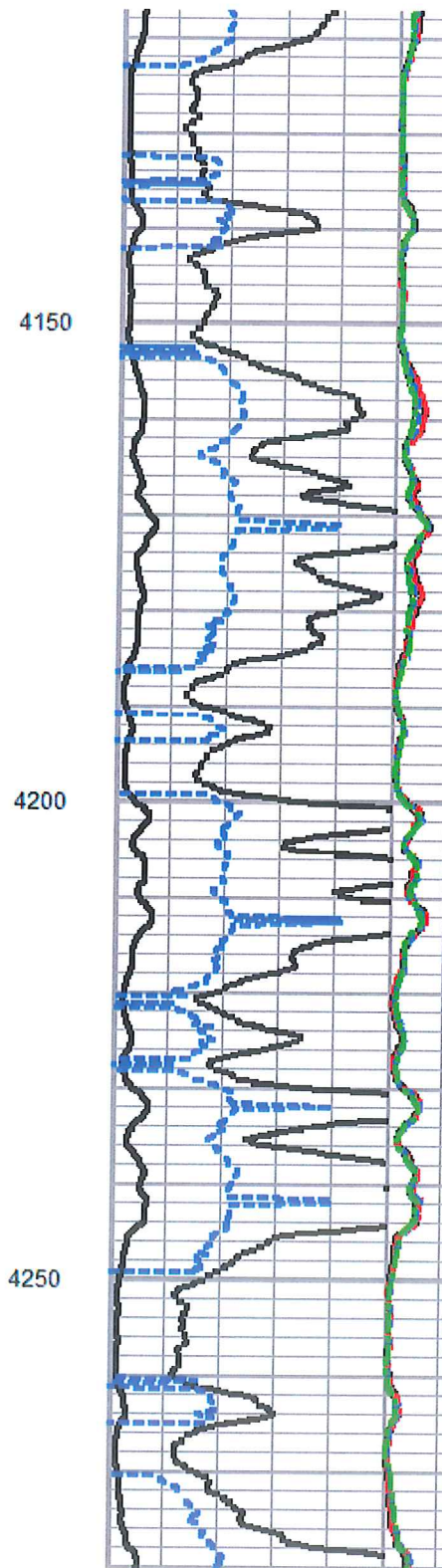
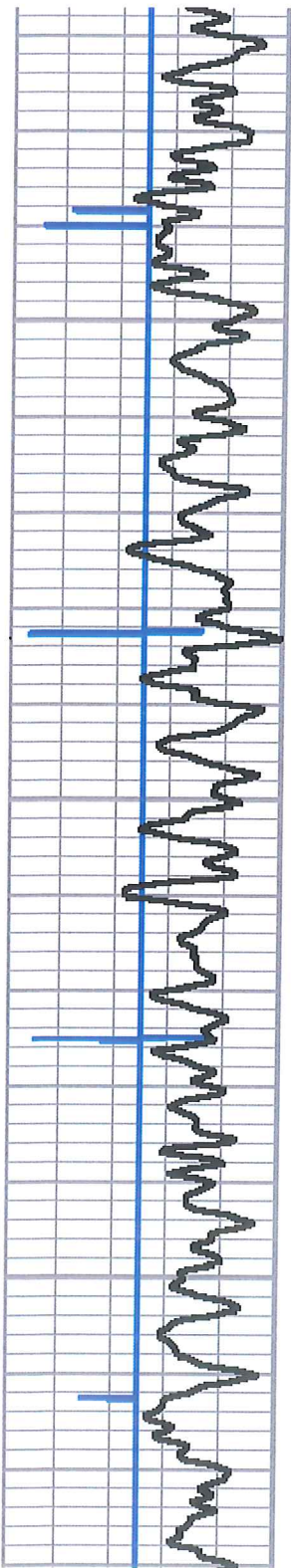




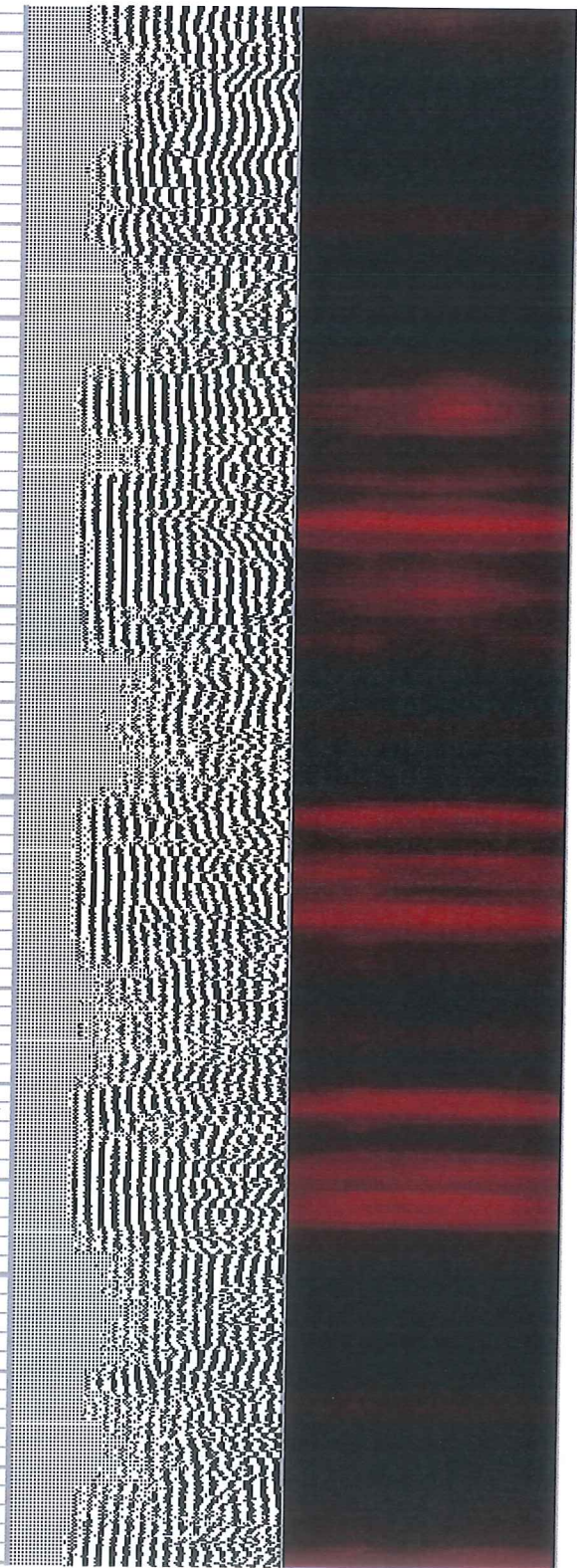
81

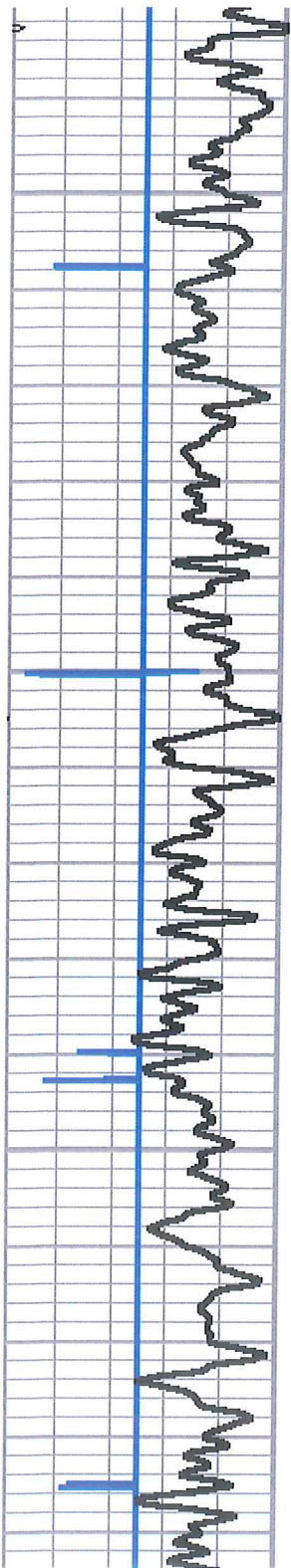
82





84

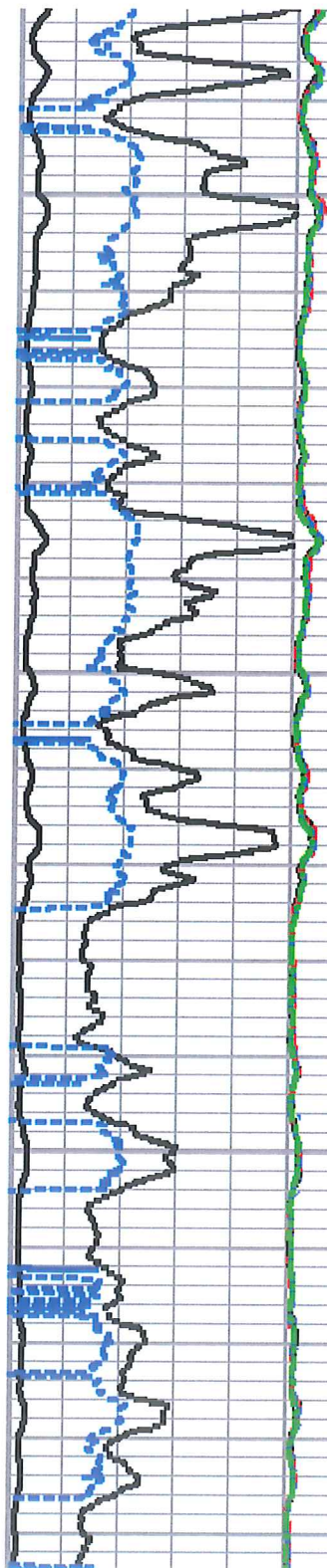




4300

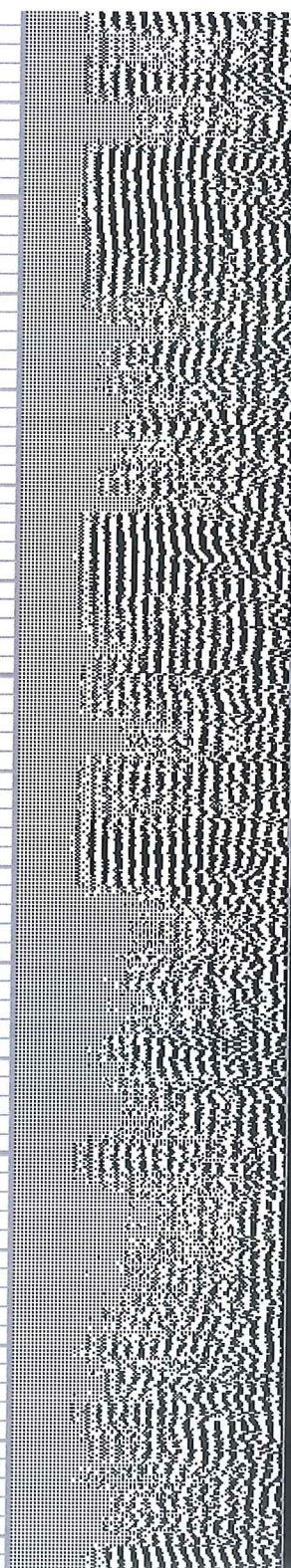
4350

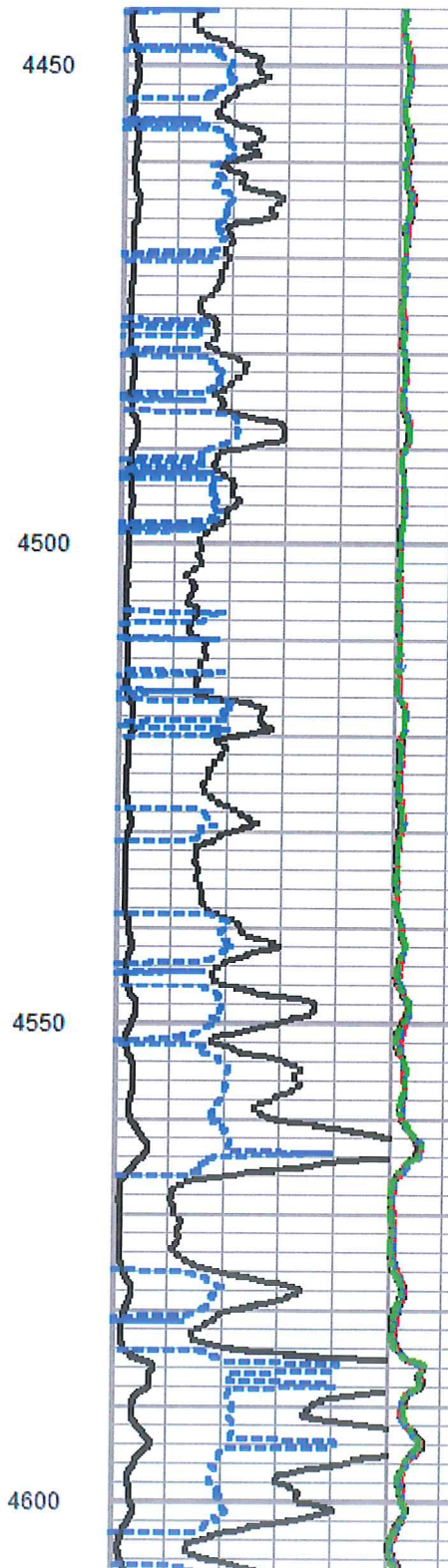
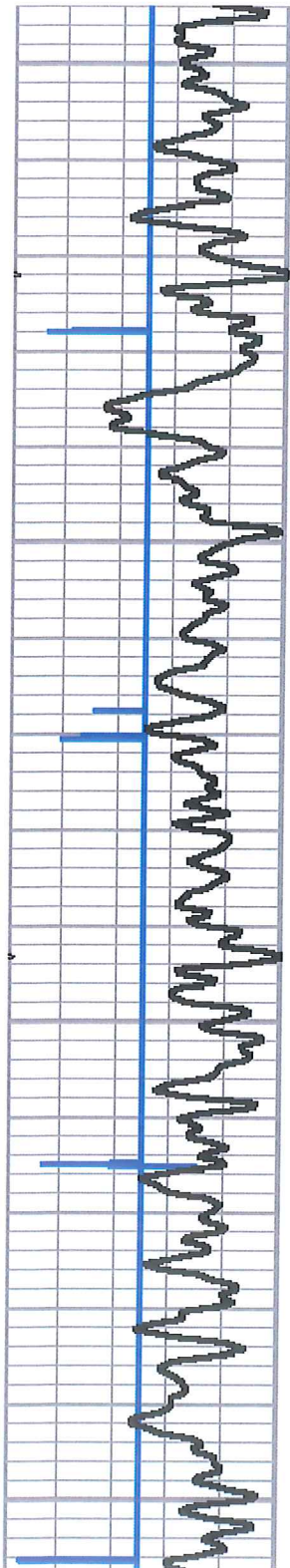
4400



85

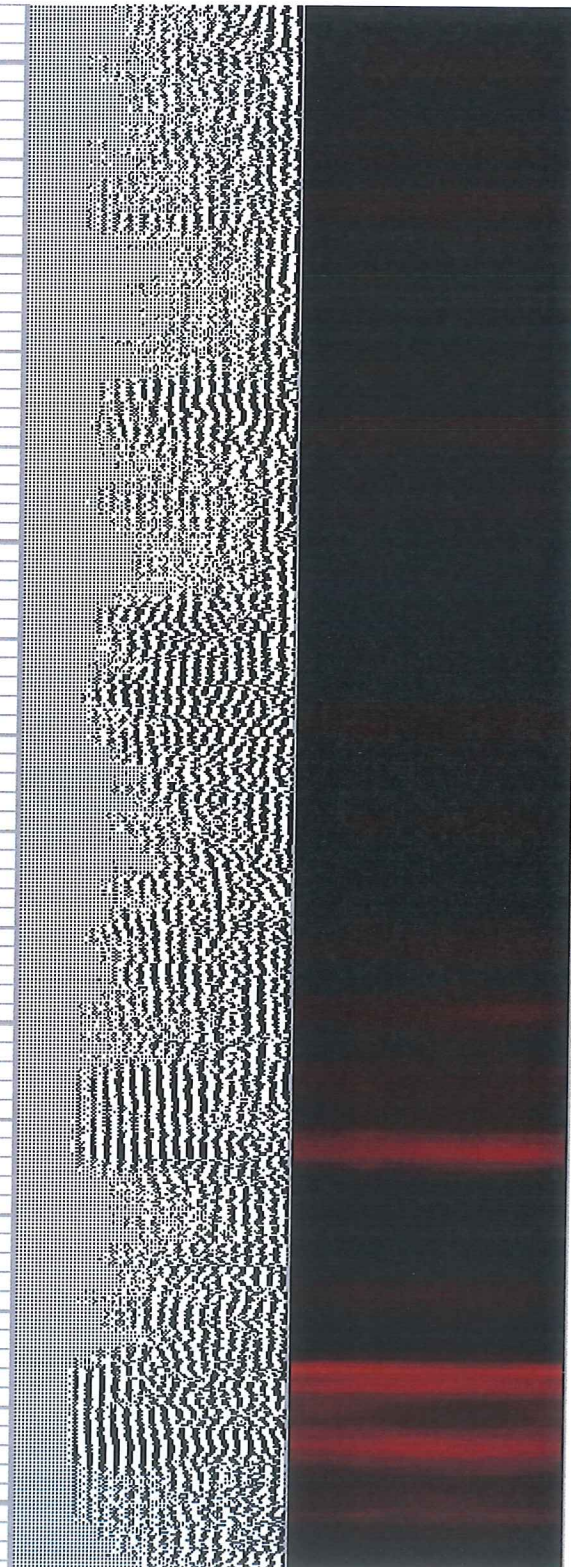
85



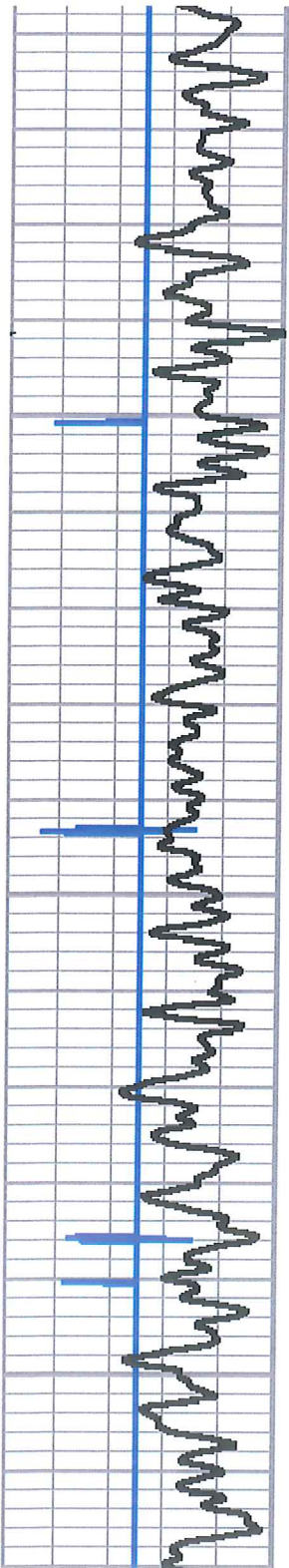


85

86



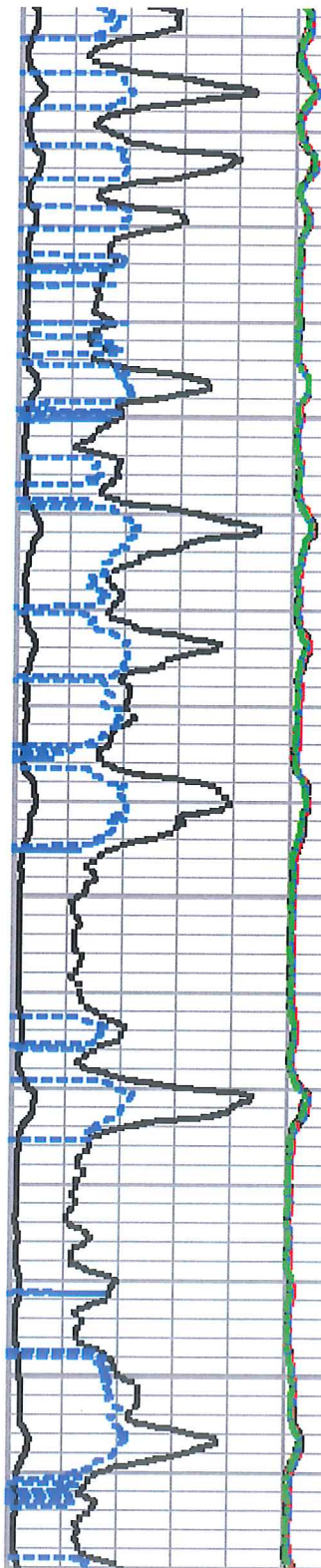




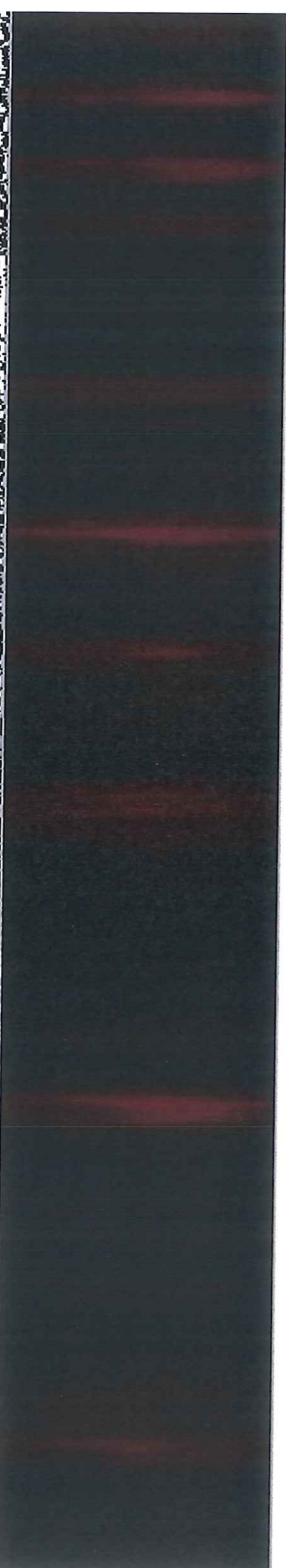
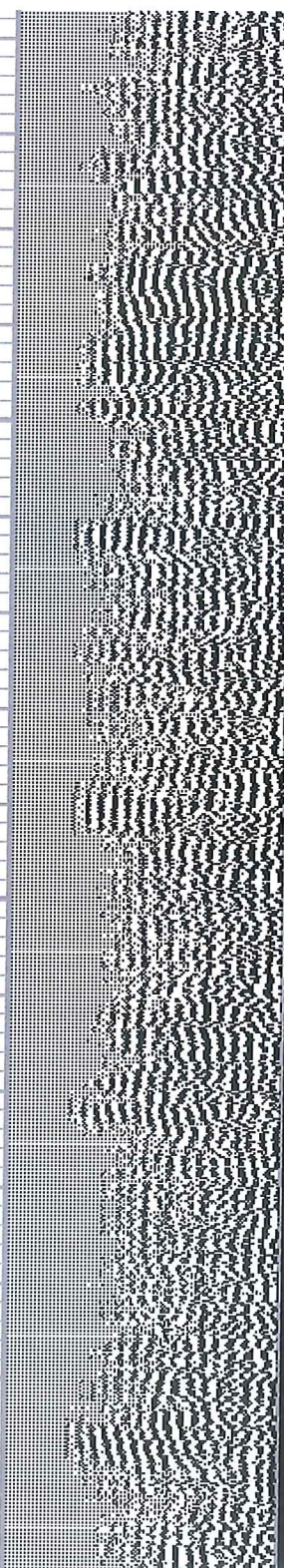
4650

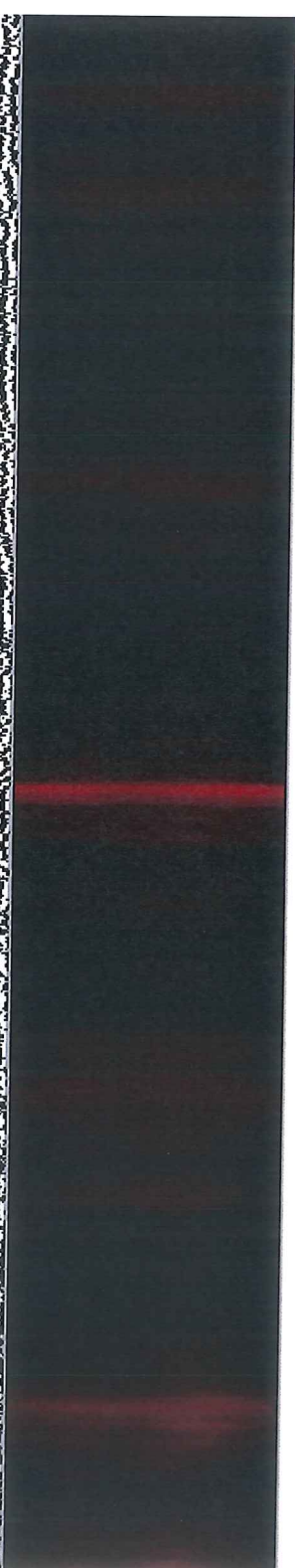
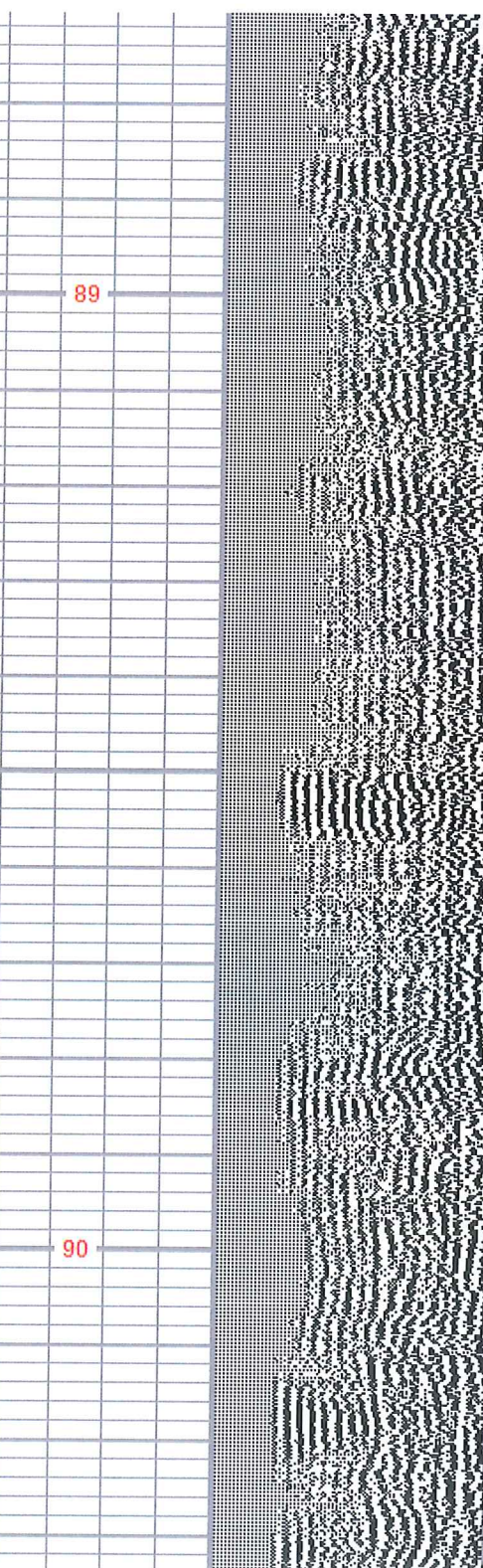
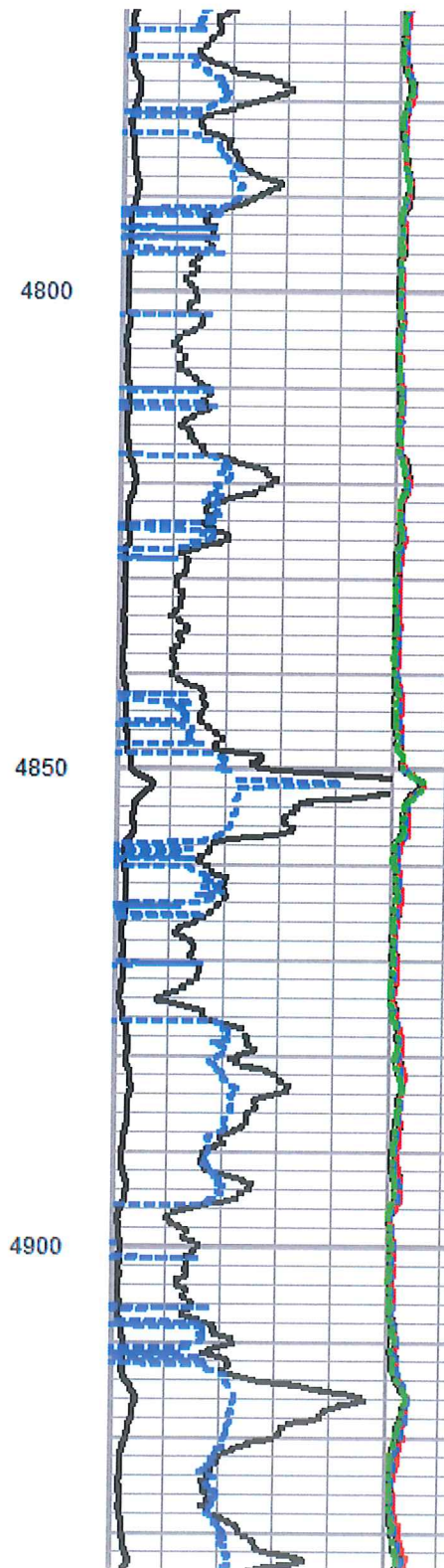
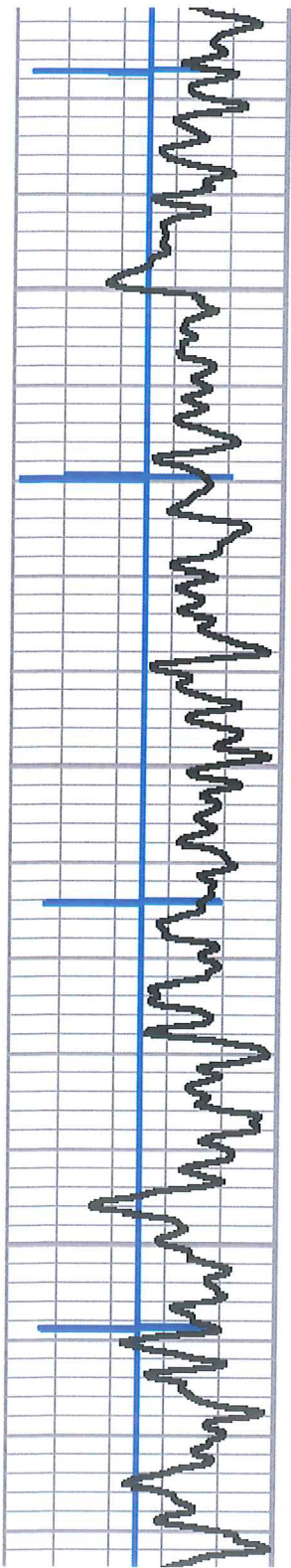
4700

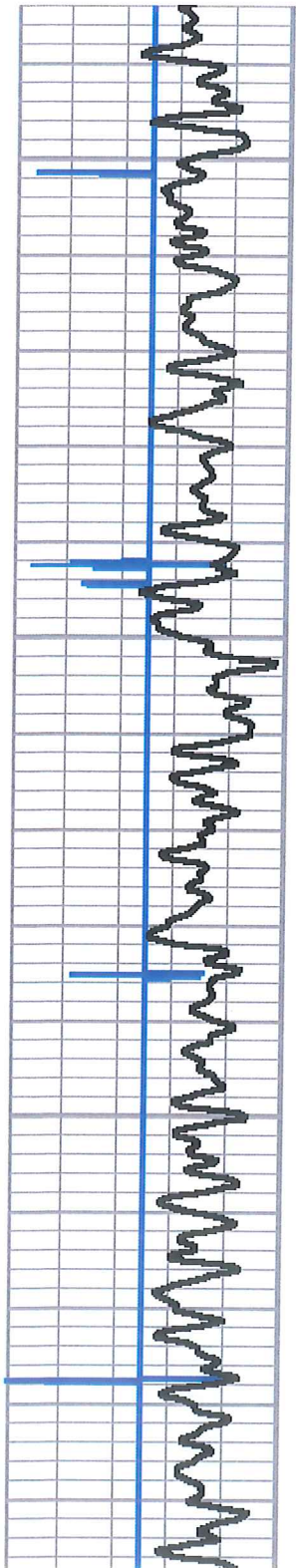
4750



88



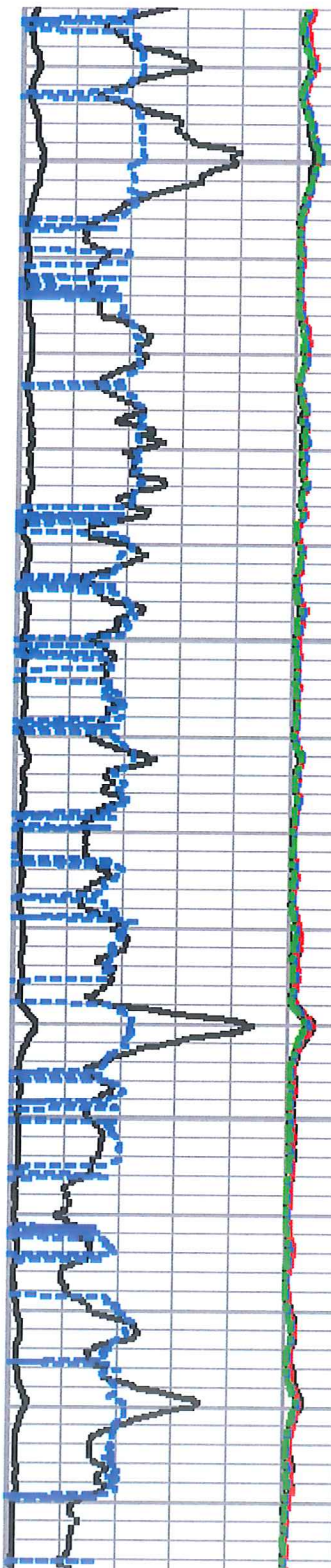




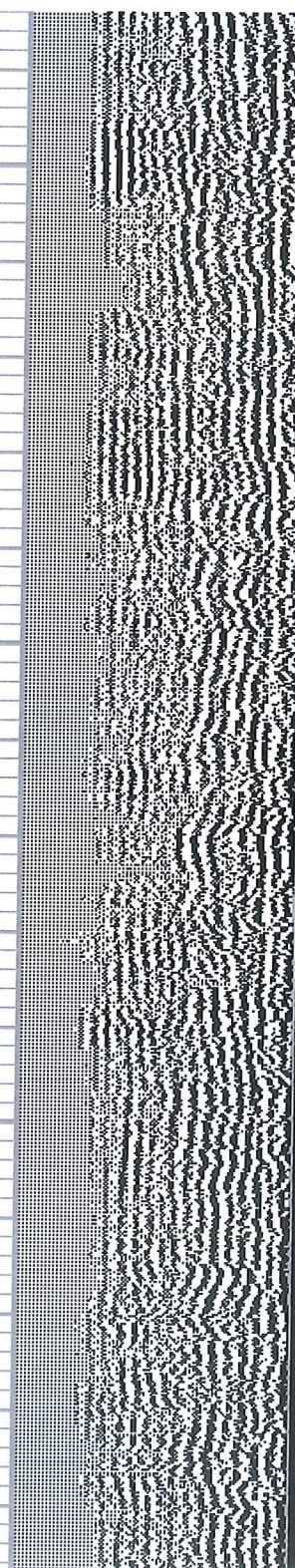
4950

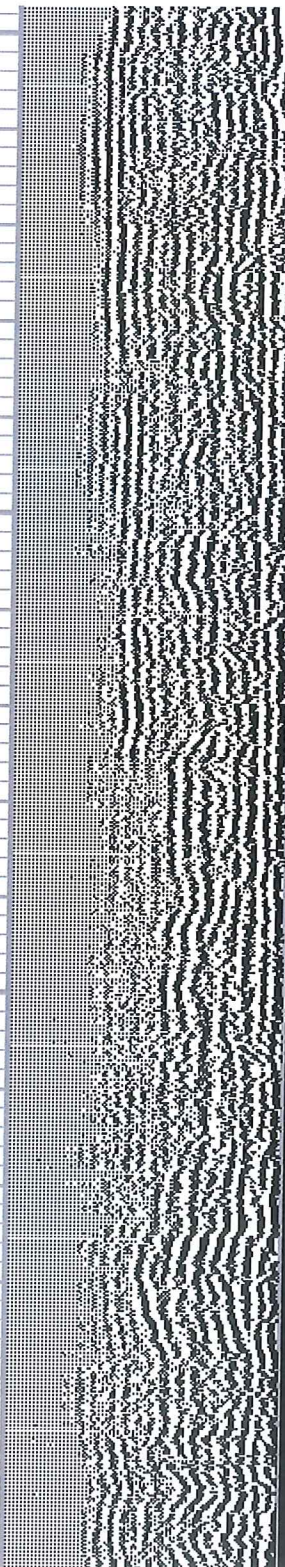
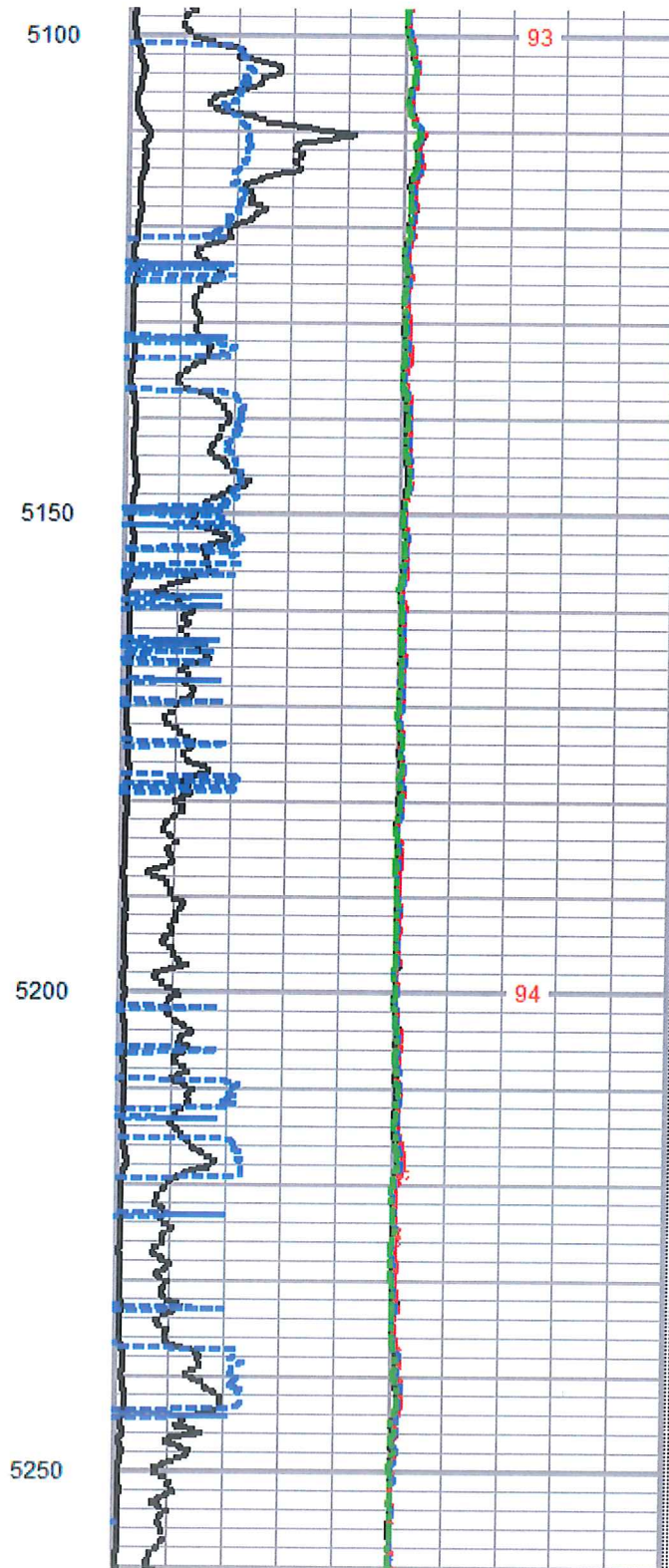
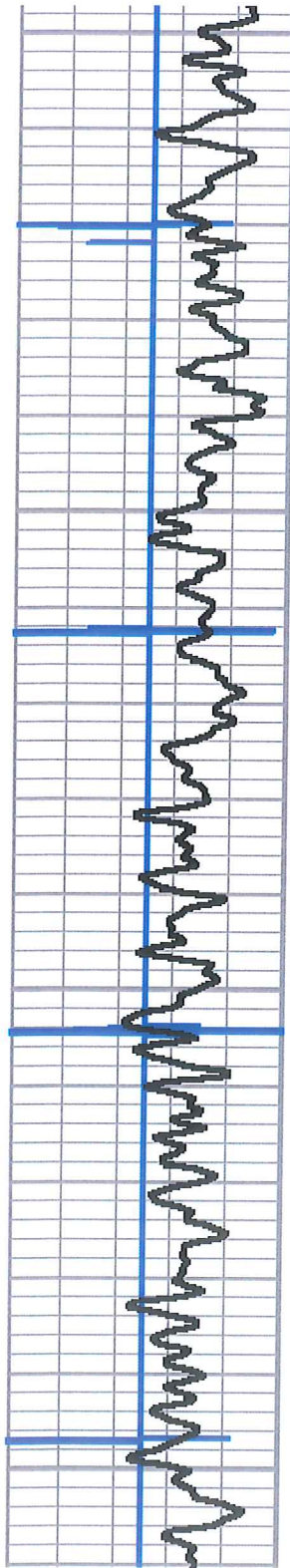
5000

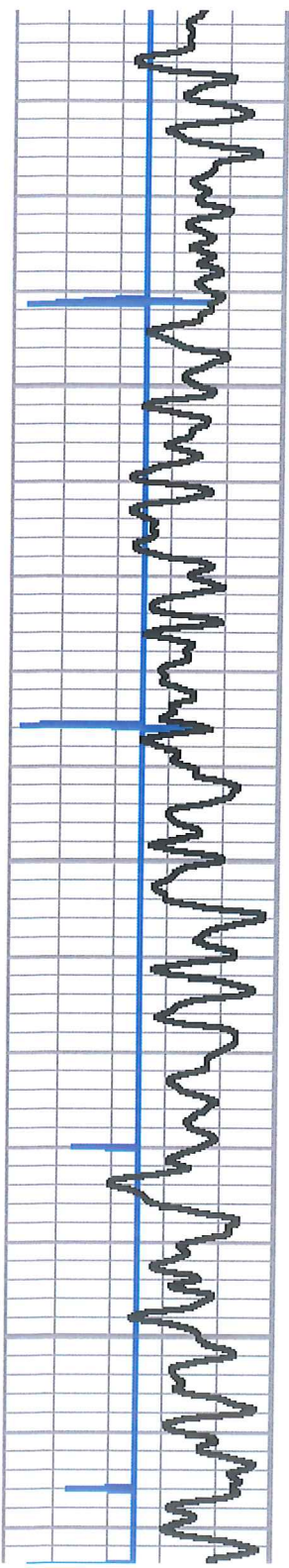
5050



91



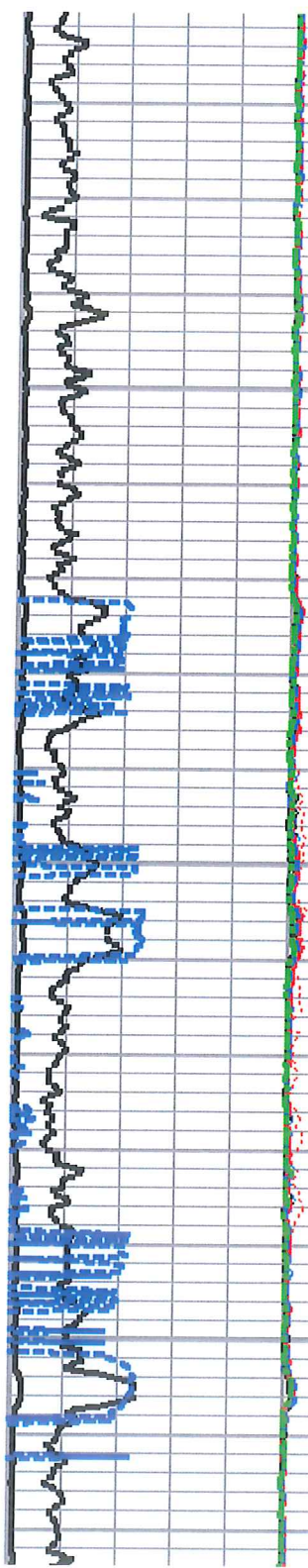




5300

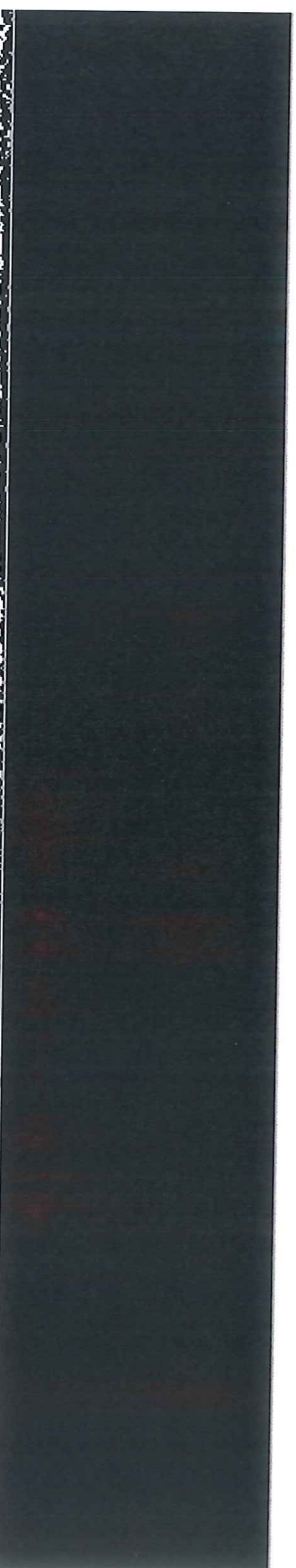
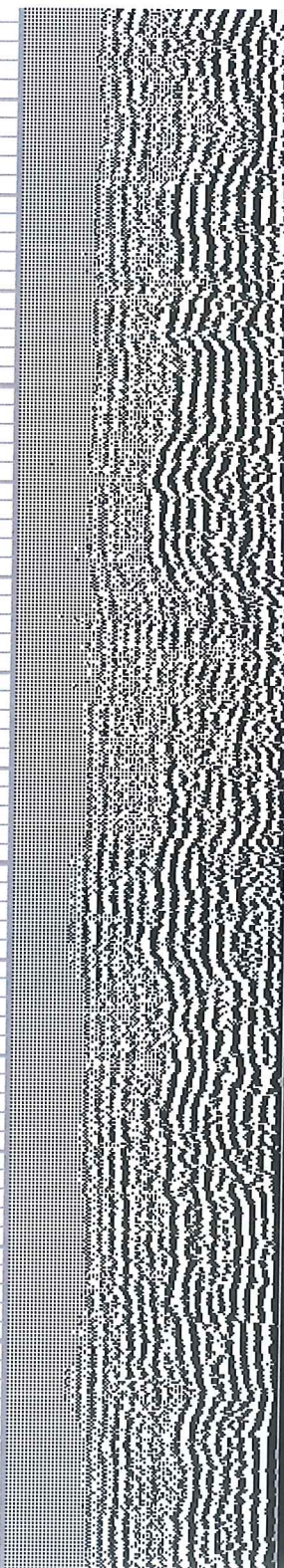
5350

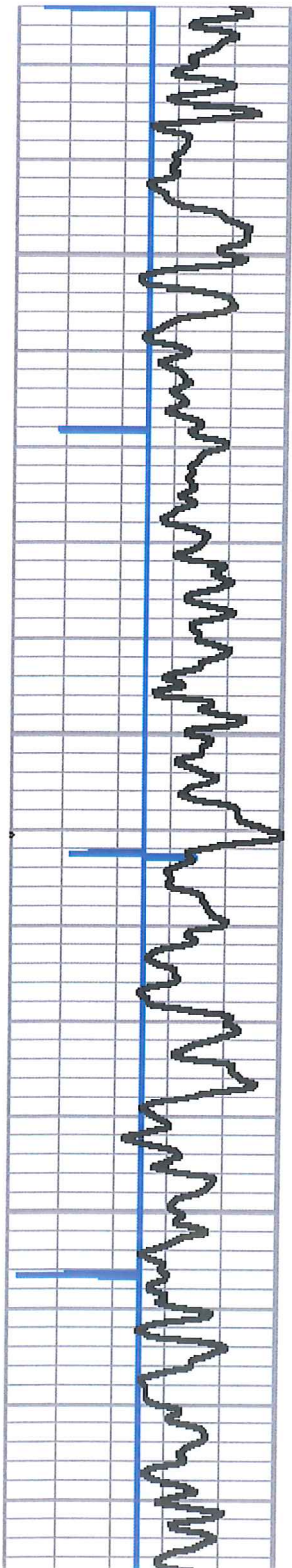
5400



95

96

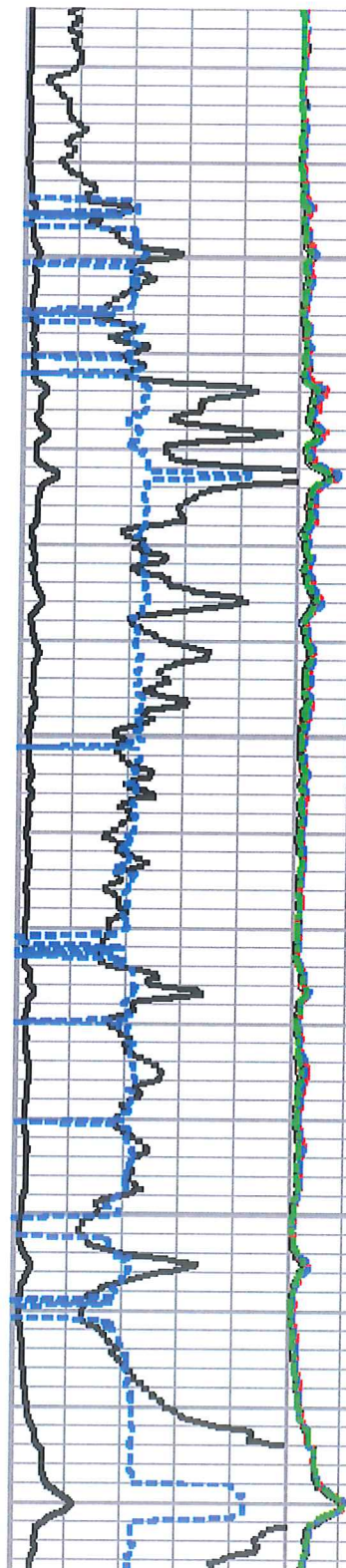




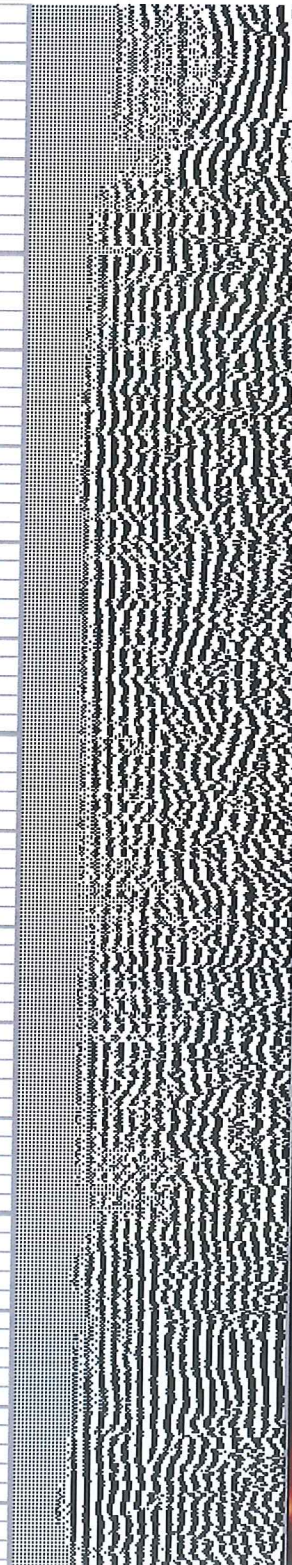
5450

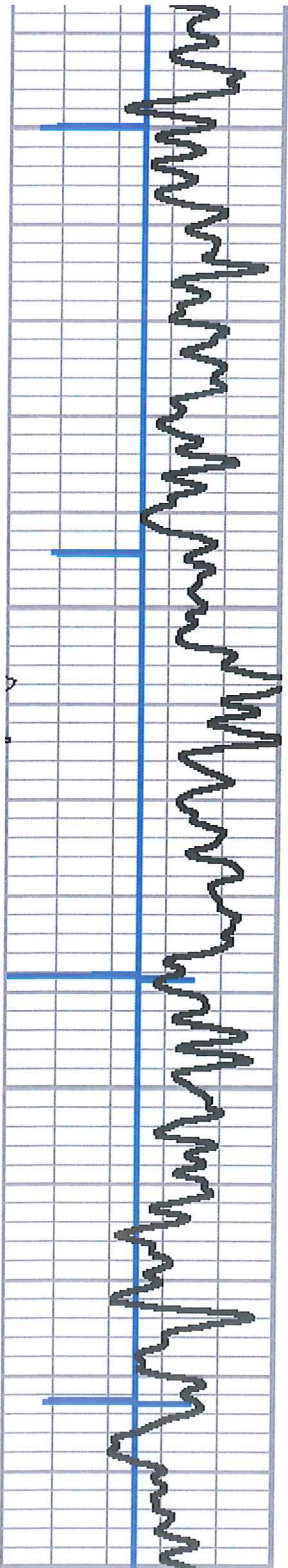
5500

5550



98



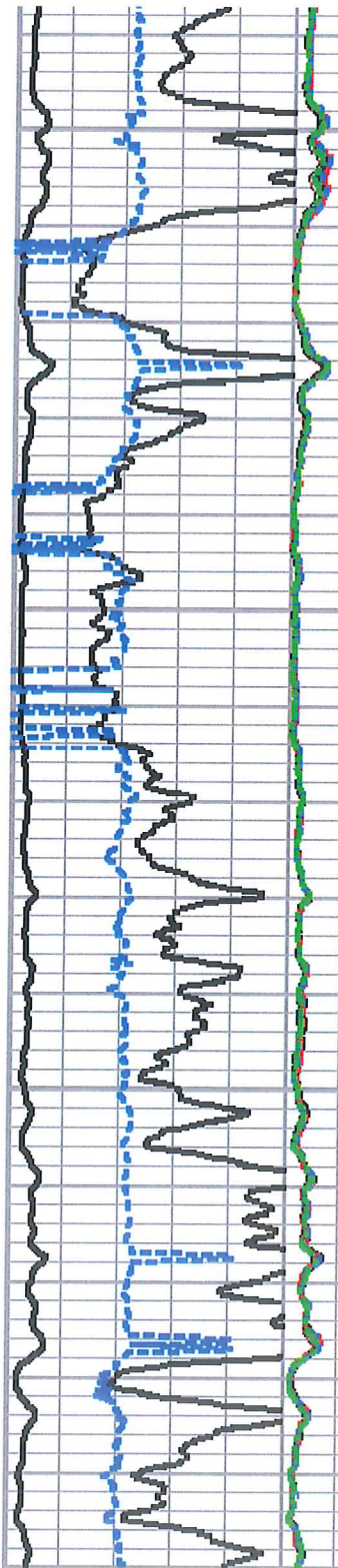


5600

5650

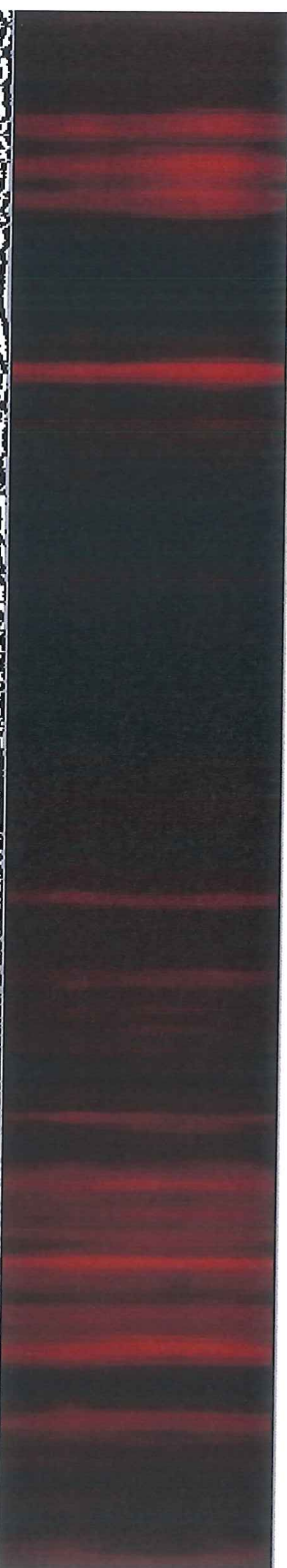
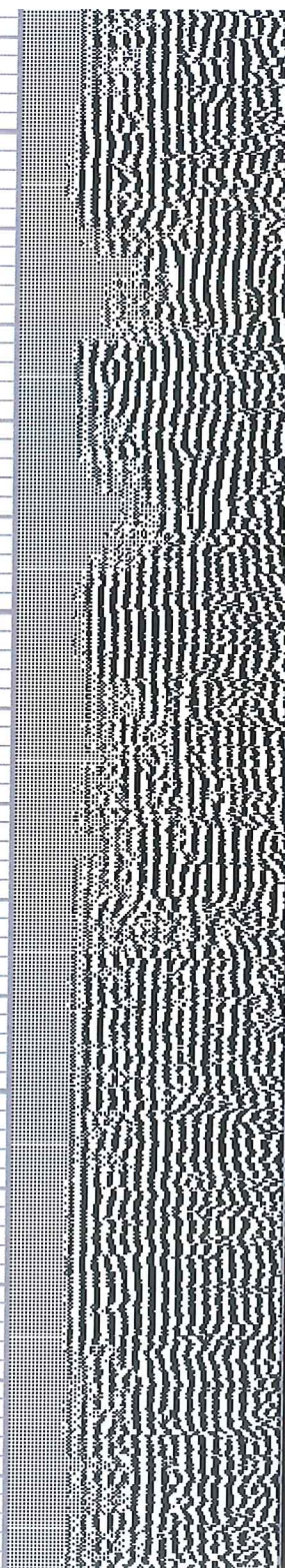
5700

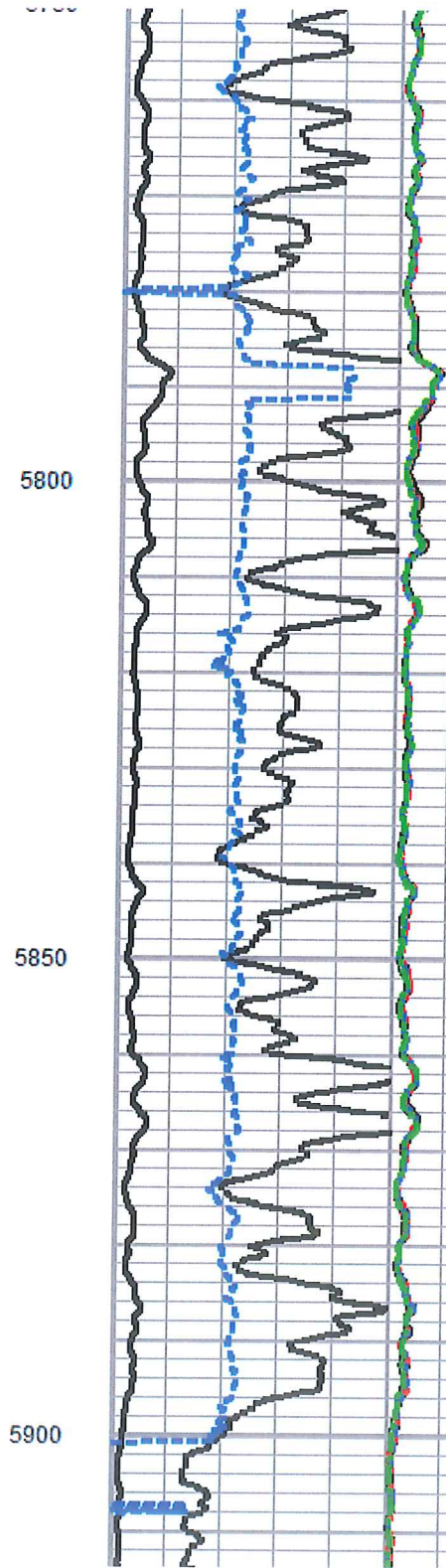
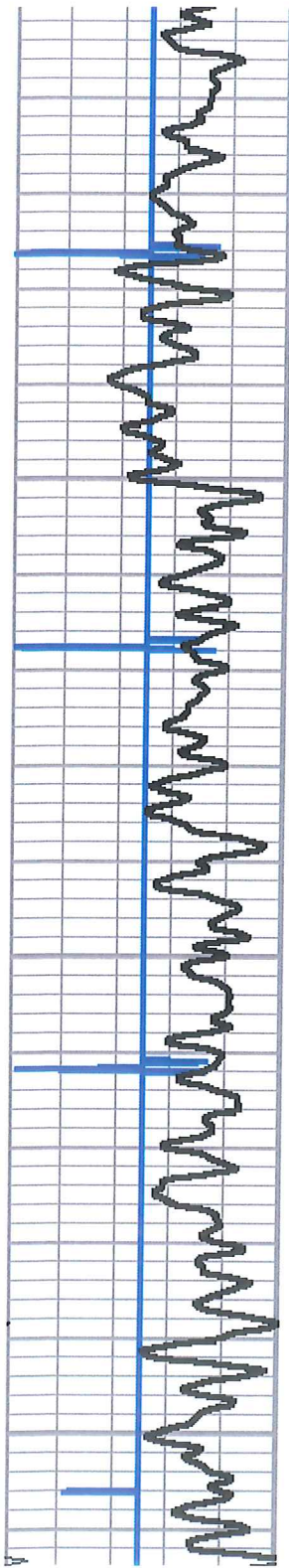
5750



99

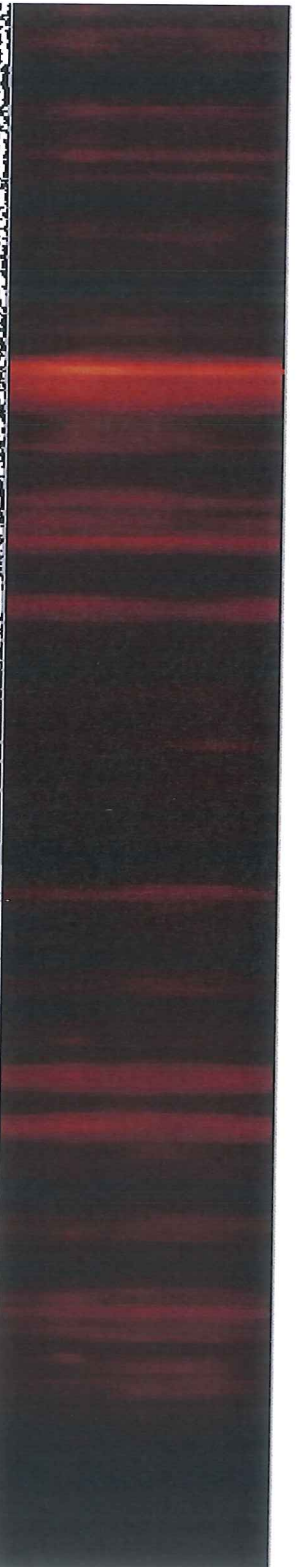
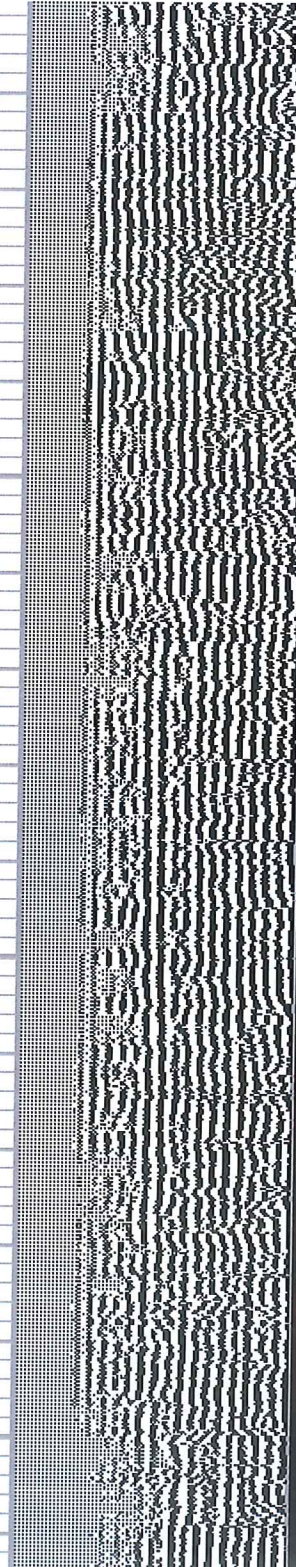
100



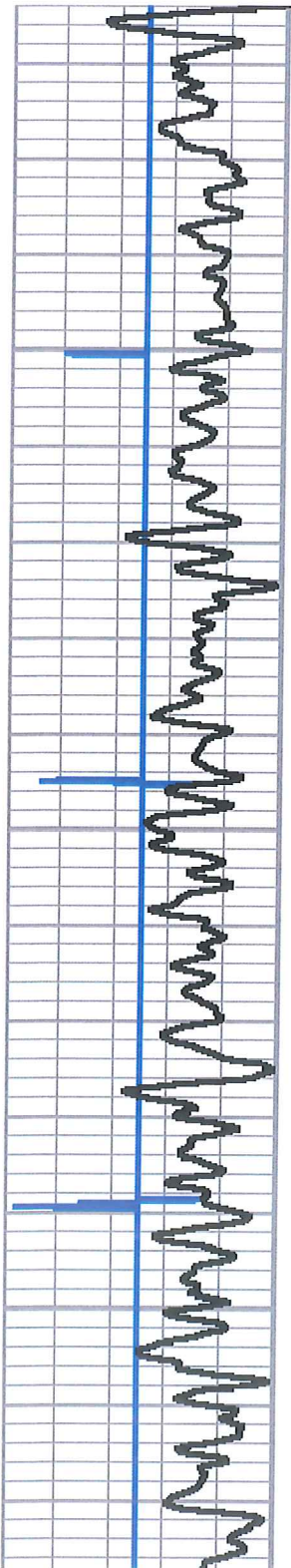


101

103



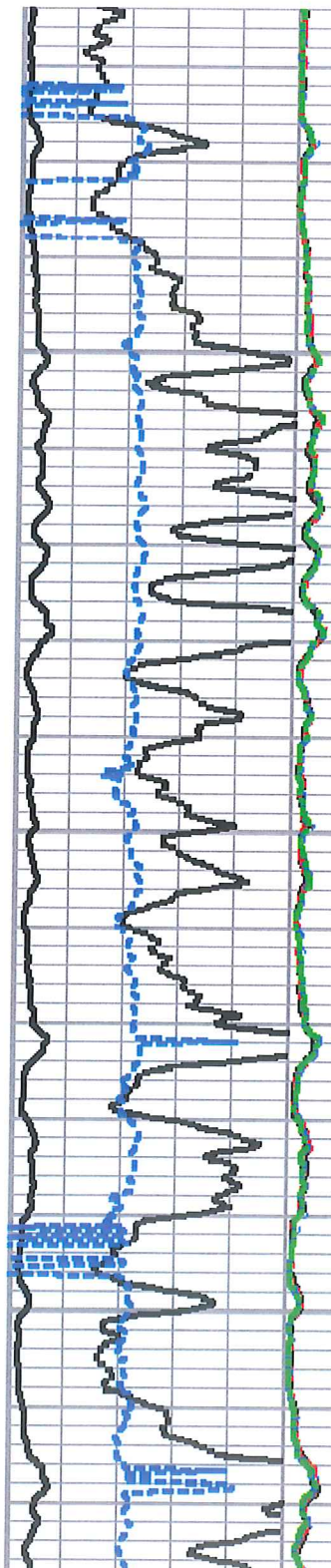




5950

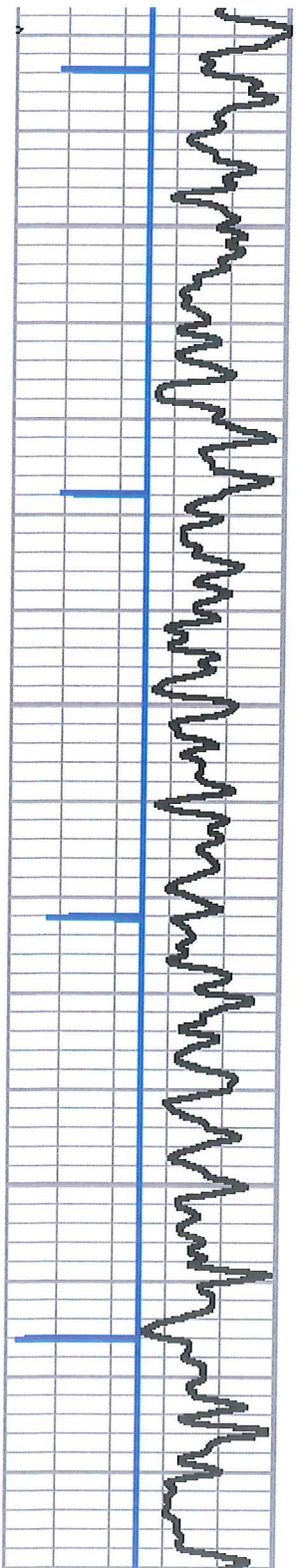
6000

6050



104

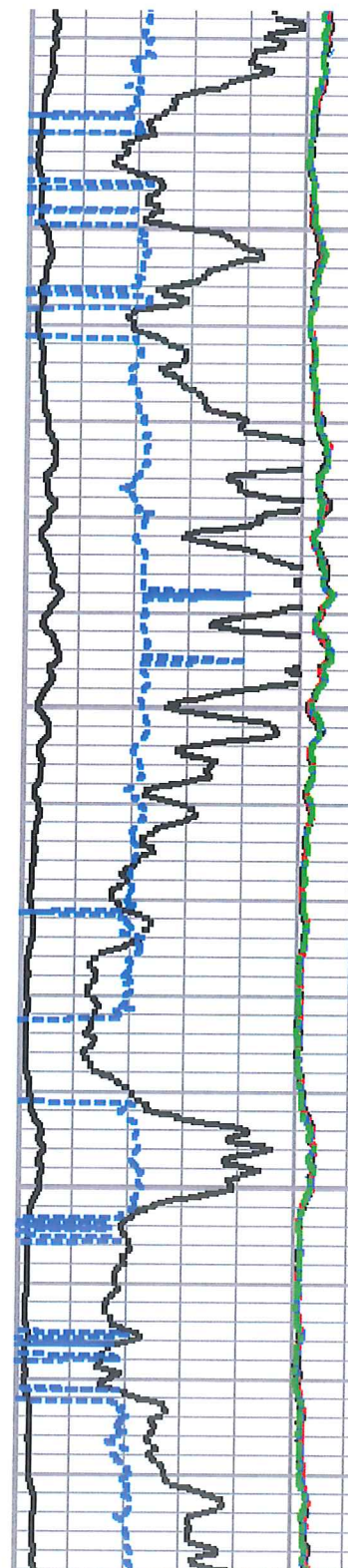




6100

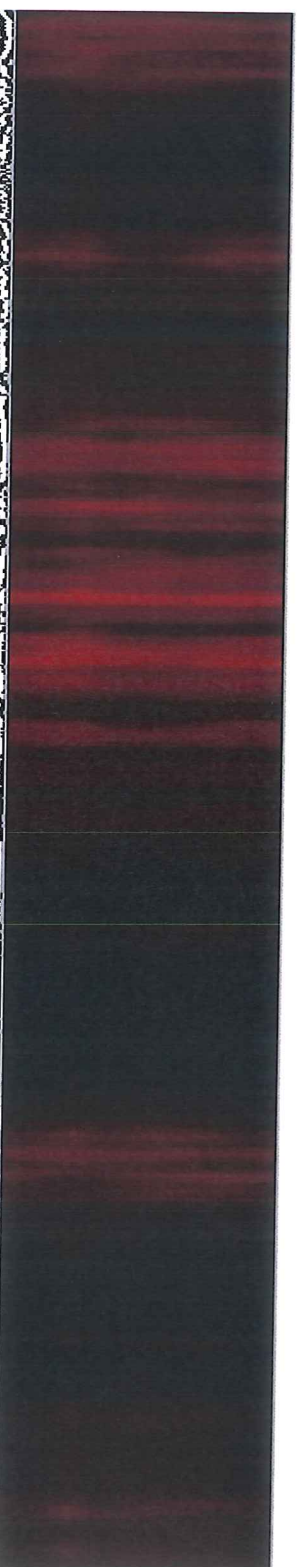
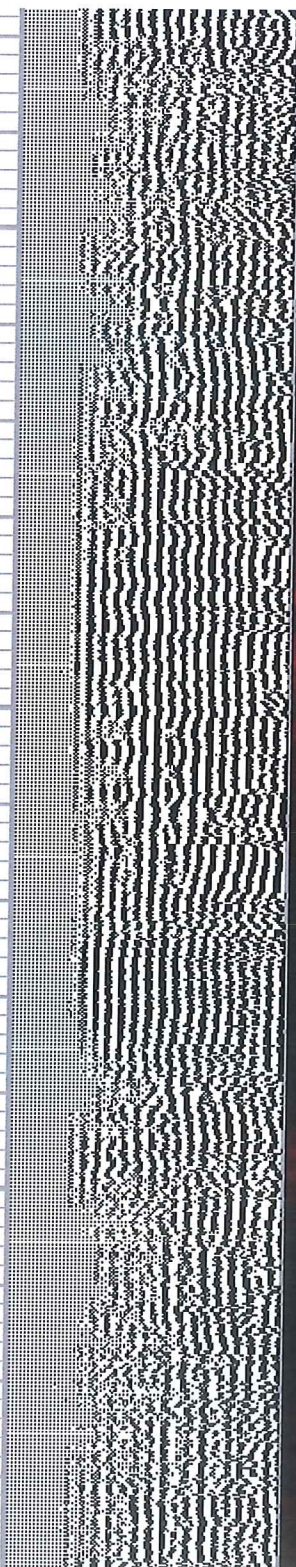
6150

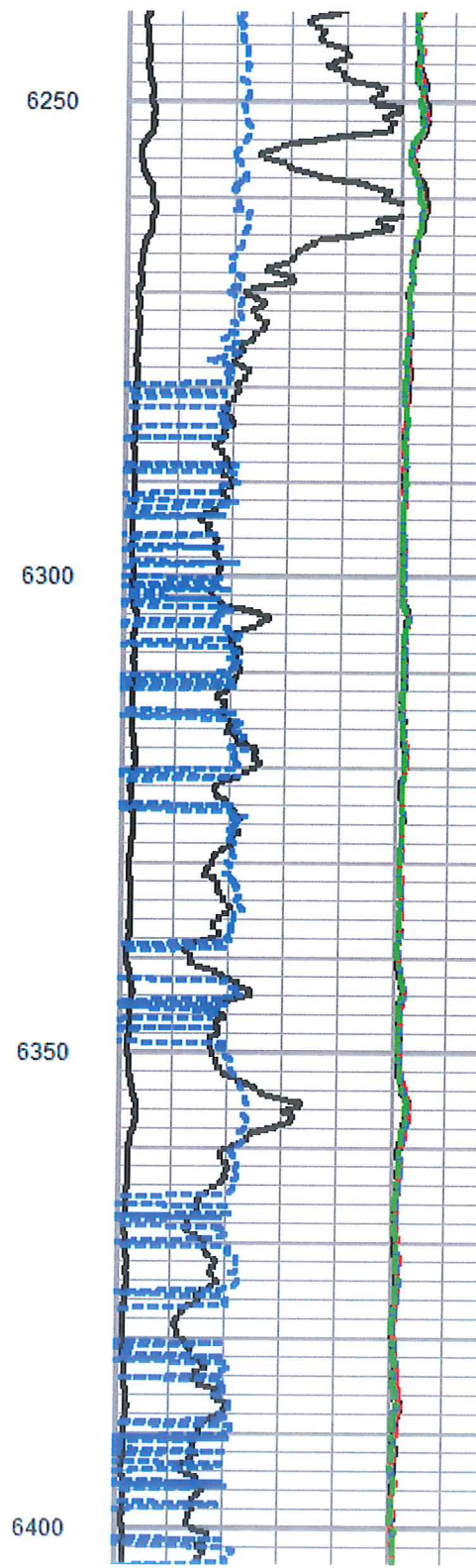
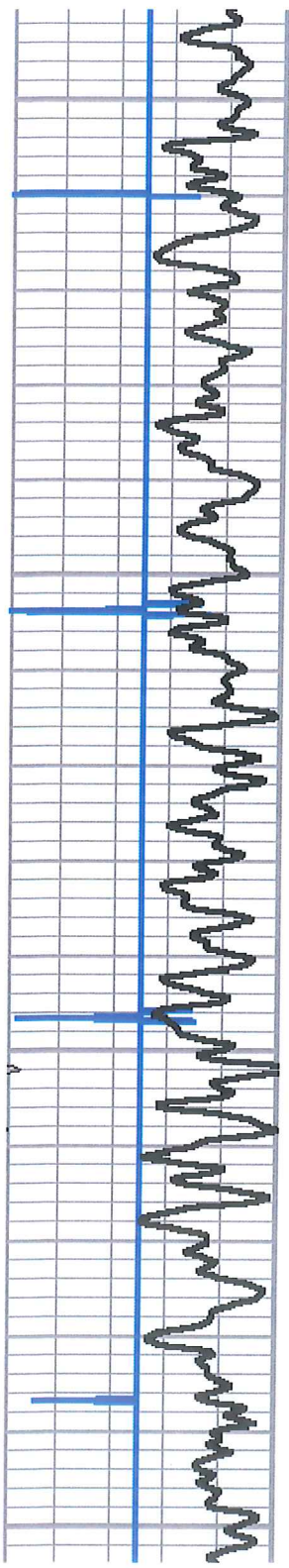
6200



105

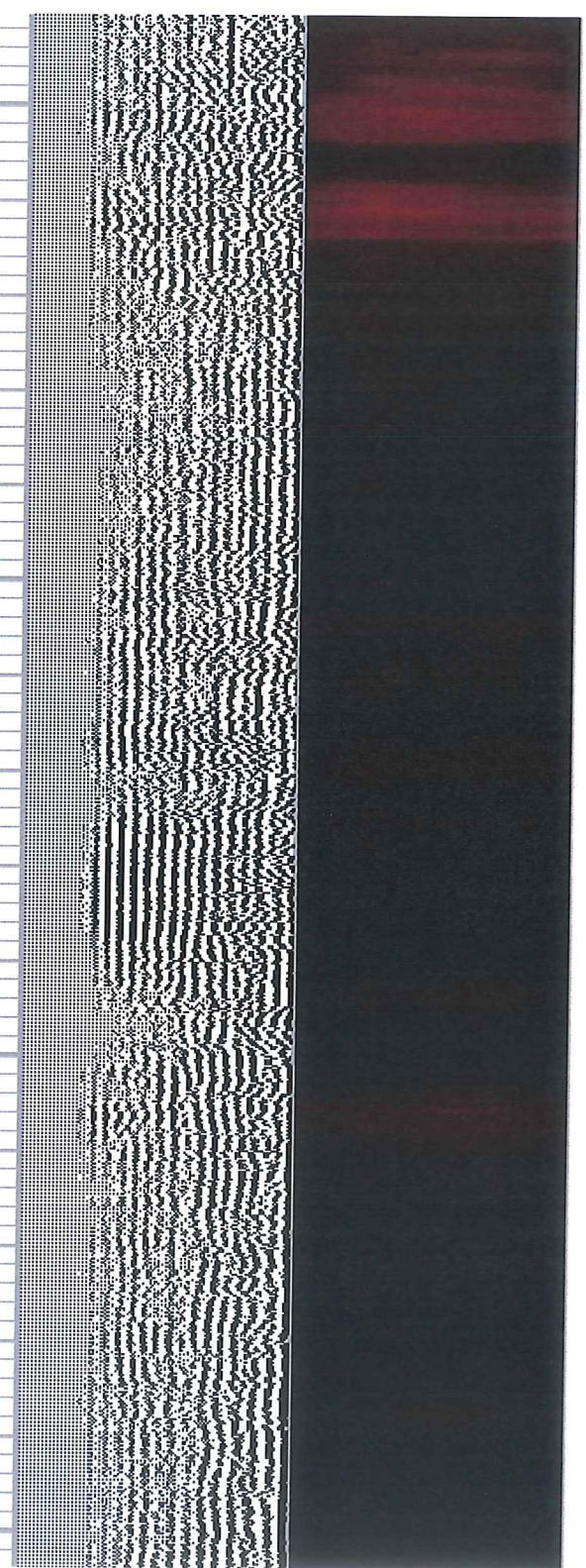
107

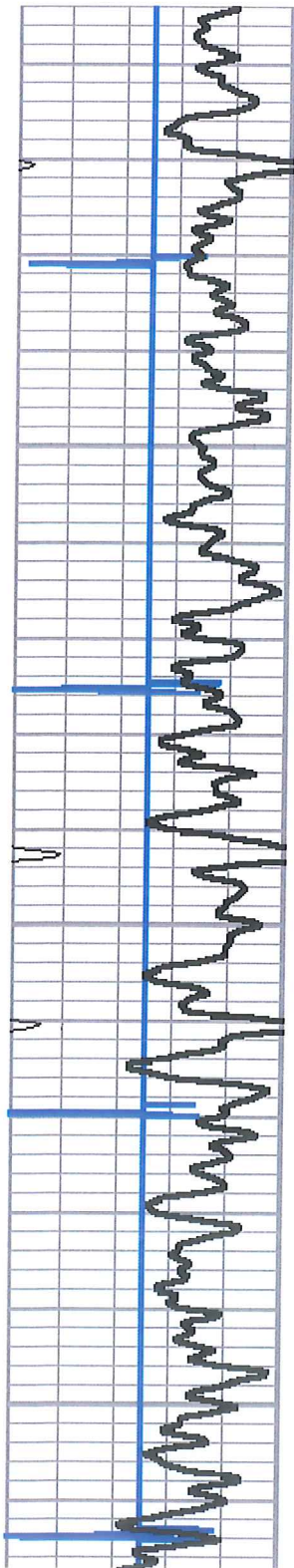




109

110

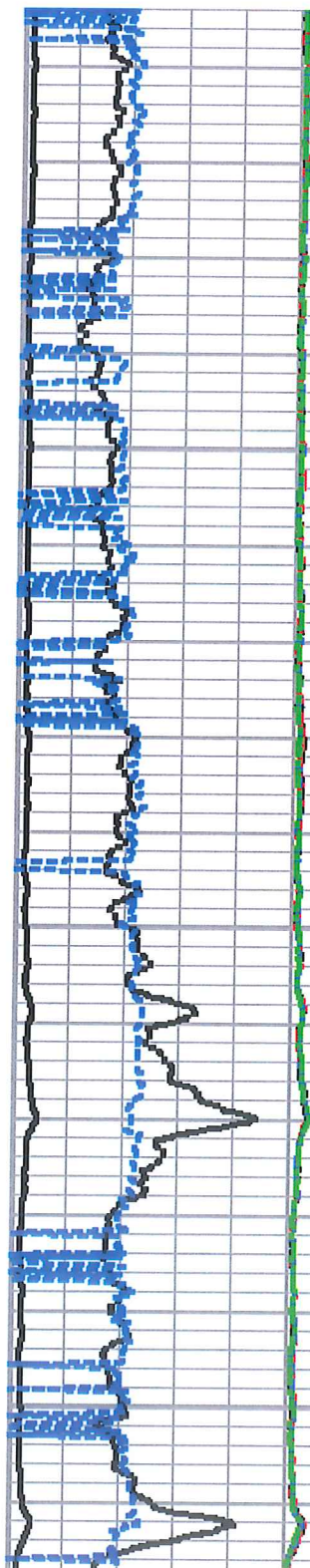




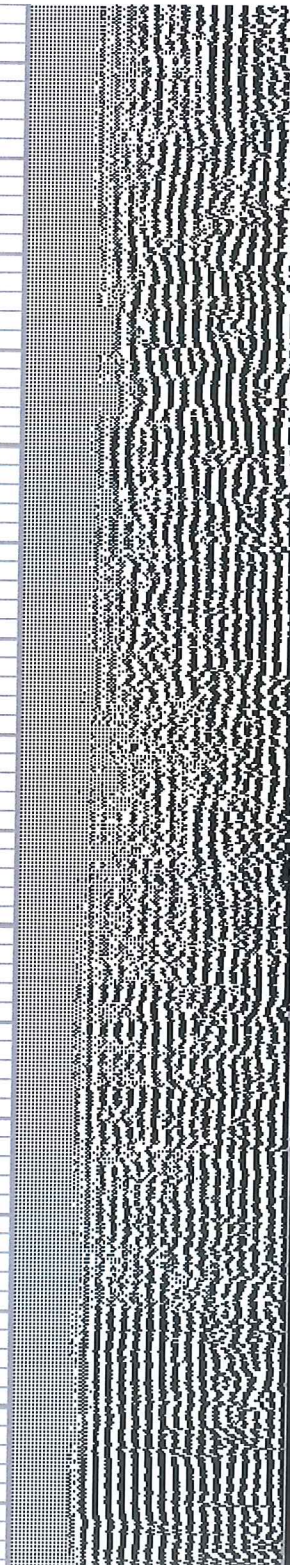
6450

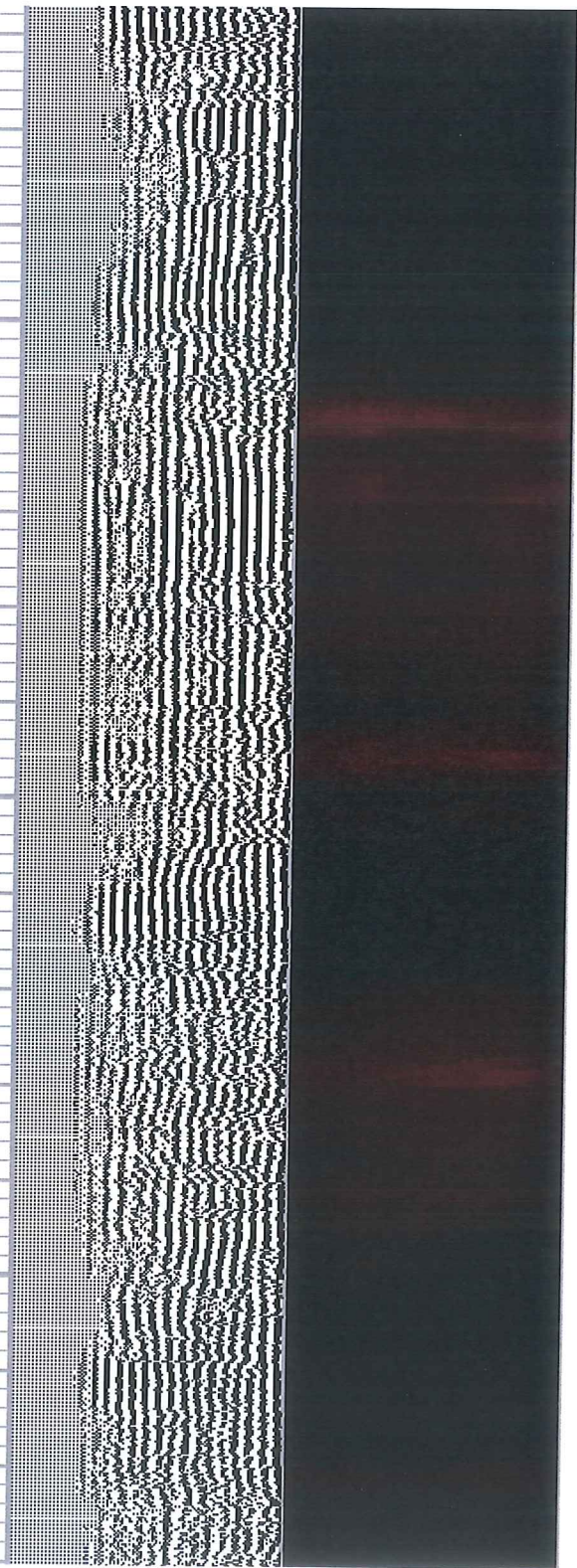
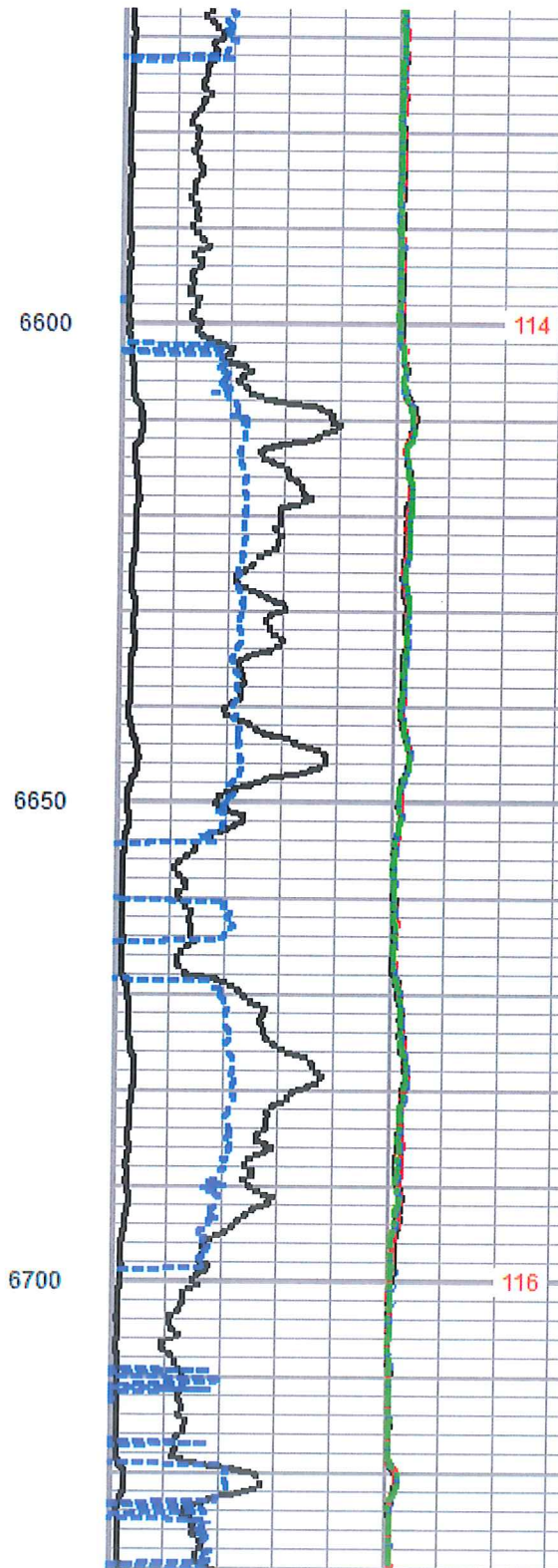
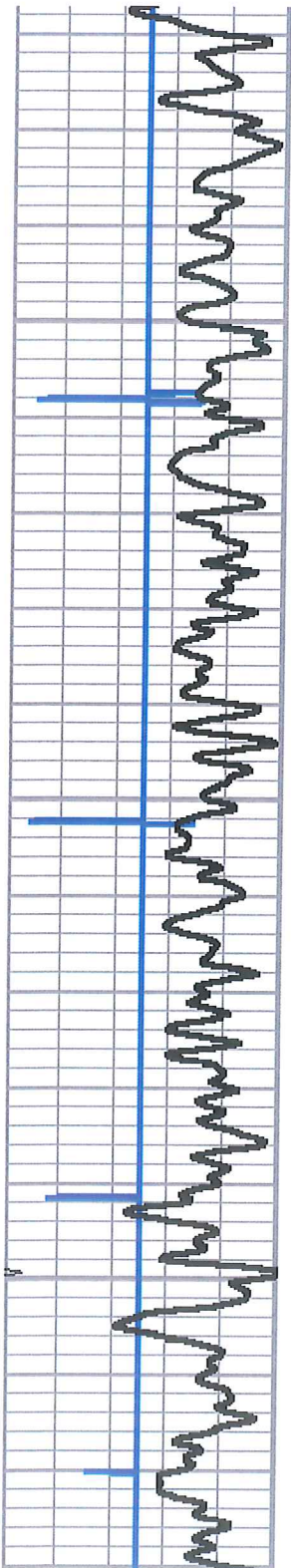
6500

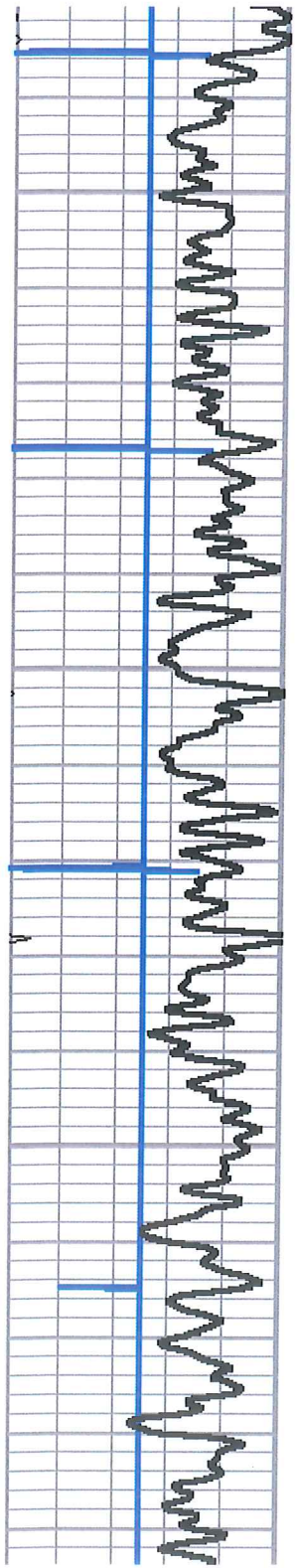
6550



112



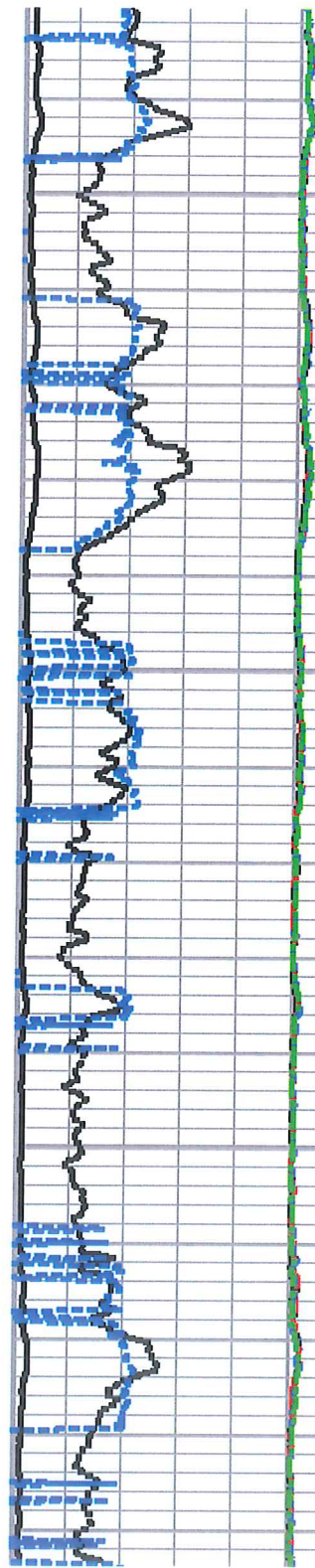




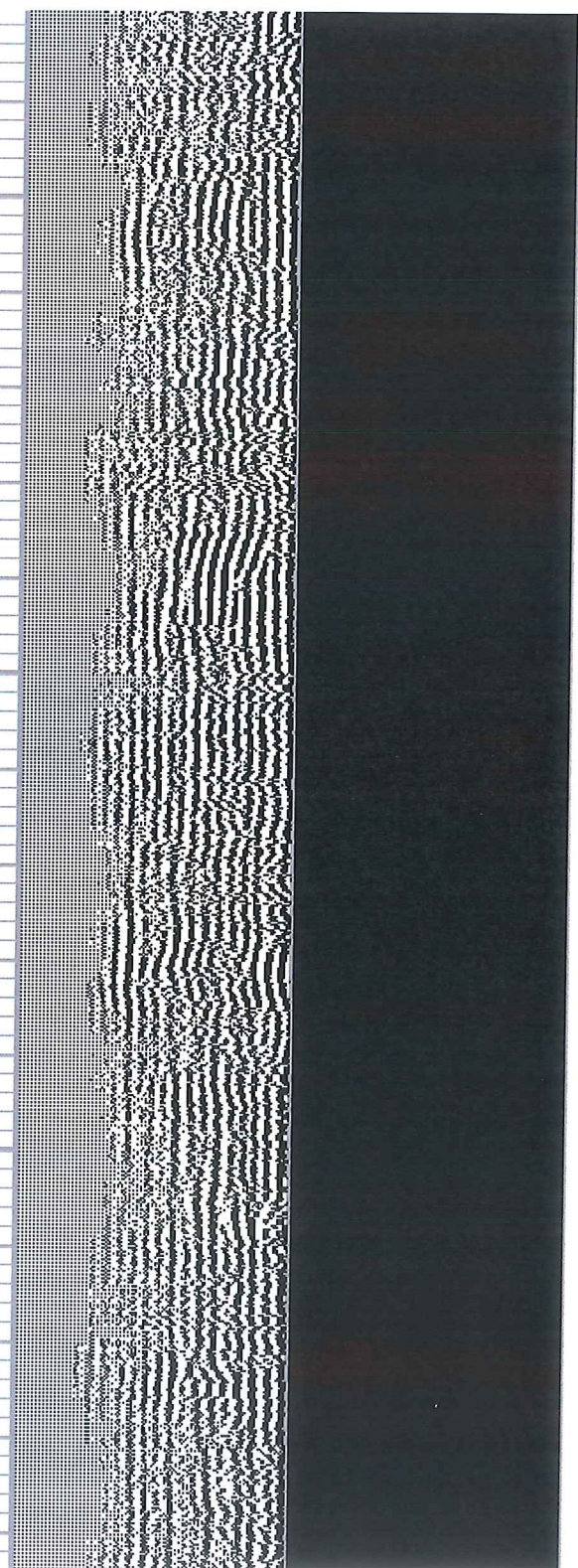
6750

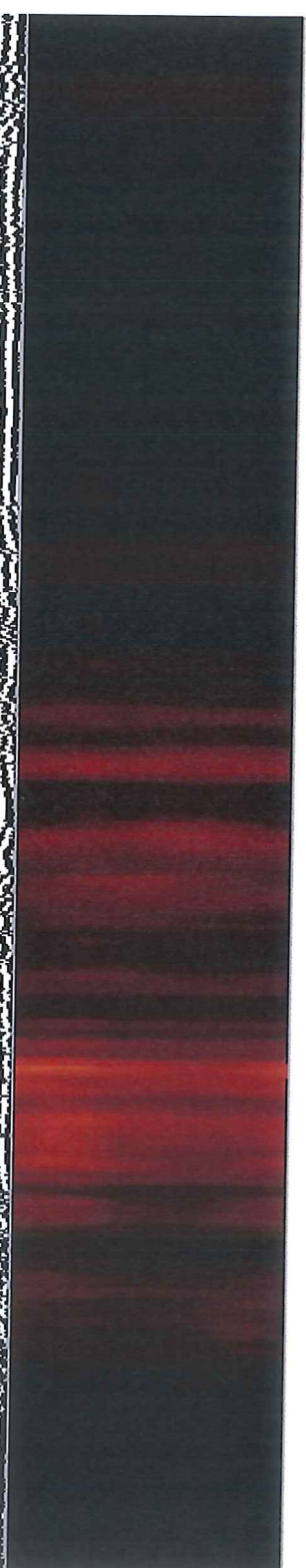
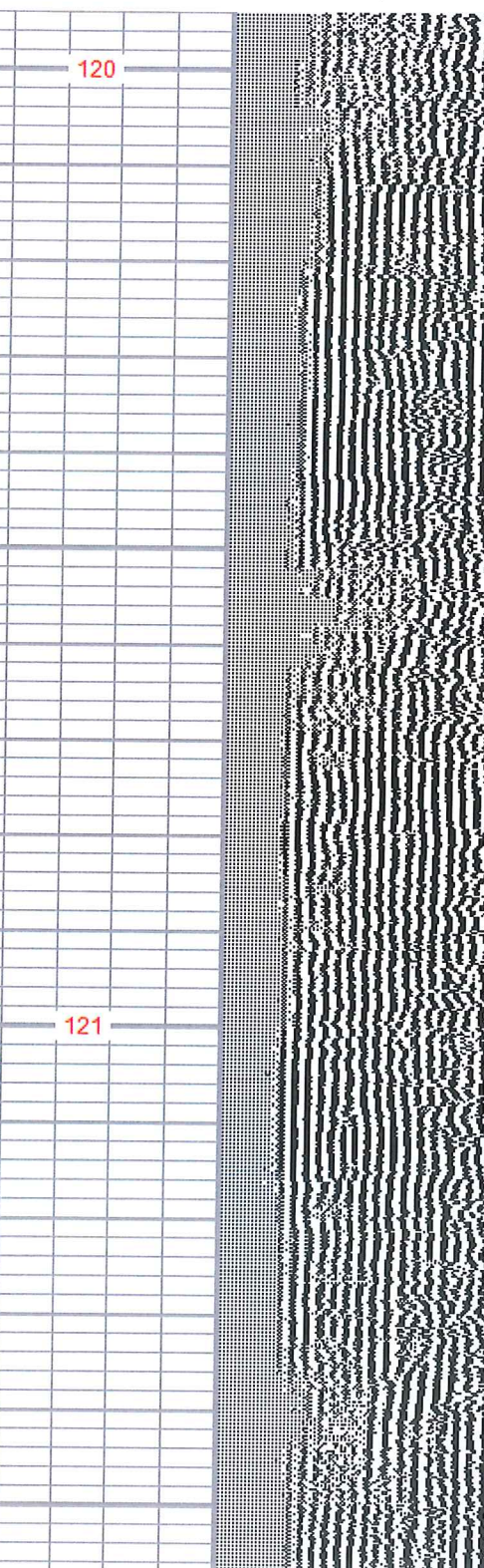
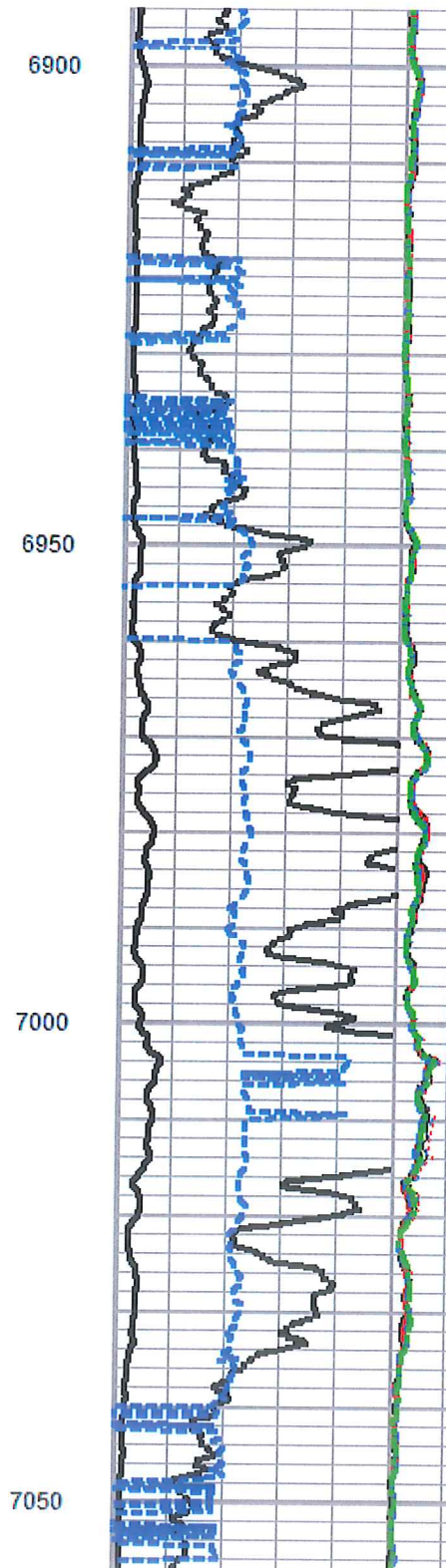
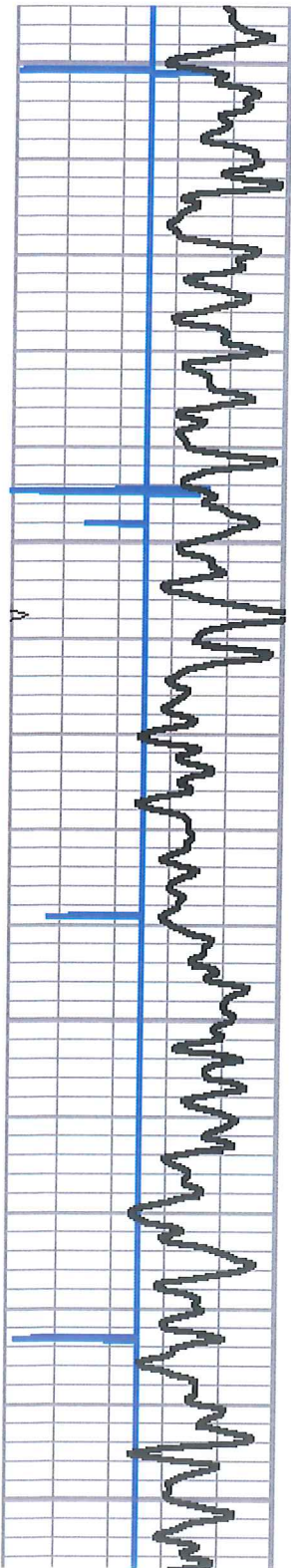
6800

6850



117





6900

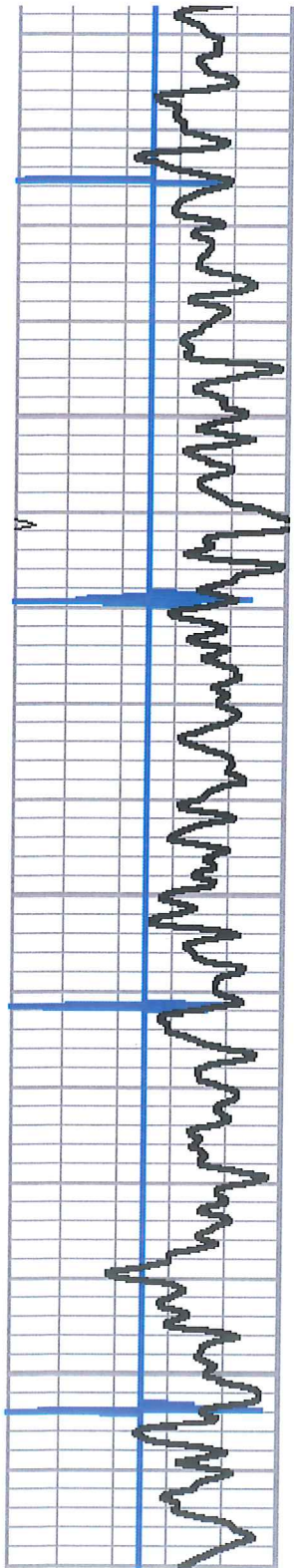
120

6950

7000

121

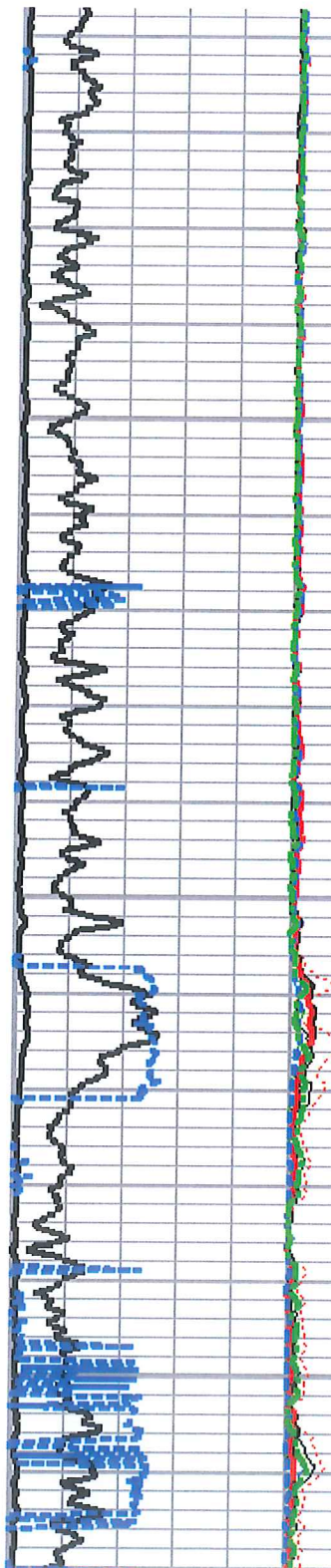
7050



7100

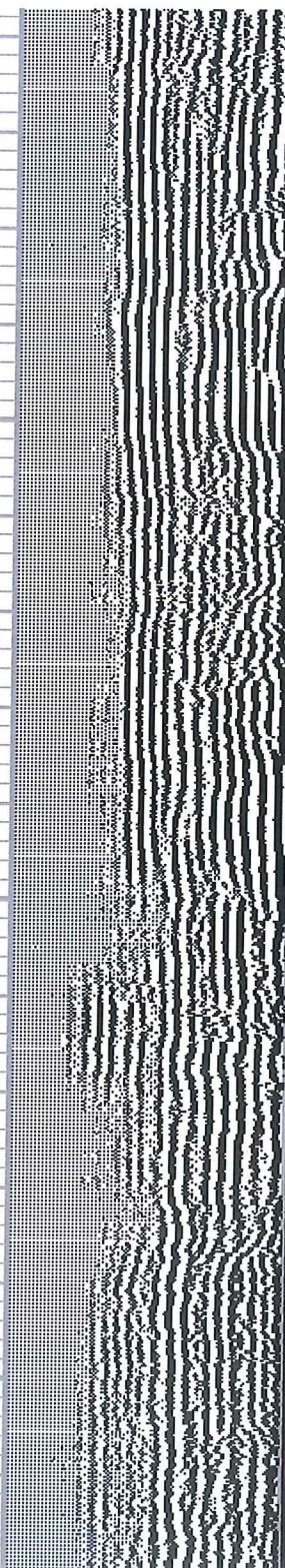
7150

7200

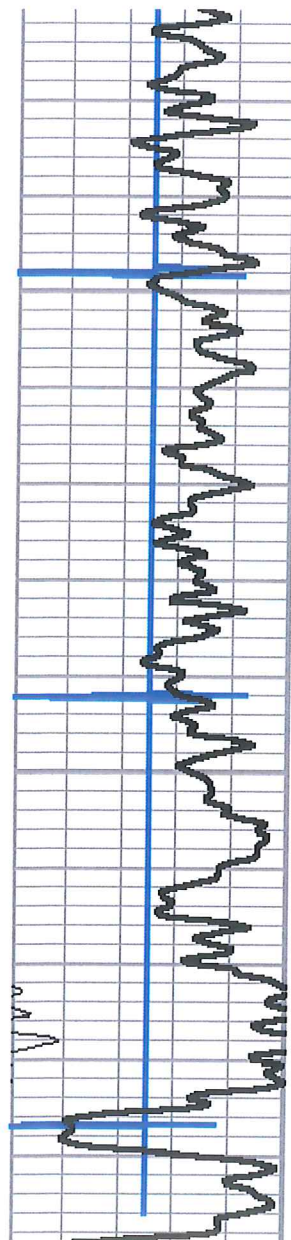


123

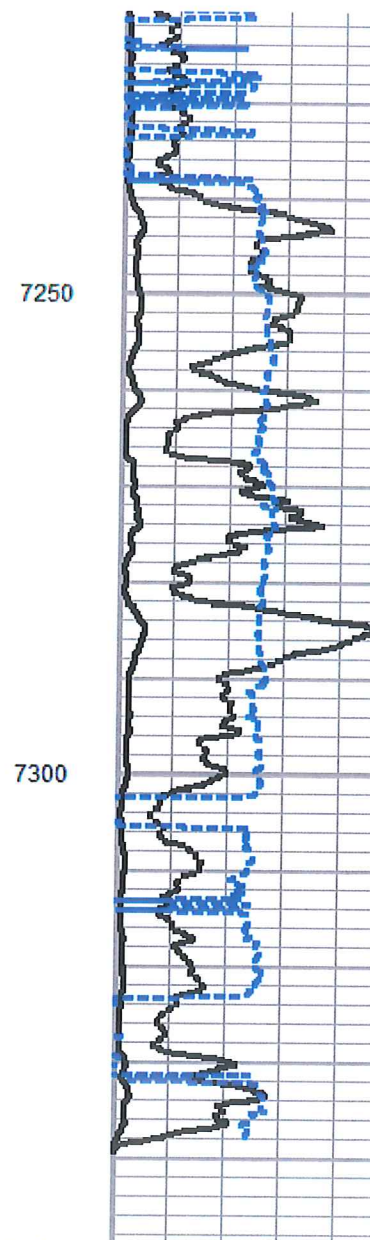
124



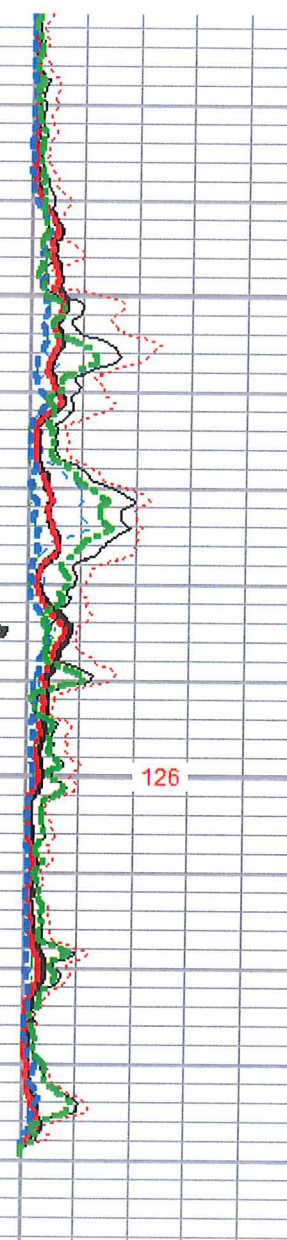




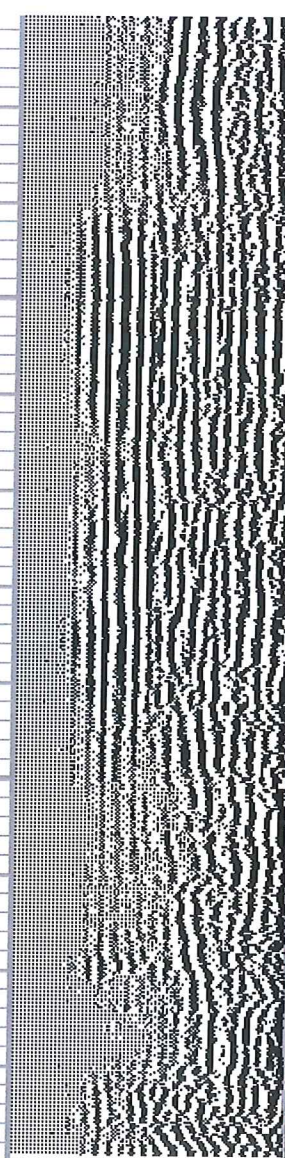
-2	CCL	2
0	GR (GAPI)	200
200	GR (GAPI)	400



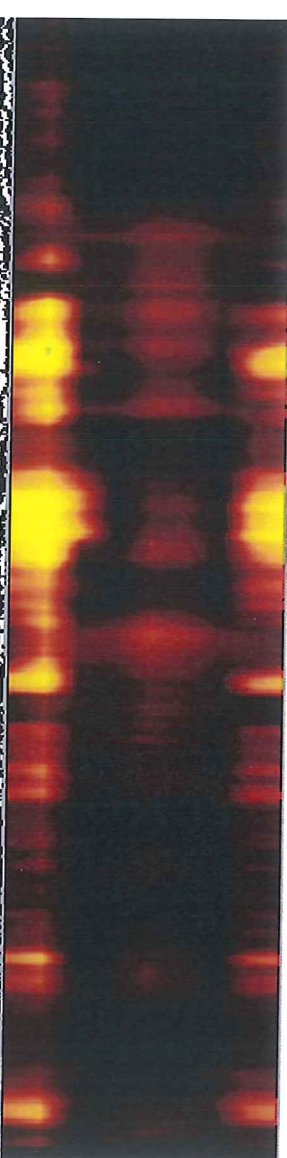
0	AMP (mV)	100
0	AMPx10 (mV)	10
350	TT (usec)	250



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
-----	-----	------



1	Cement Map	8
3		95

TEMP  
(degF)

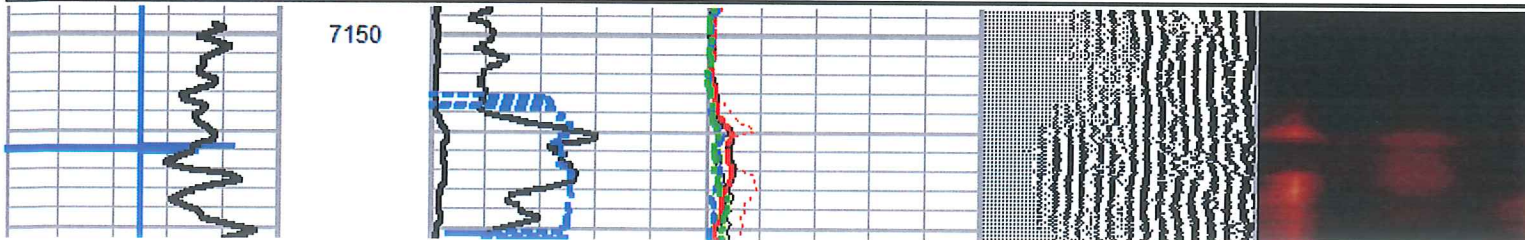


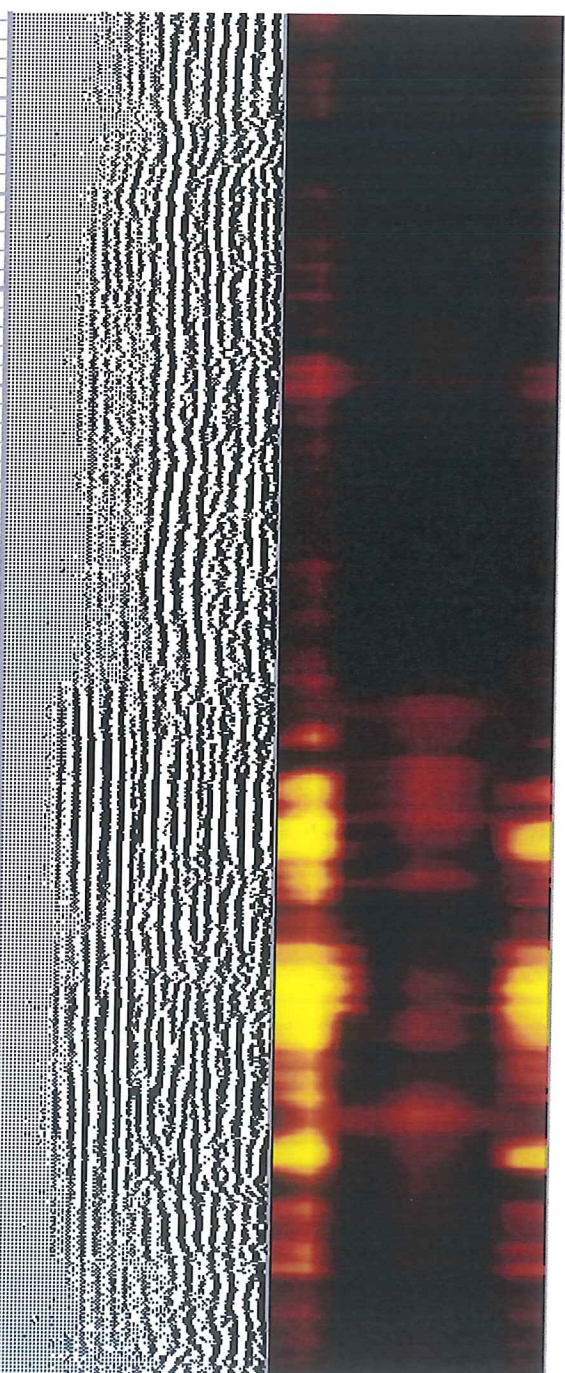
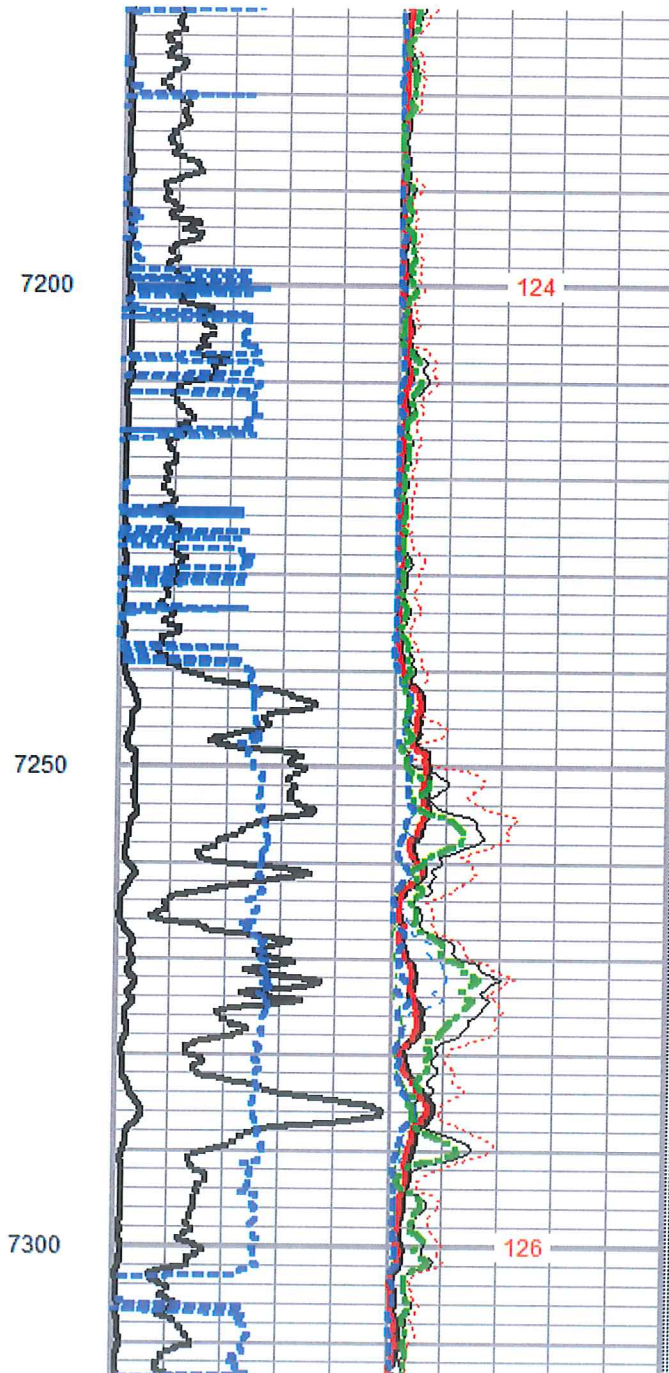
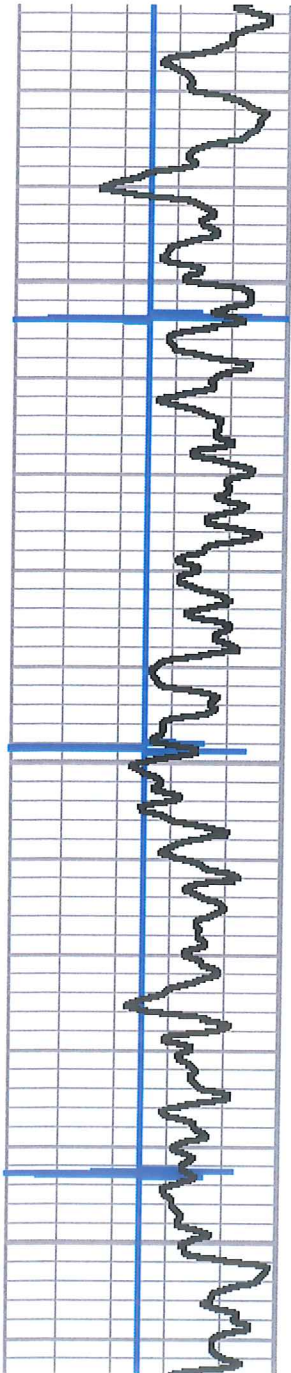
# REPEAT SECTION

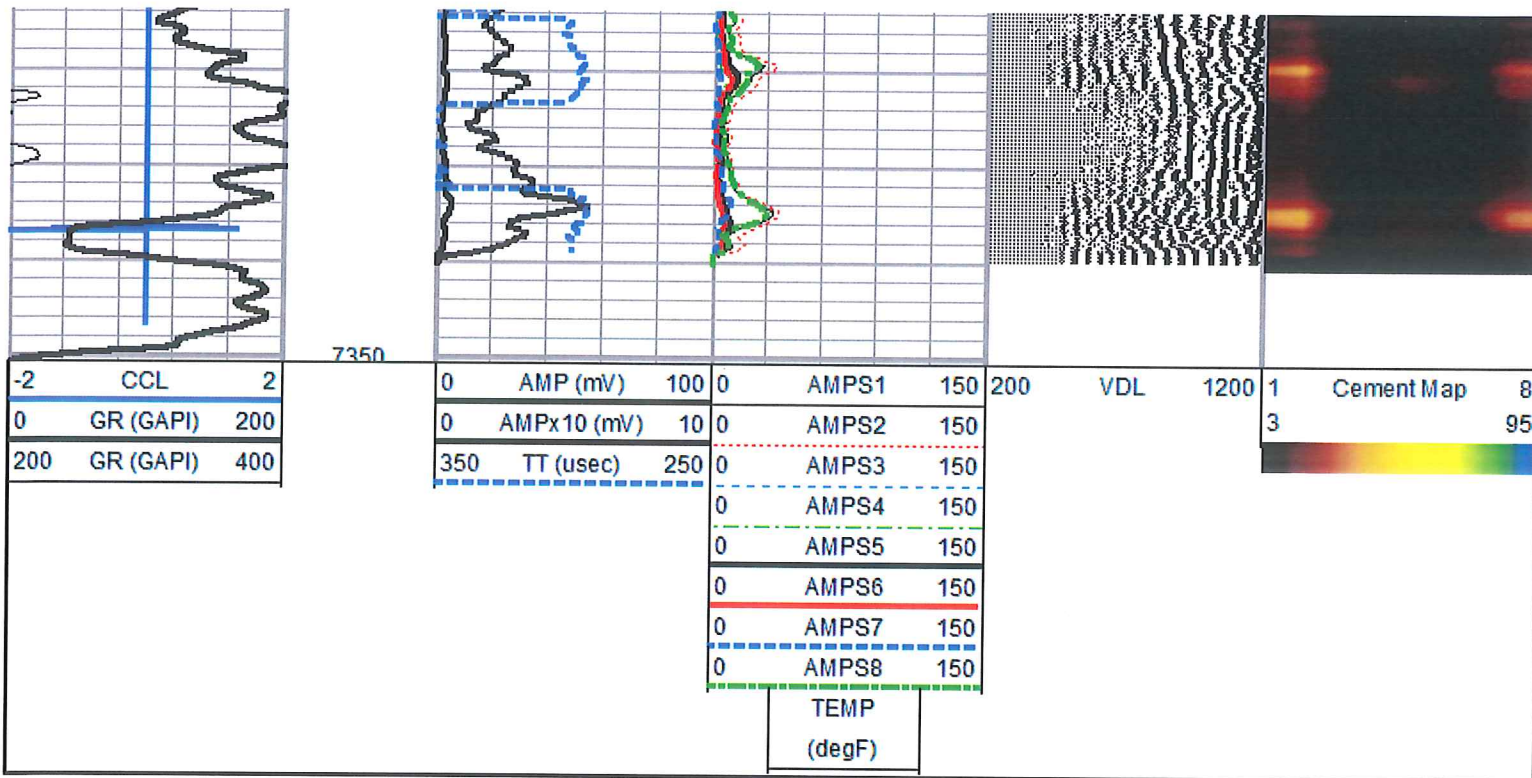
Database File: gains 1h.db  
Dataset Pathname: pass2  
Presentation Format: scbl02  
Dataset Creation: Sat Nov 08 10:56:58 2014 by Log 7.0 B1  
Charted by: Depth in Feet scaled 1:240

-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					
CCL	3.63		PTS275	2.88	2.75	24.00
GR	0.89		GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.54	2.75	30.00
		Dataset: gains 1h.db: field/well/run 1/pass3 Total Length: 19.70 ft Total Weight: 178.00 lb O.D.: 2.75 in				