

Casing Inspection

Company	JT3 DCS
Well	Well #24
Field	MFC Field
County	US Land
State	Texas
API#	00-000-00000
Date	12-07-2025
Top of Log	74.4'
Bottom of Log	2183.4'
KB	
GL	
Logged by	T Ogle
Witnessed by	S Ogle
Location	Pearland, TX
Processed by	JT3 DCS, Houston, TX
	Tim Ogle



Casing	Size	Weight	From	To
Record	(in)	(lb/ft)	(Ft)	(Ft)
Surface			Surface	
Production	5.5"	23#	Surface	9560'

Any interpretation of logs or survey, either through optical or electronic processing means or otherwise, or any recommendation or description of any reservoir based on such interpretation of other data, are opinions based upon measurements, assumptions and empirical relationships, which inferences and assumptions are not incapable of error. We cannot and do not guarantee the accuracy, correctness or completeness of such interpretations, recommendations or descriptions and Company agrees that we shall not be liable or responsible for any loss, cost, damage or expense accrued or sustained by Company resulting directly or indirectly therefrom. Under no circumstances should any such interpretation, recommendation, or description be relied upon as the basis for any procedure conducted in or on a well which involves any risk to the safety of personnel, equipment or venture. Company shall always have full responsibility for such decisions and for all decisions concerning other procedures relating to drilling, completion or production operations.

Interpretation Summary

Internal inspection was carried out with the 24 Arm Caliper.

MFC
Depth interval processed: 77.4' - 2180.4'. Number of joints processed: 54 Joints.

There are 47 joints of class 1 corrosion (0% - 15%),
6 joints of class 2 corrosion (15% - 30%),
0 joints of class 3 corrosion (30% - 50%),
1 joints of class 4 corrosion (50% - 100%),

The worst Penetration is 100.0% (1.107 in) in Joint 50 at a depth of 2026.50 Ft

The worst Showing Metal Loss is 100.0% in Joint 50

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The worst Penetrations and Projections are shown in the tables below

The Well Log, the corresponding charts, diagrams, and well trajectory, are shown below

Processing was done in CardLine software. Processed By: JT3 Data Consulting Services
Contact Tim Ogle (346) 617-0639

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Measured Logs

This interpretation is based on Data Recorded with the use of a Multi-Finger Caliper Tool. The MFC is used to detect casing deformation, bending, fractures, holes, and inner wall corrosion by using independent measuring fingers. The logging data is processed to provide casing inner face imaging, circumferential profile imaging, and cylindrical three dimensional imaging to clearly reflect casing integrity. This approach enables inside casing wear or damage detection. The inside diameter of pipe is calculated based on multi-finger caliper measurement.

Before Interpretation, The MFC data is checked for Calibrations, Pre & Post Verifications, and Anomalies encountered during the logging process.

Critical Note: It is extremely important that we have all of the information available about the well and the problem that is being investigated, the data collected is critical and it is important that all of the Calibration and Verification steps be followed

Log Quality Control

Company	JT3 DCS
Well	Well #24
Log Date	12/7/2025

5.5	in	OD of Inspected Pipe
23	#	Weight
4.6	in	ID
0.415	in	Wall Thickness
0.363	in	MIN Wall Thickness API



Run 1:	Ran in hole with 24-Arm Multi-Finger Caliper

Client Supplied Data		Log Quality Control		Interpretation Parameters	
Y	Database .db File	Y	Before Calibration	N	Data Merge
Y	.LAS File	Y	After Calibration	Y	Data Filtering
Y	Field Print	Y	Acceptable Centralization	N	Depth Corrected
Y	Wellbore Diagram	Y	Excentralization Required	Y	ECCE Corrected
Y	Completion Report	N	Bad Fingers	N	Bad Fingers Corrected
Y	Job Log	Y	Tool Sticking	Y	Default Grading (OTCG Classification)
N	Cement Bond Log	Y	GJ Penetration %	N	Client Specified Grading
N	Casing Grade	Y	GJ Wall Loss %	Y	Burst Pressure Calculated

Grade	Corrosion %
1	0-15%
2	15->30%
3	30->50%
4	50->100%
Grade	Wall Loss %
1	0-15%
2	15->30%
3	30->50%
4	50->100%
Grade	Penetration %
1	0 > 10%
2	10 > 25%
3	25 > 50%
4	50 > 75%
5	75 > 100%

Multi-Finger Caliper Logging

Multi-Finger Caliper (MFC) logging uses multiple measuring arms to record inner diameter of the casing wall. The arms independently measure radius between middle tool axis and casing wall. The MFC survey shows quantity of inside wall damage as well as position of damage. The Caliper survey will determine the extent of wear and corrosion, and detect holes inside casing or tubing string.

The Multi-Finger Caliper has 24, 40, 56 and 60 "measuring arms", upon number of arms depends tools diameter and maximum casing diameter. Calipers should be centralized during operation allowing all measuring fingers to be connected to inner casing wall. Some tool models themselves contain roller stabilizers, but the recommendation is to have at least two roller or spring centralizers in vertical holes and four in very deviated or horizontal well bores. Each caliper finger is connected to an independent non-contact displacement LVDT Sensor that features small sizes, long service life, and high measurement accuracy. The MFC transmits all arms independently over wireline, as well as head voltage, well inclination, azimuth and temperature. Data regarding minimum, maximum and average inner diameter are recorded in a database, in real time during operations.

Each measuring finger has a carbide tip to protect the area of greatest wear. As the caliper moves over casing, the measuring arms follow the contour of the casing inside wall. When measuring fingers are opened or closed, the mechanical actuating mechanism of the tool convert the radial movement of the measuring finger to axial displacement of the iron core of placement transducer. Displacement of inner core is converted to output electrical signal as a result of the axial iron core displacement of placement transducer. Signal is subsequently enter A/D converter and as telemetry signal sent to surface logging equipment.

Advances in technology has produced Multi-Finger Calipers capable of Memory Operations. This expands the calipers capability to Slickline and Coil Tubing operations. Typically the Memory Controller is programmed and powered by a high capacity lithium battery. The memory toolstring is run in hole in conjunction with a Time Depth Controller. Data vs. Time, and Time vs. Depth data are combined post logging to produce the Multi-Finger Caliper Log.

Data discrepancies can arise due to changes in logging methods, speed, or pipe properties because these factors directly influence how data is captured, processed, and interpreted. Here is a brief explanation:

1. Logging Method: Changes in the tools, sensors, or algorithms used to record data can alter the way information is collected, introducing variations.
2. Speed of Data Collection: If the speed at which data is logged changes (e.g., increasing sampling rates), it can capture more detailed variations in the system, which may not have been apparent before.
3. Pipe Properties: Variations in pipe material, size, roughness, or age can affect the data captured. These physical changes can lead to different data outputs, even under similar operating conditions.

Data inconsistencies in well logging using a Multi-Finger Caliper tool can arise due to several factors:

1. Tool Position in the Well: If the caliper tool is not centralized or is tilted within the wellbore, the measuring fingers may not accurately contact the wellbore wall. This leads to irregular or incomplete measurements, particularly in non-circular boreholes.
2. Tool Rotation: The caliper tool will rotate due to the forces applied by the wireline cable, this will effect the data collected as the measuring fingers may not follow the exact path as previous logging runs.
3. Distance Between Measuring Fingers: The spacing of the caliper fingers affects the resolution of the measurement. Wider spacing might miss small-scale irregularities, while closely spaced fingers may provide more detailed data. If the spacing is inconsistent, it can lead to gaps or overlaps in the recorded data.
4. Logging Speed: The speed at which the caliper tool moves through the well affects the frequency of data acquisition. If the logging speed is too fast, the tool might skip over subtle changes in the borehole geometry, leading to inaccurate or incomplete data. Conversely, slow logging speeds provide more detailed measurements but increase operation time and cost.

Together, these factors can result in data inconsistencies when comparing historical and current datasets.

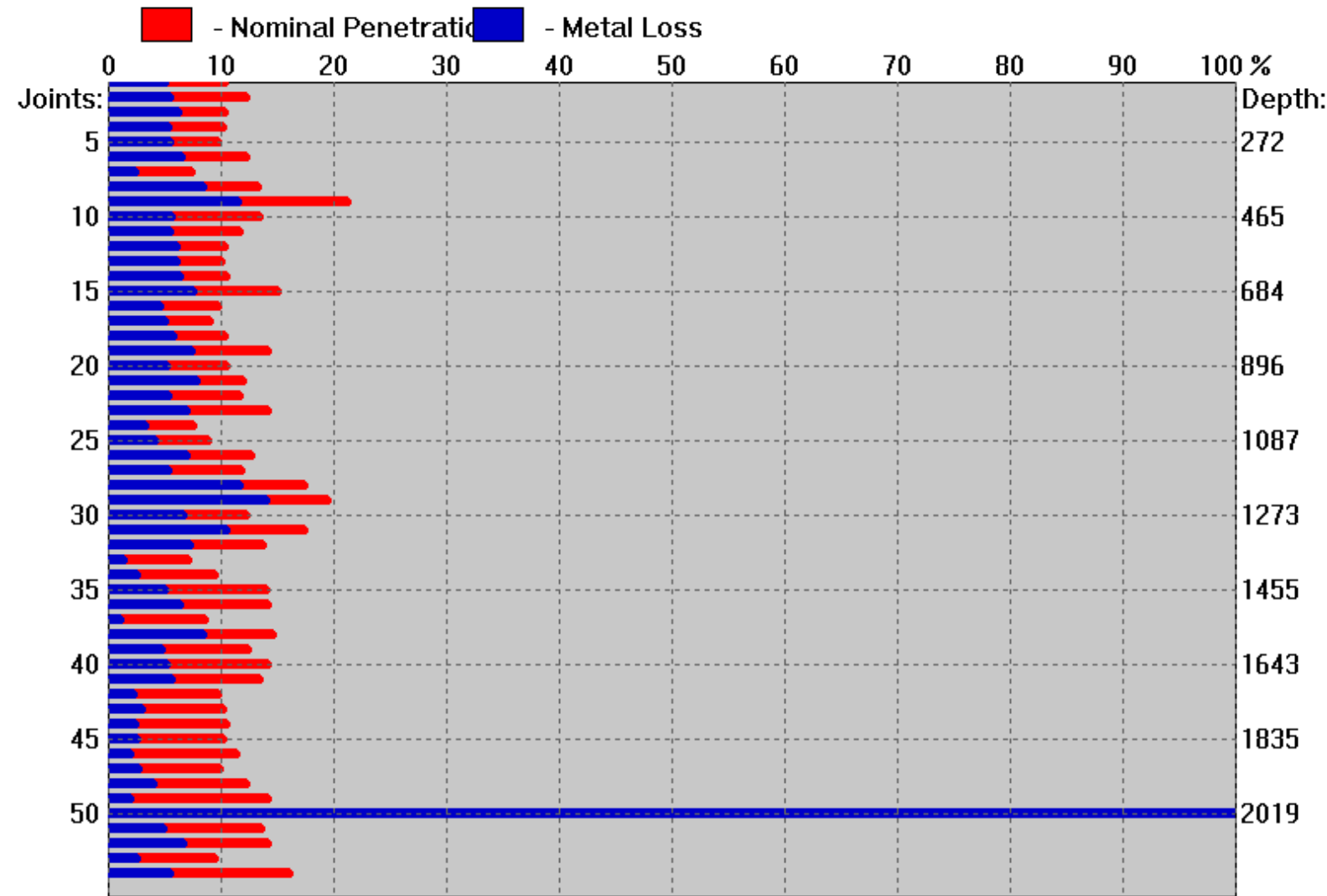
Toolstring Diagram

Sensor	Offset (ft)	Schematic	Description	Length (ft)
			WS_WTC-WTC51 (8060-WTC51) Hunting WS 1 11/16" Telemetry	1.80
CRCCnt	8.74			
FrmCnt	8.74			
WTSTime	8.74			
WTSTemp	8.74			
CHV	8.74		WS_RCT-RCT11 (8070-RCT11) Hunting WS 1-11/16" Single Roller Centralizer (3-arm)	2.05
Meas	4.45		WS_MCT-MCT41 (8020-MCT41) Hunting WS 1 11/16" Multi-finger Caliper Tool-24 Finger	4.38
MFCBEAR	2.30			
MFCACCY	2.30			
MFCACCX	2.30			
Aux1	2.30		WS_RCT-RCT11 (RCT11-XXXXXX) Hunting WS 1-11/16" Single Roller Centralizer (3-arm)	2.05
			WS_BWS-BWS_168 Hunting WS 1-11/16" Bull Nose Pressure Cap	0.25

Hunting Titan WS Pipe Integrity Suite_35K: String length: 10.54 ft Weight: 42.68 lb Max. O.D.: 1.69 in

Depth Profile - MFC

MFC Penetration and Metal Loss Depth Profile



5.5" 23# Casing

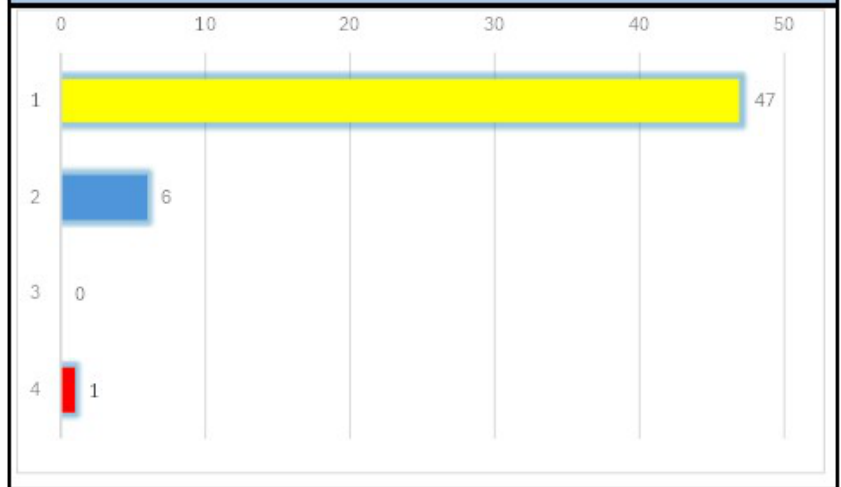
Graded Joints - Corrosion %

5.500 in Casing OD
23 # Casing Weight
4.6 in Casing ID
0.415 in Wall Thickness
0.363 in MIN Wall Thickness API

Grade	Corrosion
1	0-15%
2	15-30%
3	30->50%
4	50->100%

Grade	Joints
1	47
2	6
3	0
4	1
	54

Graded Joints MFC - Corrosion %



5.5" 23# Casing

Graded Joints - Wall Loss %

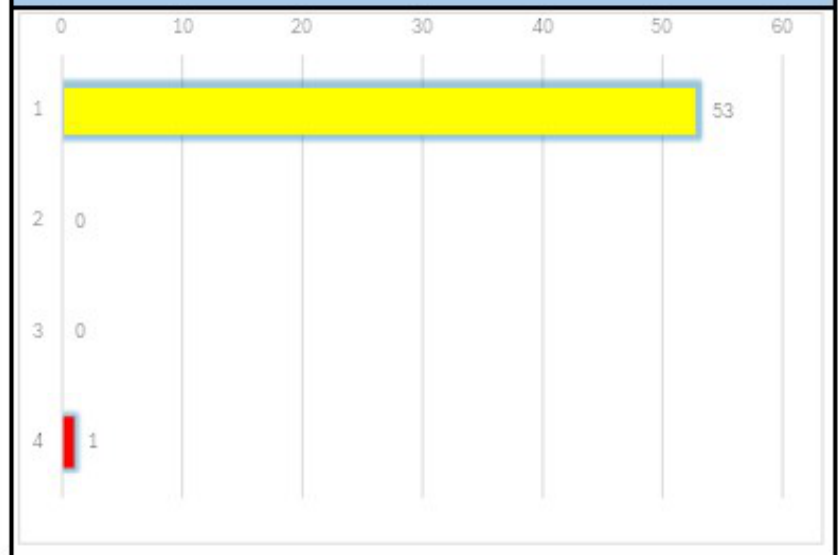
5.500 in Casing OD
23 # Casing Weight
4.6 in Casing ID
0.415 in Wall Thickness
0.363 in MIN Wall Thickness API

Grade	Wall Loss %
1	0-15%
2	15-30%
3	30->50%
4	50->100%

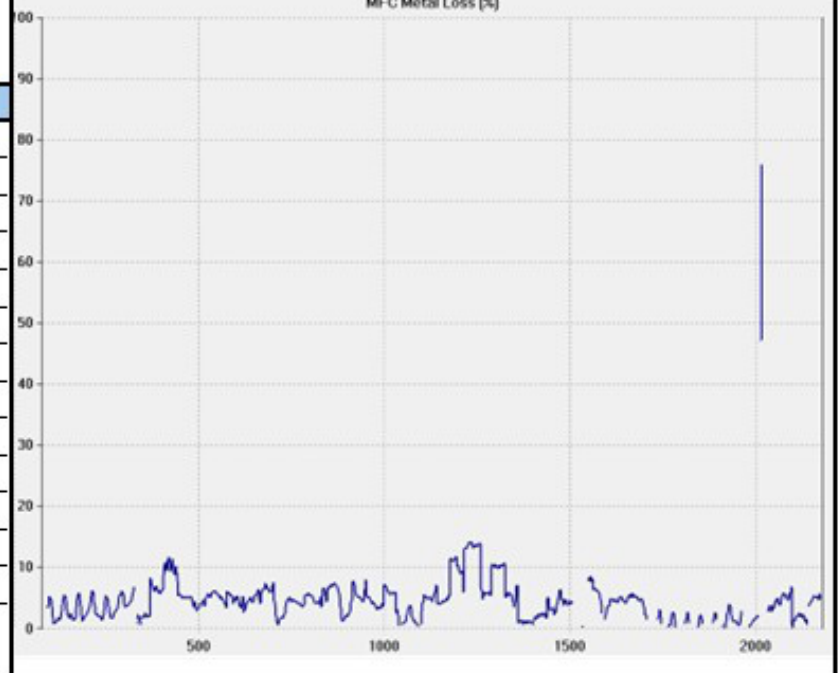
Grade	Joints
1	53
2	0
3	0
4	1
	54

Top 15 Worst Joints	
	Showing Metal Loss 100.0% in Joint 50
	Showing Metal Loss 14.1% in Joint 29
	Showing Metal Loss 11.7% in Joint 28
	Showing Metal Loss 11.6% in Joint 9
	Showing Metal Loss 10.6% in Joint 31
	Showing Metal Loss 8.5% in Joint 38
	Showing Metal Loss 8.5% in Joint 8
	Showing Metal Loss 7.9% in Joint 21
	Showing Metal Loss 7.6% in Joint 15
	Showing Metal Loss 7.4% in Joint 19
	Showing Metal Loss 7.2% in Joint 32
	Showing Metal Loss 7.1% in Joint 26
	Showing Metal Loss 7.0% in Joint 23
	Showing Metal Loss 6.7% in Joint 52
	Showing Metal Loss 6.6% in Joint 30

Graded Joints MFC - Wall Loss %



MFC Metal Loss (%)



5.5" 23# Casing

Graded Joints - Penetration %

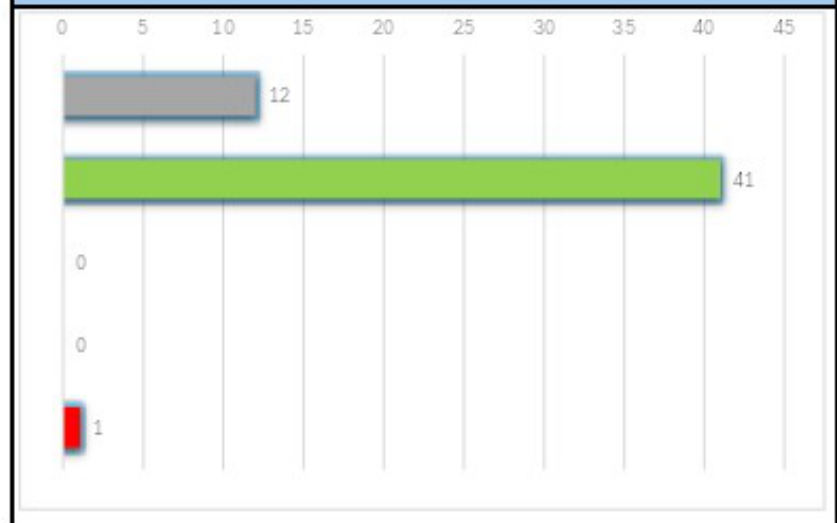
5.500 in Casing OD
23 # Casing Weight
4.6 in Casing ID
0.415 in Wall Thickness
0.363 in MIN Wall Thickness API

Grade	Penetration %
1	0->10%
2	10->25%
3	25->50%
4	50->75%
5	75->100%

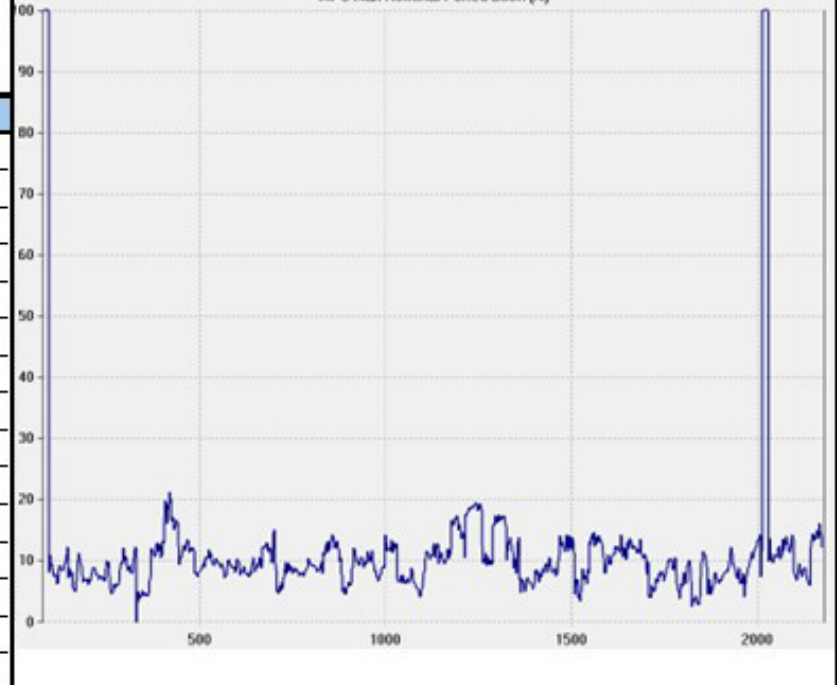
Grade	Joints
1	12
2	41
3	0
4	0
5	1
	54

Top 15 Worst Joints	
Penetration 100.0% (1.107 in) in Joint 50 at depth 2026.50 Ft	
Penetration 21.2% (0.089 in) in Joint 9 at depth 419.00 Ft	
Penetration 19.5% (0.082 in) in Joint 29 at depth 1245.00 Ft	
Penetration 17.4% (0.073 in) in Joint 31 at depth 1304.60 Ft	
Penetration 17.4% (0.073 in) in Joint 28 at depth 1193.10 Ft	
Penetration 16.1% (0.068 in) in Joint 54 at depth 2167.90 Ft	
Penetration 15.0% (0.063 in) in Joint 15 at depth 700.50 Ft	
Penetration 14.7% (0.062 in) in Joint 38 at depth 1561.20 Ft	
Penetration 14.2% (0.06 in) in Joint 49 at depth 2007.80 Ft	
Penetration 14.2% (0.06 in) in Joint 40 at depth 1633.90 Ft	
Penetration 14.2% (0.06 in) in Joint 36 at depth 1488.00 Ft	
Penetration 14.2% (0.06 in) in Joint 19 at depth 855.90 Ft	
Penetration 14.2% (0.06 in) in Joint 23 at depth 1000.80 Ft	
Penetration 14.2% (0.06 in) in Joint 52 at depth 2095.40 Ft	
Penetration 14.0% (0.059 in) in Joint 35 at depth 1469.30 Ft	

Graded Joints MFC - Penetration %

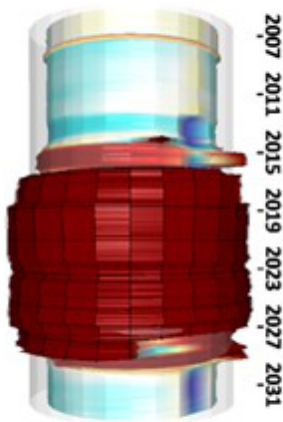


MFC Max Nominal Penetration (%)

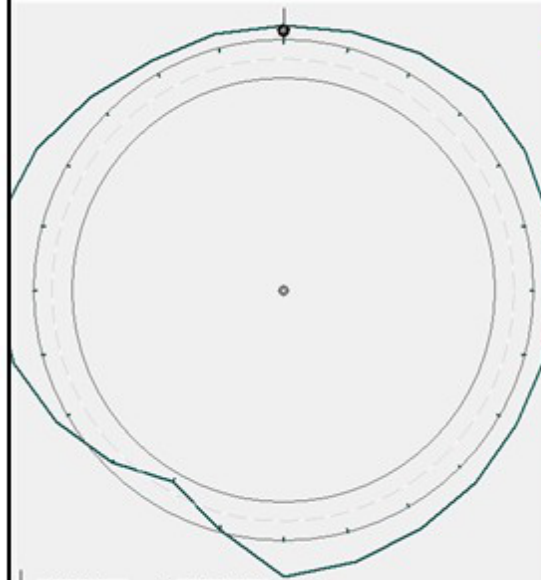


Joint 50 - Parted Casing

3D Viewer

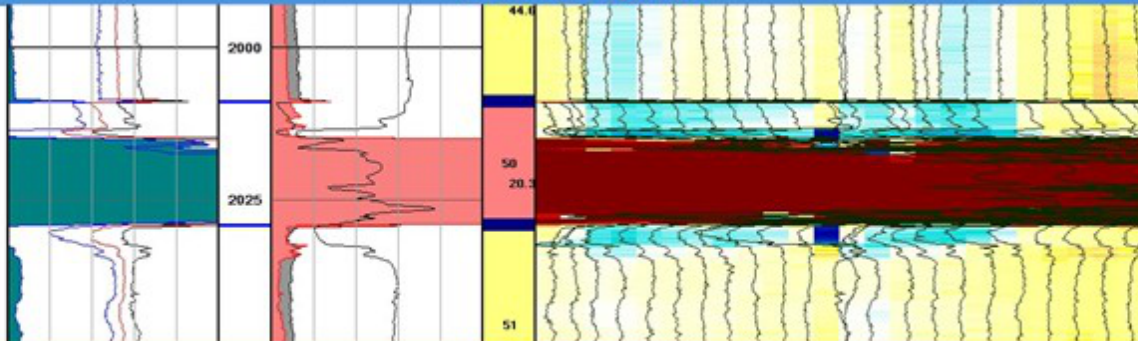


Cross Section View

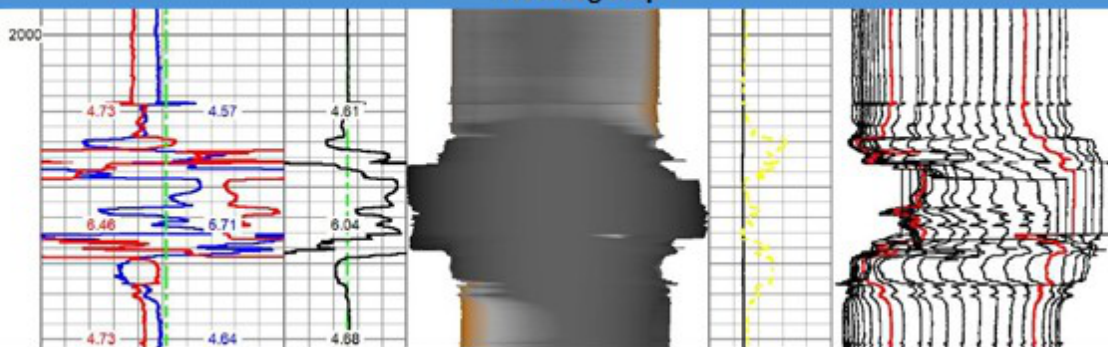


Name	Parameter
Joint	# 49
Depth	2018.70 ft
ID	4.6595 in
OD	5.5000 in
Wall Thickness	0.4202 in
Nominal	Arm # 20
Arm Radius	3.212 in
Pit mm/in	0.8821 in
Pit %	209.9 %
Pit % Average	151.5 %
Elliptical	Arm # 13
Pit mm/in	0.8572 in
Pit %	204.0 %
Mode ID	Arm # 13
Pit mm/in	0.8507 in
Pit %	208.5 %
ModeID Rad	2.342 in
Min Diameter	5.427 in
Max Diameter	6.168 in
Eccentricity	0.552 in
Ovality	0.741 in
Ovality	15.91 %
Metal Loss in^2	10.683 in...
Metal Loss %	159.29

Processed Log Strip



Field Log Strip



Joint Summary

1	Class 1	0 - 15 %
2	Class 2	15 - 30 %
3	Class 3	30 - 50 %
4	Class 4	50 - 100 %

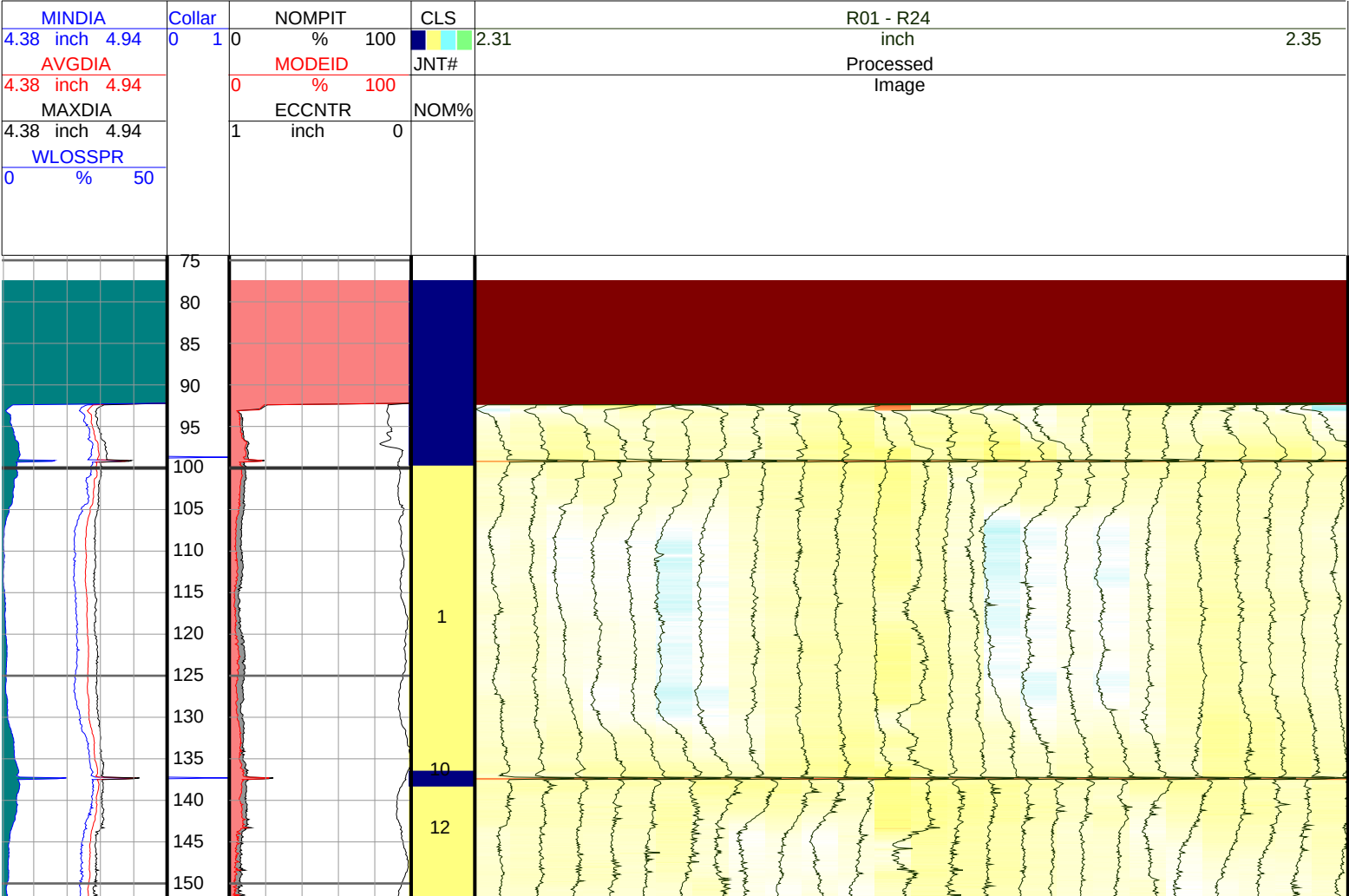
Joint	Depth	Depth	Joint	Corrosion	Max Pit	Max Pit	Max Pit	Metal	Metal	Ovality	Eccentr	Min	Max	Min Diam	Burst
Number	From	To	Length	Class	Nominal	Nominal	Position	Loss	Loss Pos	Level	Level	Diameter	Diameter	Position	Pressure
#	Ft	Ft	Ft	#	%	in	Ft	%	Ft	%	in	in	in	Ft	psi
1	98.7	137.3	38.6	1	10.4	0.044	136.4	4.9	136.2	1.6	0.074	4.623	4.725	113.1	16573
2	137.3	176	38.7	1	12.3	0.052	143.3	5.5	174.6	1.5	0.091	4.631	4.735	161.8	16224
3	176	214.8	38.8	1	10.4	0.044	177.5	6.2	213.8	1.9	0.084	4.624	4.732	183.9	16575
4	214.8	252.5	37.7	1	10.2	0.043	251.6	5.3	250.7	1.3	0.063	4.639	4.732	237.6	16604
5	252.5	291	38.5	1	9.8	0.041	253.9	5.5	287.3	1.1	0.094	4.647	4.738	263.6	16673
6	291	329.6	38.6	1	12.2	0.051	326.9	6.6	326.4	1.7	0.083	4.65	4.745	301.2	16228
7	329.6	368.8	39.2	1	7.5	0.031	367.9	2.4	354.8	0.9	0.081	4.607	4.697	330.6	17107
8	368.8	403.5	34.7	1	13.3	0.056	402.5	8.5	369.8	1.3	0.157	4.682	4.752	389.5	16031
9	403.5	443	39.5	2	21.2	0.089	419	11.6	418.8	1.8	0.156	4.692	4.793	405.5	14566
10	443	487	44	1	13.4	0.056	465.4	5.7	447.5	1.8	0.128	4.65	4.75	454.7	16012
11	487	532.7	45.7	1	11.7	0.049	524.9	5.6	524.9	1.5	0.108	4.646	4.739	495.6	16327
12	532.7	575.5	42.8	1	10.3	0.043	544.6	6.1	538.4	1.2	0.159	4.664	4.741	571.9	16585
13	575.5	621	45.5	1	10.1	0.043	599.8	6.1	577.8	1.3	0.192	4.656	4.737	614.4	16617
14	621	666.9	45.9	1	10.5	0.044	660.9	6.4	660.9	2.2	0.223	4.627	4.734	622	16552
15	666.9	701.7	34.8	2	15	0.063	700.5	7.6	700.7	1.3	0.223	4.676	4.76	668.9	15711
16	701.7	739.1	37.4	1	9.8	0.041	738.2	4.6	738	1.3	0.213	4.632	4.722	710.4	16674
17	739.1	784.8	45.7	1	9.1	0.038	745.8	5.1	744.9	1.2	0.238	4.662	4.729	783.9	16808
18	784.8	830.7	45.9	1	10.3	0.043	792.3	5.8	795.9	1.3	0.236	4.653	4.729	829.8	16586
19	830.7	877.7	47	1	14.2	0.06	855.9	7.4	866.8	2.1	0.24	4.628	4.752	843.8	15866
20	877.7	914.7	37	1	10.4	0.044	879.5	5.2	879	1.4	0.222	4.642	4.737	889.2	16559
21	914.7	952	37.3	1	12	0.051	915.9	7.9	950.6	1.5	0.234	4.653	4.748	944.2	16265
22	952	997.8	45.8	1	11.7	0.049	963.7	5.4	953.4	1.5	0.192	4.653	4.751	996.3	16328
23	997.8	1032.3	34.5	1	14.2	0.06	1000.8	7	1002.2	1.6	0.24	4.669	4.76	1031.3	15860
24	1032.3	1068.2	35.9	1	7.6	0.032	1046.9	3.4	1065.9	1.7	0.2	4.616	4.712	1041.5	17088
25	1068.2	1106	37.8	1	8.8	0.037	1070.9	4.2	1104.6	1.4	0.223	4.62	4.72	1095.5	16858
26	1106	1142.8	36.8	1	12.7	0.054	1140.1	7.1	1141.2	1.5	0.275	4.667	4.751	1112.1	16133
27	1142.8	1176.9	34.1	1	11.9	0.05	1167.7	5.4	1173.9	1.5	0.227	4.665	4.745	1148.2	16295
28	1176.9	1215.2	38.3	2	17.4	0.073	1193.1	11.7	1193	1.5	0.285	4.676	4.797	1213.3	15280
29	1215.2	1258.3	43.1	2	19.5	0.082	1245	14.1	1227.9	1	0.303	4.76	4.815	1216.3	14879
30	1258.3	1288.4	30.1	1	12.3	0.052	1259.4	6.6	1260.2	1.3	0.314	4.66	4.747	1267	16216
31	1288.4	1325.8	37.4	2	17.4	0.073	1304.6	10.6	1324.3	1.3	0.315	4.716	4.778	1300.3	15267
32	1325.8	1359.7	33.9	1	13.8	0.058	1358.3	7.1	1358.7	1.5	0.333	4.666	4.753	1348.9	15935
33	1359.7	1402.3	42.6	1	7.2	0.03	1382.8	1.4	1371.9	1.2	0.297	4.629	4.703	1400.9	17167
34	1402.3	1437.9	35.6	1	9.5	0.04	1431.9	2.6	1431.3	1.4	0.32	4.64	4.718	1403.9	16728
35	1437.9	1471.5	33.6	1	14	0.059	1469.3	5.1	1469.1	1.2	0.313	4.654	4.739	1457.1	15903
36	1471.5	1508.1	36.6	1	14.2	0.06	1488	6.4	1473.5	2	0.374	4.65	4.746	1495.1	15865
37	1508.1	1548.4	40.3	1	8.6	0.036	1530.5	1.1	1546.9	2	0.331	4.605	4.7	1545.2	16904
38	1548.4	1587.7	39.3	1	14.7	0.062	1561.2	8.5	1555.4	1.6	0.338	4.643	4.75	1586.8	15778

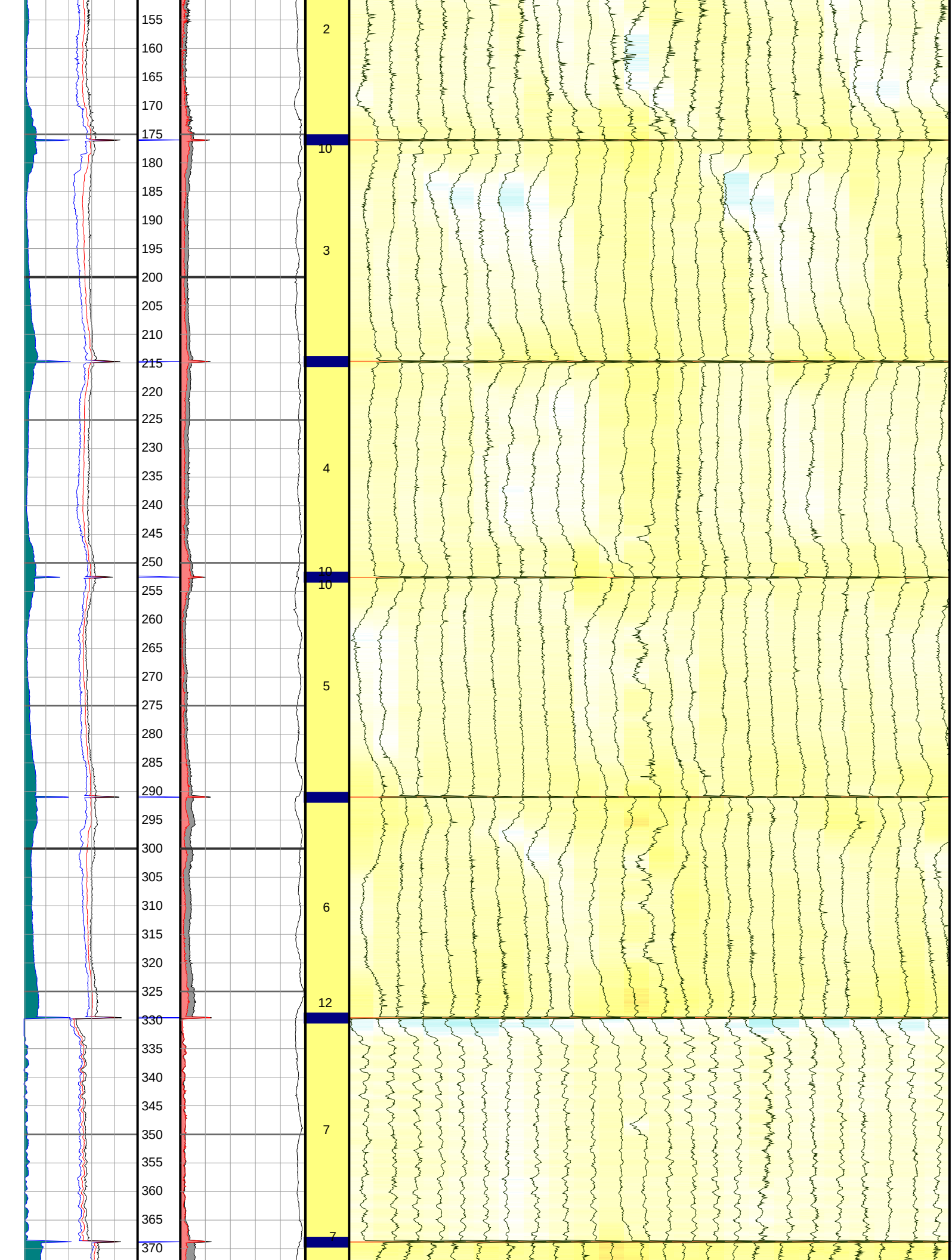
39	1587.7	1625.3	37.6	1	12.4	0.052	1621.7	4.7	1610.5	1.9	0.366	4.586	4.733	1588.7	16204
40	1625.3	1659.7	34.4	1	14.2	0.06	1633.9	5.3	1658.2	1.6	0.369	4.645	4.739	1626.5	15866
41	1659.7	1703	43.3	1	13.4	0.056	1686.6	5.7	1668	1.2	0.332	4.656	4.739	1702.1	16005
42	1703	1740.1	37.1	1	9.8	0.041	1706.8	2.2	1704	1.9	0.356	4.599	4.707	1716.9	16684
43	1740.1	1778.3	38.2	1	10.3	0.043	1765.8	3.1	1741.8	1.5	0.363	4.614	4.706	1751.1	16589
44	1778.3	1815.8	37.5	1	10.6	0.044	1779.9	2.4	1780	2	0.373	4.595	4.72	1792.7	16539
45	1815.8	1853.5	37.7	1	10.2	0.043	1851.8	2.6	1817.5	2.1	0.394	4.608	4.733	1824.5	16606
46	1853.5	1889.7	36.2	1	11.5	0.048	1855.3	2	1854.5	2.1	0.421	4.599	4.711	1862.2	16370
47	1889.7	1927.3	37.6	1	9.9	0.041	1926.2	2.6	1926.3	1.8	0.395	4.612	4.719	1900	16666
48	1927.3	1964.3	37	1	12.3	0.051	1930	4	1931	1.4	0.41	4.627	4.728	1947	16225
49	1964.3	2008.9	44.6	1	14.2	0.06	2007.8	2	2004.3	2.6	0.365	4.61	4.739	1987.9	15859
50	2008.9	2029.2	20.3	4	100	0.42	2015.1	203.4	2026.1	31.4	0.945	4.258	6.581	2014	0
51	2029.2	2062	32.8	1	13.7	0.057	2034.1	5	2058.5	4.2	0.793	4.488	4.761	2030.7	15966
52	2062	2098.2	36.2	1	14.2	0.06	2095.4	6.7	2096.8	1.3	0.467	4.662	4.742	2069	15869
53	2098.2	2142.2	44	1	9.5	0.04	2112.4	2.5	2117.1	1.5	0.457	4.621	4.705	2100.2	16731
54	2142.2	2175	32.8	2	16.1	0.068	2167.9	5.6	2172.4	2.6	0.498	4.63	4.757	2168.2	15519

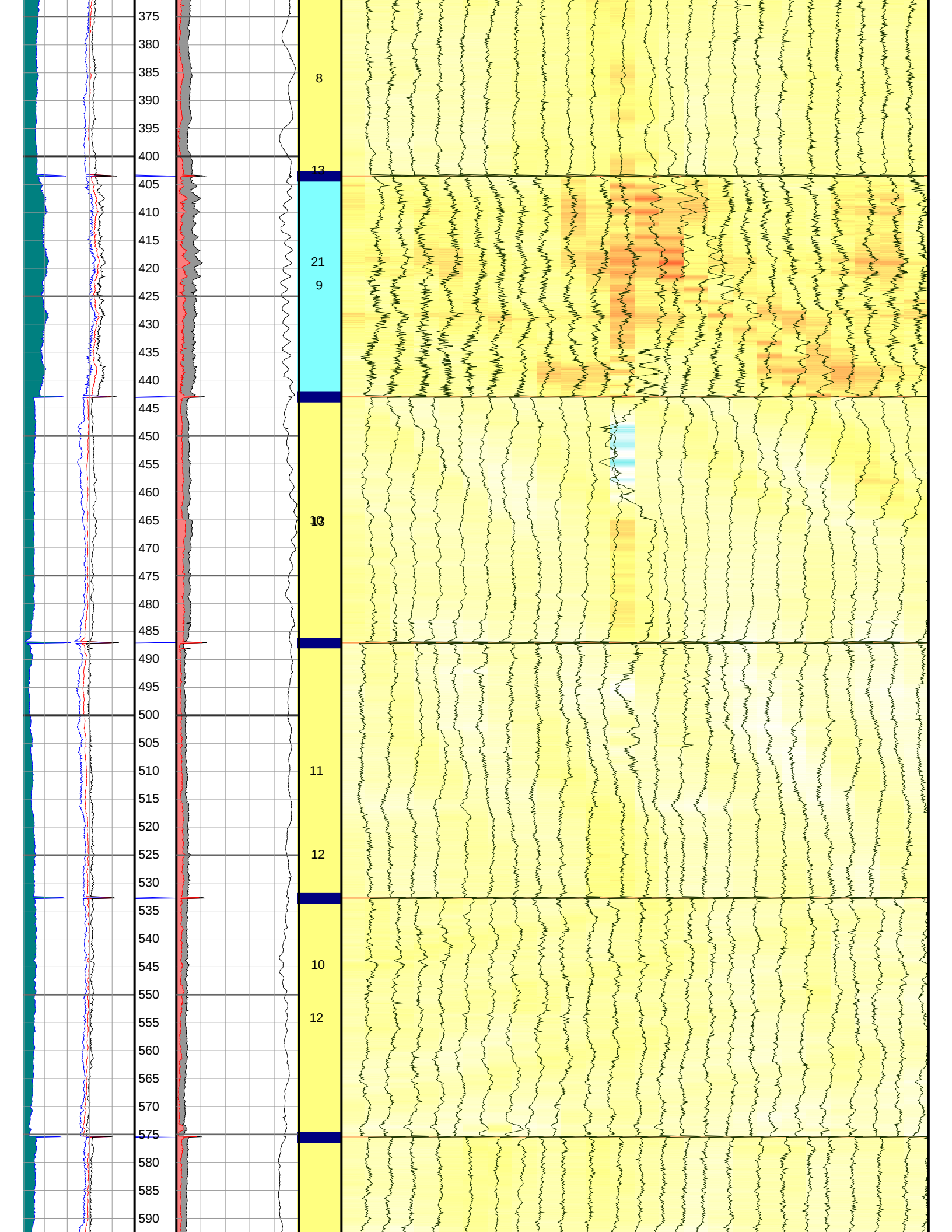
Curve Description

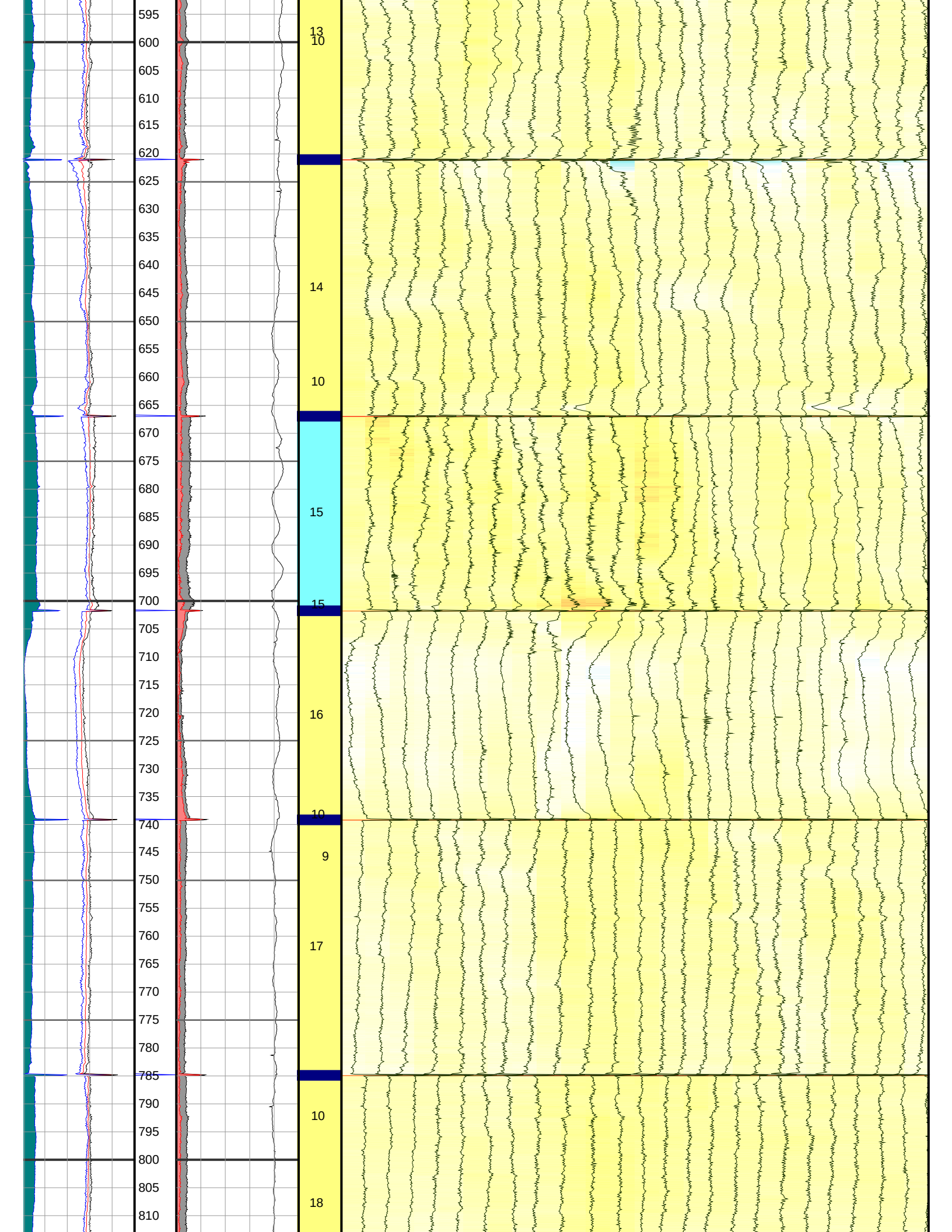
Curve	Description	Track	Units
WLOSSPR	Wall Loss in prc for current cross section	A	%
MINDIA	Minimum Diameter	A	in
AVGDIA	Average Diameter	A	in
MAXDIA	Maximum Diameter	A	in
Collar	Collar position	B	
NOMPIT	Nominal corrosion pit	C	%
MODEID	ModelD corrosion Pit (according to opt. radius)	C	%
ESSNTR	Essentricity (Deformation parameter)	C	in
Ovality	Ovalization curve relative ovality	N	%
RAW	Corrosion Class in Color: Gray Green Yellow Brown Red	D	Grade
JNT#	Joint Number in the mid of track	D	#
NOM%	Value of nominal Corrosion against max in Joint	D	%
R01-R24	24 Caliper Curves	E	%
Processed	Corrosion Image (Centralized and Filtered)	E	
LOG	MDT measure spectr Image Map in Logarithmic Scale	H	

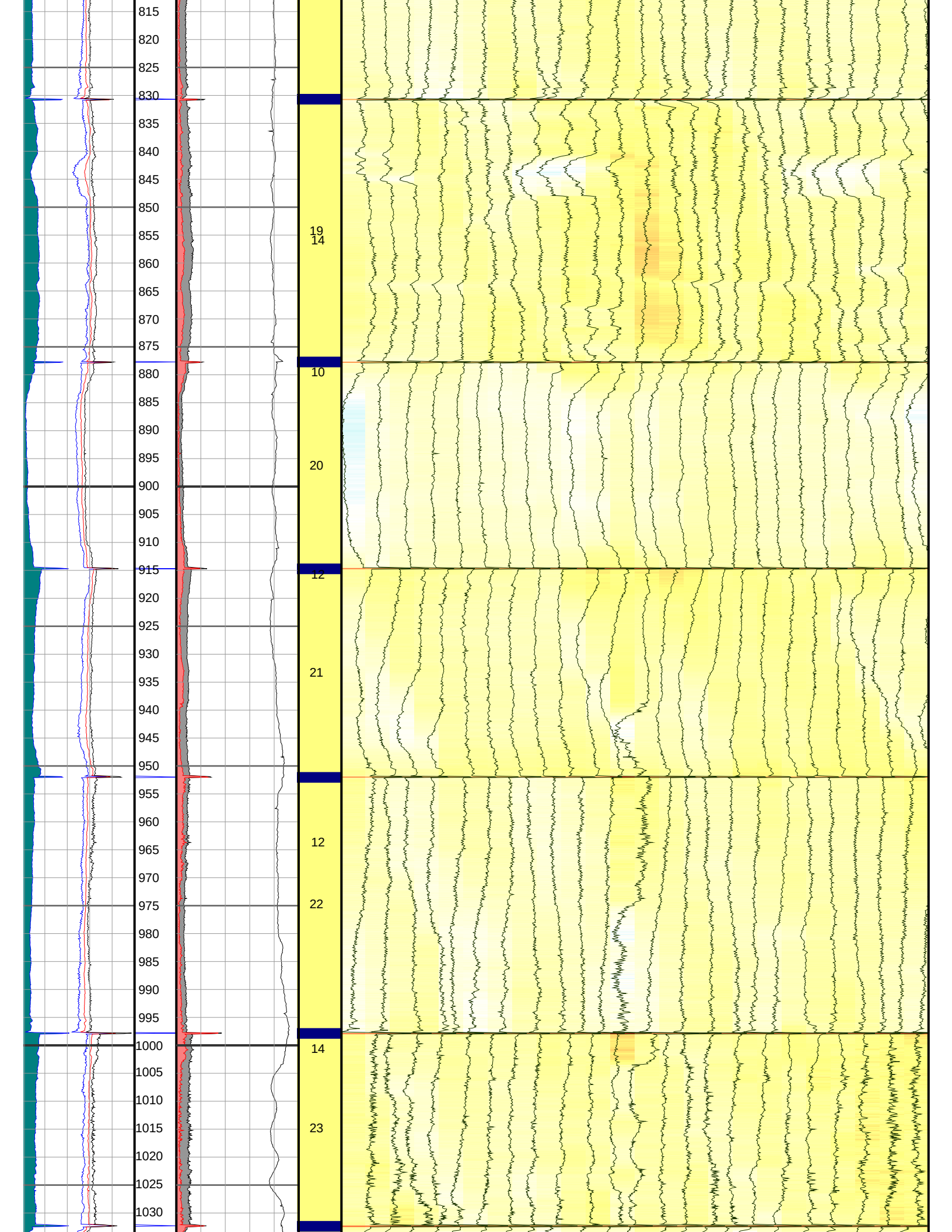
Well Log. Scale 1 : 240

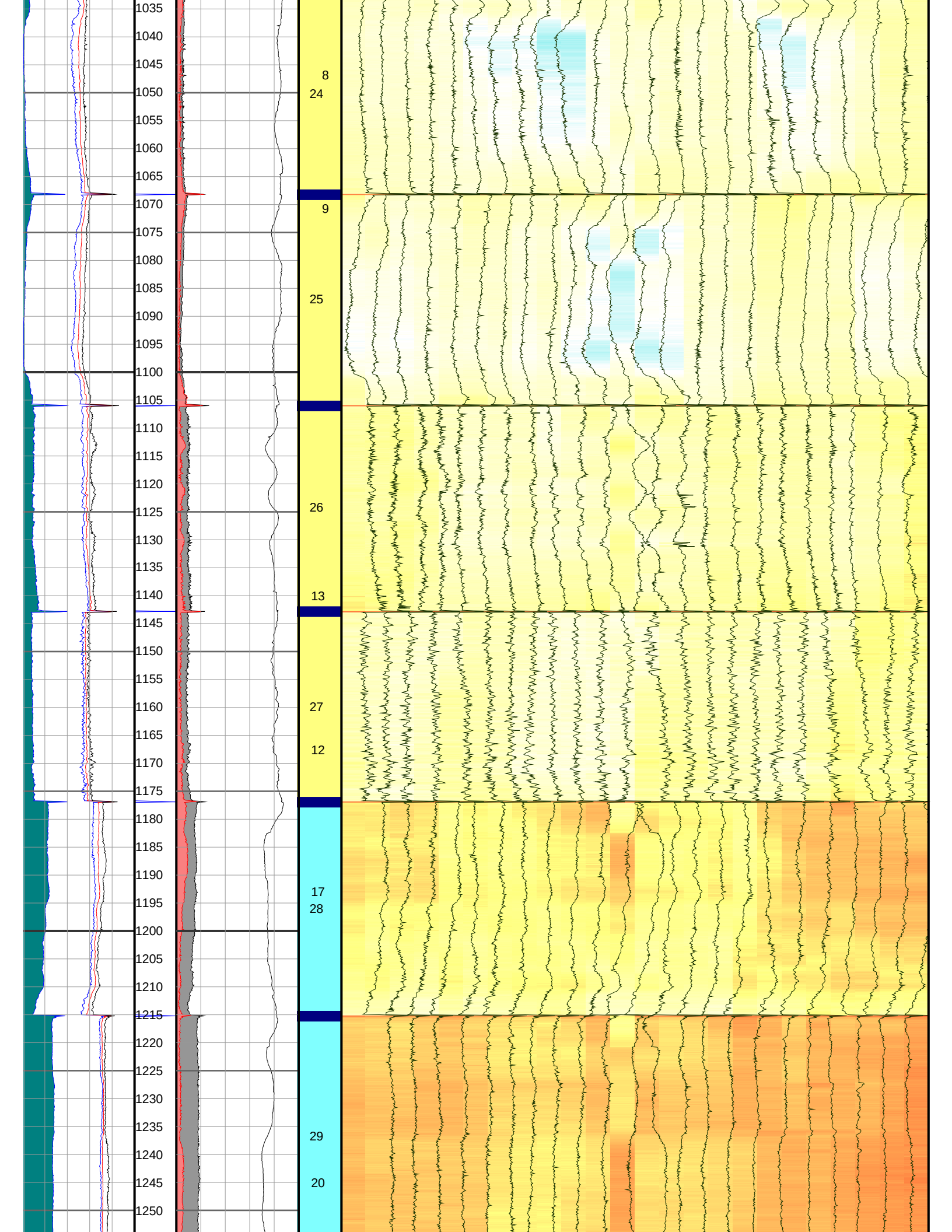


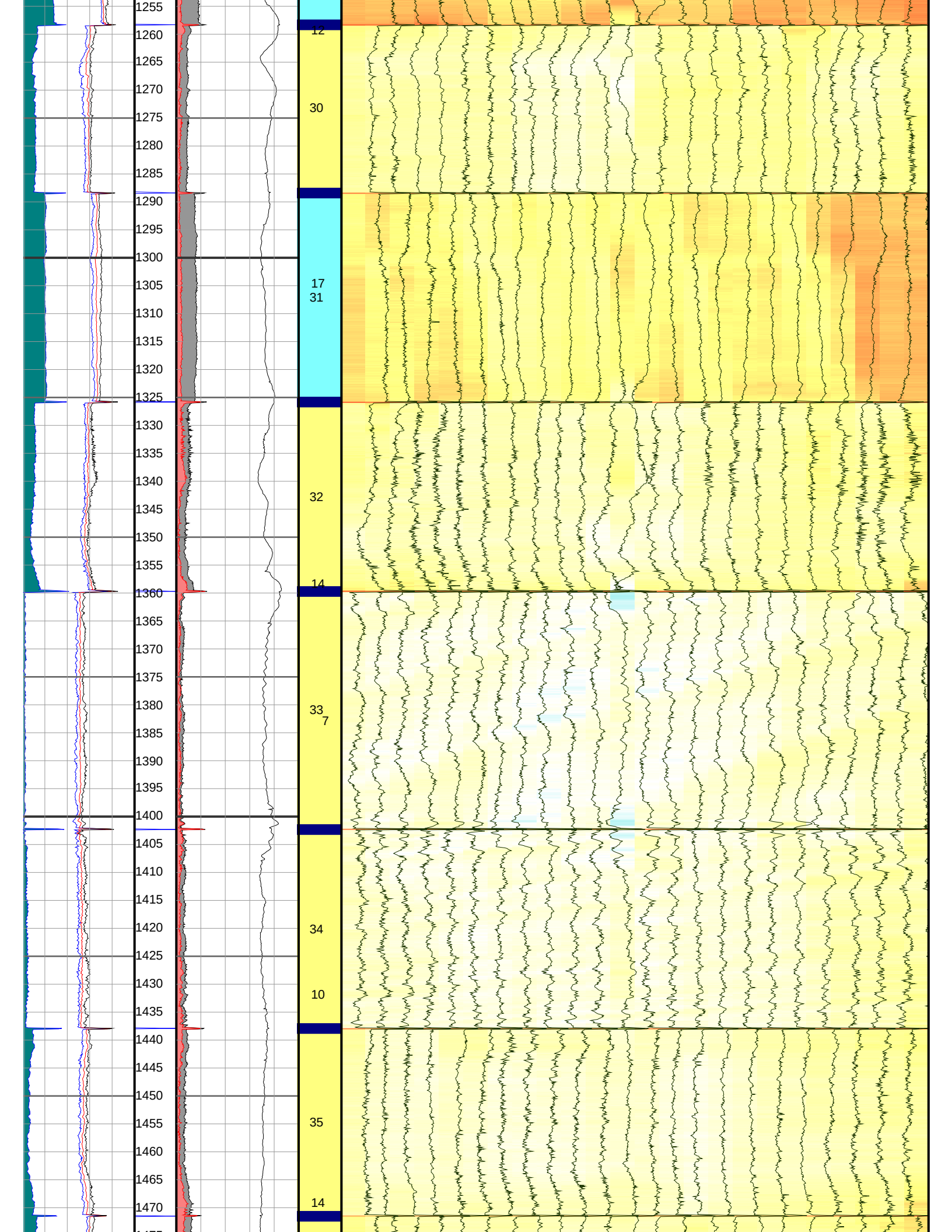


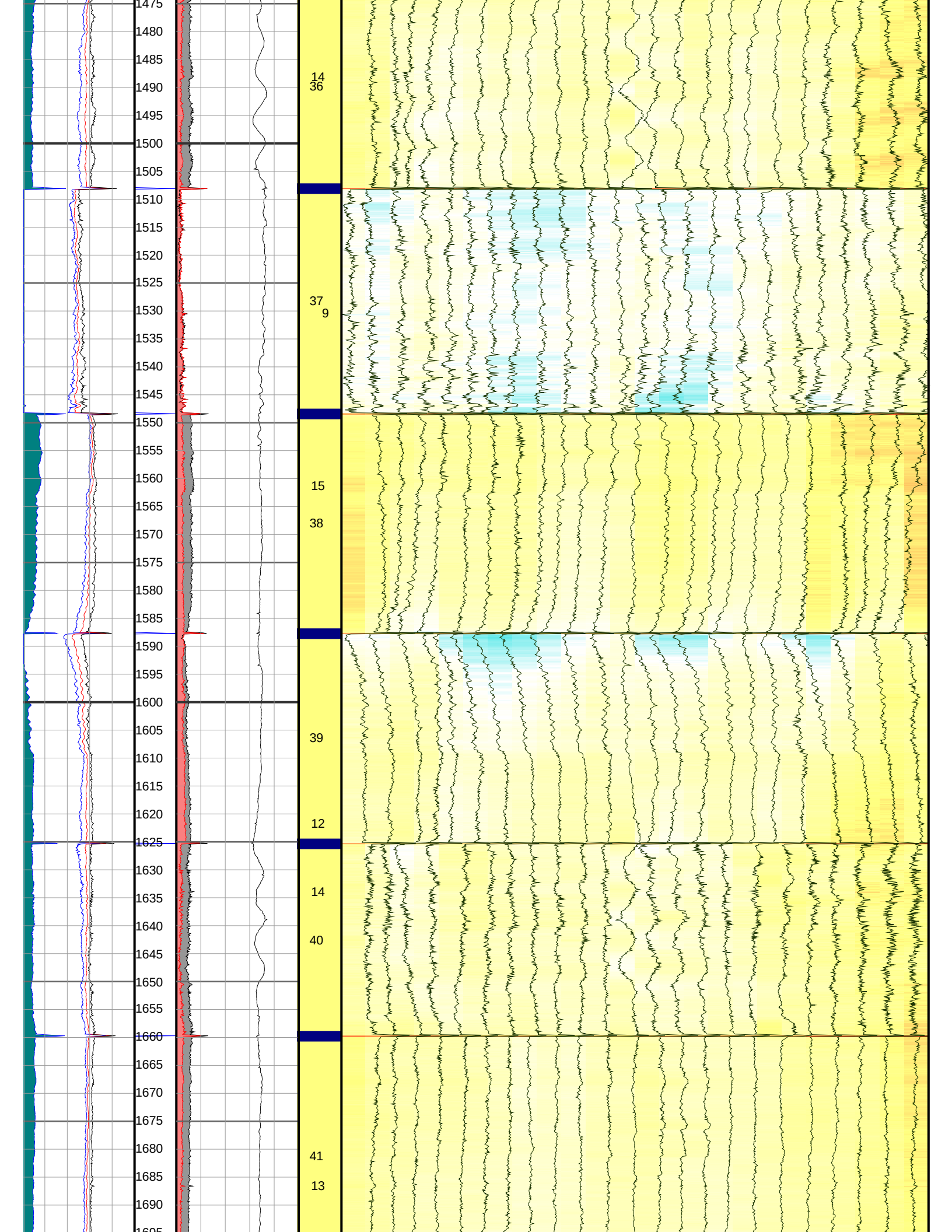


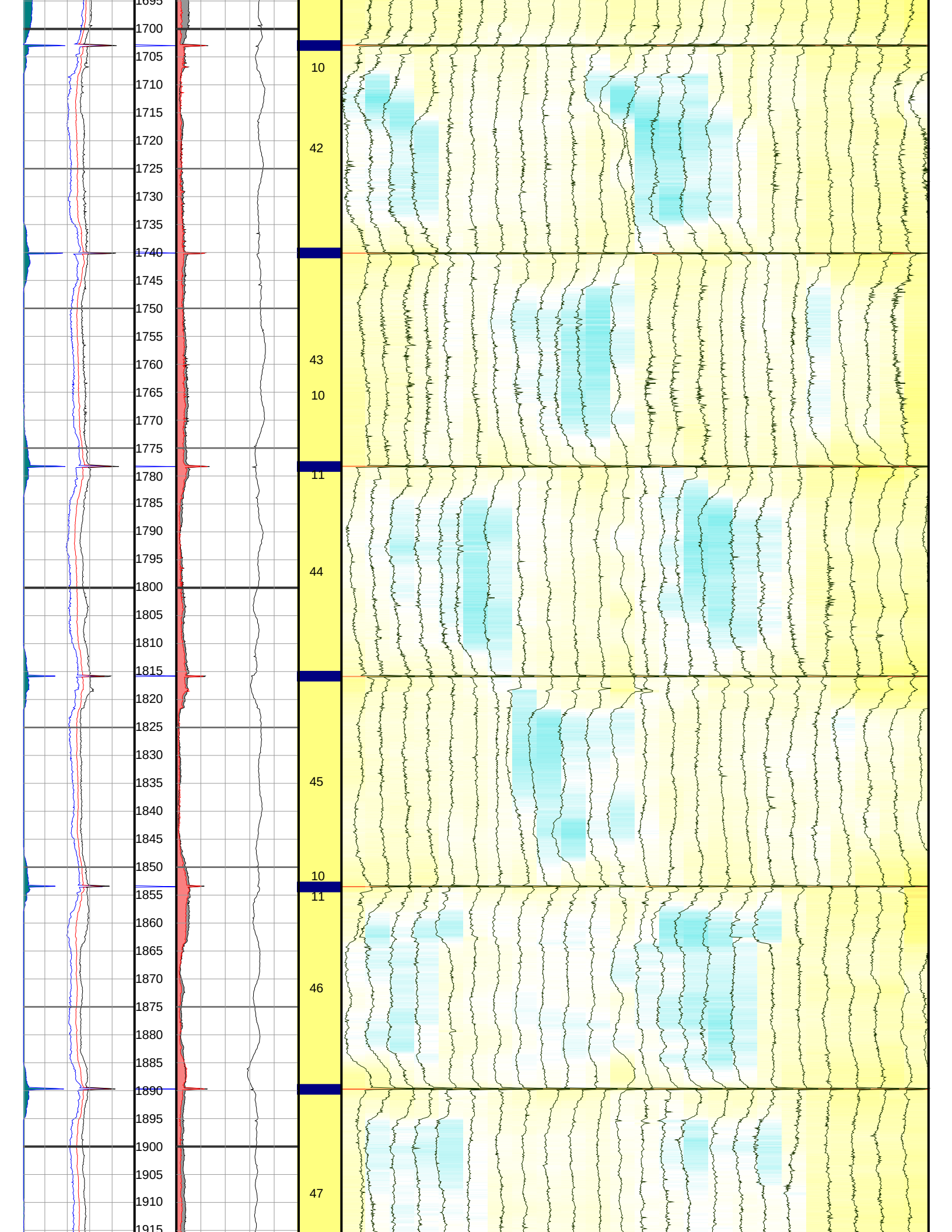


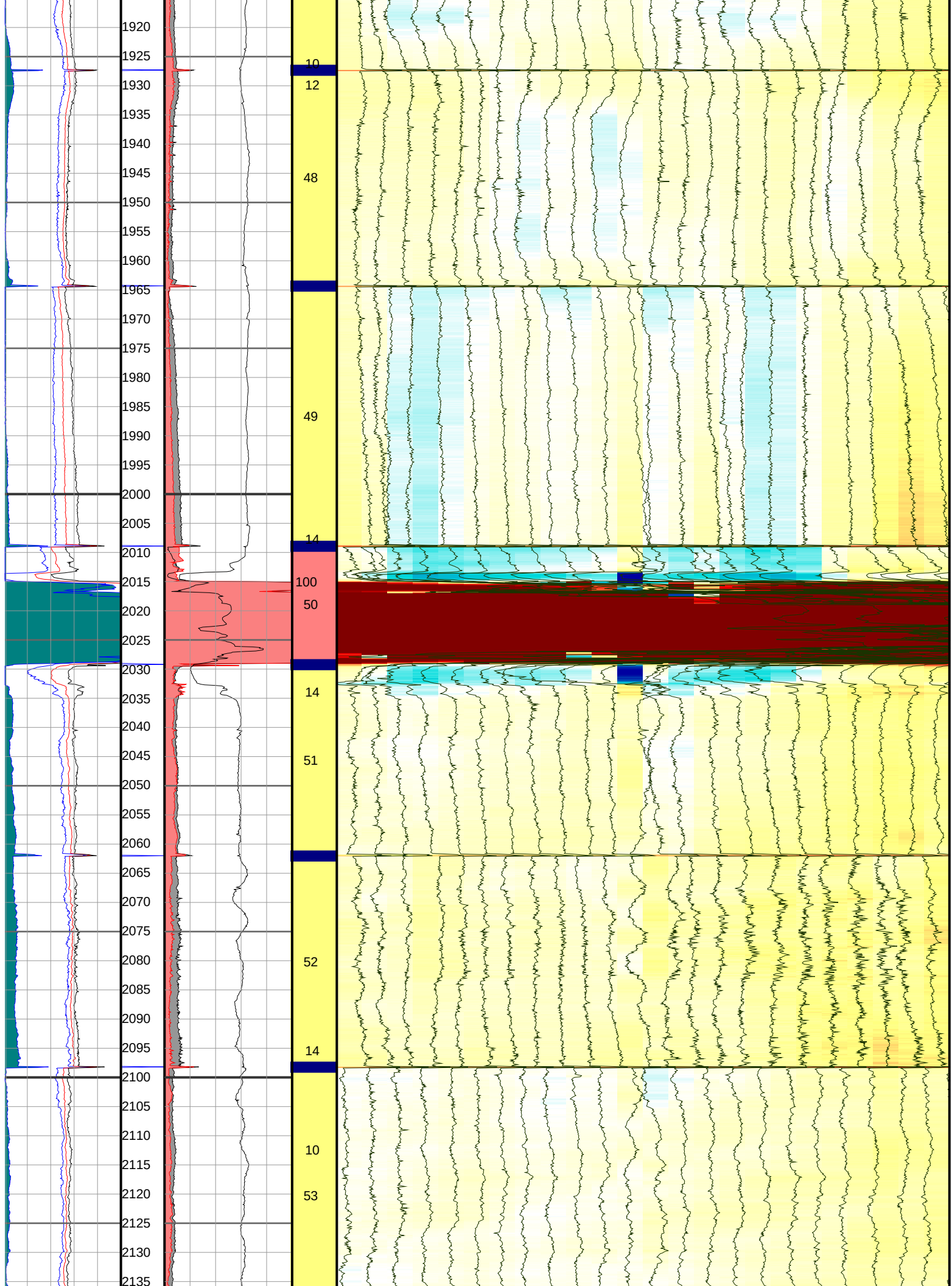


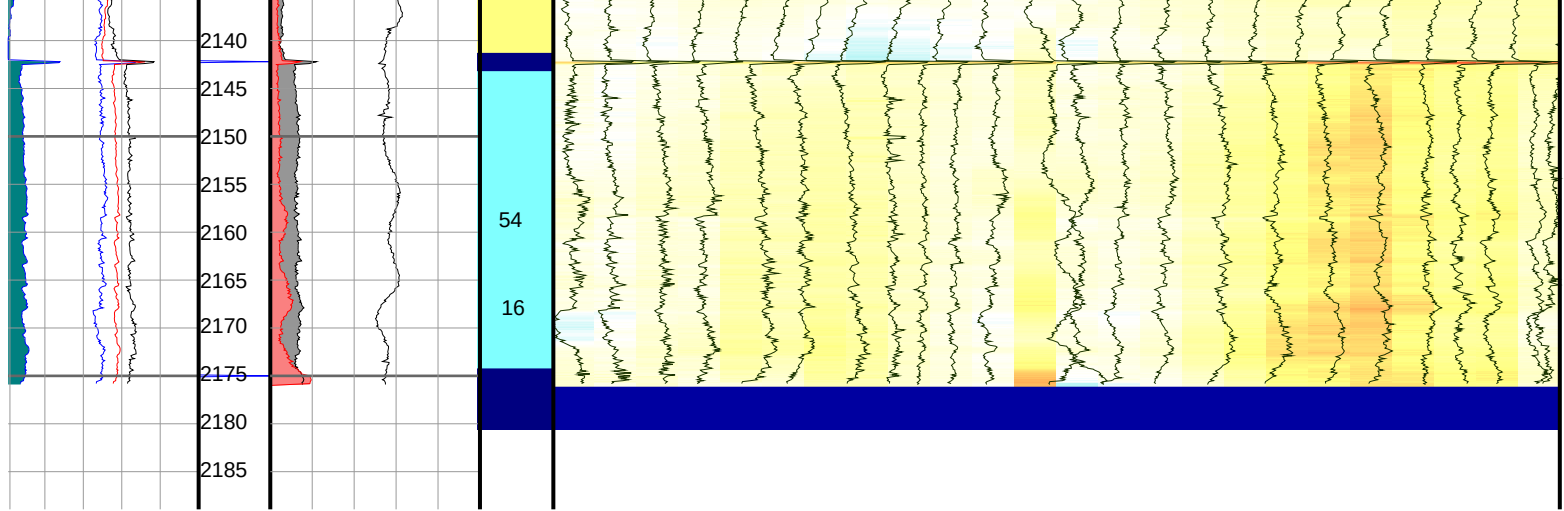










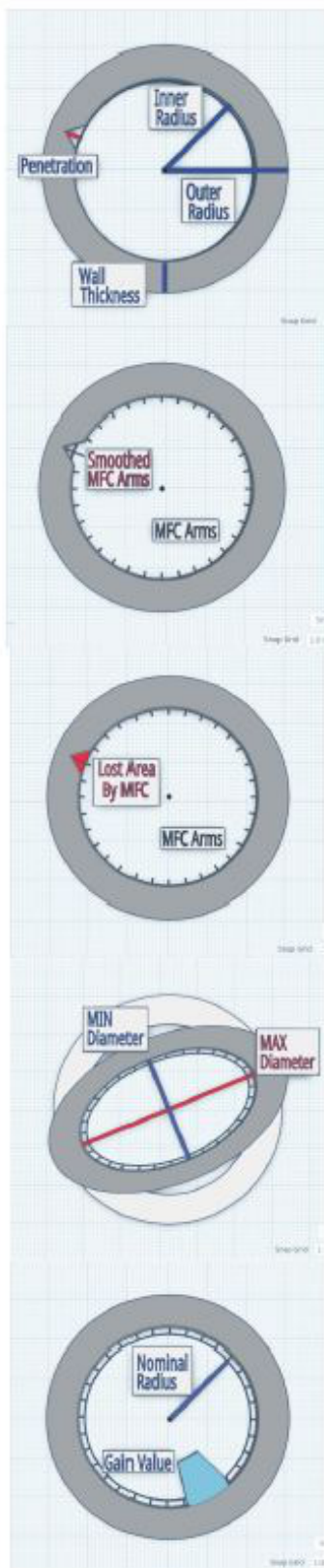


All interpretations are opinions based on inferences from electrical measurements or other measurements and JT3 Data Consulting Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and JT3 Data Consulting Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents, or employees



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Appendix A - Report Terms



Nominal Penetration (NP)

Penetration (P)

$$NP = \frac{P}{WT} \times 100\%$$

Wall Thickness (WT)

$$(NP = P / WT \times 100\%)$$

ModelD Penetration (MP%)

MFC Arm (MA)

$$MP\% = \frac{MA}{WT} \times 100\%$$

Wall Thickness (WT)

$$(MP\% = MA / WT \times 100\%)$$

Wall Loss % (WL%)

Lost Area (LA)

$$WL\% = \frac{LA}{WTA} \times 100\%$$

Wall Thickness Area (WTA)

$$(WL\% = LA / WTA \times 100\%)$$

Ovality % (O%)

Max Diameter—Min Diameter

$$O\% = \frac{\text{Max Diameter} - \text{Min Diameter}}{\text{Nominal Diameter}} \times 100\%$$

$$O\% = \text{MinD} - \text{MaxD} \times 100\%$$

Projection % (P%)

Gain Value (GV)

$$P\% = \frac{GV}{NRIR} \times 100\%$$

Nominal Radius IR (NRIR)

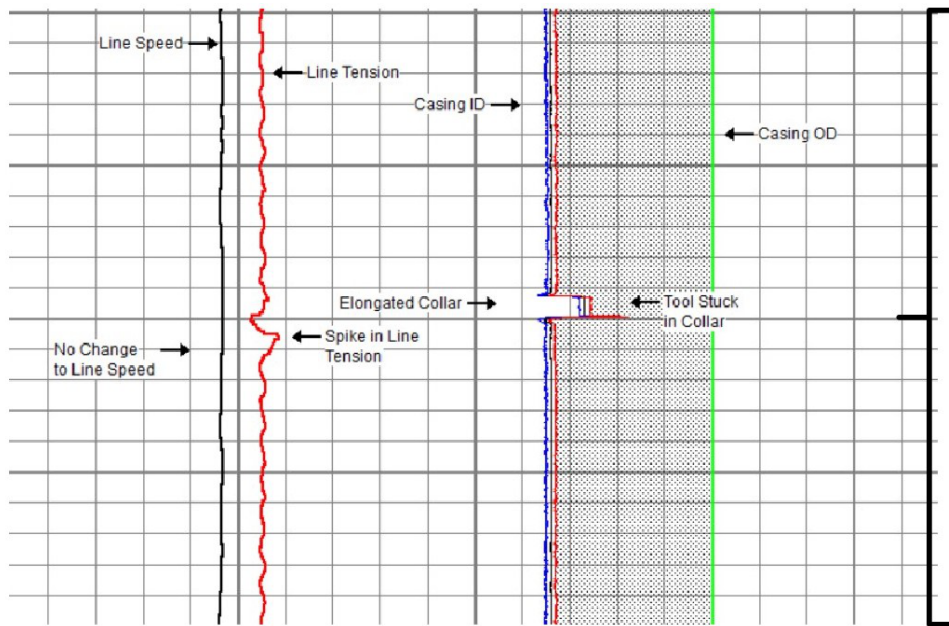
$$(P\% = GV / NRIR \times 100\%)$$

*ModelD Penetration is the most optimistic penetration calculation. It takes into account ovality and pipe tolerance. ModelD Penetration always less than

Wall Thickness Area is between Inner Radius and Outer Radius (OR)

*Gain Value—Min Radius less than Internal Radius (IR)

Appendix B - Elongated Collars



Elongated Collar

An Elongated Collar occurs when logging conditions are just right that the Multi-Finger Caliper Measuring Finger tips “Stick” the tool in the collar. This is explained away by the constant Line Speed and the Spike in Line Tension. To Avoid, The Logging Engineer should adjust logging speed.