Company: Occidental Petroleum Corporation

Well: CAMP H30-29D

Field: WATTENBURG

County: WELD State: COLORADO

Isolation Scanner

Casing Integrity

Gamma Ray - CCL Log

Location:	SHL: 1669' FSL & 969' FWL NWSW		Elev.:	K.B.	5005.00 ft
	BHL: 131' FSL & 1322' FWL SWSW			G.L.	4990.00 ft
	S19-T3N-R65W			D.F.	
	Permanent Datum:	Ground Level	Elev.:	4990.00 f	
	Log Measured From:	Kelly Bushing	15.00 ft	above Perm.Datum	
	Drilling Measured From:	Kelly Bushing			

API Serial No.	Section:	Township:	Range:
0512331414	19	3N	65W

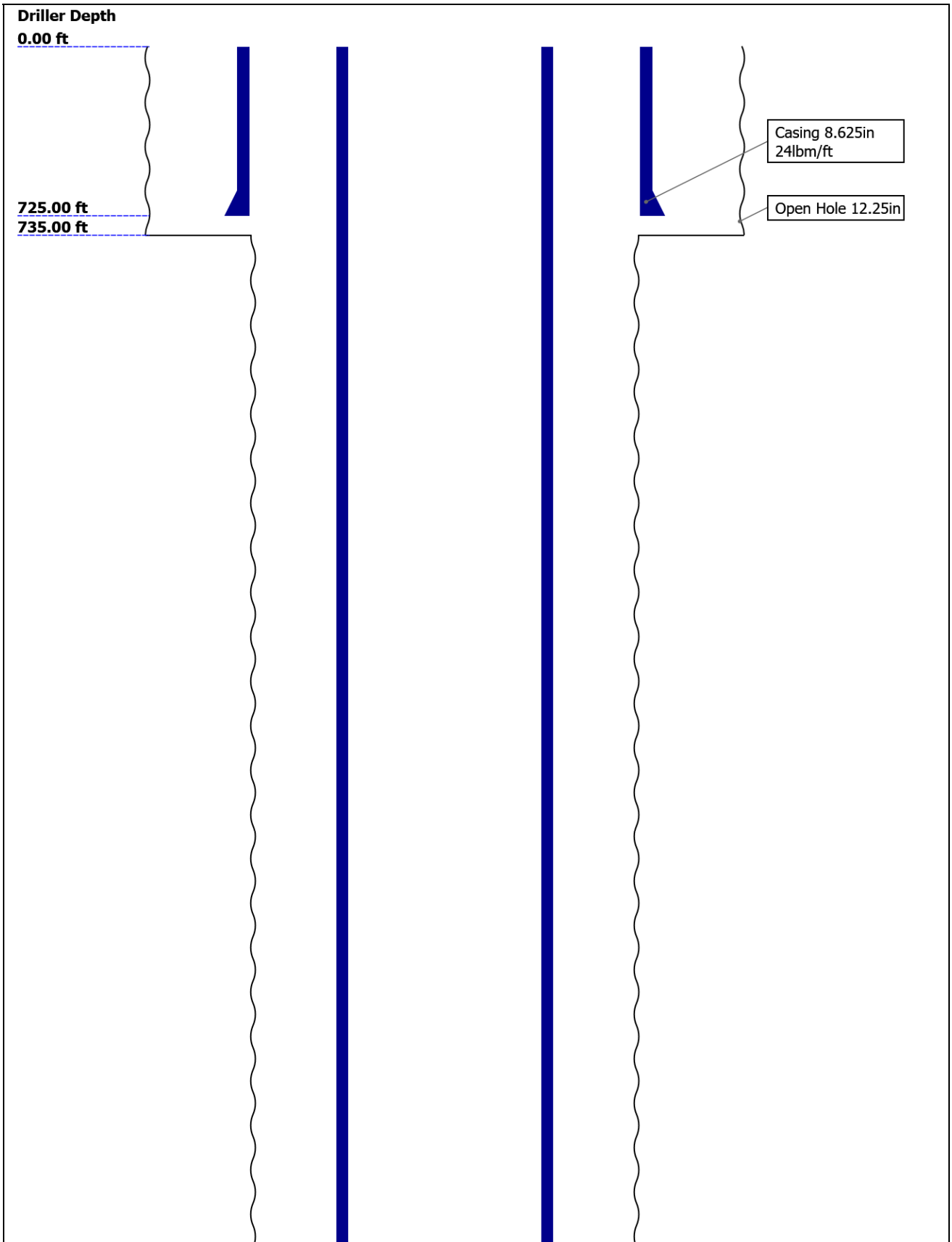
County: WELD
Field: WATTENBURG
Location: SHL: 1669' FSL & 969' FWL NWSW
Well: CAMP H30-29D
Company: Occidental Petroleum Corporation

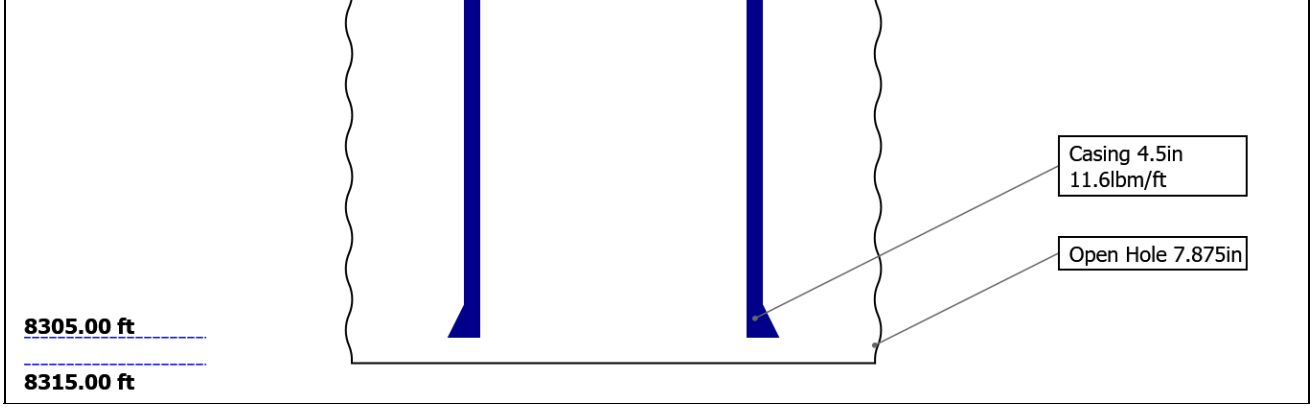
Logging Date	09-May-2023		
Run Number	ONE		
Depth Driller	8315.00 ft		
Schlumberger Depth	TD Not Tag		
Bottom Log Interval	6500.00 ft		
Top Log Interval	50.00 ft		
Casing Fluid Type	Fresh Water		
Salinity			
Density	8.6 lbm/gal		
Fluid Level	8.00 ft		
BIT/CASING/TUBING STRING			
Bit Size	7.88 in		
From	735.00 ft		
To	8315.00 ft		
Casing/Tubing Size	4.5 in		
Weight	11.6 lbm/ft		
Grade	L80		
From	0.00 ft		
To	8305.00 ft		
Max Recorded Temperatures	211.01 degF		
Logger on Bottom Time	09-May-2023	11:32:00	
Unit Number Location:	9115	Fort Morgan, CO	
Recorded By	D.May/C.Jordan		
Witnessed By	Travis Rothe		

Disclaimer

Contents

Well Sketch



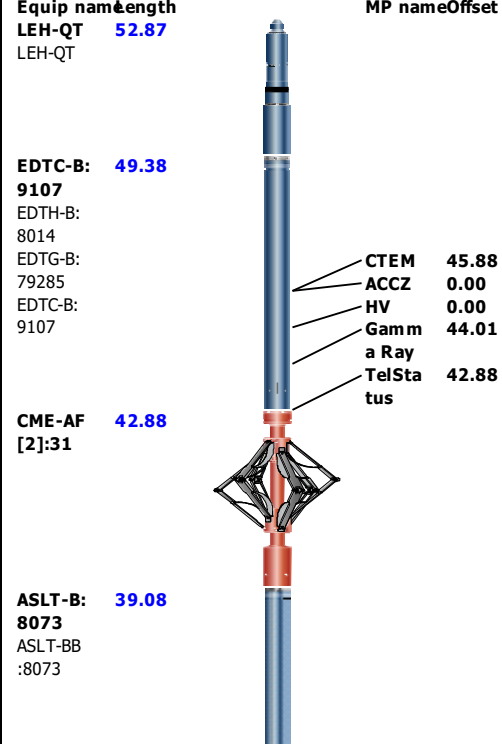


Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	12.25	7.875				
Top Driller (ft)	0	735				
Top Logger (ft)	0	735				
Bottom Driller (ft)	735	8315				
Bottom Logger (ft)	735	8315				
Casing						
Size (in)	8.625	4.5				
Weight (lbm/ft)	24	11.6				
Inner Diameter (in)	8.097	4				
Grade	J55	L80				
Top Driller (ft)	0	0				
Top Logger (ft)	0	0				
Bottom Driller (ft)	725	8305				
Bottom Logger (ft)	725	8305				

Remarks and Equipment Summary

ONE: Toolstring



ONE: Remarks

- Tool was run as per tool sketch
- All logging intervals as per client request
- Repeat Pass logged with 0 PSI applied surface pressure
- Main Pass logged with 500 psi applied surface pressure
- Cement: HAL Tuned Light Cement 10 #

Lengths are in ft
Maximum Outer Diameter = 3.800 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Depth Summary

	ONE		
Depth Measuring Device			
Type	IDW-B		
Serial Number			
Calibration Date			
Calibrator Serial Number			

Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		

Tension Device

Type	CMTD-B/A		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		

Logging Cable

Type	7-46ZVI-XS		
Serial Number	SHOP		
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type			

ONE:Depth Control Parameters		Depth Control Remarks
Log Sequence	First Log In the Well	Schlumberger depth control procedures followed
Rig Up Length At Surface		IDW used as primary depth control system
Rig Up Length At Bottom		Z-Chart used as secondary depth control system
Rig Up Length Correction		
Stretch Correction		
Tool Zero Check At Surface		

Survey Record

Survey Calculation

Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	True North	Total Correction Formula :	Magnetic Dec

Rig Location

Latitude :	40.208240 degrees	Longitude :	-104.71228 degrees

Tie In Point

Measured Depth:	0.00 ft	Inclination:	0.00 deg	Azimuth:	0.00 deg
True Vertical Depth:	0.00 ft	North Displacement:	0.00 ft	East Displacement:	0.00 ft

Survey Quality Index

9 : Manual 28 : Tie-In Point

Survey Correction Index

0 : No correction

Survey Description Index

0 : Not Flagged Survey

Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/ -S (ft)	E/ -W (ft)	Closure (ft)	at Azim (deg)	DLS deg/100ft	Tool Type	QI	CI	DI
1	0.00	0.00	0.00	- - - -	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP	28	0	0
2	725.00	2.20	153.40	725.00	724.82	-12.44	-12.44	6.23	13.91	153.40	0.30	Other	9	0	0
3	788.00	0.90	102.90	63.00	787.80	-13.64	-13.64	7.26	15.45	151.98	2.81	Other	9	0	0
4	882.00	0.70	40.00	94.00	881.79	-13.36	-13.36	8.34	15.75	148.01	0.91	Other	9	0	0
5	976.00	1.80	283.20	94.00	975.78	-12.58	-12.58	7.28	14.53	149.96	2.35	Other	9	0	0
6	1070.00	3.00	276.90	94.00	1069.69	-11.95	-11.95	3.40	12.43	164.14	1.31	Other	9	0	0
7	1164.00	4.90	255.60	94.00	1163.47	-12.65	-12.65	-2.93	12.99	193.06	2.52	Other	9	0	0
8	1258.00	6.10	234.70	94.00	1257.05	-16.54	-16.54	-10.90	19.82	213.39	2.46	Other	9	0	0
9	1352.00	8.00	216.70	94.00	1350.34	-24.67	-24.67	-18.89	31.07	217.44	3.08	Other	9	0	0

10	1446.00	10.00	205.90	94.00	1443.19	-37.26	-37.26	-26.36	45.64	215.28	2.78	Other	9	0	0
11	1540.00	10.80	203.50	94.00	1535.64	-52.68	-52.68	-33.44	62.40	212.41	0.97	Other	9	0	0
12	1634.00	12.50	194.50	94.00	1627.71	-70.61	-70.61	-39.50	80.91	209.22	2.64	Other	9	0	0
13	1727.00	14.30	187.90	93.00	1718.18	-91.73	-91.73	-43.60	101.57	205.42	2.54	Other	9	0	0
14	1821.00	15.10	180.60	94.00	1809.11	-115.47	-115.47	-45.32	124.05	201.43	2.14	Other	9	0	0
15	1915.00	16.90	173.50	94.00	1899.47	-141.30	-141.30	-43.90	147.97	197.26	2.83	Other	9	0	0
16	2009.00	18.80	167.60	94.00	1988.95	-169.67	-169.67	-39.10	174.11	192.98	2.79	Other	9	0	0
17	2103.00	18.90	164.70	94.00	2077.91	-199.15	-199.15	-31.83	201.67	189.08	1.00	Other	9	0	0
18	2196.00	20.80	166.10	93.00	2165.38	-229.71	-229.71	-23.89	230.94	185.94	2.11	Other	9	0	0
19	2290.00	22.50	165.10	94.00	2252.75	-263.29	-263.29	-15.26	263.75	183.32	1.85	Other	9	0	0
20	2384.00	24.10	163.60	94.00	2339.08	-299.09	-299.09	-5.21	299.15	181.00	1.82	Other	9	0	0
21	2478.00	23.90	167.10	94.00	2424.96	-336.06	-336.06	4.46	336.09	179.24	1.53	Other	9	0	0
22	2572.00	23.30	169.50	94.00	2511.10	-372.90	-372.90	12.10	373.10	178.14	1.20	Other	9	0	0
23	2666.00	23.10	167.20	94.00	2597.50	-409.17	-409.17	19.57	409.65	177.26	0.99	Other	9	0	0
24	2760.00	22.20	162.20	94.00	2684.26	-444.06	-444.06	29.08	445.01	176.25	2.26	Other	9	0	0
25	2854.00	23.60	157.40	94.00	2770.85	-478.34	-478.34	41.75	480.15	175.01	2.48	Other	9	0	0
26	2948.00	25.70	158.60	94.00	2856.28	-514.70	-514.70	56.42	517.78	173.74	2.30	Other	9	0	0
27	3042.00	25.90	157.70	94.00	2940.91	-552.67	-552.67	71.64	557.28	172.61	0.47	Other	9	0	0
28	3136.00	26.40	157.80	94.00	3025.29	-591.01	-591.01	87.33	597.44	171.59	0.53	Other	9	0	0
29	3230.00	27.10	162.10	94.00	3109.24	-630.74	-630.74	101.81	638.91	170.83	2.19	Other	9	0	0
30	3324.00	25.20	159.40	94.00	3193.62	-669.85	-669.85	115.43	679.72	170.22	2.38	Other	9	0	0
31	3417.00	24.70	159.00	93.00	3277.94	-706.52	-706.52	129.36	718.27	169.62	0.57	Other	9	0	0
32	3511.00	23.80	159.90	94.00	3363.64	-742.67	-742.67	142.92	756.30	169.11	1.04	Other	9	0	0
33	3605.00	22.70	163.70	94.00	3450.01	-777.89	-777.89	154.53	793.08	168.76	1.98	Other	9	0	0
34	3699.00	21.20	164.40	94.00	3537.20	-811.67	-811.67	164.19	828.12	168.56	1.62	Other	9	0	0
35	3793.00	22.20	162.10	94.00	3624.53	-844.95	-844.95	174.22	862.73	168.35	1.40	Other	9	0	0
36	3887.00	22.40	164.80	94.00	3711.51	-879.13	-879.13	184.37	898.26	168.16	1.11	Other	9	0	0
37	3981.00	22.20	167.90	94.00	3798.48	-913.78	-913.78	192.79	933.89	168.09	1.27	Other	9	0	0
38	4075.00	21.60	170.10	94.00	3885.70	-948.19	-948.19	199.49	968.93	168.12	1.08	Other	9	0	0
39	4169.00	22.00	168.90	94.00	3972.97	-982.51	-982.51	205.85	1003.84	168.17	0.64	Other	9	0	0
40	4263.00	21.20	171.90	94.00	4060.38	-1016.61	-1016.61	211.64	1038.42	168.24	1.45	Other	9	0	0
41	4357.00	22.30	169.90	94.00	4147.68	-1051.00	-1051.00	217.16	1073.20	168.33	1.41	Other	9	0	0
42	4451.00	21.90	168.60	94.00	4234.78	-1085.74	-1085.74	223.75	1108.56	168.36	0.67	Other	9	0	0
43	4545.00	22.30	167.20	94.00	4321.87	-1120.32	-1120.32	231.17	1143.93	168.34	0.70	Other	9	0	0
44	4639.00	23.60	163.50	94.00	4408.43	-1155.76	-1155.76	240.47	1180.51	168.25	2.07	Other	9	0	0
45	4733.00	22.90	163.00	94.00	4494.80	-1191.29	-1191.29	251.16	1217.49	168.09	0.77	Other	9	0	0
46	4827.00	23.90	163.80	94.00	4581.07	-1227.06	-1227.06	261.82	1254.69	167.96	1.12	Other	9	0	0
47	4921.00	24.10	165.00	94.00	4666.94	-1263.89	-1263.89	272.10	1292.85	167.85	0.56	Other	9	0	0
48	5015.00	22.20	163.00	94.00	4753.37	-1299.41	-1299.41	282.26	1329.72	167.74	2.19	Other	9	0	0
49	5109.00	19.70	162.30	94.00	4841.15	-1331.49	-1331.49	292.27	1363.19	167.62	2.67	Other	9	0	0
50	5203.00	16.80	162.00	94.00	4930.41	-1359.51	-1359.51	301.28	1392.49	167.50	3.09	Other	9	0	0
51	5297.00	14.40	159.90	94.00	5020.94	-1383.41	-1383.41	309.50	1417.62	167.39	2.62	Other	9	0	0
52	5391.00	12.60	155.40	94.00	5112.34	-1403.71	-1403.71	317.79	1439.24	167.24	2.22	Other	9	0	0
53	5485.00	11.50	151.20	94.00	5204.27	-1421.25	-1421.25	326.57	1458.27	167.06	1.50	Other	9	0	0
54	5578.00	10.70	157.40	93.00	5295.54	-1437.34	-1437.34	334.35	1475.72	166.90	1.54	Other	9	0	0
55	5672.00	9.10	154.60	94.00	5388.13	-1452.11	-1452.11	340.90	1491.60	166.79	1.78	Other	9	0	0
56	5766.00	9.10	161.00	94.00	5480.95	-1465.86	-1465.86	346.50	1506.27	166.70	1.08	Other	9	0	0
57	5860.00	8.60	162.10	94.00	5573.83	-1479.57	-1479.57	351.08	1520.67	166.65	0.56	Other	9	0	0
58	5954.00	6.30	174.90	94.00	5667.04	-1491.40	-1491.40	353.70	1532.78	166.66	3.00	Other	9	0	0
59	6048.00	4.70	177.00	94.00	5760.61	-1500.38	-1500.38	354.36	1541.67	166.71	1.72	Other	9	0	0
60	6142.00	5.70	186.50	94.00	5854.22	-1508.87	-1508.87	354.04	1549.84	166.80	1.40	Other	9	0	0
61	6236.00	5.50	190.40	94.00	5947.77	-1517.94	-1517.94	352.69	1558.27	166.93	0.46	Other	9	0	0

61	6236.00	5.50	190.40	94.00	5947.77	-1517.94	-1517.94	352.69	1558.37	166.92	0.46	Other	9	0	0
62	6290.40	4.80	193.40	54.40	6001.95	-1522.72	-1522.72	351.70	1562.80	166.99	1.38	Other	9	0	0
63	6330.00	4.30	196.20	39.60	6041.43	-1525.75	-1525.75	350.90	1565.58	167.05	1.38	Other	9	0	0
64	6423.00	3.00	202.10	93.00	6134.24	-1531.36	-1531.36	349.01	1570.64	167.16	1.45	Other	9	0	0
65	6517.00	1.60	179.10	94.00	6228.16	-1534.95	-1534.95	348.11	1573.92	167.22	1.76	Other	9	0	0
66	6611.00	1.80	183.10	94.00	6322.12	-1537.73	-1537.73	348.05	1576.64	167.25	0.25	Other	9	0	0
67	6705.00	1.00	165.00	94.00	6416.09	-1540.00	-1540.00	348.18	1578.87	167.26	0.96	Other	9	0	0
68	6799.00	0.70	189.50	94.00	6510.08	-1541.36	-1541.36	348.30	1580.22	167.27	0.49	Other	9	0	0
69	6893.00	0.30	136.70	94.00	6604.08	-1542.11	-1542.11	348.37	1580.97	167.27	0.61	Other	9	0	0
70	6987.00	0.00	192.70	94.00	6698.08	-1542.28	-1542.28	348.54	1581.17	167.27	0.32	Other	9	0	0
71	7081.00	0.40	104.40	94.00	6792.07	-1542.37	-1542.37	348.86	1581.33	167.26	0.43	Other	9	0	0
72	7174.00	0.40	123.40	93.00	6885.07	-1542.63	-1542.63	349.44	1581.69	167.24	0.14	Other	9	0	0
73	7268.00	1.00	124.40	94.00	6979.06	-1543.27	-1543.27	350.39	1582.55	167.21	0.64	Other	9	0	0
74	7362.00	1.10	118.28	94.00	7073.05	-1544.16	-1544.16	351.86	1583.73	167.16	0.16	Other	9	0	0
75	7376.80	1.21	113.51	14.80	7087.85	-1544.29	-1544.29	352.13	1583.92	167.15	0.99	Other	9	0	0
76	7456.00	1.90	98.60	79.20	7167.02	-1544.82	-1544.82	354.20	1584.91	167.09	1.00	Other	9	0	0
77	7550.00	1.80	90.90	94.00	7260.97	-1545.08	-1545.08	357.21	1585.83	166.98	0.28	Other	9	0	0
78	7644.00	1.10	95.00	94.00	7354.94	-1545.18	-1545.18	359.59	1586.48	166.90	0.75	Other	9	0	0
79	7738.00	0.70	5.30	94.00	7448.93	-1544.68	-1544.68	360.54	1586.19	166.86	1.38	Other	9	0	0
80	7832.00	1.00	316.60	94.00	7542.92	-1543.52	-1543.52	360.03	1584.94	166.87	0.80	Other	9	0	0
81	7926.00	1.10	307.40	94.00	7636.90	-1542.37	-1542.37	358.75	1583.53	166.91	0.21	Other	9	0	0
82	8020.00	0.90	298.70	94.00	7730.89	-1541.47	-1541.47	357.39	1582.35	166.95	0.27	Other	9	0	0
83	8144.00	1.00	302.10	124.00	7854.87	-1540.43	-1540.43	355.62	1580.94	167.00	0.09	Other	9	0	0
84	8265.00	1.10	312.10	121.00	7975.85	-1539.09	-1539.09	353.86	1579.23	167.05	0.17	Other	9	0	0
85	8304.00	1.10	312.10	39.00	8014.85	-1538.59	-1538.59	353.30	1578.64	167.07	0.00	Other	9	0	0
86	8315.00	1.10	312.10	11.00	8025.84	-1538.44	-1538.44	353.15	1578.44	167.07	0.00	Other	9	0	0

USIT - Fluid Properties Measurement

Run Name	Pass Name	Start Depth(ft)	Stop Depth(ft)
Run 1	Log[3]:Up	6498.97	3514.32

Fluid Velocity = "Automatic".
CFVL equals DFSL channel

Start Depth(ft)	Stop Depth(ft)	Start Value(us/ft)	End Value(us/ft)

Mud Impedance = "Theoretical".
CZMD uses theoretical results.
MUD_N_THE=1.02
DFD=1.03g/cm3(8.60lbm/gal)

Start Depth(ft)	Stop Depth(ft)	Start Value(Mrayl)	End Value(Mrayl)

Main Pass

Software Version

Acquisition System	Version
Maxwell 2023.0	13.0.221437.3100
Application Patch	Wireline_Hotfix-Mandatory-2023.0_13.0.222988
	Wireline_NPD-HCS-2023.0_13.0.222422

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[3]:Up	Up	3514.33 ft	6498.97 ft	09-May-2023 11:37:45 AM	09-May-2023 12:33:02 PM	ON	-2.00 ft	Yes
ONE	Log[4]:Up	Up	47.89 ft	3598.04 ft	09-May-2023 12:36:18 PM	09-May-2023 1:44:18 PM	ON	-2.00 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Occidental Petroleum Corporation Well:CAMP H30-29D

Main Pass:S022

Description: USI Corrosion Format: Log (IBC Casing Integrity 4.5IN) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 09-May-2023 15:37:42

TIME_1900 - Time Marked every 60.00 (s)

U L B R U

Orientation: Top of Hole

Absent 1.500 3.500

Explicit Normalization

USIT - USIT Processing Flags (UFLG) USIT-E[1]

Large Reduction from Nominal Thickness

Amplitude of Eccentering (ECCE) USIT-E[1]

0 in 0.5

Casing Within 87.5% of Nominal Thickness

Thickness Minimum Value (THMN) USIT-E[1]

0.35 in 0.15

Internal Radius Exceeds External Average

Casing Thickness (Between Max Internal and External Average)

Casing Collar Locator Ultrasonic (CCLU) USIT-E[1]

-20 in 20

Nominal Casing Thickness (THNO) USIT-E[1]

0.35 in 0.15

Internal Radius Maximum Value (IRMX) USIT-E[1]

2.7 in 1.7

Motor Revolution Speed (RSAV) USIT-E[1]

6 c/s 7.5

87.5% of Nominal Thickness

0.35 in 0.15

External Radii Average (ERAV) USIT-E[1]

2.7 in 1.7

GR

0 gAPI 150

U L B R U

Orientation: Top of Hole

Absent -5.200 -3.600 -2.000 -0.400

Explicit Normalization

USIT - Amplitude of Wave (AWBK) USIT-E[1] (dB)

Ultrasonic Azimuth (UCAZ) USIT-E[1]

360 deg 0

Internal Radius Minimum Value (IRMN) USIT-E[1]

1.7 in 2.7

Internal Radius Maximum Value (IRMX) USIT-E[1]

1.7 in 2.7

Internal Radius Averaged Value (IRAV) USIT-E[1]

1.7 in 2.7

External Radii Average (ERAV) USIT-E[1]

1.7 in 2.7

U L B R U

Orientation: Top of Hole

Absent -0.059 -0.028 0.004 0.035 0.068

Explicit Normalization

USIT - Internal Radii Normalized (IRBK) USIT-E[1] (in)

U L B R U

Orientation: Top of Hole

Absent -0.059 -0.028 0.004 0.035 0.068

Explicit Normalization

USIT - Casing Thickness Normalized (THBK) USIT-E[1] (in)

Thickness Minimum Value (THMN) USIT-E[1]

0 in 0.5

Thickness Average Value (THAV) USIT-E[1]

0 in 0.5

Thickness Maximum Value (THMX) USIT-E[1]

0 in 0.5

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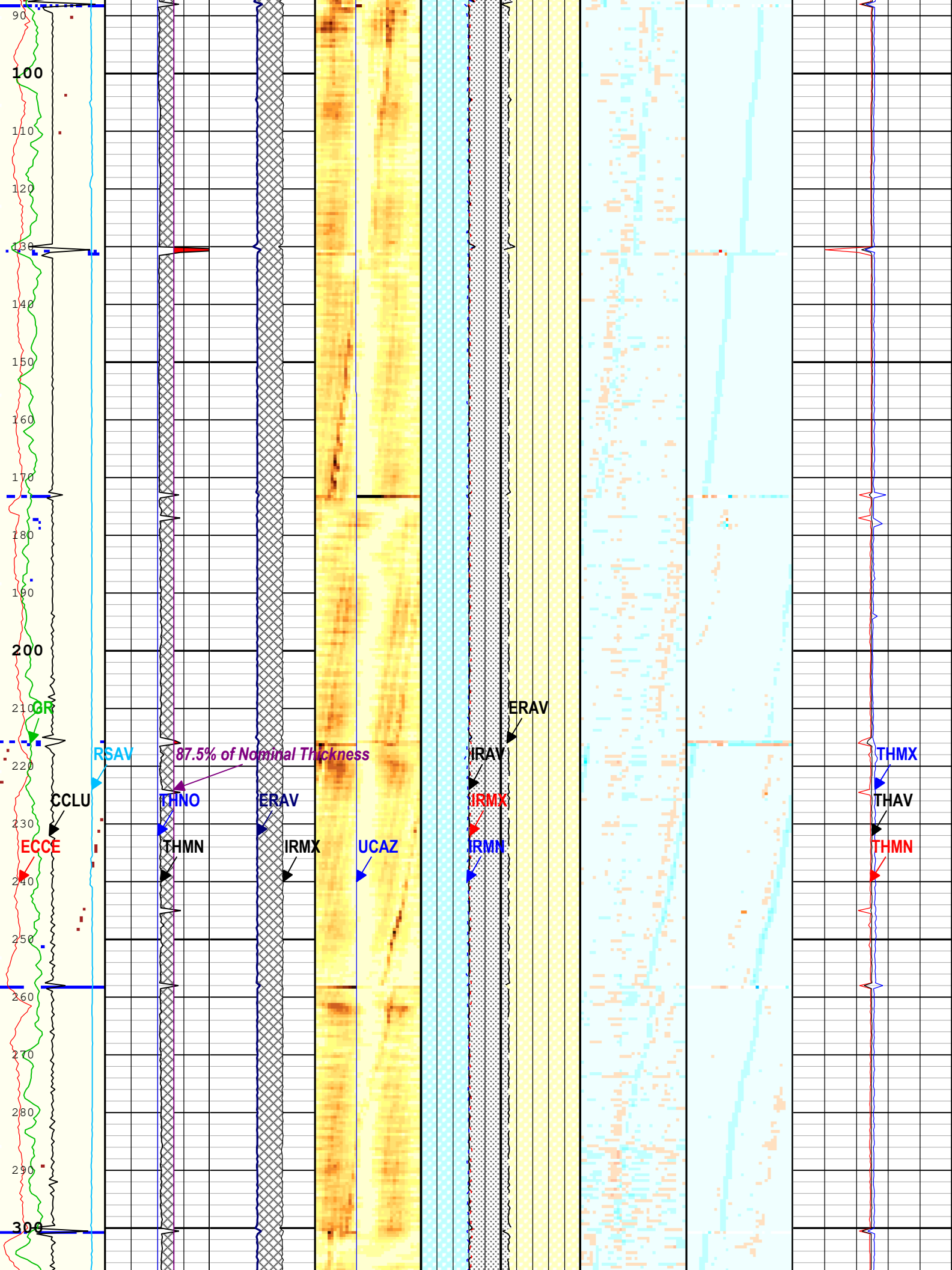
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CCLU
ECCE
87.5% of Nominal Thickness
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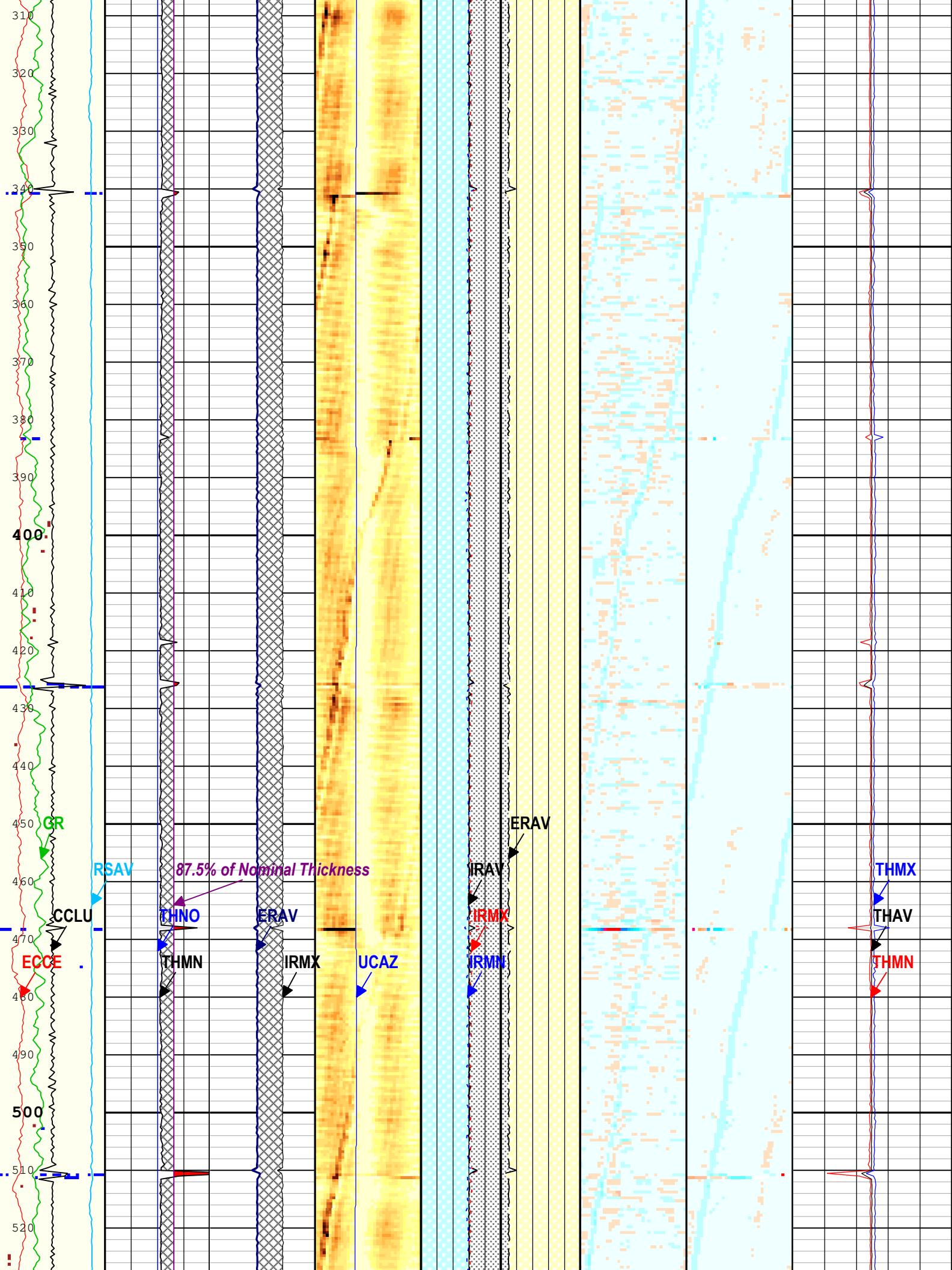
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87.5% of Nominal Thickness
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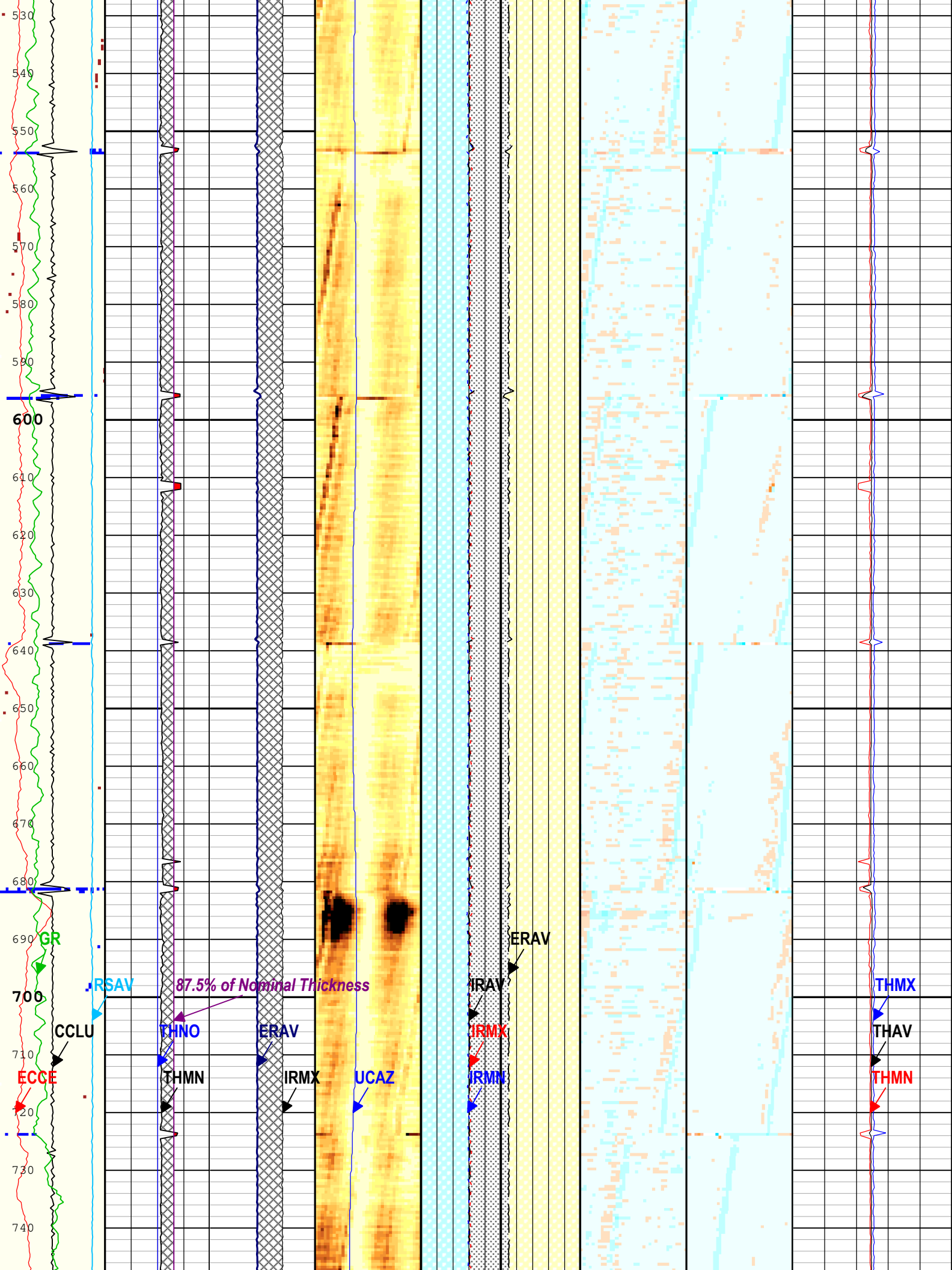
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87.5% of Nominal Thickness
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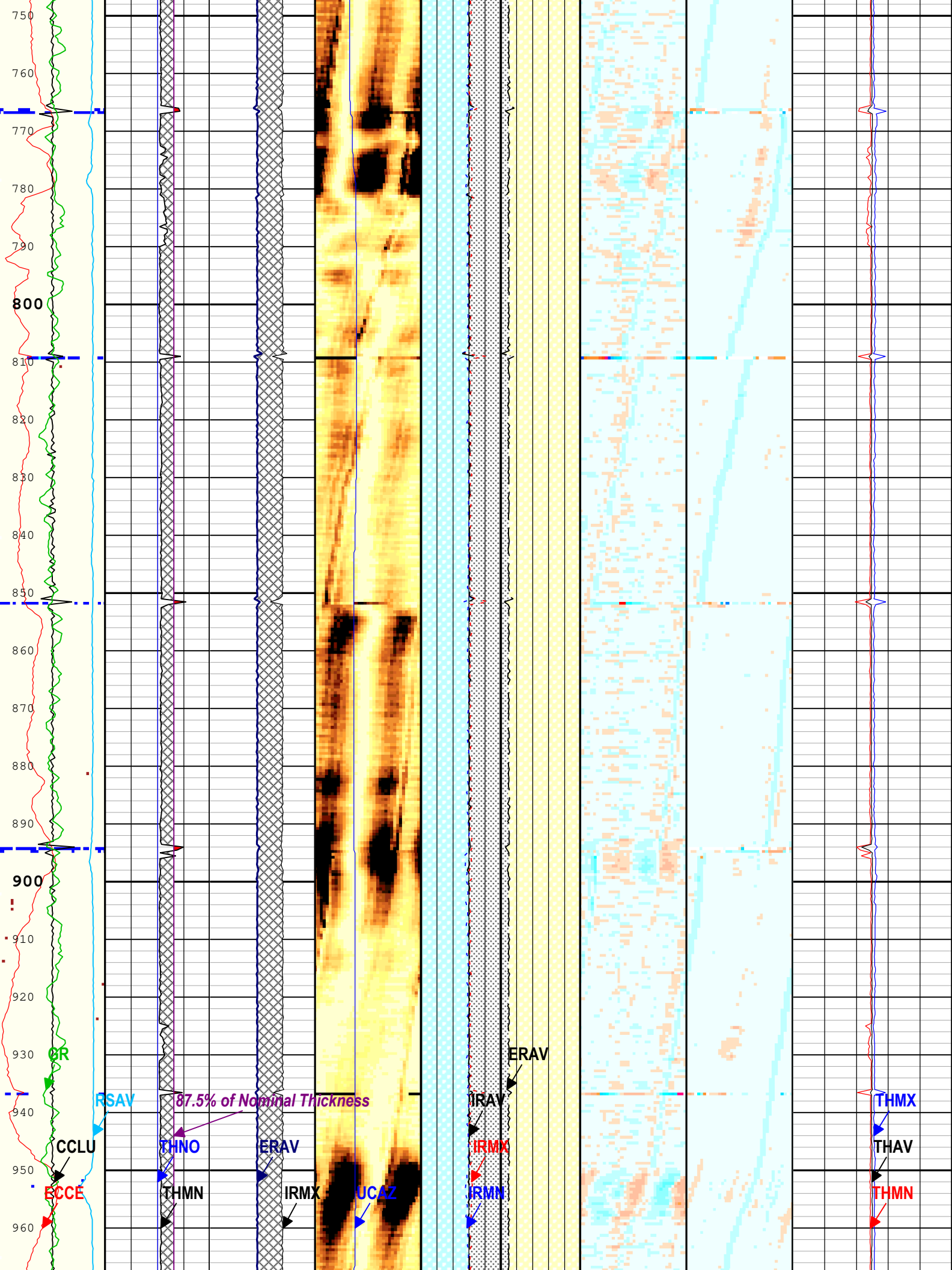
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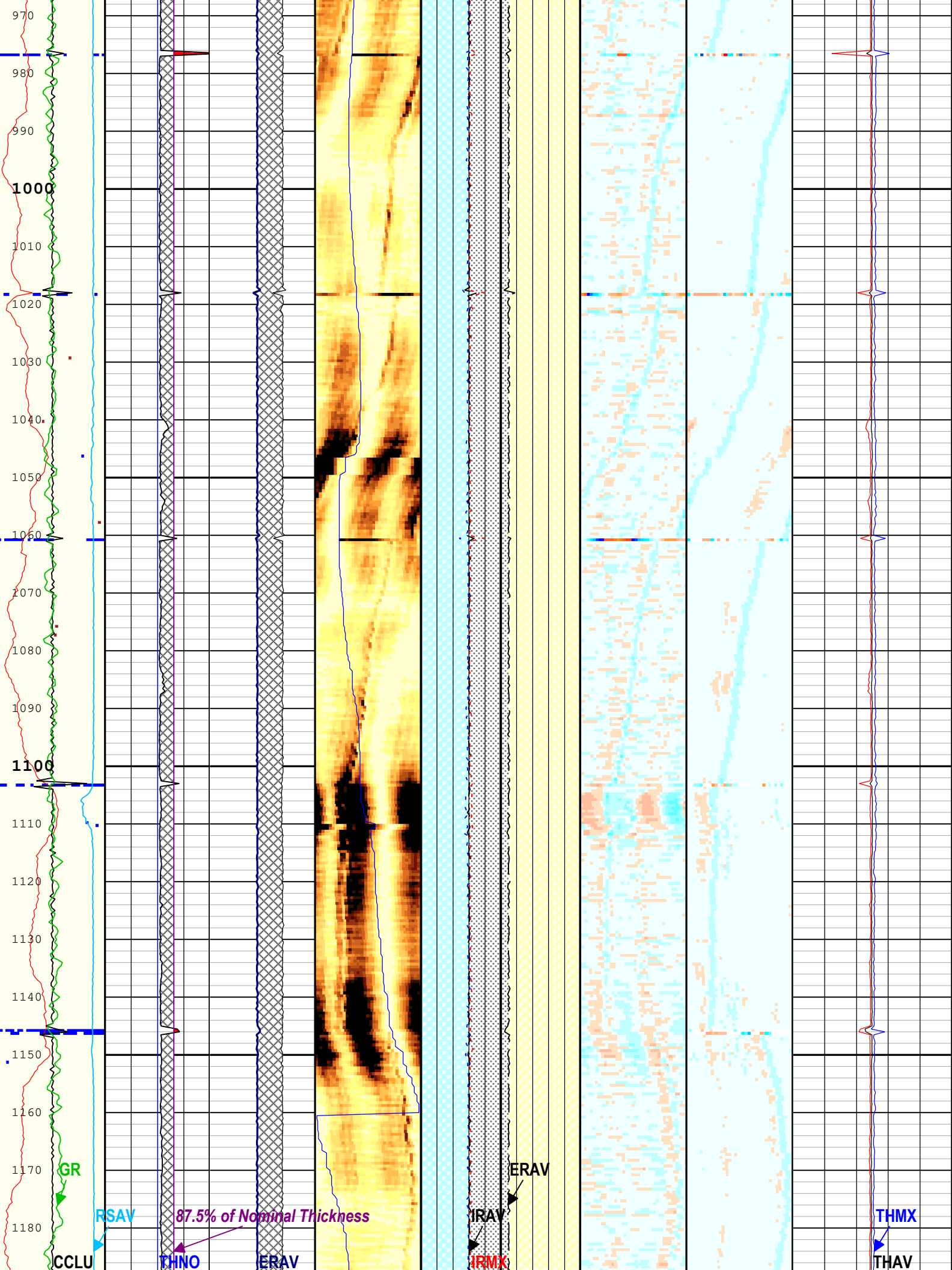
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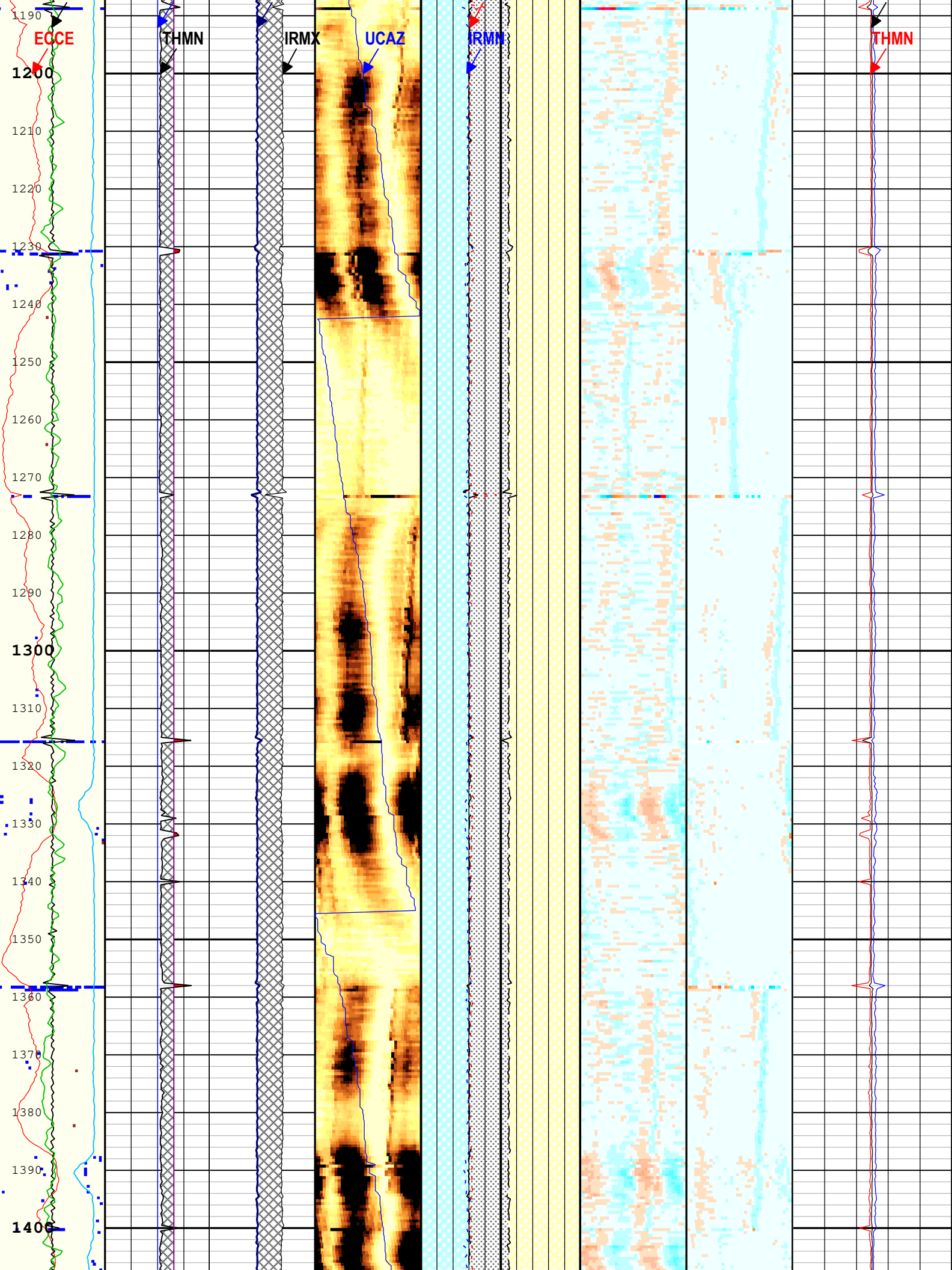
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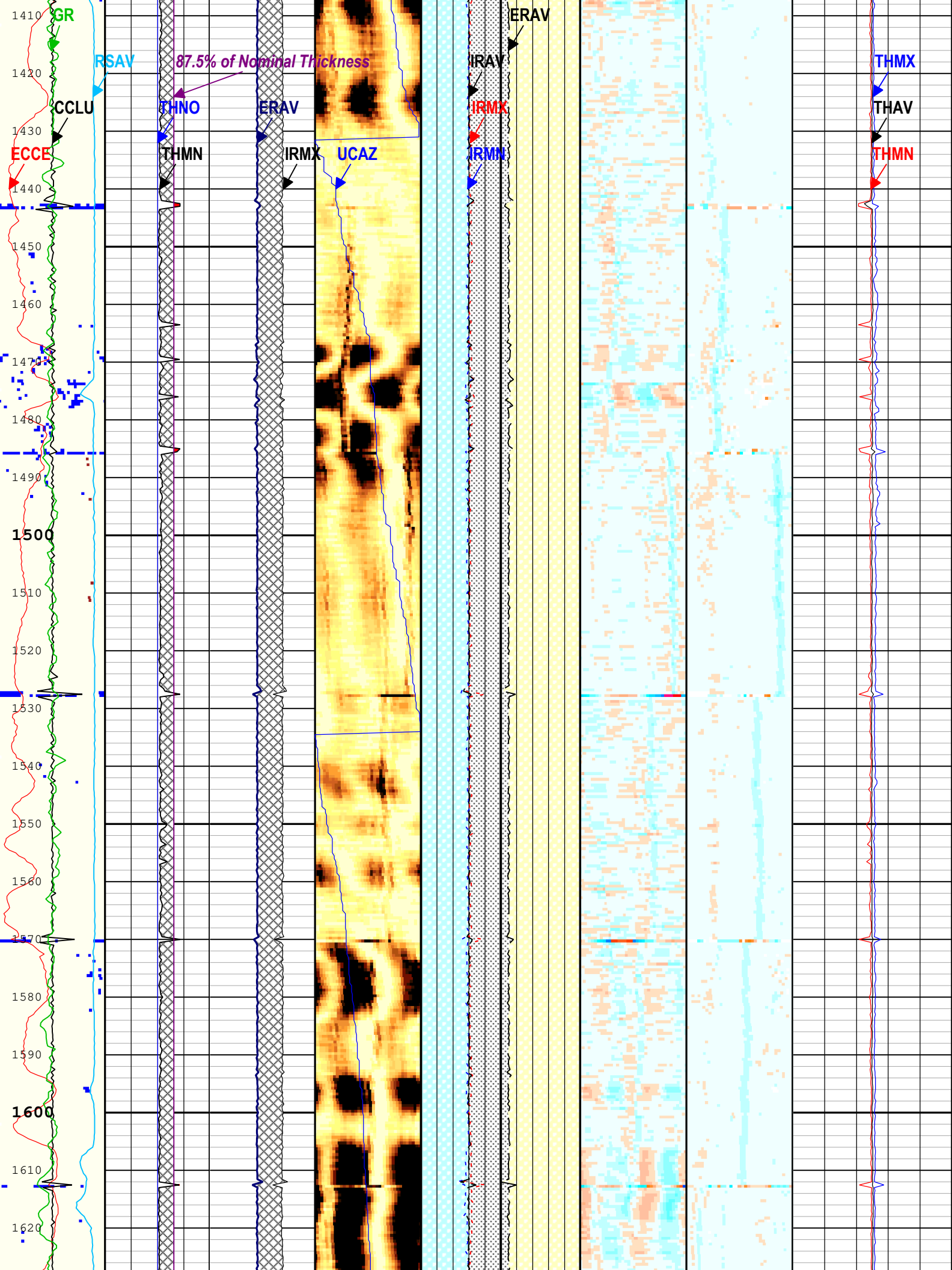
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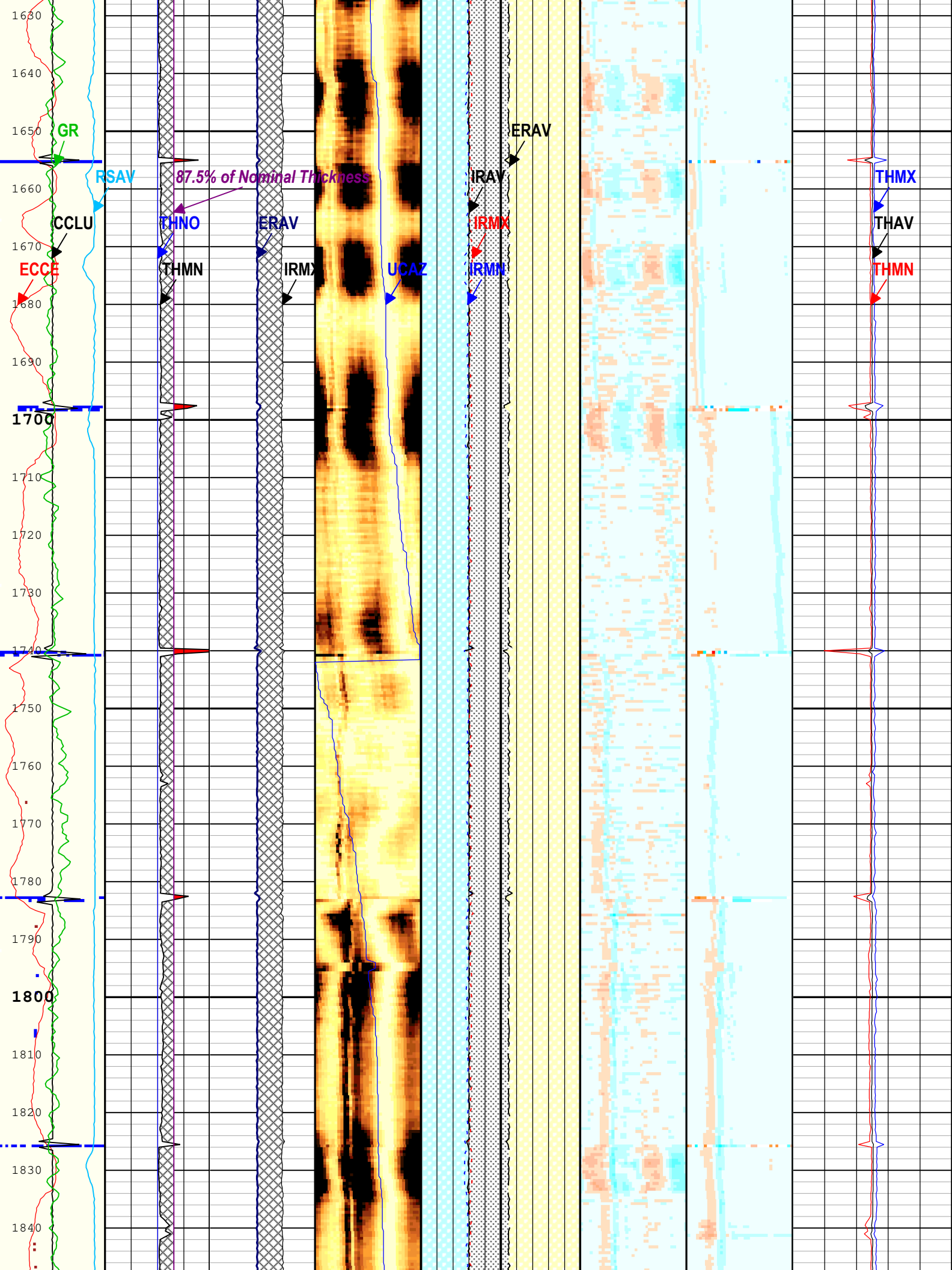
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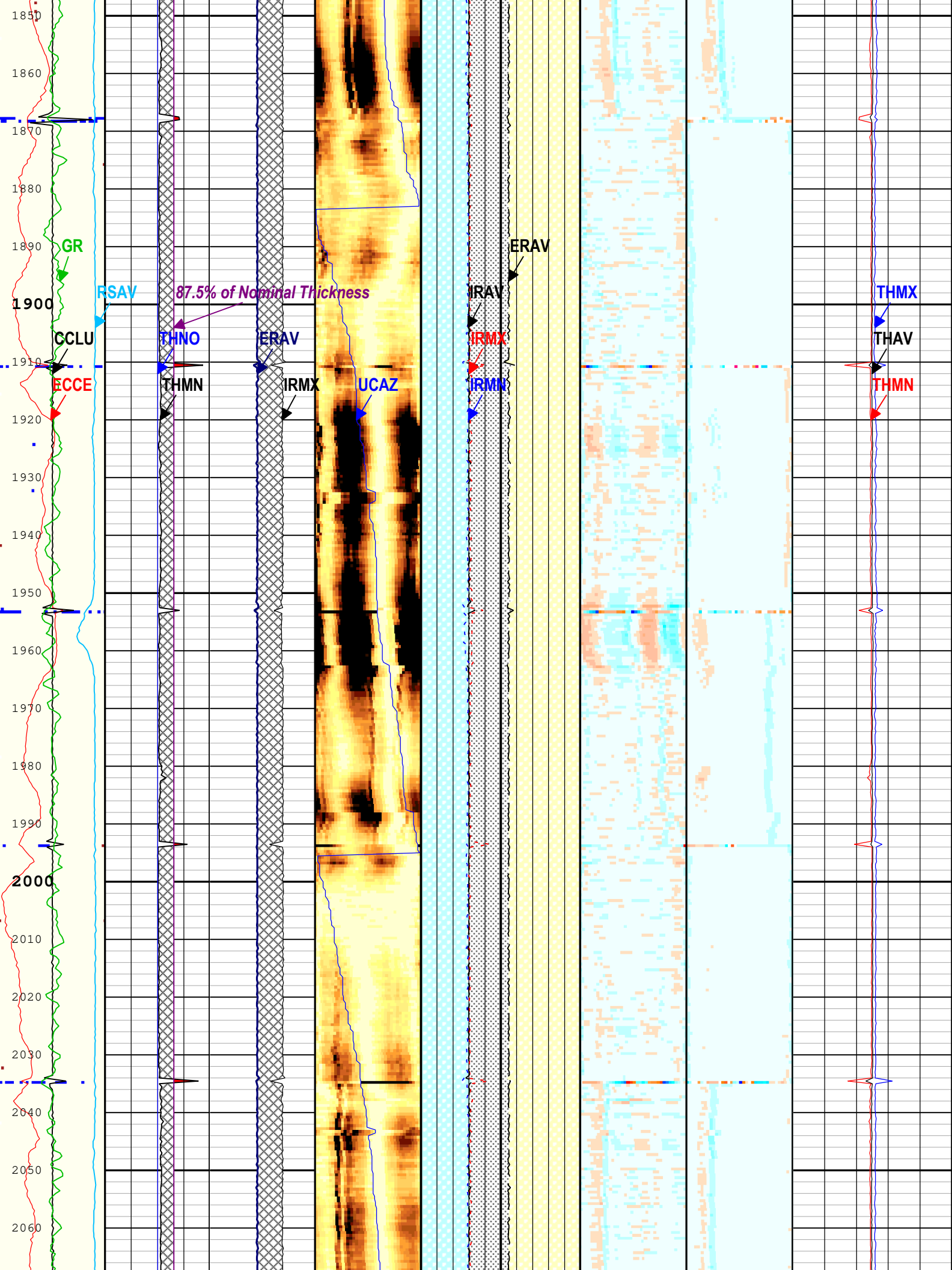
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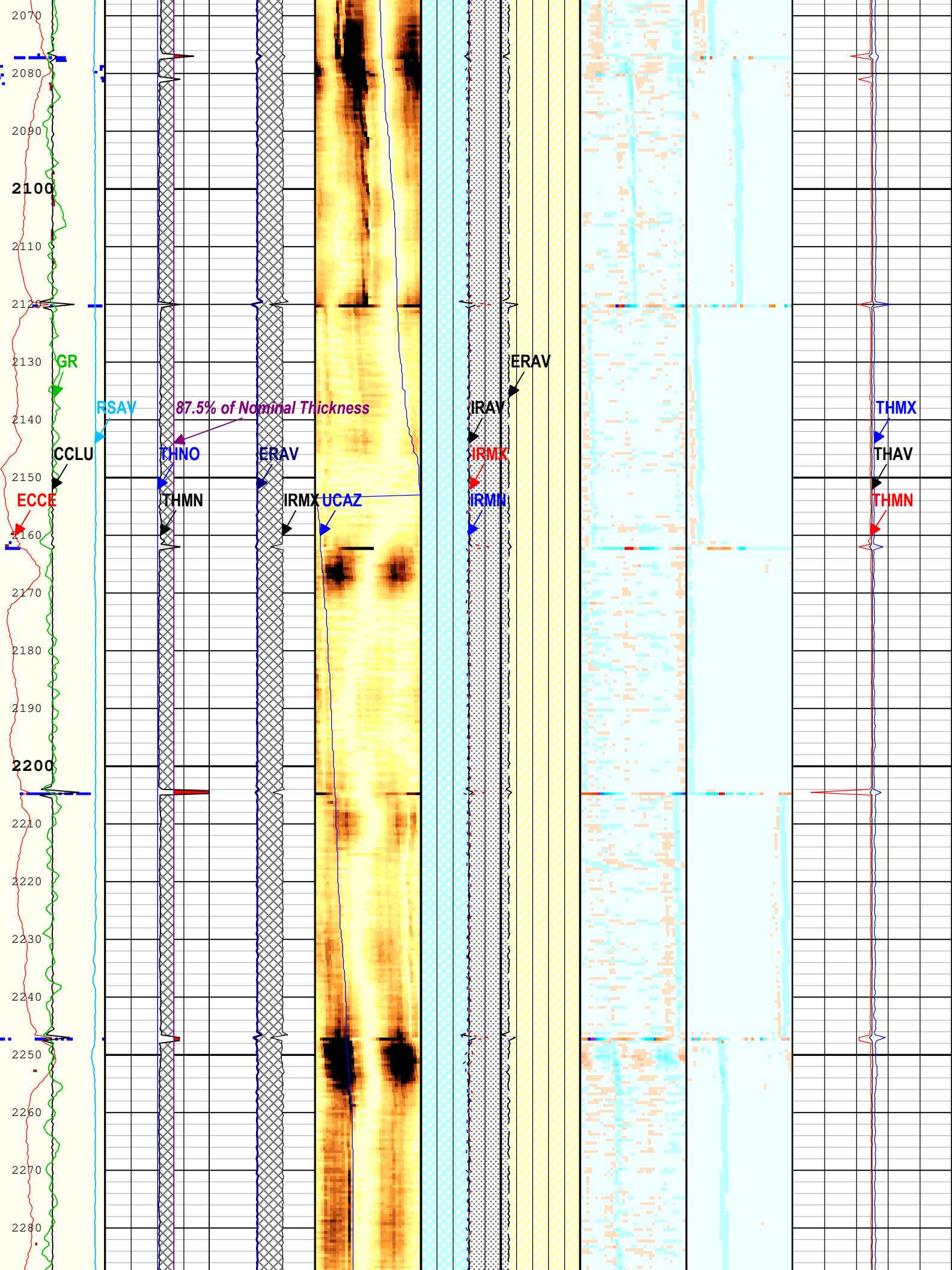
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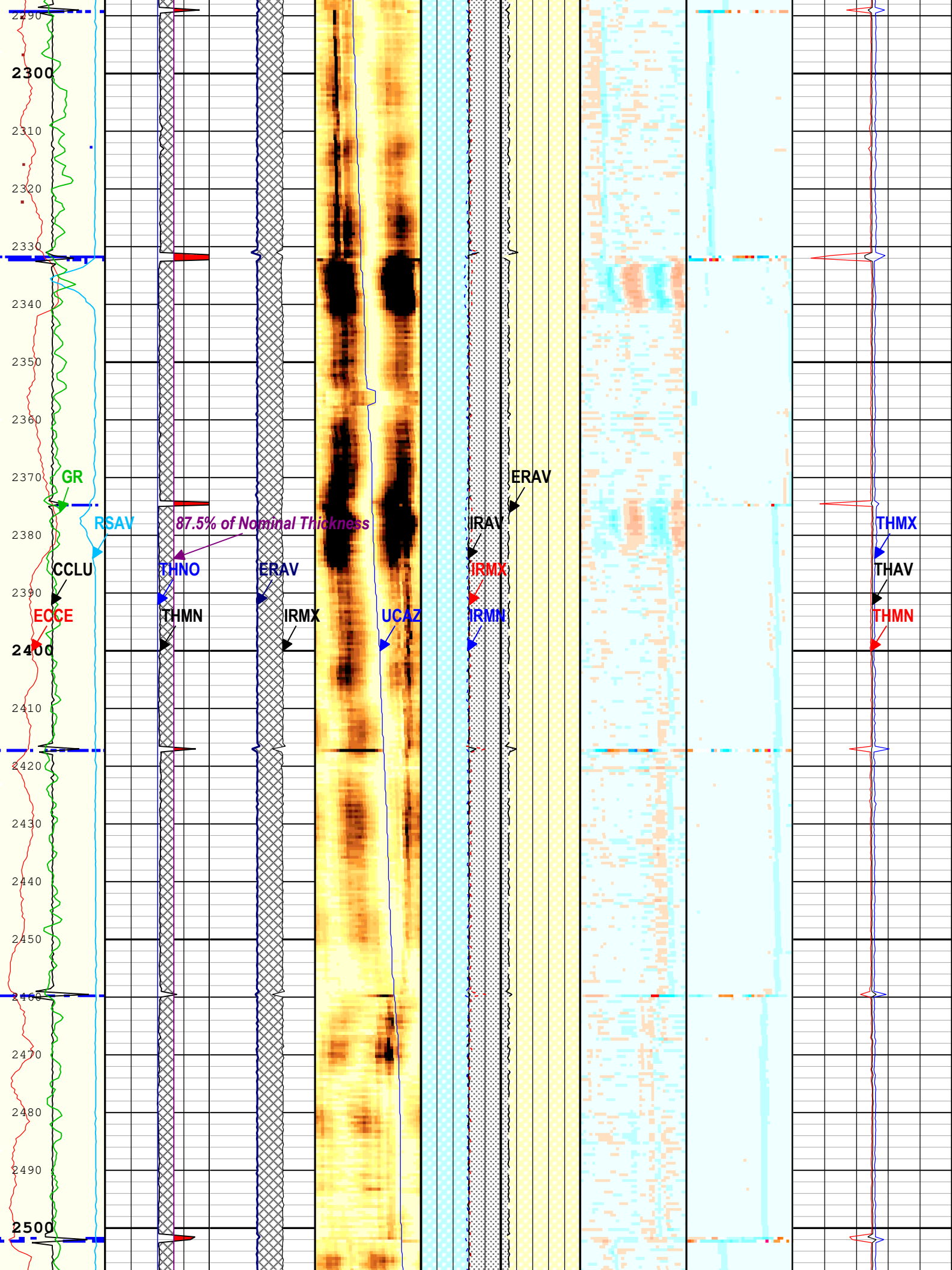
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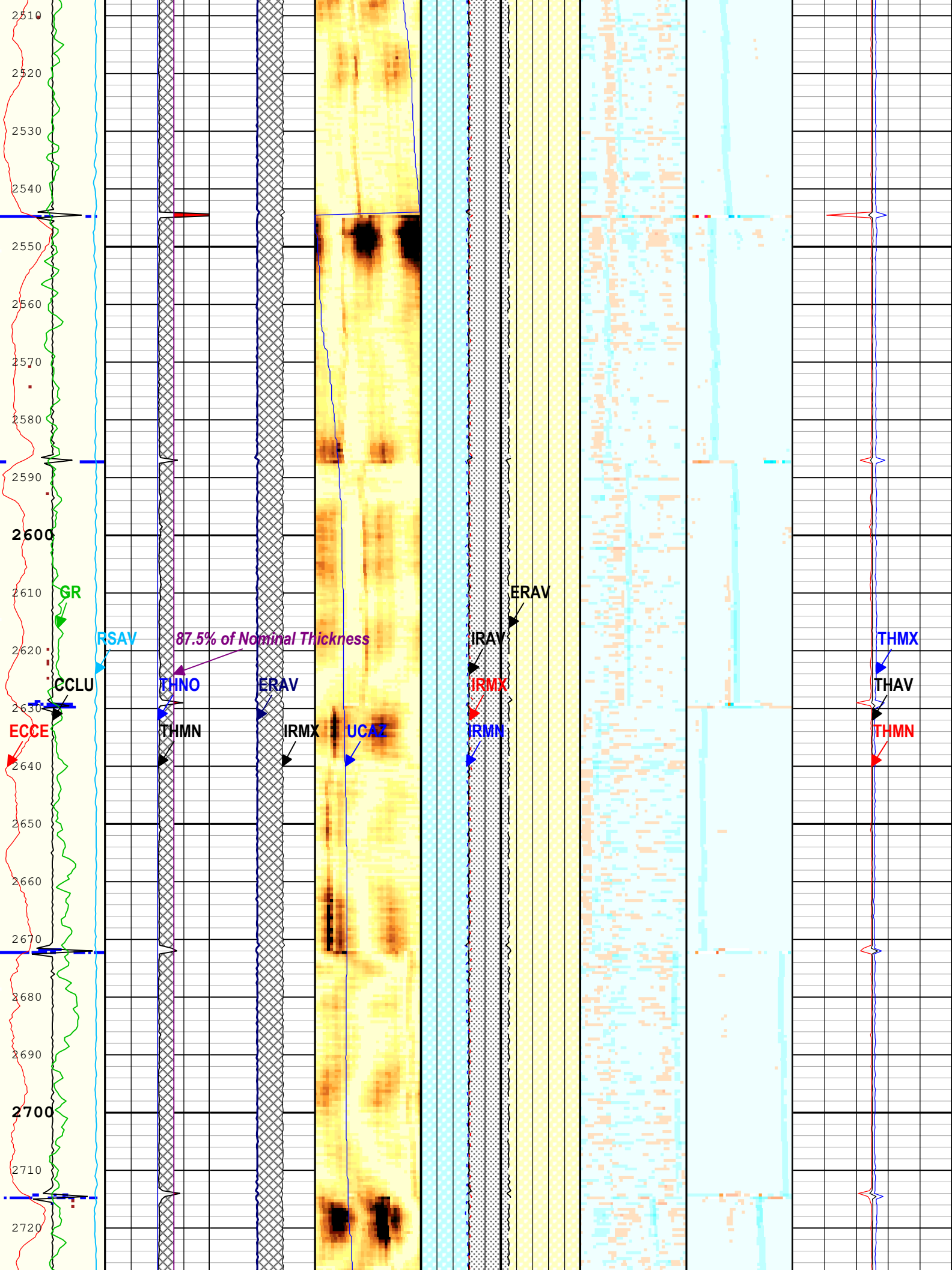
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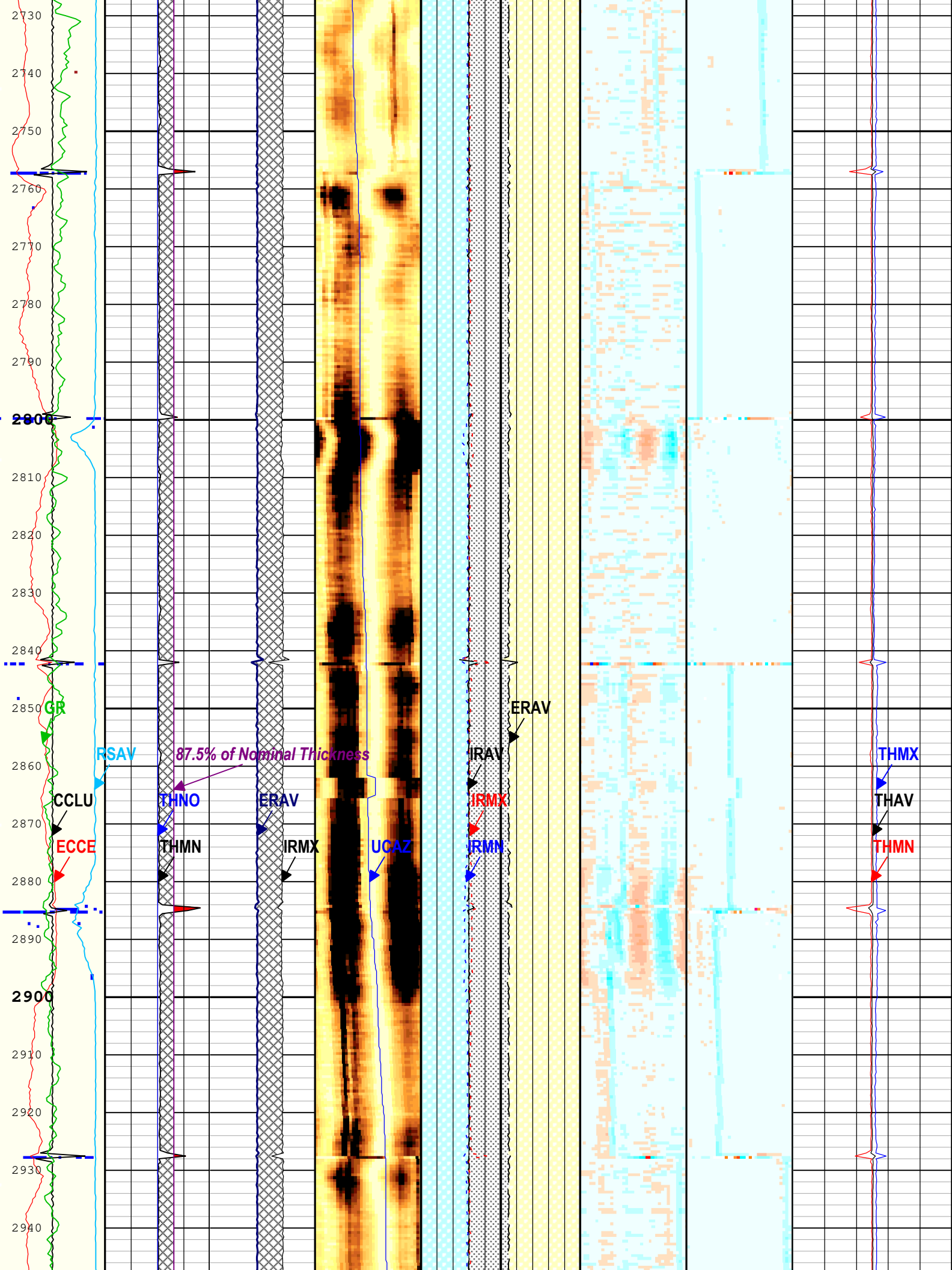
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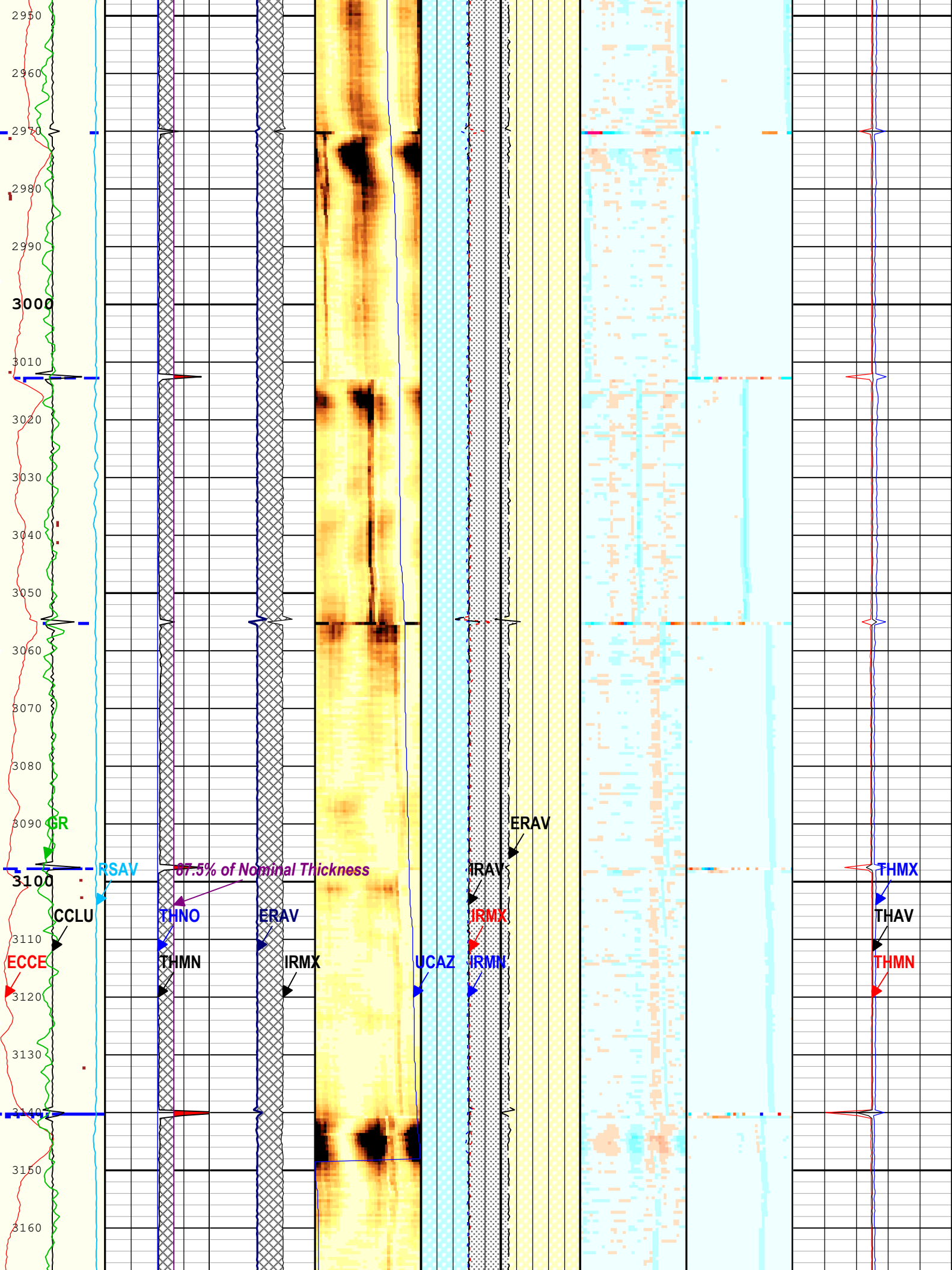
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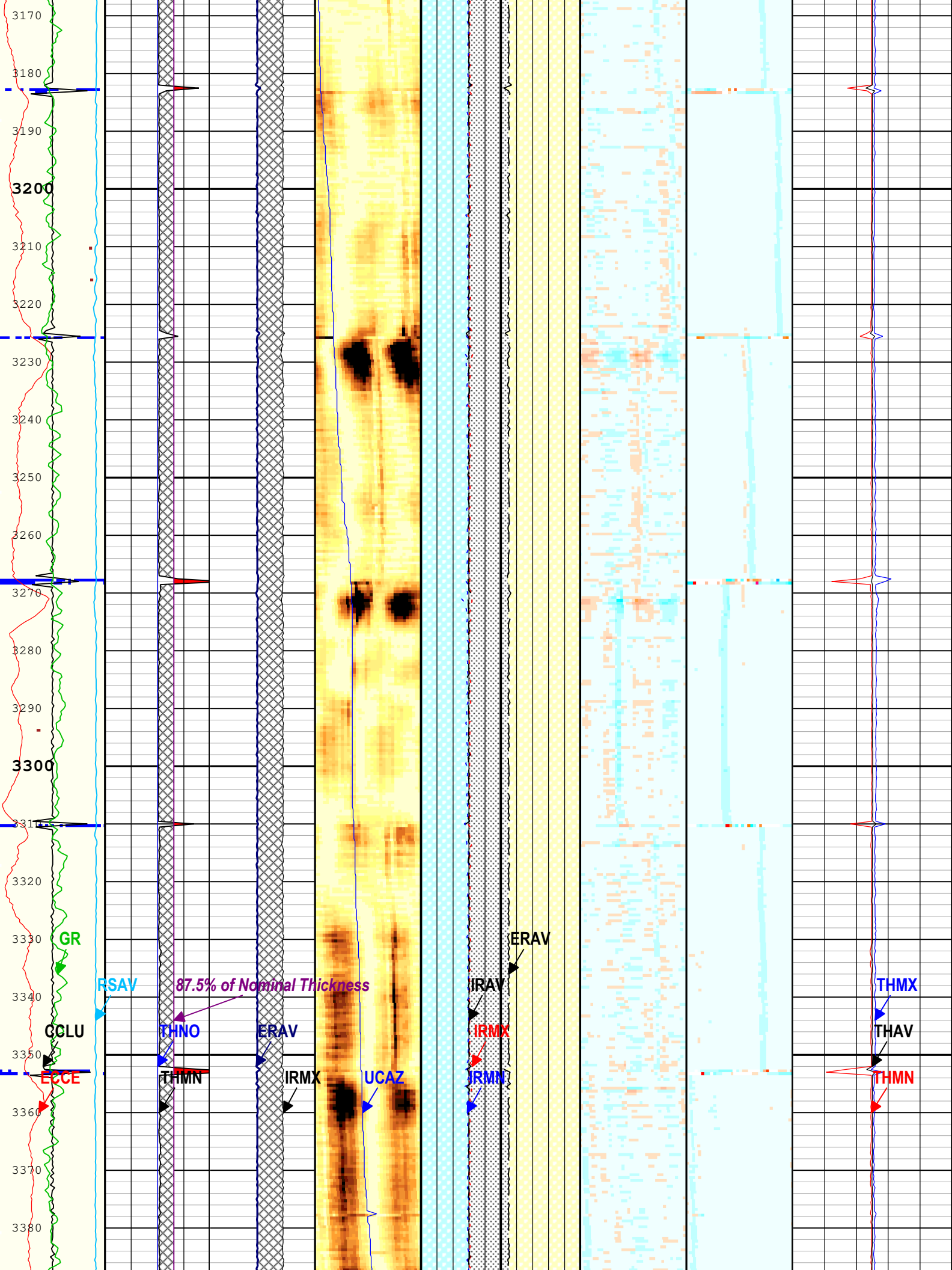
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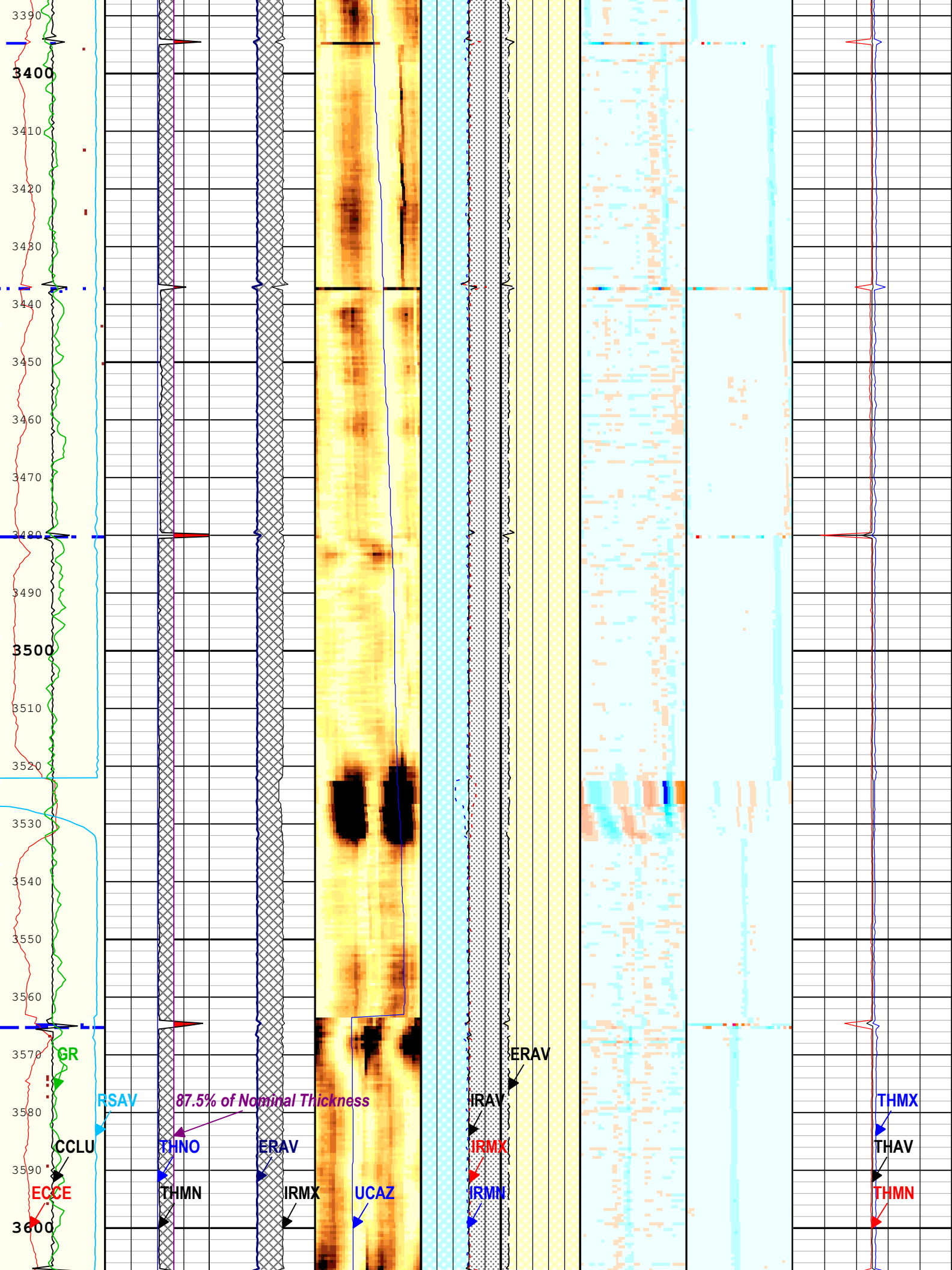
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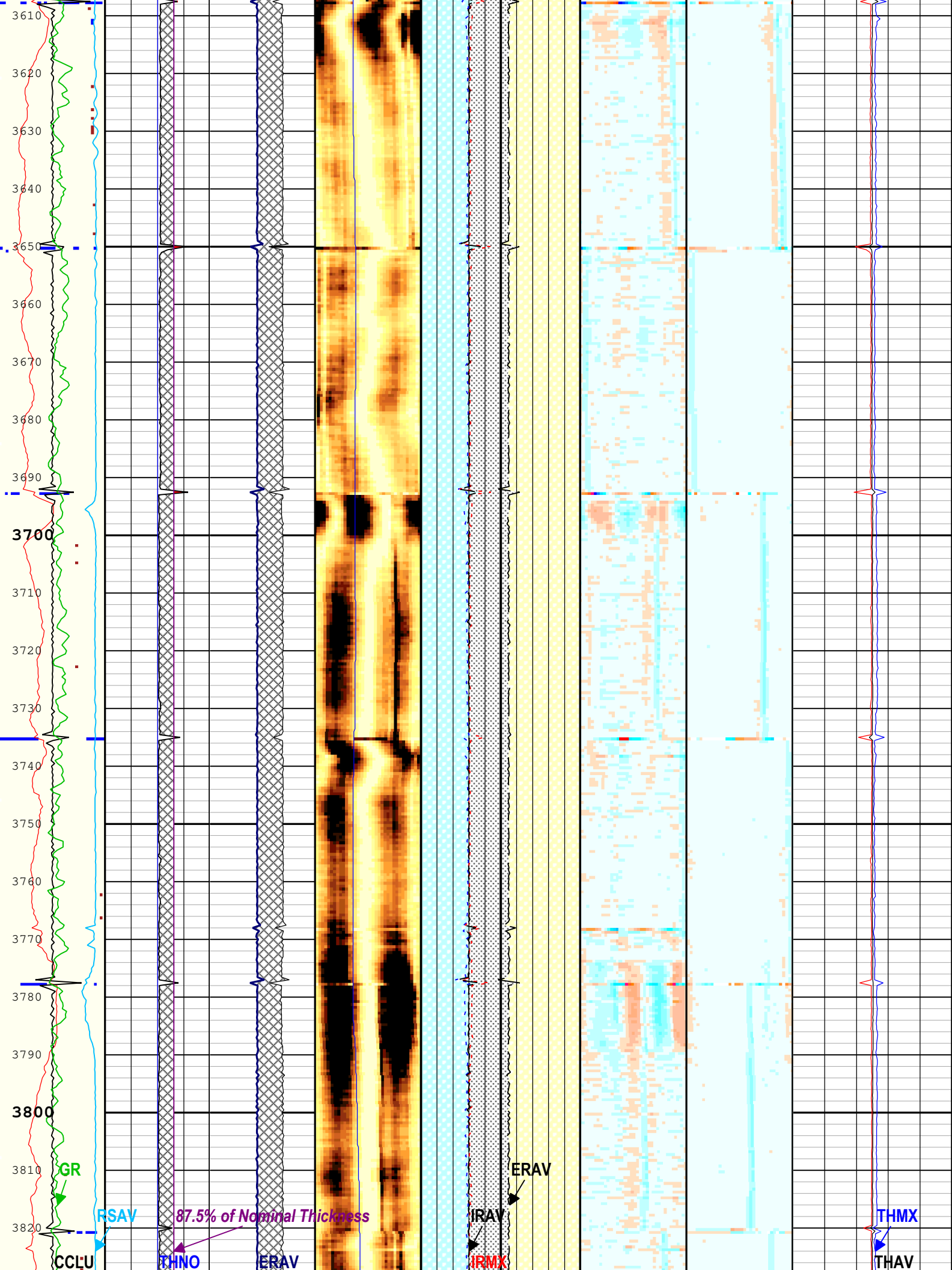
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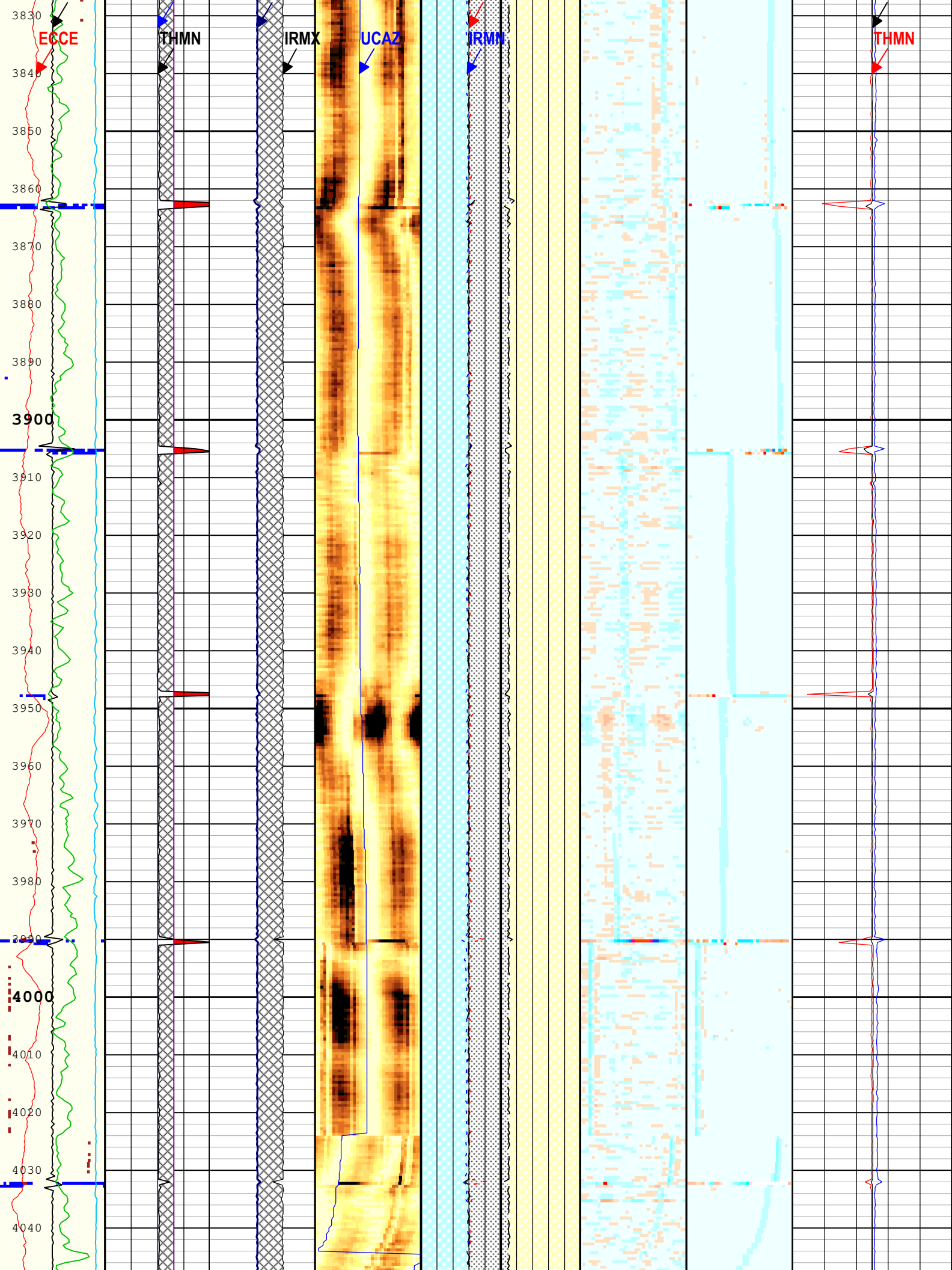
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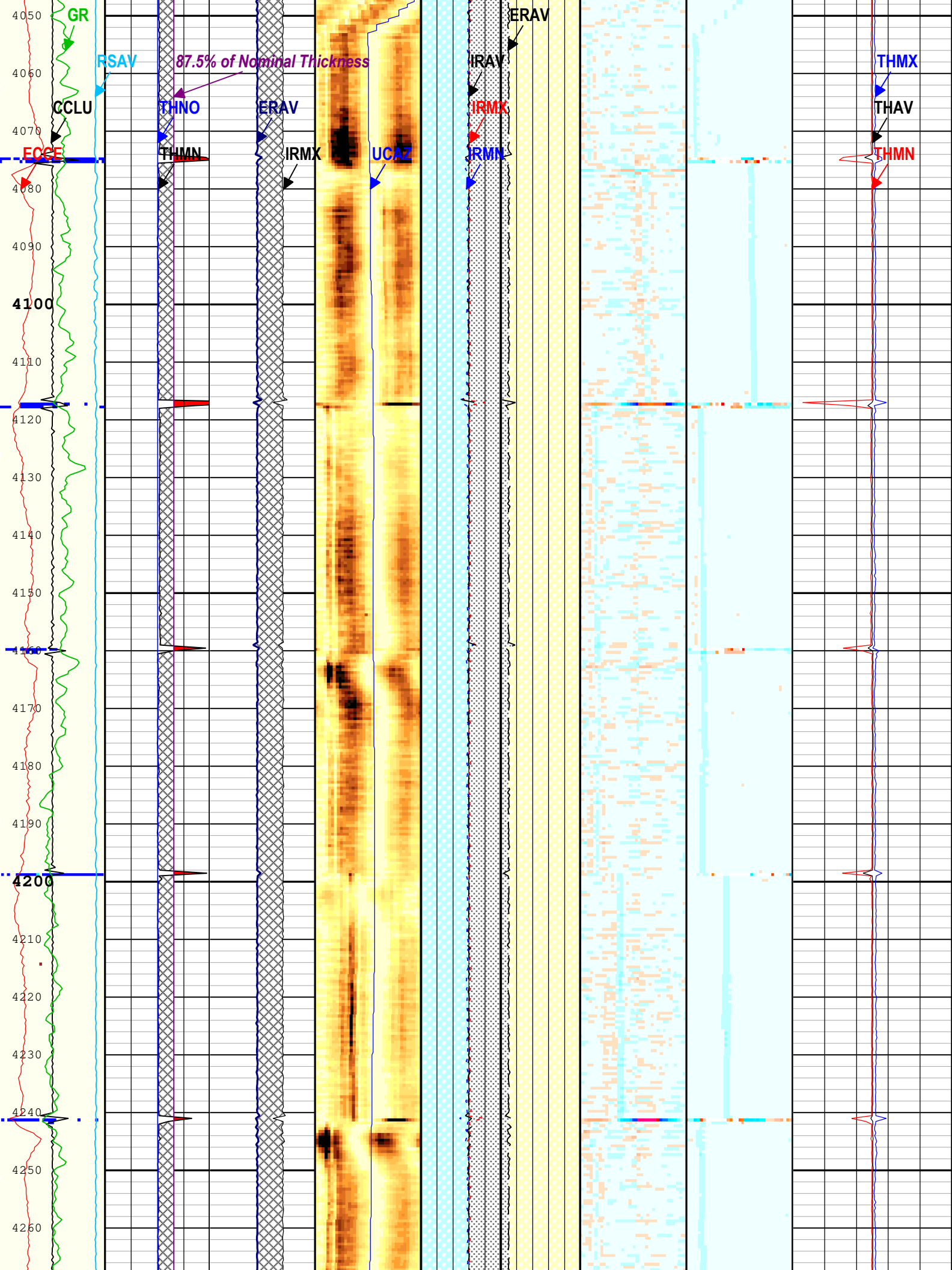
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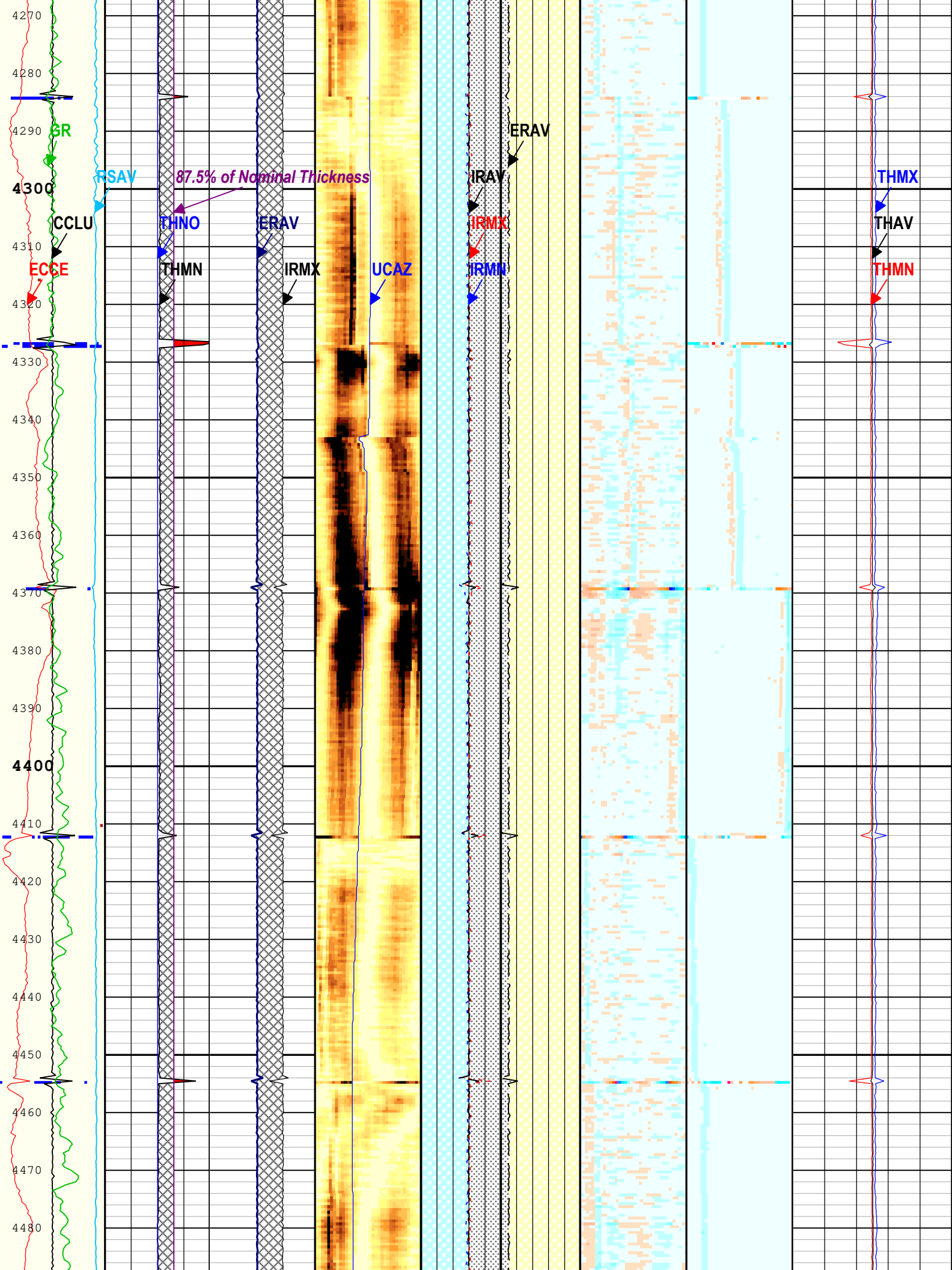
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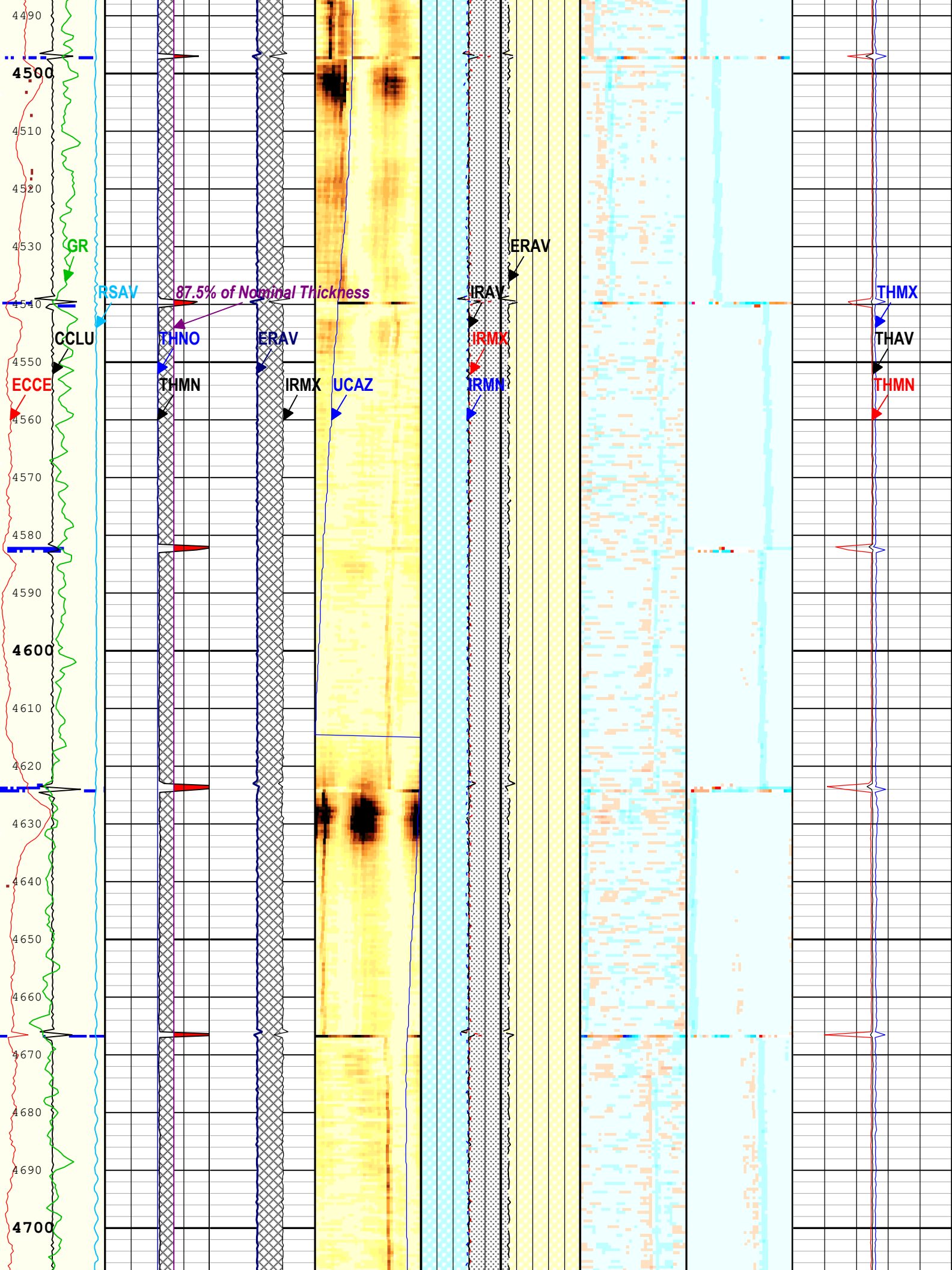
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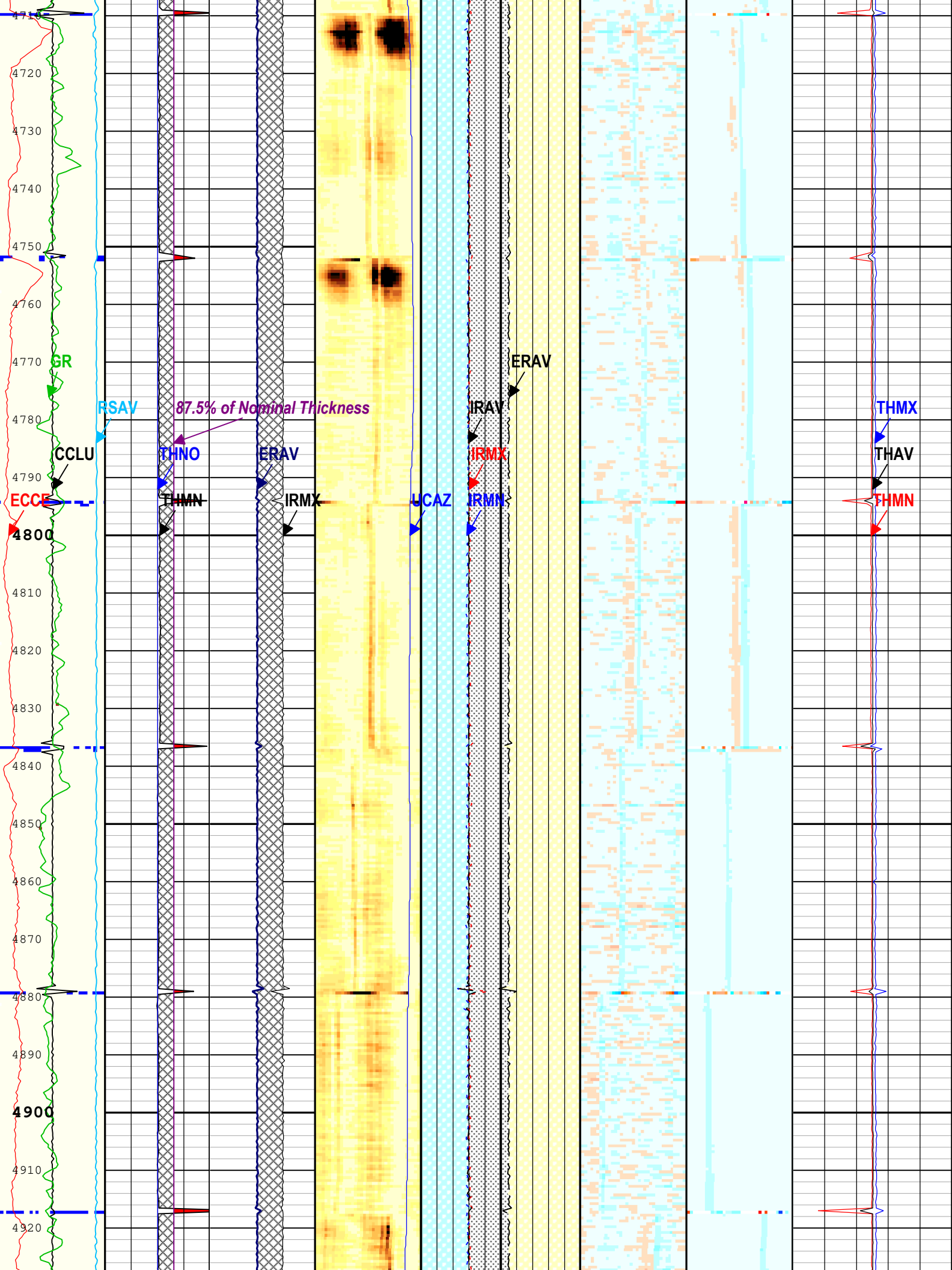
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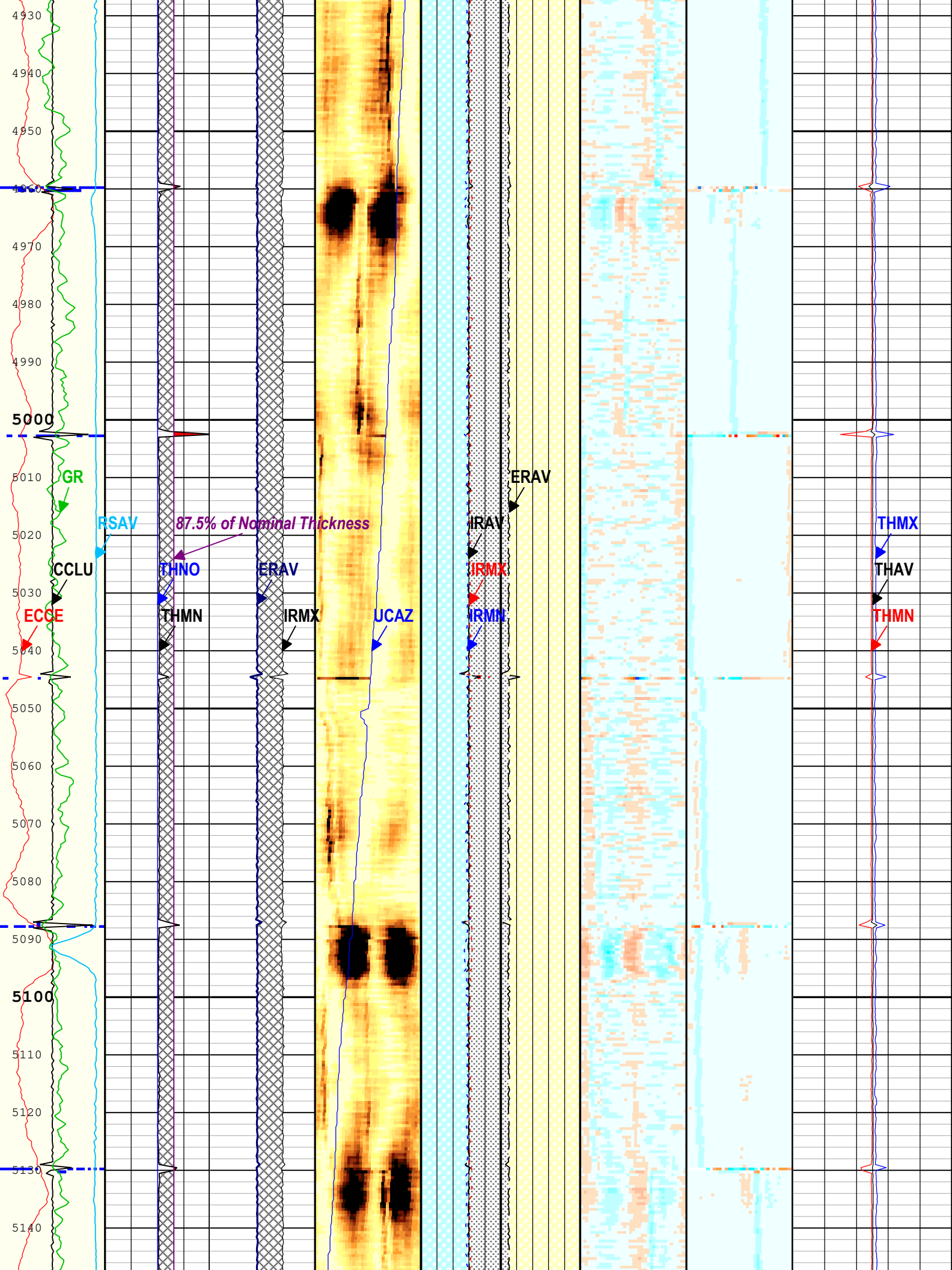
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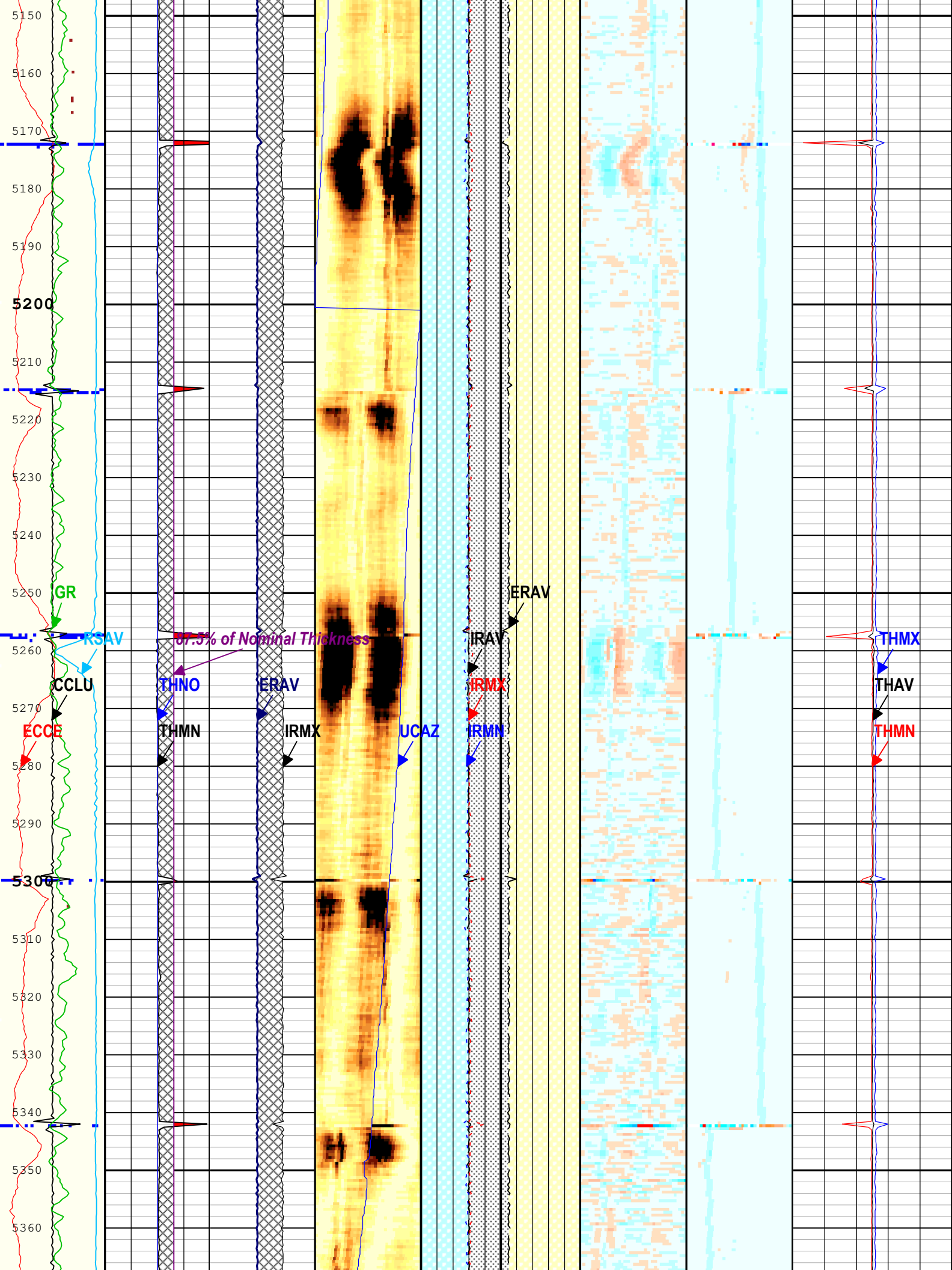
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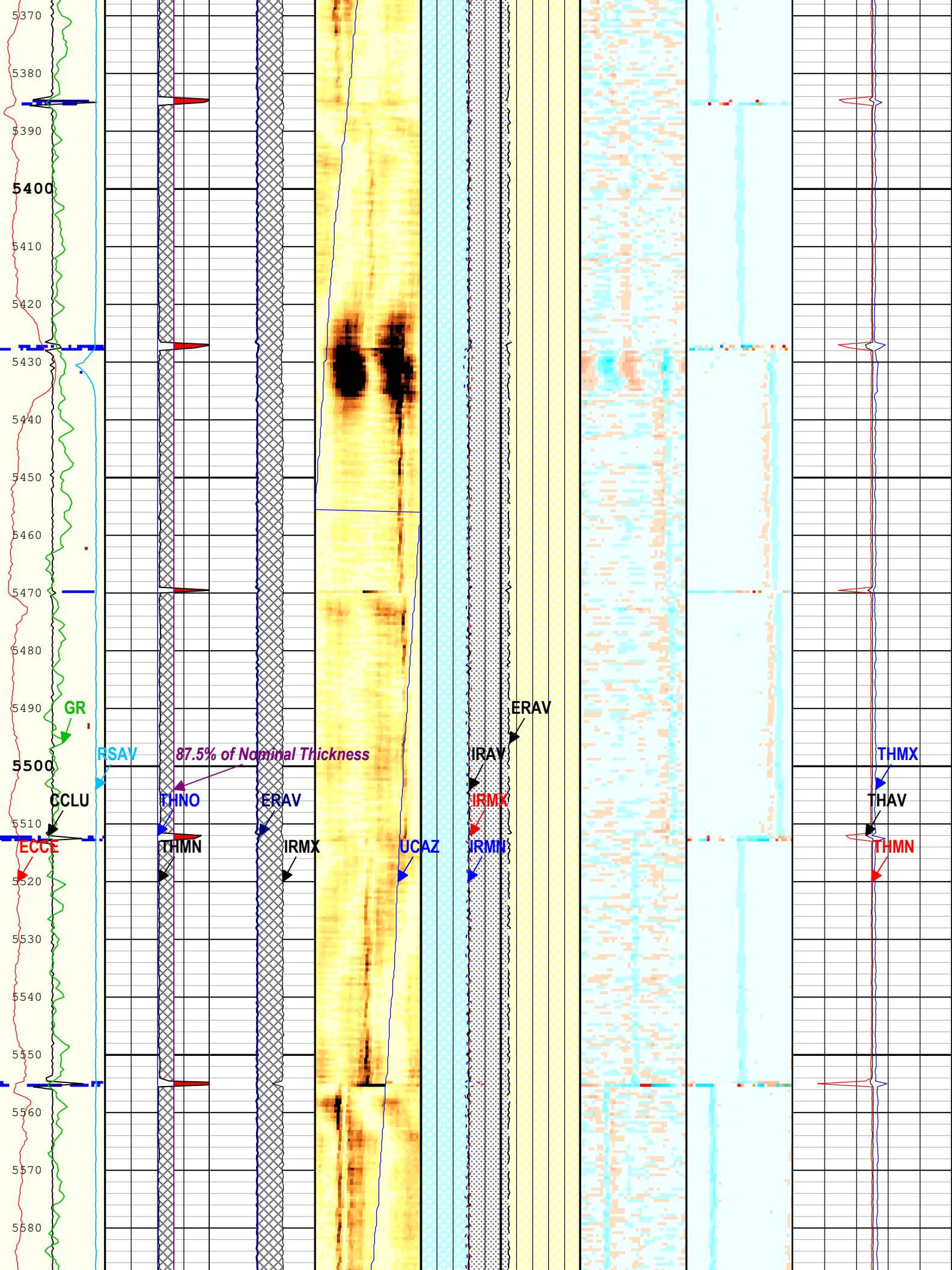
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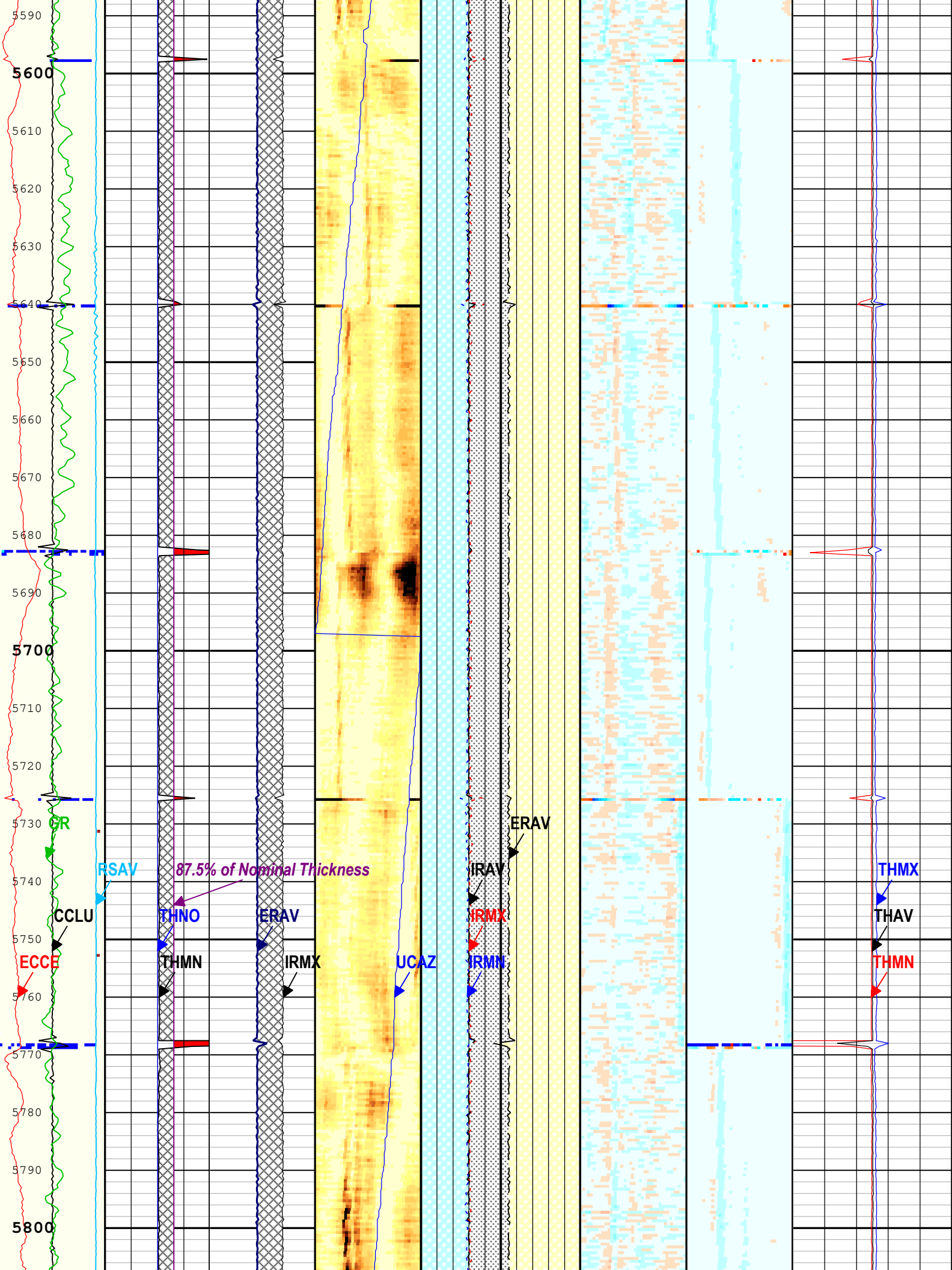
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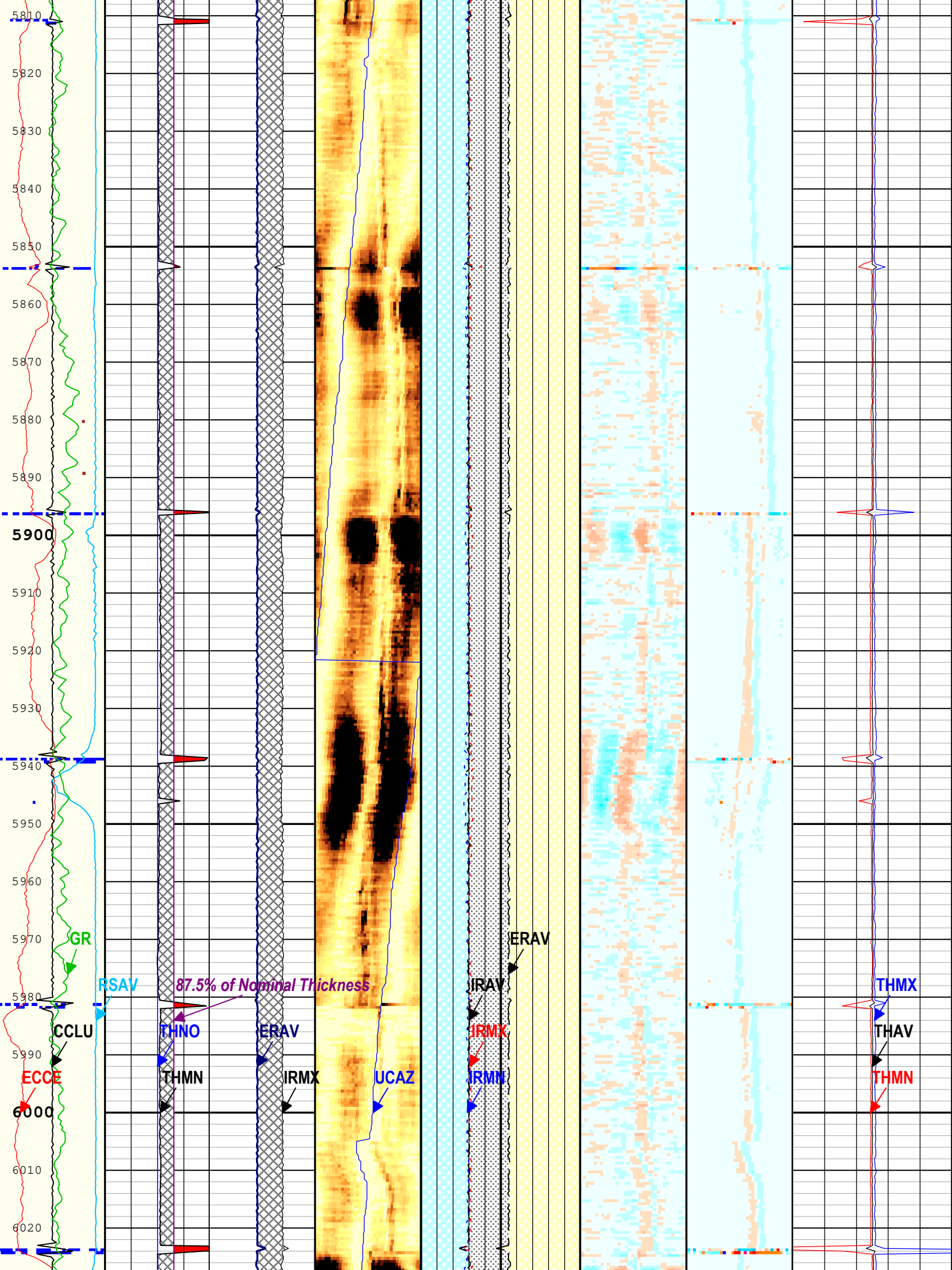
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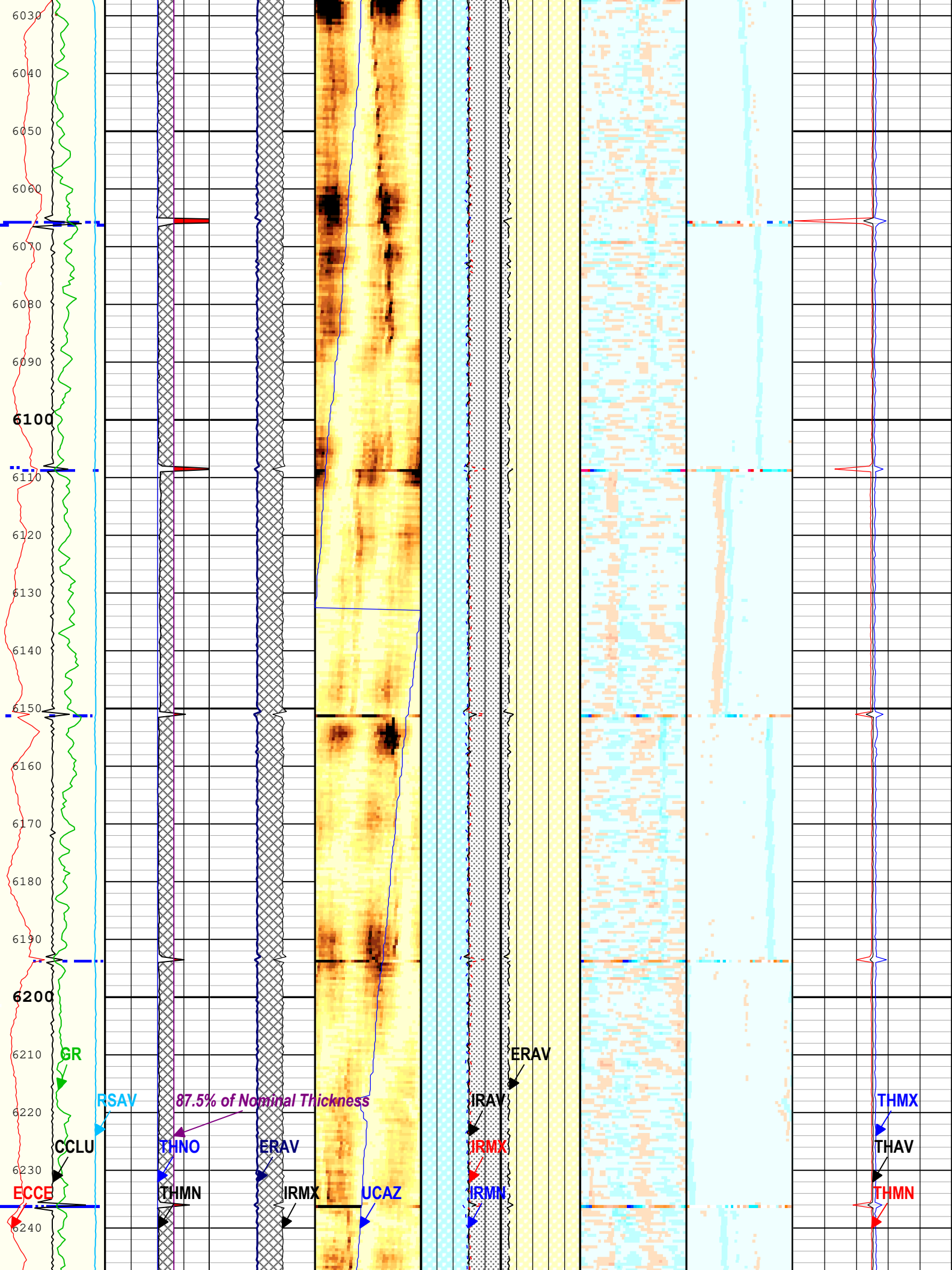
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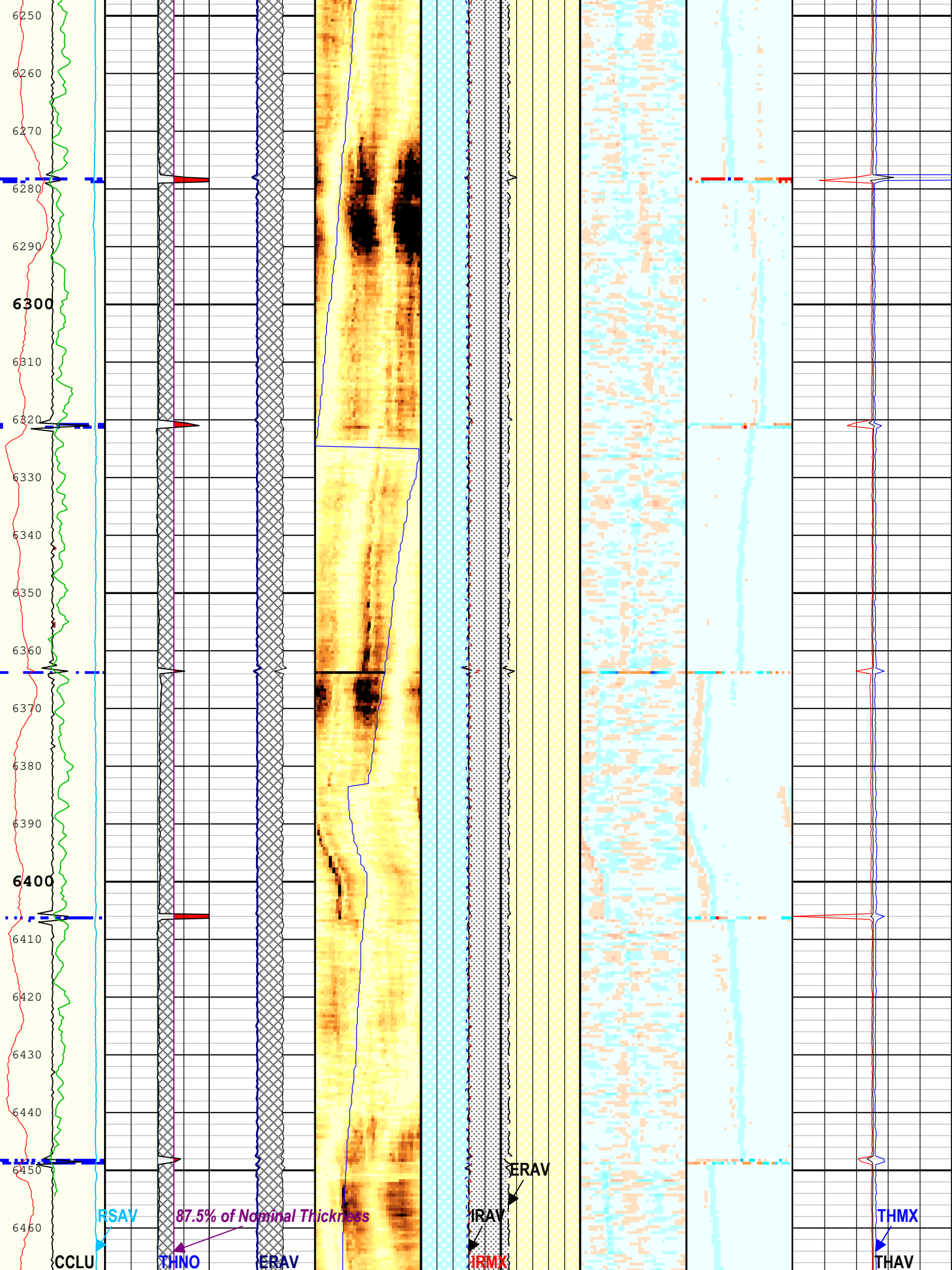
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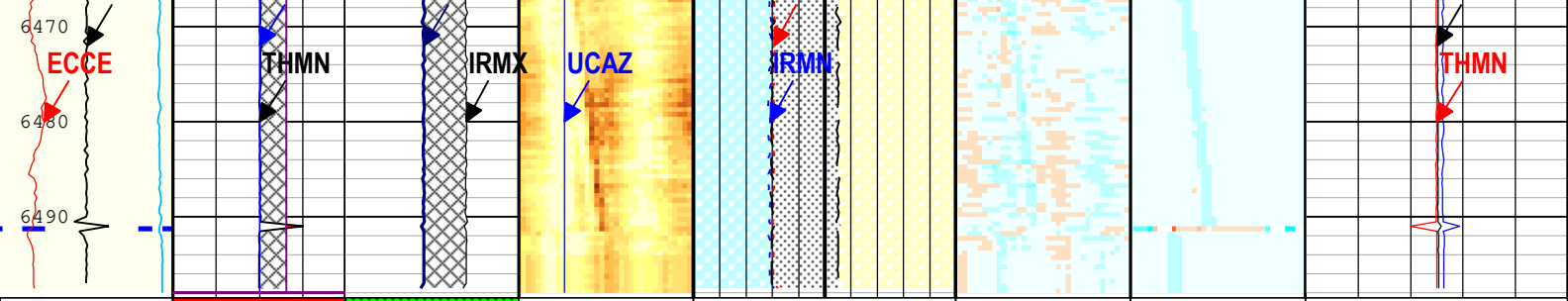
RSAV
87.5% of Nominal Thickness
ERAV
IRAV
THMX
CCLU
THNO
ERAV
IRMX
THAV



Absent 1.500 3.500

Explicit Normalization

USIT - USIT Processing Flags (UFLG) USIT-E[1]

Orientation: Top of Hole

U L B R U

Amplitude of Eccentering (ECCE) USIT-E[1]

0 in 0.5

Casing Collar Locator Ultrasonic (CCLU) USIT-E[1]

-20 in 20

Motor Revolution Speed (RSAV) USIT-E[1]

6 c/s 7.5

GR

0 gAPI 150

Large Reduction from Nominal Thickness

Casing Within 87.5% of Nominal Thickness

Thickness Minimum Value (THMN) USIT-E[1]

0.35 in 0.15

Nominal Casing Thickness (THNO) USIT-E[1]

0.35 in 0.15

87.5% of Nominal Thickness

0.35 in 0.15

Internal Radius Exceeds External Average

Casing Thickness (Between Max Internal and External Average)

Internal Radius Maximum Value (IRMX) USIT-E[1]

2.7 in 1.7

External Radii Average (ERAV) USIT-E[1]

2.7 in 1.7

Absent -5.200 -3.600 -2.000 -0.400

Explicit Normalization

USIT - Amplitude of Wave (AWBK) USIT-E[1] (dB)

Orientation: Top of Hole

U L B R U

Ultrasonic Azimuth (UCAZ) USIT-E[1]

360 deg 0

Internal Radius Minimum Value (IRMN) USIT-E[1]

1.7 in 2.7

Internal Radius Maximum Value (IRMX) USIT-E[1]

1.7 in 2.7

Internal Radius Averaged Value (IRAV) USIT-E[1]

1.7 in 2.7

External Radii Average (ERAV) USIT-E[1]

1.7 in 2.7

Absent -0.059 -0.028 0.004 0.035 0.068

Explicit Normalization

USIT - Internal Radii Normalized (IRBK) USIT-E[1] (in)

Orientation: Top of Hole

U L B R U

Absent -0.059 -0.028 0.004 0.035 0.068

Explicit Normalization

USIT - Casing Thickness Normalized (THBK) USIT-E[1] (in)

Orientation: Top of Hole

U L B R U

Thickness Minimum Value (THMN) USIT-E[1]

0 in 0.5

Thickness Average Value (THAV) USIT-E[1]

0 in 0.5

Thickness Maximum Value (THMX) USIT-E[1]

0 in 0.5

TIME_1900 - Time Marked every 60.00 (s)

Description: USI Corrosion Format: Log (IBC Casing Integrity 4.5IN) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 09-May-2023 15:37:42

Channel Processing Parameters

ONE: Parameters

Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BS	Bit Size	WLSESSION	Depth Zoned	in
CDEN	Cement Density	USIT-E	1.2	g/cm3
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
CYSTLGR	Casing Yield Strength - Zoned along logger depths	WLSESSION	80000	psi
DFD	Drilling Fluid Density	Borehole	8.6	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	1.08	g/cm3

HEMA	Hematite Presence Flag	Borehole	No	
IBC_FRP_OFFSET	IBC Flexural Offset from Free Pipe	USIT-E	-9.77	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	IBC_FRP_OFFSET	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	Theoretical	
IMAR	Image Rotation	USIT-E	RB	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	15.37	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.02	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1.02	
THDH	Maximum Search Thickness (percentage of nominal)	USIT-E	120	%
THDL	Minimum Search Thickness (percentage of nominal)	USIT-E	80	%
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.62	Mrayl
U-USIT_UFAO	USIT Flexural Attenuation Offset	USIT-E	0	dB/m
UFSFILT	Ultrasonic Flexural Surface Filter	USIT-E	LPF 250k	
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.48	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

ONEDepth Zoned Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	12.25	6	735
BS	7.875	735	6498.5

All depth are actual.

Tool Control Parameters

ONE: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	48	dB
EMXV	EMEX Voltage	USIT-E	Time Zoned	V
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
UPAT	USIT Emission Pattern	USIT-E	Pattern 750 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VRES	Vertical Resolution	USIT-E	6.0 in	

ONETime Zoned Parameters

Pass Log[3]:Up

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
EMXV	60	09-May-2023 11:42:38	09-May-2023 12:33:02	6500.51	3564.01

Pass Log[4]:Up

EMXV	60	09-May-2023 12:36:18	09-May-2023 12:47:30	3564.01	3156.61
EMXV	50	09-May-2023 12:47:30	09-May-2023 13:43:44	3156.61	54.76
EMXV	110	09-May-2023 13:43:44	09-May-2023 13:43:53	54.76	51.77
EMXV	50	09-May-2023 13:43:53	09-May-2023 13:44:18	51.77	50.01

All depth are at tool zero.

ONE

Software Version

Acquisition System	Version
Maxwell 2023.0	13.0.221437.3100
Application Patch	Wireline_Hotfix-Mandatory-2023.0_13.0.222988
	Wireline_NPD-HCS-2023.0_13.0.222422

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[2]:Up	Up	6189.52 ft	6498.04 ft	09-May-2023 11:28:11 AM	09-May-2023 11:33:35 AM	ON	-2.00 ft	Yes

All depths are referenced to toolstring zero

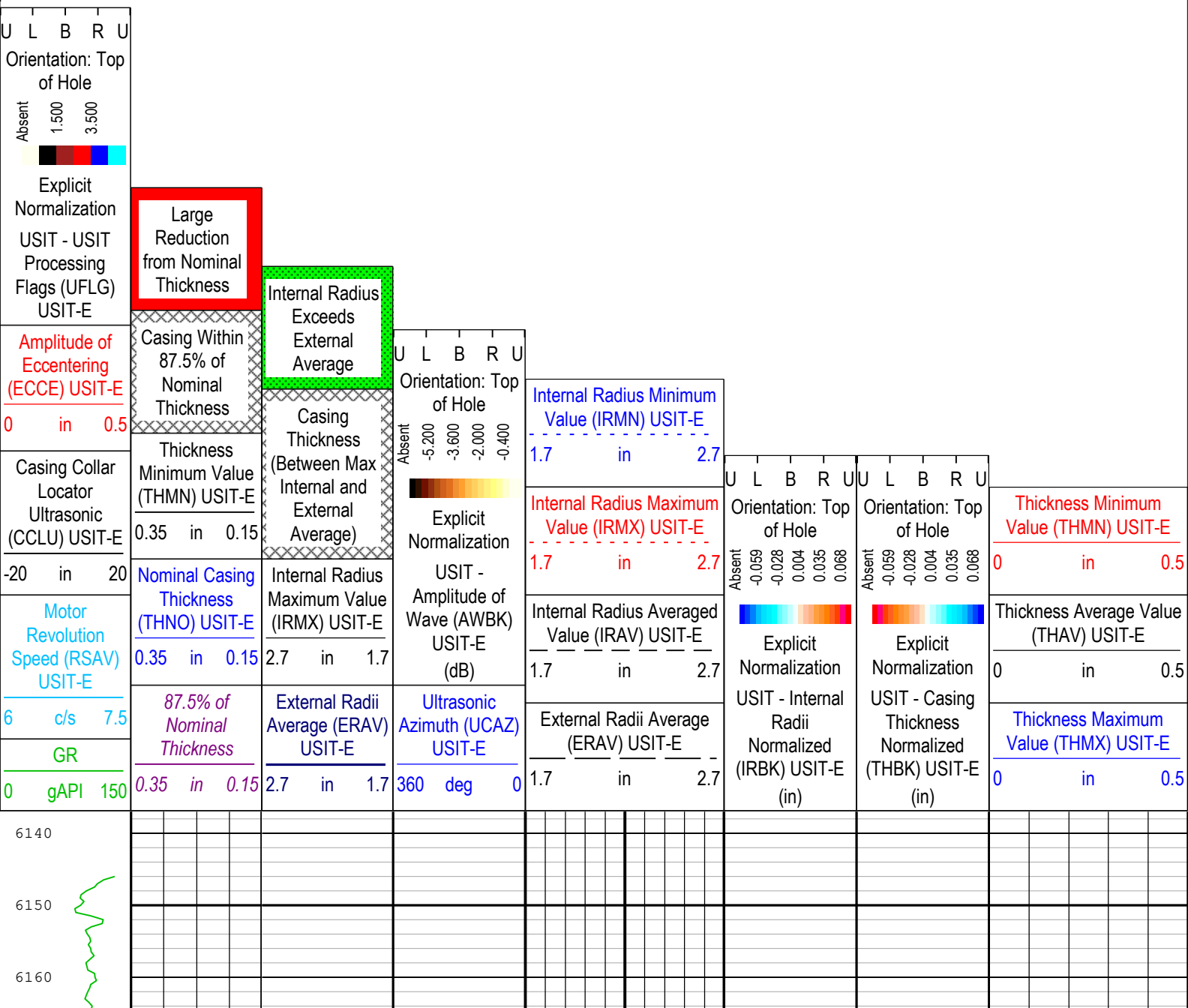
Log

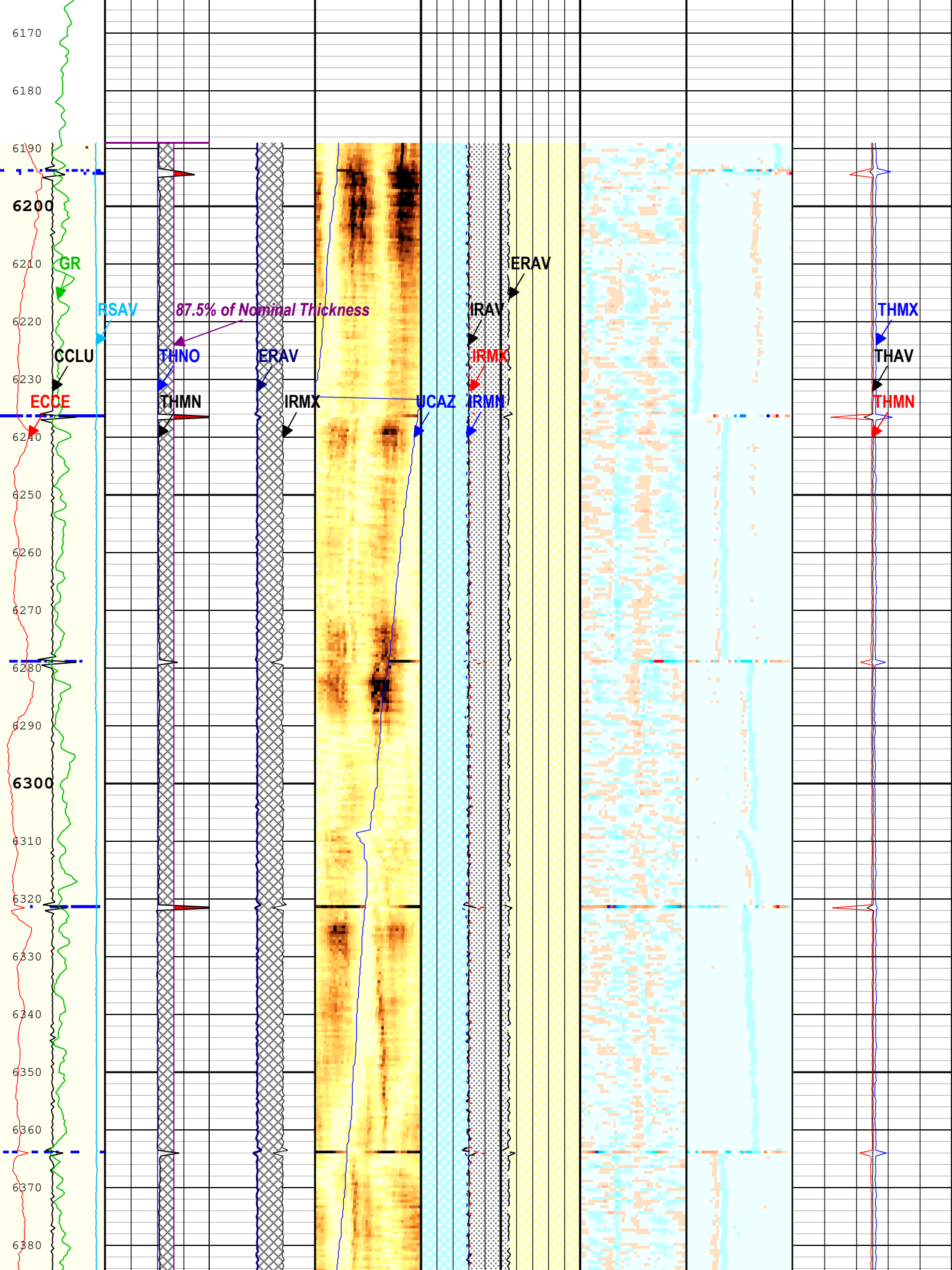
Company:Occidental Petroleum Corporation Well:CAMP H30-29D

ONE: Log[2]:Up:S022

Description: USI Corrosion Format: Log (IBC Casing Integrity 4.5IN) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 09-May-2023 15:38:02

TIME_1900 - Time Marked every 60.00 (s)

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RSAV
87.5% of Nominal Thickness
CCLU
THNO
ERAV
ECOE
THMN
IRMX
UCAZ
IRAV
IRMX
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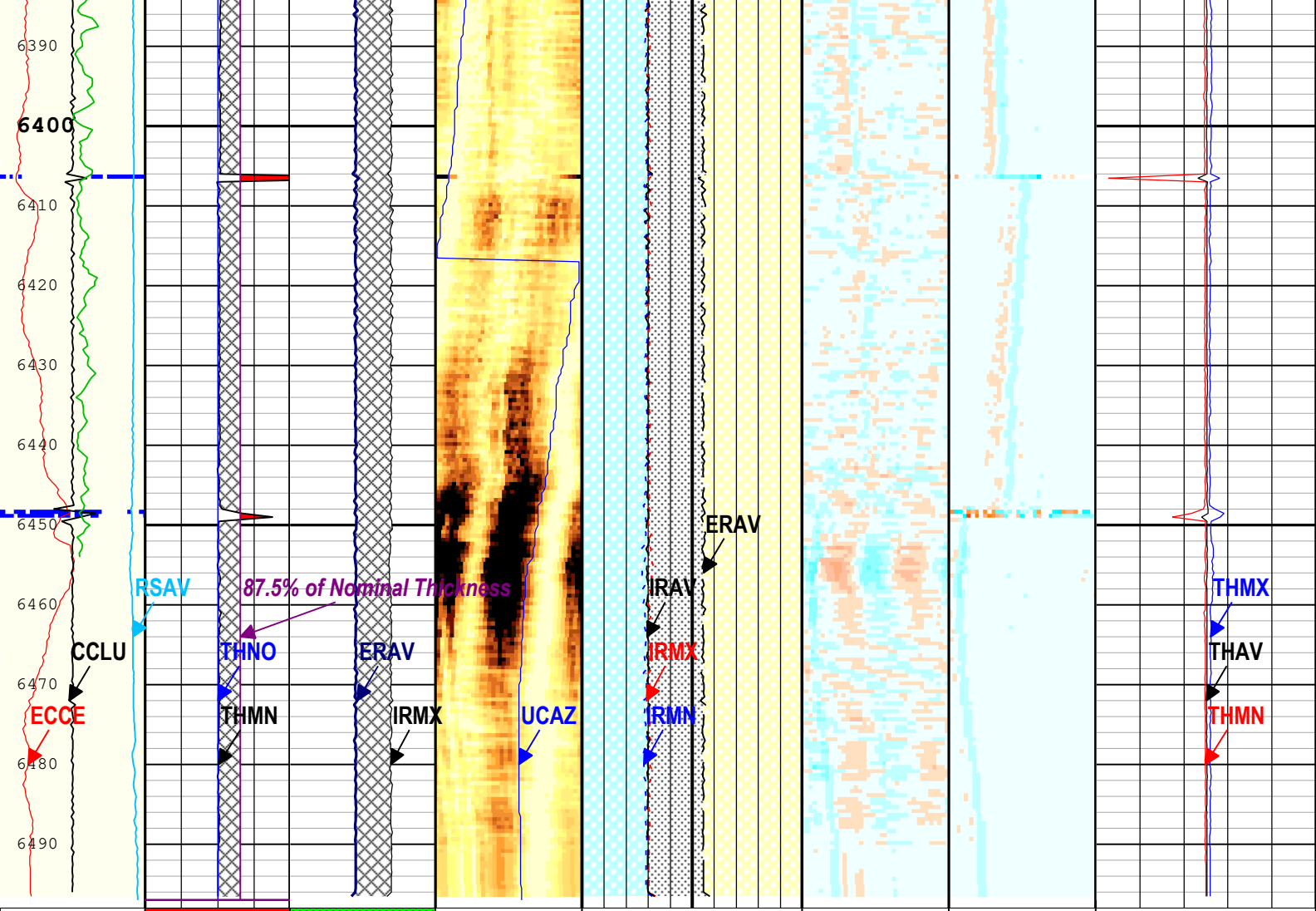
THMN



Absent 1.500 3.500

Explicit Normalization

USIT - USIT Processing Flags (UFLG) USIT-E

Orientation: Top of Hole

U L B R U

Amplitude of Eccentering (ECCE) USIT-E

0 in 0.5

Casing Collar Locator Ultrasonic (CCLU) USIT-E

-20 in 20

Motor Revolution Speed (RSAV) USIT-E

6 c/s 7.5

GR

Large Reduction from Nominal Thickness

Casing Within 87.5% of Nominal Thickness

Thickness Minimum Value (THMN) USIT-E

0.35 in 0.15

Nominal Casing Thickness (THNO) USIT-E

0.35 in 0.15

87.5% of Nominal Thickness

0.35 in 0.15

Internal Radius Exceeds External Average

Casing Thickness (Between Max Internal and External Average)

Internal Radius Maximum Value (IRMX) USIT-E

2.7 in 1.7

External Radii Average (ERAV) USIT-E

2.7 in 1.7

Absent -5.200 -3.600 -2.000 -0.400

Explicit Normalization

USIT - Amplitude of Wave (AWBK) USIT-E (dB)

Orientation: Top of Hole

U L B R U

Ultrasonic Azimuth (UCAZ) USIT-E

360 deg 0

Internal Radius Minimum Value (IRMN) USIT-E

1.7 in 2.7

Internal Radius Maximum Value (IRMX) USIT-E

1.7 in 2.7

Internal Radius Averaged Value (IRAV) USIT-E

1.7 in 2.7

External Radii Average (ERAV) USIT-E

1.7 in 2.7

Absent -0.059 -0.028 0.004 0.035 0.068

Explicit Normalization

USIT - Internal Radii Normalized (IRBK) USIT-E (in)

Orientation: Top of Hole

U L B R U

Absent -0.059 -0.028 0.004 0.035 0.068

Explicit Normalization

USIT - Casing Thickness Normalized (THBK) USIT-E (in)

Orientation: Top of Hole

U L B R U

Thickness Minimum Value (THMN) USIT-E

0 in 0.5

Thickness Average Value (THAV) USIT-E

0 in 0.5

Thickness Maximum Value (THMX) USIT-E

0 in 0.5

0 gAPI 150

TIME_1900 - Time Marked every 60.00 (s)

Description: USI Corrosion Format: Log (IBC Casing Integrity 4.5IN) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 09-May-2023 15:38:02

Channel Processing Parameters

ONE: Parameters

Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BS	Bit Size	WLSESSION	7.875	in
CDEN	Cement Density	USIT-E	1.2	g/cm3
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Regular Cement	
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
CYSTLGR	Casing Yield Strength - Zoned along logger depths	WLSESSION	80000	psi
DFD	Drilling Fluid Density	Borehole	8.6	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	1.08	g/cm3
HEMA	Hematite Presence Flag	Borehole	No	
IBC_FRP_OFFSET	IBC Flexural Offset from Free Pipe	USIT-E	-9.77	dB/m
IBC_FVEL_SEL	IBC Fluid Velocity Selection	USIT-E	Automatic	
IBC_OFFSET_SEL	IBC Flexural Offset Selector	USIT-E	IBC_FRP_OFFSET	
IBC_ZMUD_SEL	IBC Mud Impedance Selection	USIT-E	Theoretical	
IMAR	Image Rotation	USIT-E	RB	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	15.37	us
MUD_N_FRP	Free Pipe Mud Normalization Factor	USIT-E	1.02	
MUD_N_THE	Theoretical Mud Normalization Factor	USIT-E	1.02	
THDH	Maximum Search Thickness (percentage of nominal)	USIT-E	120	%
THDL	Minimum Search Thickness (percentage of nominal)	USIT-E	80	%
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	1.62	Mrayl
U-USIT_UFAO	USIT Flexural Attenuation Offset	USIT-E	0	dB/m
UFSFILT	Ultrasonic Flexural Surface Filter	USIT-E	LPF 250k	
U-USIT_UIAP	IBC Answer Product Enabled	USIT-E	SolidLiquidGasMap	
ZMUD	Acoustic Impedance of Mud	Borehole	1.48	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.6	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas	USIT-E	0.3	Mrayl

Tool Control Parameters

ONE: Parameters

Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	48	dB
EMXV	EMEX Voltage	USIT-E	Time Zoned	V
IBC_ACQTYPE	IBC Acquisition type	USIT-E	1 MHz	
IBC_FLEXDBP	IBC Flex Duration Before Peak	USIT-E	30	us
ICE2_ACQ	Ultrasonic ICE2 Acquisition	USIT-E	Yes	
UPAT	USIT Emission Pattern	USIT-E	Pattern 750 KHz	
UWKM	USIT Working Mode	USIT-E	10 deg at 6.0 in	
U-USIT_UTAN	Transducer Angles	USIT-E	33_DEG	
VRES	Vertical Resolution	USIT-E	6.0 in	

Time Zone Parameters

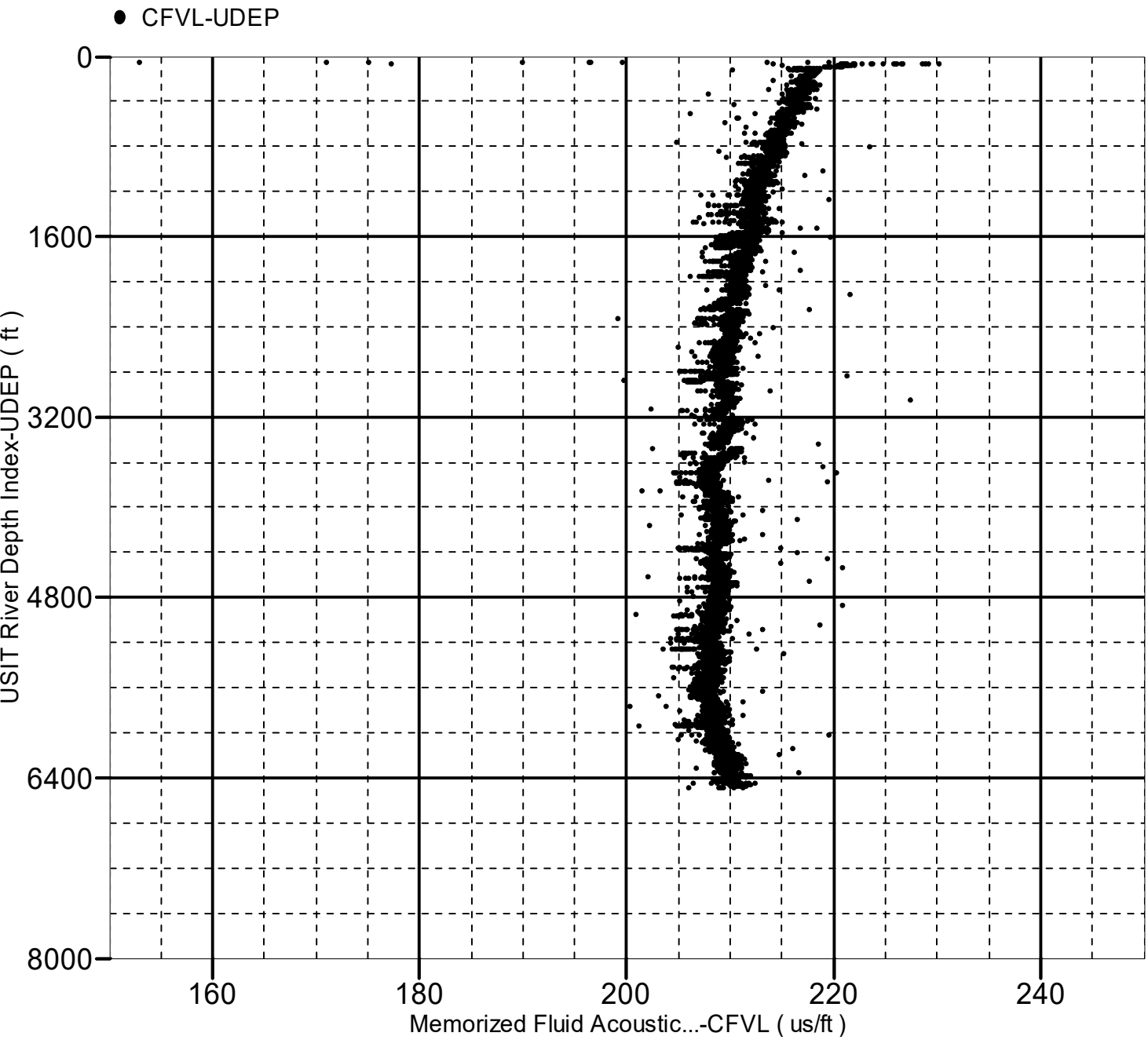
Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
EMXV	70	09-May-2023 11:28:11	09-May-2023 11:28:37	6498.04	6487.81
EMXV	60	09-May-2023 11:28:37	09-May-2023 11:33:35	6487.81	6189.52

All depth are at tool zero.

Fluid Acoustic Slowness vs Depth

2D Cross Plot

Index Range: From 49.00 to 6498.00 ft



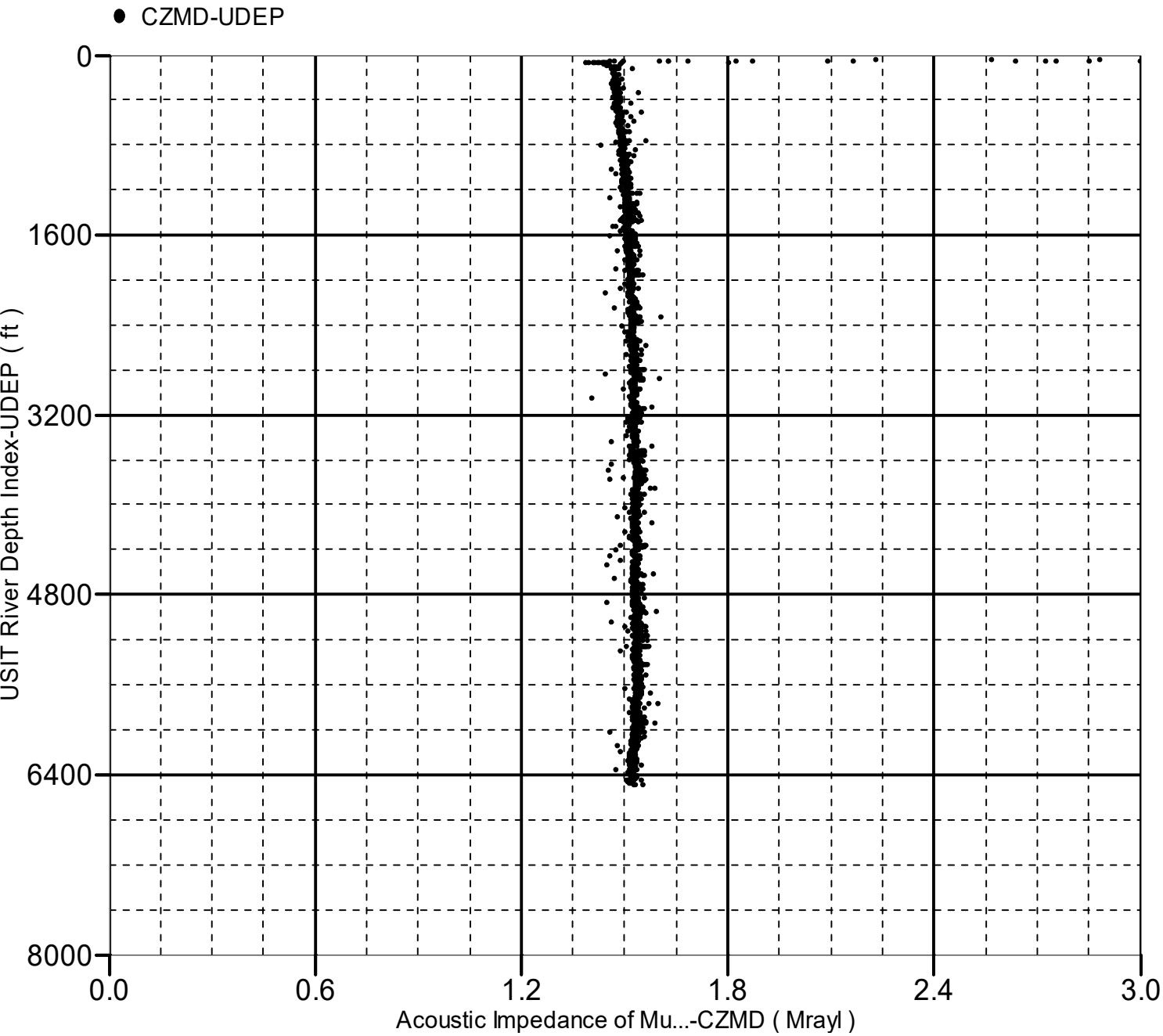
XYZ
Company:Occidental Petroleum Corporation Well:CAMP H30-29D
Main Pass:S022

Acoustic Impedance of Mud vs Depth

2D Cross Plot

2D Cross Plot

Index Range: From 49.00 to 6498.00 ft



Calibration Report

ASLT-B (Array Sonic Logging Tool - B) Calibration - Run ONE

Primary Equipment :

Array Sonic Logging Tool - BB	ASLT-BB	8073

CBL Amplitude Normalization - CBL Accumulations

Master (Measured): 15:12:55 04-Mar-2019 Expired by 1161 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Sonic Amplitude Upper Transmitter - Receiver 5 (SA_U5)		Master	3145.0	2040.0	3066.1	4250.0
Sonic Raw Amplitude Upper Transmitter - Receiver 1 (RA_U1)	mV	Master	187.500	123.000	214.701	248.000
Sonic Amplitude Lower Transmitter - Receiver 1 (SA_L1)		Master	3145.0	2040.0	3605.9	4250.0
Sonic Raw Amplitude Lower Transmitter - Receiver 5 (RA_L5)	mV	Master	187.500	123.000	192.737	248.000

CBL Amplitude Normalization - CBL/VDL Coefficients

Master (Measured): 15:12:55 04-Mar-2019 Expired by 1161 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
CBL Correction Factor for Upper Transmitter (CBCF_UT)		Master	0.500	-----	0.540	-----
CBL Correction Factor for Lower Transmitter (CBCF_LT)		Master	0.500	-----	0.602	-----
VDL Ratio between UT and LT for CBLB Mode (VDR)		Master	1.000	-----	0.850	-----

CBL Amplitude Free Pipe Adjustment - Free Pipe Measurements

Before (Manual Entry): 15:21:16 09-May-2023

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
CBL Amplitude (CBLF) - 0	mV	Before	-----	-----	-----	-----
CBL Reference Amplitude (CBRA) - 0	mV	Before	-----	-----	-----	-----
Measurement Depth (DEPTH) - 0	ft	Before	-----	-----	-----	-----

CBL Amplitude Free Pipe Adjustment - CBL Amplitude Coefficients

Before (Manual Entry): 15:21:16 09-May-2023

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
CBL Adjustment Factor (CBL_ADJUST_FACTOR)		Before	1.000	0.300	1.200	3.000
Depth of Before Calibration (BDEP)	ft	Before	-----	-----	502.82	-----

EDTC-B (Enhanced Digital Telemetry Cartridge - Version B) Calibration - Run ONE

Primary Equipment :

EDTC-B	EDTC-B	9107

Calibration Parameter :

Plus Reference (Jig minus background reference)	160

EDTC-B Accelerometer Calibration - EDTC-B Accelerometer Calibration

Before (Measured): 09:57:06 09-May-2023

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
AZ Vertical Measurement	ft/s2	Before	32.19	31.53	31.58	32.84

EDTC-B Memory Data - EDTC-B Memory Data

Master (EEPROM): 09:56:35 09-May-2023

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Initial PMT HV	V	Master	-----	-----	1461.000	-----
Accelerometer Serial Number		Master	-----	-----	395	-----
Accelerometer Coefficients - 0		Master	-----	-----	2.938E+000	-----
Accelerometer Coefficients - 1		Master	-----	-----	2.806E-004	-----
Accelerometer Coefficients - 2		Master	-----	-----	3.088E-009	-----
Accelerometer Coefficients - 3		Master	-----	-----	-7.187E-008	-----
Accelerometer Coefficients - 4		Master	-----	-----	1.757E-009	-----
Accelerometer Coefficients - 5		Master	-----	-----	-1.343E-011	-----
Accelerometer Coefficients - 6		Master	-----	-----	3.462E-014	-----
Accelerometer Coefficients - 7		Master	-----	-----	-5.478E-003	-----
Accelerometer Coefficients - 8		Master	-----	-----	5.778E-005	-----
Accelerometer Coefficients - 9		Master	-----	-----	-8.798E-008	-----
Accelerometer Coefficients - 10		Master	-----	-----	7.874E-010	-----
Accelerometer Coefficients - 11		Master	-----	-----	-3.296E-012	-----
Gamma-Ray Detector Serial Number		Master	-----	-----	7215	-----

EDTC-B Gamma-Ray Calibration - Gamma Ray Coefficients

Before: After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Gamma Ray Gain		Before	1.000	0.900	NOT DONE	1.100
		After	-----	-----	-----	-----
		After-Before	-----	-----	-----	-----

EDTC-B Gamma-Ray Calibration - Gamma Ray Accumulations

Before: After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
RGR Zero Measurement - 0	gAPI	Before	-----	-----	-----	-----
		After	-----	-----	-----	-----

		After-Before	-----	-----	-----	-----	
RGR Plus Measurement	gAPI	Before	-----	-----	NOT DONE	-----	
		After	-----	-----	NOT DONE	-----	
		After-Before	-----	-----	-----	-----	

LEH-QT (Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor) Calibration - Run ONE

Primary Equipment :

Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor — LEH-QT

HTEN Master Calibration - HTEN Master Calibration

Master:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500	
HTEN Shop Offset	lbf	Master	0	-1000.000	NOT DONE	1000.000	

HTEN Before Calibration - HTEN Before Calibration

Before:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RHTE Zero Measurement - 0	lbf	Before	-----	-----	-----	-----	
RHTE Plus Measurement - 0	lbf	Before	-----	-----	-----	-----	
HTEN Gain - 0		Before	-----	-----	-----	-----	
HTEN Offset - 0	lbf	Before	-----	-----	-----	-----	

Company:	Occidental Petroleum Corporation
Well:	CAMP H30-29D
Field:	WATTENBURG
County:	WELD
State:	COLORADO

Isolation Scanner
Casing Integrity
Gamma Ray - CCL Log