Casing Inspection

Southern California Gas Company

Fernando Fee 32H_EMIT

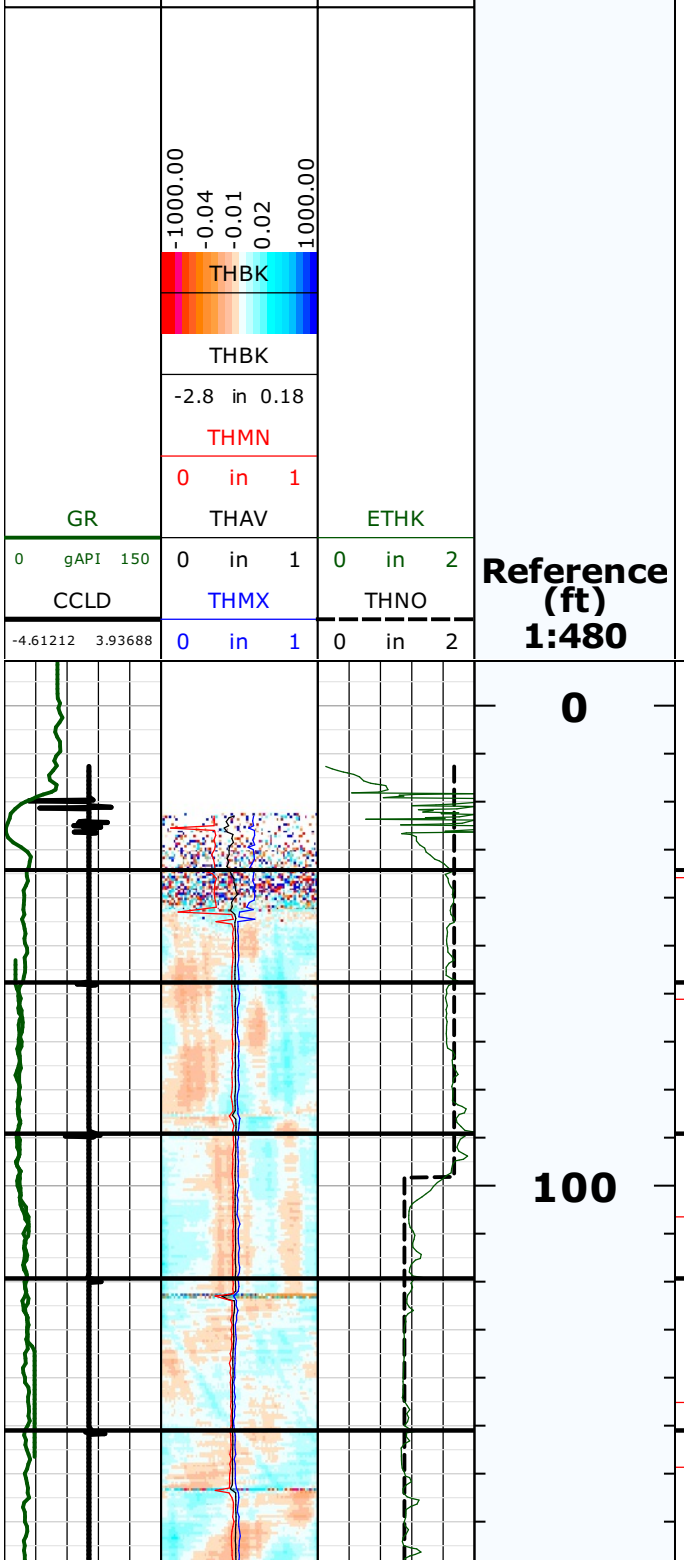
Aliso Canyon

Date Recorded: 26-Jul-2016

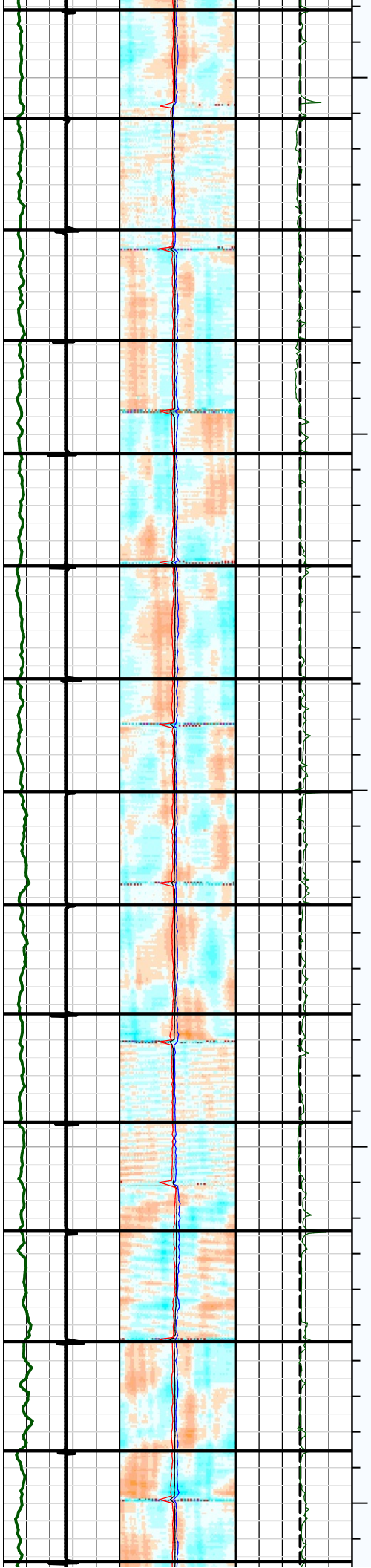
Date Analyzed: **8/5/2016**

Project: **SoCalGas_FernandoFee32H_USIT_EMIT**

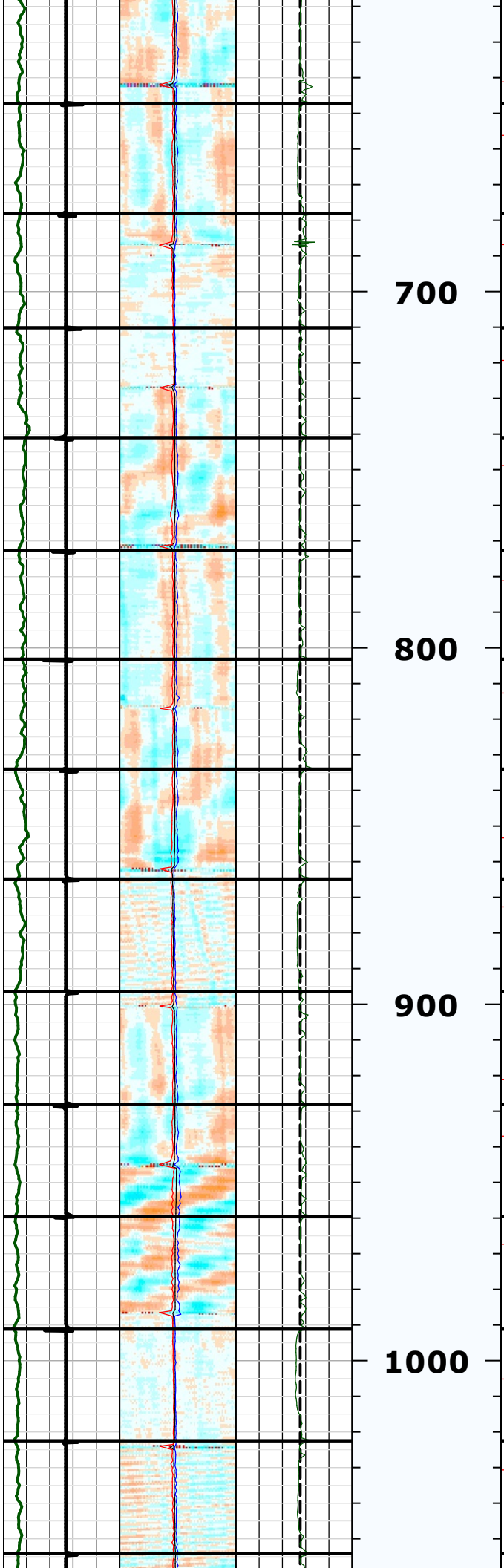
Intepreter: Chew Yeong Leong



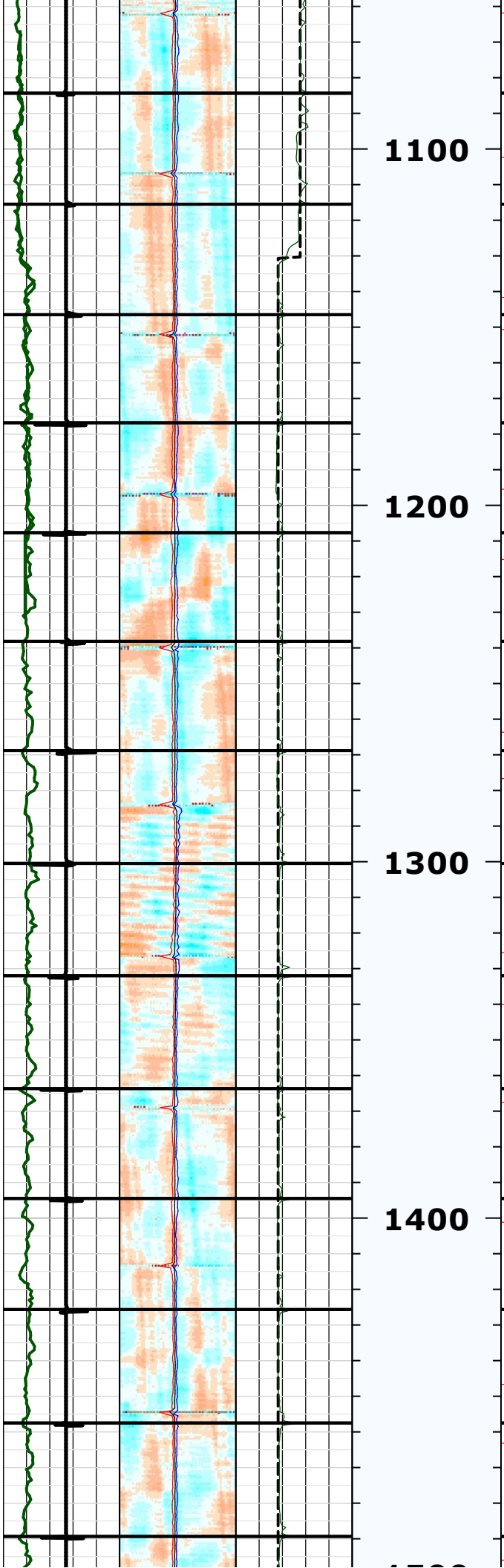
ETHKMN_Depth_Indicator	Joint Length (ft)	ETHKAV_Joint (in)	ETHKMN_Joint (in)	Maximum Metal Loss in 9-5/8" Casing (0.00 – 40.00 – 100.00; Penetration; ENMX_9_58in_Joi; NMX_9_58in_Jo; 0 % 100)	Burst Pressure in 9-5/8" Casing (BURSTMN_9_58in_Joint (psi))	Joint No (CSL_Joints)
	23.42	1.682	1.597	30.48	5454.85	1
	31.50	1.708	1.622	25.28	5862.79	2
	30.17	1.418	1.157	0.00	7846.23	3
	31.67	1.124	1.078	5.85	7387.31	4
	30.00	1.129	1.049	12.07	6898.82	5



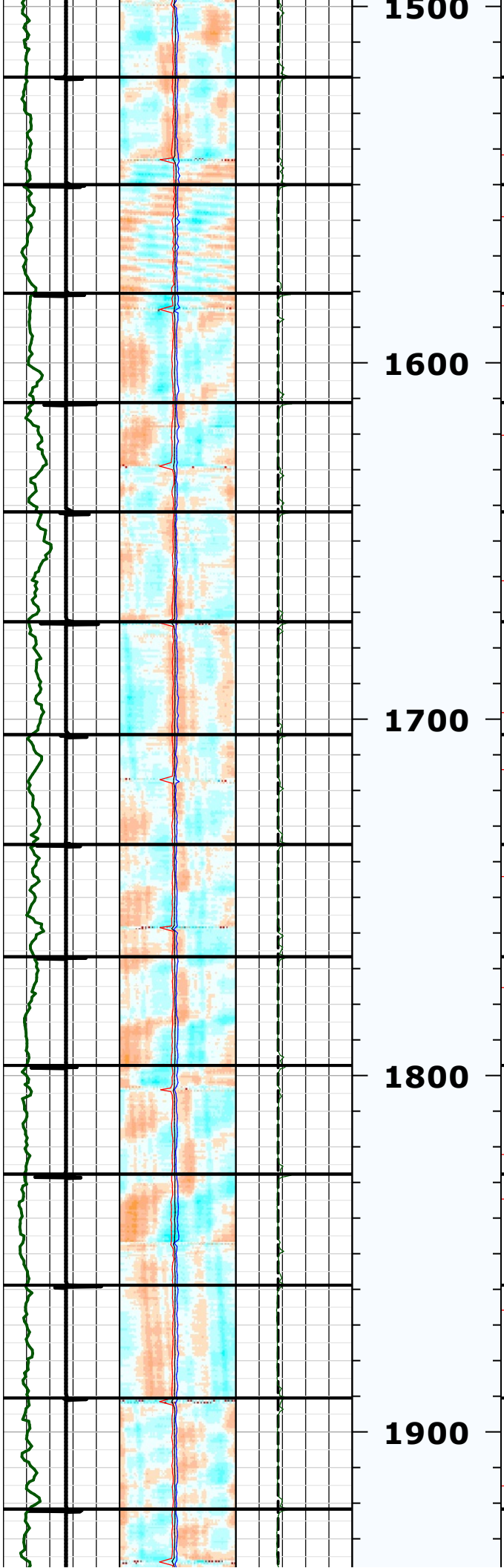
30.50	1.124	1.093	2.69	7635.47	6
31.17	1.071	1.023	17.57	6467.31	7
31.00	1.104	1.006	21.23	6180.54	8
31.83	1.084	0.967	29.36	5542.60	9
31.50	1.116	1.081	5.20	7437.92	10
31.67	1.127	1.076	6.43	7341.74	11
31.67	1.167	1.067	8.18	7204.26	12
31.67	1.170	1.054	11.02	6981.79	13
30.67	1.155	1.095	2.25	7669.52	14
30.50	1.128	1.061	9.63	7090.86	15
30.50	1.127	1.067	8.34	7191.57	16
31.00	1.148	1.088	3.83	7545.83	17
30.67	1.125	1.061	9.59	7093.90	18
31.00	1.152	1.092	2.86	7621.52	19



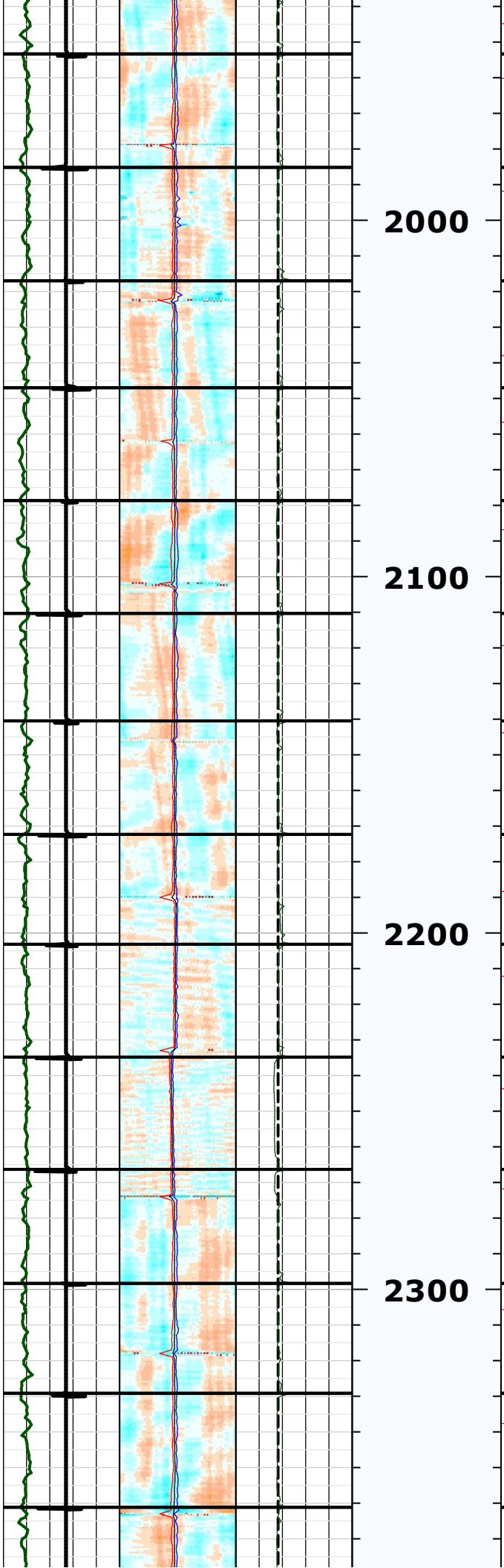
30.83	1.129	1.076	6.26	7355.28	20
31.00	1.079	1.053	11.13	6972.99	21
32.00	1.129	0.973	28.23	5631.15	22
30.83	1.121	1.071	7.38	7267.04	23
31.67	1.127	1.079	5.69	7399.41	24
30.50	1.111	1.058	10.19	7046.93	25
30.83	1.105	1.039	14.15	6735.66	26
30.83	1.098	1.077	6.15	7363.62	27
31.67	1.074	1.042	13.64	6776.21	28
31.67	1.127	1.082	5.10	7445.82	29
31.33	1.141	1.087	4.12	7523.12	30
31.67	1.132	1.086	4.33	7506.14	31
31.33	1.057	1.019	18.51	6393.92	32
31.67	1.088	1.052	11.38	6953.12	33



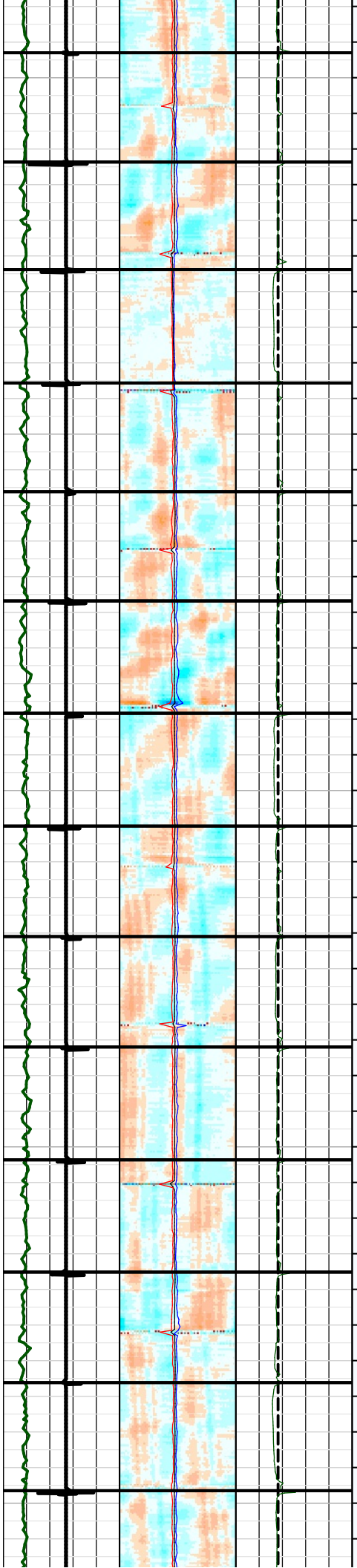
30.17	1.127	1.096	2.16	7676.77	34
31.17	1.112	1.037	14.53	6706.41	35
31.00	0.887	0.712	2.89	7619.64	36
30.33	0.744	0.719	1.50	7728.47	37
30.83	0.718	0.687	8.28	7196.44	38
30.50	0.725	0.710	3.37	7582.13	39
30.67	0.733	0.712	2.94	7615.22	40
31.67	0.740	0.701	5.21	7437.26	41
31.50	0.746	0.714	2.45	7654.24	42
31.67	0.732	0.715	2.28	7667.55	43
30.83	0.744	0.719	1.55	7724.25	44
31.17	0.734	0.714	2.46	7653.05	45
31.83	0.741	0.725	0.25	7826.89	46
31.83	0.755	0.738	0.00	7846.23	47



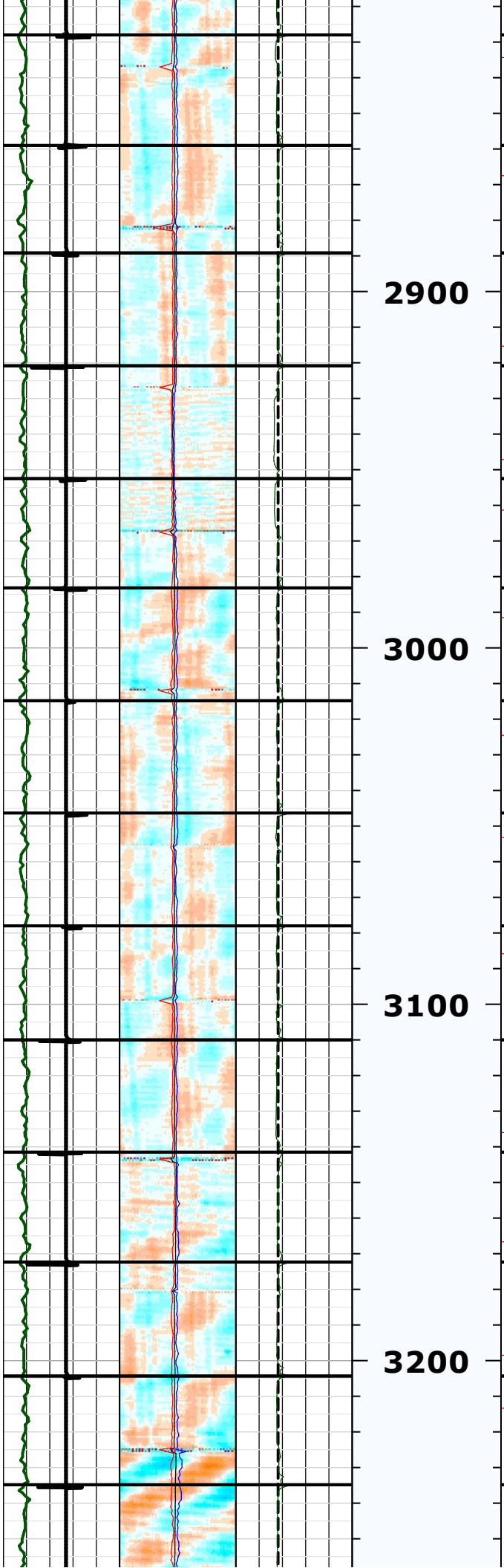
30.50	0.759	0.730	0.00	7846.23	48
30.17	0.762	0.736	0.00	7846.23	49
30.50	0.723	0.700	5.59	7407.84	50
30.67	0.737	0.709	3.67	7558.30	51
30.67	0.744	0.720	1.29	7745.29	52
30.83	0.737	0.727	0.00	7846.23	53
31.67	0.733	0.712	2.88	7620.01	54
30.83	0.740	0.714	2.58	7643.62	55
31.50	0.730	0.708	3.91	7539.38	56
30.50	0.732	0.715	2.41	7656.76	57
30.50	0.735	0.709	3.50	7571.74	58
31.17	0.733	0.708	3.77	7550.11	59
31.67	0.715	0.699	5.78	7392.67	60
31.17	0.734	0.710	3.29	7587.96	61
31.67	0.721	0.698	6.03	7372.88	62



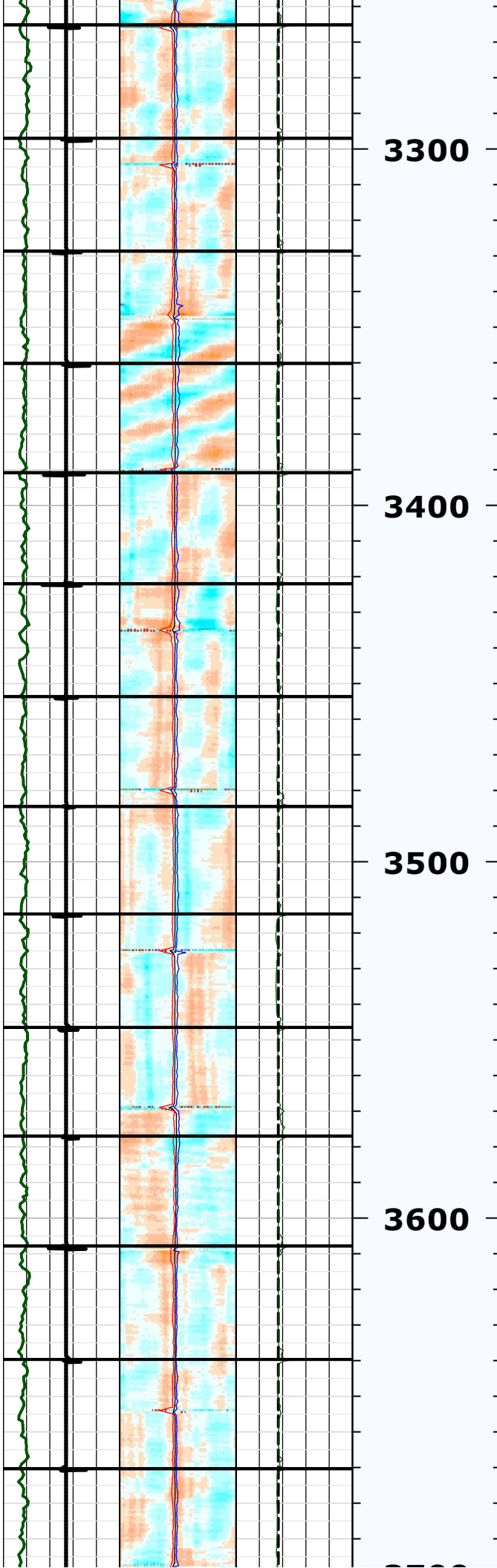
31.67	0.721	0.698	6.03	7372.88	62
31.83	0.715	0.692	7.20	7281.55	63
31.83	0.728	0.706	4.23	7514.40	64
30.00	0.744	0.722	0.84	7780.44	65
31.67	0.720	0.693	6.98	7298.63	66
31.67	0.716	0.690	7.67	7244.69	67
30.17	0.728	0.710	3.45	7575.65	68
31.83	0.734	0.701	5.32	7428.81	69
30.83	0.742	0.705	4.40	7500.70	70
31.67	0.740	0.722	0.95	7771.91	71
31.50	0.669	0.650	16.03	6588.50	72
32.00	0.715	0.663	13.36	6798.32	73
30.83	0.730	0.708	3.88	7542.19	74
32.00	0.717	0.703	4.95	7457.50	75
31.83	0.716	0.694	6.70	7320.38	76



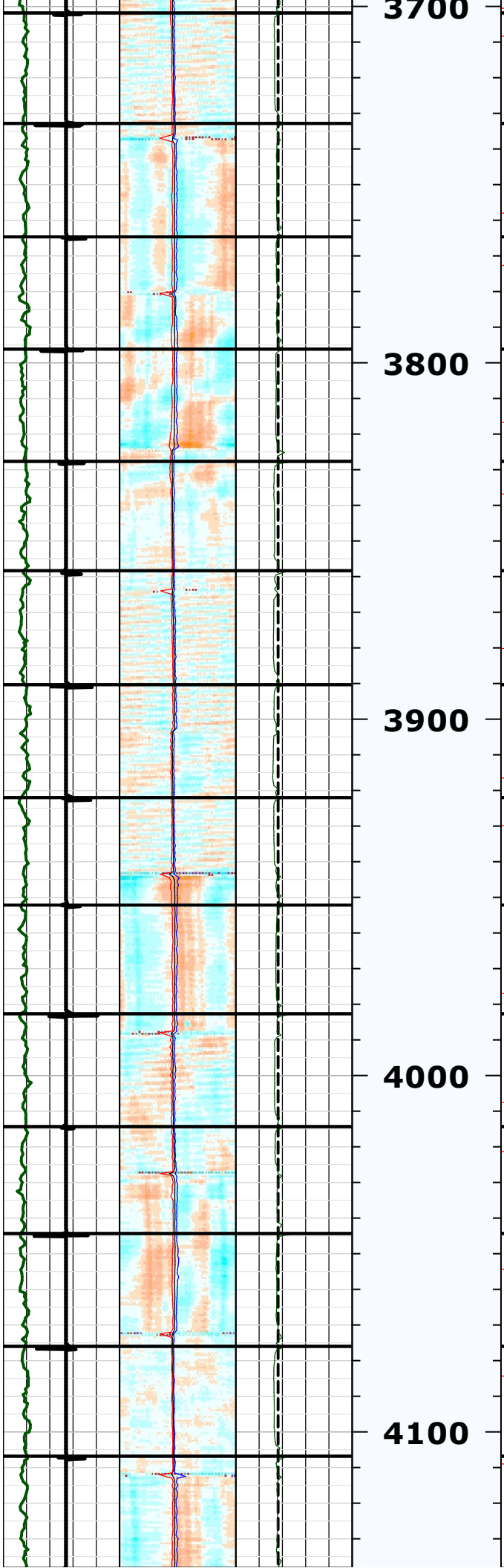
30.67	0.722	0.697	6.06	7370.59	77
30.17	0.726	0.706	4.30	7509.21	78
31.83	0.656	0.636	19.05	6351.76	79
30.50	0.731	0.706	4.22	7515.29	80
30.67	0.721	0.693	6.92	7303.53	81
31.50	0.707	0.683	9.01	7139.66	82
31.67	0.665	0.653	15.51	6629.16	83
31.00	0.712	0.680	9.70	7084.92	84
31.00	0.699	0.679	9.90	7069.84	85
31.67	0.716	0.690	7.62	7248.25	86
31.50	0.713	0.693	6.96	7299.99	87
31.00	0.700	0.653	15.42	6636.58	88
30.33	0.659	0.626	21.11	6189.59	89
31.50	0.708	0.688	8.09	7211.27	90



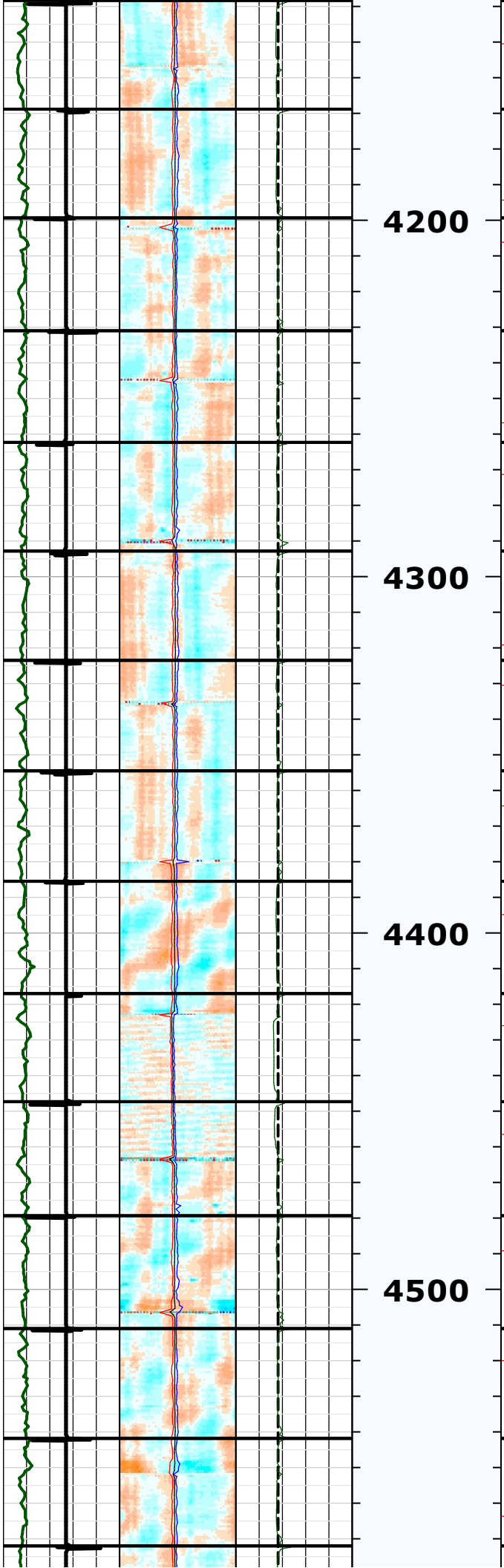
31.00	0.709	0.678	10.19	7046.66	91
30.17	0.734	0.715	2.40	7657.97	92
31.67	0.730	0.713	2.83	7624.04	93
31.67	0.680	0.648	16.60	6543.90	94
30.67	0.700	0.660	13.97	6750.08	95
31.67	0.713	0.692	7.30	7273.34	96
31.50	0.712	0.696	6.30	7351.68	97
31.67	0.710	0.684	8.95	7144.39	98
32.00	0.715	0.692	7.26	7276.47	99
31.50	0.702	0.680	9.84	7073.85	100
30.83	0.733	0.710	3.39	7580.36	101
32.00	0.725	0.700	5.49	7415.66	102
30.50	0.723	0.694	6.73	7318.57	103
30.33	0.721	0.701	5.28	7431.69	104



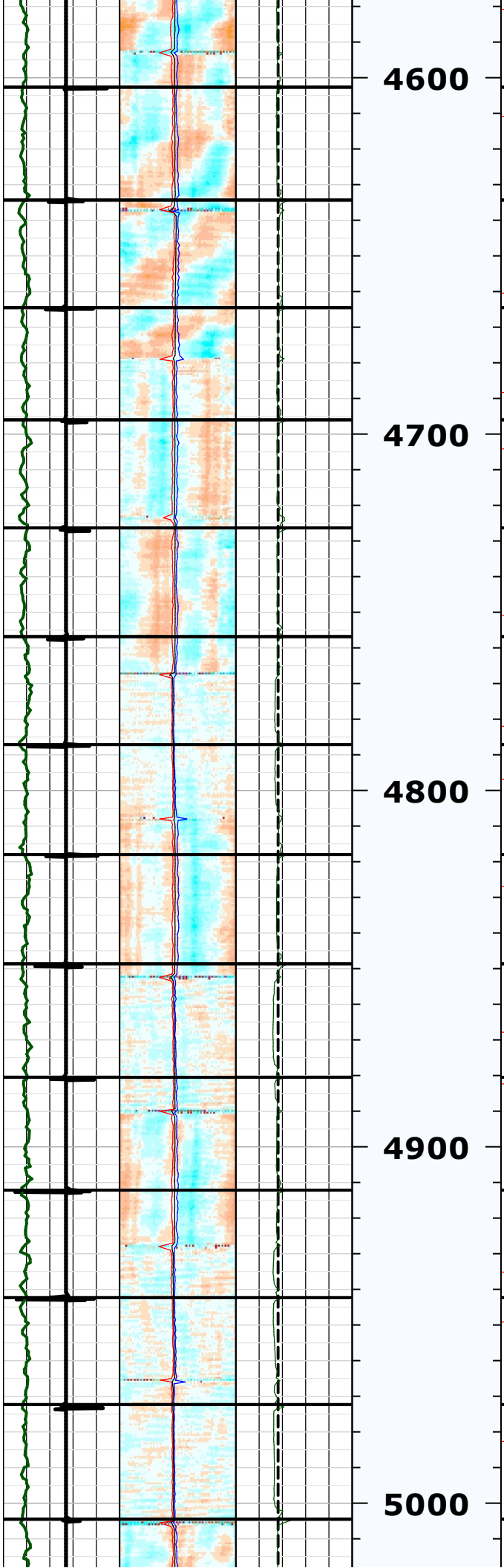
31.83	0.713	0.695	6.63	7326.07	105
31.67	0.726	0.704	4.65	7481.75	106
31.50	0.718	0.696	6.37	7346.32	107
30.67	0.703	0.688	8.10	7210.51	108
31.17	0.712	0.695	6.66	7323.78	109
31.67	0.711	0.686	8.38	7188.55	110
30.83	0.722	0.698	5.89	7383.80	111
30.17	0.715	0.699	5.67	7401.59	112
31.83	0.703	0.684	9.00	7139.88	113
30.50	0.736	0.709	3.63	7561.05	114
30.83	0.736	0.715	2.34	7662.38	115
31.83	0.734	0.711	3.11	7602.39	116
30.67	0.736	0.715	2.42	7655.97	117
31.50	0.707	0.688	8.08	7211.92	118



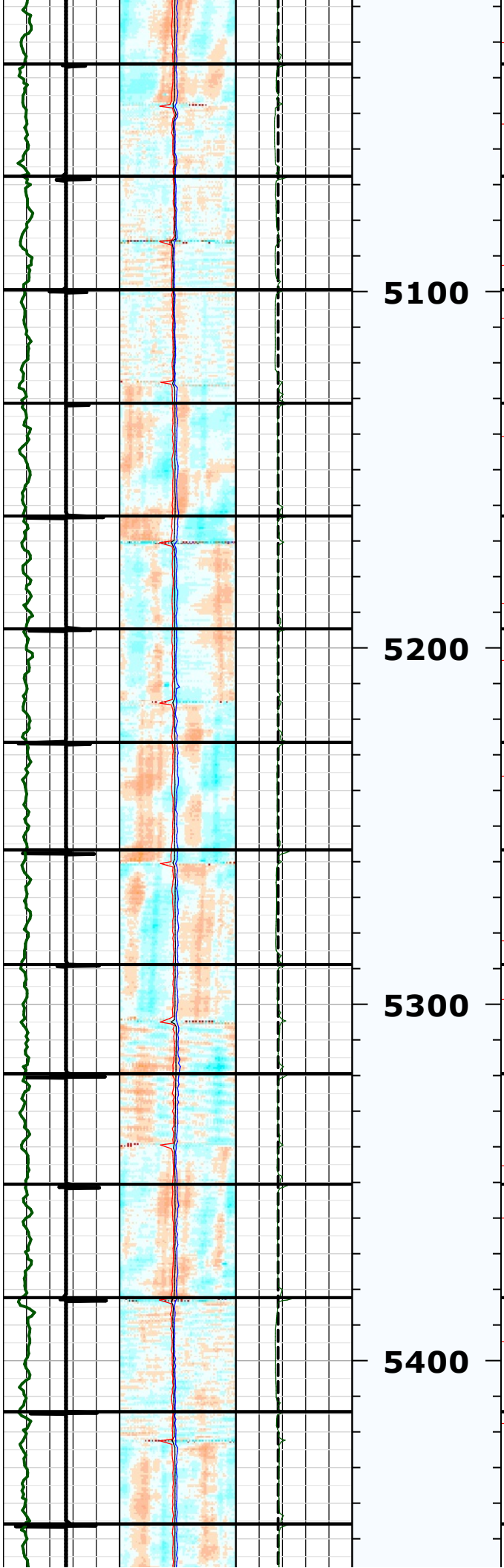
31.00	0.671	0.658	14.48	6710.35	119
31.83	0.710	0.694	6.69	7321.14	120
31.50	0.708	0.687	8.35	7190.85	121
31.50	0.697	0.684	8.90	7147.57	122
30.67	0.667	0.648	16.56	6547.27	123
32.00	0.665	0.643	17.56	6468.48	124
31.67	0.660	0.632	19.92	6283.07	125
30.17	0.676	0.647	16.75	6532.34	126
30.50	0.699	0.687	8.34	7191.86	127
31.67	0.684	0.655	14.95	6673.09	128
30.00	0.708	0.669	12.00	6904.40	129
31.67	0.708	0.687	8.22	7201.15	130
30.83	0.667	0.647	16.74	6532.98	131
31.50	0.717	0.690	7.54	7254.24	132



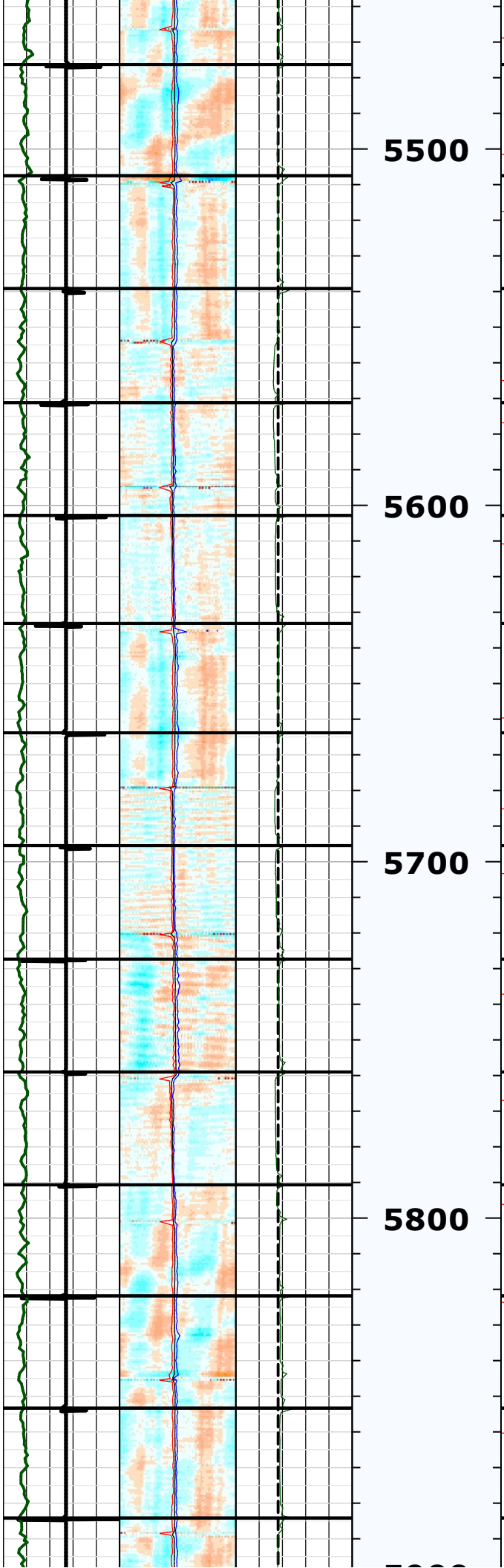
30.50	0.704	0.686	8.40	7187.41	133
30.50	0.707	0.687	8.22	7201.25	134
31.67	0.727	0.706	4.22	7515.02	135
31.33	0.719	0.690	7.63	7247.59	136
30.50	0.720	0.697	6.10	7367.55	137
30.67	0.708	0.691	7.42	7263.83	138
31.00	0.711	0.691	7.37	7267.89	139
31.00	0.720	0.700	5.49	7415.29	140
31.50	0.703	0.690	7.73	7239.56	141
30.33	0.673	0.642	17.80	6449.54	142
32.00	0.701	0.659	14.28	6725.99	143
31.67	0.721	0.694	6.76	7315.82	144
30.83	0.729	0.714	2.54	7647.01	145
30.17	0.717	0.695	6.49	7336.74	146



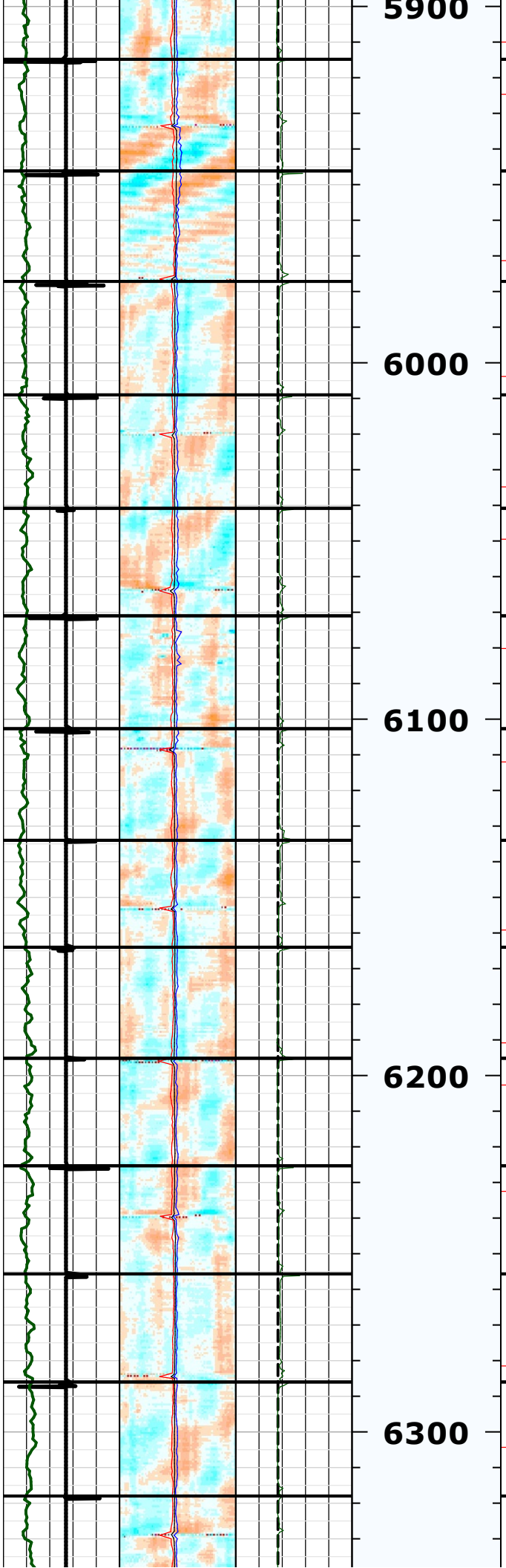
30.67	0.722	0.698	5.90	7383.08	147
31.67	0.709	0.691	7.38	7267.02	148
30.17	0.744	0.730	0.00	7846.23	149
31.50	0.729	0.700	5.47	7417.20	150
30.33	0.727	0.702	5.14	7443.26	151
30.50	0.718	0.701	5.29	7430.85	152
30.33	0.698	0.665	12.87	6836.58	153
30.83	0.710	0.669	12.07	6898.86	154
30.67	0.711	0.697	6.21	7358.78	155
31.83	0.664	0.636	19.04	6352.37	156
31.67	0.706	0.668	12.24	6885.89	157
30.17	0.688	0.638	18.65	6383.04	158
30.00	0.671	0.641	18.05	6430.26	159
32.17	0.666	0.648	16.44	6556.16	160



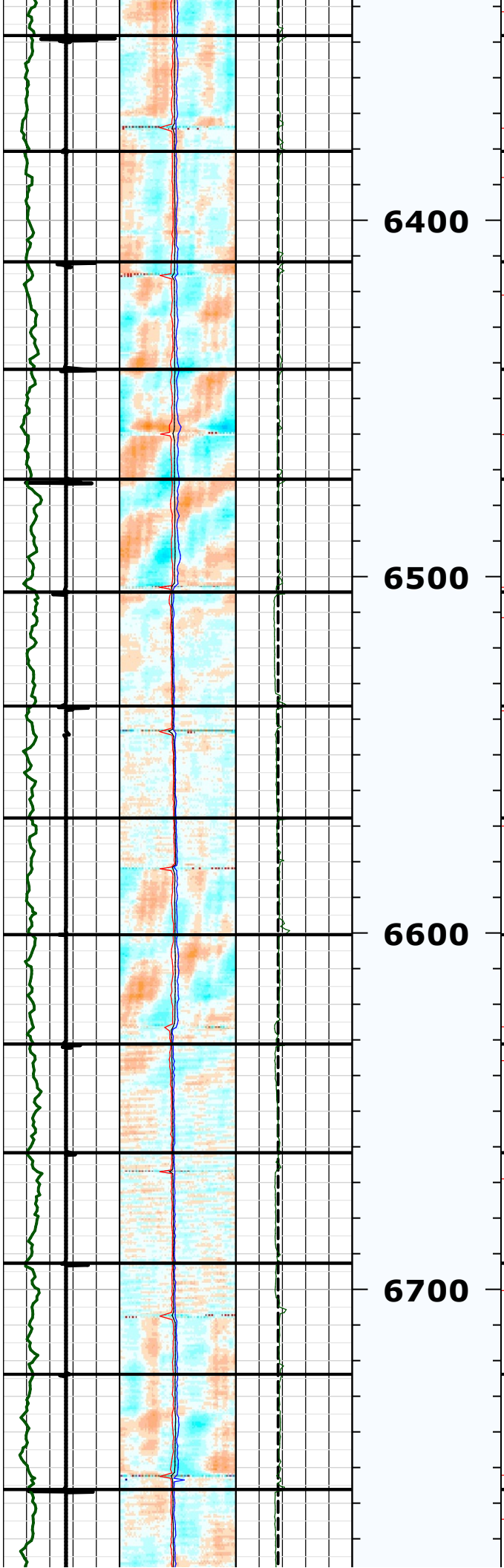
31.67	0.722	0.700	5.54	7411.44	161
31.50	0.690	0.661	13.73	6768.85	162
31.83	0.698	0.669	12.10	6896.89	163
31.83	0.699	0.672	11.48	6945.51	164
31.67	0.725	0.711	3.12	7601.80	165
31.67	0.730	0.709	3.63	7561.60	166
31.83	0.728	0.709	3.56	7567.14	167
30.17	0.717	0.701	5.29	7431.24	168
32.17	0.706	0.682	9.41	7107.66	169
30.67	0.736	0.704	4.57	7488.03	170
31.00	0.730	0.703	4.95	7457.53	171
31.83	0.725	0.707	3.96	7535.82	172
32.00	0.695	0.678	10.19	7046.33	173
31.50	0.742	0.696	6.30	7351.69	174



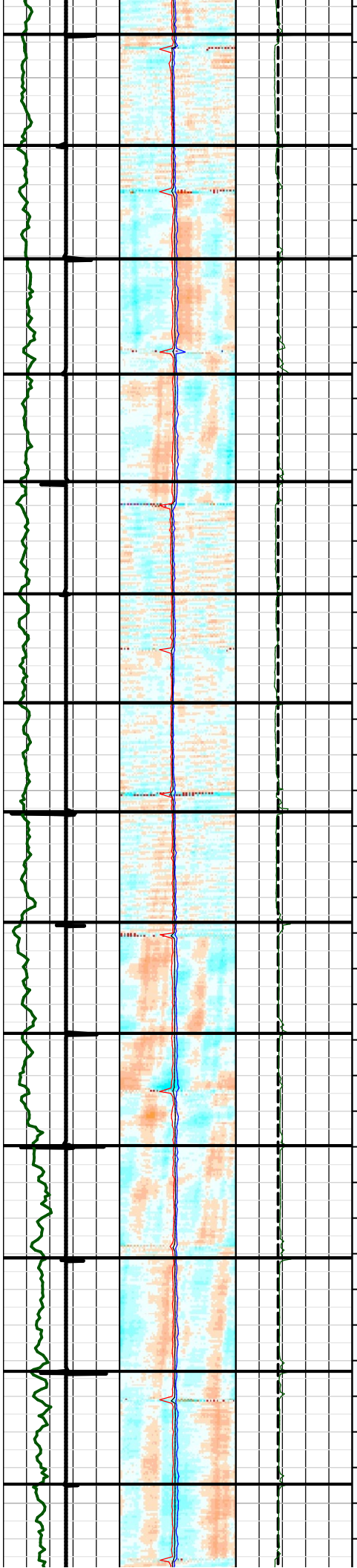
30.50	0.747	0.728	0.00	7846.23	175
31.17	0.719	0.704	4.71	7476.46	176
31.67	0.737	0.713	2.71	7633.33	177
32.00	0.698	0.641	17.91	6441.10	178
31.67	0.676	0.645	17.09	6505.23	179
30.33	0.692	0.678	10.18	7047.46	180
30.67	0.737	0.715	2.32	7664.22	181
31.67	0.699	0.668	12.27	6883.57	182
31.83	0.715	0.679	9.89	7070.00	183
31.67	0.750	0.729	0.00	7846.23	184
31.67	0.693	0.672	11.40	6951.76	185
31.17	0.749	0.697	6.05	7371.56	186
31.50	0.777	0.752	0.00	7846.23	187
30.83	0.762	0.751	0.00	7846.23	188



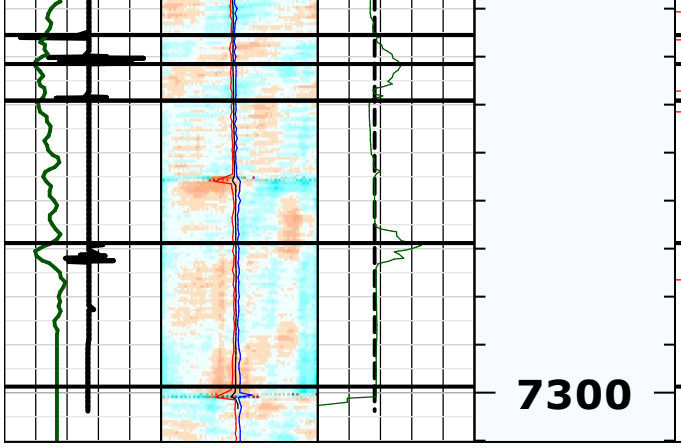
30.67	0.727	0.695	6.56	7331.50	189
31.33	0.754	0.709	3.56	7567.30	190
31.00	0.769	0.742	0.00	7846.23	191
31.83	0.747	0.729	0.00	7846.23	192
31.83	0.755	0.734	0.00	7846.23	193
30.17	0.758	0.731	0.00	7846.23	194
31.67	0.753	0.740	0.00	7846.23	195
31.33	0.757	0.734	0.00	7846.23	196
30.00	0.758	0.725	0.12	7836.92	197
31.17	0.730	0.709	3.71	7555.35	198
30.17	0.728	0.710	3.34	7584.33	199
30.33	0.738	0.702	5.03	7451.39	200
30.33	0.768	0.740	0.00	7846.23	201
32.00	0.729	0.715	2.31	7664.72	202
30.17	0.730	0.714	2.64	7639.29	203



32.50	0.743	0.715	2.25	7669.82	204
31.00	0.738	0.725	0.21	7829.81	205
30.17	0.751	0.725	0.19	7831.00	206
30.83	0.734	0.710	3.37	7582.06	207
31.67	0.737	0.692	7.17	7283.96	208
31.98	0.670	0.650	16.16	6577.91	209
31.42	0.701	0.674	11.08	6976.84	210
32.77	0.744	0.697	6.04	7372.42	211
30.67	0.733	0.651	15.84	6603.04	212
30.50	0.706	0.668	12.33	6878.56	213
31.00	0.692	0.669	12.14	6893.71	214
31.17	0.735	0.674	11.07	6977.92	215
32.33	0.752	0.700	5.51	7413.94	216
31.67	0.689	0.662	13.46	6790.19	217



31.17	0.678	0.660	14.04	6744.35	218
31.83	0.726	0.682	9.42	7107.40	219
32.33	0.745	0.706	4.32	7506.98	220
30.17	0.748	0.726	0.08	7840.25	221
31.50	0.696	0.668	12.30	6881.08	222
30.57	0.691	0.661	13.85	6759.53	223
30.59	0.699	0.665	13.00	6826.08	224
31.00	0.701	0.681	9.43	7106.09	225
31.17	0.746	0.727	0.00	7846.23	226
31.50	0.759	0.731	0.00	7846.23	227
31.50	0.767	0.749	0.00	7846.23	228
31.83	0.754	0.743	0.00	7846.23	229
31.67	0.754	0.736	0.00	7846.23	230
30.83	0.720	0.668	12.30	6881.50	231



6.04	0.853	0.730	0.00	7846.23	232
7.62	0.888	0.701	5.35	7426.67	233
29.68	0.720	0.654	15.28	6647.53	234
29.91	0.785	0.742	0.00	7846.23	235