HR Vertilog

Magnetic Flux Leakage Inspection

Advanced Analysis

Company	Southern California Gas Company
Well	Porter 69B
Field	Aliso Canyon
County	Los Angeles
State	California
Location:	

Section 28	Township 3N	Range 16W	

Date	Apr. 4, 2016
Service Order	US106734
Recorded by	B. Deal / T. Englehart
Witnessed by	T. McMahon
API Serial No.	04-037-24127

Permanent Datum:	G.L.	Elevation: 2366.000	ft.	Depth	7257.000
Log Measured From:	K.B.	23.500	ft. above Perm. Datum	Btm. Log Interval	7235.060
Drilling Measured From:	K.B.	23.500	ft. above Perm. Datum	Top Log Interval	26.370
				Fluid Type	KCL

Casing Data

Size	Weight	Grade	From	To	Length
9 5/8 inch	47.0 lb/ft	N80 (HR Std)	Surface	7344	7344.0
13 3/8 inch	54.5 lb/ft	K-55	Surface	1046	1046.0
5 1/2 inch	17.0 lb/ft	K-55	7272	7811	539.0

Software Version 6.0.0.0

Equipment Data

Run	Trip	Tool Type	Tool Series	Serial Number	Position
1	1	HRVRT MFL	4997	PA10409819	LOWER
1	1	HRVRT MFL	4997	QA10409827	UPPER
1	1	HRVRT TELEM	4993		

Calibration Data

Calibration File Name	4997-9-001-PA10409819-U.CAL
Date of Calibration	05/04/2015 14:03
Calibration Identifier	B067D5B8-C234-468C-82A0-CD1751E099F9

Tool Number	4997-00
Calibrator Number	4997-9-001
Calibrator Size	(9-5/8 In - 238 mm)
Calibration Source File	20150504_072254_MEM.MVL
Calibration Software Rev	Microvision 32-bit 7.3.2.2
Comment	RMA1200

Calibration Data

Calibration File Name	4997-9-001-QA10409827-L.CAL
Date of Calibration	05/04/2015 14:03
Calibration Identifier	B067D5B8-C234-468C-82A0-CD1751E099F9
Tool Number	4997-00
Calibrator Number	4997-9-001
Calibrator Size	(9-5/8 In - 238 mm)
Calibration Source File	20150504_072254_MEM.MVL
Calibration Software Rev	Microvision 32-bit 7.3.2.2
Comment	RMA1200

In making interpretations of logs our employees will give customer the benefit of their best judgment. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

Interpretation

HRVRT analysis was depth corrected + 15 feet from the field HRVRT for correlation to a short joint from the SLB USIT log that was tied into the openhole log, per customer request.

Short Joints recorded; JT1, JT99 and JT 164.

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  27.43 ft   Hardware - External Casing Head Response.
1047.46 ft   Hardware - Bottom of 13 3/8" External Casing.
1085.97 ft   Multiple Centralizers can be seen
             throughout the logged interval, see the Feature List for
             a complete centralizer listing.
7140.87 ft   Unidentified External Hardware
7199.37 ft   Unidentified External Hardware
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There are several external metal loss features that fall below the 15% reporting threshold in joint 1.

There are several internal metal loss features that fall below the 15% reporting threshold in joint 169.

Joint Interpretation Summary

Joint	From	To	Length	Class	Max Depth	Position	Type	ID/OD
1	26.37	52.49	26.12	Class 1	18.0%	51.12	ISO	OD
2	52.49	98.82	46.33	Class 1	-	-	-	-
3	98.82	144.70	45.88	Class 1	-	-	-	-
4	144.70	187.86	43.16	Class 1	-	-	-	-

5	187.86	230.32	42.46	Class	1	-	-	-	-
6	230.32	271.81	41.49	Class	1	-	-	-	-
7	271.81	317.30	45.49	Class	1	-	-	-	-
8	317.30	358.84	41.54	Class	1	-	-	-	-
9	358.84	403.60	44.76	Class	1	-	-	-	-
10	403.60	447.19	43.59	Class	1	-	-	-	-
11	447.19	490.87	43.68	Class	1	-	-	-	-
12	490.87	534.06	43.19	Class	1	-	-	-	-
13	534.06	573.75	39.69	Class	1	-	-	-	-
14	573.75	615.56	41.81	Class	1	-	-	-	-
15	615.56	659.00	43.44	Class	1	-	-	-	-
16	659.00	702.37	43.37	Class	1	-	-	-	-
17	702.37	745.70	43.33	Class	1	-	-	-	-
18	745.70	789.00	43.30	Class	1	-	-	-	-
19	789.00	835.04	46.04	Class	1	-	-	-	-
20	835.04	878.42	43.38	Class	1	-	-	-	-
21	878.42	919.60	41.18	Class	1	-	-	-	-
22	919.60	962.73	43.13	Class	1	-	-	-	-
23	962.73	1004.18	41.45	Class	1	-	-	-	-
24	1004.18	1044.98	40.80	Class	1	-	-	-	-
25	1044.98	1086.25	41.27	Class	1	-	-	-	-
26	1086.25	1127.74	41.49	Class	1	-	-	-	-
27	1127.74	1170.12	42.38	Class	1	-	-	-	-
28	1170.12	1212.19	42.07	Class	1	-	-	-	-
29	1212.19	1254.55	42.36	Class	1	-	-	-	-
30	1254.55	1296.22	41.67	Class	1	-	-	-	-
31	1296.22	1337.32	41.10	Class	1	-	-	-	-
32	1337.32	1377.78	40.46	Class	1	-	-	-	-
33	1377.78	1417.97	40.19	Class	1	-	-	-	-
34	1417.97	1459.77	41.80	Class	1	-	-	-	-
35	1459.77	1500.15	40.38	Class	1	-	-	-	-
36	1500.15	1541.79	41.64	Class	1	-	-	-	-
37	1541.79	1582.14	40.35	Class	1	-	-	-	-
38	1582.14	1623.63	41.49	Class	1	-	-	-	-
39	1623.63	1663.72	40.09	Class	1	-	-	-	-
40	1663.72	1705.05	41.33	Class	1	-	-	-	-
41	1705.05	1748.44	43.39	Class	1	-	-	-	-
42	1748.44	1792.03	43.59	Class	1	-	-	-	-
43	1792.03	1835.27	43.24	Class	1	-	-	-	-
44	1835.27	1879.76	44.49	Class	1	-	-	-	-
45	1879.76	1923.53	43.77	Class	1	-	-	-	-
46	1923.53	1967.07	43.54	Class	1	-	-	-	-
47	1967.07	2010.23	43.16	Class	1	-	-	-	-
48	2010.23	2055.63	45.40	Class	1	-	-	-	-
49	2055.63	2098.77	43.14	Class	1	-	-	-	-
50	2098.77	2143.36	44.59	Class	1	-	-	-	-
51	2143.36	2182.86	39.50	Class	1	-	-	-	-
52	2182.86	2226.19	43.33	Class	1	-	-	-	-
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55	2311.49	2357.74	46.25	Class	1	-	-	-	-
56	2357.74	2403.48	45.74	Class	1	-	-	-	-
57	2403.48	2448.71	45.23	Class	1	-	-	-	-
58	2448.71	2494.48	45.77	Class	1	-	-	-	-
59	2494.48	2539.69	45.21	Class	1	-	-	-	-
60	2539.69	2583.03	43.34	Class	1	-	-	-	-
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62	2626.24	2667.02	40.78	Class	1	-	-	-	-
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65	2752.44	2787.46	35.02	Class	1	-	-	-	-
66	2787.46	2832.32	44.86	Class	1	-	-	-	-
67	2832.32	2875.55	43.23	Class	1	-	-	-	-

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69	2919.19	2963.37	44.18	Class	1	-	-	-	-
70	2963.37	3006.30	42.93	Class	1	19.0%	2980.06	ISO	OD
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73	3093.71	3137.82	44.11	Class	1	-	-	-	-
74	3137.82	3180.03	42.21	Class	1	-	-	-	-
75	3180.03	3223.07	43.04	Class	1	-	-	-	-
76	3223.07	3265.26	42.19	Class	1	-	-	-	-
77	3265.26	3308.51	43.25	Class	1	-	-	-	-
78	3308.51	3345.41	36.90	Class	1	-	-	-	-
79	3345.41	3388.60	43.19	Class	1	-	-	-	-
80	3388.60	3431.91	43.31	Class	1	-	-	-	-
81	3431.91	3478.17	46.26	Class	1	-	-	-	-
82	3478.17	3521.61	43.44	Class	1	-	-	-	-
83	3521.61	3567.80	46.19	Class	1	-	-	-	-
84	3567.80	3615.58	47.78	Class	1	-	-	-	-
85	3615.58	3662.64	47.06	Class	1	-	-	-	-
86	3662.64	3705.81	43.17	Class	1	-	-	-	-
87	3705.81	3749.39	43.58	Class	1	-	-	-	-
88	3749.39	3792.75	43.36	Class	1	-	-	-	-
89	3792.75	3835.67	42.92	Class	1	-	-	-	-
90	3835.67	3880.14	44.47	Class	1	-	-	-	-
91	3880.14	3922.52	42.38	Class	1	-	-	-	-
92	3922.52	3963.17	40.65	Class	1	-	-	-	-
93	3963.17	4002.75	39.58	Class	1	-	-	-	-
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96	4087.58	4130.88	43.30	Class	1	-	-	-	-
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126	5350.78	5392.38	41.60	Class	1	-	-	-	-
127	5392.38	5435.54	43.16	Class	1	-	-	-	-
128	5435.54	5480.12	44.58	Class	1	-	-	-	-
129	5480.12	5522.92	42.80	Class	1	-	-	-	-
130	5522.92	5566.33	43.41	Class	1	-	-	-	-
131	5566.33	5609.36	43.03	Class	1	-	-	-	-

132	5609.36	5652.76	43.40	Class	1	-	-	-	-
133	5652.76	5695.89	43.13	Class	1	-	-	-	-
134	5695.89	5739.22	43.33	Class	1	-	-	-	-
135	5739.22	5776.96	37.74	Class	1	-	-	-	-
136	5776.96	5819.72	42.76	Class	1	-	-	-	-
137	5819.72	5863.43	43.71	Class	1	-	-	-	-
138	5863.43	5908.50	45.07	Class	1	-	-	-	-
139	5908.50	5951.94	43.44	Class	1	-	-	-	-
140	5951.94	5995.43	43.49	Class	1	-	-	-	-
141	5995.43	6038.44	43.01	Class	1	-	-	-	-
142	6038.44	6081.77	43.33	Class	1	-	-	-	-
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144	6125.17	6168.61	43.44	Class	1	-	-	-	-
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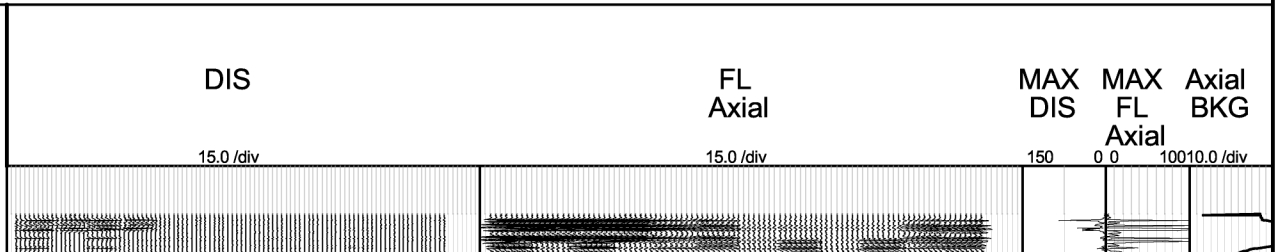
146	6211.88	6255.04	43.16	Class	1	-	-	-	-
147	6255.04	6296.07	41.03	Class	1	-	-	-	-
148	6296.07	6339.67	43.60	Class	1	-	-	-	-
149	6339.67	6381.83	42.16	Class	1	-	-	-	-
150	6381.83	6422.89	41.06	Class	1	-	-	-	-
151	6422.89	6464.74	41.85	Class	1	-	-	-	-
152	6464.74	6507.34	42.60	Class	1	-	-	-	-
153	6507.34	6548.94	41.60	Class	1	-	-	-	-
154	6548.94	6592.27	43.33	Class	1	-	-	-	-
155	6592.27	6637.07	44.80	Class	1	-	-	-	-
156	6637.07	6680.21	43.14	Class	1	-	-	-	-
157	6680.21	6723.18	42.97	Class	1	-	-	-	-
158	6723.18	6767.96	44.78	Class	2	22.0%	6742.35	ISO	ID
159	6767.96	6810.77	42.81	Class	1	19.0%	6805.14	ISO	ID
160	6810.77	6853.14	42.37	Class	1	-	-	-	-
161	6853.14	6895.47	42.33	Class	1	-	-	-	-
162	6895.47	6939.16	43.69	Class	1	-	-	-	-
163	6939.16	6983.04	43.88	Class	1	-	-	-	-
164	6983.04	6998.27	15.23	Class	1	-	-	-	-
165	6998.27	7040.62	42.35	Class	2	23.0%	7025.36	ISO	ID
166	7040.62	7084.28	43.66	Class	1	-	-	-	-
167	7084.28	7128.11	43.83	Class	1	-	-	-	-
168	7128.11	7171.59	43.48	Class	1	-	-	-	-
169	7171.59	7214.72	43.13	Class	1	-	-	-	-
170	7214.72	7235.06	20.34	Class	1	-	-	-	-

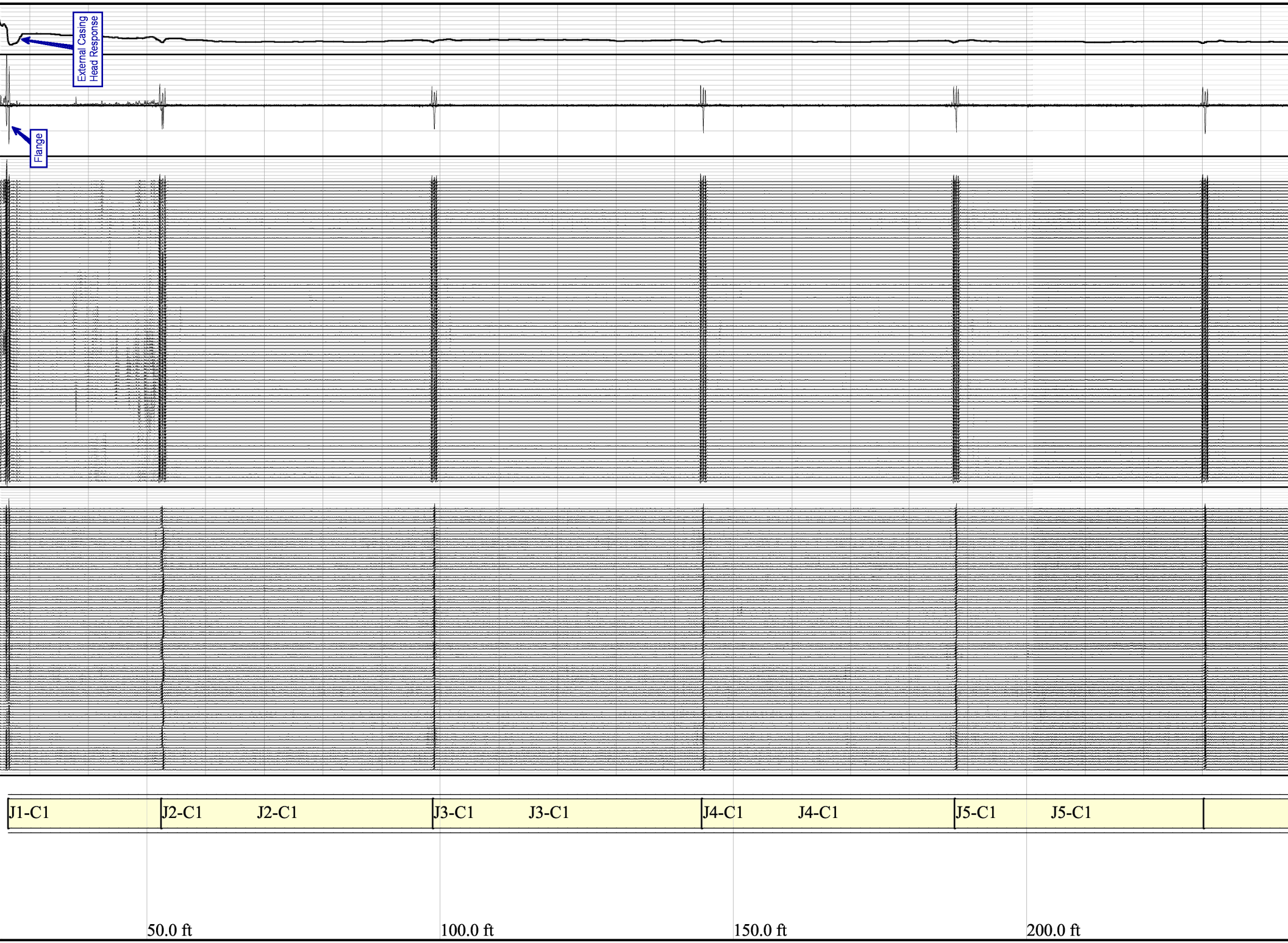
Southern California Gas Company Porter 69B

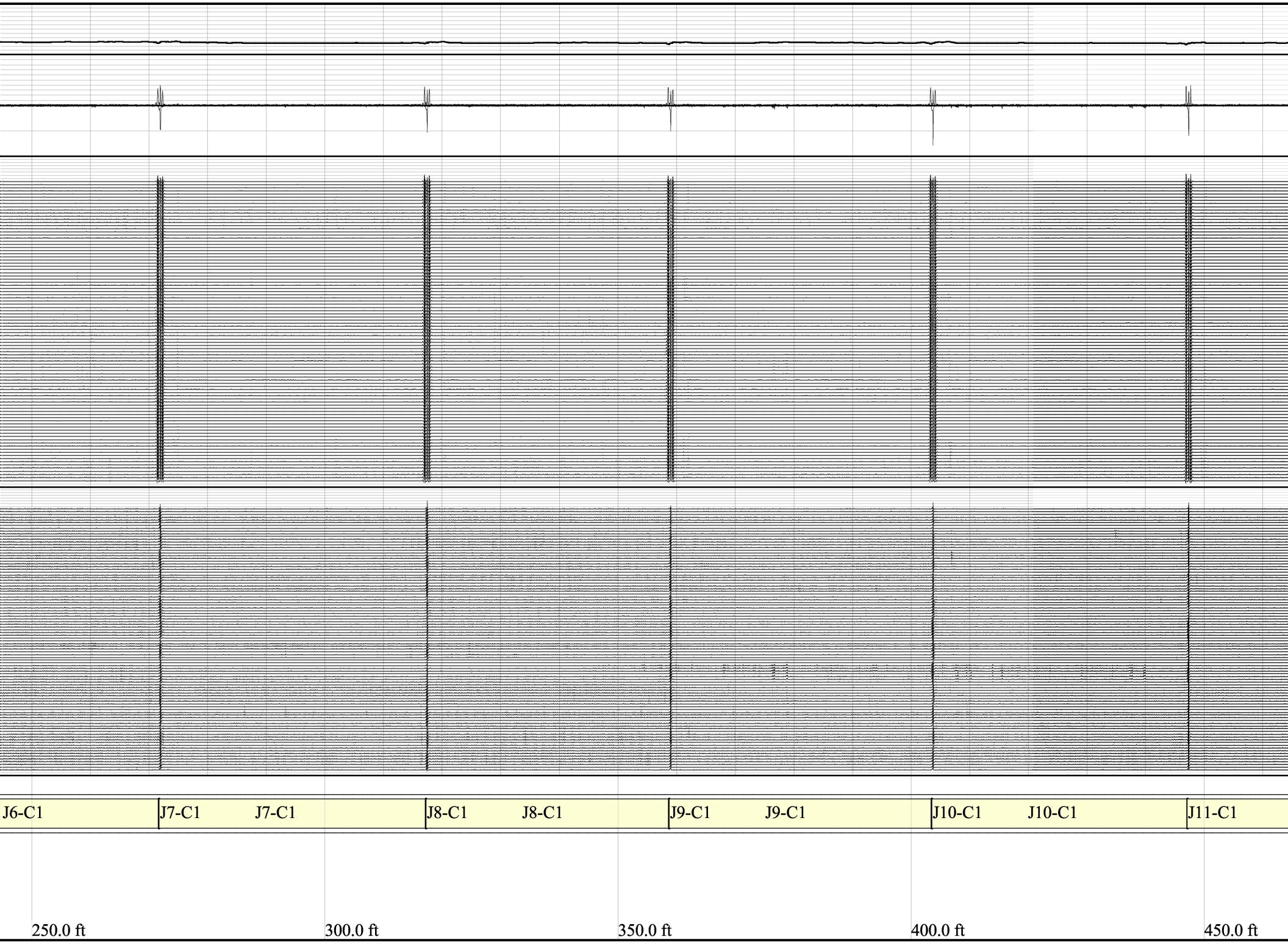
File 20160404_093405_RSP_0_0_0_0.mvl

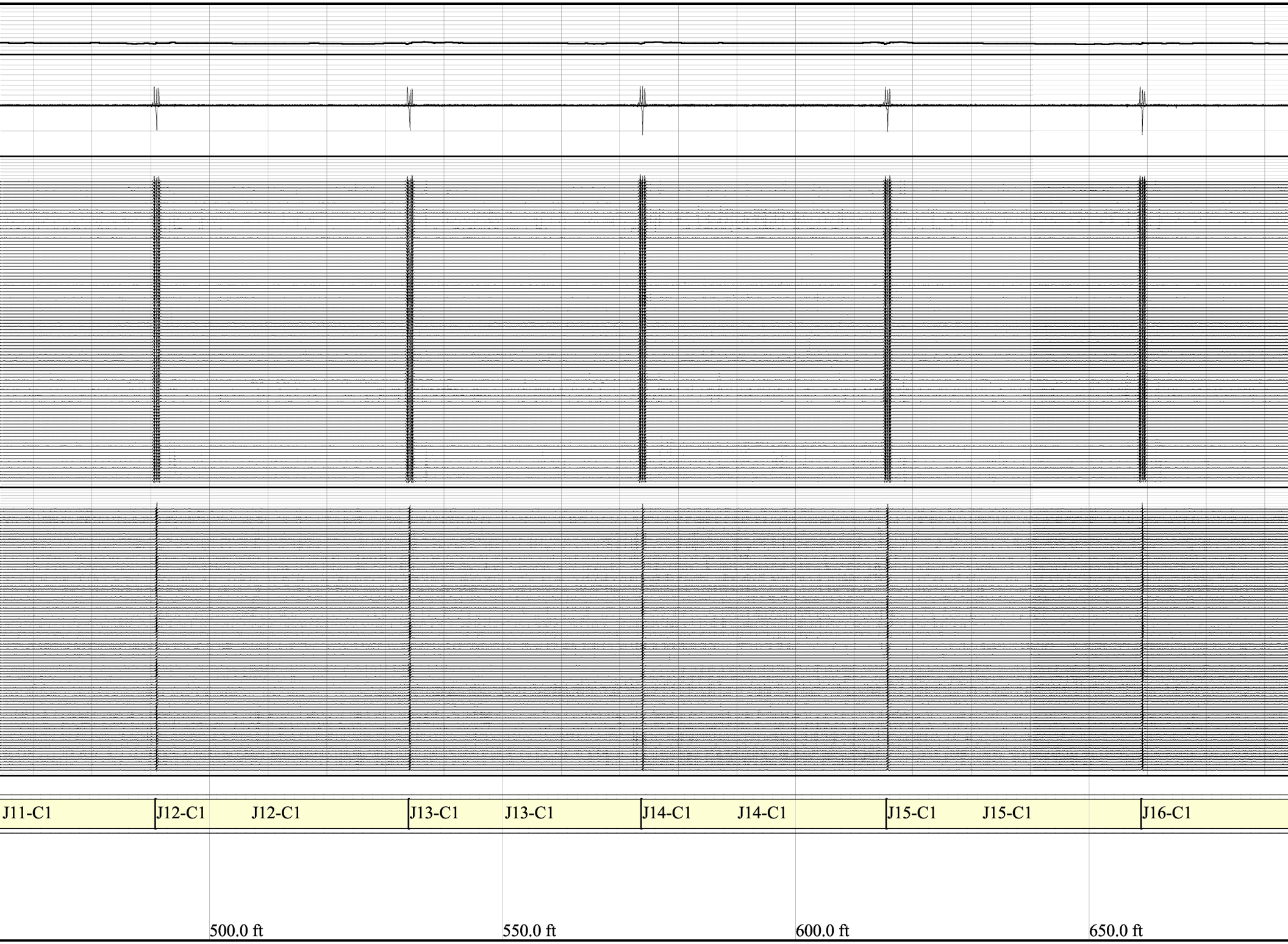
Main Log

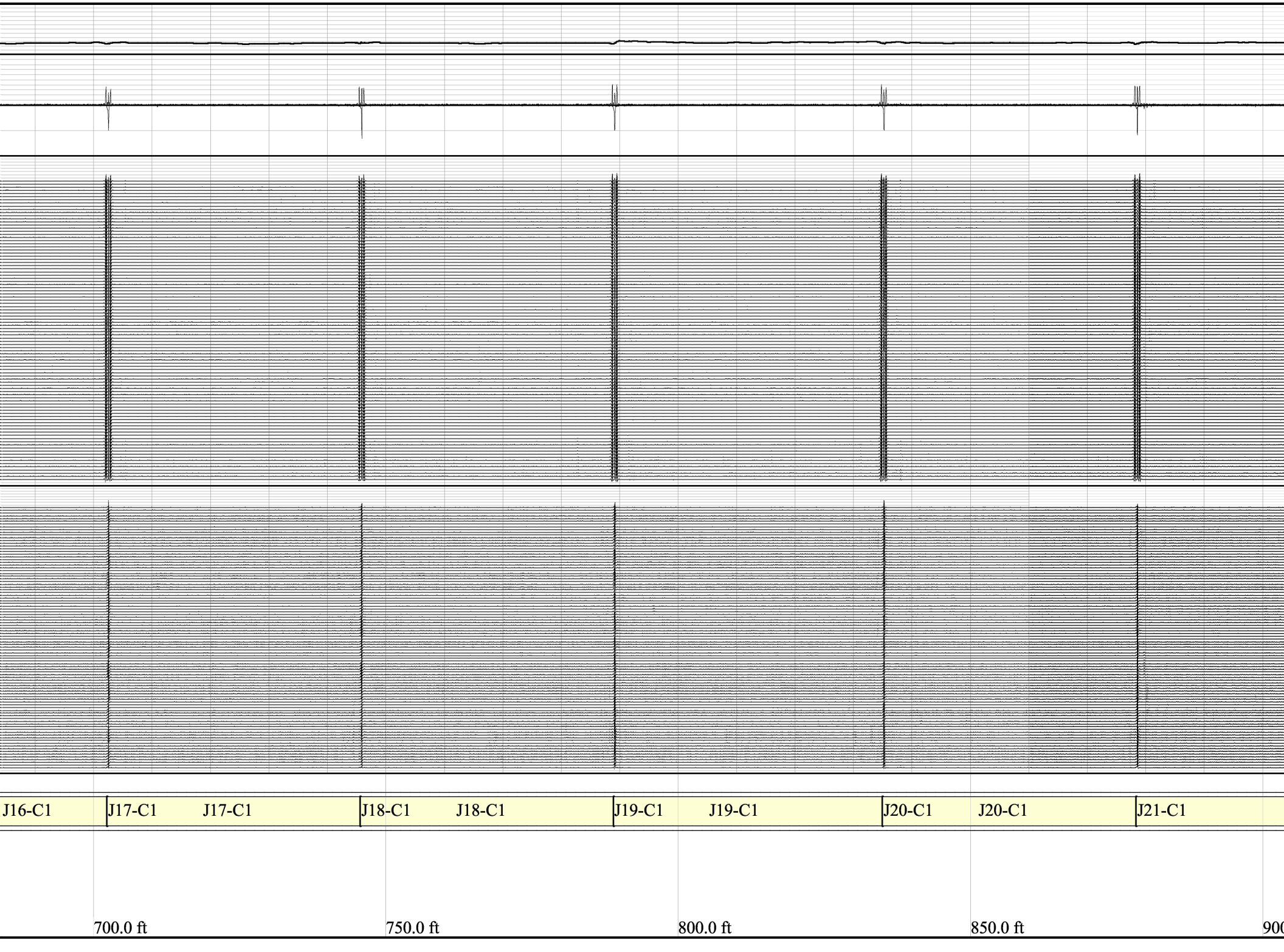
Class 1 0 - 20%	Class 2 20 - 40%	Class 3 40 - 60%	Class 4 60 - 100%

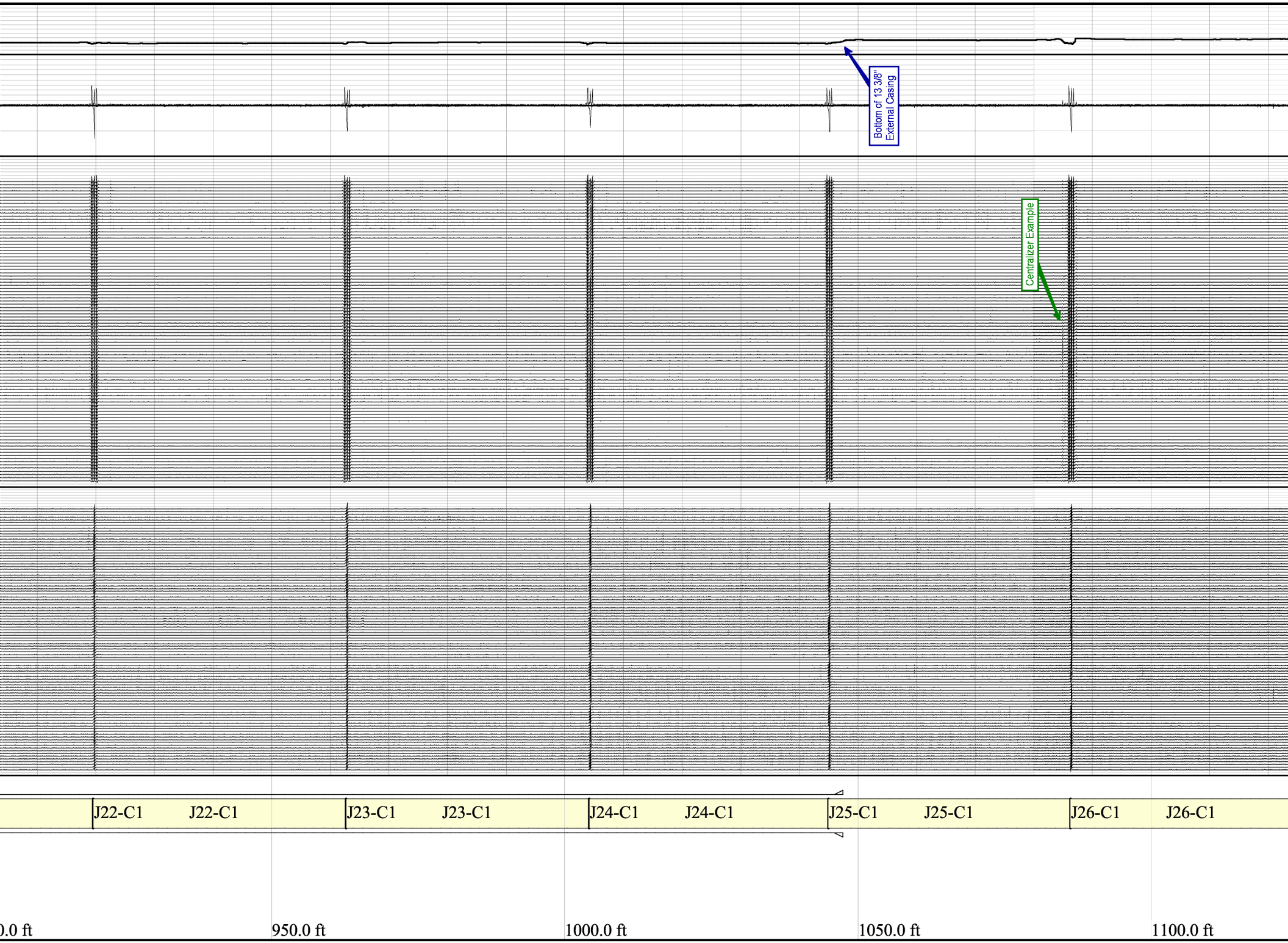


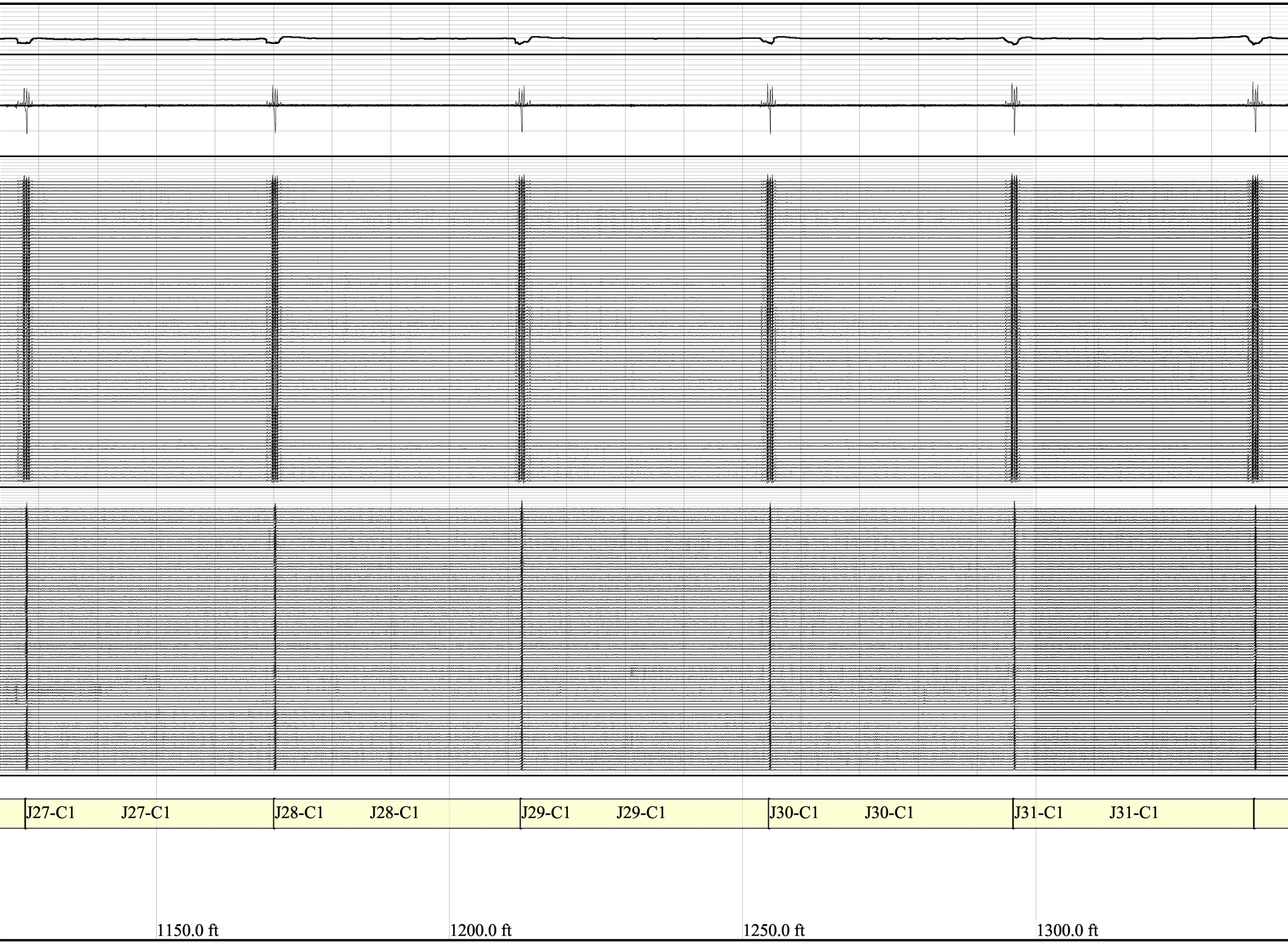

External Casing Head Response
Flange
J1-C1
J2-C1
J2-C1
J3-C1
J3-C1
J4-C1
J4-C1
J5-C1
J5-C1
50.0 ft
100.0 ft
150.0 ft
200.0 ft

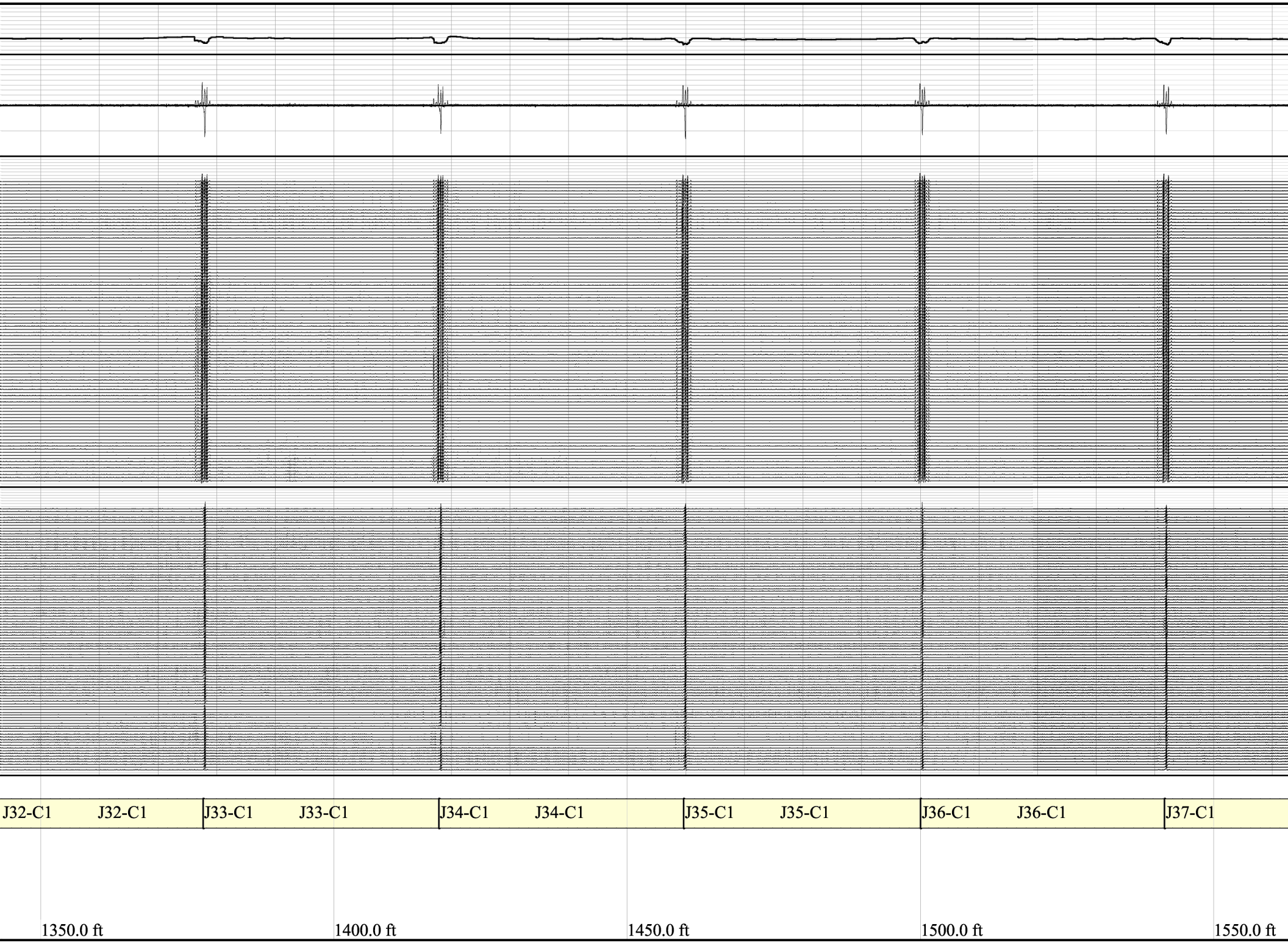

J6-C1
J7-C1
J7-C1
J8-C1
J8-C1
J9-C1
J9-C1
J10-C1
J10-C1
J11-C1
250.0 ft
300.0 ft
350.0 ft
400.0 ft
450.0 ft

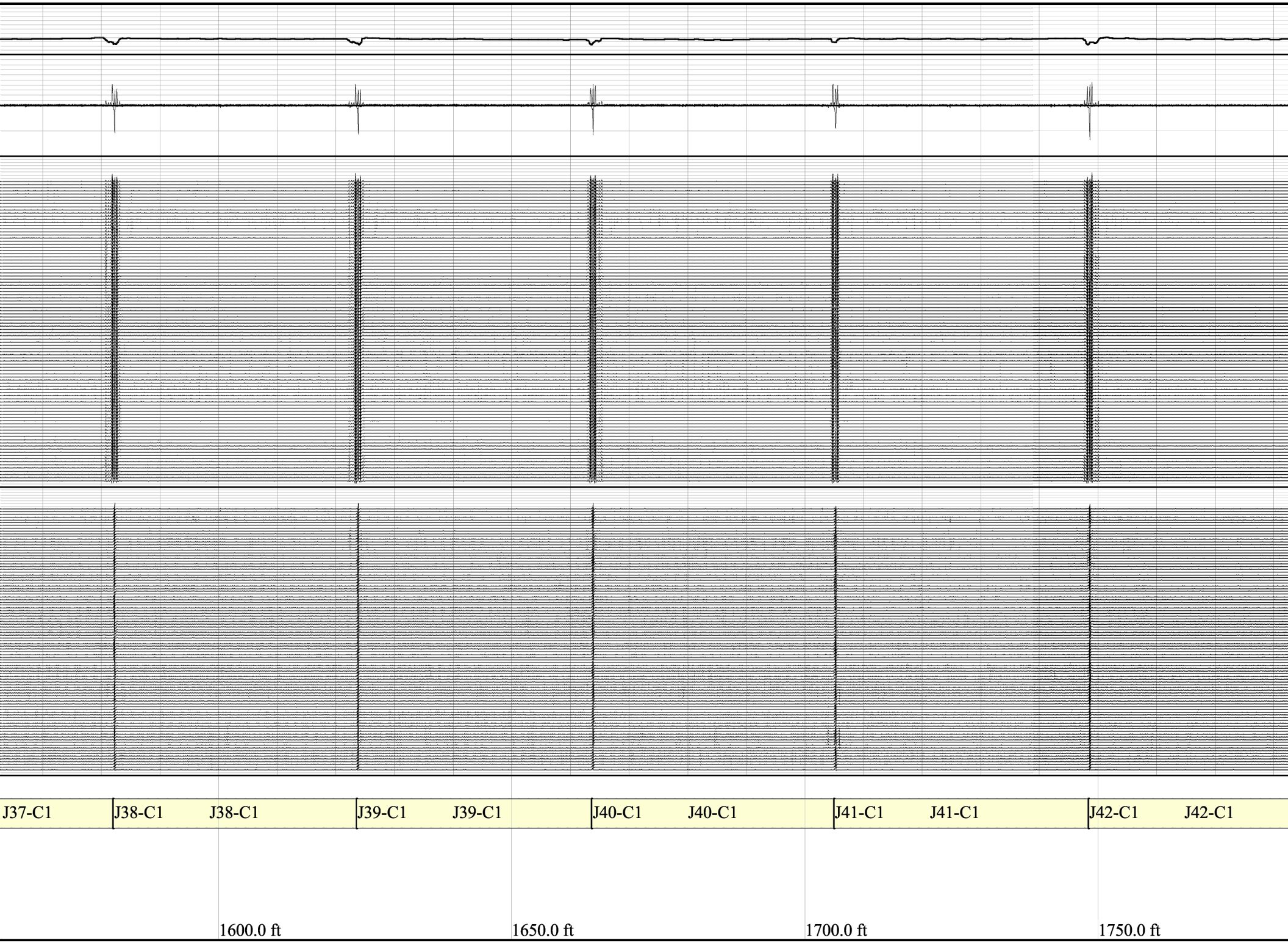

J11-C1
J12-C1
J12-C1
J13-C1
J13-C1
J14-C1
J14-C1
J15-C1
J15-C1
J16-C1
500.0 ft
550.0 ft
600.0 ft
650.0 ft

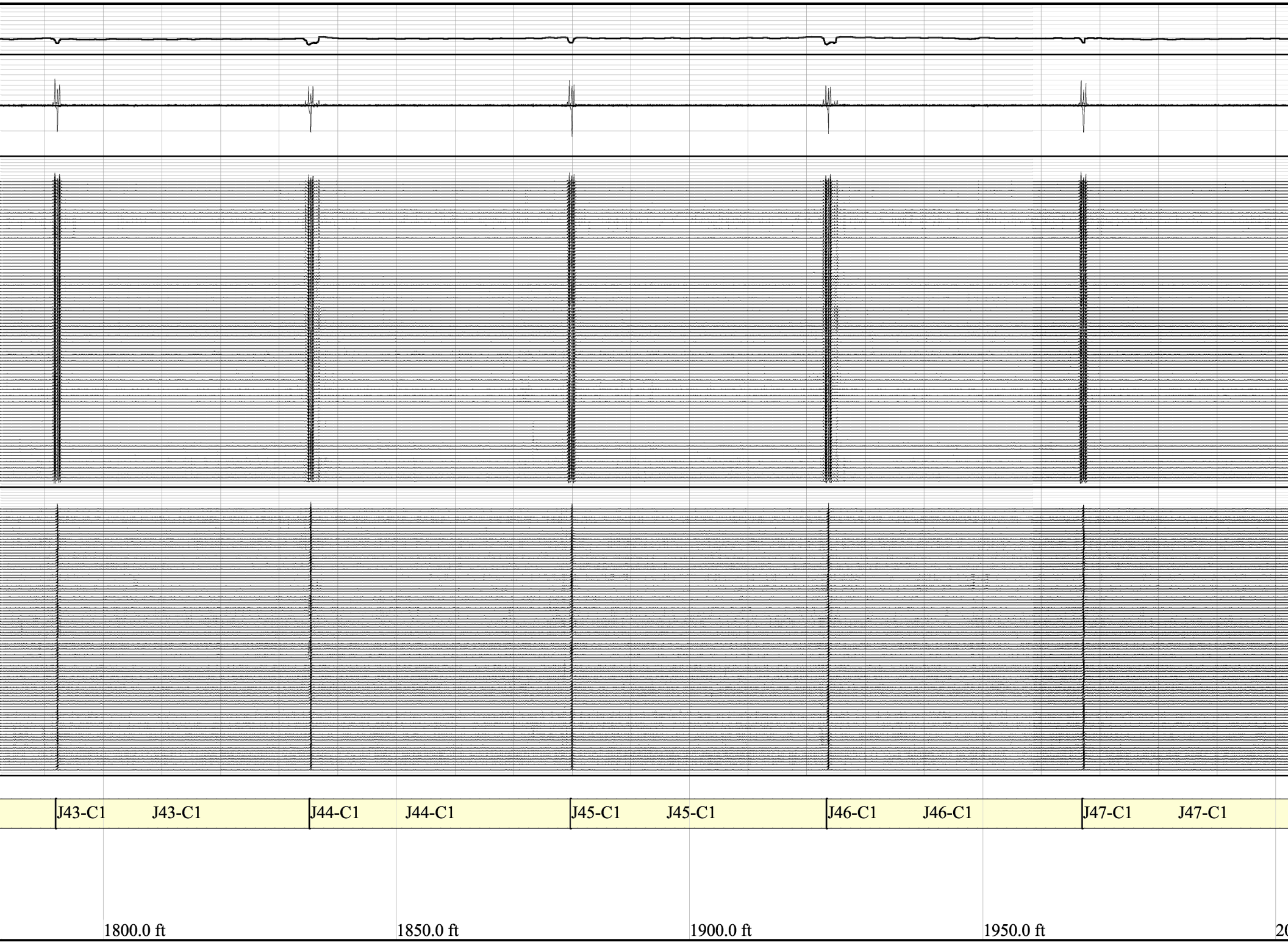

J16-C1
J17-C1
J17-C1
J18-C1
J18-C1
J19-C1
J19-C1
J20-C1
J20-C1
J21-C1
700.0 ft
750.0 ft
800.0 ft
850.0 ft

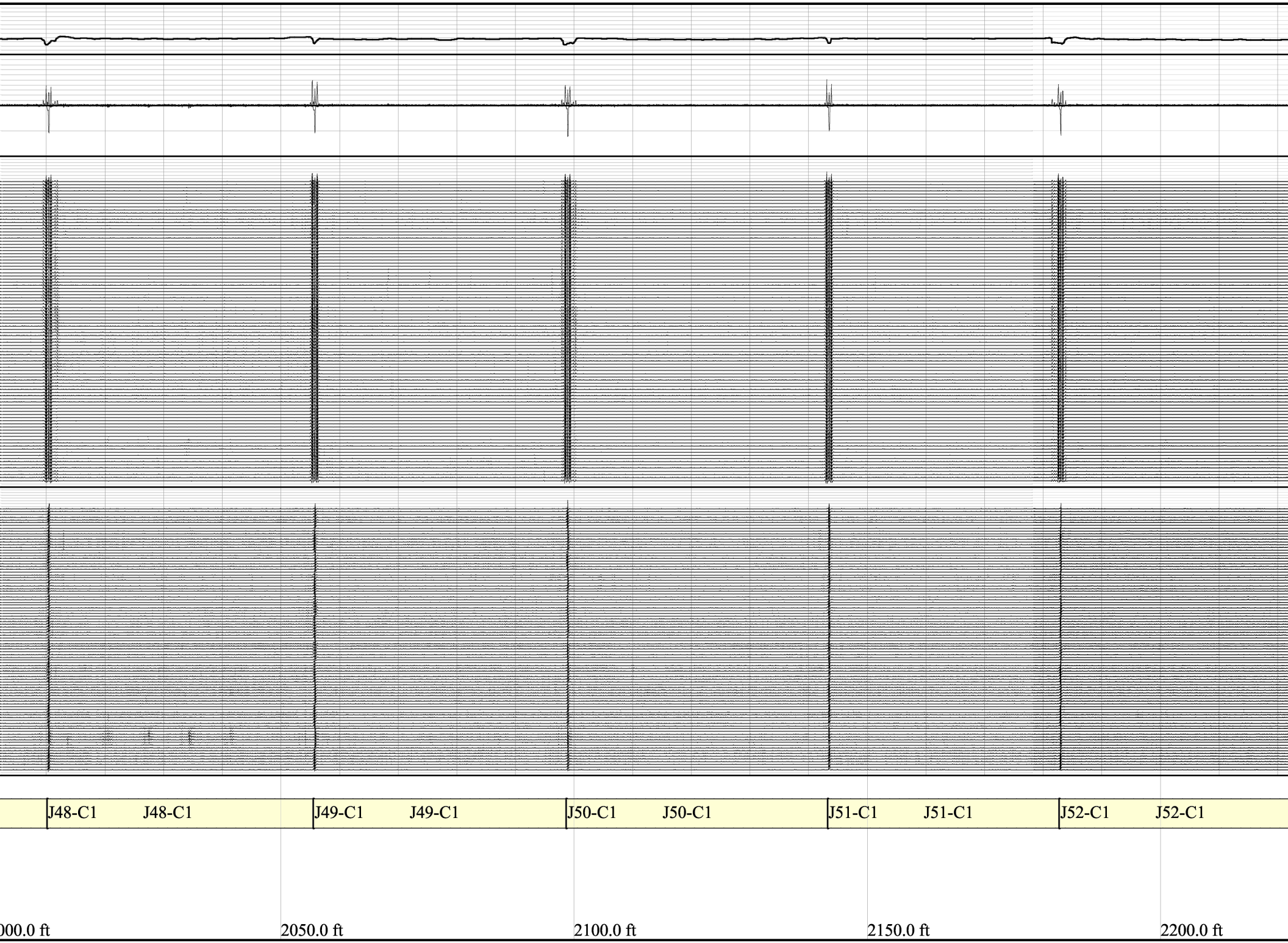

Bottom of 13 3/8" External Casing
Centralizer Example
J22-C1
J22-C1
J23-C1
J23-C1
J24-C1
J24-C1
J25-C1
J25-C1
J26-C1
J26-C1
0.0 ft
950.0 ft
1000.0 ft
1050.0 ft
1100.0 ft


J27-C1
J27-C1
J28-C1
J28-C1
J29-C1
J29-C1
J30-C1
J30-C1
J31-C1
J31-C1
1150.0 ft
1200.0 ft
1250.0 ft
1300.0 ft


J32-C1
J32-C1
J33-C1
J33-C1
J34-C1
J34-C1
J35-C1
J35-C1
J36-C1
J36-C1
J37-C1
1350.0 ft
1400.0 ft
1450.0 ft
1500.0 ft
1550.0 ft


J37-C1
J38-C1
J38-C1
J39-C1
J39-C1
J40-C1
J40-C1
J41-C1
J41-C1
J42-C1
J42-C1
1600.0 ft
1650.0 ft
1700.0 ft
1750.0 ft


J43-C1
J43-C1
J44-C1
J44-C1
J45-C1
J45-C1
J46-C1
J46-C1
J47-C1
J47-C1
1800.0 ft
1850.0 ft
1900.0 ft
1950.0 ft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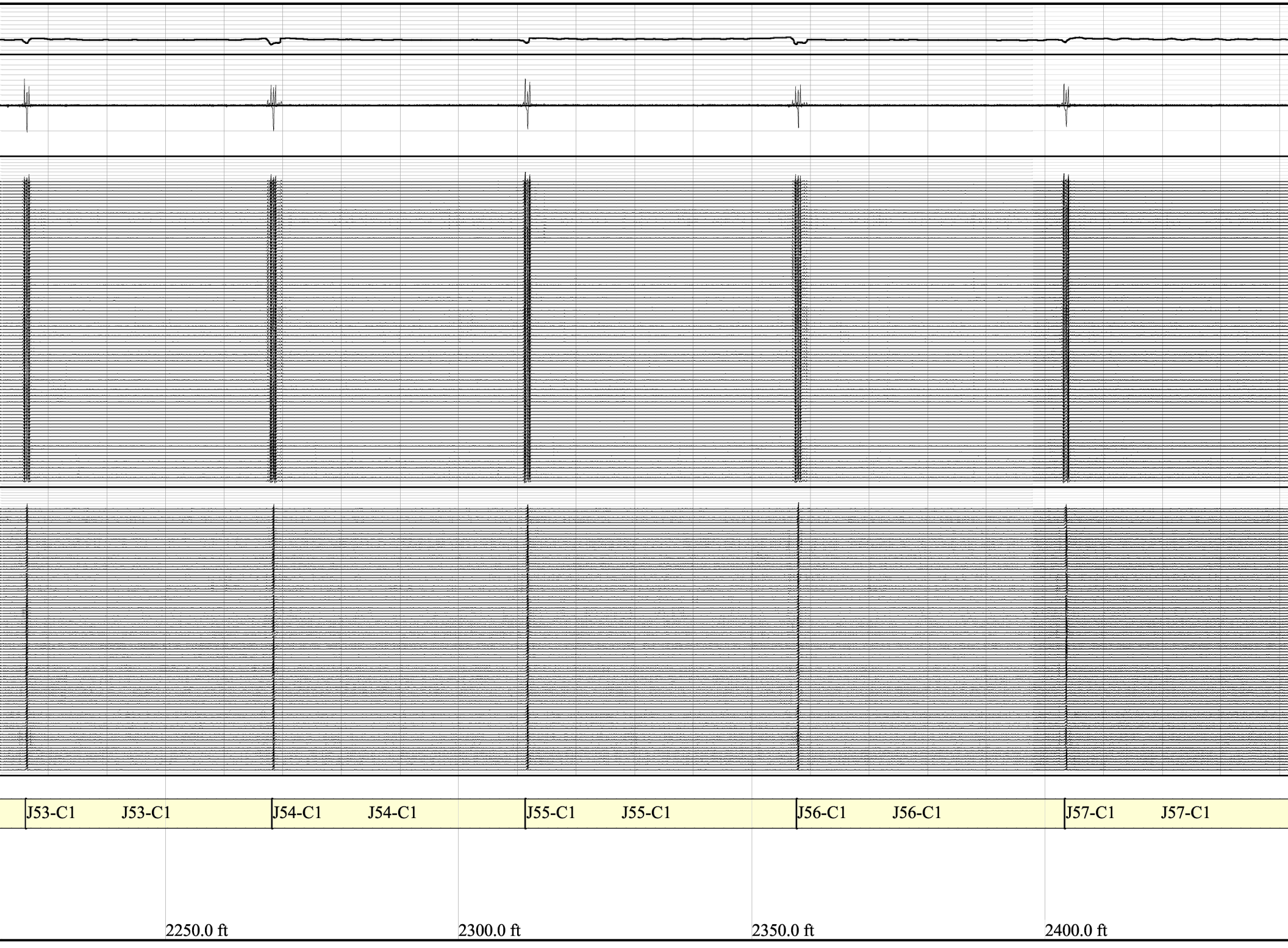
J49-C1
J49-C1
J50-C1
J50-C1
J51-C1
J51-C1
J52-C1
J52-C1
000.0 ft
2050.0 ft
2100.0 ft
2150.0 ft
2200.0 ft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J54-C1
J54-C1
J55-C1
J55-C1
J56-C1
J56-C1
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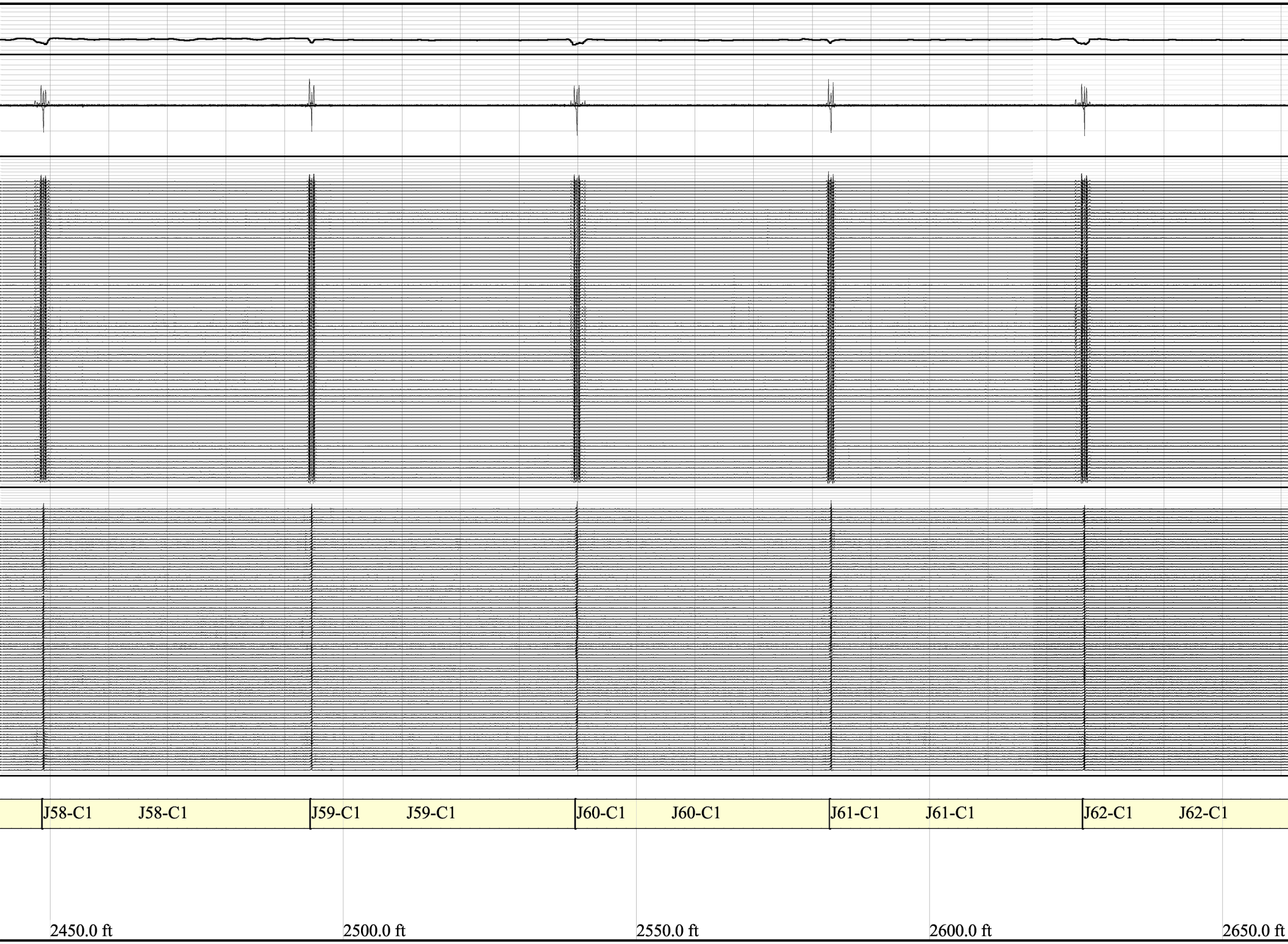
2300.0 ft
2350.0 ft
2400.0 ft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J59-C1
J60-C1
J60-C1
J61-C1
J61-C1
J62-C1
J62-C1
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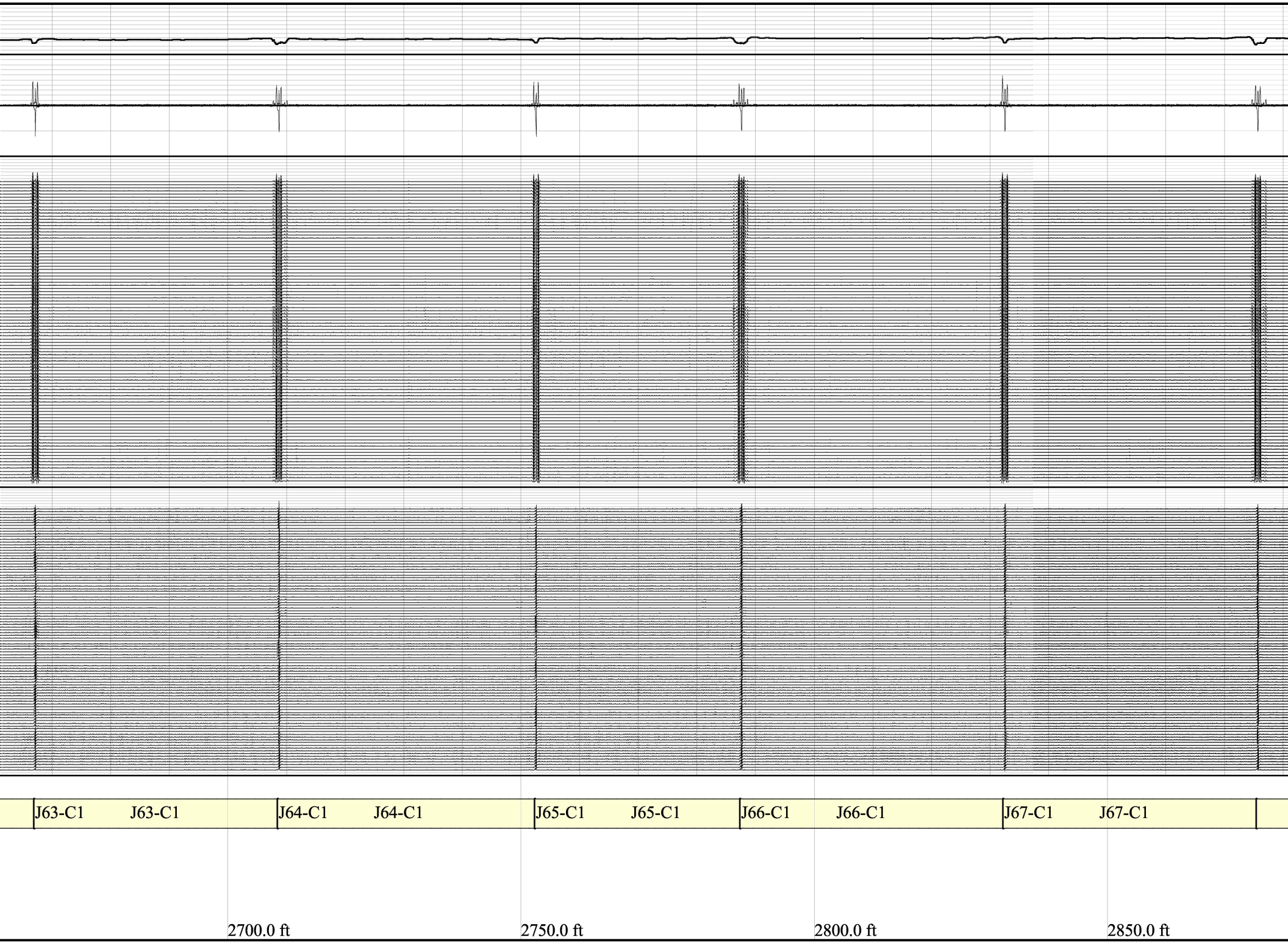
2550.0 ft
2600.0 ft
2650.0 ft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J63-C1
J64-C1
J64-C1
J65-C1
J65-C1
J66-C1
J66-C1
J67-C1
J67-C1
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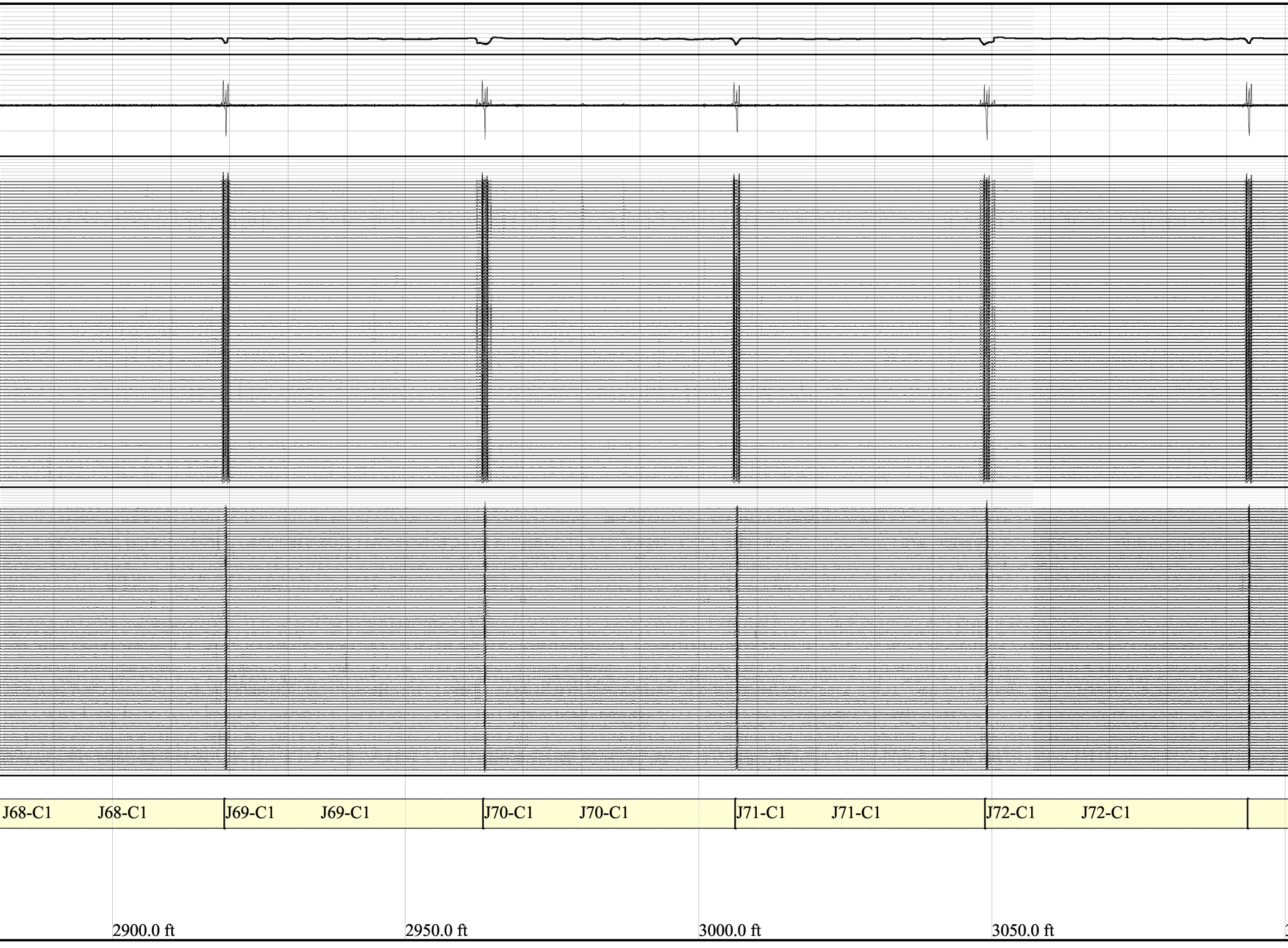
2750.0 ft
2800.0 ft
2850.0 ft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J69-C1
J69-C1
J70-C1
J70-C1
J71-C1
J71-C1
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J72-C1
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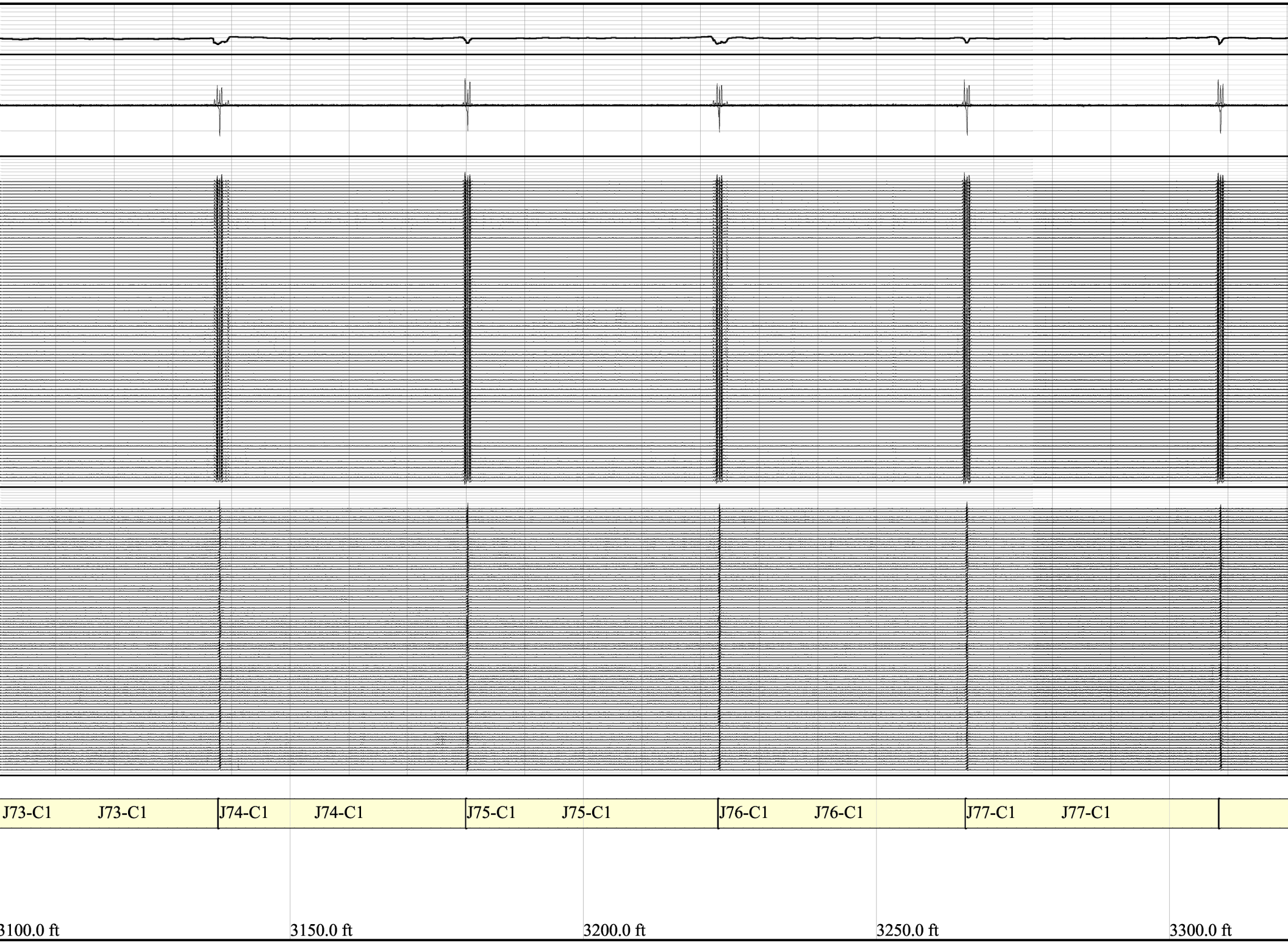
2950.0 ft
3000.0 ft
3050.0 ft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J74-C1
J74-C1
J75-C1
J75-C1
J76-C1
J76-C1
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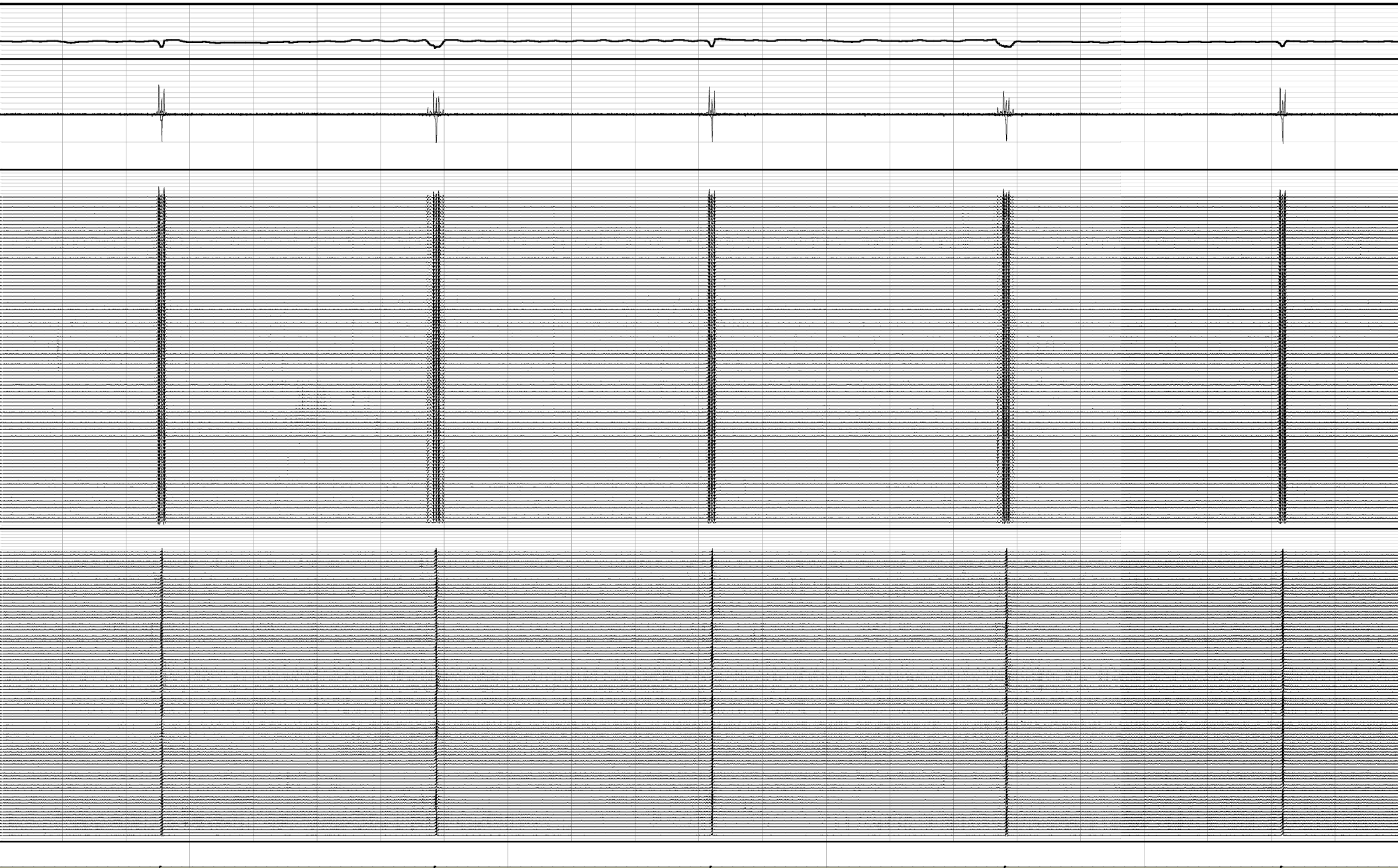
3250.0 ft
3300.0 ft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J79-C1
J79-C1
J80-C1
J80-C1
J81-C1
J81-C1
J82-C1
J82-C1
J83-C1
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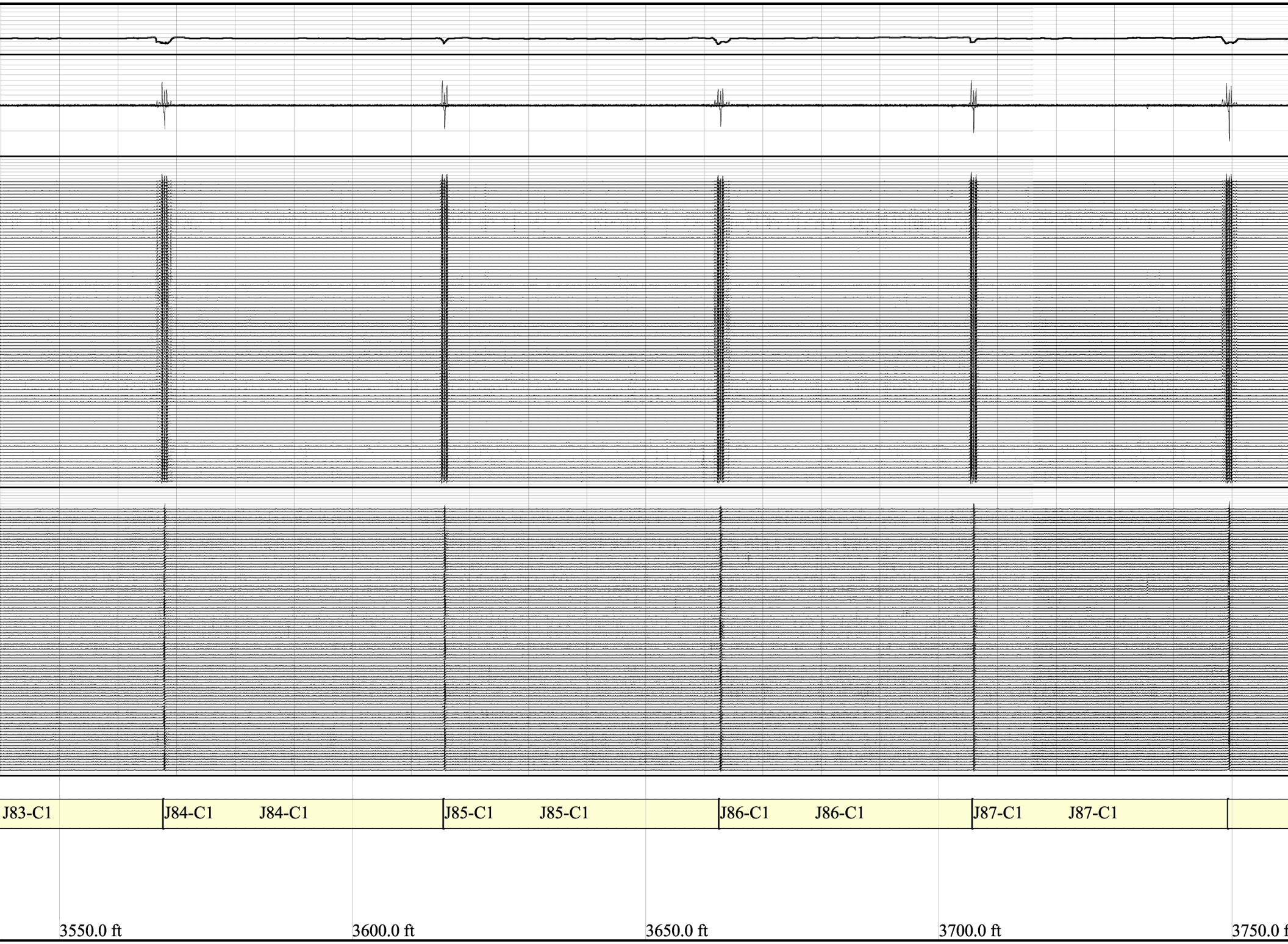
3450.0 ft
3500.0 ft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J84-C1
J84-C1
J85-C1
J85-C1
J86-C1
J86-C1
J87-C1
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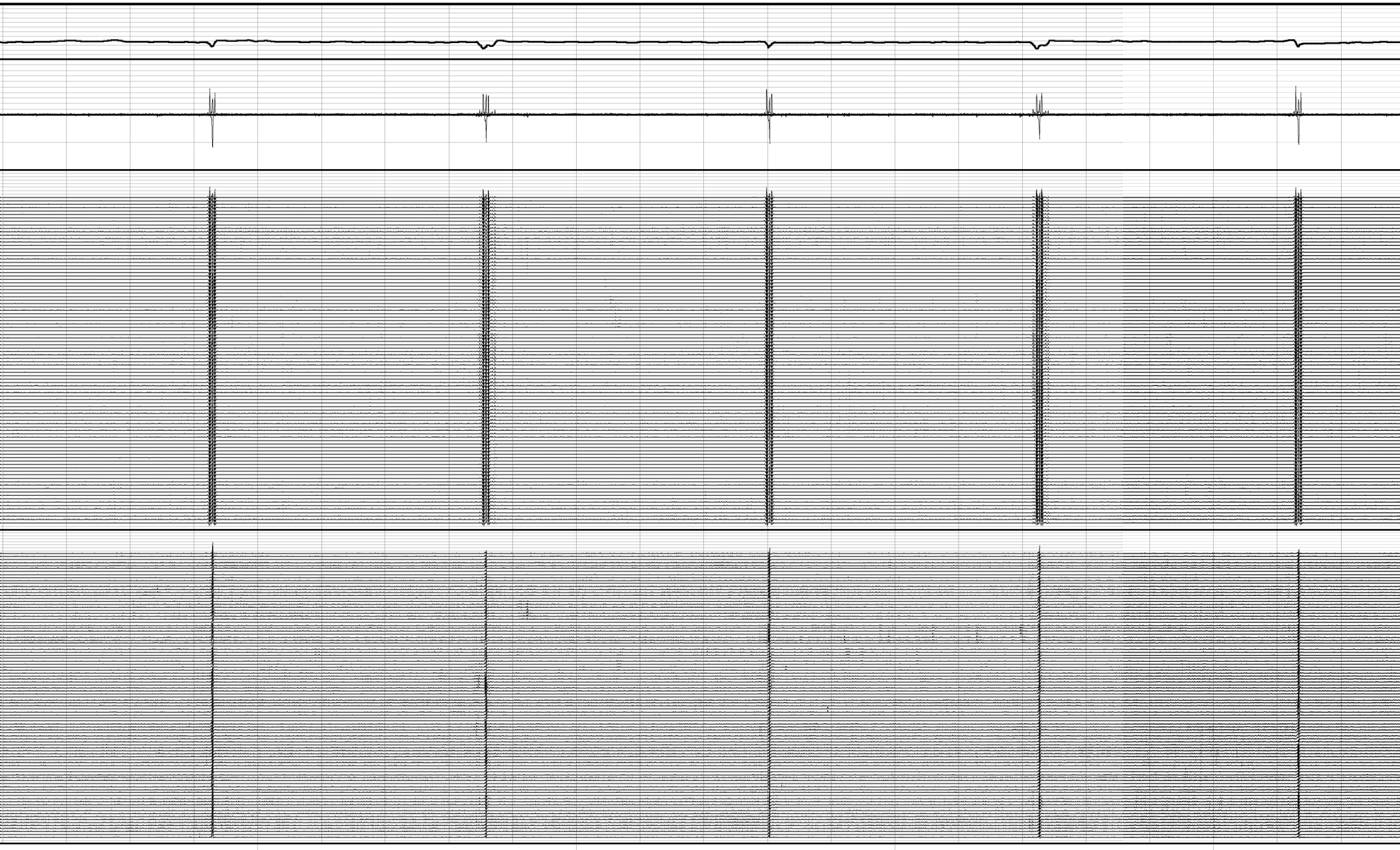
3700.0 ft
3750.0 f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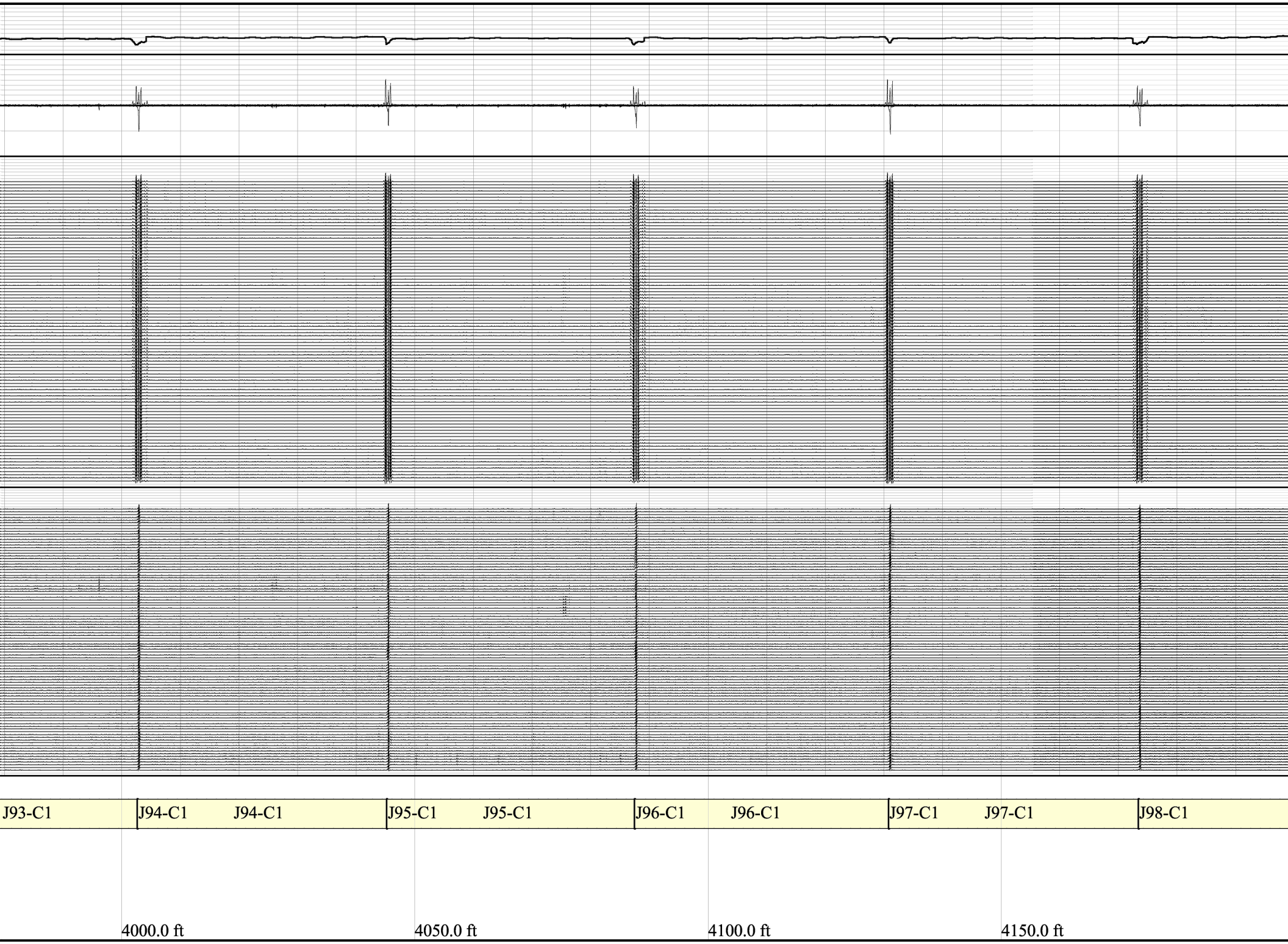
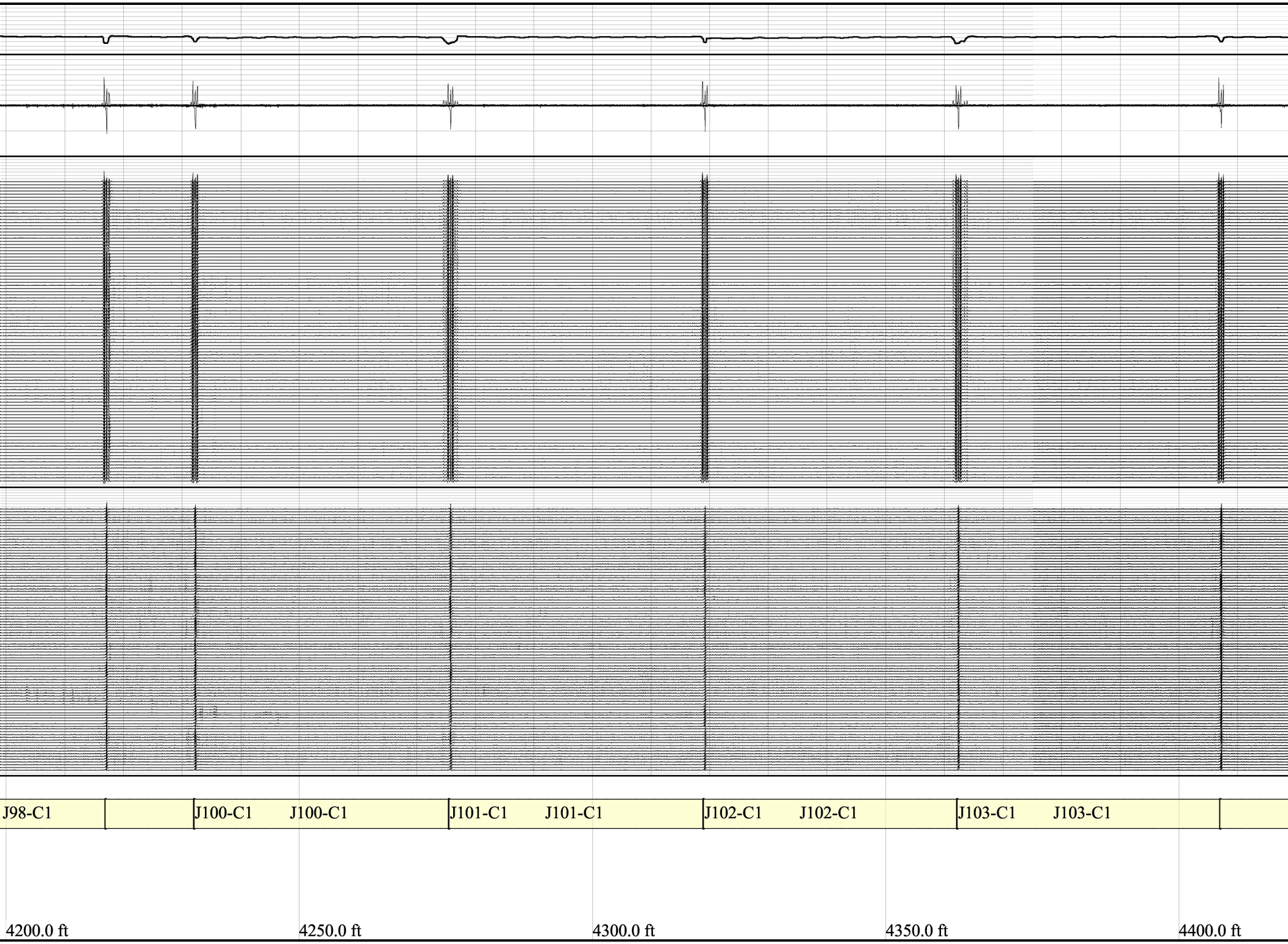
J88-C1
J89-C1
J89-C1
J90-C1
J90-C1
J91-C1
J91-C1
J92-C1
J92-C1
J93-C1
ft
3800.0 ft
3850.0 ft
3900.0 ft
3950.0 ft


J93-C1
J94-C1
J94-C1
J95-C1
J95-C1
J96-C1
J96-C1
J97-C1
J97-C1
J98-C1
4000.0 ft
4050.0 ft
4100.0 ft
4150.0 ft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J100-C1
J100-C1
J101-C1
J101-C1
J102-C1
J102-C1
J103-C1
J103-C1
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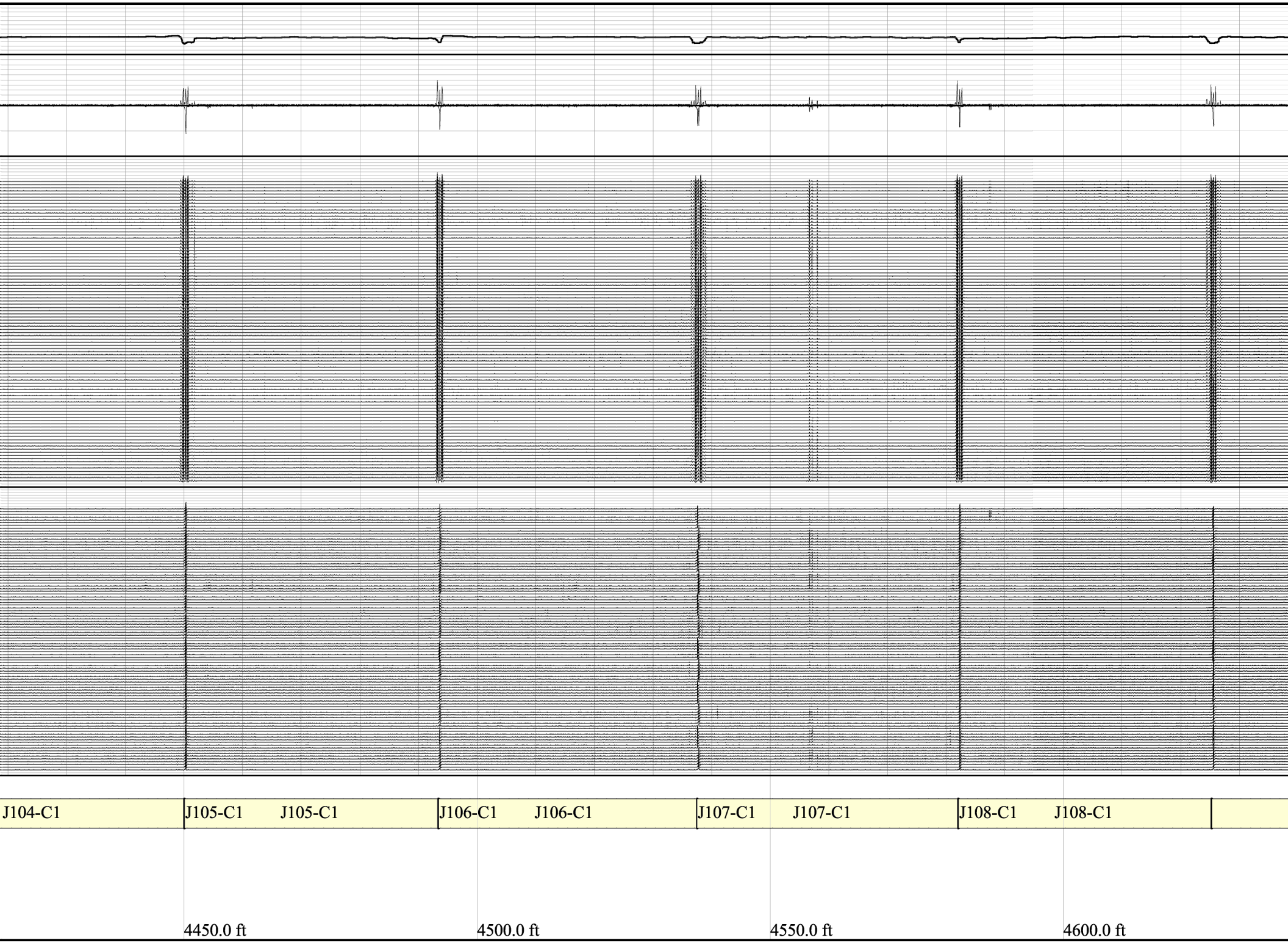
4300.0 ft
4350.0 ft
4400.0 ft


J104-C1
J105-C1
J105-C1
J106-C1
J106-C1
J107-C1
J107-C1
J108-C1
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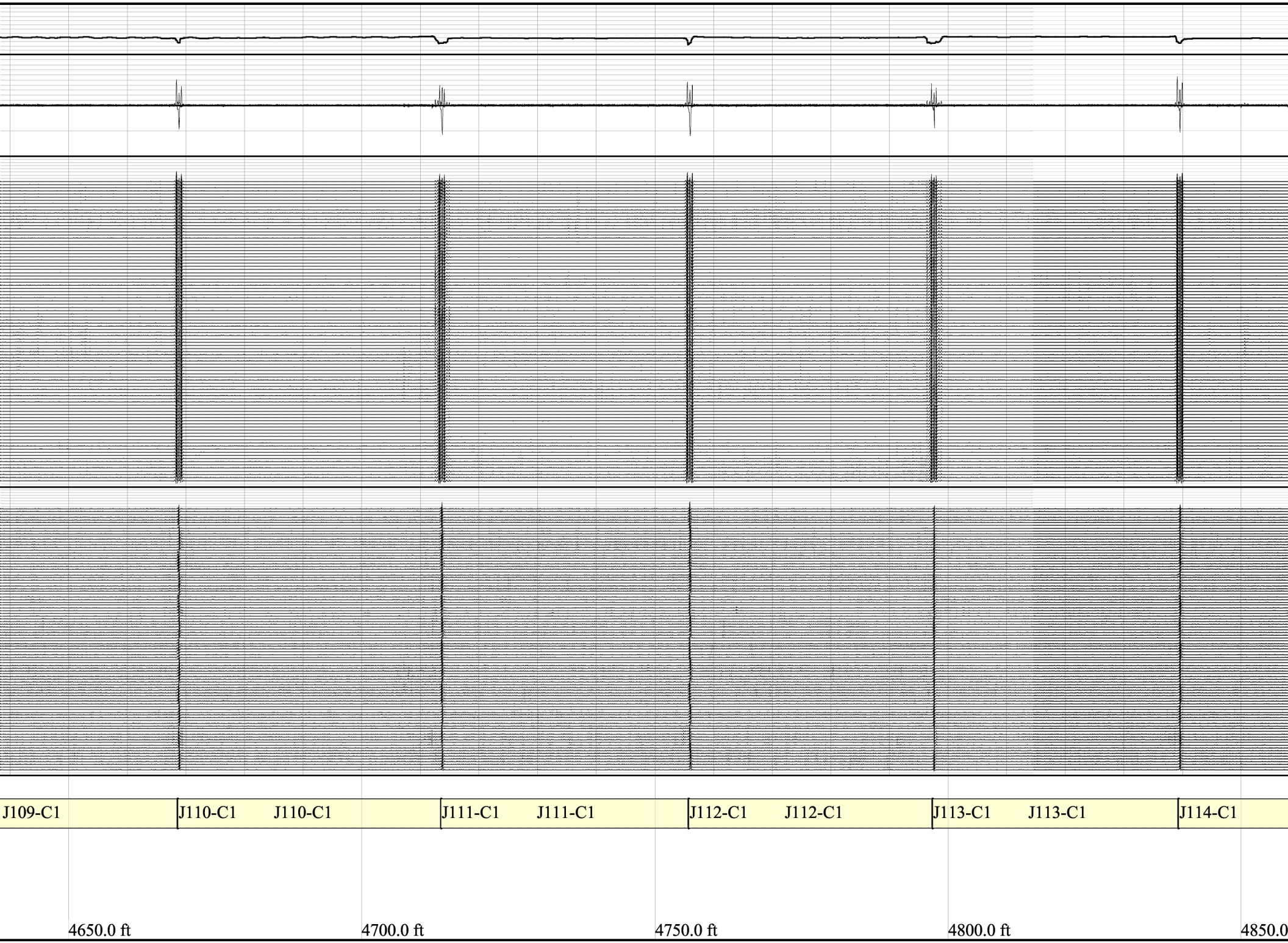
4550.0 ft
4600.0 ft


J109-C1
J110-C1
J110-C1
J111-C1
J111-C1
J112-C1
J112-C1
J113-C1
J113-C1
J114-C1
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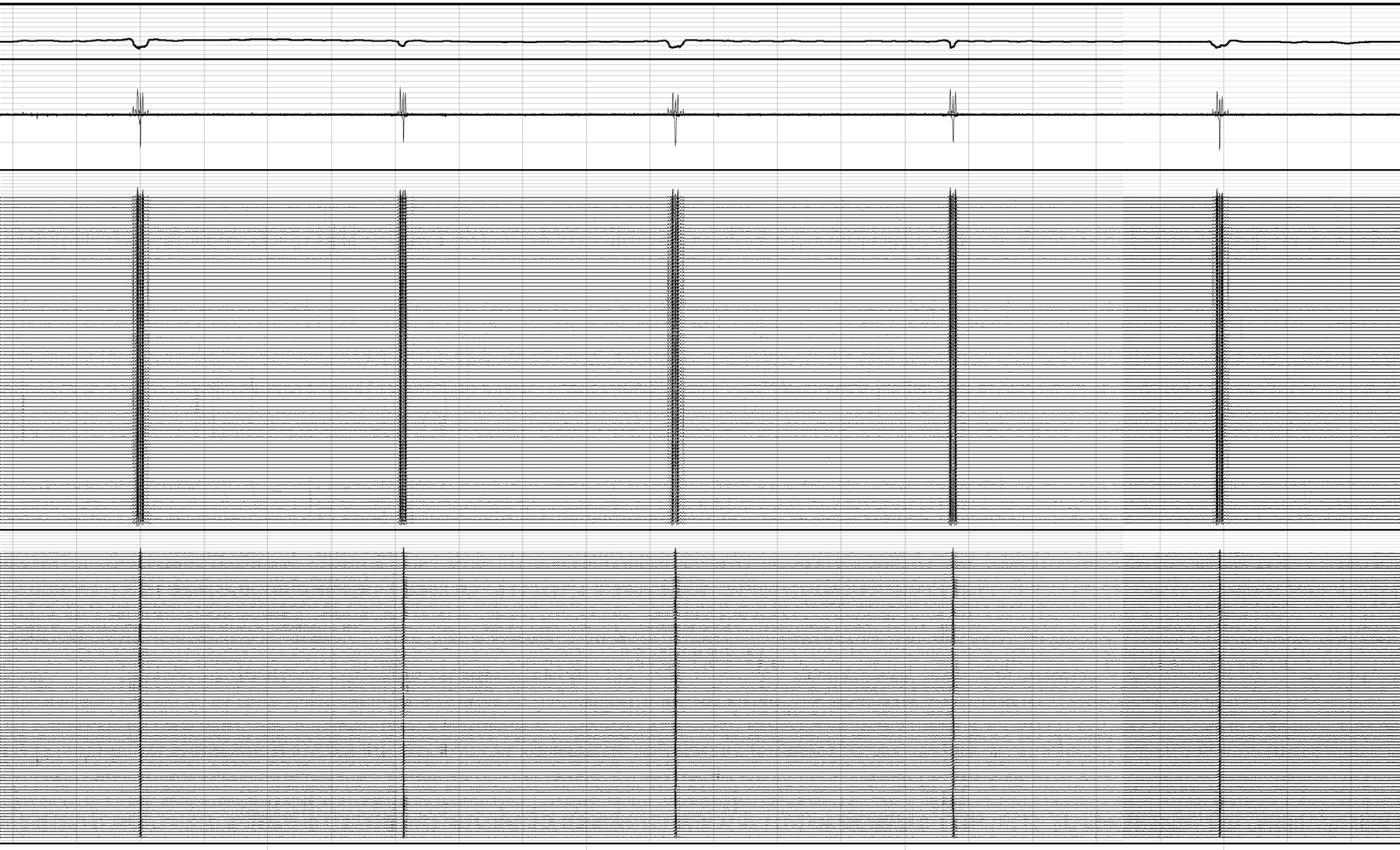
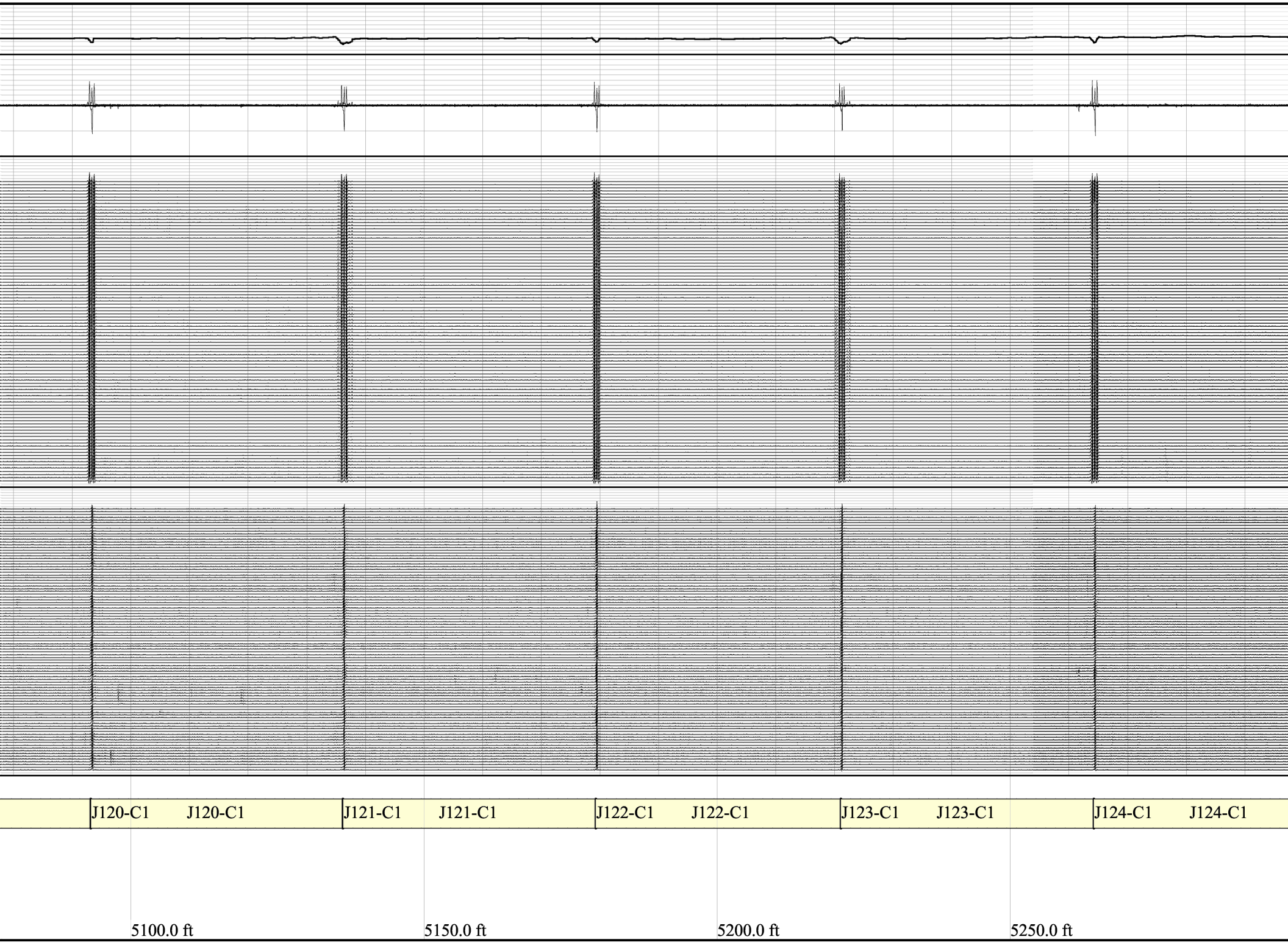
4750.0 ft
4800.0 ft
4850.0


J114-C1
J115-C1
J115-C1
J116-C1
J116-C1
J117-C1
J117-C1
J118-C1
J118-C1
J119-C1
ft
4900.0 ft
4950.0 ft
5000.0 ft
5050.0 ft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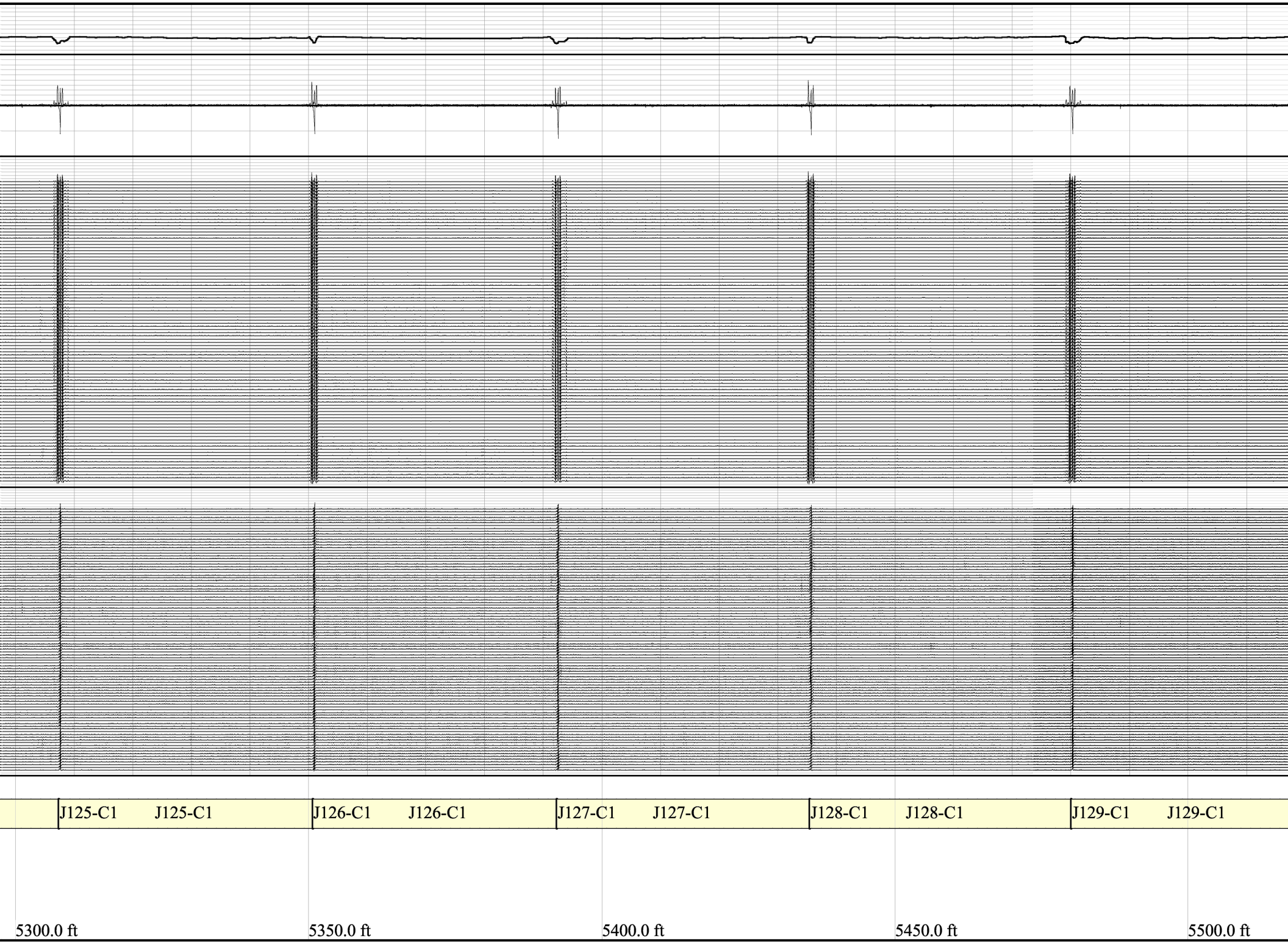
J120-C1
J121-C1
J121-C1
J122-C1
J122-C1
J123-C1
J123-C1
J124-C1
J124-C1
5100.0 ft
5150.0 ft
5200.0 ft
5250.0 ft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J125-C1
J126-C1
J126-C1
J127-C1
J127-C1
J128-C1
J128-C1
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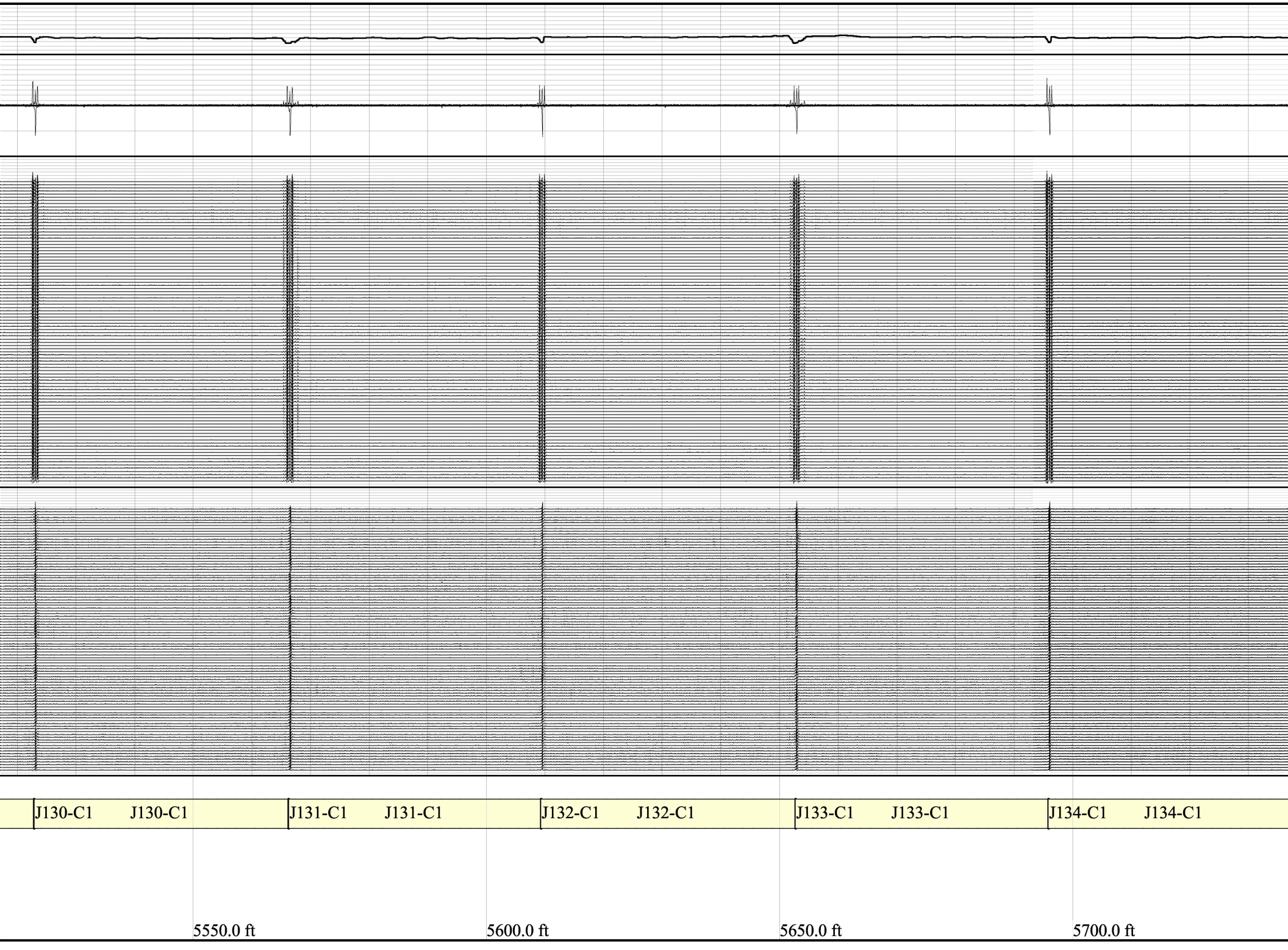
5450.0 ft
5500.0 ft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J130-C1
J131-C1
J131-C1
J132-C1
J132-C1
J133-C1
J133-C1
J134-C1
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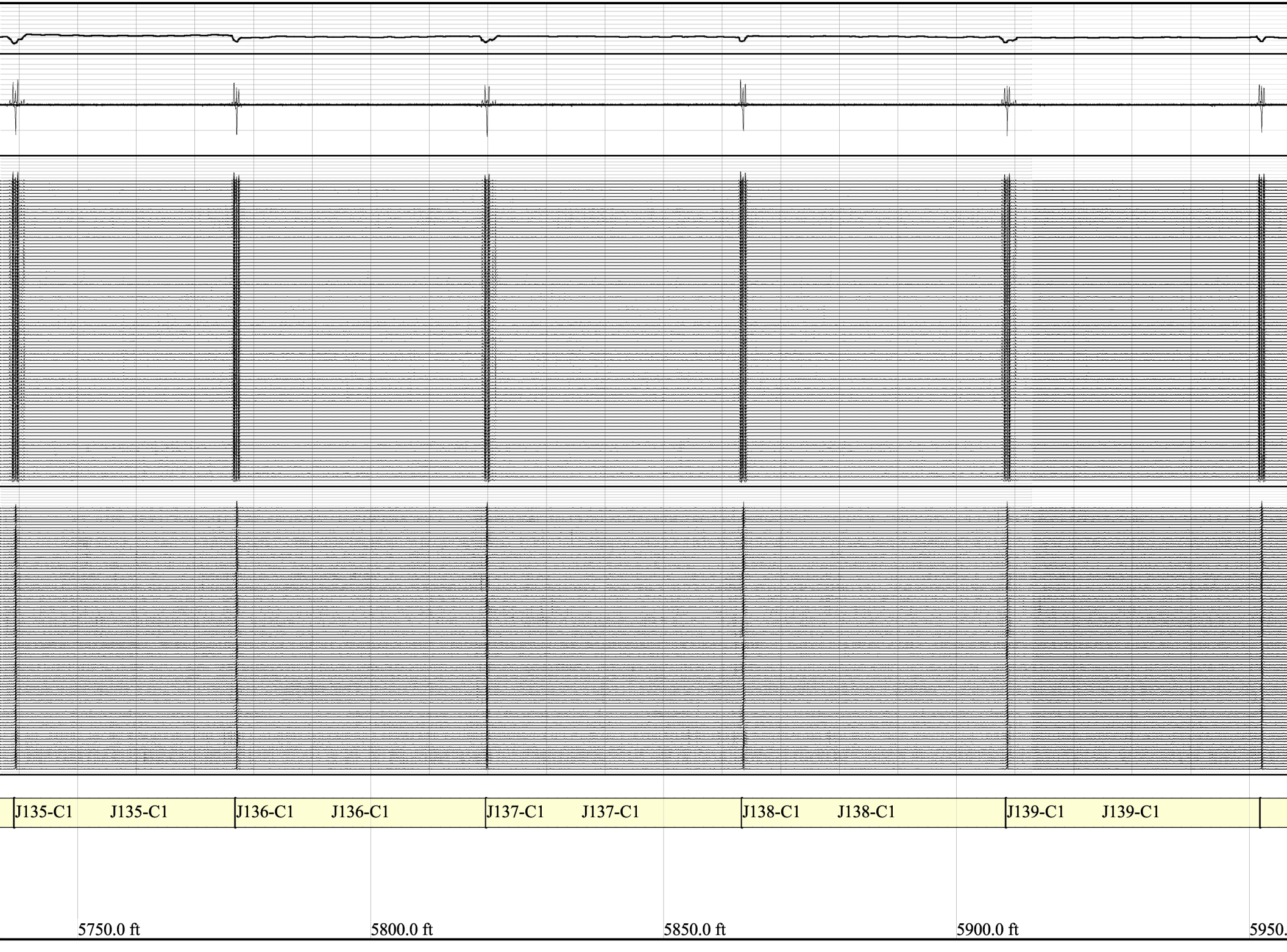
5650.0 ft
5700.0 ft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J135-C1
J136-C1
J136-C1
J137-C1
J137-C1
J138-C1
J138-C1
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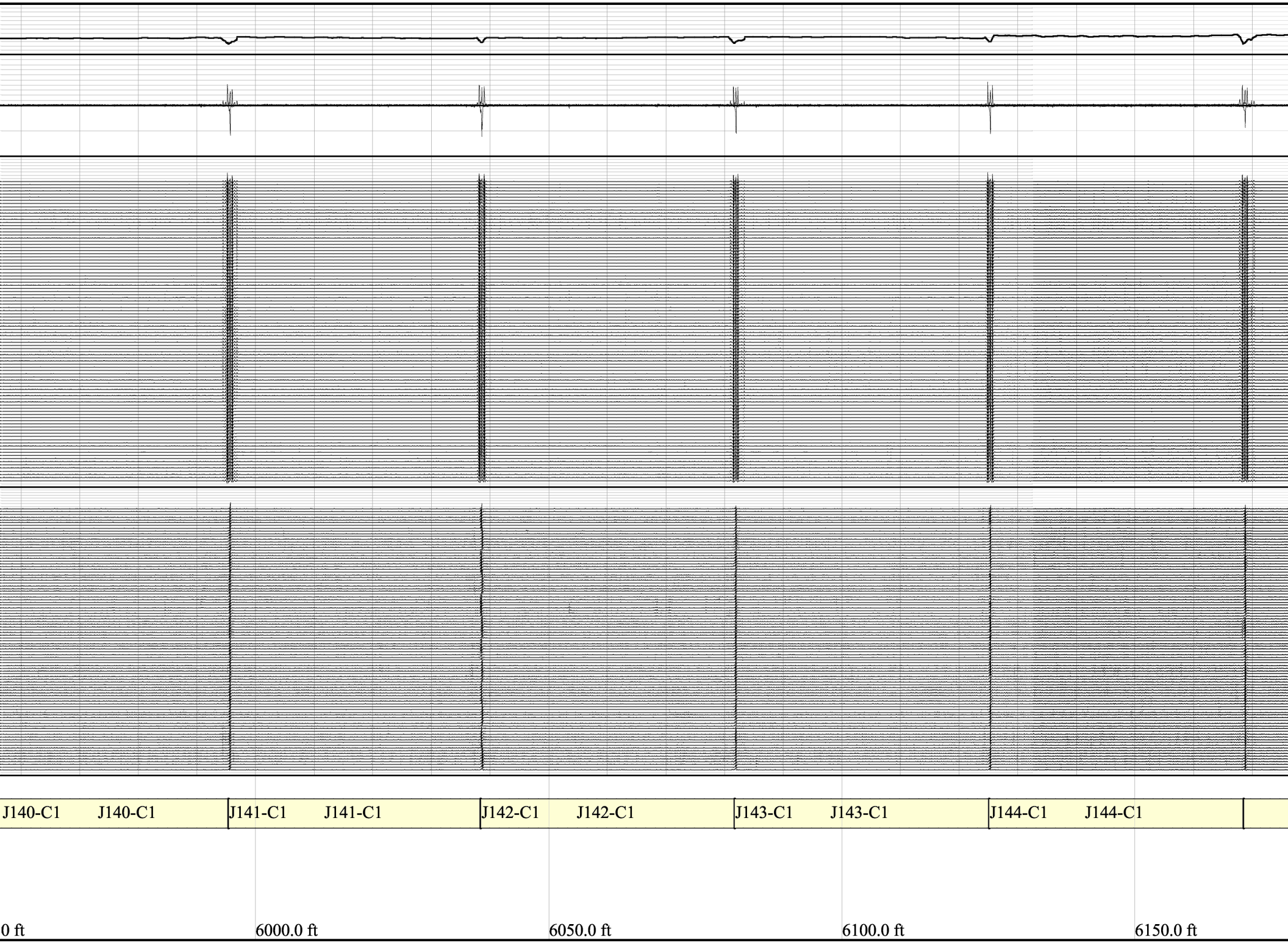
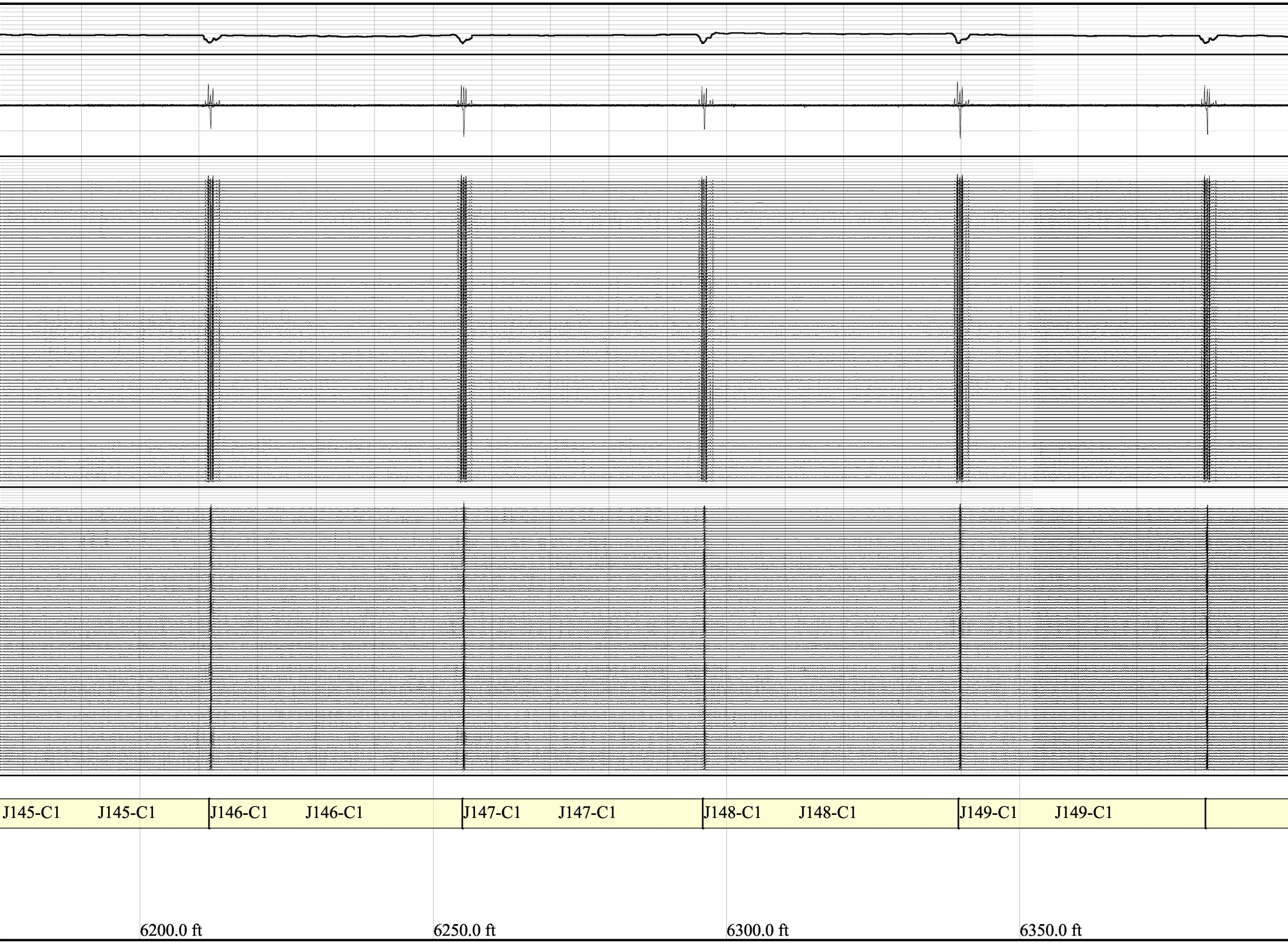
5850.0 ft
5900.0 ft
5950.


J140-C1
J140-C1
J141-C1
J141-C1
J142-C1
J142-C1
J143-C1
J143-C1
J144-C1
J144-C1
0 ft
6000.0 ft
6050.0 ft
6100.0 ft
6150.0 ft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J145-C1
J146-C1
J146-C1
J147-C1
J147-C1
J148-C1
J148-C1
J149-C1
J149-C1
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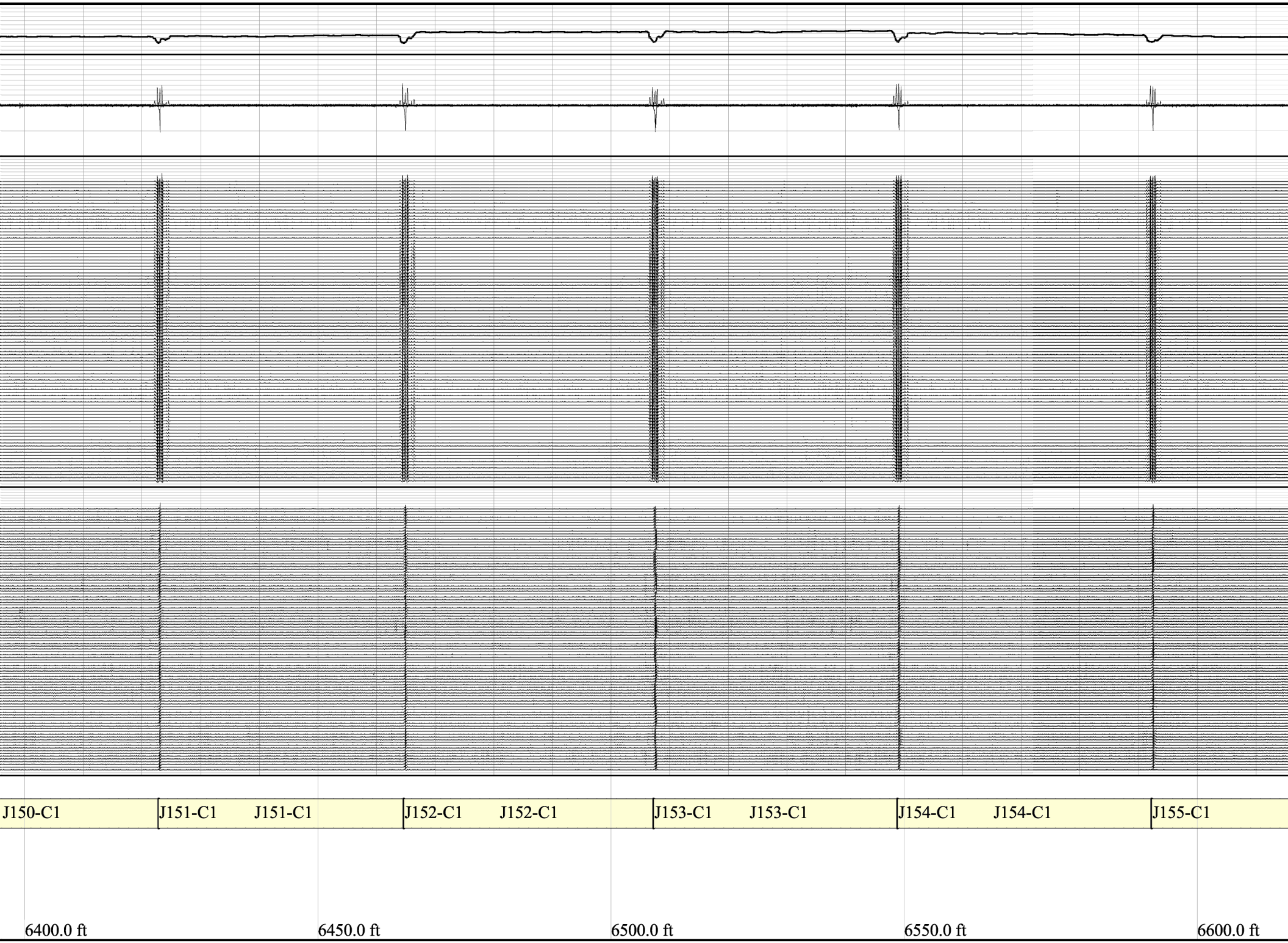
6300.0 ft
6350.0 ft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J151-C1
J151-C1
J152-C1
J152-C1
J153-C1
J153-C1
J154-C1
J154-C1
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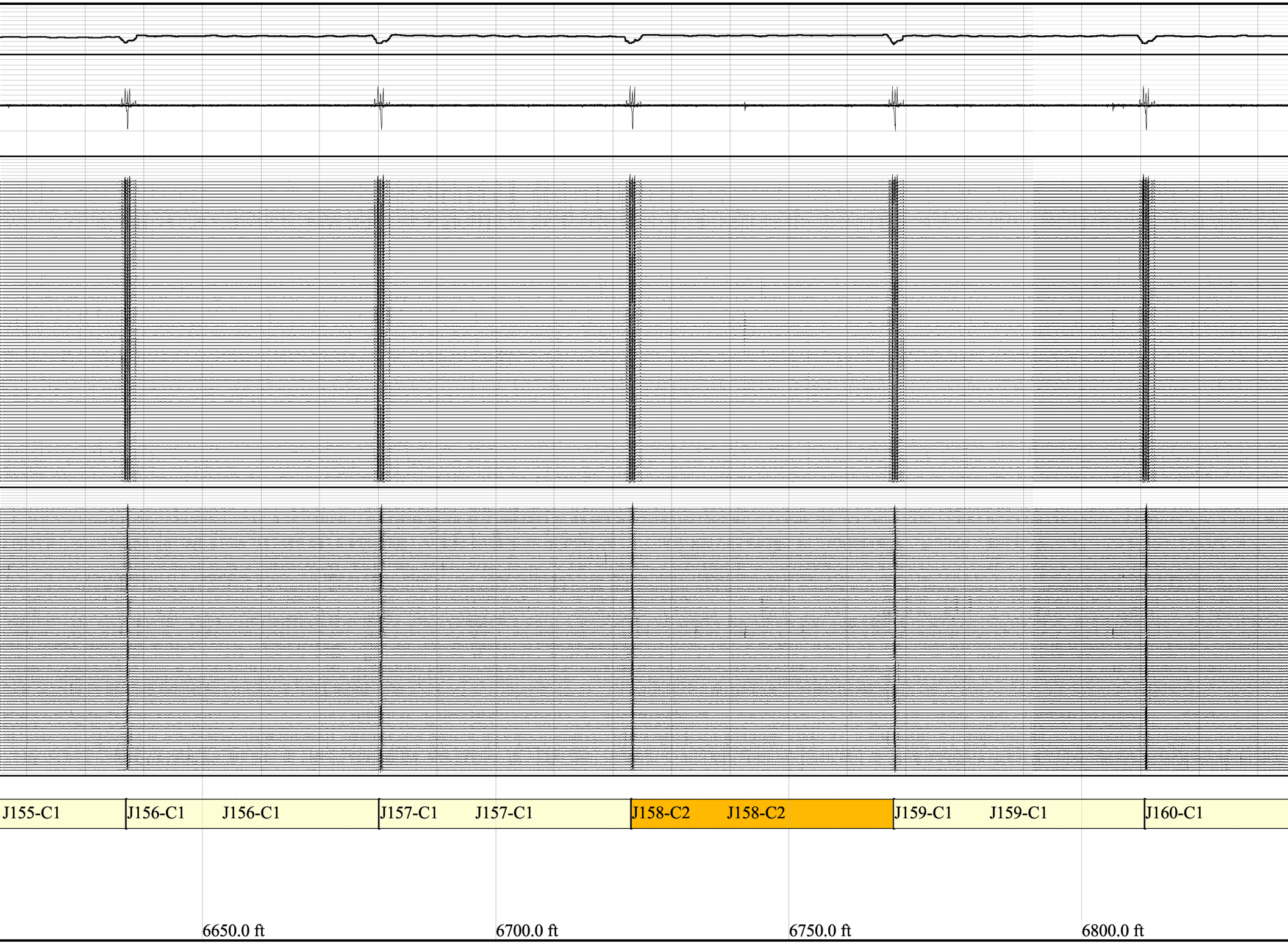
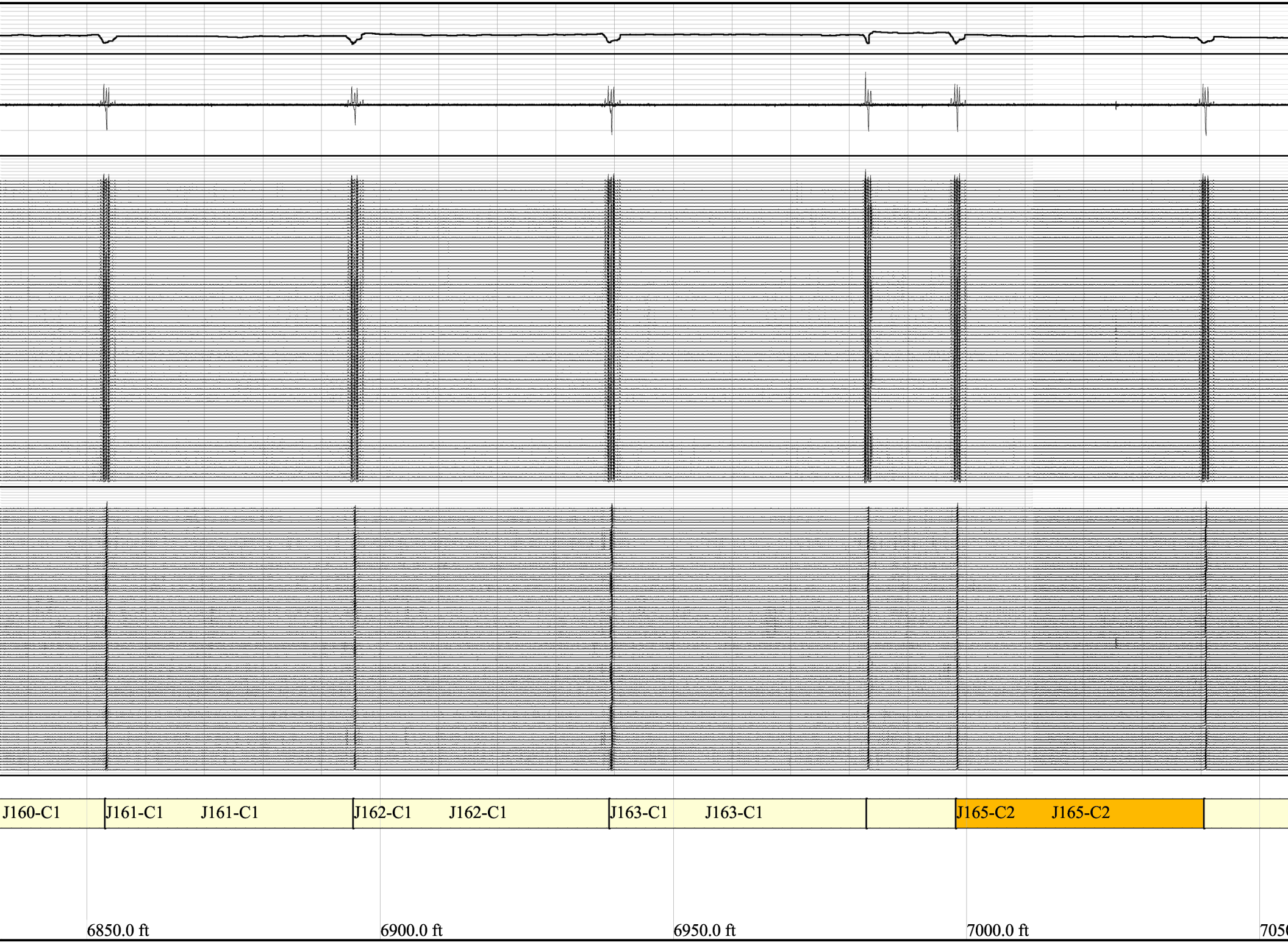
6500.0 ft
6550.0 ft
6600.0 ft


J155-C1
J156-C1
J156-C1
J157-C1
J157-C1
J158-C2
J158-C2
J159-C1
J159-C1
J160-C1
6650.0 ft
6700.0 ft
6750.0 ft
6800.0 ft


J160-C1
J161-C1
J161-C1
J162-C1
J162-C1
J163-C1
J163-C1
J165-C2
J165-C2
6850.0 ft
6900.0 ft
6950.0 ft
7000.0 ft

Southern California Gas Company Porter 69B

File 20160404_093405_RSP_0_0_0_0.mvl

Joint Summary

Southern California Gas Company
Aliso Canyon
Porter 69B

Identifier	Start Log Depth	Joint Length	Diameter	Wall Thickness	Weight	Max ML Depth	Max ML Position	Min Burst Pressure	Joint Depth Class
	ft	ft	in	in	lb/ft	%	ft	psi	
JT-1	26.37	26.12	9.625	0.472	47.0	18	51.07	8540	1
JT-2	52.49	46.33	9.625	0.472	47.0	0			1
JT-3	98.82	45.88	9.625	0.472	47.0	0			1
JT-4	144.70	43.15	9.625	0.472	47.0	0			1
JT-5	187.86	42.46	9.625	0.472	47.0	0			1
JT-6	230.32	41.49	9.625	0.472	47.0	0			1
JT-7	271.81	45.49	9.625	0.472	47.0	0			1
JT-8	317.30	41.55	9.625	0.472	47.0	0			1
JT-9	358.84	44.75	9.625	0.472	47.0	0			1
JT-10	403.60	43.59	9.625	0.472	47.0	0			1
JT-11	447.19	43.68	9.625	0.472	47.0	0			1
JT-12	490.87	43.19	9.625	0.472	47.0	0			1
JT-13	534.06	39.70	9.625	0.472	47.0	0			1
JT-14	573.75	41.81	9.625	0.472	47.0	0			1
JT-15	615.56	43.44	9.625	0.472	47.0	0			1
JT-16	659.00	43.37	9.625	0.472	47.0	0			1
JT-17	702.37	43.33	9.625	0.472	47.0	0			1
JT-18	745.70	43.30	9.625	0.472	47.0	0			1
JT-19	789.00	46.05	9.625	0.472	47.0	0			1
JT-20	835.04	43.37	9.625	0.472	47.0	0			1
JT-21	878.42	41.18	9.625	0.472	47.0	0			1
JT-22	919.60	43.13	9.625	0.472	47.0	0			1
JT-23	962.73	41.45	9.625	0.472	47.0	0			1
JT-24	1004.18	40.80	9.625	0.472	47.0	0			1
JT-25	1044.98	41.27	9.625	0.472	47.0	0			1
JT-26	1086.25	41.49	9.625	0.472	47.0	0			1
JT-27	1127.74	42.39	9.625	0.472	47.0	0			1
JT-28	1170.12	42.07	9.625	0.472	47.0	0			1
JT-29	1212.19	42.36	9.625	0.472	47.0	0			1
JT-30	1254.55	41.66	9.625	0.472	47.0	0			1
JT-31	1296.22	41.11	9.625	0.472	47.0	0			1
JT-32	1337.32	40.46	9.625	0.472	47.0	0			1
JT-33	1377.78	40.19	9.625	0.472	47.0	0			1
JT-34	1417.97	41.80	9.625	0.472	47.0	0			1
JT-35	1459.77	40.39	9.625	0.472	47.0	0			1
JT-36	1500.15	41.64	9.625	0.472	47.0	0			1
JT-37	1541.79	40.34	9.625	0.472	47.0	0			1
JT-38	1582.14	41.49	9.625	0.472	47.0	0			1
JT-39	1623.63	40.09	9.625	0.472	47.0	0			1
JT-40	1663.72	41.33	9.625	0.472	47.0	0			1
JT-41	1705.05	43.39	9.625	0.472	47.0	0			1
JT-42	1748.44	43.59	9.625	0.472	47.0	0			1
JT-43	1792.03	43.23	9.625	0.472	47.0	0			1
JT-44	1835.27	44.50	9.625	0.472	47.0	0			1
JT-45	1879.76	43.77	9.625	0.472	47.0	0			1
JT-46	1923.53	43.54	9.625	0.472	47.0	0			1
JT-47	1967.07	43.16	9.625	0.472	47.0	0			1
JT-48	2010.23	45.40	9.625	0.472	47.0	0			1
JT-49	2055.63	43.14	9.625	0.472	47.0	0			1
JT-50	2098.77	44.59	9.625	0.472	47.0	0			1
JT-51	2143.36	39.50	9.625	0.472	47.0	0			1
JT-52	2182.86	43.33	9.625	0.472	47.0	0			1
JT-53	2226.19	42.06	9.625	0.472	47.0	0			1
JT-54	2268.25	43.24	9.625	0.472	47.0	0			1
JT-55	2311.49	46.25	9.625	0.472	47.0	0			1
JT-56	2357.74	45.73	9.625	0.472	47.0	0			1
JT-57	2403.48	45.23	9.625	0.472	47.0	0			1
JT-58	2448.71	45.77	9.625	0.472	47.0	0			1
JT-59	2494.48	45.21	9.625	0.472	47.0	0			1
JT-60	2539.69	43.34	9.625	0.472	47.0	0			1
JT-61	2583.03	43.21	9.625	0.472	47.0	0			1
JT-62	2626.24	40.78	9.625	0.472	47.0	0			1
JT-63	2667.02	41.55	9.625	0.472	47.0	0			1
JT-64	2708.57	43.87	9.625	0.472	47.0	0			1
JT-65	2752.44	35.02	9.625	0.472	47.0	0			1
JT-66	2787.46	44.86	9.625	0.472	47.0	0			1
JT-67	2832.32	43.23	9.625	0.472	47.0	0			1
JT-68	2875.55	43.64	9.625	0.472	47.0	0			1
JT-69	2919.19	44.18	9.625	0.472	47.0	0			1
JT-70	2963.37	42.93	9.625	0.472	47.0	19	2980.06	8470	1
JT-71	3006.30	42.64	9.625	0.472	47.0	0			1
JT-72	3048.94	44.77	9.625	0.472	47.0	0			1
JT-73	3093.71	44.10	9.625	0.472	47.0	0			1
JT-74	3137.82	42.22	9.625	0.472	47.0	0			1
JT-75	3180.03	43.03	9.625	0.472	47.0	0			1
JT-76	3223.07	42.19	9.625	0.472	47.0	0			1

JT-77	3265.26	43.25	9.625	0.472	47.0	0			1
JT-78	3308.51	36.90	9.625	0.472	47.0	0			1
JT-79	3345.41	43.19	9.625	0.472	47.0	0			1
JT-80	3388.60	43.31	9.625	0.472	47.0	0			1
JT-81	3431.91	46.26	9.625	0.472	47.0	0			1
JT-82	3478.17	43.43	9.625	0.472	47.0	0			1
JT-83	3521.61	46.19	9.625	0.472	47.0	0			1
JT-84	3567.80	47.78	9.625	0.472	47.0	0			1
JT-85	3615.58	47.05	9.625	0.472	47.0	0			1
JT-86	3662.64	43.17	9.625	0.472	47.0	0			1
JT-87	3705.81	43.58	9.625	0.472	47.0	0			1
JT-88	3749.39	43.37	9.625	0.472	47.0	0			1
JT-89	3792.75	42.92	9.625	0.472	47.0	0			1
JT-90	3835.67	44.46	9.625	0.472	47.0	0			1
JT-91	3880.14	42.38	9.625	0.472	47.0	0			1
JT-92	3922.52	40.65	9.625	0.472	47.0	0			1
JT-93	3963.17	39.58	9.625	0.472	47.0	0			1
JT-94	4002.75	42.56	9.625	0.472	47.0	0			1
JT-95	4045.31	42.27	9.625	0.472	47.0	0			1
JT-96	4087.58	43.30	9.625	0.472	47.0	0			1
JT-97	4130.88	42.62	9.625	0.472	47.0	0			1
JT-98	4173.51	43.47	9.625	0.472	47.0	0			1
JT-99	4216.97	15.11	9.625	0.472	47.0	0			1
JT-100	4232.09	43.54	9.625	0.472	47.0	0			1
JT-101	4275.62	43.41	9.625	0.472	47.0	0			1
JT-102	4319.03	43.22	9.625	0.472	47.0	0			1
JT-103	4362.26	44.82	9.625	0.472	47.0	0			1
JT-104	4407.08	43.06	9.625	0.472	47.0	0			1
JT-105	4450.14	43.35	9.625	0.472	47.0	0			1
JT-106	4493.49	44.08	9.625	0.472	47.0	0			1
JT-107	4537.57	44.58	9.625	0.472	47.0	0			1
JT-108	4582.15	43.19	9.625	0.472	47.0	0			1
JT-109	4625.35	43.34	9.625	0.472	47.0	0			1
JT-110	4668.69	44.91	9.625	0.472	47.0	0			1
JT-111	4713.60	42.22	9.625	0.472	47.0	0			1
JT-112	4755.82	41.59	9.625	0.472	47.0	0			1
JT-113	4797.41	41.98	9.625	0.472	47.0	0			1
JT-114	4839.39	40.44	9.625	0.472	47.0	0			1
JT-115	4879.83	41.25	9.625	0.472	47.0	0			1
JT-116	4921.07	42.74	9.625	0.472	47.0	0			1
JT-117	4963.81	43.57	9.625	0.472	47.0	0			1
JT-118	5007.39	41.85	9.625	0.472	47.0	0			1
JT-119	5049.23	43.97	9.625	0.472	47.0	0			1
JT-120	5093.20	43.02	9.625	0.472	47.0	0			1
JT-121	5136.23	43.09	9.625	0.472	47.0	0			1
JT-122	5179.32	41.82	9.625	0.472	47.0	0			1
JT-123	5221.13	43.13	9.625	0.472	47.0	0			1
JT-124	5264.26	43.20	9.625	0.472	47.0	16	5276.31	8290	1
JT-125	5307.46	43.32	9.625	0.472	47.0	0			1
JT-126	5350.78	41.60	9.625	0.472	47.0	0			1
JT-127	5392.38	43.16	9.625	0.472	47.0	0			1
JT-128	5435.54	44.58	9.625	0.472	47.0	0			1
JT-129	5480.12	42.80	9.625	0.472	47.0	0			1
JT-130	5522.92	43.41	9.625	0.472	47.0	0			1
JT-131	5566.33	43.03	9.625	0.472	47.0	0			1
JT-132	5609.36	43.40	9.625	0.472	47.0	0			1
JT-133	5652.76	43.13	9.625	0.472	47.0	0			1
JT-134	5695.89	43.32	9.625	0.472	47.0	0			1
JT-135	5739.22	37.74	9.625	0.472	47.0	0			1
JT-136	5776.96	42.76	9.625	0.472	47.0	0			1
JT-137	5819.72	43.71	9.625	0.472	47.0	0			1
JT-138	5863.43	45.07	9.625	0.472	47.0	0			1
JT-139	5908.50	43.44	9.625	0.472	47.0	0			1
JT-140	5951.94	43.50	9.625	0.472	47.0	0			1
JT-141	5995.43	43.01	9.625	0.472	47.0	0			1
JT-142	6038.44	43.33	9.625	0.472	47.0	0			1
JT-143	6081.77	43.40	9.625	0.472	47.0	0			1
JT-144	6125.17	43.44	9.625	0.472	47.0	0			1
JT-145	6168.61	43.27	9.625	0.472	47.0	0			1
JT-146	6211.88	43.16	9.625	0.472	47.0	0			1
JT-147	6255.04	41.02	9.625	0.472	47.0	0			1
JT-148	6296.07	43.61	9.625	0.472	47.0	0			1
JT-149	6339.67	42.15	9.625	0.472	47.0	0			1
JT-150	6381.83	41.06	9.625	0.472	47.0	0			1
JT-151	6422.89	41.85	9.625	0.472	47.0	0			1
JT-152	6464.74	42.60	9.625	0.472	47.0	0			1
JT-153	6507.34	41.60	9.625	0.472	47.0	0			1
JT-154	6548.94	43.33	9.625	0.472	47.0	0			1
JT-155	6592.27	44.80	9.625	0.472	47.0	0			1
JT-156	6637.07	43.14	9.625	0.472	47.0	0			1
JT-157	6680.21	42.97	9.625	0.472	47.0	0			1
JT-158	6723.18	44.77	9.625	0.472	47.0	22	6742.35	8772	2
JT-159	6767.96	42.81	9.625	0.472	47.0	19	6805.14	8781	1
JT-160	6810.77	42.37	9.625	0.472	47.0	0			1
JT-161	6853.14	42.33	9.625	0.472	47.0	0			1

JT-161	6855.14	42.33	9.625	0.472	47.0	0			1
JT-162	6895.47	43.69	9.625	0.472	47.0	0			1
JT-163	6939.16	43.88	9.625	0.472	47.0	0			1
JT-164	6983.04	15.23	9.625	0.472	47.0	0			1
JT-165	6998.27	42.35	9.625	0.472	47.0	23	7025.36	8770	2
JT-166	7040.62	43.67	9.625	0.472	47.0	0			1
JT-167	7084.28	43.83	9.625	0.472	47.0	0			1
JT-168	7128.11	43.48	9.625	0.472	47.0	0			1
JT-169	7171.59	43.12	9.625	0.472	47.0	0			1
JT-170	7214.72	20.34	9.625	0.472	47.0	0			1