HR Vertilog

Magnetic Flux Leakage Inspection

Advanced Analysis

Company	Southern California Gas Company
Well	Porter 68B
Field	Aliso Canyon
County	Los Angeles
State	California
Location: G.L.	

Section 28	Township 3N	Range 16W	

Date	Apr. 14, 2016
Service Order	US106873
Recorded by	B. Deal
Witnessed by	T. McMahon
API Serial No.	04-037-24136

Permanent Datum:	G.L.	Elevation:	2077.000 ft.	Depth	6603.000
Log Measured From:	K.B.	23.500	ft. above Perm. Datum	Btm. Log Interval	6576.330
Drilling Measured From:	K.B.	23.500	ft. above Perm. Datum	Top Log Interval	15.990
				Fluid Type	KCL

Casing Data

Size	Weight	Grade	From	To	Length
9 5/8 inch	47.0 lb/ft	N80 (HR Std)	Surface	6800	6800.0
13 3/8 inch	54.5 lb/ft	K-55	Surface	799	799.0

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	EA10360726	

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.

Remarks

11 degrees

Interpretation

HRVRT analysis was depth correlated to SLB USIT logged 13 APR 2016.
Casing record was taken from SLB USIT log casing record.
The top joint and joint 51 are short joints.

17.27 ft	Hardware - External Casing Head Response
764.36 ft	Hardware - Multiple Centralizers can be seen throughout the logged interval, see the Feature List for a complete centralizer listing.
793.18 ft	Hardware - Bottom of 13 3/8" External Casing.
853.44 ft	Hardware - Centralizer, Possible broken centralizer top.
866.57 ft	Hardware - Centralizer, Possible broken centralizer bottom
953.76 ft	Hardware - Unknown External Hardware, Possible Scratcher
1024.83 ft	Metal Object - This feature does not have a metal loss signature and was not classified as metal loss.
1330.43 ft	Metal Object - This feature does not have a metal loss signature and was not classified as metal loss.

Joint Interpretation Summary

Joint	From	To	Length	Class	Max Depth	Position	Type	ID/OD
1	15.99	32.88	16.89	Class 1	-	-	-	-
2	32.88	76.04	43.16	Class 1				

2	32.88	76.04	43.16	Class 1	-	-	-	-
3	76.04	118.52	42.48	Class 1	-	-	-	-
4	118.52	160.95	42.43	Class 1	-	-	-	-
5	160.95	204.07	43.12	Class 1	-	-	-	-
6	204.07	247.43	43.36	Class 1	-	-	-	-
7	247.43	290.75	43.32	Class 1	-	-	-	-
8	290.75	333.59	42.84	Class 1	-	-	-	-
9	333.59	376.64	43.05	Class 1	-	-	-	-
10	376.64	419.73	43.09	Class 1	-	-	-	-
11	419.73	462.91	43.18	Class 1	-	-	-	-
12	462.91	507.32	44.41	Class 1	-	-	-	-
13	507.32	550.47	43.15	Class 1	-	-	-	-
14	550.47	594.50	44.03	Class 1	-	-	-	-
15	594.50	636.54	42.04	Class 1	-	-	-	-
16	636.54	679.72	43.18	Class 1	-	-	-	-
17	679.72	721.87	42.15	Class 1	-	-	-	-
18	721.87	764.33	42.46	Class 1	-	-	-	-
19	764.33	807.47	43.14	Class 1	-	-	-	-
20	807.47	850.59	43.12	Class 1	-	-	-	-
21	850.59	893.77	43.18	Class 1	-	-	-	-
22	893.77	936.55	42.78	Class 1	-	-	-	-
23	936.55	978.14	41.59	Class 1	-	-	-	-
24	978.14	1021.92	43.78	Class 1	-	-	-	-
25	1021.92	1065.13	43.21	Class 1	-	-	-	-
26	1065.13	1107.91	42.78	Class 1	-	-	-	-
27	1107.91	1152.83	44.92	Class 1	-	-	-	-
28	1152.83	1196.01	43.18	Class 1	-	-	-	-
29	1196.01	1239.08	43.07	Class 1	-	-	-	-
30	1239.08	1281.91	42.83	Class 1	-	-	-	-
31	1281.91	1325.57	43.66	Class 1	-	-	-	-
32	1325.57	1367.69	42.12	Class 1	-	-	-	-
33	1367.69	1410.00	42.31	Class 1	16.0%	1409.28	ISO	OD
34	1410.00	1453.34	43.34	Class 1	19.0%	1417.64	ISO	OD
35	1453.34	1496.36	43.02	Class 1	-	-	-	-
36	1496.36	1539.41	43.05	Class 1	15.0%	1518.78	ISO	OD
37	1539.41	1580.71	41.30	Class 1	-	-	-	-
38	1580.71	1623.82	43.11	Class 1	-	-	-	-
39	1623.82	1666.86	43.04	Class 1	-	-	-	-
40	1666.86	1707.40	40.54	Class 1	-	-	-	-
41	1707.40	1749.93	42.53	Class 1	-	-	-	-
42	1749.93	1793.51	43.58	Class 1	-	-	-	-
43	1793.51	1836.54	43.03	Class 1	-	-	-	-
44	1836.54	1878.69	42.15	Class 1	-	-	-	-
45	1878.69	1921.83	43.14	Class 1	-	-	-	-
46	1921.83	1965.01	43.18	Class 1	-	-	-	-
47	1965.01	2008.22	43.21	Class 1	-	-	-	-
48	2008.22	2051.39	43.17	Class 1	-	-	-	-
49	2051.39	2093.75	42.36	Class 1	-	-	-	-
50	2093.75	2136.78	43.03	Class 1	-	-	-	-
51	2136.78	2179.89	43.11	Class 1	-	-	-	-
52	2179.89	2223.04	43.15	Class 1	-	-	-	-
53	2223.04	2266.15	43.11	Class 1	-	-	-	-
54	2266.15	2309.48	43.33	Class 1	-	-	-	-
55	2309.48	2351.46	41.98	Class 1	-	-	-	-
56	2351.46	2394.28	42.82	Class 1	-	-	-	-
57	2394.28	2437.79	43.51	Class 1	-	-	-	-
58	2437.79	2481.05	43.26	Class 1	-	-	-	-
59	2481.05	2524.11	43.06	Class 1	-	-	-	-
60	2524.11	2567.22	43.11	Class 1	-	-	-	-
61	2567.22	2610.28	43.06	Class 1	-	-	-	-
62	2610.28	2652.39	42.11	Class 1	-	-	-	-
63	2652.39	2695.42	43.03	Class 1	-	-	-	-
64	2695.42	2738.49	43.07	Class 1	-	-	-	-
65	2738.49	2781.91	43.42	Class 1	-	-	-	-

66	2781.91	2825.16	43.25	Class 1	-	-	-	-
67	2825.16	2867.34	42.18	Class 1	-	-	-	-
68	2867.34	2909.40	42.06	Class 1	-	-	-	-
69	2909.40	2952.54	43.14	Class 1	-	-	-	-
70	2952.54	2995.64	43.10	Class 1	-	-	-	-
71	2995.64	3010.69	15.05	Class 1	-	-	-	-
72	3010.69	3051.92	41.23	Class 1	-	-	-	-
73	3051.92	3093.27	41.35	Class 1	-	-	-	-
74	3093.27	3136.17	42.90	Class 1	-	-	-	-
75	3136.17	3179.24	43.07	Class 1	-	-	-	-
76	3179.24	3222.50	43.26	Class 1	-	-	-	-
77	3222.50	3265.59	43.09	Class 1	-	-	-	-
78	3265.59	3308.69	43.10	Class 1	-	-	-	-
79	3308.69	3351.72	43.03	Class 1	-	-	-	-
80	3351.72	3394.87	43.15	Class 1	-	-	-	-
81	3394.87	3437.93	43.06	Class 1	-	-	-	-
82	3437.93	3480.96	43.03	Class 1	-	-	-	-
83	3480.96	3523.67	42.71	Class 1	-	-	-	-
84	3523.67	3566.84	43.17	Class 1	-	-	-	-
85	3566.84	3609.59	42.75	Class 1	-	-	-	-
86	3609.59	3653.36	43.77	Class 1	-	-	-	-
87	3653.36	3696.47	43.11	Class 1	-	-	-	-
88	3696.47	3739.40	42.93	Class 1	-	-	-	-
89	3739.40	3782.39	42.99	Class 1	-	-	-	-
90	3782.39	3823.82	41.43	Class 1	-	-	-	-
91	3823.82	3866.31	42.49	Class 1	-	-	-	-
92	3866.31	3909.18	42.87	Class 1	-	-	-	-
93	3909.18	3952.37	43.19	Class 1	-	-	-	-
94	3952.37	3995.47	43.10	Class 1	-	-	-	-
95	3995.47	4037.44	41.97	Class 1	-	-	-	-
96	4037.44	4080.54	43.10	Class 1	-	-	-	-
97	4080.54	4122.74	42.20	Class 1	-	-	-	-
98	4122.74	4165.75	43.01	Class 1	-	-	-	-
99	4165.75	4207.60	41.85	Class 1	-	-	-	-
100	4207.60	4250.73	43.13	Class 1	-	-	-	-
101	4250.73	4293.52	42.79	Class 1	-	-	-	-
102	4293.52	4338.45	44.93	Class 1	-	-	-	-
103	4338.45	4381.55	43.10	Class 1	-	-	-	-
104	4381.55	4424.32	42.77	Class 1	-	-	-	-
105	4424.32	4466.72	42.40	Class 1	-	-	-	-
106	4466.72	4509.52	42.80	Class 1	-	-	-	-
107	4509.52	4548.75	39.23	Class 1	-	-	-	-
108	4548.75	4591.29	42.54	Class 1	-	-	-	-
109	4591.29	4634.42	43.13	Class 1	-	-	-	-
110	4634.42	4677.46	43.04	Class 1	-	-	-	-
111	4677.46	4721.20	43.74	Class 1	-	-	-	-
112	4721.20	4764.67	43.47	Class 1	-	-	-	-
113	4764.67	4807.49	42.82	Class 1	-	-	-	-
114	4807.49	4850.32	42.83	Class 1	-	-	-	-
115	4850.32	4892.77	42.45	Class 1	-	-	-	-
116	4892.77	4936.03	43.26	Class 1	-	-	-	-
117	4936.03	4979.08	43.05	Class 1	-	-	-	-
118	4979.08	5021.18	42.10	Class 1	-	-	-	-
119	5021.18	5063.62	42.44	Class 1	-	-	-	-
120	5063.62	5106.71	43.09	Class 1	-	-	-	-
121	5106.71	5149.85	43.14	Class 1	-	-	-	-
122	5149.85	5193.03	43.18	Class 1	-	-	-	-
123	5193.03	5236.04	43.01	Class 1	-	-	-	-
124	5236.04	5278.20	42.16	Class 1	-	-	-	-
125	5278.20	5320.38	42.18	Class 1	-	-	-	-
126	5320.38	5363.84	43.46	Class 1	-	-	-	-
127	5363.84	5406.66	42.82	Class 1	-	-	-	-
128	5406.66	5450.28	43.62	Class 1	-	-	-	-
129	5450.28	5493.46	43.18	Class 1				

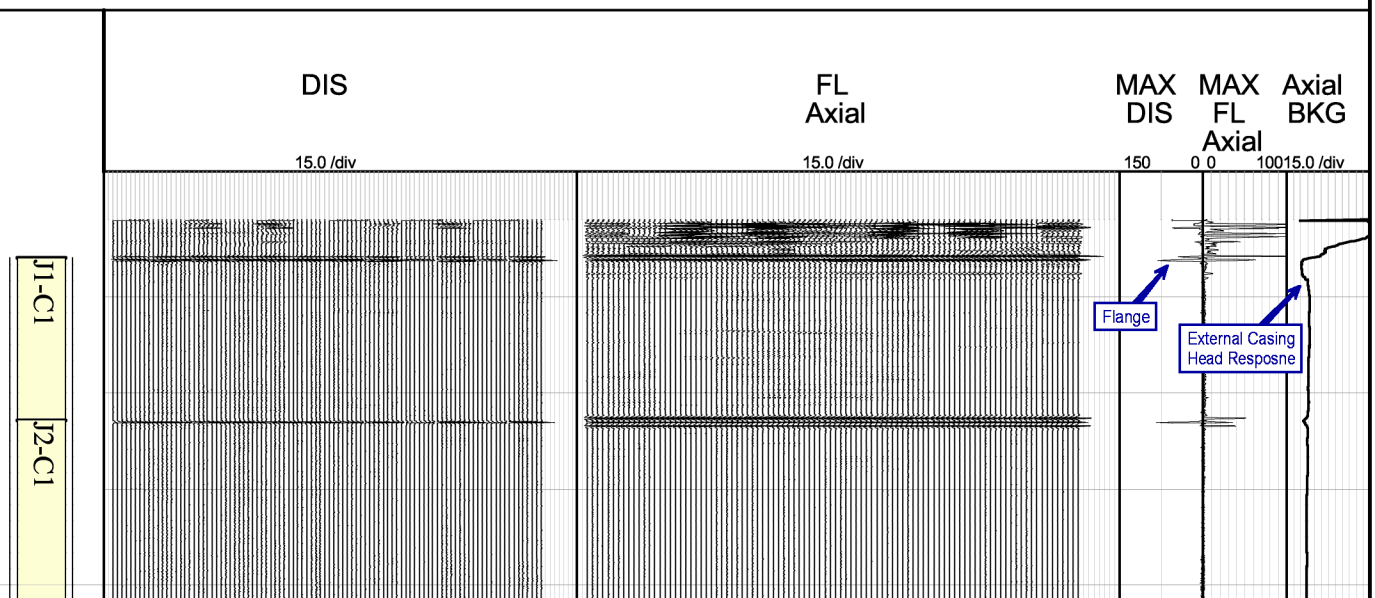
129	5450.28	5493.46	43.18	Class 1	-	-	-	-
130	5493.46	5536.58	43.12	Class 1	-	-	-	-
131	5536.58	5580.22	43.64	Class 1	-	-	-	-
132	5580.22	5622.45	42.23	Class 1	-	-	-	-
133	5622.45	5664.44	41.99	Class 1	-	-	-	-
134	5664.44	5707.70	43.26	Class 1	-	-	-	-
135	5707.70	5750.92	43.22	Class 1	-	-	-	-
136	5750.92	5792.84	41.92	Class 1	-	-	-	-
137	5792.84	5836.18	43.34	Class 1	-	-	-	-
138	5836.18	5879.41	43.23	Class 1	-	-	-	-
139	5879.41	5920.57	41.16	Class 1	-	-	-	-
140	5920.57	5963.72	43.15	Class 1	-	-	-	-
141	5963.72	6006.48	42.76	Class 1	-	-	-	-
142	6006.48	6051.24	44.76	Class 1	-	-	-	-
143	6051.24	6094.54	43.30	Class 1	-	-	-	-
144	6094.54	6135.40	40.86	Class 1	-	-	-	-
145	6135.40	6178.67	43.27	Class 1	-	-	-	-
146	6178.67	6221.76	43.09	Class 1	-	-	-	-
147	6221.76	6265.03	43.27	Class 1	-	-	-	-
148	6265.03	6306.61	41.58	Class 1	-	-	-	-
149	6306.61	6349.59	42.98	Class 1	-	-	-	-
150	6349.59	6390.48	40.89	Class 1	-	-	-	-
151	6390.48	6399.98	9.50	Class 1	-	-	-	-
152	6399.98	6443.21	43.23	Class 1	-	-	-	-
153	6443.21	6485.52	42.31	Class 1	-	-	-	-
154	6485.52	6526.33	40.81	Class 1	-	-	-	-
155	6526.33	6569.63	43.30	Class 1	-	-	-	-
156	6569.63	6576.33	6.70	Class 1	-	-	-	-

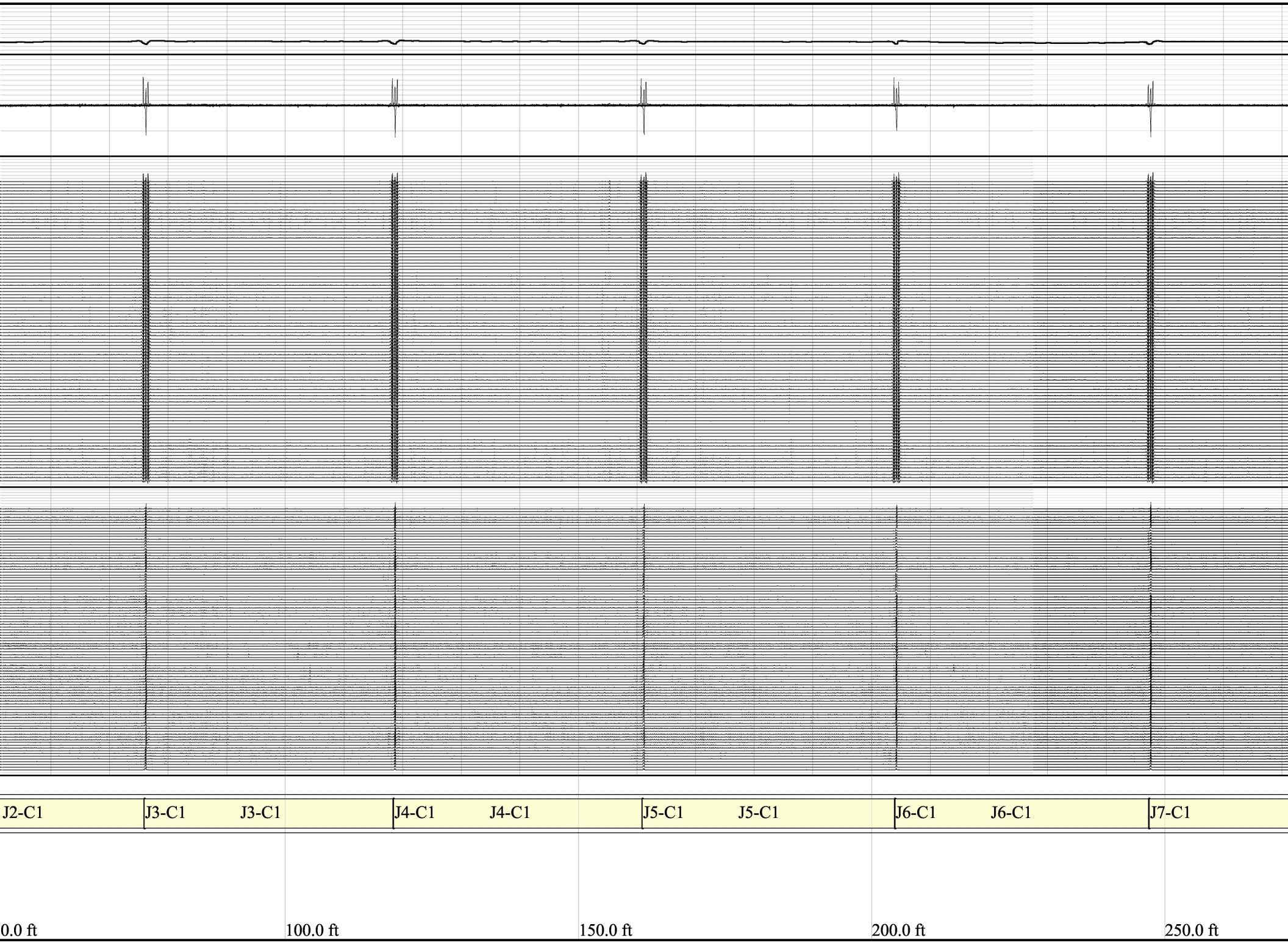
Southern California Gas Company Porter 68B

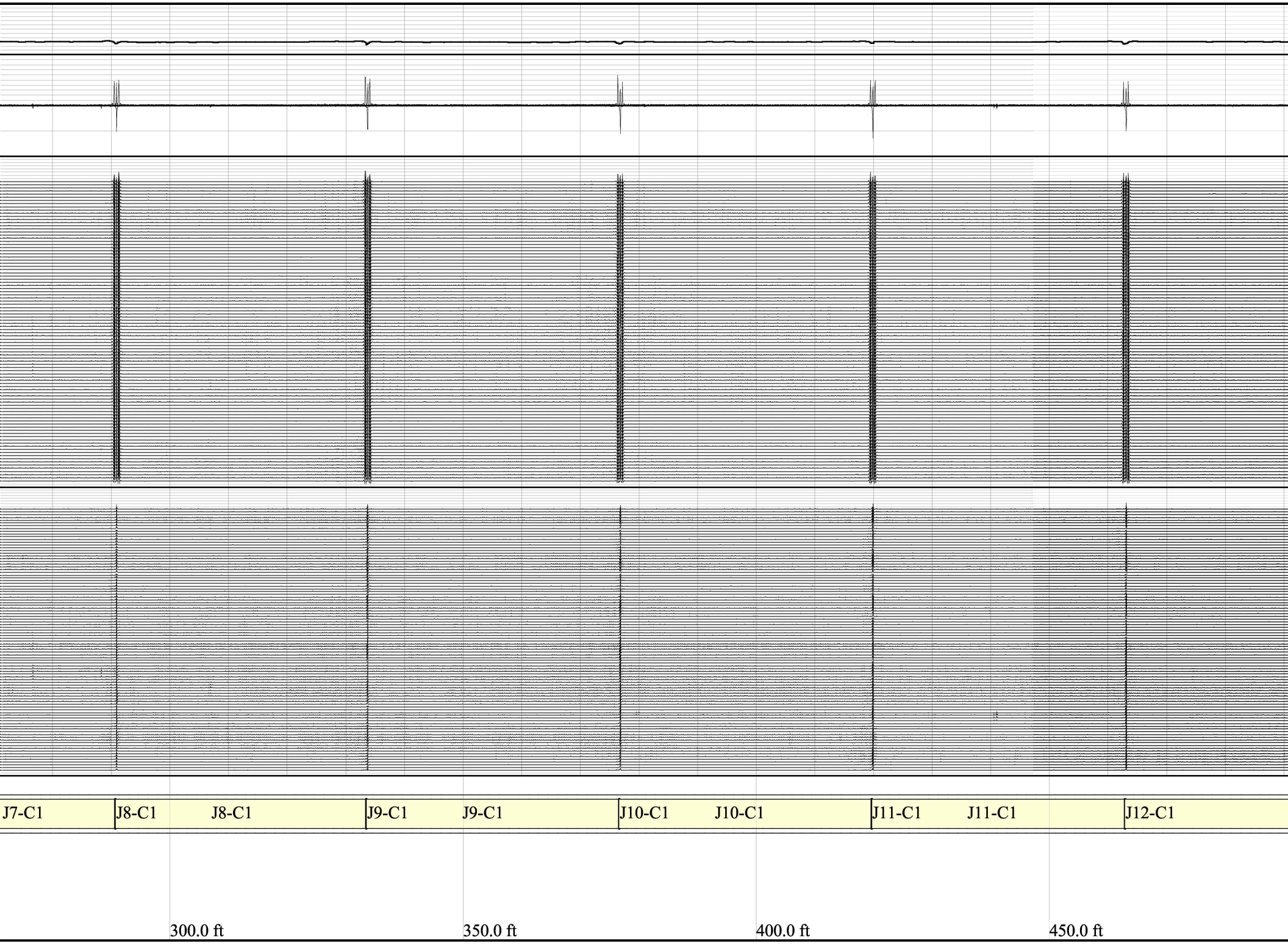
File 20160414_09570A_RSP_0_0_0_0_0_0.mvl

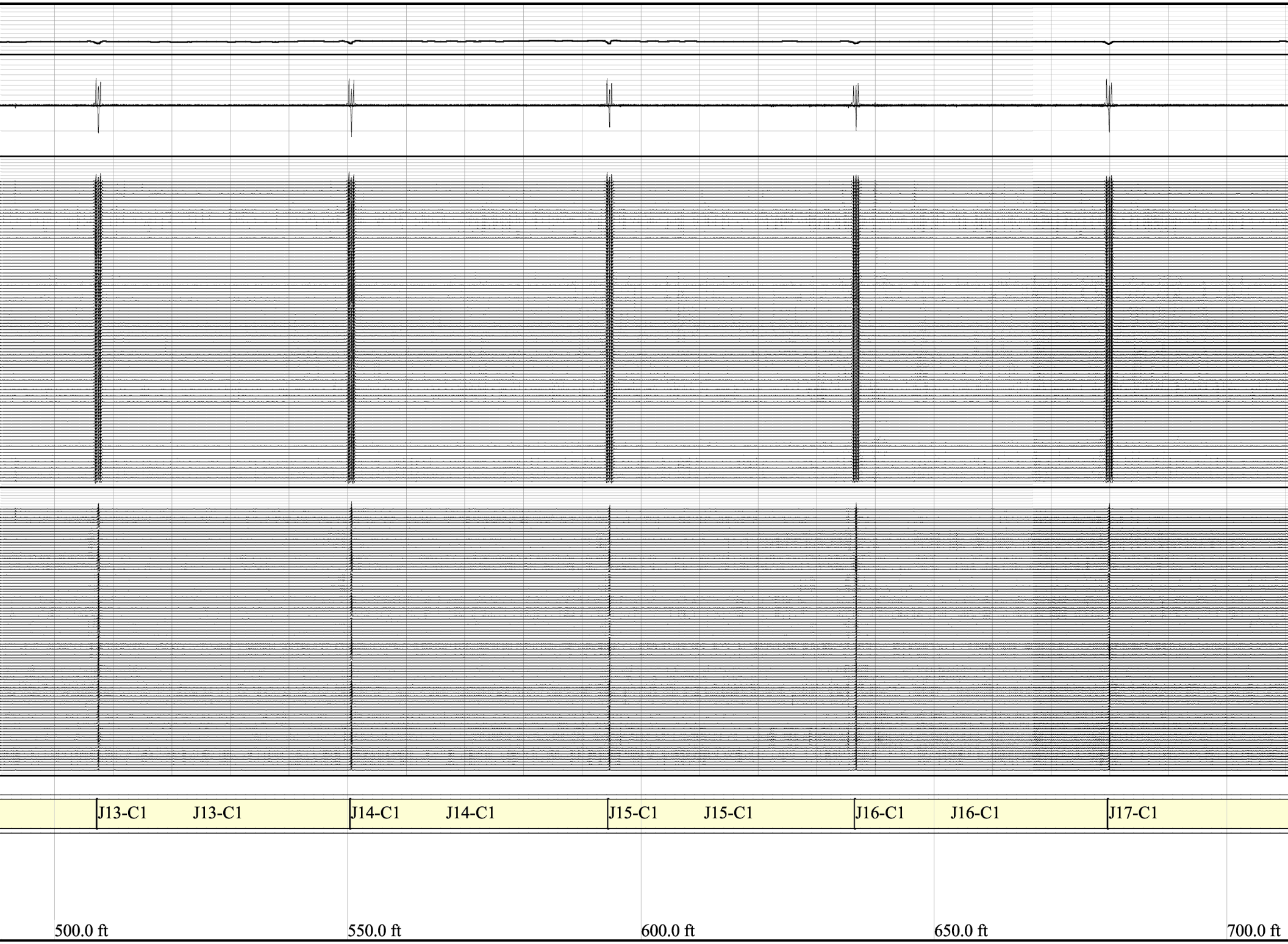
Main Log
5" / 100'

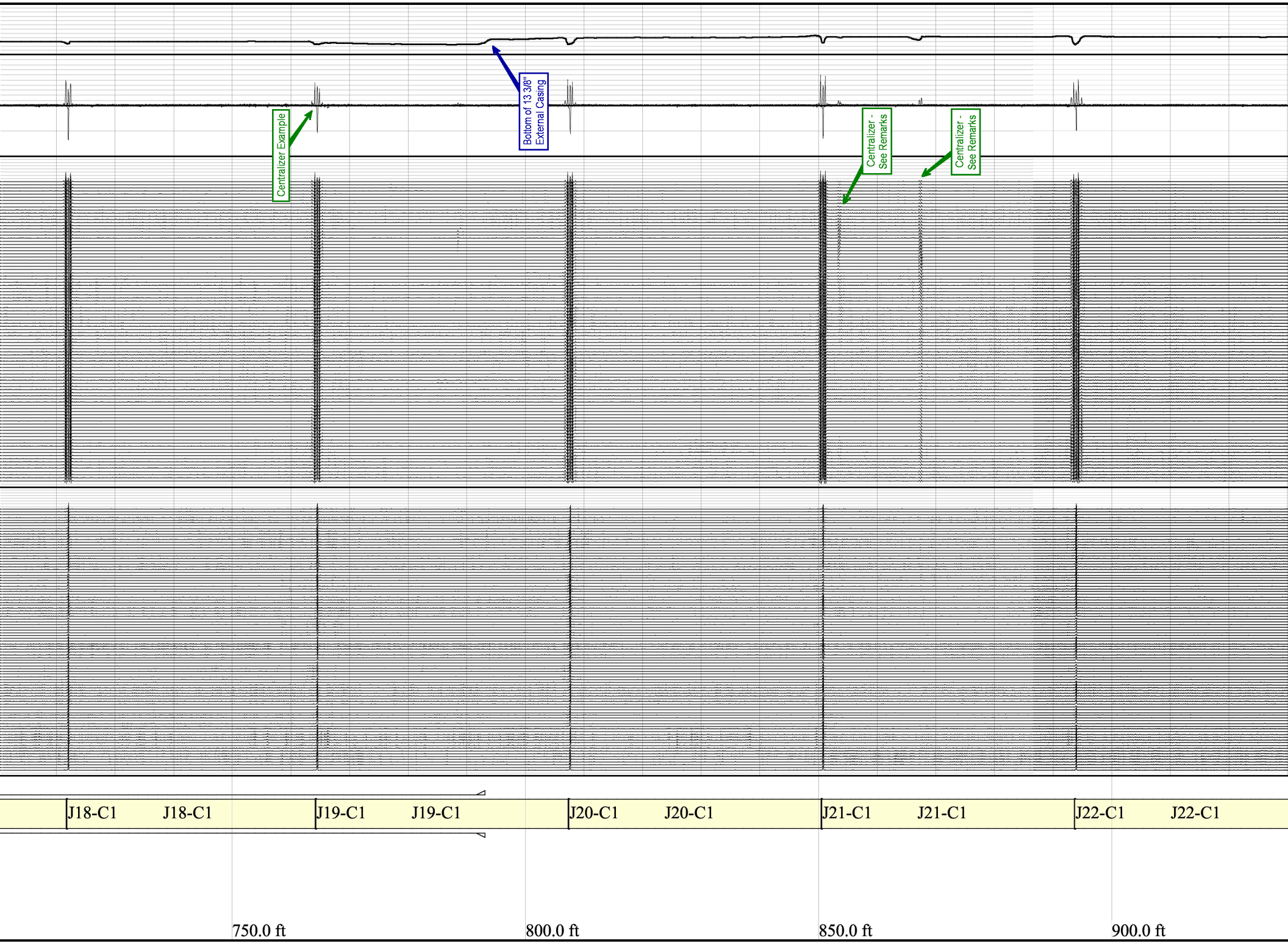
Class 1	Class 2	Class 3	Class 4
0 - 20%	20 - 40%	40 - 60%	60 - 100%

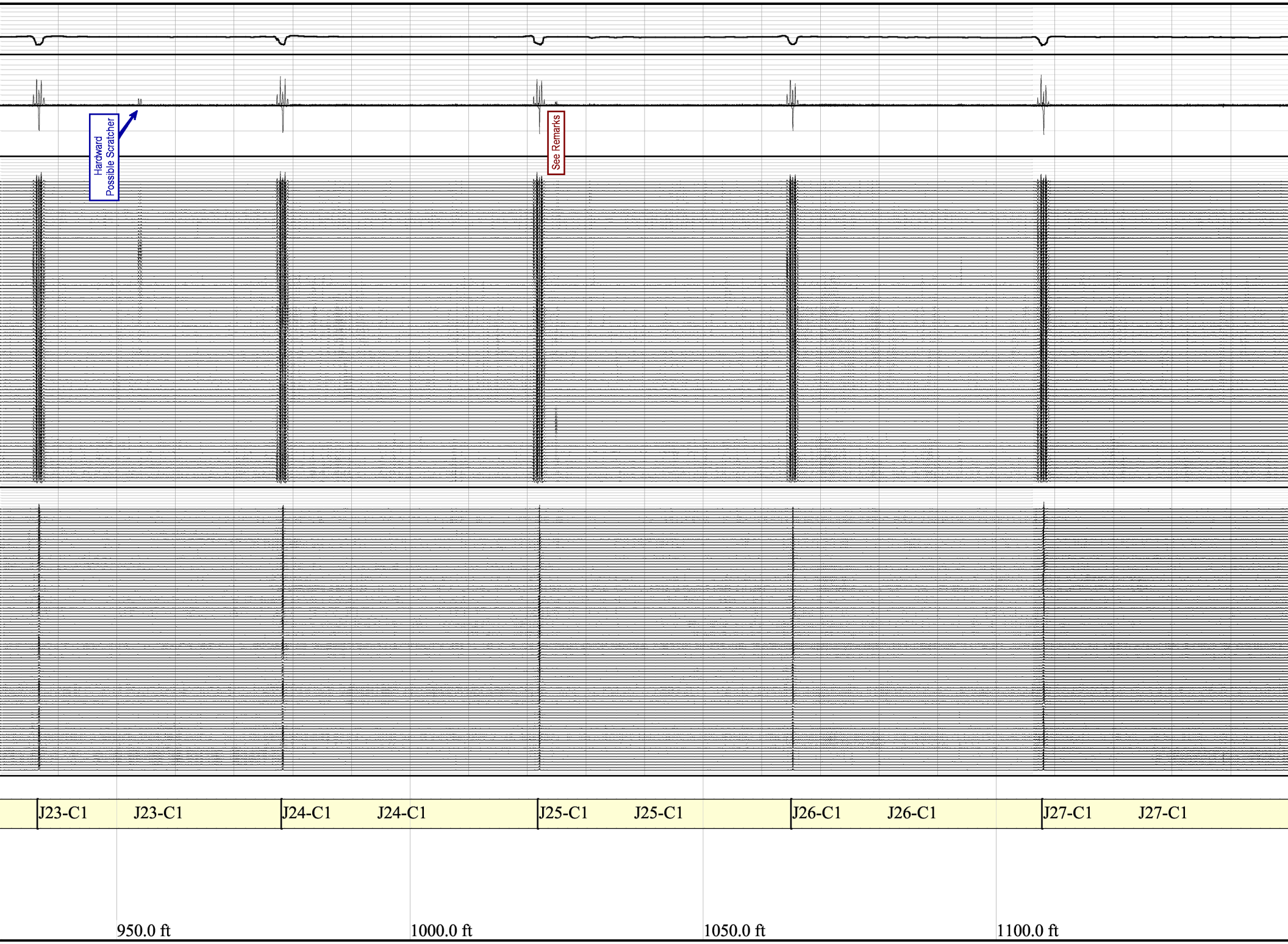


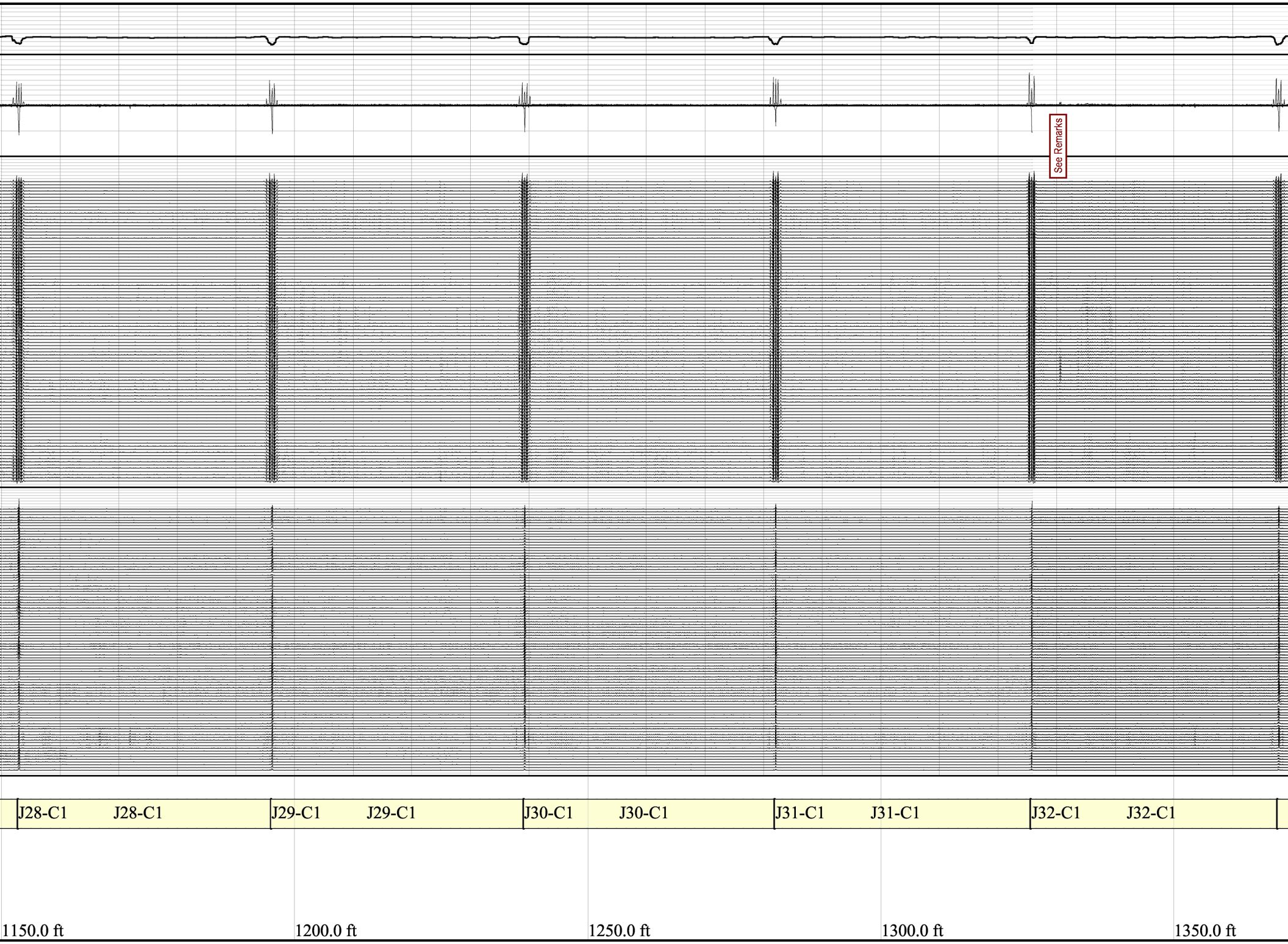

J2-C1
J3-C1
J3-C1
J4-C1
J4-C1
J5-C1
J5-C1
J6-C1
J6-C1
J7-C1
0.0 ft
100.0 ft
150.0 ft
200.0 ft
250.0 ft

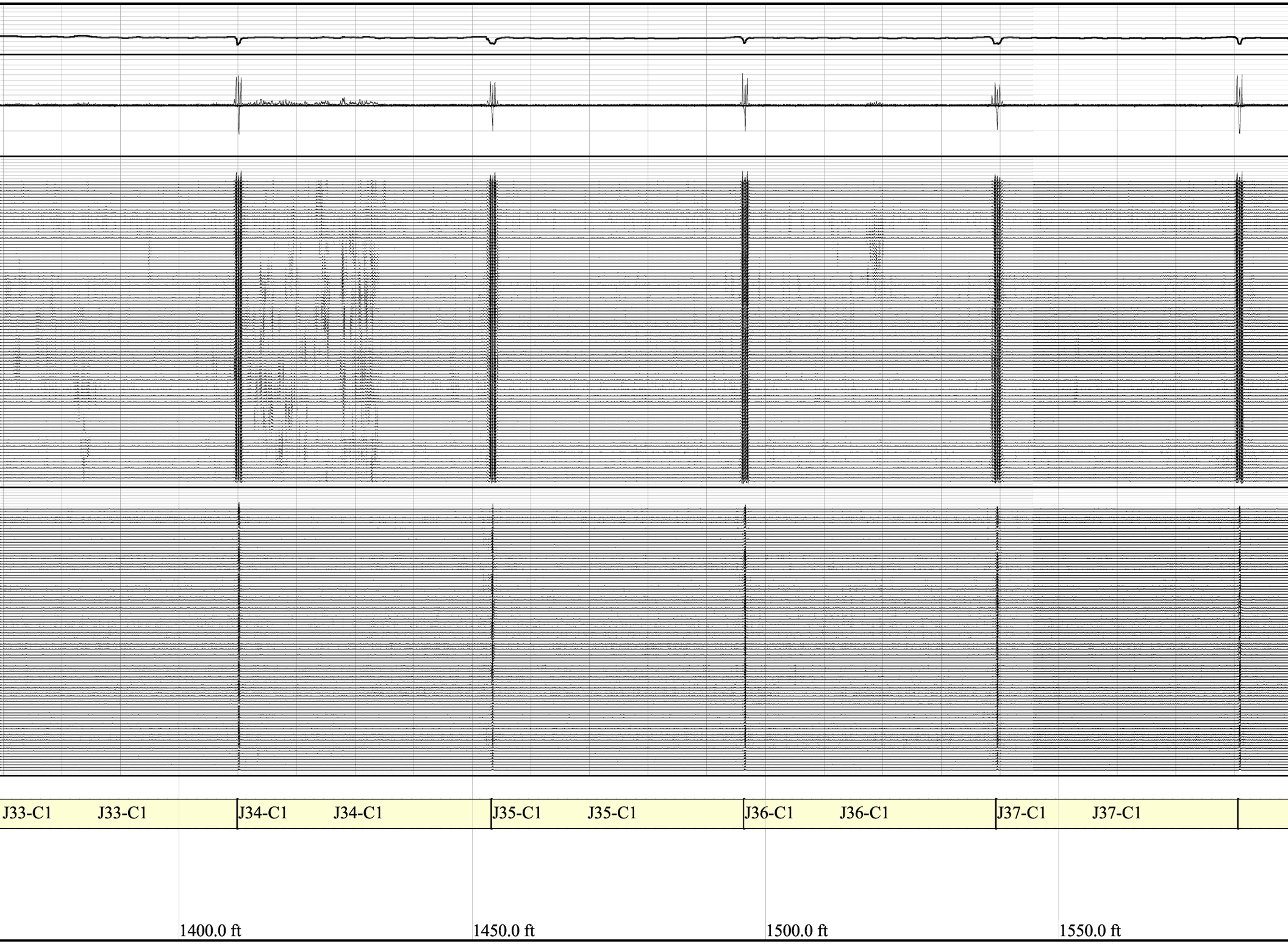

J7-C1
J8-C1
J8-C1
J9-C1
J9-C1
J10-C1
J10-C1
J11-C1
J11-C1
J12-C1
300.0 ft
350.0 ft
400.0 ft
450.0 ft

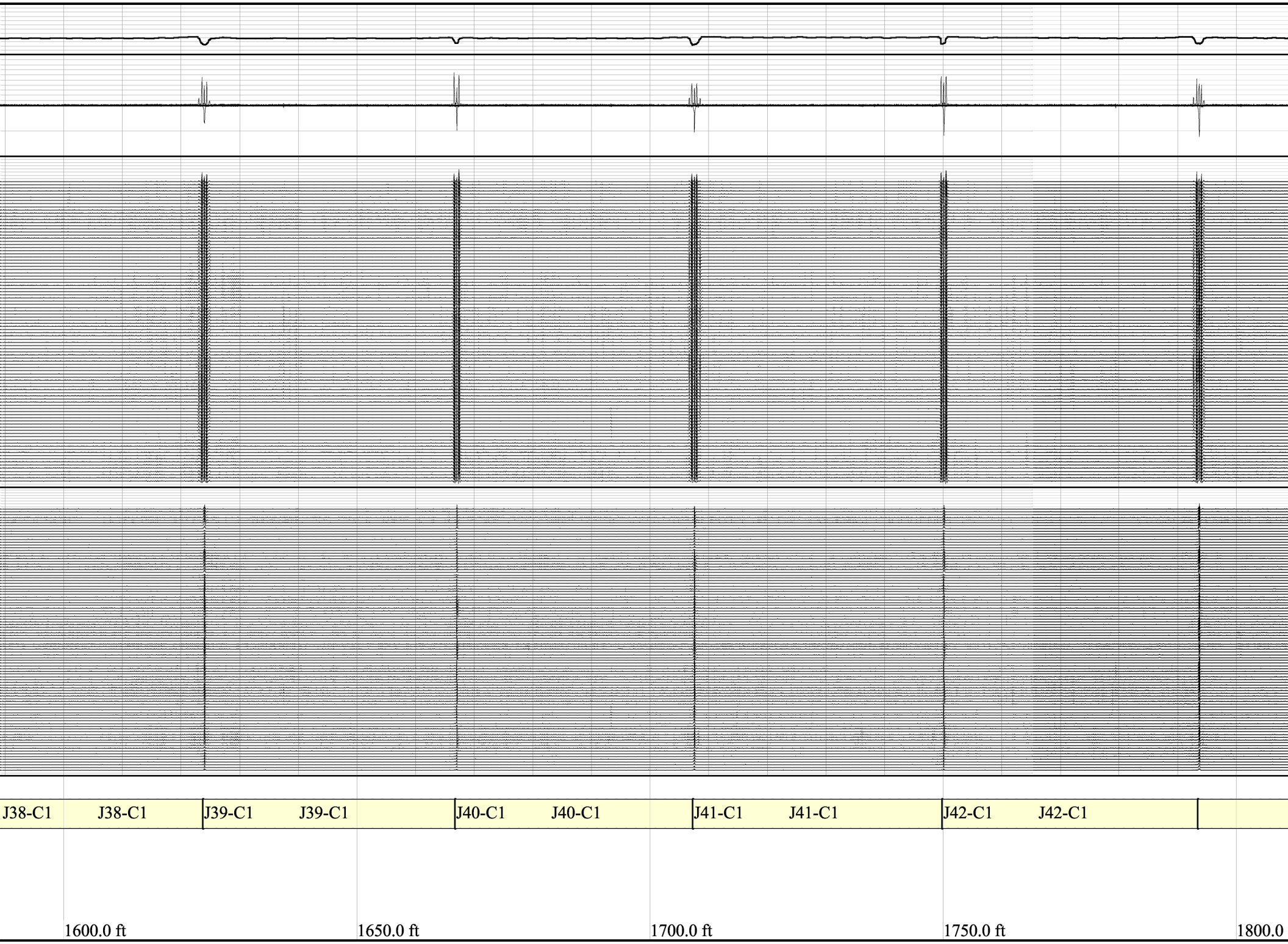

J13-C1
J13-C1
J14-C1
J14-C1
J15-C1
J15-C1
J16-C1
J16-C1
J17-C1
500.0 ft
550.0 ft
600.0 ft
650.0 ft
700.0 ft

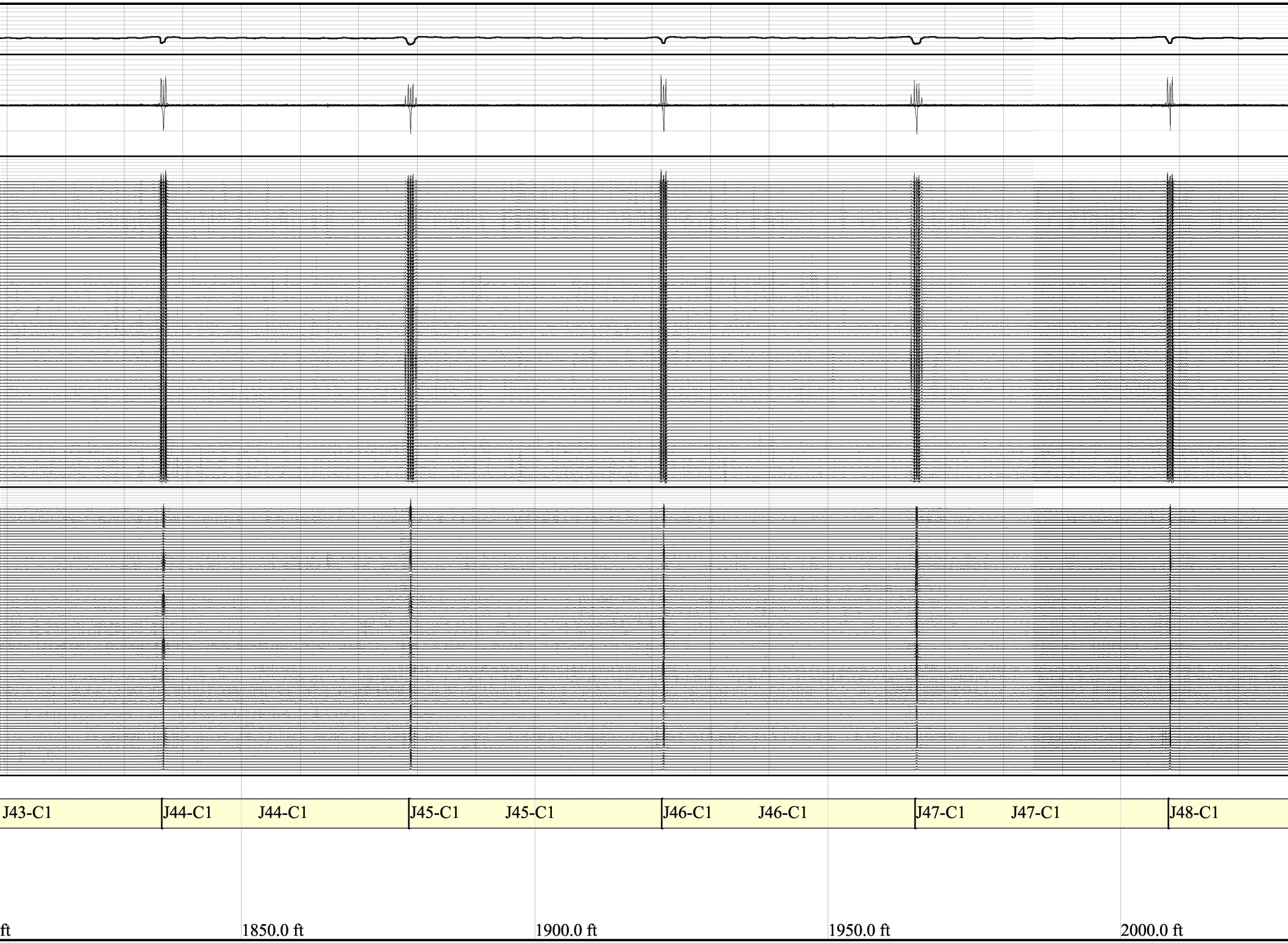

Centralizer Example
Bottom of 13 3/8" External Casing
Centralizer - See Remarks
Centralizer - See Remarks
J18-C1
J18-C1
J19-C1
J19-C1
J20-C1
J20-C1
J21-C1
J21-C1
J22-C1
J22-C1
750.0 ft
800.0 ft
850.0 ft
900.0 ft


Hardward
Possible Scratcher
See Remarks
J23-C1
J23-C1
J24-C1
J24-C1
J25-C1
J25-C1
J26-C1
J26-C1
J27-C1
J27-C1
950.0 ft
1000.0 ft
1050.0 ft
1100.0 ft

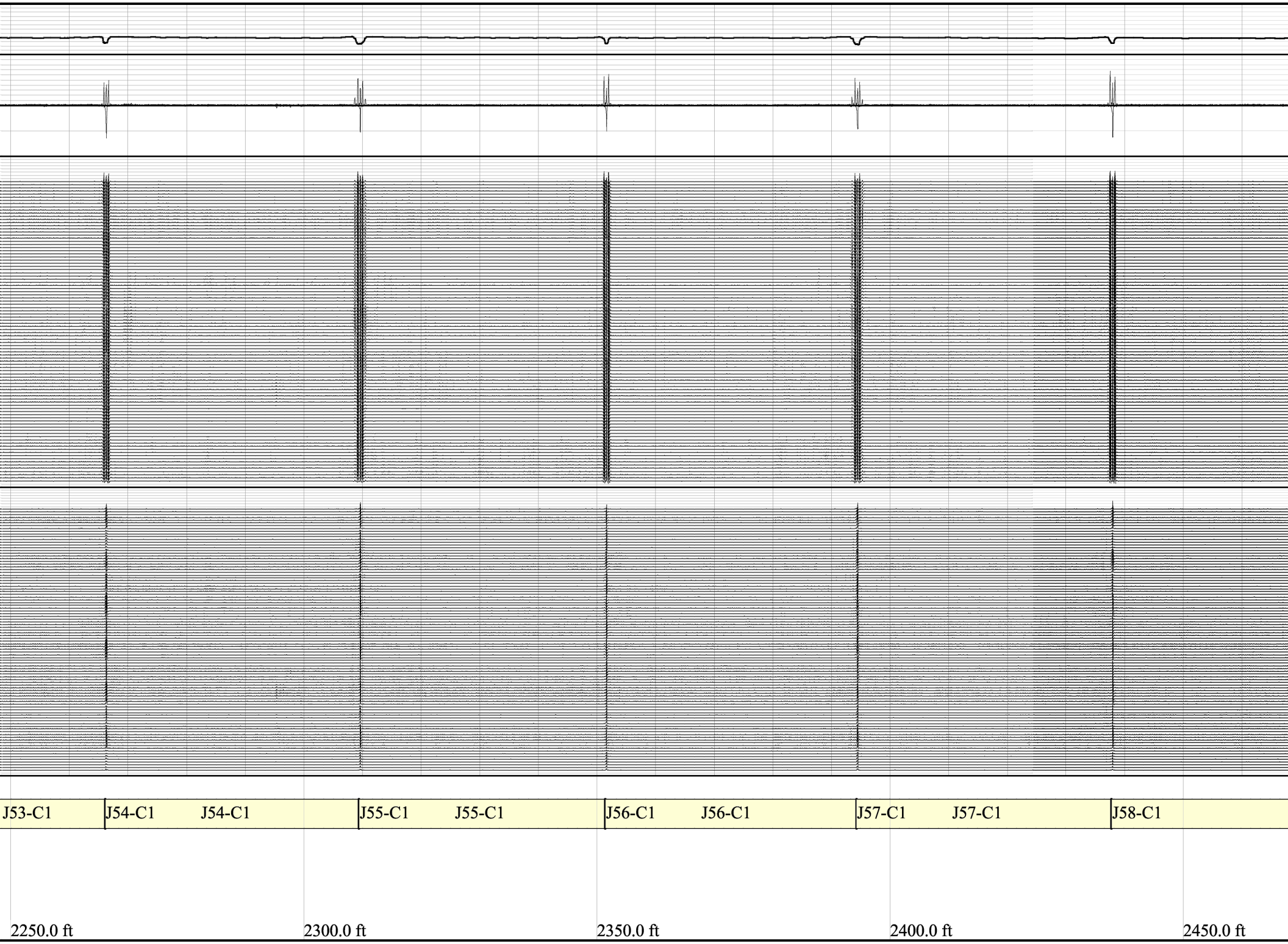

See Remarks
J28-C1
J28-C1
J29-C1
J29-C1
J30-C1
J30-C1
J31-C1
J31-C1
J32-C1
J32-C1
1150.0 ft
1200.0 ft
1250.0 ft
1300.0 ft
1350.0 ft


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

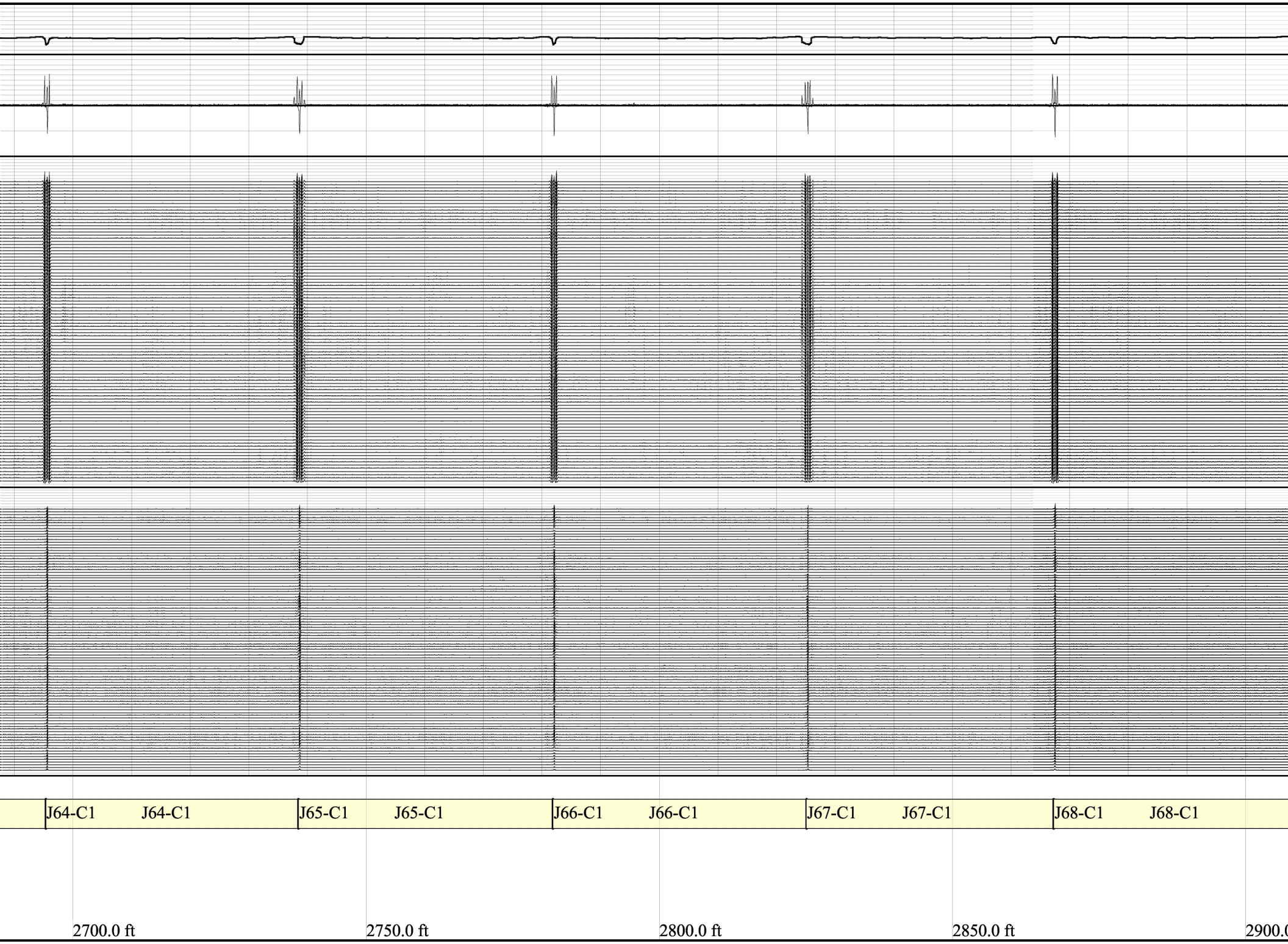

J38-C1
J38-C1
J39-C1
J39-C1
J40-C1
J40-C1
J41-C1
J41-C1
J42-C1
J42-C1
1600.0 ft
1650.0 ft
1700.0 ft
1750.0 ft
1800.0

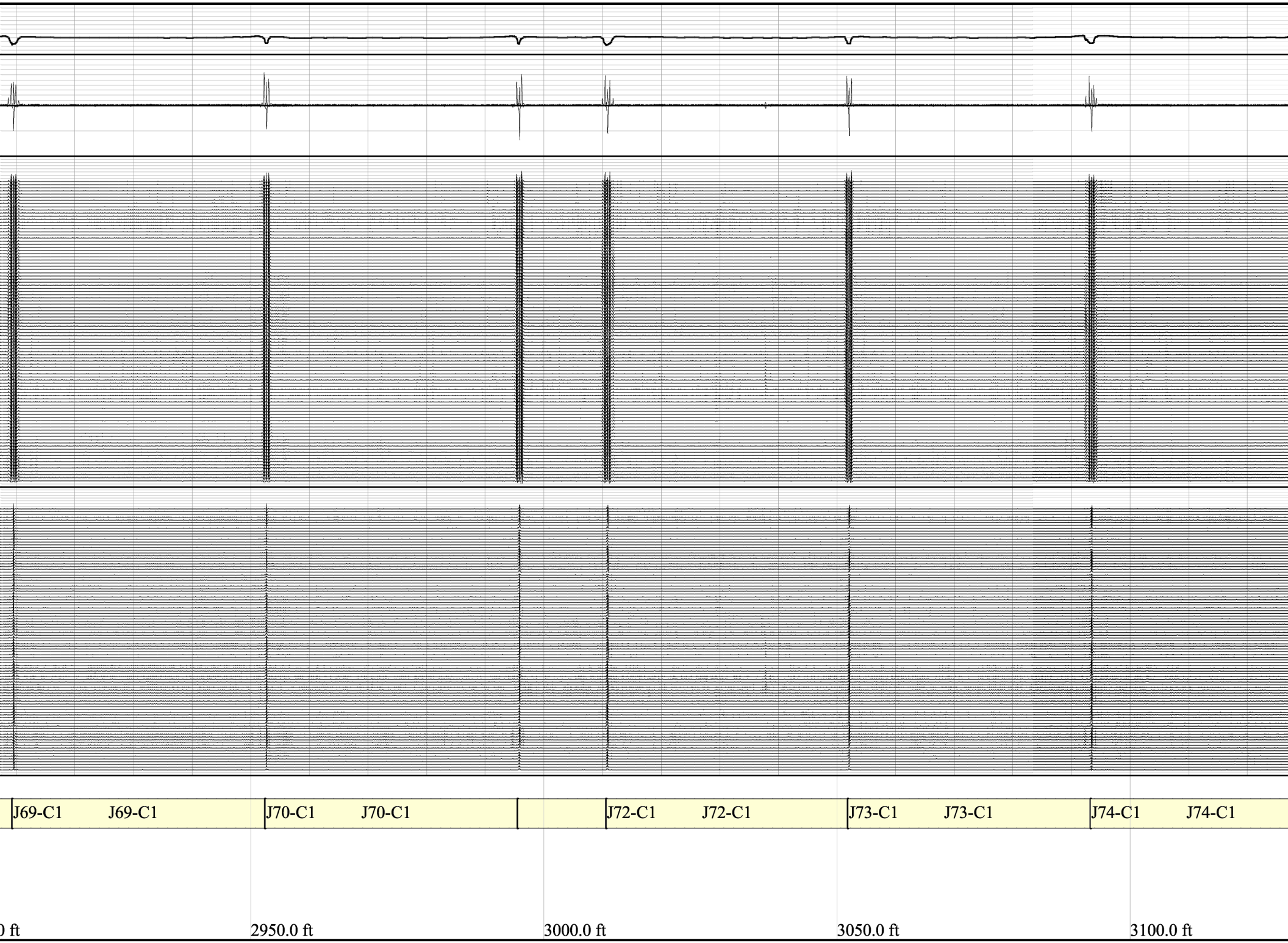

J43-C1
J44-C1
J44-C1
J45-C1
J45-C1
J46-C1
J46-C1
J47-C1
J47-C1
J48-C1
ft
1850.0 ft
1900.0 ft
1950.0 ft
2000.0 ft

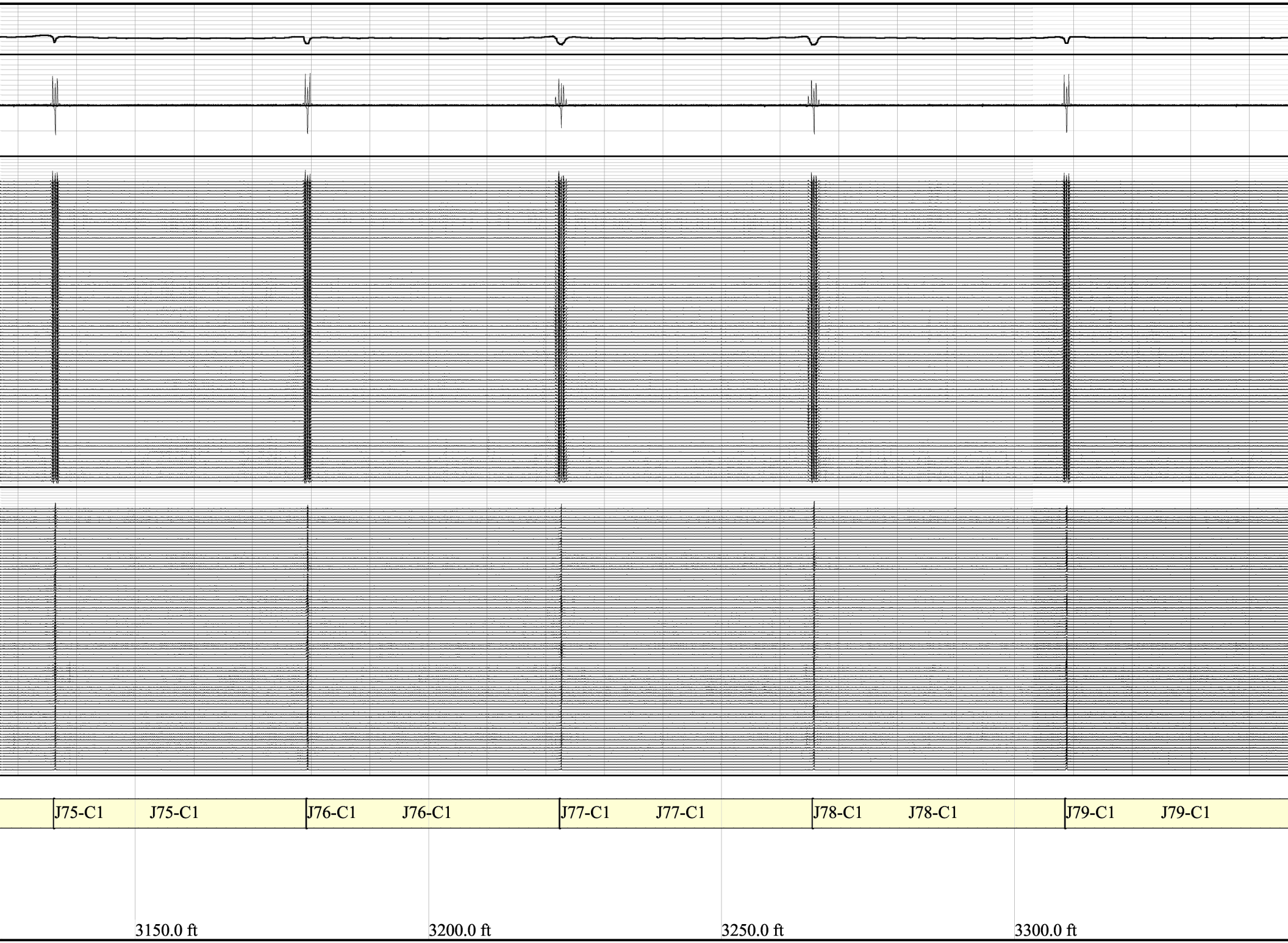
J48-C1
J49-C1
J49-C1
J50-C1
J50-C1
J51-C1
J51-C1
J52-C1
J52-C1
J53-C1
2050.0 ft
2100.0 ft
2150.0 ft
2200.0 ft

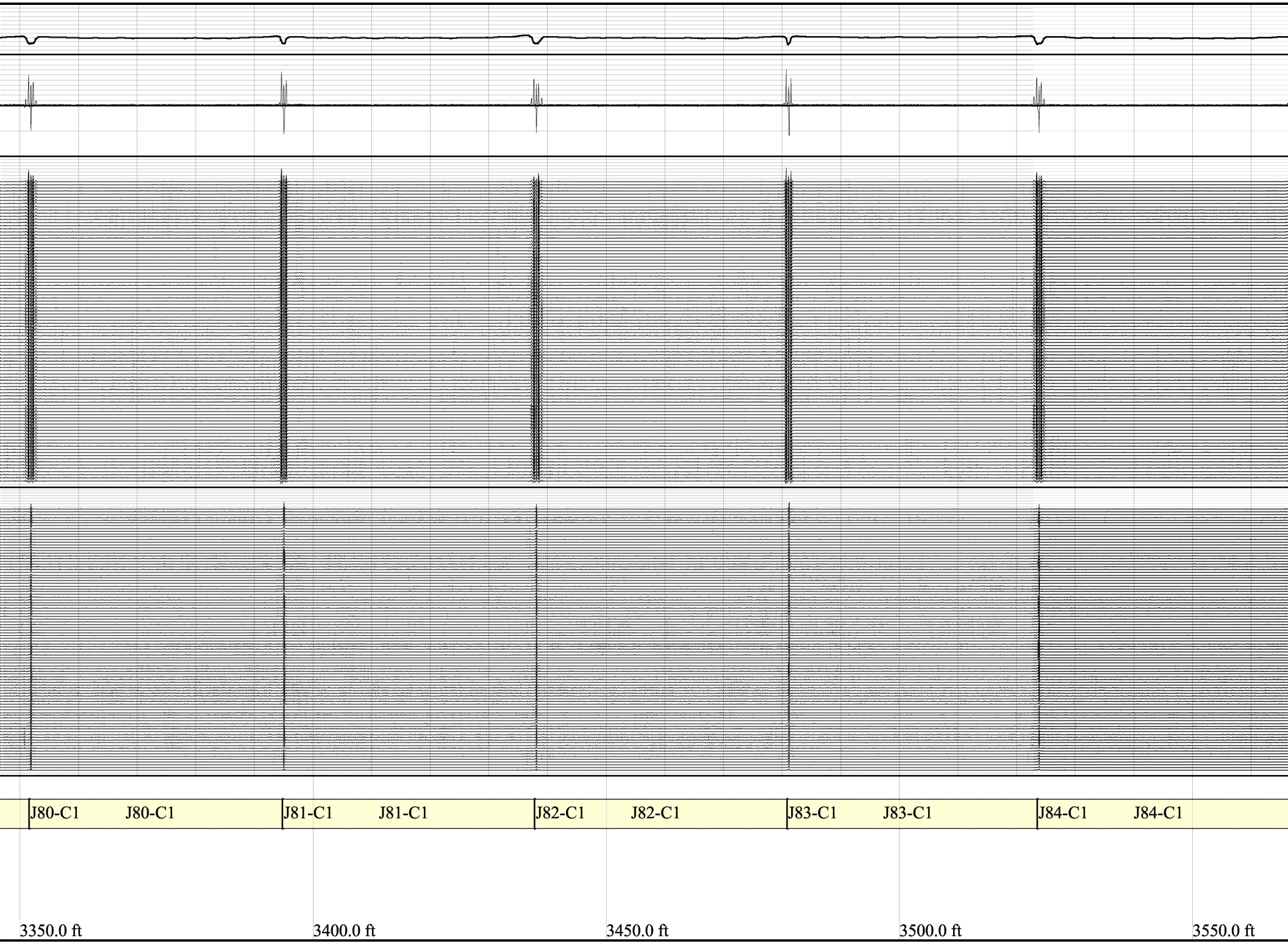

J53-C1
J54-C1
J54-C1
J55-C1
J55-C1
J56-C1
J56-C1
J57-C1
J57-C1
J58-C1
2250.0 ft
2300.0 ft
2350.0 ft
2400.0 ft
2450.0 ft

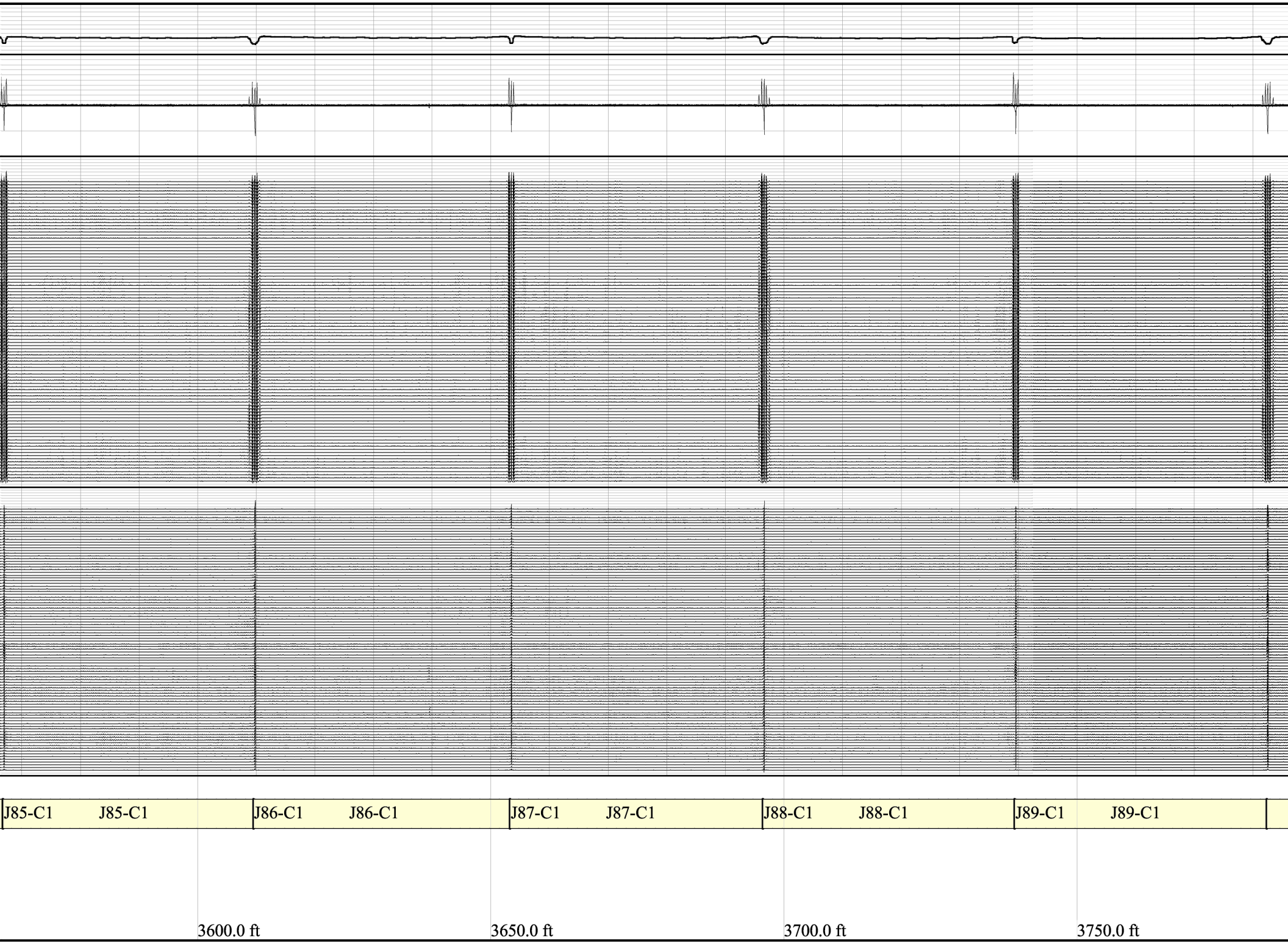
J59-C1
J59-C1
J60-C1
J60-C1
J61-C1
J61-C1
J62-C1
J62-C1
J63-C1
J63-C1
2500.0 ft
2550.0 ft
2600.0 ft
2650.0 ft

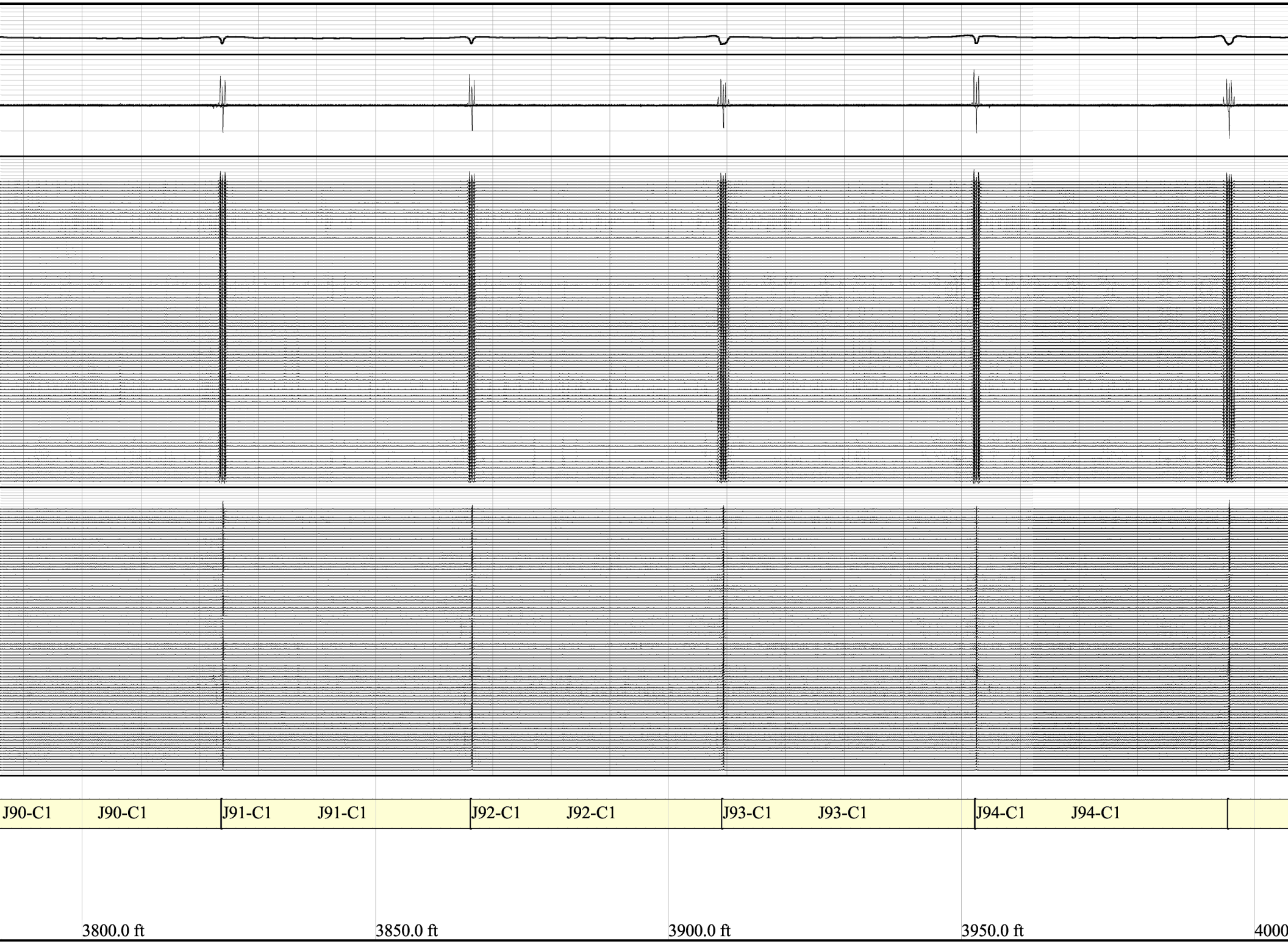

J64-C1
J64-C1
J65-C1
J65-C1
J66-C1
J66-C1
J67-C1
J67-C1
J68-C1
J68-C1
2700.0 ft
2750.0 ft
2800.0 ft
2850.0 ft

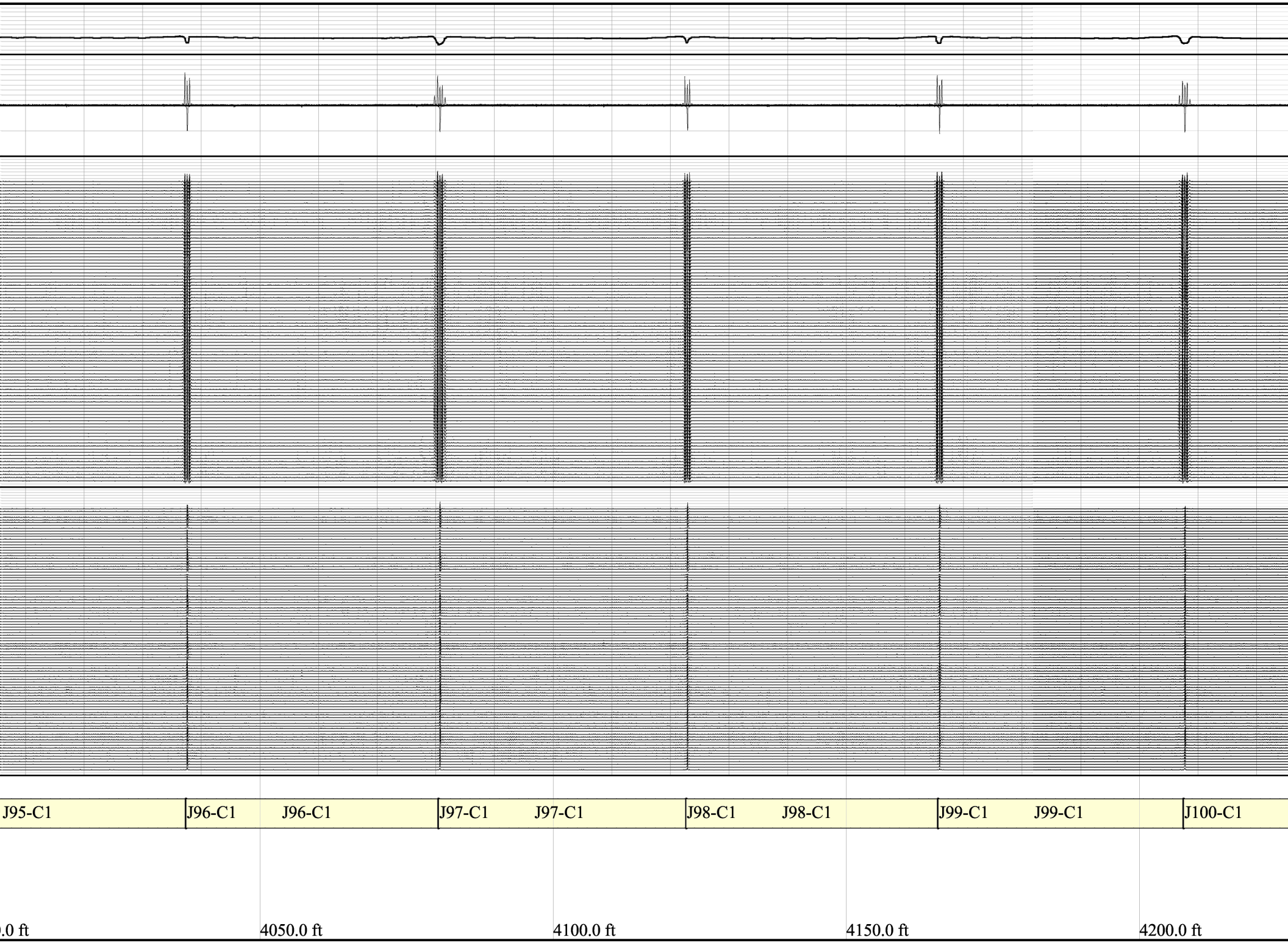

J69-C1
J69-C1
J70-C1
J70-C1
J72-C1
J72-C1
J73-C1
J73-C1
J74-C1
J74-C1
0 ft
2950.0 ft
3000.0 ft
3050.0 ft
3100.0 ft


J75-C1
J75-C1
J76-C1
J76-C1
J77-C1
J77-C1
J78-C1
J78-C1
J79-C1
J79-C1
3150.0 ft
3200.0 ft
3250.0 ft
3300.0 ft

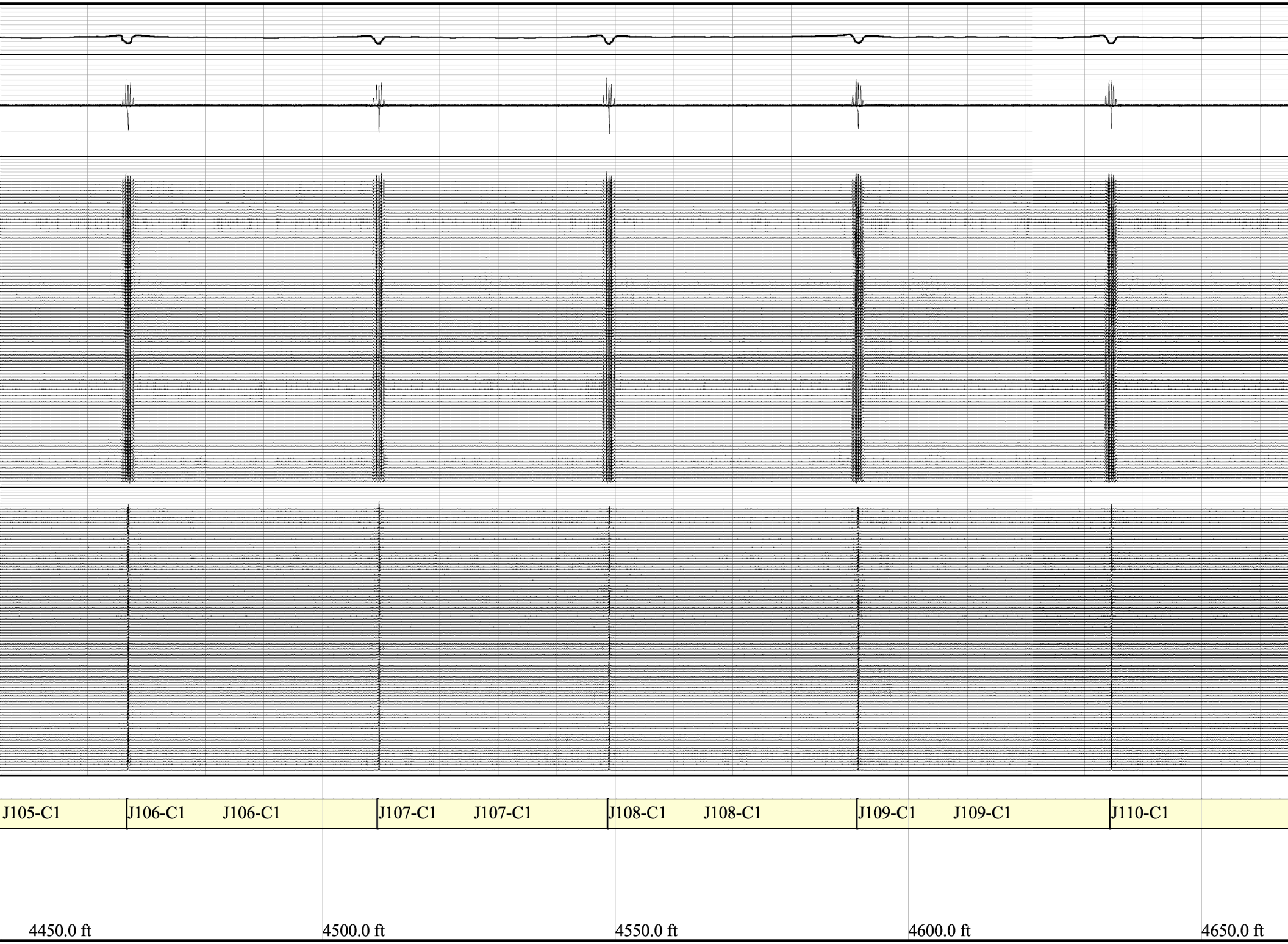

J80-C1
J80-C1
J81-C1
J81-C1
J82-C1
J82-C1
J83-C1
J83-C1
J84-C1
J84-C1
3350.0 ft
3400.0 ft
3450.0 ft
3500.0 ft
3550.0 ft

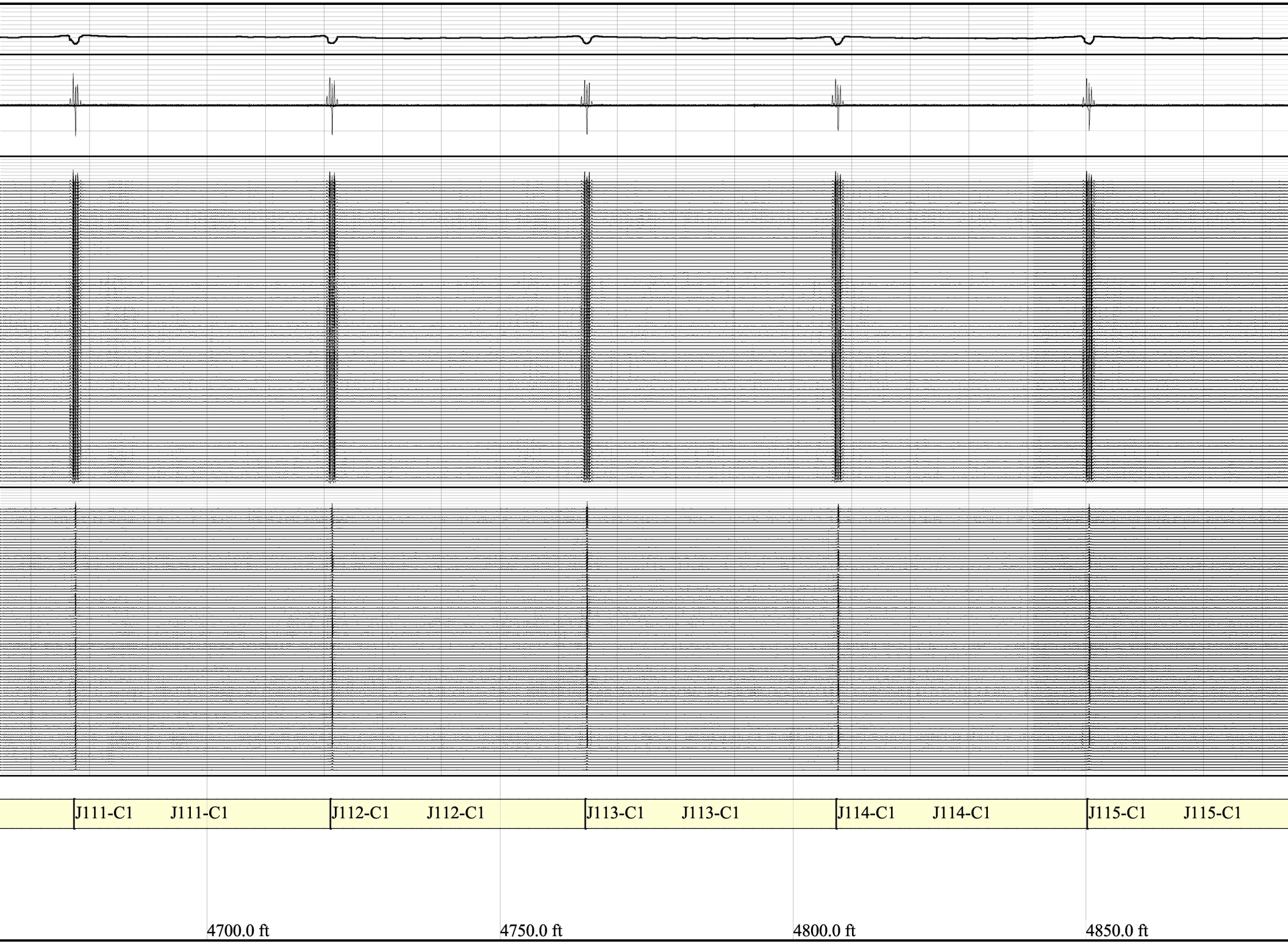

J85-C1
J85-C1
J86-C1
J86-C1
J87-C1
J87-C1
J88-C1
J88-C1
J89-C1
J89-C1
3600.0 ft
3650.0 ft
3700.0 ft
3750.0 ft

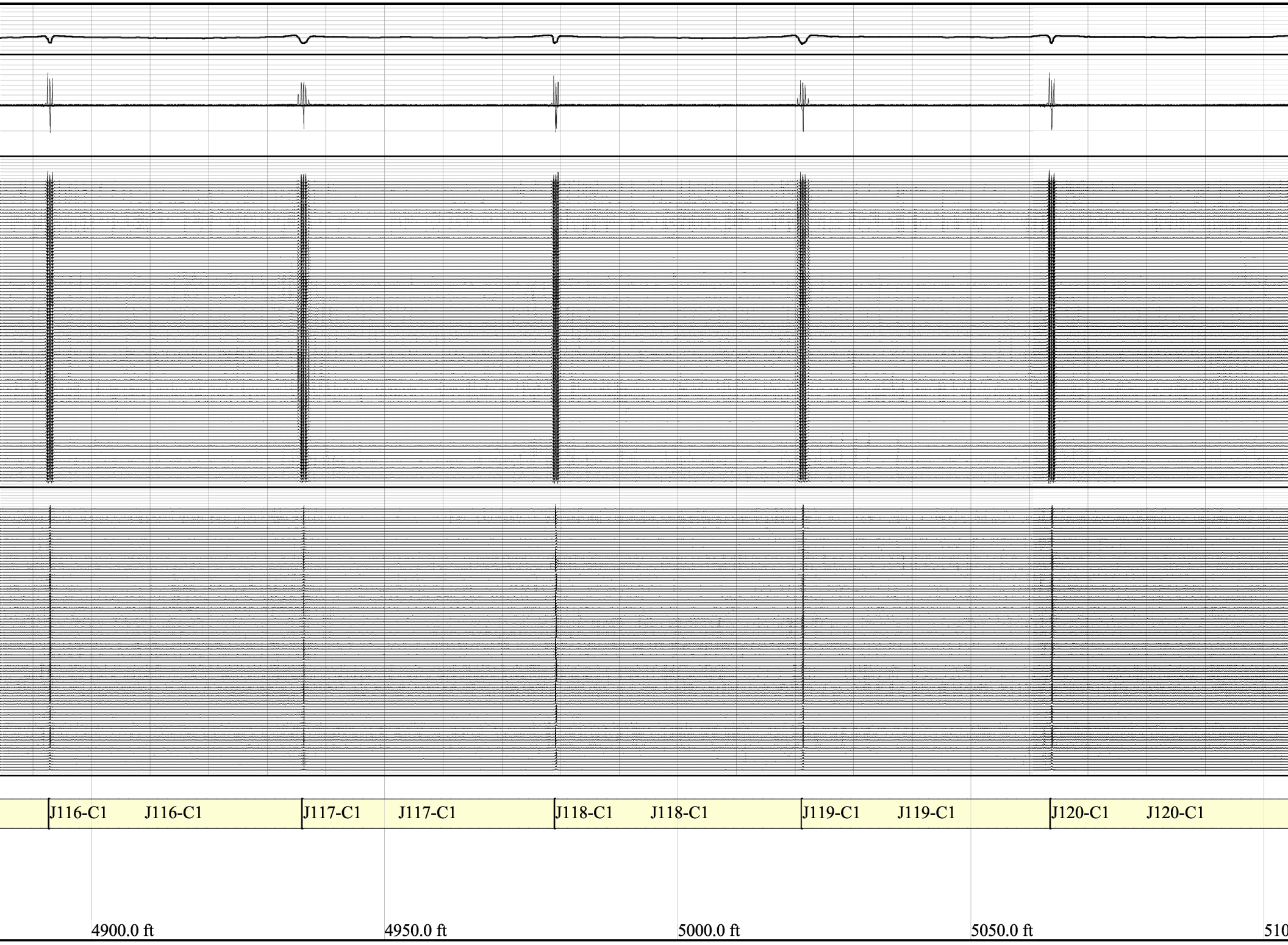

J90-C1
J90-C1
J91-C1
J91-C1
J92-C1
J92-C1
J93-C1
J93-C1
J94-C1
J94-C1
3800.0 ft
3850.0 ft
3900.0 ft
3950.0 ft
4000

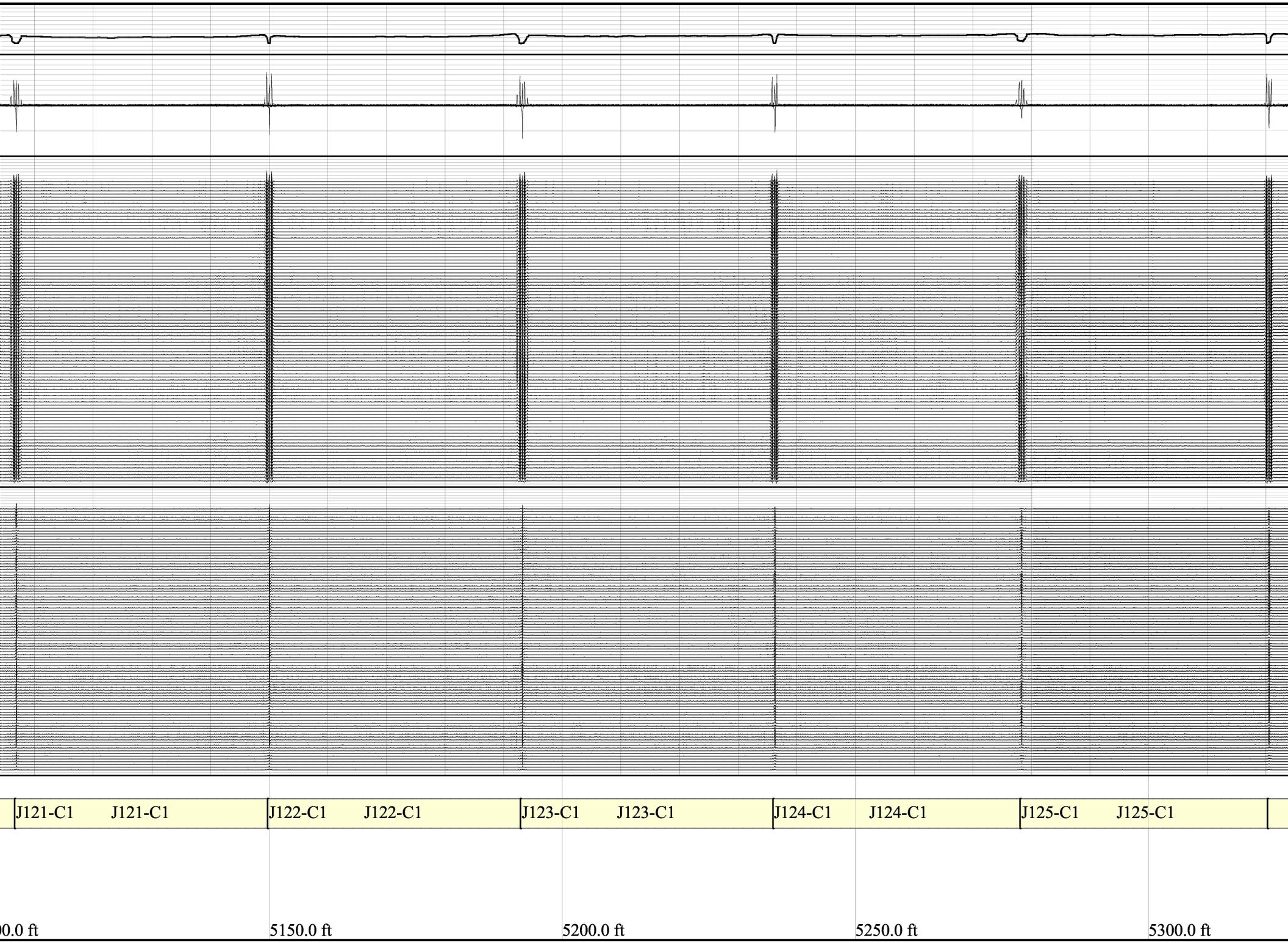

J95-C1
J96-C1
J96-C1
J97-C1
J97-C1
J98-C1
J98-C1
J99-C1
J99-C1
J100-C1
.0 ft
4050.0 ft
4100.0 ft
4150.0 ft
4200.0 ft

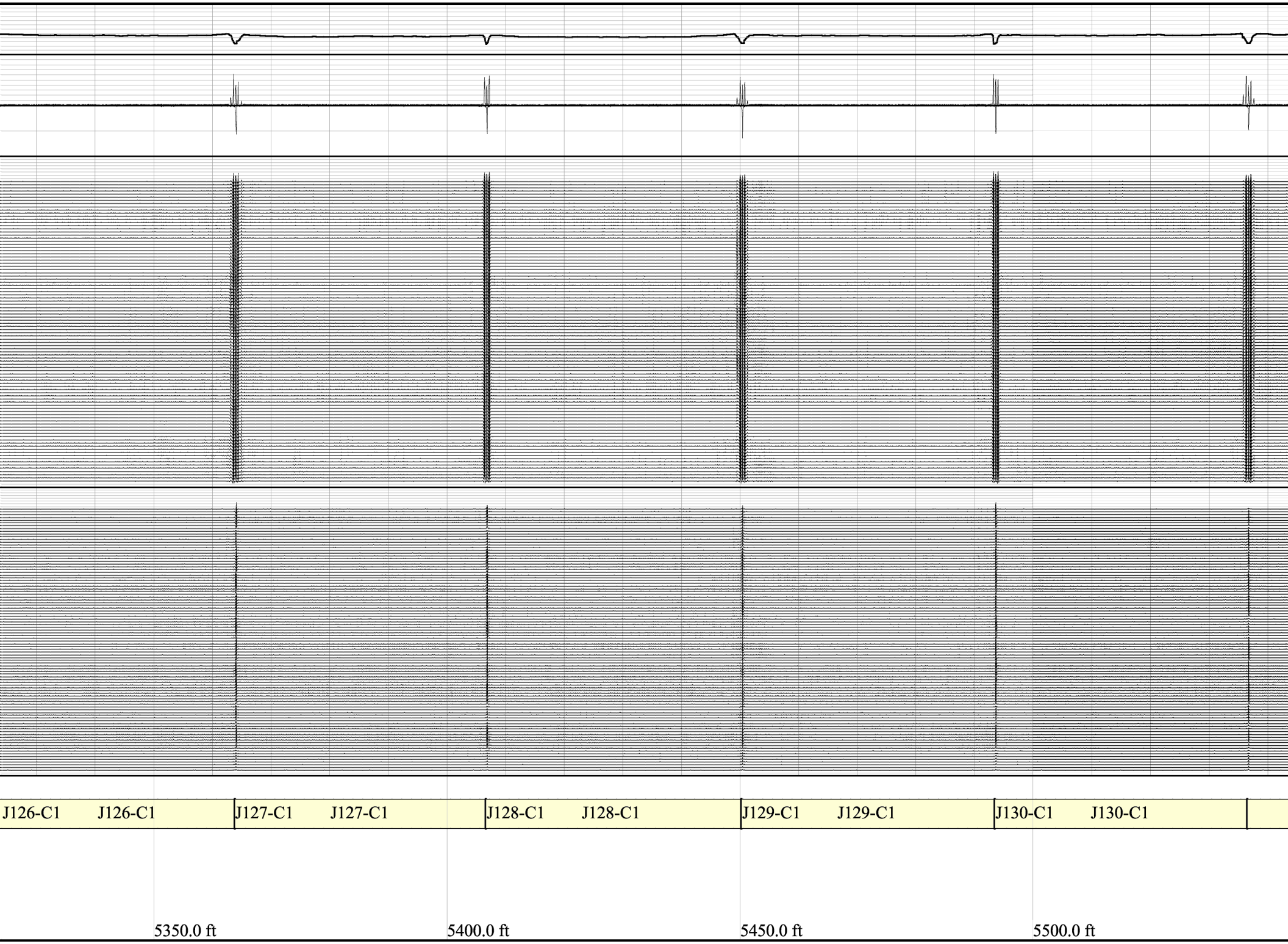
J100-C1
J101-C1
J101-C1
J102-C1
J102-C1
J103-C1
J103-C1
J104-C1
J104-C1
J105-C1
4250.0 ft
4300.0 ft
4350.0 ft
4400.0 ft


J105-C1
J106-C1
J106-C1
J107-C1
J107-C1
J108-C1
J108-C1
J109-C1
J109-C1
J110-C1
4450.0 ft
4500.0 ft
4550.0 ft
4600.0 ft
4650.0 ft


J111-C1
J111-C1
J112-C1
J112-C1
J113-C1
J113-C1
J114-C1
J114-C1
J115-C1
J115-C1
4700.0 ft
4750.0 ft
4800.0 ft
4850.0 ft

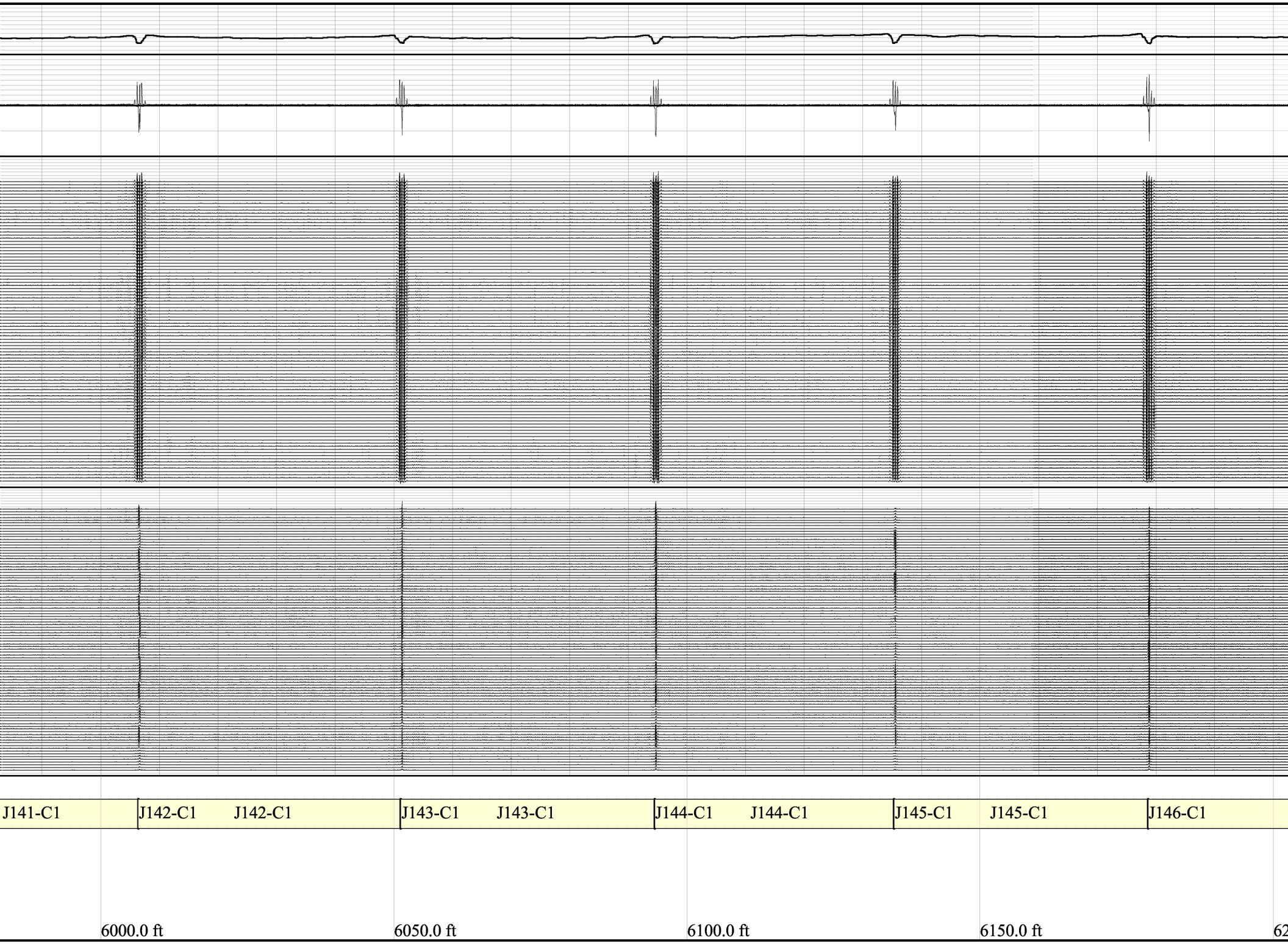

J116-C1
J116-C1
J117-C1
J117-C1
J118-C1
J118-C1
J119-C1
J119-C1
J120-C1
J120-C1
4900.0 ft
4950.0 ft
5000.0 ft
5050.0 ft
510

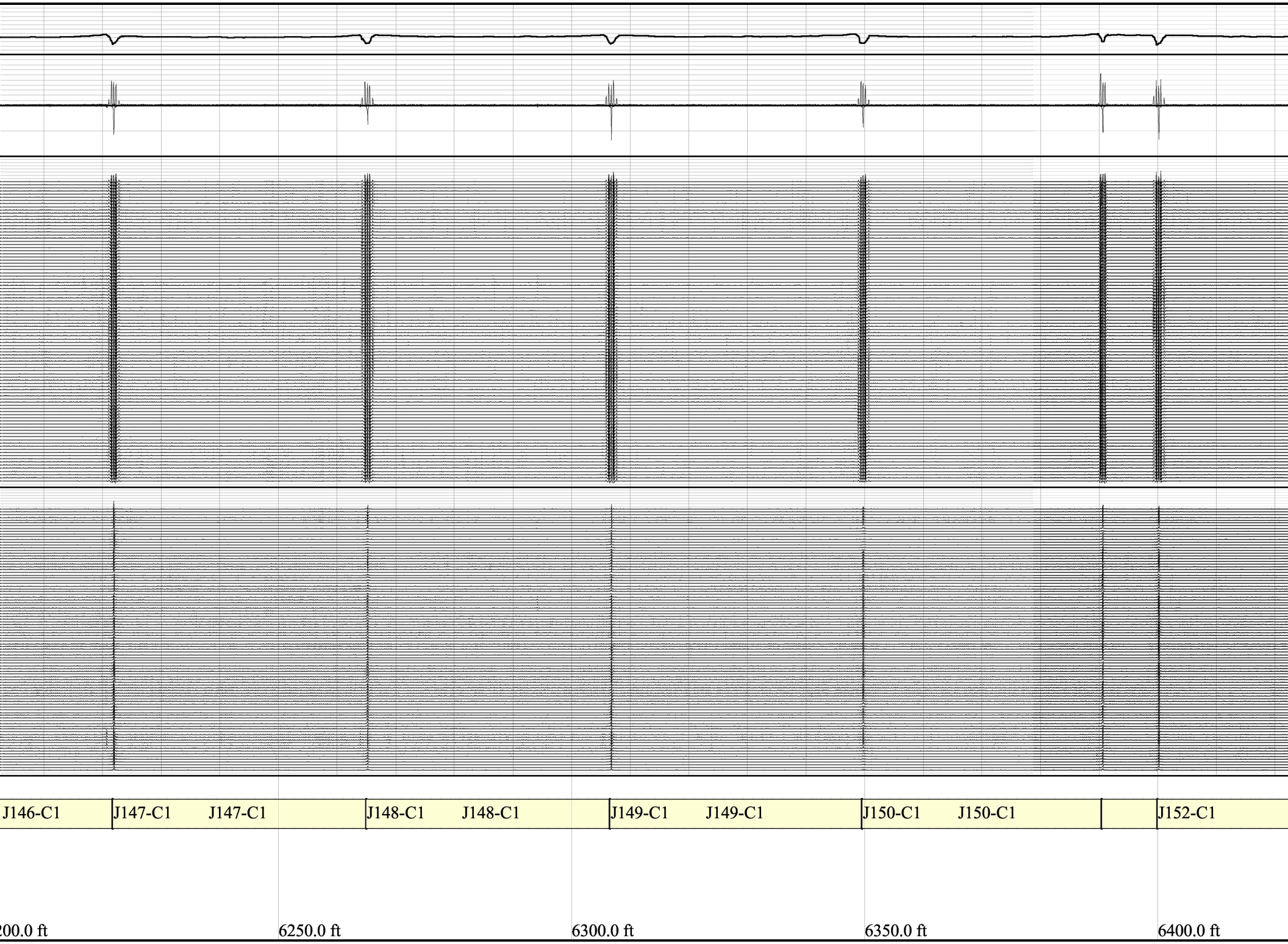

J121-C1
J121-C1
J122-C1
J122-C1
J123-C1
J123-C1
J124-C1
J124-C1
J125-C1
J125-C1
00.0 ft
5150.0 ft
5200.0 ft
5250.0 ft
5300.0 ft

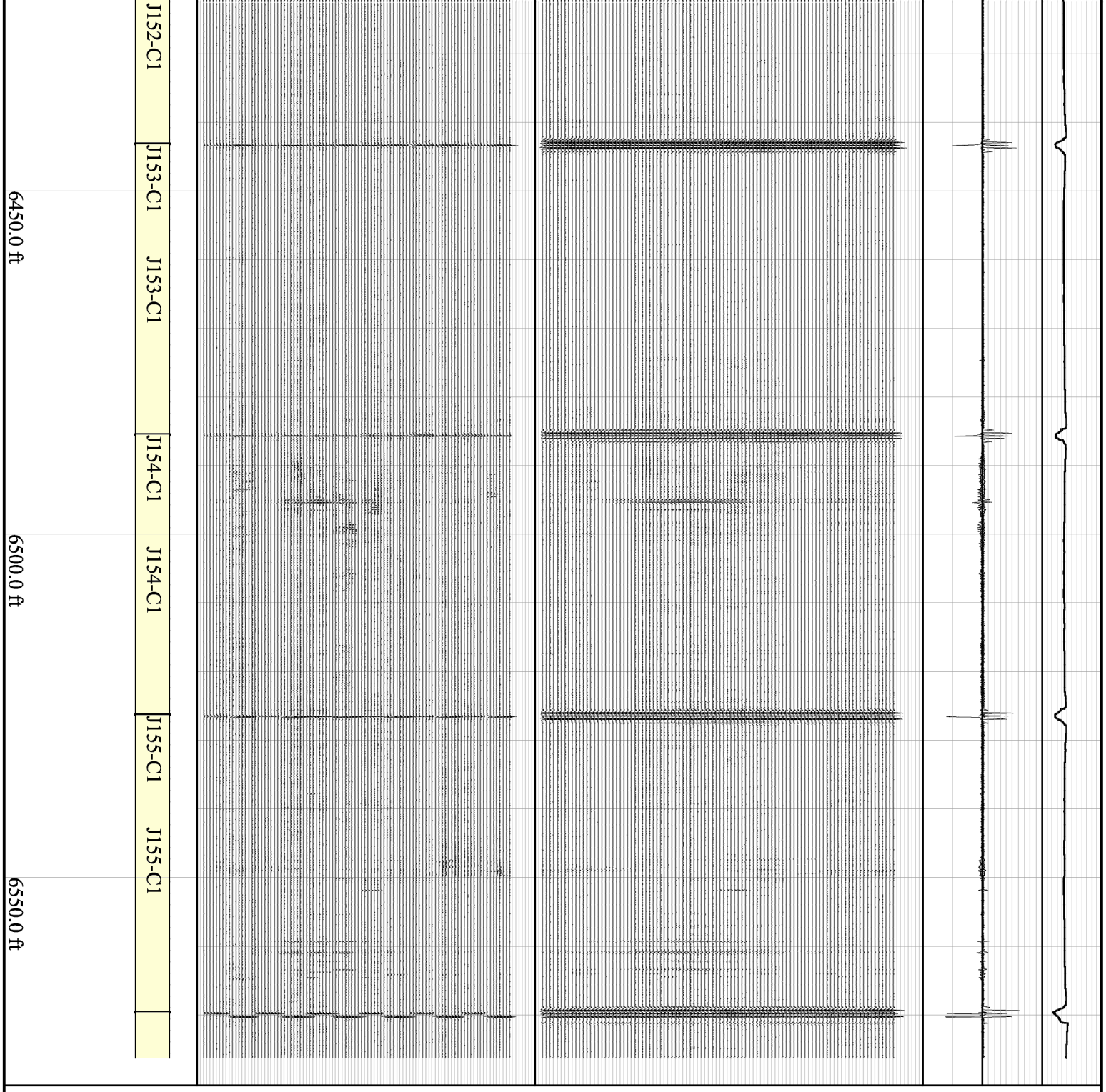

J126-C1
J126-C1
J127-C1
J127-C1
J128-C1
J128-C1
J129-C1
J129-C1
J130-C1
J130-C1
5350.0 ft
5400.0 ft
5450.0 ft
5500.0 ft

J131-C1
J131-C1
J132-C1
J132-C1
J133-C1
J133-C1
J134-C1
J134-C1
J135-C1
J135-C1
5550.0 ft
5600.0 ft
5650.0 ft
5700.0 ft
5750.0 ft

J136-C1
J137-C1
J137-C1
J138-C1
J138-C1
J139-C1
J139-C1
J140-C1
J140-C1
J141-C1
5800.0 ft
5850.0 ft
5900.0 ft
5950.0 ft


J141-C1
J142-C1
J142-C1
J143-C1
J143-C1
J144-C1
J144-C1
J145-C1
J145-C1
J146-C1
6000.0 ft
6050.0 ft
6100.0 ft
6150.0 ft
62


J146-C1
J147-C1
J147-C1
J148-C1
J148-C1
J149-C1
J149-C1
J150-C1
J150-C1
J152-C1
200.0 ft
6250.0 ft
6300.0 ft
6350.0 ft
6400.0 ft



Southern California Gas Company Porter 68B

File 20160414_09570A_RSP_0_0_0_0_0_0.mvl

Joint Summary

Southern California Gas Company
Aliso Canyon
Porter 68B

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	15.99	16.88	9.625	0.472	47.0	0			1
JT-2	32.88	43.16	9.625	0.472	47.0	0			1
JT-3	76.04	42.48	9.625	0.472	47.0	0			1

JT-4	118.52	42.43	9.625	0.472	47.0	0			1
JT-5	160.95	43.12	9.625	0.472	47.0	0			1
JT-6	204.07	43.36	9.625	0.472	47.0	0			1
JT-7	247.43	43.32	9.625	0.472	47.0	0			1
JT-8	290.75	42.84	9.625	0.472	47.0	0			1
JT-9	333.59	43.05	9.625	0.472	47.0	0			1
JT-10	376.64	43.09	9.625	0.472	47.0	0			1
JT-11	419.73	43.17	9.625	0.472	47.0	0			1
JT-12	462.91	44.41	9.625	0.472	47.0	0			1
JT-13	507.32	43.15	9.625	0.472	47.0	0			1
JT-14	550.47	44.03	9.625	0.472	47.0	0			1
JT-15	594.50	42.04	9.625	0.472	47.0	0			1
JT-16	636.54	43.18	9.625	0.472	47.0	0			1
JT-17	679.72	42.15	9.625	0.472	47.0	0			1
JT-18	721.87	42.46	9.625	0.472	47.0	0			1
JT-19	764.33	43.14	9.625	0.472	47.0	0			1
JT-20	807.47	43.12	9.625	0.472	47.0	0			1
JT-21	850.59	43.18	9.625	0.472	47.0	0			1
JT-22	893.77	42.77	9.625	0.472	47.0	0			1
JT-23	936.55	41.59	9.625	0.472	47.0	0			1
JT-24	978.14	43.78	9.625	0.472	47.0	0			1
JT-25	1021.92	43.22	9.625	0.472	47.0	0			1
JT-26	1065.13	42.78	9.625	0.472	47.0	0			1
JT-27	1107.91	44.92	9.625	0.472	47.0	0			1
JT-28	1152.83	43.18	9.625	0.472	47.0	0			1
JT-29	1196.01	43.07	9.625	0.472	47.0	0			1
JT-30	1239.08	42.83	9.625	0.472	47.0	0			1
JT-31	1281.91	43.66	9.625	0.472	47.0	0			1
JT-32	1325.57	42.12	9.625	0.472	47.0	0			1
JT-33	1367.69	42.32	9.625	0.472	47.0	16	1409.28	8761	1
JT-34	1410.00	43.33	9.625	0.472	47.0	19	1417.64	8618	1
JT-35	1453.34	43.02	9.625	0.472	47.0	0			1
JT-36	1496.36	43.05	9.625	0.472	47.0	15	1518.78	8685	1
JT-37	1539.41	41.30	9.625	0.472	47.0	0			1
JT-38	1580.71	43.11	9.625	0.472	47.0	0			1
JT-39	1623.82	43.04	9.625	0.472	47.0	0			1
JT-40	1666.86	40.54	9.625	0.472	47.0	0			1
JT-41	1707.40	42.52	9.625	0.472	47.0	0			1
JT-42	1749.93	43.58	9.625	0.472	47.0	0			1
JT-43	1793.51	43.03	9.625	0.472	47.0	0			1
JT-44	1836.54	42.16	9.625	0.472	47.0	0			1
JT-45	1878.69	43.13	9.625	0.472	47.0	0			1
JT-46	1921.83	43.18	9.625	0.472	47.0	0			1
JT-47	1965.01	43.21	9.625	0.472	47.0	0			1
JT-48	2008.22	43.17	9.625	0.472	47.0	0			1
JT-49	2051.39	42.36	9.625	0.472	47.0	0			1
JT-50	2093.75	43.03	9.625	0.472	47.0	0			1
JT-51	2136.78	43.11	9.625	0.472	47.0	0			1
JT-52	2179.89	43.15	9.625	0.472	47.0	0			1
JT-53	2223.04	43.11	9.625	0.472	47.0	0			1
JT-54	2266.15	43.32	9.625	0.472	47.0	0			1
JT-55	2309.48	41.98	9.625	0.472	47.0	0			1
JT-56	2351.46	42.82	9.625	0.472	47.0	0			1
JT-57	2394.28	43.51	9.625	0.472	47.0	0			1
JT-58	2437.79	43.25	9.625	0.472	47.0	0			1
JT-59	2481.05	43.06	9.625	0.472	47.0	0			1
JT-60	2524.11	43.11	9.625	0.472	47.0	0			1
JT-61	2567.22	43.06	9.625	0.472	47.0	0			1
JT-62	2610.28	42.11	9.625	0.472	47.0	0			1
JT-63	2652.39	43.03	9.625	0.472	47.0	0			1
JT-64	2695.42	43.07	9.625	0.472	47.0	0			1
JT-65	2738.49	43.42	9.625	0.472	47.0	0			1
JT-66	2781.91	43.25	9.625	0.472	47.0	0			1
JT-67	2825.16	42.17	9.625	0.472	47.0	0			1
JT-68	2867.34	42.07	9.625	0.472	47.0	0			1
JT-69	2909.40	43.13	9.625	0.472	47.0	0			1
JT-70	2952.54	43.10	9.625	0.472	47.0	0			1
JT-71	2995.64	15.05	9.625	0.472	47.0	0			1
JT-72	3010.69	41.22	9.625	0.472	47.0	0			1
JT-73	3051.92	41.35	9.625	0.472	47.0	0			1
JT-74	3093.27	42.90	9.625	0.472	47.0	0			1
JT-75	3136.17	43.07	9.625	0.472	47.0	0			1
JT-76	3179.24	43.26	9.625	0.472	47.0	0			1
JT-77	3222.50	43.09	9.625	0.472	47.0	0			1
JT-78	3265.59	43.10	9.625	0.472	47.0	0			1
JT-79	3308.69	43.03	9.625	0.472	47.0	0			1
JT-80	3351.72	43.15	9.625	0.472	47.0	0			1
JT-81	3394.87	43.06	9.625	0.472	47.0	0			1
JT-82	3437.93	43.03	9.625	0.472	47.0	0			1
JT-83	3480.96	42.71	9.625	0.472	47.0	0			1
JT-84	3523.67	43.17	9.625	0.472	47.0	0			1
JT-85	3566.84	42.75	9.625	0.472	47.0	0			1
JT-86	3609.59	43.77	9.625	0.472	47.0	0			1
JT-87	3653.36	43.11	9.625	0.472	47.0	0			1
JT-88	3696.47	42.93	9.625	0.472	47.0	0			1

JT-89	3739.40	42.99	9.625	0.472	47.0	0	1
JT-90	3782.39	41.43	9.625	0.472	47.0	0	1
JT-91	3823.82	42.49	9.625	0.472	47.0	0	1
JT-92	3866.31	42.87	9.625	0.472	47.0	0	1
JT-93	3909.18	43.19	9.625	0.472	47.0	0	1
JT-94	3952.37	43.10	9.625	0.472	47.0	0	1
JT-95	3995.47	41.97	9.625	0.472	47.0	0	1
JT-96	4037.44	43.10	9.625	0.472	47.0	0	1
JT-97	4080.54	42.20	9.625	0.472	47.0	0	1
JT-98	4122.74	43.01	9.625	0.472	47.0	0	1
JT-99	4165.75	41.85	9.625	0.472	47.0	0	1
JT-100	4207.60	43.13	9.625	0.472	47.0	0	1
JT-101	4250.73	42.79	9.625	0.472	47.0	0	1
JT-102	4293.52	44.93	9.625	0.472	47.0	0	1
JT-103	4338.45	43.10	9.625	0.472	47.0	0	1
JT-104	4381.55	42.77	9.625	0.472	47.0	0	1
JT-105	4424.32	42.40	9.625	0.472	47.0	0	1
JT-106	4466.72	42.80	9.625	0.472	47.0	0	1
JT-107	4509.52	39.24	9.625	0.472	47.0	0	1
JT-108	4548.75	42.53	9.625	0.472	47.0	0	1
JT-109	4591.29	43.13	9.625	0.472	47.0	0	1
JT-110	4634.42	43.05	9.625	0.472	47.0	0	1
JT-111	4677.46	43.74	9.625	0.472	47.0	0	1
JT-112	4721.20	43.47	9.625	0.472	47.0	0	1
JT-113	4764.67	42.82	9.625	0.472	47.0	0	1
JT-114	4807.49	42.82	9.625	0.472	47.0	0	1
JT-115	4850.32	42.45	9.625	0.472	47.0	0	1
JT-116	4892.77	43.26	9.625	0.472	47.0	0	1
JT-117	4936.03	43.05	9.625	0.472	47.0	0	1
JT-118	4979.08	42.10	9.625	0.472	47.0	0	1
JT-119	5021.18	42.44	9.625	0.472	47.0	0	1
JT-120	5063.62	43.08	9.625	0.472	47.0	0	1
JT-121	5106.71	43.14	9.625	0.472	47.0	0	1
JT-122	5149.85	43.18	9.625	0.472	47.0	0	1
JT-123	5193.03	43.01	9.625	0.472	47.0	0	1
JT-124	5236.04	42.16	9.625	0.472	47.0	0	1
JT-125	5278.20	42.18	9.625	0.472	47.0	0	1
JT-126	5320.38	43.46	9.625	0.472	47.0	0	1
JT-127	5363.84	42.82	9.625	0.472	47.0	0	1
JT-128	5406.66	43.62	9.625	0.472	47.0	0	1
JT-129	5450.28	43.18	9.625	0.472	47.0	0	1
JT-130	5493.46	43.12	9.625	0.472	47.0	0	1
JT-131	5536.58	43.64	9.625	0.472	47.0	0	1
JT-132	5580.22	42.24	9.625	0.472	47.0	0	1
JT-133	5622.45	41.99	9.625	0.472	47.0	0	1
JT-134	5664.44	43.26	9.625	0.472	47.0	0	1
JT-135	5707.70	43.22	9.625	0.472	47.0	0	1
JT-136	5750.92	41.92	9.625	0.472	47.0	0	1
JT-137	5792.84	43.34	9.625	0.472	47.0	0	1
JT-138	5836.18	43.23	9.625	0.472	47.0	0	1
JT-139	5879.41	41.15	9.625	0.472	47.0	0	1
JT-140	5920.57	43.15	9.625	0.472	47.0	0	1
JT-141	5963.72	42.76	9.625	0.472	47.0	0	1
JT-142	6006.48	44.76	9.625	0.472	47.0	0	1
JT-143	6051.24	43.30	9.625	0.472	47.0	0	1
JT-144	6094.54	40.85	9.625	0.472	47.0	0	1
JT-145	6135.40	43.27	9.625	0.472	47.0	0	1
JT-146	6178.67	43.09	9.625	0.472	47.0	0	1
JT-147	6221.76	43.27	9.625	0.472	47.0	0	1
JT-148	6265.03	41.58	9.625	0.472	47.0	0	1
JT-149	6306.61	42.98	9.625	0.472	47.0	0	1
JT-150	6349.59	40.89	9.625	0.472	47.0	0	1
JT-151	6390.48	9.50	9.625	0.472	47.0	0	1
JT-152	6399.98	43.23	9.625	0.472	47.0	0	1
JT-153	6443.21	42.31	9.625	0.472	47.0	0	1
JT-154	6485.52	40.81	9.625	0.472	47.0	0	1
JT-155	6526.33	43.30	9.625	0.472	47.0	0	1
JT-156	6569.63	6.70	9.625	0.472	47.0	0	1