Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Receiver-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio	Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
198.5	1730	5950	0.45	60.5	530	1810	0.45
200.1	1710	5750	0.45	61.0	520	1750	0.45
201.8	1730	5850	0.45	61.5	530	1780	0.45
203.4	1750	5950	0.45	62.0	530	1810	0.45
205.1	1770	5850	0.45	62.5	540	1780	0.45
206.7	1860	5950	0.45	63.0	570	1810	0.45
208.3	1860	5950	0.45	63.5	570	1810	0.45
210.0	1850	5850	0.44	64.0	560	1780	0.44
211.6	1890	6060	0.45	64.5	580	1850	0.45
213.3	2160	6410	0.44	65.0	660	1950	0.44
214.9	2540	6940	0.42	65.5	780	2120	0.42
216.5	2340	6940	0.44	66.0	710	2120	0.44
218.2	2250	6540	0.43	66.5	690	1990	0.43
219.8	2350	6290	0.42	67.0	720	1920	0.42
221.5	2450	6800	0.43	67.5	750	2070	0.43
223.1	2280	6670	0.43	68.0	700	2030	0.43
224.7	2200	6540	0.44	68.5	670	1990	0.44
226.4	2380	6540	0.42	69.0	730	1990	0.42
228.0	2360	6670	0.43	69.5	720	2030	0.43
229.7	2000	6410	0.45	70.0	610	1950	0.45
231.3	2180	6290	0.43	70.5	660	1920	0.43
232.9	1780	5950	0.45	71.0	540	1810	0.45
234.6	1980	6410	0.45	71.5	600	1950	0.45
236.2	3040	6670	0.37	72.0	930	2030	0.37
237.9	2400	6060	0.41	72.5	730	1850	0.41
239.5	1440	5560	0.46	73.0	440	1690	0.46
241.1	1520	5700	0.46	73.5	460	1740	0.46
242.8	2080	6290	0.44	74.0	640	1920	0.44
244.4	2130	6290	0.44	74.5	650	1920	0.44
246.1	2110	6170	0.43	75.0	640	1880	0.43
247.7	1890	6230	0.45	75.5	580	1900	0.45
249.3	1750	5900	0.45	76.0	530	1800	0.45
251.0	1710	6060	0.46	76.5	520	1850	0.46
252.6	1880	6060	0.45	77.0	570	1850	0.45
254.3	1900	6010	0.44	77.5	580	1830	0.44
255.9	1690	5950	0.46	78.0	520	1810	0.46
257.6	1540	5460	0.46	78.5	470	1670	0.46
259.2	1360	5750	0.47	79.0	410	1750	0.47
260.8	1380	5950	0.47	79.5	420	1810	0.47

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Receiver-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio	Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
262.5	1550	5950	0.46	80.0	470	1810	0.46
264.1	1730	5950	0.45	80.5	530	1810	0.45
265.8	1720	5850	0.45	81.0	520	1780	0.45
267.4	1560	5560	0.46	81.5	480	1690	0.46
269.0	1680	5950	0.46	82.0	510	1810	0.46
270.7	1700	5950	0.46	82.5	520	1810	0.46
272.3	1650	5950	0.46	83.0	500	1810	0.46
274.0	1650	5950	0.46	83.5	500	1810	0.46
275.6	1670	5950	0.46	84.0	510	1810	0.46
277.2	1750	5950	0.45	84.5	530	1810	0.45
278.9	1780	5950	0.45	85.0	540	1810	0.45
280.5	1820	5950	0.45	85.5	550	1810	0.45
282.2	1790	5950	0.45	86.0	550	1810	0.45
283.8	1710	5950	0.46	86.5	520	1810	0.46
285.4	1840	6060	0.45	87.0	560	1850	0.45
287.1	1920	6170	0.45	87.5	590	1880	0.45
288.7	2000	6170	0.44	88.0	610	1880	0.44
290.4	1890	5950	0.44	88.5	580	1810	0.44
292.0	1630	5950	0.46	89.0	500	1810	0.46
293.6	1570	5900	0.46	89.5	480	1800	0.46
295.3	1660	5900	0.46	90.0	510	1800	0.46
296.9	1830	5950	0.45	90.5	560	1810	0.45
298.6	1790	6010	0.45	91.0	550	1830	0.45
300.2	1610	5650	0.46	91.5	490	1720	0.46
301.8	1650	5650	0.45	92.0	500	1720	0.45
303.5	1650	6010	0.46	92.5	500	1830	0.46
305.1	1640	5650	0.45	93.0	500	1720	0.45
306.8	1850	5800	0.44	93.5	560	1770	0.44
308.4	1860	5950	0.45	94.0	570	1810	0.45
310.0	1840	5700	0.44	94.5	560	1740	0.44
311.7	1390	5750	0.47	95.0	420	1750	0.47
313.3	1240	5560	0.47	95.5	380	1690	0.47
315.0	1290	5750	0.47	96.0	390	1750	0.47
316.6	1320	5750	0.47	96.5	400	1750	0.47
318.2	1340	5510	0.47	97.0	410	1680	0.47
319.9	1340	5600	0.47	97.5	410	1710	0.47
321.5	1390	5950	0.47	98.0	420	1810	0.47
323.2	1520	5950	0.47	98.5	460	1810	0.47
324.8	1450	5950	0.47	99.0	440	1810	0.47

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Receiver-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio	Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
326.4	1410	5950	0.47	99.5	430	1810	0.47
328.1	1390	5750	0.47	100.0	420	1750	0.47
329.7	1400	5950	0.47	100.5	430	1810	0.47
331.4	1500	5750	0.46	101.0	460	1750	0.46
333.0	1390	5560	0.47	101.5	420	1690	0.47
334.7	1410	5560	0.47	102.0	430	1690	0.47
336.3	1380	5650	0.47	102.5	420	1720	0.47
337.9	1410	5560	0.47	103.0	430	1690	0.47
339.6	1500	5900	0.47	103.5	460	1800	0.47
341.2	1490	5950	0.47	104.0	460	1810	0.47
342.9	1470	5950	0.47	104.5	450	1810	0.47
344.5	1470	5750	0.46	105.0	450	1750	0.46
346.1	1470	5510	0.46	105.5	450	1680	0.46
347.8	1450	5750	0.47	106.0	440	1750	0.47
349.4	1410	5700	0.47	106.5	430	1740	0.47
351.1	1460	5900	0.47	107.0	450	1800	0.47
352.7	1520	5850	0.46	107.5	460	1780	0.46
354.3	1460	5950	0.47	108.0	440	1810	0.47
356.0	1440	5950	0.47	108.5	440	1810	0.47
357.6	1450	5750	0.47	109.0	440	1750	0.47
359.3	1470	5750	0.46	109.5	450	1750	0.46
360.9	1470	5560	0.46	110.0	450	1690	0.46
362.5	1530	5600	0.46	110.5	470	1710	0.46
364.2	1470	5750	0.47	111.0	450	1750	0.47
365.8	1450	5750	0.47	111.5	440	1750	0.47
367.5	1510	5950	0.47	112.0	460	1810	0.47
369.1	1410	5750	0.47	112.5	430	1750	0.47
370.7	1340	5950	0.47	113.0	410	1810	0.47
372.4	1450	5650	0.46	113.5	440	1720	0.46
374.0	1470	5560	0.46	114.0	450	1690	0.46
375.7	1390	5560	0.47	114.5	420	1690	0.47
377.3	1520	5460	0.46	115.0	460	1670	0.46
378.9	1440	5600	0.46	115.5	440	1710	0.46
380.6	1380	5750	0.47	116.0	420	1750	0.47
382.2	1380	5950	0.47	116.5	420	1810	0.47
383.9	1440	5950	0.47	117.0	440	1810	0.47
385.5	1530	5750	0.46	117.5	470	1750	0.46
387.1	1360	5560	0.47	118.0	410	1690	0.47
388.8	1440	5600	0.46	118.5	440	1710	0.46

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Receiver-to-Receiver Travel Time Data - Borehole R-7-1

American Units			
Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
390.4	1280	5510	0.47
392.1	1310	5460	0.47
393.7	1390	5600	0.47
395.3	1460	5750	0.47
397.0	1390	5750	0.47
398.6	1330	5950	0.47
400.3	1310	5600	0.47
401.9	1340	5510	0.47
403.5	1270	5560	0.47
405.2	1380	5600	0.47
406.8	1420	5560	0.46
408.5	1360	5650	0.47
410.1	1370	5750	0.47
411.8	1460	5750	0.47
413.4	1410	5750	0.47
415.0	1470	5950	0.47
416.7	1490	5950	0.47
418.3	1450	5750	0.47
420.0	1460	5750	0.47
421.6	1470	5600	0.46
423.2	1510	5600	0.46
424.9	1500	5700	0.46
426.5	1530	5950	0.46
428.2	1520	5950	0.47
429.8	1370	5750	0.47
431.4	1460	5750	0.47
433.1	1490	5950	0.47
434.7	1450	5950	0.47
436.4	1390	5750	0.47
438.0	1450	5750	0.47
439.6	1420	5750	0.47
441.3	1380	5750	0.47

Metric Units			
Depth at Midpoint Between Receivers	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
119.0	390	1680	0.47
119.5	400	1670	0.47
120.0	430	1710	0.47
120.5	440	1750	0.47
121.0	430	1750	0.47
121.5	410	1810	0.47
122.0	400	1710	0.47
122.5	410	1680	0.47
123.0	390	1690	0.47
123.5	420	1710	0.47
124.0	430	1690	0.46
124.5	410	1720	0.47
125.0	420	1750	0.47
125.5	440	1750	0.47
126.0	430	1750	0.47
126.5	450	1810	0.47
127.0	450	1810	0.47
127.5	440	1750	0.47
128.0	450	1750	0.47
128.5	450	1710	0.46
129.0	460	1710	0.46
129.5	460	1740	0.46
130.0	470	1810	0.46
130.5	460	1810	0.47
131.0	420	1750	0.47
131.5	440	1750	0.47
132.0	460	1810	0.47
132.5	440	1810	0.47
133.0	430	1750	0.47
133.5	440	1750	0.47
134.0	430	1750	0.47
134.5	420	1750	0.47

Table 8. Boring R-7-1, Structure depth, dip azimuth, dip and structure description

Depth (feet)	Dip azimuth	Dip	Structure description
30.9	N212	27	Primary-structure Planar Bedding
31.4	N219	32	Primary-structure Planar Bedding
33.7	N207	35	Primary-structure Planar Bedding
35.5	N239	27	Primary-structure Planar Bedding
41.7	N207	39	Primary-structure Planar Bedding
44.6	N195	28	Primary-structure Planar Bedding
46.9	N182	18	Primary-structure Planar Bedding
48.8	N177	18	Primary-structure Planar Bedding
51.1	N155	37	Primary-structure Planar Bedding
51.4	N149	43	Primary-structure Planar Bedding
58.7	N156	25	Primary-structure Planar Bedding
75.9	N207	31	Primary-structure Planar Bedding
82.9	N142	45	Primary-structure Planar Bedding
88.6	N135	20	Primary-structure Planar Bedding
112.5	N083	31	Primary-structure Planar Bedding
184.1	N157	41	Primary-structure Planar Bedding
198.2	N138	34	Primary-structure Planar Bedding
255.1	N135	41	Primary-structure Planar Bedding
259.1	N131	30	Primary-structure Planar Bedding
315.3	N185	34	Primary-structure Planar Bedding

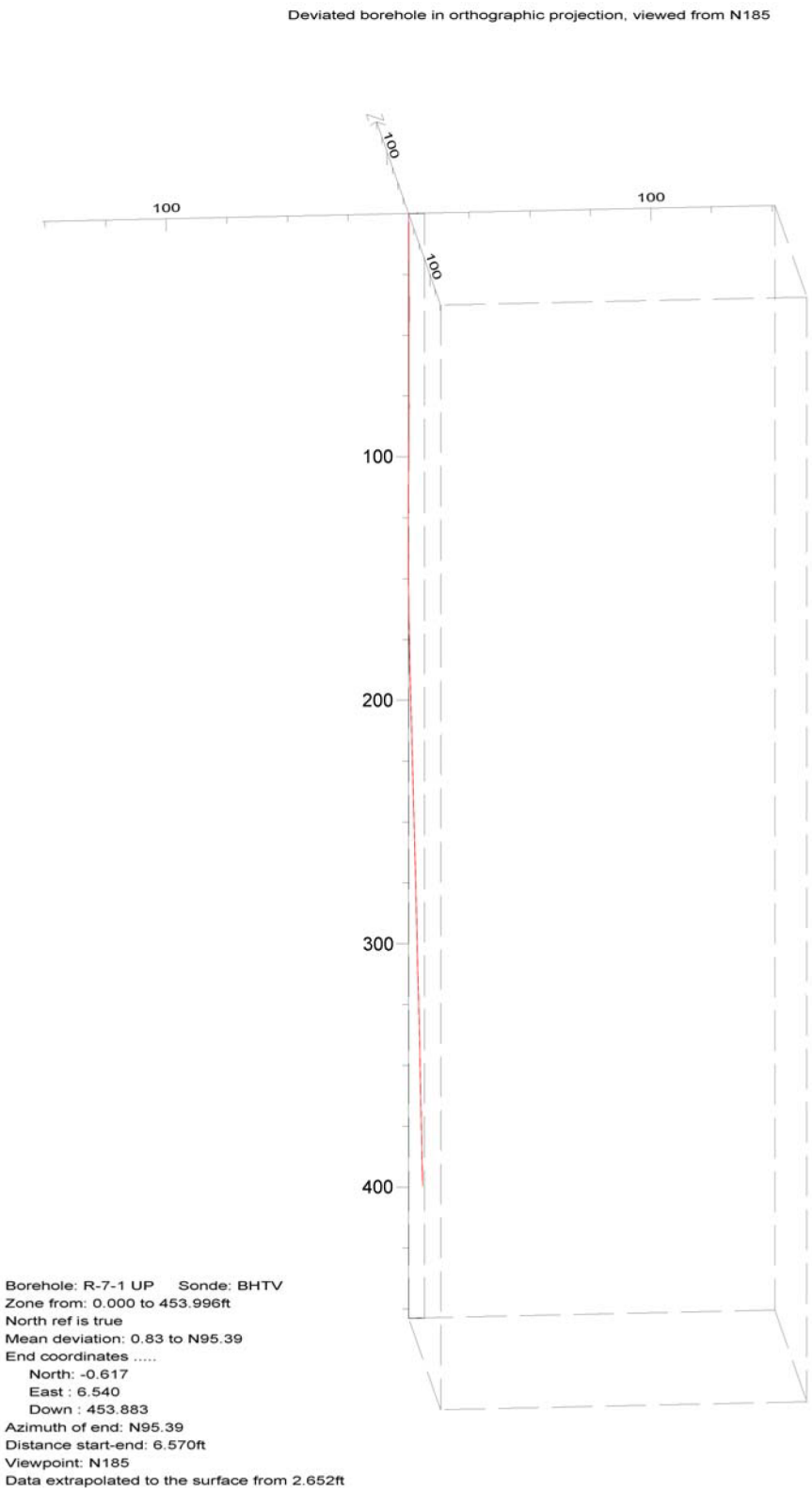


Figure 10. Boring R-7-1, Up Deviation Projection (dimensions in feet)

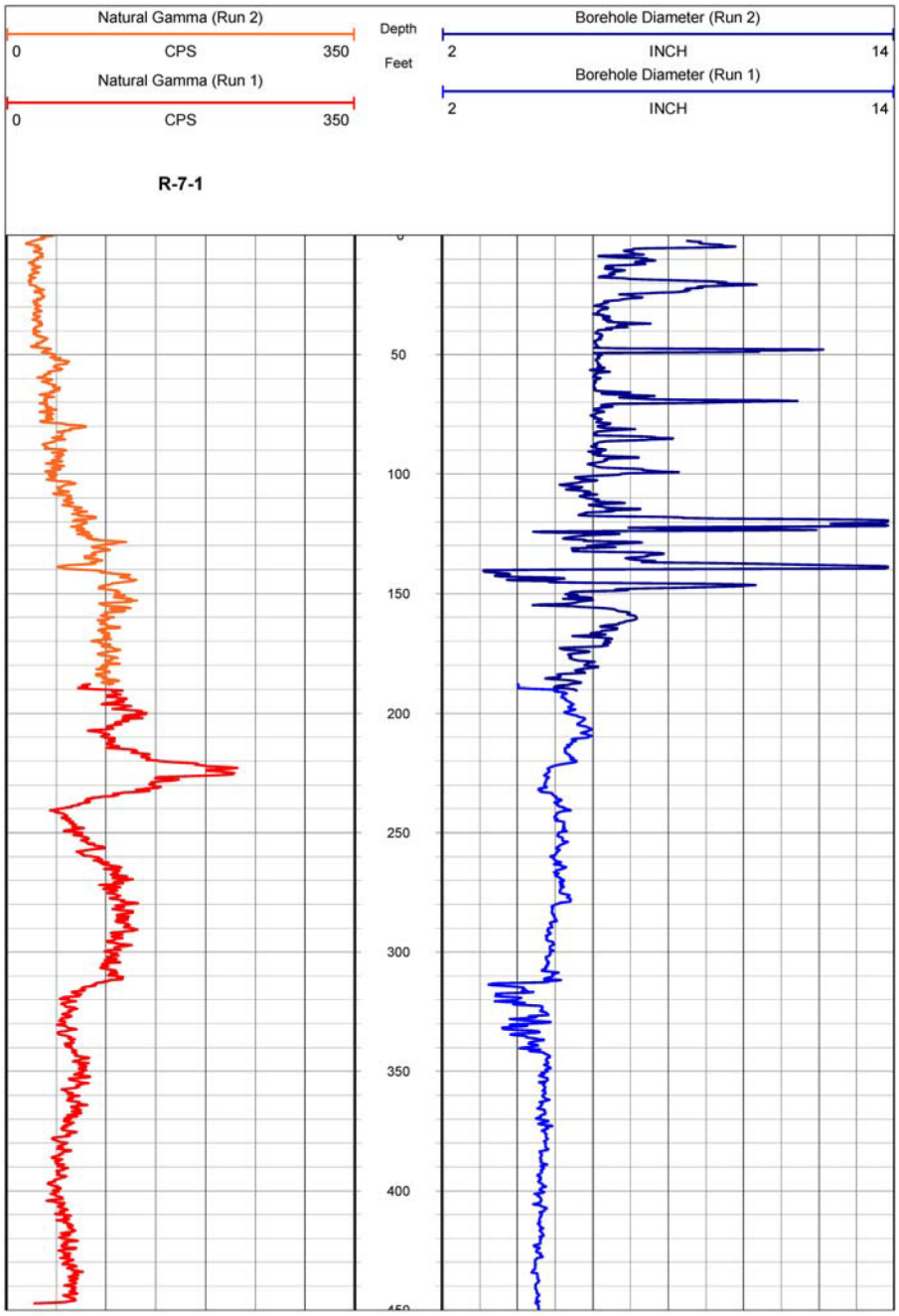


Figure 11. Boring R-7-1, Caliper and Natural gamma logs

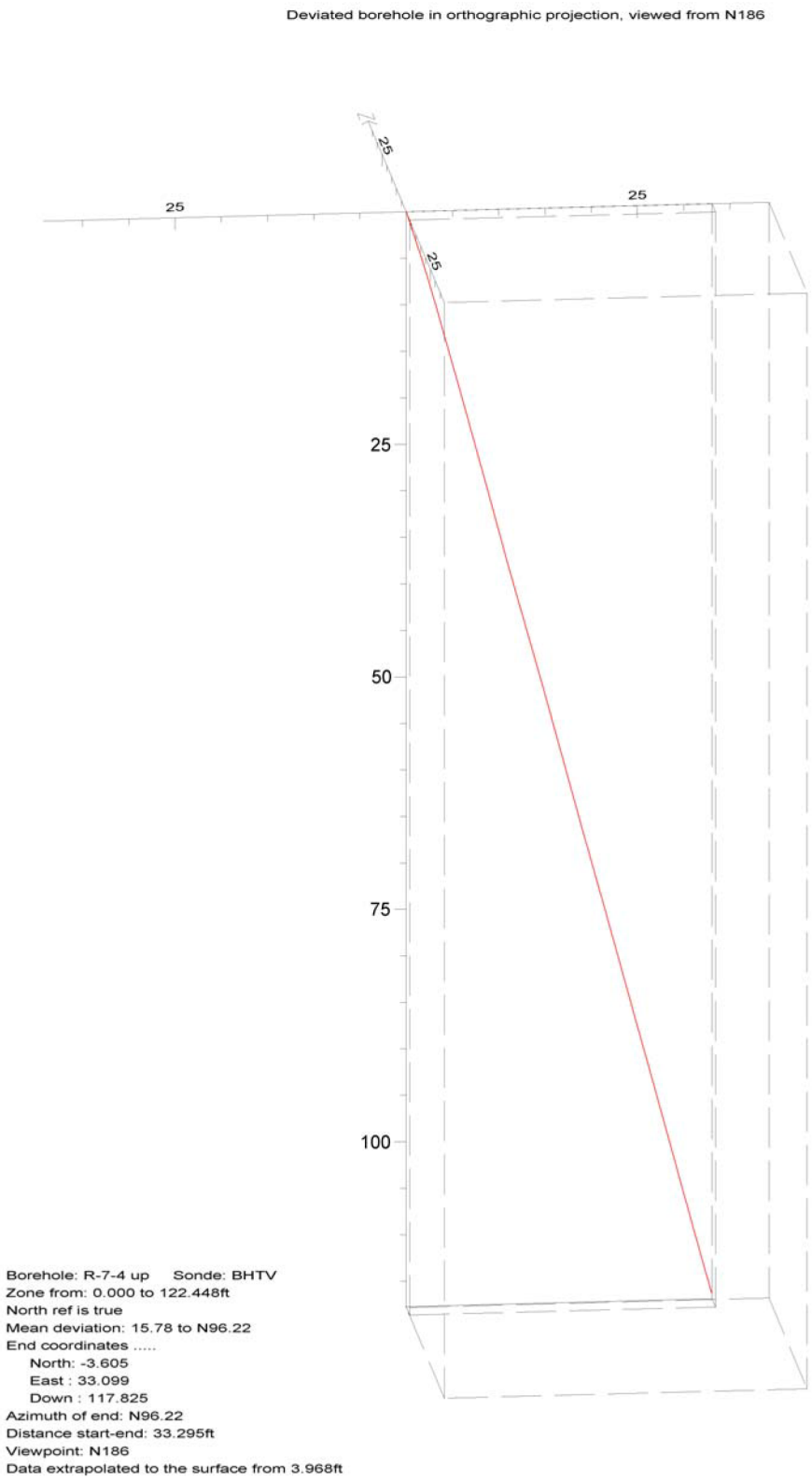


Figure 12. Boring R-7-4, Up Deviation Projection (dimensions in feet)

APPENDIX A

SUSPENSION VELOCITY MEASUREMENT QUALITY ASSURANCE SUSPENSION SOURCE TO RECEIVER ANALYSIS RESULTS

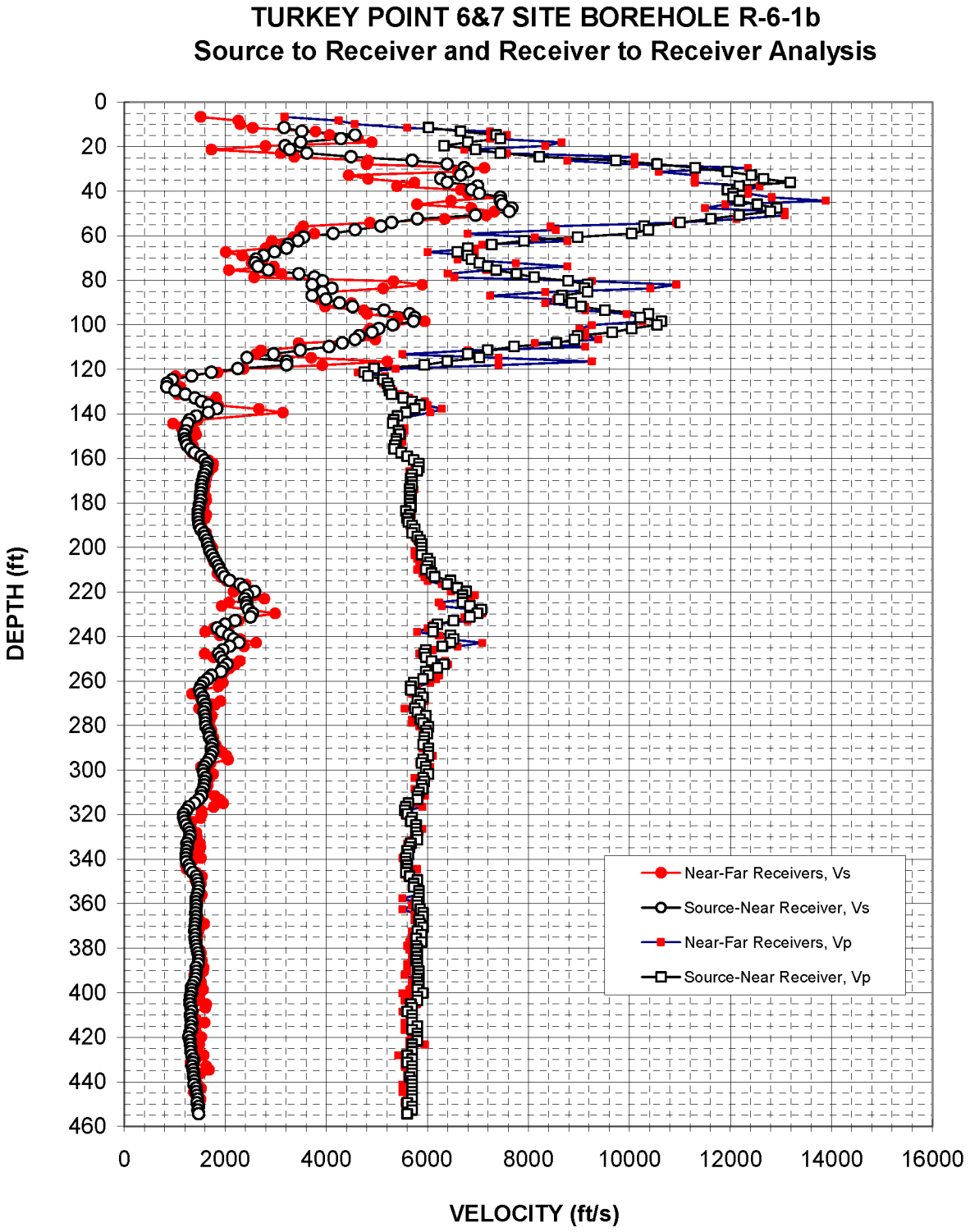


Figure A-1. Boring R-6-1b, R1 - R2 high resolution analysis and S - R1 quality assurance analysis P- and S_H-wave data

Table A-1. Boring R-6-1b, S - R1 quality assurance analysis P- and S_H-wave data

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
11.4	3170	6030	0.31	3.5	960	1840	0.31
13.0	3520	6660	0.31	4.0	1070	2030	0.31
14.7	4570	7360	0.19	4.5	1390	2240	0.19
16.3	4290	7450	0.25	5.0	1310	2270	0.25
18.0	3500	6810	0.32	5.5	1070	2070	0.32
19.6	3190	6330	0.33	6.0	970	1930	0.33
21.2	3280	6960	0.36	6.5	1000	2120	0.36
22.9	3620	7450	0.35	7.0	1100	2270	0.35
24.5	4490	8220	0.29	7.5	1370	2510	0.29
26.2	5700	9740	0.24	8.0	1740	2970	0.24
27.8	6390	10550	0.21	8.5	1950	3220	0.21
29.4	6730	11300	0.22	9.0	2050	3450	0.22
31.1	6810	11940	0.26	9.5	2070	3640	0.26
32.7	6660	12410	0.30	10.0	2030	3780	0.30
34.4	6270	12660	0.34	10.5	1910	3860	0.34
36.0	6390	13190	0.35	11.0	1950	4020	0.35
37.6	6990	12170	0.25	11.5	2130	3710	0.25
39.3	6880	11940	0.25	12.0	2100	3640	0.25
40.9	7030	12060	0.24	12.5	2140	3680	0.24
42.6	7450	12060	0.19	13.0	2270	3680	0.19
44.2	7450	12170	0.20	13.5	2270	3710	0.20
45.8	7490	12530	0.22	14.0	2280	3820	0.22
47.5	7670	12920	0.23	14.5	2340	3940	0.23
49.1	7630	12790	0.22	15.0	2320	3900	0.22
50.8	6960	12170	0.26	15.5	2120	3710	0.26
52.4	5810	11610	0.33	16.0	1770	3540	0.33
54.0	5300	11010	0.35	16.5	1610	3360	0.35
55.7	5080	10290	0.34	17.0	1550	3140	0.34
57.3	4570	10380	0.38	17.5	1390	3160	0.38
59.0	4140	10050	0.40	18.0	1260	3060	0.40
60.6	3560	8980	0.41	18.5	1080	2740	0.41
62.2	3440	7910	0.38	19.0	1050	2410	0.38
63.9	3250	7280	0.38	19.5	990	2220	0.38
65.5	3210	6810	0.36	20.0	980	2070	0.36
67.2	2980	6590	0.37	20.5	910	2010	0.37
68.8	2760	6810	0.40	21.0	840	2070	0.40
70.5	2620	6880	0.42	21.5	800	2100	0.42

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
72.1	2590	7030	0.42
73.7	2650	7190	0.42
75.4	2850	7360	0.41
77.0	3460	7770	0.38
78.7	3770	8120	0.36
80.3	3930	8790	0.38
81.9	3720	9170	0.40
83.6	4110	9110	0.37
85.2	3930	9170	0.39
86.9	3720	8670	0.39
88.5	3990	8610	0.36
90.1	4260	8850	0.35
91.8	4520	9040	0.33
93.4	5150	9520	0.29
95.1	5650	10380	0.29
96.7	5750	10210	0.27
98.3	5730	10640	0.30
100.0	5320	10550	0.33
101.6	5040	10050	0.33
103.3	4910	9660	0.33
104.9	4650	8980	0.32
106.5	4570	8920	0.32
108.2	4320	8550	0.33
109.8	4060	7720	0.31
111.5	3490	7190	0.35
113.1	2960	6810	0.38
114.7	2430	7030	0.43
116.4	3210	6390	0.33
118.0	3210	5940	0.29
119.7	2250	4950	0.37
121.3	1730	4760	0.42
122.9	1340	4830	0.46
124.6	950	5130	0.48
126.2	850	5210	0.49
127.9	850	5230	0.49
129.5	1010	5250	0.48
131.1	1210	5300	0.47
132.8	1400	5530	0.47
134.4	1530	5700	0.46

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
22.0	790	2140	0.42
22.5	810	2190	0.42
23.0	870	2240	0.41
23.5	1050	2370	0.38
24.0	1150	2470	0.36
24.5	1200	2680	0.38
25.0	1130	2800	0.40
25.5	1250	2780	0.37
26.0	1200	2800	0.39
26.5	1130	2640	0.39
27.0	1220	2630	0.36
27.5	1300	2700	0.35
28.0	1380	2760	0.33
28.5	1570	2900	0.29
29.0	1720	3160	0.29
29.5	1750	3110	0.27
30.0	1750	3240	0.30
30.5	1620	3220	0.33
31.0	1540	3060	0.33
31.5	1500	2950	0.33
32.0	1420	2740	0.32
32.5	1390	2720	0.32
33.0	1320	2610	0.33
33.5	1240	2350	0.31
34.0	1060	2190	0.35
34.5	900	2070	0.38
35.0	740	2140	0.43
35.5	980	1950	0.33
36.0	980	1810	0.29
36.5	690	1510	0.37
37.0	530	1450	0.42
37.5	410	1470	0.46
38.0	290	1560	0.48
38.5	260	1590	0.49
39.0	260	1590	0.49
39.5	310	1600	0.48
40.0	370	1610	0.47
40.5	430	1690	0.47
41.0	470	1740	0.46

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
136.1	1670	5860	0.46
137.7	1830	5750	0.44
139.3	1670	5580	0.45
141.0	1430	5410	0.46
142.6	1300	5340	0.47
144.3	1260	5320	0.47
147.6	1220	5430	0.47
149.2	1190	5460	0.48
151.2	1200	5390	0.47
152.5	1220	5390	0.47
154.1	1250	5360	0.47
155.8	1320	5340	0.47
157.4	1400	5480	0.47
159.0	1530	5600	0.46
160.7	1590	5730	0.46
162.3	1640	5830	0.46
164.0	1630	5830	0.46
165.6	1630	5810	0.46
167.2	1590	5700	0.46
168.9	1570	5680	0.46
170.5	1550	5700	0.46
172.2	1530	5700	0.46
173.8	1530	5650	0.46
175.4	1510	5650	0.46
177.1	1510	5680	0.46
178.7	1520	5650	0.46
180.4	1490	5650	0.46
182.0	1490	5680	0.46
183.6	1470	5580	0.46
185.3	1470	5650	0.46
186.9	1470	5600	0.46
188.6	1470	5630	0.46
190.2	1490	5700	0.46
191.8	1520	5750	0.46
193.5	1580	5700	0.46
195.1	1600	5810	0.46
196.8	1640	5860	0.46
198.4	1660	5890	0.46
200.0	1680	5890	0.46

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
41.5	510	1790	0.46
42.0	560	1750	0.44
42.5	510	1700	0.45
43.0	440	1650	0.46
43.5	400	1630	0.47
44.0	380	1620	0.47
45.0	370	1660	0.47
45.5	360	1660	0.48
46.1	370	1640	0.47
46.5	370	1640	0.47
47.0	380	1640	0.47
47.5	400	1630	0.47
48.0	430	1670	0.47
48.5	460	1710	0.46
49.0	490	1750	0.46
49.5	500	1780	0.46
50.0	500	1780	0.46
50.5	500	1770	0.46
51.0	480	1740	0.46
51.5	480	1730	0.46
52.0	470	1740	0.46
52.5	470	1740	0.46
53.0	470	1720	0.46
53.5	460	1720	0.46
54.0	460	1730	0.46
54.5	460	1720	0.46
55.0	460	1720	0.46
55.5	450	1730	0.46
56.0	450	1700	0.46
56.5	450	1720	0.46
57.0	450	1710	0.46
57.5	450	1720	0.46
58.0	450	1740	0.46
58.5	460	1750	0.46
59.0	480	1740	0.46
59.5	490	1770	0.46
60.0	500	1790	0.46
60.5	510	1790	0.46
61.0	510	1790	0.46

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
201.7	1700	5890	0.45
203.3	1740	5890	0.45
205.0	1780	6000	0.45
206.6	1820	6060	0.45
208.2	1860	6000	0.45
209.9	1900	5970	0.44
211.5	1940	6090	0.44
213.2	1990	6150	0.44
214.8	2090	6460	0.44
216.4	2290	6390	0.43
218.1	2370	6590	0.43
219.7	2580	6770	0.41
221.4	2440	6700	0.42
223.0	2390	6700	0.43
224.7	2430	6700	0.42
226.3	2430	6840	0.43
227.9	2460	7070	0.43
229.6	2540	6990	0.42
231.2	2500	6840	0.42
232.9	2200	6530	0.44
234.5	2000	6210	0.44
236.1	1850	6120	0.45
237.8	1930	6120	0.44
239.4	2080	6460	0.44
241.1	2170	6530	0.44
242.7	2280	6460	0.43
244.3	2090	6300	0.44
246.0	1950	5970	0.44
247.6	1870	5940	0.44
249.3	1920	5970	0.44
250.9	1970	6090	0.44
252.5	2040	6330	0.44
254.2	1950	6210	0.44
255.8	1920	5970	0.44
257.5	1730	6030	0.45
259.1	1660	5920	0.46
260.7	1570	5730	0.46
262.4	1520	5680	0.46
264.0	1490	5680	0.46

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
61.5	520	1790	0.45
62.0	530	1790	0.45
62.5	540	1830	0.45
63.0	560	1850	0.45
63.5	570	1830	0.45
64.0	580	1820	0.44
64.5	590	1860	0.44
65.0	610	1870	0.44
65.5	640	1970	0.44
66.0	700	1950	0.43
66.5	720	2010	0.43
67.0	790	2060	0.41
67.5	740	2040	0.42
68.0	730	2040	0.43
68.5	740	2040	0.42
69.0	740	2090	0.43
69.5	750	2160	0.43
70.0	770	2130	0.42
70.5	760	2090	0.42
71.0	670	1990	0.44
71.5	610	1890	0.44
72.0	560	1860	0.45
72.5	590	1860	0.44
73.0	630	1970	0.44
73.5	660	1990	0.44
74.0	690	1970	0.43
74.5	640	1920	0.44
75.0	600	1820	0.44
75.5	570	1810	0.44
76.0	580	1820	0.44
76.5	600	1860	0.44
77.0	620	1930	0.44
77.5	600	1890	0.44
78.0	580	1820	0.44
78.5	530	1840	0.45
79.0	510	1800	0.46
79.5	480	1750	0.46
80.0	460	1730	0.46
80.5	460	1730	0.46

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
265.7	1520	5860	0.46
267.3	1560	5920	0.46
268.9	1560	5810	0.46
270.6	1610	5860	0.46
272.2	1610	5750	0.46
273.9	1580	5810	0.46
275.5	1600	5970	0.46
277.1	1610	5860	0.46
278.8	1610	5920	0.46
280.4	1620	6030	0.46
282.1	1670	5970	0.46
283.7	1690	6000	0.46
285.3	1690	5940	0.46
287.0	1730	5940	0.45
288.6	1750	5920	0.45
290.3	1730	6030	0.45
291.9	1750	6030	0.45
293.5	1720	6030	0.46
295.2	1680	5920	0.46
296.8	1630	5890	0.46
298.5	1590	5970	0.46
300.1	1560	5970	0.46
301.8	1580	6030	0.46
303.4	1610	5920	0.46
305.0	1590	5940	0.46
306.7	1590	5890	0.46
308.3	1570	5920	0.46
310.0	1530	5830	0.46
311.6	1530	5810	0.46
313.2	1470	5810	0.47
314.9	1390	5630	0.47
316.5	1280	5580	0.47
318.2	1230	5550	0.47
319.8	1180	5600	0.48
321.4	1180	5700	0.48
323.1	1200	5680	0.48
324.7	1230	5780	0.48
326.4	1280	5780	0.47
328.0	1300	5780	0.47

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
81.0	460	1790	0.46
81.5	480	1800	0.46
82.0	480	1770	0.46
82.5	490	1790	0.46
83.0	490	1750	0.46
83.5	480	1770	0.46
84.0	490	1820	0.46
84.5	490	1790	0.46
85.0	490	1800	0.46
85.5	490	1840	0.46
86.0	510	1820	0.46
86.5	520	1830	0.46
87.0	520	1810	0.46
87.5	530	1810	0.45
88.0	530	1800	0.45
88.5	530	1840	0.45
89.0	530	1840	0.45
89.5	520	1840	0.46
90.0	510	1800	0.46
90.5	500	1790	0.46
91.0	480	1820	0.46
91.5	480	1820	0.46
92.0	480	1840	0.46
92.5	490	1800	0.46
93.0	490	1810	0.46
93.5	480	1790	0.46
94.0	480	1800	0.46
94.5	470	1780	0.46
95.0	470	1770	0.46
95.5	450	1770	0.47
96.0	420	1720	0.47
96.5	390	1700	0.47
97.0	380	1690	0.47
97.5	360	1710	0.48
98.0	360	1740	0.48
98.5	370	1730	0.48
99.0	370	1760	0.48
99.5	390	1760	0.47
100.0	400	1760	0.47

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
329.6	1310	5810	0.47
331.3	1280	5810	0.47
332.9	1240	5680	0.47
334.6	1250	5650	0.47
336.2	1230	5600	0.47
337.8	1230	5630	0.47
339.5	1220	5580	0.47
341.1	1230	5580	0.47
342.8	1280	5600	0.47
344.4	1310	5600	0.47
346.0	1360	5580	0.47
347.7	1430	5650	0.47
349.3	1450	5810	0.47
351.0	1460	5730	0.47
352.6	1480	5730	0.46
354.2	1470	5830	0.47
355.9	1450	5830	0.47
357.5	1420	5830	0.47
359.2	1420	5810	0.47
360.8	1430	5810	0.47
362.4	1420	5860	0.47
364.1	1420	5920	0.47
365.7	1420	5920	0.47
367.4	1420	5830	0.47
369.0	1410	5860	0.47
370.6	1400	5920	0.47
372.3	1400	5810	0.47
373.9	1410	5890	0.47
375.6	1400	5780	0.47
377.2	1420	5890	0.47
378.9	1420	5780	0.47
380.5	1440	5810	0.47
382.1	1460	5780	0.47
383.8	1480	5810	0.47
385.4	1470	5780	0.47
387.1	1470	5810	0.47
388.7	1420	5810	0.47
390.3	1430	5830	0.47
392.0	1420	5830	0.47

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
100.5	400	1770	0.47
101.0	390	1770	0.47
101.5	380	1730	0.47
102.0	380	1720	0.47
102.5	380	1710	0.47
103.0	370	1720	0.47
103.5	370	1700	0.47
104.0	380	1700	0.47
104.5	390	1710	0.47
105.0	400	1710	0.47
105.5	410	1700	0.47
106.0	440	1720	0.47
106.5	440	1770	0.47
107.0	450	1750	0.47
107.5	450	1750	0.46
108.0	450	1780	0.47
108.5	440	1780	0.47
109.0	430	1780	0.47
109.5	430	1770	0.47
110.0	440	1770	0.47
110.5	430	1790	0.47
111.0	430	1800	0.47
111.5	430	1800	0.47
112.0	430	1780	0.47
112.5	430	1790	0.47
113.0	430	1800	0.47
113.5	430	1770	0.47
114.0	430	1790	0.47
114.5	430	1760	0.47
115.0	430	1790	0.47
115.5	430	1760	0.47
116.0	440	1770	0.47
116.5	440	1760	0.47
117.0	450	1770	0.47
117.5	450	1760	0.47
118.0	450	1770	0.47
118.5	430	1770	0.47
119.0	440	1780	0.47
119.5	430	1780	0.47

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-6-1b

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
393.6	1410	5810	0.47
395.3	1390	5810	0.47
396.9	1350	5830	0.47
398.5	1330	5810	0.47
400.2	1330	5920	0.47
401.8	1310	5810	0.47
403.5	1310	5810	0.47
405.1	1310	5680	0.47
406.7	1330	5700	0.47
408.4	1340	5600	0.47
410.0	1310	5700	0.47
411.7	1320	5700	0.47
413.3	1340	5700	0.47
414.9	1320	5810	0.47
416.6	1330	5700	0.47
418.2	1300	5810	0.47
419.9	1280	5810	0.47
421.5	1310	5810	0.47
423.1	1310	5700	0.47
424.8	1320	5700	0.47
426.4	1320	5700	0.47
428.1	1340	5600	0.47
429.7	1370	5700	0.47
431.3	1360	5600	0.47
433.0	1350	5700	0.47
434.6	1370	5700	0.47
436.3	1370	5700	0.47
437.9	1370	5650	0.47
439.5	1390	5700	0.47
441.2	1390	5700	0.47
442.8	1420	5700	0.47
444.5	1430	5700	0.47
446.1	1440	5700	0.47
447.7	1460	5700	0.47
449.4	1440	5600	0.46
451.0	1480	5700	0.46
452.7	1460	5700	0.46
454.3	1480	5600	0.46

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
120.0	430	1770	0.47
120.5	420	1770	0.47
121.0	410	1780	0.47
121.5	410	1770	0.47
122.0	410	1800	0.47
122.5	400	1770	0.47
123.0	400	1770	0.47
123.5	400	1730	0.47
124.0	400	1740	0.47
124.5	410	1710	0.47
125.0	400	1740	0.47
125.5	400	1740	0.47
126.0	410	1740	0.47
126.5	400	1770	0.47
127.0	410	1740	0.47
127.5	400	1770	0.47
128.0	390	1770	0.47
128.5	400	1770	0.47
129.0	400	1740	0.47
129.5	400	1740	0.47
130.0	400	1740	0.47
130.5	410	1710	0.47
131.0	420	1740	0.47
131.5	410	1710	0.47
132.0	410	1740	0.47
132.5	420	1740	0.47
133.0	420	1740	0.47
133.5	420	1720	0.47
134.0	420	1740	0.47
134.5	420	1740	0.47
135.0	430	1740	0.47
135.5	440	1740	0.47
136.0	440	1740	0.47
136.5	440	1740	0.47
137.0	440	1710	0.46
137.5	450	1740	0.46
138.0	450	1740	0.46
138.5	450	1710	0.46

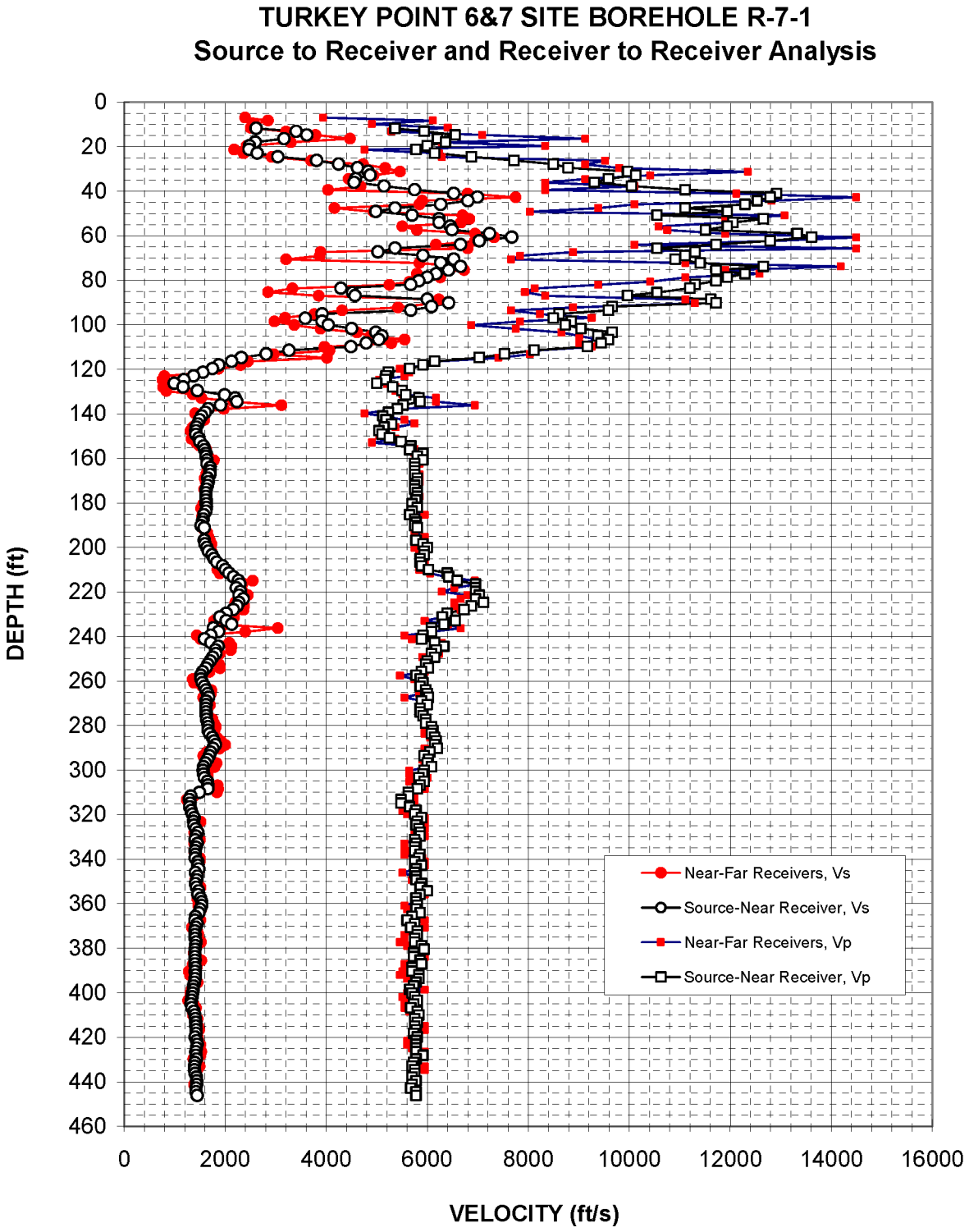


Figure A-2. Boring R-7-1, R1 - R2 high resolution analysis and S - R1 quality assurance analysis P- and S_H-wave data

Table A-2. Boring R-7-1, S - R1 quality assurance analysis P- and S_H-wave data

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
11.7	2620	5360	0.34	3.6	800	1640	0.34
13.0	3400	5940	0.26	4.0	1040	1810	0.26
14.7	3620	6560	0.28	4.5	1100	2000	0.28
16.3	3170	6210	0.32	5.0	960	1890	0.32
18.0	2590	6360	0.40	5.5	790	1940	0.40
19.6	2480	6000	0.40	6.0	760	1830	0.40
21.2	2470	5780	0.39	6.5	750	1760	0.39
22.9	2640	6150	0.39	7.0	800	1870	0.39
24.5	3040	6880	0.38	7.5	930	2100	0.38
26.2	3810	7720	0.34	8.0	1160	2350	0.34
27.8	4250	8500	0.33	8.5	1290	2590	0.33
29.4	4620	8790	0.31	9.0	1410	2680	0.31
31.1	4830	9970	0.35	9.5	1470	3040	0.35
32.7	4870	10130	0.35	10.0	1480	3090	0.35
34.4	4590	9590	0.35	10.5	1400	2920	0.35
36.0	4550	9310	0.34	11.0	1390	2840	0.34
37.6	5150	10050	0.32	11.5	1570	3060	0.32
39.3	5750	11110	0.32	12.0	1750	3380	0.32
40.9	6530	12920	0.33	12.5	1990	3940	0.33
42.6	6990	12790	0.29	13.0	2130	3900	0.29
44.2	6810	12530	0.29	13.5	2070	3820	0.29
45.8	6270	12290	0.32	14.0	1910	3750	0.32
47.5	5360	11110	0.35	14.5	1640	3380	0.35
49.1	4980	11940	0.39	15.0	1520	3640	0.39
50.8	5700	10550	0.29	15.5	1740	3220	0.29
52.4	6240	12660	0.34	16.0	1900	3860	0.34
54.0	6240	12060	0.32	16.5	1900	3680	0.32
55.7	6460	11940	0.29	17.0	1970	3640	0.29
57.3	6490	11510	0.27	17.5	1980	3510	0.27
59.0	7230	13330	0.29	18.0	2210	4060	0.29
60.6	7670	13610	0.27	18.5	2340	4150	0.27
62.2	7030	12790	0.28	19.0	2140	3900	0.28
63.9	6660	11720	0.26	19.5	2030	3570	0.26
65.5	5360	10550	0.33	20.0	1640	3220	0.33
67.2	5020	11300	0.38	20.5	1530	3450	0.38
68.8	5920	11110	0.30	21.0	1800	3380	0.30
70.5	6530	10910	0.22	21.5	1990	3330	0.22
72.1	6270	11410	0.28	22.0	1910	3480	0.28

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
73.7	6660	12660	0.31
75.4	6430	11720	0.29
77.0	6180	12290	0.33
78.7	6000	11940	0.33
80.3	5830	11720	0.34
81.9	5680	11300	0.33
83.6	4290	11200	0.41
85.5	4520	10550	0.39
86.9	4570	9970	0.37
88.5	6000	11610	0.32
90.1	6430	11720	0.29
91.8	6090	9660	0.17
93.4	5680	9590	0.23
95.1	3920	8610	0.37
97.0	3590	8500	0.39
98.3	3920	8850	0.38
100.0	4040	8730	0.36
101.6	4510	9040	0.33
103.3	4980	9660	0.32
104.9	5100	9380	0.29
106.5	5040	9590	0.31
108.2	4800	9450	0.33
109.8	4490	9170	0.34
111.5	3260	8120	0.40
113.1	2810	7540	0.42
114.7	2320	7030	0.44
116.4	2130	6150	0.43
118.0	1880	5920	0.44
119.7	1750	5650	0.45
121.3	1560	5230	0.45
122.9	1380	5190	0.46
124.6	1180	5170	0.47
126.2	1000	5000	0.48
127.9	1170	5320	0.47
129.5	1450	5500	0.46
131.5	1990	5580	0.43
132.8	2200	5830	0.42
134.4	2230	5860	0.42
136.1	1910	5530	0.43
137.7	1670	5410	0.45

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
22.5	2030	3860	0.31
23.0	1960	3570	0.29
23.5	1880	3750	0.33
24.0	1830	3640	0.33
24.5	1780	3570	0.34
25.0	1730	3450	0.33
25.5	1310	3410	0.41
26.1	1380	3220	0.39
26.5	1390	3040	0.37
27.0	1830	3540	0.32
27.5	1960	3570	0.29
28.0	1860	2950	0.17
28.5	1730	2920	0.23
29.0	1190	2630	0.37
29.6	1090	2590	0.39
30.0	1190	2700	0.38
30.5	1230	2660	0.36
31.0	1370	2760	0.33
31.5	1520	2950	0.32
32.0	1560	2860	0.29
32.5	1540	2920	0.31
33.0	1460	2880	0.33
33.5	1370	2800	0.34
34.0	990	2470	0.40
34.5	860	2300	0.42
35.0	710	2140	0.44
35.5	650	1870	0.43
36.0	570	1800	0.44
36.5	530	1720	0.45
37.0	480	1590	0.45
37.5	420	1580	0.46
38.0	360	1580	0.47
38.5	300	1530	0.48
39.0	360	1620	0.47
39.5	440	1680	0.46
40.1	610	1700	0.43
40.5	670	1780	0.42
41.0	680	1790	0.42
41.5	580	1690	0.43
42.0	510	1650	0.45

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
139.3	1610	5230	0.45
141.0	1540	5130	0.45
142.6	1490	5190	0.45
144.6	1460	5300	0.46
145.9	1430	5150	0.46
147.6	1420	5040	0.46
149.2	1420	5100	0.46
150.8	1480	5250	0.46
152.5	1500	5480	0.46
154.4	1570	5680	0.46
156.1	1600	5650	0.46
157.7	1620	5920	0.46
159.0	1620	5810	0.46
160.7	1640	5920	0.46
162.3	1640	5750	0.46
164.0	1710	5750	0.45
165.6	1700	5750	0.45
167.2	1700	5750	0.45
168.9	1660	5810	0.46
170.5	1670	5810	0.45
172.2	1650	5750	0.46
173.8	1630	5750	0.46
175.4	1620	5810	0.46
177.1	1620	5810	0.46
178.7	1620	5780	0.46
180.4	1630	5700	0.46
182.0	1630	5810	0.46
183.6	1620	5700	0.46
185.3	1580	5650	0.46
187.2	1560	5750	0.46
188.6	1550	5780	0.46
190.2	1530	5750	0.46
191.2	1590	5810	0.46
196.8	1590	5780	0.46
198.4	1600	5920	0.46
200.0	1640	6000	0.46
201.7	1670	5940	0.46
203.3	1740	5940	0.45
205.0	1780	5860	0.45
206.6	1830	5860	0.45

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
42.5	490	1590	0.45
43.0	470	1560	0.45
43.5	460	1580	0.45
44.1	440	1610	0.46
44.5	440	1570	0.46
45.0	430	1540	0.46
45.5	430	1560	0.46
46.0	450	1600	0.46
46.5	460	1670	0.46
47.1	480	1730	0.46
47.6	490	1720	0.46
48.1	490	1800	0.46
48.5	490	1770	0.46
49.0	500	1800	0.46
49.5	500	1750	0.46
50.0	520	1750	0.45
50.5	520	1750	0.45
51.0	520	1750	0.45
51.5	510	1770	0.46
52.0	510	1770	0.45
52.5	500	1750	0.46
53.0	500	1750	0.46
53.5	490	1770	0.46
54.0	490	1770	0.46
54.5	490	1760	0.46
55.0	500	1740	0.46
55.5	500	1770	0.46
56.0	490	1740	0.46
56.5	480	1720	0.46
57.1	480	1750	0.46
57.5	470	1760	0.46
58.0	460	1750	0.46
58.3	480	1770	0.46
60.0	480	1760	0.46
60.5	490	1800	0.46
61.0	500	1830	0.46
61.5	510	1810	0.46
62.0	530	1810	0.45
62.5	540	1790	0.45
63.0	560	1790	0.45

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
208.2	1950	5890	0.44	63.5	590	1790	0.44
209.9	2010	6030	0.44	64.0	610	1840	0.44
211.5	2080	6390	0.44	64.5	630	1950	0.44
213.2	2170	6430	0.44	65.0	660	1960	0.44
214.8	2260	6590	0.43	65.5	690	2010	0.43
216.4	2290	6960	0.44	66.0	700	2120	0.44
218.1	2220	6960	0.44	66.5	680	2120	0.44
219.7	2300	6960	0.44	67.0	700	2120	0.44
221.4	2280	7030	0.44	67.5	690	2140	0.44
223.0	2360	6960	0.43	68.0	720	2120	0.43
224.7	2280	7110	0.44	68.5	690	2170	0.44
226.3	2240	6880	0.44	69.0	680	2100	0.44
227.9	2160	6730	0.44	69.5	660	2050	0.44
229.6	2020	6390	0.44	70.0	620	1950	0.44
231.2	1900	6300	0.45	70.5	580	1920	0.45
232.9	2020	6560	0.45	71.0	620	2000	0.45
234.5	2130	6330	0.44	71.5	650	1930	0.44
236.1	1770	6090	0.45	72.0	540	1860	0.45
237.8	1870	6090	0.45	72.5	570	1860	0.45
239.4	1720	5920	0.45	73.0	520	1800	0.45
241.1	1590	5890	0.46	73.5	480	1790	0.46
242.7	1720	6150	0.46	74.0	520	1870	0.46
244.3	1860	6330	0.45	74.5	570	1930	0.45
246.0	1810	6180	0.45	75.0	550	1880	0.45
247.6	1820	6090	0.45	75.5	550	1860	0.45
249.3	1750	6150	0.46	76.0	530	1870	0.46
250.9	1710	6000	0.46	76.5	520	1830	0.46
252.5	1660	5970	0.46	77.0	510	1820	0.46
254.2	1620	6030	0.46	77.5	490	1840	0.46
255.8	1560	5890	0.46	78.0	470	1790	0.46
257.5	1520	5780	0.46	78.5	460	1760	0.46
259.1	1530	5860	0.46	79.0	460	1790	0.46
260.7	1550	5920	0.46	79.5	470	1800	0.46
262.4	1590	5860	0.46	80.0	480	1790	0.46
264.0	1620	5970	0.46	80.5	490	1820	0.46
265.7	1660	6000	0.46	81.0	510	1830	0.46
267.3	1670	6030	0.46	81.5	510	1840	0.46
268.9	1620	5890	0.46	82.0	490	1790	0.46
270.6	1620	6000	0.46	82.5	490	1830	0.46
272.2	1620	5860	0.46	83.0	490	1790	0.46

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
273.9	1620	5860	0.46	83.5	490	1790	0.46
275.5	1630	5920	0.46	84.0	500	1800	0.46
277.1	1630	5970	0.46	84.5	500	1820	0.46
278.8	1660	5970	0.46	85.0	510	1820	0.46
280.4	1670	6090	0.46	85.5	510	1860	0.46
282.1	1670	6120	0.46	86.0	510	1860	0.46
283.7	1700	6090	0.46	86.5	520	1860	0.46
285.3	1750	6150	0.46	87.0	530	1870	0.46
287.0	1780	6180	0.45	87.5	540	1880	0.45
288.6	1810	6150	0.45	88.0	550	1870	0.45
290.3	1760	6210	0.46	88.5	540	1890	0.46
291.9	1720	6060	0.46	89.0	520	1850	0.46
293.5	1690	5940	0.46	89.5	510	1810	0.46
295.2	1650	6030	0.46	90.0	500	1840	0.46
296.8	1610	6000	0.46	90.5	490	1830	0.46
298.5	1570	6090	0.46	91.0	480	1860	0.46
300.1	1570	5940	0.46	91.5	480	1810	0.46
301.8	1570	5920	0.46	92.0	480	1800	0.46
303.4	1590	5830	0.46	92.5	480	1780	0.46
305.0	1650	5940	0.46	93.0	500	1810	0.46
306.7	1660	5860	0.46	93.5	510	1790	0.46
308.3	1660	5810	0.46	94.0	510	1770	0.46
310.0	1490	5630	0.46	94.5	460	1720	0.46
311.6	1320	5630	0.47	95.0	400	1720	0.47
313.2	1290	5480	0.47	95.5	390	1670	0.47
314.9	1310	5480	0.47	96.0	400	1670	0.47
316.5	1300	5650	0.47	96.5	400	1720	0.47
318.2	1330	5780	0.47	97.0	410	1760	0.47
319.8	1350	5750	0.47	97.5	410	1750	0.47
321.4	1390	5890	0.47	98.0	420	1790	0.47
323.1	1380	5810	0.47	98.5	420	1770	0.47
324.7	1380	5780	0.47	99.0	420	1760	0.47
326.4	1420	5830	0.47	99.5	430	1780	0.47
328.0	1460	5860	0.47	100.0	440	1790	0.47
329.6	1430	5860	0.47	100.5	430	1790	0.47
331.3	1410	5750	0.47	101.0	430	1750	0.47
332.9	1450	5780	0.47	101.5	440	1760	0.47
334.6	1430	5750	0.47	102.0	430	1750	0.47
336.2	1410	5750	0.47	102.5	430	1750	0.47
337.8	1410	5860	0.47	103.0	430	1790	0.47

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
339.5	1410	5830	0.47	103.5	430	1780	0.47
341.1	1460	5750	0.47	104.0	440	1750	0.47
342.8	1460	5890	0.47	104.5	440	1790	0.47
344.4	1480	5780	0.46	105.0	450	1760	0.46
346.0	1410	5750	0.47	105.5	430	1750	0.47
347.7	1450	5780	0.47	106.0	440	1760	0.47
349.3	1440	5780	0.47	106.5	440	1760	0.47
351.0	1410	5890	0.47	107.0	430	1790	0.47
352.6	1430	5860	0.47	107.5	440	1790	0.47
354.2	1470	6000	0.47	108.0	450	1830	0.47
355.9	1460	5860	0.47	108.5	440	1790	0.47
357.5	1510	5780	0.46	109.0	460	1760	0.46
359.2	1540	5780	0.46	109.5	470	1760	0.46
360.8	1540	5810	0.46	110.0	470	1770	0.46
362.4	1510	5780	0.46	110.5	460	1760	0.46
364.1	1480	5860	0.47	111.0	450	1790	0.47
365.7	1410	5700	0.47	111.5	430	1740	0.47
367.4	1400	5600	0.47	112.0	430	1710	0.47
369.0	1450	5750	0.47	112.5	440	1750	0.47
370.6	1420	5680	0.47	113.0	430	1730	0.47
372.3	1400	5810	0.47	113.5	430	1770	0.47
373.9	1410	5810	0.47	114.0	430	1770	0.47
375.6	1410	5750	0.47	114.5	430	1750	0.47
377.2	1430	5750	0.47	115.0	430	1750	0.47
378.9	1410	5890	0.47	115.5	430	1790	0.47
380.5	1410	5940	0.47	116.0	430	1810	0.47
382.1	1400	5730	0.47	116.5	430	1750	0.47
383.8	1400	5730	0.47	117.0	430	1750	0.47
385.4	1410	5860	0.47	117.5	430	1790	0.47
387.1	1400	5890	0.47	118.0	430	1790	0.47
388.7	1410	5700	0.47	118.5	430	1740	0.47
390.3	1410	5700	0.47	119.0	430	1740	0.47
392.0	1410	5830	0.47	119.5	430	1780	0.47
393.6	1410	5830	0.47	120.0	430	1780	0.47
395.3	1390	5780	0.47	120.5	420	1760	0.47
396.9	1380	5730	0.47	121.0	420	1750	0.47
398.5	1370	5650	0.47	121.5	420	1720	0.47
400.2	1360	5700	0.47	122.0	410	1740	0.47
401.8	1350	5750	0.47	122.5	410	1750	0.47
403.5	1340	5810	0.47	123.0	410	1770	0.47

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole R-7-1

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
405.1	1320	5730	0.47
406.7	1340	5680	0.47
408.4	1380	5810	0.47
410.0	1400	5830	0.47
411.7	1410	5750	0.47
413.3	1420	5810	0.47
414.9	1420	5750	0.47
416.6	1430	5780	0.47
418.2	1430	5730	0.47
419.9	1410	5810	0.47
421.5	1440	5780	0.47
423.1	1450	5780	0.47
424.8	1430	5780	0.47
426.4	1420	5780	0.47
428.1	1430	5920	0.47
429.7	1430	5780	0.47
431.3	1400	5730	0.47
433.0	1390	5700	0.47
434.6	1390	5750	0.47
436.3	1410	5750	0.47
437.9	1430	5700	0.47
439.5	1440	5780	0.47
441.2	1440	5700	0.47
442.8	1430	5680	0.47
444.5	1430	5780	0.47
446.1	1450	5780	0.47

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
123.5	400	1750	0.47
124.0	410	1730	0.47
124.5	420	1770	0.47
125.0	430	1780	0.47
125.5	430	1750	0.47
126.0	430	1770	0.47
126.5	430	1750	0.47
127.0	430	1760	0.47
127.5	430	1750	0.47
128.0	430	1770	0.47
128.5	440	1760	0.47
129.0	440	1760	0.47
129.5	440	1760	0.47
130.0	430	1760	0.47
130.5	430	1800	0.47
131.0	440	1760	0.47
131.5	430	1750	0.47
132.0	420	1740	0.47
132.5	420	1750	0.47
133.0	430	1750	0.47
133.5	440	1740	0.47
134.0	440	1760	0.47
134.5	440	1740	0.47
135.0	430	1730	0.47
135.5	430	1760	0.47
136.0	440	1760	0.47

APPENDIX B

ACOUSTIC TELEVIEWER BASED CALIPER LOGS

GEOVision geophysical services

BHTV DATA PROCESSING
RGLDIP vsn 6.2
ACOUSTIC CALIPER LOG

RIZZO

Borehole: R-6-1b Up

TURKEY POINT

top of borehole.....
East: _
North:_
Elev: _

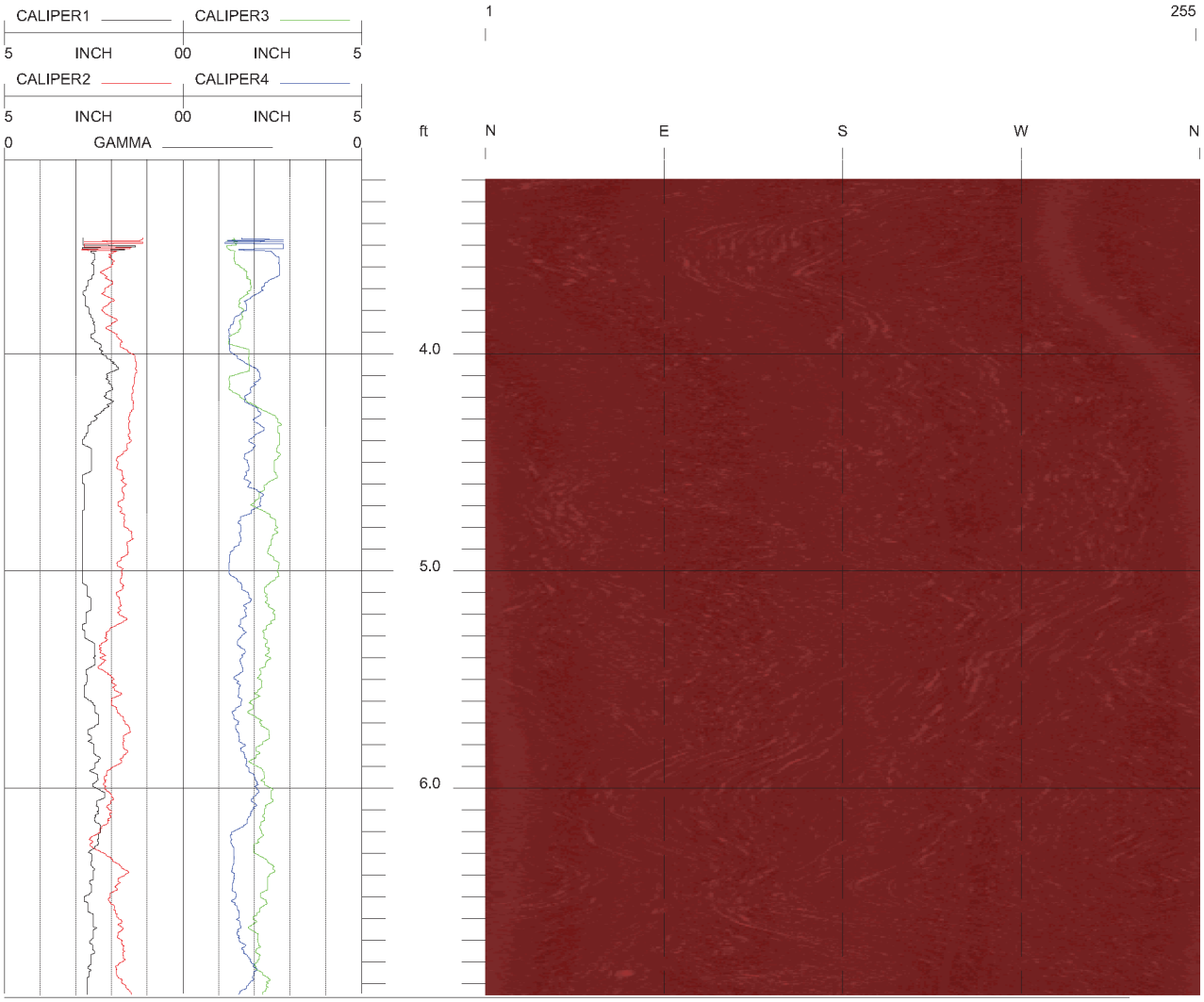
North ref. is true
Depth units are feet
Vertical scale: 1/10

Zone from 464.376 to 3.108ft

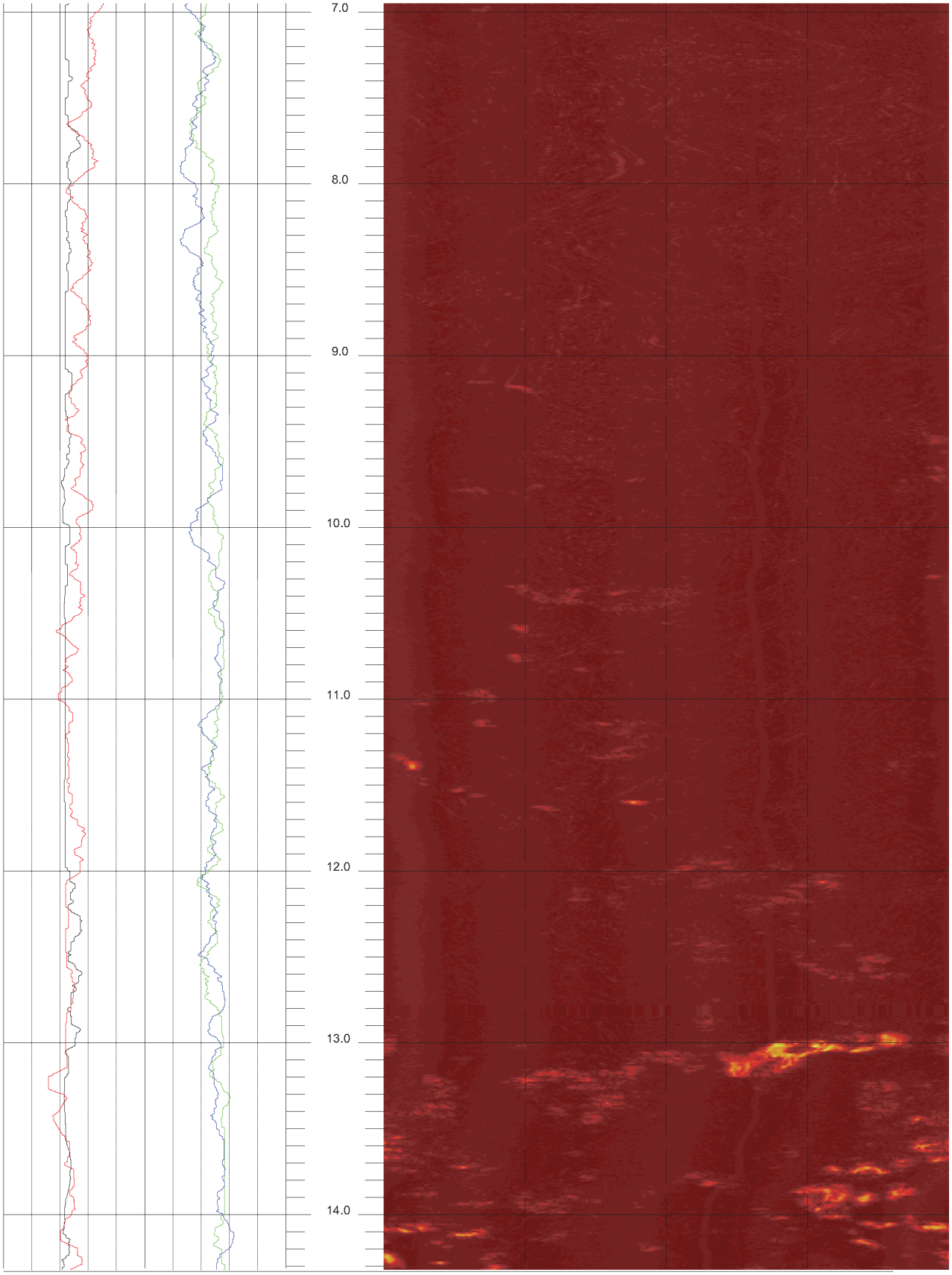
Borehole diam: 5.000inch
Vertical = borehole-axis
Image: Amplitude

Depth interval 0.004ft, Filter length 0.124ft

REFLECTANCE

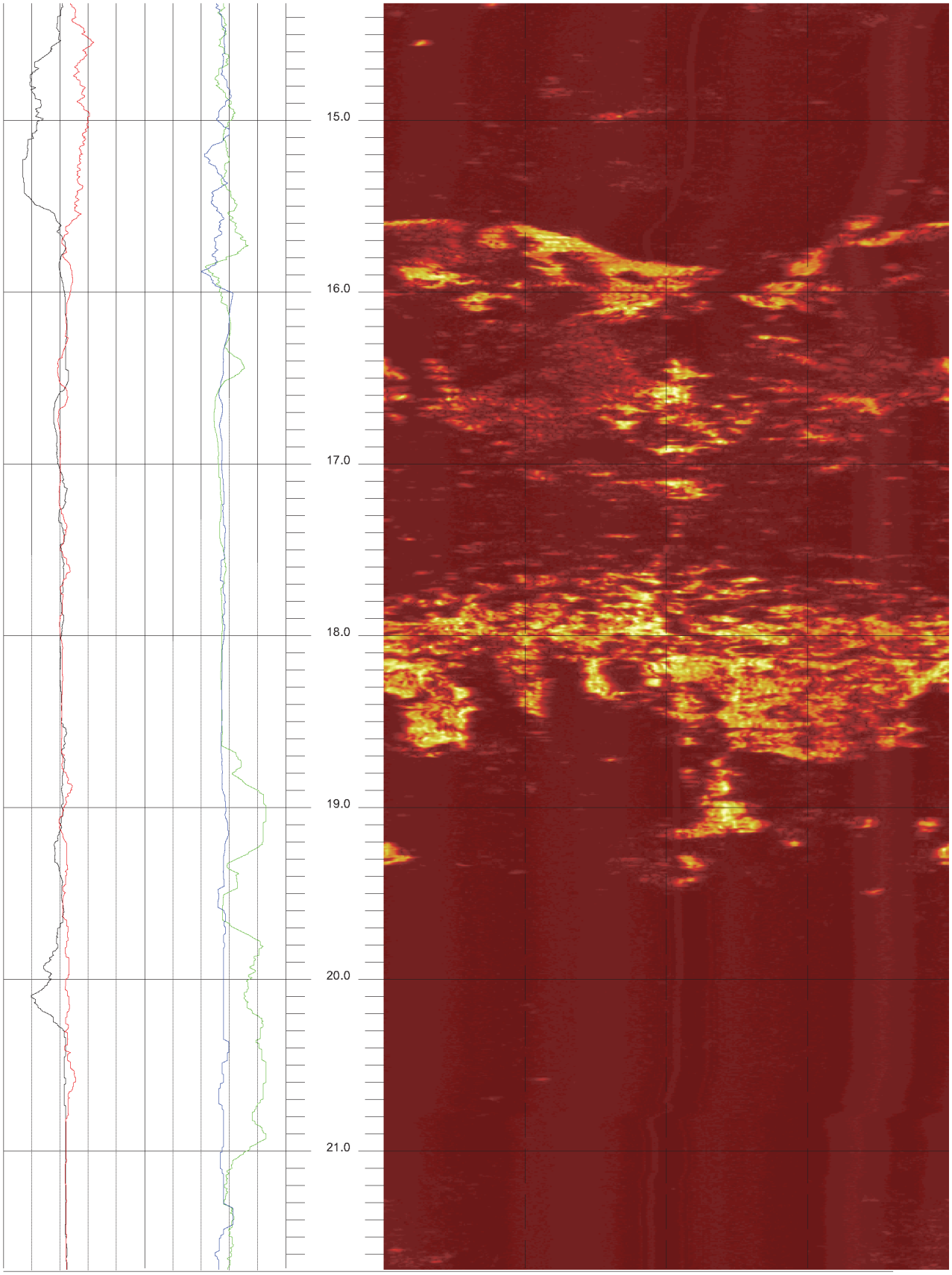


R-6-1b Up 6.952 to 3.108ft 1



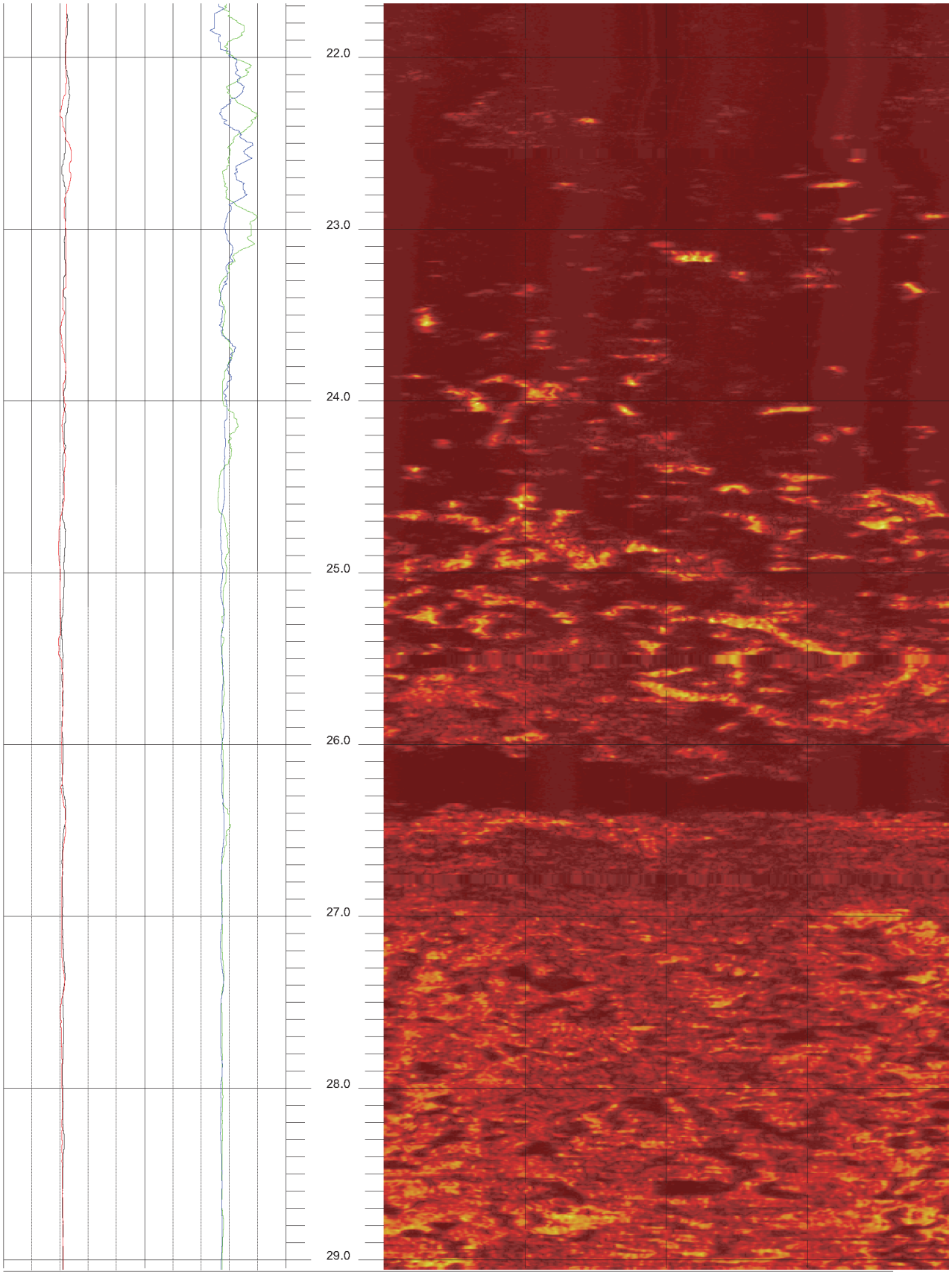
R-6-1b Up 14.320 to 6.952ft 2

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 2 of 64



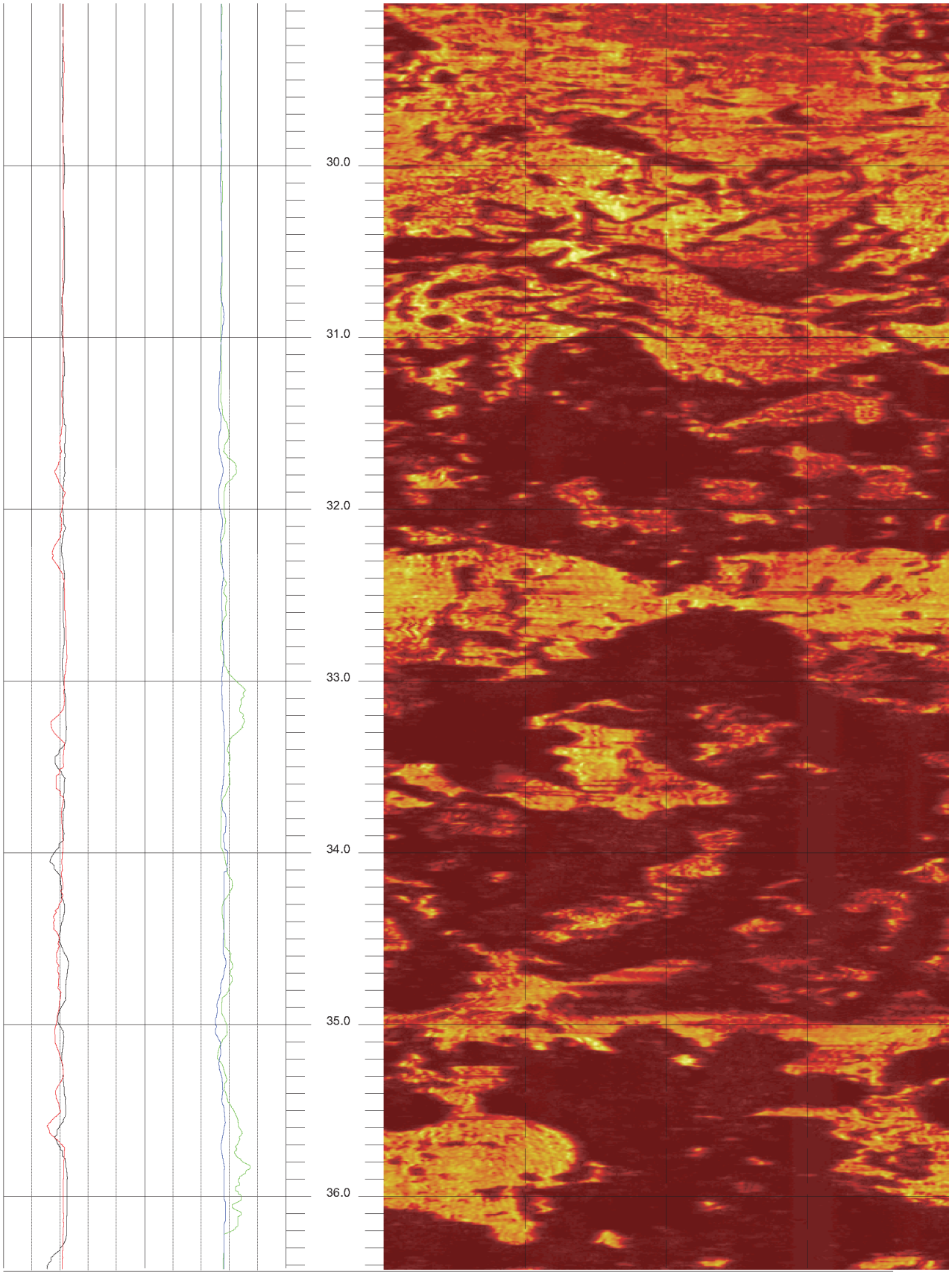
R-6-1b Up 21.688 to 14.320fl 3

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 3 of 64



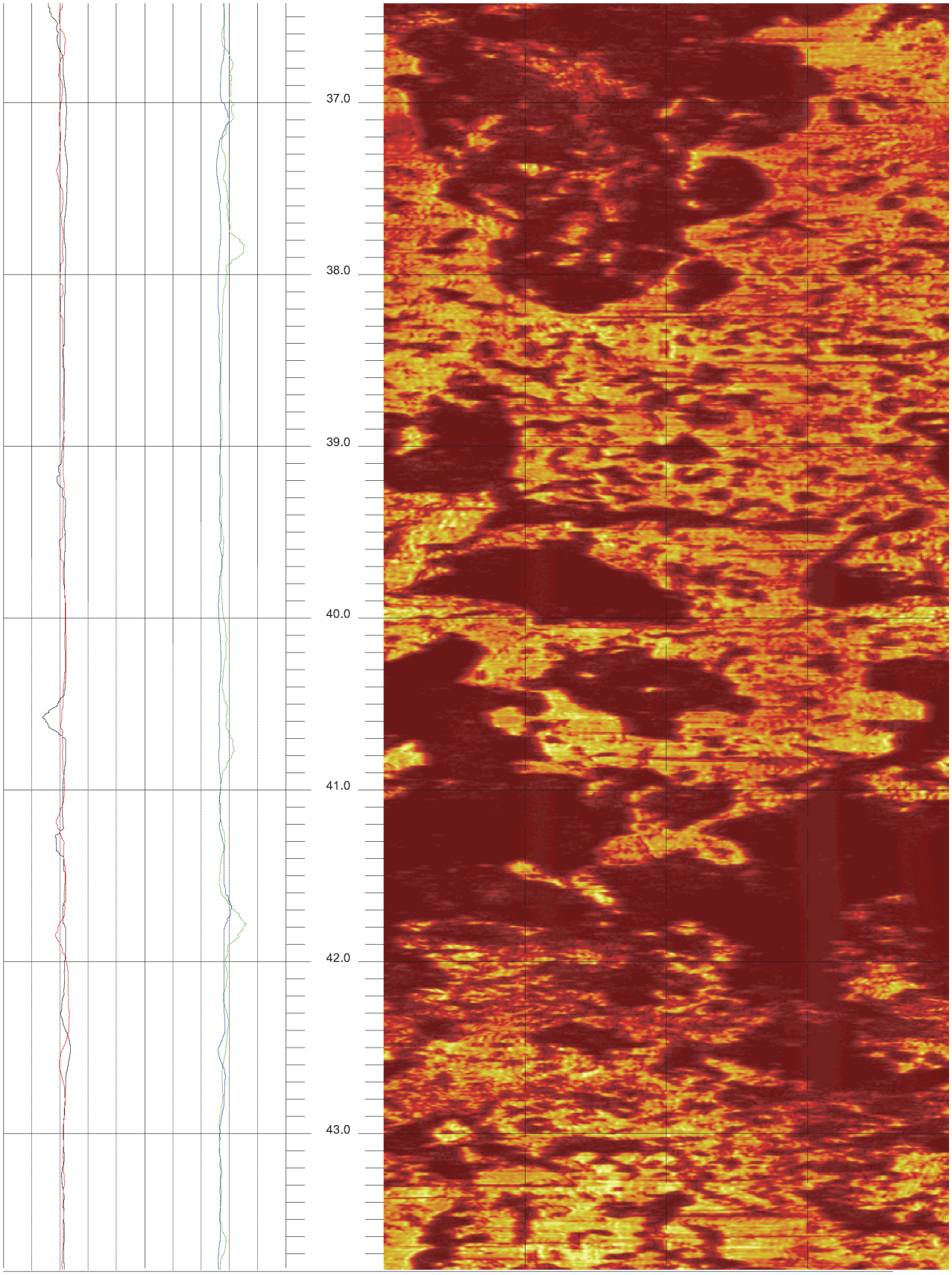
R-6-1b Up 29.056 to 21.688fl 4

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 4 of 64



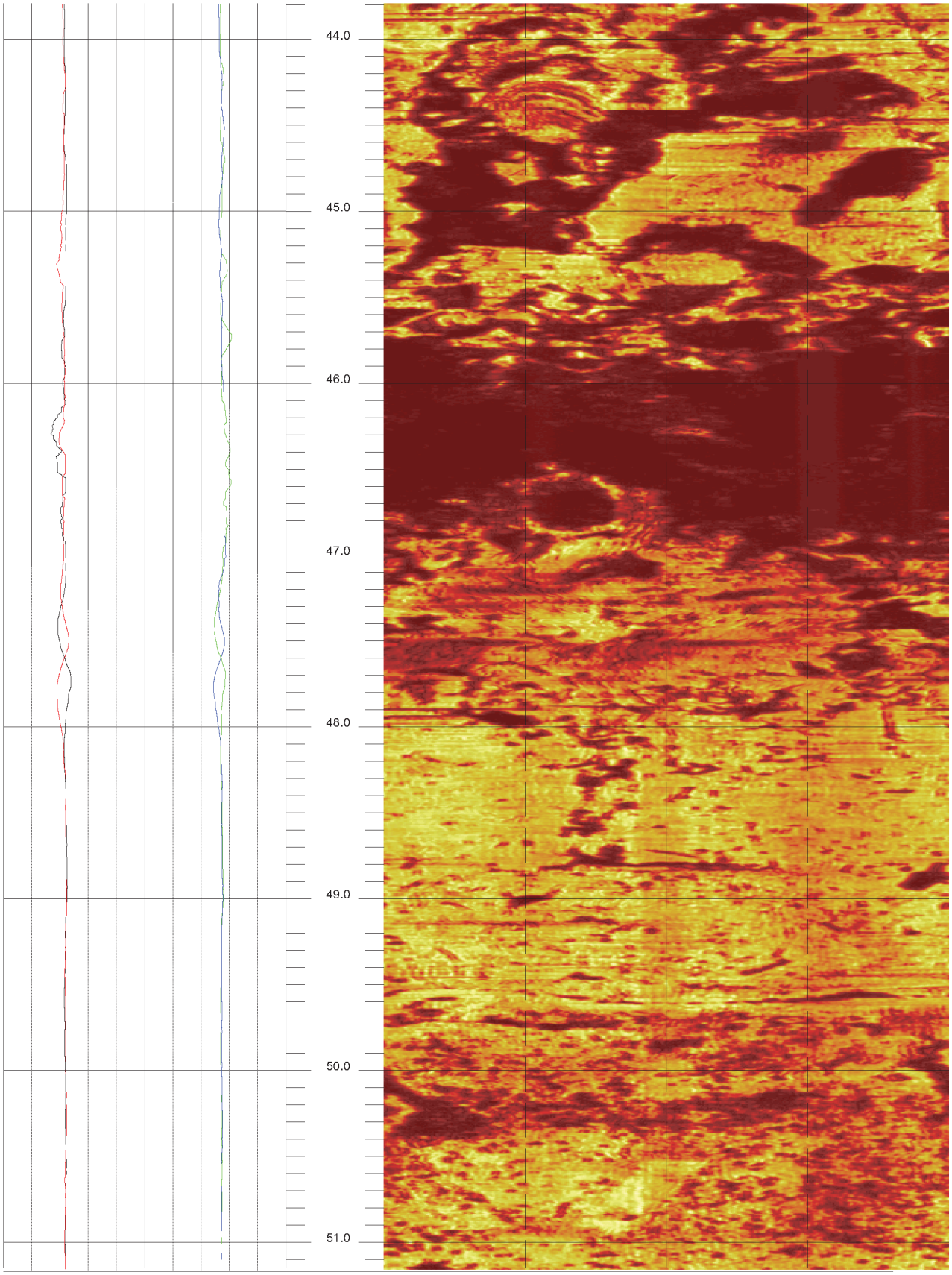
R-6-1b Up 36.424 to 29.056fl 5

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 5 of 64



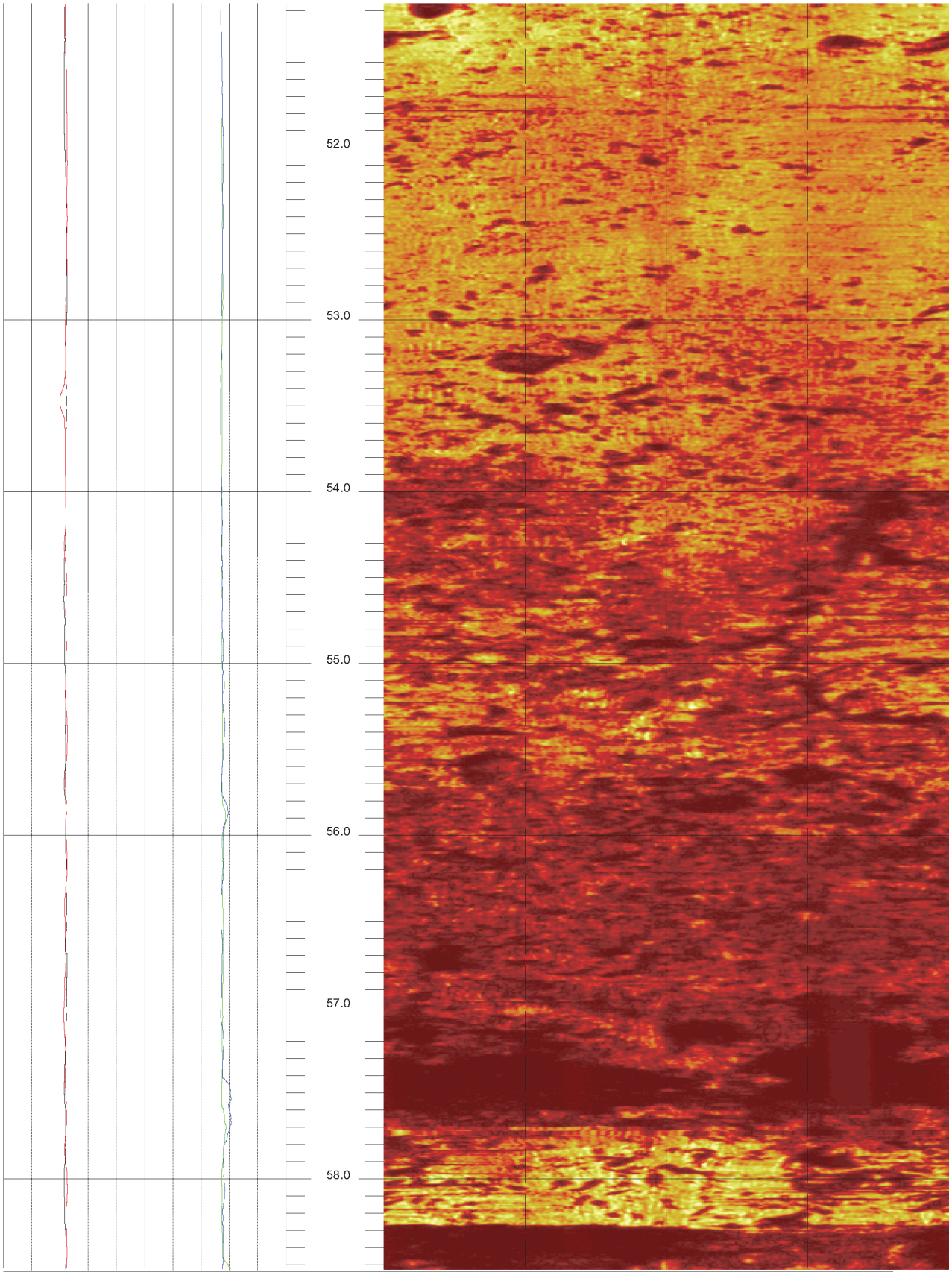
R-6-1b Up 43.792 to 36.424fl 6

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 6 of 64



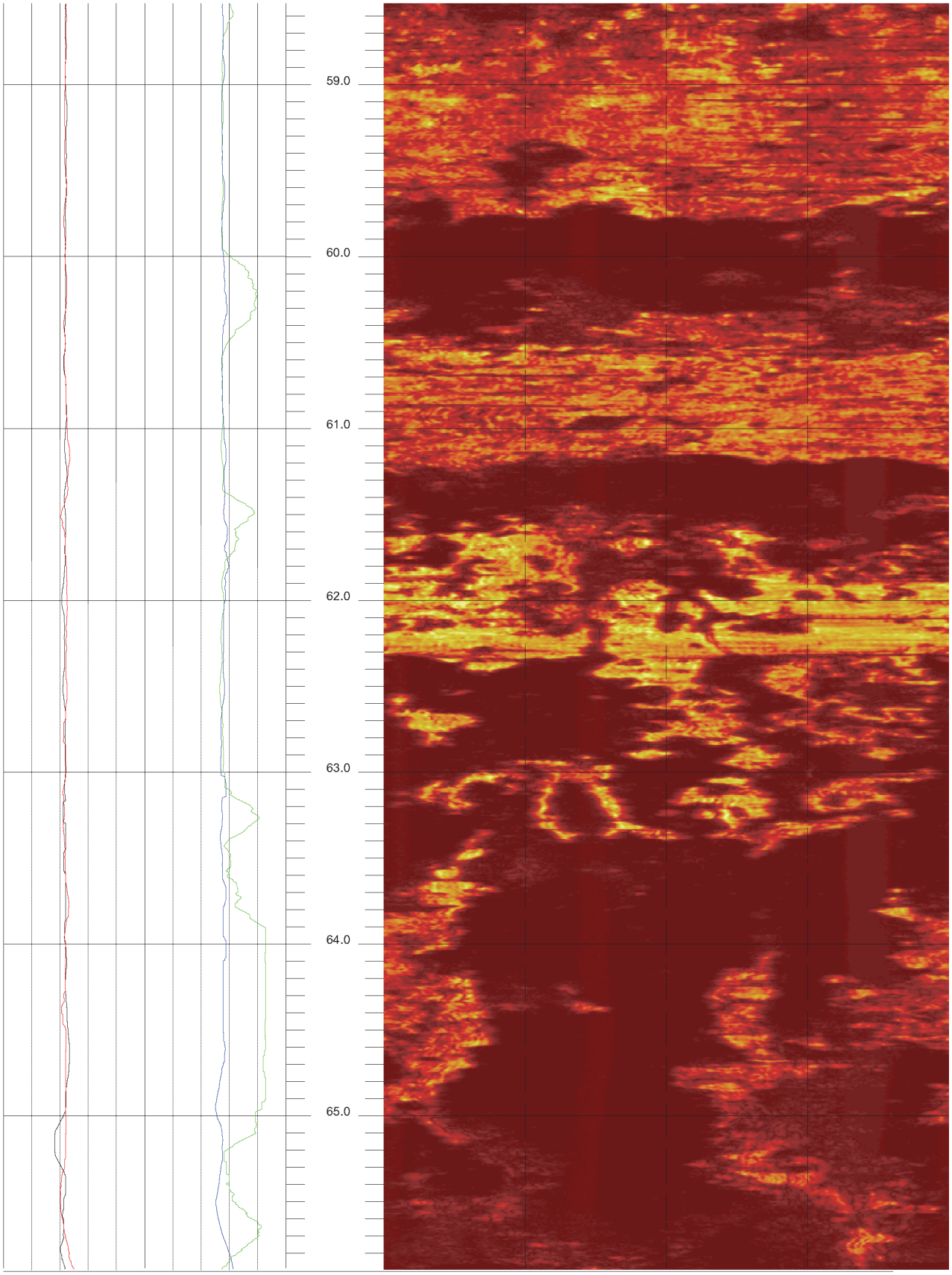
R-6-1b Up 51.160 to 43.792fl 7

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 7 of 64



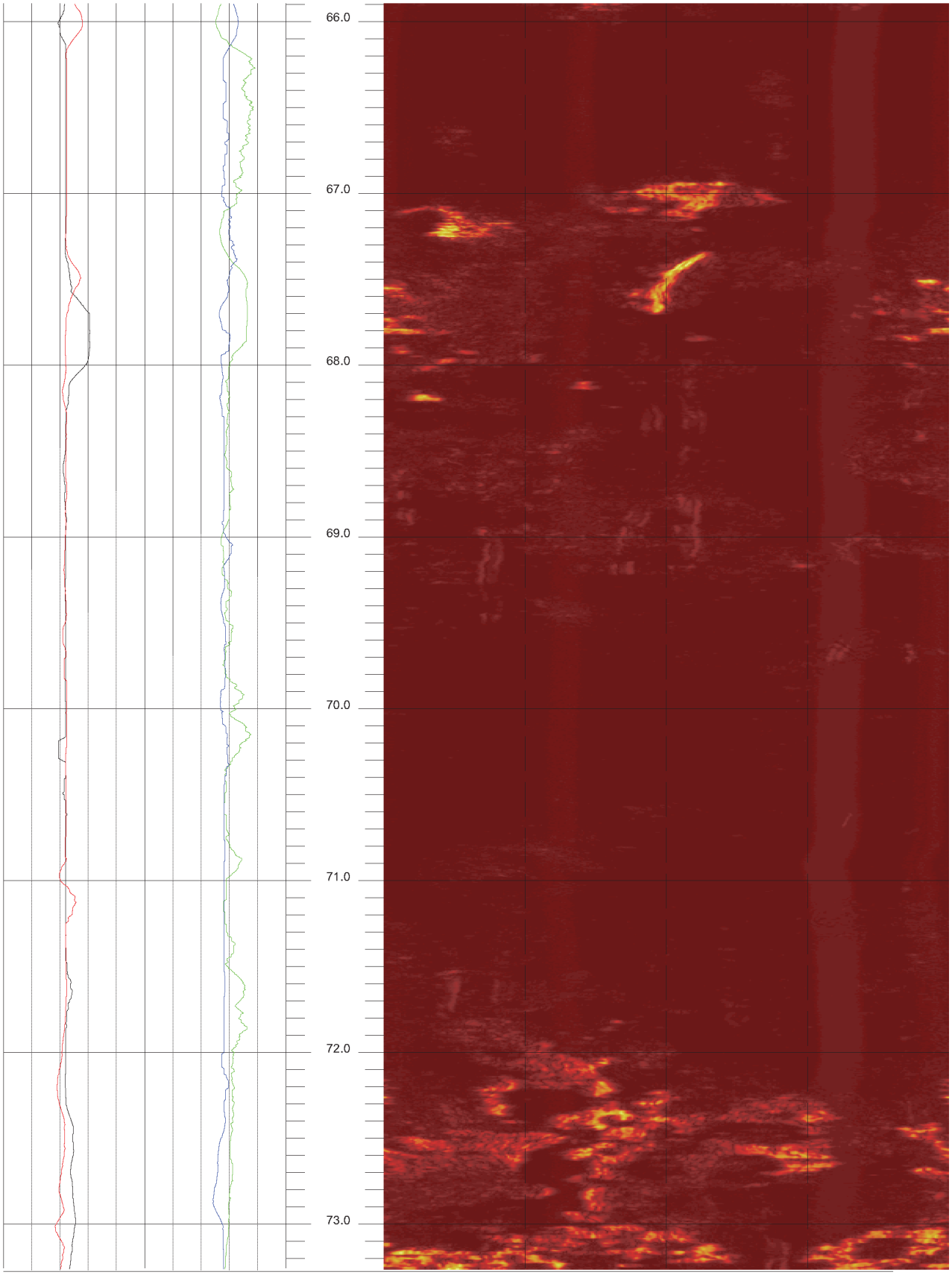
R-6-1b Up 58.528 to 51.160fl 8

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 8 of 64

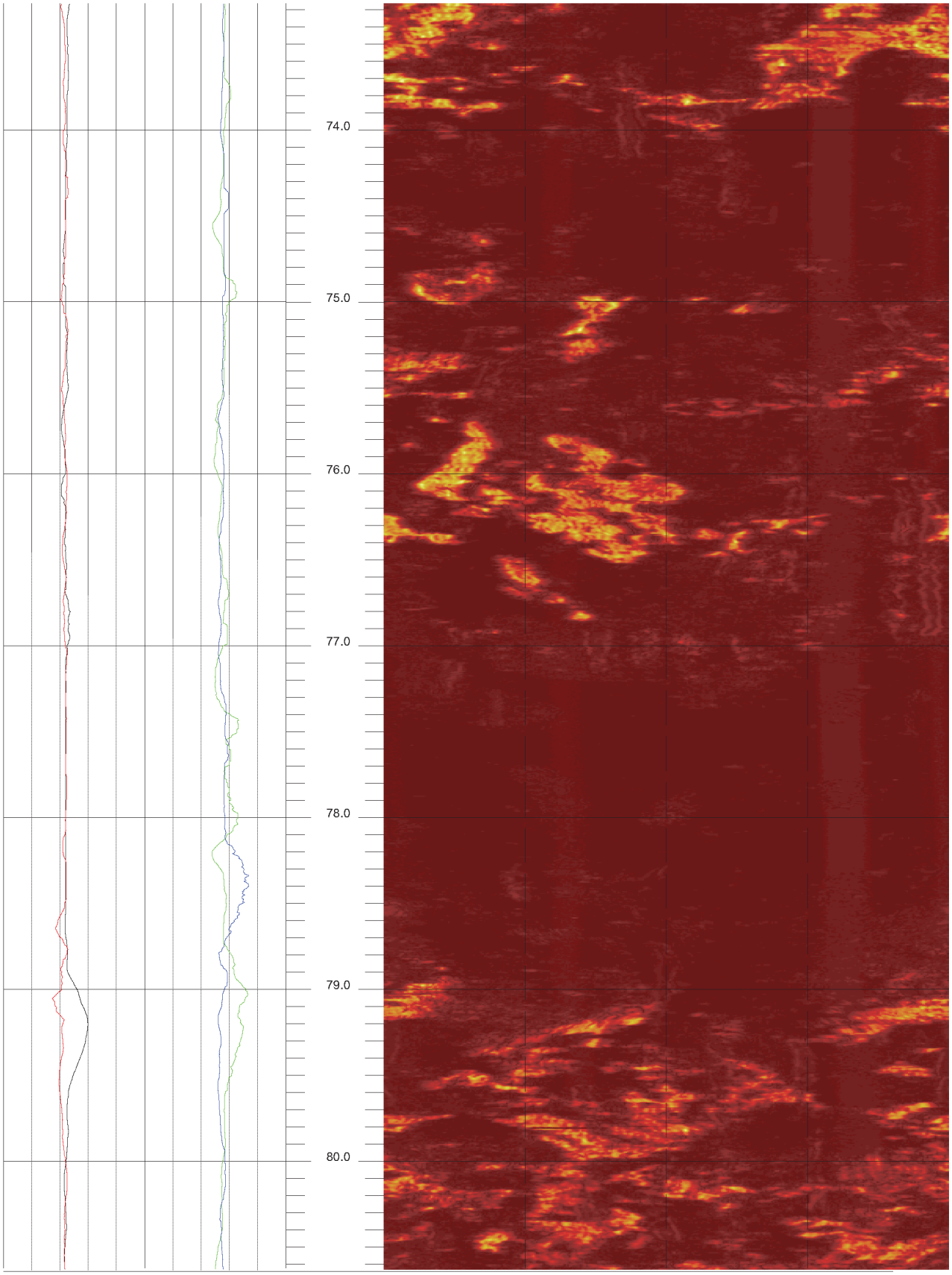


R-6-1b Up 65.896 to 58.528fl 9

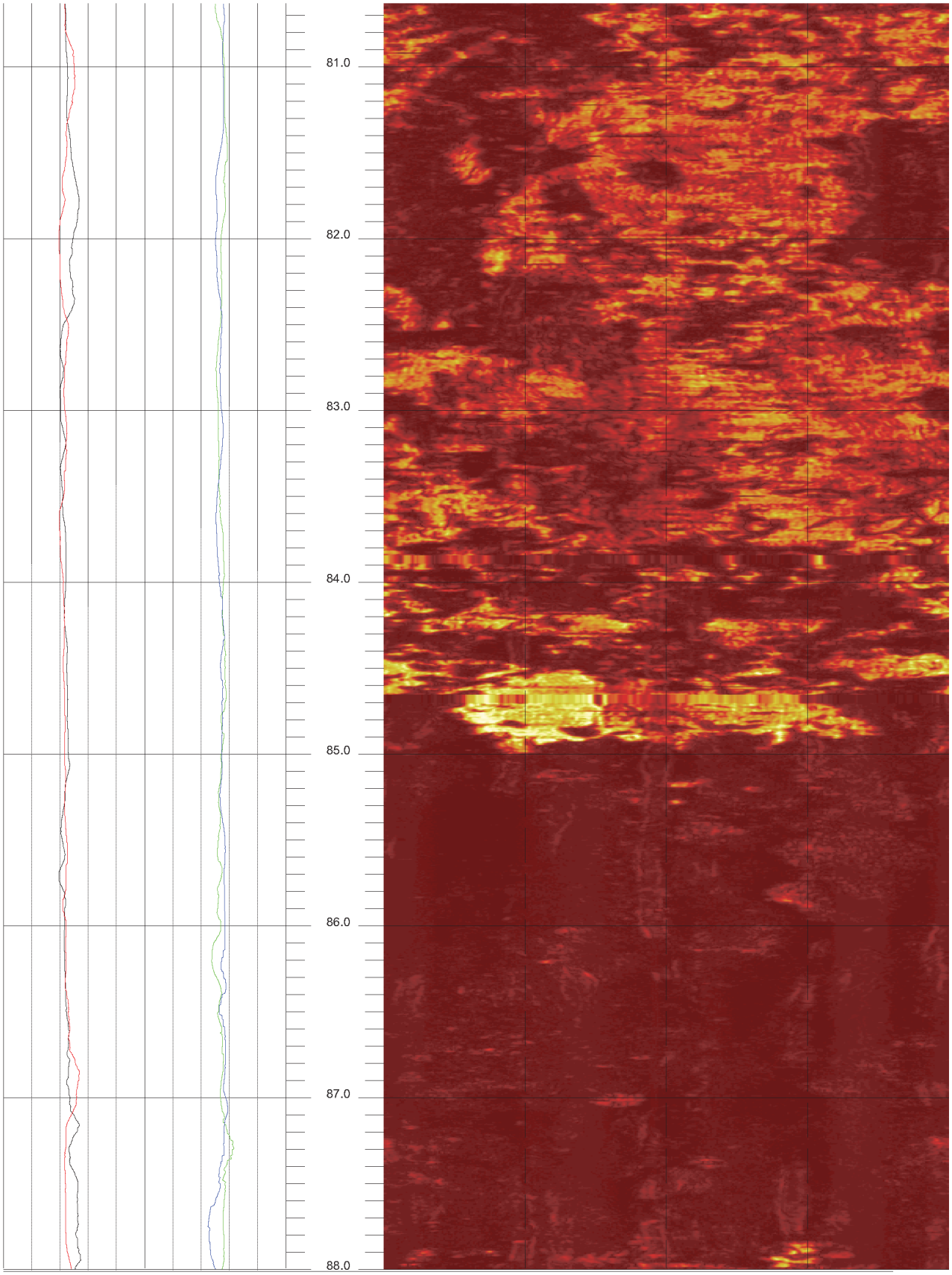
RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 9 of 64



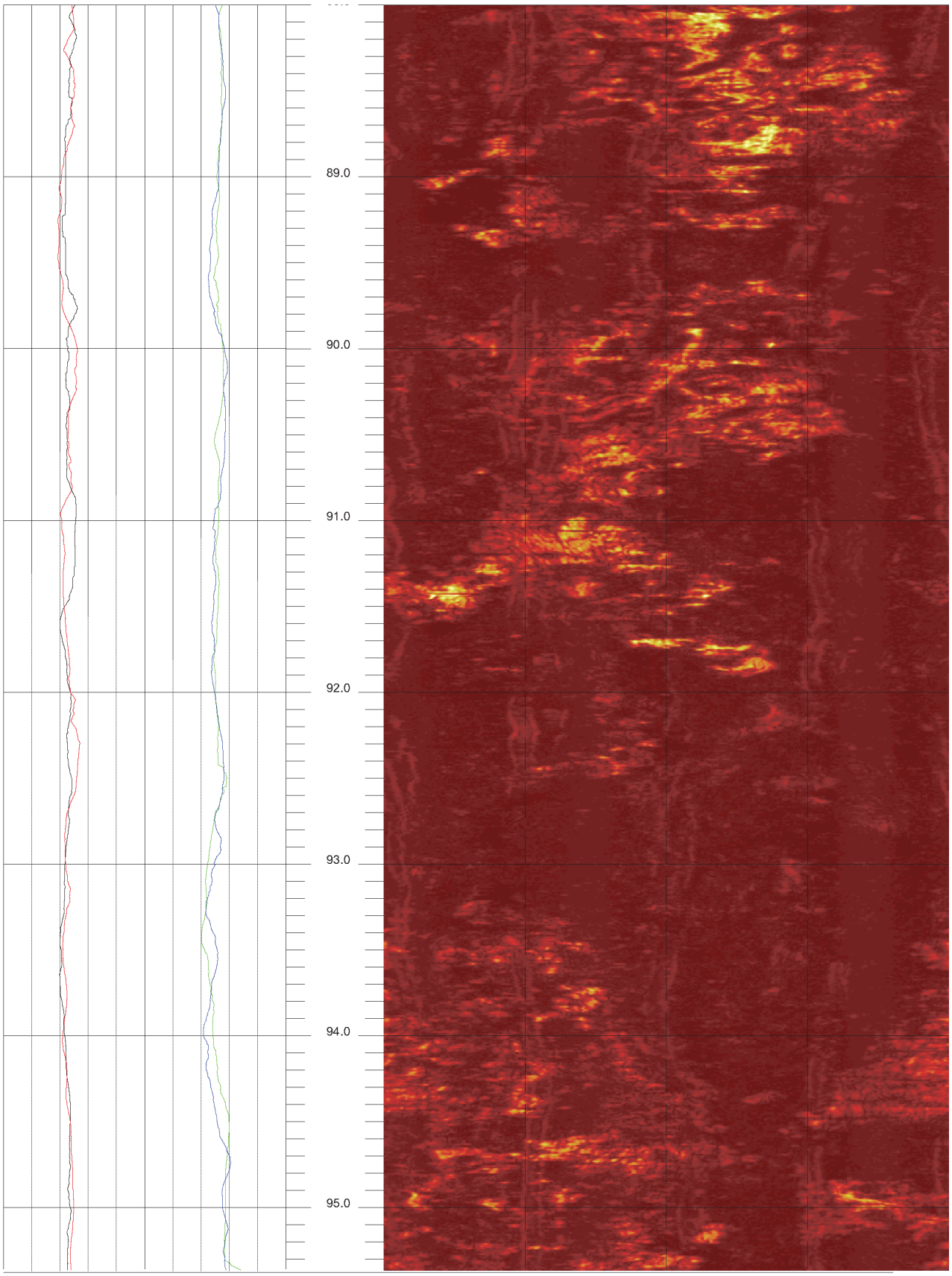
R-6-1b Up 73.264 to 65.896fl 10



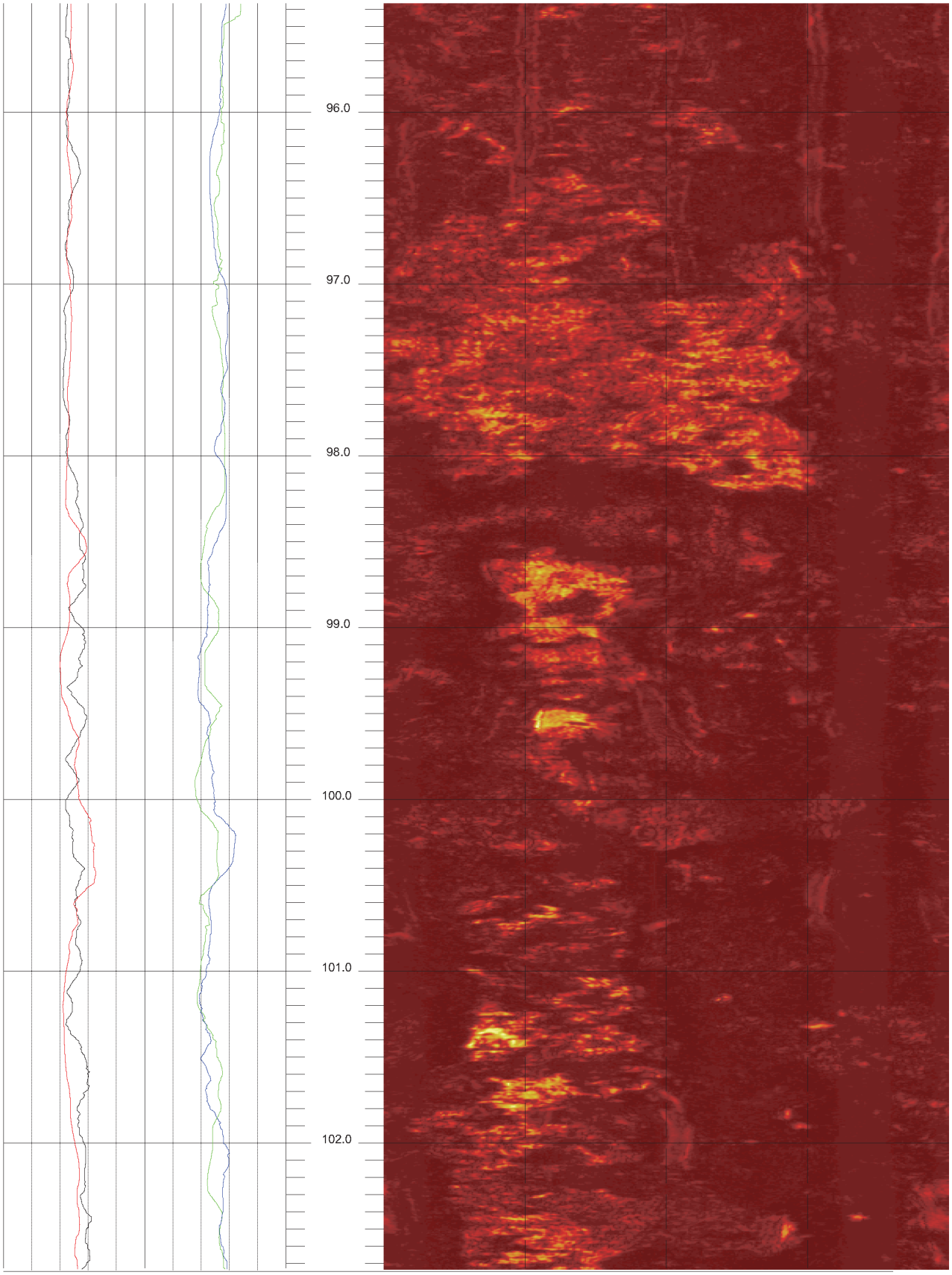
R-6-1b Up 80.632 to 73.264fl 11



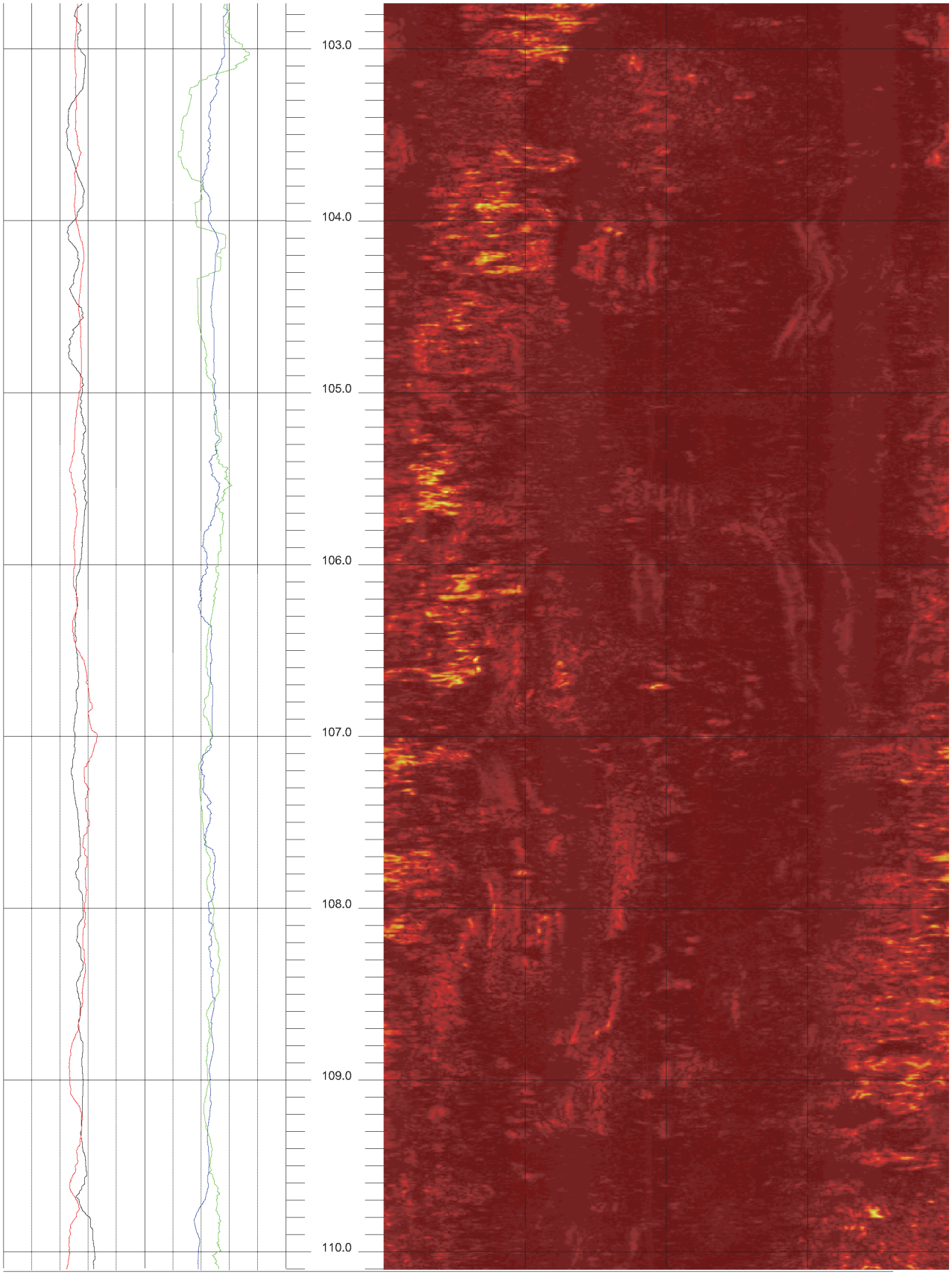
R-6-1b Up 88.000 to 80.632fl 12



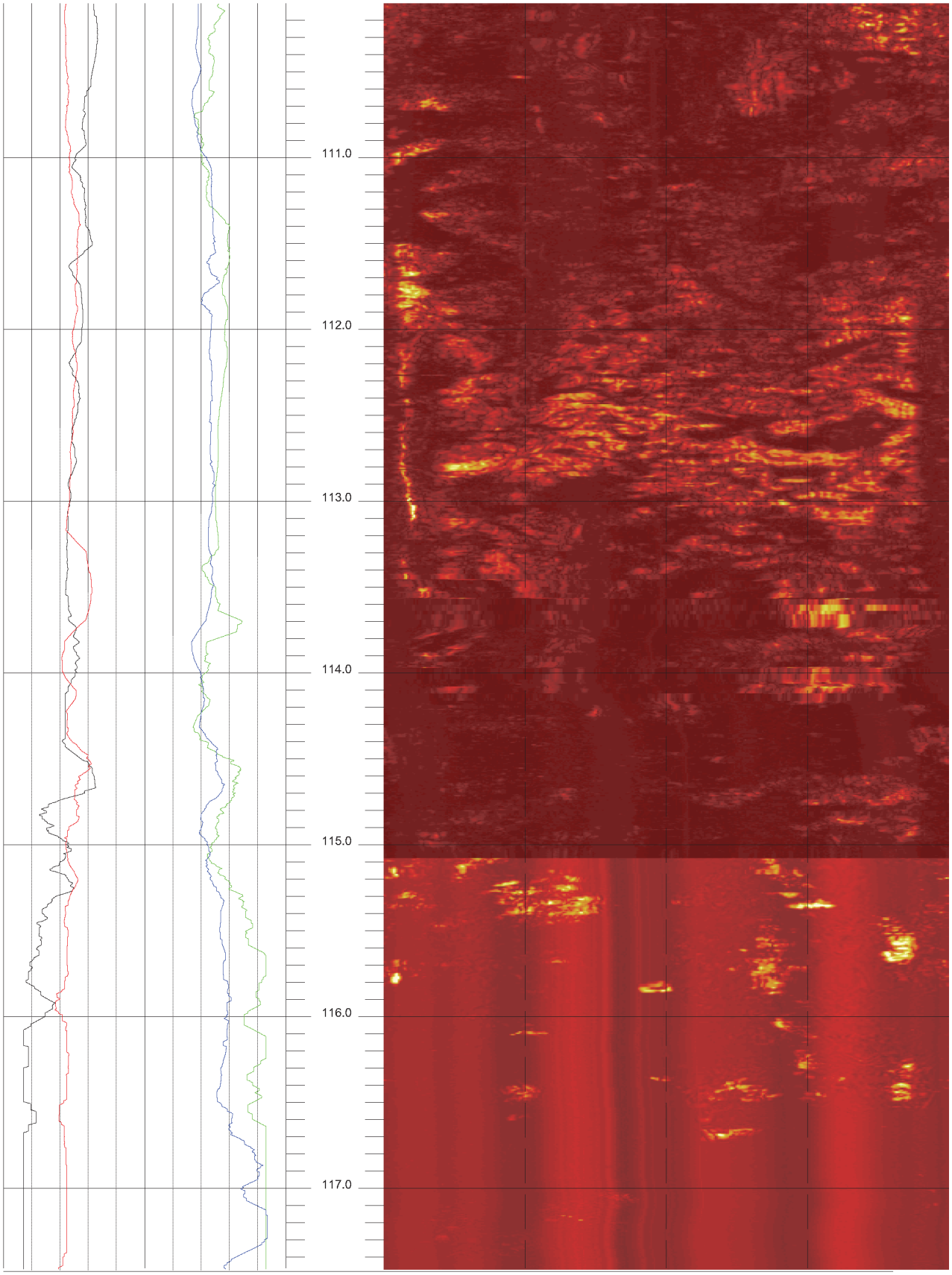
R-6-1b Up 95.368 to 88.000ft 13



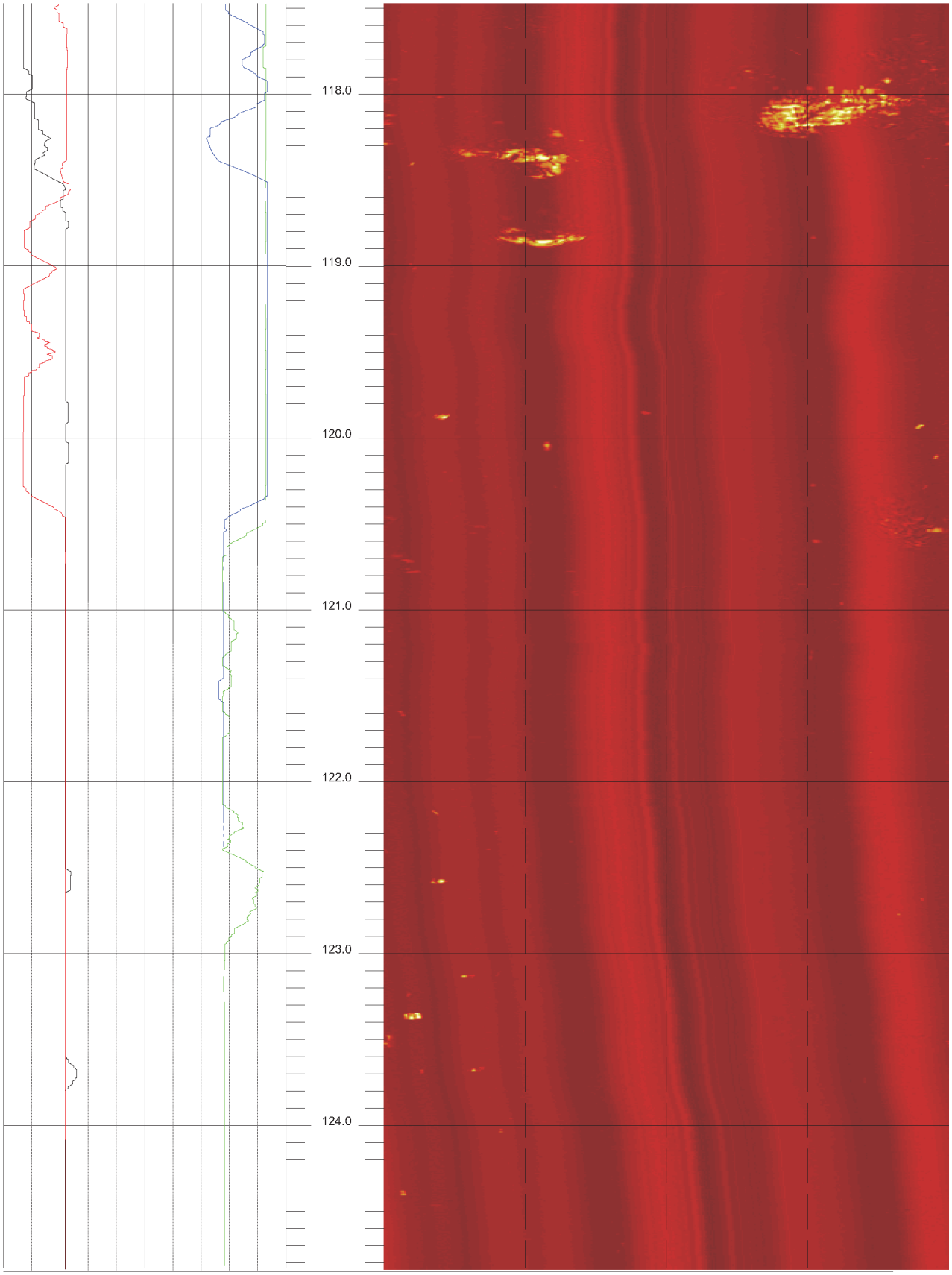
R-6-1b Up 102.736 to 95.368ft 14



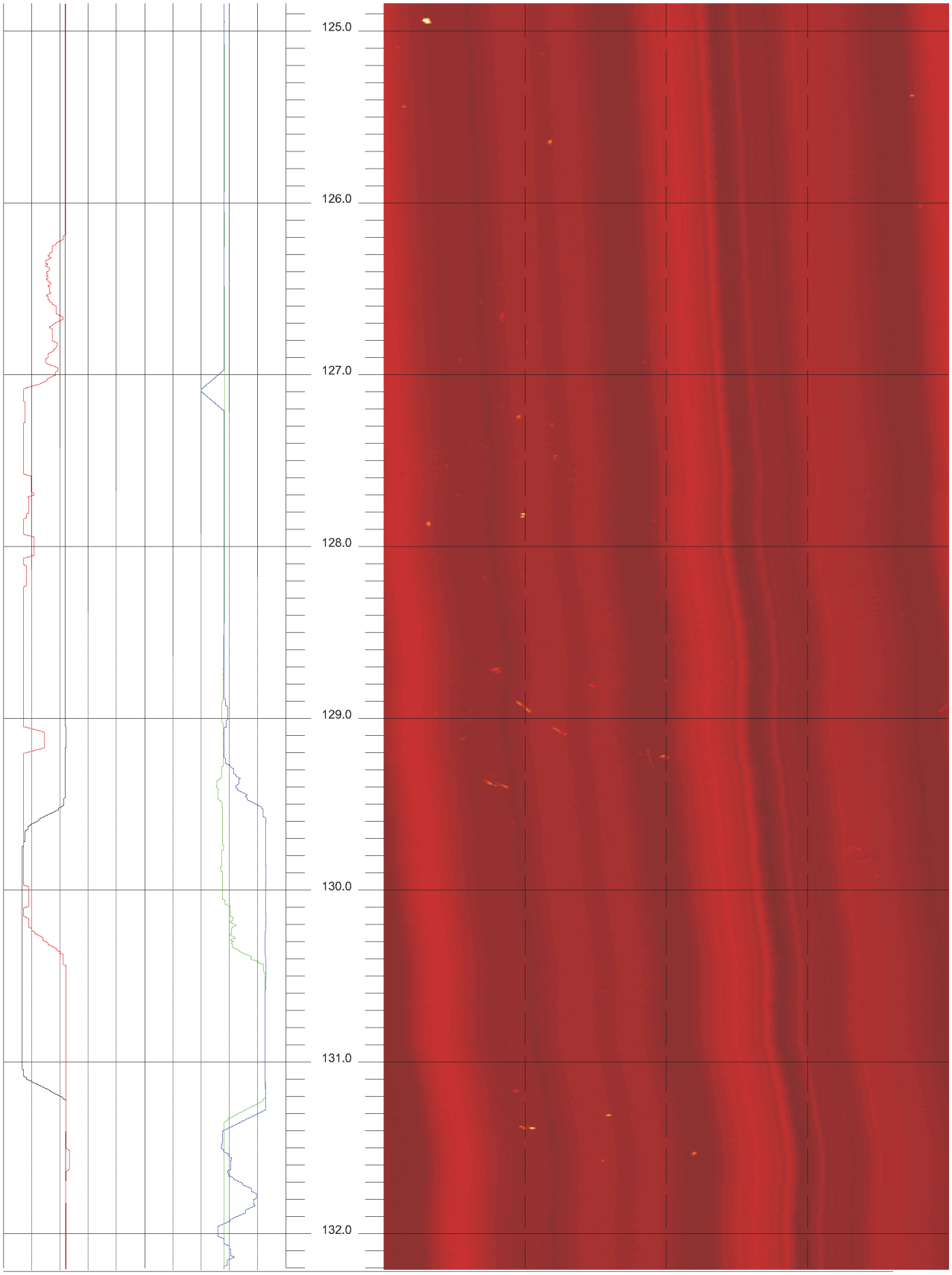
R-6-1b Up 110.104 to 102.736fl 15



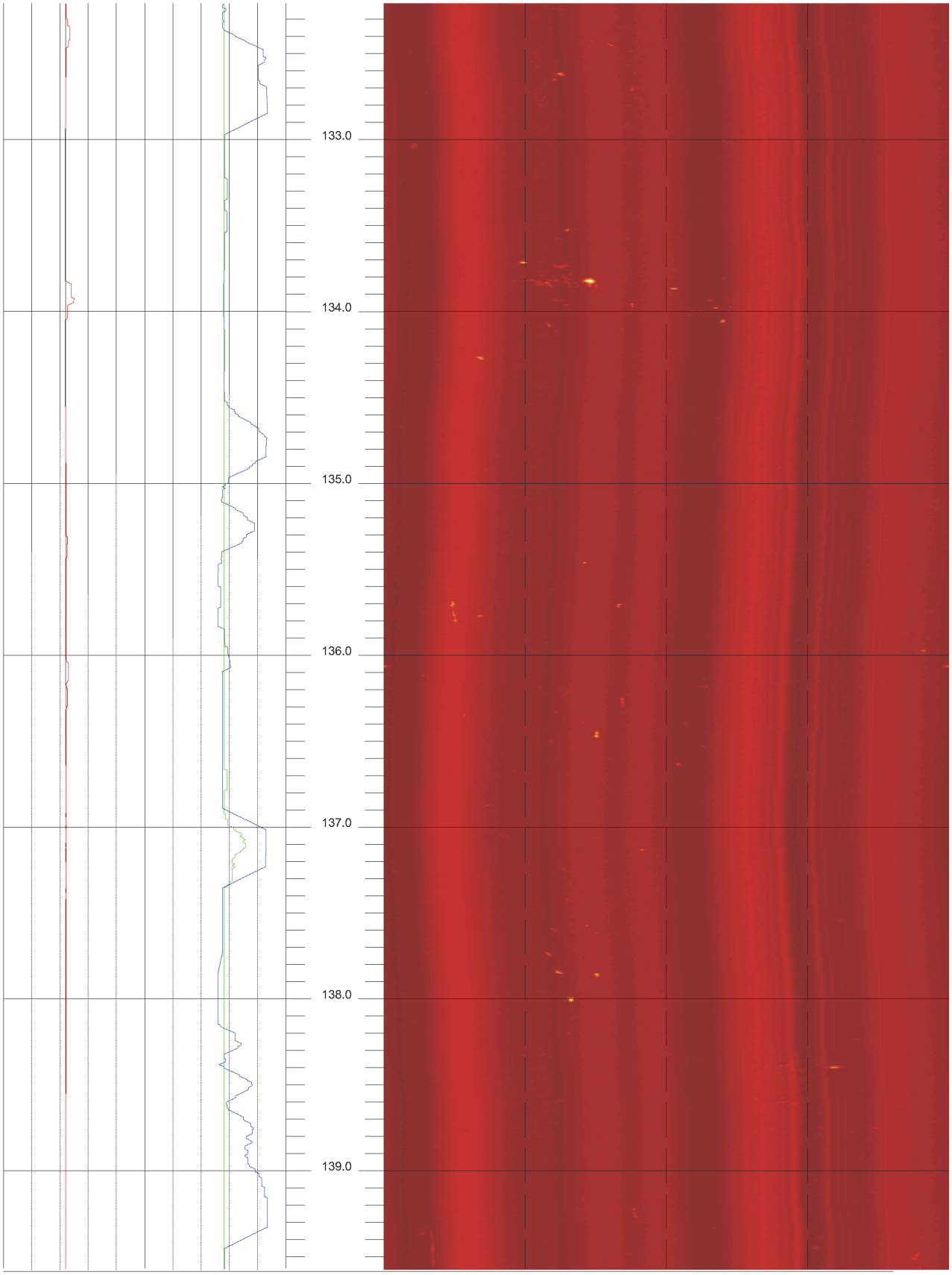
R-6-1b Up 117.472 to 110.104fl 16



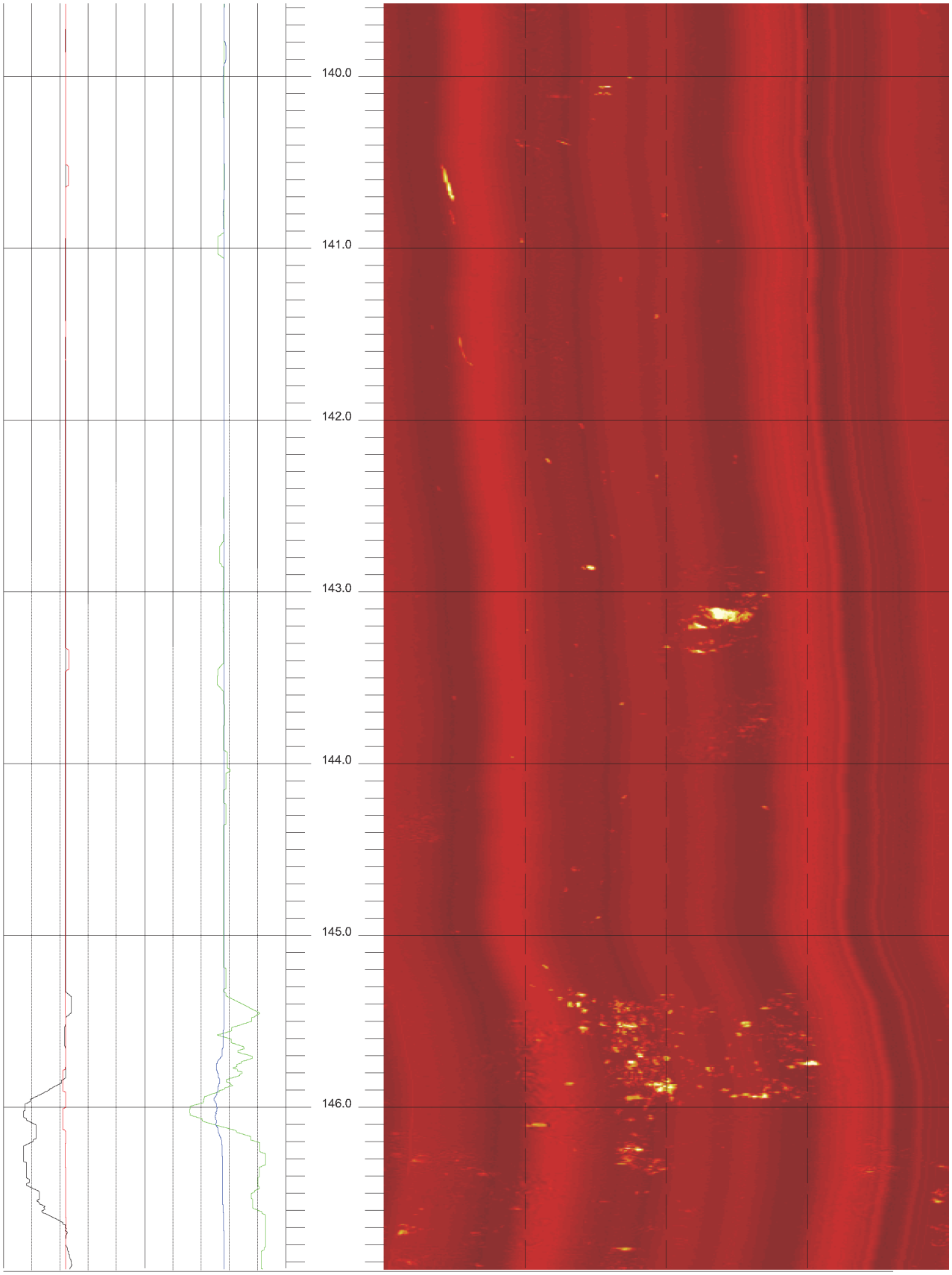
R-6-1b Up 124.840 to 117.472fl 17



R-6-1b Up 132.208 to 124.840fl 18

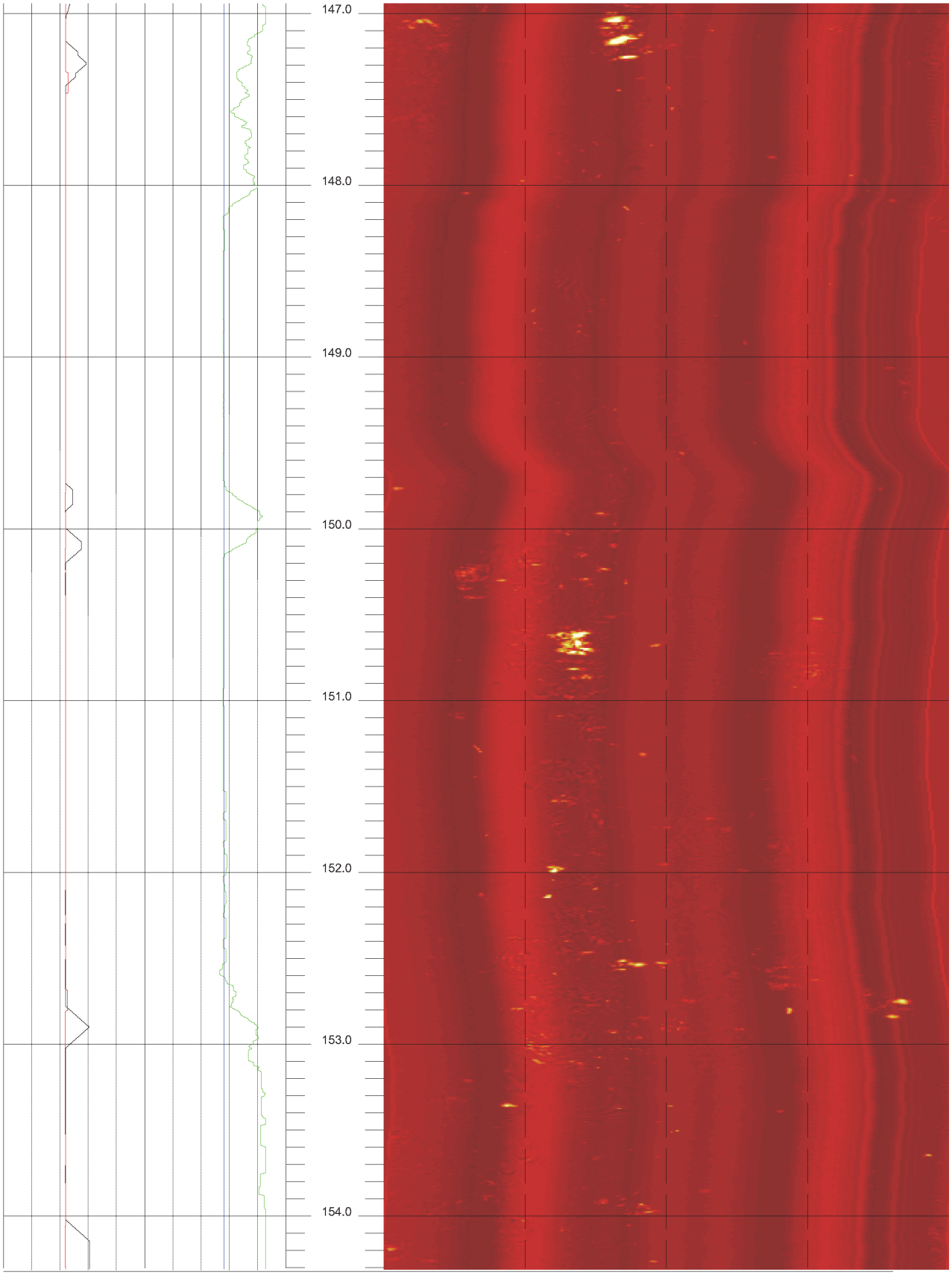


R-6-1b Up 139.576 to 132.208fl 19

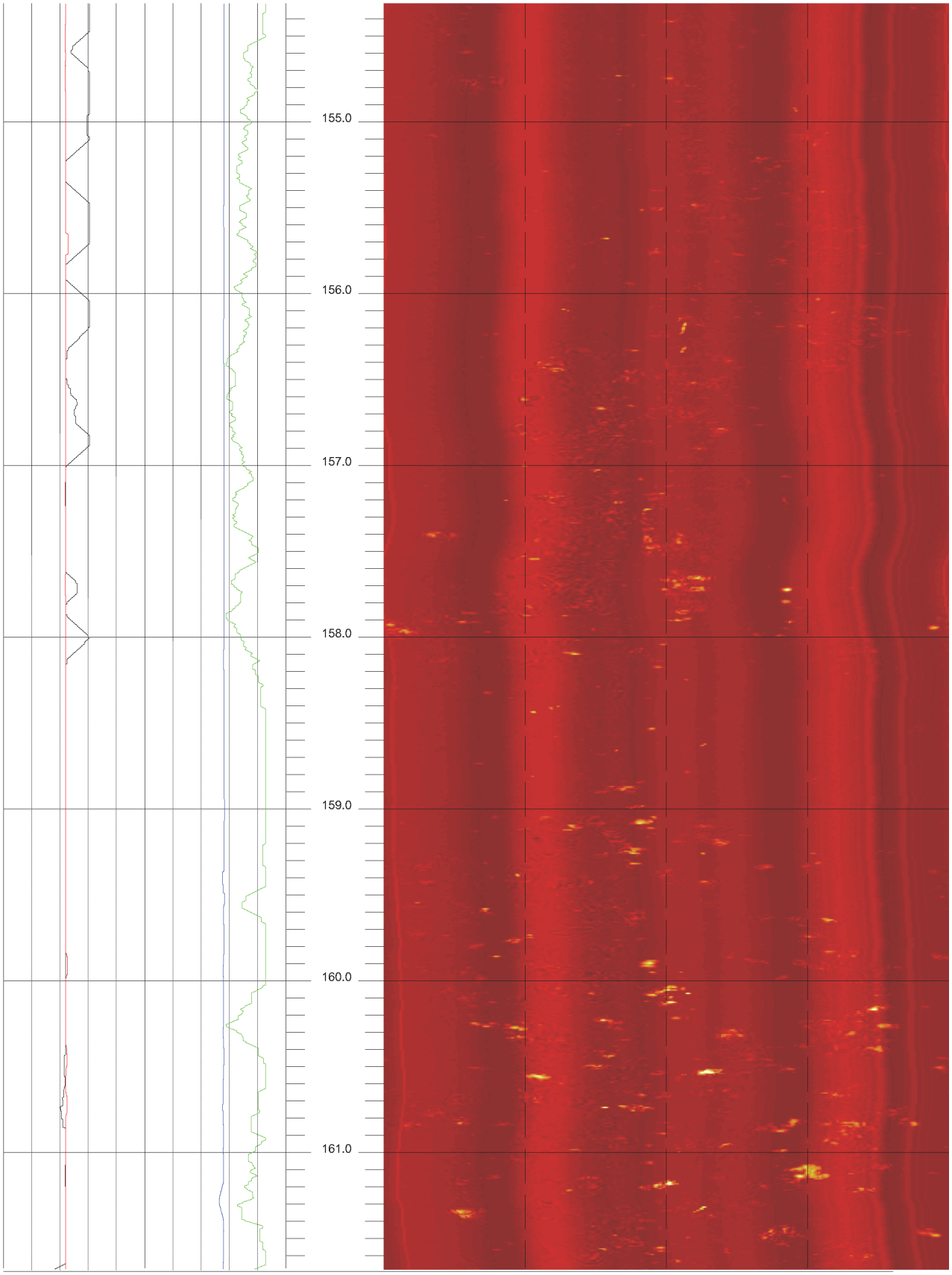


R-6-1b Up 146.944 to 139.576fl 20

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 20 of 64

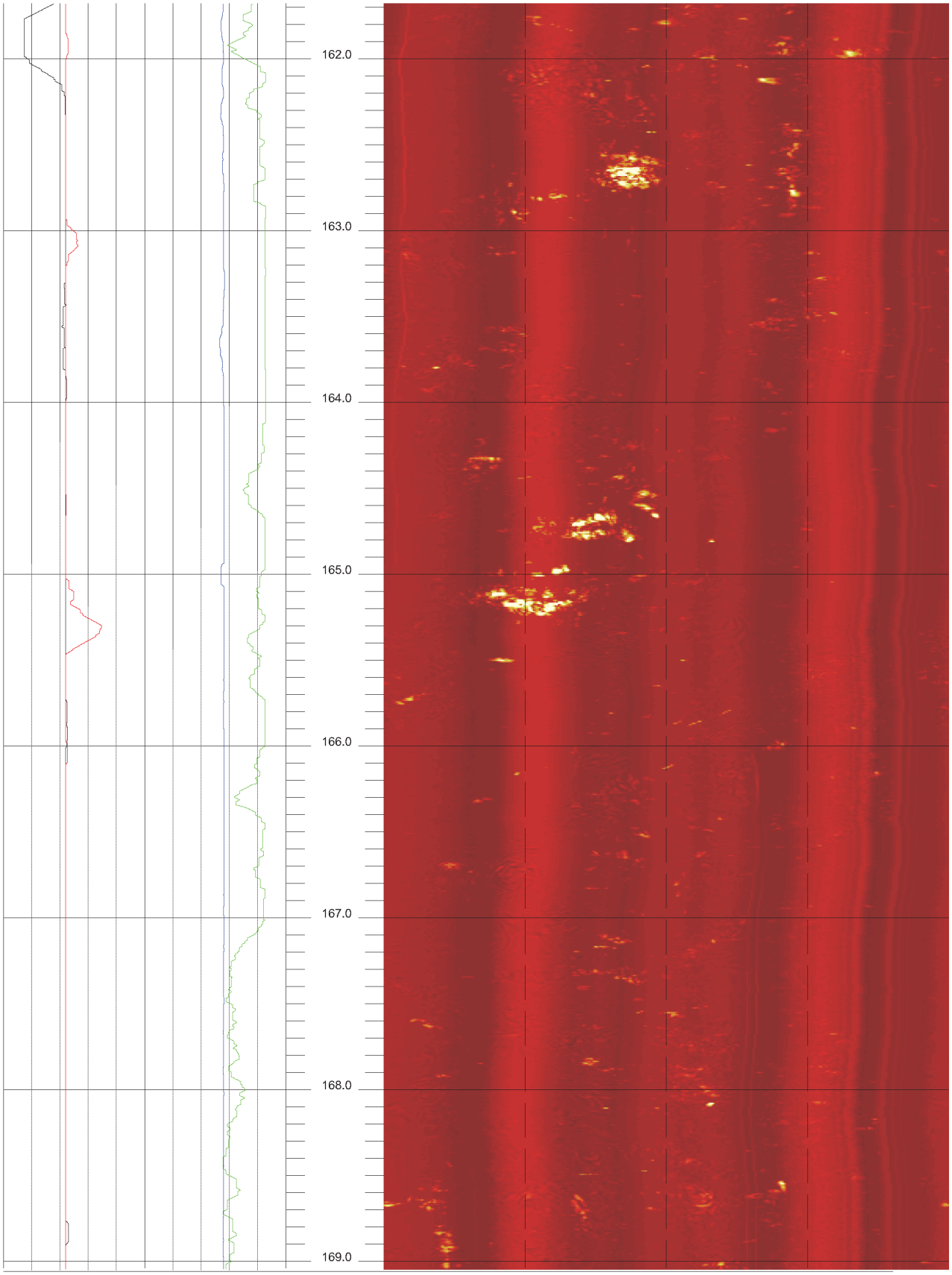


R-6-1b Up 154.312 to 146.944fl 21

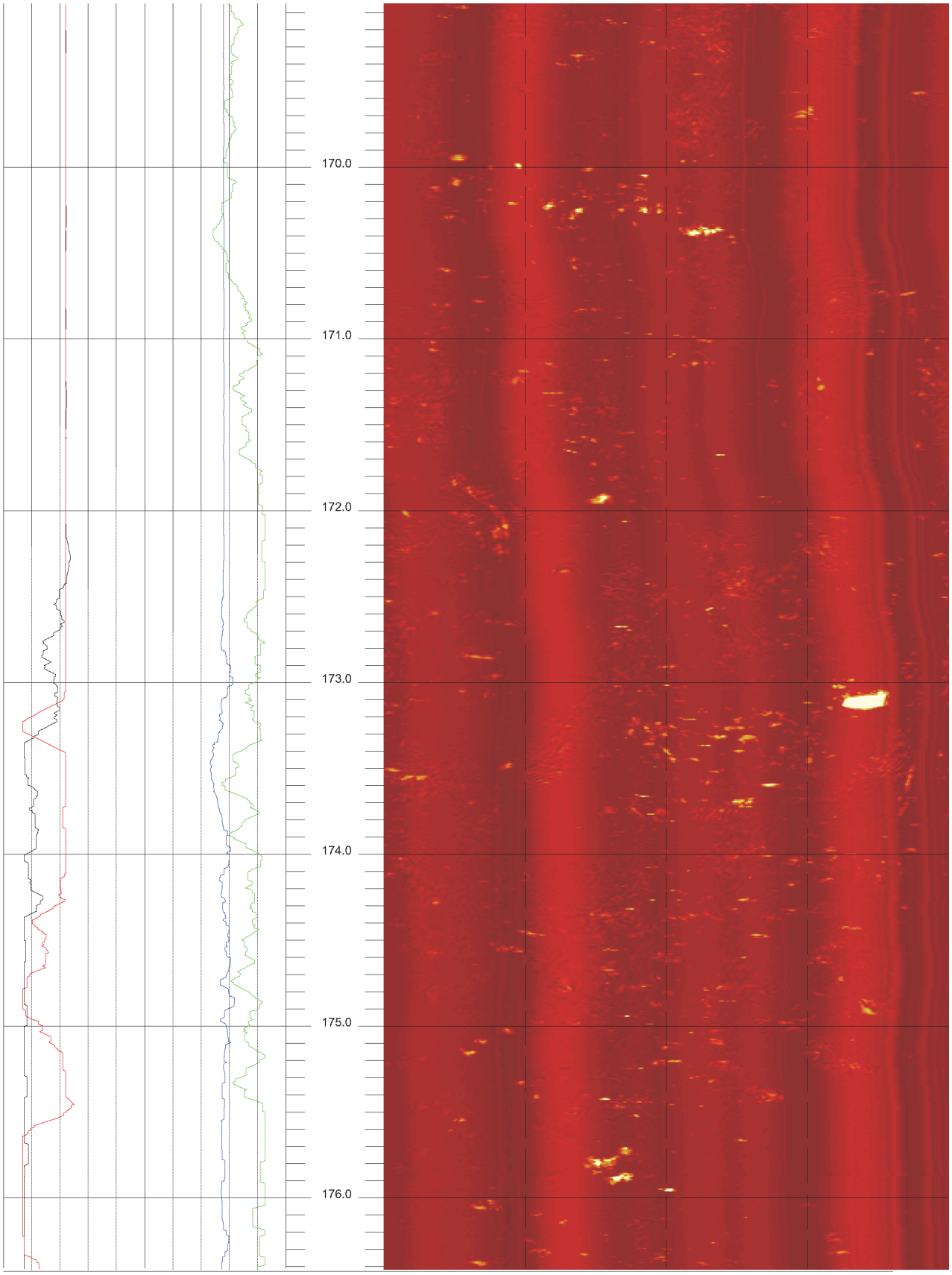


R-6-1b Up 161.680 to 154.312fl 22

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 22 of 64



R-6-1b Up 169.048 to 161.680fl 23



R-6-1b Up 176.416 to 169.048fl 24

RIZZO Turkey Point Boring R-6-1b Acoustic Televiewer Derived Caliper rev 1 Sheet 24 of 64