Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-401

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
398.5	10550	20420	0.32
400.2	10290	20750	0.34
401.8	10290	20420	0.33
403.5	10380	20750	0.33
405.1	10550	20420	0.32
406.7	10730	20750	0.32
408.4	10910	21100	0.32
410.0	11010	21100	0.31

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V_s	V_p	
(m)	(m/s)	(m/s)	
121.5	3220	6220	0.32
122.0	3140	6330	0.34
122.5	3140	6220	0.33
123.0	3160	6330	0.33
123.5	3220	6220	0.32
124.0	3270	6330	0.32
124.5	3330	6430	0.32
125.0	3360	6430	0.31

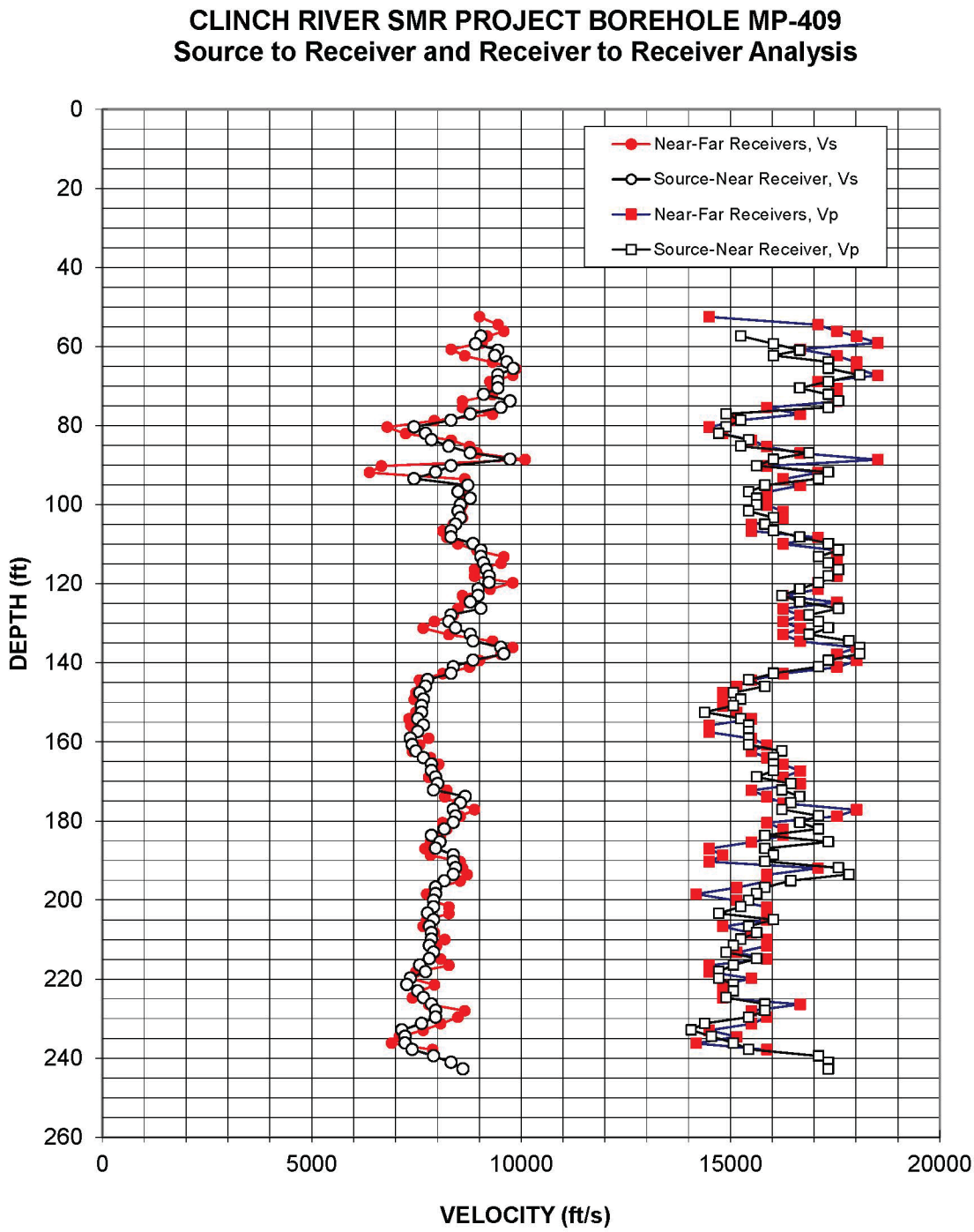

Figure A-16: Boring MP-409, Suspension S-R1 P- and S_H-wave velocities

Table A-16: Boring MP-409, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-409

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)	
57.3	9040	15250	0.23	17.5	2760	4650	0.23
59.3	8920	16030	0.28	18.1	2720	4880	0.28
60.9	9450	16660	0.26	18.6	2880	5080	0.26
62.2	9380	16030	0.24	19.0	2860	4880	0.24
63.9	9660	17340	0.27	19.5	2950	5290	0.27
65.5	9810	17340	0.26	20.0	2990	5290	0.26
67.2	9450	18090	0.31	20.5	2880	5510	0.31
68.8	9450	17340	0.29	21.0	2880	5290	0.29
70.5	9450	16660	0.26	21.5	2880	5080	0.26
72.1	9110	17340	0.31	22.0	2780	5290	0.31
73.7	9740	17580	0.28	22.5	2970	5360	0.28
75.4	9520	17340	0.28	23.0	2900	5290	0.28
77.0	8790	14890	0.23	23.5	2680	4540	0.23
78.7	8330	15250	0.29	24.0	2540	4650	0.29
80.3	7450	14890	0.33	24.5	2270	4540	0.33
81.9	7720	14720	0.31	25.0	2350	4490	0.31
83.6	7860	15440	0.32	25.5	2400	4710	0.32
85.2	8270	15250	0.29	26.0	2520	4650	0.29
86.9	8790	16880	0.31	26.5	2680	5150	0.31
88.5	9740	16030	0.21	27.0	2970	4880	0.21
90.1	8330	15630	0.30	27.5	2540	4760	0.30
91.8	7960	17340	0.37	28.0	2430	5290	0.37
93.4	7450	17110	0.38	28.5	2270	5210	0.38
95.1	8730	15830	0.28	29.0	2660	4820	0.28
96.7	8500	15440	0.28	29.5	2590	4710	0.28
98.3	8790	15630	0.27	30.0	2680	4760	0.27
100.0	8550	15630	0.29	30.5	2610	4760	0.29
101.6	8500	15440	0.28	31.0	2590	4710	0.28
103.3	8550	16030	0.30	31.5	2610	4880	0.30
104.9	8440	15830	0.30	32.0	2570	4820	0.30
106.5	8330	16030	0.31	32.5	2540	4880	0.31
108.2	8330	16660	0.33	33.0	2540	5080	0.33
109.8	8850	17340	0.32	33.5	2700	5290	0.32
111.5	9040	17580	0.32	34.0	2760	5360	0.32
113.1	9040	17110	0.31	34.5	2760	5210	0.31
114.7	9110	17340	0.31	35.0	2780	5290	0.31
116.4	9170	17580	0.31	35.5	2800	5360	0.31

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-409

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)	
118.0	9240	17340	0.30	36.0	2820	5290	0.30
119.7	9240	17110	0.29	36.5	2820	5210	0.29
121.3	8980	16660	0.30	37.0	2740	5080	0.30
122.9	8980	16230	0.28	37.5	2740	4950	0.28
124.6	8790	16660	0.31	38.0	2680	5080	0.31
126.2	9040	17580	0.32	38.5	2760	5360	0.32
127.9	8330	16880	0.34	39.0	2540	5150	0.34
129.5	8270	17110	0.35	39.5	2520	5210	0.35
131.1	8440	17340	0.34	40.0	2570	5290	0.34
132.8	8790	16880	0.31	40.5	2680	5150	0.31
134.4	8850	17830	0.34	41.0	2700	5430	0.34
136.1	9520	18090	0.31	41.5	2900	5510	0.31
137.7	9590	18090	0.30	42.0	2920	5510	0.30
139.3	8850	17340	0.32	42.5	2700	5290	0.32
141.0	8380	17110	0.34	43.0	2560	5210	0.34
142.6	8330	16030	0.31	43.5	2540	4880	0.31
144.3	7770	15440	0.33	44.0	2370	4710	0.33
145.9	7720	15830	0.34	44.5	2350	4820	0.34
147.6	7580	15070	0.33	45.0	2310	4590	0.33
149.2	7670	15250	0.33	45.5	2340	4650	0.33
150.8	7630	15070	0.33	46.0	2320	4590	0.33
152.5	7630	14390	0.30	46.5	2320	4380	0.30
154.1	7540	15250	0.34	47.0	2300	4650	0.34
155.8	7670	15440	0.34	47.5	2340	4710	0.34
157.4	7540	15440	0.34	48.0	2300	4710	0.34
159.0	7360	15440	0.35	48.5	2240	4710	0.35
160.7	7400	15440	0.35	49.0	2260	4710	0.35
162.3	7490	16230	0.36	49.5	2280	4950	0.36
164.0	7670	16030	0.35	50.0	2340	4880	0.35
165.6	7860	16030	0.34	50.5	2400	4880	0.34
167.2	7860	16030	0.34	51.0	2400	4880	0.34
168.9	7960	15630	0.32	51.5	2430	4760	0.32
170.5	8010	16440	0.34	52.0	2440	5010	0.34
172.2	7910	16230	0.34	52.5	2410	4950	0.34
173.8	8670	16660	0.31	53.0	2640	5080	0.31
175.4	8550	16440	0.31	53.5	2610	5010	0.31
177.1	8380	16230	0.32	54.0	2560	4950	0.32
178.7	8440	17110	0.34	54.5	2570	5210	0.34
180.4	8380	16660	0.33	55.0	2560	5080	0.33
182.0	8170	17110	0.35	55.5	2490	5210	0.35

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-409

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)	
183.6	7860	15830	0.34	56.0	2400	4820	0.34
185.3	8060	17340	0.36	56.5	2460	5290	0.36
186.9	7960	15830	0.33	57.0	2430	4820	0.33
188.6	8380	16030	0.31	57.5	2560	4880	0.31
190.2	8380	15830	0.30	58.0	2560	4820	0.30
191.8	8440	17580	0.35	58.5	2570	5360	0.35
193.5	8380	17830	0.36	59.0	2560	5430	0.36
195.1	8170	16440	0.34	59.5	2490	5010	0.34
196.8	7960	15830	0.33	60.0	2430	4820	0.33
198.4	7960	15630	0.32	60.5	2430	4760	0.32
200.0	7910	15440	0.32	61.0	2410	4710	0.32
201.7	7910	15250	0.32	61.5	2410	4650	0.32
203.3	7770	14720	0.31	62.0	2370	4490	0.31
205.0	7910	16030	0.34	62.5	2410	4880	0.34
206.6	7810	15440	0.33	63.0	2380	4710	0.33
208.2	7860	15630	0.33	63.5	2400	4760	0.33
209.9	7860	15250	0.32	64.0	2400	4650	0.32
211.5	7810	15070	0.32	64.5	2380	4590	0.32
213.2	7910	14890	0.30	65.0	2410	4540	0.30
214.8	7810	15630	0.33	65.5	2380	4760	0.33
216.4	7580	15070	0.33	66.0	2310	4590	0.33
218.1	7720	14720	0.31	66.5	2350	4490	0.31
219.7	7360	14720	0.33	67.0	2240	4490	0.33
221.4	7280	15070	0.35	67.5	2220	4590	0.35
223.0	7540	15070	0.33	68.0	2300	4590	0.33
224.7	7670	14890	0.32	68.5	2340	4540	0.32
226.3	7860	15830	0.34	69.0	2400	4820	0.34
227.9	7960	15830	0.33	69.5	2430	4820	0.33
229.6	7960	15440	0.32	70.0	2430	4710	0.32
231.2	7630	14390	0.30	70.5	2320	4380	0.30
232.9	7150	14070	0.33	71.0	2180	4290	0.33
234.5	7230	14550	0.34	71.5	2210	4440	0.34
236.1	7230	15070	0.35	72.0	2210	4590	0.35
237.8	7400	15440	0.35	72.5	2260	4710	0.35
239.4	7910	17110	0.36	73.0	2410	5210	0.36
241.1	8330	17340	0.35	73.5	2540	5290	0.35
242.7	8610	17340	0.34	74.0	2630	5290	0.34

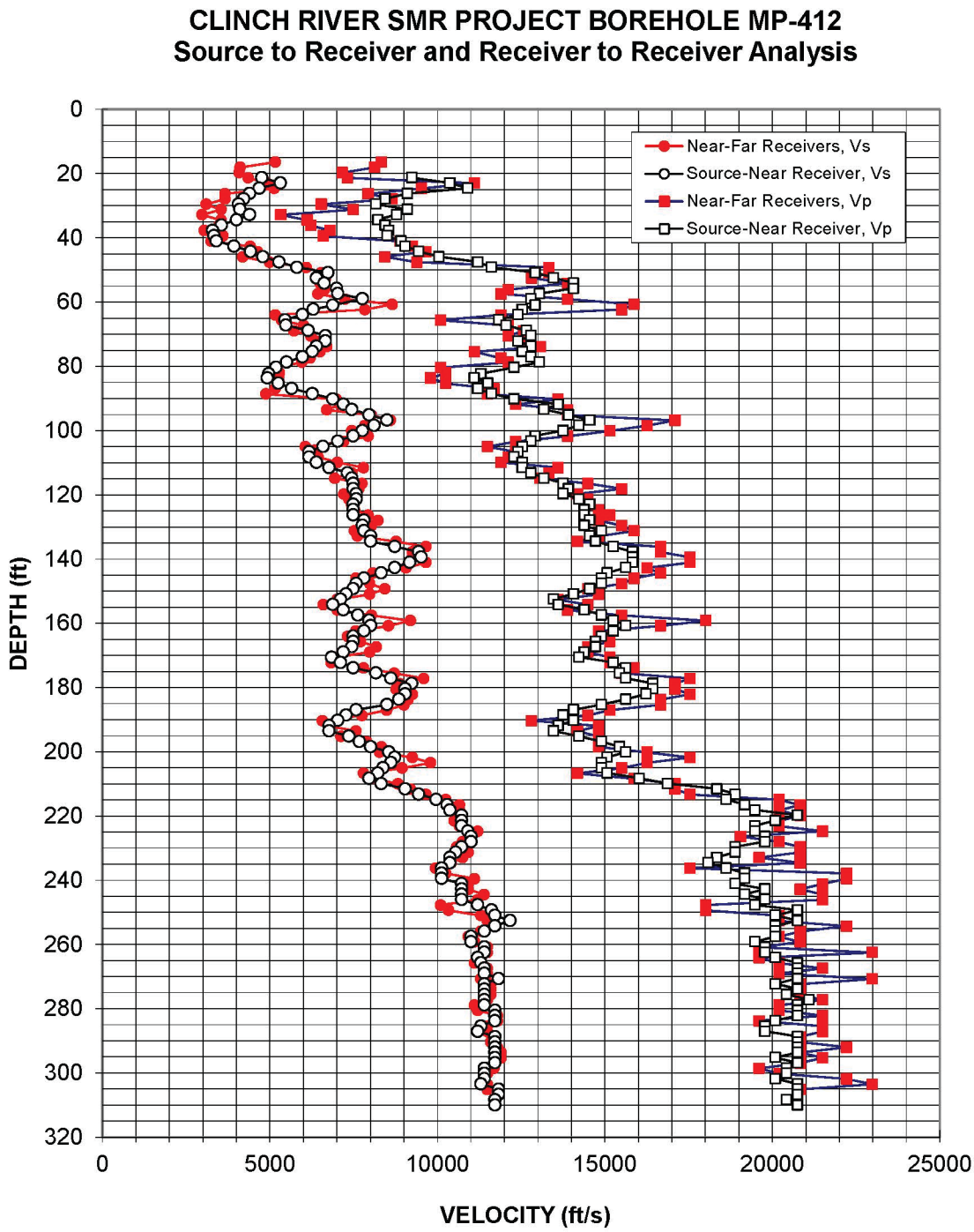

Figure A-17: Boring MP-412, Suspension S-R1 P- and S_H-wave velocities

Table A-17: Boring MP-412, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-412

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)	
21.2	4760	9240	0.32	6.5	1450	2820	0.32
22.9	5320	10380	0.32	7.0	1620	3160	0.32
24.5	4690	10910	0.39	7.5	1430	3330	0.39
26.2	4400	9110	0.35	8.0	1340	2780	0.35
27.8	4220	8440	0.33	8.5	1290	2570	0.33
29.4	4070	8170	0.33	9.0	1240	2490	0.33
31.1	4110	9110	0.37	9.5	1250	2780	0.37
32.7	4400	8790	0.33	10.0	1340	2680	0.33
34.4	4010	8220	0.34	10.5	1220	2510	0.34
36.0	3560	8440	0.39	11.0	1080	2570	0.39
37.6	3300	8550	0.41	11.5	1000	2610	0.41
39.3	3330	8500	0.41	12.0	1020	2590	0.41
40.9	3400	8920	0.41	12.5	1040	2720	0.41
42.6	3930	9040	0.38	13.0	1200	2760	0.38
44.2	4430	9450	0.36	13.5	1350	2880	0.36
45.8	4800	10050	0.35	14.0	1460	3060	0.35
47.5	5280	11200	0.36	14.5	1610	3410	0.36
49.1	5810	11610	0.33	15.0	1770	3540	0.33
50.8	6730	12920	0.31	15.5	2050	3940	0.31
52.4	6390	13470	0.35	16.0	1950	4110	0.35
54.0	6630	14070	0.36	16.5	2020	4290	0.36
55.7	6990	14070	0.34	17.0	2130	4290	0.34
57.3	7030	13050	0.30	17.5	2140	3980	0.30
59.0	7770	12790	0.21	18.0	2370	3900	0.21
60.9	6880	12920	0.30	18.6	2100	3940	0.30
62.2	6300	12530	0.33	19.0	1920	3820	0.33
63.9	5970	12410	0.35	19.5	1820	3780	0.35
65.5	5460	11830	0.36	20.0	1660	3610	0.36
67.2	5480	12060	0.37	20.5	1670	3680	0.37
68.8	6150	12660	0.35	21.0	1870	3860	0.35
70.5	6660	12790	0.31	21.5	2030	3900	0.31
72.1	6660	12410	0.30	22.0	2030	3780	0.30
73.7	6390	12790	0.33	22.5	1950	3900	0.33
75.4	6270	12530	0.33	23.0	1910	3820	0.33
77.0	5970	12790	0.36	23.5	1820	3900	0.36
78.7	5500	13050	0.39	24.0	1680	3980	0.39
80.3	5190	12290	0.39	24.5	1580	3750	0.39

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-412

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)	
82.3	4960	11300	0.38	25.1	1510	3450	0.38
83.6	4930	11110	0.38	25.5	1500	3380	0.38
85.2	5250	11510	0.37	26.0	1600	3510	0.37
86.9	5650	11200	0.33	26.5	1720	3410	0.33
88.5	6270	11610	0.29	27.0	1910	3540	0.29
90.1	6880	12290	0.27	27.5	2100	3750	0.27
91.8	7190	13610	0.31	28.0	2190	4150	0.31
93.4	7450	13190	0.27	28.5	2270	4020	0.27
95.1	7960	13910	0.26	29.0	2430	4240	0.26
96.7	8500	14550	0.24	29.5	2590	4440	0.24
98.3	8120	14220	0.26	30.0	2470	4340	0.26
100.0	7770	13760	0.27	30.5	2370	4190	0.27
101.6	7490	12920	0.25	31.0	2280	3940	0.25
103.3	7030	12790	0.28	31.5	2140	3900	0.28
104.9	6590	12530	0.31	32.0	2010	3820	0.31
106.5	6180	12410	0.34	32.5	1880	3780	0.34
108.2	6180	12290	0.33	33.0	1880	3750	0.33
109.8	6390	12530	0.32	33.5	1950	3820	0.32
111.5	6770	12530	0.29	34.0	2060	3820	0.29
113.1	7320	12790	0.26	34.5	2230	3900	0.26
114.7	7450	13190	0.27	35.0	2270	4020	0.27
116.4	7490	13760	0.29	35.5	2280	4190	0.29
118.0	7490	13910	0.30	36.0	2280	4240	0.30
119.7	7580	13760	0.28	36.5	2310	4190	0.28
121.3	7580	14220	0.30	37.0	2310	4340	0.30
122.9	7490	14550	0.32	37.5	2280	4440	0.32
124.6	7490	14390	0.31	38.0	2280	4380	0.31
126.2	7490	14390	0.31	38.5	2280	4380	0.31
127.9	7810	14550	0.30	39.0	2380	4440	0.30
129.5	7770	14390	0.29	39.5	2370	4380	0.29
131.1	7810	14890	0.31	40.0	2380	4540	0.31
132.8	8010	14550	0.28	40.5	2440	4440	0.28
134.4	8010	14720	0.29	41.0	2440	4490	0.29
136.1	8730	15250	0.26	41.5	2660	4650	0.26
137.7	9450	15830	0.22	42.0	2880	4820	0.22
139.3	9520	15830	0.22	42.5	2900	4820	0.22
141.0	9170	15830	0.25	43.0	2800	4820	0.25
142.6	8730	15630	0.27	43.5	2660	4760	0.27
144.3	8330	15070	0.28	44.0	2540	4590	0.28
145.9	7810	14890	0.31	44.5	2380	4540	0.31

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-412

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)	
147.6	7580	14890	0.33	45.0	2310	4540	0.33
149.2	7490	14550	0.32	45.5	2280	4440	0.32
150.8	7280	14070	0.32	46.0	2220	4290	0.32
152.5	7110	13470	0.31	46.5	2170	4110	0.31
154.1	6880	13610	0.33	47.0	2100	4150	0.33
155.8	7190	14390	0.33	47.5	2190	4380	0.33
157.4	7630	14890	0.32	48.0	2320	4540	0.32
159.0	7960	15250	0.31	48.5	2430	4650	0.31
160.7	8010	15630	0.32	49.0	2440	4760	0.32
162.3	7810	15250	0.32	49.5	2380	4650	0.32
164.0	7490	14890	0.33	50.0	2280	4540	0.33
165.6	7490	14720	0.33	50.5	2280	4490	0.33
167.2	7450	14720	0.33	51.0	2270	4490	0.33
168.9	7190	14390	0.33	51.5	2190	4380	0.33
170.5	6840	14220	0.35	52.0	2090	4340	0.35
172.2	7110	15250	0.36	52.5	2170	4650	0.36
173.8	7490	15630	0.35	53.0	2280	4760	0.35
175.4	8170	15440	0.31	53.5	2490	4710	0.31
177.1	8610	15630	0.28	54.0	2630	4760	0.28
178.7	9240	16440	0.27	54.5	2820	5010	0.27
180.4	9040	16440	0.28	55.0	2760	5010	0.28
182.0	9040	16230	0.27	55.5	2760	4950	0.27
183.6	8850	15630	0.26	56.0	2700	4760	0.26
185.3	8500	14890	0.26	56.5	2590	4540	0.26
186.9	7580	14070	0.30	57.0	2310	4290	0.30
188.6	7280	13760	0.31	57.5	2220	4190	0.31
190.2	7030	14070	0.33	58.0	2140	4290	0.33
191.8	6770	13610	0.34	58.5	2060	4150	0.34
193.5	6770	13470	0.33	59.0	2060	4110	0.33
195.1	7360	14220	0.32	59.5	2240	4340	0.32
196.8	7670	14890	0.32	60.0	2340	4540	0.32
198.4	8010	15440	0.32	60.5	2440	4710	0.32
200.0	8550	15630	0.29	61.0	2610	4760	0.29
201.7	8730	15070	0.25	61.5	2660	4590	0.25
203.3	8610	14890	0.25	62.0	2630	4540	0.25
205.0	8380	14890	0.27	62.5	2560	4540	0.27
206.6	8220	15070	0.29	63.0	2510	4590	0.29
208.2	7960	16030	0.34	63.5	2430	4880	0.34
209.9	8330	16880	0.34	64.0	2540	5150	0.34
211.5	9040	18350	0.34	64.5	2760	5590	0.34

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-412

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)	
213.2	9450	18900	0.33	65.0	2880	5760	0.33
214.8	9970	18620	0.30	65.5	3040	5670	0.30
216.4	10290	19180	0.30	66.0	3140	5850	0.30
218.1	10380	19480	0.30	66.5	3160	5940	0.30
219.7	10730	20750	0.32	67.0	3270	6330	0.32
221.4	10730	20100	0.30	67.5	3270	6130	0.30
223.0	10730	19480	0.28	68.0	3270	5940	0.28
224.7	10910	19480	0.27	68.5	3330	5940	0.27
226.3	11010	19780	0.28	69.0	3360	6030	0.28
227.9	11010	19780	0.28	69.5	3360	6030	0.28
229.6	10730	18900	0.26	70.0	3270	5760	0.26
231.2	10550	18900	0.27	70.5	3220	5760	0.27
232.9	10380	18350	0.26	71.0	3160	5590	0.26
234.5	10380	18090	0.25	71.5	3160	5510	0.25
236.1	10130	18620	0.29	72.0	3090	5670	0.29
237.8	10130	19180	0.31	72.5	3090	5850	0.31
239.4	10130	19180	0.31	73.0	3090	5850	0.31
241.1	10730	18900	0.26	73.5	3270	5760	0.26
242.7	10730	19780	0.29	74.0	3270	6030	0.29
244.3	10730	19180	0.27	74.5	3270	5850	0.27
246.0	10730	19780	0.29	75.0	3270	6030	0.29
247.6	11200	19480	0.25	75.5	3410	5940	0.25
249.3	11610	20750	0.27	76.0	3540	6330	0.27
250.9	11720	20100	0.24	76.5	3570	6130	0.24
252.5	12170	20750	0.24	77.0	3710	6330	0.24
254.2	11720	20100	0.24	77.5	3570	6130	0.24
255.8	11410	20100	0.26	78.0	3480	6130	0.26
257.5	11010	20100	0.29	78.5	3360	6130	0.29
259.1	11010	19480	0.27	79.0	3360	5940	0.27
260.7	11410	19780	0.25	79.5	3480	6030	0.25
262.4	11410	19780	0.25	80.0	3480	6030	0.25
264.0	11200	20100	0.27	80.5	3410	6130	0.27
265.7	11300	20750	0.29	81.0	3450	6330	0.29
267.3	11410	20750	0.28	81.5	3480	6330	0.28
268.9	11410	20750	0.28	82.0	3480	6330	0.28
270.6	11830	20750	0.26	82.5	3610	6330	0.26
272.2	11410	20100	0.26	83.0	3480	6130	0.26
273.9	11410	20750	0.28	83.5	3480	6330	0.28
275.5	11410	20420	0.27	84.0	3480	6220	0.27
277.1	11410	21100	0.29	84.5	3480	6430	0.29

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-412

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)	
278.8	11410	20750	0.28	85.0	3480	6330	0.28
280.4	11720	20750	0.27	85.5	3570	6330	0.27
282.1	11720	20750	0.27	86.0	3570	6330	0.27
283.7	11720	20100	0.24	86.5	3570	6130	0.24
285.3	11300	19780	0.26	87.0	3450	6030	0.26
287.0	11200	19780	0.26	87.5	3410	6030	0.26
288.6	11720	20750	0.27	88.0	3570	6330	0.27
290.3	11720	20750	0.27	88.5	3570	6330	0.27
291.9	11720	20750	0.27	89.0	3570	6330	0.27
293.5	11720	20750	0.27	89.5	3570	6330	0.27
295.2	11720	20100	0.24	90.0	3570	6130	0.24
296.8	11720	20750	0.27	90.5	3570	6330	0.27
298.5	11410	20420	0.27	91.0	3480	6220	0.27
300.1	11410	20420	0.27	91.5	3480	6220	0.27
301.8	11410	20100	0.26	92.0	3480	6130	0.26
303.4	11300	20750	0.29	92.5	3450	6330	0.29
305.0	11830	20750	0.26	93.0	3610	6330	0.26
306.7	11830	20750	0.26	93.5	3610	6330	0.26
308.3	11720	20420	0.25	94.0	3570	6220	0.25
310.0	11720	20750	0.27	94.5	3570	6330	0.27

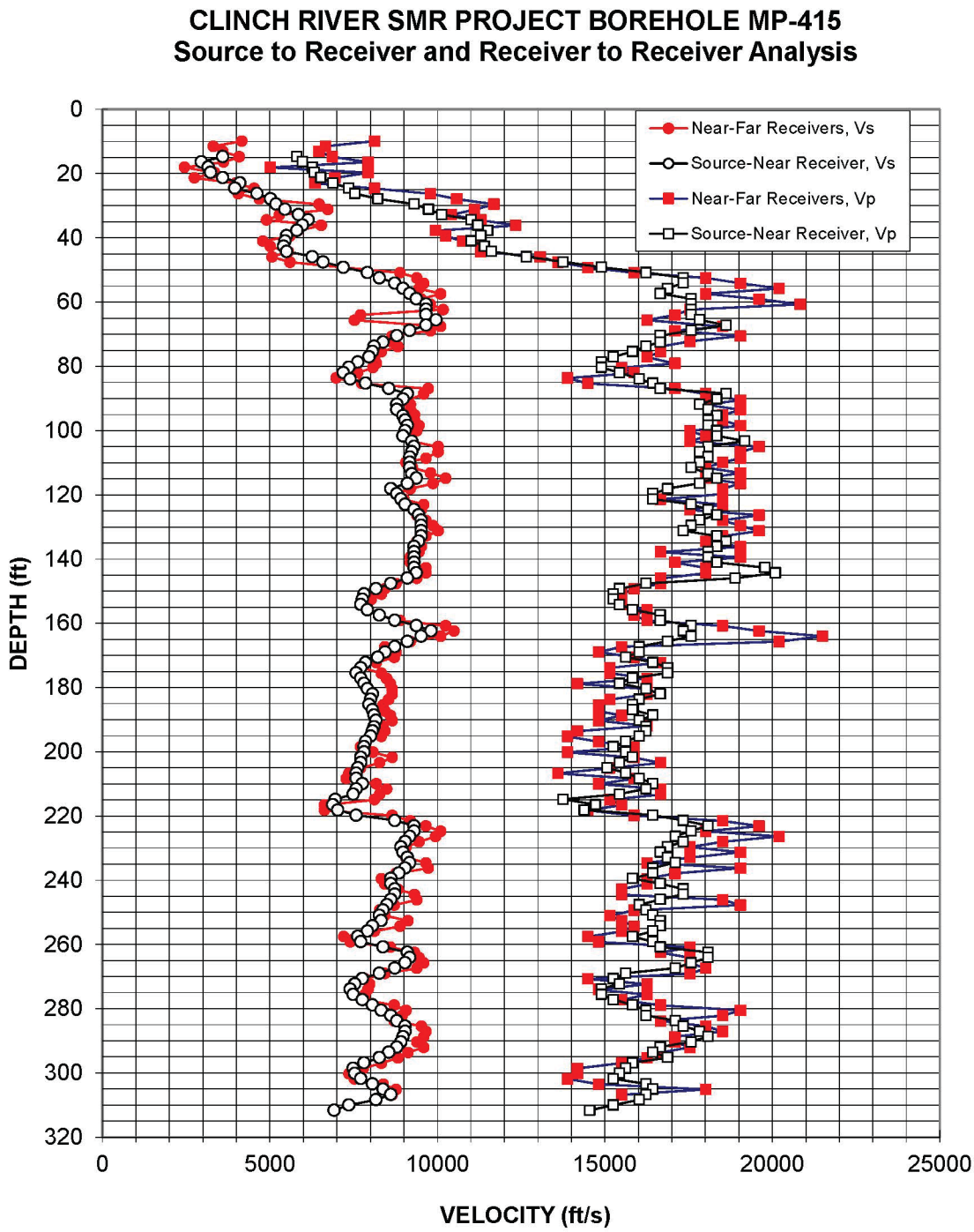

Figure A-18: Boring MP-415, Suspension S-R1 P- and S_H-wave velocities

Table A-18: Boring MP-415, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-415

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)	
14.7	3600	5810	0.19	4.5	1100	1770	0.19
16.3	2960	5970	0.34	5.0	900	1820	0.34
18.0	3170	6270	0.33	5.5	960	1910	0.33
19.6	3230	6330	0.32	6.0	980	1930	0.32
21.2	3600	6530	0.28	6.5	1100	1990	0.28
22.9	4110	6880	0.22	7.0	1250	2100	0.22
24.5	3960	7360	0.30	7.5	1210	2240	0.30
26.2	4620	7540	0.20	8.0	1410	2300	0.20
27.8	5020	8220	0.20	8.5	1530	2510	0.20
29.4	5190	9310	0.27	9.0	1580	2840	0.27
31.1	5460	9740	0.27	9.5	1660	2970	0.27
32.7	5860	10130	0.25	10.0	1790	3090	0.25
34.4	6150	11010	0.27	10.5	1870	3360	0.27
36.0	5970	11200	0.30	11.0	1820	3410	0.30
37.6	5810	11510	0.33	11.5	1770	3510	0.33
39.3	5500	11300	0.34	12.0	1680	3450	0.34
40.9	5460	11010	0.34	12.5	1660	3360	0.34
42.6	5410	11410	0.35	13.0	1650	3480	0.35
44.2	5500	11610	0.36	13.5	1680	3540	0.36
45.8	6270	12660	0.34	14.0	1910	3860	0.34
47.5	6590	13760	0.35	14.5	2010	4190	0.35
49.1	7190	14890	0.35	15.0	2190	4540	0.35
50.8	7910	16230	0.34	15.5	2410	4950	0.34
52.4	8270	17340	0.35	16.0	2520	5290	0.35
54.0	8730	17340	0.33	16.5	2660	5290	0.33
55.7	8980	16880	0.30	17.0	2740	5150	0.30
57.3	9170	16660	0.28	17.5	2800	5080	0.28
59.0	9380	17580	0.30	18.0	2860	5360	0.30
60.6	9660	17580	0.28	18.5	2950	5360	0.28
62.2	9660	17580	0.28	19.0	2950	5360	0.28
63.9	9660	17580	0.28	19.5	2950	5360	0.28
65.5	9970	17830	0.27	20.0	3040	5430	0.27
67.2	9660	18620	0.32	20.5	2950	5670	0.32
68.8	9170	17580	0.31	21.0	2800	5360	0.31
70.5	8790	16660	0.31	21.5	2680	5080	0.31
72.4	8380	16660	0.33	22.1	2560	5080	0.33
73.7	8120	16230	0.33	22.5	2470	4950	0.33

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-415

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)	
75.4	8060	15830	0.32	23.0	2460	4820	0.32
77.0	7960	15250	0.31	23.5	2430	4650	0.31
78.7	7630	14890	0.32	24.0	2320	4540	0.32
80.3	7360	14890	0.34	24.5	2240	4540	0.34
81.9	7190	15440	0.36	25.0	2190	4710	0.36
83.9	7400	16030	0.36	25.6	2260	4880	0.36
85.2	7860	16440	0.35	26.0	2400	5010	0.35
86.9	8550	16660	0.32	26.5	2610	5080	0.32
88.5	9110	18620	0.34	27.0	2780	5670	0.34
90.1	8980	18350	0.34	27.5	2740	5590	0.34
91.8	8790	17830	0.34	28.0	2680	5430	0.34
93.4	8790	18090	0.35	28.5	2680	5510	0.35
95.4	8980	18350	0.34	29.1	2740	5590	0.34
96.7	9040	18090	0.33	29.5	2760	5510	0.33
98.3	9110	18090	0.33	30.0	2780	5510	0.33
100.0	9040	18350	0.34	30.5	2760	5590	0.34
101.6	8980	18350	0.34	31.0	2740	5590	0.34
103.3	9240	19180	0.35	31.5	2820	5850	0.35
104.9	9310	18090	0.32	32.0	2840	5510	0.32
106.5	9240	17830	0.32	32.5	2820	5430	0.32
108.2	9170	18090	0.33	33.0	2800	5510	0.33
109.8	9170	17830	0.32	33.5	2800	5430	0.32
111.5	9170	17580	0.31	34.0	2800	5360	0.31
113.4	9240	18090	0.32	34.6	2820	5510	0.32
114.7	9380	18350	0.32	35.0	2860	5590	0.32
116.4	9110	17830	0.32	35.5	2780	5430	0.32
118.0	8610	16880	0.32	36.0	2630	5150	0.32
119.7	8790	16440	0.30	36.5	2680	5010	0.30
121.3	8920	16440	0.29	37.0	2720	5010	0.29
122.9	9040	17580	0.32	37.5	2760	5360	0.32
124.6	9310	18090	0.32	38.0	2840	5510	0.32
126.2	9450	18350	0.32	38.5	2880	5590	0.32
127.9	9520	17830	0.30	39.0	2900	5430	0.30
129.5	9520	17580	0.29	39.5	2900	5360	0.29
131.1	9520	17340	0.28	40.0	2900	5290	0.28
132.8	9520	18350	0.32	40.5	2900	5590	0.32
134.4	9450	18620	0.33	41.0	2880	5670	0.33
136.1	9310	18350	0.33	41.5	2840	5590	0.33
137.7	9310	18090	0.32	42.0	2840	5510	0.32
139.3	9310	18090	0.32	42.5	2840	5510	0.32

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-415

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)	
141.0	9310	18350	0.33	43.0	2840	5590	0.33
142.6	9310	19780	0.36	43.5	2840	6030	0.36
144.3	9380	20100	0.36	44.0	2860	6130	0.36
145.9	9110	18900	0.35	44.5	2780	5760	0.35
147.6	8610	16230	0.30	45.0	2630	4950	0.30
149.2	8170	15440	0.31	45.5	2490	4710	0.31
150.8	7810	15250	0.32	46.0	2380	4650	0.32
152.5	7770	15250	0.32	46.5	2370	4650	0.32
154.1	7720	15440	0.33	47.0	2350	4710	0.33
155.8	7910	15830	0.33	47.5	2410	4820	0.33
157.4	8270	16660	0.34	48.0	2520	5080	0.34
159.0	8730	16660	0.31	48.5	2660	5080	0.31
160.7	9380	17580	0.30	49.0	2860	5360	0.30
162.3	9810	17340	0.26	49.5	2990	5290	0.26
164.0	9520	17580	0.29	50.0	2900	5360	0.29
165.6	9110	16880	0.29	50.5	2780	5150	0.29
167.2	8730	16030	0.29	51.0	2660	4880	0.29
168.9	8440	16030	0.31	51.5	2570	4880	0.31
170.5	8220	15630	0.31	52.0	2510	4760	0.31
172.2	7860	16440	0.35	52.5	2400	5010	0.35
173.8	7720	16880	0.37	53.0	2350	5150	0.37
175.4	7580	16880	0.37	53.5	2310	5150	0.37
177.1	7720	15830	0.34	54.0	2350	4820	0.34
178.7	7810	15440	0.33	54.5	2380	4710	0.33
180.4	7910	16230	0.34	55.0	2410	4950	0.34
182.0	8060	16660	0.35	55.5	2460	5080	0.35
183.6	8010	16030	0.33	56.0	2440	4880	0.33
185.3	7960	15830	0.33	56.5	2430	4820	0.33
186.9	8060	15830	0.32	57.0	2460	4820	0.32
188.6	8120	16440	0.34	57.5	2470	5010	0.34
190.2	8170	16030	0.32	58.0	2490	4880	0.32
192.2	8120	16230	0.33	58.6	2470	4950	0.33
193.5	8060	16230	0.34	59.0	2460	4950	0.34
195.1	8010	16030	0.33	59.5	2440	4880	0.33
196.8	7860	15630	0.33	60.0	2400	4760	0.33
198.4	7810	15250	0.32	60.5	2380	4650	0.32
200.0	7810	15630	0.33	61.0	2380	4760	0.33
201.7	7720	15830	0.34	61.5	2350	4820	0.34
203.3	7720	15440	0.33	62.0	2350	4710	0.33
205.0	7630	15070	0.33	62.5	2320	4590	0.33

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-415

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)	
206.6	7580	15630	0.35	63.0	2310	4760	0.35
208.2	7580	16030	0.36	63.5	2310	4880	0.36
209.9	7770	16440	0.36	64.0	2370	5010	0.36
211.5	7580	16230	0.36	64.5	2310	4950	0.36
213.2	7490	15440	0.35	65.0	2280	4710	0.35
214.8	6960	13760	0.33	65.5	2120	4190	0.33
216.4	6880	14720	0.36	66.0	2100	4490	0.36
218.1	7030	14390	0.34	66.5	2140	4380	0.34
219.7	7580	16440	0.37	67.0	2310	5010	0.37
221.4	8730	17340	0.33	67.5	2660	5290	0.33
223.0	9310	18090	0.32	68.0	2840	5510	0.32
224.7	9310	17580	0.31	68.5	2840	5360	0.31
226.3	9170	17110	0.30	69.0	2800	5210	0.30
227.9	9040	17340	0.31	69.5	2760	5290	0.31
229.6	8920	16880	0.31	70.0	2720	5150	0.31
231.2	8980	16660	0.30	70.5	2740	5080	0.30
232.9	9110	16880	0.29	71.0	2780	5150	0.29
234.5	9170	17110	0.30	71.5	2800	5210	0.30
236.1	9040	16440	0.28	72.0	2760	5010	0.28
237.8	8850	16440	0.30	72.5	2700	5010	0.30
239.4	8610	15830	0.29	73.0	2630	4820	0.29
241.1	8610	16660	0.32	73.5	2630	5080	0.32
242.7	8730	17340	0.33	74.0	2660	5290	0.33
244.3	8730	17340	0.33	74.5	2660	5290	0.33
246.0	8610	16660	0.32	75.0	2630	5080	0.32
247.6	8500	16030	0.30	75.5	2590	4880	0.30
249.3	8380	16230	0.32	76.0	2560	4950	0.32
250.9	8270	16440	0.33	76.5	2520	5010	0.33
252.5	8330	16660	0.33	77.0	2540	5080	0.33
254.2	8060	16660	0.35	77.5	2460	5080	0.35
255.8	7910	16440	0.35	78.0	2410	5010	0.35
257.5	7630	15830	0.35	78.5	2320	4820	0.35
259.1	7720	16440	0.36	79.0	2350	5010	0.36
260.7	8380	16660	0.33	79.5	2560	5080	0.33
262.4	9110	18090	0.33	80.0	2780	5510	0.33
264.0	9170	18090	0.33	80.5	2800	5510	0.33
265.7	9040	17580	0.32	81.0	2760	5360	0.32
267.3	8730	17110	0.32	81.5	2660	5210	0.32
268.9	8270	15630	0.31	82.0	2520	4760	0.31
270.6	7770	15250	0.32	82.5	2370	4650	0.32

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-415

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)	
272.2	7540	15440	0.34	83.0	2300	4710	0.34
273.9	7400	14890	0.34	83.5	2260	4540	0.34
275.5	7490	14890	0.33	84.0	2280	4540	0.33
277.1	7770	15250	0.32	84.5	2370	4650	0.32
278.8	8060	15830	0.32	85.0	2460	4820	0.32
280.4	8330	16230	0.32	85.5	2540	4950	0.32
282.1	8610	16230	0.30	86.0	2630	4950	0.30
283.7	8790	17110	0.32	86.5	2680	5210	0.32
285.3	9040	17340	0.31	87.0	2760	5290	0.31
287.0	9040	17830	0.33	87.5	2760	5430	0.33
288.6	8980	18090	0.34	88.0	2740	5510	0.34
290.3	8920	17580	0.33	88.5	2720	5360	0.33
291.9	8790	16660	0.31	89.0	2680	5080	0.31
293.5	8550	16440	0.31	89.5	2610	5010	0.31
295.2	8270	16880	0.34	90.0	2520	5150	0.34
296.8	7810	15830	0.34	90.5	2380	4820	0.34
298.5	7490	15630	0.35	91.0	2280	4760	0.35
300.1	7540	15440	0.34	91.5	2300	4710	0.34
301.8	7720	15250	0.33	92.0	2350	4650	0.33
303.4	8060	16230	0.34	92.5	2460	4950	0.34
305.0	8380	16440	0.32	93.0	2560	5010	0.32
306.7	8610	16230	0.30	93.5	2630	4950	0.30
308.3	8170	16030	0.32	94.0	2490	4880	0.32
310.0	7360	15250	0.35	94.5	2240	4650	0.35
311.6	6920	14550	0.35	95.0	2110	4440	0.35

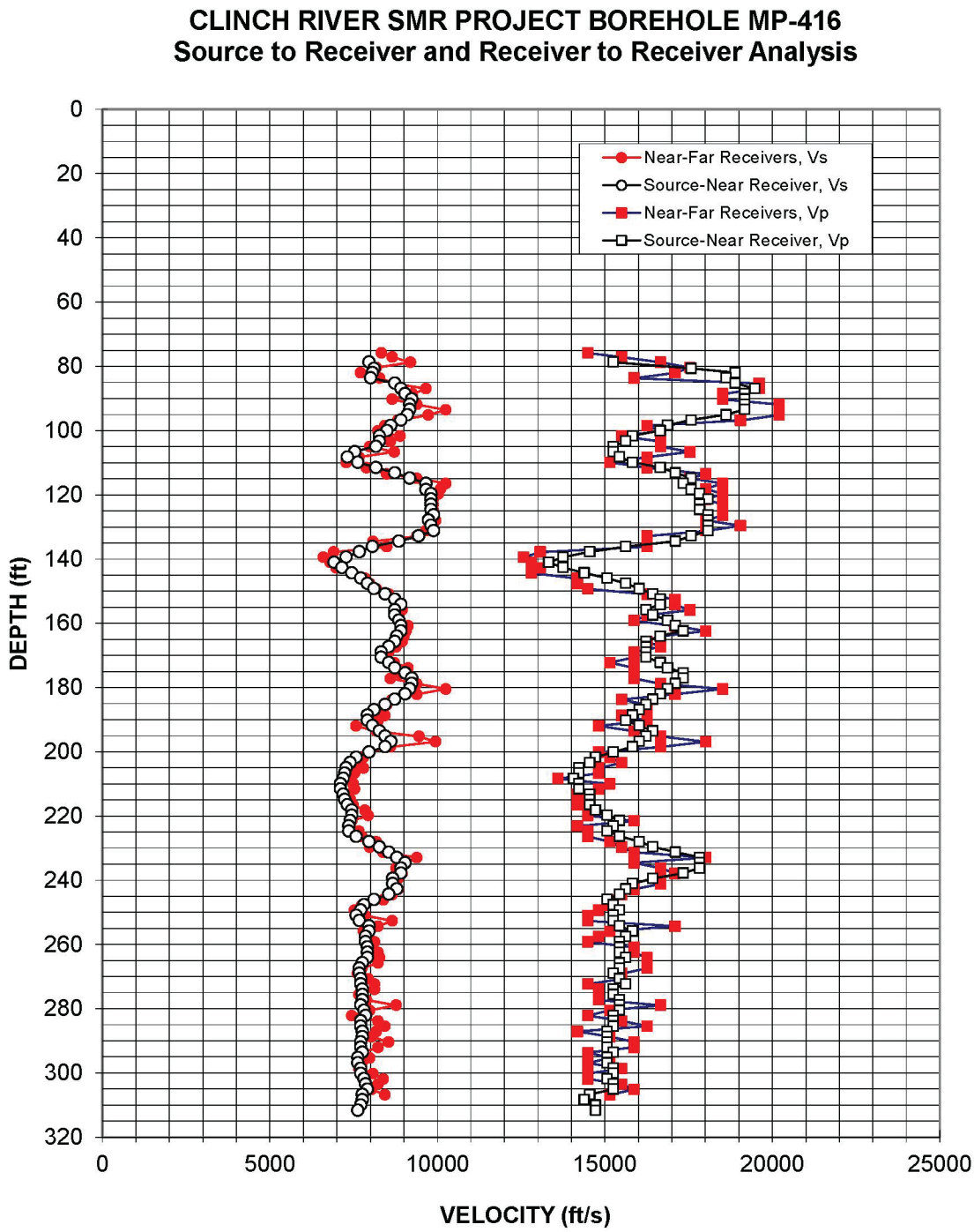

Figure A-19: Boring MP-416, Suspension S-R1 P- and S_H-wave velocities

Table A-19: Boring MP-416, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-416

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity V_s	Velocity V_p	Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity V_s	Velocity V_p	Poisson's Ratio
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
78.7	7960	15250	0.31	24.0	2430	4650	0.31
80.6	8120	17580	0.36	24.6	2470	5360	0.36
81.9	8060	18900	0.39	25.0	2460	5760	0.39
83.6	8010	18620	0.39	25.5	2440	5670	0.39
85.2	8730	18900	0.36	26.0	2660	5760	0.36
86.9	8920	19480	0.37	26.5	2720	5940	0.37
88.5	9040	19180	0.36	27.0	2760	5850	0.36
90.1	9240	19180	0.35	27.5	2820	5850	0.35
91.8	9170	19180	0.35	28.0	2800	5850	0.35
93.4	9170	19180	0.35	28.5	2800	5850	0.35
95.1	9110	18620	0.34	29.0	2780	5670	0.34
96.7	8920	17580	0.33	29.5	2720	5360	0.33
98.3	8610	16880	0.32	30.0	2630	5150	0.32
100.0	8500	16660	0.32	30.5	2590	5080	0.32
101.6	8270	15830	0.31	31.0	2520	4820	0.31
103.3	8270	15630	0.31	31.5	2520	4760	0.31
104.9	8170	15250	0.30	32.0	2490	4650	0.30
106.5	7540	15250	0.34	32.5	2300	4650	0.34
108.2	7320	15440	0.36	33.0	2230	4710	0.36
109.8	7630	15830	0.35	33.5	2320	4820	0.35
111.5	8170	16660	0.34	34.0	2490	5080	0.34
113.1	8730	17110	0.32	34.5	2660	5210	0.32
114.7	9170	17580	0.31	35.0	2800	5360	0.31
116.4	9660	17340	0.27	35.5	2950	5290	0.27
118.4	9660	17580	0.28	36.1	2950	5360	0.28
119.7	9810	17830	0.28	36.5	2990	5430	0.28
121.3	9810	18090	0.29	37.0	2990	5510	0.29
122.9	9810	17830	0.28	37.5	2990	5430	0.28
124.6	9810	17830	0.28	38.0	2990	5430	0.28
126.2	9890	18090	0.29	38.5	3010	5510	0.29
127.9	9740	18090	0.30	39.0	2970	5510	0.30
129.5	9810	18090	0.29	39.5	2990	5510	0.29
131.1	9890	18090	0.29	40.0	3010	5510	0.29
132.8	9450	17580	0.30	40.5	2880	5360	0.30
134.4	8850	17110	0.32	41.0	2700	5210	0.32
136.1	8060	15630	0.32	41.5	2460	4760	0.32
137.7	7670	14550	0.31	42.0	2340	4440	0.31

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-416

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)	
139.3	7280	13760	0.31	42.5	2220	4190	0.31
141.0	6920	13330	0.32	43.0	2110	4060	0.32
142.6	7150	13760	0.31	43.5	2180	4190	0.31
144.3	7450	14390	0.32	44.0	2270	4380	0.32
145.9	7720	15070	0.32	44.5	2350	4590	0.32
147.6	7910	15630	0.33	45.0	2410	4760	0.33
149.2	8120	16030	0.33	45.5	2470	4880	0.33
150.8	8440	16440	0.32	46.0	2570	5010	0.32
152.5	8730	16660	0.31	46.5	2660	5080	0.31
154.1	8920	16660	0.30	47.0	2720	5080	0.30
155.8	8730	16230	0.30	47.5	2660	4950	0.30
157.4	8730	16440	0.30	48.0	2660	5010	0.30
159.0	8850	16880	0.31	48.5	2700	5150	0.31
160.7	8920	17110	0.31	49.0	2720	5210	0.31
162.3	8920	17340	0.32	49.5	2720	5290	0.32
164.0	8790	16660	0.31	50.0	2680	5080	0.31
165.6	8730	16230	0.30	50.5	2660	4950	0.30
167.2	8550	16230	0.31	51.0	2610	4950	0.31
168.9	8330	16230	0.32	51.5	2540	4950	0.32
170.5	8330	16230	0.32	52.0	2540	4950	0.32
172.2	8550	16660	0.32	52.5	2610	5080	0.32
173.8	8730	16880	0.32	53.0	2660	5150	0.32
175.4	9040	17340	0.31	53.5	2760	5290	0.31
177.1	9240	17340	0.30	54.0	2820	5290	0.30
178.7	9240	17110	0.29	54.5	2820	5210	0.29
180.4	9170	16880	0.29	55.0	2800	5150	0.29
182.0	9040	16660	0.29	55.5	2760	5080	0.29
183.6	8730	16440	0.30	56.0	2660	5010	0.30
185.3	8440	16230	0.31	56.5	2570	4950	0.31
186.9	8120	16030	0.33	57.0	2470	4880	0.33
188.6	7910	15830	0.33	57.5	2410	4820	0.33
190.2	7910	15630	0.33	58.0	2410	4760	0.33
191.8	8060	16030	0.33	58.5	2460	4880	0.33
193.5	8270	16440	0.33	59.0	2520	5010	0.33
195.1	8440	16230	0.31	59.5	2570	4950	0.31
196.8	8610	16030	0.30	60.0	2630	4880	0.30
198.4	8440	15830	0.30	60.5	2570	4820	0.30
200.0	7960	15250	0.31	61.0	2430	4650	0.31
201.7	7580	14720	0.32	61.5	2310	4490	0.32
203.3	7400	14550	0.33	62.0	2260	4440	0.33

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-416

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)	
205.0	7280	14220	0.32	62.5	2220	4340	0.32
206.6	7230	14220	0.33	63.0	2210	4340	0.33
208.2	7190	14070	0.32	63.5	2190	4290	0.32
209.9	7110	14220	0.33	64.0	2170	4340	0.33
211.5	7110	14220	0.33	64.5	2170	4340	0.33
213.2	7190	14550	0.34	65.0	2190	4440	0.34
214.8	7230	14550	0.34	65.5	2210	4440	0.34
216.4	7320	14550	0.33	66.0	2230	4440	0.33
218.1	7450	14720	0.33	66.5	2270	4490	0.33
219.7	7450	15070	0.34	67.0	2270	4590	0.34
221.4	7400	15440	0.35	67.5	2260	4710	0.35
223.0	7360	15250	0.35	68.0	2240	4650	0.35
224.7	7360	15070	0.34	68.5	2240	4590	0.34
226.3	7580	15440	0.34	69.0	2310	4710	0.34
227.9	7960	16030	0.34	69.5	2430	4880	0.34
229.6	8270	16440	0.33	70.0	2520	5010	0.33
231.2	8550	17110	0.33	70.5	2610	5210	0.33
232.9	8790	17830	0.34	71.0	2680	5430	0.34
234.5	9040	17830	0.33	71.5	2760	5430	0.33
236.1	8920	17830	0.33	72.0	2720	5430	0.33
237.8	8920	17340	0.32	72.5	2720	5290	0.32
239.4	8670	16440	0.31	73.0	2640	5010	0.31
241.1	8670	15830	0.29	73.5	2640	4820	0.29
242.7	8790	15630	0.27	74.0	2680	4760	0.27
244.3	8550	15440	0.28	74.5	2610	4710	0.28
246.0	8120	15070	0.30	75.0	2470	4590	0.30
247.6	7810	15250	0.32	75.5	2380	4650	0.32
249.3	7720	15440	0.33	76.0	2350	4710	0.33
250.9	7580	15250	0.34	76.5	2310	4650	0.34
252.5	7670	15250	0.33	77.0	2340	4650	0.33
254.2	7960	15440	0.32	77.5	2430	4710	0.32
255.8	7960	15830	0.33	78.0	2430	4820	0.33
257.5	7860	15630	0.33	78.5	2400	4760	0.33
259.1	7860	15440	0.32	79.0	2400	4710	0.32
260.7	7910	15440	0.32	79.5	2410	4710	0.32
262.4	7910	15440	0.32	80.0	2410	4710	0.32
264.0	7910	15630	0.33	80.5	2410	4760	0.33
265.7	7770	15440	0.33	81.0	2370	4710	0.33
267.3	7670	15440	0.34	81.5	2340	4710	0.34
268.9	7670	15250	0.33	82.0	2340	4650	0.33

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-416

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)	
270.6	7720	15440	0.33	82.5	2350	4710	0.33
272.2	7720	15630	0.34	83.0	2350	4760	0.34
273.9	7770	15250	0.32	83.5	2370	4650	0.32
275.5	7770	15250	0.32	84.0	2370	4650	0.32
277.1	7770	15440	0.33	84.5	2370	4710	0.33
278.8	7720	15440	0.33	85.0	2350	4710	0.33
280.4	7810	15440	0.33	85.5	2380	4710	0.33
282.1	7860	15250	0.32	86.0	2400	4650	0.32
283.7	7720	15250	0.33	86.5	2350	4650	0.33
285.3	7720	15250	0.33	87.0	2350	4650	0.33
287.0	7770	15070	0.32	87.5	2370	4590	0.32
288.6	7770	15070	0.32	88.0	2370	4590	0.32
290.3	7720	15070	0.32	88.5	2350	4590	0.32
291.9	7720	15070	0.32	89.0	2350	4590	0.32
293.5	7770	15250	0.32	89.5	2370	4650	0.32
295.2	7630	15070	0.33	90.0	2320	4590	0.33
296.8	7630	15070	0.33	90.5	2320	4590	0.33
298.5	7720	15250	0.33	91.0	2350	4650	0.33
300.1	7720	15250	0.33	91.5	2350	4650	0.33
301.8	7810	15070	0.32	92.0	2380	4590	0.32
303.4	7860	15250	0.32	92.5	2400	4650	0.32
305.0	7910	15250	0.32	93.0	2410	4650	0.32
306.7	7770	14550	0.30	93.5	2370	4440	0.30
308.3	7770	14390	0.29	94.0	2370	4380	0.29
310.0	7720	14720	0.31	94.5	2350	4490	0.31
311.6	7630	14720	0.32	95.0	2320	4490	0.32

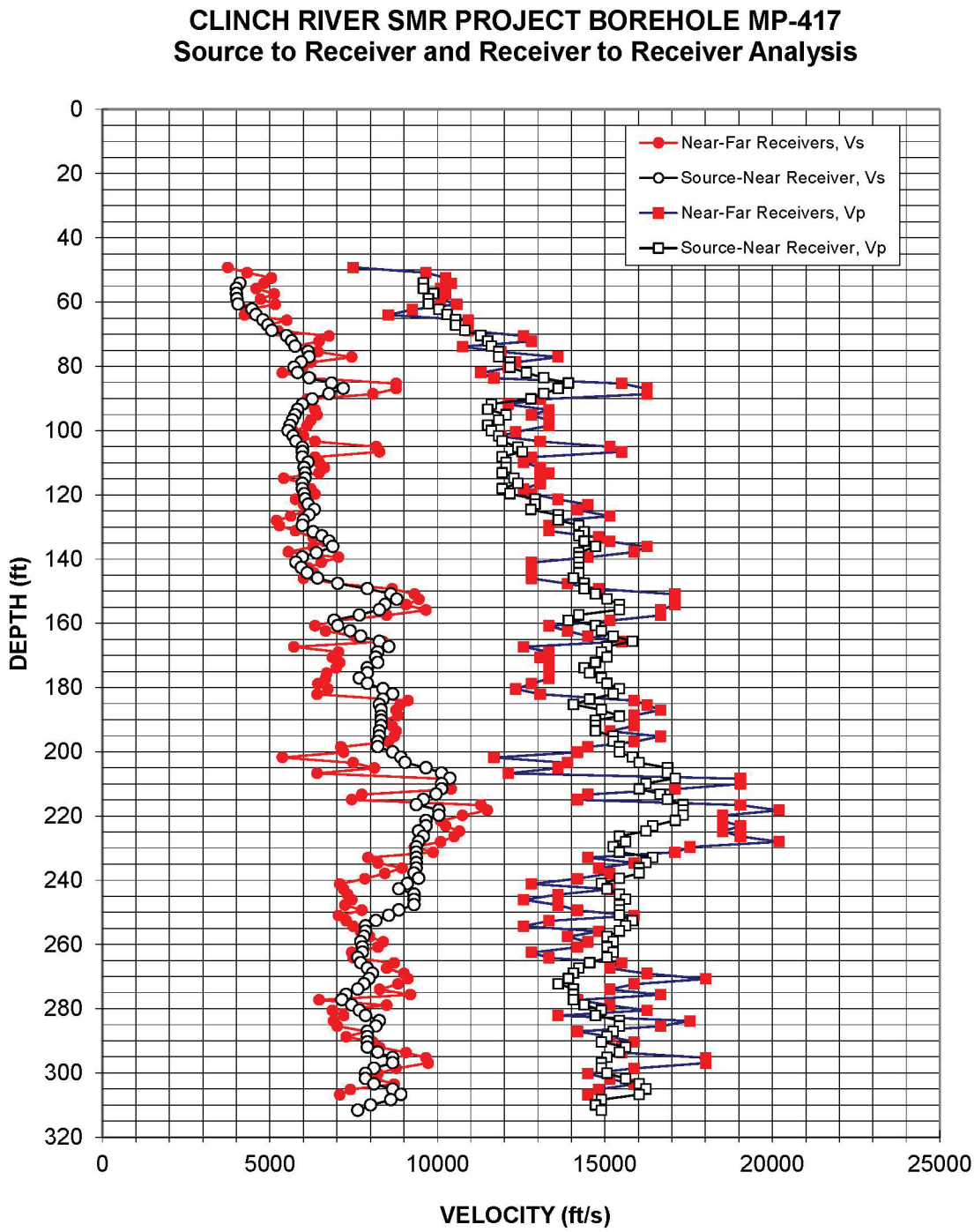

Figure A-20: Boring MP-417, Suspension S-R1 P- and S_H-wave velocities

Table A-20: Boring MP-417, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-417

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
54.0	4110	9590	0.39	16.5	1250	2920	0.39
55.7	4010	9590	0.39	17.0	1220	2920	0.39
57.3	4010	9890	0.40	17.5	1220	3010	0.40
59.0	4020	9740	0.40	18.0	1230	2970	0.40
60.6	4060	9740	0.39	18.5	1240	2970	0.39
62.2	4470	10050	0.38	19.0	1360	3060	0.38
63.9	4590	10290	0.38	19.5	1400	3140	0.38
65.5	4800	10550	0.37	20.0	1460	3220	0.37
67.2	4950	10550	0.36	20.5	1510	3220	0.36
68.8	5060	10820	0.36	21.0	1540	3300	0.36
70.5	5500	11300	0.34	21.5	1680	3450	0.34
72.1	5650	11510	0.34	22.0	1720	3510	0.34
73.7	5750	11610	0.34	22.5	1750	3540	0.34
75.4	6150	11830	0.32	23.0	1870	3610	0.32
77.0	6180	11830	0.31	23.5	1880	3610	0.31
78.7	5940	12170	0.34	24.0	1810	3710	0.34
80.3	5730	12170	0.36	24.5	1750	3710	0.36
81.9	5830	12660	0.37	25.0	1780	3860	0.37
83.6	6180	13190	0.36	25.5	1880	4020	0.36
85.2	6840	13910	0.34	26.0	2090	4240	0.34
86.9	7190	13610	0.31	26.5	2190	4150	0.31
88.5	6770	13190	0.32	27.0	2060	4020	0.32
90.1	6270	12790	0.34	27.5	1910	3900	0.34
91.8	5970	11610	0.32	28.0	1820	3540	0.32
93.4	5830	11510	0.33	28.5	1780	3510	0.33
95.1	5750	12060	0.35	29.0	1750	3680	0.35
96.7	5680	11830	0.35	29.5	1730	3610	0.35
98.3	5600	11510	0.34	30.0	1710	3510	0.34
100.0	5550	11610	0.35	30.5	1690	3540	0.35
101.6	5700	11830	0.35	31.0	1740	3610	0.35
103.3	5780	11940	0.35	31.5	1760	3640	0.35
105.2	5970	12410	0.35	32.1	1820	3780	0.35
106.5	5970	12530	0.35	32.5	1820	3820	0.35
108.2	5970	11940	0.33	33.0	1820	3640	0.33
109.8	6150	12060	0.32	33.5	1870	3680	0.32
111.5	6030	12060	0.33	34.0	1840	3680	0.33
113.1	6060	11940	0.33	34.5	1850	3640	0.33
114.7	6060	12290	0.34	35.0	1850	3750	0.34
116.4	5970	12410	0.35	35.5	1820	3780	0.35

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-417

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
118.0	5970	11940	0.33	36.0	1820	3640	0.33
119.7	6030	12170	0.34	36.5	1840	3710	0.34
121.3	6060	12920	0.36	37.0	1850	3940	0.36
122.9	6150	12920	0.35	37.5	1870	3940	0.35
124.6	6330	12790	0.34	38.0	1930	3900	0.34
126.2	6180	13610	0.37	38.5	1880	4150	0.37
127.9	6000	13610	0.38	39.0	1830	4150	0.38
129.5	5970	14220	0.39	39.5	1820	4340	0.39
131.5	6300	14390	0.38	40.1	1920	4380	0.38
132.8	6560	14220	0.36	40.5	2000	4340	0.36
134.4	6770	14390	0.36	41.0	2060	4380	0.36
136.1	6880	14720	0.36	41.5	2100	4490	0.36
138.0	6390	14220	0.37	42.1	1950	4340	0.37
139.3	5970	14220	0.39	42.5	1820	4340	0.39
141.0	5780	14220	0.40	43.0	1760	4340	0.40
142.6	5940	14220	0.39	43.5	1810	4340	0.39
144.3	6120	14220	0.39	44.0	1860	4340	0.39
145.9	6430	14070	0.37	44.5	1960	4290	0.37
147.6	7030	14390	0.34	45.0	2140	4380	0.34
149.2	7910	14390	0.28	45.5	2410	4380	0.28
150.8	8610	14720	0.24	46.0	2630	4490	0.24
152.5	8790	15070	0.24	46.5	2680	4590	0.24
154.1	8440	15440	0.29	47.0	2570	4710	0.29
155.8	8270	15440	0.30	47.5	2520	4710	0.30
157.4	7670	14220	0.29	48.0	2340	4340	0.29
159.0	6920	13910	0.34	48.5	2110	4240	0.34
160.7	7030	14720	0.35	49.0	2140	4490	0.35
162.3	7400	14890	0.34	49.5	2260	4540	0.34
164.0	7720	15250	0.33	50.0	2350	4650	0.33
165.6	8270	15830	0.31	50.5	2520	4820	0.31
167.2	8550	15070	0.26	51.0	2610	4590	0.26
168.9	8220	14890	0.28	51.5	2510	4540	0.28
170.5	8170	15070	0.29	52.0	2490	4590	0.29
172.2	8220	14720	0.27	52.5	2510	4490	0.27
173.8	7910	14390	0.28	53.0	2410	4380	0.28
175.4	7910	14550	0.29	53.5	2410	4440	0.29
177.1	7670	14890	0.32	54.0	2340	4540	0.32
178.7	7910	15070	0.31	54.5	2410	4590	0.31
180.4	8380	15440	0.29	55.0	2560	4710	0.29
182.0	8670	15250	0.26	55.5	2640	4650	0.26
183.6	8380	14550	0.25	56.0	2560	4440	0.25
185.3	8270	14070	0.24	56.5	2520	4290	0.24
186.9	8330	14890	0.27	57.0	2540	4540	0.27

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-417

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
188.9	8330	15440	0.29	57.6	2540	4710	0.29
190.2	8330	14720	0.26	58.0	2540	4490	0.26
191.8	8330	14720	0.26	58.5	2540	4490	0.26
193.5	8270	14720	0.27	59.0	2520	4490	0.27
195.1	8270	15250	0.29	59.5	2520	4650	0.29
196.8	8220	15250	0.30	60.0	2510	4650	0.30
198.4	8220	15440	0.30	60.5	2510	4710	0.30
200.0	8670	15440	0.27	61.0	2640	4710	0.27
201.7	8920	15830	0.27	61.5	2720	4820	0.27
203.3	9040	16030	0.27	62.0	2760	4880	0.27
205.0	9660	16880	0.26	62.5	2950	5150	0.26
206.6	10130	16880	0.22	63.0	3090	5150	0.22
208.2	10380	17110	0.21	63.5	3160	5210	0.21
209.9	10130	16230	0.18	64.0	3090	4950	0.18
211.5	10130	16030	0.17	64.5	3090	4880	0.17
213.2	9970	16660	0.22	65.0	3040	5080	0.22
214.8	9590	16880	0.26	65.5	2920	5150	0.26
216.4	9380	17340	0.29	66.0	2860	5290	0.29
218.1	10050	17340	0.25	66.5	3060	5290	0.25
219.7	10050	17340	0.25	67.0	3060	5290	0.25
221.4	9660	17110	0.27	67.5	2950	5210	0.27
223.0	9660	16440	0.24	68.0	2950	5010	0.24
224.7	9450	16230	0.24	68.5	2880	4950	0.24
226.3	9590	15440	0.19	69.0	2920	4710	0.19
227.9	9450	15630	0.21	69.5	2880	4760	0.21
229.6	9380	15250	0.20	70.0	2860	4650	0.20
231.2	9380	15440	0.21	70.5	2860	4710	0.21
232.9	9380	16440	0.26	71.0	2860	5010	0.26
234.5	9380	16230	0.25	71.5	2860	4950	0.25
236.1	9380	16030	0.24	72.0	2860	4880	0.24
237.8	9310	16030	0.25	72.5	2840	4880	0.25
239.4	9450	15440	0.20	73.0	2880	4710	0.20
241.1	9110	14890	0.20	73.5	2780	4540	0.20
242.7	8850	15070	0.24	74.0	2700	4590	0.24
244.3	9310	15440	0.21	74.5	2840	4710	0.21
246.0	9310	15630	0.23	75.0	2840	4760	0.23
247.6	9310	15440	0.21	75.5	2840	4710	0.21
249.3	8850	15440	0.26	76.0	2700	4710	0.26
250.9	8550	15440	0.28	76.5	2610	4710	0.28
252.5	8170	15830	0.32	77.0	2490	4820	0.32
254.2	7860	15630	0.33	77.5	2400	4760	0.33
255.8	7860	15440	0.32	78.0	2400	4710	0.32
257.5	7810	15070	0.32	78.5	2380	4590	0.32

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-417

American Units			
Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p	
(ft)	(ft/s)	(ft/s)	
259.1	7720	15250	0.33
260.7	7770	15070	0.32
262.4	7770	15250	0.32
264.0	7630	15070	0.33
265.7	7720	14550	0.30
267.3	7910	14220	0.28
268.9	8060	14070	0.26
270.6	7960	13910	0.26
272.2	7810	13610	0.25
273.9	7630	14070	0.29
275.5	7280	14070	0.32
277.1	7150	14070	0.33
278.8	7450	14390	0.32
280.4	7670	14890	0.32
282.1	7860	14720	0.30
283.7	8270	15440	0.30
285.3	8170	15440	0.31
287.0	7910	15250	0.32
288.6	7910	15070	0.31
290.3	7910	14890	0.30
291.9	7910	15630	0.33
293.5	8220	15440	0.30
295.2	8670	15070	0.25
296.8	8670	14890	0.24
298.5	8120	14890	0.29
300.1	7860	15070	0.31
301.8	7860	15630	0.33
303.4	8120	16030	0.33
305.0	8670	16230	0.30
306.7	8920	16030	0.28
308.3	8610	14890	0.25
310.0	8010	14720	0.29
311.6	7630	14890	0.32

Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p	
(m)	(m/s)	(m/s)	
79.0	2350	4650	0.33
79.5	2370	4590	0.32
80.0	2370	4650	0.32
80.5	2320	4590	0.33
81.0	2350	4440	0.30
81.5	2410	4340	0.28
82.0	2460	4290	0.26
82.5	2430	4240	0.26
83.0	2380	4150	0.25
83.5	2320	4290	0.29
84.0	2220	4290	0.32
84.5	2180	4290	0.33
85.0	2270	4380	0.32
85.5	2340	4540	0.32
86.0	2400	4490	0.30
86.5	2520	4710	0.30
87.0	2490	4710	0.31
87.5	2410	4650	0.32
88.0	2410	4590	0.31
88.5	2410	4540	0.30
89.0	2410	4760	0.33
89.5	2510	4710	0.30
90.0	2640	4590	0.25
90.5	2640	4540	0.24
91.0	2470	4540	0.29
91.5	2400	4590	0.31
92.0	2400	4760	0.33
92.5	2470	4880	0.33
93.0	2640	4950	0.30
93.5	2720	4880	0.28
94.0	2630	4540	0.25
94.5	2440	4490	0.29
95.0	2320	4540	0.32

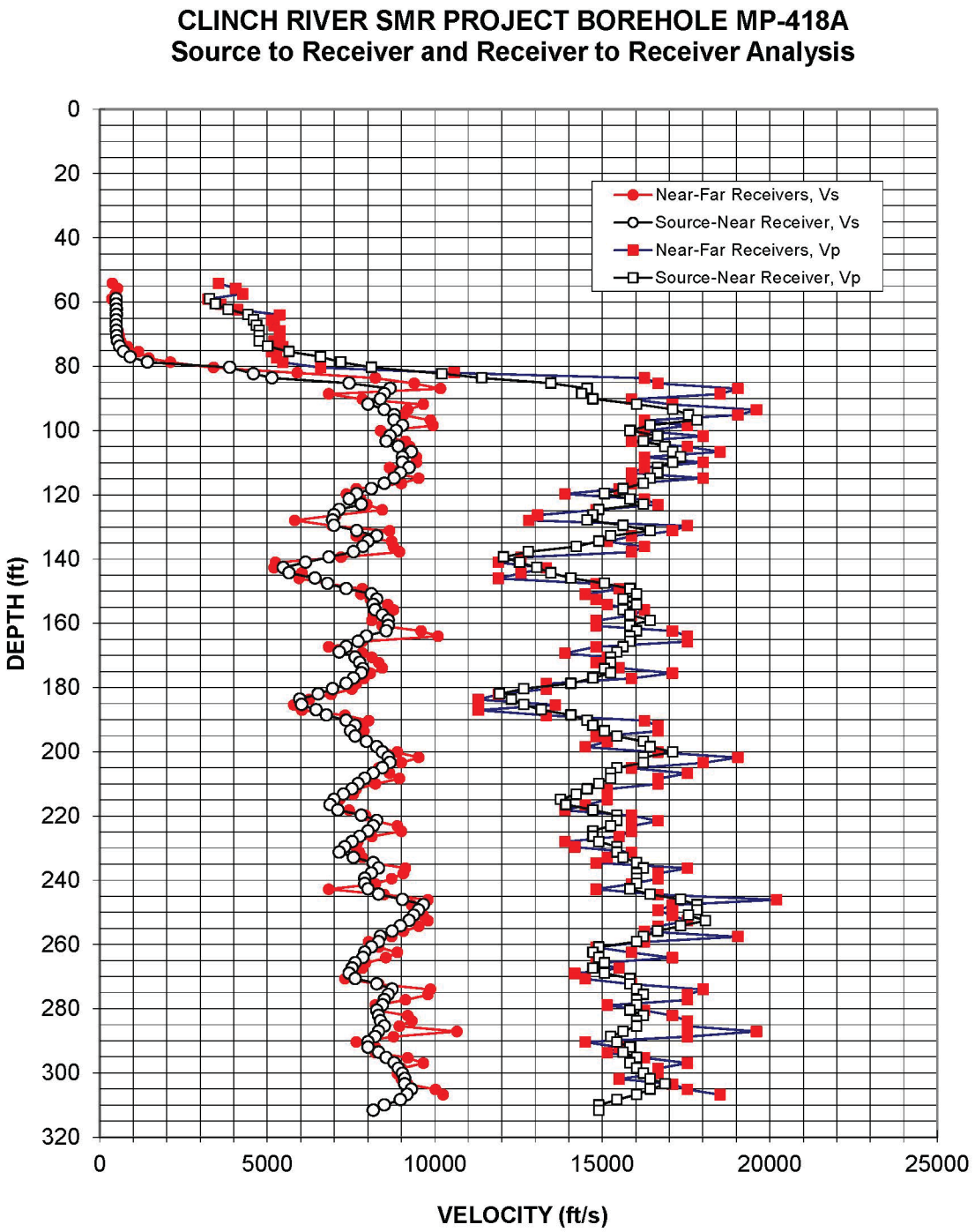

Figure A-21: Boring MP-418A, Suspension S-R1 P- and S_H-wave velocities

Table A-21: Boring MP-418A, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-418A

American Units				Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity V_s	Velocity V_p	Poisson's Ratio	Depth at Midpoint Between Source and Near Receiver	Velocity V_s	Velocity V_p	Poisson's Ratio
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
59.0	500	3280	0.49	18.0	150	1000	0.49
60.6	500	3460	0.49	18.5	150	1050	0.49
62.2	500	3840	0.49	19.0	150	1170	0.49
63.9	500	4430	0.49	19.5	150	1350	0.49
65.5	500	4590	0.49	20.0	150	1400	0.49
67.2	500	4690	0.49	20.5	150	1430	0.49
68.8	500	4760	0.49	21.0	150	1450	0.49
70.5	510	4760	0.49	21.5	150	1450	0.49
72.1	540	4760	0.49	22.0	160	1450	0.49
73.7	600	5020	0.49	22.5	180	1530	0.49
75.4	710	5650	0.49	23.0	220	1720	0.49
77.0	910	6590	0.49	23.5	280	2010	0.49
78.7	1430	7190	0.48	24.0	440	2190	0.48
80.3	3880	8120	0.35	24.5	1180	2470	0.35
82.3	4590	10210	0.37	25.1	1400	3110	0.37
83.6	5150	11410	0.37	25.5	1570	3480	0.37
85.2	7450	13470	0.28	26.0	2270	4110	0.28
86.9	8670	14550	0.22	26.5	2640	4440	0.22
88.5	8500	14390	0.23	27.0	2590	4380	0.23
90.1	8380	14720	0.26	27.5	2560	4490	0.26
91.8	8010	16030	0.33	28.0	2440	4880	0.33
93.4	8500	17110	0.34	28.5	2590	5210	0.34
95.1	8790	17580	0.33	29.0	2680	5360	0.33
96.7	8790	17830	0.34	29.5	2680	5430	0.34
98.3	9040	16440	0.28	30.0	2760	5010	0.28
100.0	8850	15830	0.27	30.5	2700	4820	0.27
101.6	8670	16660	0.31	31.0	2640	5080	0.31
103.3	8550	16230	0.31	31.5	2610	4950	0.31
104.9	8920	16880	0.31	32.0	2720	5150	0.31
106.5	9310	17110	0.29	32.5	2840	5210	0.29
108.2	9040	17340	0.31	33.0	2760	5290	0.31
109.8	9040	17110	0.31	33.5	2760	5210	0.31
111.5	9240	16660	0.28	34.0	2820	5080	0.28
113.1	8980	16660	0.30	34.5	2740	5080	0.30
114.7	8790	16440	0.30	35.0	2680	5010	0.30
116.4	8500	16230	0.31	35.5	2590	4950	0.31
118.0	8120	15630	0.32	36.0	2470	4760	0.32

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-418A

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)	
119.7	7670	15070	0.33	36.5	2340	4590	0.33
121.3	7450	15830	0.36	37.0	2270	4820	0.36
122.9	7810	16230	0.35	37.5	2380	4950	0.35
124.6	7150	14890	0.35	38.0	2180	4540	0.35
126.2	6990	14720	0.35	38.5	2130	4490	0.35
127.9	6960	14550	0.35	39.0	2120	4440	0.35
129.5	6990	15630	0.37	39.5	2130	4760	0.37
131.1	7670	16440	0.36	40.0	2340	5010	0.36
132.8	8270	15250	0.29	40.5	2520	4650	0.29
134.4	8010	14890	0.30	41.0	2440	4540	0.30
136.1	7860	14220	0.28	41.5	2400	4340	0.28
137.7	7580	12790	0.23	42.0	2310	3900	0.23
139.3	6840	12060	0.26	42.5	2090	3680	0.26
141.0	6150	12530	0.34	43.0	1870	3820	0.34
142.6	5480	13050	0.39	43.5	1670	3980	0.39
144.3	5650	13470	0.39	44.0	1720	4110	0.39
145.9	6430	14070	0.37	44.5	1960	4290	0.37
147.6	6810	15070	0.37	45.0	2070	4590	0.37
149.2	7360	15830	0.36	45.5	2240	4820	0.36
150.8	8120	16030	0.33	46.0	2470	4880	0.33
152.5	8270	15630	0.31	46.5	2520	4760	0.31
154.1	8170	16030	0.32	47.0	2490	4880	0.32
155.8	8220	15630	0.31	47.5	2510	4760	0.31
157.4	8440	15830	0.30	48.0	2570	4820	0.30
159.0	8610	16440	0.31	48.5	2630	5010	0.31
160.7	8610	15830	0.29	49.0	2630	4820	0.29
162.3	8550	16030	0.30	49.5	2610	4880	0.30
164.0	7960	15830	0.33	50.0	2430	4820	0.33
165.6	7720	15830	0.34	50.5	2350	4820	0.34
167.2	7360	15630	0.36	51.0	2240	4760	0.36
168.9	7150	15440	0.36	51.5	2180	4710	0.36
170.5	7630	15250	0.33	52.0	2320	4650	0.33
172.2	7770	15250	0.32	52.5	2370	4650	0.32
174.1	7860	15070	0.31	53.1	2400	4590	0.31
175.4	7810	15250	0.32	53.5	2380	4650	0.32
177.1	7580	14720	0.32	54.0	2310	4490	0.32
178.7	7360	14070	0.31	54.5	2240	4290	0.31
180.4	6960	12660	0.28	55.0	2120	3860	0.28
182.0	6530	11940	0.29	55.5	1990	3640	0.29
183.6	5970	12290	0.35	56.0	1820	3750	0.35

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-418A

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)	
185.3	6030	12660	0.35	56.5	1840	3860	0.35
186.9	6460	13190	0.34	57.0	1970	4020	0.34
188.6	6770	14070	0.35	57.5	2060	4290	0.35
190.2	7360	14550	0.33	58.0	2240	4440	0.33
191.8	7630	14720	0.32	58.5	2320	4490	0.32
193.5	7490	15070	0.34	59.0	2280	4590	0.34
195.1	7630	15440	0.34	59.5	2320	4710	0.34
196.8	7960	16230	0.34	60.0	2430	4950	0.34
198.4	8270	16440	0.33	60.5	2520	5010	0.33
200.0	8440	17110	0.34	61.0	2570	5210	0.34
201.7	8610	16230	0.30	61.5	2630	4950	0.30
203.3	8670	16230	0.30	62.0	2640	4950	0.30
205.0	8440	15440	0.29	62.5	2570	4710	0.29
206.6	8170	15250	0.30	63.0	2490	4650	0.30
208.2	7910	15250	0.32	63.5	2410	4650	0.32
209.9	7720	14890	0.32	64.0	2350	4540	0.32
211.5	7540	14550	0.32	64.5	2300	4440	0.32
213.2	7280	14220	0.32	65.0	2220	4340	0.32
214.8	6990	13760	0.33	65.5	2130	4190	0.33
216.4	6880	13910	0.34	66.0	2100	4240	0.34
218.1	7110	14720	0.35	66.5	2170	4490	0.35
219.7	7810	15440	0.33	67.0	2380	4710	0.33
221.4	8270	15440	0.30	67.5	2520	4710	0.30
223.0	8170	15250	0.30	68.0	2490	4650	0.30
224.7	8010	14720	0.29	68.5	2440	4490	0.29
226.3	7770	14720	0.31	69.0	2370	4490	0.31
227.9	7540	14890	0.33	69.5	2300	4540	0.33
229.6	7320	15440	0.36	70.0	2230	4710	0.36
231.2	7150	15440	0.36	70.5	2180	4710	0.36
232.9	7580	15630	0.35	71.0	2310	4760	0.35
234.5	8170	16030	0.32	71.5	2490	4880	0.32
236.1	8330	16230	0.32	72.0	2540	4950	0.32
237.8	8120	16030	0.33	72.5	2470	4880	0.33
239.4	7910	16030	0.34	73.0	2410	4880	0.34
241.1	7910	16030	0.34	73.5	2410	4880	0.34
242.7	8010	15830	0.33	74.0	2440	4820	0.33
244.3	8330	16440	0.33	74.5	2540	5010	0.33
246.0	9040	17340	0.31	75.0	2760	5290	0.31
247.6	9660	17830	0.29	75.5	2950	5430	0.29
249.3	9520	17830	0.30	76.0	2900	5430	0.30

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-418A

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)	
250.9	9380	17580	0.30	76.5	2860	5360	0.30
252.5	9240	18090	0.32	77.0	2820	5510	0.32
254.2	8980	17340	0.32	77.5	2740	5290	0.32
255.8	8730	16660	0.31	78.0	2660	5080	0.31
257.5	8380	16230	0.32	78.5	2560	4950	0.32
259.1	8330	16030	0.31	79.0	2540	4880	0.31
260.7	8120	14890	0.29	79.5	2470	4540	0.29
262.4	7910	14720	0.30	80.0	2410	4490	0.30
264.0	7860	14890	0.31	80.5	2400	4540	0.31
265.7	7630	15070	0.33	81.0	2320	4590	0.33
267.3	7540	14720	0.32	81.5	2300	4490	0.32
268.9	7450	15070	0.34	82.0	2270	4590	0.34
270.6	7630	15830	0.35	82.5	2320	4820	0.35
272.2	8270	15830	0.31	83.0	2520	4820	0.31
273.9	8730	16030	0.29	83.5	2660	4880	0.29
275.5	8610	16230	0.30	84.0	2630	4950	0.30
277.1	8500	16030	0.30	84.5	2590	4880	0.30
278.8	8440	16030	0.31	85.0	2570	4880	0.31
280.4	8270	15830	0.31	85.5	2520	4820	0.31
282.1	8330	16230	0.32	86.0	2540	4950	0.32
283.7	8380	16030	0.31	86.5	2560	4880	0.31
285.3	8500	16030	0.30	87.0	2590	4880	0.30
287.0	8330	15630	0.30	87.5	2540	4760	0.30
288.6	8220	15250	0.30	88.0	2510	4650	0.30
290.3	8010	15440	0.32	88.5	2440	4710	0.32
291.9	8010	15830	0.33	89.0	2440	4820	0.33
293.5	8330	15630	0.30	89.5	2540	4760	0.30
295.2	8550	16030	0.30	90.0	2610	4880	0.30
296.8	8790	15830	0.28	90.5	2680	4820	0.28
298.5	8920	16030	0.28	91.0	2720	4880	0.28
300.1	9040	16230	0.27	91.5	2760	4950	0.27
301.8	9110	16440	0.28	92.0	2780	5010	0.28
303.4	9110	16880	0.29	92.5	2780	5150	0.29
305.0	9310	16440	0.26	93.0	2840	5010	0.26
306.7	9170	16030	0.26	93.5	2800	4880	0.26
308.3	8980	15440	0.24	94.0	2740	4710	0.24
310.0	8500	14890	0.26	94.5	2590	4540	0.26
311.6	8170	14890	0.28	95.0	2490	4540	0.28

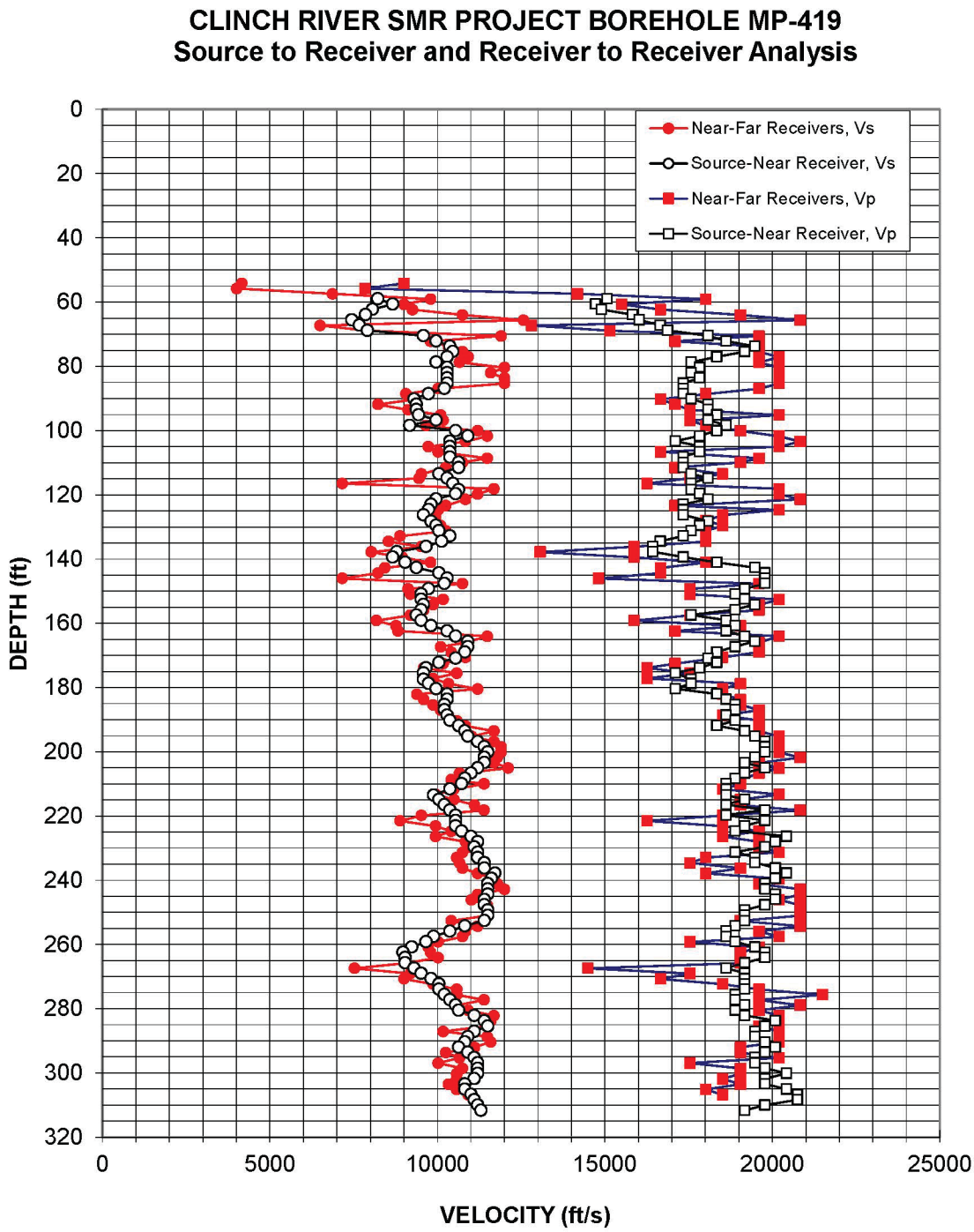

Figure A-22: Boring MP-419, Suspension S-R1 P- and S_H-wave velocities

Table A-22: Boring MP-419, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-419

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)	
59.0	8220	15070	0.29	18.0	2510	4590	0.29
60.6	8670	14720	0.23	18.5	2640	4490	0.23
62.2	8060	14890	0.29	19.0	2460	4540	0.29
63.9	7860	15830	0.34	19.5	2400	4820	0.34
65.5	7450	16030	0.36	20.0	2270	4880	0.36
67.2	7670	16660	0.37	20.5	2340	5080	0.37
68.8	7910	16880	0.36	21.0	2410	5150	0.36
70.5	9590	18090	0.30	21.5	2920	5510	0.30
72.1	9970	18620	0.30	22.0	3040	5670	0.30
73.7	10380	19480	0.30	22.5	3160	5940	0.30
75.4	10460	19180	0.29	23.0	3190	5850	0.29
77.0	10290	18350	0.27	23.5	3140	5590	0.27
78.7	9970	17580	0.26	24.0	3040	5360	0.26
80.3	10290	17830	0.25	24.5	3140	5430	0.25
81.9	10290	17580	0.24	25.0	3140	5360	0.24
83.6	10290	17830	0.25	25.5	3140	5430	0.25
85.2	10290	17340	0.23	26.0	3140	5290	0.23
86.9	10210	17340	0.23	26.5	3110	5290	0.23
88.5	9740	17340	0.27	27.0	2970	5290	0.27
90.1	9310	17580	0.31	27.5	2840	5360	0.31
91.8	9380	18090	0.32	28.0	2860	5510	0.32
93.4	9380	18090	0.32	28.5	2860	5510	0.32
95.1	9450	18350	0.32	29.0	2880	5590	0.32
96.7	9970	18090	0.28	29.5	3040	5510	0.28
98.3	9170	18620	0.34	30.0	2800	5670	0.34
100.0	10550	18350	0.25	30.5	3220	5590	0.25
101.6	10910	17830	0.20	31.0	3330	5430	0.20
103.3	10380	17110	0.21	31.5	3160	5210	0.21
104.9	10380	17830	0.24	32.0	3160	5430	0.24
106.5	10380	17830	0.24	32.5	3160	5430	0.24
108.2	10380	17340	0.22	33.0	3160	5290	0.22
109.8	10640	17340	0.20	33.5	3240	5290	0.20
111.5	10640	17340	0.20	34.0	3240	5290	0.20
113.4	10050	17580	0.26	34.6	3060	5360	0.26
114.7	10290	18090	0.26	35.0	3140	5510	0.26
116.4	10460	17580	0.23	35.5	3190	5360	0.23
118.4	10640	17580	0.21	36.1	3240	5360	0.21

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-419

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)	
119.7	10550	17830	0.23	36.5	3220	5430	0.23
121.3	9970	18090	0.28	37.0	3040	5510	0.28
122.9	9810	17340	0.26	37.5	2990	5290	0.26
124.6	9740	17340	0.27	38.0	2970	5290	0.27
126.2	9590	17340	0.28	38.5	2920	5290	0.28
128.2	9810	18090	0.29	39.1	2990	5510	0.29
129.5	9970	17830	0.27	39.5	3040	5430	0.27
131.1	10050	17580	0.26	40.0	3060	5360	0.26
132.8	10380	17340	0.22	40.5	3160	5290	0.22
134.4	10130	16660	0.21	41.0	3090	5080	0.21
136.1	9660	16440	0.24	41.5	2950	5010	0.24
137.7	8790	16440	0.30	42.0	2680	5010	0.30
139.3	8670	17340	0.33	42.5	2640	5290	0.33
141.0	9040	18350	0.34	43.0	2760	5590	0.34
142.6	9380	19480	0.35	43.5	2860	5940	0.35
144.3	10050	19780	0.33	44.0	3060	6030	0.33
145.9	10290	19780	0.31	44.5	3140	6030	0.31
147.6	10210	19780	0.32	45.0	3110	6030	0.32
149.2	9740	19180	0.33	45.5	2970	5850	0.33
150.8	9520	18900	0.33	46.0	2900	5760	0.33
152.5	9520	19180	0.34	46.5	2900	5850	0.34
154.1	9590	19480	0.34	47.0	2920	5940	0.34
155.8	9520	18900	0.33	47.5	2900	5760	0.33
157.4	9380	17580	0.30	48.0	2860	5360	0.30
159.0	9520	18620	0.32	48.5	2900	5670	0.32
160.7	9810	18900	0.32	49.0	2990	5760	0.32
162.3	10290	18620	0.28	49.5	3140	5670	0.28
164.0	10550	19180	0.28	50.0	3220	5850	0.28
165.6	10910	19480	0.27	50.5	3330	5940	0.27
167.2	10910	18900	0.25	51.0	3330	5760	0.25
168.9	10820	18350	0.23	51.5	3300	5590	0.23
170.8	10550	18090	0.24	52.1	3220	5510	0.24
172.2	10050	18350	0.29	52.5	3060	5590	0.29
173.8	9660	17830	0.29	53.0	2950	5430	0.29
175.4	9590	17110	0.27	53.5	2920	5210	0.27
177.4	9590	17580	0.29	54.1	2920	5360	0.29
178.7	9740	17580	0.28	54.5	2970	5360	0.28
180.4	9970	17110	0.24	55.0	3040	5210	0.24
182.0	10290	18350	0.27	55.5	3140	5590	0.27
183.6	10290	18620	0.28	56.0	3140	5670	0.28

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-419

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)	
185.3	10210	18900	0.29	56.5	3110	5760	0.29
186.9	10210	18900	0.29	57.0	3110	5760	0.29
188.6	10290	18620	0.28	57.5	3140	5670	0.28
190.2	10380	18900	0.28	58.0	3160	5760	0.28
191.8	10640	18350	0.25	58.5	3240	5590	0.25
193.5	10820	19180	0.27	59.0	3300	5850	0.27
195.1	10910	19480	0.27	59.5	3330	5940	0.27
196.8	11200	19780	0.26	60.0	3410	6030	0.26
198.4	11410	19780	0.25	60.5	3480	6030	0.25
200.0	11510	19780	0.24	61.0	3510	6030	0.24
201.7	11410	19480	0.24	61.5	3480	5940	0.24
203.3	11410	19180	0.23	62.0	3480	5850	0.23
205.0	11200	19780	0.26	62.5	3410	6030	0.26
206.6	11010	19180	0.25	63.0	3360	5850	0.25
208.2	10820	18900	0.26	63.5	3300	5760	0.26
209.9	10730	18620	0.25	64.0	3270	5670	0.25
211.5	10380	18620	0.27	64.5	3160	5670	0.27
213.5	9890	18620	0.30	65.1	3010	5670	0.30
214.8	10050	19180	0.31	65.5	3060	5850	0.31
216.4	10210	18620	0.28	66.0	3110	5670	0.28
218.1	10380	19780	0.31	66.5	3160	6030	0.31
219.7	10550	18620	0.26	67.0	3220	5670	0.26
221.4	10550	19780	0.30	67.5	3220	6030	0.30
223.0	10550	19180	0.28	68.0	3220	5850	0.28
224.7	10730	18900	0.26	68.5	3270	5760	0.26
226.3	11010	20420	0.30	69.0	3360	6220	0.30
227.9	11200	20100	0.27	69.5	3410	6130	0.27
229.6	11110	19780	0.27	70.0	3380	6030	0.27
231.2	11200	18900	0.23	70.5	3410	5760	0.23
232.9	11200	19480	0.25	71.0	3410	5940	0.25
234.5	11410	19480	0.24	71.5	3480	5940	0.24
236.1	11410	20100	0.26	72.0	3480	6130	0.26
237.8	11720	20420	0.25	72.5	3570	6220	0.25
239.4	11610	20100	0.25	73.0	3540	6130	0.25
241.1	11510	19780	0.24	73.5	3510	6030	0.24
242.7	11510	19780	0.24	74.0	3510	6030	0.24
244.3	11510	20100	0.26	74.5	3510	6130	0.26
246.0	11410	20100	0.26	75.0	3480	6130	0.26
247.6	11410	19780	0.25	75.5	3480	6030	0.25
249.3	11510	19180	0.22	76.0	3510	5850	0.22

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-419

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)	
250.9	11510	19180	0.22	76.5	3510	5850	0.22
252.5	11410	19180	0.23	77.0	3480	5850	0.23
254.2	10820	18900	0.26	77.5	3300	5760	0.26
255.8	10380	18620	0.27	78.0	3160	5670	0.27
257.5	9890	18620	0.30	78.5	3010	5670	0.30
259.1	9660	18900	0.32	79.0	2950	5760	0.32
260.7	9240	19480	0.35	79.5	2820	5940	0.35
262.4	8980	19780	0.37	80.0	2740	6030	0.37
264.0	9040	19780	0.37	80.5	2760	6030	0.37
265.7	9040	19180	0.36	81.0	2760	5850	0.36
267.3	9310	18620	0.33	81.5	2840	5670	0.33
268.9	9520	19180	0.34	82.0	2900	5850	0.34
270.6	9810	19180	0.32	82.5	2990	5850	0.32
272.2	10050	19180	0.31	83.0	3060	5850	0.31
273.9	10050	19180	0.31	83.5	3060	5850	0.31
275.5	10210	18900	0.29	84.0	3110	5760	0.29
277.1	10380	18900	0.28	84.5	3160	5760	0.28
278.8	10550	19180	0.28	85.0	3220	5850	0.28
280.4	10640	18900	0.27	85.5	3240	5760	0.27
282.1	11110	19180	0.25	86.0	3380	5850	0.25
283.7	11410	20100	0.26	86.5	3480	6130	0.26
285.3	11510	19780	0.24	87.0	3510	6030	0.24
287.0	11110	19480	0.26	87.5	3380	5940	0.26
288.6	10910	19480	0.27	88.0	3330	5940	0.27
290.3	10820	19780	0.29	88.5	3300	6030	0.29
291.9	10640	20100	0.31	89.0	3240	6130	0.31
293.5	10910	19780	0.28	89.5	3330	6030	0.28
295.2	11110	19480	0.26	90.0	3380	5940	0.26
296.8	11200	19480	0.25	90.5	3410	5940	0.25
298.5	11200	19780	0.26	91.0	3410	6030	0.26
300.1	11200	20420	0.28	91.5	3410	6220	0.28
301.8	11110	19780	0.27	92.0	3380	6030	0.27
303.4	10820	19780	0.29	92.5	3300	6030	0.29
305.0	10820	20420	0.30	93.0	3300	6220	0.30
306.7	11010	20750	0.30	93.5	3360	6330	0.30
308.3	11110	20750	0.30	94.0	3380	6330	0.30
310.0	11200	19780	0.26	94.5	3410	6030	0.26
311.6	11300	19180	0.23	95.0	3450	5850	0.23

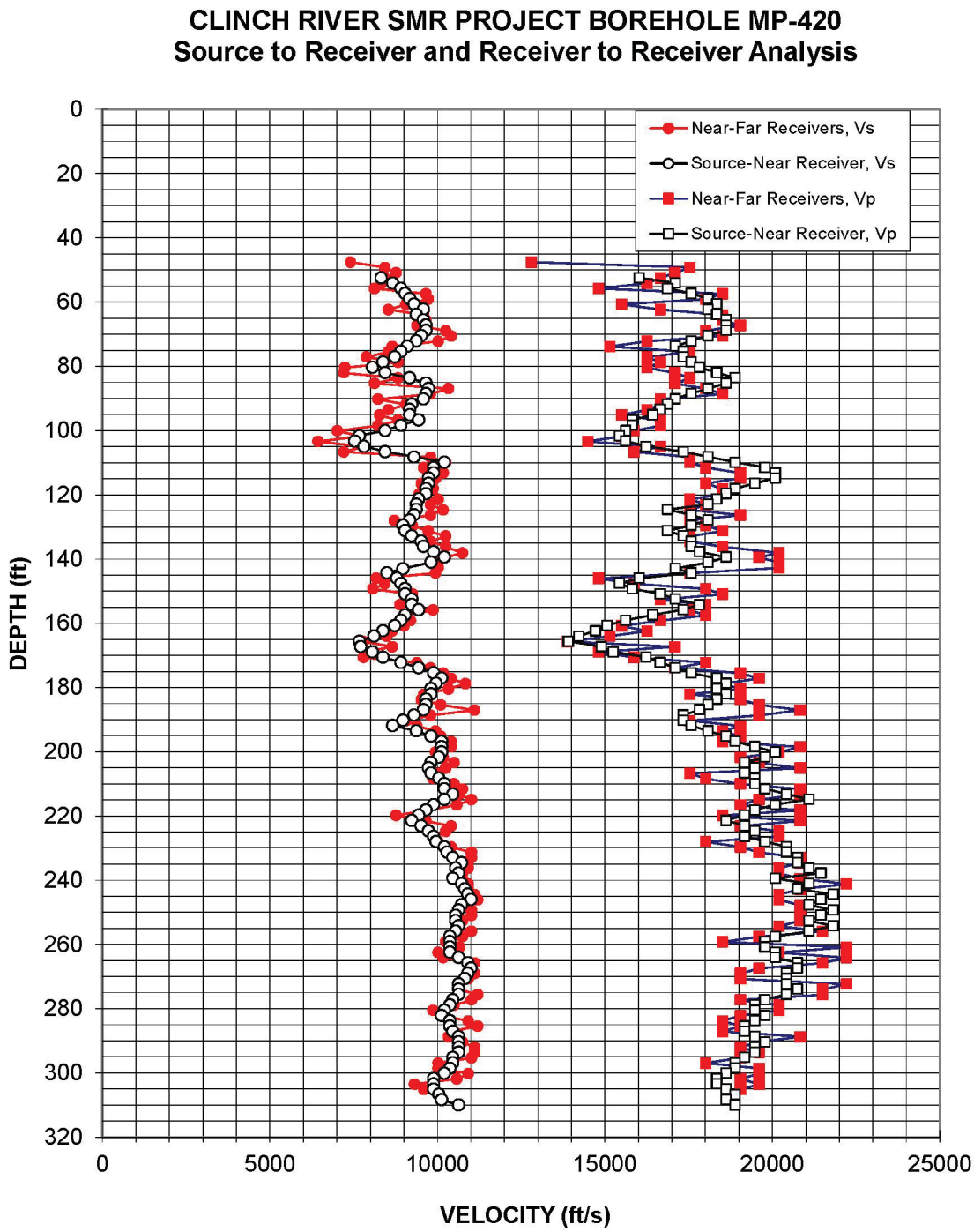

Figure A-23: Boring MP-420, Suspension S-R1 P- and S_H-wave velocities

Table A-23: Boring MP-420, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-420

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
52.4	8330	16030	0.31	16.0	2540	4880	0.31
54.0	8670	17110	0.33	16.5	2640	5210	0.33
55.7	8920	16880	0.31	17.0	2720	5150	0.31
57.3	9040	17580	0.32	17.5	2760	5360	0.32
59.0	9170	18090	0.33	18.0	2800	5510	0.33
60.6	9310	18350	0.33	18.5	2840	5590	0.33
62.2	9590	18090	0.30	19.0	2920	5510	0.30
63.9	9380	18350	0.32	19.5	2860	5590	0.32
65.5	9590	18620	0.32	20.0	2920	5670	0.32
67.2	9660	18620	0.32	20.5	2950	5670	0.32
68.8	9660	18620	0.32	21.0	2950	5670	0.32
70.5	9520	18090	0.31	21.5	2900	5510	0.31
72.1	9380	17580	0.30	22.0	2860	5360	0.30
73.7	9110	17110	0.30	22.5	2780	5210	0.30
75.4	8920	17340	0.32	23.0	2720	5290	0.32
77.0	8730	17340	0.33	23.5	2660	5290	0.33
78.7	8380	17580	0.35	24.0	2560	5360	0.35
80.3	8060	17830	0.37	24.5	2460	5430	0.37
81.9	8440	18350	0.37	25.0	2570	5590	0.37
83.6	9170	18900	0.35	25.5	2800	5760	0.35
85.2	9660	18620	0.32	26.0	2950	5670	0.32
86.9	9740	18090	0.30	26.5	2970	5510	0.30
88.5	9660	17580	0.28	27.0	2950	5360	0.28
90.1	9590	17110	0.27	27.5	2920	5210	0.27
91.8	9240	16880	0.29	28.0	2820	5150	0.29
93.4	9170	16660	0.28	28.5	2800	5080	0.28
95.1	9170	16440	0.27	29.0	2800	5010	0.27
96.7	9450	15830	0.22	29.5	2880	4820	0.22
98.3	8920	15830	0.27	30.0	2720	4820	0.27
100.0	8440	15630	0.29	30.5	2570	4760	0.29
101.6	7670	15440	0.34	31.0	2340	4710	0.34
103.3	7540	15630	0.35	31.5	2300	4760	0.35
104.9	7810	16230	0.35	32.0	2380	4950	0.35
106.5	8440	17340	0.34	32.5	2570	5290	0.34
108.2	9310	18090	0.32	33.0	2840	5510	0.32
109.8	10210	18900	0.29	33.5	3110	5760	0.29
111.5	9890	19780	0.33	34.0	3010	6030	0.33
113.1	9890	20100	0.34	34.5	3010	6130	0.34
114.7	9740	20100	0.35	35.0	2970	6130	0.35

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-420

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
116.4	9740	19480	0.33	35.5	2970	5940	0.33
118.0	9660	18900	0.32	36.0	2950	5760	0.32
119.7	9660	18620	0.32	36.5	2950	5670	0.32
121.3	9450	18350	0.32	37.0	2880	5590	0.32
122.9	9380	18090	0.32	37.5	2860	5510	0.32
124.6	9380	16880	0.28	38.0	2860	5150	0.28
126.2	9310	17580	0.31	38.5	2840	5360	0.31
127.9	9170	18090	0.33	39.0	2800	5510	0.33
129.5	8980	17580	0.32	39.5	2740	5360	0.32
131.1	9040	16880	0.30	40.0	2760	5150	0.30
132.8	9240	17340	0.30	40.5	2820	5290	0.30
134.4	9520	17580	0.29	41.0	2900	5360	0.29
136.1	9590	17580	0.29	41.5	2920	5360	0.29
137.7	9890	17830	0.28	42.0	3010	5430	0.28
139.3	10210	18620	0.28	42.5	3110	5670	0.28
141.0	9810	18090	0.29	43.0	2990	5510	0.29
143.0	8980	17110	0.31	43.6	2740	5210	0.31
144.3	8500	17580	0.35	44.0	2590	5360	0.35
145.9	8790	16030	0.28	44.5	2680	4880	0.28
147.6	8920	15440	0.25	45.0	2720	4710	0.25
149.2	9040	15830	0.26	45.5	2760	4820	0.26
150.8	9040	16660	0.29	46.0	2760	5080	0.29
152.5	9240	17110	0.29	46.5	2820	5210	0.29
154.1	9240	17830	0.32	47.0	2820	5430	0.32
155.8	9450	17340	0.29	47.5	2880	5290	0.29
157.4	9040	16440	0.28	48.0	2760	5010	0.28
159.0	8920	15630	0.26	48.5	2720	4760	0.26
160.7	8730	15070	0.25	49.0	2660	4590	0.25
162.3	8380	14720	0.26	49.5	2560	4490	0.26
164.0	8120	14220	0.26	50.0	2470	4340	0.26
165.6	7670	13910	0.28	50.5	2340	4240	0.28
167.2	7720	14890	0.32	51.0	2350	4540	0.32
168.9	8060	15250	0.31	51.5	2460	4650	0.31
170.5	8380	16230	0.32	52.0	2560	4950	0.32
172.2	8920	16660	0.30	52.5	2720	5080	0.30
173.8	9450	17110	0.28	53.0	2880	5210	0.28
175.4	9890	17580	0.27	53.5	3010	5360	0.27
177.1	10130	18350	0.28	54.0	3090	5590	0.28
178.7	9970	18620	0.30	54.5	3040	5670	0.30
180.4	9810	18350	0.30	55.0	2990	5590	0.30
182.0	9810	18620	0.31	55.5	2990	5670	0.31
183.6	9660	18350	0.31	56.0	2950	5590	0.31
185.3	9660	18090	0.30	56.5	2950	5510	0.30

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-420

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
186.9	9590	17830	0.30	57.0	2920	5430	0.30
188.6	9310	17340	0.30	57.5	2840	5290	0.30
190.2	8980	17340	0.32	58.0	2740	5290	0.32
191.8	8670	17580	0.34	58.5	2640	5360	0.34
193.5	9380	18090	0.32	59.0	2860	5510	0.32
195.1	9810	18620	0.31	59.5	2990	5670	0.31
196.8	10130	18900	0.30	60.0	3090	5760	0.30
198.4	10130	19480	0.31	60.5	3090	5940	0.31
200.0	10130	20100	0.33	61.0	3090	6130	0.33
201.7	10050	19780	0.33	61.5	3060	6030	0.33
203.3	9810	19180	0.32	62.0	2990	5850	0.32
205.0	9740	19480	0.33	62.5	2970	5940	0.33
206.6	9810	19180	0.32	63.0	2990	5850	0.32
208.2	10050	19480	0.32	63.5	3060	5940	0.32
209.9	10210	19480	0.31	64.0	3110	5940	0.31
211.5	10210	19780	0.32	64.5	3110	6030	0.32
213.2	10460	20420	0.32	65.0	3190	6220	0.32
214.8	10210	21100	0.35	65.5	3110	6430	0.35
216.4	9890	20100	0.34	66.0	3010	6130	0.34
218.1	9660	19480	0.34	66.5	2950	5940	0.34
219.7	9450	19180	0.34	67.0	2880	5850	0.34
221.4	9240	18620	0.34	67.5	2820	5670	0.34
223.0	9520	19180	0.34	68.0	2900	5850	0.34
224.7	9740	19480	0.33	68.5	2970	5940	0.33
226.3	9890	19180	0.32	69.0	3010	5850	0.32
227.9	9970	19780	0.33	69.5	3040	6030	0.33
229.6	10210	20420	0.33	70.0	3110	6220	0.33
231.2	10290	20420	0.33	70.5	3140	6220	0.33
232.9	10460	20750	0.33	71.0	3190	6330	0.33
234.5	10730	20750	0.32	71.5	3270	6330	0.32
236.1	10550	21100	0.33	72.0	3220	6430	0.33
237.8	10640	21460	0.34	72.5	3240	6540	0.34
239.4	10460	20100	0.31	73.0	3190	6130	0.31
241.1	10730	21100	0.33	73.5	3270	6430	0.33
242.7	10820	20750	0.31	74.0	3300	6330	0.31
244.3	10910	21830	0.33	74.5	3330	6650	0.33
246.0	11010	21460	0.32	75.0	3360	6540	0.32
247.6	10730	21100	0.33	75.5	3270	6430	0.33
249.3	10640	21830	0.34	76.0	3240	6650	0.34
250.9	10550	21460	0.34	76.5	3220	6540	0.34
252.5	10550	21100	0.33	77.0	3220	6430	0.33
254.2	10640	21830	0.34	77.5	3240	6650	0.34
255.8	10550	21100	0.33	78.0	3220	6430	0.33

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-420

American Units				Metric Units			
Depth at Midpoint Between Source	Velocity		Poisson's	Depth at Midpoint Between Source	Velocity		Poisson's
	V_s	V_p			V_s	V_p	
(ft)	(ft/s)	(ft/s)		(m)	(m/s)	(m/s)	
257.5	10380	20100	0.32	78.5	3160	6130	0.32
259.1	10380	19780	0.31	79.0	3160	6030	0.31
260.7	10380	19780	0.31	79.5	3160	6030	0.31
262.4	10380	20100	0.32	80.0	3160	6130	0.32
264.0	10640	20100	0.31	80.5	3240	6130	0.31
265.7	10910	20750	0.31	81.0	3330	6330	0.31
267.3	11010	20750	0.30	81.5	3360	6330	0.30
268.9	10910	20420	0.30	82.0	3330	6220	0.30
270.6	10820	20420	0.30	82.5	3300	6220	0.30
272.2	10640	20420	0.31	83.0	3240	6220	0.31
273.9	10640	20750	0.32	83.5	3240	6330	0.32
275.5	10640	20420	0.31	84.0	3240	6220	0.31
277.1	10460	19780	0.31	84.5	3190	6030	0.31
278.8	10380	19480	0.30	85.0	3160	5940	0.30
280.4	10210	19480	0.31	85.5	3110	5940	0.31
282.1	10130	19780	0.32	86.0	3090	6030	0.32
283.7	10380	19480	0.30	86.5	3160	5940	0.30
285.3	10380	19180	0.29	87.0	3160	5850	0.29
287.0	10460	19180	0.29	87.5	3190	5850	0.29
288.6	10640	19480	0.29	88.0	3240	5940	0.29
290.3	10640	19780	0.30	88.5	3240	6030	0.30
291.9	10640	19480	0.29	89.0	3240	5940	0.29
293.5	10640	19480	0.29	89.5	3240	5940	0.29
295.2	10460	19180	0.29	90.0	3190	5850	0.29
296.8	10460	18900	0.28	90.5	3190	5760	0.28
298.5	10380	18900	0.28	91.0	3160	5760	0.28
300.1	10210	18620	0.28	91.5	3110	5670	0.28
301.8	9890	18350	0.30	92.0	3010	5590	0.30
303.4	9890	18350	0.30	92.5	3010	5590	0.30
305.0	9890	18620	0.30	93.0	3010	5670	0.30
306.7	10050	18900	0.30	93.5	3060	5760	0.30
308.3	10130	18620	0.29	94.0	3090	5670	0.29
310.0	10640	18900	0.27	94.5	3240	5760	0.27

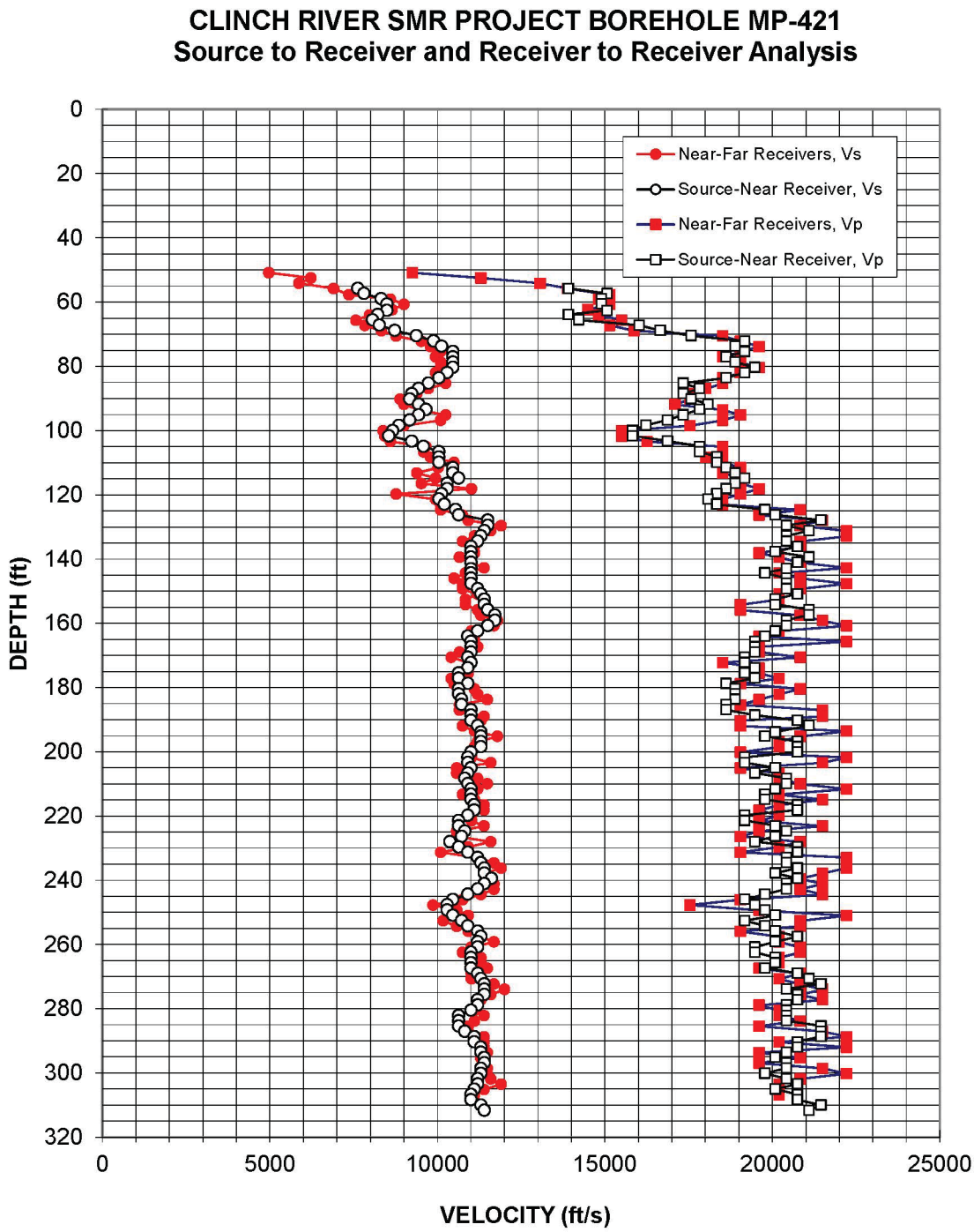

Figure A-24: Boring MP-421, Suspension S-R1 P- and S_H-wave velocities

Table A-24: Boring MP-421, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-421

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)	
55.7	7630	13910	0.29	17.0	2320	4240	0.29
57.3	7810	15070	0.32	17.5	2380	4590	0.32
59.0	8330	14890	0.27	18.0	2540	4540	0.27
60.6	8500	14890	0.26	18.5	2590	4540	0.26
62.6	8500	15070	0.27	19.1	2590	4590	0.27
63.9	8220	13910	0.23	19.5	2510	4240	0.23
65.5	8060	14220	0.26	20.0	2460	4340	0.26
67.2	8270	16030	0.32	20.5	2520	4880	0.32
68.8	8730	16660	0.31	21.0	2660	5080	0.31
70.5	9380	17580	0.30	21.5	2860	5360	0.30
72.1	9890	19180	0.32	22.0	3010	5850	0.32
73.7	10130	18900	0.30	22.5	3090	5760	0.30
75.4	10460	19180	0.29	23.0	3190	5850	0.29
77.0	10460	18620	0.27	23.5	3190	5670	0.27
78.7	10460	18900	0.28	24.0	3190	5760	0.28
80.3	10460	19480	0.30	24.5	3190	5940	0.30
81.9	10290	19180	0.30	25.0	3140	5850	0.30
83.6	10050	18620	0.29	25.5	3060	5670	0.29
85.2	9740	17340	0.27	26.0	2970	5290	0.27
86.9	9450	17830	0.30	26.5	2880	5430	0.30
88.5	9240	17340	0.30	27.0	2820	5290	0.30
90.1	9170	17580	0.31	27.5	2800	5360	0.31
91.8	9450	18090	0.31	28.0	2880	5510	0.31
93.4	9660	17830	0.29	28.5	2950	5430	0.29
95.1	9450	17340	0.29	29.0	2880	5290	0.29
96.7	9170	16880	0.29	29.5	2800	5150	0.29
98.3	8850	16230	0.29	30.0	2700	4950	0.29
100.0	8670	15830	0.29	30.5	2640	4820	0.29
101.6	8550	15830	0.29	31.0	2610	4820	0.29
103.3	9240	16880	0.29	31.5	2820	5150	0.29
104.9	9590	17830	0.30	32.0	2920	5430	0.30
106.5	10050	17830	0.27	32.5	3060	5430	0.27
108.2	10050	18350	0.29	33.0	3060	5590	0.29
109.8	10050	18350	0.29	33.5	3060	5590	0.29
111.5	10460	18620	0.27	34.0	3190	5670	0.27
113.1	10460	18900	0.28	34.5	3190	5760	0.28
114.7	10640	19180	0.28	35.0	3240	5850	0.28
116.4	10290	18900	0.29	35.5	3140	5760	0.29

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-421

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)	
118.0	10290	18620	0.28	36.0	3140	5670	0.28
119.7	10130	18350	0.28	36.5	3090	5590	0.28
121.3	10050	18090	0.28	37.0	3060	5510	0.28
122.9	10210	18350	0.28	37.5	3110	5590	0.28
124.6	10550	19780	0.30	38.0	3220	6030	0.30
126.2	10640	20100	0.31	38.5	3240	6130	0.31
127.9	11510	21460	0.30	39.0	3510	6540	0.30
129.5	11510	20420	0.27	39.5	3510	6220	0.27
131.1	11410	21100	0.29	40.0	3480	6430	0.29
132.8	11300	20420	0.28	40.5	3450	6220	0.28
134.4	11200	20420	0.28	41.0	3410	6220	0.28
136.1	11010	20750	0.30	41.5	3360	6330	0.30
137.7	11010	20100	0.29	42.0	3360	6130	0.29
139.3	11010	21100	0.31	42.5	3360	6430	0.31
141.0	11010	20750	0.30	43.0	3360	6330	0.30
143.0	11010	20420	0.30	43.6	3360	6220	0.30
144.3	11010	19780	0.28	44.0	3360	6030	0.28
145.9	11010	20420	0.30	44.5	3360	6220	0.30
147.6	11010	20420	0.30	45.0	3360	6220	0.30
149.2	11200	20420	0.28	45.5	3410	6220	0.28
150.8	11300	20750	0.29	46.0	3450	6330	0.29
152.5	11410	20100	0.26	46.5	3480	6130	0.26
154.1	11410	20100	0.26	47.0	3480	6130	0.26
155.8	11510	21100	0.29	47.5	3510	6430	0.29
157.4	11720	21100	0.28	48.0	3570	6430	0.28
159.0	11720	20420	0.25	48.5	3570	6220	0.25
160.7	11510	20420	0.27	49.0	3510	6220	0.27
162.3	11200	20100	0.27	49.5	3410	6130	0.27
164.0	10910	19780	0.28	50.0	3330	6030	0.28
165.6	11010	19480	0.27	50.5	3360	5940	0.27
167.2	11010	19480	0.27	51.0	3360	5940	0.27
168.9	11010	19480	0.27	51.5	3360	5940	0.27
170.5	10910	19180	0.26	52.0	3330	5850	0.26
172.2	11010	19180	0.25	52.5	3360	5850	0.25
173.8	10910	19480	0.27	53.0	3330	5940	0.27
175.4	10640	19180	0.28	53.5	3240	5850	0.28
177.1	10640	19480	0.29	54.0	3240	5940	0.29
178.7	10910	18620	0.24	54.5	3330	5670	0.24
180.4	10640	18900	0.27	55.0	3240	5760	0.27
182.0	10640	18900	0.27	55.5	3240	5760	0.27
183.6	10730	18900	0.26	56.0	3270	5760	0.26

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-421

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)	
185.3	10730	18620	0.25	56.5	3270	5670	0.25
186.9	11010	18620	0.23	57.0	3360	5670	0.23
188.6	11010	19480	0.27	57.5	3360	5940	0.27
190.2	11010	20750	0.30	58.0	3360	6330	0.30
191.8	11200	21100	0.30	58.5	3410	6430	0.30
193.8	11300	20100	0.27	59.1	3450	6130	0.27
195.1	11300	19780	0.26	59.5	3450	6030	0.26
196.8	11300	20750	0.29	60.0	3450	6330	0.29
198.4	11300	20750	0.29	60.5	3450	6330	0.29
200.0	11010	20750	0.30	61.0	3360	6330	0.30
201.7	10910	19180	0.26	61.5	3330	5850	0.26
203.3	10910	19180	0.26	62.0	3330	5850	0.26
205.0	11010	20100	0.29	62.5	3360	6130	0.29
206.6	10910	19480	0.27	63.0	3330	5940	0.27
208.2	10820	20420	0.30	63.5	3300	6220	0.30
209.9	10910	20420	0.30	64.0	3330	6220	0.30
211.5	11010	20100	0.29	64.5	3360	6130	0.29
213.2	11010	19780	0.28	65.0	3360	6030	0.28
214.8	11010	19780	0.28	65.5	3360	6030	0.28
216.4	11110	20750	0.30	66.0	3380	6330	0.30
218.1	11110	20750	0.30	66.5	3380	6330	0.30
219.7	10910	19180	0.26	67.0	3330	5850	0.26
221.4	10640	19180	0.28	67.5	3240	5850	0.28
223.0	10640	20100	0.31	68.0	3240	6130	0.31
224.7	10820	20420	0.30	68.5	3300	6220	0.30
226.3	10730	20100	0.30	69.0	3270	6130	0.30
227.9	10380	19480	0.30	69.5	3160	5940	0.30
229.6	10640	20750	0.32	70.0	3240	6330	0.32
231.2	10910	20750	0.31	70.5	3330	6330	0.31
232.9	11200	20420	0.28	71.0	3410	6220	0.28
234.5	11300	20420	0.28	71.5	3450	6220	0.28
236.1	11410	20750	0.28	72.0	3480	6330	0.28
237.8	11410	20100	0.26	72.5	3480	6130	0.26
239.4	11610	20750	0.27	73.0	3540	6330	0.27
241.1	11410	20420	0.27	73.5	3480	6220	0.27
242.7	11200	20420	0.28	74.0	3410	6220	0.28
244.3	10910	19780	0.28	74.5	3330	6030	0.28
246.0	10460	19180	0.29	75.0	3190	5850	0.29
247.6	10290	19480	0.31	75.5	3140	5940	0.31
249.3	10290	19780	0.31	76.0	3140	6030	0.31
250.9	10460	20100	0.31	76.5	3190	6130	0.31

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-421

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)	
252.5	10730	19180	0.27	77.0	3270	5850	0.27
254.2	10910	19780	0.28	77.5	3330	6030	0.28
255.8	11200	20100	0.27	78.0	3410	6130	0.27
257.5	11300	20750	0.29	78.5	3450	6330	0.29
259.1	11200	20100	0.27	79.0	3410	6130	0.27
260.7	11200	19480	0.25	79.5	3410	5940	0.25
262.4	11010	19480	0.27	80.0	3360	5940	0.27
264.0	11010	20100	0.29	80.5	3360	6130	0.29
265.7	11010	20100	0.29	81.0	3360	6130	0.29
267.3	11010	19780	0.28	81.5	3360	6030	0.28
268.9	11200	20750	0.29	82.0	3410	6330	0.29
270.6	11300	21100	0.30	82.5	3450	6430	0.30
272.2	11410	21460	0.30	83.0	3480	6540	0.30
273.9	11410	20420	0.27	83.5	3480	6220	0.27
275.5	11410	20750	0.28	84.0	3480	6330	0.28
277.1	11200	20750	0.29	84.5	3410	6330	0.29
278.8	11200	20420	0.28	85.0	3410	6220	0.28
280.4	11010	20420	0.30	85.5	3360	6220	0.30
282.1	10640	20420	0.31	86.0	3240	6220	0.31
283.7	10640	20420	0.31	86.5	3240	6220	0.31
285.3	10640	21460	0.34	87.0	3240	6540	0.34
287.0	10820	21460	0.33	87.5	3300	6540	0.33
288.6	11110	21460	0.32	88.0	3380	6540	0.32
290.3	11110	20750	0.30	88.5	3380	6330	0.30
291.9	11300	20750	0.29	89.0	3450	6330	0.29
293.5	11300	20420	0.28	89.5	3450	6220	0.28
295.2	11410	20100	0.26	90.0	3480	6130	0.26
296.8	11410	20420	0.27	90.5	3480	6220	0.27
298.5	11300	20420	0.28	91.0	3450	6220	0.28
300.1	11300	19780	0.26	91.5	3450	6030	0.26
301.8	11200	20420	0.28	92.0	3410	6220	0.28
303.4	11200	20750	0.29	92.5	3410	6330	0.29
305.0	11110	20100	0.28	93.0	3380	6130	0.28
306.7	11010	20750	0.30	93.5	3360	6330	0.30
308.3	11010	20750	0.30	94.0	3360	6330	0.30
310.0	11300	21460	0.31	94.5	3450	6540	0.31
311.6	11410	21100	0.29	95.0	3480	6430	0.29

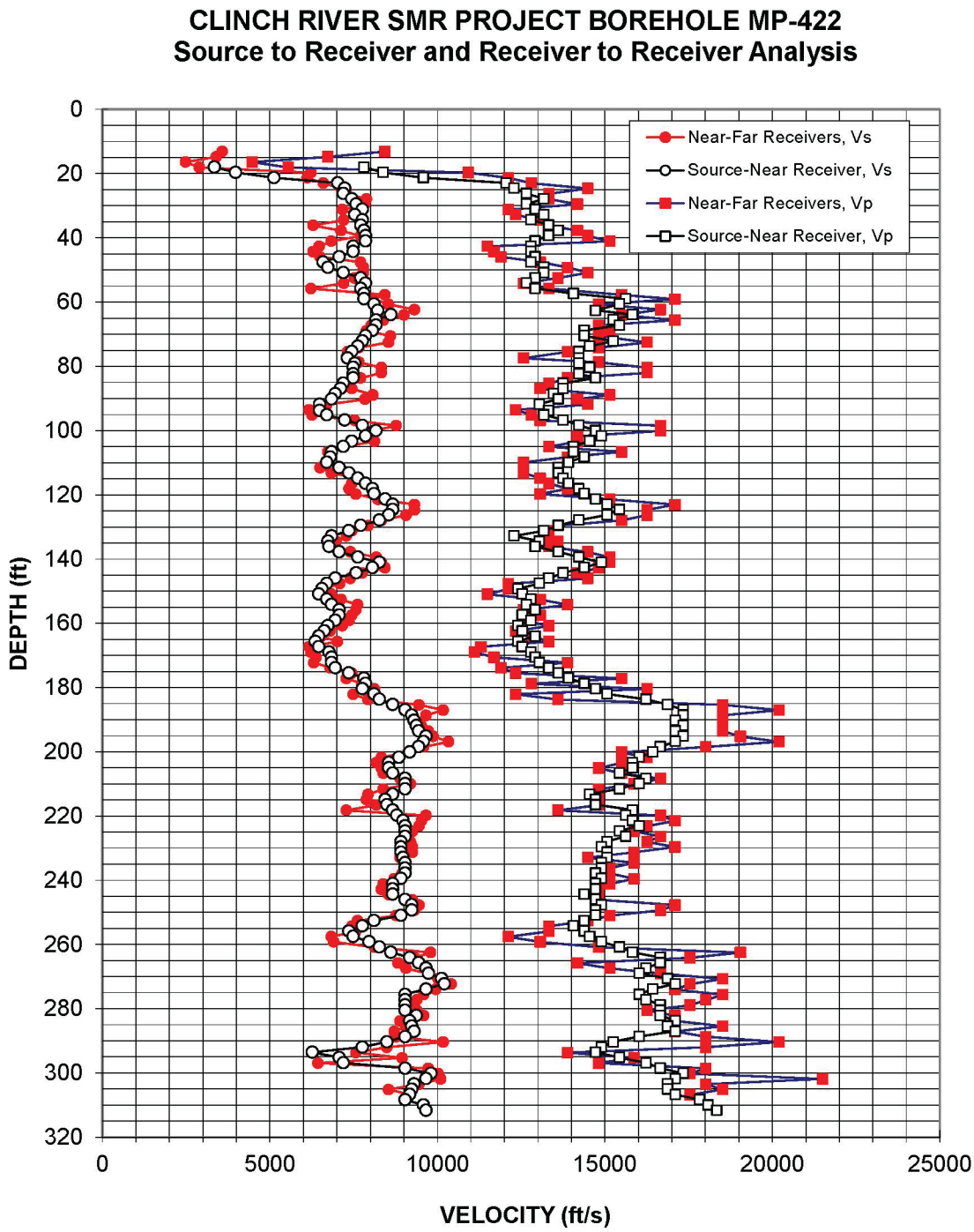

Figure A-25: Boring MP-422, Suspension S-R1 P- and S_H-wave velocities

Table A-25: Boring MP-422, Suspension S-R1 depths and P- and S_H-wave velocities

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-422

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)	
18.0	3350	7810	0.39	5.5	1020	2380	0.39
19.6	3980	8380	0.35	6.0	1210	2560	0.35
21.2	5130	9590	0.30	6.5	1560	2920	0.30
22.9	7030	12060	0.24	7.0	2140	3680	0.24
24.5	7230	12290	0.23	7.5	2210	3750	0.23
26.2	7190	12660	0.26	8.0	2190	3860	0.26
27.8	7450	13190	0.27	8.5	2270	4020	0.27
29.4	7580	12660	0.22	9.0	2310	3860	0.22
31.1	7770	12920	0.22	9.5	2370	3940	0.22
32.7	7540	13190	0.26	10.0	2300	4020	0.26
34.4	7770	12790	0.21	10.5	2370	3900	0.21
36.0	7720	13330	0.25	11.0	2350	4060	0.25
37.6	7810	13610	0.25	11.5	2380	4150	0.25
39.3	7860	13330	0.23	12.0	2400	4060	0.23
40.9	7860	12920	0.21	12.5	2400	3940	0.21
42.6	7490	12790	0.24	13.0	2280	3900	0.24
44.2	7490	12790	0.24	13.5	2280	3900	0.24
45.8	7070	12920	0.29	14.0	2160	3940	0.29
47.5	6590	12790	0.32	14.5	2010	3900	0.32
49.1	6730	13190	0.32	15.0	2050	4020	0.32
50.8	7190	13190	0.29	15.5	2190	4020	0.29
52.4	7720	12920	0.22	16.0	2350	3940	0.22
54.0	7860	12660	0.19	16.5	2400	3860	0.19
55.7	7720	12920	0.22	17.0	2350	3940	0.22
57.3	7810	14070	0.28	17.5	2380	4290	0.28
59.0	7810	15630	0.33	18.0	2380	4760	0.33
60.6	8120	15440	0.31	18.5	2470	4710	0.31
62.6	8220	14720	0.27	19.1	2510	4490	0.27
63.9	8610	15830	0.29	19.5	2630	4820	0.29
65.5	8170	15250	0.30	20.0	2490	4650	0.30
67.2	8170	15440	0.31	20.5	2490	4710	0.31
68.8	8060	14390	0.27	21.0	2460	4380	0.27
70.5	7860	14390	0.29	21.5	2400	4380	0.29
72.1	7770	15250	0.32	22.0	2370	4650	0.32
73.7	7630	14550	0.31	22.5	2320	4440	0.31
75.4	7450	14220	0.31	23.0	2270	4340	0.31
77.3	7320	14220	0.32	23.6	2230	4340	0.32

Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio Based on Source-to-Receiver Travel Time Data - Borehole MP-422

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)	
79.0	7540	14220	0.30	24.1	2300	4340	0.30
80.3	7490	14550	0.32	24.5	2280	4440	0.32
82.3	7490	14220	0.31	25.1	2280	4340	0.31
83.6	7490	14720	0.33	25.5	2280	4490	0.33
85.2	7190	13760	0.31	26.0	2190	4190	0.31
86.9	7110	13760	0.32	26.5	2170	4190	0.32
88.5	6960	13470	0.32	27.0	2120	4110	0.32
90.1	6840	13610	0.33	27.5	2090	4150	0.33
91.8	6490	13050	0.34	28.0	1980	3980	0.34
93.7	6490	13330	0.34	28.6	1980	4060	0.34
95.1	6700	13190	0.33	29.0	2040	4020	0.33
96.7	7230	13760	0.31	29.5	2210	4190	0.31
98.3	7770	14220	0.29	30.0	2370	4340	0.29
100.0	8170	14720	0.28	30.5	2490	4490	0.28
101.6	7860	14890	0.31	31.0	2400	4540	0.31
103.3	7450	14550	0.32	31.5	2270	4440	0.32
104.9	7190	14070	0.32	32.0	2190	4290	0.32
106.5	6840	14070	0.34	32.5	2090	4290	0.34
108.2	6810	14390	0.36	33.0	2070	4380	0.36
109.8	6700	13910	0.35	33.5	2040	4240	0.35
111.5	7070	13610	0.32	34.0	2160	4150	0.32
113.1	7360	13610	0.29	34.5	2240	4150	0.29
114.7	7630	13760	0.28	35.0	2320	4190	0.28
116.4	7860	13910	0.27	35.5	2400	4240	0.27
118.0	8060	14220	0.26	36.0	2460	4340	0.26
119.7	8120	14390	0.27	36.5	2470	4380	0.27
121.3	8440	14720	0.26	37.0	2570	4490	0.26
122.9	8670	15070	0.25	37.5	2640	4590	0.25
124.6	8670	15440	0.27	38.0	2640	4710	0.27
126.2	8550	15070	0.26	38.5	2610	4590	0.26
127.9	8270	14220	0.24	39.0	2520	4340	0.24
129.5	7720	13610	0.26	39.5	2350	4150	0.26
131.1	7360	13190	0.27	40.0	2240	4020	0.27
132.8	6840	12290	0.28	40.5	2090	3750	0.28
134.4	6730	13050	0.32	41.0	2050	3980	0.32
136.1	6770	12920	0.31	41.5	2060	3940	0.31
137.7	7070	13610	0.32	42.0	2160	4150	0.32
139.3	7630	14220	0.30	42.5	2320	4340	0.30
141.0	8270	14890	0.28	43.0	2520	4540	0.28
142.6	8060	14390	0.27	43.5	2460	4380	0.27