

Table A-3. Boring B-907, Top Section, 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 B-907**

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)	
6.5	650	1910	0.43	2.0	200	580	0.43
8.1	710	1870	0.42	2.5	220	570	0.42
9.8	720	1940	0.42	3.0	220	590	0.42
11.4	730	1970	0.42	3.5	220	600	0.42
13.0	800	1970	0.40	4.0	240	600	0.40
14.7	820	1900	0.38	4.5	250	580	0.38
16.3	790	1820	0.38	5.0	240	560	0.38
18.0	780	1850	0.39	5.5	240	560	0.39
19.6	750	1920	0.41	6.0	230	580	0.41
21.2	680	1910	0.43	6.5	210	580	0.43
22.9	620	1910	0.44	7.0	190	580	0.44
24.5	620	1850	0.44	7.5	190	560	0.44
26.2	590	2000	0.45	8.0	180	610	0.45
27.8	570	2000	0.46	8.5	170	610	0.46
29.4	630	1970	0.44	9.0	190	600	0.44
31.1	700	2000	0.43	9.5	210	610	0.43
32.7	750	2290	0.44	10.0	230	700	0.44
34.4	880	3210	0.46	10.5	270	980	0.46
36.0	1060	5190	0.48	11.0	320	1580	0.48
37.6	1590	6330	0.47	11.5	490	1930	0.47
39.3	2210	7110	0.45	12.0	670	2170	0.45
40.9	2460	7450	0.44	12.5	750	2270	0.44
42.6	2830	8010	0.43	13.0	860	2440	0.43
44.2	2740	8610	0.44	13.5	840	2630	0.44
45.8	2520	8440	0.45	14.0	770	2570	0.45
47.5	2430	8920	0.46	14.5	740	2720	0.46
49.1	2440	8670	0.46	15.0	740	2640	0.46
50.8	2300	8980	0.46	15.5	700	2740	0.46
52.4	2490	8850	0.46	16.0	760	2700	0.46
54.0	2790	8730	0.44	16.5	850	2660	0.44
55.7	2970	8670	0.43	17.0	910	2640	0.43
57.3	3460	8850	0.41	17.5	1050	2700	0.41
59.0	3500	8730	0.40	18.0	1070	2660	0.40
60.6	3660	8920	0.40	18.5	1120	2720	0.40
62.2	3640	8670	0.39	19.0	1110	2640	0.39

**Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio
Based on Source-to-Receiver Travel Time Data - Borehole B-907**

American Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V _s	V _p	
(ft)	(ft/s)	(ft/s)	
63.9	3420	8610	0.41
65.5	3310	8610	0.41
67.2	3180	8550	0.42
68.8	3280	8440	0.41
70.5	3300	8330	0.41

Metric Units			
Depth at Midpoint Between Source and Near Receiver	Velocity		Poisson's Ratio
	V _s	V _p	
(m)	(m/s)	(m/s)	
19.5	1040	2630	0.41
20.0	1010	2630	0.41
20.5	970	2610	0.42
21.0	1000	2570	0.41
21.5	1000	2540	0.41

Notes: "-" means no data available at that particular interval of depth.

Table A-4. Boring B-907, Bottom Section, 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 B-907**

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)	
50.9	2220	8810	0.47	15.5	680	2690	0.47
52.5	2600	8930	0.45	16.0	790	2720	0.45
54.1	3110	8930	0.43	16.5	950	2720	0.43
55.8	3580	8930	0.40	17.0	1090	2720	0.40
57.4	3680	8930	0.40	17.5	1120	2720	0.40
59.1	3630	8810	0.40	18.0	1110	2690	0.40
60.7	3680	8810	0.39	18.5	1120	2690	0.39
62.3	3750	8810	0.39	19.0	1140	2690	0.39
64.0	3730	8930	0.39	19.5	1140	2720	0.39
65.6	3660	8930	0.40	20.0	1120	2720	0.40
67.3	3480	8690	0.40	20.5	1060	2650	0.40
68.9	3470	8690	0.41	21.0	1060	2650	0.41
70.6	3450	8410	0.40	21.5	1050	2560	0.40
72.2	3200	8200	0.41	22.0	970	2500	0.41
73.8	3110	8000	0.41	22.5	950	2440	0.41
75.5	3130	7810	0.40	23.0	950	2380	0.40
77.1	3040	7950	0.41	23.5	930	2420	0.41
78.8	3000	8410	0.43	24.0	910	2560	0.43
80.4	3010	8990	0.44	24.5	920	2740	0.44
82.0	3030	9250	0.44	25.0	920	2820	0.44
83.7	2940	9660	0.45	25.5	900	2940	0.45
85.3	2800	9730	0.45	26.0	850	2970	0.45
87.0	2630	9590	0.46	26.5	800	2920	0.46
88.6	2630	9250	0.46	27.0	800	2820	0.46
90.2	2880	9380	0.45	27.5	880	2860	0.45
91.9	2870	9380	0.45	28.0	870	2860	0.45
93.5	3200	9250	0.43	28.5	970	2820	0.43
95.2	3440	9520	0.42	29.0	1050	2900	0.42
96.8	3360	9590	0.43	29.5	1020	2920	0.43
98.4	3280	9380	0.43	30.0	1000	2860	0.43
100.1	3150	9250	0.43	30.5	960	2820	0.43
101.7	3170	9060	0.43	31.0	960	2760	0.43
103.4	3540	8990	0.41	31.5	1080	2740	0.41
105.0	3590	8520	0.39	32.0	1090	2600	0.39
106.6	4130	8200	0.33	32.5	1260	2500	0.33

**Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio
Based on Source-to-Receiver Travel Time Data - Borehole B-907**

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)	
108.3	4170	8410	0.34	33.0	1270	2560	0.34
109.9	4000	8930	0.37	33.5	1220	2720	0.37
111.6	4710	10350	0.37	34.0	1430	3150	0.37
113.2	5030	12420	0.40	34.5	1530	3790	0.40
114.8	5650	13870	0.40	35.0	1720	4230	0.40
116.5	6460	14330	0.37	35.5	1970	4370	0.37
118.1	6760	14650	0.36	36.0	2060	4470	0.36
119.8	7580	14820	0.32	36.5	2310	4520	0.32
121.4	8250	14490	0.26	37.0	2520	4420	0.26
123.0	8690	15340	0.26	37.5	2650	4680	0.26
124.7	8870	14990	0.23	38.0	2700	4570	0.23
126.3	8360	14990	0.27	38.5	2550	4570	0.27
128.0	7720	15160	0.33	39.0	2350	4620	0.33
129.6	7450	14650	0.33	39.5	2270	4470	0.33
131.2	7540	14990	0.33	40.0	2300	4570	0.33
132.9	7540	15520	0.35	40.5	2300	4730	0.35
134.5	7160	15710	0.37	41.0	2180	4790	0.37
136.2	7630	15900	0.35	41.5	2320	4850	0.35
137.8	7720	16300	0.36	42.0	2350	4970	0.36
139.4	8690	16510	0.31	42.5	2650	5030	0.31
142.7	8870	17160	0.32	43.5	2700	5230	0.32
144.4	9060	16720	0.29	44.0	2760	5100	0.29
146.0	9180	16940	0.29	44.5	2800	5160	0.29
147.7	10030	17620	0.26	45.0	3060	5370	0.26
149.3	9730	17160	0.26	45.5	2970	5230	0.26
150.9	9730	16510	0.23	46.0	2970	5030	0.23
152.6	9880	16720	0.23	46.5	3010	5100	0.23
154.2	9590	17620	0.29	47.0	2920	5370	0.29
155.9	9590	16720	0.25	47.5	2920	5100	0.25
157.5	9590	17160	0.27	48.0	2920	5230	0.27
159.1	9180	16940	0.29	48.5	2800	5160	0.29
160.8	9450	16720	0.27	49.0	2880	5100	0.27
162.4	9590	16940	0.26	49.5	2920	5160	0.26
164.1	9730	16720	0.24	50.0	2970	5100	0.24
165.7	9380	16720	0.27	50.5	2860	5100	0.27
167.3	8930	16720	0.30	51.0	2720	5100	0.30
169.0	9060	17390	0.31	51.5	2760	5300	0.31
170.6	8990	16940	0.30	52.0	2740	5160	0.30
172.3	8810	17160	0.32	52.5	2690	5230	0.32

**Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio
Based on Source-to-Receiver Travel Time Data - Borehole B-907**

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)	
173.9	9060	16720	0.29	53.0	2760	5100	0.29
175.5	8810	16720	0.31	53.5	2690	5100	0.31
177.2	8520	16720	0.32	54.0	2600	5100	0.32
178.8	8810	16510	0.30	54.5	2690	5030	0.30
180.5	8810	16720	0.31	55.0	2690	5100	0.31
182.1	9060	16940	0.30	55.5	2760	5160	0.30
183.7	9250	16940	0.29	56.0	2820	5160	0.29
185.4	9060	17390	0.31	56.5	2760	5300	0.31
187.0	8870	17390	0.32	57.0	2700	5300	0.32
188.7	8580	16940	0.33	57.5	2610	5160	0.33

Notes: "-" means no data available at that particular interval of depth.

North Anna COL Borehole B-909 data collected Sept. 12, 2006
Source to Receiver and Receiver to Receiver Analysis

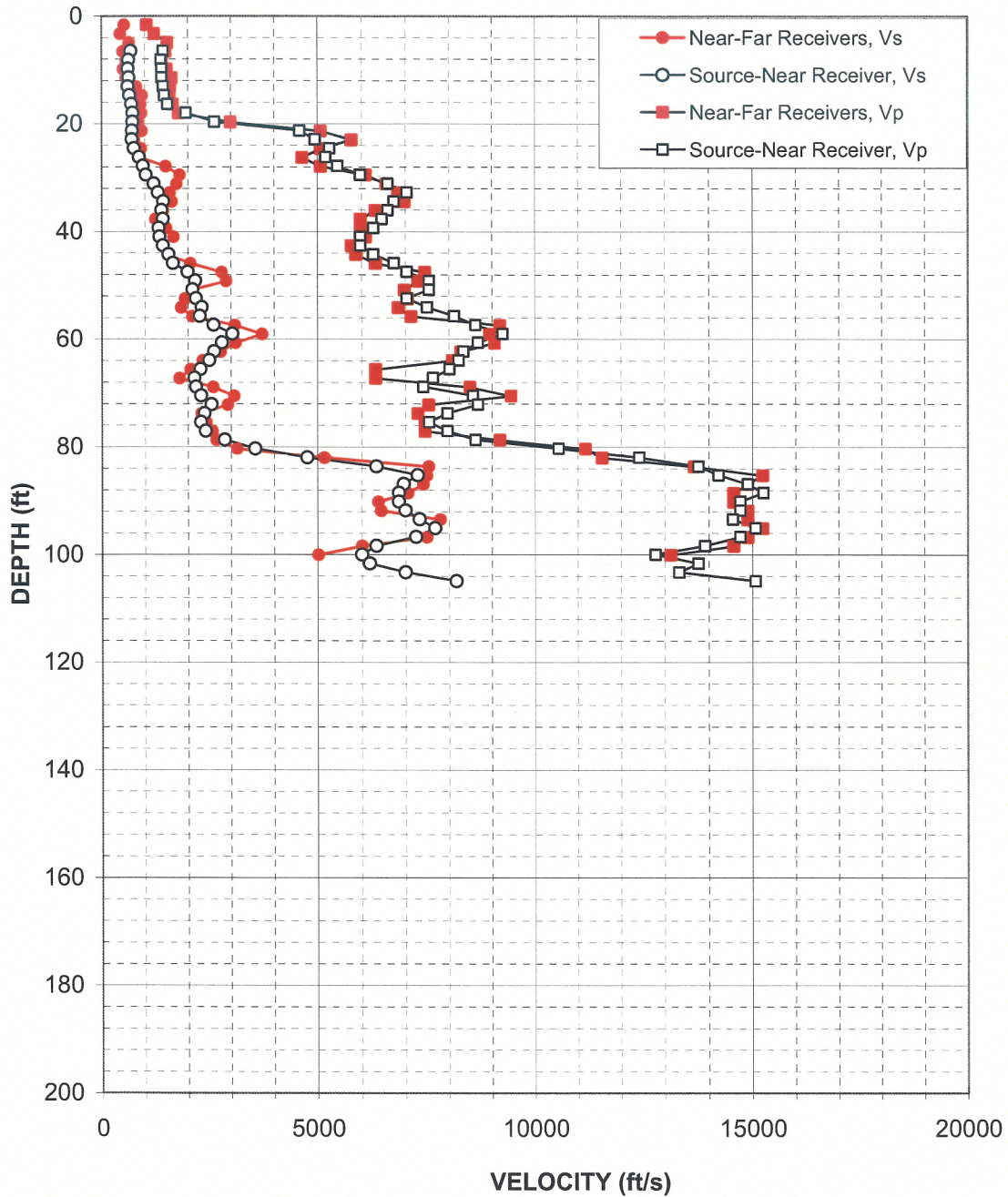


Figure A-5. Boring B-909, Top Section, Suspension S-R1 P- and S_H -wave velocities

North Anna COL Borehole B-909 Source to Receiver and Receiver to Receiver Analysis

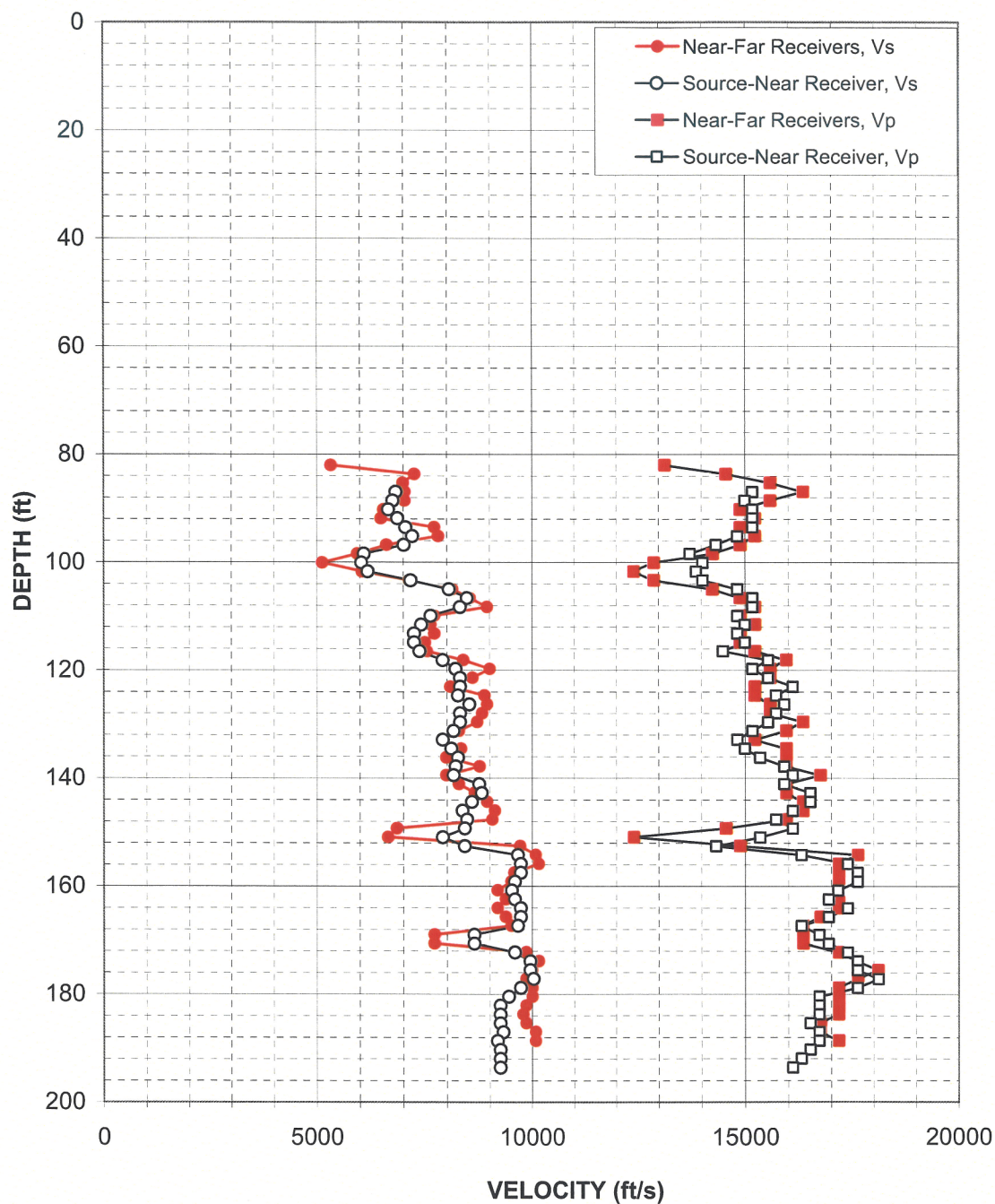


Figure A-6. Boring B-909, Bottom Section, Suspension S-R1 P- and S_H -wave velocities

Table A-5. Boring B-909, Top Section, 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 B-909**

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)	
6.5	670	1420	0.36	2.0	200	430	0.36
8.1	620	1370	0.37	2.5	190	420	0.37
9.8	610	1390	0.38	3.0	180	420	0.38
11.4	620	1390	0.37	3.5	190	420	0.37
13.0	610	1420	0.39	4.0	180	430	0.39
14.7	640	1450	0.38	4.5	200	440	0.38
16.3	690	1520	0.37	5.0	210	460	0.37
18.0	710	1950	0.42	5.5	220	600	0.42
19.6	710	2620	0.46	6.0	220	800	0.46
21.2	700	4590	0.49	6.5	210	1400	0.49
22.9	700	4950	0.49	7.0	210	1510	0.49
24.5	740	5280	0.49	7.5	230	1610	0.49
26.2	860	5190	0.49	8.0	260	1580	0.49
27.8	950	5460	0.48	8.5	290	1660	0.48
29.5	1020	5970	0.48	9.0	310	1820	0.48
31.1	1200	6590	0.48	9.5	370	2010	0.48
32.7	1300	7030	0.48	10.0	400	2140	0.48
34.4	1430	6730	0.48	10.5	430	2050	0.48
36.0	1380	6590	0.48	11.0	420	2010	0.48
37.7	1410	6460	0.47	11.5	430	1970	0.47
39.3	1320	6270	0.48	12.0	400	1910	0.48
40.9	1340	5970	0.47	12.5	410	1820	0.47
42.6	1410	5970	0.47	13.0	430	1820	0.47
44.2	1540	6270	0.47	13.5	470	1910	0.47
45.9	1650	6730	0.47	14.0	500	2050	0.47
47.5	1990	7030	0.46	14.5	610	2140	0.46
49.1	2170	7540	0.45	15.0	660	2300	0.45
50.8	2100	7540	0.46	15.5	640	2300	0.46
52.4	2180	7030	0.45	16.0	670	2140	0.45
54.1	2320	7490	0.45	16.5	710	2280	0.45
55.7	2270	8120	0.46	17.0	690	2470	0.46
57.3	2590	8610	0.45	17.5	790	2630	0.45
59.0	3030	9240	0.44	18.0	920	2820	0.44
60.6	2790	8670	0.44	18.5	850	2640	0.44
62.3	2600	8330	0.45	19.0	790	2540	0.45

**Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio
Based on Source-to-Receiver Travel Time Data - Borehole B-909**

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)	
63.9	2490	8220	0.45	19.5	760	2510	0.45
65.5	2290	8010	0.46	20.0	700	2440	0.46
67.2	2150	7630	0.46	20.5	650	2320	0.46
68.8	2180	7400	0.45	21.0	670	2260	0.45
70.5	2300	8550	0.46	21.5	700	2610	0.46
72.1	2540	8670	0.45	22.0	770	2640	0.45
73.7	2380	7960	0.45	22.5	730	2430	0.45
75.4	2300	7540	0.45	23.0	700	2300	0.45
77.0	2410	7960	0.45	23.5	730	2430	0.45
78.7	2850	8610	0.44	24.0	870	2630	0.44
80.3	3560	10550	0.44	24.5	1080	3220	0.44
81.9	4760	12410	0.41	25.0	1450	3780	0.41
83.6	6330	13760	0.37	25.5	1930	4190	0.37
85.2	7280	14220	0.32	26.0	2220	4340	0.32
86.9	6960	14890	0.36	26.5	2120	4540	0.36
88.5	6840	15250	0.37	27.0	2090	4650	0.37
90.1	6840	14720	0.36	27.5	2090	4490	0.36
91.8	6990	14720	0.35	28.0	2130	4490	0.35
93.4	7320	14550	0.33	28.5	2230	4440	0.33
95.1	7670	15070	0.33	29.0	2340	4590	0.33
96.7	7230	14720	0.34	29.5	2210	4490	0.34
98.3	6330	13910	0.37	30.0	1930	4240	0.37
100.0	6000	12790	0.36	30.5	1830	3900	0.36
101.6	6180	13760	0.37	31.0	1880	4190	0.37
103.3	6990	13330	0.31	31.5	2130	4060	0.31
104.9	8170	15070	0.29	32.0	2490	4590	0.29

Notes: "-" means no data available at that particular interval of depth.

Table A-6. Boring B-909, Bottom Section, 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 B-909**

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)	
87.0	6830	15160	0.37	26.5	2080	4620	0.37
88.6	6760	14990	0.37	27.0	2060	4570	0.37
90.2	6650	15160	0.38	27.5	2030	4620	0.38
91.9	6860	15160	0.37	28.0	2090	4620	0.37
93.5	7050	15160	0.36	28.5	2150	4620	0.36
95.2	7200	14820	0.35	29.0	2200	4520	0.35
96.8	7010	14330	0.34	29.5	2140	4370	0.34
98.4	6090	13730	0.38	30.0	1860	4180	0.38
100.1	6040	14020	0.39	30.5	1840	4270	0.39
101.7	6180	13870	0.38	31.0	1880	4230	0.38
103.4	7160	14020	0.32	31.5	2180	4270	0.32
105.0	8050	14820	0.29	32.0	2450	4520	0.29
106.6	8470	15160	0.27	32.5	2580	4620	0.27
108.3	8310	15160	0.29	33.0	2530	4620	0.29
109.9	7630	14820	0.32	33.5	2320	4520	0.32
111.6	7410	14990	0.34	34.0	2260	4570	0.34
113.2	7240	14820	0.34	34.5	2210	4520	0.34
114.8	7240	14990	0.35	35.0	2210	4570	0.35
116.5	7370	14490	0.33	35.5	2250	4420	0.33
118.1	7900	15520	0.33	36.0	2410	4730	0.33
119.8	8200	15160	0.29	36.5	2500	4620	0.29
121.4	8310	15520	0.30	37.0	2530	4730	0.30
123.0	8310	16100	0.32	37.5	2530	4910	0.32
124.7	8250	15710	0.31	38.0	2520	4790	0.31
126.3	8520	15900	0.30	38.5	2600	4850	0.30
128.0	8310	15710	0.31	39.0	2530	4790	0.31
129.6	8310	15520	0.30	39.5	2530	4730	0.30
131.2	8150	15160	0.30	40.0	2480	4620	0.30
132.9	7900	14820	0.30	40.5	2410	4520	0.30
134.5	8100	14990	0.29	41.0	2470	4570	0.29
136.2	8250	15340	0.30	41.5	2520	4680	0.30
137.8	8200	15900	0.32	42.0	2500	4850	0.32
139.4	8150	16100	0.33	42.5	2480	4910	0.33
141.1	8750	15900	0.28	43.0	2670	4850	0.28
142.7	8810	16510	0.30	43.5	2690	5030	0.30

**Summary of Compressional Wave Velocity, Shear Wave Velocity, and Poisson's Ratio
Based on Source-to-Receiver Travel Time Data - Borehole B-909**

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)	
144.4	8580	16510	0.31	44.0	2610	5030	0.31
146.0	8360	16100	0.32	44.5	2550	4910	0.32
147.7	8470	15710	0.30	45.0	2580	4790	0.30
149.3	8410	16100	0.31	45.5	2560	4910	0.31
150.9	7900	15340	0.32	46.0	2410	4680	0.32
152.6	8410	14330	0.24	46.5	2560	4370	0.24
154.2	9660	16300	0.23	47.0	2940	4970	0.23
155.9	9730	17390	0.27	47.5	2970	5300	0.27
157.5	9730	17620	0.28	48.0	2970	5370	0.28
159.1	9590	17620	0.29	48.5	2920	5370	0.29
160.8	9520	17160	0.28	49.0	2900	5230	0.28
162.4	9590	16940	0.26	49.5	2920	5160	0.26
164.1	9730	17390	0.27	50.0	2970	5300	0.27
165.7	9730	16940	0.25	50.5	2970	5160	0.25
167.3	9660	16300	0.23	51.0	2940	4970	0.23
169.0	8640	16720	0.32	51.5	2630	5100	0.32
170.6	8640	16940	0.32	52.0	2630	5160	0.32
172.3	9590	17390	0.28	52.5	2920	5300	0.28
173.9	9950	17620	0.27	53.0	3030	5370	0.27
175.5	9950	17620	0.27	53.5	3030	5370	0.27
177.2	10030	18110	0.28	54.0	3060	5520	0.28
178.8	9730	17620	0.28	54.5	2970	5370	0.28
180.5	9450	16720	0.27	55.0	2880	5100	0.27
182.1	9250	16720	0.28	55.5	2820	5100	0.28
183.7	9250	16720	0.28	56.0	2820	5100	0.28
185.4	9250	16510	0.27	56.5	2820	5030	0.27
187.0	9310	16720	0.27	57.0	2840	5100	0.27
188.7	9180	16720	0.28	57.5	2800	5100	0.28
190.3	9250	16510	0.27	58.0	2820	5030	0.27
191.9	9250	16300	0.26	58.5	2820	4970	0.26
193.6	9250	16100	0.25	59.0	2820	4910	0.25

Notes: "-" means no data available at that particular interval of depth.