

600 S. Best Estimate Profile - Deep Profile I

k = 0.05 (Note: This is the total kappa is for the upper 1.5 km of the profile)

$$\kappa = \frac{H}{Q_s V_s}$$

kappa equ:

layer	Depth (ft)	Thickness (ft)	Vs (ft/s)	H/V _s ² 7.38E-04	Qs	lamda	layer k
1	4.0	4.00	420.00	2.27E-05	26.3157895	0.0190	0.0012924
2	17.0	13.00	460.00	6.14E-05	26.3157895	0.0190	0.0035016
3	28.4	11.40	480.00	4.95E-05	35.0926446	0.0142	0.0028201
4	39.8	11.40	500.00	4.56E-05	35.0926446	0.0142	0.0025990
5	51.2	11.40	550.00	3.77E-05	35.0926446	0.0142	0.0021479
6	62.6	11.40	575.00	3.45E-05	35.0926446	0.0142	0.0019652
7	74.0	11.40	600.00	3.17E-05	35.0926446	0.0142	0.0018049
8	86.0	12.00	660.00	2.75E-05	20	0.0250	0.0015701
9	98.0	12.00	700.00	2.45E-05	20	0.0250	0.0013958
10	106.0	8.00	810.00	1.22E-05	26.3157895	0.0190	0.0006950
11	114.0	8.00	810.00	1.22E-05	26.3157895	0.0190	0.0006950
12	126.0	12.00	900.00	1.48E-05	97.0159531	0.0052	0.0008444
13	138.0	12.00	900.00	1.48E-05	101.074566	0.0049	0.0008444
14	147.0	9.00	950.00	9.97E-06	20	0.0250	0.0005684
15	157.5	10.50	910.00	1.27E-05	107.411679	0.0047	0.0007227
16	168.0	10.50	910.00	1.27E-05	110.676648	0.0045	0.0007227
17	177.3	9.30	850.00	1.29E-05	20	0.0250	0.0007336
18	188.0	10.70	860.00	1.45E-05	20	0.0250	0.0008246
19	200.9	12.86	980.00	1.34E-05	20	0.0250	0.0007632
20	213.7	12.86	1150.00	9.72E-06	121.382255	0.0041	0.0005542
21	226.6	12.86	1150.00	9.72E-06	124.306197	0.0040	0.0005542
22	260.5	33.90	1350.00	1.86E-05	129.30829	0.0039	0.0010602
23	294.4	33.90	1350.00	1.86E-05	135.962974	0.0037	0.0010602
24	328.3	33.90	1350.00	1.86E-05	142.046622	0.0035	0.0010602
25	371.2	42.90	1350.00	2.35E-05	144.211308	0.0035	0.0013416
26	414.1	42.90	1550.00	1.79E-05	144.211308	0.0035	0.0010177
27	432.3	18.20	1550.00	7.58E-06	144.211308	0.0035	0.0004318
28	472.2	39.90	1750.00	1.30E-05	144.211308	0.0035	0.0007426

$$\lambda = \frac{1}{2Q_s}$$

lambda is i
low strain c

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

29	512.1	39.90	1750.00	1.30E-05	144.211308	0.0035	0.0007426
30	552.0	39.90	1750.00	1.30E-05	144.211308	0.0035	0.0007426
31	597.9	45.90	1750.00	1.50E-05	144.211308	0.0035	0.0008542
32	643.5	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
33	689.1	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
34	734.7	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
35	780.3	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
36	825.9	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
37	871.5	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
38	917.1	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006498
39	944.7	27.60	2000.00	6.90E-06	144.211308	0.0035	0.0003933
40	994.6	49.90	2500.00	7.98E-06	144.211308	0.0035	0.0004551
k upper							4.21E-02
k remaining							7.93E-03

gamma0.0175457.93E-03

lower profile to a depth of 1.5 km

layer	depth (bottom thickness (ft)	(ft)	Vs (ft/s)	H/V _s ² 1.39E-04	Qs	lamda	layer k
41	1027.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
42	1059.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
43	1092.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
44	1124.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
45	1157.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
46	1190.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
47	1222.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
48	1255.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
49	1287.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
50	1320.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
51	1353.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
52	1385.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
53	1418.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
54	1450.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

$$\kappa = \frac{H}{Q_s V_s}$$

$$\lambda = \frac{1}{2Q_s}$$

55	1483.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
56	1516.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
57	1548.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
58	1581.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
59	1613.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
60	1646.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
61	1679.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
62	1711.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
63	1744.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
64	1776.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
65	1809.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
66	1842.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
67	1874.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
68	1907.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
69	1939.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
70	1972.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
71	2005.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
72	2037.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
73	2070.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
74	2102.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
75	2135.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
76	2168.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
77	2200.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
78	2233.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
79	2265.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
80	2298.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
81	2331.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
82	2363.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
83	2396.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
84	2428.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
85	2461.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
86	2494.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
87	2526.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
88	2559.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
89	2591.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
90	2624.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
91	2657.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006

92	2689.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
93	2722.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
94	2754.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
95	2787.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
96	2820.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
97	2852.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
98	2885.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
99	2917.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
100	2950.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
101	2983.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
102	3015.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
103	3048.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
104	3080.98	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
105	3113.58	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
106	3146.18	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
107	3178.78	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
108	3211.38	32.60	4298.00	1.76E-06	75.4091143	0.0066	0.0001006
109	3225.58	14.20	4298.00	7.69E-07	75.4091143	0.0066	0.0000438
110	3297.38	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
111	3369.18	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
112	3440.98	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
113	3512.78	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
114	3584.58	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
115	3656.38	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
116	3728.18	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
117	3799.98	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
118	3871.78	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
119	3943.58	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
120	4015.38	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
121	4087.18	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
122	4158.98	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
123	4230.78	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
124	4302.58	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
125	4374.38	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
126	4446.18	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
127	4517.98	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
128	4589.78	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455

129	4661.58	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
130	4733.38	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
131	4805.18	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455
132	4876.98	71.80	9482.00	7.99E-07	166.363244	0.0030	0.0000455

7.93E-03

600 S. Upper Bound Profile - Deep Profile I

k = 0.05 (Note: This is the total kappa is for the upper 1.5 km of the profile)

$$\kappa = \frac{H}{Q_s V_s}$$

kappa equ:

layer	Depth (ft)	Thickness (ft)	Vs (ft/s)	H/V _s ² 4.92E-04	Qs	lamda	layer k
1	4.0	4.00	514.50	1.51E-05	26.3157895	0.0190	0.0011973
2	17.0	13.00	563.50	4.09E-05	26.3157895	0.0190	0.0032440
3	28.4	11.40	588.00	3.30E-05	35.0926446	0.0142	0.0026127
4	39.8	11.40	612.50	3.04E-05	35.0926446	0.0142	0.0024078
5	51.2	11.40	673.75	2.51E-05	35.0926446	0.0142	0.0019899
6	62.6	11.40	704.38	2.30E-05	35.0926446	0.0142	0.0018207
7	74.0	11.40	735.00	2.11E-05	35.0926446	0.0142	0.0016721
8	86.0	12.00	808.50	1.84E-05	20	0.0250	0.0014546
9	98.0	12.00	857.50	1.63E-05	20	0.0250	0.0012931
10	106.0	8.00	992.25	8.13E-06	26.3157895	0.0190	0.0006438
11	114.0	8.00	992.25	8.13E-06	26.3157895	0.0190	0.0006438
12	126.0	12.00	1102.50	9.87E-06	97.0159531	0.0052	0.0007823
13	138.0	12.00	1102.50	9.87E-06	101.074566	0.0049	0.0007823
14	147.0	9.00	1163.75	6.65E-06	20	0.0250	0.0005266
15	157.5	10.50	1114.75	8.45E-06	107.411679	0.0047	0.0006695
16	168.0	10.50	1114.75	8.45E-06	110.676648	0.0045	0.0006695
17	177.3	9.30	1041.25	8.58E-06	20	0.0250	0.0006797
18	188.0	10.70	1053.50	9.64E-06	20	0.0250	0.0007639
19	200.9	12.86	1200.50	8.92E-06	20	0.0250	0.0007070
20	213.7	12.86	1408.75	6.48E-06	121.382255	0.0041	0.0005135
21	226.6	12.86	1408.75	6.48E-06	124.306197	0.0040	0.0005135
22	260.5	33.90	1653.75	1.24E-05	129.30829	0.0039	0.0009822
23	294.4	33.90	1653.75	1.24E-05	135.962974	0.0037	0.0009822
24	328.3	33.90	1653.75	1.24E-05	142.046622	0.0035	0.0009822
25	371.2	42.90	1653.75	1.57E-05	144.211308	0.0035	0.0012429
26	414.1	42.90	1898.75	1.19E-05	144.211308	0.0035	0.0009429
27	432.3	18.20	1898.75	5.05E-06	144.211308	0.0035	0.0004000
28	472.2	39.90	2143.75	8.68E-06	144.211308	0.0035	0.0006879

$$\lambda = \frac{1}{2Q_s}$$

lambda is i
low strain c

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

29	512.1	39.90	2143.75	8.68E-06	144.211308	0.0035	0.0006879
30	552.0	39.90	2143.75	8.68E-06	144.211308	0.0035	0.0006879
31	597.9	45.90	2143.75	9.99E-06	144.211308	0.0035	0.0007914
32	643.5	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
33	689.1	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
34	734.7	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
35	780.3	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
36	825.9	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
37	871.5	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
38	917.1	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006020
39	944.7	27.60	2450.00	4.60E-06	144.211308	0.0035	0.0003643
40	994.6	49.90	3062.50	5.32E-06	144.211308	0.0035	0.0004216
k upper							3.90E-02
k remaining							1.10E-02

gamma 0.012620 1.10E-02

lower profile to a depth of 1.5 km

layer	depth (bottom thickness (ft)	Vs (ft/s)	H/V _s ² 1.39E-04	Qs	lamda	layer k
41	1027.18	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
42	1059.78	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
43	1092.38	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
44	1124.98	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
45	1157.58	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
46	1190.18	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
47	1222.78	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
48	1255.38	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
49	1287.98	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
50	1320.58	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
51	1353.18	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
52	1385.78	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
53	1418.38	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398
54	1450.98	32.60	4298.00	1.76E-06	54.2419428	0.0092 0.0001398

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

$$\kappa = \frac{H}{Q_s V_s}$$

$$\lambda = \frac{1}{2Q_s}$$

55	1483.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
56	1516.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
57	1548.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
58	1581.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
59	1613.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
60	1646.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
61	1679.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
62	1711.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
63	1744.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
64	1776.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
65	1809.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
66	1842.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
67	1874.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
68	1907.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
69	1939.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
70	1972.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
71	2005.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
72	2037.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
73	2070.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
74	2102.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
75	2135.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
76	2168.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
77	2200.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
78	2233.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
79	2265.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
80	2298.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
81	2331.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
82	2363.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
83	2396.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
84	2428.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
85	2461.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
86	2494.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
87	2526.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
88	2559.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
89	2591.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
90	2624.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
91	2657.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398

92	2689.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
93	2722.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
94	2754.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
95	2787.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
96	2820.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
97	2852.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
98	2885.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
99	2917.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
100	2950.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
101	2983.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
102	3015.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
103	3048.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
104	3080.98	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
105	3113.58	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
106	3146.18	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
107	3178.78	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
108	3211.38	32.60	4298.00	1.76E-06	54.2419428	0.0092	0.0001398
109	3225.58	14.20	4298.00	7.69E-07	54.2419428	0.0092	0.0000609
110	3297.38	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
111	3369.18	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
112	3440.98	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
113	3512.78	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
114	3584.58	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
115	3656.38	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
116	3728.18	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
117	3799.98	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
118	3871.78	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
119	3943.58	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
120	4015.38	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
121	4087.18	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
122	4158.98	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
123	4230.78	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
124	4302.58	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
125	4374.38	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
126	4446.18	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
127	4517.98	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
128	4589.78	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633

129	4661.58	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
130	4733.38	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
131	4805.18	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633
132	4876.98	71.80	9482.00	7.99E-07	119.665449	0.0042	0.0000633

1.10E-02

600 S. Best Estimate Profile - Deep Profile II

k = 0.05 (Note: This is the total kappa is for the upper 1.5 km of the profile)

$$\kappa = \frac{H}{Q_s V_s}$$

kappa equ:

layer	Depth (ft)	Thickness (ft)	Vs (ft/s)	H/V _s ² 7.38E-04	Qs	lamda	layer k
1	4.0	4.00	420.00	2.27E-05	27.596865	0.0181	0.0013311
2	17.0	13.00	460.00	6.14E-05	27.596865	0.0181	0.0036064
3	28.4	11.40	480.00	4.95E-05	35.0926446	0.0142	0.0029045
4	39.8	11.40	500.00	4.56E-05	35.0926446	0.0142	0.0026768
5	51.2	11.40	550.00	3.77E-05	35.0926446	0.0142	0.0022122
6	62.6	11.40	575.00	3.45E-05	35.0926446	0.0142	0.0020240
7	74.0	11.40	600.00	3.17E-05	35.0926446	0.0142	0.0018589
8	86.0	12.00	660.00	2.75E-05	27.596865	0.0181	0.0016171
9	98.0	12.00	700.00	2.45E-05	20.1612903	0.0248	0.0014376
10	106.0	8.00	810.00	1.22E-05	27.596865	0.0181	0.0007158
11	114.0	8.00	810.00	1.22E-05	27.596865	0.0181	0.0007158
12	126.0	12.00	900.00	1.48E-05	97.0159531	0.0052	0.0008696
13	138.0	12.00	900.00	1.48E-05	101.074566	0.0049	0.0008696
14	147.0	9.00	950.00	9.97E-06	20.1612903	0.0248	0.0005854
15	157.5	10.50	910.00	1.27E-05	107.411679	0.0047	0.0007443
16	168.0	10.50	910.00	1.27E-05	110.676648	0.0045	0.0007443
17	177.3	9.30	850.00	1.29E-05	20.1612903	0.0248	0.0007556
18	188.0	10.70	860.00	1.45E-05	20.1612903	0.0248	0.0008492
19	200.9	12.86	980.00	1.34E-05	20.1612903	0.0248	0.0007860
20	213.7	12.86	1150.00	9.72E-06	121.382255	0.0041	0.0005708
21	226.6	12.86	1150.00	9.72E-06	124.306197	0.0040	0.0005708
22	260.5	33.90	1350.00	1.86E-05	129.30829	0.0039	0.0010919
23	294.4	33.90	1350.00	1.86E-05	135.962974	0.0037	0.0010919
24	328.3	33.90	1350.00	1.86E-05	142.046622	0.0035	0.0010919
25	371.2	42.90	1350.00	2.35E-05	144.211308	0.0035	0.0013818
26	414.1	42.90	1550.00	1.79E-05	144.211308	0.0035	0.0010482
27	432.3	18.20	1550.00	7.58E-06	144.211308	0.0035	0.0004447
28	472.2	39.90	1750.00	1.30E-05	144.211308	0.0035	0.0007648

$$\lambda = \frac{1}{2Q_s}$$

lambda is i
low strain c

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

29	512.1	39.90	1750.00	1.30E-05	144.211308	0.0035	0.0007648
30	552.0	39.90	1750.00	1.30E-05	144.211308	0.0035	0.0007648
31	597.9	45.90	1750.00	1.50E-05	144.211308	0.0035	0.0008798
32	643.5	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
33	689.1	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
34	734.7	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
35	780.3	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
36	825.9	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
37	871.5	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
38	917.1	45.60	2000.00	1.14E-05	144.211308	0.0035	0.0006692
39	944.7	27.60	2000.00	6.90E-06	144.211308	0.0035	0.0004050
40	994.6	49.90	2500.00	7.98E-06	144.211308	0.0035	0.0004687
k upper							4.33E-02
k remaining							6.67E-03

gamma0.0170356.67E-03

lower profile to a depth of 1.5 km

layer	depth (bottom thickness (ft)	Vs (ft/s)	H/V _s ² 1.14E-04	Qs	lamda	layer k
41	1027.18	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
42	1059.78	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
43	1092.38	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
44	1124.98	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
45	1157.58	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
46	1190.18	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
47	1222.78	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
48	1255.38	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
49	1287.98	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
50	1320.58	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
51	1353.18	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
52	1385.78	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
53	1418.38	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036
54	1450.98	32.60	4298.00	1.76E-06	73.2184693	0.0068 0.0001036

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

$$\kappa = \frac{H}{Q_s V_s}$$

$$\lambda = \frac{1}{2Q_s}$$

55	1483.58	32.60	4298.00	1.76E-06	73.2184693	0.0068	0.0001036
56	1516.18	32.60	4298.00	1.76E-06	73.2184693	0.0068	0.0001036
57	1548.78	32.60	4298.00	1.76E-06	73.2184693	0.0068	0.0001036
58	1581.38	32.60	4298.00	1.76E-06	73.2184693	0.0068	0.0001036
59	1613.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
60	1646.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
61	1679.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
62	1711.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
63	1744.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
64	1776.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
65	1809.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
66	1842.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
67	1874.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
68	1907.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
69	1939.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
70	1972.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
71	2005.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
72	2037.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
73	2070.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
74	2102.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
75	2135.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
76	2168.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
77	2200.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
78	2233.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
79	2265.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
80	2298.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
81	2331.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
82	2363.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
83	2396.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
84	2428.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
85	2461.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
86	2494.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
87	2526.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
88	2559.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
89	2591.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
90	2624.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
91	2657.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467

92	2689.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
93	2722.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
94	2754.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
95	2787.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
96	2820.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
97	2852.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
98	2885.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
99	2917.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
100	2950.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
101	2983.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
102	3015.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
103	3048.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
104	3080.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
105	3113.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
106	3146.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
107	3178.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
108	3211.38	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
109	3243.98	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
110	3276.58	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
111	3309.18	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
112	3341.78	32.60	6400.00	7.96E-07	109.027037	0.0046	0.0000467
113	3355.98	14.20	6400.00	3.47E-07	109.027037	0.0046	0.0000204
114	3427.78	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
115	3499.58	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
116	3571.38	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
117	3643.18	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
118	3714.98	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
119	3786.78	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
120	3858.58	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
121	3930.38	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
122	4002.18	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
123	4073.98	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
124	4145.78	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
125	4217.58	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
126	4289.38	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
127	4361.18	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
128	4432.98	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029

129	4504.78	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
130	4576.58	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
131	4648.38	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
132	4720.18	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
133	4791.98	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
134	4863.78	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029
135	4935.58	71.80	6400.00	1.75E-06	109.027037	0.0046	0.0001029

6.67E-03

600 S. Upper Bound Profile - Deep Profile II

k = 0.05 (Note: This is the total kappa is for the upper 1.5 km of the profile)

$$\kappa = \frac{H}{Q_s V_s}$$

kappa equ:

layer	Depth (ft)	Thickness (ft)	Vs (ft/s)	H/V _s ² 4.92E-04	Qs	lamda	layer k
1	4.0	4.00	514.50	1.51E-05	27.596865	0.0181	0.0012477
2	17.0	13.00	563.50	4.09E-05	27.596865	0.0181	0.0033806
3	28.4	11.40	588.00	3.30E-05	35.0926446	0.0142	0.0027226
4	39.8	11.40	612.50	3.04E-05	35.0926446	0.0142	0.0025092
5	51.2	11.40	673.75	2.51E-05	35.0926446	0.0142	0.0020737
6	62.6	11.40	704.38	2.30E-05	35.0926446	0.0142	0.0018973
7	74.0	11.40	735.00	2.11E-05	35.0926446	0.0142	0.0017425
8	86.0	12.00	808.50	1.84E-05	20.1612903	0.0248	0.0015158
9	98.0	12.00	857.50	1.63E-05	20.1612903	0.0248	0.0013476
10	106.0	8.00	992.25	8.13E-06	27.596865	0.0181	0.0006709
11	114.0	8.00	992.25	8.13E-06	27.596865	0.0181	0.0006709
12	126.0	12.00	1102.50	9.87E-06	97.0159531	0.0052	0.0008152
13	138.0	12.00	1102.50	9.87E-06	101.074566	0.0049	0.0008152
14	147.0	9.00	1163.75	6.65E-06	20.1612903	0.0248	0.0005487
15	157.5	10.50	1114.75	8.45E-06	107.411679	0.0047	0.0006977
16	168.0	10.50	1114.75	8.45E-06	110.676648	0.0045	0.0006977
17	177.3	9.30	1041.25	8.58E-06	20.1612903	0.0248	0.0007083
18	188.0	10.70	1053.50	9.64E-06	20.1612903	0.0248	0.0007961
19	200.9	12.86	1200.50	8.92E-06	20.1612903	0.0248	0.0007368
20	213.7	12.86	1408.75	6.48E-06	121.382255	0.0041	0.0005351
21	226.6	12.86	1408.75	6.48E-06	124.306197	0.0040	0.0005351
22	260.5	33.90	1653.75	1.24E-05	129.30829	0.0039	0.0010235
23	294.4	33.90	1653.75	1.24E-05	135.962974	0.0037	0.0010235
24	328.3	33.90	1653.75	1.24E-05	142.046622	0.0035	0.0010235
25	371.2	42.90	1653.75	1.57E-05	144.211308	0.0035	0.0012952
26	414.1	42.90	1898.75	1.19E-05	144.211308	0.0035	0.0009826
27	432.3	18.20	1898.75	5.05E-06	144.211308	0.0035	0.0004168
28	472.2	39.90	2143.75	8.68E-06	144.211308	0.0035	0.0007169

$$\lambda = \frac{1}{2Q_s}$$

lambda is i
low strain c

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

29	512.1	39.90	2143.75	8.68E-06	144.211308	0.0035	0.0007169
30	552.0	39.90	2143.75	8.68E-06	144.211308	0.0035	0.0007169
31	597.9	45.90	2143.75	9.99E-06	144.211308	0.0035	0.0008247
32	643.5	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
33	689.1	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
34	734.7	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
35	780.3	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
36	825.9	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
37	871.5	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
38	917.1	45.60	2450.00	7.60E-06	144.211308	0.0035	0.0006273
39	944.7	27.60	2450.00	4.60E-06	144.211308	0.0035	0.0003797
40	994.6	49.90	3062.50	5.32E-06	144.211308	0.0035	0.0004393
k upper							4.06E-02
k remaining							9.38E-03

gamma 0.012111 9.38E-03

lower profile to a depth of 1.5 km

layer	depth (bottom thickness (ft)	(ft)	Vs (ft/s)	H/V _s ² 1.14E-04	Qs	lamda	layer k
41	1027.18	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
42	1059.78	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
43	1092.38	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
44	1124.98	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
45	1157.58	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
46	1190.18	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
47	1222.78	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
48	1255.38	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
49	1287.98	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
50	1320.58	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
51	1353.18	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
52	1385.78	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
53	1418.38	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
54	1450.98	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457

$$\kappa = \frac{1}{\gamma} \sum_i \frac{H_i}{V_{si}^2}$$

$$\kappa = \frac{H}{Q_s V_s}$$

$$\lambda = \frac{1}{2Q_s}$$

55	1483.58	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
56	1516.18	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
57	1548.78	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
58	1581.38	32.60	4298.00	1.76E-06	52.0512977	0.0096	0.0001457
59	1613.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
60	1646.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
61	1679.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
62	1711.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
63	1744.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
64	1776.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
65	1809.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
66	1842.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
67	1874.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
68	1907.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
69	1939.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
70	1972.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
71	2005.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
72	2037.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
73	2070.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
74	2102.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
75	2135.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
76	2168.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
77	2200.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
78	2233.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
79	2265.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
80	2298.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
81	2331.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
82	2363.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
83	2396.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
84	2428.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
85	2461.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
86	2494.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
87	2526.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
88	2559.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
89	2591.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
90	2624.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
91	2657.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657

92	2689.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
93	2722.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
94	2754.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
95	2787.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
96	2820.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
97	2852.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
98	2885.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
99	2917.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
100	2950.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
101	2983.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
102	3015.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
103	3048.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
104	3080.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
105	3113.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
106	3146.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
107	3178.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
108	3211.38	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
109	3243.98	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
110	3276.58	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
111	3309.18	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
112	3341.78	32.60	6400.00	7.96E-07	77.5077491	0.0065	0.0000657
113	3355.98	14.20	6400.00	3.47E-07	77.5077491	0.0065	0.0000286
114	3427.78	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
115	3499.58	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
116	3571.38	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
117	3643.18	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
118	3714.98	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
119	3786.78	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
120	3858.58	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
121	3930.38	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
122	4002.18	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
123	4073.98	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
124	4145.78	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
125	4217.58	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
126	4289.38	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
127	4361.18	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
128	4432.98	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447

129	4504.78	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
130	4576.58	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
131	4648.38	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
132	4720.18	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
133	4791.98	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
134	4863.78	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447
135	4935.58	71.80	6400.00	1.75E-06	77.5077491	0.0065	0.0001447

9.38E-03