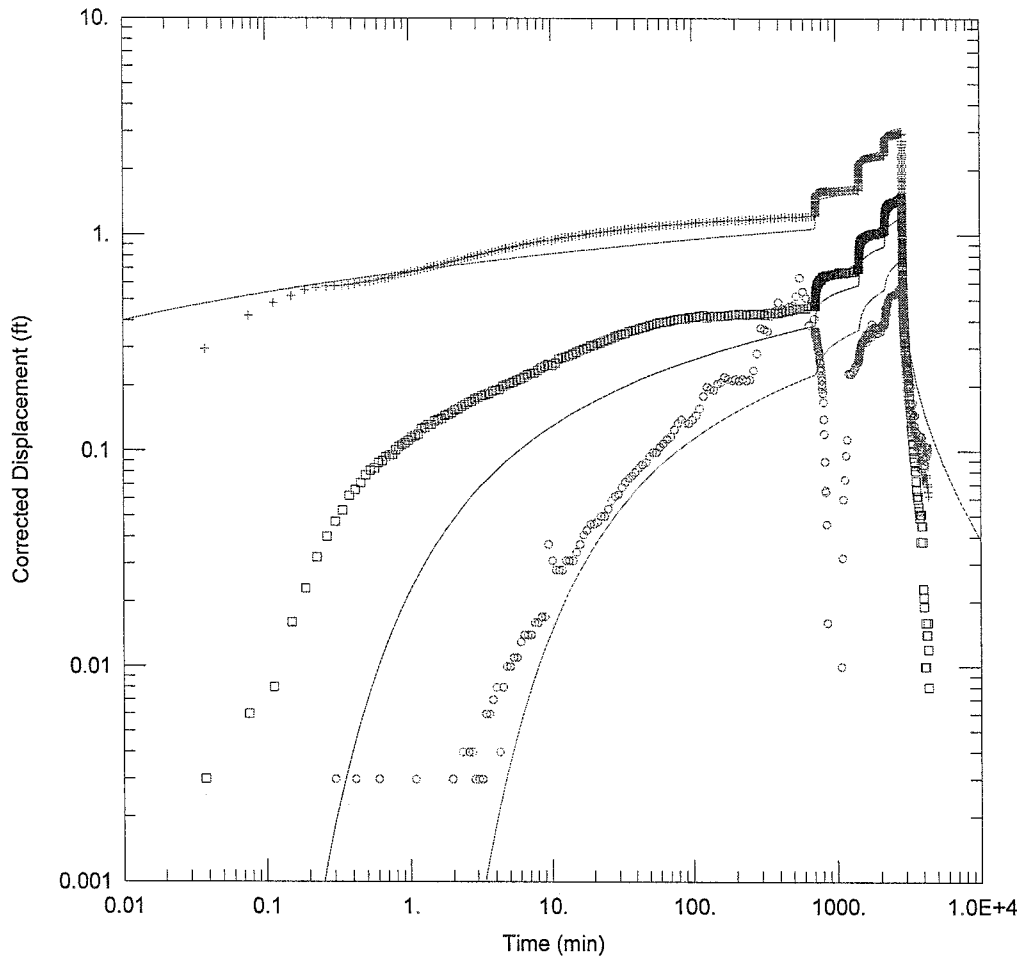


APPENDIX L
PUMP TEST DATA



MW-4 PUMPING TEST

Data Set: C:\files\2184 AVM Gowanda\Pre-design Field Work\Data Logger Data\Aqtesolv files\Pumping Test\Gowanda steps1-5.aqt
 Date: 08/25/04 Time: 13:04:39

PROJECT INFORMATION

Company: DVIRKA & BARTILUCCI
 Client: NYSDEC
 Project: 2184
 Location: AVM GOWANDA
 Test Well: MW-4
 Test Date: 7/27/04

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
MW-4	0	0	□ TW-3	25.6	0
			+ MW4	0	0
			○ MW-3	93.6	0

SOLUTION

Aquifer Model: Unconfined
 $T = 3.72 \text{ cm}^2/\text{sec}$
 $Kz/Kr = 1.$

Solution Method: Theis
 $S = 0.001032$
 $b = 16.57 \text{ ft}$

Data Set: C:\files\2184 AVM Gowanda\Pre-design Field Work\Data Logger Data\Aqtesolv files\Pumping Test\Gowanda steps1-5.aqt
 Title: MW-4 PUMPING TEST
 Date: 08/25/04
 Time: 13:04:46

PROJECT INFORMATION

Company: DVIRKA & BARTILUCCI
 Client: NYSDEC
 Project: 2184
 Location: AVM GOWANDA
 Test Date: 7/27/04
 Test Well: MW-4

AQUIFER DATA

Saturated Thickness: 16.57 ft
 Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

No. of pumping wells: 1

Pumping Well No. 1: MW-4

X Location: 0. ft
 Y Location: 0. ft

Casing Radius: 0.083 ft
 Wellbore Radius: 0.083 ft

Fully Penetrating Well

No. of pumping periods: 5

<u>Pumping Period Data</u>			
<u>Time (min)</u>	<u>Rate (gal/min)</u>	<u>Time (min)</u>	<u>Rate (gal/min)</u>
0.	1.36	2160.	3.8
720.	1.94	2880.	0.
1440.	2.86		

OBSERVATION WELL DATA

No. of observation wells: 3

Observation Well No. 1: TW-3

X Location: 25.6 ft
 Y Location: 0. ft

Radial distance from MW-4: 25.6 ft

Fully Penetrating Well

No. of Observations: 739

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0378	0.003	1468.3	0.93
0.0757	0.006	1469.9	0.937
0.1135	0.008	1471.7	0.939
0.1513	0.016	1473.6	0.945
0.1892	0.023	1475.6	0.95
0.227	0.032	1477.7	0.95
0.2648	0.04	1479.9	0.954
0.3027	0.047	1482.3	0.956
0.3405	0.053	1484.8	0.963
0.3783	0.062	1487.4	0.965
0.4162	0.066	1490.2	0.967
0.454	0.071	1493.2	0.971
0.4918	0.077	1496.3	0.973
0.5297	0.081	1499.6	0.976
0.5675	0.083	1503.2	0.98
0.6053	0.088	1506.9	0.98
0.6432	0.09	1510.9	0.982
0.681	0.094	1515.1	0.986
0.7188	0.096	1519.5	0.989
0.7567	0.096	1524.2	0.991
0.7962	0.101	1529.2	0.993
0.838	0.105	1534.5	0.993
0.8823	0.107	1540.1	0.995
0.9293	0.109	1546.	0.997
0.9792	0.112	1552.3	0.995
1.032	0.116	1558.9	0.999
1.088	0.118	1566.	1.002
1.147	0.12	1573.4	1.006
1.21	0.127	1581.3	1.006
1.276	0.129	1589.7	1.008
1.346	0.133	1598.6	1.012
1.421	0.133	1608.	1.017
1.5	0.138	1617.9	1.023
1.583	0.14	1628.4	1.019
1.672	0.142	1639.6	1.023
1.766	0.146	1651.4	1.025
1.865	0.148	1664.	1.028
1.97	0.151	1677.2	1.034
2.082	0.155	1691.3	1.036
2.2	0.157	1706.2	1.036
2.325	0.161	1721.9	1.041
2.458	0.164	1738.6	1.043
2.598	0.168	1756.3	1.043
2.747	0.17	1775.	1.047
2.905	0.174	1794.9	1.049
3.071	0.177	1815.9	1.051
3.248	0.181	1838.2	1.051
3.436	0.183	1861.8	1.043
3.634	0.185	1886.8	1.054
3.844	0.19	1913.2	1.06
4.067	0.192	1941.3	1.06
4.303	0.194	1971.	1.064
4.552	0.2	2001.	1.062
4.817	0.203	2031.	1.058

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
5.097	0.207	2061.	1.071
5.394	0.209	2091.	1.08
5.709	0.213	2121.	1.08
6.042	0.216	2151.	1.086
6.395	0.22	2160.	1.086
6.769	0.226	2160.	1.084
7.165	0.229	2160.1	1.086
7.584	0.231	2160.1	1.086
8.028	0.237	2160.2	1.088
8.499	0.244	2160.2	1.09
8.997	0.248	2160.2	1.09
9.525	0.252	2160.3	1.093
10.08	0.25	2160.3	1.093
10.68	0.257	2160.3	1.095
11.3	0.268	2160.4	1.097
11.97	0.272	2160.4	1.099
12.67	0.274	2160.4	1.101
13.42	0.278	2160.5	1.101
14.21	0.283	2160.5	1.103
15.05	0.289	2160.6	1.108
15.93	0.294	2160.6	1.106
16.87	0.298	2160.6	1.108
17.87	0.302	2160.7	1.11
18.92	0.309	2160.7	1.11
20.04	0.311	2160.8	1.114
21.22	0.317	2160.8	1.114
22.47	0.32	2160.8	1.116
23.8	0.326	2160.9	1.116
25.2	0.33	2160.9	1.123
26.69	0.335	2161.	1.125
28.27	0.341	2161.	1.125
29.94	0.346	2161.1	1.127
31.71	0.35	2161.2	1.132
33.58	0.354	2161.2	1.132
35.56	0.361	2161.3	1.134
37.67	0.365	2161.3	1.138
39.89	0.367	2161.4	1.138
42.25	0.372	2161.5	1.14
44.75	0.376	2161.6	1.145
47.4	0.38	2161.7	1.147
50.2	0.385	2161.8	1.151
53.17	0.389	2161.9	1.151
56.32	0.393	2162.	1.155
59.65	0.398	2162.1	1.16
63.18	0.4	2162.2	1.16
66.92	0.402	2162.3	1.164
70.88	0.406	2162.5	1.166
75.07	0.41	2162.6	1.168
79.51	0.413	2162.8	1.173
84.22	0.415	2162.9	1.175
89.21	0.415	2163.1	1.177
94.49	0.421	2163.3	1.183
100.1	0.423	2163.4	1.19
106.	0.423	2163.6	1.19
112.3	0.428	2163.8	1.194

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
118.9	0.43	2164.1	1.201
126.	0.421	2164.3	1.203
133.4	0.426	2164.6	1.207
141.3	0.426	2164.8	1.212
149.7	0.426	2165.1	1.216
158.6	0.428	2165.4	1.218
168.	0.428	2165.7	1.222
177.9	0.43	2166.	1.225
188.4	0.434	2166.4	1.229
199.6	0.434	2166.8	1.235
211.4	0.436	2167.2	1.238
224.	0.436	2167.6	1.242
237.2	0.434	2168.	1.244
251.3	0.436	2168.5	1.246
266.2	0.439	2169.	1.248
281.9	0.436	2169.5	1.255
298.6	0.439	2170.1	1.259
316.3	0.434	2170.7	1.264
335.	0.443	2171.3	1.264
354.9	0.443	2172.	1.266
375.9	0.441	2172.7	1.274
398.2	0.443	2173.4	1.279
421.8	0.447	2174.2	1.281
446.8	0.454	2175.1	1.285
473.2	0.454	2175.9	1.29
501.3	0.458	2176.9	1.294
531.	0.465	2177.9	1.296
561.	0.465	2178.9	1.296
591.	0.465	2180.	1.316
621.	0.467	2181.2	1.311
651.	0.48	2182.5	1.316
681.	0.478	2183.8	1.318
711.	0.48	2185.2	1.322
720.	0.48	2186.7	1.326
720.	0.482	2188.3	1.329
720.1	0.48	2189.9	1.335
720.1	0.482	2191.7	1.337
720.2	0.482	2193.6	1.344
720.2	0.482	2195.6	1.348
720.2	0.482	2197.7	1.357
720.3	0.486	2199.9	1.357
720.3	0.484	2202.3	1.361
720.3	0.486	2204.8	1.365
720.4	0.486	2207.4	1.368
720.4	0.488	2210.2	1.372
720.5	0.488	2213.2	1.372
720.5	0.493	2216.3	1.376
720.5	0.493	2219.7	1.383
720.6	0.495	2223.2	1.387
720.6	0.497	2226.9	1.387
720.6	0.497	2230.9	1.391
720.7	0.499	2235.1	1.396
720.7	0.499	2239.5	1.396
720.8	0.497	2244.2	1.4
720.8	0.499	2249.2	1.404

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
720.8	0.499	2254.5	1.404
720.9	0.499	2260.1	1.411
720.9	0.501	2266.	1.411
721.	0.501	2272.3	1.417
721.	0.504	2278.9	1.424
721.1	0.506	2286.	1.426
721.1	0.506	2293.4	1.432
721.2	0.506	2301.3	1.437
721.3	0.506	2309.7	1.443
721.4	0.508	2318.6	1.448
721.4	0.508	2328.	1.454
721.5	0.51	2337.9	1.456
721.6	0.512	2348.4	1.456
721.7	0.517	2359.6	1.458
721.8	0.517	2371.4	1.463
721.9	0.519	2383.9	1.467
722.	0.519	2397.2	1.469
722.1	0.521	2411.3	1.471
722.2	0.521	2426.2	1.469
722.3	0.523	2441.9	1.474
722.5	0.523	2458.6	1.476
722.6	0.527	2476.3	1.487
722.8	0.527	2495.	1.489
722.9	0.532	2514.9	1.487
723.1	0.534	2535.9	1.489
723.3	0.538	2558.2	1.491
723.4	0.538	2581.8	1.491
723.6	0.54	2606.8	1.495
723.8	0.543	2633.2	1.5
724.1	0.545	2661.3	1.504
724.3	0.545	2691.	1.508
724.6	0.547	2721.	1.523
724.8	0.551	2751.	1.526
725.1	0.553	2781.	1.534
725.4	0.558	2811.	1.547
725.7	0.556	2841.	1.558
726.	0.558	2871.	1.558
726.4	0.558	2880.	1.562
726.8	0.562	2880.	1.562
727.2	0.56	2880.1	1.565
727.6	0.564	2880.1	1.558
728.	0.566	2880.2	1.552
728.5	0.566	2880.2	1.547
729.	0.569	2880.2	1.539
729.5	0.573	2880.3	1.528
730.1	0.573	2880.3	1.515
730.7	0.575	2880.3	1.506
731.3	0.577	2880.4	1.497
732.	0.579	2880.4	1.484
732.7	0.577	2880.4	1.474
733.4	0.582	2880.5	1.463
734.2	0.582	2880.5	1.452
735.	0.584	2880.6	1.441
735.9	0.588	2880.6	1.428
736.9	0.592	2880.6	1.422

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
737.9	0.592	2880.7	1.413
738.9	0.59	2880.7	1.404
740.	0.595	2880.8	1.396
741.2	0.595	2880.8	1.383
742.5	0.599	2880.8	1.374
743.8	0.599	2880.9	1.365
745.2	0.601	2880.9	1.357
746.7	0.601	2881.	1.348
748.3	0.603	2881.	1.337
749.9	0.608	2881.1	1.326
751.7	0.61	2881.1	1.313
753.6	0.612	2881.2	1.303
755.6	0.612	2881.3	1.29
757.7	0.618	2881.3	1.281
759.9	0.618	2881.4	1.268
762.3	0.623	2881.5	1.255
764.8	0.625	2881.6	1.244
767.4	0.627	2881.7	1.233
770.2	0.631	2881.8	1.222
773.2	0.636	2881.9	1.207
776.3	0.636	2882.	1.199
779.7	0.638	2882.1	1.188
783.2	0.638	2882.2	1.175
786.9	0.636	2882.3	1.16
790.9	0.638	2882.4	1.149
795.1	0.642	2882.6	1.138
799.5	0.649	2882.7	1.125
804.2	0.653	2882.9	1.116
809.2	0.653	2883.1	1.106
814.5	0.653	2883.2	1.09
820.1	0.657	2883.4	1.082
826.	0.657	2883.6	1.069
832.3	0.657	2883.8	1.056
838.9	0.66	2884.1	1.045
846.	0.664	2884.3	1.034
853.4	0.662	2884.6	1.019
861.3	0.668	2884.8	1.008
869.7	0.668	2885.1	0.997
878.6	0.666	2885.4	0.986
888.	0.668	2885.7	0.976
897.9	0.666	2886.	0.963
908.4	0.668	2886.4	0.952
919.6	0.67	2886.8	0.939
931.4	0.673	2887.2	0.93
944.	0.673	2887.6	0.917
957.2	0.673	2888.	0.906
971.3	0.673	2888.5	0.893
986.2	0.675	2889.	0.885
1001.9	0.679	2889.5	0.872
1018.6	0.677	2890.1	0.861
1036.3	0.683	2890.7	0.848
1055.1	0.69	2891.3	0.837
1074.9	0.683	2892.	0.82
1095.9	0.681	2892.7	0.809
1118.2	0.681	2893.4	0.794

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1141.8	0.681	2894.2	0.785
1166.8	0.685	2895.	0.772
1193.2	0.69	2895.9	0.755
1221.3	0.688	2896.9	0.744
1251.	0.69	2897.9	0.729
1281.	0.69	2898.9	0.718
1311.	0.692	2900.	0.705
1341.	0.694	2901.2	0.69
1371.	0.707	2902.5	0.677
1401.	0.714	2903.8	0.664
1431.	0.714	2905.2	0.655
1440.	0.714	2906.7	0.64
1440.	0.716	2908.3	0.625
1440.1	0.716	2909.9	0.614
1440.1	0.716	2911.7	0.601
1440.2	0.716	2913.6	0.588
1440.2	0.72	2915.6	0.573
1440.2	0.72	2917.7	0.562
1440.3	0.722	2919.9	0.549
1440.3	0.724	2922.3	0.536
1440.3	0.729	2924.7	0.525
1440.4	0.729	2927.4	0.51
1440.4	0.729	2930.2	0.501
1440.5	0.733	2933.2	0.491
1440.5	0.733	2936.3	0.475
1440.5	0.735	2939.6	0.467
1440.6	0.737	2943.2	0.458
1440.6	0.74	2946.9	0.445
1440.6	0.742	2950.9	0.434
1440.7	0.742	2955.1	0.421
1440.7	0.742	2959.5	0.415
1440.8	0.744	2964.2	0.402
1440.8	0.748	2969.2	0.393
1440.8	0.746	2974.5	0.378
1440.9	0.75	2980.1	0.374
1440.9	0.753	2986.	0.363
1441.	0.755	2992.3	0.35
1441.	0.757	2998.9	0.343
1441.1	0.761	3006.	0.333
1441.1	0.763	3013.4	0.322
1441.2	0.766	3021.3	0.309
1441.3	0.768	3029.7	0.298
1441.3	0.774	3038.6	0.291
1441.4	0.776	3047.9	0.281
1441.5	0.779	3057.9	0.272
1441.6	0.781	3068.4	0.268
1441.7	0.785	3079.6	0.261
1441.8	0.787	3091.4	0.252
1441.9	0.789	3103.9	0.242
1442.	0.792	3117.2	0.237
1442.1	0.798	3131.3	0.226
1442.2	0.802	3146.2	0.22
1442.3	0.805	3161.9	0.209
1442.5	0.809	3178.6	0.198
1442.6	0.811	3196.3	0.181

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1442.7	0.813	3215.	0.177
1442.9	0.818	3234.9	0.168
1443.1	0.82	3255.9	0.153
1443.2	0.824	3278.2	0.148
1443.4	0.826	3301.8	0.133
1443.6	0.828	3326.8	0.125
1443.8	0.833	3353.2	0.118
1444.1	0.835	3381.3	0.109
1444.3	0.839	3411.	0.101
1444.6	0.841	3441.	0.094
1444.8	0.846	3471.	0.09
1445.1	0.846	3501.	0.086
1445.4	0.848	3531.	0.081
1445.7	0.852	3561.	0.073
1446.	0.854	3591.	0.066
1446.4	0.857	3621.	0.062
1446.8	0.861	3651.	0.06
1447.2	0.861	3681.	0.062
1447.6	0.865	3711.	0.055
1448.	0.867	3741.	0.053
1448.5	0.87	3771.	0.049
1449.	0.876	3801.	0.051
1449.5	0.874	3831.	0.038
1450.1	0.878	3861.	0.051
1450.7	0.88	3891.	0.045
1451.3	0.883	3921.	0.045
1452.	0.887	3951.	0.038
1452.7	0.891	3981.	0.023
1453.4	0.893	4011.	0.021
1454.2	0.896	4041.	0.019
1455.	0.9	4071.	0.01
1455.9	0.9	4101.	0.01
1456.9	0.904	4131.	0.016
1457.9	0.906	4161.	0.01
1458.9	0.913	4191.	0.014
1460.	0.915	4221.	0.014
1461.2	0.919	4251.	0.014
1462.5	0.922	4281.	0.016
1463.8	0.926	4311.	0.012
1465.2	0.928	4341.	0.008
1466.7	0.93		

Observation Well No. 2: MW4

X Location: 0. ft

Y Location: 0. ft

Radial distance from MW-4: 0. ft

Fully Penetrating Well

No. of Observations: 739

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>

0.0378	0.299	1468.3	2.353
0.0757	0.427	1469.9	2.358
0.1135	0.489	1471.7	2.36
0.1513	0.528	1473.6	2.362
0.1892	0.563	1475.6	2.367
0.227	0.577	1477.7	2.369
0.2648	0.586	1479.9	2.371
0.3027	0.588	1482.3	2.374
0.3405	0.59	1484.8	2.378
0.3783	0.597	1487.4	2.381
0.4162	0.602	1490.2	2.383
0.454	0.609	1493.2	2.383
0.4918	0.613	1496.3	2.39
0.5297	0.62	1499.6	2.392
0.5675	0.622	1503.2	2.397
0.6053	0.632	1506.9	2.401
0.6432	0.636	1510.9	2.403
0.681	0.641	1515.1	2.41
0.7188	0.645	1519.5	2.408
0.7567	0.657	1524.2	2.41
0.7962	0.659	1529.2	2.413
0.838	0.664	1534.5	2.415
0.8823	0.673	1540.1	2.415
0.9293	0.675	1546.	2.42
0.9792	0.68	1552.3	2.422
1.032	0.687	1558.9	2.42
1.088	0.691	1566.	2.426
1.147	0.698	1573.4	2.431
1.21	0.703	1581.3	2.433
1.276	0.712	1589.7	2.438
1.346	0.721	1598.6	2.44
1.421	0.726	1608.	2.445
1.5	0.733	1617.9	2.447
1.583	0.737	1628.4	2.454
1.672	0.744	1639.6	2.459
1.766	0.751	1651.4	2.456
1.865	0.758	1664.	2.459
1.97	0.767	1677.2	2.463
2.082	0.772	1691.3	2.465
2.2	0.779	1706.2	2.47
2.325	0.785	1721.9	2.47
2.458	0.797	1738.6	2.47
2.598	0.804	1756.3	2.477
2.747	0.811	1775.	2.484
2.905	0.818	1794.9	2.486
3.071	0.824	1815.9	2.493
3.248	0.834	1838.2	2.5
3.436	0.841	1861.8	2.502
3.634	0.85	1886.8	2.509
3.844	0.857	1913.2	2.514
4.067	0.866	1941.3	2.514
4.303	0.873	1971.	2.521
4.552	0.882	2001.	2.525
4.817	0.889	2031.	2.527
5.097	0.896	2061.	2.534
5.394	0.903	2091.	2.539

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
5.709	0.909	2121.	2.534
6.042	0.916	2151.	2.539
6.395	0.925	2160.	2.546
6.769	0.932	2160.	2.573
7.165	0.939	2160.1	2.619
7.584	0.948	2160.1	2.642
8.028	0.953	2160.2	2.663
8.499	0.962	2160.2	2.672
8.997	0.967	2160.2	2.679
9.525	0.971	2160.3	2.688
10.08	0.971	2160.3	2.695
10.68	0.983	2160.3	2.704
11.3	0.994	2160.4	2.711
11.97	0.999	2160.4	2.718
12.67	1.004	2160.4	2.722
13.42	1.006	2160.5	2.732
14.21	1.015	2160.5	2.738
15.05	1.02	2160.6	2.745
15.93	1.026	2160.6	2.75
16.87	1.031	2160.6	2.757
17.87	1.04	2160.7	2.771
18.92	1.047	2160.7	2.782
20.04	1.052	2160.8	2.789
21.22	1.056	2160.8	2.794
22.47	1.063	2160.8	2.803
23.8	1.068	2160.9	2.812
25.2	1.075	2160.9	2.819
26.69	1.075	2161.	2.828
28.27	1.084	2161.	2.837
29.94	1.091	2161.1	2.842
31.71	1.095	2161.2	2.849
33.58	1.1	2161.2	2.858
35.56	1.102	2161.3	2.865
37.67	1.107	2161.3	2.876
39.89	1.111	2161.4	2.881
42.25	1.116	2161.5	2.888
44.75	1.121	2161.6	2.901
47.4	1.123	2161.7	2.908
50.2	1.13	2161.8	2.915
53.17	1.137	2161.9	2.922
56.32	1.141	2162.	2.927
59.65	1.144	2162.1	2.933
63.18	1.146	2162.2	2.94
66.92	1.153	2162.3	2.945
70.88	1.157	2162.5	2.947
75.07	1.155	2162.6	2.954
79.51	1.16	2162.8	2.956
84.22	1.162	2162.9	2.963
89.21	1.164	2163.1	2.977
94.49	1.173	2163.3	3.002
100.1	1.178	2163.4	3.014
106.	1.183	2163.6	3.014
112.3	1.185	2163.8	3.021
118.9	1.189	2164.1	3.028
126.	1.192	2164.3	3.034

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
133.4	1.196	2164.6	3.037
141.3	1.196	2164.8	3.039
149.7	1.203	2165.1	3.044
158.6	1.203	2165.4	3.046
168.	1.206	2165.7	3.046
177.9	1.212	2166.	3.05
188.4	1.21	2166.4	3.05
199.6	1.212	2166.8	3.053
211.4	1.215	2167.2	3.06
224.	1.219	2167.6	3.062
237.2	1.222	2168.	3.064
251.3	1.226	2168.5	3.071
266.2	1.231	2169.	3.076
281.9	1.233	2169.5	3.078
298.6	1.238	2170.1	3.083
316.3	1.242	2170.7	3.087
335.	1.245	2171.3	3.087
354.9	1.247	2172.	3.092
375.9	1.247	2172.7	3.099
398.2	1.251	2173.4	3.101
421.8	1.261	2174.2	3.108
446.8	1.263	2175.1	3.108
473.2	1.263	2175.9	3.112
501.3	1.263	2176.9	3.112
531.	1.261	2177.9	3.117
561.	1.265	2178.9	3.117
591.	1.27	2180.	3.124
621.	1.274	2181.2	3.124
651.	1.277	2182.5	3.126
681.	1.279	2183.8	3.131
711.	1.281	2185.2	3.133
720.	1.284	2186.7	3.135
720.	1.297	2188.3	3.135
720.1	1.309	2189.9	3.145
720.1	1.327	2191.7	3.147
720.2	1.346	2193.6	3.147
720.2	1.359	2195.6	3.151
720.2	1.371	2197.7	3.154
720.3	1.373	2199.9	3.156
720.3	1.385	2202.3	3.163
720.3	1.387	2204.8	3.165
720.4	1.389	2207.4	3.165
720.4	1.396	2210.2	3.167
720.5	1.401	2213.2	3.17
720.5	1.401	2216.3	3.172
720.5	1.405	2219.7	3.174
720.6	1.408	2223.2	3.174
720.6	1.408	2226.9	3.177
720.6	1.41	2230.9	3.177
720.7	1.414	2235.1	3.179
720.7	1.412	2239.5	3.181
720.8	1.414	2244.2	3.184
720.8	1.414	2249.2	3.186
720.8	1.419	2254.5	3.186
720.9	1.419	2260.1	3.186

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
720.9	1.419	2266.	3.186
721.	1.419	2272.3	3.186
721.	1.421	2278.9	3.188
721.1	1.424	2286.	3.19
721.1	1.424	2293.4	3.19
721.2	1.437	2301.3	3.19
721.3	1.453	2309.7	3.195
721.4	1.465	2318.6	3.195
721.4	1.469	2328.	3.197
721.5	1.476	2337.9	3.197
721.6	1.481	2348.4	3.2
721.7	1.488	2359.6	3.202
721.8	1.49	2371.4	3.202
721.9	1.495	2383.9	3.204
722.	1.497	2397.2	3.209
722.1	1.499	2411.3	3.211
722.2	1.504	2426.2	3.209
722.3	1.504	2441.9	3.211
722.5	1.508	2458.6	3.216
722.6	1.511	2476.3	3.218
722.8	1.545	2495.	3.22
722.9	1.554	2514.9	3.22
723.1	1.564	2535.9	3.227
723.3	1.568	2558.2	3.229
723.4	1.573	2581.8	3.236
723.6	1.577	2606.8	3.241
723.8	1.58	2633.2	3.243
724.1	1.584	2661.3	3.25
724.3	1.589	2691.	3.255
724.6	1.593	2721.	3.259
724.8	1.593	2751.	3.264
725.1	1.598	2781.	3.271
725.4	1.6	2811.	3.273
725.7	1.603	2841.	3.278
726.	1.607	2871.	3.28
726.4	1.607	2880.	3.282
726.8	1.609	2880.	3.223
727.2	1.612	2880.1	3.
727.6	1.614	2880.1	2.888
728.	1.616	2880.2	2.791
728.5	1.616	2880.2	2.702
729.	1.619	2880.2	2.624
729.5	1.621	2880.3	2.562
730.1	1.623	2880.3	2.502
730.7	1.626	2880.3	2.442
731.3	1.628	2880.4	2.381
732.	1.632	2880.4	2.33
732.7	1.63	2880.4	2.277
733.4	1.632	2880.5	2.225
734.2	1.635	2880.5	2.176
735.	1.637	2880.6	2.133
735.9	1.639	2880.6	2.089
736.9	1.642	2880.6	2.048
737.9	1.644	2880.7	2.011
738.9	1.642	2880.7	1.97

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
740.	1.651	2880.8	1.938
741.2	1.648	2880.8	1.903
742.5	1.651	2880.8	1.873
743.8	1.653	2880.9	1.841
745.2	1.658	2880.9	1.811
746.7	1.658	2881.	1.779
748.3	1.658	2881.	1.747
749.9	1.66	2881.1	1.727
751.7	1.66	2881.1	1.685
753.6	1.662	2881.2	1.66
755.6	1.662	2881.3	1.637
757.7	1.665	2881.3	1.614
759.9	1.667	2881.4	1.587
762.3	1.669	2881.5	1.566
764.8	1.669	2881.6	1.548
767.4	1.671	2881.7	1.531
770.2	1.671	2881.8	1.511
773.2	1.671	2881.9	1.497
776.3	1.674	2882.	1.465
779.7	1.676	2882.1	1.444
783.2	1.678	2882.2	1.43
786.9	1.681	2882.3	1.419
790.9	1.681	2882.4	1.417
795.1	1.681	2882.6	1.408
799.5	1.688	2882.7	1.398
804.2	1.685	2882.9	1.385
809.2	1.685	2883.1	1.373
814.5	1.688	2883.2	1.355
820.1	1.688	2883.4	1.339
826.	1.69	2883.6	1.318
832.3	1.69	2883.8	1.307
838.9	1.69	2884.1	1.295
846.	1.688	2884.3	1.286
853.4	1.69	2884.6	1.272
861.3	1.69	2884.8	1.258
869.7	1.692	2885.1	1.249
878.6	1.685	2885.4	1.238
888.	1.685	2885.7	1.224
897.9	1.688	2886.	1.206
908.4	1.685	2886.4	1.189
919.6	1.685	2886.8	1.18
931.4	1.685	2887.2	1.169
944.	1.688	2887.6	1.155
957.2	1.688	2888.	1.132
971.3	1.69	2888.5	1.116
986.2	1.692	2889.	1.095
1001.9	1.69	2889.5	1.079
1018.6	1.692	2890.1	1.063
1036.3	1.694	2890.7	1.043
1055.1	1.697	2891.3	1.026
1074.9	1.697	2892.	1.006
1095.9	1.699	2892.7	0.969
1118.2	1.699	2893.4	0.944
1141.8	1.704	2894.2	0.923
1166.8	1.704	2895.	0.903

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1193.2	1.706	2895.9	0.882
1221.3	1.71	2896.9	0.861
1251.	1.713	2897.9	0.838
1281.	1.715	2898.9	0.818
1311.	1.717	2900.	0.795
1341.	1.717	2901.2	0.769
1371.	1.717	2902.5	0.746
1401.	1.713	2903.8	0.723
1431.	1.71	2905.2	0.705
1440.	1.71	2906.7	0.68
1440.	1.727	2908.3	0.659
1440.1	1.754	2909.9	0.643
1440.1	1.782	2911.7	0.62
1440.2	1.811	2913.6	0.6
1440.2	1.837	2915.6	0.577
1440.2	1.853	2917.7	0.558
1440.3	1.862	2919.9	0.542
1440.3	1.871	2922.3	0.524
1440.3	1.88	2924.7	0.503
1440.4	1.892	2927.4	0.485
1440.4	1.901	2930.2	0.469
1440.5	1.908	2933.2	0.453
1440.5	1.915	2936.3	0.439
1440.5	1.922	2939.6	0.418
1440.6	1.928	2943.2	0.409
1440.6	1.935	2946.9	0.395
1440.6	1.938	2950.9	0.379
1440.7	1.947	2955.1	0.368
1440.7	1.977	2959.5	0.358
1440.8	1.99	2964.2	0.338
1440.8	2.009	2969.2	0.329
1440.8	2.023	2974.5	0.31
1440.9	2.036	2980.1	0.306
1440.9	2.046	2986.	0.294
1441.	2.057	2992.3	0.28
1441.	2.066	2998.9	0.274
1441.1	2.075	3006.	0.262
1441.1	2.087	3013.4	0.255
1441.2	2.101	3021.3	0.248
1441.3	2.11	3029.7	0.237
1441.3	2.119	3038.6	0.23
1441.4	2.128	3047.9	0.223
1441.5	2.135	3057.9	0.216
1441.6	2.146	3068.4	0.212
1441.7	2.153	3079.6	0.2
1441.8	2.165	3091.4	0.195
1441.9	2.172	3103.9	0.191
1442.	2.181	3117.2	0.182
1442.1	2.188	3131.3	0.175
1442.2	2.195	3146.2	0.168
1442.3	2.202	3161.9	0.163
1442.5	2.208	3178.6	0.159
1442.6	2.213	3196.3	0.152
1442.7	2.218	3215.	0.152
1442.9	2.225	3234.9	0.143

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1443.1	2.229	3255.9	0.131
1443.2	2.236	3278.2	0.136
1443.4	2.238	3301.8	0.133
1443.6	2.243	3326.8	0.127
1443.8	2.247	3353.2	0.131
1444.1	2.252	3381.3	0.127
1444.3	2.254	3411.	0.124
1444.6	2.257	3441.	0.122
1444.8	2.261	3471.	0.12
1445.1	2.261	3501.	0.117
1445.4	2.266	3531.	0.115
1445.7	2.27	3561.	0.113
1446.	2.27	3591.	0.113
1446.4	2.27	3621.	0.108
1446.8	2.27	3651.	0.106
1447.2	2.275	3681.	0.104
1447.6	2.282	3711.	0.099
1448.	2.284	3741.	0.099
1448.5	2.284	3771.	0.094
1449.	2.289	3801.	0.092
1449.5	2.289	3831.	0.088
1450.1	2.293	3861.	0.083
1450.7	2.298	3891.	0.081
1451.3	2.303	3921.	0.076
1452.	2.307	3951.	0.074
1452.7	2.309	3981.	0.074
1453.4	2.314	4011.	0.074
1454.2	2.316	4041.	0.076
1455.	2.321	4071.	0.078
1455.9	2.323	4101.	0.076
1456.9	2.328	4131.	0.076
1457.9	2.328	4161.	0.078
1458.9	2.332	4191.	0.076
1460.	2.332	4221.	0.076
1461.2	2.337	4251.	0.071
1462.5	2.342	4281.	0.069
1463.8	2.344	4311.	0.065
1465.2	2.348	4341.	0.062
1466.7	2.351		

Observation Well No. 3: MW-3

X Location: 93.6 ft

Y Location: 0. ft

Radial distance from MW-4: 93.6 ft

Fully Penetrating Well

No. of Observations: 739

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0378	0.001	1468.3	0.293
0.0757	0.001	1469.9	0.295

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.1135	-0.005	1471.7	0.298
0.1513	-0.012	1473.6	0.301
0.1892	-0.003	1475.6	0.304
0.227	0.	1477.7	0.302
0.2648	0.001	1479.9	0.304
0.3027	0.003	1482.3	0.307
0.3405	0.001	1484.8	0.308
0.3783	0.001	1487.4	0.31
0.4162	0.003	1490.2	0.313
0.454	0.001	1493.2	0.314
0.4918	0.001	1496.3	0.317
0.5297	0.001	1499.6	0.319
0.5675	0.001	1503.2	0.319
0.6053	0.003	1506.9	0.323
0.6432	0.001	1510.9	0.323
0.681	0.001	1515.1	0.323
0.7188	0.001	1519.5	0.325
0.7567	0.001	1524.2	0.328
0.7962	0.001	1529.2	0.328
0.838	0.001	1534.5	0.331
0.8823	0.001	1540.1	0.329
0.9293	0.001	1546.	0.332
0.9792	0.001	1552.3	0.331
1.032	-0.002	1558.9	0.328
1.088	0.003	1566.	0.328
1.147	0.001	1573.4	0.338
1.21	0.001	1581.3	0.333
1.276	0.001	1589.7	0.338
1.346	0.	1598.6	0.336
1.421	0.	1608.	0.338
1.5	0.	1617.9	0.354
1.583	0.	1628.4	0.326
1.672	0.	1639.6	0.348
1.766	0.	1651.4	0.348
1.865	0.	1664.	0.354
1.97	0.003	1677.2	0.338
2.082	0.	1691.3	0.357
2.2	0.001	1706.2	0.362
2.325	0.004	1721.9	0.354
2.458	0.001	1738.6	0.374
2.598	0.004	1756.3	0.344
2.747	0.004	1775.	0.394
2.905	0.003	1794.9	0.359
3.071	0.003	1815.9	0.366
3.248	0.003	1838.2	0.382
3.436	0.006	1861.8	0.379
3.634	0.006	1886.8	0.376
3.844	0.007	1913.2	0.375
4.067	0.008	1941.3	0.359
4.303	0.004	1971.	0.372
4.552	0.008	2001.	0.381
4.817	0.01	2031.	0.363
5.097	0.01	2061.	0.379
5.394	0.011	2091.	0.394
5.709	0.011	2121.	0.387

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
6.042	0.013	2151.	0.396
6.395	0.014	2160.	0.397
6.769	0.014	2160.	0.396
7.165	0.014	2160.1	0.396
7.584	0.016	2160.1	0.397
8.028	0.016	2160.2	0.397
8.499	0.017	2160.2	0.397
8.997	0.017	2160.2	0.397
9.525	0.037	2160.3	0.396
10.08	0.031	2160.3	0.397
10.68	0.028	2160.3	0.397
11.3	0.028	2160.4	0.397
11.97	0.028	2160.4	0.397
12.67	0.031	2160.4	0.397
13.42	0.031	2160.5	0.396
14.21	0.031	2160.5	0.397
15.05	0.034	2160.6	0.397
15.93	0.037	2160.6	0.396
16.87	0.041	2160.6	0.396
17.87	0.043	2160.7	0.396
18.92	0.046	2160.7	0.396
20.04	0.046	2160.8	0.396
21.22	0.047	2160.8	0.396
22.47	0.05	2160.8	0.394
23.8	0.05	2160.9	0.394
25.2	0.054	2160.9	0.394
26.69	0.059	2161.	0.394
28.27	0.062	2161.	0.393
29.94	0.063	2161.1	0.396
31.71	0.068	2161.2	0.393
33.58	0.072	2161.2	0.393
35.56	0.075	2161.3	0.394
37.67	0.077	2161.3	0.393
39.89	0.08	2161.4	0.391
42.25	0.084	2161.5	0.394
44.75	0.087	2161.6	0.394
47.4	0.089	2161.7	0.394
50.2	0.095	2161.8	0.394
53.17	0.099	2161.9	0.394
56.32	0.099	2162.	0.396
59.65	0.105	2162.1	0.396
63.18	0.109	2162.2	0.396
66.92	0.114	2162.3	0.396
70.88	0.117	2162.5	0.396
75.07	0.126	2162.6	0.396
79.51	0.135	2162.8	0.396
84.22	0.141	2162.9	0.396
89.21	0.136	2163.1	0.396
94.49	0.135	2163.3	0.396
100.1	0.141	2163.4	0.397
106.	0.147	2163.6	0.396
112.3	0.158	2163.8	0.396
118.9	0.181	2164.1	0.397
126.	0.2	2164.3	0.396
133.4	0.195	2164.6	0.397

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
141.3	0.193	2164.8	0.397
149.7	0.207	2165.1	0.397
158.6	0.21	2165.4	0.399
168.	0.222	2165.7	0.399
177.9	0.218	2166.	0.4
188.4	0.215	2166.4	0.403
199.6	0.218	2166.8	0.402
211.4	0.213	2167.2	0.403
224.	0.218	2167.6	0.405
237.2	0.215	2168.	0.405
251.3	0.216	2168.5	0.406
266.2	0.239	2169.	0.408
281.9	0.287	2169.5	0.408
298.6	0.378	2170.1	0.408
316.3	0.372	2170.7	0.408
335.	0.365	2171.3	0.409
354.9	0.431	2172.	0.411
375.9	0.454	2172.7	0.412
398.2	0.498	2173.4	0.417
421.8	0.464	2174.2	0.418
446.8	0.452	2175.1	0.42
473.2	0.477	2175.9	0.418
501.3	0.482	2176.9	0.421
531.	0.532	2177.9	0.422
561.	0.651	2178.9	0.424
591.	0.56	2180.	0.397
621.	0.522	2181.2	0.431
651.	0.39	2182.5	0.433
681.	0.508	2183.8	0.436
711.	0.418	2185.2	0.439
720.	0.366	2186.7	0.436
720.	0.363	2188.3	0.436
720.1	0.363	2189.9	0.439
720.1	0.363	2191.7	0.44
720.2	0.363	2193.6	0.443
720.2	0.362	2195.6	0.446
720.2	0.362	2197.7	0.47
720.3	0.363	2199.9	0.455
720.3	0.362	2202.3	0.455
720.3	0.362	2204.8	0.455
720.4	0.363	2207.4	0.454
720.4	0.362	2210.2	0.457
720.5	0.362	2213.2	0.458
720.5	0.362	2216.3	0.464
720.5	0.362	2219.7	0.465
720.6	0.362	2223.2	0.468
720.6	0.36	2226.9	0.468
720.6	0.362	2230.9	0.471
720.7	0.36	2235.1	0.442
720.7	0.356	2239.5	0.476
720.8	0.356	2244.2	0.476
720.8	0.359	2249.2	0.477
720.8	0.36	2254.5	0.479
720.9	0.359	2260.1	0.483
720.9	0.36	2266.	0.488

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
721.	0.359	2272.3	0.491
721.	0.359	2278.9	0.494
721.1	0.36	2286.	0.497
721.1	0.359	2293.4	0.503
721.2	0.359	2301.3	0.507
721.3	0.359	2309.7	0.511
721.4	0.359	2318.6	0.513
721.4	0.357	2328.	0.52
721.5	0.357	2337.9	0.523
721.6	0.356	2348.4	0.523
721.7	0.356	2359.6	0.525
721.8	0.354	2371.4	0.528
721.9	0.354	2383.9	0.529
722.	0.354	2397.2	0.532
722.1	0.354	2411.3	0.532
722.2	0.354	2426.2	0.534
722.3	0.353	2441.9	0.537
722.5	0.354	2458.6	0.535
722.6	0.354	2476.3	0.544
722.8	0.354	2495.	0.544
722.9	0.354	2514.9	0.543
723.1	0.354	2535.9	0.543
723.3	0.354	2558.2	0.543
723.4	0.354	2581.8	0.544
723.6	0.354	2606.8	0.544
723.8	0.353	2633.2	0.547
724.1	0.353	2661.3	0.551
724.3	0.356	2691.	0.554
724.6	0.351	2721.	0.565
724.8	0.351	2751.	0.566
725.1	0.35	2781.	0.575
725.4	0.35	2811.	0.587
725.7	0.35	2841.	0.594
726.	0.35	2871.	0.597
726.4	0.35	2880.	0.62
726.8	0.35	2880.	0.618
727.2	0.35	2880.1	0.617
727.6	0.348	2880.1	0.608
728.	0.366	2880.2	0.614
728.5	0.363	2880.2	0.617
729.	0.36	2880.2	0.617
729.5	0.359	2880.3	0.617
730.1	0.356	2880.3	0.617
730.7	0.353	2880.3	0.617
731.3	0.35	2880.4	0.617
732.	0.35	2880.4	0.615
732.7	0.35	2880.4	0.615
733.4	0.35	2880.5	0.606
734.2	0.347	2880.5	0.596
735.	0.345	2880.6	0.6
735.9	0.333	2880.6	0.606
736.9	0.338	2880.6	0.611
737.9	0.336	2880.7	0.615
738.9	0.331	2880.7	0.615
740.	0.335	2880.8	0.615

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
741.2	0.332	2880.8	0.612
742.5	0.331	2880.8	0.612
743.8	0.329	2880.9	0.609
745.2	0.325	2880.9	0.611
746.7	0.319	2881.	0.611
748.3	0.314	2881.	0.609
749.9	0.308	2881.1	0.611
751.7	0.305	2881.1	0.606
753.6	0.304	2881.2	0.608
755.6	0.302	2881.3	0.608
757.7	0.302	2881.3	0.608
759.9	0.298	2881.4	0.608
762.3	0.295	2881.5	0.606
764.8	0.289	2881.6	0.606
767.4	0.282	2881.7	0.606
770.2	0.274	2881.8	0.605
773.2	0.268	2881.9	0.605
776.3	0.262	2882.	0.603
779.7	0.259	2882.1	0.602
783.2	0.246	2882.2	0.602
786.9	0.239	2882.3	0.597
790.9	0.225	2882.4	0.6
795.1	0.216	2882.6	0.597
799.5	0.206	2882.7	0.599
804.2	0.197	2882.9	0.597
809.2	0.188	2883.1	0.596
814.5	0.17	2883.2	0.593
820.1	0.142	2883.4	0.593
826.	0.121	2883.6	0.589
832.3	0.09	2883.8	0.589
838.9	0.066	2884.1	0.586
846.	0.065	2884.3	0.586
853.4	0.046	2884.6	0.581
861.3	0.016	2884.8	0.58
869.7	-0.006	2885.1	0.578
878.6	-0.029	2885.4	0.575
888.	-0.046	2885.7	0.572
897.9	-0.063	2886.	0.569
908.4	-0.075	2886.4	0.569
919.6	-0.085	2886.8	0.565
931.4	-0.097	2887.2	0.563
944.	-0.097	2887.6	0.559
957.2	-0.063	2888.	0.556
971.3	-0.066	2888.5	0.553
986.2	-0.072	2889.	0.55
1001.9	-0.058	2889.5	0.546
1018.6	-0.069	2890.1	0.544
1036.3	-0.06	2890.7	0.54
1055.1	-0.021	2891.3	0.535
1074.9	0.01	2892.	0.522
1095.9	0.032	2892.7	0.526
1118.2	0.06	2893.4	0.522
1141.8	0.074	2894.2	0.519
1166.8	0.096	2895.	0.513
1193.2	0.114	2895.9	0.508

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1221.3	0.231	2896.9	0.504
1251.	0.231	2897.9	0.5
1281.	0.23	2898.9	0.495
1311.	0.236	2900.	0.489
1341.	0.241	2901.2	0.483
1371.	0.25	2902.5	0.479
1401.	0.259	2903.8	0.473
1431.	0.271	2905.2	0.468
1440.	0.27	2906.7	0.463
1440.	0.267	2908.3	0.457
1440.1	0.262	2909.9	0.434
1440.1	0.267	2911.7	0.449
1440.2	0.268	2913.6	0.442
1440.2	0.27	2915.6	0.428
1440.2	0.271	2917.7	0.421
1440.3	0.271	2919.9	0.418
1440.3	0.271	2922.3	0.415
1440.3	0.271	2924.7	0.411
1440.4	0.271	2927.4	0.397
1440.4	0.271	2930.2	0.396
1440.5	0.271	2933.2	0.39
1440.5	0.271	2936.3	0.379
1440.5	0.271	2939.6	0.378
1440.6	0.271	2943.2	0.372
1440.6	0.271	2946.9	0.372
1440.6	0.271	2950.9	0.36
1440.7	0.271	2955.1	0.348
1440.7	0.271	2959.5	0.344
1440.8	0.271	2964.2	0.344
1440.8	0.271	2969.2	0.336
1440.8	0.271	2974.5	0.323
1440.9	0.271	2980.1	0.319
1440.9	0.271	2986.	0.314
1441.	0.271	2992.3	0.305
1441.	0.271	2998.9	0.31
1441.1	0.273	3006.	0.302
1441.1	0.27	3013.4	0.287
1441.2	0.271	3021.3	0.277
1441.3	0.271	3029.7	0.276
1441.3	0.271	3038.6	0.267
1441.4	0.271	3047.9	0.262
1441.5	0.271	3057.9	0.261
1441.6	0.271	3068.4	0.255
1441.7	0.271	3079.6	0.256
1441.8	0.271	3091.4	0.241
1441.9	0.271	3103.9	0.231
1442.	0.271	3117.2	0.249
1442.1	0.271	3131.3	0.236
1442.2	0.271	3146.2	0.219
1442.3	0.271	3161.9	0.221
1442.5	0.271	3178.6	0.203
1442.6	0.27	3196.3	0.207
1442.7	0.27	3215.	0.218
1442.9	0.271	3234.9	0.206
1443.1	0.27	3255.9	0.221

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1443.2	0.271	3278.2	0.201
1443.4	0.271	3301.8	0.157
1443.6	0.271	3326.8	0.141
1443.8	0.273	3353.2	0.163
1444.1	0.271	3381.3	0.152
1444.3	0.271	3411.	0.169
1444.6	0.271	3441.	0.144
1444.8	0.271	3471.	0.147
1445.1	0.271	3501.	0.132
1445.4	0.271	3531.	0.148
1445.7	0.271	3561.	0.123
1446.	0.271	3591.	0.124
1446.4	0.271	3621.	0.105
1446.8	0.271	3651.	0.106
1447.2	0.273	3681.	0.112
1447.6	0.273	3711.	0.115
1448.	0.271	3741.	0.112
1448.5	0.274	3771.	0.12
1449.	0.276	3801.	0.114
1449.5	0.276	3831.	0.111
1450.1	0.276	3861.	0.117
1450.7	0.276	3891.	0.111
1451.3	0.277	3921.	0.118
1452.	0.277	3951.	0.106
1452.7	0.279	3981.	0.095
1453.4	0.279	4011.	0.093
1454.2	0.28	4041.	0.096
1455.	0.28	4071.	0.087
1455.9	0.28	4101.	0.084
1456.9	0.282	4131.	0.087
1457.9	0.283	4161.	0.095
1458.9	0.285	4191.	0.095
1460.	0.285	4221.	0.101
1461.2	0.286	4251.	0.106
1462.5	0.289	4281.	0.099
1463.8	0.29	4311.	0.103
1465.2	0.292	4341.	0.105
1466.7	0.293		

SOLUTION

Aquifer Model: Unconfined

Solution Method: Theis

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
T	3.583	cm ² /sec
S	0.0002315	
Kz/Kr	1.	
b	16.57	ft

K = T/b = 0.007095 cm/sec

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	<u>Std. Error</u>	
T	3.72	0.02014	cm ² /sec
S	0.001032	6.204E-5	
Kz/Kr	1.	not estimated	
b	16.57	not estimated	ft

$K = T/b = 0.007365 \text{ cm/sec}$

Parameter Correlations

	<u>T</u>	<u>S</u>
T	1.00	-0.82
S	-0.82	1.00

Residual Statistics

for weighted residuals

Sum of Squares	72.96 ft ²
Variance	0.03294 ft ²
Std. Deviation	0.1815 ft
Mean	0.02144 ft
No. of Residuals	2217
No. of Estimates	2