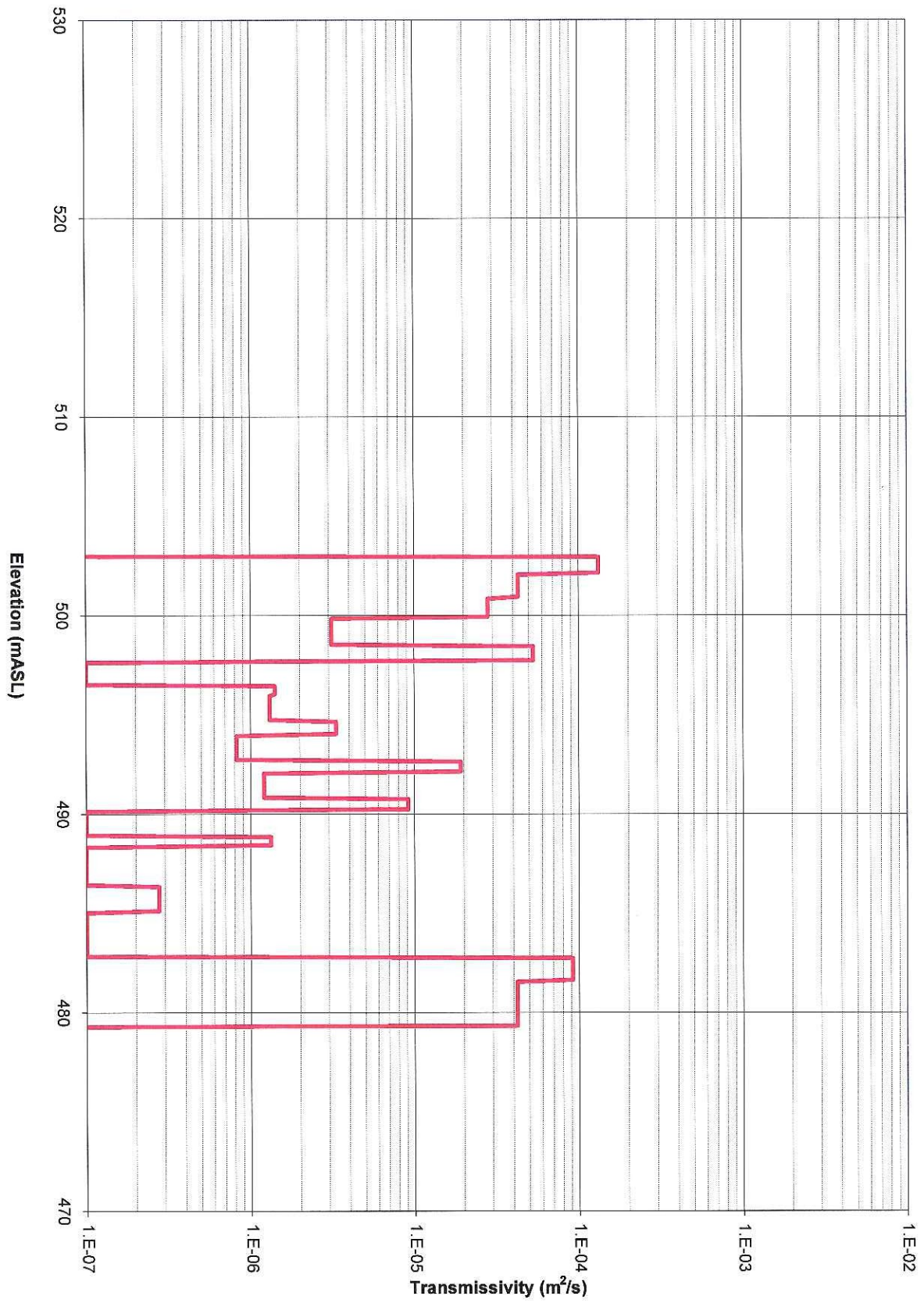


Highland Quarry - OW5 Packer Testing Results

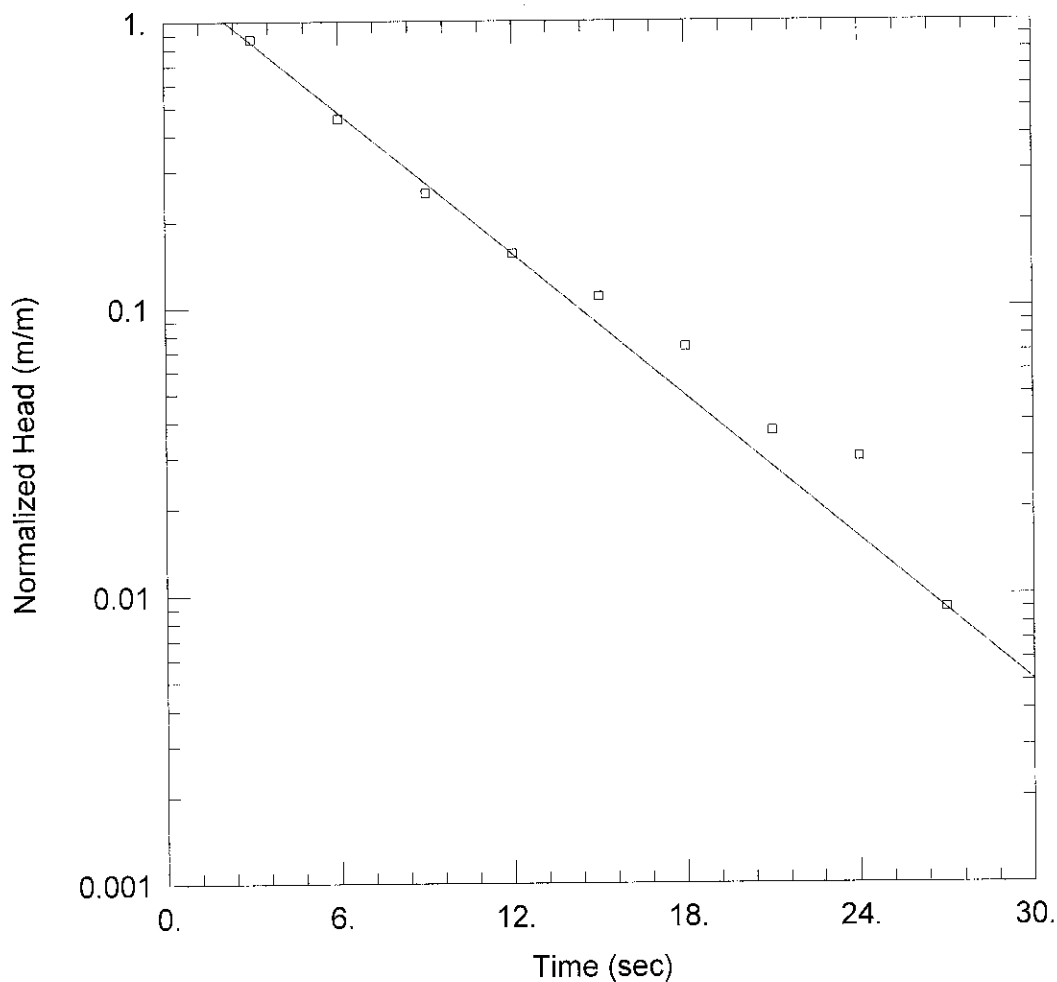


Highland Quarry Packer Testing Results

OW5-04

Test Interval	Depth (m)		Elevation (masl)		Transmissivity (m ² /s)	Hydraulic Conductivity (m/s)	Storativity
OW5-P1	27.4	28.6	482.6	481.4	9.E-05	8.E-05	N/A
OW5-P2	26.5	27.7	483.5	482.3	4.E-05	3.E-05	N/A
OW5-P3	6.7	7.9	503.4	502.2	1.E-04	8.E-05	N/A
OW5-P4	7.6	8.8	502.4	501.2	4.E-05	4.E-05	1.E-19
OW5-P5	8.5	9.7	501.5	500.3	3.E-05	2.E-05	1.E-19
OW5-P6	9.8	11.0	500.3	499.1	3.E-06	3.E-06	1.E-10
OW5-P7	10.7	11.9	499.4	498.2	5.E-05	4.E-05	1.E-19
OW5-P8	11.6	12.8	498.5	497.3	1.E-07	8.E-08	N/A
OW5-P9	12.5	13.7	497.6	496.4	1.E-06	1.E-06	1.E-19
OW5-P10	13.4	14.6	496.6	495.4	1.E-06	1.E-06	1.E-10
OW5-P11	14.3	15.5	495.7	494.5	3.E-06	3.E-06	1.E-10
OW5-P12	15.2	16.4	494.8	493.6	8.E-07	7.E-07	1.E-10
OW5-P13	16.2	17.4	493.9	492.7	2.E-05	2.E-05	1.E-10
OW5-P14	17.1	18.3	493.0	491.8	1.E-06	1.E-06	1.E-10
OW5-P15	18.0	19.2	492.1	490.9	9.E-06	8.E-06	1.E-19
OW5-P16	18.9	20.1	491.2	490.0	1.E-07	8.E-08	N/A
OW5-P17	19.8	21.0	490.2	489.0	1.E-06	8.E-07	1.E-10
OW5-P18	20.7	21.9	489.3	488.1	1.E-07	8.E-08	N/A
OW5-P19	21.6	22.8	488.4	487.2	1.E-07	8.E-08	N/A
OW5-P20	22.6	23.8	487.5	486.3	3.E-07	3.E-07	N/A
OW5-P21	24.7	25.9	485.4	484.2	1.E-07	8.E-08	N/A
OW5-P22	24.4	25.6	485.7	484.5	1.E-07	8.E-08	N/A
OW5-P23	26.5	27.7	483.5	482.3	1.E-07	8.E-08	N/A
Range					1 E-4 to < 1 E-7	8 E-5 to < 8 E-8	
Harmonic Mean					3.E-07	2.E-07	

Notes: 1.E-7 represents zone where the response was at least as low as
 1.0×10^{-7} m²/s (i.e. too slow to test)



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p1)

Initial Displacement: -1. m
 Total Well Penetration Depth: 1.2 m
 Casing Radius: 0.0158 m

Static Water Column Height: 22.38 m
 Screen Length: 1.2 m
 Wellbore Radius: 0.05 m

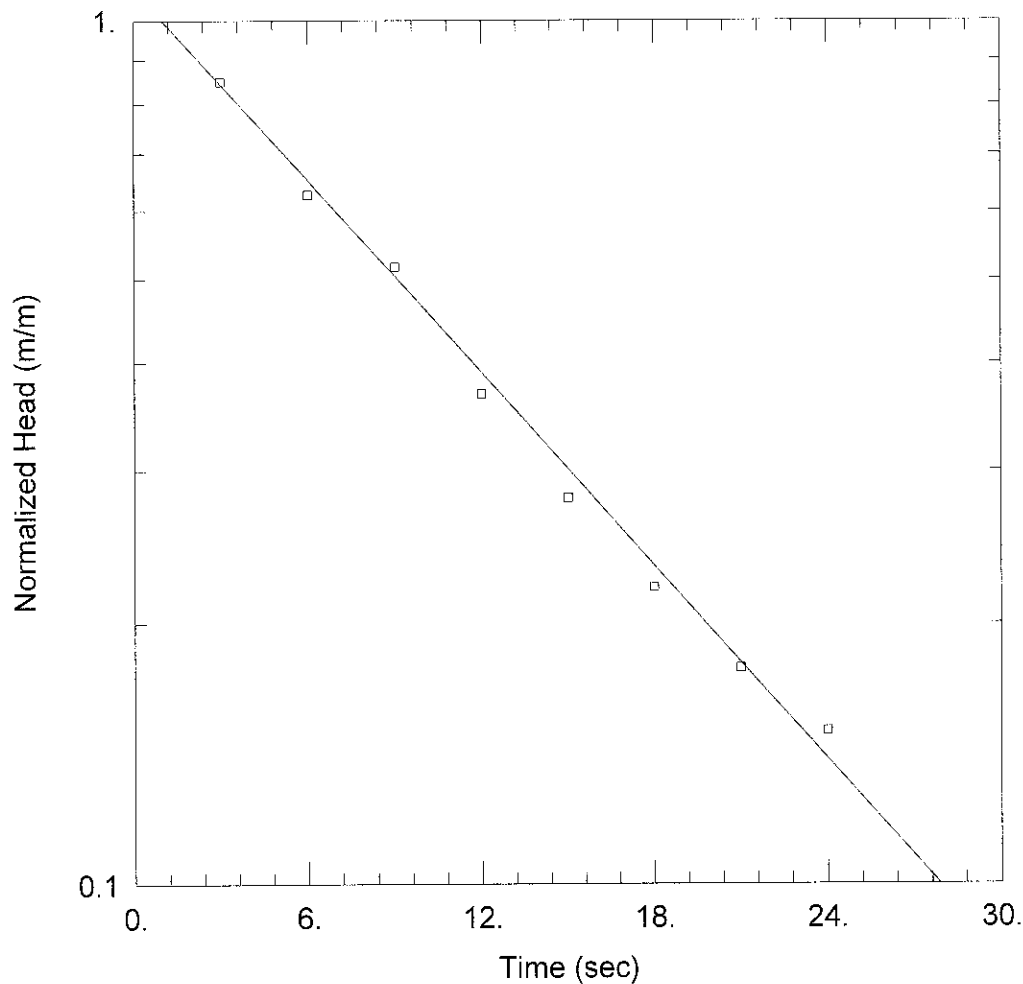
SOLUTION

Aquifer Model: Confined
 $K = 7.642E-5$ m/sec

Solution Method: Hvorslev
 $y_0 = -1.494$ m

Packer Test- OW5-P1-air

Time	Displ.
3	-0.87
6	-0.46
9	-0.25
12	-0.15
15	-0.11
18	-0.07
21	-0.04
24	-0.03
27	-0.01



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-05
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p2)

Initial Displacement: -0.8 m
 Total Well Penetration Depth: 1.2 m
 Casing Radius: 0.0158 m

Static Water Column Height: 25.31 m
 Screen Length: 1.2 m
 Wellbore Radius: 0.05 m

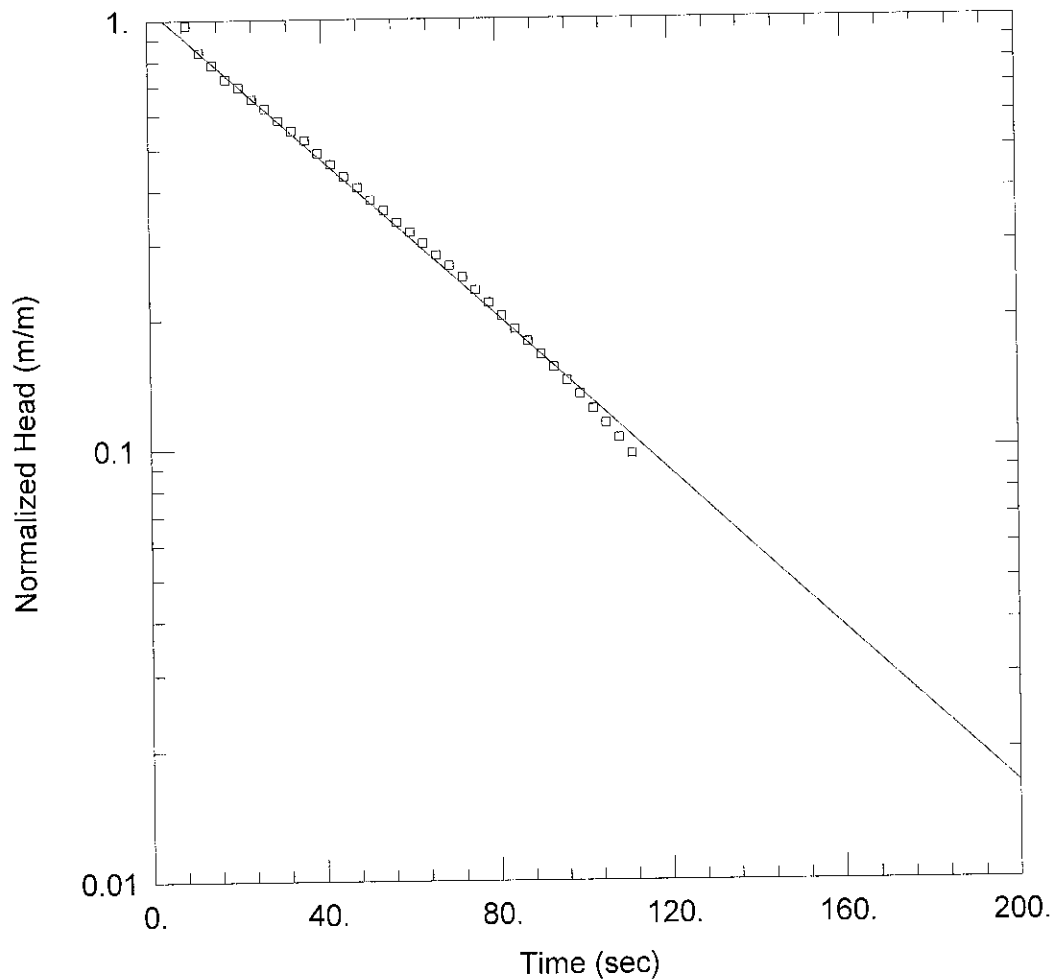
SOLUTION

Aquifer Model: Confined
 $K = 3.452\text{E-}5 \text{ m/sec}$

Solution Method: Hvorslev
 $y_0 = -0.8722 \text{ m}$

Packer Test- OW5-P2-air

Time	Displ.
3	-0.68
6	-0.50
9	-0.41
12	-0.29
15	-0.22
18	-0.18
21	-0.14
24	-0.12



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p3)

Initial Displacement: -1.3 m
 Total Well Penetration Depth: 1.2 m
 Casing Radius: 0.05 m

Static Water Column Height: 2.22 m
 Screen Length: 1.2 m
 Wellbore Radius: 0.0158 m

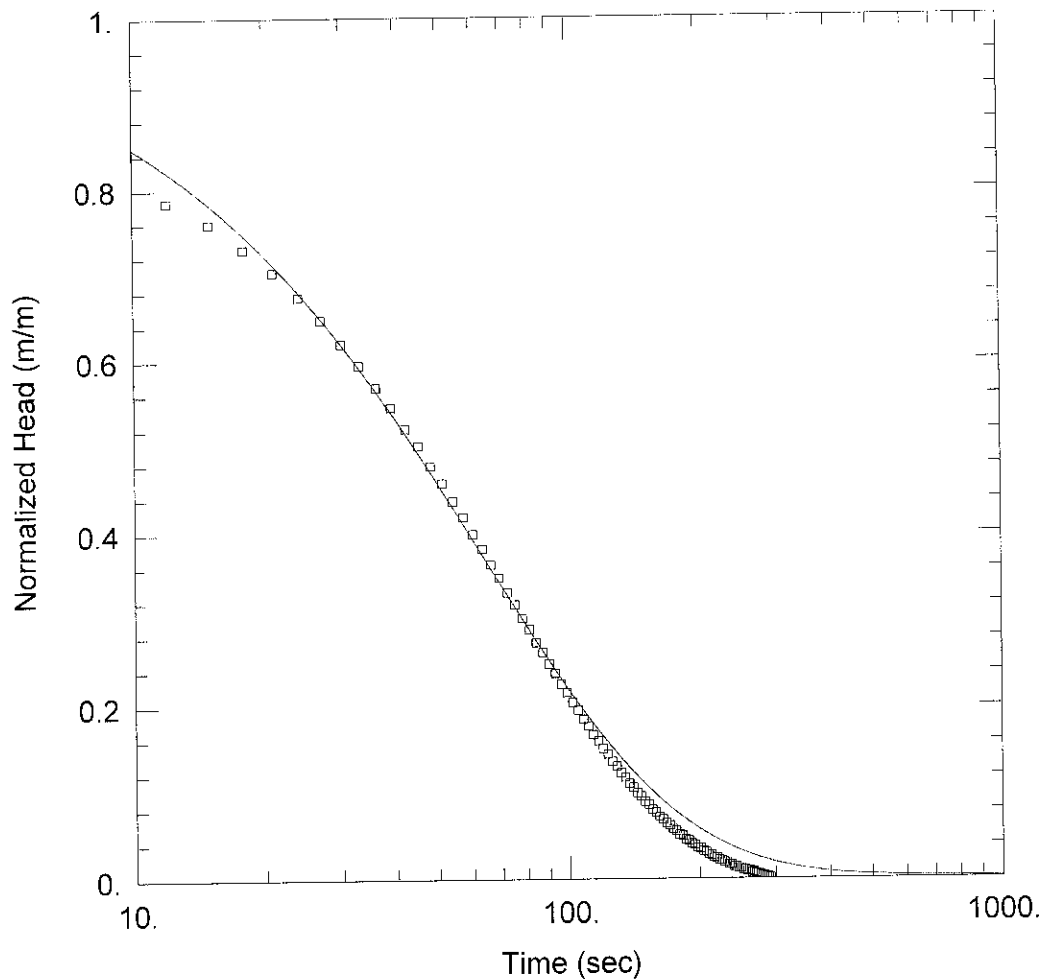
SOLUTION

Aquifer Model: Confined
 $K = 0.0001092 \text{ m/sec}$

Solution Method: Hvorslev
 $y_0 = -1.403 \text{ m}$

Packer Test- OW5-P3-w

Time	Displ.	Time	Displ.
9	-1.26	108	-0.137
12	-1.09	111	-0.126
15	-1.02		
18	-0.95		
21	-0.91		
24	-0.85		
27	-0.81		
30	-0.76		
33	-0.72		
36	-0.68		
39	-0.64		
42	-0.60		
45	-0.56		
48	-0.53		
51	-0.49		
54	-0.47		
57	-0.44		
60	-0.41		
63	-0.39		
66	-0.37		
69	-0.35		
72	-0.33		
75	-0.30		
78	-0.28		
81	-0.26		
84	-0.25		
87	-0.23		
90	-0.21		
93	-0.20		
96	-0.19		
99	-0.17		
102	-0.16		
105	-0.15		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p4)

Initial Displacement: -3.3 m
 Total Well Penetration Depth: 1.2 m
 Casing Radius: 0.0158 m

Static Water Column Height: 3.21 m
 Screen Length: 1.2 m
 Wellbore Radius: 0.05 m

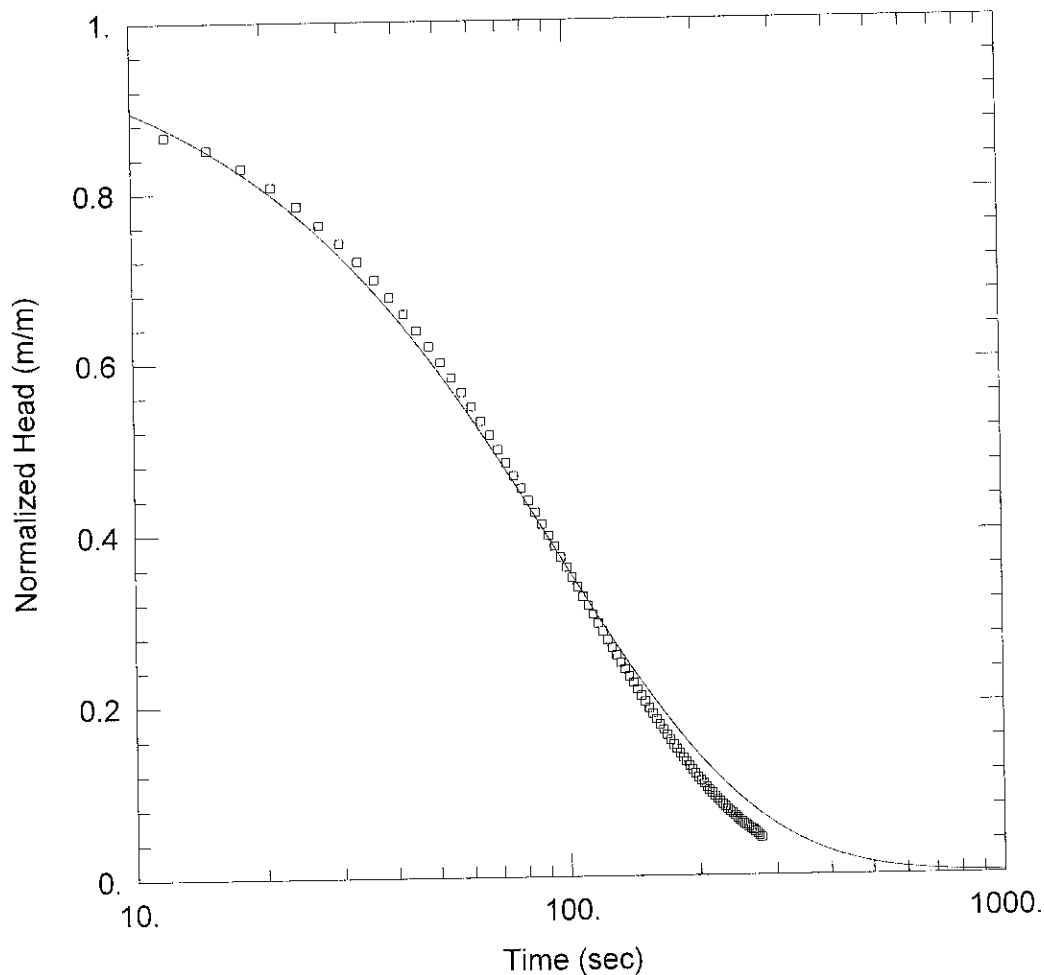
SOLUTION

Aquifer Model: Confined
 $T = 4.285E-5 \text{ m}^2/\text{sec}$

Solution Method: Cooper et al.
 $S = 1.059E-19$

Packer Test- OW5-P4

Time	Displ.	Time	Displ.	Time	Displ.
12	-2.59	111	-0.582	210	-0.091
15	-2.51	114	-0.55	213	-0.089
18	-2.41	117	-0.526	216	-0.08
21	-2.32	120	-0.496	219	-0.078
24	-2.23	123	-0.475	222	-0.07
27	-2.14	126	-0.447	225	-0.068
30	-2.05	129	-0.428	228	-0.062
33	-1.97	132	-0.403	231	-0.06
36	-1.88	135	-0.387	234	-0.053
39	-1.80	138	-0.363	237	-0.052
42	-1.72	141	-0.348	240	-0.045
45	-1.66	144	-0.326	243	-0.045
48	-1.58	147	-0.313	246	-0.039
51	-1.51	150	-0.293	249	-0.039
54	-1.44	153	-0.282	252	-0.033
57	-1.38	156	-0.263	255	-0.033
60	-1.32	159	-0.252	258	-0.028
63	-1.26	162	-0.235	261	-0.028
66	-1.20	165	-0.226	264	-0.022
69	-1.15	168	-0.211	267	-0.024
72	-1.09	171	-0.202	270	-0.018
75	-1.05	174	-0.188	273	-0.019
78	-0.99	177	-0.182	276	-0.014
81	-0.95	180	-0.167	279	-0.011
84	-0.90	183	-0.162	282	-0.009
87	-0.86	186	-0.149	285	-0.007
90	-0.82	189	-0.144	288	-0.005
93	-0.78	192	-0.133	291	-0.003
96	-0.74	195	-0.128		
99	-0.71	198	-0.117		
102	-0.67	201	-0.114		
105	-0.64	204	-0.104		
108	-0.61	207	-0.101		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW 5-p5)

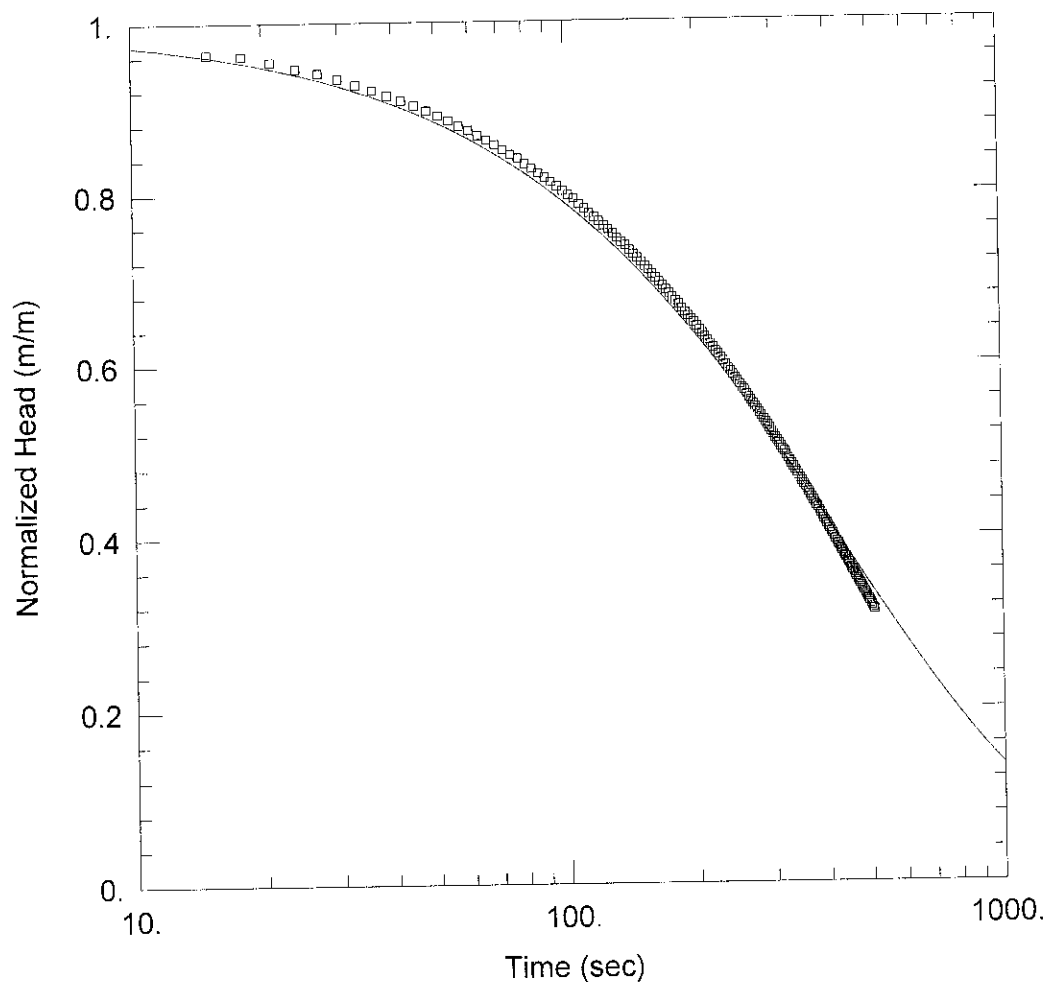
Initial Displacement: -3.9 m Static Water Column Height: 4.12 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 2.845E-5 \text{ m}^2/\text{sec}$ $S = 1.059E-19$

Packer Test- OW5-P5

Time	Displ.	Time	Displ.	Time	Displ.
12	-3.38	111	-1.227	210	-0.382
15	-3.32	114	-1.186	213	-0.369
18	-3.24	117	-1.146	216	-0.355
21	-3.15	120	-1.108	219	-0.342
24	-3.06	123	-1.071	222	-0.331
27	-2.97	126	-1.034	225	-0.318
30	-2.89	129	-1	228	-0.307
33	-2.80	132	-0.966	231	-0.296
36	-2.72	135	-0.936	234	-0.286
39	-2.64	138	-0.904	237	-0.276
42	-2.56	141	-0.874	240	-0.267
45	-2.49	144	-0.843	243	-0.257
48	-2.41	147	-0.814	246	-0.248
51	-2.34	150	-0.786	249	-0.239
54	-2.27	153	-0.758	252	-0.231
57	-2.20	156	-0.732	255	-0.223
60	-2.13	159	-0.706	258	-0.215
63	-2.07	162	-0.681	261	-0.208
66	-2.00	165	-0.658	264	-0.201
69	-1.94	168	-0.635	267	-0.194
72	-1.88	171	-0.611	270	-0.184
75	-1.82	174	-0.59	273	-0.176
78	-1.76	177	-0.57	276	-0.169
81	-1.71	180	-0.549		
84	-1.65	183	-0.53		
87	-1.60	186	-0.512		
90	-1.55	189	-0.493		
93	-1.50	192	-0.476		
96	-1.45	195	-0.458		
99	-1.40	198	-0.442		
102	-1.36	201	-0.426		
105	-1.31	204	-0.412		
108	-1.27	207	-0.396		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p6)

Initial Displacement: -3.8 m
 Total Well Penetration Depth: 1.2 m
 Casing Radius: 0.0158 m

Static Water Column Height: 5.53 m
 Screen Length: 1.2 m
 Wellbore Radius: 0.05 m

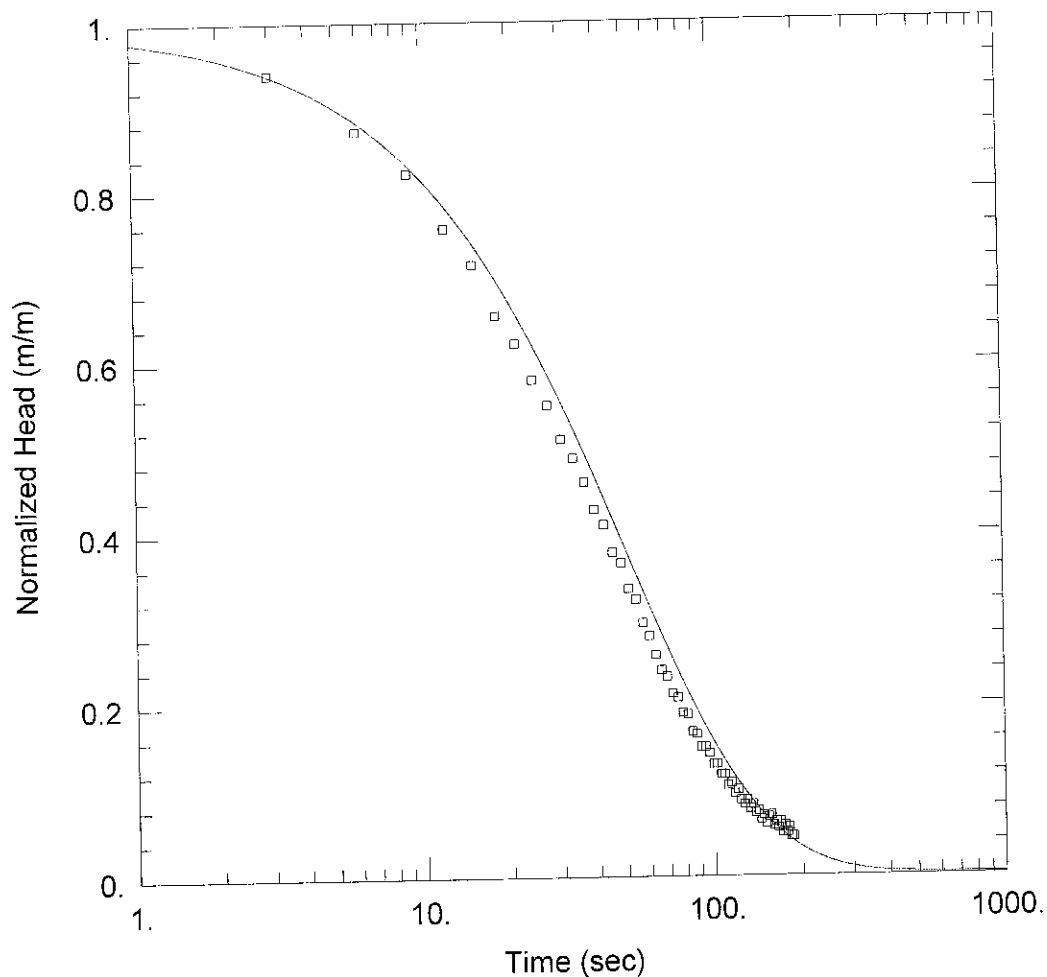
SOLUTION

Aquifer Model: Confined
 $T = 3.107E-6 \text{ m}^2/\text{sec}$

Solution Method: Cooper et al.
 $S = 1.059E-10$

Packer Test- OW5-P6

Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.
15	-3.66	114	-2.948	213	-2.379	312	-1.907	411	-1.511		
18	-3.65	117	-2.93	216	-2.363	315	-1.894	414	-1.5		
21	-3.63	120	-2.911	219	-2.347	318	-1.885	417	-1.489		
24	-3.60	123	-2.892	222	-2.332	321	-1.868	420	-1.479		
27	-3.58	126	-2.874	225	-2.317	324	-1.854	423	-1.467		
30	-3.55	129	-2.855	228	-2.302	327	-1.842	426	-1.456		
33	-3.52	132	-2.836	231	-2.286	330	-1.83	429	-1.446		
36	-3.50	135	-2.817	234	-2.271	333	-1.817	432	-1.435		
39	-3.48	138	-2.803	237	-2.256	336	-1.804	435	-1.425		
42	-3.45	141	-2.782	240	-2.241	339	-1.792	438	-1.418		
45	-3.43	144	-2.764	243	-2.226	342	-1.779	441	-1.404		
48	-3.41	147	-2.746	246	-2.212	345	-1.766	444	-1.394		
51	-3.38	150	-2.728	249	-2.197	348	-1.755	447	-1.383		
54	-3.36	153	-2.71	252	-2.182	351	-1.742	450	-1.373		
57	-3.34	156	-2.693	255	-2.168	354	-1.73	453	-1.363		
60	-3.32	159	-2.675	258	-2.158	357	-1.718	456	-1.352		
63	-3.30	162	-2.657	261	-2.139	360	-1.706	459	-1.342		
66	-3.27	165	-2.64	264	-2.123	363	-1.695	462	-1.332		
69	-3.25	168	-2.623	267	-2.111	366	-1.683	465	-1.321		
72	-3.23	171	-2.606	270	-2.097	369	-1.67	468	-1.312		
75	-3.21	174	-2.589	273	-2.082	372	-1.659	471	-1.303		
78	-3.19	177	-2.572	276	-2.069	375	-1.648	474	-1.293		
81	-3.17	180	-2.555	279	-2.055	378	-1.639	477	-1.283		
84	-3.15	183	-2.54	282	-2.041	381	-1.625	480	-1.273		
87	-3.13	186	-2.522	285	-2.027	384	-1.613	483	-1.263		
90	-3.11	189	-2.504	288	-2.013	387	-1.601	486	-1.253		
93	-3.09	192	-2.488	291	-2	390	-1.59	489	-1.243		
96	-3.07	195	-2.473	294	-1.986	393	-1.578	492	-1.234		
99	-3.05	198	-2.46	297	-1.973	396	-1.567	495	-1.225		
102	-3.03	201	-2.441	300	-1.96	399	-1.556	498	-1.216		
105	-3.01	204	-2.424	303	-1.946	402	-1.545	501	-1.205		
108	-2.99	207	-2.41	306	-1.933	405	-1.533	504	-1.196		
111	-2.97	210	-2.396	309	-1.92	408	-1.522	507	-1.187		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (K_z/K_r): 1

WELL DATA (OW 5-p7)

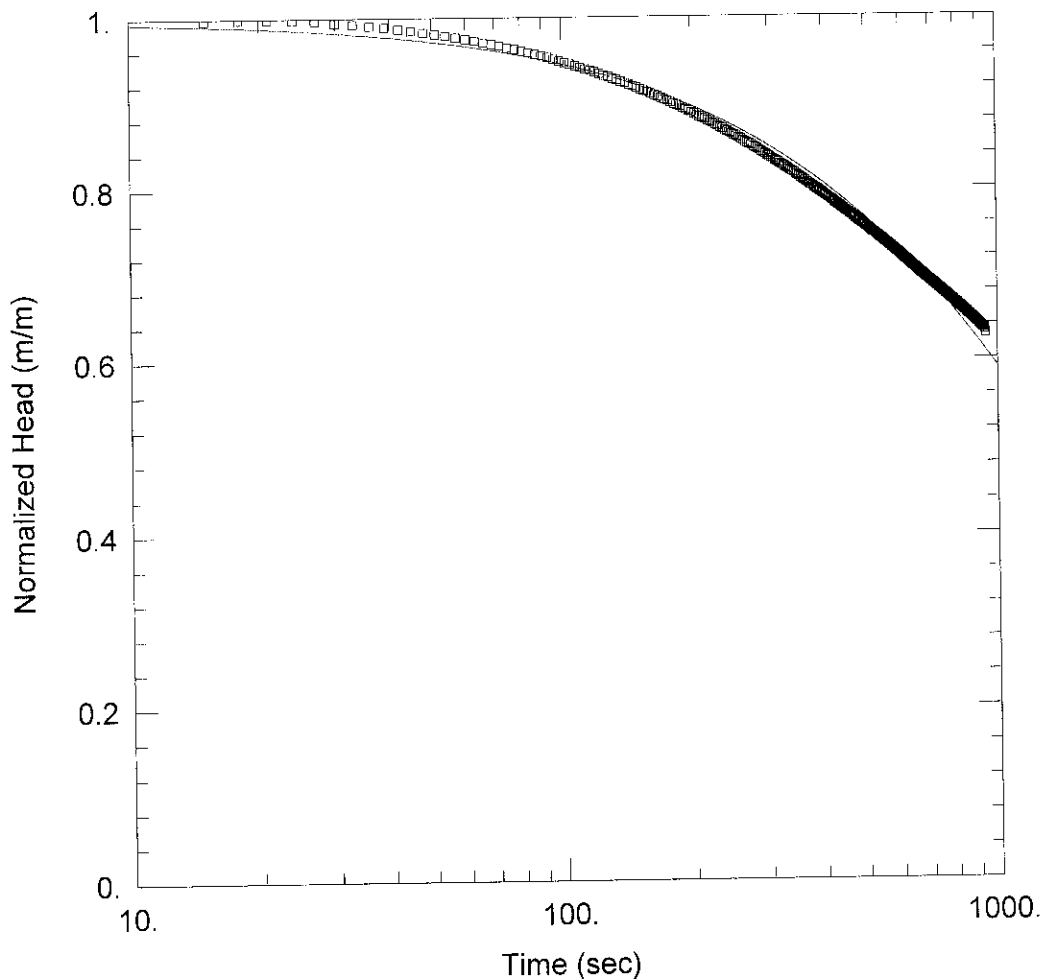
Initial Displacement: -0.4 m Static Water Column Height: 11.87 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 5.336E-5 \text{ m}^2/\text{sec}$ $S = 1.059E-19$

Packer Test- OW5-P7-air

Time	Displ.	Time	Displ.
3	-0.38	102	-0.052
6	-0.35	105	-0.047
9	-0.33	108	-0.047
12	-0.30	111	-0.042
15	-0.29	114	-0.043
18	-0.26	117	-0.038
21	-0.25	120	-0.04
24	-0.23	123	-0.035
27	-0.22	126	-0.033
30	-0.20	129	-0.035
33	-0.20	132	-0.031
36	-0.18	135	-0.033
39	-0.17	138	-0.029
42	-0.16	141	-0.03
45	-0.15	144	-0.026
48	-0.15	147	-0.028
51	-0.13	150	-0.024
54	-0.13	153	-0.027
57	-0.12	156	-0.028
60	-0.11	159	-0.023
63	-0.10	162	-0.025
66	-0.10	165	-0.022
69	-0.09	168	-0.025
72	-0.09	171	-0.02
75	-0.08	174	-0.023
78	-0.08	177	-0.02
81	-0.08	180	-0.022
84	-0.07	183	-0.018
87	-0.07	186	-0.018
90	-0.06		
93	-0.06		
96	-0.06		
99	-0.05		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p9)

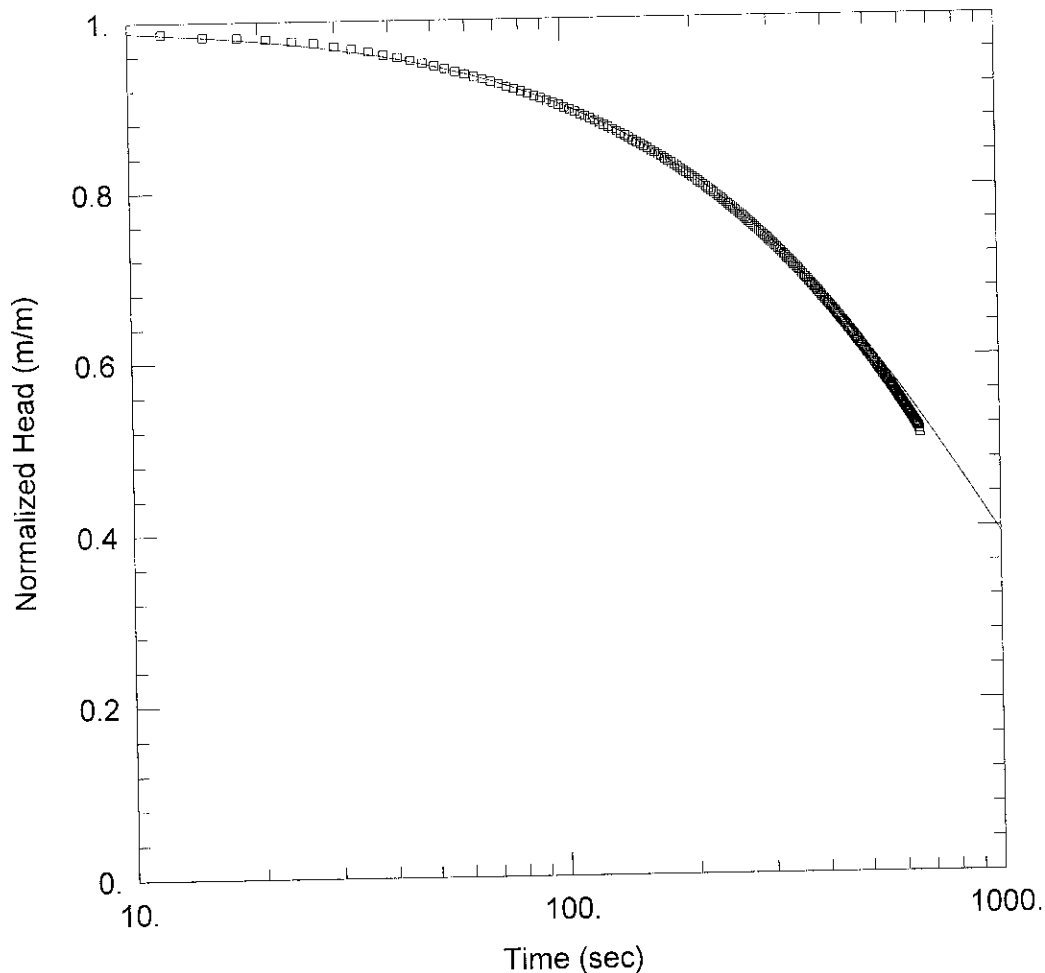
Initial Displacement: -3.52 m Static Water Column Height: 7.98 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 1.422E-6 \text{ m}^2/\text{sec}$ $S = 1.059E-19$

Packer Test- OW5-P9

	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.
15	-3.51	114	-3.306	213	-3.102	312	-2.928	411	-2.777	510	-2.646	609	-2.53	708	-2.426	807	-2.336	906	-2.253	
18	-3.52	117	-3.3	216	-3.098	315	-2.923	414	-2.773	513	-2.643	612	-2.526	711	-2.423	810	-2.335	909	-2.252	
21	-3.52	120	-3.294	219	-3.092	318	-2.919	417	-2.768	516	-2.639	615	-2.523	714	-2.42	813	-2.332	912	-2.249	
24	-3.51	123	-3.287	222	-3.086	321	-2.913	420	-2.765	519	-2.636	618	-2.52	717	-2.418	816	-2.329	915	-2.246	
27	-3.51	126	-3.28	225	-3.081	324	-2.909	423	-2.76	522	-2.632	621	-2.517	720	-2.415	819	-2.326	918	-2.244	
30	-3.50	129	-3.274	228	-3.076	327	-2.904	426	-2.756	525	-2.629	624	-2.513	723	-2.412	822	-2.324	921	-2.241	
33	-3.49	132	-3.267	231	-3.07	330	-2.899	429	-2.751	528	-2.625	627	-2.51	726	-2.409	825	-2.321	924	-2.238	
36	-3.49	135	-3.261	234	-3.064	333	-2.895	432	-2.748	531	-2.621	630	-2.506	729	-2.406	828	-2.319	927	-2.237	
39	-3.48	138	-3.254	237	-3.059	336	-2.89	435	-2.744	534	-2.617	633	-2.503	732	-2.403	831	-2.317	930	-2.234	
42	-3.47	141	-3.248	240	-3.053	339	-2.884	438	-2.74	537	-2.614	636	-2.499	735	-2.4	834	-2.314	933	-2.232	
45	-3.47	144	-3.241	243	-3.048	342	-2.88	441	-2.736	540	-2.61	639	-2.496	738	-2.398	837	-2.312	936	-2.227	
48	-3.46	147	-3.235	246	-3.042	345	-2.876	444	-2.732	543	-2.607	642	-2.492	741	-2.395	840	-2.309	939	-2.212	
51	-3.45	150	-3.229	249	-3.037	348	-2.87	447	-2.728	546	-2.604	645	-2.49	744	-2.393	843	-2.306			
54	-3.45	153	-3.222	252	-3.032	351	-2.866	450	-2.723	549	-2.6	648	-2.487	747	-2.39	846	-2.304			
57	-3.44	156	-3.216	255	-3.026	354	-2.861	453	-2.719	552	-2.596	651	-2.484	750	-2.386	849	-2.301			
60	-3.43	159	-3.21	258	-3.021	357	-2.856	456	-2.715	555	-2.593	654	-2.481	753	-2.384	852	-2.299			
63	-3.43	162	-3.204	261	-3.016	360	-2.852	459	-2.712	558	-2.59	657	-2.477	756	-2.382	855	-2.296			
66	-3.42	165	-3.197	264	-3.01	363	-2.847	462	-2.707	561	-2.586	660	-2.474	759	-2.378	858	-2.293			
69	-3.41	168	-3.192	267	-3.005	366	-2.843	465	-2.704	564	-2.582	663	-2.47	762	-2.376	861	-2.291			
72	-3.40	171	-3.186	270	-2.999	369	-2.838	468	-2.7	567	-2.579	666	-2.467	765	-2.373	864	-2.289			
75	-3.40	174	-3.179	273	-2.995	372	-2.834	471	-2.695	570	-2.575	669	-2.464	768	-2.371	867	-2.286			
78	-3.39	177	-3.174	276	-2.99	375	-2.829	474	-2.692	573	-2.573	672	-2.461	771	-2.368	870	-2.284			
81	-3.38	180	-3.168	279	-2.984	378	-2.825	477	-2.688	576	-2.568	675	-2.459	774	-2.365	873	-2.282			
84	-3.38	183	-3.161	282	-2.979	381	-2.82	480	-2.684	579	-2.565	678	-2.455	777	-2.362	876	-2.279			
87	-3.37	186	-3.155	285	-2.974	384	-2.816	483	-2.68	582	-2.562	681	-2.452	780	-2.36	879	-2.277			
90	-3.36	189	-3.15	288	-2.969	387	-2.812	486	-2.676	585	-2.558	684	-2.449	783	-2.358	882	-2.274			
93	-3.36	192	-3.143	291	-2.963	390	-2.807	489	-2.672	588	-2.555	687	-2.446	786	-2.355	885	-2.271			
96	-3.35	195	-3.138	294	-2.958	393	-2.802	492	-2.668	591	-2.551	690	-2.443	789	-2.353	888	-2.269			
99	-3.34	198	-3.132	297	-2.954	396	-2.798	495	-2.665	594	-2.548	693	-2.441	792	-2.35	891	-2.267			
102	-3.33	201	-3.126	300	-2.948	399	-2.794	498	-2.661	597	-2.545	696	-2.437	795	-2.347	894	-2.264			
105	-3.33	204	-3.12	303	-2.944	402	-2.79	501	-2.657	600	-2.541	699	-2.434	798	-2.344	897	-2.262			
108	-3.32	207	-3.114	306	-2.938	405	-2.786	504	-2.654	603	-2.537	702	-2.432	801	-2.342	900	-2.259			
111	-3.31	210	-3.108	309	-2.933	408	-2.781	507	-2.65	606	-2.534	705	-2.429	804	-2.339	903	-2.257			



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW 5-p10)

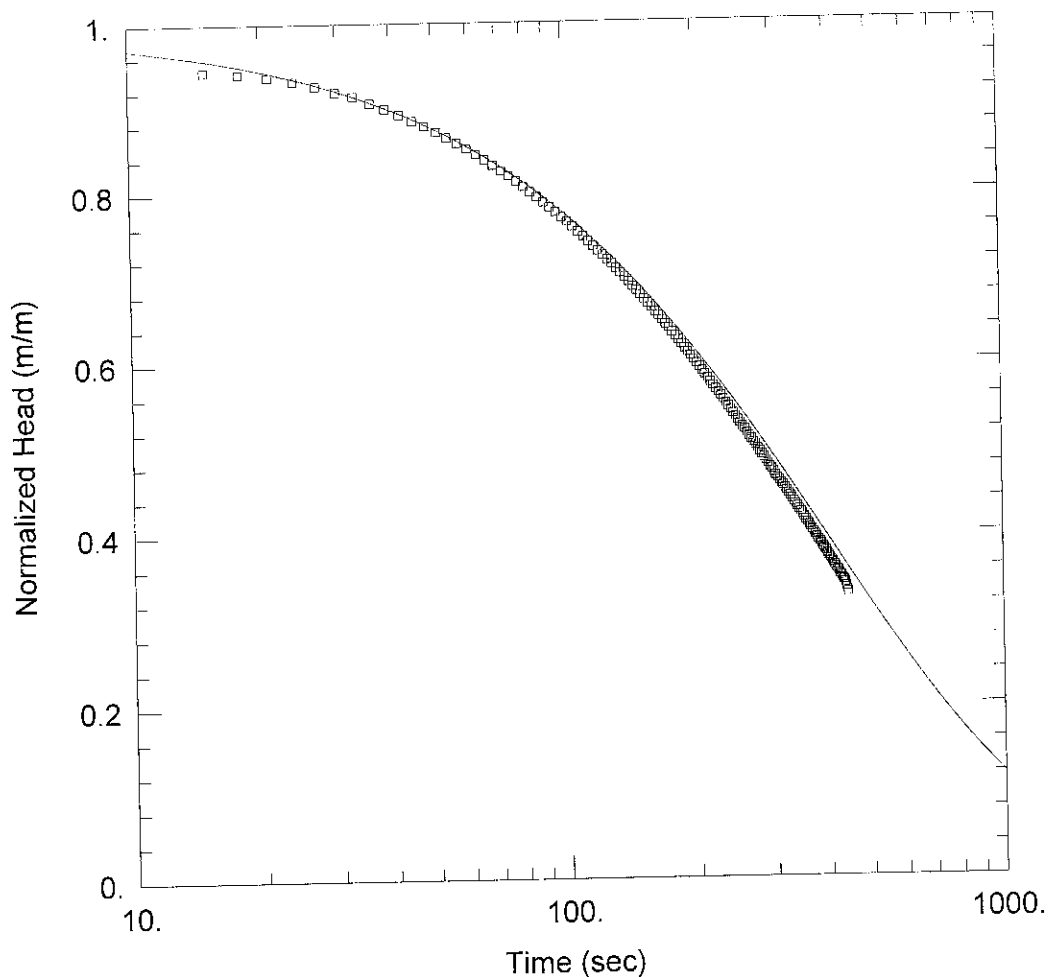
Initial Displacement: -3.57 m Static Water Column Height: 10.29 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 1.327E-6 \text{ m}^2/\text{sec}$ $S = 1.059E-10$

Packer Test- OW5-P10

	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.
12	-3.52	111	-3.166	210	-2.87	309	-2.604	408	-2.36	507	-2.139	606	-1.931							
15	-3.51	114	-3.158	213	-2.863	312	-2.596	411	-2.354	510	-2.132	609	-1.925							
18	-3.51	117	-3.148	216	-2.854	315	-2.589	414	-2.347	513	-2.126	612	-1.92							
21	-3.50	120	-3.138	219	-2.845	318	-2.581	417	-2.34	516	-2.119	615	-1.913							
24	-3.49	123	-3.129	222	-2.837	321	-2.573	420	-2.333	519	-2.112	618	-1.907							
27	-3.48	126	-3.12	225	-2.829	324	-2.566	423	-2.327	522	-2.107	621	-1.902							
30	-3.46	129	-3.11	228	-2.82	327	-2.558	426	-2.319	525	-2.099	624	-1.895							
33	-3.45	132	-3.1	231	-2.812	330	-2.55	429	-2.312	528	-2.093	627	-1.89							
36	-3.44	135	-3.092	234	-2.804	333	-2.543	432	-2.306	531	-2.087	630	-1.884							
39	-3.43	138	-3.082	237	-2.796	336	-2.535	435	-2.299	534	-2.08	633	-1.878							
42	-3.41	141	-3.073	240	-2.787	339	-2.529	438	-2.292	537	-2.074	636	-1.872							
45	-3.40	144	-3.064	243	-2.78	342	-2.521	441	-2.286	540	-2.068	639	-1.866							
48	-3.39	147	-3.054	246	-2.771	345	-2.513	444	-2.279	543	-2.061	642	-1.86							
51	-3.38	150	-3.045	249	-2.763	348	-2.506	447	-2.272	546	-2.055	645	-1.854							
54	-3.37	153	-3.036	252	-2.755	351	-2.499	450	-2.265	549	-2.05	648	-1.848							
57	-3.35	156	-3.027	255	-2.745	354	-2.49	453	-2.258	552	-2.042	651	-1.842							
60	-3.34	159	-3.019	258	-2.738	357	-2.483	456	-2.251	555	-2.037	654	-1.832							
63	-3.33	162	-3.009	261	-2.731	360	-2.476	459	-2.244	558	-2.031	657	-1.816							
66	-3.32	165	-3.001	264	-2.722	363	-2.469	462	-2.237	561	-2.024									
69	-3.31	168	-2.992	267	-2.714	366	-2.462	465	-2.231	564	-2.017									
72	-3.30	171	-2.983	270	-2.706	369	-2.454	468	-2.224	567	-2.012									
75	-3.29	174	-2.974	273	-2.698	372	-2.446	471	-2.217	570	-2.005									
78	-3.28	177	-2.965	276	-2.69	375	-2.44	474	-2.211	573	-1.999									
81	-3.27	180	-2.958	279	-2.682	378	-2.432	477	-2.205	576	-1.992									
84	-3.26	183	-2.948	282	-2.674	381	-2.425	480	-2.197	579	-1.987									
87	-3.25	186	-2.94	285	-2.666	384	-2.418	483	-2.191	582	-1.98									
90	-3.24	189	-2.931	288	-2.659	387	-2.411	486	-2.185	585	-1.974									
93	-3.23	192	-2.921	291	-2.651	390	-2.403	489	-2.177	588	-1.967									
96	-3.22	195	-2.914	294	-2.643	393	-2.396	492	-2.171	591	-1.962									
99	-3.21	198	-2.905	297	-2.636	396	-2.389	495	-2.165	594	-1.956									
102	-3.20	201	-2.896	300	-2.627	399	-2.382	498	-2.158	597	-1.95									
105	-3.19	204	-2.888	303	-2.62	402	-2.375	501	-2.152	600	-1.944									
108	-3.18	207	-2.879	306	-2.613	405	-2.368	504	-2.146	603	-1.938									



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p11)

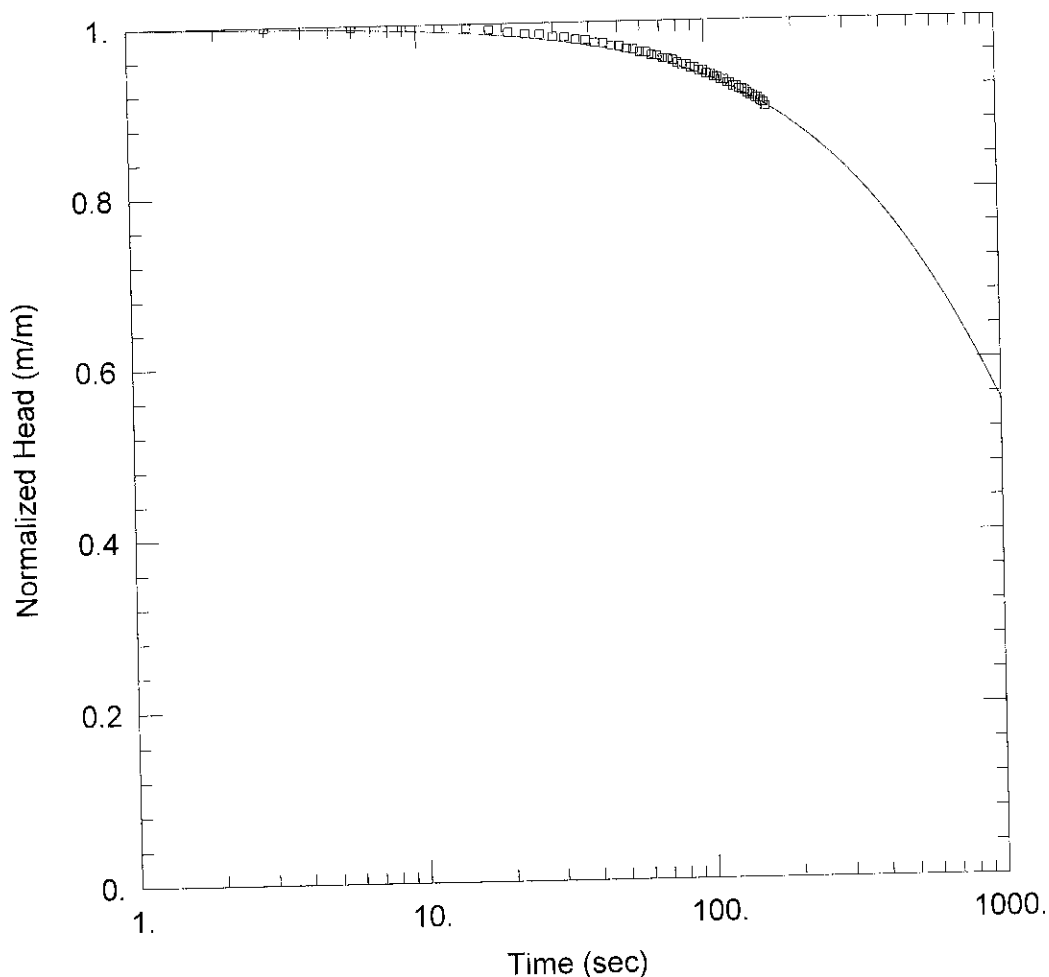
Initial Displacement: -2.9 m Static Water Column Height: 9.27 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 3.333E-6 \text{ m}^2/\text{sec}$ $S = 1.059E-10$

Packer Test- OW5-P11

Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.
15	-2.74	114	-2.15	213	-1.681	312	-1.323	411	-1.045		
18	-2.73	117	-2.134	216	-1.668	315	-1.315	414	-1.038		
21	-2.72	120	-2.118	219	-1.656	318	-1.307	417	-1.03		
24	-2.71	123	-2.103	222	-1.644	321	-1.298	420	-1.024		
27	-2.69	126	-2.087	225	-1.632	324	-1.288	423	-1.015		
30	-2.67	129	-2.072	228	-1.62	327	-1.279	426	-1.009		
33	-2.65	132	-2.057	231	-1.608	330	-1.27	429	-1.001		
36	-2.63	135	-2.041	234	-1.596	333	-1.26	432	-0.994		
39	-2.61	138	-2.026	237	-1.585	336	-1.251	435	-0.987		
42	-2.59	141	-2.011	240	-1.573	339	-1.243	438	-0.973		
45	-2.57	144	-1.995	243	-1.56	342	-1.234	441	-0.954		
48	-2.55	147	-1.981	246	-1.549	345	-1.225				
51	-2.53	150	-1.966	249	-1.538	348	-1.216				
54	-2.51	153	-1.951	252	-1.527	351	-1.207				
57	-2.49	156	-1.937	255	-1.516	354	-1.198				
60	-2.47	159	-1.923	258	-1.506	357	-1.19				
63	-2.45	162	-1.908	261	-1.493	360	-1.181				
66	-2.43	165	-1.894	264	-1.483	363	-1.173				
69	-2.41	168	-1.88	267	-1.473	366	-1.165				
72	-2.39	171	-1.865	270	-1.461	369	-1.156				
75	-2.38	174	-1.853	273	-1.452	372	-1.148				
78	-2.36	177	-1.838	276	-1.441	375	-1.14				
81	-2.34	180	-1.825	279	-1.43	378	-1.131				
84	-2.32	183	-1.811	282	-1.42	381	-1.124				
87	-2.30	186	-1.798	285	-1.41	384	-1.116				
90	-2.28	189	-1.784	288	-1.399	387	-1.107				
93	-2.27	192	-1.771	291	-1.389	390	-1.1				
96	-2.25	195	-1.758	294	-1.379	393	-1.093				
99	-2.23	198	-1.745	297	-1.37	396	-1.083				
102	-2.22	201	-1.732	300	-1.36	399	-1.076				
105	-2.20	204	-1.72	303	-1.35	402	-1.069				
108	-2.18	207	-1.706	306	-1.34	405	-1.06				
111	-2.17	210	-1.694	309	-1.331	408	-1.053				



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW 5-p12)

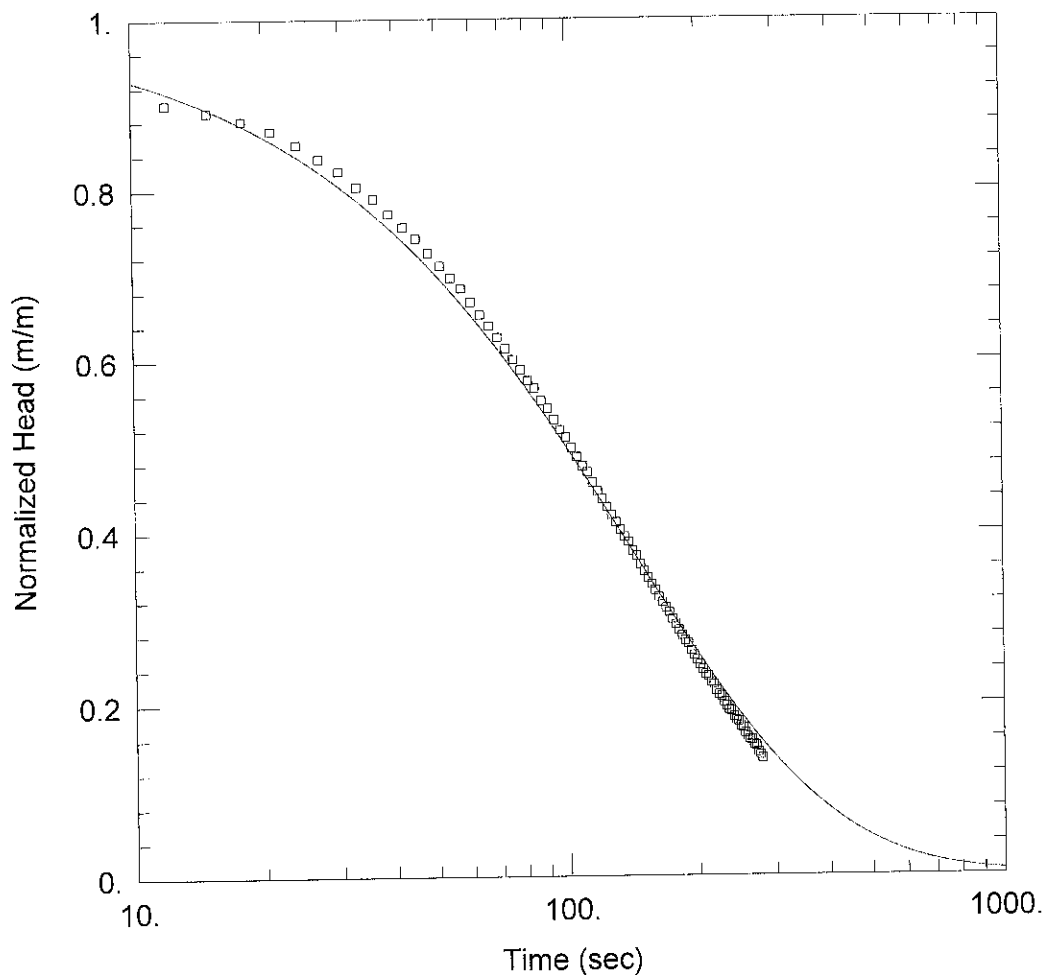
Initial Displacement: -3.324 m Static Water Column Height: 12.12 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 8.183E-7 \text{ m}^2/\text{sec}$ $S = 1.059E-10$

Packer Test- OW5-P12

Time	Displ.	Time	Displ.
3	-3.32	102	-3.113
6	-3.32	105	-3.112
9	-3.32	108	-3.101
12	-3.31	111	-3.099
15	-3.31	114	-3.088
18	-3.30	117	-3.088
21	-3.29	120	-3.076
24	-3.28	123	-3.075
27	-3.28	126	-3.063
30	-3.27	129	-3.063
33	-3.27	132	-3.052
36	-3.26	135	-3.05
39	-3.25	138	-3.045
42	-3.24	141	-3.034
45	-3.24	144	-3.027
48	-3.23	147	-3.026
51	-3.23	150	-3.016
54	-3.22	153	-3.014
57	-3.21	156	-3.005
60	-3.20	159	-2.997
63	-3.20	162	-2.982
66	-3.19		
69	-3.19		
72	-3.18		
75	-3.18		
78	-3.17		
81	-3.16		
84	-3.15		
87	-3.15		
90	-3.14		
93	-3.14		
96	-3.13		
99	-3.12		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m
 Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p13)

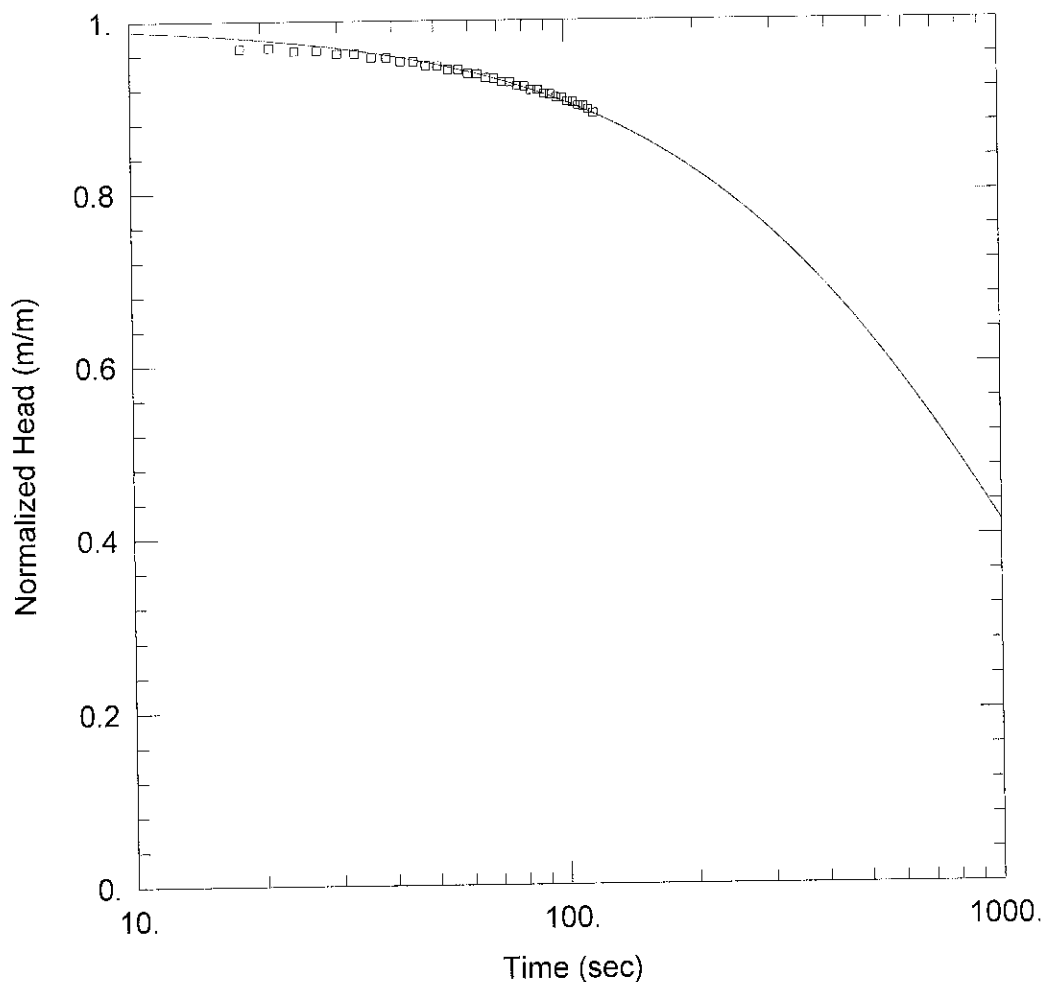
Initial Displacement: -2.71 m
 Static Water Column Height: 11.72 m
 Total Well Penetration Depth: 1.2 m
 Screen Length: 1.2 m
 Casing Radius: 0.0158 m
 Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined
 Solution Method: Cooper et al.
 $T = 1.909E-5 \text{ m}^2/\text{sec}$
 $S = 1.059E-19$

Packer Test-OW5-P13

Time	Displ.	Time	Displ.	Time	Displ.
12	-2.44	111	-1.271	210	-0.626
15	-2.42	114	-1.238	213	-0.606
18	-2.39	117	-1.212	216	-0.599
21	-2.36	120	-1.186	219	-0.58
24	-2.31	123	-1.161	222	-0.567
27	-2.27	126	-1.136	225	-0.561
30	-2.23	129	-1.113	228	-0.543
33	-2.18	132	-1.089	231	-0.53
36	-2.14	135	-1.066	234	-0.518
39	-2.09	138	-1.05	237	-0.515
42	-2.05	141	-1.022	240	-0.497
45	-2.01	144	-1.006	243	-0.486
48	-1.97	147	-0.979	246	-0.482
51	-1.93	150	-0.957	249	-0.466
54	-1.89	153	-0.936	252	-0.462
57	-1.85	156	-0.916	255	-0.445
60	-1.81	159	-0.897	258	-0.435
63	-1.77	162	-0.876	261	-0.426
66	-1.74	165	-0.859	264	-0.424
69	-1.70	168	-0.841	267	-0.409
72	-1.66	171	-0.828	270	-0.406
75	-1.63	174	-0.805	273	-0.386
78	-1.60	177	-0.788	276	-0.377
81	-1.56	180	-0.77	279	-0.367
84	-1.54	183	-0.754		
87	-1.50	186	-0.738		
90	-1.47	189	-0.728		
93	-1.44	192	-0.706		
96	-1.41	195	-0.691		
99	-1.38	198	-0.676		
102	-1.35	201	-0.661		
105	-1.32	204	-0.646		
108	-1.29	207	-0.631		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p14)

Initial Displacement: -2.58 m
 Total Well Penetration Depth: 1.2 m
 Casing Radius: 0.0158 m

Static Water Column Height: 13.89 m
 Screen Length: 1.2 m
 Wellbore Radius: 0.05 m

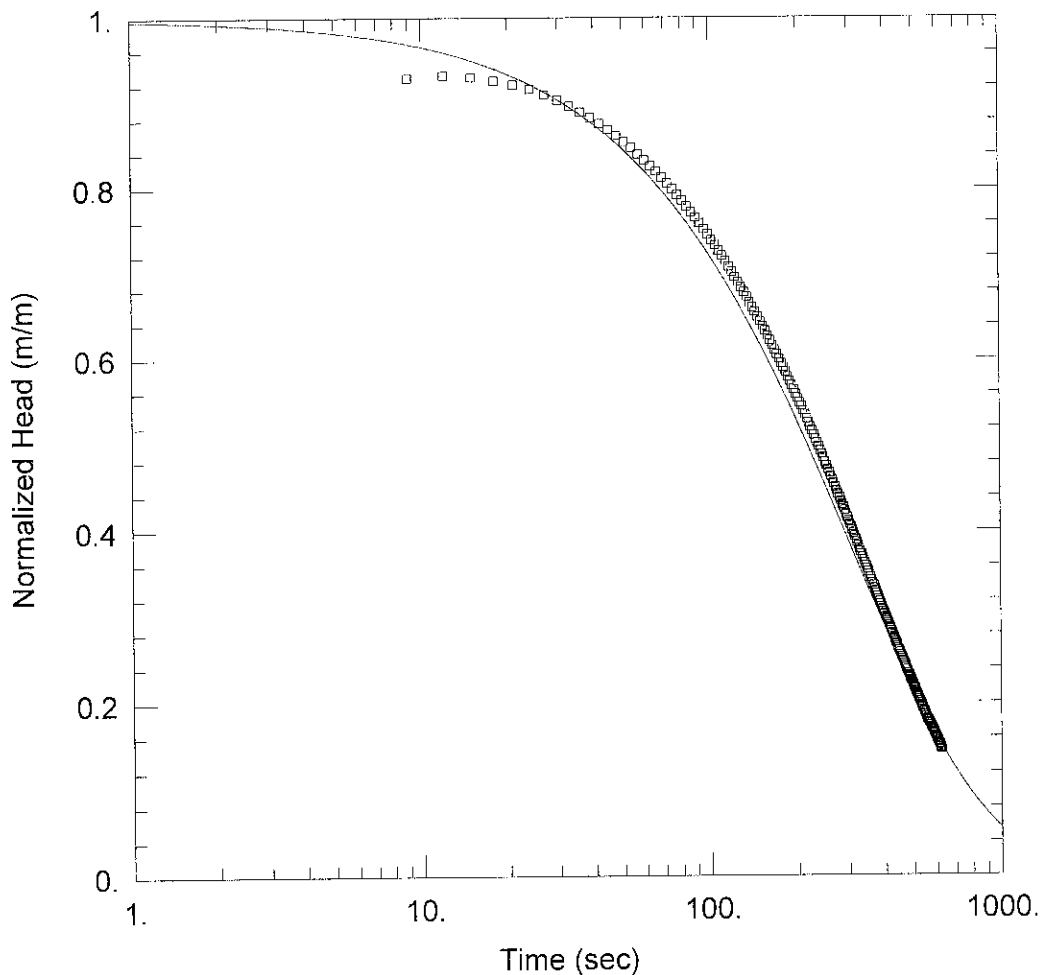
SOLUTION

Aquifer Model: Confined
 $T = 1.239E-6 \text{ m}^2/\text{sec}$

Solution Method: Cooper et al.
 $S = 1.059E-10$

Packer Test- OW5-P14

Time	Displ.	Time	Displ.
18	-2.497	117	-2.299
21	-2.5		
24	-2.491		
27	-2.492		
30	-2.481		
33	-2.481		
36	-2.47		
39	-2.469		
42	-2.457		
45	-2.456		
48	-2.444		
51	-2.443		
54	-2.432		
57	-2.431		
60	-2.42		
63	-2.418		
66	-2.407		
69	-2.405		
72	-2.394		
75	-2.393		
78	-2.382		
81	-2.381		
84	-2.369		
87	-2.369		
90	-2.358		
93	-2.356		
96	-2.346		
99	-2.345		
102	-2.334		
105	-2.332		
108	-2.322		
111	-2.32		
114	-2.31		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

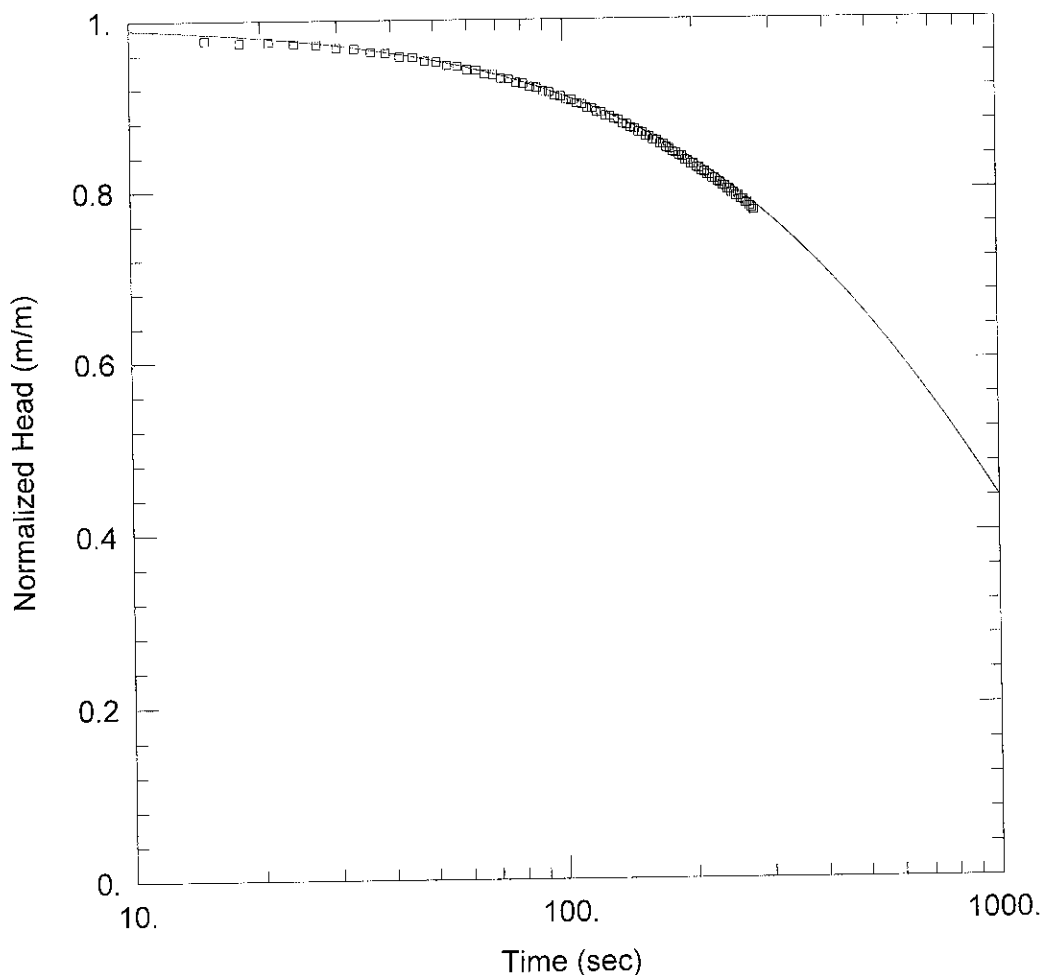
Saturated Thickness: 1.2 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p15)

Initial Displacement: -1.7 m Static Water Column Height: 13.76 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 9.148E-6 \text{ m}^2/\text{sec}$ $S = 1.235E-20$



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p17)

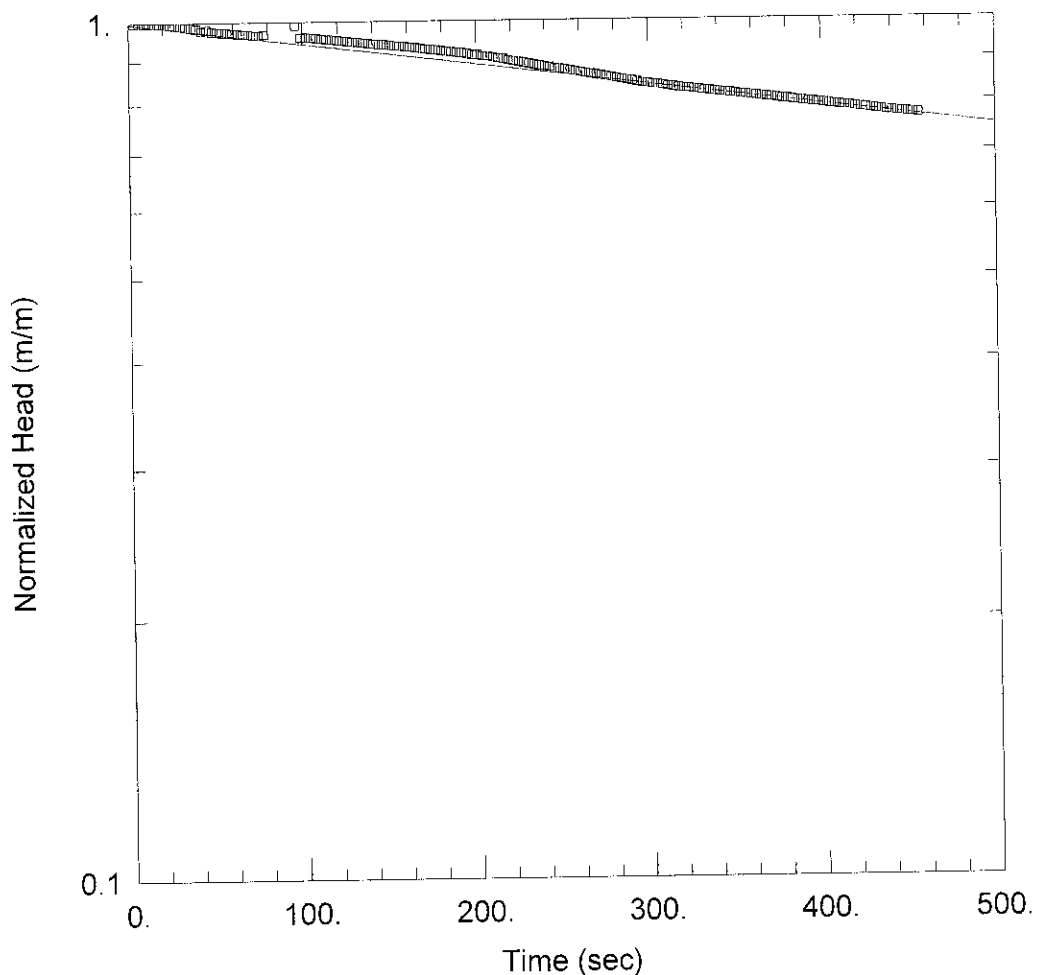
Initial Displacement: -2.7 m Static Water Column Height: 16.69 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Cooper et al.
 $T = 1.156E-6 \text{ m}^2/\text{sec}$ $S = 1.059E-10$

Packer Test-OW5-P17

Time	Displ.	Time	Displ.	Time	Displ.
15	-2.64	114	-2.419	213	-2.214
18	-2.63	117	-2.417	216	-2.205
21	-2.63	120	-2.406	219	-2.203
24	-2.63	123	-2.404	222	-2.193
27	-2.62	126	-2.393	225	-2.192
30	-2.61	129	-2.392	228	-2.182
33	-2.61	132	-2.383	231	-2.18
36	-2.60	135	-2.379	234	-2.17
39	-2.60	138	-2.367	237	-2.169
42	-2.58	141	-2.365	240	-2.159
45	-2.58	144	-2.355	243	-2.158
48	-2.57	147	-2.351	246	-2.147
51	-2.57	150	-2.341	249	-2.147
54	-2.56	153	-2.339	252	-2.137
57	-2.55	156	-2.328	255	-2.136
60	-2.54	159	-2.326	258	-2.126
63	-2.54	162	-2.316	261	-2.125
66	-2.53	165	-2.314	264	-2.115
69	-2.53	168	-2.303	267	-2.114
72	-2.51	171	-2.302	270	-2.104
75	-2.51	174	-2.291	273	-2.099
78	-2.50	177	-2.287	276	-2.092
81	-2.50	180	-2.277		
84	-2.49	183	-2.274		
87	-2.48	186	-2.265		
90	-2.47	189	-2.263		
93	-2.47	192	-2.251		
96	-2.46	195	-2.25		
99	-2.46	198	-2.239		
102	-2.45	201	-2.238		
105	-2.44	204	-2.228		
108	-2.43	207	-2.226		
111	-2.43	210	-2.216		



PROJECT INFORMATION

Company: Azimuth Environmental
 Client: MAQ Aggregates Inc.
 Project: 04-015
 Location: Duntroon
 Test Well: OW5-04
 Test Date: July 8, 2004

AQUIFER DATA

Saturated Thickness: 1.2 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (OW 5-p20)

Initial Displacement: -1.911 m Static Water Column Height: 19.59 m
 Total Well Penetration Depth: 1.2 m Screen Length: 1.2 m
 Casing Radius: 0.0158 m Wellbore Radius: 0.05 m

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev
 $K = 2.292E-7$ m/sec $y_0 = -1.903$ m

Packer Test- OW5-P20

Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.	Time	Displ.
3	-1.91	102	-1.832	201	-1.74	300	-1.607	399	-1.52		
6	-1.91	105	-1.83	204	-1.735	303	-1.603	402	-1.517		
9	-1.91	108	-1.827	207	-1.734	306	-1.601	405	-1.514		
12	-1.91	111	-1.824	210	-1.729	309	-1.598	408	-1.512		
15	-1.91	114	-1.821	213	-1.725	312	-1.594	411	-1.51		
18	-1.91	117	-1.819	216	-1.721	315	-1.591	414	-1.507		
21	-1.90	120	-1.816	219	-1.716	318	-1.588	417	-1.506		
24	-1.90	123	-1.813	222	-1.711	321	-1.585	420	-1.502		
27	-1.90	126	-1.81	225	-1.707	324	-1.583	423	-1.499		
30	-1.89	129	-1.807	228	-1.703	327	-1.581	426	-1.497		
33	-1.89	132	-1.805	231	-1.698	330	-1.578	429	-1.494		
36	-1.88	135	-1.802	234	-1.694	333	-1.575	432	-1.492		
39	-1.88	138	-1.8	237	-1.69	336	-1.572	435	-1.489		
42	-1.87	141	-1.797	240	-1.686	339	-1.57	438	-1.487		
45	-1.87	144	-1.795	243	-1.682	342	-1.567	441	-1.484		
48	-1.87	147	-1.793	246	-1.675	345	-1.564	444	-1.482		
51	-1.86	150	-1.791	249	-1.673	348	-1.563	447	-1.48		
54	-1.86	153	-1.788	252	-1.671	351	-1.56	450	-1.478		
57	-1.86	156	-1.785	255	-1.666	354	-1.557	453	-1.476		
60	-1.86	159	-1.782	258	-1.662	357	-1.555	456	-1.474		
63	-1.85	162	-1.78	261	-1.657	360	-1.552				
66	-1.85	165	-1.777	264	-1.654	363	-1.55				
69	-1.85	168	-1.774	267	-1.65	366	-1.547				
72	-1.84	171	-1.771	270	-1.646	369	-1.545				
75	-1.84	174	-1.768	273	-1.642	372	-1.543				
78	-1.85	177	-1.766	276	-1.638	375	-1.54				
81	-1.95	180	-1.761	279	-1.634	378	-1.535				
84	-1.94	183	-1.759	282	-1.63	381	-1.535				
87	-1.94	186	-1.756	285	-1.626	384	-1.531				
90	-1.94	189	-1.753	288	-1.622	387	-1.529				
93	-1.94	192	-1.752	291	-1.619	390	-1.527				
96	-1.89	195	-1.748	294	-1.614	393	-1.524				
99	-1.83	198	-1.742	297	-1.608	396	-1.522				