

**SUMMARY OF
TRANSMISSIVITY VALUES
FOR GEOLOGIC AND HYDROGEOLOGIC UNITS IN NEW JERSEY
January, 2012**

Geologic unit	Number of tests	Arithmetic mean (ft ² /d)	Minimum (ft ² /d)	Maximum (ft ² /d)	Median (ft ² /d)	Standard deviation
Outwash deposits	2	9719	6162	13275	9719	5030
Deltaic sediment	2	22285	1070	43500	22285	30003
Fluvial over lacustrine sediment	2	14176	7142	21210	14176	9948
Till (Quaternary)	1	640	640	640		
Till (late Wisconsinan)	1	11432	11432	11432		
Stratified drift	12	8718	227	23875	7527	6306
Glaciolacustrine sand and gravel	1	26700	26700	26700		
Glaciolacustrine sand and gravel (late Wisconsinan)	3	8121	3200	17511	3653	8135
Glaciolacustrine sand and gravel (Illinoian)	1	2642	2642	2642		
Moraines (late Wisconsinan)	1	14129	14129	14129		
Cape May Formation	1	1312	1312	1312		
Unnamed Formation at Cape May	1	4659	4659	4659		
Cohansey Formation	24	10977	1428	27499	10867	5687
Cohansey & Kirkwood Formations	20	11344	2651	32250	8804	7065
Atlantic City Formation	2	1506	1319	1693	1506	264
Kirkwood Formation - lower member (sand facies)	29	8164	1792	31645	6676	5234
Kirkwood Formation - Belleplain Member	2	9668	9559	9777	9668	154
Kirkwood Formation - Wildwood Member	3	8101	3994	10941	9369	3643
Kirkwood Formation - Shiloh Marl Member	5	7330	3739	11268	7412	3401
Kirkwood Formation	8	11077	2354	38475	6737	11408
Shark River Formation - Toms River Member	9	2295	442	5137	1152	2089
Vincentown Formation	3	8461	1798	21300	2286	11121
Mount Laurel Formation	4	1100	666	2050	842	645
Mount Laurel and Wenonah Formations	17	787	411	1232	747	218
Englishtown Formation	10	1382	426	3799	805	1217
Magothy, Raritan, and Potomac Formations	1	2593	2593	2593		
Magothy Formation	19	5679	1089	22956	3726	6220
Magothy Formation - Old Bridge Sand Member (No. 3 sand)	5	5690	1710	8475	6383	2963
Raritan Formation	6	7050	1176	23829	3195	8571
Raritan Formation - Farrington Sand Member (No. 1 sand)	5	10274	2870	21599	10948	7500
Potomac Formation	4	2859	1957	3604	2938	715
Potomac Formation, Unit 3 (upper subsurface and outcrop)	6	10303	6622	15878	8801	3741
Potomac Formation, Unit 2 (middle subsurface)	1	1223	1223	1223		
Potomac Formation, Unit 1 (lower subsurface)	1	18893	18893	18893		
Brunswick Group (Passaic Formation through Boonton Formation)	2	458	136	780	458	455
Towaco Formation	2	889	583	1195	889	433
Felthville Formation	2	760	426	1093	760	472
Passaic Formation	21	1199	45	5362	814	1437
Passaic Formation - conglomeratic sandstone	3	1213	764	1940	935	635
Passaic Formation - sandstone	1	440	440	440		
Lockatong Formation	2	238	218	258	238	28
Stockton Formation	1	70	70	70		
Stockton Formation - conglomerate	1	2723	2723	2723		
Martinsburg Formation - Ramseyburg Member	2	207	202	212	207	7
Jutland Klippe Sequence, Unit A of Perissoratis	1	64	64	64		
Rickenback Dolomite	1	19254	19254	19254		
Rickenback dolomite - lower Member	1	127	127	127		
Allentown Dolomite	7	4479	75	27000	427	9951
Allentown Dolomite - Limeport Member	1	330	330	330		
Leithsville Formation	6	4478	1041	9251	4137	3182
Leithsville Formation - Walkill Member	1	274	274	274		
Leithsville Formation and Hardyston Quartzite, undivided	1	1184	1184	1184		
late Proterozoic rocks, undifferentiated	1	14	14	14		
Hornblende granite	1	100	100	100		
Microperthite alaskite	1	85	85	85		
Pyroxene granite	7	135	28	345	95	114
Quartz-oligoclase gneiss	1	56	56	56		
Hypersthene-quartz-plagioclase gneiss	2	126	95	157	126	44
Hydrogeologic unit						
continuous or discontinuous till	2	6036	640	11432	6036	7631
morainic deposits	1	14129	14129	14129		
glacial sand and gravel	23	10899	227	43500	7142	10171
Holly Beach water-bearing zone	1	1312	1312	1312		
Cohansey aquifer	6	10479	1428	17488	11694	6304
Kirkwood-Cohansey water-table aquifer system	43	11549	2651	38475	9553	7398
Atlantic City "800-foot" sand aquifer	40	7921	1792	31645	6729	4729
Piney Point aquifer	11	2151	442	5137	1319	1898
Vincentown aquifer	3	8461	1798	21300	2286	11121
Mount Laurel-Wenonah aquifer	21	846	411	2050	747	341
Englishtown aquifer system	10	1382	426	3799	805	1217
Potomac-Raritan-Magothy aquifer system	1	2593	2593	2593		
upper Potomac-Raritan-Magothy aquifer	24	5682	1089	22956	3774	5640
middle Potomac-Raritan-Magothy aquifer	13	7730	1176	23829	3604	7443
lower Potomac-Raritan-Magothy aquifer	10	8655	1223	18893	7879	6029
Brunswick aquifer	31	1080	45	5362	780	1218
Lockatong Formation	2	238	218	258	238	28
Stockton Formation	2	1397	70	2723	1397	1876
Martinsburg Formation and Jutland klippe sequence	3	159	64	212	202	83
Jacksonburg limestone, Kittatinny Supergroup and Hardyston quartzite	18	4411	75	27000	1298	7387
igneous and metamorphic rocks	13	112	14	345	95	90
Hydrogeologic zone						
Rio Grande water-bearing zone	3	8101	3994	10941	9369	3643
Brunswick aquifer conglomerate	3	1213	764	1940	935	635
Stockton Formation conglomerate	1	2723	2723	2723		