

APPENDIX 2.3-A
Oak Ridge Reservation Selected Bedrock Hydraulic Conductivity Test Results

Table 2.3-A (Sheet 1 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
55-1A	A	Nolichucky Shale	Conasauga	14.3	19.3	16.8	Slug	Hvorslev	4.2E-04	1.2	NA	NA
55-1B	A	Nolichucky Shale	Conasauga	33.8	38.8	36.3	Slug	Hvorslev	3.9E-04	1.1	NA	NA
55-1C	A	Nolichucky Shale	Conasauga	70.7	75.7	73.2	Slug	Hvorslev	1.2E-04	0.34	NA	NA
55-2C	A	Nolichucky Shale	Conasauga	71	76	73.5	Slug	Hvorslev	4.9E-04	1.4	NA	NA
55-3A	A	Nolichucky Shale	Conasauga	9.3	14.3	11.8	Slug	Hvorslev	6.0E-04	1.7	NA	NA
55-3B	A	Nolichucky Shale	Conasauga	33.1	38.1	35.6	Slug	Hvorslev	1.6E-03	4.6	NA	NA
55-3C	A	Nolichucky Shale	Conasauga	72.5	77.5	75	Slug	Hvorslev	6.7E-05	0.19	NA	NA
55-4B	A	Nolichucky Shale	Conasauga	20.5	25.5	23	Slug	Hvorslev	4.6E-04	1.3	NA	NA
55-4C	A	Nolichucky Shale	Conasauga	67.6	72.6	70.1	Slug	Hvorslev	1.7E-04	0.49	NA	NA
56-1A	A	Nolichucky Shale	Conasauga	14	19	16.5	Slug	Hvorslev	4.9E-05	0.14	NA	NA
56-1C	A	Nolichucky Shale	Conasauga	70.3	75.3	72.8	Slug	Hvorslev	6.7E-04	1.9	NA	NA
56-2A	A	Nolichucky Shale	Conasauga	10.1	15.1	12.6	Slug	Hvorslev	8.1E-04	2.3	NA	NA
56-2B	A	Nolichucky Shale	Conasauga	33.8	38.8	36.3	Slug	Hvorslev	3.0E-04	0.84	NA	NA
56-2C	A	Nolichucky Shale	Conasauga	72.3	77.3	74.8	Slug	Hvorslev	1.6E-04	0.45	NA	NA
56-3A	A	Nolichucky Shale	Conasauga	12.8	17.8	15.3	Slug	Hvorslev	2.8E-04	0.8	NA	NA
56-3C	A	Nolichucky Shale	Conasauga	50.5	55.5	53	Slug	Hvorslev	5.6E-04	1.6	NA	NA
56-4C	A	Nolichucky Shale	Conasauga	71.3	76.3	73.8	Slug	Hvorslev	1.3E-03	3.6	NA	NA
56-5C	A	Maynardville Limestone	Conasauga	66.6	71.6	69.1	Slug	Hvorslev	2.5E-02	70	NA	NA
GW-1	A	Dismal Gap Formation	Conasauga	14.4	25.7	20.1	Bailer-Rec	Not Specified	2.6E-05	0.074	NA	NA
GW-2	A	Dismal Gap Formation	Conasauga	47.8	60	53.9	Packer	Not Specified	1.1E-05	0.03	NA	NA
GW-2	A	Dismal Gap Formation	Conasauga	38.9	60	49.5	Packer	Not Specified	4.9E-06	0.014	NA	NA
GW-2	A	Dismal Gap Formation	Conasauga	39.6	46.7	43.2	Packer	Not Specified	9.5E-06	0.027	NA	NA
GW-2	A	Dismal Gap Formation	Conasauga	34.8	41.9	38.4	Packer	Not Specified	2.8E-06	0.008	NA	NA
GW-3	A	Nolichucky Shale	Conasauga	23.9	35	29.5	Packer	Not Specified	5.1E-05	0.145	NA	NA
GW-3	A	Nolichucky Shale	Conasauga	20.9	32	26.5	Packer	Not Specified	4.1E-05	0.115	NA	NA
GW-3	A	Nolichucky Shale	Conasauga	18	23	20.5	Bailer-Rec	Not Specified	1.3E-05	0.038	NA	NA
GW-4	A	Nolichucky Shale	Conasauga	17	27.2	22.1	Packer	Not Specified	1.1E-03	3.23	NA	NA
GW-4	A	Nolichucky Shale	Conasauga	27.2	50.6	38.9	Packer	Not Specified	7.2E-04	2.05	NA	NA
GW-5	A	Nolichucky Shale	Conasauga	3	12.5	7.8	Bailer-Rec	Not Specified	2.0E-04	0.575	NA	NA
GW-6	A	Nolichucky Shale	Conasauga	35.7	46.8	41.3	Packer	Not Specified	6.7E-05	0.189	NA	NA
GW-6	A	Nolichucky Shale	Conasauga	15.3	31.5	23.4	Bailer-Rec	Not Specified	3.1E-05	0.088	NA	NA
GW-7	A	Nolichucky Shale	Conasauga	8.7	16.5	12.6	Bailer-Rec	Not Specified	1.9E-04	0.548	NA	NA
GW-8	A	Nolichucky Shale	Conasauga	13	21.9	17.5	Bailer-Rec	Not Specified	1.5E-04	0.438	NA	NA
GW-9	A	Nolichucky Shale	Conasauga	51.5	55.3	53.4	Packer	Not Specified	6.8E-05	0.192	NA	NA
GW-9	A	Nolichucky Shale	Conasauga	39.6	49.8	44.7	Packer	Not Specified	9.0E-05	0.255	NA	NA
GW-9	A	Nolichucky Shale	Conasauga	30.4	40.6	35.5	Packer	Not Specified	7.9E-04	2.25	NA	NA

Table 2.3-A (Sheet 2 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-9	A	Nolichucky Shale	Conasauga	20.5	30.7	25.6	Packer	Not Specified	2.8E-04	0.795	NA	NA
GW-10	A	Nolichucky Shale	Conasauga	9.6	15	12.3	Bailer-Rec	Not Specified	8.0E-05	0.222	NA	NA
GW-11	A	Nolichucky Shale	Conasauga	27.8	39.5	33.7	Packer	Not Specified	2.4E-04	0.685	NA	NA
GW-11	A	Nolichucky Shale	Conasauga	19.7	31.4	25.6	Packer	Not Specified	4.6E-04	1.29	NA	NA
GW-11	A	Nolichucky Shale	Conasauga	48.7	60.8	54.8	Packer	Not Specified	5.0E-05	0.137	NA	NA
GW-11	A	Nolichucky Shale	Conasauga	39	50.8	44.9	Packer	Not Specified	4.2E-05	0.118	NA	NA
GW-12	A	Nolichucky Shale	Conasauga	8.7	14.7	11.7	Bailer-Rec	Not Specified	3.4E-05	0.096	NA	NA
GW-13	A	Nolichucky Shale	Conasauga	6	14	10	Bailer-Rec	Not Specified	3.3E-05	0.093	NA	NA
GW-13	A	Nolichucky Shale	Conasauga	22.5	33.9	28.2	Packer	Not Specified	5.8E-04	1.64	NA	NA
GW-13	A	Nolichucky Shale	Conasauga	15.6	27.4	21.5	Packer	Not Specified	6.0E-04	1.7	NA	NA
GW-43	A	Dismal Gap Formation	Conasauga	28.6	35	31.8	Bailer-Rec	Not Specified	5.0E-05	0.14	NA	NA
GW-44	A	Dismal Gap Formation	Conasauga	27.1	38.7	32.9	Packer	Not Specified	1.3E-04	0.381	NA	NA
GW-44	A	Dismal Gap Formation	Conasauga	58	64	61	Packer	Not Specified	2.1E-05	0.06	NA	NA
GW-44	A	Dismal Gap Formation	Conasauga	47.5	64	55.8	Packer	Not Specified	6.3E-05	0.178	NA	NA
GW-44	A	Dismal Gap Formation	Conasauga	47.6	64	55.8	Packer	Not Specified	1.8E-04	0.521	NA	NA
GW-44	A	Dismal Gap Formation	Conasauga	35.3	46.9	41.1	Packer	Not Specified	8.7E-05	0.247	NA	NA
GW-58	A	Maynardville Limestone	Conasauga	21.5	33.2	27.4	Packer	Not Specified	3.7E-04	1.036	NA	NA
GW-58	A	Maynardville Limestone	Conasauga	30.2	41.9	36.1	Packer	Not Specified	2.0E-03	5.81	NA	NA
GW-59	A	Maynardville Limestone	Conasauga	18.2	27	22.6	Packer	Not Specified	4.1E-03	11.63	NA	NA
GW-62	A	Maynardville Limestone	Conasauga	22.5	32.5	27.5	Packer	Not Specified	3.3E-03	9.3	NA	NA
GW-62	A	Maynardville Limestone	Conasauga	34	44	39	Packer	Not Specified	8.9E-05	0.252	NA	NA
GW-62	A	Maynardville Limestone	Conasauga	44	54	49	Packer	Not Specified	4.6E-05	0.129	NA	NA
GW-131	A	Knox Group	Knox	120	147	133.5	Packer	Homer Semi-Log	4.6E-04	1.3	NA	NA
GW-131	A	Knox Group	Knox	240	267	253.5	Packer	Homer Semi-Log	1.3E-03	3.67	NA	NA
GW-131	A	Knox Group	Knox	290	317	303.5	Packer	Homer Semi-Log	7.0E-08	0.0002	NA	NA
GW-131	A	Knox Group	Knox	370	397	383.5	Packer	Homer Semi-Log	4.4E-05	0.124	NA	NA
GW-131	A	Knox Group	Knox	450	477	463.5	Packer	Homer Semi-Log	1.9E-04	0.544	NA	NA
GW-131	A	Knox Group	Knox	490	517	503.5	Packer	Homer Semi-Log	1.1E-06	0.003	NA	NA
GW-131	A	Maynardville Limestone	Conasauga	665	692	678.5	Packer	Homer Semi-Log	1.0E-05	0.029	NA	NA
GW-131	A	Maynardville Limestone	Conasauga	765	792	778.5	Packer	Homer Semi-Log	3.5E-06	0.01	NA	NA
GW-131	A	Maynardville Limestone	Conasauga	892	919	905.5	Packer	Homer Semi-Log	7.0E-08	0.0002	NA	NA
GW-131	A	Maynardville Limestone	Conasauga	988	1015	1001.5	Packer	Homer Semi-Log	3.3E-04	0.932	NA	NA
GW-132	A	Friendship Formation	Conasauga	145	172	158.5	Packer	Homer Semi-Log	1.1E-08	0.00003	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	305	332	318.5	Packer	Homer Semi-Log	3.5E-06	0.01	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	347	374	360.5	Packer	Homer Semi-Log	3.5E-06	0.01	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	490	517	503.5	Packer	Homer Semi-Log	2.1E-06	0.006	NA	NA

Table 2.3-A (Sheet 3 of 14)
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Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-132	A	Pumpkin Valley Shale	Conasauga	557	584	570.5	Packer	Homer Semi-Log	1.5E-05	0.042	NA	NA
GW-132	A	Rome Formation	Rome	642	669	655.5	Packer	Homer Semi-Log	3.9E-04	1.1	NA	NA
GW-132	A	Rome Formation	Rome	690	717	703.5	Packer	Homer Semi-Log	3.2E-07	0.0009	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	105	132	118.5	Packer	Homer Semi-Log	1.1E-07	0.0003	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	148	175	161.5	Packer	Homer Semi-Log	1.1E-06	0.003	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	230	257	243.5	Packer	Homer Semi-Log	1.8E-07	0.0005	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	305	332	318.5	Packer	Homer Semi-Log	1.4E-06	0.004	NA	NA
GW-133	A	Rogersville Shale	Conasauga	428	455	441.5	Packer	Homer Semi-Log	7.1E-07	0.002	NA	NA
GW-133	A	Friendship Formation	Conasauga	543	570	556.5	Packer	Homer Semi-Log	2.1E-07	0.0006	NA	NA
GW-134	A	Maynardville Limestone	Conasauga	75	102	88.5	Packer	Homer Semi-Log	2.4E-04	0.67	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	173	200	186.5	Packer	Homer Semi-Log	2.8E-06	0.008	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	270	297	283.5	Packer	Homer Semi-Log	1.8E-06	0.005	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	360	387	373.5	Packer	Homer Semi-Log	3.5E-08	0.0001	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	450	477	463.5	Packer	Homer Semi-Log	3.2E-07	0.0009	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	560	587	573.5	Packer	Homer Semi-Log	3.5E-07	0.001	NA	NA
GW-134	A	Dismal Gap Formation	Conasauga	730	757	743.5	Packer	Homer Semi-Log	7.1E-07	0.002	NA	NA
GW-134	A	Dismal Gap Formation	Conasauga	793	820	806.5	Packer	Homer Semi-Log	1.4E-07	0.0004	NA	NA
GW-135	A	Knox undifferentiated	Knox	190	217	203.5	Packer	Homer Semi-Log	5.6E-06	0.016	NA	NA
GW-135	A	Knox undifferentiated	Knox	324	351	337.5	Packer	Homer Semi-Log	7.2E-05	0.203	NA	NA
GW-135	A	Knox undifferentiated	Knox	397	425	411	Packer	Homer Semi-Log	9.6E-05	0.272	NA	NA
GW-135	A	Knox undifferentiated	Knox	446	473	459.5	Packer	Homer Semi-Log	7.8E-05	0.222	NA	NA
GW-135	A	Knox undifferentiated	Knox	588	615	601.5	Packer	Homer Semi-Log	3.5E-06	0.01	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	710	737	723.5	Packer	Homer Semi-Log	1.8E-06	0.005	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	832	859	845.5	Packer	Homer Semi-Log	1.8E-05	0.052	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	945	972	958.5	Packer	Homer Semi-Log	3.5E-07	0.001	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	990	1017	1003.5	Packer	Homer Semi-Log	2.5E-06	0.007	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	1124	1151	1137.5	Packer	Homer Semi-Log	1.5E-04	0.411	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	1185	1212	1198.5	Packer	Homer Semi-Log	2.5E-06	0.007	NA	NA
GW-157	A	Knox undifferentiated	Knox	145	157	151	Packer	Homer Semi-Log	8.5E-05	0.24	NA	NA
GW-157	A	Knox undifferentiated	Knox	215	227	221	Packer	Homer Semi-Log	1.8E-04	0.502	NA	NA
GW-157	A	Knox undifferentiated	Knox	265	277	271	Packer	Homer Semi-Log	1.1E-03	3.03	NA	NA
GW-157	A	Knox undifferentiated	Knox	282	294	288	Packer	Homer Semi-Log	2.0E-04	0.561	NA	NA
GW-157	A	Knox undifferentiated	Knox	314	326	320	Packer	Homer Semi-Log	3.2E-06	0.009	NA	NA
GW-157	A	Knox undifferentiated	Knox	326	338	332	Packer	Homer Semi-Log	3.1E-04	0.89	NA	NA
GW-157	A	Knox undifferentiated	Knox	344	356	350	Packer	Homer Semi-Log	7.1E-08	0.0002	NA	NA
GW-157	A	Knox undifferentiated	Knox	392	404	398	Packer	Homer Semi-Log	2.8E-07	0.0008	NA	NA
GW-157	A	Knox undifferentiated	Knox	432	444	438	Packer	Homer Semi-Log	7.4E-05	0.209	NA	NA

Table 2.3-A (Sheet 4 of 14)
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Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-157	A	Knox undifferentiated	Knox	468	480	474	Packer	Homer Semi-Log	1.5E-04	0.417	NA	NA
GW-456 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	9.2E-04	2.6	180	0.0021
GW-457 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	1.2E-04	0.34	24	0.00046
GW-458 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	1.1E-04	0.31	13	0.00088
GW-459 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	2.5E-03	7.1	530	0.0048
GW-460 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	3.3E-04	0.96	61	0.0013
GW-461 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	9.9E-04	2.8	138	0.0018
GW-462 ⁽¹⁾	A	Nolichucky Shale	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	5.6E-05	0.16	17	NA
GW-427	A	Maynardville Limestone	Conasauga	38	48	43	Pump	Theis	3.5E-02	99	7690	0.000056
GW-428 ⁽¹⁾	A	Maynardville Limestone	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	1.6E-02	45	NA	NA
GW-463	A	Maynardville Limestone	Conasauga	45.8	55.8	50.8	Pump	Theis	8.1E-03	23	950	0.0004
GW-464 ⁽¹⁾	A	Maynardville Limestone	Conasauga	Not Specified	Not Specified	Not Specified	Pump	Theis	7.4E-03	21	1037	0.00083
GW-465	A	Maynardville Limestone	Conasauga	31	41	36	Pump	Theis	2.2E-03	6.2	372	0.0023
GW-466	A	Maynardville Limestone	Conasauga	32	42	37	Pump	Theis	5.3E-03	15	631	0.00046
GW-467	A	Maynardville Limestone	Conasauga	38.5	58.5	48.5	Pump	Theis	7.4E-03	21	NA	NA
1063	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	12	0.00024
1062/OB-4	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	68	0.0066
1061/OB-5	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	51	0.0041
1060/OB-8	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	38	0.0006
1059/OB-1	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	19	NA
1058/OB-3	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	18	0.00013
1057/OB-7	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	17	0.00019
1056/OB-2	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	18	0.00025
1055/OB-6	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	NA	NA	25	0.0007
1002/AP-2	A	Dismal Gap Formation	Conasauga	35	45	40	Slug	Not Specified	7.3E-04	2.08	NA	NA
1003/AP-3	A	Nolichucky Shale	Conasauga	27	37	32	Slug	Not Specified	9.4E-05	0.266	NA	NA
1027/BG-1	A	Dismal Gap Formation	Conasauga	20	30	25	Packer	Not Specified	1.0E-04	0.296	NA	NA
1027/BG-1	A	Dismal Gap Formation	Conasauga	30	40	35	Packer	Not Specified	6.7E-04	1.9	NA	NA
1027/BG-1	A	Dismal Gap Formation	Conasauga	40	50	45	Packer	Not Specified	1.3E-04	0.381	NA	NA
1032/BG-6	A	Maynardville Limestone	Conasauga	43	53	48	Slug	Not Specified	2.3E-04	0.66	NA	NA
1032/BG-6	A	Maynardville Limestone	Conasauga	43	53	48	Slug	Not Specified	1.8E-04	0.507	NA	NA
1035/BG-9	A	Pumpkin Valley Shale	Conasauga	20	30	25	Packer	Not Specified	2.3E-05	0.066	NA	NA
1035/BG-9	A	Pumpkin Valley Shale	Conasauga	30	40	35	Packer	Not Specified	1.2E-04	0.334	NA	NA
1035/BG-9	A	Pumpkin Valley Shale	Conasauga	35	45	40	Packer	Not Specified	9.8E-05	0.279	NA	NA
1035/BG-9	A	Pumpkin Valley Shale	Conasauga	35	45	40	Packer	Not Specified	1.2E-04	0.331	NA	NA

Table 2.3-A (Sheet 5 of 14)
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1035/BG-9	A	Pumpkin Valley Shale	Conasauga	40	50	45	Packer	Not Specified	1.2E-04	0.331	NA	NA
1035/BG-9	A	Pumpkin Valley Shale	Conasauga	40	50	45	Packer	Not Specified	1.0E-04	0.29	NA	NA
1051/OD-4	A	Nolichucky Shale	Conasauga	18	28	23	Slug	Not Specified	6.0E-04	1.69	NA	NA
1051/OD-4	A	Nolichucky Shale	Conasauga	18	28	23	Slug	Not Specified	3.7E-04	1.06	NA	NA
1095/SD-1	A	Knox undifferentiated	Knox	108	118	113	Slug	Not Specified	3.1E-04	0.874	NA	NA
1055/OB-6	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	1.9E-04	0.54	10	0.0009
1056/OB-2	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	1.7E-04	0.48	16.7	0.0072
1057/OB-7	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	9.4E-04	2.66	4.7	0.00041
1058/OB-3	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	4.9E-05	0.14	NA	0.00053
1059/OB-1	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	1.7E-04	0.48	32.2	0.0013
1060/OB-8	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	9.2E-04	2.6	20.7	0.0017
1061/OB-5	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	1.3E-03	3.67	NA	0.0047
1062/OB-4	A	Nolichucky Shale	Conasauga	20	70	45	Pump	Theis	8.6E-04	2.44	39.4	0.0054
1044/BG18	A	Maynardville Limestone	Conasauga	100	160	130	Pump	Hantush	NA	NA	16	NA
1031/BG8	A	Nolichucky Shale	Conasauga	37	47	42	Pump	Hantush	1.1E-07	0.0003	41	0.0003
1034/BG5	A	Nolichucky Shale	Conasauga	35	45	40	Pump	Hantush	3.2E-09	0.000009	20	0.000009
GW-104	A	Nolichucky Shale	Conasauga	51	74	62.5	Pump	Jacob	NA	NA	37	NA
GW-245	A	Nolichucky Shale	Conasauga	30	75	52.5	Pump	Theis	NA	NA	13.4	NA
GW-246	A	Nolichucky Shale	Conasauga	30	75	52.5	Pump	Theis	NA	NA	28	0.001
GW-247	A	Nolichucky Shale	Conasauga	30	75	52.5	Pump	Theis	NA	NA	16	0.0004
GW-122	A	Maynardville Limestone	Conasauga	92	142	117	Not Specified	Not Specified	9.7E-06	0.0274	NA	NA
GW-120	A	Nolichucky Shale	Conasauga	130	180	155	Not Specified	Not Specified	1.9E-06	0.0055	NA	NA
GW-117	A	Nolichucky Shale	Conasauga	480	530	505	Not Specified	Not Specified	7.1E-08	0.0002	NA	NA
GW-123	A	Nolichucky Shale	Conasauga	525	575	550	Not Specified	Not Specified	1.8E-08	0.00005	NA	NA
GW-473	A	Not Specified	Not Specified	30	45	37.5	Pump	Chow	7.0E-05	0.1984	NA	NA
GW-132	A	Friendship Formation	Conasauga	850	Not Specified	850	Packer	Not Specified	1.02E-06	0.0029	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	720	Not Specified	720	Packer	Not Specified	3.75E-06	0.0106	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	650	Not Specified	650	Packer	Not Specified	4.04E-06	0.0115	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	520	Not Specified	520	Packer	Not Specified	1.99E-06	0.0056	NA	NA
GW-132	A	Pumpkin Valley Shale	Conasauga	450	Not Specified	450	Packer	Not Specified	1.47E-05	0.0417	NA	NA
GW-132	A	Rome Formation	Rome	380	Not Specified	380	Packer	Not Specified	4.08E-04	1.1565	NA	NA
GW-132	A	Rome Formation	Rome	320	Not Specified	320	Packer	Not Specified	3.05E-07	0.0009	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	920	Not Specified	920	Packer	Not Specified	1.0E-07	0.0003	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	850	Not Specified	850	Packer	Not Specified	1.07E-06	0.003	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	760	Not Specified	760	Packer	Not Specified	1.7E-07	0.0005	NA	NA
GW-133	A	Dismal Gap Formation	Conasauga	680	Not Specified	680	Packer	Not Specified	1.49E-06	0.0042	NA	NA

Table 2.3-A (Sheet 6 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-133	A	Rogersville Shale	Conasauga	550	Not Specified	550	Packer	Not Specified	6.42E-07	0.0018	NA	NA
GW-133	A	Friendship Formation	Conasauga	450	Not Specified	450	Packer	Not Specified	1.98E-07	0.0006	NA	NA
GW-134	A	Maynardville Limestone	Conasauga	920	Not Specified	920	Packer	Not Specified	2.37E-04	0.6718	NA	NA
GW-134	A	Maynardville Limestone	Conasauga	800	Not Specified	800	Packer	Not Specified	2.87E-06	0.0081	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	650	Not Specified	650	Packer	Not Specified	1.74E-06	0.0049	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	560	Not Specified	560	Packer	Not Specified	5.14E-06	0.0145	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	500	Not Specified	500	Packer	Not Specified	3.17E-07	0.0009	NA	NA
GW-134	A	Nolichucky Shale	Conasauga	400	Not Specified	400	Packer	Not Specified	4.26E-07	0.0012	NA	NA
GW-134	A	Dismal Gap Formation	Conasauga	240	Not Specified	240	Packer	Not Specified	5.55E-07	0.0016	NA	NA
GW-134	A	Dismal Gap Formation	Conasauga	200	Not Specified	200	Packer	Not Specified	1.33E-07	0.0004	NA	NA
GW-135	A	Knox undifferentiated	Knox	950	Not Specified	950	Packer	Not Specified	5.49E-06	0.0156	NA	NA
GW-135	A	Knox undifferentiated	Knox	820	Not Specified	820	Packer	Not Specified	7.15E-05	0.2027	NA	NA
GW-135	A	Knox undifferentiated	Knox	750	Not Specified	750	Packer	Not Specified	9.61E-05	0.2724	NA	NA
GW-135	A	Knox undifferentiated	Knox	700	Not Specified	700	Packer	Not Specified	7.84E-05	0.2222	NA	NA
GW-135	A	Knox undifferentiated	Knox	550	Not Specified	550	Packer	Not Specified	3.55E-06	0.0101	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	400	Not Specified	400	Packer	Not Specified	1.69E-04	0.0048	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	300	Not Specified	300	Packer	Not Specified	1.83E-05	0.0519	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	150	Not Specified	150	Packer	Not Specified	4.30E-07	0.0012	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	100	Not Specified	100	Packer	Not Specified	2.30E-06	0.0065	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	50	Not Specified	50	Packer	Not Specified	1.45E-04	0.411	NA	NA
GW-135	A	Maynardville Limestone	Conasauga	100	Not Specified	100	Packer	Not Specified	2.55E-06	0.0072	NA	NA
458	B	Not Specified	Conasauga	150	203	176.5	Slug	Not Specified	1.06E-05	0.03	1.6	1.50E-08
458	B	Not Specified	Conasauga	190	203	196.5	Slug	Not Specified	1.06E-05	0.03	0.3	1.60E-12
458	B	Not Specified	Conasauga	150	203	176.5	Pump	Not Specified	1.06E-05	0.03	1.6	1.60E-05
459	B	Not Specified	Conasauga	100	150	125	Slug	Not Specified	7.06E-08	0.0002	0.011	1.60E-04
459	B	Not Specified	Conasauga	136	150	143	Slug	Not Specified	2.86E-05	0.081	1.1	1.60E-05
460	B	Not Specified	Conasauga	44	100	72	Slug	Not Specified	7.06E-06	0.020	1.4	1.60E-04
460	B	Not Specified	Conasauga	84	100	92	Slug	Not Specified	5.29E-06	0.015	0.2	1.40E-04
460	B	Not Specified	Conasauga	44	100	72	Pump	Not Specified	1.06E-05	0.03	1.6	7.50E-04
439	B	Not Specified	Conasauga	24	34	29	Slug	Not Specified	2.05E-04	0.58	NA	NA
440	B	Not Specified	Conasauga	26	36	31	Slug	Not Specified	1.87E-05	0.053	NA	NA
472	B	Not Specified	Conasauga	15	20	17.5	Slug	Not Specified	1.16E-04	0.33	NA	NA
464	B	Not Specified	Conasauga	6	11	8.5	Slug	Not Specified	2.68E-04	0.76	NA	NA
468	B	Not Specified	Conasauga	10	15	12.5	Slug	Not Specified	1.73E-04	0.49	NA	NA
OMW-01A	C	Not Specified	Conasauga ⁽⁶⁾	210	258	234	Slug	Bouwer-Rice	1.05E-05	0.03	NA	NA
OMW-01AA	C	Not Specified	Conasauga ⁽⁶⁾	120	170	145	Slug	Bouwer-Rice	8.91E-06	0.025	NA	NA

Table 2.3-A (Sheet 7 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
OMW-02A	C	Not Specified	Conasauga ⁽⁶⁾	200	250	225	Slug	Bouwer-Rice	1.20E-05	0.034	NA	NA
OMW-02AA	C	Not Specified	Conasauga ⁽⁶⁾	120	170	145	Slug	Bouwer-Rice	1.49E-05	0.042	NA	NA
OMW-02B	C	Not Specified	Conasauga ⁽⁶⁾	300	350	325	Slug	Bouwer-Rice	9.84E-06	0.028	NA	NA
OMW-03A	C	Not Specified	Conasauga ⁽⁶⁾	60	120	90	Slug	Bouwer-Rice	2.46E-04	0.697	NA	NA
OMW-03B ⁽²⁾	C	Not Specified	Conasauga ⁽⁶⁾	152.7	177.7	165.2	Slug	Bouwer-Rice	4.12E-05	0.117	NA	NA
OMW-04A ⁽²⁾	C	Not Specified	Conasauga ⁽⁶⁾	30	90	60	Slug	Bouwer-Rice	5.81E-04	1.646	NA	NA
OMW-04B	C	Not Specified	Conasauga ⁽⁶⁾	119	164	141.5	Slug	Bouwer-Rice	4.40E-06	0.012	NA	NA
OMW-04C	C	Not Specified	Conasauga ⁽⁶⁾	182.7	217.7	200.2	Slug	Bouwer-Rice	1.58E-04	0.448	NA	NA
7-1 ⁽³⁾	D	Not Specified	Conasauga	60	120	90	Slug	Hvorslev	3.86E-06	0.011	NA	NA
7-2 ⁽³⁾	D	Not Specified	Conasauga	35	95	65	Slug	Hvorslev	5.10E-05	0.145	NA	NA
7-3	D	Not Specified	Conasauga	68	88	78	Slug	Hvorslev	2.98E-04	0.845	NA	NA
7-4	D	Not Specified	Conasauga	70	90	80	Slug	Hvorslev	1.05E-05	0.030	NA	NA
7-5	D	Not Specified	Conasauga	76	95	85.5	Slug	Hvorslev	3.84E-05	0.109	NA	NA
7-7	D	Not Specified	Conasauga	18	28	23	Slug	Hvorslev	1.12E-04	0.317	NA	NA
7-8	D	Not Specified	Conasauga	20	30	25	Slug	Hvorslev	2.29E-05	0.065	NA	NA
7-9	D	Not Specified	Conasauga	20	30	25	Slug	Hvorslev	6.59E-05	0.187	NA	NA
7-11 ⁽³⁾	D	Not Specified	Conasauga	38	86	62	Slug	Hvorslev	1.42E-05	0.040	NA	NA
7-12	D	Not Specified	Conasauga	60	70	65	Slug	Hvorslev	1.13E-06	0.003	NA	NA
7-13 ⁽³⁾	D	Not Specified	Conasauga	10	28	19	Slug	Hvorslev	1.47E-04	0.417	NA	NA
7-14	D	Not Specified	Conasauga	60	70	65	Slug	Hvorslev	8.21E-06	0.023	NA	NA
ETF-1	E	Dismal Gap Formation	Conasauga	24.8	28.7	26.7	Slug/Pump	Hvorslev	3.10E-04	0.879	24.6	5.12E-04
ETF-2	E	Dismal Gap Formation	Conasauga	27.9	31.8	29.8	Slug	Hvorslev	2.30E-05	0.065	NA	NA
ETF-3	E	Dismal Gap Formation	Conasauga	26.9	30.8	28.9	Slug/Pump	Hvorslev	5.00E-05	0.142	67.6	0.01
ETF-4	E	Dismal Gap Formation	Conasauga	26.8	30.8	28.8	Slug	Hvorslev	1.30E-04	0.369	NA	NA
ETF-5	E	Dismal Gap Formation	Conasauga	26.3	30.2	28.3	Slug	Hvorslev	3.00E-04	0.850	NA	NA
ETF-6	E	Dismal Gap Formation	Conasauga	26.2	30.1	28.1	Slug	Hvorslev	3.90E-04	1.106	NA	NA
ETF-7	E	Dismal Gap Formation	Conasauga	26.5	30.4	28.4	Slug	Hvorslev	2.00E-04	0.567	NA	NA
ETF-8	E	Dismal Gap Formation	Conasauga	25.8	29.8	27.8	Slug/Pump	Hvorslev	3.10E-04	0.879	58	0.03
ETF-9	E	Dismal Gap Formation	Conasauga	27	30.9	28.9	Slug/Pump	Hvorslev	5.10E-05	0.145	19.4	0.01
ETF-10	E	Dismal Gap Formation	Conasauga	27.1	31.1	29.1	Pump	Theis	NA	NA	27	3.34E-04
ETF-11	E	Dismal Gap Formation	Conasauga	41.7	49.6	45.6	Slug	Hvorslev	2.40E-04	0.680	NA	NA
ETF-12	E	Dismal Gap Formation	Conasauga	42.2	50.1	46.2	Slug	Hvorslev	4.10E-04	1.162	NA	NA
ETF-13	E	Dismal Gap Formation	Conasauga	240.9	250.7	245.8	Slug	Hvorslev	1.70E-05	0.048	NA	NA
ETF-14	E	Dismal Gap Formation	Conasauga	84.7	94.6	89.7	Slug	Hvorslev	2.30E-05	0.065	NA	NA
ETF-15	E	Dismal Gap Formation	Conasauga	36.9	46.8	41.8	Slug	Hvorslev	6.60E-06	0.019	NA	NA
ETF-16	E	Dismal Gap Formation	Conasauga	234.6	244.5	239.6	Slug	Hvorslev	2.90E-05	0.082	NA	NA

Table 2.3-A (Sheet 8 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
ETF-17	E	Dismal Gap Formation	Conasauga	12.8	18.7	15.8	Slug	Hvorslev	9.60E-06	0.027	NA	NA
ETF-20	E	Dismal Gap Formation	Conasauga	15.9	21.8	18.9	Slug	Hvorslev	2.30E-04	0.652	NA	NA
ETF-21	E	Dismal Gap Formation	Conasauga	14.5	20.4	17.5	Slug	Hvorslev	1.10E-05	0.031	NA	NA
ETF-22	E	Dismal Gap Formation	Conasauga	16.6	22.5	19.6	Slug	Hvorslev	4.50E-05	0.128	NA	NA
ETF-23	E	Dismal Gap Formation	Conasauga	14.4	20.3	17.4	Slug	Hvorslev	6.00E-05	0.170	NA	NA
ETF-24	E	Dismal Gap Formation	Conasauga	15.7	21.7	18.7	Slug	Hvorslev	6.00E-04	1.701	NA	NA
ETF-25	E	Dismal Gap Formation	Conasauga	15.7	21.6	18.6	Slug	Hvorslev	7.60E-05	0.215	NA	NA
ETF-26	E	Dismal Gap Formation	Conasauga	15.3	21.2	18.2	Slug	Hvorslev	4.70E-05	0.133	NA	NA
ETF-27	E	Dismal Gap Formation	Conasauga	14.5	20.4	17.5	Slug	Hvorslev	2.20E-05	0.062	NA	NA
ETF-28	E	Dismal Gap Formation	Conasauga	14.4	20.3	17.4	Slug	Hvorslev	9.20E-06	0.026	NA	NA
ETF-29	E	Dismal Gap Formation	Conasauga	14.8	20.7	17.8	Slug	Hvorslev	2.20E-05	0.062	NA	NA
ETF-31	E	Dismal Gap Formation	Conasauga	11.4	17.3	14.3	Slug	Hvorslev	2.40E-05	0.068	NA	NA
ETF-32	E	Dismal Gap Formation	Conasauga	13.9	19.8	16.9	Slug	Hvorslev	2.90E-05	0.082	NA	NA
ETF-33	E	Dismal Gap Formation	Conasauga	14.1	20	17.1	Slug	Hvorslev	2.38E-03	6.746	NA	NA
ETF-34	E	Dismal Gap Formation	Conasauga	16	21.9	19.0	Slug	Hvorslev	2.10E-05	0.060	NA	NA
ETF-35	E	Dismal Gap Formation	Conasauga	14.7	20.6	17.7	Slug	Hvorslev	1.50E-05	0.043	NA	NA
ETF-36	E	Dismal Gap Formation	Conasauga	15.3	21.2	18.2	Slug	Hvorslev	3.00E-05	0.085	NA	NA
ETF-37	E	Dismal Gap Formation	Conasauga	15.5	21.4	18.5	Slug	Hvorslev	7.90E-05	0.224	NA	NA
ETF-38	E	Dismal Gap Formation	Conasauga	16.1	22	19.1	Slug	Hvorslev	9.70E-05	0.275	NA	NA
ETF-39	E	Dismal Gap Formation	Conasauga	16.3	22.2	19.2	Slug	Hvorslev	4.30E-05	0.122	NA	NA
ETF-40	E	Dismal Gap Formation	Conasauga	14.8	20.7	17.7	Slug	Hvorslev	5.60E-05	0.159	NA	NA
668	F	Not Specified	Conasauga	11	13	12.0	Injection	Not Specified	5.21E-05	0.148	0.301	NA
668	F	Not Specified	Conasauga	13	15	14.0	Injection	Not Specified	1.40E-06	0.004	0.080	NA
669	F	Not Specified	Conasauga	7.5	8.5	8.0	Injection	Not Specified	9.84E-05	0.279	0.28	NA
739	F	Not Specified	Conasauga	25	27.5	26.3	Injection	Not Specified	4.75E-04	1.345	3.34	NA
741	F	Not Specified	Conasauga	15	21	18.0	Injection	Not Specified	2.31E-04	0.656	3.98	NA
747	F	Not Specified	Conasauga	16	24	20.0	Injection	Not Specified	3.82E-05	0.108	0.872	NA
748	F	Not Specified	Conasauga	14.5	23.5	19.0	Injection	Not Specified	5.09E-05	0.144	1.292	NA
749	F	Not Specified	Conasauga	14	16	15.0	Injection	Not Specified	1.97E-05	0.056	0.118	NA
749	F	Not Specified	Conasauga	18	21	19.5	Injection	Not Specified	7.64E-05	0.217	0.646	NA
756	F	Not Specified	Conasauga	18	20.5	19.3	Injection	Not Specified	2.55E-03	7.218	18.3	NA
757	F	Not Specified	Conasauga	12	16	14.0	Injection	Not Specified	2.78E-05	0.079	0.312	NA
757	F	Not Specified	Conasauga	16	22	19.0	Injection	Not Specified	6.94E-05	0.197	1.184	NA
758	F	Not Specified	Conasauga	14	23	18.5	Injection	Not Specified	9.72E-06	0.028	0.248	NA
759	F	Not Specified	Conasauga	14	15.5	14.8	Injection	Not Specified	4.05E-04	1.148	1.722	NA
759	F	Not Specified	Conasauga	20	23	21.5	Injection	Not Specified	1.74E-04	0.492	1.507	NA

Table 2.3-A (Sheet 9 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
760	F	Not Specified	Conasauga	14	23	18.5	Injection	Not Specified	6.37E-05	0.180	1.615	NA
766	F	Not Specified	Conasauga	10	13.5	11.8	Injection	Not Specified	2.20E-04	0.623	2.153	NA
767	F	Not Specified	Conasauga	38	40	39.0	Injection	Not Specified	5.09E-05	0.144	0.291	NA
768	F	Not Specified	Conasauga	7	15	11.0	Injection	Not Specified	1.09E-05	0.031	0.248	NA
774	F	Not Specified	Conasauga	8	10	9.0	Injection	Not Specified	6.83E-03	19.357	38.75	NA
775	F	Not Specified	Conasauga	39	40	39.5	Injection	Not Specified	2.89E-04	0.820	0.818	NA
775	F	Not Specified	Conasauga	40	42	41.0	Injection	Not Specified	8.45E-05	0.240	0.474	NA
777	F	Not Specified	Conasauga	37	38	37.5	Injection	Not Specified	3.59E-05	0.102	0.103	NA
779	F	Not Specified	Conasauga	39	41	40.0	Injection	Not Specified	3.36E-04	0.951	1.938	NA
779	F	Not Specified	Conasauga	41	43	42.0	Injection	Not Specified	7.99E-05	0.226	0.452	NA
781	F	Not Specified	Conasauga	29	33	31.0	Injection	Not Specified	3.70E-05	0.105	0.431	NA
781	F	Not Specified	Conasauga	33	35	34.0	Injection	Not Specified	2.66E-04	0.755	1.507	NA
782	F	Not Specified	Conasauga	12	14	13	Injection	Not Specified	5.90E-04	1.673	3.552	NA
783	F	Not Specified	Conasauga	28	29	28.5	Injection	Not Specified	4.51E-04	1.28	1.292	NA
904	F	Not Specified	Conasauga	41	44	42.5	Injection	Not Specified	1.62E-03	4.593	13.993	NA
905	F	Not Specified	Conasauga	36	37.5	36.8	Injection	Not Specified	2.78E-04	0.787	1.184	NA
1118	F	Not Specified	Conasauga	8	12	10	Injection	Not Specified	6.60E-05	0.187	0.743	NA
1119	F	Not Specified	Conasauga	24.5	27	25.8	Injection	Not Specified	2.55E-04	0.722	1.830	NA
1119	F	Not Specified	Conasauga	30.5	33	31.8	Injection	Not Specified	1.74E-04	0.492	1.184	NA
1121	F	Not Specified	Conasauga	8.5	9.5	9	Injection	Not Specified	7.18E-04	2.034	2.045	NA
1121	F	Not Specified	Conasauga	9.5	11.5	10.5	Injection	Not Specified	2.20E-04	0.623	1.184	NA
1122	F	Not Specified	Conasauga	38	41	39.5	Injection	Not Specified	3.36E-05	0.095	0.280	NA
1122	F	Not Specified	Conasauga	41	42.5	41.8	Injection	Not Specified	2.08E-04	0.591	0.883	NA
1122	F	Not Specified	Conasauga	44	46	45	Injection	Not Specified	4.17E-05	0.118	0.237	NA
1126	F	Not Specified	Conasauga	48	49.5	48.8	Injection	Not Specified	8.91E-04	2.526	3.767	NA
1126	F	Not Specified	Conasauga	56	57	56.5	Injection	Not Specified	3.36E-04	0.951	0.947	NA
1127	F	Not Specified	Conasauga	17.5	19	18.3	Injection	Not Specified	3.24E-04	0.919	1.399	NA
1127	F	Not Specified	Conasauga	20.2	21	20.6	Injection	Not Specified	5.21E-04	1.476	1.184	NA
1128	F	Not Specified	Conasauga	46	52	49.0	Injection	Not Specified	6.13E-05	0.174	1.055	NA
1128	F	Not Specified	Conasauga	56	57	56.5	Injection	Not Specified	4.63E-05	0.131	0.129	NA
1129	F	Not Specified	Conasauga	32	33	32.5	Injection	Not Specified	6.25E-05	0.177	0.172	NA
1129	F	Not Specified	Conasauga	35.5	36.5	36	Injection	Not Specified	2.20E-04	0.623	0.614	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	26.5	38.5	32.5	Packer	Multiple	1.90E-05	0.054	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	38	50	44	Packer	Multiple	9.40E-06	0.027	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	50	62	56	Packer	Multiple	9.36E-06	0.027	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	62	74	68	Packer	Multiple	7.00E-06	0.020	NA	NA

Table 2.3-A (Sheet 10 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	74	86	80	Packer	Multiple	4.30E-05	0.122	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	86	98	92	Packer	Multiple	5.42E-06	0.015	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	98	110	104	Packer	Multiple	6.57E-05	0.186	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	110	122	116	Packer	Multiple	1.72E-04	0.488	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	122	134	128	Packer	Multiple	2.90E-05	0.082	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	134	146	140	Packer	Multiple	5.86E-05	0.166	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	146	158	152	Packer	Multiple	5.44E-06	0.015	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	158	170	164	Packer	Multiple	4.07E-05	0.115	NA	NA
GW-404 ⁽²⁾	G	Dismal Gap Formation	Conasauga	170	182	176	Packer	Multiple	2.77E-06	0.008	NA	NA
GW-455 ⁽²⁾	G	Nolichucky Shale	Conasauga	65	87	76	Packer	Multiple	6.47E-05	0.183	NA	NA
GW-455 ⁽²⁾	G	Nolichucky Shale	Conasauga	87	109	98	Packer	Multiple	1.60E-05	0.045	NA	NA
GW-455 ⁽²⁾	G	Dismal Gap Formation/ Nolichucky Shale	Conasauga	109	131	120	Packer	Multiple	4.64E-07	0.001	NA	NA
GW-455 ⁽²⁾	G	Dismal Gap Formation	Conasauga	138	160	149	Packer	Multiple	2.61E-05	0.074	NA	NA
GW-455 ⁽²⁾	G	Dismal Gap Formation	Conasauga	152.8	174.8	163.8	Packer	Multiple	6.41E-05	0.182	NA	NA
GW-471 ⁽²⁾	G	Dismal Gap Formation	Conasauga	33	45	39	Packer	Multiple	3.09E-04	0.876	NA	NA
GW-471 ⁽²⁾	G	Dismal Gap Formation	Conasauga	45	57	51	Packer	Multiple	2.29E-04	0.649	NA	NA
GW-471 ⁽²⁾	G	Dismal Gap Formation	Conasauga	57	69	63	Packer	Multiple	4.61E-05	0.131	NA	NA
GW-471 ⁽²⁾	G	Dismal Gap Formation	Conasauga	69	81	75	Packer	Multiple	5.80E-06	0.016	NA	NA
GW-471 ⁽²⁾	G	Dismal Gap Formation	Conasauga	81	93	87	Packer	Multiple	5.39E-06	0.015	NA	NA
GW-471 ⁽²⁾	G	Dismal Gap Formation	Conasauga	84.4	96.4	90.4	Packer	Multiple	7.10E-05	0.201	NA	NA
GW-403	G	Dismal Gap Formation	Conasauga	306	328	317	Packer	Multiple	4.90E-08	0.0001	NA	NA
GW-403	G	Dismal Gap Formation	Conasauga	387	409	398	Packer	Multiple	1.37E-07	0.0004	NA	NA
GW-455	G	Dismal Gap Formation	Conasauga	157.7	185.8	171.8	Slug	Hvorslev	4.57E-05	0.130	NA	NA
GW-471	G	Dismal Gap Formation	Conasauga	89.7	103.4	96.6	Slug	Hvorslev	1.18E-06	0.003	NA	NA
GW-473	G	Dismal Gap Formation	Conasauga	68.4	94.4	81.4	Slug	Hvorslev	3.93E-05	0.111	NA	NA
GW-474	G	Dismal Gap Formation	Conasauga	27.9	45.1	36.5	Slug	Hvorslev	3.33E-05	0.094	NA	NA
GW-475A	G	Dismal Gap Formation	Conasauga	86.4	99.7	93.1	Slug	Hvorslev	7.85E-07	0.002	NA	NA
GW-475B	G	Dismal Gap Formation	Conasauga	49.9	62.9	56.4	Slug	Hvorslev	6.96E-05	0.197	NA	NA
GW-476A	G	Dismal Gap Formation	Conasauga	69.9	83	76.5	Slug	Hvorslev	6.61E-06	0.019	NA	NA
GW-476B	G	Dismal Gap Formation	Conasauga	36.9	49.4	43.2	Slug	Hvorslev	7.96E-05	0.226	NA	NA
GW-477A	G	Dismal Gap Formation	Conasauga	54.7	68.7	61.7	Slug	Hvorslev	1.37E-05	0.039	NA	NA
GW-477B	G	Maynardville Limestone	Conasauga	22.3	34.9	28.6	Slug	Hvorslev	1.12E-05	0.032	NA	NA
GW-478A	G	Dismal Gap Formation	Conasauga	66.9	81.3	74.1	Slug	Hvorslev	9.81E-06	0.028	NA	NA
GW-478B	G	Dismal Gap Formation	Conasauga	35.2	47.2	41.2	Slug	Hvorslev	2.35E-05	0.067	NA	NA
GW-480A	G	Dismal Gap Formation	Conasauga	33.6	37.6	35.6	Slug	Hvorslev	2.86E-06	0.008	NA	NA

Table 2.3-A (Sheet 11 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-480B	G	Maynardville Limestone	Conasauga	28.6	32.6	30.6	Slug	Hvorslev	5.23E-06	0.015	NA	NA
GW-481A	G	Dismal Gap Formation	Conasauga	31.4	35.1	33.3	Slug	Hvorslev	1.81E-04	0.513	NA	NA
GW-481B	G	Maynardville Limestone	Conasauga	28.6	32.6	30.6	Slug	Hvorslev	6.76E-06	0.019	NA	NA
GW-482A	G	Dismal Gap Formation	Conasauga	32.7	36.7	34.7	Slug	Hvorslev	1.82E-06	0.005	NA	NA
GW-482B	G	Maynardville Limestone	Conasauga	26.2	30.2	28.2	Slug	Hvorslev	2.29E-05	0.065	NA	NA
GW-483	G	Maynardville Limestone	Conasauga	18.4	28	23.2	Slug	Hvorslev	3.27E-05	0.093	NA	NA
GW-474	G	Dismal Gap Formation	Conasauga	27.9	45.1	36.5	Pump	Multiple	2.66E-05	0.075	2.26	NA
GW-475B	G	Dismal Gap Formation	Conasauga	49.9	62.9	56.4	Pump	Multiple	2.88E-05	0.082	2.45	1.35E-04
GW-476B	G	Dismal Gap Formation	Conasauga	36.9	49.4	43.2	Pump	Multiple	6.47E-05	0.183	5.50	2.38E-04
GW-477B	G	Maynardville Limestone	Conasauga	22.3	34.9	28.6	Pump	Multiple	7.48E-05	0.212	6.36	7.92E-04
GW-478B	G	Dismal Gap Formation	Conasauga	35.2	47.2	41.2	Pump	Multiple	3.54E-05	0.100	3.01	1.64E-04
GW-471	G	Dismal Gap Formation	Conasauga	89.7	105.6	97.7	Pump	Multiple	1.28E-05	0.036	0.72	1.47E-04
GW-473	G	Dismal Gap Formation	Conasauga	68.4	94.4	81.4	Pump	Multiple	1.01E-05	0.029	0.57	NA
GW-475A	G	Dismal Gap Formation	Conasauga	86.4	99.7	93.1	Pump	Multiple	1.23E-05	0.035	0.70	1.65E-03
GW-476A	G	Dismal Gap Formation	Conasauga	69.9	83	76.5	Pump	Multiple	1.14E-05	0.032	0.65	3.60E-05
GW-477A	G	Dismal Gap Formation	Conasauga	54.7	68.7	61.7	Pump	Multiple	1.63E-05	0.046	0.92	1.51E-04
GW-478A	G	Dismal Gap Formation	Conasauga	67.9	81.3	74.6	Pump	Multiple	1.00E-05	0.028	0.57	1.62E-04
GW-136	H	Nolichucky Shale	Conasauga	53	80	66.5	Packer	Log-Log	6.10E-06	0.173	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	113	140	126.5	Packer	Log-Log	4.40E-06	0.012	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	175	202	188.5	Packer	Log-Log	4.50E-06	0.013	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	216	243	229.5	Packer	Log-Log	1.50E-06	0.004	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	221	248	234.5	Packer	Log-Log	2.80E-07	0.001	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	283	310	296.5	Packer	Log-Log	2.40E-05	0.068	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	288	315	301.5	Packer	Log-Log	3.90E-05	0.111	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	420	447	433.5	Packer	Log-Log	1.00E-05	0.028	NA	NA
GW-136	H	Nolichucky Shale	Conasauga	501	528	514.5	Packer	Log-Log	4.20E-07	0.001	NA	NA
GW-137	H	Nolichucky Shale	Conasauga	337	364	350.5	Packer	Log-Log	1.40E-04	0.397	NA	NA
GW-137	H	Nolichucky Shale	Conasauga	675	702	688.5	Packer	Log-Log	1.30E-07	0.0004	NA	NA
GW-139	H	Nolichucky Shale	Conasauga	195	217	206.0	Packer	Log-Log	5.90E-06	0.017	NA	NA
GW-139	H	Nolichucky Shale	Conasauga	300	322	311.0	Packer	Log-Log	1.70E-06	0.005	NA	NA
GW-139	H	Nolichucky Shale	Conasauga	382	404	393.0	Packer	Log-Log	2.70E-07	0.001	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	125	147	136.0	Packer	Log-Log	8.20E-06	0.023	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	244	266	255.0	Packer	Log-Log	1.50E-06	0.004	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	266	288	277.0	Packer	Log-Log	6.50E-06	0.018	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	317	339	328.0	Packer	Log-Log	7.80E-07	0.002	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	386	408	397.0	Packer	Log-Log	1.00E-05	0.028	NA	NA

Table 2.3-A (Sheet 12 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-401	H	Nolichucky Shale	Conasauga	266	273	269.5	Packer	Log-Log	9.50E-06	0.027	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	273	280	276.5	Packer	Log-Log	5.30E-05	0.150	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	280	287	283.5	Packer	Log-Log	3.00E-05	0.085	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	386	393	389.5	Packer	Log-Log	1.60E-05	0.045	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	393	400	396.5	Packer	Log-Log	2.70E-05	0.077	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	400	407	403.5	Packer	Log-Log	4.80E-07	0.001	NA	NA
GW-401	H	Nolichucky Shale	Conasauga	448	455	451.5	Packer	Log-Log	3.80E-05	0.108	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	110	137	123.5	Packer	Log-Log	1.30E-05	0.037	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	150	177	163.5	Packer	Log-Log	2.50E-05	0.071	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	192	219	205.5	Packer	Log-Log	1.20E-06	0.003	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	243	270	256.5	Packer	Log-Log	2.40E-06	0.007	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	270	297	283.5	Packer	Log-Log	2.90E-07	0.001	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	302	329	315.5	Packer	Log-Log	4.60E-08	0.0001	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	333	360	346.5	Packer	Log-Log	5.50E-08	0.0002	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	373	400	386.5	Packer	Log-Log	1.20E-07	0.0003	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	403	430	416.5	Packer	Log-Log	2.70E-07	0.001	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	525	552	538.5	Packer	Log-Log	2.00E-07	0.001	NA	NA
GW-402	H	Nolichucky Shale	Conasauga	559	586	572.5	Packer	Log-Log	4.40E-08	0.0001	NA	NA
GW-403	H	Nolichucky Shale	Conasauga	92	114	103	Packer	Log-Log	1.60E-03	4.535	NA	NA
GW-403	H	Nolichucky Shale	Conasauga	160	182	171	Packer	Log-Log	7.80E-06	0.022	NA	NA
GW-403	H	Nolichucky Shale	Conasauga	234	256	245	Packer	Log-Log	9.10E-05	0.258	NA	NA
GW-403	H	Nolichucky Shale	Conasauga	275	297	286	Packer	Log-Log	3.50E-05	0.099	NA	NA
GW-403	H	Nolichucky Shale	Conasauga	306	328	317	Packer	Log-Log	4.90E-08	0.0001	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	109	131	120	Packer	Log-Log	1.70E-05	0.048	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	138	160	149	Packer	Log-Log	9.00E-05	0.255	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	210	232	221	Packer	Log-Log	3.40E-06	0.010	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	279	301	290	Packer	Log-Log	1.40E-06	0.004	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	355	377	366	Packer	Log-Log	1.80E-05	0.051	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	413	435	424	Packer	Log-Log	9.40E-09	0.00003	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	465	487	476	Packer	Log-Log	1.00E-07	0.0003	NA	NA
GW-468	H	Nolichucky Shale	Conasauga	109	116	112.5	Packer	Log-Log	4.40E-05	0.125	NA	NA
GW-134	H	Nolichucky Shale	Conasauga	173	200	186.5	Packer	Not Specified	2.87E-06	0.0081	NA	NA
GW-134	H	Nolichucky Shale	Conasauga	270	297	283.5	Packer	Not Specified	1.74E-06	0.0049	NA	NA
GW-134	H	Nolichucky Shale	Conasauga	360	387	373.5	Packer	Not Specified	5.14E-08	0.0001	NA	NA
GW-134	H	Nolichucky Shale	Conasauga	450	477	463.5	Packer	Not Specified	3.17E-07	0.0009	NA	NA
GW-134	H	Nolichucky Shale	Conasauga	560	587	573.5	Packer	Not Specified	4.26E-07	0.0012	NA	NA
GW-381	I	Maynardville Limestone	Conasauga	46.3	60.4	53.4	Pump	Theis	3.33E-03	9.45	2834.78	2.78E-03

Table 2.3-A (Sheet 13 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K_{avg} cm/s	Hydraulic Cond. K_{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
GW-153	I	Maynardville Limestone	Conasauga	49.5	59.5	54.5	Pump	Theis	1.08E-02	30.52	9156.35	6.00E-03
GW-223	I	Maynardville Limestone	Conasauga	80	90	85.0	Pump	Theis	1.51E-03	4.28	1284.16	1.62E-03
GW-151	I	Maynardville Limestone	Conasauga	86	96	91.0	Pump	Theis	7.94E-04	2.25	674.68	4.72E-04
GW-750	I	Maynardville Limestone	Conasauga	61.2	72.7	67.0	Pump	Theis	6.53E-04	1.85	555.62	1.93E-03
GW-735	I	Maynardville Limestone	Conasauga	67.9	78.1	73.0	Pump	Theis	5.86E-04	1.66	498.92	1.50E-03
GW-734	I	Maynardville Limestone	Conasauga	59.4	Not Specified	59.4	Pump	Theis	1.20E-03	3.40	1020.52	1.40E-03
GW-168	I	Maynardville Limestone	Conasauga	104	135.4	119.7	Pump	Theis	2.65E-04	0.75	223.95	9.50E-05
GW-733	I	Maynardville Limestone	Conasauga	240.1	256.5	248.3	Pump	Theis	1.48E-04	0.42	125.30	3.80E-04
GW-722	I	Maynardville Limestone	Conasauga	333	333	333.0	Pump	Theis	9.17E-05	0.26	78.52	1.69E-05
4434	J	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	49.75 ⁽⁵⁾	83.35 ⁽⁵⁾	66.6 ⁽⁵⁾	Slug	Bouwer-Rice	4.57E-04	1.30	NA	NA
4435	J	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	62.41 ⁽⁵⁾	79.9 ⁽⁵⁾	71.2 ⁽⁵⁾	Slug	Bouwer-Rice	7.70E-04	2.18	NA	NA
4436	J	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	46.17 ⁽⁵⁾	65 ⁽⁵⁾	55.6 ⁽⁵⁾	Slug	Bouwer-Rice	5.83E-05	0.17	NA	NA
4437	J	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	43.47 ⁽⁵⁾	63.77 ⁽⁵⁾	53.6 ⁽⁵⁾	Slug	Bouwer-Rice	8.33E-04	2.36	NA	NA
GW-838	J	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	19.12 ⁽⁵⁾	35.45 ⁽⁵⁾	27.3 ⁽⁵⁾	Slug	Bouwer-Rice	7.58E-04	2.15	NA	NA
BRW-115 ⁽²⁾	K	Not Specified	Knox ⁽⁶⁾	88.8	98.8	93.8	Slug	Bouwer-Rice	1.08E-03	3.06	NA	NA
BRW-116 ⁽²⁾	K	Not Specified	Knox ⁽⁶⁾	45	55	50.0	Slug	Bouwer-Rice	3.73E-03	10.56	NA	NA
BRW-117 ⁽²⁾	K	Not Specified	Knox ⁽⁶⁾	38.1	43.1	40.6	Slug	Bouwer-Rice	2.35E-02	66.76	NA	NA
BRW-118 ⁽²⁾	K	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	45	65	55.0	Slug	Bouwer-Rice	6.48E-05	0.18	NA	NA
UA-1	L	Not Specified	Conasauga ⁽⁶⁾	41.6	50.5	46.1	Slug	Cooper	2.26E-05	0.064	0.57	NA
UA-2	L	Not Specified	Conasauga ⁽⁶⁾	142	169	155.5	Slug	Cooper	3.88E-09	0.00001	0.0003	NA
UB-1	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	25.9	35.5	30.7	Slug	Cooper	1.48E-04	0.420	4	NA
UB-2	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	101	126.1	113.6	Slug	Cooper	5.29E-07	0.002	0.037	NA
UC-1	L	Rome Formation ⁽⁶⁾	Rome ⁽⁶⁾	77	86.2	81.6	Slug	Cooper	9.17E-05	0.260	2.4	NA
UC-2	L	Not Specified	Chickamauga ⁽⁶⁾	188.2	206.7	197.5	Slug	Cooper	8.11E-06	0.023	0.42	NA
UD-2	L	Pumpkin Valley Shale ⁽⁶⁾	Conasauga ⁽⁶⁾	180	205	192.5	Slug	Cooper	3.32E-09	0.00001	0.00023	NA
UE-1	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	69.2	76.7	73.0	Slug	Cooper	1.59E-04	0.450	3.4	NA
UE-2	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	175.7	197.7	186.7	Slug	Cooper	3.88E-08	0.0001	0.0023	NA
UF-1	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	16.5	23.5	20.0	Slug	Cooper	8.47E-04	2.400	17	NA
UG-1	L	Nolichucky Shale ⁽⁶⁾	Conasauga ⁽⁶⁾	25	32	28.5	Slug	Cooper	3.03E-04	0.860	6.1	NA
UG-2	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	242	300	271.0	Slug	Cooper	1.73E-09	0.000005	0.00028	NA
UG-3	L	Dismal Gap Formation ⁽⁶⁾	Conasauga ⁽⁶⁾	180	200	190.0	Slug	Cooper	1.09E-06	0.003	0.063	NA
UH-1	L	Nolichucky Shale ⁽⁶⁾	Conasauga ⁽⁶⁾	19	26	22.5	Slug	Cooper	1.06E-04	0.30	2.1	NA
UH-2	L	Nolichucky Shale ⁽⁶⁾	Conasauga ⁽⁶⁾	231	288	259.5	Slug	Cooper	3.53E-09	0.00001	0.00059	NA

Table 2.3-A (Sheet 14 of 14)
A Selection of Oak Ridge Reservation Published Bedrock Aquifer Testing Results

Well	Data Source	Geologic Unit	Group	Top Depth (ftbgs)	Bottom Depth (ftbgs)	Interval Midpoint (ftbgs)	Test Type	Interpretation Method	Hydraulic Cond. K _{avg} cm/s	Hydraulic Cond. K _{avg} ft/d	Trans-missivity ⁽⁴⁾ ft ² /d	Storage Coefficient ⁽⁴⁾
UI-1	L	Nolichucky Shale ⁽⁶⁾	Conasauga ⁽⁶⁾	18	25	21.5	Slug	Cooper	2.65E-04	0.75	5.2	NA
UI-2	L	Nolichucky Shale ⁽⁶⁾	Conasauga ⁽⁶⁾	188	210	199.0	Slug	Cooper	5.29E-08	0.0002	0.0034	NA
HHMS1B	L	Not Specified	Conasauga ⁽⁶⁾	182.3	201.2	191.8	Slug	Cooper	2.01E-05	0.057	1.1	NA
HHMS1C	L	Not Specified	Conasauga ⁽⁶⁾	63.7	101	82.4	Slug	Cooper	2.82E-05	0.08	3	NA
HHMS2A	L	Not Specified	Conasauga ⁽⁶⁾	380	400.6	390.3	Slug	Cooper	1.38E-07	0.0004	0.008	NA
HHMS2B	L	Not Specified	Conasauga ⁽⁶⁾	180.6	200.6	190.6	Slug	Cooper	2.29E-06	0.007	0.13	NA
HHMS2C	L	Not Specified	Conasauga ⁽⁶⁾	62.3	81.1	71.7	Slug	Cooper	1.34E-05	0.038	0.72	NA
HHMS3A	L	Not Specified	Conasauga ⁽⁶⁾	380.5	399.1	389.8	Slug	Cooper	1.90E-07	0.0005	0.01	NA
HHMS3B	L	Not Specified	Conasauga ⁽⁶⁾	189.7	211.6	200.7	Slug	Cooper	2.36E-07	0.0007	0.0015	NA
HHMS3C	L	Not Specified	Conasauga ⁽⁶⁾	62	80.6	71.3	Slug	Cooper	1.48E-05	0.042	0.78	NA
HHMS4B	L	Not Specified	Conasauga ⁽⁶⁾	174.3	215.3	194.8	Slug	Cooper	1.13E-05	0.032	1.3	NA
HHMS5B	L	Not Specified	Conasauga ⁽⁶⁾	196.1	219.5	207.8	Slug	Cooper	4.23E-06	0.012	0.29	NA
HHMS5C	L	Not Specified	Conasauga ⁽⁶⁾	42.1	63	52.6	Slug	Cooper	5.64E-05	0.16	3.4	NA
HHMS6B	L	Not Specified	Conasauga ⁽⁶⁾	145	165.4	155.2	Slug	Cooper	5.64E-06	0.016	0.32	NA
HHMS6C	L	Not Specified	Conasauga ⁽⁶⁾	40.8	60.8	50.8	Slug	Cooper	4.59E-05	0.13	2.7	NA

Notes: NA = Not Available Maryville Limestone has been re-designated Dismal Gap Formation and Rutledge Limestone has been re-designated Friendship Formation

(1) Not included in analysis because depth information is missing

(2) average of rising and falling tests or geometric mean of two interpretation methods

(3) multiple zones screened

(4) Where multiple aquifer pumping test interpretations are available, the method results are reported

(5) Depths are relative to top of casing

(6) Geologic unit and/or group estimated based on available geologic information

Sources:

A (Reference 2.3-A-1), Table F.10

B (Reference 2.3-A-2)

C (Reference 2.3-A-3), Table D.1

D (Reference 2.3-A-4), Table 14

E (Reference 2.3-A-5), Tables 25 and 26

F (Reference 2.3-A-6), Table 2

G (Reference 2.3-A-7), Tables 4.2, 4.3, 4.4, 4.5, 8.1, 9.1, and 9.2

H (Reference 2.3-A-8), Tables A.1 and A.2

I (Reference 2.3-A-9), Table 4.2

J (Reference 2.3-A-10)

K (Reference 2.3-A-11), Appendix B

L (Reference 2.3-A-12), Table 2

Repeated Test Results

REFERENCES

Reference 2.3-A-1. Jacobs EM Team, "Feasibility Study for the Bear Creek Valley at the Oak Ridge Y-12 Plant, Oak Ridge, Tennessee," DOE/OR/02-1525/V2&D2, U.S. Department of Energy Office of Environmental Management under contract DE-AC05-93OR22028, November, 1997.

Reference 2.3-A-2. Webster, D. A. and Bradley, M. W., "Hydrology of the Melton Valley Radioactive-Waste Burial Grounds at Oak Ridge National Laboratory, Tennessee," Open-File Report 87-686, U.S. Geological Survey, 1988.

Reference 2.3-A-3. Bechtel Jacobs Company, LLC, "Field Summary Report for Drilling and Installation of the Melton Valley Offsite Monitoring Wells, September 2009 to August 2010," BJC/OR-3483, U.S. Department of Energy Office of Environmental Management under contract DE-AC05-98OR22700, September, 2010.

Reference 2.3-A-4. Rothschild, E. R., Huff, D. D., Haase, C. S., Clapp, R. B., Spalding, B. P., Farmer, C. D., and Farrow, N. D., "Geohydrologic Characterization of Proposed Solid Waste Storage Area (SWSA) 7," ORNL/TM-9314, U.S. Department of Energy Office of Defense Waste and Byproduct Management under contract DE-AC05-84OR21400, Oak Ridge National Laboratory, Environmental Sciences Division, December, 1984.

Reference 2.3-A-5. Moore, G. K., "Quantification of Ground-Water Flow in Fractured Rock, Oak Ridge, Tennessee," Ground Water Vol. 35(No. 3), 1997.

Reference 2.3-A-6. Moore, G. K. and Young, S. C., "Identification of Groundwater-Producing Fractures by Using an Electromagnetic Borehole Flowmeter in Monitoring Wells on the Oak Ridge Reservation, Oak Ridge, Tennessee," ORNL/ER-91, U.S. Department of Energy Office of Environmental Restoration and Waste Management under contract DE-AC05-84OR21400, Oak Ridge National Laboratory Environmental Sciences Division, March, 1992.

Reference 2.3-A-7. Golder Associates, Inc., "Contaminant Transport Model Validation, Geohydrologic Site Characterization, and Groundwater Flow Computer Model Application," ORNL/Sub/88-SA706/5/V1, Oak Ridge National Laboratory for the U.S. Department of Energy under contract DE-AC05-84OR21400, September, 1988.

Reference 2.3-A-8. Science Applications International Corporation, "Decision Document for Performing a Long-Term Pumping Test at the S-3 Site, Oak Ridge Y-12 Plant, Oak Ridge, Tennessee," Y/ER-210, U.S. Department of Energy Office of Environmental Restoration and Waste Management under contract DE-AC05-84OR21400, February, 1995.

Reference 2.3-A-9. Science Applications International Corporation, "East End VOC Plume Pump and Tracer Test Technical Memorandum," BJC/OR-103, U.S. Department of Energy Office of Environmental Management under contract DE-AC05-98OR22700, August, 1998.

Reference 2.3-A-10. Jacobs EM Team, "Task Order 125 - Documentation Regarding Slug Test Data and Analysis, White Wing Scrap Yard and East Bear Creek Valley Sites Task 35H83125," JE/OR/97-01839, Memorandum for Steve Lampkins, September 29, 1997.

Reference 2.3-A-11. URS and CH2M Oak Ridge LLC, "Final Zone 1 Remedial Investigation and Feasibility Study for East Tennessee Technology Park, Oak Ridge, Tennessee," DOE/OR/01-2561&D1, U.S. Department of Energy Office of Environmental Management under contract DE-SC-0004645, March, 2012.

Reference 2.3-A-12. Tucci, P., "Hydrology of Melton Valley at Oak Ridge National Laboratory, Tennessee," U.S. Geological Survey, Water-Resources Investigations Report 92-4131, 1992.