U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
ARIZONA DEPARTMENT OF WATER RESOURCES
and
YAVAPAI COUNTY

SCIENTIFIC INVESTIGATIONS REPORT 2005–5198
Specific-capacity values for wells in the upper and middle Verde River watersheds, central Arizona—Plate 2 of 3
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Hydrogeology of the upper and middle Verde River watersheds, central Arizona

WATER-LEVEL AND SPECIFIC-CAPACITY DATA

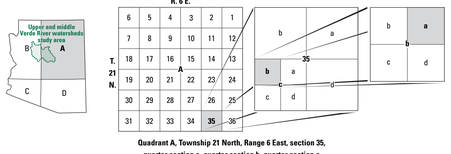
{ft, feet; gal/min, gallons per minute; ft^3/d, cubic feet per day; [(gal/min)/ft], gallons per minute per foot; [(gal/d)/ft], gallons per day per foot; ND, no data}

Map number	Local identifier[1]	Aquifer code	Water-level below land surface median (ft)	Water-level below land surface range (ft)	Northing[2]	Easting[2]	Yield (gal/min)	Yield (ft^3/day)	Drawdown (ft)	Specific capacity median [(gal/d)/ft]	Specific capacity range [(gal/d)/ft]	Specific capacity standard deviation [(gal/d)/ft]	Specific capacity number of wells
1	A-13-04 25acd	ND	25	25	3816654.2	419495.7	26	5,000	11	3,400	3,400	0	1
2	A-13-05	Holocene alluvium and Verde Formation	24	0 to 2,400	3821314.8	422529.4	20	3,900	10	3,500	90 to 77,000	12,000	270
3	A-13-10 6da	ND	400	400	3821954.9	470456.3	5	960	80	90	90	0	1
4	A-14-03	ND	40	0 to 70	3829227.7	403824.6	9	1,700	55	450	7 to 4,300	1,200	12
5	A-14-04	Holocene alluvium and Verde Formation	42	0 to 6,100	3829721.6	418494.3	25	4,800	23	1,700	75 to 260,000	28,000	110
6	A-14-05	Holocene alluvium and Verde Formation	41	0 to 350	3827343.0	421967.3	20	3,900	29	1,200	15 to 86,000	9,600	150
7	A-14-09 36aac	ND	640	640	3824171.8	468501.7	15	2,900	610	37	37	0	1
8	A-14-10	Coconino Sandstone	440	340 to 640	3827807.2	470992.9	33	6,300	13	5,000	210 to 3,800	17,000	4
9	A-15-01	ND	420	0 to 500	3838989.3	381012.7	7	1,300	200	37	0 to 2,000	600	17
10	A-15-03	Holocene alluvium and Verde Formation	64	0 to 570	3841678.5	409157.0	18	3,500	33	870	7 to 72,000	7,300	200
11	A-15-04	Verde Formation and Supai Group	90	0 to 370	3841362.5	417006.0	15	2,900	35	620	52 to 290,000	18,000	250
12	A-15-05	Verde Formation	98	0 to 440	3834404.5	427704.8	20	3,900	28	960	52 to 25,000	5,000	48
13	A-15-06	Holocene alluvium	19	0 to 90	3839961.0	436789.1	33	6,300	25	19,000	130 to 36,000	20,000	4
14	A-15-07 25dba	ND	260	260	3834974.1	448982.9	20	3,900	72	400	400	0	1
15	A-16-02	Verde Formation	300	200 to 350	3847901.0	400053.8	230	45,000	42	5,300	250 to 190,000	92,000	4
16	A-16-03	Verde Formation, Verde Formation, and volcanic rocks	150	0 to 680	3845601.0	404915.2	16	3,100	26	1,300	22 to 85,000	12,000	110
17	A-16-04	Holocene alluvium and Verde Formation	60	47 to 400	3844621.3	417639.5	16	3,100	25	720	15 to 16,000	3,200	64
18	A-16-05	Supai Group	380	170 to 420	3847939.3	428940.2	69	13,000	50	1,200	7 to 220,000	59,000	13
19	A-16-06	Supai Group	400	250 to 560	3848926.8	431933.9	25	4,800	39	1,400	250 to 25,000	7,800	13
20	A-16-08	ND	24	22 to 25	3850215.3	455464.0	15	2,900	8	3,600	1,400 to 5,800	3,100	2
21	A-16-09	Volcanic rocks	39	30 to 44	3844459.8	462453.5	25	4,800	3	12,000	770 to 14,400	7,300	3
22	A-17-04	Supai Group	490	0 to 760	3860468.8	415911.5	13	2,500	90	560	15 to 16,000	5,800	7
23	A-17-05	Supai Group and Redwall Limestone	320	0 to 700	3853716.5	425778.0	17	3,200	23	1,200	7 to 170,000	29,000	46
24	A-17-06	Holocene alluvium and Supai Group	100	0 to 480	3857083.4	430141.7	26	5,000	30	1,400	330 to 41,000	11,000	15
25	A-18-02 25BCB	Supai Formation, upper	630	630	3864075.0	398501.1	17	3,300	30	820	820	0	1
26	A-18-04	ND	470	0 to 830	3863803.7	417838.3	11	2,100	250	67	7 to 82	40	3
27	A-18-05 20dcc		690	690	3864348.2	421896.0	15	2,900	170	130	130	0	1
28	A-18-06	Supai Group	53	9 to 550	3865236.1	433235.0	20	3,900	20	1,400	580 to 32,000	9,300	11
29	A-18-07	Holocene alluvium and Supai Formation	170	98 to 1,300	3866055.1	440841.8	95	18,000	59	2,600	120 to 72,000	21,000	12
30	A-19-06	ND	9	7 to 10	3872591.7	432394.7	33	6,300	100	680	52 to 1,300	890	2
31	A-20-4 3cbb	ND	50	50	3888864.9	412070.5	53	10,000	13	5,900	5,900	0	1
32	A-20-06	Volcanic rocks, Quaternary alluvium, and Kaibab Limestone	850	55 to 1,100	3884932.1	434440.6	340	65,000	300	2,100	110 to 8,700	2,300	13
33	A-20-07	Volcanic rocks, Quaternary alluvium, and Holocene alluvium	640	0 to 1,100	3884127.9	436306.5	120	22,000	180	920	530 to 3,300	1,000	9
34	A-21-03	Volcanic rocks	120	110 to 2,800	3897253.8	401277.8	20	3,900	40	1,500	140 to 14,000	7,900	3
35	A-21-04	ND	60	0 to 200	3891094.5	411250.1	5	960	30	220	7 to 72,000	17,000	17
36	A-21-05	Holocene alluvium	190	50 to 1,300	3893014.8	417083.4	10	1,900	100	82	22 to 500	260	3
37	A-22-03	Holocene alluvium	11	3 to 42	3903058.2	404764.2	13	2,400	26	430	120 to 1,500	530	8
38	A-22-04	ND	70	0 to 200	3903867.9	413780.7	3	580	30	110	15 to 20,000	3,500	33
39	A-22-05	Kaibab Limestone and Holocene alluvium	58	0 to 1,600	3899648.0	423217.2	25	4,800	76	200	7 to 160,000	59,000	13
40	B-13-02	ND	85	0 to 380	3820368.3	364139.1	5	960	190	22	0 to 3,000	580	45
41	B-13-03	ND	20	5 to 180	3822571.6	356728.5	5	960	160	37	7 to 1,200	320	15
42	B-14-02	ND	87	0 to 530	3827849.6	363275.3	7	1,300	140	90	0 to 110,000	9,500	140
43	B-14-03	ND	65	0 to 400	3824359.3	356793.4	3	480	380	15	0 to 90	28	16
44	B-15-01	ND	350	0 to 520	3837003.3	379600.3	20	3,900	80	250	15 to 54,000	7,900	47
45	B-15-02	ND	180	0 to 900	3833800.4	362083.3	20	3,900	100	350	7 to 140,000	16,000	97
46	B-15-03	ND	100	10 to 400	3838428.6	359387.5	15	2,900	80	360	7 to 72,000	11,000	45
47	B-15-04	ND	110	45 to 180	3837969.6	347907.4	13	2,400	130	430	30 to 820	560	2
48	B-16-01	ND	150	0 to 350	3848345.2	372026.9	13	2,400	32	540	15 to 6,200	2,400	6
49	B-16-02	ND	190	0 to 460	3848494.7	364568.2	15	2,900	33	910	0 to 69,000	6,600	290
50	B-16-03	ND	95	0 to 450	3847334.1	358555.4	6	1,200	200	37	0 to 10,000	1,400	100
51	B-16-04	ND	95	1 to 360	3844471.9	348931.2	43	8,200	66	1,600	120 to 57,000	18,000	10
52	B-16-05	ND	82	8 to 160	3843275.9	338533.0	8	1,500	120	170	37 to 310	190	2
53	B-17-02	ND	140	0 to 600	3857895.1	365083.9	25	4,800	60	1,300	60 to 320,000	52,000	49
54	B-17-03	ND	85	0 to 600	3857743.4	353978.3	8	1,500	140	520	7 to 790	400	3
55	B-17-4 25bbc	ND	17	17	3855552.8	349508.8	780	150,000	20	56,000	56,000	0	1
56	B-18-02	ND	180	0 to 520	3864557.9	364254.8	20	3,900	200	240	30 to 630,000	93,000	48
57	B-18-03	ND	150	130 to 180	3864407.8	359823.9	60	12,000	4	22,000	90 to 100,000	38,000	9
58	B-19-03	ND	160	130 - 290	3877040.6	352733.0	32	6,200	150	580	220 to 9,200	5,100	3
59	B-20-06	ND	280	280 to 290	3890625.1	325778.7	9	1,700	260	41	30 to 52	16	2
60	B-21-02	Volcanic rocks	980	190 to 1,000	3896025.2	364616.7	40	7,700	89	110	15 to 14,000	7,800	3
61	B-21-07	ND	1000	900 - 1,200	3900226.5	316434.6	5	870	1,100	4	0 to 7	5	2
62	B-23-7 7cca	ND	770	770	3917903.4	312954.5	4	770	170	30	30	0	1

[1]Designates location where the median specific capacity value was calculated using all available data. When only one data value was located within the township and range, the local well number is used. See illustration below.

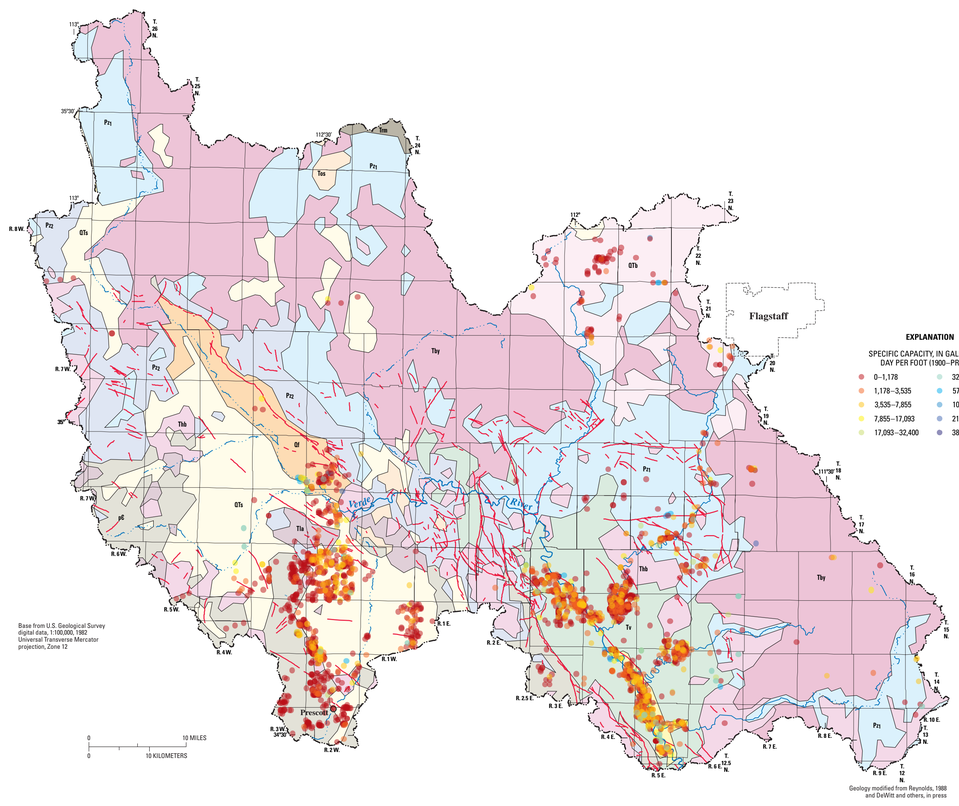
[2]Universal Transverse Mercator descriptors are based on Zone 12 and a North American Datum of 1927 (NAD 27).

ARIZONA WELL-NUMBERING SYSTEM



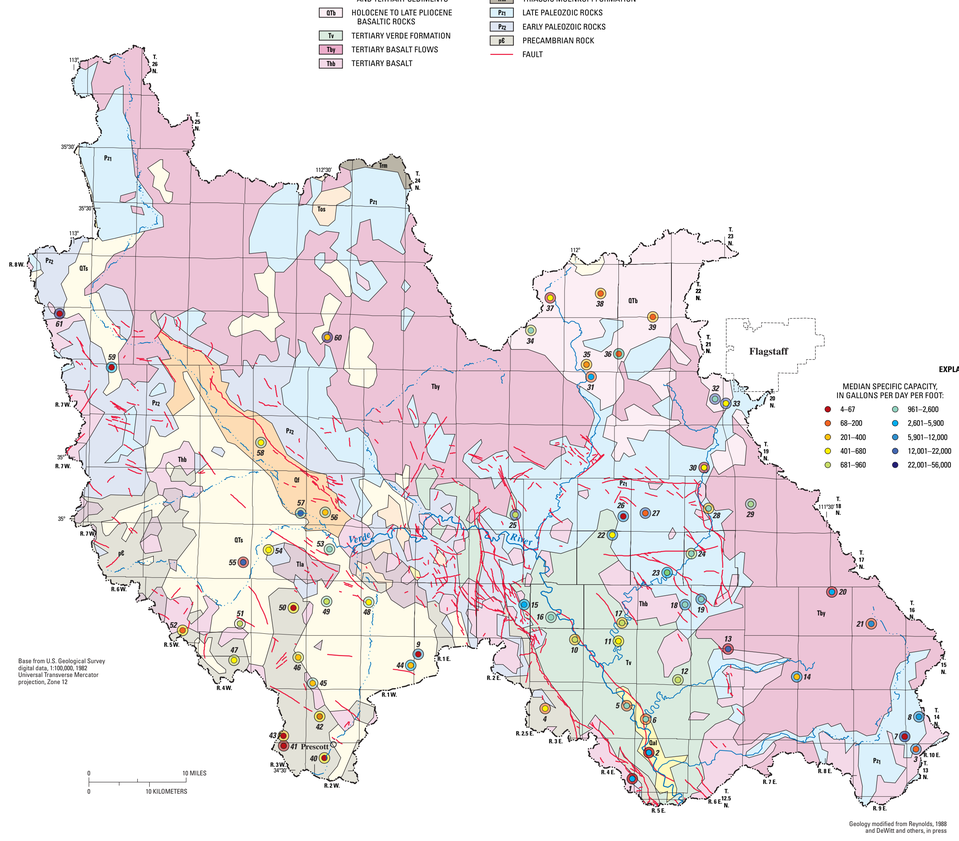
Quadrant A, Township 21 North, Range 6 East, section 35, quarter section c, quarter section b, quarter section a

The well numbers used by the U.S. Geological Survey in Arizona are in accordance with the Bureau of Land Management's system of land subdivision. The land survey in Arizona is based on the Gila and Salt River meridian and base line, which divide the State into four quadrants and are designated by capital letters A, B, C, and D in a counterclockwise direction beginning in the northeast quarter. The first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lowercase letters a, b, c, and d after the section number indicate the well location within the section. The first letter denotes a particular 160 -acre tract, the second the 40-acre tract and the third the 10-acre tract. These letters also are assigned in a counterclockwise direction beginning in the northeast quarter. If the location is known within the 10-acre tract, three lowercase letters are shown in the well number. Where more than one well is within a 10-acre tract, consecutive numbers beginning with 1 are added as suffixes. In the example shown, well number (A–21–06)35cba designates the well as being in the NE¼, NW¼, SW¼, section 35, Township 21 North, and Range 6 East.



EXPLANATION FOR GEOLOGY

- Qal — QUATERNARY ALLUVIUM
- Qf — QUATERNARY FANGLOMERATE
- QTs — UNDIFFERENTIATED QUATERNARY AND TERTIARY SEDIMENTS
- QTb — HOLOCENE TO LATE PLIOCENE BASALTIC ROCKS
- Tv — TERTIARY VERDE FORMATION
- Thy — TERTIARY BASALT FLOWS
- Tha — TERTIARY BASALT
- Tla — TERTIARY LATI-ANDESITE
- Tss — TERTIARY FLUVIAL GRAVEL AND ALLUVIAL FANS
- Trm — TRIASSIC MOENKOPI FORMATION
- P̄z1 — LATE PALEOZOIC ROCKS
- P̄z2 — EARLY PALEOZOIC ROCKS
- p€ — PRECAMBRIAN ROCK
- FAULT



SPECIFIC-CAPACITY VALUES FOR WELLS IN THE UPPER AND MIDDLE VERDE RIVER WATERSHEDS, CENTRAL ARIZONA

By
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