

**Table A 3. Selected data for 42 key wells in the Mesilla Basin, NM, including location, depth, water table, major chemical constituents, hydrostratigraphic and aquifer units, and data sources. (footnote 1)**

Location number	Depth of well (ft)	Altitude land surface (bottom hole) (ft)	Water table depth (elev.) (ft)	Water sample depth interval (ft)	Calcium, dissolved (mg/L) as Ca	Magnesium, dissolved (mg/L) as Mg	Sodium, dissolved (mg/L) as Na	Potassium, dissolved (mg/L) as K	Bicarbonate, (mg/L) as HCO <sub>3</sub>	Sulfate, dissolved (mg/L) as SO <sub>4</sub>	Chloride, dissolved (mg/L) as Cl	dissolved solids (mg/L)	Hydrostratigraphic unit (footnote 2)	Aquifer system	References (footnote 3)			
23.1.13.411	2,008	3,892 (1,886)	23 (3,869)	40 - 45	190	48.0	220		386	590	300	<2050	RA	shallow	2, 5, 10 (Fire station)			
					120	21.0	92	7.1	207	170	140	700	USF (CR)	medial?				
					29	8.0	120	11.0	197	83	78	460	MSF	medial				
					20	6.2	150	9.1	174	130	81	510	MSF	medial				
					15	3.2	200	5.7	163	170	150	640	LSF	deep				
17	2.9	280	5.9	172	270	160	837	LSF	deep									
													SF to 1,825' Tv					
23.1.30.422	1,500	4,192 (2,692)	317 (3,875)	-1210	26	4.4	110	6.1	167	110	96	<650	RA/SF	upper/ medial	5, 6 (City 36)			
23.2.30.243A	804	3,878 (3,074)	24 (3,854)	205 - 225	64	9.4	49	4.3	195	81	50	377	USF (CR)	shallow	2, 10 (NMSU 800)			
					50	8.8	44	3.7	154	62	41	309	USF (CR)	upper?				
					65	9.5	55	3.6	140	77	69	388	USF (CR)	medial?				
					26	5.7	91	8.5	186	71	50	369	MSF	medial?				
24.1W.5.111 (23.1W.32.330)	501	4,400 (3,899)	350 (4,050)	-	-	-	-	-	-	-	-	-	SF-Tb to 430'/Tv	upper	1, 2, 3 (1)			
24.1.8.123	2,470	4,203 (1,833)	342 (3,861)	568 - 588	56	8.9	110	4.1	150	160	94	526	USF	upper	2, 6, 10 (W. Mesa 2500)			
					66	7.6	110	4.3	172	170	91	556	MSF	medial				
					20	2.8	140	13.0	288	73	40	461	MSF	medial				
24.2.4.334	1,870	3,860 (1,990)	-	-	-	-	-	-	-	-	-	-	RA/SF to 1,660'/Tv	upper?	2 (LEGG)			
24.2.15.231A	704	3,855 (3,151)	21 (3,834)	287 - 308	39.0	9.4	52	12.0	161	63	46	336	USF (CR)	upper?	2, 10, 11 (Upper Mesquite Drain)			
					58.0	11.0	45	18.0	147	71	80	401	USF (CR)	medial				
					8.6	4.2	57	6.8	54	60	39	234	MSF	medial				
					-	-	-	-	-	-	-	-	-	SF to 1,905' Tvs				
					-	-	-	-	-	-	-	-	-					
24.2.17.423	1,210	3,858 (2,648)	10 - 16 (3,848)	30 - 35	70	11.0	84	7.3	190	130	100	509	RA	shallow	7, 10, 11 (EBID-1)			
					140	21.0	78	5.0	250	230	120	722	USF (CR)	shallow				
					50	7.2	41	2.8	170	46	39	293	USF (CR)	medial?				
					46	7.2	43	3.0	160	50	34	288	MSF	medial				
					26	5.2	82	6.5	168	74	50	354	MSF	medial				
24.2.36.131	823	3,841 (3,018)	14 - 16 (3,827)	132 - 138	89	16.0	180	29	192	220	220	<1500	USF (CR)	shallow	2, 10, 11 (Koenig)			
					67	14.0	120	29	170	140	160	657	USF (CR)	medial?				
					45	12.0	61	19	160	67	80	404	USF (CR)	medial				
					40	10.0	66	14	161	69	68	384	MSF	medial				
					24	5.9	74	12	168	63	41	331	MSF	medial				
25.1.6.333	2,468	4,209 (1,741)	336 (3,873)	640 - 660	24	3.9	148	19.0	222	101	67	601	MSF (FH)	medial	12 (MT1 Afton Test)			
					53	13.0	393	29.0	483	184	253	1476	MSF (FH)	medial				
					38	0.2	325	5.0	356	241	356	1052	LSF	deep				
					59	3.9	602	8.1	57	783	442	1959	Tvs? LSF					
					48	4.9	651	12.0	90	805	482	2096	Tvs? LSF					

Location number	Depth of well (ft)	Altitude land surface (bottom hole) (ft)	Water table depth (elev.) (ft)	Water sample depth interval (ft)	Calcium, dissolved (mg/L) as Ca	Magnesium, dissolved (mg/L) as Mg	Sodium, dissolved (mg/L) as Na	Potassium, dissolved (mg/L) as K	Bicarbonate, (mg/L) as HCO <sub>3</sub>	Sulfate, dissolved (mg/L) as SO <sub>4</sub>	Chloride, dissolved (mg/L) as Cl	dissolved solids (mg/L)	Hydrostratigraphic unit (footnote 2)	Aquifer system	References (footnote 3)
25.1.16.111	1,650	4,189 (2,539)	359 (3,830)	-	-	-	-	-	-	-	-	-	USF/MSF/LSF		2, 6, 10 (ASARCO)
25.1.31.141	21,759	4,228 (-17,531)	-	-	-	-	-	-	-	-	-	-	SF to 1,920' Trv		2, 8 (Grimm)
25.2.3.224A	2,030	3,834 (1,804)	-	298 - 318 598 - 618 1180 - 1200 1700 - 1727	42 36 45 18	9.3 8.8 3.8 0.1	63 59 94 180	2.9 3.2 4.1 2.2	152 153 120 83	63 55 100 200	55 47 74 100	339 314 400 580	USF MSF MSF LSF	medial? medial medial	2, 10 (Mesquite 2000)
25.2.4.141	704	3,850 (3,146)	22 - 27 (3,828)	242 - 262 505 - 525 660 - 680	52 43 37	8.7 7.2 5.6	57 44 48	4.4 3.0 3.8	162 151 121	69 49 59	53 37 41	353 284 281	USF (CR) MSF (FH) MSF (FH)	medial? medial medial	2, 10 (San Miguel 700)
25.3.17.111A	716	3,827 (3,113)	14 (3,813)	215 - 225 437 - 447 555 - 565 675 - 685	100 150 59 17	30.0 34.0 17.0 46.0	440 310 240 140	10.0 7.1 26.0 14.0	471 543 399 261	370 220 230 100	440 390 170 56	1650 1430 975 494	MSF (FH) MSF (FH) MSF (FH) MSF (FH)	medial medial medial medial	2, 10 (Vado 700)
25.3.28.434	1,307	3,820 (2,513)	12 (3,808)	225 - 245 730 - 750 1200 - 1220	150 27 37	34.0 5.0 3.8	320 190 490	43.0 12.0 9.8	568 387 213	200 120 380	400 59 460	1470 639 1520	MSF (FH) MSF (FH) MSF (FH)	medial medial medial	2, 10 (Vado 1300)
26.1W.24.243	N/A	4,400	N/A	-	-	-	-	-	-	-	-	-	Gardner Cones intrusive basalt	Afton basalt (Qb)	8
26.1W.35.131	477	4,195 (3,718)	-	-	-	-	-	-	-	-	-	-	USF/MSF		13 (H15)
26.2W.15.443	437	4,250 (3,813)	416 (3,834)	-	-	-	-	-	-	-	-	-	Qb/USF/SF		3, 10
26.2W.17.213	1,270	4,270 (3,000)	449 (3,821)	-	-	-	-	-	-	-	-	-	SF to 540' KP		13 (H1000)
26.1.35.333	6,620	4,162 (-2,458)	-	-	-	-	-	-	-	-	-	-	USF/MSF/LSF to 2,020'/Tv		2, 3, 8 (Federal Weaver)
26.3.8.143	1,714	3,810 (2,110)	-	-	-	-	-	-	-	-	-	-	RAMSF/LSF		2, 10 (Berino 1700)
26.3.15.322	1,212	3,800 (2,588)	-	310 - 330 565 - 585 670 - 690 820 - 840 1050 - 1070 1170 - 1190	120 27 27 31 24 38	41.0 6.0 4.5 4.0 2.2 3.6	260 200 210 220 200 420	52.0 10.0 9.6 9.3 7.7 11.0	403 188 345 327 357 183	240 210 170 200 180 280	360 130 75 84 82 430	1320 710 707 747 658 1300	MSF (FH) MSF (FH) MSF (FH) MSF (FH) MSF (FH) MSF (FH)	medial medial medial medial medial medial	2, 10 (Berino 1300)

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26.3.33.212	1,050	3,793 (2,743)	23 (3,770)	650 - 1050	24	4.0	125	4.8	109	137	65	493	LSF RAMSF/LSF	deep	12 (Colquitt Farms)
27.1.4.121	1,565	4,189 (2,624)	383 (3,806)	902 - 922 1134 - 1154 1533 - 1553	30 22 315	14.0 10.0 2.4	298 409 2122	6.0 9.5 15.0	356 227 54	163 173 1471	202 397 2666	1097 1288 6664	MSF (FH) LSF TV LSF to 1,490 TV	medial deep	12 (MT2 Lanark Test)
27.1.10.100	1,010	4,165 (3,155)	365 (3,800)	-	-	-	-	-	-	-	-	-	USF/MSF(FH)	-	12 (NMSU)
27.1.11.331 (27.1.1.330)	950	4,165 (3,215)	365 (3,800)	-	-	-	-	-	-	-	-	-	USF/MSF (FH)	-	1, 2, 10 (Lanark RR)
27.2.13.331	2,250	4,100 (1,850)	317 (3,783)	463 - 483 712 - 722 801 - 821 1571 - 1591 1787 - 1807	21.0 9.0 10.0 9.2 72.0	0.85 2.80 1.70 0.00 1.50	154 178 205 111 371	3.1 2.0 2.1 0.9 2.4	126 229 254 90 44	151 135 185 123 281	87 45 37 38 465	554 617 716 378 1238	MSF (FH) MSF (FH) MSF (FH) MSF (FH) LSF	medial medial medial medial deep	12 (MT3 La Union Test)
27.3.20.432	706	3,780 (3,074)	12 - 13 (3,768)	195 - 215 450 - 470 640 - 660	7.7 6.3 7.3	1.5 0.7 0.5	200 170 87	2.3 1.8 1.3	291 207 95	160 140 84	44 59 35	603 523 304	MSF (FH) MSF (FH) MSF (FH)	medial medial medial	2, 10 (La Union 700)
28.1.34.414	1,300	4,127 (2,827)	327 (3,800)	523 - 533 799 - 819 984 - 1004	17 37 109	6.3 3.6 18.0	257 467 1133	13.0 4.5 11.0	334 122 82	122 556 1012	139 317 1188	911 1516 3557	MSF (FH) MSF (FH) MSF (FH)	medial medial medial	12 (MT4 Noria Test)
28.2.23.324	1,980	4,112 (2,132)	300 (3,812)	-	-	-	-	-	-	-	-	-	USF/MSF/LSF to 1,820/TV-TI	-	2, 10 - 12 (ST14)
28.2.25.233	680	4,082 (3,402)	305 (3,777)	-	-	-	-	-	-	-	-	-	USF/MSF	-	2, 10, 12 (ST9)
28.2.36.142	725	4,112 (3,387)	335 (3,777)	-	-	-	-	-	-	-	-	-	USF/MSF	-	2, 10, 12 (ST10)
28.3.27.111	1,573	3,803 (2,230)	47 (3,756)	156 - 158 468 - 478 679 - 689 858 - 868	- - - -	- - - -	- - - -	- - - -	- - - -	390 1210 750 840	217 2100 1020 955	915 4750 2700 2400	MSF (?) MSF(FH) MSF(FH) MSF(FH) LSF to 1,511' K	upper? medial medial medial	2, 4 (Q144)
28.3.32.143	700	4,095 (3,395)	306 (3,789)	-	-	-	-	-	-	-	-	-	USF/MSF	-	10, 12 (ST11)

Location number	Depth of well (ft)	Altitude land surface (bottom hole) (ft)	Water table depth (elev.) (ft)	Water sample depth interval (ft)	Calcium, dissolved (mg/L) as Ca	Magnesium, dissolved (mg/L) as Mg	Sodium, dissolved (mg/L) as Na	Potassium, dissolved (mg/L) as K	Bicarbonate, (mg/L) as HCO <sub>3</sub>	Sulfate, dissolved (mg/L) as SO <sub>4</sub>	Chloride, dissolved (mg/L) as Cl	dissolved solids (mg/L)	Hydrostratigraphic unit (footnote 2)	Aquifer system	References (footnote 3)
28.3.34.331	1,004	3,997 (2,993)	248 (3,749)	300 - 825	156	10.0	-	-	48	360	410	1270	USF/MSF	UPPER? medial	2, 3, 10 (SPRR #2 Lizard)
29.1W.3.344	2,000	4,135 (2,135)	300 (3,835)	-	-	-	-	-	-	-	-	-	USF/MSF/LSF	-	9 (H1014)
29.1W.5.411	2,000	4,160 (2,160)	310 (3,850)	-	-	-	-	-	-	-	-	-	SF to 1,925' K	-	9, 13 (H1017) (H1417)
29.1W6.410	2,000	4,230 (2,230)	400 (3,830)	-	-	-	-	-	-	-	-	-	SF to 590' K	-	9, 13 (H1485)
29.1W.12.232	500	4,130 (3,630)	-	-	-	-	-	-	-	-	-	-	USF/MSF (FH)	-	13 (H49)
29.1.8.213	565	4,125 (3,560)	321 (3,804)	-	-	-	-	-	-	-	-	-	-	-	1, 2, 3 USF/MSF (FH) (Noria SPRR)
29.3.3.243	298	3,960 (3,672)	-	-	-	-	-	-	-	-	-	-	USF/MSF to 288'/Ti	-	2, 3 (SPRR #1 Lizard)

<sup>1</sup> Remarks: See Tables A1, A2, A4, and A5

<sup>2</sup> Hydrostratigraphic Units: RA. River alluvium-Late Quaternary; SF. Santa Fe Group HSUs-undivided; USF. Upper Santa Fe Group HSUs-undivided; Camp Rice Fm (CR); MSF. Middle Santa Fe HSUs-undivided; Fort Hancock Fm (FH); LSF. Lower Santa Fe HSU; Qb. Quaternary basalt (intrusives and flows); Tv. Middle and Lower Tertiary volcanics-undivided; Trv. Middle and Lower Tertiary silicic volcanic rocks; Tvs. Lower Tertiary volcanic rocks; Ti. Lower Tertiary intermediate-intrusive rocks; K. Cretaceous sedimentary rocks

<sup>3</sup> References: 1. Conover (1954); 2. Leggat et al. (1962); 3. Doty (1963); 4. King et al. (1971); 5. Wilson et al. (1981); 6. Mack (1984); 7. Mack (1984); 8. Myers and Orr (1985); 9. Nickerson (1986, 1995); 10. Seager et al. (1987); 11. Hawley and Lozhinsky (1992); 12. Nickerson and Myers (1993); 13. Clemons (1979)