

Table 5. Water quality of the Laredo aquifer

[ft, feet; gal/min, gallons per minute; $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity units; -- not available; <, less than; $\mu\text{g}/\text{L}$, micrograms per liter]

Sampled well number (fig. 2)	USGS station number	State well number	Aquifer	Sample date	Depth of well (ft)	Flow rate (gal/min)	Specific conductance (field) ($\mu\text{S}/\text{cm}$)	pH (field) (standard units)	Water temperature (°C)	Dissolved solids, residue at 180 °C (mg/L)	Turbidity (NTU)	Hardness, total (mg/L as CaCO_3)
2	280152099240901	YZ-77-61-902	Laredo	01/16/1998	520	50	1,160	7.1	26.9	740	3.5	350
3	280034099220101	YZ-77-62-710	Laredo	01/16/1998	600	10	1,270	7.4	28.5	856	2.0	270
7	275157099301801	YZ-85-12-301	Laredo	09/18/1997	301	12	1,590	7.1	29.0	1,040	.74	350
8	275223099235301	YZ-85-13-301	Laredo	01/29/1998	502	20	2,613	8.3	27.9	1,470	1.0	180
9	275305099194201	YZ-85-06-802	Laredo	03/04/1998	468	5	3,753	8.5	25.5	2,400	.28	43
10	275332099132001	YZ-85-07-701	Laredo	03/04/1998	1,200	5	3,230	8.6	27.0	2,000	.22	9.0
11	275125099155601	YZ-85-14-302	Laredo	02/04/1998	1,200	15	2,940	8.7	29.0	1,740	.30	8.0
12	274759099273201	YZ-85-13-501	Laredo	03/04/1998	520	15	3,600	7.0	28.5	2,610	7.1	890
13	274633099265401	YZ-85-13-801	Laredo	01/28/1998	550	15	3,350	7.0	27.5	2,400	.60	660
14	274808099221301	YZ-85-14-401	Laredo	01/29/1998	--	20	4,820	8.1	27.5	2,910	.45	60
15	274839099203401	YZ-85-14-402	Laredo	02/04/1998	--	1.5	3,860	8.4	28.0	2,380	.40	22
16	274828099190601	YZ-85-14-501	Laredo	01/29/1998	500	20	3,630	8.7	29.5	2,260	.15	15
18	274012099343101	YZ-85-20-502	Laredo	03/18/1998	240	7	3,169	7.5	27.5	2,190	1.2	240
20	274122099261301	YZ-85-21-502	Laredo	09/17/1997	452	30	4,230	8.2	29.5	2,520	.30	47
21	273521099274101	YZ-85-29-102	Laredo	09/03/1997	800	--	3,204	8.8	30.0	2,010	.14	14
22	273533099260401	YZ-85-29-204	Laredo	03/03/1998	710	15	1,840	8.9	28.7	1,130	.12	7.0
23	273331099291701	YZ-85-29-401	Laredo	03/03/1998	300	30	2,200	8.9	27.1	1,310	.16	7.0
24	273145099285401	YZ-85-29-706	Laredo	09/17/1997	235	20	2,120	8.7	28.0	1,280	.14	9.0
25	273154099284801	YZ-85-29-709	Laredo	01/14/1998	440	167	1,970	8.8	27.5	1,260	.15	8.0
26	272942099262001	YZ-85-37-206	Laredo	09/11/1997	370	<10	3,230	8.5	28.5	1,970	.60	11
27	272902099251601	YZ-85-37-205	Laredo	03/02/1998	290	8	3,668	7.6	27.2	2,430	.18	240
28	273455099175901	YZ-85-30-501	Laredo	11/12/1997	500	20	5,450	8.1	29.5	4,090	2.0	100
29	272749099100701	YZ-85-39-201	Laredo	03/02/1998	860	2	4,170	8.5	37.5	2,570	.14	9.0
30	272813099093901	YZ-85-39-301	Laredo	11/13/1997	1,230	40	4,435	8.4	39.0	2,840	.16	7.0

Sampled well number (fig. 2)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Sodium-adsorption ratio	Sodium percentage	Potassium, dissolved (mg/L as K)	Alkalinity (field, total) (mg/L as CaCO_3)	Bicarbonate, dissolved (mg/L as HCO_3)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)
2	90	29	130	3.0	45	6.0	253	308	192	121	0.60
3	58	30	174	5.0	58	6.7	227	277	296	100	.62
7	91	30	210	5.0	57	5.4	276	336	345	140	.90
8	44	16	422	14	83	6.0	89	108	412	441	.25
9	13	2.4	819	55	97	2.5	213	260	900	461	.38
10	3.0	.37	691	100	99	1.3	295	360	527	510	.72
11	2.8	.19	630	98	99	1.4	240	294	363	530	.50
12	194	96	494	7	55	11	180	222	1,080	442	.24
13	170	55	510	9	62	11	237	290	924	430	.70
14	17	3.9	970	55	97	3.0	230	283	569	1,030	.40
15	6.9	1.1	850	80	99	1.7	300	367	607	670	.60
16	5.0	.48	750	86	99	1.5	163	199	842	490	.30
18	47	28	699	20	86	5.1	417	508	965	180	1.1
20	13	3.6	830	53	97	2.8	280	341	672	730	1.2
21	4.3	.62	670	79	99	1.4	241	294	601	490	.70
22	2.1	.35	401	68	99	.99	305	372	306	184	.57
23	2.3	.30	476	79	99	.99	265	323	338	294	.50
24	2.4	.77	450	65	99	1.3	306	373	350	280	.60
25	2.3	.55	450	69	99	1.3	304	371	349	240	.65
26	2.2	1.1	730	99	99	1.8	694	846	303	440	1.9
27	58	22	769	22	87	6.6	192	234	740	702	.28
28	21	12	1,300	56	96	5.6	294	358	1,680	750	.20
29	2.4	.72	982	140	99	1.9	710	865	512	580	2.0
30	1.5	.69	1,000	170	100	2.1	1,006	1,226	354	710	2.1

Sampled well number (fig. 2)	Silica, dissolved (mg/L as Si)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, nitrite + nitrate, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as NH ₃)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Nitrogen, organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, ortho, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO ₄)	Aluminum, dissolved (µg/L as Al)
2	21	--	--	--	--	--	--	--	--	--	4.4
3	19	<0.01	0.08	0.10	0.08	<0.1	--	<0.01	0.01	0.04	4.5
7	22	<.01	<.05	.08	.06	<.2	--	<.01	.01	.03	4.0
8	11	<.01	<.05	.55	.43	.43	--	.02	<.01	--	5.2
9	11	<.01	<.05	.27	.21	.16	--	<.01	.02	.05	4.9
10	15	.01	<.05	.46	.36	.35	--	<.01	.04	.13	8.1
11	15	<.01	<.05	.40	.31	.40	0.08	.04	.07	.21	12
12	18	<.01	<.05	.28	.21	.20	--	<.01	.01	.04	4.7
13	20	<.01	<.05	.33	.25	.20	--	.02	.01	.05	3.4
14	12	<.01	<.05	.37	.29	.30	--	<.01	.01	.05	5.0
15	13	<.01	<.05	.14	.11	.10	.03	<.01	.03	.1	6.0
16	13	<.01	<.05	.35	.27	.30	.01	<.01	.04	.13	12
18	18	<.01	<.05	.28	.22	.28	.06	<.01	.03	.08	3.9
20	12	<.01	<.05	.41	.32	.30	--	.02	.01	.05	6.2
21	13	<.01	<.05	.35	.27	.30	.01	.03	.02	.07	13
22	14	<.01	<.05	.24	.18	.20	--	.02	.06	.17	9.5
23	13	<.01	<.05	.26	.20	.20	--	<.01	.04	.13	7.9
24	12	.01	<.05	.21	.16	<.2	--	.01	.03	.08	8.5
25	12	<.01	.09	.20	.15	.1	--	.03	.04	.12	8.0
26	12	<.01	<.05	.31	.24	.2	--	.03	.04	.14	6.5
27	16	<.01	.25	.22	.17	.2	--	<.01	.01	.04	5.1
28	15	<.01	<.05	1.4	1.1	1.3	.22	.03	.03	.09	5.0
29	17	<.01	<.05	.65	.51	.5	.01	.05	.09	.29	10
30	17	<.01	<.05	.85	.66	.8	.12	.06	.12	.37	18

Sampled well number (fig. 2)	Antimony, dissolved, (µg/L as Sb)	Arsenic, dissolved (µg/L as As)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, dissolved (µg/L as B)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Cobalt, dissolved (µg/L as Co)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)
2	<1	<1	28	<1	681	<1	5.6	<1	<1	364	<1
3	<1	<1	27	<1	776	<1	4.1	<1	<1	248	<1
7	<1	<1	20	<1	671	<1	1.5	<1	3.3	180	9.5
8	<2	<1	24	<2	2,067	<2	<2.0	<2	<2	302	<2
9	<2	<1	13	<2	1,420	<2	2.8	<2	<2	231	<2
10	<2	<1	23	<2	1,608	<2	3.3	<2	<2	43	<2
11	<2	<1	39	<2	1,170	<2	3.3	<2	<2	<30	<2
12	<2	<1	12	<2	1,516	<2	2.5	<2	2.0	791	<2
13	<2	<1	15	<2	1,510	<2	<2.0	<2	<2	130	<2
14	<2	<1	18	<2	1,480	<2	<2.0	<2	<2	230	<2
15	<2	<1	12	<2	1,880	<2	4.5	<2	<2	31	<2
16	<2	<1	13	<2	1,500	<2	<2.0	<2	<2	<30	<2
18	<2	<1	13	<2	4,203	<2	<2.0	<2	<2	396	<2
20	<2	<1	19	<2	3,740	<2	2.3	<2	2.1	140	<2
21	<2	<1	16	<2	1,960	<2	2.9	<2	<2	21	<2
22	<1	<1	21	<1	1,206	<1	5.9	<1	<1	<10	<1
23	<1	<1	16	<1	1,430	<1	3.6	<1	<1	<30	<1
24	<1	<1	15	<1	1,350	<1	<1.0	<1	<1	<9	<1
25	<1	<1	17	<1	1,300	<1	5.3	<1	<1	<30	<1
26	<2	<1	20	<2	2,820	<2	6.2	<2	2.1	130	<2
27	<2	<1	23	<2	1,569	<2	2.9	<2	2.1	<30	<2
28	<3	<1	14	<3	2,450	<3	<3.0	<3	<3	960	<3
29	<2	<1	30	<2	2,885	<2	9.3	<2	<2	32	<2
30	<2	<1	44	<2	3,929	<2	4.7	<2	<2	21	<2

Sampled well number (fig. 2)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Mercury, dissolved (µg/L as Hg)	Molybdenum, dissolved (µg/L as Mo)	Nickel, dissolved (µg/L as Ni)	Selenium, dissolved (µg/L as Se)	Silver, dissolved (µg/L as Ag)	Strontium, dissolved (µg/L as Sr)	Uranium, dissolved (µg/L as U)	Vanadium, dissolved (µg/L as V)	Zinc, dissolved (µg/L as Zn)
2	143	11	--	<1	<1	<1	<1	706	<1	<10	1.0
3	142	13	<0.1	<1	<1	<1	<1	1,404	<1	<10	20
7	130	19	<1	1.1	<1	<1	<1	854	<1	<6	23
8	156	30	<1	<2	<2	<1	<2	1,993	<2	<30	<2
9	278	29	<1	<2	<2	<1	--	464	<2	<30	<2
10	106	4.3	<1	6.1	<2	<1	<2	162	<2	<30	583
11	68	2.1	<1	<2	<2	<1	<2	135	<2	<30	3.2
12	252	102	<1	<2	<2	<1	<2	6,889	<2	<30	9.1
13	202	53	<1	11	<2	<1	<2	4,860	<2	<30	6.2
14	280	8.0	<1	6.2	<2	<1	<2	510	<2	<30	<2
15	210	5.5	<1	8.1	<2	<1	--	222	<2	<30	4.3
16	180	<2	<1	<2	<2	<1	<2	184	<2	<30	<2
18	391	30	<1	5.7	<2	<1	<2	2,774	<2	<30	152
20	159	21	.60	3.7	<2	<1	<2	632	<2	<18	<2
21	82	3.3	<1	<2	<2	<1	<2	313	<2	<18	5.1
22	48	2.5	<1	1.3	<1	<1	<1	105	<1	<10	8.0
23	62	1.1	<1	1.8	<1	<1	<1	148	<1	<30	1.5
24	60	2.1	<1	1.8	<1	<1	<1	164	<1	<18	2.0
25	56	2.2	<1	1.2	<1	<1	<1	153	<1	<30	15
26	92	8.5	<1	2.2	<2	<1	<2	230	<2	<18	5.1
27	260	27	<1	<2	<2	<1	<2	2,136	<2	<30	70
28	430	64	<1	8.0	<3	<1	<3	1,590	<3	<30	3.1
29	177	4.0	.35	4.4	<2	<1	--	201	<2	<30	<2
30	130	7.6	<1	<2	<2	<1	--	245	<2	<24	3.7