

Table 3.-Analysis of water from wells and test holes in the Lyons area.

CHEMICAL ANALYSES OF WATER FROM SELECTED WELLS, TEST HOLES, AND SPRINGS
DISSOLVED CONSTITUENTS AND HARDNESS GIVEN IN MILLIGRAMS PER LITER(A).

SALT VAULT, RICE COUNTY, KANSAS

WELL NUMBER	(B) DEPTH, FEET	GEOLOGIC SOURCE	DATE OF COLLECTION	TEM- PERA- TURE (*C)	DIS- SOLVED SOLIDS (EVAPO- RATED AT 180°C)	SILICA (SiO2)	IRON (FE)	MAN- GAN- ESE (MN)	CALCIUM (CA)	MAG- NESIUM (MG)	SODIUM AND PO- TASSIUM (NA+K)	BICAR- BONATE (HCO3)	SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	(C) NITRATE (NO3)	HARDNESS AS CaCO3			SPECIFIC CONDUCT- ANCE (MI- CROMHOS AT 25°C)	PH	(D) ANALYST
																	TOTAL	CAR- BONATE	NON CAR- BONATE			
19 7W 20RBB	61	KIOWA SH	9 24 70	...	462	....	.....	....	129	11	17	337	7.0	49	.5	53	367	276	91	790	7.4	1
19 7W 30RCD	53	KIOWA SH	9 24 70	16	356	....	.....	....	105	11	12	322	5.8	30	.4	15	307	264	43	600	7.4	1
19 7W 31CCD	60	KIOWA SH	9 25 70	15	376	....	.....	....	97	13	24	332	9.9	37	.1	18	296	272	24	630	7.4	1
19 8W 14ARB	65	KIOWA SH	9 24 70	...	648	....	.....	....	145	36	19	346	23	95	.5	112	510	284	226	1110	7.3	1
19 8W 14CCC	75	KIOWA SH	9 7 70	14	382	....	.....	....	99	8.0	36	310	15	59	.2	6.6	290	254	26	660	7.9	1
19 8W 14DDC	59	KIOWA SH	9 24 70	16	360	....	.....	....	91	16	23	339	8.6	32	.2	3.8	293	278	15	610	7.4	1
19 8W 20DCD2	50	KIOWA SH	9 24 70	15	648	....	.....	....	163	15	33	332	18	92	.2	132	468	272	196	1090	7.3	1
19 8W 22CCC	125	PLEISTOCENE SER	9 15 70	15	396	....	.....	....	93	7.8	43	295	14	69	.2	5.3	264	242	22	660	7.7	1
19 8W 22CCC2	68	KIOWA SH	10 21 70	14	342	....	.....	....	57	15	50	283	17	37	.7	.7	204	204	0	580	7.8	1
19 8W 24CCC	115	KIOWA SH	9 11 70	15	608	....	.....	....	51	18	152	395	96	71	1.2	.4	201	201	0	960	7.8	1
19 8W 24CCC2	95	KIOWA SH	10 15 70	14	600	....	.....	....	54	17	152	405	89	67	1.2	1.8	204	204	0	970	7.9	1
19 8W 26BAA2	135	KIOWA SH	1 19 71	13	650	10	.....	....	69	22	150	407	82	114	1.0	.0	262	262	0	1150	7.5	1
19 8W 26BAA3	316	STONE CORRAL FM	1 21 71	13	6430	6.4	.....	....	724	227	1115	73	2428	1820	1.1	.9	2740	60	2680	8720	8.0	1
19 8W 26DDD	105	KIOWA SH	9 9 70	15	370	....	.....	....	93	4.9	34	315	16	36	.3	2.9	252	252	0	600	7.8	1
19 8W 27AAB	95	KIOWA SH	10 6 70	15	438	....	.....	....	81	16	59	278	25	90	.4	4.9	268	228	40	760	7.2	1
19 8W 27ABB2	135	KIOWA SH	1 13 71	13	1208	9.0	.....	....	97	39	271	285	286	318	1.1	.0	402	234	168	2050	7.7	1
19 8W 27ABB3	316	STONE CORRAL FM	1 16 71	13	5960	6.8	.....	....	512	161	1322	56	1972	1910	1.2	.0	1939	54	1885	8720	8.3	1
19 8W 27DCC2	74	KIOWA SH	12 29 70	13	540	11	1.6	.2	85	32	68	371	67	71	.8	10	344	304	40	920	7.4	1
19 8W 27DCC3	284	STONE CORRAL FM	1 2 71	14	5880	5.5	18	.0	690	249	949	93	2336	1610	1.2	.4	2720	76	2644	9000	7.4	1
19 8W 27DDD	85	KIOWA SH	9 8 70	...	652	....	.....	....	147	15	71	273	49	212	.2	1.5	428	224	204	1150	7.9	1
19 8W 27DDD2	68	KIOWA SH	10 20 70	14	.....	....	.....	....	99	22	72	205	40	193	.3	.7	338	168	170	.....	8.0	1
19 8W 28BBB	105	KIOWA SH	9 24 70	15	444	....	.....	....	91	11	57	298	14	98	.1	1.8	272	244	26	750	7.9	1
19 8W 28CDC2	42	PLEISTOCENE SER	9 25 70	...	444	....	.....	....	104	14	39	344	17	57	.2	13	317	282	35	740	7.4	1
19 8W 31BBB	64	TERRACE DEP	8 31 70	...	460	....	.....	....	77	17	70	310	63	58	1.0	2.7	262	254	8	750	8.1	1
19 8W 32DDC	85	PLEISTOCENE SER	9 16 70	15	296	....	.....	....	70	14	25	298	9.9	16	.4	1.1	232	232	0	490	8.0	1
19 8W 34RDD	85	KIOWA SH	9 23 70	15	54940	....	.....	....	1530	137	19252	400	2288	30900	.1	13	4330	328	4052	91566	7.2	1
19 8W 34CDA	65	KIOWA SH	10 16 70	15	3410	....	.....	....	576	44	614	224	99	1860	.1	23	1618	184	1434	6340	7.6	1
19 8W 36CCC	105	TERRACE DEP	9 25 70	16	544	....	.....	....	142	13	38	312	26	130	.1	16	408	256	152	930	8.0	1
19 9W 13DDD	105	KIOWA SH	9 3 70	15	442	....	.....	....	83	19	62	273	33	105	.4	1.1	285	224	61	740	7.8	1
19 9W 14CCC	65	KIOWA SH	9 4 70	15	1508	....	.....	....	270	23	241	249	30	750	.2	3.6	768	204	564	2700	7.5	1
19 9W 24CDC	90	DAKOTA FM	9 24 70	16	604	....	.....	....	163	13	26	407	12	59	.1	91	460	334	126	970	7.1	1
20 8W 18CC	90	KIOWA SH	9 25 70	...	438	....	.....	..	99	17	38	278	14	102	.5	1.3	317	228	89	770	7.5	1
20 8W 1CCC	105	KIOWA SH	9 22 70	15	580	....	.....	....	64	29	108	312	119	80	1.4	2.9	278	256	22	950	7.8	1
20 8W 2BBB	105	KIOWA SH	9 17 70	14	360	....	.....	....	90	10	31	327	19	30	.4	2.4	266	266	0	590	7.6	1
20 8W 3AAB	57	KIOWA SH	9 25 70	...	656	....	.....	....	169	14	58	498	30	101	.1	15	479	408	71	1100	7.2	1
20 8W 7AAA	85	ALLUVIUM	8 25 70	15	568	....	.....	....	91	20	94	303	58	135	.2	8.0	309	248	61	960	8.1	1
20 8W 8AAA	65	ALLUVIUM	8 26 70	14	566	....	.....	....	104	11	87	244	60	119	.4	9.7	304	256	48	900	8.6	1
20 8W 12CCB	64	KIOWA SH	9 25 70	...	1200	....	.....	....	193	30	206	298	93	492	.1	4.0	605	244	361	2150	7.3	1
20 8W 13CCC	53	ALLUVIUM	8 12 70	14	1704	....	.48	.00	227	33	340	300	103	770	.1	5.3	702	246	456	2990	7.7	1
20 8W 14CCC	32	ALLUVIUM	8 13 70	14	380	....	1.9	.02	70	6.2	55	224	46	47	.5	19	200	184	16	620	7.7	1
20 8W 15CCC	36	ALLUVIUM	8 14 70	15	394	....	2.8	.04	65	12	58	239	45	48	.6	21	212	196	16	630	7.8	1
20 8W 18CCC	55	ALLUVIUM	8 19 70	...	420	....	.77	.00	59	8.0	84	239	33	68	.6	9.7	180	180	0	690	8.5	1
20 8W 18DDD	55	ALLUVIUM	8 18 70	...	484	....	.98	.00	77	15	81	312	41	72	.4	19	254	254	0	790	7.9	1
20 8W 20AAA	26	ALLUVIUM	8 18 70	...	250	....	1.9	.02	45	6.7	32	163	24	25	.2	16	140	134	6	400	7.7	1
20 8W 23ARA	50	ALLUVIUM	9 25 70	...	412	....	.....	....	72	10	67	239	52	72	.5	8.0	220	196	24	710	7.6	1
20 9W 14DDD	55	ALLUVIUM	8 20 70	...	360	....	.34	.00	70	12	40	273	15	29	.3	28	224	224	0	580	8.0	1
20 9W 22AAA	25	ALLUVIUM	8 20 70	...	618	....	3.0	.15	149	15	58	288	19	201	.1	9.7	434	236	198	1100	7.9	1

* = DEGREE SYMBOL

A. ONE MILLIGRAM PER LITER IS EQUIVALENT TO 8.33 POUNDS OF SUBSTANCE PER MILLION GALLONS OF WATER.

B. COMP - COMPOSITE SAMPLE FROM 2 OR MORE WELLS.

C. IN AREAS IN WHICH THE NITRATE CONTENT OF WATER IS KNOWN TO EXCEED 45 MG/L, THE PUBLIC SHOULD BE WARNED OF THE
POTENTIAL DANGERS OF USING THE WATER FOR INFANT FEEDING (U.S. PUBLIC HEALTH SERVICE, 1962, P.7)

D. ANALYST