HYDROLOGIC DATA FOR THE ALLUVIUM AND TERRACE DEPOSITS OF THE CIMARRON RIVER FROM FREEDOM TO GUTHRIE, OKLAHOMA

by Gregory P. Adams, DeRoy L. Bergman, David J. Pruitt, Jayne E. May, and Joanne K. Kurklin

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CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATED WATER-QUALITY UNITS

Multiply	By	To Obtain
inch (in)	2.540	centimeter
foot (ft)	0.3048	meter
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer

Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) as follows:

$$°F = 1.8\ (°C) + 32$$

Sea Level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NVGD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level of 1929.

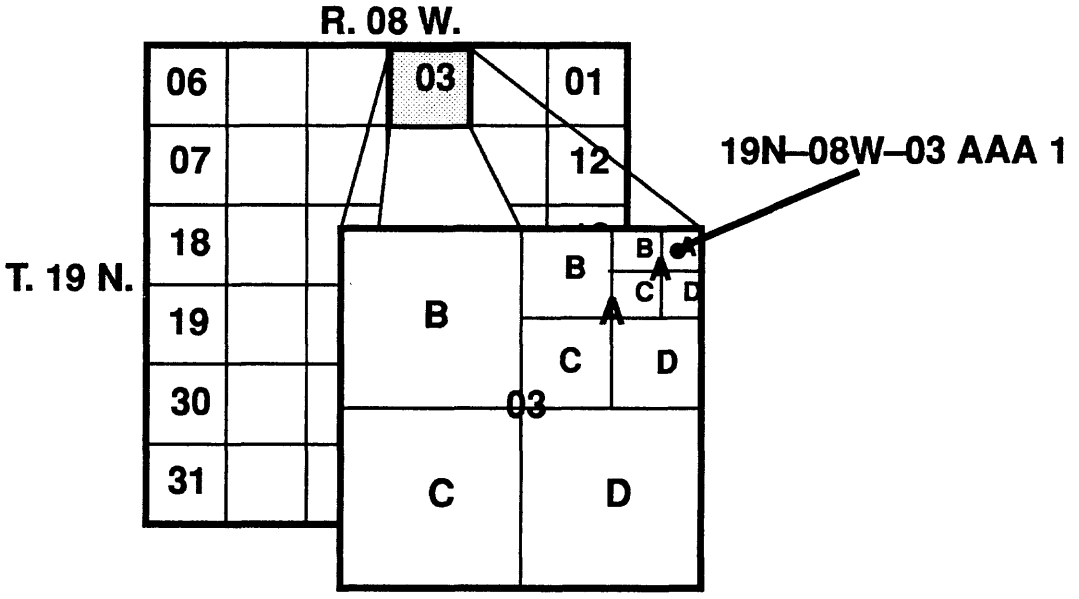
Abbreviated water-quality units and terms used in report:

micrograms per liter	(µg/L)
milligrams per liter	(mg/L)
micrograms per kilogram	(µg/kg)
picocuries per liter	(pCi/L)
polychlorinated biphenyls	(PCB's)

EXPLANATION OF THE SITE-NUMBERING SYSTEM

The standard legal method of describing locations of data-collection sites by fractional section, section, township, and range is replaced in this report by the method illustrated in the diagram below. By the legal method, the location of the site indicated by the dot is described as NE 1/4 NE 1/4 NE 1/4 sec. 3, T. 19 N., R. 8 W. The method used in this report indicates quarter subdivisions of the section by letters and reverses the order of presentation of the subdivisions. By this method, location of the site is given as 19N–08W–03 AAA 1. The final digit (1) is the sequence number of the site within the smallest fractional subdivision. For example, if three data collection sites were located within the same quarter-quarter- quarter section, they would be uniquely identified as AAA 1, AAA 2, and AAA 3.

Each site or station in this report is assigned a unique identification number. This local number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely.



HYDROLOGIC DATA FOR THE ALLUVIUM AND TERRACE DEPOSITS OF THE CIMARRON RIVER FROM FREEDOM TO GUTHRIE, OKLAHOMA

By Gregory P. Adams, DeRoy L. Bergman, David J. Pruitt, Jayne E. May, *and* Joanne K. Kurklin

ABSTRACT

Ground water in the Quaternary alluvium and terrace deposits associated with the Cimarron River in northwestern Oklahoma is used extensively for irrigation, municipal, mining, industrial, stock, and domestic supplies. The data in this report were collected as part of an investigation to provide State water managers with the quantitative knowledge necessary to effectively manage the ground-water resource. The investigation was conducted by the U.S. Geological Survey in cooperation with the Oklahoma Geological Survey. The information presented in this report include data collected in the field from 1985 through 1989, and published and unpublished data compiled from files of the U.S. Geological Survey and the Oklahoma Water Resources Board. Data include well and test-hole records, consisting of ground-water levels, depth of wells, casing diameter, principal aquifer, and primary use of water. Water levels include continuous, daily, monthly, and periodic measurements for selected wells. Physical properties, concentrations of common chemical constituents, selected trace elements, organic analyses, and tritium analyses of water samples from wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units are reported. Winter and summer base-flow discharge measurements of the Cimarron River and its tributaries are presented together with water-quality data from the measuring sites. Continuous water-level and precipitation-gage data are presented graphically.

INTRODUCTION

Ground water in the Quaternary-age alluvium and terrace deposits associated with the Cimarron River from Freedom to Guthrie, Oklahoma, an area of approximately 1,305 square miles, is used extensively for irrigation, municipal, mining, industrial, stock, and domestic supplies. The U.S. Geological Survey (USGS), in cooperation with the Oklahoma Geological Survey (OGS), conducted an investigation of this ground-water resource. The objectives of the investigation were to: (1) Describe the geologic setting of the alluvium and terrace deposits along the Cimarron River from Freedom to Guthrie, Oklahoma (fig.1); (2) estimate the approximate quantity of water in storage, the approximate annual recharge, and the approximate annual discharge from the alluvium and terrace deposits to the Cimarron River; (3) describe the water quality of the Cimarron River alluvium and terrace deposits; and (4) develop a mathematical model to test the conceptual model of the ground-water hydrology of the alluvium and terrace deposits.

PURPOSE AND SCOPE

The purpose of this report is to present a compilation of existing and new geohydrologic data collected during the study. No interpretations of the data are presented.

ACKNOWLEDGMENTS

The authors wish to thank the personnel of the Oklahoma Water Resources Board (OWRB) for their cooperation in all phases of the study and for supplying data vital to the study. Special thanks are extended to the residents of the study area for their cooperation in providing access to wells and streams on their lands and for furnishing information to the U.S. Geological Survey.

EXPLANATION OF DATA

The information presented in this report includes data collected in the field from 1985 through 1989, data compiled from unpublished records from files of the USGS National Water Information System (NWIS), the OWRB, and data from a published report (Reed and others, 1952). The geologic setting within the study area is shown on figure 2.

Selected information for wells and test-holes are listed in table 1. Daily, monthly, and periodic water-level measurements are presented in table 2. Records of wells equipped with continuous water-level recorders,

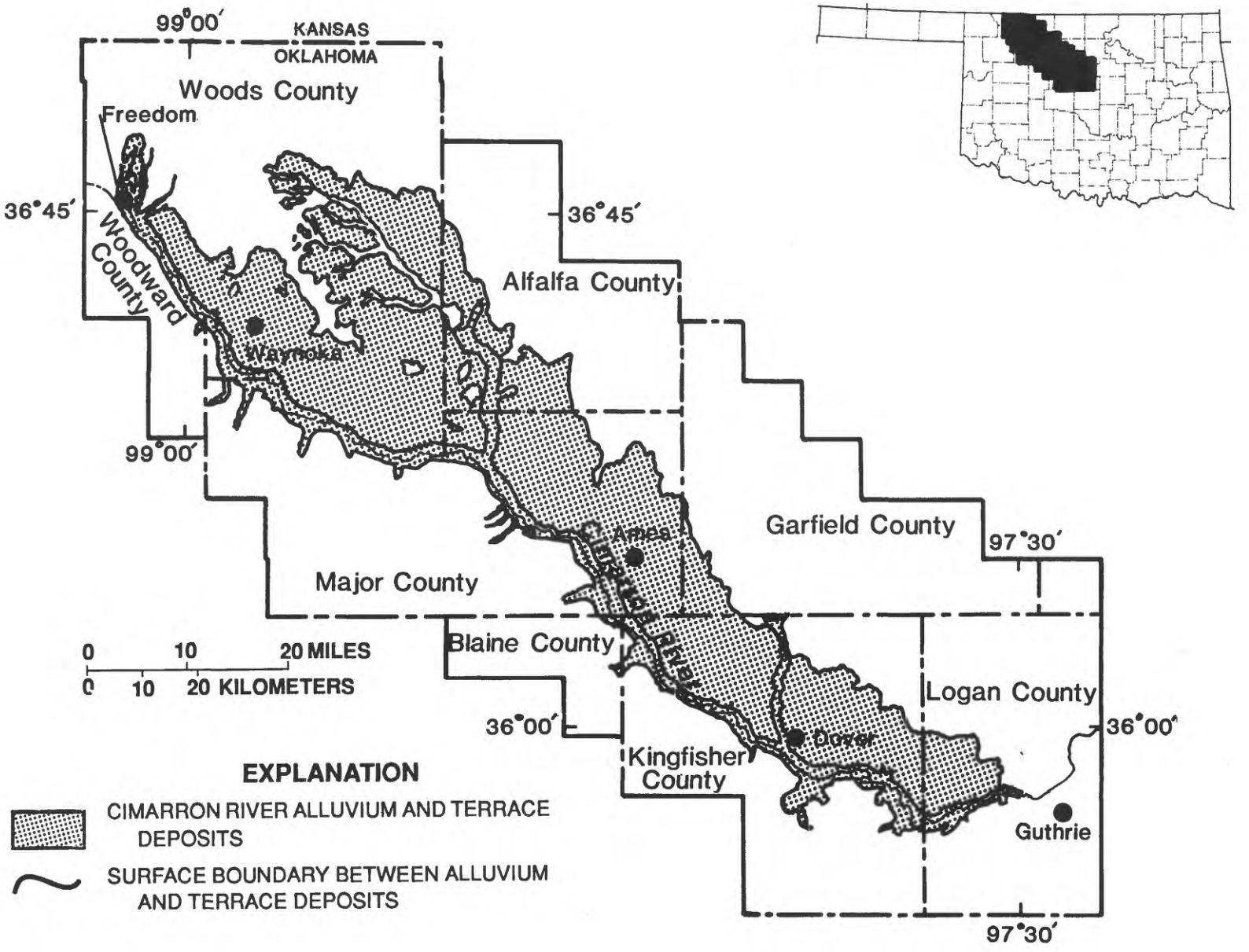


Figure 1. Location of the study area.

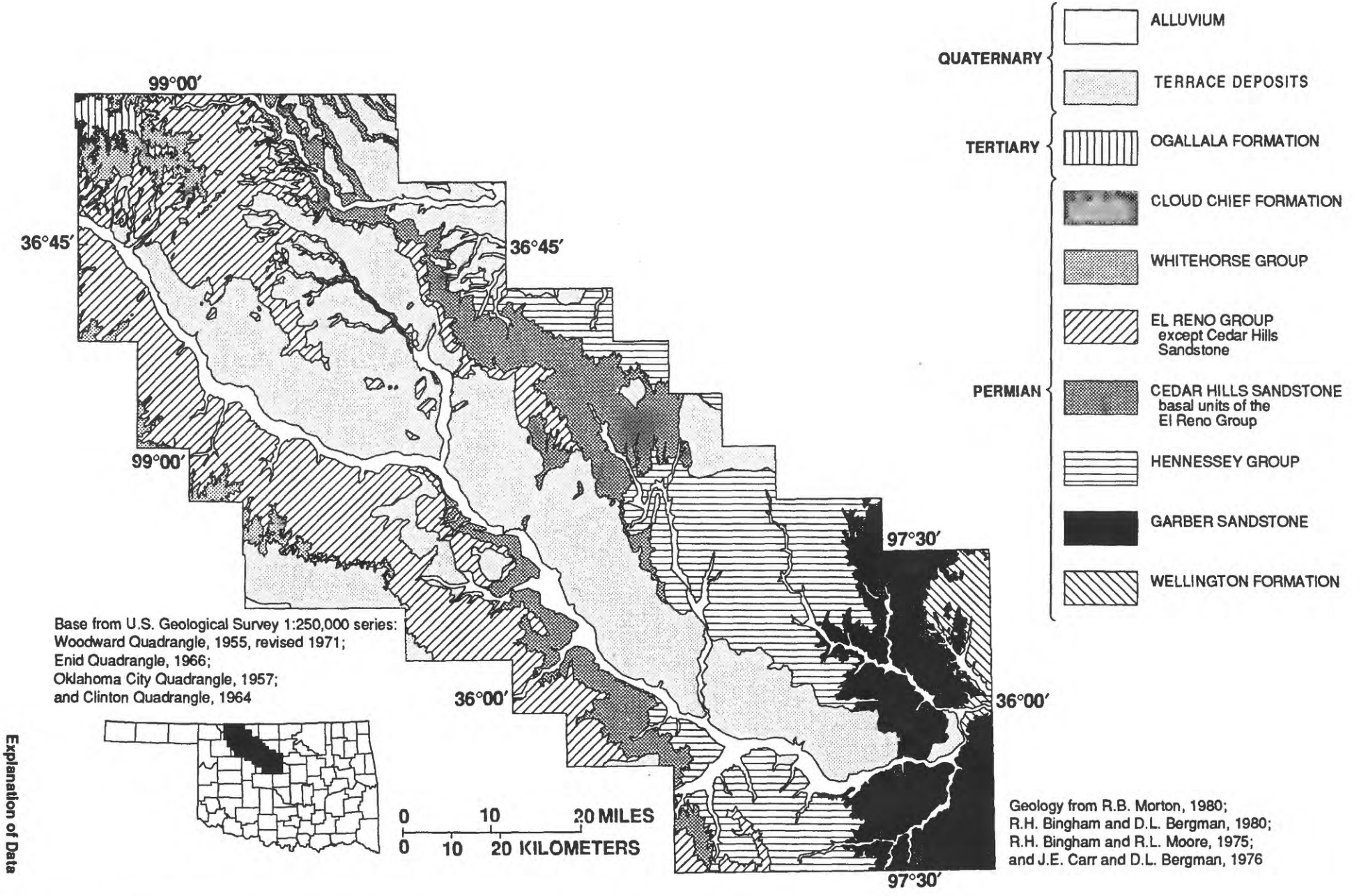


Figure 2. Geologic setting of the alluvium and terrace deposits along the Cimarron River from Freedom to Guthrie, Oklahoma.

located near Waynoka, in Woods County, Ames, in Major County, and Dover, in Kingfisher County, Oklahoma, are listed in table 3. Physical properties, concentrations of common chemical constituents, and concentrations of selected trace elements of water samples are reported in table 4. Organic chemical analyses and tritium analyses of water samples collected in the summer of 1988 are listed in tables 5 and 6, respectively. Five sets of base-flow measurements and estimates for the Cimarron River and its tributaries are given in table 7. Field water-quality measurements and chemical analyses of water samples collected at the time of the base-flow measurements are given in table 8. Records of continuous precipitation-gage measurements from sites located near Waynoka in Woods County and Dover in Kingfisher County are listed in table 9. Continuous precipitation-gage data and water-level data are illustrated in figures 3 and 4.

SELECTED REFERENCES

Bingham, R.H., and Bergman, D.L., 1980, Reconnaissance of the water resources of the Enid quadrangle, north-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 7, scale 1:250,000, 4 sheets.

Bingham, R.H., and Moore, R.L., 1975, Reconnaissance of the water resources of the Oklahoma City quadrangle, central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 4, scale 1:250,000, 4 sheets.

Carr, J.E., and Bergman, D.L., 1976, Reconnaissance of the water resources of the Clinton quadrangle, west-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 5, scale 1:250,000, 4 sheets.

Morton, R.B., 1980, Reconnaissance of the water resources of the Woodward quadrangle, northwestern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 8, scale 1:250,000, 4 sheets.

Reed, E.W., Mogg, J.L., Barclay, J.E., and Peden, G.H., 1952, Ground-water resources of the terrace deposits along the northeast side of the Cimarron River in Alfalfa, Garfield, Kingfisher, and Major Counties, Oklahoma: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 9, 101 p.

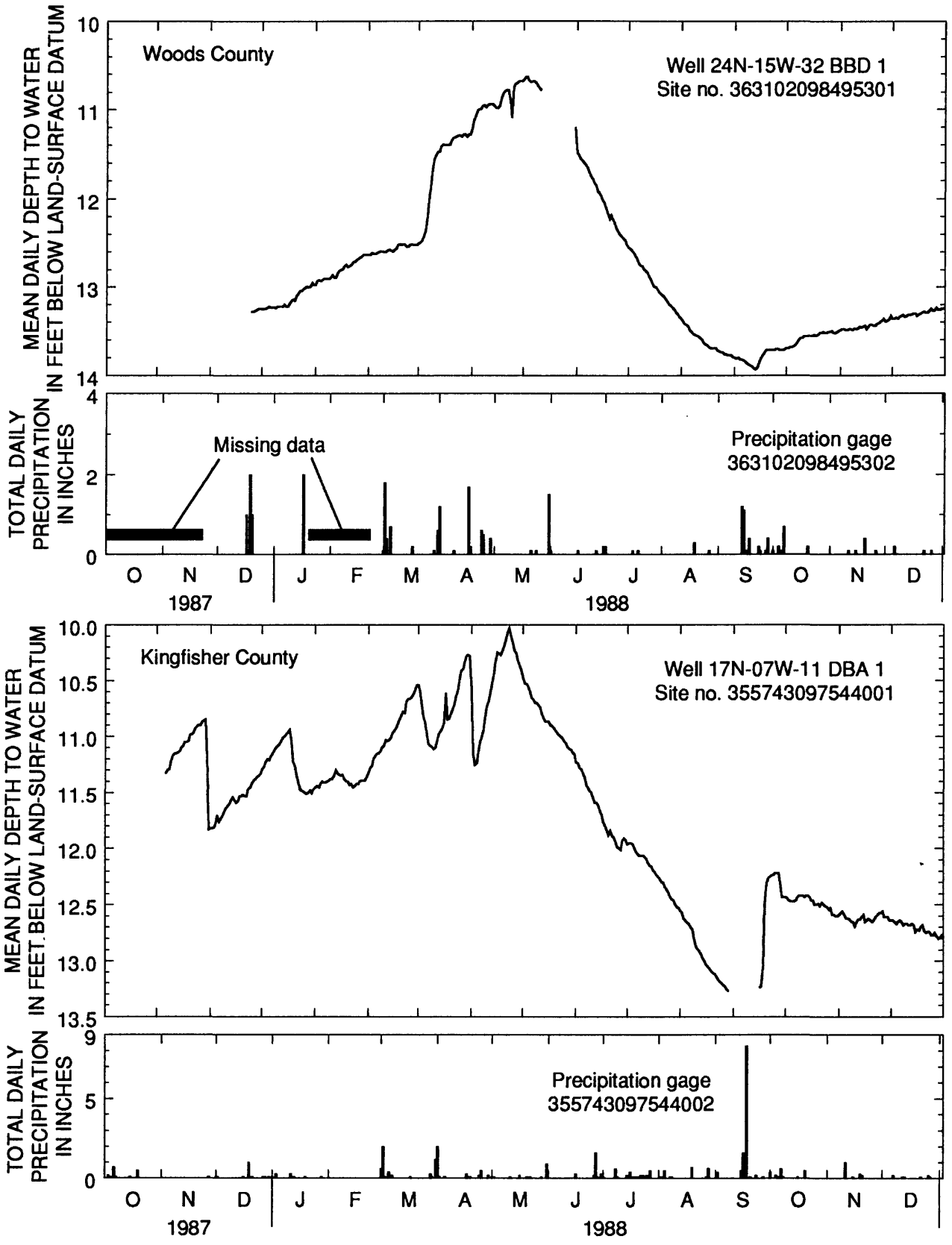


Figure 3. Water-level hydrographs of wells completed in the Cimarron River alluvium and terrace deposits and precipitation measurements at selected sites in Woods and Kingfisher Counties.

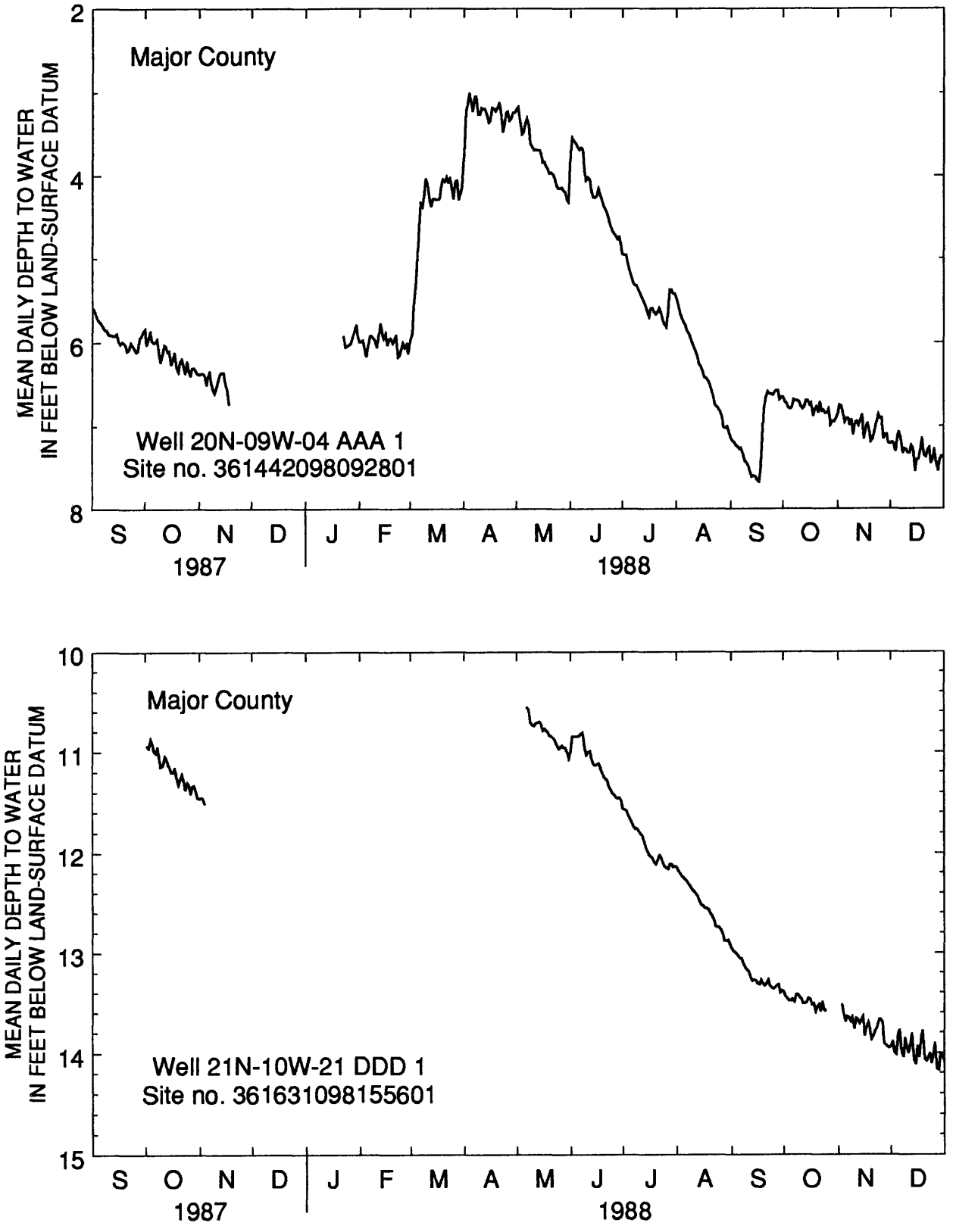


Figure 4. Water-level hydrographs of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Major County.

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units

[Water levels are in feet below land-surface datum. Water-level status: O, obstruction; R, recently pumped; P, pumping; S, nearby pumping; X, surface-water effects; –, static. Method of measurement: E, estimated; R, reported; S, steel tape; T, electric tape. Principal aquifer: 110CMTA, Cimarron terrace and alluvial aquifer; 318CDHL, Cedar Hills Sandstone; 318GRBR, Garber Sandstone; 318HNSS, Hennessey Shale. Primary use of water: C, commercial; H, domestic; I, irrigation; N, industrial; P, public supply; S, stock; U, unused. Record classification: C, field checked; M, minimal data ; U, no field check. Remarks: NW, network well: PM, periodic water-level measurement, table 2; CR, continuous water-level measurements, table 3]

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
Alfalfa County													
23N-09W-01 BBA 1	363021098071301	19720712	23.99	–	S	67	--	318CDHL	1320	S	C	--	--
23N-09W-09 CCB 1	362848098102801	19720712	42.29	–	S	67	5	318CDHL	1347	U	C	--	--
23N-10W-07 BBC 1	362923098190201	19850607	8.21	–	S	44	--	110CMTA	1425	H	C	4	--
23N-10W-11 DD 1	362846098140201	19720712	47.28	–	S	95	--	318CDHL	1405	S	C	--	--
23N-11W-06 CBB 1	362953098245401	19830325	7.4	–	S	58	5	110CMTA	1325	U	C	--	NW,PM
23N-11W-07 D 1	362851098244201	19520221	9.2	–	R	95	--	110CMTA	1340	U	U	--	--
23N-11W-08 AAA 1	362927098232601	19500600	18.2	–	R	75	--	110CMTA	1366	U	U	--	--
23N-11W-08 CBC 1	362856098242501	19850604	13.00	–	S	60	--	110CMTA	1343	H	C	--	--
23N-11W-11 DDB 1	362844098201701	19850607	8	–	R	80	--	110CMTA	1390	H	C	--	--
23N-12W-01 AAA 1	363019098253401	1950	14	–	R	29	--	110CMTA	1320	U	U	--	--
23N-12W-02 CCC 1	362934098274101	19850604	13.80	–	S	58	--	110CMTA	1280	H	C	4	--
23N-12W-08 DDC 1	362843098300301	19850613	7.84	P	S	44	--	110CMTA	1325	S	C	4	--
23N-12W-14 BBB 1	362835098273901	19501215	19.43	–	S	48	12	110CMTA	1270	S	U	--	--
24N-09W-09 CB 1	363410098102701	19720712	30.56	–	S	71	5	318CDHL	1300	S	C	--	--
24N-09W-21 C 1	363228098102301	19541015	21	–	R	46	36	318CDHL	1380	P	U	4	--
24N-09W-23 BC 1	363235098082401	19720712	69.34	–	S	96	--	318CDHL	1326	S	C	--	--
24N-09W-31 BAB 1	363111098123101	19720712	35.22	–	S	121	5	318CDHL	1355	S	C	--	--
24N-10W-06 ADA 1	363519098180801	19720711	21.43	–	S	62	--	318CDHL	1355	S	C	--	--
24N-10W-11 AA 1	363435098140101	19720711	15.63	–	S	21	18	318CDHL	1365	U	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
24N-11W-12 BB 1	363431098200501	19720710	78.55	–	S	144	5	318CDHL	1300	S	C	--	--
24N-11W-16 DCC 1	363305098225501	19720710	29.36	–	S	53	12	110CMTA	1410	S	C	--	--
24N-11W-20 DCC 1	363209098235301	19850606	45	–	R	58	--	110CMTA	1375	H	C	--	--
24N-11W-26 BBB 1	363202098211301			–		57	--	110CMTA	1440	H	C	4	--
24N-11W-29 BDA 1	363148098235401	19850606	28.0	–	S	60	--	110CMTA	1370	S	C	--	--
24N-11W-32 CDA 1	363034098240101	19661115	20	–	R	57	--	110CMTA	1370	I	C	4	--
24N-12W-05 CDD 1	363446098303301	19850604	15.20	–	S	39	--	110CMTA	1320	H	C	4	--
24N-12W-09 DAA 1	363416098285201	19850606	14.18	–	S	28	--	110CMTA	1320	P	C	--	--
24N-12W-26 ADA 1	363154098264101	19630429	20	–	R	24	1.5	110CMTA	1300	I	U	--	--
24N-12W-29 BBA 1	363207098304701	19850604	9.10	–	S	44	--	110CMTA	1370	H	C	--	--
24N-12W-33 DCC 1	363025098291101	19830325	15.05	–	S	25	--	110CMTA	1390	U	C	--	--
24N-12W-35 CDA 1	363033098271401	19850606	13.48	–	S	31	--	110CMTA	1295	D	C	4	--
24N-12W-35 CDC 1	363034098273001			–		38	--	110CMTA	1295	I	U	4	--
25N-11W-16 CCD 1	363823098233701	19750123	7.07	–	S	86	--	110CMTA	1260	U	C	--	NW,PM
25N-11W-33 BCC 1	363603098234201	19661205	20	–	R	85	--	318CDHL	1280	S	U	4	--
25N-12W-05 CCC 1	364001098311101	19850606	13.69	R	S	64	--	110CMTA	1400	H	C	4	--
25N-12W-06 ABB 1	364053098315001	19720628	10.7	–	S	44	5	110CMTA	1400	S	C	--	--
25N-12W-12 AB 1	363950098262401	19720628	42.1	–	S	62	--	318CDHL	1340	S	C	--	--
25N-12W-21 AA 1	363805098292101	19720628	27.72	–	S	51	--	110CMTA	1400	S	C	--	--
25N-12W-21 BBB 1	363812098301401	19850604	11.45	P	S	29	--	110CMTA	1385	H	C	--	--
25N-12W-33 CD 1	363544098295101	19720628	20.7	–	S	28	4	110CMTA	1350	S	C	--	--
26N-12W-22 BAB 1	364321098285501	19720628	28.8	–	S	90	--	318CDHL	1360	S	C	--	--
26N-12W-29 CCD 1	364145098310701	19850607	11.99	–	S	26	--	110CMTA	1420	H	C	4	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
Garfield County													
20N-08W-06 BBB 1	361440098060101	19500600	23.6	–	R	48	--	110CMTA	1261	U	U	--	--
20N-08W-07 DAB 1	361325098052001	19850604	20	–	R	100	--	110CMTA	1260	H	C	4	--
20N-08W-10 CC 1	361314098025001	19720907	19.57	–	S	34	6	318CDHL	1265	U	C	--	--
20N-08W-17 CCC 1	361210098045701	19500600	29.8	–	R	87	--	110CMTA	1257	U	U	--	--
20N-08W-19 DDD 1	361118098050501	19500600	29.3	–	R	87	--	110CMTA	1242	U	U	--	--
20N-08W-23 CC 1	361128098014401	19501213	12	–	R	104	6	110CMTA	1270	H	U	4	--
20N-08W-26 CCC 1	361026098014501	19500600	25.4	–	R	43	--	110CMTA	1259	U	U	--	--
20N-08W-27 BBB 1	361112098024901	19500600	16.8	–	R	64	--	110CMTA	1256	U	U	--	--
20N-08W-29 CBA 1	361049098050001	19850604	11.66	–	S	101	--	110CMTA	1230	H	C	--	--
20N-08W-30 BAA 1	361110098053701	--	--	--	--	--	--	110CMTA	1240	H	U	4	--
21N-07W-04 CCC 1	361907097573601	19770311	19.08	–	S	165	--	318CDHL	1240	N	C	--	PM
21N-08W-06 DCC 1	361907098053801	19500306	5.13	–	S	11	36	110CMTA	1208	S	C	--	PM
21N-08W-18 DCD 1	361725098052001	19500303	2.64	–	S	13	36	110CMTA	1216	U	C	--	NW,PM
21N-08W-19 BA 1	361713098055001	19500327	13.32	–	S	22	24	110CMTA	1234	S	C	--	PM
21N-08W-19 BBB 1	361707098055801	19500208	15.80	–	S	110	12	318CDHL	1240	U	U	--	PM
21N-08W-19 CB 1	361655098061301	19500208	10.34	–	S	122	8	110CMTA	1238	U	U	--	PM
21N-08W-19 CBB 1	361651098061001	19540310	7.30	–	R	56	12	110CMTA	1242	P	C	4	NW,PM
21N-08W-19 CBC 1	361645098061201	19870000	17	–	R	--	--	110CMTA	1250	H	U	--	--
21N-08W-19 CCC 1	361633098060901	19500330	10.78	–	S	180	12	318CDHL	1243	U	C	4	PM
21N-08W-19 DDB 1	361640098051601	19500327	4.55	–	S	16	40	110CMTA	1220	S	C	--	PM
21N-08W-30 CCC 1	361545098061001	--	--	--	--	105	12	110CMTA	1270	P	U	4	--
21N-08W-31 ADC 1	361514098052501	19500406	14.60	–	S	28	6	110CMTA	1246	U	U	--	PM
21N-08W-31 CCD 1	361450098060001	19500329	23.53	–	S	36	6	110CMTA	1260	H	C	--	PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
Kingfisher County													
17N-05W-01 BAA 1	355855097411001	19701127	23	–	R	59	6	110CMTA	1150	U	C	--	--
17N-05W-04 BBB 1	355902097443901	19740123	26.16	–	S	--	--	110CMTA	1130	U	U	--	PM
17N-05W-06 BBA 1	355902097462601	19740123	33.40	–	S	--	--	110CMTA	1125	U	U	--	PM
17N-05W-07 AAA 1	355812097460001	19850522	35.44	–	S	83	--	110CMTA	1100	H	C	4	--
17N-05W-07 CDD 1	355725097462401	--	--	--	--	105	--	110CMTA	1040	H	C	4	--
17N-05W-10 ABA 1	355800097431001	19701127	24	–	R	33	36	110CMTA	1080	U	C	--	--
17N-05W-10 DCC 1	355724097430301	19740123	20.72	–	S	45	--	110CMTA	1050	U	C	4	NW,PM
17N-05W-13 DDD 1	355632097403101	19740123	34.51	–	S	95	--	110CMTA	1090	U	C	--	PM
17N-05W-14 CBC 1	355645097423101	19740123	30.87	–	S	--	--	110CMTA	1070	U	U	--	PM
17N-05W-18 CCC 1	355632097464801	19740123	27.30	–	S	30	--	110CMTA	1040	U	U	--	PM
17N-05W-20 AAB 1	355627097450301	19740123	29.02	–	S	33	--	110CMTA	1060	H	C	--	PM
17N-05W-22 ABA 1	355628097425501	19870204	20.28	–	S	59	6.75	110CMTA	1065	H	C	--	--
17N-05W-26 CDC 1	355449097421901	19850529	24.65	–	S	56	--	110CMTA	1050	H	C	--	--
17N-05W-27 DDD 1	355447097423901	19740123	7.49	–	R	25	4.5	110CMTA	1030	U	C	--	PM
17N-05W-36 A 1	355436097404501	--	--	--	--	90	--	110CMTA	1060		U	4	--
17N-06W-02 AAA 1	355902097480001	19740123	25.10	–	S	85	--	110CMTA	1120	U	C	--	PM
17N-06W-05 DDD 1	355816097511701	19850522	11.75	–	S	41	--	110CMTA	1080	H	C	4	--
17N-06W-11 BBB 1	355812097485801	19850522	38.76	–	S	72	--	110CMTA	1105	H	C	--	--
17N-06W-11 DDD 1	355724097480001	19740123	36.78	–	S	60	--	110CMTA	1060	U	C	4,5,6	NW,PM
17N-06W-12 AAA 1	355810097465601	19740123	42.30	–	S	80	--	110CMTA	1090	U	C	--	NW,PM
17N-06W-18 BCC 1	355658097531201	19740125	1.86	–	R	30	--	110CMTA	1015	U	C	--	NW,PM
17N-07W-02 BCD 1	355850097543001	19710610	18	–	R	39	--	110CMTA	1020	P	U	--	--
17N-07W-02 DBD 1	355829097544001	19740125	5.54	–	R	37	--	110CMTA	1030	U	C	--	PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
17N-07W-11 BAB 1	355814097551201	19850523	14.46	–	S	40	--	110CMTA	1025	H	C	--	--
17N-07W-11 DAA 1	355743097542801	--	--	--	--	--	--	110CMTA	1020	H	C	6	--
17N-07W-11 DBA 1	355743097544001	19730606	14.90	–	S	40	4.5	110CMTA	1025	U	C	3	CR,PM
17N-07W-11 DCD 2	355724097544001	19740124	9.50	–	S	33	4.5	110CMTA	1020	U	C	--	NW,PM
17N-07W-12 DAA 1	355743097532001	19750121	5.52	–	S	30	--	110CMTA	1020	U	C	--	NW,PM
18N-05W-29 CCB 1	360037097454501	19850529	11.18	–	S	96	--	110CMTA	1170	S	C	--	--
18N-06W-03 CBD 1	360342097495201	19740124	13.71	–	S	45	--	110CMTA	1170	U	C	--	PM
18N-06W-06 BBB 1	360415097531201	19740124	21.65	–	S	--	--	110CMTA	1120	U	U	--	PM
18N-06W-07 AAC 1	360316097522401	19740124	8.17	–	S	34	--	110CMTA	1145	U	C	4,6	NW,PM
18N-06W-08 CCB 1	360242097513501	19850529	10.9	–	S	140	--	110CMTA	1135	H	C	4	--
18N-06W-10 DDD 1	360237097490401	19740124	13.63	–	S	65	--	110CMTA	1170	U	C	--	PM
18N-06W-11 ADD 1	360302097480701	19850529	4.3	–	S	51	--	110CMTA	1165	H	C	--	--
18N-06W-15 CAD 1	360158097493601	19740124	7.90	–	S	--	--	110CMTA	1170	U	U	--	PM
18N-06W-16 CCD 1	360145097505601	19740124	30.85	–	S	65	--	110CMTA	1160	U	C	--	PM
18N-06W-17 AAB 1	360230097512001	19740124	42.05	–	S	58	--	110CMTA	1175	U	C	--	NW,PM
18N-06W-17 BBB 2	360204097521401	19740124	21.46	–	S	--	--	110CMTA	1130	U	U	--	PM
18N-06W-20 CCA 1	360059097520001	19740124	19	–	R	68	--	110CMTA	1110	U	C	--	PM
18N-06W-22 CDD 1	360052097493601	19740124	42.17	–	S	--	--	110CMTA	1170	U	U	--	--
18N-06W-26 ADB 1	360311097453701	19850529	3.50	–	S	85	--	110CMTA	1175	H	C	--	--
18N-06W-29 CBC 1	362000097521101	19850529	10.3	–	S	49	--	110CMTA	1100	U	C	--	--
18N-06W-31 BAA 1	355954097524801	19740124	19.74	–	S	56	--	110CMTA	1100	U	C	--	NW,PM
18N-06W-31 DDD 2	355908097521601	19740124	6.64	–	S	36	--	110CMTA	1085	U	C	--	NW,PM
18N-06W-32 BAA 1	355954097514401	19740124	18.07	–	S	70	--	110CMTA	1100	U	C	--	NW,PM
18N-06W-34 CCC 1	355915097495001	19701118	14	–	R	76	--	110CMTA	1100	H	U	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
18N-06W-35 BBB 1	355954097485601	19740124	22.21	–	S	64	--	110CMTA	1145	U	C	--	PM
18N-06W-35 CDC 1	355915097483001	19701101	17	–	R	31	--	110CMTA	1090	U	U	--	--
18N-07W-01 AB 1	360456097534501	--	--	--	--	48	--	110CMTA	1120	H	U	4	--
18N-07W-01 DD 1	360405097534001	--	--	--	--	68	6	110CMTA	1130	H	U	4	--
18N-07W-04 DA 1	360345097570801	19500731	13.25	–	R	26	36	110CMTA	1097	U	U	--	PM
18N-07W-08 CCC 1	360243097584101	19850530	8	–	R	53	--	110CMTA	1120	H	C	4	--
18N-07W-08 D 2	360415097574501	--	--	--	--	24	2	110CMTA	1130	H	U	--	--
18N-07W-10 CC 1	360241097563001	19500714	21.56	–	R	28	60	110CMTA	1060	S	U	--	--
18N-07W-10 DA 1	360615097553501	19500717	21.22	–	S	30	6	318CDHL	1097	U	C	--	PM
18N-07W-10 DA 2	360616097553601	19500717	26.08	–	S	68	6	318CDHL	1101	S	C	--	--
18N-07W-13 AC 1	360201097534601	19490520	25	–	R	58	12	110CMTA	1117	P	U	4	--
18N-07W-13 BA 1	360300097541001	--	--	--	--	45	--	110CMTA	1110	H	U	--	--
18N-07W-13 BBA 1	360235097541801	19850529	6.25	–	S	35	--	110CMTA	1100	H	C	--	--
18N-07W-13 DB 1	360210097535002	19490526	29	–	R	59	12	110CMTA	1117	P	U	--	--
18N-07W-13 DB 2	360202097534701	19490425	26	–	R	62	12	110CMTA	1114	P	U	--	--
18N-07W-14 AB 1	360232097544801	19500717	23.34	–	R	42	8	110CMTA	1095	H	U	--	--
18N-07W-15 A 1	360227097554301	--	--	--	--	60	8	110CMTA	1080	H	U	4	--
18N-07W-15 AA 1	360232097554001	19500801	31.71	–	R	53	6	110CMTA	1097	H	U	--	--
18N-07W-15 BB 1	360234097562501	19500714	18.61	–	R	29	42	110CMTA	1060	S	U	--	--
18N-07W-17 DDD 1	360145097573601	1950	16.5	–	R	50	--	110CMTA	1101	U	U	--	--
18N-07W-21 DCD 1	360052097564801	19500731	30.74	–	S	63	5	110CMTA	1081	U	C	--	PM
18N-07W-23 BA 1	360200097550501	19500717	29.6	–	S	72	5	110CMTA	1100	S	U	--	--
18N-07W-24 AB 1	360140097534501	19450810	17.5	–	R	45	--	110CMTA	1120	H	U	4	--
18N-07W-24 CD 1	360120097543501	--	--	--	--	50	4	110CMTA	1120	H	U	4	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
18N-07W-26 AA 1	360055097543001	--	--	--	--	35	--	110CMTA	1100	H	U	--	--
18N-07W-26 CCA 1	360011097552201	19850530	11.80	–	S	48	--	110CMTA	1080	H	C	--	--
18N-07W-28 C 1	360020097572001	--	--	--	--	31	1.25	110CMTA	1070	U	U	4	--
18N-07W-29 AAA 1	360045097574501	--	--	--	--	42	6	110CMTA	1090	S	U	4	--
18N-07W-29 ADA 1	360040097574001	19850530	19.32	–	S	47	--	110CMTA	1090	H	C	--	--
18N-07W-35 BAA 1	360000097545901	--	--	--	--	30	--	110CMTA	1085	U	M	4	--
18N-08W-01 DDD 1	360329097594501	1950	27.6	–	R	55	--	110CMTA	1147	U	U	--	--
18N-08W-02 DDA 1	360345098005201	19850527	20.15	P	S	58	--	110CMTA	1145	H	C	--	--
18N-08W-03 ABA 1	360418098021601	19850530	17.9	–	S	53	--	110CMTA	1160	H	C	4	--
18N-08W-10 BAB 1	360322098023301	19740207	15.40	–	S	42	--	110CMTA	1120	U	C	--	PM
18N-08W-11 CCC 1	360237098014502	1950	18.5	–	R	32	--	110CMTA	1079	U	U	--	--
18N-08W-11 D 1	360240098005801	19501004	18	–	R	25	1.25	110CMTA	1100	H	U	4	--
18N-08W-13 BB 1	360235098004101	--	--	--	--	12	1.25	110CMTA	1100	U	U	--	--
18N-08W-13 BB 2	360929098004501	19500803	.89	–	S	9	1.25	110CMTA	1090	U	C	--	PM
18N-08W-13 BBA 2	360234098004002	19520221	4.28	–	S	20	1.25	110CMTA	1110	U	C	--	--
18N-08W-13 BBB 1	360230098004101	19750122	8.20	–	S	--	--	110CMTA	1093	U	C	--	NW,PM
18N-08W-13 BBB 2	360232098005101	19520221	6.19	–	S	16	1.25	110CMTA	1100	U	C	--	PM
18N-08W-26 DDA 1	360525098005501	19850523	6.50	R	S	75	--	110CMTA	1045	H	C	--	--
19N-07W-08 ADA 1	360830097574201	19740207	18.64	–	S	--	--	110CMTA	1145	U	U	--	PM
19N-07W-09 AD 1	360842097564001	19490506	6	–	R	33	16	110CMTA	1100	I	U	--	--
19N-07W-17 ABC 1	360743097581201	19850523	35.50	–	S	103	--	110CMTA	1190	H	C	4	--
19N-07W-18 BC 1	360824097583601	19500803	18.73	–	S	24	6	110CMTA	1205	U	C	--	--
19N-07W-22 AAB 1	360651097553601	19740130	14.10	–	S	47	--	110CMTA	1085	U	C	--	PM
19N-07W-22 BAA 2	360651097560001	19740207	9.73	–	S	42	--	110CMTA	1095	U	C	--	PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
19N-07W-24 CCA 1	360545097541501	19450810	42	–	R	46	48	318HNSS	1150	P	U	--	--
19N-07W-25 B 1	360555097540701	--	--	--	--	58	--	110CMTA	1160	U	U	4	--
19N-07W-25 BA 1	360602097540001	19450709	41	–	R	50	120	318HNSS	1146	P	C	4	--
19N-07W-29 BBA 1	360601097583301	19850523	13.47	–	S	31	--	110CMTA	1170	H	C	--	--
19N-07W-29 DDD 1	360513097573601	1950	16.8	–	R	80	--	110CMTA	1150	U	U	--	--
19N-07W-30 D 1	360523097585201	--	--	--	--	81	2	110CMTA	1150	S	C	4	--
19N-07W-30 DCD 1	361045097590501	19500803	42.19	–	S	92	16	110CMTA	1183	I	C	--	PM
19N-07W-31 BBB 1	360507097593702	1950	17.7	–	R	84	--	110CMTA	1160	U	U	--	--
19N-07W-31 CC 1	360424097594101	19500714	30.47	–	S	68	7	110CMTA	1200	H	U	--	--
19N-07W-36 CD 1	360431097535901	19450709	30	–	R	47	--	110CMTA	1200	S	C	4	--
19N-08W-03 AAA 1	360922098021401	19500710	21.26	–	S	48	5	110CMTA	1228	U	C	--	NW,PM
19N-08W-03 DCD 1	360845098021001	19771021	10	–	R	102	16	110CMTA	1205	I	C	4	--
19N-08W-05 B 1	360903098050301	19501004	22	–	R	82	1.25	110CMTA	1220	H	C	4	--
19N-08W-06 AB 1	360923098054101	19670000	8	–	R	80	12	110CMTA	1220	I	U	--	--
19N-08W-06 CCC 1	360842098060101	1950	19.6	–	R	73	--	110CMTA	1198	U	U	--	--
19N-08W-08 DDA 1	360758098041001	--	--	--	--	109	--	110CMTA	1195	H	C	4	--
19N-08W-10 DAB 1	360812098020501	19850531	15.87	–	S	90	--	110CMTA	1205	S	C	--	--
19N-08W-10 DD 1	360655098020001	--	--	--	--	94	1.25	110CMTA	1210	T	C	--	--
19N-08W-12 AAA 1	360835097594501	1950	13.3	–	R	22	--	110CMTA	1226	U	U	--	--
19N-08W-13 AAB 1	360955098020001	19500710	21.26	–	S	48	5	110CMTA	1220	U	C	--	--
19N-08W-14 A 1	360736098010701	19690901	13	–	R	86	16	110CMTA	1195	I	U	--	--
19N-08W-14 CBC 1	360710098081201	19500714	22.26	–	S	65	1.25	110CMTA	1193	U	U	--	PM
19N-08W-14 CCC 1	360657098014501	19500728	33.3	–	R	115	--	110CMTA	1204	U	U	--	--
19N-08W-16 D 1	360709098032201	1952	24.00	–	R	75	15	110CMTA	1190	I	U	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
19N-08W-17 DCD 1	360657098041701	19740207	11.87	–	S	74	--	110CMTA	1195	U	C	4,6	NW,PM
19N-08W-20 BBB 1	360655098050501	--	--	--	--	48	1.25	110CMTA	1184	H	C	4	--
19N-08W-20 CA 1	360620098045401	19700501	12	–	R	64	12	110CMTA	1180	I	U	--	--
19N-08W-24 AAA 1	360651097594501	1950	10.9	–	R	95	--	110CMTA	1188	U	U	--	--
19N-08W-27 DAC 1	360526098020101	19500714	17.54	–	S	67	16	110CMTA	1170	I	C	--	NW,PM
19N-08W-29 DAA 1	360530098041001	19850523	13.0	–	S	59	--	110CMTA	1170	H	C	--	--
19N-08W-33 B 1	360458098035201	19710901	10	–	R	46	12	110CMTA	1170	I	U	--	--
19N-09W-10 AAA 1	360835098081701	1950	16.0	–	R	35	--	110CMTA	1156	U	U	--	--
19N-09W-10 AB 1	361032098084001	19500705	16.69	–	S	31	15	110CMTA	1150	U	C	--	PM
19N-09W-10 CDD 1	360750098084901	19740207	5.80	–	S	32	--	110CMTA	1130	U	C	--	PM
19N-09W-11 CBC 1	360805098081501	19850603	9.35	–	S	35	--	110CMTA	1150	H	C	--	--
19N-09W-11 D 1	360750098072001	19501004	10	–	R	27	1.25	110CMTA	1170	H	C	--	--
19N-09W-12 BBB 1	360838098083301	--	--	--	--	54	--	110CMTA	1195	H	U	--	--
19N-09W-24 AAD 1	360649098062501	19500706	10.57	–	S	16	1.25	110CMTA	1163	U	C	--	PM
19N-09W-25 BBA 1	360602098065801	19850530	12.45	–	S	39	--	110CMTA	1150	H	C	--	--
19N-09W-34 CBB 1	360441098091901	19721101	42	–	R	70	5	318CDHL	1100	S	U	--	--
Logan County													
16N-04W-04 ABB 1	355353097373901	19870203	40.64	–	S	73	6.75	318GRBR	1050	H	C	4	--
16N-04W-04 ABB 2	355352097374401					175	--	318GRBR	1050	S	U	--	--
16N-04W-05 CCA 1	355315097390701	19830317	28.90	–	S	75	--	110CMTA	1010	I	C	--	PM
16N-04W-18 ABA 1	355211097394201	19850522	6.03	–	S	28	--	110CMTA	960	H	C	4	--
17N-02W-07 CBB 1	355748097273001	19710210	50	–	R	90	--	318GRBR	1020	H	C	4	--
17N-02W-17 AAA 1	355722097253401	19850603	7.38	–	S	22	--	110CMTA	990	U	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
17N-02W-28 BBB 1	355535097252801	19850610	3	–	R	20	--	110CMTA	940	H	U	--	--
17N-03W-01 DCD 1	355818097280301	19870130	45.92	–	S	170	6.75	318GRBR	1010	H	C	4	--
17N-03W-11 DDD 1	355726097284601	19850610	17.18	–	S	37	--	318GRBR	1040	H	C	--	--
17N-03W-13 DDA 1	355643097274201	19870130	10.87	–	S	124	5.75	318GRBR	1120	H	C	--	--
17N-03W-14 CCC 1	355634097294501	19870202	49.06	–	S	60	5.75	318GRBR	1130	U	C	--	--
17N-03W-19 ABB 1	355627097332801	19870203	6.06	–	S	120	5	110CMTA	1140	H	C	--	--
17N-03W-23 DDD 1	355543097284701	19850603	19.10	–	S	112	--	318GRBR	1075	H	U	4	--
17N-03W-29 BBC 1	355528097330201	19850521	11.72	–	S	45	--	110CMTA	1090	H	C	4	--
17N-04W-01 AAA 1	355907097341101	19870202	4.19	–	S	81	6	318GRBR	1040	U	C	--	--
17N-04W-06 AAA 1	355902097392601	19870204	11.93	–	S	48	6.75	110CMTA	1143	H	C	4	--
17N-04W-15 CDC 1	355632097365501	19740123	20.50	–	S	--	--	110CMTA	1140	U	C	--	NW,PM
17N-04W-16 DAA 1	355655097372001	19870202	2.74	–	S	34	6.75	110CMTA	1135	H	C	--	--
17N-04W-17 DAD 1	355652097382501	19850522	17.34	–	S	105	--	110CMTA	1120	H	C	4	--
17N-04W-18 CDD 1	355632097395901	19800123	26.54	–	S	--	--	110CMTA	1090	U	C	--	PM
17N-04W-19 ADD 1	355606097392701	19740123	28.34	–	S	--	--	110CMTA	1085	U	C	--	NW,PM
17N-04W-19 BBC 1	355622097402301	19870204	14.39	–	S	35	5.5	110CMTA	1080	U	C	4	--
17N-04W-20 BBD 1	355617097390601	19670428	35	–	R	92	--	110CMTA	1090	U	U	4	--
17N-04W-21 CCC 1	355542097381801	19620718	10	–	R	80	12	110CMTA	1050	P	U	4	--
17N-04W-23 DCD 1	355543097353001	--	--	--	--	203	--	110CMTA	1080	H	U	4	--
17N-04W-26 ADA 1	355525097351501	19850521	18.45	–	S	84	--	110CMTA	1040	H	U	--	--
17N-04W-27 CBB 1	355507097371101	19740123	9.92	–	S	--	--	110CMTA	1035	U	C	--	PM
17N-04W-27 CDC 1	355447097365501	19750120	6.83	–	S	--	--	110CMTA	1030	U	C	--	NW,PM
17N-04W-28 C 1	355457097380301	--	--	--	--	12	--	110CMTA	1050	U	M	4	--
17N-04W-28 CCC 1	355448097381301	--	--	--	--	9	--	110CMTA	1045	H	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
17N-04W-28 CCD 1	355445097380201	--	--	--	--	65	6	110CMTA	1050	H	U	4	--
17N-04W-28 CDC 1	355445097375401	--	--	--	--	44	12	110CMTA	1030	S	U	4	--
17N-04W-31 CCC 1	355355097402301	19740123	23.62	–	S	52	4	110CMTA	1040	U	C	5	NW,PM
17N-04W-31 CDD 1	355357097400201	--	--	--	--	57	--	110CMTA	1040	H	U	4	--
17N-04W-34 ABB 1	355441097363901	19740123	32.65	–	S	--	--	110CMTA	1045	U	C	--	NW,PM
17N-04W-35 BBB 1	355446097361201	19860609	45.58	P	S	117	7	110CMTA	1040	H	C	4	--
17N-04W-35 DCB 1	355402097353401	19870203	32.54	–	S	123	5	318GRBR	1000	H	C	--	--
17N-04W-35 DCC 1	355358097353801	--	--	--	--	102	--	110CMTA	1030	H	U	4	--
18N-03W-33 DDA 1	355915097305401	19870202	19.05	–	S	67	6.25	318GRBR	1040	U	C	4	--
18N-04W-34 CCC 1	355909097371501	19870202	21.39	–	S	40	8	318GRBR	1090	U	C	--	--
Major County													
20N-09W-02 BBB 1	361440098080901	19491112	36.0	–	R	140	--	318CDHL	1247	U	U	--	--
20N-09W-02 DDD 1	361355098071301	1950	27.8	–	R	49	--	110CMTA	1253	U	U	--	--
20N-09W-03 CC 1	361405098085701	19500607	18	–	R	32	1.25	110CMTA	1225	H	C	4	--
20N-09W-04 AAA 1	361442098092801	19650423	18.61	–	S	60	6	110CMTA	1225	U	C	3	CR,NW,PM
20N-09W-04 AAA 2	361440098092101	19500130	23.94	–	S	60	24	110CMTA	1226	U	C	--	PM
20N-09W-05 AAA 1	361440098102501	1950	24.0	–	R	55	--	110CMTA	1227	U	U	--	--
20N-09W-05 CCC 1	361355098112101	19491117	7.74	–	S	53	--	110CMTA	1174	U	C	--	NW,PM
20N-09W-06 BA 1	361440098121201	19500505	7.92	–	S	67	10	110CMTA	1181	I	C	4	NW
20N-09W-06 DB 1	361411098114901	19501026	5.60	–	S	65	6	110CMTA	1172	P	U	--	PM
20N-09W-06 DB 2	361437098114901	19501026	4.67	–	S	60	--	110CMTA	1171	U	C	--	NW
20N-09W-06 DCB 1	361408098115701	19500912	6.32	–	R	67	12	110CMTA	1169	P	M	--	--
20N-09W-07 BAA 1	361348098120101	19740131	9.20	–	S	--	--	110CMTA	1170	U	U	--	PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
20N-09W-09 BAA 1	361348098100201	19850604	11.1	–	S	60	6	110CMTA	1215	H	C	4	--
20N-09W-10 AAA 1	361348098081701	1950	34.0	–	R	55	--	110CMTA	1235	U	U	--	--
20N-09W-11 BBA 1	361350098080801	19850604	17.30	–	S	49	--	110CMTA	1240	H	C	--	--
20N-09W-13 AD 1	361242098062001	19500424	22.68	–	S	34	6	110CMTA	1249	U	C	--	PM
20N-09W-14 BB 1	361255098081301	19500427	13.60	–	S	19.2	32	110CMTA	1230	U	C	--	PM
20N-09W-16 CBB 1	361235098102801	19850603	3.75	–	S	42	--	110CMTA	1205	U	C	--	--
20N-09W-17 CC 1	361214098111701	19500227	25.28	–	S	30	3	110CMTA	1186	U	C	--	PM
20N-09W-19 AA 1	361201098113301	1950	34.0	–	R	46	--	110CMTA	1269	U	U	--	--
20N-09W-23 AAA 1	361204098071301	1950	16.0	–	R	54	--	110CMTA	1226	U	U	--	--
20N-09W-25 DC 1	361036098063301	--	--	--	--	86	4	110CMTA	1220	H	C	4	--
20N-09W-26 BA 1	361108098074901	19500502	24.44	–	S	51	1.25	110CMTA	1214	U	C	--	PM
20N-09W-26 CDC 1	361030098080201	19850603	8.9	–	S	60	--	110CMTA	1205	H	C	--	--
20N-09W-28 AAA 1	361112098092101	1950	22.0	–	R	54	--	110CMTA	1204	U	U	--	--
20N-09W-28 BC 1	361102098101701	19500607	22	–	R	45	1.25	110CMTA	1190	H	C	4	--
20N-09W-31 DAA 1	360953098112901	1950	11.0	–	R	40	--	110CMTA	1125	U	U	--	--
20N-09W-36 AAA 1	361019098060901	1950	21.0	–	R	58	--	110CMTA	1208	U	U	--	--
20N-10W-01 BBB 1	361440098133001	19740326	10.58	–	S	--	--	110CMTA	1191	U	C	--	PM
20N-10W-03 DA 1	361418098125801	--	--	--	--	21	1.25	110CMTA	1155	U	C	4	--
20N-10W-03 DA 2	361415098145501	19500519	18.09	–	S	27	1.25	110CMTA	1157	U	C	--	PM
20N-10W-12 AA 1	361352098124201	--	--	--	--	60	12	110CMTA	1165	P	C	--	--
20N-10W-12 AA 2	361347098124501	19500921	8.69	–	S	52	6	110CMTA	1166	P	C	--	PM
20N-10W-12 AA 3	361347098124502	19500921	8.81	–	S	53	2	110CMTA	1170	P	C	--	PM
20N-10W-12 AAD 1	361342098123401	19750122	11.97	–	S	--	--	110CMTA	1170	U	U	--	--
20N-10W-12 CD 1	361313098131401	--	--	--	--	52	12	110CMTA	1150	P	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
20N-10W-12 CD 2	361309098121401	19500921	16.49	–	S	54	6	110CMTA	1152	P	C	--	PM
20N-10W-12 CDD 1	361302098130601	19780106	20.00	–	S	54	--	110CMTA	1155	U	C	4	NW,PM
20N-10W-12 DB 1	361326098125801	--	--	--	--	55	12	110CMTA	1160	P	C	--	--
20N-10W-13 AAA 1	361256098123401	1950	24.0	–	R	53	--	110CMTA	1176	U	U	--	--
20N-10W-13 BB 1	361300098133001	19500607	20	–	R	33	1.25	110CMTA	1135	H	C	4	--
20N-10W-14 AAD 1	361249098133801	19740131	1.03	–	S	--	--	110CMTA	1135	U	U	--	--
20N-10W-24 AAA 1	361204098123401	1950	34.0	–	R	40	--	110CMTA	1186	U	U	--	--
20N-10W-29 CBC 1	351044098175001	19720906	34.03	–	S	54	--	318CDHL	1180	S	U	--	--
21N-09W-01 ADB 1	361938098062201	19500405	11.42	–	S	15	6	110CMTA	1229	U	C	--	PM
21N-09W-04 AAA 1	361953098093001	19500600	23.7	–	R	43	--	110CMTA	1321	U	U	--	--
21N-09W-04 CC 1	361812098102501	19500508	66.94	–	S	163	6	318CDHL	1316	U	C	--	PM
21N-09W-06 CCC 1	361907098123501	19760115	25.28	–	S	40	--	110CMTA	1276	U	C	6	--
21N-09W-07 AAA 1	361901098113901	1950	60.0	–	R	66	4	110CMTA	1300	U	U	--	--
21N-09W-07 DCD 1	361818098115501	19850530	11.50	–	S	101	--	110CMTA	1255	H	C	--	--
21N-09W-10 DDD 1	361825098083801	19500228	22.64	–	S	71	4	318CDHL	1313	U	C	--	PM
21N-09W-11 DCD 1	361815098073501	19850529	24.10	–	S	42	--	110CMTA	1282	U	C	--	--
21N-09W-13 BBA 1	361811098070701	19500407	34.68	–	S	51	6	318CDHL	1274	U	C	--	PM
21N-09W-14 AAA 1	361809098072201	19500600	32.1	–	R	54	--	110CMTA	1283	U	U	--	--
21N-09W-14 CC 1	361728098081501	19500509	25.57	–	S	103	4	318CDHL	1307	U	C	--	PM
21N-09W-19 AB 1	361713098115901	19500706	8.69	–	S	13	1.25	110CMTA	1224	U	C	--	--
21N-09W-20 AAA 1	361717098103501	1950	34.0	–	R	56	--	110CMTA	1250	U	U	--	--
21N-09W-20 DDD 1	361631098103501	19500130	19.90	–	S	50	24	110CMTA	1235	U	C	4	NW,PM
21N-09W-22 BCC 1	361657098092201	19500406	31.59	–	S	178	2	318CDHL	1273	U	C	--	PM
21N-09W-22 BCC 2	361707098091001	19500525	21.90	–	S	29	2	110CMTA	1273	U	C	--	PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
21N-09W-23 BA 1	361717098075401	1950	39.7	–	R	130	--	110CMTA	1310	U	U	--	--
21N-09W-24 CDD 1	361642098070201	19500217	13.75	–	S	191	12	318HNSS	1252	U	C	--	PM
21N-09W-25 AD 1	361608098062201	19500227	15.82	–	S	126	6	318CDHL	1250	S	C	--	PM
21N-09W-25 CC 1	361542098071001	19500410	18.85	–	S	24	3	110CMTA	1270	U	C	--	PM
21N-09W-25 DD 1	361542098062201	19500410	20.07	–	S	31	36	110CMTA	1250	H	C	--	--
21N-09W-27 CC 1	361542098081801	19500705	30.58	–	S	60	6	110CMTA	1240	U	C	--	PM
21N-09W-27 CCD 1	361540098091001	19850529	32.33	–	S	66	--	110CMTA	1255	H	C	--	--
21N-09W-28 DC 1	361549098095901	--	--	--	--	59	12	110CMTA	1240	P	C	4	--
21N-09W-28 DD 1	361543098093601	19500705	25.17	–	R	63	6	110CMTA	1233	U	U	--	PM
21N-09W-28 DD 2	361544098093601	19500920	29.41	–	S	59	2	110CMTA	1236	P	C	--	PM
21N-09W-28 DDC 1	361542098093401	1950	24.5	–	R	70	--	110CMTA	1230	U	U	--	--
21N-09W-28 DDD 1	361539098093001	19560202	32.44	–	S	59	--	110CMTA	1237	U	C	--	PM
21N-09W-29 BD 1	361616098111901	19500607	18	–	R	48	1.25	110CMTA	1240	H	C	4	--
21N-09W-29 BDD 1	361609098111101	19850530	13.60	–	S	54	--	110CMTA	1235	H	C	--	--
21N-09W-30 AAA 1	361624098113901	1950	29.0	–	R	47	--	110CMTA	1235	U	U	--	--
21N-09W-30 AB 1	361624098120301	19500706	13.35	–	R	21	1.25	110CMTA	1217	U	U	--	NW,PM
21N-09W-31 AA 1	361532098113901	19500417	37.73	–	S	40	4	318CDHL	1201	U	C	--	PM
21N-09W-31 DDC 1	361453098114901	19500417	5.42	–	S	19	6	110CMTA	1186	U	C	--	PM
21N-09W-32 BAA 1	361532098110701	1950	13.0	–	R	29	--	110CMTA	1215	U	U	--	--
21N-09W-32 CD 1	361450098111101	19500517	18.52	–	R	6	--	110CMTA	1210	I	U	--	--
21N-09W-32 DCDA 1	361450098105501	1950	21.5	–	R	45	12	110CMTA	1220	U	U	--	--
21N-09W-33 AA 1	361536098094301	19500607	40	–	R	53	1.25	110CMTA	1235	S	C	4	--
21N-09W-34 BCC 1	361526098092201	19740131	30.08	–	R	--	--	110CMTA	1239	U	U	--	PM
21N-09W-36 BC 1	361516098071001	19500411	43.57	–	S	101	2	318CDHL	1286	U	C	--	PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
21N-10W-03 AA 1	361950098145601	19500523	36.73	–	S	165	8	318CDHL	1263	U	C	--	--
21N-10W-05 AB 1	361958098173001	--	--	--	--	42	2	110CMTA	1265	H	C	4	--
21N-10W-06 AAA 1	361953098180501	1950	33.0	–	R	48	--	110CMTA	1263	U	U	--	--
21N-10W-06 AAD 1	361950098180801	19850606	17.32	–	S	43	--	110CMTA	1260	H	C	4	--
21N-10W-06 B 1	361951098185801	--	--	--	--	59	--	110CMTA	1260	H	M	--	--
21N-10W-07 AAA 1	361901098180501	1950	26.0	–	R	51	--	110CMTA	1241	U	U	--	--
21N-10W-12 BB 1	361858098133501	19500418	33.73	–	S	124	5	110CMTA	1262	U	C	--	PM
21N-10W-16 CC 1	361723098164401	19510307	23.98	–	R	39	10	110CMTA	1220	I	C	4	NW,PM
21N-10W-21 DCC 1	361642098162501	19500607	8	–	R	14	1.25	110CMTA	1210	S	C	4	--
21N-10W-21 DDD 1	361631098155601	19500130	21.11	–	S	40	24	110CMTA	1214	U	U	3	CR,PM
21N-10W-23 CCC 1	361632098144201	19790322	20	–	R	44	12	110CMTA	1235	I	C	4	--
21N-10W-24 BBB 1	361719098134301	19500706	34.71	–	S	53	1.25	110CMTA	1248	U	C	--	PM
21N-10W-26 ABA 1	361628098111001	19850530	26.40	–	S	52	--	110CMTA	1230	H	C	--	--
21N-10W-26 BA 1	361629098143301	19500608	18	–	R	51	1.25	110CMTA	1230	H	C	4	--
21N-10W-36 AAA 1	361532098124301	1950	12.0	–	R	41	--	110CMTA	1211	U	U	--	--
21N-11W-02 B 2	361951098210702	--	--	--	--	60	--	110CMTA	1280	S	C	--	--
21N-11W-09 A 1	361859098224401	--	--	--	--	100	4	110CMTA	1225	S	M	4	--
21N-11W-12 BA 1	361901098194101	1950	18.0	–	R	30	--	110CMTA	1235	U	U	--	--
21N-11W-12 C 2	361833098200302	--	--	--	--	61	--	110CMTA	1220	H	M	--	--
21N-11W-14 AAA 1	361809098201301	1950	21.0	–	R	57	--	110CMTA	1212	U	U	--	--
21N-11W-21 BCB 1	361711098232801	--	--	--	--	18	--	110CMTA	1190	I	C	--	--
21N-12W-01 CBB 1	361935098264101	19670426	20	–	R	35	--	110CMTA	1220	I	C	--	--
22N-09W-08 CDC 1	362330098111501	19850530	--	O	--	--	--	110CMTA	1340	H	C	--	--
22N-09W-17 AA 1	362320098105501	19501215	25	–	R	80	8	318CDHL	1340	C	C	4	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
22N-09W-32 BDD 1	362030098111001	19850530	12	–	R	80	--	110CMTA	1295	H	C	--	--
22N-10W-07 AAA 1	362414098180501	19500600	31.7	–	R	95	--	110CMTA	1363	U	U	--	--
22N-10W-08 CCB 1	362334098180201	19850606	37.55	–	S	232	--	110CMTA	1345	H	C	4	--
22N-10W-12 CCD 1	362333098133201	19850530	28.00	–	S	114	--	318CDHL	1320	H	C	--	--
22N-10W-14 D 1	362254098140801	19501214	65	–	R	206	4	110CMTA	1275	P	C	4	--
22N-10W-16 D 1	362254098161701	--	--	--	--	43	1.25	110CMTA	1270	S	C	4	--
22N-10W-17 DD 1	362241098170701	19500703	31.77	–	S	38	6	110CMTA	1304	U	C	--	PM
22N-10W-19 AAA 1	362231098180901	19500706	38.87	–	S	80	1.25	110CMTA	1312	U	C	--	PM
22N-10W-20 A 1	362228096145601	19231115	57	–	E	58	2	110CMTA	1300	H	C	--	--
22N-10W-24 CDC 1	362147098132201	19850530	11.70	–	S	99	--	110CMTA	1312	H	C	4	--
22N-10W-29 AAA 1	362140098170301	19500706	35.92	–	S	69	1.25	110CMTA	1295	U	C	--	PM
22N-10W-29 DDD 1	362052098170301	19850605	17.76	–	S	61	--	110CMTA	1290	H	C	--	--
22N-10W-31 BAA 1	362045098183101	19740207	27.28	–	S	51	--	110CMTA	1290	U	C	4,6	NW,PM
22N-10W-35 BA 1	362042098142401	19500619	34.20	–	S	50	18	110CMTA	1263	U	C	--	--
22N-10W-36 AAA 1	362045098124301	19500600	35.1	–	R	47	--	110CMTA	1317	U	U	--	--
22N-11W-02 BBA 1	362506098210101	19830322	13.24	–	S	75	--	110CMTA	1353	U	C	--	PM
22N-11W-03 DDA 1	362427098211701	19830322	7.83	–	S	--	--	110CMTA	1350	U	C	--	NW,PM
22N-11W-05 BBD 1	362508098242501	19670317	24	–	R	70	--	110CMTA	1325	I	C	--	--
22N-11W-05 DDD 1	362421098232501	19850603	13.2	–	S	64	--	110CMTA	1312	H	C	4	--
22N-11W-06 BAA 1	362506098250201	1950	26.0	–	R	47	--	110CMTA	1304	U	U	--	--
22N-11W-08 BD 11	362406098241201	19500612	25	–	R	62	1.25	110CMTA	1310	H	C	4	--
22N-11W-09 AAA 1	362414098222201	19470000	25.0	–	R	64	--	110CMTA	1326	U	U	--	--
22N-11W-11 CCD 1	362332098210201	19850606	30	–	R	101	--	110CMTA	1343	H	C	4	--
22N-11W-14 A 1	362320098203501	--	--	--	--	80	1.25	110CMTA	1340	H	C	4	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
22N-11W-17 AB 1	362318098234601	19470000	16	–	R	52	--	110CMTA	1297	U	U	--	--
22N-11W-18 BAA 1	362322098250201	1950	28	–	R	49	--	110CMTA	1298	U	U	--	--
22N-11W-19 AB 1	362226098245001	19470000	18.5	–	R	28	--	110CMTA	1273	U	U	--	--
22N-11W-20 AB 1	362226098234601	19470000	42.5	–	R	67	--	110CMTA	1301	U	U	--	--
22N-11W-21 AAA 1	362229098222201	1950	33	–	R	68	--	110CMTA	1310	U	U	--	--
22N-11W-21 DD 1	362147098222601	19470000	31	–	R	62	--	110CMTA	1300	U	U	--	--
22N-11W-22 D 1	362202098213901	--	--	--	--	67	1.25	110CMTA	1310	H	C	4	--
22N-11W-22 DDA 1	362156098211701	19860611	22.56	–	S	69	5	110CMTA	1318	H	C	4	--
22N-11W-23 ADD 1	362210098201301	19740207	28.68	–	S	75	--	110CMTA	1325	I	C	--	NW,PM
22N-11W-25 DD 1	362103098192301	19500807	30	–	R	61	6	110CMTA	1290	H	C	4	--
22N-11W-26 AAA 1	362137098201301	1950	40	–	R	75	--	110CMTA	1313	U	U	--	--
22N-11W-26 DAA 1	362112098201701	19850605	23.33	–	S	51	--	110CMTA	1300	H	C	--	--
22N-11W-29 CCC 1	362054098242301	19850605	17.00	–	S	37	--	110CMTA	1253	H	C	--	--
22N-11W-29 CD 1	362055098240201	19501026	19.18	–	R	38	14	110CMTA	1275	P	U	--	--
22N-11W-30 AAA 1	362137098243001	19470000	18	–	R	30	--	110CMTA	1265	U	U	--	--
22N-11W-32 AB 1	362042098234601	19470000	30.5	–	R	52	--	110CMTA	1271	U	U	--	--
22N-11W-32 BA 1	362050098241201	--	--	--	--	57	12	110CMTA	1255	P	C	--	--
22N-11W-32 BAA 1	362045098235801	19500308	21.70	–	S	36	12	110CMTA	1265	U	C	--	PM
22N-11W-32 BCA 1	362036098241401	19860611	13.74	P	S	22	5	110CMTA	1250	H	C	4	--
22N-11W-33 AAA 1	362045098222201	19470000	37.5	–	R	50	--	110CMTA	1280	U	U	--	--
22N-11W -35 D 1	362017098203501	19530813	36	–	R	200	--	110CMTA	1270	U	C	--	--
22N-11W-36 CD 1	362017098200301	19530813	18	–	R	205	--	110CMTA	1265	U	C	--	--
22N-12W-01 C 1	362109098151301	19640217	7	–	R	12	--	110CMTA	1315	H	M	--	--
22N-12W-01 DDA 1	362427098253601	19850502	17	–	R	43	5	110CMTA	1300	H	C	4	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
22N-12W-02 AAA 1	362506098263901	1950	15	–	R	25	--	110CMTA	1243	U	U	--	--
22N-12W-10 AA 1	362410098274701	1950	13	–	R	36	--	110CMTA	1239	U	U	--	--
22N-12W-11 AAA 1	362416098264101	19850604	14.38	–	S	46	--	110CMTA	1262	I	C	--	--
22N-12W-12 AAA 1	362414098253401	1950	28	–	R	42	--	110CMTA	1302	U	U	--	--
22N-12W-12 D 1	362346098255701	--	--	--	--	82	2	110CMTA	1290	H	C	--	--
22N-12W-14 AAA 1	362322098263901	1950	18	–	R	29	--	110CMTA	1254	U	U	--	--
22N-12W-25 A 1	362135098255701	--	--	--	--	24	2	110CMTA	1220	I	C	--	--
22N-12W-25 ACA 1	362132098260101	--	--	--	--	23	--	110CMTA	1210	U	C	--	--
23N-10W-29 BDC 1	362630098173601	19670426	25	–	R	250	--	110CMTA	1390	I	C	--	--
23N-10W-36 BAA 1	362555098132301	19720908	55.66	–	S	115	--	318CDHL	1395	U	U	--	--
23N-11W-19 DAA 1	362716098243001	19740207	7.65	–	S	55	--	110CMTA	1321	U	C	4,5	NW,PM
23N-11W-24 ADD 1	362725098191301	19850606	25.70	–	S	64	--	110CMTA	1412	H	C	--	--
23N-11W-25 AAB 1	362650098191701	19830322	14.65	–	S	--	--	110CMTA	1410	U	C	--	NW,PM
23N-11W-29 ADB 1	362636098233801	19850603	11.78	–	S	62	--	110CMTA	1335	H	C	--	--
23N-12W-25 AAA 1	362650098253401	1950	19	–	R	39	--	110CMTA	1301	U	U	--	--
23N-12W-30 DDC 1	362605098310601	19850604	13.80	–	S	57	--	110CMTA	1310	H	C	--	--
23N-12W-35 AAA 1	362558098263901	1950	13	–	R	32	--	110CMTA	1242	U	U	--	--
23N-12W-36 AAA 1	362559098253801	19850604	18	–	R	33	--	110CMTA	1295	H	C	--	--
Woods County													
22N-13W-08 ADC 1	362357098362701	19850613	3.70	R	S	16	--	110CMTA	1275	S	C	--	--
23N-13W-02 BAB 1	363023098334701	19850604	18.80	–	S	58	--	110CMTA	1470	H	C	--	--
23N-13W-02 DD 1	362942098331501	19720524	16.53	–	S	21	5	110CMTA	1480	S	C	--	--
23N-13W-03 CCC 1	362933098350501	19830324	12.50	–	S	73	--	110CMTA	1488	U	C	--	NW,PM

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
23N-13W-05 C 1	362948098371301	19680300	24	–	R	83	12	110CMTA	1500	I	C	--	--
23N-13W-08 ACC 1	362905098364701	19850613	10.49	–	S	55	--	110CMTA	1485	S	C	4	--
23N-13W-17 CC 1	362758098372101	19670200	9	–	R	72	12	110CMTA	1450	I	U	--	--
23N-13W-17 CCB 1	362755098371301	19750123	4.82	–	S	70	--	110CMTA	1460	U	C	--	NW,PM
23N-13W-24 CDD 1	362702098323901	19720524	24.24	–	T	26	4	110CMTA	1410	S	C	--	--
23N-13W-26 AAB 1	362654098331701	19850604	13	–	R	60	--	110CMTA	1413	H	C	4	--
23N-13W-28 DDD 1	362609098351801	19850613	10.56	–	S	46	--	110CMTA	1380	S	C	--	--
23N-13W-34 CDC 1	362518098391001	19720524	34.4	–	S	57	5	110CMTA	1320	S	U	--	--
23N-14W-07 ACA 1	362915098441101	19700800	10	–	R	32	4	110CMTA	1470	I	C	--	--
23N-14W-09 DDC 1	362846098414901	19850613	17	P	R	60	--	110CMTA	1440	H	C	--	--
23N-14W-11 BAA 1	362928098400701	19850612	44.37	–	S	64	--	110CMTA	1503	H	C	--	--
23N-14W-13 BAB 1	362837098390901	19720524	28.15	–	S	58	5	110CMTA	1480	S	C	--	--
23N-14W-13 DCD 1	362754098383601	19830727	37.58	–	R	95	12	110CMTA	1470	P	C	4,6	--
23N-14W-18 ACC 1	362817098441201	19561221	28	–	R	60	6	110CMTA	1420	S	C	--	--
23N-14W-19 BAB 1	362743098443001	19561221	18	–	R	70	--	110CMTA	1370	S	C	--	--
23N-14W-19 DDD 1	362701098435201	19850613	7.28	–	S	38	--	110CMTA	1345	H	C	--	--
23N-14W-36 BD 1	362549098391001	19720524	29.73	–	S	30	4	110CMTA	1355	S	C	4	--
23N-15W-10 ACC 1	362908098472401	19850610	1.0	–	S	47	--	110CMTA	1440	S	C	--	--
24N-13W-02 CDC 1	363446098334401	19830323	1.72	–	S	55	6	110CMTA	1375	U	M	--	NW,PM
24N-13W-04 DCD 1	363446098352901	19830323	2.43	–	S	32	6	110CMTA	1370	S	M	--	PM
24N-13W-09 CDD 1	363358098355001	19720626	12.8	–	S	36	--	110CMTA	1390	S	C	--	--
24N-13W-10 CBB 1	363416098351201	19850605	14.48	–	S	91	--	110CMTA	1387	S	C	4	--
24N-13W-13 CDD 1	363306098324201	19720524	13.32	–	S	24	--	110CMTA	1370	S	C	--	--
24N-13W-19 DDA 1	363218098372601	19850605	9.82	–	S	43	--	110CMTA	1445	H	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
24N-13W-23 AAA 1	363259098330701	19850604	22.76	–	S	48	--	110CMTA	1395	H	C	--	--
24N-13W-32 DAA 1	363042098363101	19720524	26.85	–	S	44	4	110CMTA	1500	S	C	4	--
24N-13W-35 AAA 1	363119098330701	19850604	6.51	–	S	8	--	110CMTA	1423	S	C	--	--
24N-14W-10 ABD 1	363437098404801	19850606	18.94	–	S	33	--	110CMTA	1515	S	C	--	--
24N-14W-19 DDC 1	363211098434701	19561221	40.33	–	S	56	6	110CMTA	1590	S	C	--	--
24N-14W-23 AA 1	363254098394201	19720524	27.65	–	S	32	--	110CMTA	1490	S	C	--	--
24N-14W-23 CCC 1	363209098402601	19740207	32.05	–	S	60	4.5	110CMTA	1510	U	M	4,5,6	NW,PM
24N-14W-24 CCC 1	363211098392401	19850606	8.74	–	S	68	--	110CMTA	1520	H	C	--	--
24N-14W-28 BCC 1	363141098423701	19850606	21.64	–	S	37	--	110CMTA	1575	H	C	--	--
24N-14W-30 BCB 1	363150098444301	19830324	21.84	–	S	59	5	110CMTA	1580	U	M	--	NW,PM
24N-14W-34 DAA 1	363045098403401	19790612	40	–	R	75	5	110CMTA	1550	N	C	--	NW,PM
24N-15W-06 ABB 1	363538098503601	--	--	--	--	58	10	110CMTA	1560	I	C	4,6	--
24N-15W-06 BAA 1	363535098504301	19561206	45.35	–	S	82	6	110CMTA	1570	S	C	--	--
24N-15W-06 CCC 1	363445098510501	19561121	33.30	–	S	62	--	110CMTA	1550	S	C	--	--
24N-15W-07 CCB 1	363401098510701	19561220	24.36	–	S	67	--	110CMTA	1540	I	C	--	--
24N-15W-11 BBC 1	363431098465201	19850610	4.1	R	S	30	--	110CMTA	1615	S	C	--	--
24N-15W-15 BAA 1	363350098473201	19561220	30.00	–	S	40	6	110CMTA	1600	S	C	--	--
24N-15W-16 BB 1	363345098485601	19521100	14	–	R	37	--	110CMTA	1570	I	C	--	--
24N-15W-18 DAA 1	363324098501201	19850611	21.46	–	S	50	--	110CMTA	1545	H	C	4	--
24N-15W-26 BAD 1	363157098462901	19850610	8.57	–	S	43	--	110CMTA	1525	S	C	--	--
24N-15W-28 DAD 1	363133098481801	19561220	17.60	–	S	24	6	110CMTA	1485	S	M	4	--
24N-15W-28 DBB 1	363139098482501	19900611	8	P	S	53	--	110CMTA	1455	S	C	--	--
24N-15W-32 BBD 1	363102098495301	19871217	13.17	–	S	51	--	110CMTA	1395	N	C	3	CR,PM
24N-15W-33 DDD 1	363026098480301	19390529	32.57	–	S	43	6	110CMTA	1470	S	U	--	--,

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
24N-16W-01 BB 1	363534098520901	19560100	14	–	R	35	5	110CMTA	1530	I	M	--	--
24N-16W-01 DCC 1	363446098514101	19830324	26.00	–	S	80	--	110CMTA	1545	C	M	--	NW,PM
24N-16W-02 D 1	363457098522201	19520800	9	–	R	15	6	110CMTA	1510	I	C	--	--
24N-16W-03 CDD 1	363446098535001	19561121	35.86	–	S	48	5.5	110CMTA	1480	S	C	--	--
24N-16W-04 BCC 1	363513098552201	19561121	8.85	–	S	13	6	110CMTA	1425	S	C	--	--
24N-16W-10 BAA 1	363440098535301	19561121	29.30	–	S	39	8	110CMTA	1460	S	C	--	--
24N-16W-11 ACB 1	363429098524501	19850611	22.10	–	S	55	--	110CMTA	1520	H	C	4	--
24N-16W-12 BBC 1	363442098521201	19840200	20	R	R	48	--	110CMTA	1520	H	C	--	--
24N-16W-26 ABA 1	363202098523901	19850611	12.19	–	S	59	--	110CMTA	1480	R	C	--	--
25N-13W-08 CAB 1	363930098373201	19850606	8.17	R	S	65	--	110CMTA	1405	H	C	4	--
25N-13W-08 DDD 1	363915098365701	19720523	12.22	–	S	116	5	110CMTA	1390	S	C	--	--
25N-13W-10 CCC 1	363916098353601	19830325	3.89	–	S	35	--	110CMTA	1360	S	M	--	NW,PM
25N-13W-11 ADC 1	363935098334101	19860612	9.72	P	S	27	--	110CMTA	1363	H	C	4	--
25N-13W-11 CAA 1	363934098340101	19850606	9.70	R	S	28	--	110CMTA	1360	H	C	--	--
25N-13W-25 BBD 1	363716098332201	19850604	17.45	–	S	40	--	110CMTA	1340	H	C	--	--
25N-13W-26 DAD 1	363650098333901	19721003	27	–	R	35	--	110CMTA	1355	S	C	--	--
25N-13W-32 AAB 1	363628098365901	19720524	36.79	–	S	72	--	110CMTA	1400	S	C	--	--
25N-13W-32 BBB 1	363627098374601	19850605	9.26	–	S	56	--	110CMTA	1410	H	C	--	--
25N-14W-02 CCC 1	364002098405601	19850612	5.08	–	S	31	--	110CMTA	1455	U	C	--	--
25N-14W-07 DAD 1	363925098442301	19850613	8.48	P	S	26	--	110CMTA	1485	S	C	4	--
25N-14W-19 ADD 1	363752098441801	19850605	7.26	–	S	24	--	110CMTA	1525	S	C	4	--
25N-14W-24 CBB 1	363751098395501	19830322	7.49	–	S	14	--	110CMTA	1420	S	M	--	NW,PM
25N-14W-27 DAA 1	363654098410501	19850605	11.86	–	S	38	--	110CMTA	1452	H	C	--	--
25N-14W-35 CB 1	363601098405701	19720524	21.15	–	S	38	5	110CMTA	1500	S	C	4	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
25N-15W-08 CDC 1	363911098502301	19561213	9.45	–	S	16	12	110CMTA	1540	U	C	--	--
25N-15W-08 DAC 1	363927098495301	19850611	11.68	–	S	25	--	110CMTA	1545	S	C	4	--
25N-15W-18 ADB 1	363855098505701	19561121	10.46	–	S	17	36	110CMTA	1530	U	U	--	--
25N-15W-18 CCC 1	363822098514401	19561121	9	–	R	14	48	110CMTA	1520	U	M	--	--
25N-15W-20 BCC 1	363752098504101	19561119	5.18	–	S	8	38	110CMTA	1545	S	U	--	--
25N-15W-20 CCC 1	363736098504101	1954	12	–	R	34	14	110CMTA	1550	I	M	--	--
25N-15W-21 DAD 1	363740098483401	19561221	33.15	–	S	--	6	110CMTA	1650	S	U	--	--
25N-15W-29 CAB 1	363658098502601	19750123	39.77	–	S	82	--	110CMTA	1575	U	M	--	NW,PM
25N-15W-29 CCC 1	363635098504101	19850415	35	P	R	50	--	110CMTA	1580	H	C	--	--
25N-15W-29 DDA 1	363645098494501	19740207	23.42	–	S	--	--	110CMTA	1600	U	U	--	--
25N-15W-31 AA 1	363627098505901	19531200	25	–	R	51	16	110CMTA	1575	I	M	--	--
25N-15W-31 DDD 1	363547098505001	19830324	46.30	–	S	68	5	110CMTA	1580	U	M	--	NW,PM
25N-15W-32 BBB 1	363630098504001	19561206	34	–	R	54	6	110CMTA	1580	S	M	--	--
25N-15W-32 CCD 1	363545098503201	19860619	35.38	–	S	69	3	110CMTA	1580	S	C	4	--
25N-16W-02 AAA 1	364052098525801	19561119	23.66	–	S	38	24	110CMTA	1610	U	C	--	--
25N-16W-04 ABA 1	364054098552001	19561112	18.87	–	S	68	5.5	110CMTA	1750	S	C	--	--
25N-16W-05 CDD 1	364005098564001	19561109	25.40	–	S	30	5	110CMTA	1695	S	C	--	--
25N-16W-06 BCC 1	364031098581201	19561213	25.35	–	S	38	6	110CMTA	1655	U	C	--	--
25N-16W-06 D 1	364026098574101	19561109	36.48	–	S	40	5	110CMTA	1700	S	C	--	--
25N-16W-08 BAB 1	363959098564901	19561112	37.77	–	S	48	5.5	110CMTA	1630	U	C	--	--
25N-16W-13 BBB 1	363907098524701	19850612	11.14	–	S	47	--	110CMTA	1548	I	C	4	--
25N-16W-13 BCA 1	363859098523801	19561206	18.07	–	S	34	6	110CMTA	1540	S	C	--	--
25N-16W-14 ABA 1	363910098531201	19561119	14.67	–	S	33	48	110CMTA	1550	U	C	--	--
25N-16W-17 BAA 1	363909098564101	19561109	22.90	–	S	38	6	110CMTA	1620	U	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
25N-16W-20 DCC 1	363736098563501	19561109	21.53	–	S	27	5	110CMTA	1520	U	C	--	--
25N-16W-20 DDD 1	363728098560601	19561109	20.03	–	S	22	6	110CMTA	1520	U	C	--	--
25N-16W-22 BAA 1	363817098543101	19561109	10.15	–	S	16	48	110CMTA	1580	U	C	--	--
25N-16W-23 CCC 1	363732098535301	19561112	23.54	–	S	43	6	110CMTA	1550	S	C	--	--
25N-16W-25 BCC 1	363933098524701	19561207	13.33	–	S	27	12	110CMTA	1500	S	C	--	--
25N-16W-26 DAA 1	363654098525701	19850611	11.18	–	S	26	--	110CMTA	1495	H	C	--	--
25N-16W-27 ABA 1	363722098540301	19561109	11.73	–	S	15	5	110CMTA	1540	S	C	--	--
25N-16W-29 ACA 1	363708098562701	19850611	21.88	–	S	64	--	110CMTA	1485	U	C	4	--
25N-16W-29 DCB 1	363645098563601	19561109	16.25	–	S	24	5	110CMTA	1475	S	C	--	--
25N-16W-32 DBC 1	363556098563501	19561121	8.00	–	S	20	5.5	110CMTA	1430	U	C	--	--
25N-17W-01 CDD 1	364005098585501	19850612	22.90	–	S	44	--	110CMTA	1615	H	C	4	--
25N-17W-01 DCC 1	364004098584701	--	--	--	--	70	10	110CMTA	1460	I	C	4	--
26N-13W-04 CCB 1	364513098361601	19860618	55.15	–	S	152	6	110CMTA	1455	H	C	4	--
26N-13W-05 AAA 1	364601098365701	19720523	31.71	–	S	48	--	110CMTA	1420	S	C	--	--
26N-13W-07 BBB 1	364514098385001	19850410	25	–	R	81	5	110CMTA	1445	S	C	4,5	--
26N-13W-09 BAA 1	364513098361701	19850612	5.32	–	S	23	--	110CMTA	1425	S	C	4	--
26N-13W-11 BAB 1	364512098341801	19850612	18.47	–	S	35	--	110CMTA	1410	H	C	4	--
26N-13W-15 CDD 1	364337098351001	19661220	22	–	R	60	--	110CMTA	1390	I	C	4	--
26N-13W-17 BBB 1	364422098374601	19830324	14.79	–	S	76	--	110CMTA	1430	U	M	--	NW,PM
26N-13W-26 AAD 1	364227098333301	19850607	13.04	–	S	35	--	110CMTA	1390	H	C	--	--
26N-13W-32 CCC 1	364059098374801	19850610	17.05	–	S	31	--	110CMTA	1382	H	C	--	--
26N-14W-03 DDC 1	364517098411701	19850613	21.91	–	S	272	--	110CMTA	1425	S	C	--	--
26N-14W-08 BBA 1	364512098440601	19850613	21.21	–	S	62	--	110CMTA	1470	S	C	4	--
26N-14W-18 AA 1	364416098442801	19720523	77.67	–	S	142	--	110CMTA	1480	S	C	--	--

Table 1. Selected records of wells and test-holes in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date of water-level measurement (yr-mo-day)	Water level (feet)	Water-level status	Method of measurement	Depth of well (feet)	Casing diameter (inches)	Principal aquifer	Altitude of land surface (feet)	Primary use of water	Record classification	Table containing water-quality information	Remarks
26N-14W-18 CBB 1	364355098451701	19850612	64.07	–	S	222	--	110CMTA	1485	U	C	4	--
26N-14W-20 CDC 1	364242098435401	19850613	18.54	–	S	42	--	110CMTA	1430	U	C	--	--
26N-14W-23 ABA 1	364330098401901	19830322	9.24	–	S	44	--	110CMTA	1430	U	M	--	NW,PM
26N-14W-26 BBB 1	364232098405601	19720523	10.52	–	S	50	5	110CMTA	1430	S	C	--	--
26N-14W-27 AAB 1	364234098411701	19850613	7.47	S	S	115	--	110CMTA	1432	U	C	--	--
26N-14W-32 CBB 1	364118098440901	19720523	30.55	–	S	91	--	110CMTA	1460	S	C	--	--
26N-15W-25 AAC 1	364229098453501	19850612	4.6	–	S	37	--	110CMTA	1440	U	C	--	--
26N-15W-31 BBC 1	364135098514401	19561213	17	–	R	34	36	110CMTA	1550	U	C	--	--
26N-15W-31 C 1	364120098511701	19561121	12.35	–	S	18	5.5	110CMTA	1550	U	C	--	--
26N-17W-04 DDD 1	364518099013101	19561112	6.75	–	S	13	48	110CMTA	1590	S	C	--	--
26N-17W-09 DDD 1	364425099013201	19561112	22.46	–	S	31	6	110CMTA	1570	U	C	--	--
26N-17W-10 CBB 1	364445099012901	19561112	18.66	–	S	26	36	110CMTA	1575	S	C	--	--
26N-17W-15 CAA 1	364358099005801	19561119	21.00	–	S	36	7	110CMTA	1600	U	C	–	--
26N-17W-22 AAD 1	364318099002401	19561119	25.78	–	S	31	5.5	110CMTA	1580	U	U	--	--
26N-17W-28 CA 1	364258099000801	19561119	5	–	R	20	6	110CMTA	1500	H	C	--	--
26N-17W-28 CBA 1	364210099021901	19850611	4.80	R	S	27	--	110CMTA	1498	H	C	4	--
26N-17W-36 DDA 1	364107098581601	19561109	22.83	–	S	31	5	110CMTA	1615	U	C	--	--
26N-18W-02 DBB 1	364529099060901	19561101	9	–	R	25	6	110CMTA	1520	U	M	--	--
27N-14W-29 DAB 1	364724098432101	19850613	9.17	–	S	28	--	110CMTA	1475	U	C	--	--
27N-14W-34 BBA 1	364653098415101	19850613	2.8	X	S	13	--	110CMTA	1445	S	C	--	--
27N-14W-34 BBD 1	364652098415401	19860619	8.28	–	S	15	1	110CMTA	1450	S	C	4	--
27N-14W-36 DCD 1	364613098391401	19830322	18.10	–	S	48	--	110CMTA	1455	S	M	--	NW,PM

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units

[Water levels and wells depths are in feet below land-surface datum; altitude is in feet above National Geodetic Vertical Datum of 1929. Reading above land-surface datum are indicated by "+". Principal aquifers: 110CMTA, Cimarron terrace and alluvial aquifer; 318CDHL, Cedar Hills Sandstone: 318HNSS, Hennessey Shale. The M column lists methods of measurement, if known: B, analog recorder; R, reported; S, steel tape; T, electric tape. The S column lists site status of well during measurement, if known: D, dry; F, flowing; N, measurements discontinued; O, obstruction; P, pumping; R, recently pumped; S, nearby pumping; W, well destroyed. --, no data]

Local well number: 23N–11W–06 CBB 1; Site–ID: 362953098245401
Location: lat 36°29′53″, long 098°24′54″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1325
Well depth: 58

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Aug. 07, 1950	13.51	S		Oct. 07, 1987	7.70	S		Apr. 21, 1988	6.24	S		Nov. 30, 1988	10.06	S	
Mar. 25, 1983	7.40	S		Nov. 05	8.38	S		June 02	7.48	S		Jan. 03, 1989	10.42	S	
Feb. 10, 1984	9.41	S		Dec. 17	9.08	S		28	9.92	S		Mar. 31, 1990	8.74	S	
Feb. 27, 1985	8.98	S		Jan. 20, 1988	8.67	S		July 25	8.46	S		Jan. 03, 1991	11.06	S	
Feb. 05, 1986	10.28	S		Feb. 17	8.49	S		Aug. 16	8.90	S		Mar. 03, 1992	7.86	S	
Mar. 12, 1987	6.97	S		Mar. 09	7.30	S		Sept. 27	9.58	S					
Sept. 02	7.53	S		Mar. 17	6.70	S		Nov. 01	9.69	S					
Highest	6.24	Apr. 21, 1988													
Lowest	13.51	Aug. 07, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 25N–11W–16 CCD 1; Site–ID: 363823098233701
Location: lat 36°38′18″, long 098°23′35″; Hydrologic unit: 11060004
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1260
Well depth: 86

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1975	7.07	S		Feb. 17, 1984	4.75	S		Feb. 17, 1988	3.78	S		Nov. 01, 1988	5.37	S	
Jan. 16, 1976	6.24			Feb. 28, 1985	4.79	S		Mar. 09	1.27	S		30	5.88	S	
Dec. 15, 1977	7.63			Feb. 05, 1986	5.05	S		16	2.29	S		Jan. 03, 1989	6.42	S	
Jan. 04, 1978	8.25			Mar. 12, 1987	3.02	S		Apr. 21	2.75	S		Mar. 31, 1990	.41	S	
Mar. 28, 1979	5.35			Sept. 02	5.04	S		June 02	3.89	S		Jan. 03, 1991	4.83	S	R
Jan. 28, 1980	4.85			Oct. 07	5.45	S		28	3.50	S		Mar. 03, 1992	3.94	S	
Jan. 22, 1981	7.40	S		Nov. 05	4.72	S		July 25	5.20	S					
Mar. 05, 1982	3.87	S		Dec. 17	--	--	O	Aug. 15	5.49	S					
Mar. 02, 1983	3.64	S		Jan. 20, 1988	--	--	O	Sept. 27	6.15	S					
Highest	.41	Mar. 31, 1990													
Lowest	8.25	Jan. 04, 1978													

Local well number: 21N–07W–04 CCC 1; Site–ID: 361907097573601
Location: lat 36°19′07″, long 097°57′36″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1240
Well depth: 165

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 11, 1977	19.08	S		Feb. 28, 1983	--	--	P	Mar. 11, 1987	16.07	S		Jan. 09, 1991	19.40	S	
Jan. 05, 1978	19.43			Feb. 21, 1984	18.67	S		Mar. 01, 1988	15.67	S		Jan. 09, 1992	17.67	S	
Mar. 20, 1979	18.45			Mar. 01, 1985	20.83	S		Feb. 23, 1989	15.40						
Mar. 10, 1982	20.37	S		Jan. 09, 1986	17.45	S		Mar. 26, 1990	15.24	S					
Highest	15.24	Mar. 26, 1990													
Lowest	20.83	Mar. 01, 1985													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N–08W–06 DCC 1; Site–ID: 361907098053801
Location: lat 36°19′07″, long 098°05′38″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1208
Well depth: 11

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 06, 1950	5.13	S		Jan. 29, 1951	4.13	S		June 29, 1953	7.25	S		Nov. 29, 1956	9.05	S	
09	5.20	S		Feb. 28	2.49	S		July 31	6.58	S		Dec. 20	9.01	S	
15	5.12	S		Mar. 26	3.37	S		Aug. 31	7.18	S		Feb. 08, 1957	9.01	S	
23	5.12	S		Apr. 26	3.86	S		Sept. 28	7.50	S		28	8.98	S	
30	5.22	S		June 05	3.15	S		Oct. 30	7.25	S		Apr. 09	8.65	S	
Apr. 06	5.30	S		July 10	2.97	S		Nov. 30	7.16	S		Nov. 21	5.38	S	
13	5.43	S		Aug. 08	4.70	S		Dec. 30	6.96	S		Dec. 19, 1957	5.23	S	
20	5.49	S		Sept. 05	5.37	S		Jan. 29, 1954	6.93	S		Jan. 30, 1958	5.33	S	
27	5.65	S		27	4.91	S		Feb. 25	7.00	S		Feb. 27	5.42	S	
May 04	5.76	S		Oct. 29	4.99	S		Mar. 22	6.88	S		Mar. 27	4.44	S	
11	5.07	S		Dec. 06	3.98	S		Apr. 26	7.23	S		Apr. 24	4.52	S	
18	4.97	S		Jan. 01, 1952	4.25	S		June 28	7.59	S		May 22	5.46	S	
25	5.02	S		31	4.07	S		July 26	8.16	S		July 25	6.95	S	
June 01	5.15	S		Mar. 31, 1952	3.78	S		Aug. 27	8.59	S		Aug. 28	6.30	S	
08	4.68	S		Apr. 29	3.89	S		Sept. 20	8.83	S		Sept. 19	6.12	S	
15	4.89	S		May 28	5.04	S		Oct. 28	9.08	S		Oct. 31	7.36	S	
30	5.62	S		June 27	6.20	S		Nov. 29	8.95	S		Nov. 21	6.61	S	
July 07	5.85	S		July 30	6.83	S		Jan. 06, 1955	8.89			Jan. 09, 1959	6.53	S	
13	6.01	S		Aug. 27	7.03	S		Oct. 27	8.64	S		30	6.45	S	
22	5.84	S		Sept. 30	7.42	S		Dec. 01	7.07	S		Feb. 27	6.15	S	
28	5.74	S		Oct. 28	7.22	S		28	7.01	S		Mar. 27	6.20	S	
Aug. 04	2.98	S		Nov. 25	7.38	S		Feb. 23, 1956	6.87	S		Apr. 24	6.04	S	
Sept. 03	3.68	S		Dec. 29	7.07	S		Mar. 22	6.82	S		June 26	6.97	S	
20	2.60	S		Jan. 29, 1953	6.90	S		Apr. 27	6.89	S		July 24	7.28	S	
Oct. 05	3.26	S		Feb. 26	6.85	S		May 24	7.63	S		Aug. 28	7.65	S	
06	3.74	S		Mar. 31	6.54	S		June 28	8.22	S		Nov. 24	4.72	S	
Nov. 28	4.01	S		Apr. 27	6.43	S		July 26	8.66	S		Dec. 16	4.80	S	
Dec. 27	4.09	S		May 28	6.48	S		Aug. 30	9.09	S		Mar. 25, 1960	2.70	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N–08W–06 DCC 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 22, 1960	5.73	S		Dec. 13, 1961	2.60	S		Oct. 11, 1963	6.39	S		Feb. 26, 1973	4.32		
May 20	4.71	S		Feb. 26, 1962	2.17	S		Jan. 27, 1965	5.10	S		Jan. 24, 1974	2.57		
June 17	3.93	S		Mar. 26	3.38	S		Apr. 28	5.36	S		Jan. 22, 1975	2.45		
Sept. 16	4.35	S		May 28	5.02	S		Oct. 15	5.01	S		Jan. 13, 1976	4.88		
Nov. 18	3.35	S		June 29	4.78	S		Jan. 07, 1966	4.96	S		Dec. 08, 1977	6.18		
Jan. 19, 1961	3.50	S		Oct. 02	4.94	S		Apr. 22	5.36	S		Mar. 21, 1979	4.75		
Feb. 17	3.06	S		19	5.18	S		July 21	6.68	S		Jan. 15, 1981	5.20	S	
Apr. 21	3.36	S		Nov. 16	5.32	S		Sept. 21	5.79	S		Mar. 10, 1982	2.10	S	
May 19	4.50	S		Jan. 10, 1963	5.19	S		Oct. 21	5.70	S		Feb. 28, 1983	3.37	S	
June 23	4.68	S		Feb. 07	5.62	S		Nov. 21	5.75	S		Feb. 21, 1984	2.20	S	
July 17	4.89	S		Mar. 28	5.14	S		Dec. 20	5.78	S		Mar. 01, 1985	--	--	O
Aug. 04	5.43	S		Apr. 26, 1963	S	P		Jan. 20, 1967	5.79			Jan. 09, 1986	--	--	O
Sept. 01	4.64	S		May 23	6.40	S		Jan. 25, 1968	4.35						
29	4.10	S		June 20	6.69	S		Mar. 04, 1969	5.30						
Oct. 27	3.58	S		July 17	6.12	S		Mar. 08, 1971	4.43						
Nov. 17	2.17	S		Aug. 19	6.80	S		Feb. 01, 1972	5.25						
Highest	2.10	Mar. 10, 1982													
Lowest	9.09	Aug. 30, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N–08W–18 DCD 1;Site–ID: 361725098052001
Location: lat 36°17′22″, long 098°05′37″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1216
Well depth: 13

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 03, 1950	2.64	S		Sept. 03, 1950	2.64	S		June 27, 1952	6.72	S		Oct. 07, 1987	5.84	S	
09	2.70	S		20	2.05	S		July 30	9.21	S		Nov. 05	5.44	S	
15	2.60	S		Oct. 04	2.63	S		Aug. 27	10.54	S		Dec. 18	--	--	O
23	2.82	S		25	2.99	S		Sept. 30	11.43	S		Jan. 21, 1988	--	--	O
30	3.07	S		Nov. 28	2.39	S		Mar. 04, 1969	10.48			Feb. 17	2.40	S	
Apr. 06	2.69	S		Dec. 27	2.35	S		Mar. 03, 1970	4.07			Mar. 01	2.34	S	
13	3.12	S		Jan. 29, 1951	2.46	S		Mar. 08, 1971	8.15			16	1.47	S	
20	3.08	S		Feb. 28	1.28	S		Feb. 01, 1972	10.50			Apr. 21	.91	S	
27	3.53	S		Mar. 26	2.09	S		Jan. 22, 1975	1.70			June 02	.99	S	
May 04	3.73	S		Apr. 26	2.38	S		Jan. 15, 1976	4.55			29	5.25	S	
11	2.32	S		June 05	2.30	S		Dec. 08, 1977	7.55			July 25	5.37	S	
18	2.97	S		July 10	2.63	S		Jan. 05, 1978	7.28			Aug. 15	5.49	S	
25	3.23	S		Aug. 08	4.12	S		Mar. 21, 1979	9.75			Sept. 28	5.39	S	
June 01	3.27	S		Sept. 05	5.13	S		Jan. 29, 1980	11.17			Nov. 02	4.79	S	
08	3.05	S		27	4.85	S		Jan. 15, 1981	10.80	S		Dec. 01	4.05	S	
15	3.74	S		Oct. 29	4.56	S		Mar. 10, 1982	10.42	S		Jan. 04, 1989	3.81	S	
30	4.59	S		Dec. 06	3.09	S		Feb. 28, 1983	7.92	S		Mar. 26, 1990	2.40	S	
July 07	4.80	S		Jan. 01, 1952	3.05	S		Feb. 21, 1984	3.22	S		Jan. 09, 1991	1.33	S	
13	4.86	S		31	2.57	S		Mar. 01, 1985	3.90	S		Jan. 09, 1992	4.03	S	
22	3.55	S		Mar. 31, 1952	3.06	S		Jan. 09, 1986	6.35	S					
28	3.37	S		Apr. 29	3.07	S		Mar. 11, 1987	.92	S					
Aug. 04	1.83	S		May 28	4.13	S		Sept. 03	5.97	S					
Highest	.91	Apr. 21, 1988													
Lowest	11.43	Sept. 30, 1952													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N–08W–19 BA 1; Site–ID: 361713098055001
Location: lat 36°17′13″, long 098°05′50″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1234
Well depth: 22

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 27, 1950	13.32	S		Nune 15, 1950	13.54	S		Dec. 27, 1950	12.23	S		Jan. 01, 1952	12.95	S	
30	13.15	S		30	13.92	S		Jan. 29, 1951	12.34	S		31	12.80	S	
Apr. 06	13.20	S		July 07	14.00	S		Feb. 28	12.29	S		Mar. 31	14.35	S	
13	13.25	S		13	14.16	S		Mar. 27	11.99	S		Apr. 29	14.84	S	
20	13.27	S		22	14.05	S		Apr. 26	12.09	S		May 28	15.31	S	
27	13.33	S		28	13.98	S		June 05	10.15	S		June 26, 1952	16.46	S	
May 04	13.37	S		Aug. 04	12.54	S		July 10	8.13	S		July 30	18.36	S	
11	13.43	S		Sept. 03	12.10	S		Aug. 08	10.44	S		Aug. 27	18.65	S	
18	13.39	S		20	11.80	S		Sept. 05	12.24	S		Sept. 30	20.40	S	
25	13.50	S		Oct. 04	11.77	S		27	13.12	S		Oct. 28	--	--	D
June 01	13.53	S		25	11.80	S		Oct. 29	13.73	S		Nov. 25	--	--	D
08	13.52	S		Nov. 28	12.06	S		Dec. 06	13.24	S		Dec. 29	--	--	D
Highest	8.13	July 10, 1951													
Lowest	20.40	Sept. 30, 1952													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N–08W–19 BBB 1; Site–ID: 361707098055801
Location: lat 36°17′07″, long 098°05′58″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1240
Well depth: 110

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 08, 1950	15.80	S		Mar. 06, 1950	15.80	B		Mar. 31, 1950	15.84	B		Apr. 23, 1050	15.78	B	
09	15.80	B		07	15.91	B		Apr. 01	15.87	B		24	15.89	B	
10	15.80	B		08	15.96	B		02	15.77	B		25	15.94	B	
11	15.77	B		09	15.91	B		03	15.83	B		27	15.97	S	
12	15.74	B		10	15.93	B		04	15.93	B		May 04	15.92	S	
13	15.81	B		11	15.94	B		05	15.95	B		11	15.89	S	
14	15.85	B		14	15.98	B		06	15.89	B		18	15.77	S	
15	15.86	B		15	15.90	B		07	15.77	B		31	15.86	S	
16	15.86	B		16	15.90	B		08	15.74	B		June 30	16.64	S	
17	15.80	B		17	15.84	B		09	15.72	B		July 31	15.79	S	
18	15.87	B		18	15.82	B		10	15.90	B		Sept. 03	14.67	S	
19	15.87	B		19	15.84	B		11	15.93	B		20	14.27	S	
20	15.79	B		20	15.83	B		12	15.91	B		Oct. 04	14.38	S	
21	15.73	B		21	15.84	B		13	15.92	B		25	14.36	S	
22	15.73	B		22	15.85	B		14	15.89	B		Nov. 28	14.16	S	
23	15.80	B		23	15.76	B		15	15.86	B		Dec. 27	14.20	S	
24	15.91	B		24	15.79	B		16	15.84	B		Jan. 29, 1951	14.36	S	
28	15.87	B		25	15.73	B		17	15.83	B		Feb. 28	14.09	S	
Mar. 01	15.91	B		26	15.66	B		18	15.87	B		Mar. 26	13.94	S	
02	15.91	B		27	15.81	B		19	15.94	B		Apr. 26	13.96	S	
03	15.85	B		28	15.89	B		20	15.90	B		June 05	12.23	S	
04	15.88	B		29	15.97	B		21	15.82	B		Aug. 08, 1951	--	--	P
05	15.88	B		30	15.96	B		22	15.79	B		Sept. 05	--	--	P
Highest	12.23	June 05, 1951													
Lowest	16.64	June 30, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-08W-19 CB 1; Site–ID: 361655098061301
Location: lat 36°16′55″, long 098°06′13″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1238
Well depth: 122

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 08, 1950	10.34	S		July 10, 1951	5.18	S		Nov. 30, 1953	31.58	S		Mar. 23, 1956	17.79	S	
14	10.45	S		Aug. 08	17.23	S	S	Dec. 30	30.68	S		Apr. 27	18.79	S	
24	10.68	S		Sept. 05	18.95	S	S	Jan. 29, 1954	19.56	S		May 25	22.62	S	
Mar. 02	10.42	S		27	19.43	S		Feb. 25	31.47	S		June 29	22.41	S	
09	10.72	S		Oct. 29	14.38	S		Mar. 22	30.66	S		July 27	30.27	S	
15	10.50	S		Dec. 06	15.45	S		Apr. 26	28.10	S		Aug. 31	29.05	S	
23	10.43	S		Jan. 01, 1952	15.83	S		May 24	31.73	S		Sept. 21, 1956	36.02	S	
30	10.48	S		31	12.17	S		June 28	33.11	S		Nov. 02	35.69	S	
Apr. 06	10.50	S		Mar. 31	21.69	S		July 26	34.04	S		30	31.89	S	
13	10.57	S		Apr. 29	22.10	S		Aug. 27	33.57	S		Dec. 21	31.91	S	
20	10.55	S		May 28	22.10	S		Sept. 20	34.03	S		Feb. 09, 1957	27.92	S	
27	10.61	S		June 27	24.67	S		Oct. 28	34.49	S		28	30.85	S	
May 04	10.59	S		July 30	25.96	S		Nov. 29	34.00	S		Apr. 08	32.45	S	
11	10.59	S		Aug. 27, 1952	26.33	S		Jan. 06, 1955	31.56	S		May 10	31.42	S	
18	10.53	S		Sept. 30	16.49	S		27	31.44	S		June 27	19.31	S	
31	10.66	S		Oct. 28	27.32	S		Feb. 24	21.77	S		July 25	20.38	S	
June 30	11.82	S		Nov. 25	23.57	S		Mar. 28	24.11	S		Oct. 02	29.09	S	
July 31	11.12	S		Dec. 29	27.87	S		Apr. 25	30.89	S		31	29.90	S	
Sept. 03	9.53	S		Jan. 29, 1953	28.29	S		May 27	31.34	S		Mar. 04, 1969	33.14		
Oct. 05	8.83	S		Feb. 26	24.27	S		June 27	31.47	S		Mar. 08, 1971	33.90		
25	9.00	S		Mar. 31	30.13	S		July 29	30.08	S		Feb. 01, 1972	30.67		
Nov. 28	9.21	S		Apr. 27	30.25	S		Aug. 26	23.64	S		Feb. 26, 1973	35.18		
Dec. 27	9.22	S		May 28	30.70	S		Sept. 27	21.00	S		Jan. 24, 1974	25.36		
Jan. 29, 1951	9.40	S		June 29	31.67	S		Oct. 28	18.85	S		Feb. 24, 1990	10.68	R	
Feb. 28	9.30	S		July 30	31.10	S		Dec. 02	18.23	S		Mar. 02	10.42	R	
Mar. 26	8.67	S		Aug. 31	31.20	S		28	18.14	S					
Apr. 26	8.53	S		Sept. 28	25.91	S		Feb. 03, 1956	17.96	S					
June 05	6.51	S		Oct. 30	29.82	S		24	17.77	S					
Highest	5.18	July 10, 1951													
Lowest	36.02	Sept. 21, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-08W-19 CBB 1; Site–ID: 361651098061001
Location: lat 36°16′51″, long 098°06′10″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1242
Well depth: 56

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 10, 1954	7.30	R		Feb. 28, 1983	21.92	S		Jan. 21, 1988	8.57	S		Sept. 28, 1988	9.36	S	
Jan. 22, 1975	22.22			Feb. 21, 1984	15.05	S		Feb. 17	8.32	S		Nov. 02	9.42	S	
Jan. 15, 1976	18.54			Mar. 01, 1985	18.16	S		Mar. 01	8.52	S		Dec. 01	9.89	S	
Dec. 08, 1977	18.18			Jan. 09, 1986	16.40	S		16	7.41	S		Jan. 04, 1989	10.25	S	
Jan. 05, 1978	22.80			Mar. 11, 1987	8.62	S		Apr. 21	6.77	S		Mar. 26, 1990	8.56	S	
Mar. 21, 1979	27.22			Sept. 03	7.48	S		June 02	6.49	S		Jan. 09, 1991	11.82	S	
Jan. 29, 1980	25.38			Oct. 07	7.86	S		29	7.24	S		Jan. 09, 1992	11.00	S	
Jan. 15, 1981	21.00	S		Nov. 05	8.22	S		July 25	7.36	S					
Mar. 10, 1982	26.93	S		Dec. 18	8.94	S		Aug. 16	8.95	S					
Highest	6.49	June 02, 1988													
Lowest	27.22	Mar. 21, 1979													

Local well number: 21N-08W-19 CCC 1; Site–ID: 361633098060901
Location: lat 36°16′33″, long 098°06′09″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1243
Well depth: 180

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 30, 1950	10.78	S		May 04, 1950	10.69	S		July 31, 1950	10.51	S		Dec. 27, 1950	9.17	S	
Apr. 06	10.71	S		11	10.60	S		Sept. 03	9.36	S		Jan. 29, 1951	9.30	S	
13	10.77	S		18	10.57	S		Oct. 05	8.84	S		Feb. 28	8.87	S	
20	10.72	S		31	10.69	S		25	9.14	S		Mar. 26	9.00	S	
27	10.76	S		June 30	14.41	S		Nov. 28	9.25	S		Apr. 26	--	--	W
Highest	8.84	Oct. 05, 1950													
Lowest	14.41	June 30, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-08W-19 DDB 1; Site–ID: 361640098051601
Location: lat 36°16′40″, long 098°05′16″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1220
Well depth: 16

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 27, 1950	4.55	S		Apr. 06, 1950	4.38	S		Apr. 20, 1950	4.48	S		May 04, 1950	4.77	S	
30	4.58	S		13	13.33	S	P	27	4.69	S					
Highest	4.38	Apr. 06, 1950													
Lowest	4.77	May 04, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-08W-31 ADC 1; Site–ID: 361514098052501
Location: lat 36°15′14″, long 098°05′25″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1246
Well depth: 28

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 06, 1950	14.60	S		July 10, 1951	11.30	S		Dec. 30, 1953	14.87	S		May 25, 1956	13.89	S	
13	14.66	S		Aug. 08	12.17	S		Jan. 29, 1954	14.70	S		June 29	15.03	S	
20	14.70	S		Sept. 05	13.39	S		Feb. 25	14.59	S		July 27	15.90	S	
27	14.48	S		27	13.51	S		Mar. 22	14.56	S		Aug. 31, 1956	17.09	S	
May 04	14.82	S		Oct. 29	12.29	S		Apr. 26	14.66	S		Sept. 21	17.62	S	
11	14.97	S		Dec. 06	12.49	S		May 24	14.92	S		Nov. 02	18.16	S	
18	14.94	S		Jan. 01, 1952	12.50	S		June 28	16.03	S		30	17.82	S	
25	15.04	S		31	12.05	S		July 26	16.90	S		Dec. 21	17.64	S	
June 08	14.99	S		Mar. 31	11.59	S		Aug. 26	17.63	S		Feb. 09, 1957	17.66	S	
15	15.17	S		Apr. 29	11.30	S		Sept. 20	18.13	S		28	17.56	S	
23	15.56	S		May 27	11.20	S		Oct. 28	18.21	S		May 10	18.20	S	
30	15.93	S		June 27	12.34	S		Nov. 29	17.06	S		July 25	8.20	S	
July 07	16.13	S		July 30, 1952	13.79	S		Jan. 06, 1955	17.38	S		Oct. 02	8.99	S	
13	16.30	S		Aug. 28	14.44	S		27	17.34	S		31	9.19	S	
22	16.35	S		Sept. 30	15.07	S		Feb. 24	17.32	S		Nov. 21	8.40	S	
28	16.32	S		Oct. 28	15.25	S		Mar. 28	17.30	S		Dec. 19	7.54	S	
Aug. 04	16.11	S		Nov. 25	14.66	S		Apr. 25	17.26	S		Jan. 30, 1958	7.92	S	
Sept. 03	15.96	S		Dec. 29	14.40	S		May 27	16.37	S		Feb. 27	8.05	S	
20	15.65	S		Jan. 29, 1953	14.32	S		June 27	15.14	S		Mar. 27	7.52	S	
Oct. 05	15.57	S		Feb. 26	14.29	S		29	14.62	S		Apr. 24	7.05	S	
25	15.73	S		Mar. 31	14.19	S		Aug. 26	15.56	S		May 22	7.48	S	
Nov. 28	15.35	S		Apr. 27	14.13	S		Sept. 27	16.14	S		June 26	8.66	S	
Dec. 27	15.10	S		May 28	14.62	S		Oct. 28	14.62	S		July 22	9.38	S	
Jan. 29, 1951	14.91	S		June 29	15.82	S		Dec. 02	14.03	S		Aug. 28	9.47	S	
Feb. 28	14.72	S		July 30	14.65	S		28	13.80	S		Sept. 19	9.83	S	
Mar. 26	14.56	S		Aug. 31	15.00	S		Feb. 03, 1956	13.58	S		Oct. 31	9.62	S	
Apr. 26	14.47	S		Sept. 28	15.78	S		24	13.46	S		Nov. 21	10.56	S	
June 05	12.93	S		Oct. 30	15.65	S		Mar. 23	13.33	S		Jan. 09, 1959	10.78	S	
10	11.30	S		Nov. 30	15.15	S		Apr. 27	13.26	S		30	10.96	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-08W-31 ADC 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 27, 1959	10.94	S		July 25, 1960	10.20	S		Oct. 27, 1961	12.06	S		Apr. 26, 1963	12.79	S	
Mar. 27	11.07	S		Aug. 19	11.17	S		Nov. 17	11.09	S		May 23	14.11	S	
Apr. 24	10.49	S		Sept. 16	11.38	S		Dec. 13	10.77	S		June 20	14.32	S	
May 22	10.38	S		Oct. 20	11.22	S		Jan. 29, 1962	10.26	S		July 17	14.42	S	
June 26	10.93	S		Nov. 18	10.79	S		Feb. 26	9.97	S		Aug. 19	14.78	S	
July 24	11.90	S		Dec. 14	10.74	S		Mar. 26	10.11	S		Oct. 11	14.18	S	
Aug. 28	13.00	S		Jan. 19, 1961	11.04	S		Apr. 30	9.76	S		Jan. 27, 1965	16.97	S	
Sept. 28	12.53	S		Feb. 17, 1961	10.82	S		May 28	10.39	S		Apr. 28	17.00	S	
Oct. 23	10.73	S		Mar. 17	11.00	S		June 29	11.06	S		July 16	18.40	S	
Nov. 24	10.86	S		Apr. 21	10.25	S		Aug. 24	12.69	S		Oct. 15	18.63	S	
Dec. 16	11.04	S		June 19	9.85	S		Oct. 02	12.93	S		Jan. 07, 1966	18.26	S	
Jan. 29, 1960	11.45	S		July 19	10.98	S		19	13.00	S		Apr. 22	17.80	S	
Mar. 25	9.64	S		23	10.44	S		Nov. 16	12.89	S					
Apr. 22	9.32	S		Aug. 04	10.96	S		Jan. 10, 1963	13.02	S					
May 20	9.76	S		Sept. 01	12.63	S		Feb. 07	13.25	S					
June 17	9.46	S		29	12.65	S		Mar. 28	13.35	S					
Highest	7.05	Apr. 24, 1958													
Lowest	18.63	Oct. 15, 1965													

Local well number: 21N-08W-31 CCD 1; Site–ID: 361450098060001
Location: lat 36°14'50", long 098°06'00"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1260
Well depth: 36

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 29, 1950	23.53	S		Apr. 13, 1950	23.40	S		Apr. 27, 1950	23.38	S	
Apr. 06	23.31	S		20	23.33	S					
Highest	23.31	Apr. 06, 1950									
Lowest	23.53	Mar. 29, 1950									

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-05W-04 BBB 1; Site–ID: 355902097443901
Location: lat 35°59′02″, long 097°44′39″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1130
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	26.16	S		Jan. 21, 1975	18.08			Jan. 12, 1976	13.80			Dec. 07, 1976	15.10		
Highest	13.80	Jan. 12, 1976													
Lowest	26.16	Jan. 23, 1974													

Local well number: 17N-05W-06 BBA 1; Site–ID: 355902097462601
Location: lat 35°59′02″, long 097°46′30″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1125
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	33.40	S		Jan. 21, 1975	29.75			Jan. 12, 1976	24.36			Dec. 07, 1976	25.59		
Highest	24.36	Jan. 12, 1976													
Lowest	33.40	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-05W-10 DCC 1; Site–ID: 355724097430301
Location: lat 35°57′22″, long 097°43′13″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1050
Well depth: 45

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	20.72	S		Mar. 16, 1983	18.60	S		Jan. 21, 1988	16.03	S		Sept. 28, 1988	16.06	S	
Jan. 20, 1975	17.90			Feb. 29, 1984	18.39	S		Feb. 10	17.00	S		Nov. 02	16.00	S	
Jan. 12, 1976	16.69			Mar. 11, 1985	18.39	S		18	15.99	S		Dec. 01	16.08	S	
Dec. 07	18.89			Jan. 29, 1986	18.20	S		Mar. 17	15.71	S		Jan. 04, 1989	16.18	S	
Jan. 03, 1977	19.77			Mar. 04, 1987	16.55	S		Apr. 22	15.06	S		Feb. 07, 1990	17.22	S	
Feb. 21, 1979	20.04			Sept. 01	16.81	S		June 02	15.37	S		Feb. 25, 1991	16.49	S	
Feb. 20, 1980	18.93			Oct. 06	16.58	S		30	15.88	S		Jan. 23, 1992	16.35	S	
Jan. 27, 1981	18.51	S		Nov. 05	16.90	S		July 26	16.38	S		Feb. 02, 1993	14.85	S	
Mar. 17, 1982	18.34	S		Dec. 18	16.46	S		Aug. 16	16.78	S					
Highest	14.85	Feb. 02, 1993													
Lowest	20.72	Jan. 23, 1974													

Local well number: 17N-05W-13 DDD 1; Site–ID: 355632097403101
Location: lat 35°56′32″, long 097°40′31″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1090
Well depth: 95

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	34.51	S		Jan. 12, 1976	24.24			Jan. 03, 1978	28.67			Mar. 19, 1980	--	--	N
Jan. 20, 1975	28.07			Dec. 07	27.04			Mar. 19, 1979	28.30						
Highest	24.24	Jan. 12, 1976													
Lowest	34.51	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-05W-14 CBC 1; Site–ID: 355645097423101
Location: lat 35°56′46″, long 097°42′38″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1070
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	30.87	S		Jan. 20, 1975	27.11			Jan. 12, 1976	24.96			Dec. 07, 1976	26.92		
Highest	24.96			Jan. 12, 1976											
Lowest	30.87			Jan. 23, 1974											

Local well number: 17N-05W-18 CCC 1; Site–ID: 355632097464801
Location: lat 35°56′32″, long 097°46′48″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1040
Well depth: 30

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	27.30	S		Feb. 20, 1980	27.42			Mar. 04, 1987	--	--	O	Mar. 23, 1989	25.03		
Jan. 20, 1975	24.65			Mar. 17, 1982	26.65	S		Sept. 01	25.06	S		Feb. 07, 1990	25.45	S	
Jan. 12, 1976	25.32			Mar. 16, 1983	26.59	S		Jan. 21, 1988	22.81	S		Feb. 25, 1991	--	--	O
Dec. 07	27.29			Feb. 29, 1984	26.77	S		Feb. 17	24.70	S		Jan. 23, 1992	--	--	O
Jan. 04, 1978	28.00			Jan. 16, 1985	27.42	S		18	--	--	O				
Feb. 21, 1979	26.75			Jan. 29, 1986	26.40	S		Mar. 17	--	--	O				
Highest	22.81			Jan. 21, 1988											
Lowest	28.00			Jan. 04, 1978											

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-05W-20 AAB 1; Site–ID: 355627097450301
Location: lat 35°56′27″, long 097°45′03″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1060
Well depth: 33

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	29.02	S		Jan. 20, 1975	27.23			May 22, 1985	26.88		
Highest	26.88	May 22, 1985									
Lowest	29.02	Jan. 23, 1974									

Local well number: 17N-05W-27 DDD 1; Site–ID: 355447097423901
Location: lat 35°54′47″, long 097°42′39″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1030
Well depth: 25

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	7.49	R		Dec. 07, 1976	8.20	R		Feb. 21, 1980	4.44			Mar. 16, 1983	--	--	N
Jan. 20, 1975	4.11	R		Jan. 03, 1978	8.50	R		Jan. 27, 1981	6.50	S					
Jan. 12, 1976	5.22	R		Feb. 21, 1979	6.50			Mar. 17, 1982	--	--	O				
Highest	4.11	Jan. 20, 1975													
Lowest	8.50	Jan. 03, 1978													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-06W-02 AAA 1; Site–ID: 355902097480001
Location: lat 35°59′02″, long 097°48′00″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1120
Well depth: 85

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	25.10	S		Dec. 07, 1976	17.86			Feb. 20, 1980	19.14			Mar. 16, 1983	17.09	S	
Jan. 21, 1975	19.54			Jan. 04, 1978	19.20			Jan. 27, 1981	17.00	S		Feb. 28, 1984	15.30	S	
Jan. 12, 1976	15.84			Feb. 21, 1979	20.20			Mar. 17, 1982	17.80	S		Jan. 16, 1985	--	--	W
Highest	15.30	Feb. 28, 1984													
Lowest	25.10	Jan. 23, 1974													

Local well number: 17N-06W-11 DDD 1; Site–ID: 355724097480001
Location: lat 35°57′24″, long 097°48′00″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1060
Well depth: 60

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	36.78	S		Mar. 16, 1983	33.12	S		Dec. 18, 1987	30.67	S		July 26, 1988	29.98	S	
Jan. 20, 1975	34.00			Feb. 28, 1984	32.58	S		Jan. 21, 1988	30.26	S		Aug. 16	30.19	S	
Jan. 12, 1976	33.01			Jan. 16, 1985	32.82	S		Feb. 17	30.40	S		Sept. 28	29.84	S	
Jan. 03, 1978	35.05			Jan. 29, 1986	32.40	S		18	30.19	S		Nov. 02	29.91	S	
Feb. 21, 1979	34.85			Mar. 04, 1987	31.52	S		Mar. 17	30.12	S		Dec. 01	30.13	S	
Feb. 20, 1980	33.55			Sept. 01	30.77	S		Apr. 22	29.44	S		Jan. 04, 1989	30.22	S	
Jan. 27, 1981	33.20	S		Oct. 06	30.56	S		June 02	29.79	S					
Mar. 17, 1982	33.82	S		Nov. 05	30.75	S		30	29.73	S					
Highest	29.44	Apr. 22, 1988													
Lowest	36.78	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-06W-12 AAA 1; Site–ID: 355810097465601
Location: lat 35°58′10″, long 097°46′56″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1090
Well depth: 80

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	42.30	S		Mar. 16, 1983	34.19	S		Jan. 21, 1988	27.06	S		Sept. 28, 1988	25.04	S	
Jan. 21, 1975	37.98			Feb. 28, 1984	33.18	S		Feb. 17	27.17	S		Nov. 02	24.82	S	
Jan. 12, 1976	34.08			Jan. 16, 1985	33.10	S		18	26.95	S		Dec. 01	25.15	S	
Dec. 07	35.75			Jan. 29, 1986	32.45	S		Mar. 17	24.87	S		Jan. 04, 1989	25.22	S	
Jan. 03, 1978	36.98			Mar. 04, 1987	30.05	S		Apr. 22	25.52	S		Feb. 07, 1990	27.02	S	
Feb. 21, 1979	37.60			Sept. 01	27.75	S		June 02	24.90	S		Feb. 25, 1991	26.55	S	
Feb. 20, 1980	36.14			Oct. 06	27.65	S		30	24.83	S		Jan. 23, 1992	28.38	S	
Jan. 27, 1981	34.50	S		Nov. 05	27.52	S		July 26	25.03	S		Feb. 02, 1993	25.91	S	
Mar. 17, 1982	35.50	S		Dec. 18	27.19	S		Aug. 16	25.19	S					
Highest	24.82	Nov. 02, 1988													
Lowest	42.30	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-06W-18 BCC 1; Site–ID: 355658097531201
Location: lat 35°57′03″, long 097°53′18″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1015
Well depth: 30

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 25, 1974	1.86	R		Mar. 16, 1983	4.00	S		Jan. 21, 1988	.83	S		Sept. 28, 1988	1.75	S	
Jan. 21, 1975	.18			Feb. 28, 1984	2.45	S		Feb. 17	1.42	S		Nov. 02	1.95	S	
Jan. 12, 1976	2.22			Jan. 16, 1985	4.23	S		18	1.36	S		Dec. 01	1.57	S	
Dec. 09	5.33			Jan. 29, 1986	3.80	S		Mar. 17	.96	S		Jan. 04, 1989	1.73	S	
Jan. 03, 1978	5.93			Mar. 04, 1987	.94	S		Apr. 22	1.04	S		Feb. 07, 1990	3.08	S	
Mar. 19, 1979	4.93			Sept. 01	3.79	S		June 02	2.48	S		Feb. 25, 1991	1.05	S	
Feb. 20, 1980	2.62			Oct. 06	3.31	S		29	3.12	S		Jan. 23, 1992	3.18	S	
Jan. 27, 1981	5.43	S		Nov. 05	3.01	S		July 26	4.11	S		Feb. 02, 1993	2.43	S	
Mar. 17, 1982	4.29	S		Dec. 18	1.39	S		Aug. 16	4.76	S					
Highest	.18	Jan. 21, 1975													
Lowest	5.93	Jan. 03, 1978													

Local well number: 17N-07W-02 DBD 1; Site–ID: 355829097544001
Location: lat 35°58′33″, long 097°54′50″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1030
Well depth: 37

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 25, 1974	5.54	R		Dec. 07, 1976	9.05			Feb. 20, 1980	8.85			Mar. 16, 1983	7.96	S	
Jan. 21, 1975	2.70			Jan. 03, 1978	10.80			Jan. 27, 1981	10.20	S		Feb. 29, 1984	6.84	S	
Jan. 12, 1976	5.30			Mar. 19, 1979	11.22			Mar. 17, 1982	10.13	S		Jan. 16, 1985	--	--	W
Highest	2.70	Jan. 21, 1975													
Lowest	11.22	Mar. 19, 1979													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-07W-11 DBA 1; Site–ID: 355743097544001
Location: lat 35°57′50″, long 097°54′47″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1025
Well depth: 40

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
June 06, 1973	14.90	S		Mar. 17, 1982	15.63	S		Dec. 18, 1987	12.04	S		Aug. 16, 1988	13.04	S	
Jan. 25, 1974	11.90	R		Mar. 16, 1983	14.90	S		Jan. 21, 1988	11.43	S		Sept. 28	12.38	S	
Jan. 21, 1975	9.94			Feb. 29, 1984	14.39	S		Feb. 18	11.39	S		Nov. 02	12.55	S	
Jan. 21, 1976	13.40			Jan. 16, 1985	15.60	S		Mar. 17	10.87	S		Dec. 01	12.63	S	
Dec. 07	15.84			Jan. 29, 1986	15.04	S		Apr. 22	10.06	S		Jan. 04, 1989	12.80	S	
Jan. 03, 1978	16.85			Mar. 04, 1987	15.00	S		June 02	11.25	S		Oct. 04	12.20	S	
Mar. 19, 1979	16.92			Sept. 01	11.33	S		21	11.88	S		Nov. 28	12.68	S	
Feb. 20, 1980	15.20			Oct. 06	11.87	S		July 14	12.15						
Jan. 27, 1981	15.90	S		Nov. 05	11.76	S		26	11.89	S					
Highest	9.94	Jan. 21, 1975													
Lowest	16.92	Mar. 19, 1979													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-07W-11 DCD 2; Site–ID: 355724097544001
Location: lat 35°57′29″, long 097°54′46″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1020
Well depth: 33

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	9.50	S		Mar. 16, 1983	11.47	S		Jan. 21, 1988	10.65	S		Nov. 02, 1988	11.12	S	
Jan. 21, 1975	11.05			Feb. 29, 1984	11.65	S		Feb. 18	10.72	S		Dec. 01	11.33	S	
Jan. 12, 1976	11.23			Jan. 16, 1985	12.31	S		Mar. 17	10.34	S		Jan. 04, 1989	11.40	S	
Dec. 07	12.75			Jan. 29, 1986	12.02	S		Apr. 22	9.60	S		Nov. 28	11.20	S	
Jan. 03, 1978	13.06			Mar. 04, 1987	7.63	S		June 02	10.03	S		Feb. 07, 1990	11.27	S	
Mar. 19, 1979	12.13			Sept. 01	10.23	S		29	10.64	S		Feb. 25, 1991	11.50	S	
Feb. 20, 1980	11.81			Oct. 06	10.77	S		July 26	11.22	S		Jan. 23, 1992	10.67	S	
Jan. 27, 1981	12.80	S		Nov. 05	11.18	S		Aug. 16	11.67	S		Feb. 02, 1993	11.27	S	
Mar. 17, 1982	10.80	S		Dec. 18	11.47	S		Sept. 28	11.01	S					
Highest	7.63	Mar. 04, 1987													
Lowest	13.06	Jan. 03, 1978													

Local well number: 17N-07W-12 DAA 1; Site–ID: 355743097532001
Location: lat 35°57′49″, long 097°53′29″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1020
Well depth: 30

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 21, 1975	5.52	S		Feb. 29, 1984	7.60	S		Jan. 21, 1988	5.52	S		Sept. 28, 1988	8.27	S	
Jan. 12, 1976	5.98			Jan. 16, 1985	11.60	S		Feb. 17	6.15	S		Nov. 02	7.26	S	
Jan. 03, 1978	13.50			Jan. 29, 1986	10.72	S		Mar. 17	5.82	S		Dec. 01	6.82	S	
Mar. 19, 1979	13.10			Mar. 04, 1987	4.10	S		Apr. 22	3.99	S		Jan. 04, 1989	7.11	S	
Feb. 20, 1980	9.42			Sept. 01	8.23	S		June 02	6.19	S		Feb. 07, 1990	7.22	S	
Jan. 27, 1981	12.00	S		Oct. 06	8.03	S		29	7.79	S		Feb. 25, 1991	10.87	S	
Mar. 17, 1982	11.26	S		Nov. 05	8.02	S		July 26	8.74	S		Jan. 23, 1992	11.12	S	
Mar. 16, 1983	9.87	S		Dec. 18	7.01	S		Aug. 16	9.92	S		Feb. 02, 1993	7.80	S	
Highest	3.99	Apr. 22, 1988													
Lowest	13.50	Jan. 03, 1978													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-03 CBD 1; Site–ID: 360342097495201
Location: lat 36°03′43″, long 097°49′50″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1170
Well depth: 45

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	13.71	S		Jan. 27, 1981	7.90	S		Jan. 29, 1986	10.92	S		Feb. 25, 1991	8.05	S	
Jan. 21, 1975	7.25			Mar. 16, 1982	6.32	S		Mar. 04, 1987	--	S	O	Jan. 23, 1992	7.62	S	
Jan. 13, 1976	6.55			Mar. 15, 1983	8.25	S		Feb. 17, 1988	2.96	S		Feb. 02, 1993	3.47	S	
Feb. 21, 1979	9.28			Feb. 28, 1984	8.45	S		Mar. 23, 1989	5.04						
Feb. 20, 1980	7.19			Jan. 16, 1985	11.47	S		Feb. 08, 1990	4.55	S					
Highest	2.96	Feb. 17, 1988													
Lowest	13.71	Jan. 24, 1974													

Local well number: 18N-06W-06 BBB 1; Site–ID: 360415097531201
Location: lat 36°04′20″, long 097°53′19″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1120
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	21.65	S		Jan. 21, 1975	17.47			Jan. 13, 1976	18.45			Dec. 07, 1976	21.17		
Highest	17.47	Jan. 21, 1975													
Lowest	21.65	Jan. 24, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-07 AAC 1; Site–ID: 360316097522401
Location: lat 36°03′18″, long 097°52′27″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1145
Well depth: 34

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	8.17	S		Feb. 28, 1984	4.67	S		Feb. 17, 1988	3.97	S		Nov. 02, 1988	6.03	S	
Jan. 21, 1975	3.66			Jan. 16, 1985	7.01	S		18	3.85	S		Dec. 01	5.73	S	
Jan. 13, 1976	7.15			Jan. 29, 1986	6.36	S		Mar. 17	2.97	S		Jan. 04, 1989	5.67	S	
Dec. 07	7.81			Mar. 04, 1987	--	S	O	Apr. 22	3.19	S		Feb. 25, 1991	--	S	O
Jan. 04, 1978	8.10			Sept. 01	6.02	S		June 02	4.48	S		Jan. 23, 1992	--	--	O
Feb. 21, 1979	8.37			Oct. 06	5.75	S		29	5.64	S		Feb. 02, 1993	3.84	S	
Feb. 20, 1980	6.97			Nov. 05	6.23	S		July 26	6.78	S					
Mar. 16, 1982	6.40	S		Dec. 18	5.25	S		Aug. 16	7.67	S					
Mar. 16, 1983	5.95	S		Jan. 21, 1988	3.66	S		Sept. 28	6.20	S					
Highest	2.97	Mar. 17, 1988													
Lowest	8.37	Feb. 21, 1979													

Local well number: 18N-06W-10 DDD 1; Site–ID: 360237097490401
Location: lat 36°02′38″, long 097°49′08″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1170
Well depth: 65

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	13.63	S		Jan. 04, 1978	8.25			Mar. 16, 1982	4.42	S		Jan. 29, 1986	--	--	W
Jan. 21, 1975	2.88			Feb. 21, 1979	9.10			Mar. 15, 1983	3.64	S					
Jan. 13, 1976	4.77			Feb. 20, 1980	6.52			Feb. 28, 1984	2.85	S					
Dec. 07	7.24			Jan. 27, 1981	6.35	S		Jan. 16, 1985	5.90	S					
Highest	2.85	Feb. 28, 1984													
Lowest	13.63	Jan. 24, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-15 CAD 1; Site–ID: 360158097493601
Location: lat 36°02′02″, long 097°49′43″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1170
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	7.90	S		Jan. 21, 1975	1.47			Jan. 13, 1976	2.84		
Highest	1.47	Jan. 21, 1975									
Lowest	7.90	Jan. 24, 1974									

Local well number: 18N-06W-16 CCD 1; Site–ID: 360145097505601
Location: lat 36°01′48″, long 097°51′02″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1160
Well depth: 65

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	30.85	S		Jan. 04, 1978	22.17			Mar. 16, 1982	21.49	S		Jan. 29, 1986	--	--	O
Jan. 21, 1975	26.02			Feb. 21, 1979	23.42			Mar. 15, 1983	19.64	S		Mar. 04, 1987	--	--	O
Jan. 13, 1976	19.05			Feb. 20, 1980	23.97			Feb. 28, 1984	17.67	S		Feb. 17, 1988	--	--	O
Dec. 07	21.12			Jan. 27, 1981	20.50	S		Jan. 16, 1985	17.70	S					
Highest	17.67	Feb. 28, 1984													
Lowest	30.85	Jan. 24, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-17 AAB 1; Site–ID: 360230097512001
Location: lat 36°02′36″, long 097°51′27″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1175
Well depth: 58

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	42.05	S		Mar. 15, 1983	27.97	S		Jan. 21, 1988	19.68	S		Sept. 28, 1988	20.98	S	
Jan. 21, 1975	36.59			Feb. 28, 1984	24.99	S		Feb. 17	19.40	S		Nov. 02	20.70	S	
Jan. 31, 1976	31.43			Jan. 16, 1985	26.20	S		18	19.13	S		Dec. 01	20.70	S	
Dec. 07	32.59			Jan. 29, 1986	24.66	S		Mar. 17	17.99	S		Jan. 04, 1989	20.78	S	
Jan. 04, 1978	33.70			Mar. 04, 1987	15.72	S		Apr. 22	15.96	S		Feb. 08, 1990	21.93	S	
Feb. 21, 1979	34.55			Sept. 01	19.34	S		June 02	17.89	S		Feb. 25, 1991	24.34	S	
Feb. 20, 1980	33.02			Oct. 06	20.08	S		29	19.28	S		Jan. 23, 1992	26.05	S	
Jan. 27, 1981	30.60	S		Nov. 05	20.86	S		July 26	20.10	S		Feb. 02, 1993	20.87	S	
Mar. 16, 1982	31.36	S		Dec. 18	20.76	S		Aug. 16	20.90	S					
Highest	15.72	Mar. 04, 1987													
Lowest	42.05	Jan. 24, 1974													

Local well number: 18N-06W-17 BBB 2; Site–ID: 360204097521401
Location: lat 36°02′36″, long 097°52′15″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1130
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	21.46	S		Jan. 21, 1975	9.90			Jan. 13, 1976	10.97			Dec. 07, 1976	13.73		
Highest	9.90	Jan. 21, 1975													
Lowest	21.46	Jan. 24, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-20 CCA 1; Site–ID: 360059097520001
Location: lat 36°01′04″, long 097°52′06″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1110
Well depth: 68

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	19	R		Jan. 04, 1978	13.05			Mar. 16, 1982	11.33	S		Jan. 29, 1986	7.94	S	
Jan. 21, 1975	12.43			Feb. 21, 1979	14.22			Mar. 15, 1983	9.42	S		Mar. 04, 1987	--	--	O
Jan. 13, 1976	8.00			Feb. 20, 1980	14.03			Feb. 28, 1984	5.48	S					
Dec. 07	11.40			Jan. 27, 1981	14.70	S		Mar. 11, 1985	4.96	S					
Highest	4.96	Mar. 11, 1985													
Lowest	19	Jan. 24, 1974													

Local well number: 18N-06W-31 BAA 1; Site–ID: 355954097524801
Location: lat 36°00′01″, long 097°52′56″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1100
Well depth: 56

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	19.74	S		Mar. 16, 1983	12.44	S		Jan. 21, 1988	6.32	S		Sept. 28, 1988	7.47	S	
Jan. 21, 1975	13.05			Feb. 28, 1984	11.40	S		Feb. 17	7.21	S		Nov. 02	10.06	S	
Jan. 13, 1976	11.68			Jan. 16, 1985	11.93	S		18	7.03	S		Dec. 01	8.48	S	
Dec. 07	14.50			Jan. 29, 1986	12.75	S		Mar. 17	6.59	S		Jan. 04, 1989	8.73	S	
Jan. 04, 1978	15.90			Mar. 04, 1987	4.36	S		Apr. 22	6.28	S		Feb. 07, 1990	9.48	S	
Mar. 19, 1979	16.56			Sept. 01	8.11	S		June 02	7.59	S		Feb. 25, 1991	11.20	S	
Feb. 20, 1980	15.41			Oct. 06	7.31	S		29	8.04	S		Jan. 23, 1992	11.82	S	
Jan. 27, 1981	14.25	S		Nov. 05	8.08	S		July 26	8.89	S		Feb. 02, 1993	9.01	S	
Mar. 17, 1982	14.29	S		Dec. 18	7.70	S		Aug. 16	9.38	S					
Highest	4.36	Mar. 04, 1987													
Lowest	19.74	Jan. 24, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-31 DDD 2; Site–ID: 355908097521601
Location: lat 35°59′11″, long 097°52′21″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1085
Well depth: 36

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	6.64	S		Mar. 17, 1982	3.03	S		Nov. 05, 1987	2.69	S		July 26, 1988	3.99	S	
Jan. 21, 1975	2.74			Mar. 16, 1983	2.84	S		Dec. 18	2.12	S		Aug. 16	4.67	S	
Jan. 12, 1976	2.97			Feb. 28, 1984	2.06	S		Jan. 21, 1988	2.12	S		Sept. 28	2.44	S	
Dec. 07	4.23			Jan. 16, 1985	2.60	S		Feb. 18	--	--	O	Nov. 02	2.44	S	
Jan. 04, 1978	4.70			Jan. 29, 1986	3.09	S		Mar. 17	2.12	S		Dec. 01	--	--	O
Mar. 19, 1979	3.92			Mar. 04, 1987	--	--	O	Apr. 22	--	--	O	Jan. 04, 1989	--	--	O
Feb. 20, 1980	3.25			Sept. 01	2.04	S		June 02	2.84	S		Feb. 25, 1991	--	S	O
Jan. 27, 1981	3.75	S		Oct. 06	2.60	S		29	3.21	S		Jan. 23, 1992	--	--	O
Highest	2.04	Sept. 01, 1987													
Lowest	6.64	Jan. 24, 1974													

Local well number: 18N-06W-32 BAA 1; Site–ID: 355954097514401
Location: lat 36°00′00″, long 097°51′47″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1100
Well depth: 70

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	18.07	S		Mar. 17, 1982	10.75	S		Nov. 05, 1987	6.72	S		June 29, 1988	6.42	S	
Jan. 21, 1975	9.32			Mar. 16, 1983	9.04	S		Dec. 18	5.68	S		July 26	7.42	S	
Jan. 13, 1976	8.85			Feb. 28, 1984	7.77	S		Jan. 21, 1988	4.91	S		Aug. 16	8.29	S	
Dec. 07	11.54			Jan. 16, 1985	8.94	S		Feb. 17	6.58	S		Sept. 28	6.56	S	
Jan. 04, 1978	12.74			Jan. 29, 1986	9.18	S		18	5.41	S		Nov. 02	6.53	S	
Mar. 19, 1979	13.55			Mar. 04, 1987	4.32	S		Mar. 17	4.88	S		Dec. 01	6.67	S	
Feb. 20, 1980	11.92			Sept. 01	7.09	S		Apr. 22	4.62	S		Jan. 04, 1989	6.85	S	
Jan. 27, 1981	10.80	S		Oct. 06	6.23	S		June 02	6.35	S					
Highest	4.32	Mar. 04, 1987													
Lowest	18.07	Jan. 24, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-06W-35 BBB 1; Site–ID: 355954097485601
Location: lat 35°59′57″, long 097°49′00″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1145
Well depth: 64

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 24, 1974	22.21	S		Jan. 21, 1975	16.37			Jan. 27, 1981	--	W	
Highest	16.37	Jan. 21, 1975									
Lowest	22.21	Jan. 24, 1974									

Local well number: 18N-07W-04 DA 1; Site–ID: 360345097570801
Location: lat 36°03′52″, long 097°56′44″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1097
Well depth: 26

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 31, 1950	13.25	R		Jan. 29, 1951	12.54	S		Sept. 04, 1951	12.43	S		Apr. 28, 1952	14.65		
Sept. 03	13.20	S		Feb. 28	12.54	S		27	12.65	S		May 27	13.30		
20	12.14	S		Mar. 26	12.58	S		Oct. 29	11.84	S		Mar. 04, 1969	11.60		
Oct. 05	12.17	S		Apr. 26	12.64	S		Dec. 06	12.64	S		Mar. 08, 1971	11.65		
25	12.30	S		June 05	12.39	S		31	15.15	S		Jan. 26, 1972	12.18		
Nov. 29	12.33	S		July 09	14.84	S		Jan. 31, 1952	15.70						
Dec. 28	12.38	S		Aug. 07	11.83	S		Mar. 31	12.95						
Highest	11.60	Mar. 04, 1969													
Lowest	15.70	Jan. 31, 1952													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-07W-10 DA 1; Site–ID: 360615097553501
Location: lat 36°03′02″, long 097°55′38″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1097
Well depth: 30

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 17, 1950	21.22	S		Mar. 26, 1951	21.17	S		Mar. 31, 1952	21.22	S		Feb. 26, 1953	21.45	S	
31	21.07	S		Apr. 26	21.18	S		Apr. 28	21.25	S		Mar. 30	21.49	S	
Aug. 04	20.92	S		June 05	21.11	S		May 27	21.26	S		Apr. 27	22.49	S	
Sept. 03	20.85	S		July 09	21.06	S		June 27	21.31	S		May 28	21.49	S	
20	20.97	S		Aug. 07	21.05	S		July 30	21.34	S		June 29	21.54	S	
Oct. 05	20.98	S		Sept. 04	21.13	S		Aug. 27	21.38	S		July 30	21.50	S	
25	21.01	S		27	21.16	S		Sept. 29	21.40	S		Aug. 31	21.52	S	
Nov. 29	21.05	S		Oct. 29	21.18	S		Oct. 31	21.41	S		Sept. 28	21.56	S	
Dec. 28	21.08	S		Dec. 06	21.17	S		Nov. 25	21.40	S		Oct. 30, 1953	21.55	S	
Jan. 29, 1951	21.12	S		31	21.20	S		Dec. 29	21.42	S		Nov. 30	21.56	S	
Feb. 28	21.13	S		Jan. 31, 1952	21.26	S		Jan. 29, 1953	21.45	S		Dec. 30	21.53	S	
Highest	20.85	Sept. 03, 1950													
Lowest	22.49	Apr. 27, 1953													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-07W-21 DCD 1; Site–ID: 360052097564801
Location: lat 36°00′58″, long 097°56′53″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1081
Well depth: 63

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 31, 1950	30.74	S		Nov. 25, 1952	31.29	S		Apr. 25, 1955	32.91	R		Feb. 27, 1958	24.73	S	
Aug. 04	30.65	S		Dec. 29	31.25	S		July 29	32.39	S		Mar. 27	24.49	S	
Sept. 03	30.35	S		Jan. 29, 1953	31.25	S		Aug. 26	32.49	R		Apr. 24	24.45	S	
20	30.21	S		Feb. 26	31.30	S		Sept. 26	32.47	R		May 22, 1958	24.12	S	
29	30.19	S		Mar. 30	31.16	S		Oct. 28	32.20	S		June 26	24.42	S	
Oct. 25	30.16	S		Apr. 27	31.22	S		Dec. 02	31.84	S		July 25	24.70	S	
Nov. 29	30.09	S		May 28	31.48	S		28	31.74	S		Aug. 28	24.16	S	
Dec. 28	30.02	S		June 29	31.93	S		Feb. 03, 1956	31.50	S		Sept. 15	24.20	S	
Jan. 29, 1951	30.10	S		July 30	32.09	S		24	31.40	S		Oct. 31	24.01	S	
Feb. 28	29.94	S		Aug. 31	32.19	S		Mar. 23	31.35	S		Nov. 21	23.76	S	
Mar. 26	29.96	S		Sept. 28	32.31	S		Apr. 27	31.26	S		Jan. 09, 1959	24.10	S	
Apr. 26	30.01	S		Oct. 30	32.34	S		May 25	31.49	S		30	24.05	S	
June 05	29.89	S		Nov. 30, 1953	32.21	S		June 29	31.78	S		Feb. 27	23.95	S	
July 09	29.80	S		Dec. 30	32.11	S		July 27	32.08	S		Mar. 27	24.12	S	
Aug. 07	29.98	S		Jan. 29, 1954	31.96	S		Aug. 31	32.44	S		Apr. 24	24.08	S	
Sept. 04	30.29	S		Feb. 25	31.89	S		Sept. 21	32.64	S		May 22	24.33	S	
27	29.43	S		Mar. 22	31.90	S		Nov. 02	32.70	S		June 26	24.81	S	
Oct. 29	30.32	S		Apr. 26	31.90	S		30	32.48	S		July 24	24.90	S	
Dec. 06	30.14	S		May 24	32.14	S		Dec. 21	32.35	S		Aug. 28	25.29	S	
31	30.06	S		June 28	32.50	S		Feb. 08, 1957	32.24	R		Oct. 23	24.85	S	
Jan. 31, 1952	29.95	S		July 26	32.85	S		28	32.22	R		Nov. 24	24.55	S	
Mar. 31	29.92	S		Aug. 26	33.04	S		Apr. 08	32.27	R		Dec. 16	24.37	S	
Apr. 28	29.99	S		Sept. 20	33.20	S		May 10	32.15	R		Jan. 29, 1960	24.25	S	
May 27	30.24	S		Oct. 28	33.25	S		Aug. 29	26.80	R		Mar. 25	23.68	S	
June 27	30.62	S		Nov. 29	33.20	S		Oct. 02	26.06	R		Apr. 22	23.54	S	
July 30	31.07	S		Jan. 05, 1955	32.99	R		31	25.63	R		May 20	23.62	S	
Aug. 27	31.34	S		27	32.96	R		Nov. 21	25.45	R		June 17	23.20	S	
Sept. 29	31.58	S		Feb. 24	32.96	R		Dec. 19	24.79	R		July 25	22.79	S	
Oct. 31	31.45	S		Mar. 28	32.88	R		Jan. 30, 1958	24.72	S		Aug. 19	23.15	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-07W-21 DCD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 16, 1960	22.86	S		Apr. 28, 1965	23.74	S		Oct. 14, 1968	27.69	R		Dec. 09, 1976	23.85		
Dec. 14	22.03	S		July 16	24.50	S		Nov. 07	27.73	R		Jan. 10, 1978	27.00		
Jan. 19, 1961	22.09	S		Oct. 15	24.66	S		Dec. 05	27.57	R		Mar. 19, 1979	26.37		
Feb. 17	21.90	S		Jan. 07, 1966	24.59	S		Jan. 09, 1969	27.53	R		Feb. 21, 1980	25.02		
Mar. 17	22.04	S		Apr. 22	24.93	S		Feb. 06	27.66	R		Jan. 28, 1981	24.85	S	
Apr. 21	22.20	S		July 21	25.80	S		Mar. 04	27.38	R		Mar. 16, 1983	23.19	S	
May 19	22.42	S		Sept. 21	26.00	S		Apr. 23	27.03	R		Feb. 28, 1984	22.50	S	
June 23	22.53	S		Oct. 21	25.98	S		May 23	26.07	R		Jan. 16, 1985	24.53	S	
July 17	22.48	S		Nov. 21	25.87	S		June 26	25.32	R		Feb. 25, 1986	23.80	S	
Aug. 04	22.75	S		Dec. 21	25.95	S		July 16	25.52	R		Mar. 04, 1987	14.35	S	
Sept. 01	21.92	S		Jan. 20, 1967	26.05	R		Sept. 10	25.82	R		Feb. 17, 1988	16.28	S	
29	22.04	S		Feb. 20	26.27	R		Oct. 09	25.77	R		Mar. 23, 1989	19.56		
Oct. 27	21.33	S		Mar. 20	26.20	R		Nov. 20, 1969	25.76	R		Feb. 08, 1990	19.36	S	
Nov. 17	20.88	S		Apr. 17	26.40	R		Dec. 22	25.60	R		Feb. 25, 1991	21.10	S	
Feb. 26, 1962	19.81	S		May 18	26.50	R		Jan. 28, 1970	25.74	R		Jan. 23, 1992	22.40	S	
Mar. 26	19.96	S		July 17	26.47	R		Feb. 26	25.87	R		Feb. 02, 1993	22.67	S	
May 28	20.53	S		Aug. 21	26.74	R		Mar. 03	25.80						
June 29	20.82	S		Sept. 18	26.88	R		26	26.17	R					
Aug. 24	20.61	S		Oct. 19	26.93	R		Apr. 28	25.92	R					
Oct. 02	21.74	S		Nov. 20	26.92	R		May 27	26.28	R					
19	21.68	S		Dec. 18	26.91	R		June 25	25.15	R					
Nov. 16	21.63	S		Jan. 25, 1968	26.90	R		Aug. 27	27.96	R					
Jan. 10, 1963	21.69	S		Feb. 27	27.07	R		Sept. 24	27.36	R					
Feb. 07, 1963	20.79	S		Mar. 22	27.10	R		Nov. 24	27	R					
Mar. 28	20.85	S		Apr. 18	27.14	R		Mar. 05, 1971	27.25						
Apr. 26	21.88	S		May 16	27.21	R		Jan. 26, 1972	28.77						
May 23	22.69	S		June 17	27.22	R		Feb. 26, 1973	28.80						
June 20	22.38	S		July 15	27.41	R		Jan. 24, 1974	26.11						
Aug. 19	22.99	S		Aug. 13	27.69	R		Jan. 21, 1975	22.49						
Jan. 27, 1965	23.40	S		Sept. 16	27.62	R		Jan. 13, 1976	20.92						
Highest	14.35	Mar. 04, 1987													
Lowest	33.25	Oct. 28, 1954													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-08W-10 BAB 1; Site–ID: 360322098023301
Location: lat 36°03′26″, long 098°02′40″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1120
Well depth: 42

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	15.40	S		Jan. 10, 1978	13.92			Mar. 16, 1982	12.90	S		Feb. 25, 1986	--	--	O
Jan. 22, 1975	11.09			Mar. 19, 1979	14.85			Mar. 15, 1983	9.93	S					
Jan. 13, 1976	11.69			Feb. 21, 1980	7.13			Feb. 28, 1984	9.38	S					
Dec. 09	12.90			Jan. 28, 1981	12.20	S		Mar. 11, 1985	--	--	O				
Highest	7.13	Feb. 21, 1980													
Lowest	15.40	Feb. 07, 1974													

Local well number: 18N-08W-13 BB 2; Site–ID: 360929098004501
Location: lat 36°02′32″, long 098°00′44″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1090
Well depth: 9

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Aug. 03, 1950	.89	S		Mar. 26, 1951	1.36	S		Jan. 31, 1952	1.53	S		Dec. 29, 1952	2.92	S	
Sept. 03	1.23	S		Apr. 26	1.64	S		Mar. 31	1.48	S		Jan. 29, 1953	1.74	S	
20	1.26	S		June 05	1.32	S		Apr. 28	1.53	S		Feb. 26	1.64	S	
28	1.47	S		July 09	1.61	S		May 27	2.07	S		Mar. 30	1.65	S	
Oct. 04	1.40	S		Aug. 07	3.03	S		June 27	3.78	S		Apr. 27	1.88	S	
25	1.49	S		Sept. 04	3.77	S		July 30	4.48	S		May 28	3.00	S	
Nov. 29	1.21	S		27	3.18	S		Aug. 27	4.65	S		Mar. 08, 1971	2.62		
Dec. 28	1.24	S		Oct. 29	1.80	S		Sept. 29	5.00	S		Jan. 26, 1972	2.80		
Jan. 29, 1951	1.39	S		Dec. 06	1.60	S		Oct. 31	4.38	S		Jan. 24, 1974	2.53		
Feb. 28	1.15	S		31	1.51	S		Nov. 25	2.95	S		Jan. 22, 1975	.69		
Highest	.69	Jan. 22, 1975													
Lowest	5.00	Sept. 29, 1952													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-08W-13 BBA 2; Site–ID: 360234098004002
Location: lat 36°02′34″, long 098°00′40″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1110
Well depth: 20

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 21, 1952	4.28	S		July 30, 1953	9.70	S		Jan. 05, 1955	10.57	S		May 25, 1956	9.20	S	
Mar. 31	5.60	S		Aug. 31	9.75	S		27	10.63	S		June 29	9.33	S	
Apr. 28	6.12	S		Sept. 28	9.81	S		Feb. 24	10.68	S		July 27	9.50	S	
May 27	6.64	S		Oct. 30	9.92	S		Mar. 28	10.71	S		Aug. 31	9.82	S	
June 27	7.16	S		Nov. 30	9.94	S		Apr. 25	10.72	S		Sept. 21	10.00	S	
July 30	7.69	S		Dec. 30	9.94	S		May 27	1.04	S		Nov. 02	10.40	S	
Aug. 28	8.20	S		Jan. 29, 1954	9.94	S		June 27	5.02	S		30	10.60	S	
Sept. 29	8.58	S		Feb. 25	9.92	S		July 29, 1955	6.68	S		Dec. 21	10.72	S	
Oct. 31	8.84	S		Mar. 22	9.91	S		Aug. 26	7.48	S		Feb. 08, 1957	10.87	S	
Nov. 25	9.00	S		Apr. 26	9.89	S		Sept. 26	8.10	S		28	10.90	S	
Dec. 29	9.20	S		May 24	9.90	S		Oct. 28	8.34	S		Apr. 08	10.74	S	
Jan. 29, 1953	9.30	S		June 28	9.85	S		Dec. 02	8.63	S		May 10	10.53	S	
Feb. 26	9.36	S		July 26	9.91	S		28	8.76	S		Oct. 02	6.43	S	
Mar. 30	9.42	S		Aug. 26	10.04	S		Feb. 03, 1956	8.91	S		31	6.43	S	
Apr. 27	9.50	S		Sept. 20	10.15	S		24	8.96	S		Nov. 15	--	--	N
May 28	9.55	S		Oct. 28	10.34	S		Mar. 23	9.03	S					
June 29	9.64	S		Nov. 29	10.47	S		Apr. 27	9.11	S					
Highest	1.04	May 27, 1955													
Lowest	10.90	Feb. 28, 1957													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-08W-13 BBB 1; Site–ID: 360230098004101
Location: lat 36°02′32″, long 098°00′51″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1093
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 22, 1975	8.20	S		Mar. 11, 1985	4.22	S		Feb. 17, 1988	3.00	S		Sept. 28, 1988	1.81	S	
Jan. 13, 1976	10.71			Feb. 25, 1986	2.94	S		18	.75	S		Nov. 02	1.88	S	
Dec. 09	11.20			Mar. 04, 1987	--	--	O	Mar. 17	.33	S		Dec. 01	1.86	S	
Jan. 10, 1978	3.75			Sept. 02	+.20	S		Apr. 22	.09	S		Jan. 04, 1989	1.88	S	
Feb. 21, 1980	1.19			Oct. 06	.52	S		June 02	.12	S		Feb. 08, 1990	1.60	S	
Jan. 28, 1981	2.20	S		Nov. 05	.67	S		29	.61	S		Feb. 26, 1991	2.33	S	
Mar. 16, 1982	2.87	S		Dec. 18	.99	S		July 26	.81	S		Jan. 24, 1992	3.45	S	
Mar. 15, 1983	1.79	S		Jan. 21, 1988	.76	S		Aug. 16	1.17	S		Feb. 02, 1993	.20	S	
Highest	+.20	Sept. 02, 1987													
Lowest	11.20	Dec. 09, 1976													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 18N-08W-13 BBB 2; Site–ID: 360232098005101
Location: lat 36°02′32″, long 098°00′51″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1100
Well depth: 16

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 21, 1952	6.19	S		July 30, 1953	4.66	S		Jan. 05, 1955	7.62	S		May 25, 1956	6.18	S	
Mar. 31	6.08	S		Aug. 31	6.69	S		27	7.00	S		June 29	6.38	S	
Apr. 28	6.00	S		Sept. 28	6.58	S		Feb. 24	6.15	S		July 27	7.86	S	
May 27	6.79	S		Oct. 30	6.13	S		Mar. 28	5.78	S		Aug. 31	9.28	S	
June 27	8.30	S		Nov. 30	5.43	S		Apr. 25	5.85	S		Sept. 21	--	S	D
July 30	9.38	S		Dec. 30	5.16	S		May 27	2.24	S		Nov. 02	9.00	S	
Aug. 28	9.75	S		Jan. 29, 1954	5.07	S		June 27	4.54	S		30	8.30	S	
Sept. 29	10.08	S		Feb. 25	5.03	S		July 29, 1955	5.19	S		Dec. 21	8.00	S	
Oct. 31	9.05	S		Mar. 22	5.13	S		Aug. 26	7.75	S		Feb. 08, 1957	7.79	S	
Nov. 25	7.18	S		Apr. 26	5.24	S		Sept. 26	7.78	S		28	6.05	S	
Dec. 29	7.30	S		May 24	4.63	S		Oct. 28	5.65	S		Apr. 08	4.95	S	
Jan. 29, 1953	5.66	S		June 28	6.34	S		Dec. 02	5.21	S		May 10	3.97	S	
Feb. 26	5.46	S		July 26	8.40	S		28	5.09	S		Aug. 29	5.45	S	
Mar. 30	5.27	S		Aug. 26	8.76	S		Feb. 03, 1956	4.99	S		Oct. 02	4.75	S	
Apr. 27	5.35	S		Sept. 20	9.32	S		23	4.84	S		31	4.35	S	
May 28	5.95	S		Oct. 28	8.98	S		Mar. 23	4.99	S		Nov. 15	--	--	N
June 29	8.10	S		Nov. 29	7.68	S		Apr. 27	5.22	S					
Highest	2.24	May 27, 1955													
Lowest	10.08	Sept. 29, 1952													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-07W-08 ADA 1; Site–ID: 360830097574201
Location: lat 36°08′30″, long 097°57′42″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1145
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	18.64	S		Jan. 22, 1975	10.73			Jan. 13, 1976	13.28			Dec. 09, 1976	15.84		
Highest	10.73	Jan. 22, 1975													
Lowest	18.64	Feb. 07, 1974													

Local well number: 19N-07W-22 AAB 1; Site–ID: 360651097553601
Location: lat 36°06′57″, long 097°55′44″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1085
Well depth: 47

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 30, 1974	14.10	S		Jan. 28, 1981	--	--	O	Mar. 15, 1983	--	--	N
Jan. 22, 1975	13.18			Mar. 16, 1982	--	--	O				
Highest	13.18	Jan. 22, 1975									
Lowest	14.10	Jan. 30, 1974									

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-07W-22 BAA 2; Site–ID: 360651097560001
Location: lat 36°06′58″, long 097°56′08″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1095
Well depth: 42

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	9.73	S		Jan. 10, 1978	9.29			Mar. 16, 1982	7.40	S		Feb. 25, 1986	5.05	S	
Jan. 22, 1975	4.20			Mar. 20, 1979	10.98			Mar. 15, 1983	6.68	S		Mar. 04, 1987	--	--	O
Jan. 13, 1976	7.54			Feb. 21, 1980	7.38			Feb. 28, 1984	5.28	S					
Dec. 09	9.40			Jan. 28, 1981	8.20	S		Jan. 16, 1985	6.61	S					
Highest	4.20	Jan. 22, 1975													
Lowest	10.98	Mar. 20, 1979													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-07W-30 DCD 1; Site–ID: 361045097590501
Location: lat 36°05′16″, long 097°59′01″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1183
Well depth: 92

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Aug. 03, 1950	42.19	S		Mar. 31, 1952	41.34	S		May 28, 1953	43.64	S		Jan. 28, 1981	34.75	S	
Dec. 28	41.55	S		Apr. 28	41.48	S		June 29	43.89	S		Mar. 16, 1982	36.90	S	
Jan. 29, 1951	41.27	S		May 27	41.66	S		July 30	43.79	S		Mar. 15, 1983	32.53	S	
Feb. 28	41.27	S		June 27	41.84	S		Aug. 31	43.61	S		Feb. 28, 1984	31.49	S	
Mar. 26	41.27	S		July 30	42.02	S		Sept. 28	43.61	S		Jan. 16, 1985	32.37	S	
Apr. 26	40.29	S		Aug. 28	42.62	S		Mar. 04, 1969	41.45			Feb. 25, 1986	32.75	S	
June 05	41.38	S		Sept. 29	37.50	S		Mar. 03, 1970	38.27			Mar. 04, 1987	23.46	S	
July 09	41.04	S		Oct. 31	42.85	S		Mar. 08, 1971	40.16			Feb. 17, 1988	29.63	S	
Aug. 08	40.85	S		Nov. 25	43.10	S		Jan. 26, 1972	41.25			Mar. 23, 1989	32.02		
Sept. 27	41.00	S		Dec. 29	43.05	S		Feb. 26, 1973	42.33			Feb. 08, 1990	30.78	S	
Oct. 29	40.87	S		Jan. 29, 1953	43.19	S		Jan. 24, 1974	39.33			Feb. 26, 1991	32.30	S	
Dec. 06	40.93	S		Feb. 26	43.30	S		Jan. 13, 1976	29.95			Jan. 24, 1992	35.92	S	
31	40.94	S		Mar. 30	43.32	S		Dec. 09	34.15			Feb. 02, 1993	34.50	S	
Jan. 31, 1952	41.16	S		Apr. 27	43.47	S		Feb. 21, 1980	37.88						
Highest	23.46	Mar. 04, 1987													
Lowest	43.89	June 29, 1953													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-08W-03 AAA 1; Site–ID: 360922098021401
Location: lat 36°09′31″, long 098°02′04″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1228
Well depth: 48

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 10, 1950	21.26	S		Aug. 28, 1952	19.28	S		Feb. 24, 1955	22.72	R		Nov. 21, 1957	13.15	R	
14	21.35	S		Sept. 29	19.75	S		Mar. 28	22.61	R		Dec. 19	12.58	R	
21	21.34	S		Oct. 28	20.08	S		Apr. 25	22.73	R		Jan. 30, 1958	12.50	S	
28	21.21	S		Nov. 25	19.51	S		May 27	22.73	R		Feb. 27, 1958	12.57	S	
Aug. 04	21.00	S		Dec. 29	19.60	S		June 27	21.69	R		Mar. 27	12.40	S	
Sept. 03	21.04	S		Jan. 29, 1953	19.68	S		July 29	21.57	R		Apr. 24	12.36	S	
30	20.74	S		Feb. 26	19.72	S		Aug. 26	21.83	R		May 22	11.57	S	
Oct. 04	20.85	S		Mar. 30	19.55	S		Sept. 27	21.97	R		June 26	11.73	S	
25	20.86	S		Apr. 27	19.70	S		Oct. 28	21.72	S		July 25	11.80	S	
Nov. 29	20.70	S		May 28	20.30	S		Dec. 02	21.33	S		Aug. 28	11.79	S	
Dec. 27	20.62	S		June 29	20.64	S		28	21.43	S		Sept. 15	12.06	S	
Jan. 29, 1951	20.84	S		July 30	20.58	S		Feb. 03, 1956	21.45	S		Oct. 31	12.30	S	
Feb. 28	20.48	S		Aug. 31, 1953	20.73	S		24	21.20	S		Nov. 21	12.37	S	
Mar. 26	20.49	S		Sept. 28	20.80	S		Mar. 23	21.00	S		Jan. 09, 1959	12.43	S	
Apr. 26	20.58	S		Oct. 30	20.90	S		Apr. 27	21.50	S		30	12.52	S	
June 05	19.77	S		Nov. 30	20.93	S		June 29	22.16	S		Feb. 27	12.28	S	
July 09	18.10	S		Dec. 30	20.99	S		July 27	22.80	S		Mar. 27	12.47	S	
Aug. 08	17.88	S		Jan. 29, 1954	20.80	S		Aug. 31	23.14	S		Apr. 24	12.12	S	
Sept. 04	18.22	S		Feb. 25	20.69	S		Sept. 21	23.32	S		May 22	13.36	S	
27	18.58	S		Mar. 22	20.84	S		Nov. 02	23.25	S		June 26	12.06	S	
Oct. 29	18.27	S		Apr. 26	20.88	S		30	23.17	S		July 24	12.06	S	
Dec. 06	18.20	S		May 24	21.09	S		Dec. 21	23.09	S		Aug. 28	11.93	S	
31	18.15	S		July 26	22.06	S		Feb. 09, 1957	22.99	R		Sept. 28	11.94	S	
Jan. 31, 1952	18.28	S		Aug. 26	22.26	S		28	23.10	R		Oct. 23	8.08	S	
Mar. 31	18.25	S		Sept. 20	22.55	S		Apr. 08	23.27	R		Nov. 24	7.99	S	
Apr. 28	18.14	S		Oct. 28	22.64	S		May 10	22.74	R		Dec. 16	7.84	S	
May 27	18.26	S		Nov. 29	22.80	S		31	16.70	R		Jan. 29, 1960	7.76	S	
June 27	18.40	S		Jan. 05, 1955	22.40	R		June 27	13.46	R		Mar. 25	5.32	S	
July 30	19.02	S		27	22.72	R		July 25	13.06	R		Apr. 22	4.53	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-08W-03 AAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 20, 1960	4.73	S		Mar. 28, 1963	5.82	S		Mar. 22, 1968	12.17	R		Jan. 26, 1972	13.56		
June 17	3.27	S		Apr. 26	5.52	S		Apr. 18	12.15	R		Feb. 26, 1973	14.58		
July 22	4.09	S		May 23	6.25	S		May 16	11.34	R		Jan. 24, 1974	8.17		
Aug. 19	4.84	S		June 20	6.63	S		June 17	10.49	R		Jan. 22, 1975	1.90	S	
Sept. 16	4.45	S		July 18	4.23	S		July 15	11.05	R		Jan. 13, 1976	3.04	S	
Oct. 20	5.03	S		Aug. 19	5.85	S		Aug. 13	11.93	R		Dec. 09	6.03	S	
Nov. 18	4.70	S		Oct. 11	6.32	S		Sept. 16	11.84	R		Jan. 10, 1978	6.85	S	
Dec. 14	3.40	S		Jan. 27, 1965	7.22	R		Oct. 14	12.20	R		Mar. 20, 1979	7.15	S	
Jan. 19, 1961	3.80	R		Apr. 28	6.84	R		Nov. 08, 1968	12.44	R		Feb. 21, 1980	6.54	S	
Feb. 17	3.36	R		July 16	6.53	R		Dec. 05	12.28	R		Jan. 28, 1981	6.15	S	
Mar. 17	3.55	R		Oct. 15	8.95	R		Jan. 09, 1969	12.39	R		Mar. 16, 1982	5.87	S	
Apr. 21	2.76	R		Jan. 07, 1966	9.01	R		Feb. 06	12.15	R		Mar. 16, 1983	2.08	S	
May 19	3.57	R		Apr. 22	9.28	R		Mar. 04	12.29	R		Feb. 28, 1984	1.32	S	
June 23	3.95	R		July 21	9.35	R		Apr. 23	11.01	R		Mar. 11, 1985	3.09	S	
July 17	4.30	R		Sept. 21	10.59	R		May 23	7.70	R		Feb. 25, 1986	3.40	S	
Aug. 04	5.03	R		Oct. 21	10.61	R		June 26	8.27	R		Feb. 18, 1987	.74	S	
Sept. 01	5.37	R		Nov. 21	10.72	R		July 16	8.48	R		Sept. 02	2.10	S	
29	4.73	R		Dec. 21	10.74	R		Aug. 10	10.69	R		Oct. 06	1.88	S	
Oct. 27	3.66	R		Jan. 20, 1967	10.75	R		Oct. 09	10.55	R		Nov. 05	2.57	S	
Nov. 17	2.16	R		Feb. 20	11.09	R		Nov. 20	10.75	R		Dec. 18	2.05	S	
Jan. 29, 1962	1.62	R		Mar. 20	10.90	R		Dec. 22	10.45	R		Jan. 21, 1988	.15	S	
Feb. 26	2.22	R		Apr. 17	11.33	R		Jan. 28, 1970	10.54	R		Feb. 17	.34	S	
Mar. 26	2.30	R		May 18	10.88	R		Feb. 26	10.87	R		18	.49	S	
Apr. 30, 1962	2.25	R		June 19	11.40	R		Mar. 03	10.78			Mar. 17	.02	S	
May 28	3.11	R		July 17	11.48	R		26	11.02	R		Apr. 22	.19	S	
June 29	2.99	R		Aug. 21	11.80	R		Apr. 28	10.62	R		June 02, 1988	.28	S	
Aug. 24	2.93	R		Sept. 18	11.67	R		May 27	11.12	R		29	1.72	S	
Oct. 02	5.36	R		Oct. 19	11.87	R		June 25	12.04	R		July 26	2.82	S	
19	5.55	R		Nov. 20	11.82	R		Aug. 27	12.41	R		Aug. 16	3.54	S	
Nov. 16	5.75	R		Dec. 18	11.84	R		Nov. 24	12.47	R		Sept. 28	3.13	S	
Jan. 10, 1963	5.44	S		Jan. 25, 1968	11.78	R		Dec. 22	12.36	R		Nov. 02	3.17	S	
Feb. 07	5.85	S		Feb. 27	12.13	R		Mar. 08, 1971	12.52			Dec. 01	2.89	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-08W-03 AAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 04, 1989	2.84	S		Feb. 26, 1991	5.62	S		Feb. 02, 1993	4.63	S	
Feb. 08, 1990	3.53	S		Jan. 24, 1992	8.20	S					
Highest	.02	Mar. 17, 1988									
Lowest	23.32	Sept. 21, 1956									

Local well number: 19N-08W-14 CBC 1; Site–ID: 360710098081201
Location: lat 36°07′15″, long 098°01′52″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1193
Well depth: 65

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 14, 1950	22.26	S		Dec. 27, 1950	19.69	S		Sept. 27, 1951	19.64	S		Aug. 28, 1952	20.40	S	
21	21.00	S		Jan. 29, 1951	19.91	S		Oct. 29	19.67	S		Sept. 29	19.48	S	
28	20.89	S		Feb. 28	19.87	S		Dec. 06	19.71	S		Oct. 28	20.62	S	
Aug. 04	19.39	S		Mar. 26	19.91	S		31	19.69	S		Dec. 29	18.41	S	
Sept. 03	19.88	S		Apr. 26	19.23	S		Jan. 31, 1952	19.91	S		Jan. 29, 1953	21.09	S	
20	19.63	S		June 05	19.46	S		Mar. 31	19.93	S		Feb. 26	21.22	S	
Oct. 04	19.67	S		July 09	18.86	S		Apr. 28	19.98	S					
25	19.62	S		Aug. 08	18.79	S		May 27	20.06	S					
Nov. 29	19.57	S		Sept. 04	19.23	S		July 30	20.58	S					
Highest	18.41	Dec. 29, 1952													
Lowest	22.26	July 14, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-08W-17 DCD 1; Site–ID: 360657098041701
Location: lat 36°06′59″, long 098°04′24″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1195
Well depth: 74

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	11.87	S		Mar. 15, 1983	8.58	S		Jan. 21, 1988	6.72	S		Sept. 28, 1988	7.72	S	
Jan. 22, 1975	7.72			Feb. 28, 1984	7.93	S		Feb. 17	6.65	S		Nov. 02	7.57	S	
Jan. 13, 1976	4.89			Mar. 11, 1985	10.98	S		18	6.66	S		Dec. 01	7.72	S	
Dec. 09	6.76			Feb. 25, 1986	10.76	S		Mar. 17	6.61	S		Jan. 04, 1989	7.83	S	
Jan. 10, 1978	8.30			Feb. 18, 1987	2.69	S		Apr. 22	6.31	S		Feb. 08, 1990	9.84	S	
Mar. 20, 1979	10.05			Sept. 02	5.06	S		June 02	6.18	S		Feb. 26, 1991	10.42	S	
Feb. 21, 1980	9.69			Oct. 06	5.67	S		29	7.03	S		Jan. 24, 1992	11.50	S	
Jan. 28, 1981	10.60	S		Nov. 05	6.07	S		July 26	7.42	S		Feb. 02, 1993	9.23	S	
Mar. 16, 1982	11.27	S		Dec. 18	6.54	S		Aug. 16	8.34	S					
Highest	2.69	Feb. 18, 1987													
Lowest	11.87	Feb. 07, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-08W-27 DAC 1; Site–ID: 360526098020101
Location: lat 36°05′28″, long 098°02′08″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1170
Well depth: 67

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 14, 1950	17.54	S		July 09, 1951	16.02	S		Jan. 28, 1981	9.30	S		Mar. 17, 1988	2.15	S	
28	17.30	S		Aug. 08	17.33	S		Mar. 16, 1982	10.64	S		Apr. 22	.82	S	
Aug. 04	17.15	S		Sept. 04	--	--	P	Mar. 15, 1983	6.66	S		June 02	1.50	S	
Sept. 03	16.72	S		Mar. 04, 1969	12.25			Feb. 28, 1984	8.80	S		29	--	--	P
20	16.44	S		Mar. 03, 1970	9.91			Mar. 11, 1985	6.95	S		July 26	--	--	P
28	16.45	S		Mar. 08, 1971	12.23			Feb. 25, 1986	8.45	S		Aug. 16	4.92	S	
Oct. 25	17.06	S		Jan. 26, 1972	13.72			Mar. 04, 1987	--	--	O	Sept. 28	3.94	S	
Nov. 29	16.48	S		Feb. 26, 1973	16.00			Sept. 02	2.47	S		Nov. 02	3.83	S	
Dec. 28	16.20	S		Jan. 24, 1974	13.67			Oct. 06	2.79	S		Dec. 01	4.20	S	
Jan. 29, 1951	16.34	S		Jan. 22, 1975	7.40			Nov. 05	3.13	S		Jan. 04, 1989	4.19	S	
Feb. 28	16.15	S		Jan. 13, 1976	4.63			Dec. 18	2.87	S		Feb. 08, 1990	5.60	S	
Mar. 26	16.11	S		Dec. 09	7.84			Jan. 21, 1988	1.69	S		Feb. 26, 1991	8.13	S	
Apr. 26	16.18	S		Mar. 20, 1979	11.84			Feb. 17	2.45	S		Jan. 24, 1992	10.28	S	
June 05	17.27	S		Feb. 21, 1980	9.16			Feb. 18, 1988	2.02	S		Feb. 02, 1993	8.70	S	
Highest	.82	Apr. 22, 1988													
Lowest	17.54	July 14, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-09W-10 AB 1; Site–ID: 361032098084001
Location: lat 36°08′34″, long 098°08′44″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1150
Well depth: 31

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 05, 1950	16.69	S		Apr. 26, 1951	14.65	S		June 27, 1952	15.70	S		Sept. 28, 1953	16.36	S	
13	16.81	S		June 05	10.70	S		July 30	16.58	S		Oct. 30	16.37	S	
28	16.86	S		July 09	11.17	S		Aug. 28	16.98	S		Nov. 30, 1953	16.18	S	
Aug. 04	16.38	S		Aug. 07	14.18	S		Sept. 29	17.30	S		Dec. 30	15.98	S	
Sept. 03	15.73	S		Sept. 05	15.31	S		Oct. 31	17.40	S		Jan. 29, 1954	15.65	S	
20	15.59	S		27	15.62	S		Nov. 25	16.75	S		Feb. 25	15.55	S	
Oct. 03	15.66	S		Oct. 29	15.54	S		Dec. 29	16.50	S		Mar. 22	15.42	S	
25	15.72	S		Dec. 06	15.04	S		Jan. 29, 1953	16.20	S		Apr. 26	15.36	S	
Nov. 29	15.50	S		31	14.77	S		Feb. 26	16.07	S		June 28	16.43	S	
Dec. 27	15.38	S		Jan. 31, 1952	14.56	S		Mar. 31	15.90	S		July 26	16.94	S	
Jan. 20, 1951	15.27	S		Mar. 31	14.05	S		Apr. 27	15.75	S					
Feb. 28	15.08	S		Apr. 29	13.66	S		May 28	15.89	S					
Mar. 26	14.82	S		May 27	13.77	S		June 29	16.84	S					
Highest	10.70	June 05, 1951													
Lowest	17.40	Oct. 31, 1952													

Local well number: 19N-09W-10 CDD 1; Site–ID: 360750098084901
Location: lat 36°07′50″, long 098°08′54″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1130
Well depth: 32

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	5.80	S		Jan. 10, 1978	8.53			Mar. 15, 1983	4.97	S		Feb. 18, 1987	1.21	S	
Jan. 22, 1975	3.29			Mar. 20, 1979	9.25			Feb. 28, 1984	4.86	S		Feb. 17, 1988	3.66	S	
Jan. 14, 1976	3.38			Jan. 28, 1981	6.40	S		Mar. 11, 1985	6.28			Mar. 23, 1989	5.57		
Dec. 09	6.74			Mar. 16, 1982	7.82	S		Feb. 25, 1986	6.12	S					
Highest	1.21	Feb. 18, 1987													
Lowest	9.25	Mar. 20, 1979													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-09W-24 AAD 1; Site–ID: 360649098062501
Location: lat 36°06'47", long 098°06'17"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1163
Well depth: 16

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 06, 1950	10.57	S		June 27, 1952	9.25	S		Nov. 29, 1954	11.28	S		May 31, 1957	7.87	S	
13	10.55	S		July 30	9.92	S		Jan. 05, 1955	11.23	S		June 27	6.07	S	
28	10.42	S		Aug. 28	10.04	S		27	11.26	S		July 25	5.70	S	
Aug. 04	9.92	S		Sept. 29	10.20	S		Feb. 24	11.31	S		Aug. 29, 1957	5.93	S	
18	9.91	S		Oct. 31	10.24	S		Mar. 28	11.28	S		Oct. 02	5.45	S	
25	9.93	S		Nov. 25	10.19	S		Apr. 25	11.33	S		31	5.25	S	
Sept. 03	9.78	S		Dec. 29	10.22	S		May 27	10.93	S		Nov. 21	5.23	S	
20	9.73	S		Jan. 29, 1953	10.28	S		June 27	10.84	S		Dec. 19	5.02	S	
28	9.80	S		Feb. 26	10.32	S		July 29	10.88	S		Jan. 30, 1958	5.13	S	
Oct. 04	9.82	S		Mar. 31	10.33	S		Aug. 26	11.14	S		Feb. 27	5.18	S	
25	9.86	S		Apr. 27	10.36	S		Sept. 27	11.22	S		Mar. 27	5.15	S	
Nov. 29	9.82	S		May 28	10.50	S		Oct. 28	11.02	S		Apr. 24	5.11	S	
Dec. 27	9.83	S		June 29, 1953	10.73	S		Dec. 02	10.89	S		May 22	5.11	S	
Jan. 29, 1951	9.92	S		July 30	9.84	S		28	10.89	S		June 26	4.24	S	
Feb. 28	9.88	S		Aug. 31	9.91	S		Feb. 03, 1956	10.93	S		July 25	5.31	S	
Mar. 26	9.93	S		Sept. 28	10.02	S		24	10.88	S		Aug. 28	5.03	S	
Apr. 26	9.87	S		Oct. 30	10.13	S		Mar. 23	10.96	S		Sept. 19	5.09	S	
June 05	8.63	S		Nov. 30	11.15	S		Apr. 27	11.02	S		Oct. 31	6.36	S	
July 09	8.59	S		Dec. 30	10.26	S		June 29	11.37	S		Nov. 21	5.46	S	
Aug. 08	8.96	S		Jan. 29, 1954	10.16	S		July 27	11.49	S		Jan. 09, 1959	5.63	S	
Sept. 05	10.22	S		Feb. 25	10.18	S		Aug. 31	11.60	S		30	5.70	S	
27	7.85	S		Mar. 22	10.25	S		Sept. 21	11.64	S		Feb. 27	5.73	S	
Oct. 29	9.24	S		Apr. 26	10.39	S		Nov. 02	11.68	S		Mar. 27	5.82	S	
Dec. 06	9.15	S		May 24	10.54	S		30	11.65	S		Apr. 24	5.67	S	
31	9.16	S		June 28	10.80	S		Dec. 21	11.65	S		May 22	5.73	S	
Jan. 31, 1952	10.22	S		July 26	11.02	S		Feb. 09, 1957	11.69	S		June 26	6.04	S	
Apr. 01	9.32	S		Aug. 26	11.21	S		28	11.74	S		July 24	6.35	S	
28	9.23	S		Sept. 20	11.30	S		Apr. 08	11.78	S		Aug. 28	6.60	S	
May 27	9.34	S		Oct. 28	11.27	S		May 10	10.84	S		Sept. 28	6.55	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 19N-09W-24 AAD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Oct. 23, 1959	5.32	S		May 28, 1962	+.06	S		Feb. 20, 1967	5.22	R		Feb. 05, 1969	3.32	R	
Nov. 24	4.95	S		June 29	.10	S		Mar. 30	5.20	R		Mar. 04	4.24	R	
Dec. 16	4.80	S		Aug. 24	1.23	S		Apr. 17	5.33	R		Apr. 23	3.48	R	
Jan. 29, 1960	4.66	S		Oct. 02	1.69	S		May 18	4.73	R		May 23	2.55	R	
Mar. 25	3.70	S		19	1.75	S		June 19	5.07	R		July 16	2.86	R	
Apr. 22	3.50	S		Nov. 16	1.90	S		July 17	5.30	R		Sept. 10	3.67	R	
May 20	3.48	S		Jan. 10, 1963	2.15	S		Aug. 21	5.44	R		Oct. 09	3.59	R	
June 17	1.65	S		Feb. 07	2.29	S		Sept. 18	4.53	R		Nov. 20	3.67	R	
July 22	1.98	S		Mar. 28	2.49	S		Oct. 19	4.44	R		Dec. 22	3.65	R	
Aug. 19	2.34	S		Apr. 26	2.61	S		Nov. 20	4.47	R		Jan. 28, 1970	3.90	R	
Sept. 16	.60	S		May 23	2.89	S		Dec. 18	4.55	R		Feb. 26	4.04	R	
Nov. 18	.30	S		June 20	2.59	S		Jan. 25, 1968	4.63	R		Mar. 26	4.15	R	
Dec. 14	.12	S		Jan. 27, 1965	2.10	S		Feb. 27	4.74	R		Apr. 28	3.90	R	
Jan. 19, 1961	.60	S		Apr. 28	2.32	S		Mar. 22	4.82	R		May 27	4.34	R	
Feb. 17	.40	S		July 16	3.34	S		Apr. 18	4.85			June 25	5.11	R	
Mar. 17	.54	S		Oct. 15	2.98	S		May 16	3.77	R		Aug. 27	4.38	R	
Apr. 21	.59	S		Jan. 07, 1966	3.48	S		June 17	4.25	R		Sept. 24	4.11	R	
May 19	.74	S		Apr. 26	3.78	S		July 15	4.58	R		Oct. 27	4.24	R	
June 23	.57	S		July 21	4.60	S		Aug. 13	5.93	R		Nov. 24	4.25	R	
July 17	.96	S		Sept. 21	4.76	S		Sept. 16	4.40	R		Dec. 22	4.38	R	
Aug. 04	1.55	S		Oct. 21	4.80	S		Oct. 14	4.53	R		Mar. 08, 1971	4.40	R	
Sept. 01	1.47	S		Nov. 21	4.87	S		Nov. 07	4.38	R		Jan. 26, 1972	4.74	R	
29	2.25	S		Dec. 21	5.00	S		Dec. 05	4.34	R		Feb. 26, 1973	5.14	R	
Dec. 13, 1961	2.15	S		Jan. 20, 1967	5.10	R		Jan. 08, 1969	4.24	R		Jan. 24, 1974	.28	R	
Highest	+.06	May 28, 1962													
Lowest	11.78	Apr. 08, 1957													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 16N-04W-05 CCA 1; Site–ID: 355315097390701
Location: lat 35°53′15″, long 097°39′07″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1010
Well depth: 75

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 17, 1983	28.90	S		Jan. 27, 1986	26.12	S		June 22, 1989	23.2			Jan. 23, 1992	22.86	S	
Feb. 29, 1984	27.64	S		Mar. 04, 1987	26.12	S		Feb. 07, 1990	22.10	S		Feb. 03, 1993	17.47	S	
Jan. 15, 1985	28.64	S		Feb. 10, 1988	20.05	S		Feb. 25, 1991	21.99	S					
Highest	17.47	Feb. 03, 1993													
Lowest	28.90	Mar. 17, 1983													

Local well number: 17N-04W-15 CDC 1; Site–ID: 355632097365501
Location: lat 35°56′32″, long 097°36′55″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1140
Well depth

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	20.50	S		Mar. 16, 1983	11.56	S		Jan. 21, 1988	5.51	S		Sept. 28, 1988	7.24	S	
Jan. 20, 1975	12.53			Feb. 29, 1984	10.62	S		Feb. 10	5.46	S		Nov. 02	7.30	S	
Jan. 12, 1976	11.12			Jan. 15, 1985	11.08	S		18	5.55	S		Dec. 01	7.26	S	
Dec. 06	13.00			Jan. 28, 1986	7.82	S		Mar. 17	4.77	S		Jan. 04, 1989	7.42	S	
Jan. 05, 1978	14.10			Mar. 04, 1987	2.60	S		Apr. 22	3.63	S		Feb. 07, 1990	7.28	S	
Feb. 06, 1979	13.40			Sept. 01	5.36	S		June 02	3.85	S		Feb. 25, 1991	7.93	S	
Jan. 23, 1980	12.58			Oct. 06	5.86	S		30	6.22	S		Jan. 23, 1992	7.86	S	
Jan. 21, 1981	11.62	S		Nov. 05	6.24	S		July 26	6.92	S					
Mar. 03, 1982	12.85	S		Dec. 18	6.19	S		Aug. 16	7.26	S					
Highest	2.60	Mar. 04, 1987													
Lowest	20.50	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-04W-18 CDD 1; Site–ID: 355632097395901
Location: lat 35°56′32″, long 097°39′59″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1090
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1980	26.54	S		Mar. 03, 1982	25.65	S		Feb. 29, 1984	--	--	P
Jan. 21, 1981	--	--	P	Mar. 16, 1983	25.42	S		Jan. 15, 1985	--	--	N
Highest	25.42	Mar. 16, 1983									
Lowest	26.54	Jan. 23, 1980									

Local well number: 17N-04W-19 ADD 1; Site–ID: 355606097392701
Location: lat 35°56′06″, long 097°39′27″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1085
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	28.34	S		Mar. 03, 1982	20.30	S		Nov. 05, 1987	9.27	S		June 30, 1988	7.48	S	
Jan. 20, 1975	22.42			Mar. 17, 1983	16.49	S		Dec. 18	9.49	S		July 26	12.42	S	
Jan. 12, 1976	17.89			Feb. 29, 1984	18.85	S		Jan. 21, 1988	8.48	S		Aug. 16	13.68	S	
Dec. 06	22.20			Jan. 15, 1985	20.08	S		Feb. 10	8.02	S		Sept. 28	13.90	S	
Jan. 05, 1978	22.40			Jan. 28, 1986	17.34	S		18	8.13	S		Nov. 02	12.07	S	
Feb. 06, 1979	22.09			Mar. 04, 1987	10.02	S		Mar. 17	6.86	S		Dec. 01	10.52	S	
Jan. 23, 1980	21.96			Sept. 01	8.20	S		Apr. 22	5.18	S		Jan. 04, 1989	10.79	S	
Jan. 21, 1981	18.84	S		Oct. 06	8.68	S		June 02	6.39	S		Jan. 23, 1992	--	--	O
Highest	5.18	Apr. 22, 1988													
Lowest	28.34	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-04W-27 CBB 1; Site–ID: 355507097371101
Location: lat 35°55′07″, long 097°37′11″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1035
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	9.92	S		Dec. 06, 1976	5.90			Jan. 23, 1980	6.00		
Jan. 20, 1975	4.85			Jan. 05, 1978	7.30			Jan. 21, 1981	6.62	S	
Jan. 12, 1976	3.65			Feb. 06, 1979	7.01			Feb. 29, 1984	--	--	W
Highest	3.65			Jan. 12, 1976							
Lowest	9.92			Jan. 23, 1974							

Local well number: 17N-04W-27 CDC 1; Site–ID: 355447097365501
Location: lat 35°54′47″, long 097°36′55″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1030
Well depth

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 20, 1975	6.83	S		Feb. 29, 1984	8.60	S		Feb. 10, 1988	5.40	S		Nov. 02, 1988	4.90	S	
Jan. 12, 1976	5.58			Jan. 15, 1985	8.78	S		18	4.39	S		Dec. 01	5.02	S	
Dec. 06	7.74			Jan. 28, 1986	6.92	S		Mar. 17	4.29	S		Jan. 04, 1989	5.06	S	
Jan. 05, 1978	9.03			Mar. 04, 1987	4.84	S		Apr. 22	4.19	S		Feb. 07, 1990	6.65	S	
Feb. 06, 1979	8.88			Sept. 01	4.36	S		June 02	4.30	S		Feb. 25, 1991	5.34	S	
Jan. 23, 1980	7.86			Oct. 06	4.50	S		30	5.23	S		Jan. 23, 1992	5.88	S	
Jan. 21, 1981	7.90	S		Nov. 05	4.63	S		July 26	5.23	S		Feb. 03, 1993	3.68	S	
Mar. 03, 1982	6.65	S		Dec. 18	4.36	S		Aug. 16	5.49	S					
Mar. 16, 1983	8.83	S		Jan. 21, 1988	4.34	S		Sept. 28	4.92	S					
Highest	3.68	Feb. 03, 1993													
Lowest	9.03	Jan. 05, 1978													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-04W-31 CCC 1; Site–ID: 355355097402301
Location: lat 35°53′55″, long 097°40′29″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1040
Well depth: 52

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	23.62	S		Mar. 16, 1983	20.13	S		Dec. 18, 1987	12.19	S		Aug. 16, 1988	12.74	S	
Jan. 20, 1975	20.12			Feb. 29, 1984	19.80	S		Jan. 21, 1988	11.40	S		Sept. 28	12.55	S	
Jan. 12, 1976	18.68			Jan. 15, 1985	20.04	S		Feb. 10	10.90	S		Nov. 02	12.59	S	
Dec. 06	20.35			Jan. 28, 1986	17.66	S		18	11.16	S		Dec. 01	12.84	S	
Jan. 05, 1978	21.37			Feb. 04, 1987	13.98	S		Mar. 17	10.22	S		Jan. 04, 1989	12.95	S	
Feb. 06, 1979	21.65			Mar. 04	12.85	S		Apr. 22	9.38	S		Feb. 07, 1990	14.80	S	
Jan. 23, 1980	20.98			Sept. 01	11.79	S		June 02	10.49	S		Feb. 25, 1991	13.43	S	
Jan. 21, 1981	19.64	S		Oct. 06	12.27	S		30	11.41	S		Jan. 23, 1992	12.62	S	
Mar. 03, 1982	20.24	S		Nov. 05	12.50	S		July 26	12.28	S		Feb. 03, 1993	7.29	S	
Highest	7.29	Feb. 03, 1993													
Lowest	23.62	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 17N-04W-34 ABB 1; Site–ID: 355441097363901
Location: lat 35°54′41″, long 097°36′39″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1045
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1974	32.65	S		Feb. 29, 1984	30.92	S		Feb. 10, 1988	26.60	S		Nov. 02, 1988	27.17	S	
Jan. 20, 1975	29.00			Jan. 15, 1985	31.13	S		18	26.61	S		Dec. 01	27.28	S	
Jan. 12, 1976	27.77			Jan. 28, 1986	29.24	S		Mar. 17	26.56	S		Jan. 04, 1989	27.28	S	
Dec. 06	31.45			Mar. 04, 1987	27.32	S		Apr. 22	26.29	S		Feb. 07, 1990	27.93	S	
Jan. 05, 1978	31.30			Sept. 01	26.44	S		June 02	26.37	S		Feb. 25, 1991	27.50	S	
Feb. 06, 1979	30.86			Oct. 06	28.33	S		30	26.63	S		Jan. 23, 1992	28.27	S	
Jan. 23, 1980	30.33			Nov. 05	26.75	S		July 26	27.09	S		Feb. 03, 1993	25.73	S	
Jan. 21, 1981	30.20	S		Dec. 18	26.63	S		Aug. 16	27.21	S					
Mar. 03, 1982	29.72	S		Jan. 21, 1988	26.44	S		Sept. 28	27.08	S					
Highest	25.73	Feb. 03, 1993													
Lowest	32.65	Jan. 23, 1974													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 1; Site–ID: 361442098092801
Location: lat 36°14′42″, long 098°09′28″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1225
Well depth: 60

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 23, 1965	18.61	S		Sept. 16, 1968	22.66			Jan. 10, 1971	22.38	B		June 10, 1971	23.90	B	
July 16	19.37			Oct. 14	23.00			15	22.48	B		15	23.76	B	
Oct. 15	19.31			Nov. 07	23.20			20	22.33	B		20	23.75	B	
Jan. 07, 1966	16.90			Dec. 05	22.75			31	22.37	B		25	24.24	B	
Apr. 22	19.00			Jan. 08, 1969	21.60			Feb. 05	22.33	B		30	24.01	B	
July 21	20.64			Feb. 05	22.44			10	22.26	B		July 05	23.81	B	
Sept. 20	20.40			Mar. 07	22.46			15	22.27	B		10	24.14	B	
Oct. 21	20.64			Apr. 23	22.38			20	22.31	B		15	25.18	B	
Nov. 22	20.48			May 22	21.92			25	22.20	B		20	25.36	B	
Dec. 21	20.45			June 26	22.00			28	22.30	B		25	25.36	B	
Jan. 20, 1967	20.40			July 16	22.81			Mar. 04	22.30	S		31	25.10	B	
Feb. 20	20.65			Sept. 10	22.92			05	22.37	B		Aug. 05	24.81	B	
Mar. 20	20.35			Oct. 09, 1969	22.30			10	22.33	B		10	25.26	B	
Apr. 18	21.14			Nov. 20	21.92			15	22.39	B		15	25.76	B	
May 18	21.31			Dec. 22	21.61			20	22.41	B		20	24.94	B	
June 19	21.48			Jan. 28, 1970	21.59			25	22.39	B		25	25.06	B	
July 21	21.62			Feb. 26	21.67			31	22.44	B		31	25.36	B	
Aug. 21	22.47			Mar. 03	21.68	S		Apr. 05	23.08	B		Sept. 05	25.24	B	
Sept. 19	21.81			26	22.12			15	23.98	B		10	25.81	B	
Oct. 20	21.53			Apr. 28	21.58			20	23.95	B		15	25.97	B	
Nov. 21	21.28			May 27	22.21			25	23.98	B		20	25.25	B	
Dec. 18	21.28			June 25	22.10			30	23.49	B		25	24.93	B	
Jan. 18, 1968	21.29			July 28	23.67			May 05	23.20	B		30	24.75	B	
Feb. 27	21.12			Aug. 27	23.65			10	24.01	B		Oct. 05	24.66	B	
Mar. 21	21.18			Sept. 24	23.02			15	24.40	B		10	24.57	B	
Apr. 18	22.05			Oct. 27	22.72			20	24.05	B		15	24.94	B	
June 17	21.86			Nov. 24	22.49			25	24.69	B		25	24.52	B	
July 15	22.51			Dec. 22	22.35			31	24.63	B		31	24.45	B	
Aug. 13	23.25			Jan. 05, 1971	22.49	B		June 05	24.20	B		Nov. 05	24.39	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Nov. 10, 1971	24.28	B		July 20, 1972	22.98	B		Dec. 31, 1972	22.84	B		Sept. 30, 1973	24.74	B	
15	24.20	B		25	22.95	B		Feb. 26, 1973	23.60	S		Oct. 05	24.72	B	
20	24.16	B		30	23.07	B		28	24.55	B		10	24.60	B	
25	24.10	B		Aug. 05	23.12	B		Mar. 05	24.52	B		15	24.43	B	
30	24.14	B		10	23.37	B		10	24.49	B		20	24.13	B	
Dec. 05	24.05	B		15	24.14	B		15	24.37	B		25	23.02	B	
10	24.03	B		20	23.72	B		20	24.10	B		Nov. 15	20.69	B	
Jan. 26, 1972	23.82	S		25	23.49	B		25	23.92	B		20	20.54	B	
Feb. 10	21.83	B		31	23.37	B		31	23.69	B		25	20.50	B	
15	21.79	B		Sept. 05	23.26	B		May 31	24.50	B		30	20.51	B	
20	21.76	B		10	23.19	B		June 05	24.32	B		Dec. 05	20.54	B	
25	21.81	B		15	23.13	B		10	24.28	B		10	20.42	B	
29	21.68	B		20	23.12	B		15	24.88	B		15	20.39	B	
Mar. 05	21.83	B		25	23.03	B		20	23.12	B		20	20.36	B	
10	21.77	B		30	23.14	B		25	24.07	B		25	20.22	B	
15	21.64	B		Oct. 05	23.11	B		30	23.50	B		31	20.28	B	
20	22.36	B		10	23.10	B		July 05	23.10	B		Jan. 05, 1974	20.14	B	
25	22.44	B		15	23.14	B		10	23.91	B		10	20.13	B	
30	23.01	B		20	23.97	B		15	22.60	B		24	20.04	S	
Apr. 05	23.19	B		25	23.39	B		20	22.46	B		25	20.04	B	
10	22.78	B		31	23.21	B		25	22.32	B		31	20.07	B	
May 15	22.54	B		Nov. 05	23.11	B		Aug. 05	22.03	B		Feb. 05	20.03	B	
20	22.57	B		10	23.10	B		10	21.90	B		10	20.01	B	
25	23.56	B		15	23.05	B		15	21.77	B		15	19.97	B	
30	23.70	B		20	23.02	B		20	21.70	B		20	19.94	B	
June 05	23.75	B		25	22.94	B		25	21.65	B		Mar. 31, 1974	18.63	B	
10	24.01	B		30	22.93	B		31	22.21	B		Apr. 05	18.63	B	
25	23.02	B		Dec. 05	22.96	B		Sept. 05	21.88	B		10	18.35	B	
30	23.00	B		10	22.94	B		10	21.42	B		15	18.36	B	
July 05	22.99	B		15	22.93	B		15	22.08	B		20	18.24	B	
10	22.89	B		20	22.81	B		20	21.90	B		25	18.12	B	
15	22.95	B		25	22.85	B		25	21.80	B		30	18.06	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 05, 1974	17.94	B		Nov. 10, 1974	15.91	B		June 05, 1975	9.41	B		Sept. 30, 1976	14.06	B	
10	17.81	B		15	15.57	B		10	8.69	B		Oct. 05	14.07	B	
15	17.72	B		20	15.44	B		15	6.71	B		10	13.93	B	
20	17.66	B		25	15.25	B		20	6.54	B		15	14.04	B	
25	17.65	B		30	15.05	B		July 05	6.55	B		20	14.00	B	
31	17.59	B		Dec. 05	14.84	B		25	7.92	B		25	13.93	B	
June 05	17.33	B		10	14.81	B		31	8.83	B		31	13.96	B	
10	17.32	B		15	14.76	B		Aug. 05	9.44	B		Nov. 05	13.88	B	
15	17.14	B		20	14.73	B		10	9.55	B		10	13.99	B	
20	17.18	B		Dec. 25, 1974	14.74	B		15	9.79	B		15	13.92	B	
25	17.15	B		Jan. 22, 1975	14.37	S		20	9.49	B		20	13.92	B	
30	17.80	B		25	14.26	B		25	10.02	B		25	13.81	B	
July 05	18.29	B		31	14.27	B		Sept. 05	10.62	B		30	13.98	B	
10	18.62	B		Feb. 05	14.12	B		Oct. 10	10.97	B		Dec. 05	13.91	B	
15	18.51	B		10	13.82	B		15	10.94	B		10	14.01	B	
20	19.14	B		15	13.85	B		Nov. 25	10.81	B		15	13.99	B	
Aug. 15	18.62	B		20	13.62	B		Jan. 15, 1976	11.18	B		20	14.13	B	
20	18.52	B		Mar. 05	13.03	B		20	11.20	B		25	14.07	B	
25	18.43	B		10	12.89	B		25	11.30	B		31	14.17	B	
31	18.25	B		15	12.63	B		31	11.14	B		Jan. 05, 1977	14.23	B	
Sept. 05	18.12	B		20	12.34	B		Feb. 05	11.37	B		10	14.26	B	
10	18.00	B		25	12.21	B		10	11.33	B		Mar. 15	14.64	B	
15	17.92	B		31	11.67	B		Apr. 10	12.79	B		20	14.50	B	
20	17.83	B		Apr. 05	11.58	B		15	12.19	B		25	14.43	B	
25	17.61	B		10	11.52	B		20	11.97	B		31	14.68	B	
30	17.42	B		15	11.40	B		Apr. 25, 1976	11.90	B		Apr. 05	14.65	B	
Oct. 05	17.21	B		20	11.53	B		30	11.79	B		10	15.17	B	
10	17.12	B		25	11.29	B		May 05	11.76	B		20	14.69	B	
15	17.13	B		30	11.27	B		June 25	13.80	B		25	14.73	B	
20	17.02	B		May 05	10.95	B		Sept. 10	14.65	B		30	14.72	B	
25	16.97	B		10	11.14	B		15	14.12	B		May 05	14.74	B	
31	16.88	B		25	12.16	B		20	14.07	B		10	14.80	B	
Nov. 05	16.63	B		31	9.69	B		25	14.49	B		15	14.77	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 20, 1977	14.85	B		Jan. 25, 1978	15.13	B		Sept. 20, 1978	17.73	B		Oct. 10, 1980	17.64	B	
25	15.16	B		31	15.26	B		25	17.29	B		15	17.35	B	
31	13.83	B		Feb. 05	15.34	B		30	17.18	B		20	17.13	B	
June 05	13.37	B		Mar. 10	15.54	B		Oct. 05	17.26	B		25	16.95	B	
10	13.31	B		15	15.74	B		10	17.25	B		31	16.99	B	
15	13.26	B		20	15.61	B		15	16.98	B		Nov. 05	17.00	B	
20	14.01	B		25	15.73	B		20	17.19	B		10	16.91	B	
25	13.93	B		31	15.65	B		Nov. 05	17.86	B		Nov. 15, 1980	16.64	B	
June 30, 1977	14.01	B		Apr. 05	15.68	B		10	17.47	B		20	16.97	B	
July 05	14.64	B		May 05	15.79	B		Dec. 05	17.00	B		25	16.71	B	
10	14.24	B		10	15.76	B		10	17.04	B		30	16.49	B	
15	14.64	B		15	15.61	B		Mar. 30, 1979	16.52	S		Jan. 31, 1981	18.97	B	
20	15.26	B		20	15.73	B		31	16.56	B		Mar. 20	16.92		
Aug. 15	15.48	B		25	15.73	B		Apr. 05	16.47	B		Mar. 23, 1982	16.77		
20	15.10	B		31	15.65	B		10	16.30	B		Feb. 28, 1983	14.47		
25	14.97	B		June 05	15.58	B		15	16.36	B		Feb. 09, 1984	12.44	S	
31	15.07	B		10	15.48	B		20	16.35	B		Dec. 21, 1988	7.43	S	
Sept. 05	14.88	B		15	15.46	B		25	16.29	B		Feb. 27, 1989	7.68	S	
10	14.88	B		20	15.53	B		30	16.23	B		Apr. 13	7.87	S	
25	14.63	B		25	15.37	B		Aug. 20	17.02	B		Oct. 04	9.02	S	
30	15.06	B		30	16.19	B		25	16.96	B		Feb. 27, 1990	9.30	S	
Oct. 05	14.98	B		July 05	16.65	B		31	16.94	B		May 21	5.63	S	
10	14.99	B		10	16.74	B		Sept. 05	16.95	B		June 21	6.21	S	
15	15.05	B		15	17.06	B		30	17.70	B		Sept. 24	9.60	S	
20	14.91	B		July 20, 1978	17.38	B		Mar. 11, 1980	17.60	S		Nov. 15	9.94	S	
25	15.48	B		25	17.33	B		15	17.75	B		Mar. 11, 1991	10.29	S	
31	15.46	B		31	16.68	B		20	17.72	B		June 26	10.79	S	
Nov. 10	15.23	B		Aug. 05	17.43	B		25	17.70	B		Aug. 14	11.78	S	
15	15.98	B		10	17.18	B		31	17.68	B		Oct. 02	12.05	S	
Jan. 06, 1978	15.02	S		15	16.73	B		Apr. 05	17.72	B		Jan. 06, 1992	12.06	S	
10	15.02	B		31	17.38	B		10	17.68	B		09	11.30	S	
15	15.00	B		Sept. 05	17.81	B		May 15	17.38	B		Apr. 06	11.95	S	
20	15.05	B		10	18.04	B		Oct. 05	17.25	B		21	11.92	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Oct. 01	11.40	S		Jan. 07, 1993	9.58	S		June 29, 1993	3.74	S		Nov. 08, 1993	7.13	S	
Dec. 01	11.11	S		Mar. 24	7.65	S		Aug. 17	4.77	S		Dec. 23	7.54	S	
Highest	3.74	June 29, 1993													
Lowest	25.97	Sept. 15, 1971													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 2; Site–ID: 361440098092101
Location: lat 36°14′42″, long 098°09′28″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1226
Well depth: 60

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 30, 1950	24.00	S		Jan. 06, 1951	24.33	B		Feb. 07, 1951	24.36	B		Mar. 12, 1951	24.31	B	
Feb. 01	24.03	S		07	24.33	B		08	24.29	B		13	24.22	B	
07	23.95	S		08	24.29	B		09	24.32	B		14	24.22	B	
14	24.01	S		09	24.18	B		10	24.23	B		15	24.22	B	
23	23.86	S		10	24.30	B		11	24.18	B		16	24.14	B	
Mar. 02	24.04	S		11	24.27	B		16	24.17	S		17	24.29	B	
09	23.94	S		12	24.22	B		17	24.18	B		18	24.31	B	
15	23.88	S		13	24.24	B		18	24.16	B		19	24.28	B	
23	23.95	S		14	24.22	B		19	24.20	B		20	24.29	B	
30	24.06	S		15	24.28	B		20	24.26	B		21	24.28	B	
Apr. 06	23.94	S		16	24.24	B		21	24.26	B		22	24.17	B	
13	24.00	S		17	24.17	B		22	24.22	B		23	24.31	B	
20	23.96	S		18	24.19	B		23	24.25	B		24	24.30	B	
May 01	23.99	R		19	24.19	B		24	24.22	B		25	24.23	B	
June 01	24.05	R		20	24.38	B		25	24.16	B		26	24.21	B	
July 01	24.05	R		21	24.38	B		26	24.23	B		27	24.09	S	
Aug. 01	24.45	R		22	24.23	B		27	24.20	B		28	24.24	B	
Sept. 01	24.32	R		23	24.29	B		28	24.25	B		29	24.24	B	
Oct. 01	24.23	R		24	24.30	B		Mar. 01	24.21	S		30	24.22	B	
26	24.23	S		25	24.30	B		02	24.16	B		31	24.21	B	
27	24.27	S		26	24.11	S		03	24.26	B		Apr. 01	24.25	B	
Nov. 01	24.40	R		30	24.26	S		04	24.23	B		02	24.26	B	
Dec. 01	24.17	R		31	24.33	B		05	24.18	B		03	24.26	B	
28	24.23	S		Feb. 01	24.34	B		06	24.26	B		04	24.20	B	
Jan. 01, 1951	24.21	B		02	24.23	S		07	24.26	B		05	24.17	B	
02	24.23	B		03	24.21	B		08	24.31	B		06	24.19	B	
03	24.25	B		04	24.24	B		09	24.31	B		07	24.22	B	
04	24.30	B		05	24.18	B		10	24.26	B		08	24.20	B	
05	24.30	B		06	24.32	B		11	24.32	B		09	24.18	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 2—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 10, 1951	24.26	B		May 12, 1951	24.20	B		June 13, 1951	23.64	B		July 15, 1951	22.86	B	
11	24.24	B		13	24.22	B		14	23.62	B		16	22.87	B	
12	24.22	B		14	24.24	B		15	23.62	B		17	22.86	B	
13	24.21	B		15	24.26	B		16	23.57	B		18	22.84	B	
14	24.22	B		16	24.25	B		17	23.59	B		19	22.84	B	
15	24.27	B		17	24.21	B		18	23.62	B		20	22.83	B	
16	24.30	B		18	24.21	B		19	23.64	B		21	22.79	B	
17	24.21	B		19	24.22	B		20	23.68	B		22	22.83	B	
18	24.21	B		20	24.18	B		21	23.57	B		23	22.82	B	
19	24.24	B		21	24.24	B		22	23.58	B		24	22.77	B	
20	24.19	B		22	24.18	B		23	23.52	B		25	22.73	B	
21	24.28	B		23	24.17	B		24	23.56	B		26	22.73	B	
22	24.34	B		24	24.03	B		25	23.47	B		27	22.73	B	
23	24.27	B		25	23.99	B		26	23.39	B		28	22.73	B	
24	24.16	B		26	23.96	B		27	23.34	B		29	22.72	B	
25	24.25	B		27	23.92	B		28	23.37	B		30	22.71	B	
26	24.25	B		28	23.84	B		29	23.32	B		31	22.71	B	
27	24.25	B		29	23.76	B		30	23.29	B		Aug. 01	22.68	B	
28	24.20	B		30	23.76	B		July 01	23.25	B		02	22.67	B	
29	24.14	B		31	23.76	B		02	23.20	B		03	22.70	B	
30	24.21	B		June 01	23.76	B		03	23.18	B		04	22.69	B	
May 01	24.21	B		02	23.74	B		04	23.25	B		05	22.66	B	
02	24.24	B		03	23.73	B		05	23.12	B		06	22.64	B	
03	24.23	B		04	23.72	B		06	23.09	B		07	22.65	B	
04	24.23	B		05	23.70	B		07	23.04	B		08	22.61	S	
05	24.19	B		06	23.66	B		08	22.99	B		09	22.69	B	
06	24.29	B		07	23.66	B		09	22.99	B		10	22.73	B	
07	24.27	B		08	23.72	B		10	23.01	B		14	22.56	S	
08	24.20	B		09	23.72	B		11	22.95	B		15	22.62	B	
09	24.20	B		10	23.71	B		12	22.96	B		16	22.61	B	
10	24.24	B		11	23.64	B		13	22.95	B		17	22.65	B	
11	24.25	B		12	23.63	B		14	22.92	B		18	22.61	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 2—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Aug. 19, 1951	22.58	B		Sept. 27, 1951	22.57	S		Nov. 05. 1051	22.56	B		Dec. 14. 1951	22.60	B	
20	22.58	B		28	22.61	B		06	22.53	B		15	22.61	B	
21	22.61	B		29	22.52	B		07	22.55	B		16	22.48	B	
22	22.60	B		30	22.52	B		08	22.47	B		17	22.48	B	
23	22.57	B		Oct. 01	22.51	B		09	22.49	B		18	22.50	B	
24	22.54	B		02	22.45	B		10	22.51	B		19	22.36	B	
25	22.55	B		03	22.48	B		11	22.48	B		20	22.46	B	
26	22.55	B		04	22.60	B		12	22.40	B		21	22.48	B	
27	22.53	B		05	22.51	S		13	22.50	B		22	22.46	B	
28	22.56	B		11	22.50	S		14	22.50	B		23	22.53	B	
29	22.56	B		12	22.55	B		15	22.59	B		24	22.49	B	
30	22.57	B		13	22.62	B		16	22.63	B		25	22.54	B	
31	22.52	S		14	22.58	B		17	22.65	B		26	22.59	B	
Sept. 02	22.52	S		15	22.53	B		18	22.56	B		27	22.58	B	
07	22.52	S		16	22.58	B		19	22.51	B		28	22.40	B	
08	22.58	B		17	22.60	B		20	22.48	B		29	22.40	B	
09	22.54	B		18	22.61	B		21	22.44	B		30	22.41	B	
10	22.55	B		19	22.60	B		22	22.50	B		31	22.55	B	
11	22.57	B		20	22.46	B		23	22.51	B		Jan. 01, 1952	22.58	B	
12	22.58	B		21	22.55	B		24	22.51	B		02	22.56	B	
13	22.58	B		22	22.60	B		25	22.51	B		03	22.56	B	
14	22.58	B		23	22.56	B		30	22.42	S		04	22.46	B	
15	22.60	B		24	22.55	B		Dec. 01	22.43	B		05	22.51	B	
16	22.58	B		25	22.53	B		02	22.40	B		06	22.52	B	
17	22.52	B		26	22.55	B		04	22.41	B		07	22.41	B	
18	22.52	B		27	22.55	B		05	22.30	S		08	22.41	B	
19	22.48	B		28	22.52	B		06	22.51	B		09	22.55	B	
20	22.49	B		29	22.47	B		07	22.56	B		10	22.55	B	
21	22.58	B		30	22.49	S		08	22.57	B		11	22.42	B	
22	22.56	B		31	22.55	B		09	22.59	B		12	22.43	B	
23	22.51	B		Nov. 01	22.58	B		10	22.52	B		13	22.40	B	
24	22.53	B		02	22.59	B		11	22.50	B		14	22.44	B	
25	22.53	B		03	22.55	B		12	22.45	B		15	22.43	B	
26	22.52	B		04	22.54	B		13	22.44	B		16	22.40	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 2—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 17, 1952	22.49	B		Feb. 19, 1952	22.44	B		Mar. 23. 1952	22.50	B		May 01, 1952	22.40	B	
18	22.46	B		20	22.48	B		24	22.44	B		02	22.41	B	
19	22.44	B		21	22.46	B		25	22.47	B		03	22.42	B	
20	22.47	B		22	22.47	B		26	22.51	B		04	22.41	B	
21	22.42	B		23	22.47	B		27	22.51	B		05	22.36	B	
22	22.50	B		24	22.48	B		28	22.44	B		06	22.40	B	
23	22.50	B		25	22.51	B		29	22.41	B		07	22.39	B	
24	22.45	B		26	22.46	B		30	22.38	B		08	22.36	B	
25	22.36	B		27	22.41	B		31	22.42	B		09	22.44	B	
26	22.45	B		28	22.40	B		Apr. 01	22.48	B		10	22.47	B	
27	22.48	B		29	22.46	B		02	22.48	B		11	22.44	B	
28	22.48	B		Mar. 01	22.45	B		03	22.43	B		12	22.44	B	
29	22.47	B		02	22.38	B		04	22.49	B		13	22.43	B	
30	22.47	B		03	22.48	B		05	22.48	B		14	22.38	B	
31	22.43	B		04	22.51	B		06	22.48	B		15	22.35	B	
Feb. 01	22.43	B		05	22.47	B		07	22.39	B		16	22.44	B	
02	22.43	B		06	22.47	B		08	22.36	B		17	22.50	B	
03	22.43	B		07	22.49	B		09	22.52	B		18	22.47	B	
04	22.45	B		08	22.42	B		10	22.51	B		19	22.44	B	
05	22.50	B		09	22.35	B		11	22.30	S		20	22.40	B	
06	22.49	B		10	22.45	B		18	22.38	S		21	22.39	B	
07	22.43	B		11	22.44	B		19	22.39	B		22	22.43	B	
08	22.46	B		12	22.43	B		20	22.39	B		23	22.47	B	
09	22.44	B		13	22.47	B		21	22.43	B		24	22.41	B	
10	22.41	B		14	22.51	B		22	22.43	B		25	22.43	B	
11	22.42	B		15	22.53	B		23	22.44	B		26	22.40	B	
12	22.34	B		16	22.45	B		24	22.44	B		27	22.44	B	
13	22.40	B		17	22.34	B		25	22.45	B		28	22.44	B	
14	22.46	B		18	22.43	B		26	22.42	B		29	22.40	B	
15	22.48	B		19	22.40	B		27	22.39	B		30	22.34	B	
16	22.43	B		20	22.43	B		28	22.40	B		31	22.41	B	
17	22.42	B		21	22.46	B		29	22.40	B		June 01	22.46	B	
18	22.36	B		22	22.50	B		30	22.42	B		02	22.38	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 2—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
June 03, 1952	22.39	B		July 06, 1952	22.61	B		Aug. 08, 1952	23.03	B		Sept. 10, 1952	23.17	B	
04	22.37	B		07	22.70	B		09	22.98	B		11	23.17	B	
05	22.38	B		08	22.69	B		10	22.96	B		12	23.16	B	
06	22.39	B		09	22.64	B		11	23.01	B		13	23.18	B	
07	22.39	B		10	22.63	B		12	23.03	B		14	23.22	B	
08	22.37	B		11	22.66	B		13	22.98	B		15	23.22	B	
09	22.38	B		12	22.67	B		14	22.97	B		16	23.16	B	
10	22.38	B		13	22.67	B		15	23.00	B		17	23.16	B	
11	22.41	B		14	22.70	B		16	23.00	B		18	23.24	B	
12	22.39	B		15	22.70	B		17	23.07	B		19	23.23	B	
13	22.39	B		16	22.74	B		18	23.05	B		20	23.28	B	
14	22.43	B		17	22.74	B		19	23.03	B		21	23.28	B	
15	22.42	B		18	22.77	B		20	23.00	B		22	23.27	B	
16	22.47	B		19	22.77	B		21	23.08	B		23	23.25	B	
17	22.47	B		20	22.79	B		22	23.08	B		24	23.25	B	
18	22.49	B		21	22.86	B		23	23.09	B		25	23.25	B	
19	22.47	B		22	22.98	B		24	23.06	B		26	23.26	B	
20	22.42	B		23	22.95	B		25	23.04	B		27	23.25	B	
21	22.46	B		24	22.91	B		26	23.03	B		28	23.30	B	
22	22.46	B		25	22.91	B		27	23.06	B		29	23.30	B	
23	22.46	B		26	22.93	B		28	23.08	B		30	23.30	B	
24	22.46	B		27	22.92	B		29	23.03	B		Oct. 01	23.34	B	
25	22.49	B		28	22.93	B		30	23.00	B		02	23.37	B	
26	22.51	B		29	22.97	B		31	23.00	B		03	23.33	B	
27	22.54	B		30	22.98	B		Sept. 01	23.13	B		04	23.34	B	
28	22.57	B		31	22.99	B		02	23.13	B		05	23.40	B	
29	22.57	B		Aug. 01	22.98	B		03	23.11	B		06	23.40	B	
30	22.57	B		02	22.95	B		04	23.11	B		07	23.40	B	
July 01	22.57	B		03	22.95	B		05	23.12	B		08	23.34	B	
02	22.67	B		04	22.99	B		06	23.13	B		09	23.33	B	
03	22.65	B		05	22.98	B		07	23.15	B		10	23.33	B	
04	22.62	B		06	23.01	B		08	23.15	B		Nov. 26	23.46	B	
05	22.61	B		07	22.99	B		09	23.16	B		Dec. 30	23.30	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-04 AAA 2—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 29, 1953	23.31	S		Apr. 26	23.10	S		July 28	24.43	S		Nov. 01	26.15	S	
Feb. 26	23.34	S		May 24	23.21	S		Aug. 25	24.75	S		29	26.18	S	
Mar. 31	23.53	S		June 29	23.47	S		Sept. 27	25.06	S		Dec. 20	26.29	S	
Apr. 28	23.34	S		July 26	23.83	S		Oct. 27	24.74	S		Feb. 08, 1957	26.29	R	
May 29	23.50	S		Aug. 27	24.10	S		Dec. 01, 1955	25.68	S		Mar. 01	26.44	R	
June 30	23.83	S		Sept. 20	24.27	S		29	24.91	S		Apr. 09	26.49	R	
July 31	23.34	S		Oct. 29	24.54	S		Feb. 02, 1956	24.92	S		May 09	26.35	S	
Sept. 01	23.23	S		Nov. 29	24.58	S		23	24.75	S		30	22.31	R	
29	23.15	S		Jan. 06, 1955	24.71	S		Mar. 22	25.00	S		June 27	21.28	R	
Oct. 29	23.10	S		28	24.79	S		Apr. 26	24.99	S		July 25	20.64	R	
Dec. 01	22.97	S		Feb. 25	24.72	S		May 24	25.19	S		Aug. 30	20.55	R	
30	23.10	S		Mar. 28	24.77	S		June 28	25.40	S		Oct. 03	20.39	R	
Jan. 29, 1954	23.05	S		Apr. 25	24.93	S		July 26	25.57	S		Nov. 01	20.35	R	
Feb. 25	23.03	S		May 26	24.84	S		Aug. 30	25.94	S					
Mar. 22	23.09	S		June 27	25.58	S		Sept. 20	26.05	S					
Highest	20.35	Nov. 01, 1957													
Lowest	26.49	Apr. 09, 1957													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-05 CCC 1; Site–ID: 361355098112101
Location: lat 36°13'56", long 098°11'34"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1174
Well depth: 53

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Nov. 17, 1949	7.74	S		Aug. 18, 1950	6.85	S		July 30, 1952	8.62	S		Jan. 06, 1955	11.67	S	
Jan. 30, 1950	7.99	S		25	7.30	S		Aug. 28	9.34	S		28	11.65	S	
Feb. 01	8.02	S		Sept. 01	6.02	S		Sept. 30	9.80	S		Feb. 25	11.62	S	
07	8.00	S		08	5.77	S		Oct. 31	9.77	S		Mar. 29, 1955	11.65	S	
14	8.03	S		15	6.04	S		Nov. 26	9.66	S		Apr. 26	11.02	S	
23	7.98	S		22	6.31	S		Dec. 30	9.62	S		May 26	9.80	S	
Mar. 02	8.06	S		29	6.45	S		Jan. 30, 1953	9.59	S		June 28	8.69	S	
09	8.04	S		Oct. 05	6.52	S		Feb. 27	9.54	S		July 28	9.23	S	
15	8.03	S		25	6.68	S		Mar. 31	9.45	S		Aug. 25	10.36	S	
23	8.08	S		Nov. 28	7.11	S		Apr. 28	9.42	S		Sept. 27	11.00	S	
30	8.16	S		Dec. 27	7.31	S		May 29	9.59	S		Oct. 27	9.58	S	
Apr. 06	8.17	S		Jan. 15, 1951	7.47	S		June 30	10.38	S		Dec. 01	10.49	S	
13	8.25	S		Jan. 30, 1951	7.54	S		July 31	7.57	S		29	11.19	S	
20	8.32	S		Mar. 01	7.10	S		Sept. 01	8.32	S		Feb. 02, 1956	11.56	S	
27	8.38	S		27	7.00	S		29	8.46	S		23	11.70	S	
May 04	8.42	S		Apr. 27	7.06	S		Oct. 29	8.65	S		Mar. 22	11.92	S	
11	7.75	S		June 05	4.29	S		Dec. 04	8.60	S		Apr. 26	12.33	S	
18	7.94	S		July 11	4.16	S		31	8.64	S		May 24	12.89	S	
25	8.08	S		Aug. 08	5.31	S		Jan. 28, 1954	8.65	S		June 28	13.00	S	
June 01	8.15	S		Sept. 05	6.03	S		Feb. 26	8.65	S		July 26	13.60	S	
08	7.91	S		28	6.37	S		Mar. 22	8.82	S		Aug. 30	14.38	S	
15	8.16	S		Oct. 30	6.67	S		Apr. 26	9.30	S		Sept. 20	14.76	S	
23	8.45	S		Dec. 05	6.19	S		May 25	8.57	S		Nov. 01	15.05	S	
30	8.58	S		Jan. 01, 1952	6.27	S		June 29	9.37	S		29	14.80	S	
July 07	8.72	S		Feb. 02	6.18	S		July 27	10.31	S		Dec. 20	14.77	S	
13	8.83	S		Mar. 31	6.06	S		Aug. 27	11.10	S		Feb. 08, 1957	14.19	R	
22	8.71	S		Apr. 29	5.77	S		Sept. 21	11.64	S		Mar. 01	13.16	R	
Aug. 04	6.95	S		May 28	6.56	S		Oct. 29	11.78	S		Apr. 09	13.88	R	
11	7.38	S		June 27	7.48	S		Nov. 30	10.63	S		May 09	10.50	R	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-05 CCC 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
June 27, 1957	2.90	R		Mar. 25, 1960	4.39	S		Nov. 16, 1962	9.02	R		Dec. 18, 1967	12.46	R	
July 26	4	R		Apr. 22	5.16	S		Jan. 10, 1963	8.63	S		Jan. 25, 1968	12.48	R	
Aug. 30	5.84	R		May 20	4.81	S		Feb. 07	8.92	S		Feb. 27	12.50	R	
Oct. 03	5.01	R		June 17	3.70	S		Mar. 28	9.02	S		Mar. 21	12.52	R	
Nov. 01	5.15	R		July 25	4.38	S		Apr. 26	9.36	S		Apr. 18	12.70	R	
21	5.03	R		Aug. 19	4.67	S		May 23	9.70	S		May 16	12.91	R	
Dec. 19	5.36	R		Sept. 16	3.83	S		June 20	9.83	S		June 17	13.09	R	
Jan. 30, 1958	5.58	S		Oct. 20	2.43	S		July 18	7.84	S		July 15	12.51	R	
Feb. 27	5.74	S		Nov. 18	2.77	S		Aug. 19, 1963	9.35	S		Aug. 13	14.07	R	
Mar. 27	4.96	S		Dec. 14	3.08	S		Oct. 11	10.09	S		Sept. 16	13.97	R	
Apr. 24	5.10	S		Jan. 19, 1961	3.94	R		Jan. 27, 1965	10.30	R		Oct. 15	14.24	R	
May 22	5.98	S		Feb. 17	3.57	R		Apr. 28	9.92	R		Nov. 07	14.35	R	
June 26	5.32	S		Mar. 17	4.33	R		July 16	9.90	R		Dec. 05	14.12	R	
July 25	6.36	S		Apr. 21	4.10	R		Oct. 15	9.12	R		Jan. 08, 1969	12.79	R	
Sept. 19	6.29	S		May 19	4.65	R		Jan. 06, 1966	10.19	R		Feb. 05	13.81	R	
Oct. 31	6.99	S		June 23	4.58	R		Apr. 22	9.02	R		Mar. 07	13.60	R	
Nov. 21	7.13	S		July 17	4.95	R		July 21	11.10	R		Apr. 23	11.80	R	
Jan. 09, 1959	7.20	S		Aug. 04	5.39	R		Sept. 21	11.21	R		May 23	8.85	R	
30	7.37	S		Sept. 01	5.76	R		Oct. 21	11.37	R		June 26	9.33	R	
Feb. 27	7.59	S		29	5.68	R		Nov. 22	11.57	R		July 16	10	R	
Mar. 27	7.60	S		Oct. 27	5.26	R		Dec. 21	11.85	R		Sept. 10	10.95	R	
Apr. 24	7.23	S		Nov. 17	3.92	R		Jan. 20, 1967	12.02	R		Oct. 09	10.07	R	
May 22	7.36	S		Dec. 13	4.35	R		Feb. 20	12.23	R		Nov. 20	10.38	R	
June 26, 1959	7.89	S		Jan. 29, 1962	4.06	R		Mar. 20	12.30	R		Dec. 22	10.42	R	
July 24	8.33	S		Feb. 26	4.65	R		Apr. 17	12.38	R		Jan. 28, 1970	10.68	R	
Aug. 28	9.15	S		Mar. 26	4.95	R		May 18	12.53	R		Feb. 26, 1970	10.82	R	
Sept. 28	7.96	S		Apr. 30	5.53	R		June 21	12.59	R		Mar. 26	10.98	R	
Oct. 23	5.30	S		May 28	6.72	R		July 17	12.86	R		Apr. 28	9.94	R	
28	7.96	S		June 29	6.76	R		Aug. 21	13.10	R		May 27	9.82	R	
Nov. 24	5.25	S		Aug. 24	7.13	R		Sept. 18	12.18	R		June 25	10.56	R	
Dec. 16	5.50	S		Oct. 02	8.24	R		Oct. 19	12.20	R		Aug. 27	10.94	R	
Jan. 29, 1960	5.49	S		19	8.49	R		Nov. 20	12.35	R		Oct. 27	11.06	R	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-05 CCC 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Nov. 24, 1970	11.21	R		Feb. 28, 1983	7.33	S		Jan. 21, 1988	3.72	S		Sept. 27, 1988	6.03	S	
Dec. 22	11.29	R		Feb. 09, 1984	6.43	S		Feb. 18	4.50	S		Nov. 02	6.30	S	
Jan. 13, 1976	6.99	R		Feb. 28, 1985	8.78	S		Mar. 16	3.52	S		Dec. 01	6.43	S	
Dec. 09	11.74	R		Jan. 09, 1986	4.70	S		23	3.07	S		Jan. 04, 1989	6.78	S	
Jan. 06, 1978	12.04			Mar. 26, 1987	2.59	S		Apr. 21	3.43	S		Feb. 27, 1990	6.40	S	
Mar. 30, 1979	12.83			Sept. 03	6.25	S		June 02	3.40	S		Jan. 09, 1991	6.16	S	
Mar. 11, 1980	14.00			Oct. 07	5.58	S		29	4.91	S		Jan. 08, 1992	6.66	S	
Mar. 20, 1981	13.05	S		Nov. 05	6.09	S		July 25	4.94	S		Mar. 16, 1993	3.30	S	
Mar. 23, 1982	10.14	S		Dec. 18	6.41	S		Aug. 16	5.57	S					
Highest	2.43	Oct. 20, 1960													
Lowest	15.05	Nov. 01, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-06 BA 1; Site–ID: 361440098121201
Location: lat 36°14′40″, long 098°12′12″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1181
Well depth: 67

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 05, 1950	7.92	S		Dec. 27, 1950	7.37	S		Feb. 01, 1952	5.65	S		Dec. 04, 1953	9.51	S	
June 07	9	R		Jan. 30, 1951	7.32	S		Mar. 31	11.62	S		31	9.45	S	
15	7.90	S	R	Mar. 01	7.13	S		Apr. 29	5.41	S		Jan. 28, 1954	9.45	S	
23	7.88	S		27	7.04	S		June 27	6.98	S		Mar. 22	9.82	S	
30	8.06	S		Apr. 27	7.17	S		July 30	7.97	S		Apr. 26	10.64	S	
July 07	9.22	S	R	June 05	4.92	S		Sept. 30	8.79	S		May 25	9.78	S	
13	8.32	S		July 11	3.41	S		Oct. 31	9.84	S		June 29	10.28	S	
22	8.37	S		Aug. 08	5.96	S	R	Nov. 26	9.35	S		July 26	11.08	S	
Aug. 04	6.99	S		Sept. 05	5.47	S		Dec. 30	9.18	S		Aug. 27	15.54	S	
Sept. 01	6.42	S		27	5.95	S		Feb. 26, 1953	9.32	S		Sept. 21	--	--	P
Oct. 05	6.64	S		Oct. 30	5.95	S		May 29	10.20	S		Oct. 29	--	--	P
26	7.22	S	R	Dec. 05	5.57	S		June 30	10.27	S					
Nov. 28	7.2	S		Jan. 01, 1952	5.60	S		Oct. 29	9.61	S					
Highest	3.41	July 11, 1951													
Lowest	15.54	Aug. 27, 1954													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-06 DB 1; Site–ID: 361411098114901
Location: lat 36°14′10″, long 098°12′01″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1172
Well depth: 65

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 20, 1950	5.05	S		July 30, 1952	11.78	R		Mar. 22, 1954	8.18	R		Oct. 27, 1955	13.48	R	
Oct. 26	5.60	S		Aug. 28	9.08	R		Apr. 26	8.49	R		Dec. 01	16.65	S	P
Nov. 27	9.61	S		Sept. 30	12.88	R		May 25	8.20	R		29	17.19	S	
Dec. 15	7.21	S		Nov. 26	8.76	R		June 29, 1954	12.45	R		Feb. 02, 1956	14.62	S	
28	10.84	S		Dec. 30	8.65	R		July 27	14.31	R		23	15.56	S	P
Jan. 15, 1951	11.37	S	S	Jan. 30, 1953	8.59	R		Aug. 27	11.60	R		Mar. 22	14.75	S	P
30	7.19	S		Feb. 27	8.56	R		Sept. 21	14.48	R		Apr. 26	17.25	S	
Mar. 01	8.98	S	S	Mar. 31	8.42	R		Oct. 29	11.25	R		May 24	15.38	S	
27	6.18	S		Apr. 28	8.22	R		Nov. 30	11.19	R		June 28	17.85	S	P
Apr. 27	6.35	S		May 29	12.07	R		Jan. 06, 1955	11.16	R		July 26	18.74	S	
June 05	7.27	S	S	June 30	11	R		28	11.08	R		Aug. 30	19.25	S	
July 11	6.67	S		July 31	9.28	R		Feb. 25	10.98	R		Sept. 20	17.74	S	
Dec. 06	5.58	S		Sept. 01	8.62	R		Mar. 29	11.04	R		Nov. 01	15.11	S	
Jan. 01, 1952	5.38	S		29	10.28	R		Apr. 26	15.81	R		29	14.28	S	
Feb. 01	5.16	R		Oct. 29	8.36	R		May 26	15.30	R		Dec. 20	15.06	S	
Apr. 01	4.93	R		Dec. 04	8.23	R		June 28	14.46	R		Feb. 08, 1957	13.75	R	
29	4.80	R		31	8.14	R		July 28	14.20	R		Mar. 01	13.66	R	
May 28	5.82	R		Jan. 28, 1954	8.10	R		Aug. 25	15.79	R		Apr. 09	13.24	R	
June 27	10.45	R		Feb. 26	8.07	R		Sept. 27	16.98	R					
Highest	4.80	Apr. 29, 1952													
Lowest	19.25	Aug. 30, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-06 DB 2; Site–ID: 361437098114901
Location: lat 36°14′15″, long 098°12′00″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1171
Well depth: 60

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 20, 1950	4.67	S		Jan. 15, 1951	8.99	S	S	June 05, 1951	4.77	S	S	Dec. 01, 1955	13.82	S	
Oct. 26	5.25	S		30	6.81	S		July 11	4.08	S		29	14.33	S	
Nov. 27	7.08	S		Mar. 01	6.94	S	S	Dec. 06	5.22	S		Feb. 02, 1956	--	--	W
Dec. 15	6.74	S		27	5.82	S		Jan. 01, 1952	5.02	S					
28	8.49	S		Apr. 27	5.91	S		Oct. 27, 1955	14.74	S					
Highest	4.08	July 11, 1951													
Lowest	14.74	Oct. 27, 1955													

Local well number: 20N-09W-07 BAA 1; Site–ID: 361348098120101
Location: lat 36°13′52″, long 098°12′13″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1170
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 31, 1974	9.20	S		Apr. 13, 1977	19.85			Mar. 11, 1980	19.35		
Jan. 22, 1975	7.39			Jan. 06, 1978	15.70						
Jan. 13, 1976	11.22			Mar. 30, 1979	19.03						
Highest	7.39	Jan. 22, 1975									
Lowest	19.85	Apr. 13, 1977									

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-13 AD 1; Site–ID: 361242098062001
Location: lat 36°12′42″, long 098°06′20″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1249
Well depth: 34

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 24, 1950	22.68	S		Sept. 03, 1950	23.61	S		Nov. 25, 1952	20.26			Feb. 24, 1956	20.32	S	
27	22.74	S		20	23.49	S		Feb. 26, 1953	20.63			Mar. 23	20.48	S	
May 04	22.75	S		Oct. 04	23.56	S		Apr. 27	20.80			Apr. 27	20.55	S	
11	22.87	S		25	23.74	S		May 28	19.93			June 29	20.95	S	
18	22.82	S		Nov. 28	23.57	S		June 29	20.17			July 27	20.15	S	
25	22.97	S		Dec. 27	23.45	S		July 30, 1953	21.17			Aug. 31	21.43	S	
June 01	23.06	S		Jan. 29, 1951	23.46	S		Dec. 30	21.35			Sept. 21	21.66	S	
08	23.14	S		Feb. 28	23.44	S		Apr. 26, 1954	21.69			Nov. 02	21.91	S	
15	23.23	S		Mar. 26	23.53	S		July 26	22.02			30	21.96	S	
23	23.36	S		Apr. 26	23.54	S		Nov. 29	22.48			Dec. 21	21.96	S	
30	23.53	S		June 05	22.97	S		Feb. 24, 1955	22.70			Feb. 09, 1957	22.10	R	
July 06	23.60	S		July 10	21.79	S		June 27	21.87			28	22.19	R	
13	23.68	S		Aug. 08	21.03	S		July 29	21.18			Apr. 09	22.26	R	
21	23.75	S		Sept. 05	20.81	S		Sept. 27	20.97			June 27	11.57	R	
28	23.78	S		Dec. 31	20.44	S		Oct. 28	20.68	S		July 25	10.98	R	
Aug. 04	23.76	S		Jan. 31, 1952	18.87			Dec. 02	20.37	S		Aug. 29	11.58	R	
18	23.65	S		May 27	19.23			28	20.32	S		Oct. 02	10.90	R	
25	23.60	S		Aug. 28	19.97			Feb. 03, 1956	20.34	S		31	11.67	R	
Highest	10.90	Oct. 02, 1957													
Lowest	23.78	July 28, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-14 BB 1; Site–ID: 361255098081301
Location: lat 36°12′55″, long 098°08′13″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1230
Well depth: 19

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 27, 1950	13.60	S		June 05, 1951	13.53	S		July 30, 1953	13.80	S		Aug. 26, 1955	14.35		
May 04	13.61	S		July 10	13.43	S		Aug. 31	13.80	S		Sept. 27	14.33		
11	13.58	S		Aug. 08	13.42	S		Sept. 28	13.77	S		Oct. 28	14.34	S	
18	13.57	S		Sept. 05	13.41	S		Oct. 30	13.75	S		Dec. 02	14.49	S	
25	13.58	S		27	13.38	S		Nov. 30	13.81	S		28	14.66	S	
June 01	13.56	S		Oct. 29	13.40	S		Dec. 30	13.85	S		Feb. 24, 1956	14.80	S	
08	13.55	S		Dec. 06	13.46	S		Jan. 29, 1954	13.93	S		Mar. 23	14.86	S	
15	13.54	S		31	13.55	S		Feb. 25	13.98	S		Apr. 27	14.90	S	
23	13.55	S		Jan. 31, 1952	13.62	S		Mar. 23	14.07	S		June 29	15.86	S	
30	13.54	S		Mar. 31	13.67	S		Apr. 26	14.09	S		July 27	14.88	S	
July 06	13.55	S		Apr. 29	13.65	S		May 24	14.00	S		Aug. 31	14.81	S	
13	13.53	S		May 27	13.63	S		June 28	13.90	S		Sept. 21	14.80	S	
22	13.46	S		June 27	13.67	S		July 26	13.92	S		Nov. 02	14.91	S	
28	13.46	S		July 30	13.71	S		Aug. 26	13.90	S		30	14.85	S	
Aug. 04	13.41	S		Aug. 28	13.67	S		Sept. 20	13.94	S		Dec. 21	15.10	S	
Sept. 03	13.36	S		Sept. 29	13.68	S		Oct. 28	14.05	S		Feb. 08, 1957	15.17	R	
20	13.36	S		Oct. 31, 1952	13.71	S		Nov. 29	14.21	S		28	15.15	R	
Oct. 03	13.37	S		Nov. 25	13.72	S		Jan. 05, 1955	14.38			Apr. 09	15.24	R	
25	13.39	S		Dec. 29	13.78	S		27	14.43			June 27	12.47	R	
Nov. 28	13.46	S		Jan. 29, 1953	13.89	S		Feb. 24	13.51			July 25	12.55	R	
Dec. 27	13.54	S		Feb. 26	13.95	S		Mar. 28	14.60			Aug. 29	12.57	R	
Jan. 29, 1951	13.62	S		Mar. 31	13.96	S		Apr. 25	14.62			Oct. 02	12.62	R	
Feb. 28	13.65	S		Apr. 27	13.98	S		May 27	14.45			31	12.74	R	
Mar. 26	13.67	S		May 28	13.97	S		June 27	14.43						
Apr. 26	13.67	S		June 29	13.98	S		July 29	14.37						
Highest	12.47	June 27, 1957													
Lowest	15.86	June 29, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-17 CC 1; Site–ID: 361214098111701
Location: lat 36°12′14″, long 098°11′17″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1186
Well depth: 30

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 27, 1950	25.28	S		Mar. 23, 1950	25.27	S		Apr. 13, 1950	25.29	S	
Mar. 02	25.39	S		30	25.35	S		20	25.23	S	
09	25.26	S		Apr. 06	25.23	S		27	25.27	S	
Highest	25.23	Apr. 06, 1950			Apr. 20, 1950						
Lowest	25.39	Mar. 02, 1950									

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-09W-26 BA 1; Site–ID: 361108098074901
Location: lat 36°11'08", long 098°07'49"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1214
Well depth: 51

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 02, 1950	24.44	S		Sept. 27, 1951	21.43	S		Mar. 22, 1954	24.20	S		Aug. 31, 1956	22.30	S	
04	24.44	S		Oct. 29	22.29	S		Apr. 26	24.36	S		Sept. 21	22.63	S	
11	17.91	S		Dec. 06	22.56	S		May 24	22.80	S		Nov. 02	23.30	S	
18	21.55	S		31	22.67	S		June 28	20.03	S		Nov. 30, 1956	23.60	S	
25	22.97	S		Jan. 31, 1952	22.72	S		July 26	23.49	S		Dec. 21	23.74	S	
June 01	23.66	S		Mar. 31	22.75	S		Aug. 26	24.67	S		Feb. 08, 1957	22.92	R	
08	24.03	S		Apr. 29	21.57	S		Sept. 20	25.27	S		28	23.99	--	R
15	24.27	S		May 27	22.15	S		Oct. 28	25.72	S		Apr. 09	21.36	R	
23	24.51	S		June 27	22.64	S		Nov. 29	25.83	S		May 10	21.40	R	
30	24.68	S		July 30	22.97	S		Jan. 05, 1955	25.79	R		June 27	19.90	R	
July 06	24.84	S		Aug. 28	23.58	S		27	25.73	R		July 25	19.35	R	
13	24.92	S		Sept. 29	23.93	S		Feb. 24	25.72	R		Aug. 29	19.35	R	
22	11.52	S		Oct. 31, 1952	24.14	S		Mar. 28	25.52	R		Oct. 02	19.02	R	
28	20.37	S		Nov. 25	24.17	S		Apr. 25	25.49	R		31	19.81	R	
Aug. 04	20.73	S		Dec. 29	24.10	S		May 27	19.84	R		Nov. 21	18.77	R	
Sept. 03	21.16	S		Jan. 29, 1953	24.06	S		June 27	18.90	R		Dec. 19	18.07	R	
20	22.37	S		Feb. 26	24.01	S		July 29	21.70	R		Jan. 30, 1958	17.87	S	
Oct. 03	22.89	S		Mar. 31	23.98	S		Aug. 26	22.25	R		Feb. 27	17.90	S	
25	23.51	S		Apr. 27	23.91	S		Sept. 27	21.76	R		Mar. 27	17.76	S	
Nov. 28	24.04	S		May 28	22.33	S		Oct. 28	21.70	S		Apr. 24	17.75	S	
Dec. 27	24.22	S		June 29	23.50	S		Dec. 02	22.13	S		May 22	17.40	S	
Jan. 29, 1951	24.34	S		July 30	21.88	S		28	22.37	S		June 26	17.47	S	
Feb. 28	24.34	S		Aug. 31	23.32	S		Feb. 03, 1956	22.60	S		July 25	17.28	S	
Mar. 26	24.39	S		Sept. 28	23.49	S		24	22.64	S		Aug. 28	16.19	S	
Apr. 26	24.33	S		Oct. 30	24.24	S		Mar. 23	22.69	S		Sept. 19	17.18	S	
June 05	16.09	S		Nov. 30	24.51	S		Apr. 27	22.65	S		Oct. 31	17.31	S	
July 10	19.91	S		Dec. 30	22.99	S		May 25	22.58	S		Nov. 21	17.96	S	
Aug. 08	21.10	S		Jan. 29, 1954	23.73	S		June 29	21.29	S		Jan. 09, 1959	17.26	S	
Sept. 05	19.89	S		Feb. 25	23.98	S		July 27	21.72	S		30	17.28	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 27, 1959	17.21	S		Mar. 25, 1960	16.03	S		Apr. 21, 1961	2.06	R		Mar. 26, 1962	4.97	R	
Mar. 27	17.34	S		Apr. 22	15.70	S		May 19	1.86	R		Apr. 30	5.25	R	
Apr. 24	17.17	S		May 20	14.82	S		June 25	1.65	R		May 28	5.62	R	
May 22	17.33	S		June 17	5.76	S		July 17	3.13	R		June 29	3.18	R	
June 26	17.54	S		July 25	1.29	S		Aug. 04	4.05	R		Aug. 24	4.21	R	
July 24	17.78	S		Aug. 19	2.37	S		Sept. 01	1.65	R		Oct. 02	5	R	
Aug. 28	18.06	S		Sept. 16	3.25	S		29	3.11	R		19	5.30	R	
Sept. 28	18.18	S		Nov. 18	3.38	S		Oct. 27	2.90	R		Nov. 16	5.78	R	
Oct. 23	17.30	S		Dec. 14	5.23	S		Nov. 17	1.75	R		Jan. 10, 1963	6.55	S	
Nov. 24	16.84	S		Jan. 19, 1961	7.07	R		Dec. 13	2.72	R		Feb. 07	6.94	S	
Dec. 16	16.63	S		Feb. 17	7.98	R		Jan. 29, 1962	3.90	R		Mar. 28	7.55	S	
Jan. 29, 1960	16.60	S		Mar. 17, 1961	8.63	R		Feb. 26	4.47	R		Apr. 26	--	--	W
Highest	1.29	July 25, 1960													
Lowest	25.83	Nov. 29, 1954													

Local well number: 20N-10W-01 BBB 1; Site–ID: 361440098133001
Location: lat 36°14′42″, long 098°13′37″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1191
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 26, 1974	10.58	S		Dec. 09, 1976	9.73		
Jan. 22, 1975	8.48			Dec. 06, 1978	16.06		
Jan. 13, 1976	7.60						
Highest	7.60	Jan. 13, 1976					
Lowest	16.06	Dec. 06, 1978					

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-10W-03 DA 2; Site–ID: 361415098145501
Location: lat 36°14′15″, long 098°14′55″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1157
Well depth: 27

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 19, 1950	18.09	S		Sept. 28, 1951	17.31	S		Dec. 04, 1953	20.13	S		Dec. 29, 1955	19.99	S	
25	18.15	S		Oct. 30	17.55	S		31	20.00	S		Feb. 02, 1956	19.87	S	
June 01	18.14	S		Dec. 05	17.36	S		Jan. 28, 1954	19.89	S		23	19.80	S	
08	18.24	S		Jan. 01, 1952	17.47	S		Feb. 26	19.80	S		Mar. 23	19.75	S	
15	18.27	S		Feb. 01	17.41	S		Mar. 22	19.76	S		Apr. 26	19.70	S	
23	18.44	S		Apr. 01	17.22	S		Apr. 26	19.75	S		May 24	20.09	S	
30	18.48	S		29	16.93	S		May 25	19.73	S		June 28	20.51	S	
July 07	18.58	S		May 28	16.80	S		June 29	20.00	S		July 26	20.81	S	
13	18.65	S		June 27	17.59	S		July 27	20.48	S		Aug. 30	21.27	S	
22	18.70	S		July 30	18.29	S		Aug. 27	19.72	S		Sept. 20	21.40	S	
Aug. 04	18.69	S		Aug. 28	18.72	S		Sept. 21	21.02	S		Nov. 01	21.60	S	
Sept. 01	18.57	S		Sept. 30	19.23	S		Oct. 29	21.18	S		29	21.40	S	
22	18.26	S		Oct. 31	19.37	S		Nov. 30	20.90	S		Dec. 20	21.30	S	
Oct. 05	18.14	S		Nov. 26	19.46	S		Jan. 06, 1955	20.75	R		Feb. 08, 1957	21.14	R	
26	18.13	S		Dec. 30	19.29	S		28	20.70	R		Mar. 01	21.10	R	
Nov. 29	18.03	S		Jan. 30, 1953	19.23	S		Feb. 25	20.65	R		Apr. 09, 1957	21	R	
Dec. 27	18.06	S		Feb. 27, 1953	19.22	S		Mar. 29	20.56	R		May 09	20.74	R	
Jan. 30, 1951	18.12	S		Mar. 31	19.15	S		Apr. 26	20.54	R		June 27	13.86	R	
Mar. 01	18.14	S		Apr. 28	19.19	S		May 26	20.40	R		July 26	14.30	R	
27	17.99	S		May 29	19.39	S		June 28	20	R		Aug. 30	14.99	R	
Apr. 27	17.94	S		June 30	19.74	S		July 28	19.70	R		Oct. 03	14.40	R	
June 05	16.32	S		July 31	19.94	S		Aug. 25	20.11	R		Nov. 01	15.53	R	
July 11	15.66	S		Sept. 01	20.18	S		Sept. 27	20.40	R					
Aug. 07	16.40	S		29	20.30	S		Oct. 27	20.32	S					
Sept. 05	17.04	S		Oct. 29	20.36	S		Dec. 01	20.08	S					
Highest	13.86	June 27, 1957													
Lowest	21.60	Nov. 01, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-10W-12 AA 2; Site–ID: 361347098124501
Location: lat 36°13′47″, long 098°12′45″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1166
Well depth: 52

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 21, 1950	8.69	S		June 27, 1952	14.71			Feb. 26, 1954	10.31			Sept. 27, 1955	20.48		
Oct. 26	8.99	S		July 30	16.05			Mar. 22	10.38			Oct. 27	19.71	S	
Nov. 27	15.39	S	S	Aug. 28	11.60			Apr. 26	10.50			Dec. 01	20.15	S	
28	13.93	S	S	Sept. 30	15.50			May 25, 1954	10.30			29	20.48	S	
Dec. 15	10.24	S		Nov. 26	10.97			June 29	17.39			Feb. 02, 1956	20.84	S	
28	14.50	S		Dec. 30	10.79			July 27	19.18			23	20.82	S	
Jan. 15, 1951	14.95	S	S	Jan. 30, 1953	10.71			Aug. 27	13.02			Mar. 22	21.30	S	
30	9.92	S		Feb. 27	10.67			Sept. 21	19.30			Apr. 26	21.45	S	
Mar. 01	12.51	S	S	Mar. 31	10.57			Oct. 29	12.41			May 24	15.01	S	
27	9.38	S		Apr. 28	10.46			Nov. 30	12.21			June 28	22.10	S	P
Apr. 27	9.45	S		May 29	15.33			Jan. 06, 1955	12.07			July 26	21.04	S	
June 05	10.81	S	S	June 30	11.55			28	12.00			Aug. 30	21.72	S	
July 11	9.32	S		July 31	11.01			Feb. 25	11.90			Sept. 20	14.17	S	
Dec. 06	9.07	S		Sept. 01	11.42			Mar. 29	11.85			Nov. 01	14.51	S	
Jan. 01, 1952	8.98	S		29	15.02			Apr. 26	17.82			29	14.17	S	
Feb. 01	8.79			Oct. 29	10.85			May 26	18.41			Dec. 20	14.00	S	
Mar. 28	8.75			Dec. 04	10.60			June 28	17.18			Feb. 08, 1957	13.66		
Apr. 01	8.48			31	10.47			July 28	18.75			Mar. 01	13.59		
29	8.27			Jan. 28, 1954	10.39			Aug. 25	19.60			Apr. 09	13.34		
Highest	8.27	Apr. 29, 1952													
Lowest	21.72	Aug. 30, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-10W-12 AA 3; Site–ID: 361347098124502
Location: lat 36°13′47″, long 098°12′45″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1170
Well depth: 53

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 21, 1950	8.81	S		Aug. 28, 1952	11.86			Apr. 26, 1954	10.40			Dec. 01, 1955	15.50	S	
Oct. 26	9.02	S		Sept. 30	13.65			May 25	10.36			29	15.79	S	
Nov. 27	10.13	S	S	Nov. 26	10.84			June 29	12.31			Feb. 02, 1956	16.07	S	
28	10.24	S	S	Dec. 30	10.70			July 27, 1954	13.71			23	16.20	S	P
Dec. 15	10.96	S		Jan. 30, 1953	10.63			Aug. 27	13.54			Mar. 22	15.90	S	
28	11.58	S		Feb. 27	10.59			Sept. 21	13.12			Apr. 26	16.32	S	
Jan. 15, 1951	12.11	S	S	Mar. 31	10.51			Oct. 29	12.24			May 24	16.37	S	
30	7.04	S		Apr. 28	10.43			Nov. 30	12.07			June 28	16.57	S	P
Mar. 01	9.24	S	S	May 29	11.38			Jan. 06, 1955	11.89			July 26	16.11	S	
27	9.50	S		June 30	11.78			28	11.84			Aug. 30	17.10	S	
Apr. 27	9.45	S		July 31	11.24			Feb. 25	11.78			Sept. 20	14.73	S	
July 11	7.39	S		Sept. 01	11.58			Mar. 29	11.70			Nov. 01	14.83	S	
Dec. 06	9.13	S		29	11.39			Apr. 26	13.98			29	14.15	S	
Jan. 01, 1952	9.04	S		Oct. 29	10.81			May 26	14.57			Dec. 20	13.97	S	
Feb. 01	8.85			Dec. 04	10.57			June 28	12.12			Feb. 08, 1957	13.54		
Apr. 29	8.44			31	10.43			July 28	13.16			Mar. 01	13.41		
May 28	8.94			Jan. 28, 1954	10.35			Aug. 25	14.40			Apr. 09	13.14		
June 27	11.68			Feb. 26	10.30			Sept. 27	15.78						
July 30	12.49			Mar. 22	10.30			Oct. 27	15.16	S					
Highest	7.04	Jan. 30, 1951													
Lowest	17.10	Aug. 30, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-10W-12 CD 2; Site–ID: 361309098121401
Location: lat 36°13′08″, long 098°13′18″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1152
Well depth: 54

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 21, 1950	16.49	S		June 27, 1952	21.97			Mar. 22, 1954	17.55			Oct. 27, 1955	22.50	S	
Oct. 26	16.05	S		July 30	21.83			Apr. 26	17.47			Dec. 01	18.09	S	
Nov. 27	21.72	S	S	Aug. 28	17.50			May 25	17.35			29	17.89	S	
28	21.48	S	S	Nov. 26	17.70			June 29, 1954	21.77			Feb. 02, 1956	17.81	S	
Dec. 15	16.94	S		Dec. 30	17.59			July 27	22.38			23	17.73	S	
28	22.16	S		Jan. 30, 1953	17.53			Aug. 27	18.97			Mar. 22	17.72	S	
Jan. 15, 1951	22.49	S	S	Feb. 27	17.44			Sept. 21	18.77			Apr. 26	17.73	S	
30	17.07	S		Mar. 31	17.34			Oct. 29	18.74			May 24	17.92	S	
Mar. 01	21.74	S	S	Apr. 28	17.24			Nov. 30	18.68			June 28	18.38	S	
27	16.49	S		May 29	17.25			Jan. 06, 1955	18.45			July 26	18.43	S	
Apr. 27	22.41	S		June 30	18.21			28	18.53			Aug. 30	22.75	S	P
June 05	21.84	S	S	July 31	17.95			Feb. 25	18.43			Sept. 20	19.10	S	
July 11	21.99	S		Sept. 01	18.46			Mar. 29	18.34			Nov. 01	19.17	S	
Dec. 06	16.54	S		29	18.15			Apr. 26	18.54			29	19.12	S	
Jan. 01, 1952	16.47	S		Oct. 29	18.02			May 26	18.36			Dec. 20	19.07	S	
Feb. 01	16.35			Dec. 04	17.83			June 28	17.77			Feb. 08, 1957	18.91		
Apr. 01	15.68			31	17.72			July 28	21.83			Mar. 01	18.42		
29	15.97			Jan. 28, 1954	17.66			Aug. 25	22.35						
May 28	16.22			Feb. 26	17.58			Sept. 27	22.86						
Highest	15.68	Apr. 01, 1952													
Lowest	22.86	Sept. 27, 1955													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 20N-10W-12 CDD 1; Site–ID: 361302098130601
Location: lat 36°13′02″, long 098°13′12″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1155
Well depth: 54

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 06, 1978	20.00	S		Jan. 09, 1986	18.63	S		Mar. 16, 1988	9.82	S		Nov. 02, 1988	11.91	S	
Mar. 30, 1979	20.09			Mar. 26, 1987	13.28	S		23	--	--	F	Dec. 01	12.17	S	
Mar. 11, 1980	20.34			Sept. 03	10.79	S		Apr. 21	10.21	S		Jan. 04, 1989	12.19	S	
Mar. 20, 1981	20.16	S		Oct. 07	10.41	S		June 02	10.12	S		Feb. 27, 1990	11.90	S	
Mar. 23, 1982	21.02	S		Nov. 05	10.66	S		29	10.61	S		Jan. 09, 1991	11.58	S	
Feb. 28, 1983	18.29	S		Dec. 18	10.67	S		July 25	11.08	S		Jan. 08, 1992	11.90	S	
Feb. 09, 1984	16.69	S		Jan. 21, 1988	10.45	S		Aug. 16	11.48	S		Mar. 16, 1993	11.27	S	
Feb. 28, 1985	19.98	S		Feb. 18	10.23	S		Sept. 27	11.75	S					
Highest	9.82	Mar. 16, 1988													
Lowest	21.02	Mar. 23, 1982													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-01 ADB 1; Site–ID: 361938098062201
Location: lat 36°19′38″, long 098°06′22″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1229
Well depth: 15

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 05, 1950	11.42	S		Dec. 27, 1950	9.38	S		June 29, 1953	12.93	S		Feb. 23, 1956	12.56	S	
13	11.38	S		Jan. 29, 1951	9.55	S		July 31	12.09	S		Mar. 22	12.42	S	
20	11.36	S		Feb. 28	9.13	S		Aug. 31	12.35	S		Apr. 27	12.49	S	
27	11.39	S		Mar. 26	8.95	S		Sept. 28	13.25	S		May 24, 1956	13.00	S	
May 04	11.34	S		Apr. 26	9.04	S		Oct. 30	13.49	S		June 28	13.78	S	
11	10.95	S		June 05	7.14	S		Nov. 30	13.37	S		July 26	14.56	S	
18	10.79	S		July 10	8.90	S		Dec. 30	13.09	S		Aug. 30	--	S	D
25	10.90	S		Aug. 08	8.17	S		Jan. 29, 1954	12.93	S		Sept. 20	--	S	D
June 01	10.96	S		Sept. 05	9.34	S		Feb. 25	12.79	S		Nov. 01	--	S	D
08	10.93	S		27	9.20	S		Mar. 22	12.72	S		29	--	S	D
15	11.13	S		Oct. 29	9.25	S		Apr. 26	12.78	S		Dec. 20	--	S	D
23	11.40	S		Dec. 06	8.53	S		May 24	12.36	S		Feb. 08, 1957	--	R	D
30	11.66	S		Jan. 01, 1952	8.75	S		June 28	12.91	S		28	--	R	D
July 07	11.80	S		31	8.51	S		July 26	14.44	S		Apr. 09	--	R	D
13	11.72	S		Mar. 31	8.26	S		Aug. 27	--	S	D	May 09	--	R	D
22	11.95	S		Apr. 29	8.09	S		Sept. 20	--	S	D	Mar. 04, 1969	13.58	R	
28	12.04	S		May 28	8.70	S		Oct. 28	--	S	D	Mar. 03, 1970	11.25	R	
Aug. 04	9.59	S		June 27	9.79	S		Nov. 29	--	S	D	Mar. 08, 1971	12.04	R	
11	9.52	S		July 30	11.78	S		Jan. 06, 1955	--	R	D	Feb. 01, 1972	12.07	R	
18	9.61	S		Aug. 27	12.64	S		27	--	R	D	Feb. 26, 1973	12.20	R	
25	9.65	S		Sept. 30	13.22	S		Feb. 24	--	R	D	Jan. 25, 1974	7.80	R	
Sept. 01	9.31	S		Oct. 28	13.43	S		May 27	13.99	S		Jan. 22, 1975	6.00	S	
09	8.43	S		Nov. 25	13.14	S		June 29	11.31	S		Jan. 06, 1978	8.07	S	
15	8.43	S		Dec. 29	12.99	S		July 29	13.27	S		Mar. 30, 1979	8.30	S	
22	8.18	S		Jan. 29, 1953	12.85	S		Aug. 26	13.37	S		Mar. 11, 1980	7.08	S	
29	8.24	S		Feb. 26	12.70	S		Sept. 27	14.02	S		Mar. 20, 1981	8.13	S	
Oct. 05	8.32	S		Mar. 31	12.41	S		Oct. 27	12.72	S		Mar. 23, 1982	5.90	S	
26	8.77	S		Apr. 27	12.19	S		Dec. 01	12.77	S		Feb. 28, 1983	6.21	S	
Nov. 28	9.19	S		May 28	12.00	S		28	12.71	S		Feb. 09, 1984	--	--	O

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-01 ADB 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 28, 1985	--	--	N												
Highest	5.90	Mar. 23, 1982													
Lowest	14.56	July 26, 1956													

Local well number: 21N-09W-04 CC 1; Site–ID: 361812098102501
Location: lat 36°19′12″, long 098°10′23″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1316
Well depth: 163

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 08, 1950	66.94	S		Sept. 05, 1951	67.37	S		Apr. 28, 1953	64.04			Sept. 21, 1954	65.60		
11	67.11	S		28	63.99	S		May 29	64.11			Oct. 29	65.52		
18	66.97	S		Oct. 30	63.36	S		June 30	64.60			Nov. 30	65.52		
31	67.10	S		Dec. 05	63.13	S		July 31	64.26			Jan. 06, 1955	65.57		
June 30	67.23	S		Jan. 01, 1952	63.25	S		Sept. 01	64.49			28	65.60		
Sept. 02	66.97	S		Feb. 01	63.13			29	64.69			Feb. 25	65.50		
Oct. 06	66.51	S		Apr. 29	63.34			Oct. 29	64.96			Mar. 28	65.61		
27	66.34	S		May 28	63.39			Dec. 04, 1953	65.97			Apr. 26	65.63		
Nov. 28	66.27	S		June 27	63.58			31	64.09			May 26	65.44		
Dec. 27	66.22	S		July 30	63.73			Jan. 29, 1954	63.98			June 27	65.54		
Jan. 30, 1951	66.30	S		Aug. 27	63.82			Feb. 26	63.71			July 28	65.57		
Feb. 28	65.94	S		Oct. 28	64.20			Mar. 22	63.83			Aug. 25	65.42		
Mar. 26	65.76	S		Nov. 26	64.26			Apr. 27	63.87			Sept. 27	66.80		
Apr. 27	66.03	S		Dec. 30	63.94			May 25	63.97			Oct. 27	66.31		
June 05	65.82	S		Jan. 30, 1953	63.94			June 29	64.31			Dec. 01	66.33		
July 11	64.76	S		Feb. 27	64.13			July 26	65.12			29	66.26		
Aug. 08	64.04	S		Mar. 31	64.20			Aug. 27	65.10						
Highest	63.13	Dec. 05, 1951			Feb. 01, 1952										
Lowest	67.37	Sept. 05, 1951													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-10 DDD 1; Site–ID: 361825098083801
Location: lat 36°18′25″, long 098°08′38″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1313
Well depth: 71

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 28, 1950	22.64	S		July 28, 1950	25.16	S		Jan. 31, 1952	18.47			Jan. 29, 1954	29.20		
Mar. 02	23.00	S		Aug. 04	25.15	S		Mar. 31	18.99			Feb. 25	29.47		
06	22.10	S		11	25.01	S		Apr. 29	19.94			Mar. 22	30.13		
09	22.69	S		18	25.02	S		May 28	20.89			Apr. 26	30.55		
15	22.37	S		25	24.57	S		June 27	21.69			May 24	30.40		
23	22.62	S		Sept. 01	24.32	S		July 30	22.35			June 28	32.93		
30	23.47	S		09	23.09	S		Aug. 27	22.60			July 26	33.30		
Apr. 06	23.45	S		15	22.16	S		Sept. 30	23.80			Aug. 27	34.04		
13	23.59	S		22	21.79	S		Oct. 28	24.90			Sept. 20	34.37		
20	23.61	S		29	21.25	S		Nov. 25	24.72			Oct. 28	34.64		
27	23.67	S		Oct. 05	20.93	S		Dec. 29	25.05			Nov. 29	34.64		
May 04	23.43	S		25	20.76	S		Jan. 29, 1953	26.02			Jan. 06, 1955	33.84	R	
11	24.10	S		Nov. 28	20.44	S		Feb. 26	26.67			27	33.45	R	
18	24.02	S		Dec. 27	20.84	S		Mar. 31	27.35			Feb. 24	33.73	R	
25	24.07	S		Jan. 29, 1951	21.35	S		Apr. 27	26.12			Mar. 28	33.41	R	
June 01	24.24	S		Feb. 28	21.54	S		May 28	28.84			Apr. 25	33.71	R	
08	24.22	S		Mar. 26	21.83	S		June 29	29.62			Mar. 04, 1969	34.79		
15	24.45	S		Apr. 26	22.61	S		July 31	27.46			Mar. 03, 1970	27.23		
23	24.38	S		June 05, 1951	20.57	S		Aug. 31	26.08			Mar. 09, 1971	24.10		
30	24.89	S		July 10	18.58	S		Sept. 28	26.73			Feb. 01, 1972	22.76		
July 07	25.02	S		Aug. 07	18.04	S		Oct. 30	27.13			Feb. 27, 1973	21.11		
13	25.20	S		Sept. 05	18.58	S		Nov. 30	28.09			Jan. 25, 1974	14.72		
22	25.25	S		Jan. 01, 1952	18.87	S		Dec. 30	28.65			Jan. 22, 1975	11.33		
Highest	11.33	Jan. 22, 1975													
Lowest	34.79	Mar. 04, 1969													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-13 BBA 1; Site–ID: 361811098070701
Location: lat 36°18′11″, long 098°07′07″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1274
Well depth: 51

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 07, 1950	34.68		S	July 31, 1950	34.47		S	Sept. 27, 1951	31.82		S	Dec. 29, 1952	31.44		
13	34.67		S	Sept. 03	34.26		S	Oct. 29	31.61		S	Jan. 29, 1953	31.44		
20	34.65		S	Oct. 05	34.05		S	Dec. 06	31.44		S	Feb. 26	31.34		
27	34.56		S	25	34.03		S	Jan. 01, 1952	31.46		S	Mar. 31	31.29		
May 04	34.59		S	Nov. 28	33.94		S	31	31.22			Apr. 27	31.40		
11	34.57		S	Dec. 27	33.80		S	Mar. 31	31.11			May 28	31.48		
18	34.49		S	Jan. 29, 1951	33.61		S	Apr. 29	31.10			June 29	31.80		
25	34.60		S	Feb. 28	33.49		S	May 28	30.97			July 31	31.78		
June 01	34.50		S	Mar. 26	33.45		S	June 27	30.88			Aug. 31	31.79		
08	34.45		S	Apr. 26	33.35		S	July 30	31.05			Sept. 28	32.17		
15	34.45		S	June 05	33.02		S	Aug. 27	31.20			Oct. 30	32.12		
30	34.46		S	July 10	32.34		S	Sept. 30	32.86			Nov. 30	32.15		
July 07	34.49		S	Aug. 07	32.16		S	Oct. 28	31.64			Dec. 30	32.22		
13	34.48		S	Sept. 05	31.92		S	Nov. 25, 1952	31.46			Jan. 29, 1954	32.08	R	
Highest	30.88	June 27, 1952													
Lowest	34.68	Apr. 07, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-14 CC 1; Site–ID: 361728098081501
Location: lat 36°17′28″, long 098°08′15″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1307
Well depth: 103

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 09, 1950	25.57	S		July 10, 1951	25.58	S		Oct. 30, 1953	29.12			Dec. 28, 1955	33.46	S	
11	25.64	S		Sept. 27	23.86	S		Dec. 01	29.40			Feb. 03, 1956	33.64	S	
18	25.55	S		Oct. 30	23.72	S		30	31.10			23	33.43	S	
25	25.71	S		Dec. 05	23.56	S		Jan. 29, 1954	30.70			Mar. 22	33.75	S	
June 01	25.78	S		Jan. 01, 1952	23.80	S		Feb. 25	29.34			May 24	34.07	S	
08	25.83	S		31	23.67			Mar. 22	29.42			June 28	34.53	S	
15	25.93	S		Mar. 31	23.80			Apr. 26	29.62			July 26	37.62	S	
23	26.01	S		Apr. 29	23.92			June 28	30.30			Aug. 30	35.26	S	
30	26.21	S		May 28	24.02			July 26	30.85			Sept. 20	35.62	S	
July 07	26.32	S		June 27	24.18			Aug. 27	31.34			Nov. 01	36.01	S	
13	26.46	S		July 30	24.74			Sept. 20	31.65			29	36.47	S	
22	26.59	S		Aug. 27	25.18			Oct. 28	32.00			Dec. 20	36.63	S	
28	26.64	S		Sept. 30	25.74			Nov. 29	32.19			Feb. 08, 1957	36.79	R	
Aug. 04	26.73	S		Oct. 28	26.17			Jan. 06, 1955	32.25			Mar. 01	37.34	R	
Sept. 03	27.05	S		Nov. 25	26.27			27	32.37			Apr. 09	38.18	R	
20	27.07	S		Dec. 29	26.45			Feb. 24	32.66			May 09, 1957	37.87	R	
Oct. 05	27.08	S		Jan. 29, 1953	26.60			Mar. 28	32.70			30	29.92	R	
25	27.15	S		Feb. 26	26.76			Apr. 25	32.82			June 27	26.37	R	
Nov. 28	27.17	S		Mar. 31	26.87			May 27	33.12			Aug. 30	24.80	R	
Dec. 27	27.20	S		Apr. 27	27.02			June 27	33.21			Oct. 02	24.92	R	
Jan. 29, 1951	27.31	S		May 28	27.42			July 29	33.13			31	25.08	R	
Feb. 28	27.19	S		June 29	27.85			Aug. 26	33.48						
Mar. 26	27.27	S		July 31	28.23			Sept. 27	33.79						
Apr. 26	27.33	S		Aug. 31	28.45			Oct. 27	33.54	S					
June 05	26.83	S		Sept. 28	28.78			Dec. 01	33.52	S					
Highest	23.56	Dec. 05, 1951													
Lowest	38.18	Apr. 09, 1957													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-20 DDD 1; Site–ID: 361631098103501
Location: lat 36°16′31″, long 098°10′35″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1235
Well depth: 50

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 30, 1950	19.90	S		Aug. 18, 1950	20.05	S		Aug. 27, 1952	18.32	S		Feb. 24, 1955	22.47	R	
Feb. 01	20.00	S		25	19.93	S		Sept. 30	18.64	S		Mar. 28	22.89	R	
07	19.86	S		Sept. 01	19.92	S		Oct. 28	19.23	S		May 26	22.99	R	
14	20.04	S		08	19.85	S		Nov. 25	18.91	S		June 27, 1955	21.87	R	
23	19.78	S		15	19.67	S		Jan. 29, 1953	18.87	S		July 29	P		
Mar. 02	20.13	S		22	19.73	S		Feb. 26	19.04	S		Aug. 27	P		
09	20.00	S		29	19.67	S		Mar. 31	19.63	S		Sept. 27	P		
15	19.88	S		Oct. 05	19.64	S		Apr. 27	19.58	S		Oct. 27	22.63	S	
23	19.97	S		25	19.74	S		May 28	--	--	P	Dec. 01	22.05	S	
30	20.30	S		Nov. 28	19.87	S		June 30	20.61	S		28	22.13	S	
Apr. 06	20.18	S		Dec. 27	19.93	S		July 31	18.79	S		Feb. 02, 1956	22.17	S	
13	20.27	S		Jan. 29, 1951	20.13	S		Aug. 31	--	--	P	23	21.86	S	
20	20.16	S		Feb. 28, 1951	20.08	S		Sept. 28	19.12	S		Mar. 22	22.25	S	
27	20.20	S		Mar. 26	20.01	S		Oct. 29	19.24	S		Apr. 26	22.79	S	
May 04	20.03	S		Apr. 26	20.17	S		Dec. 01	19.11	S		May 24	23.85	S	
11	20.32	S		June 05	19.13	S		30	19.40	S		June 28	24.54	S	
18	20.09	S		July 10	17.35	S		Jan. 28, 1954	19.32	S		July 26	P		
25	20.27	S		Aug. 08	17.12	S		Feb. 25	19.96	S		Aug. 30	P		
June 01	20.23	S		Sept. 05	17.10	S		Mar. 22	20.54	S		Sept. 20	26.27	S	
08	20.20	S		27	17.14	S		Apr. 27	20.57	S		Nov. 01	25.25	S	
15	20.29	S		Oct. 30	17.14	S		May 24	20.19	S		29	24.68	S	
23	20.23	S		Dec. 05	16.97	S		June 28	21.61	S		Dec. 20	24.52	S	
30	20.43	S		Jan. 01, 1952	17.47	S		Aug. 26	--	--	P	Feb. 08, 1957	29.70	R	
July 07	20.50	S		Feb. 01	17.41	S		27	23.46	S		Mar. 01	33.07	R	
13	20.57	S		Mar. 31	17.50	S		Sept. 20	--	--	P	Apr. 09	24.19	R	
22	20.58	S		Apr. 29	17.58	S		Oct. 29	23.12	S		May 09	23.84	R	
27	20.51	S		May 28	17.77	S		Nov. 29	23.74	S		30	20.10	R	
Aug. 04	20.24	S		June 27	17.98	S		Jan. 06, 1955	22.86	R		July 26	17.20	R	
11	20.05	S		July 30	18.30	S		27	22.48	R		Aug. 30	18.29	R	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-20 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Oct. 03, 1957	17.34	R		June 17, 1960	14.98	S		May 23, 1963	14.70	S		July 15, 1968	18.59	R	
Nov. 01	17.15	R		July 25	14.38	S		June 20	14.45	S		Sept. 16	18.63	R	
21	17.38	R		Aug. 19	15.10	S		July 22	14.37	S		Oct. 14	18.55	R	
Dec. 19	16.93	R		Sept. 16	13.18	S		Aug. 19	14.85	S		Nov. 07	17.85	R	
Jan. 30, 1958	17.12	S		Oct. 20	12.98	S		Oct. 11	14.93	S		Dec. 05	18.70	R	
Feb. 27	17.23	S		Nov. 18	12.87	S		Jan. 27, 1965	15.00	R		Jan. 08, 1969	18.67	R	
Mar. 27	17.30	S		Dec. 14	12.46	S		Apr. 28	14.87	R		Feb. 05	17.52	R	
Apr. 24	17.49	S		Jan. 19, 1961	12.86	R		Oct. 15	15.37	R		Mar. 04	18.52	R	
May 22	17.20	S		Feb. 17	12.53	R		Jan. 06, 1966	15.23	R		Apr. 23	18.66	R	
June 26	17.90	S		Mar. 17	12.56	R		Apr. 22	15.67	R		May 22	17.92	R	
July 25	18.33	S		Apr. 21	12.61	R		Sept. 21	16.53	R		June 26	17.18	R	
Aug. 28	17.73	S		May 19	12.58	R		Oct. 21	16.60	R		Sept. 10	17.10	R	
Sept. 19	17.56	S		June 23	12.55	R		Nov. 22	16.78	R		Oct. 09	17.57	R	
Oct. 31	17.60	S		July 17	12.65	R		Dec. 20	16.88	R		Dec. 22	17.80	R	
Nov. 21	18.09	S		Sept. 01	13.21	R		Jan. 20, 1967	16.83	R		Jan. 28, 1970	17.41	R	
Jan. 09, 1959	17.90	S		29	13.13	R		Feb. 20	17.19	R		Feb. 26	17.47	R	
30	17.84	S		Oct. 27	12.99	R		Mar. 20	17.36	R		Mar. 03	17.40		
Feb. 27	17.76	S		Nov. 17	12.78	R		Apr. 17	18	R		26	17.87	R	
Mar. 27	17.97	S		Dec. 13	12.49	R		May 18	17.47	R		Apr. 28	17.82	R	
Apr. 24	17.63	S		Jan. 29, 1962	12.41	R		June 21	17.48	R		May 27	17.84	R	
May 22	17.75	S		Feb. 26	12.45	R		July 17	17.69	R		June 25	18.28	R	
June 26	18.17	S		Mar. 26	12.42	R		Aug. 21	17.94	R		July 28	19.62	R	
July 24	19.10	S		Apr. 30	12.41	R		Sept. 18	17.30	R		Aug. 27	19.22	R	
Aug. 28, 1959	19.25	S		June 29	13	R		Oct. 19	17.06	R		Sept. 24	19.12	R	
Sept. 28	18.79	S		Aug. 24	12.95	R		Nov. 20	17.12	R		Oct. 27	18.96	R	
Oct. 23	16.94	S		Oct. 02	13.12	R		Dec. 18	17.20	R		Nov. 24, 1970	18.88	R	
Nov. 24	16.70	S		19	12.89	R		Jan. 25, 1968	17.19	R		Dec. 22	18.93	R	
Dec. 16	16.77	S		Nov. 16	13.11	R		Feb. 27	17.45	R		Mar. 09, 1971	19.00		
Jan. 20, 1960	16.75	S		Jan. 10, 1963	13.09	S		Mar. 21	17.75	R		Feb. 01, 1972	19.89		
Mar. 25	16.07	S		Feb. 07	13.20	S		Apr. 18	17.83	R		Feb. 27, 1973	20.05		
Apr. 22	15.78	S		Mar. 28	13.54	S		May 16	17.92	R		Jan. 25, 1974	15.92		
May 20	15.58	S		Apr. 26	13.86	S		June 17	17.99	R		Jan. 15, 1976	8.62	R	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-20 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Dec. 15, 1976	12.07	R		Feb. 28, 1985	11.58	S		Feb. 18, 1988	5.35	S		Sept. 28, 1988	5.56	S	
Jan. 06, 1978	13.55	S		Jan. 09, 1986	10.35	S		Mar. 16	4.43	S		Nov. 02	5.93	S	
Mar. 29, 1979	15.95	S		Mar. 26, 1987	2.40	S		23	3.84	S		Dec. 01	6.66	S	
Mar. 11, 1980	17.20	S		Sept. 03	4.28	S		Apr. 21	4.26	S		Jan. 04, 1989	6.93	S	
Mar. 20, 1981	16.15	S		Oct. 07	5.00	S		June 02	4.79	S		Feb. 27, 1990	7.20	S	
Mar. 23, 1982	16.86	S		Nov. 05	5.69	S		29	5.48	S		Jan. 09, 1991	8.60	S	
Feb. 28, 1983	14.80	S		Dec. 18	6.15	S		July 25	5.86	S		Jan. 08, 1992	9.46	S	
Feb. 09, 1984	10.70	S		Jan. 21, 1988	4.90	S		Aug. 16	6.16	S		Mar. 16, 1993	11.20	S	
Highest	2.40	Mar. 26, 1987													
Lowest	33.07	Mar. 01, 1957													

Local well number: 21N-09W-22 BCC 1; Site–ID: 361657098092201
Location: lat 36°16′57″, long 098°09′22″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1273
Well depth: 178

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 06, 1950	31.59	S		May 11. 1950	32.40	S		Sept. 02, 1950	34.22	S		Jan. 29, 1951	37.61	S	
13	31.99	S		18	32.48	S		Oct. 05	34.59	S		Feb. 28	37.81	S	
20	31.98	S		31	32.85	S		25	35.08	S		Mar. 26	38.02	S	
27	32.27	S		June 30	33.62	S		Nov. 28	36.24	S		Apr. 26	--	--	W
May 04	32.52	S		July 31	34.02	S		Dec. 27	37.04	S					
Highest	31.59	Apr. 06, 1950													
Lowest	38.02	Mar. 26, 1951													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-22 BCC 2; Site–ID: 361707098091001
Location: lat 36°16′57″, long 098°09′26″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1273
Well depth: 29

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
May 25, 1950	21.90	S		June 30, 1950	22.22	S		Aug. 04, 1950	22.47	S		Nov. 28, 1950	22.74	S	
June 01	21.98	S		July 07	22.27	S		Sept. 02	22.63	S		Dec. 27	22.74	S	
08	22.05	S		13	22.27	S		20	22.72	S		Jan. 29, 1951	22.76	S	
15	22.10	S		22	22.34	S		Oct. 05	22.77	S		Feb. 28	22.83	S	
23	22.15	S		28	22.40	S		25	22.79	S		Mar. 26	23.10	S	
Highest	21.90			May 25, 1950											
Lowest	23.10			Mar. 26, 1951											

Local well number: 21N-09W-24 CDD 1; Site–ID: 361642098070201
Location: lat 36°16′42″, long 098°07′02″; Hydrologic unit: 11050002
Principal aquifer: 318HNSS
Altitude of land-surface datum: 1252
Well depth: 191

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 17, 1950	13.75	S		Mar. 23, 1950	15.24	S		Apr, 13, 1950	15.23	S		May 04, 1950	15.24	S	
24	18.68	S	R	30	15.33	S		20	15.25	S		11	13.73	S	
Mar. 02	15.10	S		Apr. 06	15.17	S		27	15.24	S		18	13.67	S	
Highest	13.67	May 18, 1950													
Lowest	15.33	Mar. 30, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-25 AD 1; Site–ID: 361608098062201
Location: lat 36°16′08″, long 098°06′22″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1250
Well depth: 126

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 27, 1950	15.82	S		Mar. 15, 1950	17.34	S		Apr. 13, 1950	16.04	S		May 04, 1950	16.00	S	
Mar. 02	15.78	S		23	16.07	S		20	16.05	S		11	15.96	S	
06	16.05	S		30	16.13	S		27	16.04	S		18	15.90	S	
Mar. 09, 1950	18.25	S		Apr. 06, 1950	16.00	S									
Highest	15.78	Mar. 02, 1950													
Lowest	18.25	Mar. 09, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-25 CC 1; Site–ID: 361542098071001
Location: lat 36°15′42″, long 098°07′10″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1270
Well depth: 24

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 10, 1950	18.85	S		Feb. 28, 1951	18.92	S		Apr. 27, 1953	18.00	S		July 29, 1955	20.95		
13	18.91	S		Mar. 26	19.07	S		May 28	18.33	S		Aug. 26	21.07		
20	18.95	S		Apr. 26	19.28	S		June 29	18.61	S		Sept. 27	21.79		
27	18.98	S		June 05	16.69	S		July 30	18.50	S		Oct. 28	21.44	S	
May 04	18.99	S		July 10	14.98	S		Aug. 31	18.30	S		Dec. 02	21.61	S	
11	19.10	S		Aug. 08	13.87	S		Sept. 28	18.43	S		28	21.70	S	
18	19.24	S		Sept. 05	14.05	S		Oct. 30	18.75	S		Feb. 03, 1956	21.99	S	
25	19.19	S		27	14.21	S		Nov. 30	18.92	S		24	22.18	S	
June 01	19.20	S		Oct. 29	14.36	S		Dec. 30	19.18	S		Mar. 23	22.38	S	
08	19.12	S		Dec. 06	14.34	S		Jan. 29, 1954	19.35	S		Apr. 27	22.53	S	
15	19.16	S		Jan. 01, 1952	14.54	S		Feb. 25	19.52	S		June 29	22.70	S	
23	19.24	S		31	14.52	S		Mar. 22	19.70	S		July 27	23.02	S	
30	19.33	S		Mar. 31	14.80	S		Apr. 26	19.90	S		Aug. 31	23.20	S	
July 07	19.39	S		Apr. 29	14.92	S		June 28	20.21	S		Sept. 21	23.33	S	
13	19.43	S		May 28	14.99	S		July 26	20.71	S		Nov. 02	23.56	S	
22	19.44	S		June 26	16.62	S		Aug. 27	20.78	S		Nov. 30, 1956	23.72	S	
28	19.35	S		July 30, 1952	15.86	S		Sept. 30	20.98	S		Dec. 21	23.82	S	
Aug. 04	18.93	S		Aug. 28	16.05	S		Oct. 28	21.24	S		June 27, 1957	15.65	R	
Sept. 03	18.26	S		Sept. 30	16.10	S		Nov. 29	21.45	S		Aug. 29	14.69	R	
20	18.18	S		Oct. 28	16.42	S		Jan. 06, 1955	21.67			Oct. 02	15.08	R	
Oct. 05	18.19	S		Nov. 25	16.50	S		27	21.85			31	16.33	R	
25	18.25	S		Dec. 29	16.90	S		Feb. 24	21.90						
Nov. 28	18.34	S		Jan. 29, 1953	17.20	S		Mar. 28	22.13						
Dec. 27	18.48	S		Feb. 26	17.50	S		Apr. 25	22.27						
Jan. 29, 1951	18.74	S		Mar. 31	17.80	S		May 27	21.39						
Highest	13.87	Aug. 08, 1951													
Lowest	23.82	Dec. 21, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-27 CC 1; Site–ID: 361542098081801
Location: lat 36°15′42″, long 098°09′18″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1240
Well depth: 60

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 05, 1950	30.58	S		Oct. 30, 1951	30.16	S		Jan. 29, 1954	29.95	S		Feb. 02, 1956	34.53	S	
14	30.65	S		Dec. 05	29.73	S		Feb. 25	29.93	S		23	34.57	S	
22	30.72	S		Jan. 01, 1952	29.62	S		Mar. 22	29.85	S		Mar. 22	34.60	S	
28	30.76	S		Feb. 01	29.52	S		Apr. 26	29.79	S		Apr. 26	33.94	S	
Aug. 04	30.71	S		Apr. 01	29.38	S		May 24	30.01	S		May 24	33.68	S	
Sept. 02	31.08	S		29	29.24	S		June 29	30.46	S		June 28	33.78	S	
20	31.40	S		May 28	29.20	S		July 26	31.45	S		July 26	33.81	S	
Oct. 05	31.56	S		June 27	29.93	S		Aug. 27	31.76	S		Aug. 30	33.94	S	
26	31.35	S		July 30	30.58	S		Sept. 20	31.76	S		Sept. 20	34.06	S	
Nov. 27	31.29	S		Aug. 28	30.89	S		Oct. 29	31.75	S		Nov. 01	34.17	S	
Dec. 15	31.63	S		Nov. 26	30.30	S		Nov. 29	31.80	S		29	34.05	S	
28	31.61	S		Dec. 30	30.04	S		Jan. 06, 1955	31.78	S		Dec. 20	34.05	S	
Jan. 15, 1951	31.85	S	S	Jan. 29, 1953	30.02	S		28	31.84	S		Feb. 08, 1957	34.11	R	
17	31.76	S		Feb. 26	30.13	S		Feb. 25	31.78	S		Mar. 01	34.14	R	
18	31.78	S		Mar. 31	30.12	S		Mar. 28	31.87	S		Apr. 09	34.19	R	
30	31.59	S		Apr. 28	29.98	S		Apr. 25	32.15	S		May 09	33.97	R	
Mar. 01	31.22	S		May 29	30.35	S		May 26	32.26	S		30	32.87	R	
27	31.07	S		June 30, 1953	31.15	S		June 27	32.50	S		June 27	31.18	R	
Apr. 26	31.05	S		July 31	30.89	S		July 28	32.63	S		July 26, 1957	30.25	R	
June 05	30.99	S		Sept. 01	30.64	S		Aug. 25	33.29	S		Aug. 30	29.58	R	
July 11	30.65	S		29	30.55	S		Sept. 27	33.76	S		Oct. 03	29.19	R	
Aug. 08	31.14	S		Oct. 29	30.43	S		Oct. 27	34.12	S					
Sept. 05	31.13	S		Dec. 01	30.08	S		Dec. 01	34.38	S					
28	30.58	S		30	30.02	S		29	34.55	S					
Highest	29.19	Oct. 03, 1957													
Lowest	34.60	Mar. 22, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-28 DD 1; Site–ID: 361543098093601
Location: lat 36°15′43″, long 098°09′36″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1233
Well depth: 63

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 05, 1950	25.17	R		Feb. 01, 1952	23.90	S		May 24, 1954	24.73	S		July 26, 1956	28.15	S	
14	25.24	S		Apr. 01	24.74	S		June 29	29.64	S		Aug. 30	28.36	S	
22	25.29	S		29	23.72	S		July 23	30.71	S		Sept. 20	28.45	S	
28	25.31	S		May 28	23.69	S		Aug. 27	27.16	S		Nov. 01	28.62	S	
Aug. 04	25.26	S		June 27	29.41	S		Sept. 20	27.97	S		29	28.57	S	
Sept. 02	30.67	S		July 30	30.13	S		Oct. 29	26.44	S		Dec. 20	29.90	S	
20	31.09	S		Aug. 28	25.95	S		Nov. 29	26.39	S		Feb. 08, 1957	28.49	R	
Oct. 05	26.67	S		Sept. 30	27.56	S		Jan. 06, 1955	26.42			Mar. 01	28.57	R	
26	26.01	S		Nov. 26	24.87	S		28	26.67			Apr. 09	28.60	R	
Nov. 27	27.38	S		Dec. 30	24.58	S		Feb. 25	26.37			May 09	28.53	R	
Dec. 15	28.78	S		Jan. 29, 1953	24.53	S		Mar. 28	26.49			30	26.64	R	
28	28.77	S		Feb. 26	25.19	S		Apr. 25	30.77			June 27	24.40	R	
Jan. 15, 1951	29.04	S	S	Mar. 31	24.65	S		May 26	26.94			July 26, 1957	23.94	R	
17	27.07	S		Apr. 28	24.47	S		June 27	31.13			Aug. 30	23.53	R	
18	26.78	S		May 29	29.46	S		July 28	32.44			Oct. 03	23.19	R	
30	26.17	S		June 30, 1953	28.36	S		Aug. 25	33.34			Nov. 01	23.01	R	
Mar. 01	27.51	S		July 31	25.53	S		Sept. 27	33.84			Mar. 04, 1969	24.20	R	
27	25.49	S		Sept. 01	26.34	S		Oct. 27	33.93	S		Mar. 03, 1970	27.20	R	S
Apr. 26	27.81	S		29	28.84	S		Dec. 01	33.92	S		Mar. 09, 1971	24.60	R	S
June 05	29.08	S	S	Oct. 29	24.99	S		29	33.34	S		Feb. 01, 1972	27.04	R	
July 11	28.99	S		Dec. 01	24.54	S		Feb. 02, 1956	33.05	S		Feb. 26, 1973	35.17	R	S
Aug. 08	31.06	S	S	30	24.53	S		23	32.77	S		Jan. 24, 1974	24.99		
Sept. 28	--	--	P	Jan. 29, 1954	24.48	S		Mar. 22	32.47	S		Jan. 22, 1975	19.85		
Oct. 30	26.55	S		Feb. 25	24.49	S		Apr. 26	28.27	S					
Dec. 05	22.98	S		Mar. 22	24.37	S		May 24	27.96	S					
Jan. 01, 1952	24.17	S		Apr. 26	24.34	S		June 28	28.13	S					
Highest	19.85	Jan. 22, 1975													
Lowest	33.93	Oct. 27, 1955													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-28 DD 2; Site–ID: 361544098093601
Location: lat 36°15′44″, long 098°09′36″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1236
Well depth: 59

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 20, 1950	29.41	S		July 30, 1952	28.79			Mar. 22, 1954	26.31			Oct. 27, 1955	32.72	S	
Oct. 26	28.07	S		Aug. 28	28.10			Apr. 26	26.28			Dec. 01	32.12	S	
Nov. 27	28.16	S		Sept. 30	31.54			May 24	26.78			29	32.73	S	
Dec. 15	28.98	S		Nov. 26	26.71			June 29, 1954	28.18			Feb. 02, 1956	32.44	S	
28	29.05	S		Dec. 30	26.50			July 26	28.41			23	32.48	S	
Jan. 15, 1951	29.28	S	S	Jan. 29, 1953	26.53			Aug. 27	29.27			Mar. 22	32.31	S	P
30	28.26	S		Feb. 26	27.33			Sept. 20	28.62			Apr. 26	30.38	S	
Mar. 01	27.65	S	S	Mar. 31	26.54			Oct. 29	28.33			June 28	31.11	S	
27	27.53	S		Apr. 28	26.47			Nov. 29	28.33			July 26	30.15	S	
Apr. 27	27.62	S		May 29	28.17			Jan. 06, 1955	28.30			Aug. 30	30.33	S	
June 05	28.03	S	S	June 30	29.35			28	28.81			Sept. 20	30.44	S	
July 11	28.47	S		July 31	27.67			Feb. 25	28.74			Nov. 01	30.60	S	
Dec. 05	26.18	S		Sept. 01	28.38			Mar. 28	28.47			27	30.57	S	
Jan. 01, 1952	26.13	S		29	27.70			Apr. 25	30.09			Dec. 20	30.63	S	P
Feb. 01	25.87			Oct. 29	27.01			May 26	28.89			Feb. 08, 1957	30.53		
Apr. 01	26.27			Dec. 01	26.58			June 27	31.48			Mar. 01	30.48		
29	25.66			30	26.44			July 28	32.66						
May 28	25.60			Jan. 29, 1954	26.45			Aug. 25	32.51						
June 27	27.89			Feb. 25	26.43			Sept. 27	32.60						
Highest	25.60	May 28, 1952													
Lowest	32.73	Dec. 29, 1955													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-28 DDD 1; Site–ID: 361539098093001
Location: lat 36°15′39″, long 098°09′30″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1237
Well depth: 59

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 02, 1956	32.44	S		Jan. 06, 1978	19.10			Mar. 20, 1981	26.19	S		Feb. 09, 1984	--	--	W
Jan. 13, 1976	15.02			Mar. 30, 1979	21.40			Mar. 23, 1982	27.73	S		Feb. 28, 1985	--	--	N
Apr. 13, 1977	18.64			Mar. 11, 1980	26.39			Feb. 28, 1983	21.81	S					
Highest	15.02	Jan. 13, 1976													
Lowest	32.44	Feb. 02, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-30 AB 1; Site–ID: 361624098120301
Location: lat 36°16′24″, long 098°12′03″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1217
Well depth: 21

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 06, 1950	13.35	S		Dec. 06, 1951	11.43	S		Mar. 27, 1969	10.70	R		Oct. 07, 1987	6.36	S	
13	13.10	S		Jan. 01, 1952	11.34	S		Mar. 04, 1970	9.42	R		Nov. 05	6.44	S	
22	13.08	S		Feb. 01	11.46	S		Mar. 09, 1971	10.36	R		Dec. 18	5.90	S	
Aug. 04	9.15	S		Apr. 01	11.42	S		Feb. 01, 1972	11.56	R		Jan. 21, 1988	5.37	S	
Sept. 01	10.59	S		29	11.30	S		Feb. 27, 1973	12.33	R		Feb. 18	6.40	S	
20	10.57	S		May 28	11.20	S		Jan. 25, 1974	9	R		Mar. 16	6.38	S	
Oct. 05	11.04	S		June 27	11.95	S		Jan. 22, 1975	7.79	R		23	6.39	S	
26	11.96	S		July 30	13.22	S		Jan. 15, 1976	7.39			Apr. 21	6.36	S	
Nov. 29	12.76	S		Aug. 27	13.79	S		Apr. 13, 1977	7.94			June 02	5.88	S	
Dec. 27	13.11	S		Sept. 30	14.26	S		Jan. 06, 1978	8.17			29	6.44	S	
Jan. 30, 1951	13.41	S		Oct. 31	14.33	S		Mar. 29, 1979	8.58			July 25	6.44	S	
Mar. 01	13.60	S		Nov. 26	14.08	S		Mar. 11, 1980	8.50			Aug. 16	6.38	S	
26	13.70	S		Dec. 30	13.98	S		Mar. 20, 1981	8.56	S		Sept. 27	6.58	S	
Apr. 27	13.73	S		Jan. 30, 1953	13.84	S		Mar. 23, 1982	8.53	S		Nov. 02	6.62	S	
June 04	8.22	S		Feb. 27	13.78	S		Feb. 28, 1983	7.96	S		Dec. 01	6.65	S	
July 11	6.05	S		Mar. 31	13.74	S		Feb. 09, 1984	7.19	S		Jan. 04, 1989	6.68	S	
Aug. 08	7.94	S		Apr. 28	13.69	S		Feb. 28, 1985	7.30	S		Feb. 27, 1990	6.06	S	
Sept. 05	9.93	S		May 29	13.86	S		Jan. 09, 1986	7.28	S		Jan. 09, 1991	6.20	S	
28	10.45	S		July 31	14.13	S		Mar. 26, 1987	6.43	S		Mar. 24, 1992	6.39	S	
Oct. 30	11.10	S		Dec. 04	15.00	S		Sept. 03	6.18	S					
Highest	5.37	Jan. 21, 1988													
Lowest	15.00	Dec. 04, 1953													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-31 AA 1; Site–ID: 361532098113901
Location: lat 36°15′32″, long 098°11′39″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1201
Well depth: 40

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 17, 1950	37.73	S		June 05, 1951	32.56	S		Jan. 30, 1953	39.84			Aug. 27, 1954	37.00		
20	37.85	S		July 11	31.90	S		Feb. 26	--	R	D	Sept. 21	37.10		
27	36.00	S		Aug. 08	32.38	S		Mar. 31	--	R	D	Oct. 29	36.54		
May 04	36.03	S		Sept. 05	--	S	D	Apr. 28, 1953	--	R	D	Nov. 29	37.58		
11	35.88	S		27	37.91	S		May 29	38.69			Jan. 06, 1955	37.25		
18	35.39	S		Oct. 30	37.35	S		June 30	39.87			28	37.00		
25	35.67	S		Dec. 05	35.04	S		July 31	36.44			Feb. 25	37.00		
31	35.67	S		Jan. 01, 1952	34.99	S		Sept. 01	36.11			Mar. 28	--	R	D
June 30	33.45	S		Feb. 01	32.42	R		29	35.63			Apr. 26	--	R	D
July 31	33.71	S		Mar. 31	34.42			Oct. 29	36.56			May 26	--	R	D
Sept. 02	33.17	S		Apr. 29	34.51			Dec. 01	36.42	R		June 28	--	--	D
Oct. 05	33.53	S		May 28	35.69			31	36.92			July 29	--	R	D
26	33.62	S		June 27	36.77			Jan. 28, 1954	36.49			Oct. 27	--	S	D
Nov. 28	33.87	S		July 30	37.13			Feb. 26	36.13			Dec. 01	--	S	D
Dec. 27	33.74	S		Aug. 28	36.66			Mar. 22	36.11			29	--	S	D
Jan. 30, 1951	33.70	S		Sept. 30	37.88			Apr. 26	36.29			Feb. 02, 1956	--	S	D
Feb. 28	32.34	S		Oct. 31	39.87			May 25	36.47						
Mar. 26	32.69	S		Nov. 26	40.90			June 29	32.64						
Apr. 26	33.02	S		Dec. 30	40.14			July 26	35.77						
Highest	31.90	July 11, 1951													
Lowest	40.90	Nov. 26, 1952													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-31 DDC 1; Site–ID: 361453098114901
Location: lat 36°14′53″, long 098°11′49″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1186
Well depth: 19

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 17, 1950	5.42	S		Mar. 01, 1951	4.61	S		Sept. 01, 1953	6.64	S		Feb. 02, 1956	6.33	S	
20	5.43	S		27	4.52	S		29	6.96	S		23	6.18	S	
27	5.48	S		Apr. 27	4.64	S		Oct. 29	7.27	S		Mar. 22	6.15	S	
May 04	5.50	S		June 05	2.91	S		Dec. 04	6.97	S		Apr. 26, 1956	6.27	S	
11	4.66	S		July 11	2.26	S		31	6.41	S		May 24	6.82	S	
18	4.44	S		Aug. 07	4.30	S		Jan. 28, 1954	6.08	S		June 28	7.66	S	
25	4.61	S		Sept. 05	5.42	S		Feb. 26	5.90	S		July 26	8.52	S	
June 01	4.77	S		27	5.62	S		Mar. 22	5.81	S		Aug. 30	8.65	S	
08	4.54	S		Oct. 30	5.40	S		Apr. 26	5.91	S		Sept. 20	10.31	S	
15	4.85	S		Dec. 05	4.55	S		May 25	5.50	S		Nov. 01	11.17	S	
23	5.19	S		Jan. 01, 1952	4.66	S		June 29	6.33	S		29	11.47	S	
30	5.50	S		Feb. 01	4.55	S		July 26	7.52	S		Dec. 20	11.50	S	
July 07	5.76	S		Mar. 31, 1952	4.25	S		Aug. 27	8.85	S		Feb. 08, 1957	11.38	R	
13	5.96	S		Apr. 29	3.91	S		Sept. 21	9.48	S		Mar. 01	11.27	R	
22	6.20	S		May 28	4.63	S		Oct. 29	10.08	S		Apr. 09	10.45	R	
Aug. 04	4.45	S		June 27	5.66	S		Nov. 30	10.14	S		May 09	6.15	R	
11	4.49	S		July 30	6.83	S		Jan. 06, 1955	10.13	R		30	.50	R	
18	4.64	S		Aug. 28	7.55	S		28	10.10			June 27	.60	R	
25	4.83	S		Sept. 30	8.20	S		Feb. 25	9.94			July 26	2.03	R	
Sept. 01	4.37	S		Oct. 31	8.33	S		Mar. 28	9.88			Aug. 30	5	R	
08	4.23	S		Nov. 26	8.19	S		Apr. 26	9.94			Oct. 03	4.69	R	
15	4.32	S		Dec. 30	7.88	S		May 26	7.37			Nov. 01	4.56	R	
22	4.45	S		Jan. 30, 1953	7.34	S		June 27	3.58			21	4.22	R	
29	4.62	S		Feb. 26	6.89	S		July 28	5.27			Dec. 19	4.19	R	
Oct. 05	4.73	S		Mar. 31	6.23	S		Aug. 25	6.63			Jan. 30, 1958	4.25	S	
25	5.04	S		Apr. 28	5.72	S		Sept. 27	6.65			Feb. 27	4.37	S	
Nov. 28	5.22	S		May 29	5.86	S		Oct. 27	6.42	S		Mar. 27	3.82	S	
Dec. 27	5.26	S		June 30	6.86	S		Dec. 01	6.38	S		Apr. 24	3.75	S	
Jan. 30, 1951	5.20	S		July 31	6.09	S		29	6.37	S		May 22	4.37	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-31 DDC 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
June 26, 1958	4.13	S		Jan. 30, 1959	4.48	S		July 24, 1959	5.02	S		Jan. 29, 1960	2.99	S	
July 25	5.13	S		Feb. 27	4.28	S		Aug. 28		S	O	Mar. 25	2.46	S	
Aug. 28	4.10	S		Mar. 27	3.95	S		Sept. 28		S	O	Apr. 22	2.80	S	
Sept. 19	--	S	O	Apr. 24	3.40	S		Oct. 23	2.45	S		May 20	2.92	S	
Nov. 21	--	S	O	May 22	3.63	S		Nov. 24	3.15	S		June 17	.45	S	
Jan. 09, 1959	4.52	S		June 26	4.43	S		Dec. 16	3.50	S		Aug. 19, 1960	3.67	S	
Highest	.45	June 17, 1960													
Lowest	11.50	Dec. 20, 1956													

Local well number: 21N-09W-34 BCC 1; Site–ID: 361526098092201
Location: lat 36°15′14″, long 098°09′24″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1239
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 31, 1974	30.08	R		Dec. 09, 1976	21.94			Mar. 11, 1980	26.94		
Jan. 22, 1975	24.01			Jan. 06, 1978	23.48						
Jan. 13, 1976	21.25			Mar. 30, 1979	25.60						
Highest	21.25	Jan. 13, 1976									
Lowest	30.08	Jan. 31, 1974									

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-09W-36 BC 1; Site–ID: 361516098071001
Location: lat 36°15′16″, long 098°07′10″; Hydrologic unit: 11050002
Principal aquifer: 318CDHL
Altitude of land-surface datum: 1286
Well depth: 101

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 11, 1950	43.57	S		May 11, 1950	43.50	S		June 15, 1950	43.53	S		July 31, 1950	43.82	S	
13	43.46	S		18	43.20	S		23	43.45	S		Sept. 03	43.62	S	
20	43.33	S		25	43.46	S		30	43.88	S		Oct. 05	--	--	O
27	43.27	S		June 01	43.55	S		July 07	43.89	S					
May 04	43.00	S		08	43.40	S		13	44.03	S					
Highest	43.00	May 04, 1950													
Lowest	44.03	July 13, 1950													

Local well number: 21N-10W-12 BB 1; Site–ID: 361858098133501
Location: lat 36°18′58″, long 098°13′35″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1262
Well depth: 124

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Apr. 18, 1950	33.73	S		May 11, 1950	33.36	S		June 30, 1950	33.74	S	
20	33.76	S		18	33.54	S		July 31	--	--	N
27	33.61	S		25	33.48	S					
May 04	33.48	S		31	33.49	S					
Highest	33.36	May 11, 1950									
Lowest	33.76	Apr. 20, 1950									

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-16 CC 1; Site–ID: 361723098164401
Location: lat 36°17′23″, long 098°16′44″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1220
Well depth: 39

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 07, 1951	23.98	R		Jan. 05, 1978	21.50			Sept. 03, 1987	15.16	S		June 29, 1988	16.39	S	
Mar. 27, 1969	24.56	R		Mar. 29, 1979	21.69			Oct. 07	15.09	S		July 25	16.71	S	
Mar. 04, 1970	23.12			Mar. 11, 1980	21.86			Nov. 05	16.28	S		Aug. 16	16.85	S	
Feb. 01, 1971	24.20			Mar. 20, 1981	21.20	S		Dec. 18	16.68	S		Sept. 27	17.07	S	
Mar. 09	23.59			Mar. 23, 1982	21.10	S		Jan. 21, 1988	16.62	S		Nov. 02	17.21	S	
Feb. 27, 1973	24.02			Mar. 01, 1983	16.21	S		Feb. 18	15.83	S		30	17.79	S	
Jan. 25, 1974	21.70			Feb. 09, 1984	18.47	S		Mar. 16	15.86	S		Jan. 04, 1989	18.01	S	
Jan. 23, 1975	21.00			Feb. 28, 1985	19.84	S		23	15.49	S		Feb. 27, 1990	15.70	S	
Jan. 15, 1976	20.17			Jan. 08, 1986	19.29	S		Apr. 21	15.69	S		Jan. 08, 1992	20.10	S	
Dec. 15	20.90			Mar. 26, 1987	14.78	S		June 02	15.99	S		Mar. 16, 1993	19.80	S	
Highest	14.78	Mar. 26, 1987													
Lowest	24.56	Mar. 27, 1969													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-21 DDD 1; Site–ID: 361631098155601
Location: lat 36°16′31″, long 098°15′56″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1214
Well depth: 40

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 30, 1950	21.11	S		Aug. 25, 1950	21.31	S		Sept. 30, 1952	20.33	R		Jan. 26, 1953	20.74	B	
Feb. 01	21.13	S		Sept. 01	21.29	S		Oct. 28	20.47	R		30	20.73	S	
07	21.13	S		08	21.25	S		Nov. 26	20.67	R		Feb. 03	20.81	B	
14	21.17	S		15	21.20	S		Dec. 30	20.66	R		Feb. 04, 1953	20.81	B	
23	21.14	S		22	21.18	S		Jan. 01, 1953	20.67	B		05	20.81	B	
Mar. 02	21.21	S		29	21.13	S		02	20.68	B		06	20.81	B	
09	21.20	S		Oct. 05	21.11	S		03	20.68	B		07	20.82	B	
15	21.18	S		26	21.02	S		04	20.68	B		08	20.81	B	
23	21.20	S		Nov. 28	20.94	S		05	20.68	B		09	20.82	B	
30	21.27	S		Dec. 27	20.94	S		06	20.69	B		10	20.83	B	
Apr. 06	21.25	S		Jan. 30, 1951	20.95	S		07	20.70	B		11	20.83	B	
13	21.29	S		Mar. 01	20.95	S		08	20.71	B		12	20.83	B	
20	21.29	S		Mar. 26, 1951	20.96	S		09	20.71	B		13	20.83	B	
27	21.29	S		Apr. 27	20.97	S		10	20.71	B		14	20.83	B	
May 04	21.27	S		June 04	20.80	S		11	20.72	B		15	20.82	B	
11	21.32	S		July 11	19.87	S		12	20.70	B		16	20.84	B	
18	21.30	S		Aug. 08	19.45	S		13	20.70	B		17	20.83	B	
25	21.34	S		Sept. 05	19.37	S		14	20.69	B		18	20.81	B	
June 01	21.34	S		28	19.48	S		15	20.75	B		19	20.82	B	
08	21.34	S		Oct. 30	19.49	S		16	20.75	B		20	20.84	B	
15	21.37	S		Dec. 05	19.43	S		17	20.71	B		21	20.84	B	
23	21.37	S		Jan. 01, 1952	19.60	S		18	20.71	B		22	20.84	B	
30	21.40	S		Feb. 02	19.62	R		19	20.72	B		23	20.84	B	
July 07	21.42	S		Mar. 31	19.66	R		20	20.74	B		24	20.83	B	
13	21.44	S		Apr. 29	19.69	R		21	20.73	B		25	20.83	B	
22	21.46	S		May 28	19.68	R		22	20.74	B		26	20.83	B	
Aug. 04	21.45	S		June 27	19.78	R		23	20.74	B		27	20.85	S	
11	21.40	S		July 30	19.95	R		24	20.75	B		28	20.85	B	
18	21.38	S		Aug. 28	20.11	R		25	20.74	B		Mar. 01	20.84	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-21 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 02, 1953	20.84	B		Apr. 10, 1953	20.90	B		May 19, 1953	20.98	B		June 20, 1953	21.04	B	
10	20.84	B		11	20.89	B		20	20.97	B		21	21.04	B	
11	20.85	B		12	20.90	B		21	20.98	B		22	21.05	B	
12	20.86	B		13	20.90	B		22	20.99	B		23	21.05	B	
13	20.86	B		14	20.89	B		23	20.99	B		24	21.05	B	
14	20.87	B		15	20.91	B		24	20.98	B		25	21.07	B	
15	20.87	B		16	20.91	B		25	20.99	B		26	21.07	B	
16	20.86	B		17	20.92	B		26	20.99	B		27	21.08	B	
17	20.84	B		18	20.92	B		27	20.99	B		28	21.08	B	
18	20.87	B		19	20.92	B		28	20.99	B		29	21.08	B	
19	20.87	B		20	20.92	B		29	20.99	B		Sept. 01	21.25	S	
20	20.84	B		28	20.91	B		30	20.99	B		02	21.26	B	
21	20.86	B		29	20.91	B		31	21	B		03	21.27	B	
22	20.87	B		30	20.92	B		June 01	21.00	B		04	21.27	B	
23	20.88	B		May 01	20.96	B		02	21.00	B		05	21.27	B	
24	20.89	B		02	20.97	B		03	21.00	B		06	21.27	B	
25	20.89	B		03	20.97	B		04	21.01	B		07	21.27	B	
26	20.88	B		04	20.97	B		05	21.01	B		08	21.27	B	
27	20.89	B		05	20.96	B		06	21.02	B		09	21.27	B	
28	20.89	B		06	20.95	B		07	21.00	B		10	21.27	B	
29	20.87	B		07	20.95	B		08	21.01	B		11	21.28	B	
30	20.87	B		08	20.95	B		09	21.02	B		12	21.28	B	
31	20.89	B		09	20.94	B		10	21.02	B		13	21.28	B	
Apr. 01, 1953	20.89	B		10	20.96	B		11	21.02	B		14	21.28	B	
02	20.89	B		11	20.95	B		12	21.02	B		15	21.28	B	
03	20.89	B		12	20.97	B		13	21.02	B		16	21.28	B	
04	20.88	B		13	20.97	B		14	21.01	B		17	21.28	B	
05	20.87	B		14	20.96	B		15	21.02	B		18	21.29	B	
06	20.87	B		15	20.95	B		16	21.03	B		22	21.29	B	
07	20.86	B		16	20.95	B		17	21.03	B		23	21.28	B	
08	20.88	B		17	20.96	B		18	21.03	B		24	21.29	B	
09	20.90	B		18	20.96	B		19	21.03	B		25	21.29	B	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-21 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Sept. 26, 1953	21.29	B		Oct. 29, 1953	21.44	B		Dec. 08, 1953	21.53	B		Jan. 15, 1954	21.61	B	
27	21.29	B		Nov. 02	21.43	B		09	21.53	B		16	21.61	B	
28	21.29	B		03	21.44	B		10	21.52	B		17	21.62	B	
29	21.34	S		04	21.44	B		11	21.53	B		18	21.60	B	
30	21.36	B		05	21.44	B		12	21.53	B		19	21.60	B	
Oct. 01	21.36	B		06	21.44	B		13	21.53	B		20	21.64	B	
02	21.36	B		07	21.45	B		14	21.53	B		21	21.64	B	
03	21.37	B		08	21.45	B		15	21.54	B		22	21.63	B	
04	21.37	B		10	21.47	B		16	21.54	B		23	21.61	B	
05	21.37	B		11	21.48	B		17	21.54	B		24	21.62	B	
06	21.37	B		12	21.48	B		18	21.54	B		25	21.63	B	
07	21.37	B		13	21.48	B		19	21.52	B		26	21.65	B	
08	21.37	B		14	21.48	B		20	21.50	B		27	21.64	B	
09	21.37	B		15	21.48	B		21	21.52	B		28	21.64	B	
10	21.37	B		16	21.48	B		22	21.58	B		29	21.63	B	
11	21.37	B		17	21.48	B		23	21.58	B		30	21.65	B	
12	21.38	B		18	21.48	B		29	21.58	B		31	21.64	B	
13	21.39	B		19	21.49	B		30	21.58	B		Feb. 01	21.64	B	
14	21.39	B		20	21.49	B		31	21.58	S		02	21.64	B	
15	21.39	B		21	21.49	B		Jan. 01, 1954	21.57	B		03	21.65	B	
16	21.40	B		22	21.49	B		02	21.59	B		04	21.65	B	
17	21.40	B		23	21.49	B		03	21.59	B		05	21.65	B	
18	21.40	B		24	21.50	B		04	21.58	B		06	21.66	B	
19	21.41	B		25	21.50	B		05	21.59	B		07	21.66	B	
20	21.41	B		26	21.50	B		06	21.60	B		08	21.66	B	
21	21.42	B		27	21.51	B		07	21.60	B		09	21.64	B	
22	21.42	B		28	21.51	B		08	21.58	B		10	21.65	B	
23	21.43	B		29	21.51	B		09	21.60	B		11	21.67	B	
24	21.42	B		30	21.51	B		10	21.60	B		12	21.67	B	
25	21.42	B		Dec. 04	21.52	S		11	21.60	B		13	21.65	B	
26	21.43	B		05	21.52	B		12	21.60	B		14	21.63	B	
27	21.44	B		06	21.53	B		13	21.58	B		15	21.66	B	
28	21.44	B		07	21.51	B		14	21.57	B		16	21.67	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-21 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 17, 1954	21.67	B		Mar. 22, 1954	21.71	B		Apr. 28, 1954	21.79	B		Jan. 28, 1955	22.36	S	
18	21.66	B		23	21.71	B		29	21.80	B		Feb. 25	22.39	S	
19	21.65	B		24	21.71	B		30	21.79	B		Mar. 29	22.46	S	
20	21.67	B		25	21.72	B		May 01	21.80	B		May 26	22.53	S	
21	21.68	B		30	21.72	B		02	21.80	B		June 28	22.40	S	
22	21.68	B		31	21.72	B		03	21.80	B		July 28	22.24	S	
23	21.68	S		Apr. 01	21.72	B		04	21.79	B		Aug. 25	22.21	S	
24	21.68	B		02	21.72	B		05	21.79	B		Sept. 27, 1955	22.32	S	
25	21.67	B		03	21.72	B		06	21.80	B		Oct. 27	22.36	S	
26	21.67	B		04	21.72	B		07	21.80	B		Dec. 01	22.40	S	
27	21.69	B		05	21.72	B		08	21.80	B		29	22.45	S	
28	21.69	B		06	21.72	S		09	21.81	B		Feb. 02, 1956	22.49	S	
Mar. 01	21.69	B		07	21.74	B		10	21.81	B		Mar. 22	22.54	S	
02	21.69	B		08	21.74	B		11	21.80	B		Apr. 26	22.58	S	
03	21.70	B		09	21.73	B		12	21.80	B		June 28	22.67	S	
04	21.69	B		10	21.75	B		13	21.80	B		July 26	22.74	S	
05	21.69	B		11	21.76	B		14	21.80	B		Aug. 30	22.84	S	
06	21.69	B		12	21.76	B		15	21.80	B		Sept. 20	22.91	S	
07	21.68	B		13	21.75	B		16	21.80	B		Nov. 01	22.99	S	
08	21.70	B		14	21.74	B		17	21.80	B		29	23.05	S	
09	21.67	B		15	21.76	B		18	21.81	B		Dec. 20	23.09	S	
10	21.66	B		16	21.76	B		19	21.81	B		Feb. 08, 1957	23.14	R	
11	21.66	B		17	21.75	B		20	21.81	B		Mar. 01	23.18	R	
12	21.70	B		18	21.75	B		21	21.81	B		Apr. 09	23.22	R	
13	21.70	B		19	21.76	B		22	21.81	B		May 09	23.19	R	
14	21.70	B		20	21.78	B		23	21.82	B		30	22.70	R	
15	21.71	B		21	21.79	B		24	21.82	B		June 28	21.52	R	
16	21.71	B		22	21.79	B		25	21.82	B		July 26	20.79	R	
17	21.70	B		23	21.78	B		26	21.81	B		Aug. 30	20.42	R	
18	21.69	B		24	21.79	B		Sept. 21	22.04	S		Oct. 03	20.33	R	
19	21.70	B		25	21.78	B		Oct. 29	22.16	S		Nov. 21	20.50	R	
20	21.71	B		26	21.77	S		Nov. 30	22.26	S		Dec. 19	20.44	R	
21	21.72	B		27	21.79	S		Jan. 06, 1955	22.31	S		Jan. 30, 1958	20.50	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-21 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 27, 1958	20.50	S		Apr. 21, 1961	18.03	R		Jan. 06, 1966	19.95	R		June 26, 1969	19.49	R	
Mar. 27	20.59	S		May 19	17.66	R		Apr. 22	20.06	R		July 16	19.44	R	
Apr. 24	20.59	S		June 23	17.49	R		July 21	20.36	R		Sept. 10	19.45	R	
May 22	20.47	S		July 17	17.49	R		Sept. 21	19.67	R		Oct. 09	20.43	R	
June 26	20.54	S		Aug. 04	17.74	R		Oct. 21	20.04	R		Nov. 20	19.54	R	
July 25	20.54	S		Sept. 01	18.80	R		Nov. 22	19.94	R		Dec. 22	19.48	R	
Aug. 28	20.61	S		29	17.92	R		Dec. 20, 1966	19.92	R		Jan. 28, 1970	19.64	R	
Oct. 31	20.78	S		Oct. 27	17.77	R		Jan. 20, 1967	19.92	R		Feb. 26	19.73	R	
Nov. 21	20.68	S		Nov. 17	17.52	R		Feb. 20	20.01	R		Mar. 04	19.79	R	
Jan. 09, 1959	20.92	S		Dec. 13	17	R		Mar. 20	20	R		26	19.80	R	
30	20.94	S		Jan. 29, 1962	16.73	R		Apr. 17	20.06	R		May 27	19.49	R	
Feb. 27	20.96	S		Feb. 26	16.74	R		May 18	20.06	R		Aug. 27	19.94	R	
Mar. 27	21.03	S		Mar. 26	16.77	R		June 19	20.21	R		Sept. 24	20.08	R	
Apr. 24	21.01	S		Apr. 30	16.69	R		July 17	20.32	R		Oct. 27	20.23	R	
June 26	21.01	S		May 28	16.79	R		Aug. 21	20.39	R		Nov. 24	20.24	R	
July 24	21.07	S		June 29	17.17	R		Oct. 19	20.54	R		Dec. 22	20.27	R	
Aug. 28	21.13	S		Aug. 24	17.75	R		Nov. 20	20.61	R		Mar. 09, 1971	20.41	R	
Oct. 23	20.92	S		Oct. 02	17.99	R		Dec. 18	20.64	R		Feb. 01, 1972	21.06	R	
Nov. 24	20.54	S		19	17.97	R		Jan. 25, 1968	20.68	R		Feb. 27, 1973	21.14	R	
Dec. 16	20.39	S		Nov. 16	18.12	R		Feb. 27	20.74	R		Jan. 25, 1974	18.72	R	
Jan. 29, 1960	20.27	S		Jan. 10, 1963	18.36	S		Mar. 21	20.77	R		Jan. 23, 1975	16.82	R	
Mar. 25	19.84	S		Feb. 07	18.45	S		Apr. 18	20.77	R		Apr. 13, 1977	18.06		
Apr. 22	19.69	S		Mar. 28	18.47	S		June 17	20.84	R		Jan. 05, 1978	23.50	S	
May 20, 1960	19.47	S		Apr. 26	18.47	S		July 15	20.91	R		Mar. 29, 1979	18.79	S	
June 17	19.08	S		May 23	18.47	S		Aug. 13	21.02	R		Mar. 11, 1980	18.09	S	
July 25	18.48	S		June 20	18.79	S		Sept. 16	21.10	R		Mar. 20, 1981	17.44	S	
Aug. 19	18.52	S		July 18	17.92	S		Oct. 15	21.18	R		Mar. 23, 1982	17.24	S	
Sept. 16	19.49	S		Aug. 19	18.27	S		Dec. 05	21.28	R		Mar. 01, 1983	15.92	S	
Nov. 18	18.34	S		Oct. 11	19.53	S		Jan. 08, 1969	21.31	R		Feb. 09, 1984	13.07	S	
Dec. 14	18.19	S		Jan. 27, 1965	19.27	R		Feb. 05	21.32	R		Feb. 28, 1985	15.72	S	
Jan. 19, 1961	18.27	R		Apr. 28	20.22	R		Mar. 07	21.35	R		Jan. 08, 1986	14.37	S	
Feb. 17	18.11	R		July 16	19.84	R		Apr. 24	21.21	R		Mar. 26, 1987	9.17	S	
Mar. 17	18.17	R		Oct. 15	19.97	R		May 22	20.59	R		Sept. 29	10.88	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 21N-10W-21 DDD 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Oct. 07, 1987	11.00	S		Mar. 16, 1988	11.13	S		July 13, 1988	11.93	S		Nov. 30, 1988	13.95	S	
Nov. 05	11.57	S		23	10.97	S		25	12.05	S		Jan. 04, 1989	14.13	S	
Dec. 18	11.97	S		Apr. 21	10.61	S		Aug. 16	12.55	S		May 22, 1991	16.71	S	
Jan. 21, 1988	11.95	S		June 02	10.87	S		Sept. 27	13.29	S		Jan. 08, 1992	17.08	S	
Feb. 18	11.67	S		21	11.24	S		Nov. 02	13.51	S		Mar. 16, 1993	17.14	S	
Highest	9.17			Mar. 26, 1987											
Lowest	23.50			Jan. 05, 1978											

Local well number: 21N-10W-24 BBB 1; Site–ID: 361719098134301
Location: lat 36°17'19", long 098°13'43"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1248
Well depth: 53

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 06, 1950	34.71	S		Apr. 27, 1951	33.47	S		May 28, 1952	32.27	S		May 29, 1953	32.53	S	
13	34.72	S		June 04	34.06	S		June 27	32.29	S		June 30	32.73	S	
22	34.74	S		July 11	33.57	S		July 30	32.45	S		July 31	32.74	S	
Aug. 04	34.68	S		Aug. 08	33.19	S		Aug. 27	32.40	S		Sept. 01	32.90	S	
Sept. 02	34.58	S		Sept. 05	32.87	S		Sept. 30	32.67	S		29	32.98	S	
20	34.47	S		28	32.82	S		Oct. 28	32.87	S		Oct. 29, 1953	33.03	S	
Oct. 05	34.41	S		Oct. 30	32.61	S		Nov. 26	32.93	S		Dec. 04	32.93	S	
26	34.38	S		Dec. 05	32.28	S		Dec. 30	32.61	S		31	33.00	S	
Dec. 27	34.39	S		Jan. 01, 1952	32.28	S		Jan. 30, 1953	32.56	S		Jan. 28, 1954	--	--	W
Jan. 30, 1951	34.31	S		Feb. 01	32.33	S		Feb. 27	32.56	S					
Mar. 01	34.23	S		Apr. 01	32.35	S		Mar. 31	32.53	S					
26	34.18	S		29	32.22	S		Apr. 28	32.40	S					
Highest	32.22	Apr. 29, 1952													
Lowest	34.74	July 22, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 22N-10W-17 DD 1; Site–ID: 362241098170701
Location: lat 36°22′41″, long 098°17′07″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1304
Well depth: 38

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 03, 1950	31.77	S		Mar. 01, 1951	30.05	S		Apr. 01, 1952	27.59	S		Mar. 31, 1953	29.22	S	
13	31.83	S		26	30.03	S		29	27.58	S		Apr. 28	29.14	S	
22	31.78	S		Apr. 27	30.08	S		May 28	27.80	S		May 29	29.48	S	
27	31.73	S		June 04	29.48	S		June 27	27.84	S		June 30	29.73	S	
Aug. 04	31.56	S		July 11	27.54	S		July 30	27.98	S		July 31	29.78	S	
Sept. 02	30.91	S		Aug. 07	25.95	S		Aug. 28	28.13	S		Sept. 01, 1953	29.92	S	
20	30.33	S		Sept. 05	26.03	S		Sept. 30	28.38	S		29	29.99	S	
Oct. 05	29.96	S		28	26.29	S		Oct. 28	28.74	S		Oct. 29	30.10	S	
26	29.81	S		Oct. 30	26.20	S		Nov. 26	28.80	S		Dec. 04	28.06	S	
Nov. 28	29.85	S		Dec. 05	26.44	S		Dec. 30	28.78	S		31	28.33	S	
Dec. 27	29.94	S		Jan. 01, 1952	27.05	S		Jan. 30, 1953	28.94	S		Jan. 28, 1954	30.27	S	
Jan. 30, 1951	30.00	S		Feb. 01	27.03	S		Feb. 27	29.06	S		Feb. 26	30.67	S	
Highest	25.95			Aug. 07, 1951											
Lowest	31.83			July 13, 1950											

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 22N-10W-19 AAA 1; Site–ID: 362231098180901
Location: lat 36°22′31″, long 098°18′09″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1312
Well depth: 80

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 06, 1950	38.87	S		Oct. 26, 1950	37.05	S		July 11, 1951	35.96	S		Aug. 28, 1952	35.25	S	
13	38.03	S		Nov. 28	36.90	S		Jan. 01, 1952	34.93	S		Sept. 30	35.50	S	
22	37.86	S		Dec. 27	36.82	S		Feb. 01	34.74	S		Oct. 28	35.60	S	
27	37.83	S		Jan. 30, 1951	36.82	S		Apr. 01	34.82	S		Nov. 26	35.48	S	
Aug. 04	37.74	S		Mar. 01	36.68	S		29	34.79	S		Dec. 30	35.44	S	
Sept. 02	37.55	S		26	36.69	S		May 28	34.88	S					
20	37.38	S		Apr. 27	36.56	S		June 27	34.90	S					
Oct. 05	37.22	S		June 04	36.60	S		July 30	35.07	S					
Highest	34.74	Feb. 01, 1952													
Lowest	38.87	July 06, 1950													

Local well number: 22N-10W-29 AAA 1; Site–ID: 362140098170301
Location: lat 36°21′40″, long 098°17′03″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1295
Well depth: 69

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
July 06, 1950	35.92	S		Sept. 02, 1950	31.88	S		Dec. 27, 1950	31.44	S		June 04, 1951	31.01	S	
13	33.33	S		20	31.69	S		Jan. 30, 1951	31.42	S		July 11	30.29	S	
22	32.26	S		Oct. 05	31.55	S		Mar. 01	31.35	S		Aug. 07	29.75	S	
27	32.26	S		26	31.51	S		26	31.31	S					
Aug. 04	32.13	S		Nov. 28	31.42	S		Apr. 27	31.22	S					
Highest	29.75	Aug. 07, 1951													
Lowest	35.92	July 06, 1950													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 22N-10W-31 BAA 1; Site–ID: 362045098183101
Location: lat 36°20'50", long 098°18'38"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1290
Well depth: 51

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	27.28	S		Feb. 09, 1984	19.78	S		Feb. 18, 1988	10.26	S		Nov. 01, 1988	10.15	S	
Jan. 15, 1976	23.12			Feb. 28, 1985	19.97	S		Mar. 16	9.55	S		30	10.55	S	
Dec. 15	23.71			Jan. 08, 1986	18.82	S		23	9.20	S		Jan. 03, 1989	10.85	S	
Jan. 05, 1978	24.28			Mar. 26, 1987	14.29	S		Apr. 21	8.82	S		Feb. 27, 1990	10.20	S	
Mar. 29, 1979	24.90			Sept. 03	10.49	S		June 02	8.93	S		Jan. 09, 1991	13.38	S	
Mar. 11, 1980	22.08			Oct. 07	10.45	S		29	9.09	S		Jan. 09, 1992	14.50	S	
Mar. 20, 1981	21.62	S		Nov. 05	10.51	S		July 25	9.48	S		Mar. 16, 1993	14.30	S	
Mar. 23, 1982	21.89	S		Dec. 17	10.90	S		Aug. 15	9.63	S					
Mar. 02, 1983	21.08	S		Jan. 20, 1988	10.76	S		Sept. 28	9.94	S					
Highest	8.82	Apr. 21, 1988													
Lowest	27.28	Feb. 07, 1974													

Local well number: 22N-11W-02 BBA 1; Site–ID: 362506098210101
Location: lat 36°25'06", long 098°21'01"; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1353
Well depth: 75

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 22, 1983	13.24	S		Sept. 03, 1987	5.38	S		Feb. 18, 1988	5.10	S		Jan. 03, 1991	7.72	S	
Feb. 09, 1984	8.85	S		Oct. 07	5.21	S		Mar. 16	--	--	O	Jan. 09, 1992	11.02	S	
Feb. 28, 1985	10.26	S		Nov. 05	5.58	S		23	2.59	S		Mar. 10, 1993	8.30	S	
Jan. 09, 1986	13.00	S		Dec. 18	--	--	O	Mar. 02, 1989	3.00						
Mar. 25, 1987	9.57	S		Jan. 20, 1988	5.26	S		Feb. 27, 1990	2.60	S					
Highest	2.59	Mar. 23, 1988													
Lowest	13.24	Mar. 22, 1983													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 22N-11W-03 DDA 1; Site–ID: 362427098211701
Location: lat 36°24′27″, long 098°21′17″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1350
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 22, 1983	7.83	S		Dec. 17, 1987	4.37	S		June 28, 1988	--	--	P	Feb. 27, 1990	2.18	S	
Feb. 09, 1984	--	--	P	Jan. 20, 1988	3.86	S		July 25	--	--	P	Jan. 03, 1991	7.30	S	
Feb. 28, 1985	8.73	S		Feb. 18	2.88	S		Aug. 15	7.87	S		Jan. 09, 1992	8.36	S	
Jan. 09, 1986	9.45	S		Mar. 16	1.43	S		Sept. 27	6.86	S		Mar. 16, 1993	7.70	S	
Mar. 25, 1987	1.98	S		23	1.22	S		Nov. 01	--	--	P				
Oct. 07	4.09	S		Apr. 21	1.48	S		30	5.83	S					
Nov. 05	4.58	S		June 01	2.64	S		Jan. 03, 1989	5.70	S					
Highest	1.22	Mar. 23, 1988													
Lowest	9.45	Jan. 09, 1986													

Local well number: 22N-11W-23 ADD 1; Site–ID: 362210098201301
Location: lat 36°22′10″, long 098°20′13″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1325
Well depth: 75

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	28.68	S		Mar. 02, 1983	27.58	S		Jan. 20, 1988	19.53	S		Sept. 27, 1988	18.61	S	
Jan. 23, 1975	26.52			Feb. 09, 1984	25.92	S		Feb. 18	19.22	S		Nov. 01	18.63	S	
Jan. 15, 1976	24.89			Feb. 28, 1985	25.03	S		Mar. 16	18.94	S		30	19.04	S	
Apr. 13, 1977	25.20			Jan. 08, 1986	29.86	S		23	18.80	S		Jan. 03, 1989	19.07	S	
Jan. 05, 1978	24.50			Mar. 26, 1987	22.03	S		Apr. 21	18.06	S		Feb. 27, 1990	18.80	S	
Mar. 29, 1979	30.52			Sept. 03	19.18	S		June 01	17.66	S		Jan. 09, 1991	20.50	S	
Mar. 11, 1980	29.43			Oct. 07	19.25	S		29	17.63	S		Jan. 09, 1992	21.70	S	
Mar. 20, 1981	28.29	S		Nov. 05	19.34	S		July 25	17.74	S		Mar. 16, 1993	21.50	S	
Mar. 23, 1982	28.01	S		Dec. 17	19.44	S		Aug. 15	18.12	S					
Highest	17.63	June 29, 1988													
Lowest	30.52	Mar. 29, 1979													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 22N-11W-32 BAA 1; Site–ID: 362045098235801
Location: lat 36°20′45″, long 098°23′58″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1265
Well depth: 36

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 08, 1950	21.70	S		Apr. 01, 1952	23.01	S		Aug. 27, 1954	24.71	S		Mar. 01, 1957	23.53	R	
June 05	21.34	S		29	23.35	S		Sept. 21	23.22	S		Apr. 09	23.43	R	
12	21.20	S		May 28	23.56	S		Oct. 29	22.86	S		May 09	23.25	R	
19	21.10	S		June 27	23.49	S		Nov. 30	22.74	S		May 30, 1957	22.45	R	
23	21.16	S		July 30	23.49	S		Jan. 06, 1955	22.63	R		June 28	20.98	R	
30	21.43	S		Aug. 28	23.58	S		28	22.64	R		July 26	19.62	R	
July 06	21.57	S		Sept. 30	23.54	S		Feb. 25	23.05	R		Aug. 30	18.97	R	
13	21.69	S		Oct. 28	24.09	S		Mar. 29	23.26	R		Oct. 03	18.95	R	
22	21.72	S		Nov. 26	24.26	S		Apr. 26	24.04	S		Nov. 20	20.80	R	
27	21.65	S		Dec. 30	24.82	S		May 26	24.09	R		Dec. 18	21.97	R	
Aug. 04	21.45	S		Jan. 30, 1953	25.09	S		June 28	24.22	R		Jan. 29, 1958	22.30	S	
Sept. 02	21.47	S		Feb. 27	25.24	S		July 28	24.26	R		Feb. 26	23.99	S	
Oct. 06	21.69	S		Mar. 31, 1953	24.69	S		Aug. 25	23.96	R		Mar. 26	24.27	S	
26	21.56	S		Apr. 28	24.33	S		Oct. 27	24.95	S		Apr. 23	24.79	S	
Nov. 28	21.04	S		May 29	24.03	S		Dec. 01	25.40	S		May 21	24.97	S	
Dec. 27	20.76	S		June 30	24.75	S		29	25.89	S		June 25	23.44	S	
Jan. 30, 1951	21.49	S		July 31	23.63	S		Feb. 02, 1956	25.26	S		July 24	22.67	S	
Mar. 01	22.45	S		Sept. 01	23.30	S		23	24.70	S		Aug. 27	22.10	S	
26	22.99	S		29	23.06	S		Mar. 22	25.60	S		Sept. 19	21.91	S	
Apr. 27	23.51	S		Oct. 29	22.85	S		Apr. 26	25.96	S		Oct. 31	21.73	S	
June 04	22.78	S		Dec. 04	22.77	S		May 24	25.59	S		Nov. 21	21.85	S	
July 11	21.08	S		31	23.89	S		June 28	25.29	S		Jan. 08, 1959	23.50	S	
Aug. 07	21.16	S		Jan. 28, 1954	23.78	S		July 26	24.75	S		29	24.12	S	
Sept. 05	21.16	S		Feb. 26	23.62	S		Aug. 30	24.30	S		Feb. 26	24.95	S	
28	20.90	S		Mar. 23	23.28	S		Sept. 20	24.10	S		Mar. 26	25.11	S	
Oct. 30	20.84	S		Apr. 27	22.96	S		Nov. 01	23.85	S		Apr. 23	25.68	S	
Dec. 05	21.60	S		May 25	23.68	S		29	24.22	S		May 21	25.09	S	
Jan. 01, 1952	22.23	S		June 29	23.22	S		Dec. 20	23.94	S		June 25	23.95	S	
Feb. 01	22.56	S		July 27	23.52	S		Feb. 08, 1957	23.73	R		July 23	23.70	S	

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 22N-11W-32 BAA 1—Continued

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Aug. 27, 1959	23.72	S		Apr. 30, 1962	20.19	R		May 18, 1967	23.22	R		Feb. 27, 1970	22.73	R	
Oct. 22	23.14	S		May 28	20.07	R		June 21	22.72	R		Mar. 04	22.64		
Nov. 24	21.86	S		June 29	20.11	R		July 21	22.57	R		27	22.24	R	
Dec. 16	21.82	S		Aug. 23	19.87	R		Aug. 22	23.53	R		Apr. 28	21.70	R	
Jan. 28, 1960	18.04	S		Oct. 01	19.77	R		Sept. 19	23.79	R		May 27	21.05	R	
Mar. 24	23.59	S		19	19.79	R		Oct. 20	23.53	R		June 25	20.64	R	
Apr. 21	23.58	S		Nov. 15	19.74	R		Nov. 21	23.17	R		Aug. 27	24.20	R	
May 19	23.87	S		Jan. 10, 1963	19.52	S		Dec. 18	23.58	R		Sept. 24	24.17	R	
June 16	22.71	S		Feb. 07	19.70	S		Jan. 25, 1968	23.46	R		Oct. 27	23.49	R	
July 21	21.91	S		Mar. 28	19.58	S		Feb. 28	23.21	R		Nov. 24	22.80	R	
Aug. 18	21.53	S		Apr. 25	19.57	S		Mar. 20, 1968	22.78	R		Dec. 22	23.73	R	
Sept. 15	20.97	S		May 23	19.85	S		Apr. 18	22.73	R		Mar. 04, 1971	22.60		
Oct. 19	20.65	S		June 19	19.73	S		May 16	22.73	R		Feb. 01, 1972	23.70		
Nov. 17	20.26	S		July 17	19.26	S		June 17	23.88	R		Feb. 27, 1973	23.08		
Dec. 14	20.10	S		Aug. 18	19.99	S		July 15	25.02	R		Jan. 25, 1974	20.38		
Jan. 18, 1961	20.44	R		Oct. 11	18.80	S		Aug. 13	25.48	R		Jan. 23, 1975	18.36		
Feb. 16	21.73	R		Jan. 26, 1965	22.18	R		Sept. 16	24.90	R		Jan. 15, 1976	16.68		
Mar. 16	22.74	R		Apr. 21	21.92	R		Oct. 15	24.93	R		Dec. 15	19.69		
Apr. 20	22.60	R		July 15	20.74	R		Nov. 07	25.73	R		Jan. 05, 1978	18.90		
May 18	22.86	R		Oct. 14	20.38	R		Dec. 06	25.03	R		Mar. 29, 1979	19.10		
June 22	21.83	R		Jan. 06, 1966	20.02	R		Jan. 08, 1969	25.53	R		Mar. 11, 1980	20.60		
July 13	20.70	R		Apr. 21	19.12	R		Feb. 06	24.62	R		Mar. 20, 1981	19.46	S	
Aug. 03	20.31	R		July 20	20.32	R		Mar. 07	24.75	R		Mar. 23, 1982	20.64	S	
Aug. 28, 1961	20.38	R		Sept. 20	23.62	R		Apr. 24	24.00	R		Mar. 02, 1983	20.52	S	
31	19.75	R		Oct. 20	23.85	R		May 22	23.92	R		Feb. 09, 1984	20.40	S	
Oct. 26	20.90	R		Nov. 22	24.64	R		June 26	23.27	R		Feb. 28, 1985	19.57	S	
Nov. 16	20.66	R		Dec. 20	24.64	R		July 16	22.81	R		Jan. 09, 1986	18.56	S	
Dec. 07	20.36	R		Jan. 19, 1967	25.23	R		Oct. 09	22.44	R		Mar. 25, 1987	--	S	O
Jan. 29, 1962	20.05	R		Feb. 21	24.00	R		Nov. 21	23.52	R		Mar. 23, 1988	--	--	O
Feb. 26	20.00	R		Mar. 21	24.23	R		Dec. 23	23.52	R					
Mar. 26	20.32	R		Apr. 18	23.89	R		Jan. 29, 1970	23.43	R					
Highest	16.68	Jan. 15, 1976													
Lowest	25.96	Apr. 26, 1956													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 23N-11W-19 DAA 1; Site–ID: 362716098243001
Location: lat 36°27′16″, long 098°24′30″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1321
Well depth: 55

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	7.65	S		Mar. 02, 1983	5.59	S		Jan. 20, 1988	5.30	S		Sept. 27, 1988	6.94	S	
Jan. 23, 1975	5.92			Feb. 09, 1984	6.13	S		Feb. 18	5.70	S		Nov. 01	6.66	S	
Jan. 15, 1976	6.85			Feb. 28, 1985	6.28	S		Mar. 16	4.84	S		30	6.69	S	
Dec. 15	9.18			Jan. 09, 1986	7.00	S		23	4.40	S		Jan. 03, 1989	6.74	S	
Jan. 05, 1978	9.47			Mar. 25, 1987	4.42	S		Apr. 21	5.67	S		Feb. 27, 1990	6.10	S	
Mar. 29, 1979	7.41			Sept. 03	7.22	S		June 01	5.58	S		Jan. 03, 1991	8.16	S	
Mar. 11, 1980	7.17			Oct. 07	6.18	S		28	6.65	S		Jan. 09, 1992	8.16	S	
Mar. 20, 1981	7.66	S		Nov. 05	6.58	S		July 25	7.06	S		Mar. 16, 1993	6.70	S	
Mar. 23, 1982	5.00	S		Dec. 17	6.45	S		Aug. 15	7.06	S					
Highest	4.40	Mar. 23, 1988													
Lowest	9.47	Jan. 05, 1978													

Local well number: 23N-11W-25 AAB 1; Site–ID: 362650098191701
Location: lat 36°26′50″, long 098°19′17″; Hydrologic unit: 11050002
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1410
Well depth: --

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 22, 1983	14.65	S		Nov. 05, 1987	9.21	S		June 01, 1988	7.32	S		Jan. 03, 1989	10.48	S	
Feb. 09, 1984	13.12	S		Dec. 17	9.37	S		28	7.79	S		Feb. 27, 1990	8.70	S	
Feb. 28, 1985	13.28	S		Jan. 20, 1988	8.60	S		July 25	8.37	S		Jan. 03, 1991	12.69	S	
Jan. 09, 1986	12.94	S		Feb. 18	8.53	S		Aug. 15	9.22	S		Jan. 09, 1992	14.59	S	
Mar. 25, 1987	7.16	S		Mar. 16	7.32	S		Sept. 27	10.00	S		Mar. 16, 1993	11.90	S	
Sept. 03	8.57	S		23	6.91	S		Nov. 01	9.93	S					
Oct. 07	8.86	S		Apr. 21	7.11	S		30	10.30	S					
Highest	6.91	Mar. 23, 1988													
Lowest	14.65	Mar. 22, 1983													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 23N-13W-03 CCC 1; Site–ID: 362933098350501
Location: lat 36°29'33", long 098°35'05"; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1488
Well depth: 73

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 24, 1983	12.50	S		Nov. 05, 1987	7.84	S		June 01, 1988	5.02	S		Jan. 03, 1989	8.25	S	
Feb. 10, 1984	11.17	S		Dec. 17	--	--	O	28	5.52	S		Mar. 07, 1990	9.40	S	
Feb. 27, 1985	10.62	S		Jan. 20, 1988	8.53	S		July 25	6.06	S		Jan. 03, 1991	10.48	S	
Feb. 05, 1986	12.70	S		Feb. 17	8.66	S		Aug. 15	--	--	P	Jan. 06, 1992	10.10	S	
Mar. 24, 1987	9.30	S		Mar. 11	7.22	S		Sept. 27	7.40	S		Mar. 17, 1993	6.06	S	
Sept. 02	7.16	S		16	6.92	S		Nov. 01	7.68	S					
Oct. 07	7.70	S		Apr. 21	6.31	S		30	7.98	S					
Highest	5.02	June 01, 1988													
Lowest	12.70	Feb. 05, 1986													

Local well number: 23N-13W-17 CCB 1; Site–ID: 362755098371301
Location: lat 36°27'55", long 098°37'13"; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1460
Well depth: 70

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1975	4.82	S		Feb. 27, 1985	4.65	S		Mar. 11, 1988	1.08	S		Nov. 30, 1988	2.74	S	
Mar. 10, 1977	7.10			Feb. 05, 1986	5.74	S		16	1.45	S		Jan. 03, 1989	5.38	S	
Mar. 06, 1978	5.28			Mar. 24, 1987	2.74	S		Apr. 21	1.25	S		Mar. 07, 1990	3.80	S	
Mar. 28, 1979	4.77			Sept. 02	4.54	S		June 01	2.36	S		Jan. 03, 1991	8.38	S	
Mar. 19, 1980	4.82			Oct. 07	4.24	S		28	1.55	S		Jan. 06, 1992	4.30	S	
Feb. 12, 1981	6.95	S		Nov. 06	4.88	S		July 25	--	--	P	Mar. 17, 1993	3.10	S	
Mar. 23, 1982	4.20	S		Dec. 17	4.19	S		Aug. 15	5.44	S					
Mar. 01, 1983	5.48	S		Jan. 20, 1988	2.89	S		Sept. 27	5.80	S					
Feb. 10, 1984	4.97	S		Feb. 17	2.90	S		Nov. 01	--	--	P				
Highest	1.08	Mar. 11, 1988													
Lowest	8.38	Jan. 03, 1991													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 24N-13W-02 CDC 1; Site–ID: 363446098334401
Location: lat 36°34′46″, long 098°33′44″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1375
Well depth: 55

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 23, 1983	1.72	S		Nov. 05, 1987	9.77	S		June 01, 1988	4.74	S		Mar. 07, 1990	3.70	S	
Feb. 10, 1984	6.23	S		Dec. 17	9.58	S		July 25	--	--	P	Jan. 03, 1991	7.08	S	
Feb. 27, 1985	3.20	S		Jan. 20, 1988	6.22	S		Aug. 15	5.77	S		Jan. 06, 1992	7.10	S	
Feb. 05, 1986	6.64	S		Feb. 17	5.39	S		Sept. 27	13.19	S		Mar. 17, 1993	2.58	S	
Mar. 24, 1987	--	--	O	Mar. 11	2.16	S		Nov. 01	13.61	S					
Sept. 02	8.96	S		16	2.67	S		30	13.65	S					
Oct. 07	9.52	S		Apr. 21	2.29	S		Jan. 03, 1989	13.83	S					
Highest	1.72	Mar. 23, 1983													
Lowest	13.83	Jan. 03, 1989													

Local well number: 24N-13W-04 DCD 1; Site–ID: 363446098352901
Location: lat 36°34′46″, long 098°35′29″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1370
Well depth: 32

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 23, 1983	2.43	S		Feb. 05, 1986	2.85	S		Jan. 24, 1989	1.75			Jan. 06, 1992	2.41	S	
Feb. 10, 1984	6.23	S		Mar. 24, 1987	1.32	S		Mar. 07, 1990	1.71	S		Mar. 17, 1993	2.09	S	
Feb. 27, 1985	5.97	S		Mar. 11, 1988	1.80	S		Jan. 03, 1991	6.58	S					
Highest	1.32	Mar. 24, 1987													
Lowest	6.58	Jan. 03, 1991													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 24N-14W-23 CCC 1; Site–ID: 363209098402601
Location: lat 36°32′09″, long 098°40′26″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1510
Well depth: 60

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Feb. 07, 1974	32.05	S		Feb. 10, 1984	27.73	S		Feb. 17, 1988	27.73	S		Nov. 01, 1988	25.37	S	
Jan. 23, 1975	32.44			Feb. 27, 1985	28.45	S		Mar. 11	27.50	S		30	25.68	S	
Jan. 15, 1976	31.60			Feb. 05, 1986	29.00	S		16	27.52	S		Jan. 03, 1989	25.88	S	
Mar. 10, 1977	31.76			Mar. 24, 1987	28.88	S		Apr. 21	26.48	S		Mar. 07, 1990	23.60	S	
Mar. 06, 1978	31.80			Sept. 02	27.08	S		June 01	24.87	S		Jan. 03, 1991	28.17	S	
Mar. 28, 1979	30.68			Oct. 07	27.28	S		28	24.45	S		Jan. 06, 1992	29.96	S	
Mar. 19, 1980	31.03			Nov. 05	27.33	S		July 25	24.88	S		Mar. 17, 1993	30.89	S	
Feb. 12, 1981	31.65	S		Dec. 17	27.58	S		Aug. 15	24.88	S					
Mar. 23, 1982	30.14	S		Jan. 20, 1988	27.63	S		Sept. 27	25.32	S					
Highest	23.60	Mar. 07, 1990													
Lowest	32.44	Jan. 23, 1975													

Local well number: 24N-14W-30 BCB 1; Site–ID: 363150098444301
Location: lat 36°31′50″, long 098°44′43″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1580
Well depth: 59

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 24, 1983	21.84	S		Nov. 05, 1987	18.51	S		June 01, 1988	16.73	S		Jan. 03, 1989	18.23	S	
Feb. 10, 1984	21.33	S		Dec. 17	19.03	S		28	16.63	S		Mar. 07, 1990	16.50	S	
Feb. 27, 1985	22.59	S		Jan. 20, 1988	19.58	S		July 25	16.83	S		Jan. 03, 1991	21.49	S	
Feb. 05, 1986	22.52	S		Feb. 17	19.63	S		Aug. 15	17.01	S		Jan. 06, 1992	19.70	S	
Mar. 24, 1987	18.72	S		Mar. 11	19.10	S		Sept. 27	17.26	S		Mar. 17, 1993	22.00	S	
Sept. 02	17.67	S		16	19.04	S		Nov. 01	17.42	S					
Oct. 07	18.38	S		Apr. 21	17.59	S		30	17.98	S					
Highest	16.50	Mar. 07, 1990													
Lowest	22.59	Feb. 27, 1985													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 24N-14W-34 DAA 1; Site–ID: 363045098403401
Location: lat 36°30′45″, long 098°40′34″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1550
Well depth: 75

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
June 12, 1979	40	R		Oct. 07, 1987	32.47	S		Apr. 21, 1988	31.87	S		Nov. 30, 1988	30.12	S	
Mar. 24, 1983	24.79	S		Nov. 06	32.23	S		June 01	31.21	S		Jan. 03, 1989	30.16	S	
Feb. 10, 1984	33.22	S		Dec. 17	32.24	S		28	29.99	S		Mar. 07, 1990	28.70	S	
Feb. 27, 1985	33.29	S		Jan. 20, 1988	32.12	S		July 25	30.45	S		Jan. 03, 1991	30.70	S	
Feb. 05, 1986	33.50	S		Feb. 17	32.31	S		Aug. 15	30.45	S		Jan. 06, 1992	31.13	S	
Mar. 24, 1987	34.10	S		Mar. 11	32.10	S		Sept. 27	30.17	S		Mar. 17, 1993	31.96	S	
Sept. 02	32.46	S		16	32.60	S		Nov. 01	29.98	S					
Highest	24.79	Mar. 24, 1983													
Lowest	40	June 12, 1979													

Local well number: 24N-15W-32 BBD 1; Site–ID: 363102098495301
Location: lat 36°31′02″, long 098°49′53″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1395
Well depth: 51

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Dec. 17, 1987	13.17	S		Apr. 21, 1988	10.79	S		Aug. 15, 1988	13.65	S		Jan. 03, 1989	13.30	S	
Jan. 20, 1988	12.79	S		June 01	11.49	S		Sept. 27	13.71	S					
Feb. 17	12.55	S		July 12	12.83	S		Nov. 01	13.49	S					
Mar. 16	11.39	S		25	13.22	S		30	13.39	S					
Highest	10.79	Apr. 21, 1988													
Lowest	13.71	Sept. 27, 1988													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 24N-16W-01 DCC 1; Site–ID: 363446098514101
Location: lat 36°34′46″, long 098°51′41″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1545
Well depth: 80

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 24, 1983	26.00	S		Nov. 05, 1987	21.98	S		June 01, 1988	19.12	S		Jan. 03, 1989	23.14	S	
Feb. 10, 1984	21.20	S		Dec. 17	21.83	S		28	19.43	S		Mar. 07, 1990	20.55	S	
Feb. 27, 1985	28.14	S		Jan. 20, 1988	21.82	S		July 25	--	--	P	Jan. 03, 1991	21.04	S	
Feb. 05, 1986	26.02	S		Feb. 17	21.11	S		Aug. 15	23.29	S		Jan. 06, 1992	23.61	S	
Mar. 24, 1987	24.50	S		Mar. 11	21.09	S		Sept. 27	24.55	S		Mar. 17, 1993	22.33	S	
Sept. 02	23.28	S		16	21.11	S		Nov. 01	23.00	S					
Oct. 07	22.29	S		Apr. 21	19.72	S		30	23.35	S					
Highest	19.12	June 01, 1988													
Lowest	28.14	Feb. 27, 1985													

Local well number: 25N-13W-10 CCC 1; Site–ID: 363916098353601
Location: lat 36°39′09″, long 098°35′38″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1360
Well depth: 35

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 25, 1983	3.89	S		Sept. 02	5.83	S		Feb. 17	--	--	P	Jan. 03, 1991	5.65	S	
Feb. 10, 1984	5.95	S		Oct. 07	4.82	S		Mar. 11	2.37	S		Jan. 06, 1992	6.30	S	
Feb. 27, 1985	5.07	S		Nov. 05	4.83	S		16	2.78	S		Mar. 17, 1993	3.15	S	
Feb. 05, 1986	4.33	S		Dec. 17	5.02	S		Jan. 24, 1989	--	--	P				
Mar. 24, 1987	2.48	S		Jan. 20, 1988	4.74	S		Mar. 07, 1990	--	--	P				
Highest	2.37	Mar. 11, 1988													
Lowest	6.30	Jan. 06, 1992													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 25N-14W-24 CBB 1; Site–ID: 363751098395501
Location: lat 36°37′51″, long 098°39′55″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1420
Well depth: 14

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 22, 1983	7.49	S		Oct. 06, 1987	8.72	S		Mar. 16, 1988	7.07	S		Nov. 01, 1988	--	--	P
Feb. 10, 1984	8.67	S		Nov. 05	8.62	S		Apr. 21	6.35	S		30	--	--	P
Feb. 27, 1985	--	--	P	Dec. 17	8.79	S		June 01	7.16	S		Jan. 03, 1989	10.23	S	
Feb. 05, 1986	8.83	S		Jan. 20, 1988	8.44	S		July 25	--	--	P	Mar. 07, 1990	5.50	S	
Mar. 24, 1987	6.09	S		Feb. 17	8.38	S		Aug. 15	8.71	S					
Sept. 02	8.82	S		Mar. 11	6.77	S		Sept. 27	--	--	P				
Highest	5.50	Mar. 07, 1990													
Lowest	10.23	Jan. 03, 1989													

Local well number: 25N-15W-29 CAB 1; Site–ID: 363658098502601
Location: lat 36°36′58″, long 098°50′26″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1575
Well depth: 82

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Jan. 23, 1975	39.77	S		Mar. 01, 1983	39.18	S		Nov. 05, 1987	36.41	S		Mar. 07, 1990	34.00	S	
Mar. 10, 1977	39.76			Feb. 10, 1984	38.05	S		Dec. 17	36.41	S		Jan. 03, 1991	36.61	S	
Mar. 06, 1978	39.45			Feb. 27, 1985	38.72	S		Jan. 20, 1988	36.12	S		Jan. 06, 1992	37.60	S	
Mar. 28, 1979	39.78			Feb. 05, 1986	38.20	S		Feb. 17	36.08	S		Mar. 17, 1993	37.78	S	
Mar. 19, 1980	39.25			Mar. 24, 1987	37.80	S		Mar. 11	35.86	S					
Feb. 12, 1981	40.50	S		Sept. 01	37.31	S		16	36.02	S					
Mar. 23, 1982	40.35	S		Oct. 07	36.65	S		Jan. 24, 1989	35.90						
Highest	34.00	Mar. 07, 1990													
Lowest	40.50	Feb. 12, 1981													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 25N-15W-31 DDD 1; Site–ID: 363547098505001
Location: lat 36°35′47″, long 098°50′50″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1580
Well depth: 68

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 24, 1983	46.30	S		Nov. 05, 1987	42.12	S		June 01, 1988	41.14	S		Jan. 04, 1989	42.24	S	
Feb. 10, 1984	45.24	S		Dec. 17	42.01	S		28	41.47	S		Mar. 07, 1990	39.08	S	
Feb. 27, 1985	46.49	S		Jan. 20, 1988	41.41	S		July 25	41.81	S		Jan. 03, 1991	41.82	S	
Feb. 05, 1986	44.72	S		Feb. 17	41.25	S		Aug. 15	43.60	S		Jan. 06, 1992	43.20	S	
Mar. 24, 1987	44.76	S		Mar. 11	42.65	S		Sept. 27	44.78	S		Mar. 17, 1993	43.20	S	
Sept. 02	44.08	S		16	41.04	S		Nov. 01	43.14	S					
Oct. 07	42.38	S		Apr. 21	40.64	S		30	42.64	S					
Highest	39.08	Mar. 07, 1990													
Lowest	46.49	Feb. 27, 1985													

Local well number: 26N-13W-17 BBB 1; Site–ID: 364422098374601
Location: lat 36°44′22″, long 098°37′46″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1430
Well depth: 76

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 24, 1983	14.79	S		Nov. 05, 1987	15.73	S		June 01, 1988	14.12	S		Jan. 03, 1989	16.93	S	
Feb. 10, 1984	15.00	S		Dec. 17	15.88	S		28	14.79	S		Jan. 03, 1991	17.39	S	
Feb. 27, 1985	15.52	S		Jan. 20, 1988	15.20	S		July 25	15.48	S		Jan. 06, 1992	16.70	S	
Feb. 05, 1986	14.13	S		Feb. 17	14.80	S		Aug. 15	16.02	S		Mar. 17, 1993	11.90	S	
Mar. 24, 1987	--	--	O	Mar. 11	--	--	P	Sept. 27	16.79	S					
Sept. 02	15.68	S		16	14.48	S		Nov. 01	16.71	S					
Oct. 07	15.67	S		Apr. 21	13.43	S		30	16.87	S					
Highest	11.90	Mar. 17, 1993													
Lowest	17.39	Jan. 03, 1991													

Table 2. Records of wells with periodic water-level measurements in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local well number: 26N-14W-23 ABA 1; Site–ID: 364330098401901
Location: lat 36°43′30″, long 098°40′19″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1430
Well depth: 44

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 22, 1983	9.24	S		Oct. 07, 1987	8.53	S		Mar. 16, 1988	6.49	S		Nov. 01, 1988	10.88	S	
Feb. 10, 1984	10.98	S		Nov. 05	8.84	S		Apr. 21	5.04	S		30	11.43	S	
Feb. 27, 1985	13.96	S		Dec. 17	9.05	S		June 01	6.57	S		Jan. 03, 1989	11.94	S	
Feb. 03, 1986	6.92	S		Jan. 20, 1988	8.71	S		July 25	8.62	S		Mar. 07, 1990	11.70	S	
Mar. 24, 1987	3.34	S		Feb. 17	8.72	S		Aug. 15	9.51	S		Jan. 03, 1991	--	S	O
Sept. 02	8.24	S		Mar. 11	6.03	S		Sept. 27	10.78	S		Jan. 06, 1992	--	--	O
Highest	3.34	Mar. 24, 1987													
Lowest	13.96	Feb. 27, 1985													

Local well number: 27N-14W-36 DCD 1; Site–ID: 364613098391401
Location: lat 36°46′13″, long 098°39′14″; Hydrologic unit: 11050001
Principal aquifer: 110CMTA
Altitude of land-surface datum: 1455
Well depth: 48

Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S	Date	Water level (feet)	M	S
Mar. 22, 1983	18.10	S		Nov. 05, 1987	12.63	S		June 01, 1988	12.07	S		Jan. 03, 1989	--	--	P
Feb. 10, 1984	18.52	S		Dec. 17	13.01	S		28	12.11	S		Mar. 07, 1990	12.10	S	
Feb. 27, 1985	16.22	S		Jan. 20, 1988	12.93	S		July 25	12.44	S		Mar. 27, 1991	14.80	S	
Feb. 05, 1986	13.98	S		Feb. 17	12.88	S		Aug. 15	12.49	S		Jan. 06, 1992	14.90	S	
Mar. 24, 1987	13.02	S		Mar. 11	12.00	S		Sept. 27	12.87	S		Mar. 17, 1993	10.88	S	
Sept. 02	12.72	S		16	12.15	S		Nov. 01	12.98	S					
Oct. 07	12.65	S		Apr. 21	12.04	S		30	13.29	S					
Highest	10.88	Mar. 17, 1993													
Lowest	18.52	Feb. 10, 1984													

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma
[--, missing data]

Kingfisher County
Local number: 17N–07W–11 DBA 1; Site–ID: 355743097544001
Location: lat 35°57'50", long 097°54'47"; Hydrologic unit: 11050002.
Owner: Dean Hodgen
Aquifer: Cimarron terrace and alluvial aquifer
Well characteristics: Drilled unused well, diameter 4.5 in., depth 40 ft.
Datum: Altitude of land-surface datum is 1025 ft NGVD; Measuring point: 2.60 ft above land-surface datum.
Period of record: Periodic record from June 1973 to October 1987, continuous recorder record October 1987 to January 16, 1989, then periodic record for January 16, 1989 to November 28, 1989, when well was destroyed.
Extremes for period of record: Highest water level, 9.94 ft below land-surface datum, January 21, 1975; lowest water level, 16.92 ft below land-surface datum, March 19, 1979.

Water level, in feet below land-surface datum, water year October 1987 to September 1988.

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	--	11.82	11.29	11.45	11.32	10.54	10.58	10.47	11.23	11.96	12.55	--
2	--	11.82	11.27	11.44	11.28	10.59	11.15	10.52	11.24	11.95	12.57	--
3	--	11.81	11.23	11.45	11.26	10.72	11.25	10.53	11.28	11.95	12.62	--
4	--	11.79	11.20	11.42	11.20	10.82	11.24	10.55	11.29	11.96	12.64	--
5	--	11.70	11.21	11.40	11.17	10.88	11.14	10.60	11.33	12.00	12.66	--
6	11.33	11.76	11.18	11.41	11.15	10.99	11.04	10.65	11.37	12.03	12.67	--
7	11.30	11.74	11.15	11.41	11.15	11.07	11.01	10.67	11.43	12.05	12.70	--
8	11.29	11.71	11.13	11.40	11.13	11.08	10.94	10.70	11.46	12.06	12.72	--
9	11.22	11.68	11.10	11.39	11.10	11.09	10.80	10.70	11.48	12.06	12.80	--
10	11.17	11.64	11.08	11.38	11.08	11.11	10.73	10.72	11.50	12.06	12.87	--
11	11.15	11.62	11.07	11.38	11.03	11.10	10.68	10.74	11.55	12.07	12.89	--
12	11.15	11.60	11.04	11.35	11.04	11.04	10.61	10.80	11.59	12.09	12.91	--
13	11.14	11.57	11.01	11.30	11.03	10.98	10.52	10.84	11.59	12.12	12.94	--
14	11.13	11.54	11.00	11.33	11.01	10.96	10.43	10.87	11.61	12.15	12.97	--
15	11.10	11.56	10.98	11.34	10.97	10.93	10.33	10.87	11.66	12.16	13.00	--
16	11.08	11.59	10.96	11.35	10.95	10.88	10.25	10.87	11.70	12.19	13.03	13.24
17	11.05	11.58	10.94	11.34	10.92	10.61	10.26	10.90	11.76	12.21	13.05	13.23
18	11.05	11.53	11.04	11.38	10.89	10.85	10.27	10.91	11.80	12.23	13.07	13.05
19	11.04	11.53	11.22	11.40	10.85	10.84	10.23	10.93	11.84	12.25	13.09	12.50
20	10.99	11.52	11.26	11.40	10.82	10.80	10.18	10.95	11.88	12.27	13.11	12.31
21	10.98	11.53	11.35	11.43	10.78	10.76	10.13	10.97	11.84	12.30	13.12	12.26
22	10.97	11.53	11.40	11.42	10.79	10.71	10.06	10.99	11.89	12.30	13.14	12.25
23	10.93	11.47	11.47	11.45	10.69	10.64	10.03	11.00	11.90	12.34	13.17	12.24
24	10.91	11.45	11.48	11.44	10.66	10.59	10.10	11.02	11.94	12.36	13.19	12.23
25	10.90	11.42	11.49	11.42	10.66	10.50	10.17	11.04	11.98	12.39	13.20	12.22
26	10.90	11.39	11.50	11.42	10.65	10.41	10.23	11.06	12.00	12.43	13.22	12.22
27	10.87	11.38	11.51	11.40	10.62	10.40	10.26	11.09	12.01	12.45	13.23	12.22
28	10.86	11.36	11.50	11.39	10.59	10.34	10.32	11.11	11.93	12.46	13.26	12.31
29	10.85	11.35	11.48	11.39	10.54	10.28	10.37	11.12	11.91	12.49	13.27	12.43
30	11.19	11.33	11.50	11.39	--	10.27	10.41	11.14	11.92	12.52	--	12.43
31	11.83	--	11.47	11.36	--	10.28	--	11.16	--	12.53	--	--
Mean	--	11.58	11.24	11.39	10.94	10.74	10.52	10.85	11.66	12.21	--	--
Max	--	11.82	11.51	11.45	11.32	11.11	11.25	11.16	12.01	12.53	--	--
Min	--	11.33	10.94	11.30	10.54	10.27	10.03	10.47	11.23	11.95	--	--

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 17N–07W–11 DBA 1; Site–ID: 355743097544001—Continued

Water level, in feet below land-surface datum, October 1988 to Jan 16, 1989.

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	12.43	12.59	12.64	12.79	--	--	--	--	--	--	--	--
2	12.44	12.57	12.64	12.81	--	--	--	--	--	--	--	--
3	12.46	12.56	12.65	12.82	--	--	--	--	--	--	--	--
4	12.47	12.59	12.67	12.81	--	--	--	--	--	--	--	--
5	12.47	12.62	12.65	12.77	--	--	--	--	--	--	--	--
6	12.47	12.62	12.64	12.80	--	--	--	--	--	--	--	--
7	12.46	12.63	12.65	12.81	--	--	--	--	--	--	--	--
8	12.43	12.65	12.68	12.85	--	--	--	--	--	--	--	--
9	12.42	12.65	12.67	12.84	--	--	--	--	--	--	--	--
10	12.42	12.69	12.67	12.83	--	--	--	--	--	--	--	--
11	12.42	12.66	12.68	12.83	--	--	--	--	--	--	--	--
12	12.43	12.63	12.68	12.87	--	--	--	--	--	--	--	--
13	12.42	12.63	12.67	12.87	--	--	--	--	--	--	--	--
14	12.42	12.61	12.68	12.84	--	--	--	--	--	--	--	--
15	12.43	12.59	12.74	12.87	--	--	--	--	--	--	--	--
16	12.46	12.65	12.72	12.89	--	--	--	--	--	--	--	--
17	12.46	12.64	12.73	--	--	--	--	--	--	--	--	--
18	12.50	12.62	12.70	--	--	--	--	--	--	--	--	--
19	12.50	12.64	12.68	--	--	--	--	--	--	--	--	--
20	12.49	12.65	12.73	--	--	--	--	--	--	--	--	--
21	12.51	12.64	12.75	--	--	--	--	--	--	--	--	--
22	12.48	12.61	12.74	--	--	--	--	--	--	--	--	--
23	12.50	12.59	12.74	--	--	--	--	--	--	--	--	--
24	12.51	12.57	12.77	--	--	--	--	--	--	--	--	--
25	12.52	12.57	12.77	--	--	--	--	--	--	--	--	--
26	12.54	12.56	12.75	--	--	--	--	--	--	--	--	--
27	12.53	12.61	12.78	--	--	--	--	--	--	--	--	--
28	12.59	12.61	12.80	--	--	--	--	--	--	--	--	--
29	12.59	12.61	12.79	--	--	--	--	--	--	--	--	--
30	12.60	12.64	12.77	--	--	--	--	--	--	--	--	--
31	12.60	--	12.78	--	--	--	--	--	--	--	--	--
Mean	12.48	12.62	12.71	--	--	--	--	--	--	--	--	
Max	12.60	12.69	12.80	--	--	--	--	--	--	--	--	--
Min	12.42	12.56	12.64	--	--	--	--	--	--	--	--	--

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Major County
Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801
Location: lat 36°14'42", long 098°09'28"; Hydrologic unit: 11050002
Owner: Ross M. Sturgeon
Aquifer: Cimarron terrace and alluvial aquifer
Well characteristics: Drilled unused well, diameter 6 in., depth 60 ft.
Datum: Altitude of land-surface datum is 1225 ft NGVD. Measuring point: 2.20 ft above land-surface datum.
Period of record: Periodic record April 1965–December 1970, September 1989–present; Continuous record January 1971–September 1993
Extremes for period of record: Highest water level, 1.73 ft below land-surface datum, June 1, 1987; lowest, 25.97 ft below land-surface datum, Sept. 15, 1971.

Water level, in feet below land-surface datum, August 25 to September 30, 1983

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	--	--	--	--	--	--	--	--	--	--	--	13.41
2	--	--	--	--	--	--	--	--	--	--	--	13.41
3	--	--	--	--	--	--	--	--	--	--	--	13.42
4	--	--	--	--	--	--	--	--	--	--	--	13.43
5	--	--	--	--	--	--	--	--	--	--	--	13.46
6	--	--	--	--	--	--	--	--	--	--	--	13.60
7	--	--	--	--	--	--	--	--	--	--	--	13.67
8	--	--	--	--	--	--	--	--	--	--	--	13.71
9	--	--	--	--	--	--	--	--	--	--	--	13.74
10	--	--	--	--	--	--	--	--	--	--	--	13.69
11	--	--	--	--	--	--	--	--	--	--	--	13.67
12	--	--	--	--	--	--	--	--	--	--	--	13.64
13	--	--	--	--	--	--	--	--	--	--	--	13.68
14	--	--	--	--	--	--	--	--	--	--	--	13.58
15	--	--	--	--	--	--	--	--	--	--	--	13.48
16	--	--	--	--	--	--	--	--	--	--	--	13.50
17	--	--	--	--	--	--	--	--	--	--	--	13.42
18	--	--	--	--	--	--	--	--	--	--	--	13.43
19	--	--	--	--	--	--	--	--	--	--	--	13.43
20	--	--	--	--	--	--	--	--	--	--	--	13.59
21	--	--	--	--	--	--	--	--	--	--	--	13.58
22	--	--	--	--	--	--	--	--	--	--	--	13.52
23	--	--	--	--	--	--	--	--	--	--	--	13.52
24	--	--	--	--	--	--	--	--	--	--	--	13.45
25	--	--	--	--	--	--	--	--	--	--	13.35	13.47
26	--	--	--	--	--	--	--	--	--	--	13.34	13.47
27	--	--	--	--	--	--	--	--	--	--	13.34	13.43
28	--	--	--	--	--	--	--	--	--	--	13.34	13.43
29	--	--	--	--	--	--	--	--	--	--	13.33	13.48
30	--	--	--	--	--	--	--	--	--	--	13.33	13.50
31	--	--	--	--	--	--	--	--	--	--	13.37	--
Mean	--	--	--	--	--	--	--	--	--	--	--	13.53
Max	--	--	--	--	--	--	--	--	--	--	--	13.74
Min	--	--	--	--	--	--	--	--	--	--	--	13.41

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801—Continued

Water level, in feet below land-surface datum, water year October 1983 to September 1984

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	13.46	12.67	12.41	12.41	12.36	12.47	11.82	10.59	10.50	11.08	13.30	13.64
2	13.42	12.66	12.30	12.46	12.41	12.51	11.66	10.47	10.64	11.07	13.34	13.69
3	13.45	12.63	12.30	12.35	12.44	12.44	11.72	10.56	10.54	11.06	13.27	13.75
4	13.47	12.63	12.26	12.34	12.49	12.51	11.75	10.56	10.49	11.10	13.36	13.72
5	13.57	12.59	12.37	12.30	12.52	12.54	11.65	10.52	10.52	11.13	13.45	13.87
6	13.58	12.56	12.42	12.37	12.50	12.51	11.55	10.53	10.56	11.14	13.47	13.75
7	13.53	12.54	12.35	12.36	12.49	12.51	11.50	10.71	10.56	11.19	13.60	13.66
8	13.57	12.49	12.33	12.33	12.50	12.63	11.48	10.68	10.66	11.23	13.37	13.67
9	13.57	12.56	12.36	12.40	12.44	12.52	11.32	10.52	10.69	11.26	13.20	13.65
10	13.49	12.57	12.25	12.49	12.40	12.56	11.21	10.43	10.78	11.29	13.14	13.63
11	13.45	12.50	12.35	12.31	12.36	12.49	11.08	10.51	10.75	11.36	13.08	13.74
12	13.57	12.43	12.28	12.38	12.47	12.44	11.10	10.58	10.76	11.36	13.03	13.98
13	13.50	12.42	12.26	12.51	12.48	12.51	11.02	10.58	10.84	11.36	12.99	14.04
14	13.45	12.42	12.25	12.51	12.40	12.43	11.01	10.60	10.83	11.42	12.96	14.20
15	13.50	12.54	12.36	12.41	12.38	12.50	10.97	10.54	10.83	11.47	12.97	14.25
16	13.56	12.46	12.42	12.35	12.52	12.53	10.91	10.55	10.83	11.46	12.97	14.38
17	13.55	12.35	12.44	12.46	12.44	12.51	10.84	10.56	10.85	11.48	12.94	14.43
18	13.46	12.29	12.51	12.51	12.44	12.38	10.81	10.50	10.91	11.58	12.92	14.48
19	13.35	12.34	12.40	12.49	12.60	12.48	10.78	10.43	10.92	11.62	12.94	14.44
20	13.31	12.35	12.33	12.51	12.60	12.49	10.66	10.45	10.90	11.74	12.97	14.59
21	13.26	12.33	12.37	12.43	12.49	12.46	10.79	10.42	10.87	12.08	13.02	14.70
22	13.18	12.36	12.40	12.32	12.41	12.43	10.81	10.54	10.88	12.31	13.12	14.74
23	13.06	12.41	12.40	12.33	12.47	12.37	10.70	10.64	10.98	12.44	13.13	14.80
24	13.00	12.44	12.40	12.37	12.52	12.29	10.63	10.42	11.05	12.54	13.14	14.64
25	13.04	12.32	12.40	12.41	12.39	12.19	10.55	10.47	10.99	12.72	13.17	14.50
26	12.91	12.31	12.36	12.36	12.44	12.06	10.58	10.58	10.93	12.87	13.19	14.40
27	12.85	12.32	12.31	12.45	12.60	12.05	10.77	10.51	10.97	12.94	13.23	14.26
28	12.80	12.37	12.32	12.36	12.65	12.08	10.78	10.72	11.00	13.03	13.26	14.24
29	12.80	12.37	12.33	12.38	12.57	12.06	10.58	10.67	11.03	12.97	13.26	14.17
30	12.76	12.49	12.36	12.52	--	11.99	10.81	10.57	11.04	12.98	13.30	14.09
31	12.70	--	12.35	12.47	--	11.92	--	10.47	--	13.19	13.36	--
Mean	13.30	12.46	12.35	12.41	12.48	12.38	11.06	10.54	10.80	11.82	13.18	14.14
Max	13.58	12.67	12.51	12.52	12.65	12.63	11.82	10.72	11.05	13.19	13.60	14.80
Min	12.70	12.29	12.25	12.30	12.36	11.92	10.55	10.42	10.49	11.06	12.92	13.63

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801—Continued

Water level, in feet below land-surface datum, water year October 1984 to September 1985

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14.06	13.97	13.88	14.05	14.06	13.95	13.83	13.15	12.89	12.92	13.76	14.03
2	14.01	13.98	14.00	14.06	14.06	13.95	13.75	13.14	12.90	12.93	13.75	14.05
3	13.99	13.81	14.04	14.03	14.06	13.99	13.68	13.10	12.93	12.92	13.72	14.04
4	13.96	13.90	14.03	14.00	14.03	13.99	13.64	13.06	12.93	12.91	13.76	14.08
5	13.93	13.98	14.01	14.01	14.01	14.05	13.73	13.04	12.91	12.97	13.78	14.10
6	13.98	13.93	14.06	13.95	14.05	14.00	13.77	13.06	12.86	13.01	13.78	14.15
7	14.02	13.85	13.96	14.00	14.13	13.93	13.85	13.05	12.81	13.03	13.80	14.18
8	14.01	13.85	13.92	13.98	14.03	13.99	13.85	13.05	12.72	13.05	13.80	14.19
9	14.01	13.83	13.91	13.90	13.96	14.00	13.74	13.02	12.74	13.05	13.81	14.20
10	14.01	13.98	13.96	14.04	14.06	13.88	13.57	12.98	12.71	13.11	13.87	14.21
11	14.01	13.97	13.84	14.13	14.12	13.90	13.48	12.95	12.76	13.17	13.84	14.22
12	13.98	13.98	13.85	14.09	14.07	13.94	13.49	12.99	12.78	13.23	13.86	14.22
13	13.93	13.94	13.88	13.95	14.09	13.94	13.47	12.93	12.69	13.29	13.91	14.25
14	13.88	13.88	14.02	14.01	14.10	13.99	13.42	13.00	12.66	13.35	13.92	14.26
15	13.91	14.01	13.92	13.93	14.05	13.96	13.38	13.01	12.69	13.42	13.90	14.22
16	13.91	14.02	13.94	13.95	14.02	13.95	13.41	13.01	12.67	13.43	13.88	14.16
17	13.98	13.91	14.01	13.92	14.09	13.97	13.38	12.97	12.71	13.44	13.91	14.16
18	13.89	13.91	14.00	13.92	14.12	13.91	13.35	12.93	12.75	13.46	13.95	14.23
19	13.96	14.00	13.96	13.98	14.08	13.86	13.30	12.90	12.73	13.49	13.96	14.26
20	13.89	14.04	13.89	14.10	14.02	13.86	13.32	12.91	12.67	13.51	13.95	14.29
21	13.96	14.03	13.90	14.07	14.01	13.86	13.29	12.94	12.67	13.52	13.91	14.25
22	14.00	14.01	14.01	14.05	14.01	13.82	13.25	12.94	12.75	13.56	13.88	14.18
23	14.01	13.94	13.90	13.99	14.02	13.85	13.33	12.93	12.74	13.57	13.93	14.32
24	13.94	13.88	13.99	13.98	14.09	13.84	13.32	12.91	12.75	13.60	13.96	14.27
25	13.94	13.79	14.05	14.05	14.02	13.84	13.24	12.88	12.74	13.66	13.97	14.24
26	13.89	13.82	13.99	14.02	14.07	13.77	13.23	12.86	12.79	13.70	13.97	14.27
27	13.82	13.95	13.96	13.98	14.09	13.72	13.30	12.90	12.89	13.68	13.98	14.20
28	13.93	13.85	13.91	14.01	13.99	13.72	13.26	12.89	12.86	13.66	13.98	14.22
29	13.93	13.84	13.96	13.94	--	13.75	13.17	12.86	12.86	13.69	13.96	14.25
30	13.93	13.92	14.02	14.01	--	13.77	13.12	12.83	12.87	13.68	13.98	14.29
31	13.89	--	13.95	14.07	--	13.79	--	12.93	--	13.71	14.00	--
Mean	13.95	13.93	13.96	14.01	14.05	13.89	13.46	12.97	12.78	13.35	13.88	14.20
Max	14.06	14.04	14.06	14.13	14.13	14.05	13.85	13.15	12.93	13.71	14.00	14.32
Min	13.82	13.79	13.84	13.90	13.96	13.72	13.12	12.83	12.66	12.91	13.72	14.03

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801—Continued

Water level, in feet below land-surface datum, October 1985 to September 1986

	Mean values											
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14.24	13.61	13.04	12.77	12.67	12.62	12.74	12.39	12.62	12.92	13.75	14.55
2	14.19	13.62	13.05	12.76	12.66	12.63	12.61	12.41	12.65	12.96	13.79	14.53
3	14.13	13.62	12.96	12.76	12.58	12.68	12.62	12.37	12.64	12.95	13.82	14.53
4	14.24	13.62	12.98	12.86	12.62	12.67	12.29	12.29	12.62	12.95	13.81	14.55
5	14.23	13.52	12.98	12.79	12.67	12.62	12.12	12.25	12.62	12.99	13.80	14.55
6	14.13	13.56	12.92	12.71	12.66	12.65	12.11	12.30	12.60	13.08	13.83	14.57
7	14.05	13.57	12.90	12.92	12.68	12.66	12.08	12.35	12.62	13.11	13.85	14.60
8	14.14	13.49	12.92	12.90	12.70	12.58	12.17	12.37	12.64	13.09	13.86	14.56
9	14.18	13.50	12.90	12.77	12.70	12.52	12.18	12.44	12.62	13.09	13.84	14.52
10	14.18	13.58	12.95	12.80	12.69	12.64	12.09	12.45	12.64	13.08	13.89	14.51
11	14.11	13.55	12.95	12.72	12.71	12.56	12.06	12.47	12.69	13.11	13.90	14.57
12	14.08	13.49	12.90	12.81	12.72	12.56	12.08	12.46	12.70	13.13	13.87	14.62
13	14.07	13.49	12.95	12.73	12.59	12.64	12.03	12.51	12.72	13.21	13.86	14.63
14	14.11	13.49	12.90	12.71	12.68	12.64	12.19	12.49	12.71	13.23	13.89	14.62
15	14.13	13.47	12.90	12.68	12.57	12.66	12.22	12.57	12.67	13.24	14.24	14.61
16	14.08	13.40	12.90	12.69	12.53	12.66	12.17	12.61	12.72	13.26	14.45	14.63
17	14.00	13.30	12.88	12.70	12.59	12.57	12.06	12.68	12.76	13.29	14.49	14.60
18	13.98	13.24	12.94	12.71	12.56	12.59	12.13	12.69	12.74	13.33	14.51	14.63
19	13.97	13.31	12.87	12.67	12.58	12.74	12.20	12.69	12.72	13.36	14.49	14.66
20	13.92	13.29	12.89	12.63	12.66	12.84	12.12	12.64	12.75	13.41	14.52	14.67
21	13.86	13.13	12.84	12.74	12.68	12.79	12.22	12.56	12.76	13.44	14.53	14.67
22	13.79	13.11	12.82	12.85	12.66	12.69	12.21	12.48	12.78	13.48	14.51	14.67
23	13.77	13.10	12.79	12.73	12.61	12.71	12.14	12.61	12.80	13.48	14.52	14.67
24	13.81	13.06	12.88	12.67	12.66	12.71	12.16	12.66	12.81	13.49	14.51	14.66
25	13.79	13.01	12.89	12.76	12.63	12.67	12.17	12.68	12.81	13.54	14.52	14.70
26	13.74	13.03	12.77	12.78	12.58	12.76	12.16	12.65	12.83	13.57	14.53	14.71
27	13.75	13.03	12.87	12.70	12.67	12.76	12.20	12.65	12.84	13.59	14.56	14.73
28	13.70	13.01	12.80	12.60	12.70	12.69	12.29	12.63	12.85	13.61	14.56	14.74
29	13.67	12.98	12.78	12.76	--	12.67	12.23	12.67	12.86	13.64	14.54	14.70
30	13.64	12.97	12.72	12.68	--	12.67	12.27	12.67	12.87	13.66	14.55	14.64
31	13.56	--	12.85	12.63	--	12.66	--	12.63	--	13.73	14.56	--
Mean	13.98	13.34	12.89	12.74	12.64	12.66	12.21	12.53	12.72	13.29	14.20	14.62
Max	14.24	13.62	13.05	12.92	12.72	12.84	12.74	12.69	12.87	13.73	14.56	14.74
Min	13.56	12.97	12.72	12.60	12.53	12.52	12.03	12.25	12.60	12.92	13.75	14.51

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801—Continued

Water level, in feet below land-surface datum, Water year October 1986 to September 1987

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14.48	7.67	6.16	6.41	6.03	4.93	--	--	--	--	--	5.59
2	14.15	7.63	6.29	6.24	6.06	4.80	--	--	--	--	--	5.61
3	13.02	7.49	6.38	6.42	6.13	4.78	--	--	--	--	--	5.68
4	11.59	7.33	6.43	6.40	6.11	4.73	--	--	--	--	--	5.72
5	10.48	6.94	6.31	6.27	6.23	4.58	--	--	--	--	--	5.75
6	9.62	6.57	6.22	6.35	6.22	4.50	--	--	--	--	--	5.77
7	8.91	6.38	6.21	6.50	6.08	4.46	4.08	--	--	--	--	5.81
8	8.47	6.37	6.22	6.41	6.16	4.37	4.06	--	--	--	--	5.85
9	8.27	6.44	6.32	6.30	6.09	4.43	--	--	--	--	--	5.85
10	7.93	6.28	6.35	6.46	5.96	4.43	--	--	--	--	--	5.89
11	7.77	6.24	6.23	6.46	6.00	4.42	--	--	--	--	--	5.91
12	7.75	6.37	6.32	6.40	6.05	4.42	--	--	--	--	4.89	5.91
13	7.55	6.32	6.31	6.31	5.89	4.30	--	--	--	--	4.85	5.92
14	7.55	6.03	6.25	6.29	5.79	4.16	--	--	--	--	4.93	5.92
15	7.57	5.99	6.27	6.45	5.84	4.27	--	--	--	--	4.97	5.90
16	7.46	6.01	6.27	6.47	5.78	4.17	--	--	--	--	5.00	5.99
17	7.46	6.00	6.29	6.40	5.73	--	--	--	--	--	5.09	6.02
18	7.54	6.21	6.29	6.32	5.67	--	--	--	--	2.94	5.13	5.99
19	7.63	5.99	6.23	6.43	5.65	--	--	--	--	--	5.17	6.00
20	7.66	6.23	6.31	6.53	5.62	--	--	--	--	--	5.24	6.03
21	7.70	6.11	6.42	6.36	5.49	--	--	--	--	--	5.33	6.10
22	7.49	6.01	6.34	6.43	5.48	--	--	5.56	--	--	5.42	6.08
23	7.42	6.26	6.21	6.32	5.43	--	--	5.43	--	--	5.35	6.00
24	7.37	6.22	6.20	6.34	5.44	--	--	5.32	--	--	5.33	6.03
25	7.33	6.05	6.30	6.43	5.44	--	--	5.22	--	--	5.43	6.07
26	7.37	6.27	6.37	6.48	5.34	--	--	5.21	--	--	5.50	6.11
27	7.38	6.26	6.37	6.40	5.18	--	--	3.86	--	--	5.52	6.10
28	7.40	6.21	6.36	6.23	4.95	--	--	2.70	--	--	5.51	5.95
29	7.52	6.14	6.37	6.28	--	--	--	2.12	--	--	5.52	5.92
30	7.41	6.04	6.33	6.33	--	--	--	1.92	--	--	5.58	5.87
31	7.47	--	6.30	6.10	--	--	--	1.82	--	--	5.60	--
Mean	8.54	6.40	6.30	6.37	5.78	--	--	--	--	--	--	5.91
Max	14.48	7.67	6.43	6.53	6.23	--	--	--	--	--	--	6.11
Min	7.33	5.99	6.16	6.10	4.95	--	--	--	--	--	--	5.87

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801—Continued

Water level, in feet below land-surface datum, water year October 1987 to September 1988

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5.84	6.38	--	--	5.99	5.98	3.73	3.19	3.72	4.94	5.47	7.14
2	6.03	6.37	--	--	5.99	5.91	3.22	3.17	3.54	4.95	5.55	7.18
3	5.96	6.37	--	--	5.97	5.56	3.14	3.34	3.58	4.95	5.66	7.19
4	5.86	6.39	--	--	6.08	5.34	3.00	3.49	3.61	5.05	5.71	7.23
5	5.97	6.51	--	--	6.16	5.08	3.13	3.47	3.65	5.14	5.76	7.24
6	6.00	6.41	--	--	6.03	4.62	3.22	3.36	3.68	5.20	5.80	7.27
7	5.99	6.34	--	--	5.92	4.33	3.04	3.31	3.66	5.28	5.86	7.26
8	5.96	6.48	--	--	5.92	4.37	3.04	3.39	3.68	5.32	5.90	7.33
9	6.13	6.57	--	--	5.95	4.21	3.26	3.61	3.93	5.32	5.95	7.42
10	6.23	6.61	--	--	5.97	4.03	3.26	3.65	4.05	5.37	6.00	7.44
11	6.14	6.53	--	--	6.06	4.10	3.18	3.69	4.02	5.42	6.06	7.47
12	6.03	6.44	--	--	5.90	4.29	3.20	3.68	4.04	5.46	6.10	7.56
13	6.04	6.38	--	--	5.77	4.36	3.19	3.69	4.16	5.51	6.16	7.61
14	6.11	6.36	--	--	5.89	4.27	3.26	3.69	4.25	5.56	6.25	7.60
15	6.10	6.36	--	--	5.95	4.27	3.35	3.73	4.26	5.63	6.29	7.61
16	6.26	6.48	--	--	5.89	4.28	3.33	3.84	4.24	5.69	6.35	7.65
17	6.19	6.56	--	--	6.03	4.28	3.18	3.83	4.15	5.60	6.42	7.67
18	6.12	6.74	--	--	5.96	4.27	3.19	3.88	4.21	5.59	6.43	7.55
19	6.29	--	--	--	5.95	4.11	3.22	3.92	4.28	5.64	6.46	7.13
20	6.35	--	--	--	6.01	4.04	3.18	3.97	4.36	5.66	6.50	6.80
21	6.23	--	--	--	5.97	4.07	3.12	3.96	4.40	5.64	6.58	6.66
22	6.20	--	--	--	5.91	4.01	3.22	3.98	4.45	5.59	6.66	6.59
23	6.29	--	--	5.92	6.17	4.07	3.47	4.02	4.52	5.65	6.75	6.62
24	6.37	--	--	6.05	6.15	4.03	3.40	4.11	4.60	5.74	6.77	6.62
25	6.22	--	--	6.04	6.07	4.15	3.24	4.15	4.67	5.78	6.79	6.63
26	6.33	--	--	6.03	6.00	4.27	3.23	4.15	4.69	5.82	6.83	6.60
27	6.40	--	--	6.01	6.06	4.06	3.33	4.14	4.72	5.63	6.90	6.58
28	6.31	--	--	5.95	6.02	4.05	3.30	4.17	4.76	5.37	7.01	6.58
29	6.30	--	--	5.86	6.13	4.28	3.24	4.19	4.74	5.37	7.02	6.68
30	6.34	--	--	5.79	--	4.20	3.24	4.29	4.85	5.42	7.00	6.66
31	6.37	--	--	5.91	--	4.13	--	4.31	--	5.42	7.06	--
Mean	6.16	--	--	--	6.00	4.42	3.24	3.79	4.18	5.44	6.32	7.12
Max	6.40	--	--	--	6.17	5.98	3.73	4.31	4.85	5.82	7.06	7.67
Min	5.84	--	--	--	5.77	4.01	3.00	3.17	3.54	4.94	5.47	6.58

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 20N–09W–04 AAA 1; Site–ID: 361442098092801—Continued

Water level, in feet below land-surface datum. water year October 1988 to September 1989

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.65	6.85	7.21	7.40	7.67	7.83	7.69	8.06	8.31	8.13	8.73	8.97
2	6.71	6.75	7.19	7.42	7.80	7.67	7.67	7.96	8.22	8.17	8.69	9.00
3	6.73	6.76	7.21	7.53	7.90	7.65	7.70	8.00	8.21	8.24	8.70	8.96
4	6.78	6.83	7.30	7.45	7.79	7.98	7.88	7.96	8.19	8.27	8.75	8.97
5	6.79	6.95	7.13	7.27	7.72	7.97	7.87	8.06	8.25	8.27	8.81	8.98
6	6.78	6.91	7.06	7.36	7.76	7.93	7.76	8.12	8.19	8.30	8.85	8.98
7	6.69	6.91	7.15	7.47	7.78	7.93	7.71	8.00	8.16	8.34	8.88	8.98
8	6.70	6.99	7.32	7.64	7.92	7.96	7.81	7.91	8.24	8.32	8.87	8.97
9	6.70	6.92	7.27	7.52	7.82	7.95	7.91	8.12	8.27	8.33	8.88	9.04
10	6.71	7.10	7.28	7.45	7.68	7.86	7.95	8.12	8.25	8.40	8.90	9.03
11	6.77	6.95	7.32	7.45	7.70	7.82	7.82	8.09	8.19	8.43	8.90	9.05
12	6.79	6.94	7.32	7.69	7.63	7.81	7.82	8.04	8.12	8.46	8.90	9.04
13	6.77	6.99	7.23	7.63	7.65	7.80	7.83	8.03	8.08	8.49	8.87	9.04
14	6.70	6.91	7.27	7.43	7.77	7.79	7.76	8.08	8.06	8.41	8.75	9.00
15	6.70	6.86	7.54	7.58	7.90	8.00	7.78	8.10	8.04	8.38	8.68	8.97
16	6.75	7.15	7.41	7.60	7.94	7.90	7.68	8.07	7.96	8.39	8.67	8.93
17	6.73	7.04	7.40	7.50	7.87	7.87	7.82	8.04	7.94	8.33	8.72	8.93
18	6.88	6.96	7.27	7.61	7.79	8.06	7.86	8.00	8.05	8.39	8.74	8.93
19	6.80	7.05	7.14	7.62	7.65	7.84	7.91	8.07	8.02	8.47	8.66	8.93
20	6.77	7.18	7.35	7.74	7.66	7.94	7.82	8.15	7.99	8.47	8.70	8.94
21	6.84	7.15	7.37	7.59	7.84	8.04	7.81	8.05	7.99	8.48	8.75	8.93
22	6.71	7.05	7.29	7.51	7.99	7.92	7.75	8.12	8.10	8.52	8.79	8.95
23	6.82	6.96	7.26	7.48	7.89	7.87	7.75	8.09	8.11	8.56	8.81	--
24	6.81	6.86	7.45	7.61	7.81	7.85	7.82	7.99	8.11	8.55	8.82	--
25	6.85	6.91	7.39	7.65	7.73	7.87	7.86	8.09	8.11	8.59	8.84	--
26	6.84	6.90	7.27	7.77	7.75	7.90	7.86	8.27	8.09	8.62	8.87	--
27	6.80	7.15	7.46	7.67	7.71	7.92	7.85	8.24	8.13	8.61	8.90	--
28	6.98	7.10	7.54	7.59	7.86	7.82	7.92	8.12	8.17	8.60	8.91	--
29	6.94	7.10	7.41	7.65	--	7.73	8.02	8.11	8.20	8.61	8.94	--
30	6.95	7.20	7.36	7.62	--	7.84	8.04	8.15	8.17	8.65	8.91	--
31	6.91	--	7.37	7.47	--	7.88	--	8.25	--	8.70	8.89	--
Mean	6.79	6.98	7.31	7.55	7.78	7.88	7.82	8.08	8.13	8.43	8.81	--
Max.	6.98	7.20	7.54	7.77	7.99	8.06	8.04	8.27	8.31	8.70	8.94	--
Min.	6.65	6.75	7.06	7.27	7.63	7.65	7.67	7.91	7.94	8.13	8.66	--

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Major County—Continued
Local number: 21N–10W–21 DDD 1; Site–ID: 361631098155601
Location: lat 36°16'31", long 098°15'56"; Hydrologic unit: 11050002.
Owner: W.H. Winfree
Aquifer: Cimarron terrace and alluvial aquifer
Well characteristics: Drilled unused well, diameter 24 in., depth 40 ft.
Datum: Altitude of land-surface datum is 1214 ft NGVD, measuring point: 1.06 ft above land-surface datum.
Period of record: January 1950–March 1993; continuous recorder record January 1953–May 1954, October 1987–January 1989.
Extremes for period of record: Highest water level, 9.17 ft below land-surface datum, March 26, 1987; lowest water level, 23.50 ft below land-surface datum, January 5, 1978.

Water level, in feet below-land surface datum, water year October 1987 to September 1988

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	--	11.46	--	--	--	--	--	--	10.98	11.56	12.14	12.95
2	10.94	11.45	--	--	--	--	--	--	10.85	11.57	12.18	12.98
3	10.96	11.46	--	--	--	--	--	--	10.85	11.58	12.21	12.99
4	10.87	11.51	--	--	--	--	--	--	10.85	11.62	12.23	13.01
5	10.91	--	--	--	--	--	--	--	10.85	11.66	12.25	13.03
6	10.99	--	--	--	--	--	--	--	10.84	11.69	12.27	13.06
7	11.01	--	--	--	--	--	--	10.55	10.82	11.73	12.29	13.06
8	10.95	--	--	--	--	--	--	10.58	10.81	11.76	12.32	13.11
9	11.08	--	--	--	--	--	--	10.70	10.96	11.75	12.35	13.15
10	11.14	--	--	--	--	--	--	10.73	11.03	11.78	12.37	13.17
11	11.13	--	--	--	--	--	--	10.74	11.00	11.81	12.39	13.19
12	11.04	--	--	--	--	--	--	10.72	10.99	11.82	12.41	13.25
13	11.06	--	--	--	--	--	--	10.71	11.07	11.93	12.44	13.28
14	11.12	--	--	--	--	--	--	10.70	11.12	11.95	12.48	13.27
15	11.14	--	--	--	--	--	--	10.72	11.13	11.98	12.50	13.28
16	11.20	--	--	--	--	--	--	10.79	11.12	12.02	12.53	13.31
17	11.20	--	--	--	--	--	--	10.77	11.11	12.03	12.55	13.32
18	11.15	--	--	--	--	--	--	10.79	11.15	12.05	12.55	13.27
19	11.25	--	--	--	--	--	--	10.81	11.20	12.09	12.57	13.31
20	11.32	--	--	--	--	--	--	10.84	11.24	12.11	12.60	13.33
21	11.27	--	--	--	--	--	--	10.85	11.26	12.07	12.63	13.31
22	11.22	--	--	--	--	--	--	10.86	11.28	12.02	12.67	13.27
23	11.29	--	--	--	--	--	--	10.88	11.34	12.04	12.73	13.33
24	11.37	--	--	--	--	--	--	10.93	11.37	12.10	12.74	13.35
25	11.30	--	--	--	--	--	--	10.97	11.41	12.13	12.74	13.36
26	11.32	--	--	--	--	--	--	10.96	11.42	12.15	12.77	13.35
27	11.41	--	--	--	--	--	--	10.94	11.45	12.16	12.81	13.33
28	11.34	--	--	--	--	--	--	10.96	11.46	12.11	12.88	13.32
29	11.33	--	--	--	--	--	--	10.96	11.45	12.11	12.88	13.40
30	11.39	--	--	--	--	--	--	11.01	11.48	12.14	12.87	13.38
31	11.45	--	--	--	--	--	--	11.06	--	12.13	12.90	--
Mean	--	--	--	--	--	--	--	--	11.13	11.92	12.52	13.22
Max	--	--	--	--	--	--	--	--	11.48	12.16	12.90	13.40
Min	--	--	--	--	--	--	--	--	10.81	11.56	12.14	12.95

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 21N–10W–21 DDD 1; Site–ID: 361631098155601—Continued

Water level, in feet below land-surface datum, water year October 1988 to September 1989

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	13.39	--	13.94	14.16	--	--	--	--	--	--	--	--
2	13.44	--	13.88	14.05	--	--	--	--	--	--	--	--
3	13.46	13.52	13.99	14.22	--	--	--	--	--	--	--	--
4	13.48	13.60	14.01	14.12	--	--	--	--	--	--	--	--
5	13.48	13.69	13.81	--	--	--	--	--	--	--	--	--
6	13.47	13.64	13.77	--	--	--	--	--	--	--	--	--
7	13.49	13.65	13.99	--	--	--	--	--	--	--	--	--
8	13.42	13.69	14.04	--	--	--	--	--	--	--	--	--
9	13.42	13.65	13.85	--	--	--	--	--	--	--	--	--
10	13.45	13.76	13.95	--	--	--	--	--	--	--	--	--
11	13.47	13.66	14.00	--	--	--	--	--	--	--	--	--
12	13.51	13.67	13.90	--	--	--	--	--	--	--	--	--
13	13.51	13.71	13.81	--	--	--	--	--	--	--	--	--
14	13.50	13.67	14.07	--	--	--	--	--	--	--	--	--
15	13.46	13.64	14.11	--	--	--	--	--	--	--	--	--
16	13.47	13.83	13.93	--	--	--	--	--	--	--	--	--
17	13.52	13.75	14.04	--	--	--	--	--	--	--	--	--
18	13.51	13.70	13.84	--	--	--	--	--	--	--	--	--
19	13.59	13.78	13.78	--	--	--	--	--	--	--	--	--
20	13.55	13.86	14.06	--	--	--	--	--	--	--	--	--
21	13.52	13.83	14.08	--	--	--	--	--	--	--	--	--
22	13.59	13.78	14.05	--	--	--	--	--	--	--	--	--
23	13.49	13.74	14.00	--	--	--	--	--	--	--	--	--
24	13.57	13.67	14.10	--	--	--	--	--	--	--	--	--
25	13.59	13.67	14.00	--	--	--	--	--	--	--	--	--
26	--	13.70	13.90	--	--	--	--	--	--	--	--	--
27	--	13.91	14.16	--	--	--	--	--	--	--	--	--
28	--	13.92	14.17	--	--	--	--	--	--	--	--	--
29	--	13.94	14.01	--	--	--	--	--	--	--	--	--
30	--	13.95	14.03	--	--	--	--	--	--	--	--	--
31	--	--	14.08	--	--	--	--	--	--	--	--	--
Mean	--	--	13.98	--	--	--	--	--	--	--	--	--
Max	--	--	14.17	--	--	--	--	--	--	--	--	--
Min	--	--	13.77	--	--	--	--	--	--	--	--	--

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Woods County
Local number: 24N–15W–32 BBD 1; Site–ID: 363102098495301
Location: lat 36°31'02", long 098°49'53"; Hydrologic unit: 11050001
Owner: Tuttle and Barbie Oil
Aquifer: Cimarron terrace and alluvial aquifer
Well characteristics: Drilled well, depth 51 ft.
Datum: Altitude of land-surface datum is 1395 ft NGVD, measuring point 0.80 ft below land-surface datum.
Period of record: November 1987 to January 1989
Extremes for period of record: Highest water level, 10.63 ft below land-surface datum, May 02, 1988; lowest water level, 13.94 ft below land-surface datum, September 12, 1988.

Water level, in feet below land-surface datum, November 25, 1987 to September 30, 1988

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	--	--	13.25	12.97	12.63	12.50	11.21	10.66	11.49	12.55	13.36	13.80
2	--	--	13.25	12.93	12.63	12.49	11.12	10.63	11.51	12.56	13.39	13.81
3	--	--	13.25	12.92	12.61	12.47	11.07	10.63	11.55	12.58	13.42	13.80
4	--	--	13.24	12.93	12.62	12.42	11.01	10.67	11.58	12.61	13.43	13.82
5	--	--	13.22	12.92	12.62	12.35	11.00	10.69	11.60	12.64	13.45	13.82
6	--	--	13.23	12.90	12.61	12.23	10.99	10.68	11.62	12.68	13.49	13.83
7	--	--	13.23	12.90	12.60	12.02	10.96	10.68	11.66	12.72	13.51	13.84
8	--	--	13.23	12.90	12.59	11.82	10.95	10.70	11.70	12.75	13.53	13.86
9	--	--	13.24	12.90	12.59	11.67	10.97	10.72	11.75	12.76	13.54	13.88
10	--	--	13.22	12.89	12.60	11.55	10.95	10.76	11.78	12.79	13.55	13.89
11	--	--	13.22	12.86	12.60	11.51	10.94	10.78	11.82	12.81	13.56	13.90
12	--	--	13.22	12.89	12.58	11.48	10.94	--	11.85	12.83	13.58	13.92
13	--	--	13.22	12.89	12.57	11.47	10.94	--	11.91	12.87	13.60	13.93
14	--	--	13.20	12.84	12.58	11.42	10.96	--	11.93	12.91	13.63	13.91
15	--	--	13.22	12.81	12.59	11.39	10.98	--	11.97	12.95	13.65	13.86
16	--	--	13.22	12.80	12.57	11.40	10.98	--	12.01	12.99	13.66	13.81
17	--	--	13.19	12.79	12.56	11.40	10.95	--	12.05	13.00	13.68	13.77
18	--	--	13.16	12.76	12.52	11.40	10.87	--	12.11	13.02	13.69	13.75
19	--	--	13.14	12.74	12.51	11.39	10.81	--	12.16	13.05	13.69	13.71
20	--	--	13.15	12.77	12.52	11.35	10.79	--	12.22	13.07	13.69	13.71
21	--	--	13.10	12.76	12.51	11.32	10.78	--	12.18	13.09	13.69	13.71
22	--	--	13.08	12.74	12.51	11.31	10.78	--	12.23	13.11	13.72	13.71
23	--	--	13.04	12.71	12.54	11.30	10.90	--	12.28	13.14	13.73	13.71
24	--	--	13.04	12.71	12.54	11.29	11.09	--	12.33	13.17	13.74	13.71
25	--	13.28	13.02	12.69	12.52	11.29	10.74	--	12.37	13.20	13.74	13.70
26	--	13.28	13.01	12.68	12.51	11.30	10.71	--	12.40	13.21	13.76	13.70
27	--	13.27	12.99	12.66	12.52	11.28	10.70	--	12.42	13.24	13.76	13.71
28	--	13.26	13.00	12.65	12.52	11.28	10.68	--	12.45	13.26	13.77	13.71
29	--	13.25	12.99	12.63	12.52	11.30	10.68	--	12.47	13.29	13.77	13.71
30	--	13.25	12.95	12.63	--	11.28	10.68	--	12.52	13.31	13.77	13.70
31	--	--	12.97	12.63	--	11.28	--	11.20	--	13.34	13.79	--
Mean	--	--	13.14	12.80	12.57	11.61	10.90	--	12.00	12.95	13.62	13.79
Max	--	--	13.25	12.97	12.63	12.50	11.21	--	12.52	13.34	13.79	13.93
Min	--	--	12.95	12.63	12.51	11.28	10.68	--	11.49	12.55	13.36	13.70

Table 3. Records of continuous water-level measurements of wells completed in the Cimarron River alluvium and terrace deposits at selected sites in Kingfisher, Major, and Woods Counties, Oklahoma—Continued

Local number: 24N–15W–32 BBD 1; Site–ID: 363102098495301—Continued

Water level, in feet below land-surface datum, October 1, 1988 to January 2, 1989

Day	Mean values											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	13.69	13.49	13.36	13.24	--	--	--	--	--	--	--	--
2	13.69	13.48	13.36	13.23	--	--	--	--	--	--	--	--
3	13.68	13.48	13.35	--	--	--	--	--	--	--	--	--
4	13.68	13.49	13.36	--	--	--	--	--	--	--	--	--
5	13.67	13.49	13.34	--	--	--	--	--	--	--	--	--
6	13.66	13.48	13.33	--	--	--	--	--	--	--	--	--
7	13.63	13.48	13.32	--	--	--	--	--	--	--	--	--
8	13.60	13.49	13.34	--	--	--	--	--	--	--	--	--
9	13.58	13.47	13.33	--	--	--	--	--	--	--	--	--
10	13.58	13.48	13.32	--	--	--	--	--	--	--	--	--
11	13.56	13.47	13.32	--	--	--	--	--	--	--	--	--
12	13.56	13.45	13.31	--	--	--	--	--	--	--	--	--
13	13.56	13.46	13.30	--	--	--	--	--	--	--	--	--
14	13.55	13.45	13.30	--	--	--	--	--	--	--	--	--
15	13.55	13.44	13.33	--	--	--	--	--	--	--	--	--
16	13.55	13.48	13.31	--	--	--	--	--	--	--	--	--
17	13.54	13.45	13.30	--	--	--	--	--	--	--	--	--
18	13.55	13.43	13.29	--	--	--	--	--	--	--	--	--
19	13.54	13.43	13.28	--	--	--	--	--	--	--	--	--
20	13.52	13.44	13.29	--	--	--	--	--	--	--	--	--
21	13.52	13.44	13.29	--	--	--	--	--	--	--	--	--
22	13.51	13.42	13.27	--	--	--	--	--	--	--	--	--
23	13.52	13.41	13.25	--	--	--	--	--	--	--	--	--
24	13.52	13.39	13.27	--	--	--	--	--	--	--	--	--
25	13.51	13.38	13.27	--	--	--	--	--	--	--	--	--
26	13.51	13.36	13.24	--	--	--	--	--	--	--	--	--
27	13.50	13.39	13.26	--	--	--	--	--	--	--	--	--
28	13.52	13.38	13.26	--	--	--	--	--	--	--	--	--
29	13.52	13.37	13.25	--	--	--	--	--	--	--	--	--
30	13.51	13.33	13.25	--	--	--	--	--	--	--	--	--
31	13.50	--	13.24	--	--	--	--	--	--	--	--	--
Mean	13.57	13.44	13.30	--	--	--	--	--	--	--	--	--
Max	13.69	13.49	13.36	--	--	--	--	--	--	--	--	--
Min	13.50	13.33	13.24	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units

[Geologic unit: 110CMTA, Cimarron River terrace and alluvial aquifer; 318CDHL, Cedar Hills Sandstone; 318GRBR, Garber Sandstone. Agency: ODEQ, Oklahoma Department of Environmental Quality, formerly Oklahoma State Department of Health; USGS, U.S. Geological Survey; NWQL, U.S. Geological Survey National Water Quality Laboratory; ODWQL, U.S. Geological Survey Oklahoma District Water Quality Laboratory; OGS Oklahoma Geological Survey, OWRB, Oklahoma Water Resources Board; NURE, National Uranium Resources Evaluation. Units of physical and constituents parameters: deg C, degrees Celsius; mg/L, milligrams per liter; µg/L, micrograms per liter; µs/cm, microsiemens per centimeter; water wh fet, water, whole, fixed end point titration; water wh tot fet, water, whole, total fixed end point titration; E, estimated; <, less than; --, no data]

Local number	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Alfalfa County									
23N-10W-07 BBC 1	362923098190201	06-07-85	1035	110CMTA	44	USGS	OGS	1,400	7.0
23N-12W-02 CCC 1	362934098274101	06-11-86	1300	110CMTA	58	USGS	OGS	2,780	6.7
23N-12W-08 DDC 1	362843098300301	06-13-85	1030	110CMTA	44	USGS	OGS	550	7.1
24N-09W-21 C 1	363228098102301	04-05-61	--	318CDHL	46	ODEQ	ODWQL	571	7.4
24N-11W-26 BBB 1	363202098211301	06-06-85	0830	110CMTA	57	USGS	OGS	1,850	7.1
24N-11W-32 CDA 1	363034098240101	11-15-66	1200	110CMTA	57	ODEQ	ODWQL	651	7.9
24N-12W-05 CDD 1	363446098303301	06-04-85	0900	110CMTA	39	USGS	OGS	869	7.2
24N-12W-35 CDA 1	363033098271401	06-06-85	1145	110CMTA	31	USGS	OGS	5,200	6.6
24N-12W-35 CDC 1	363034098273001	11-15-66	--	110CMTA	38	ODEQ	ODWQL	696	8.0
25N-11W-33 BCC 1	363603098234201	12-05-66	--	318CDHL	85	--	ODWQL	3,770	7.4
25N-12W-05 CCC 1	364001098311101	06-06-85	1515	110CMTA	64	USGS	OGS	2,180	7.4
		06-12-86	1145	110CMTA	64	USGS	OGS	2,360	7.1
26N-12W-29 CCD 1	364145098310701	06-12-86	1515	110CMTA	26	USGS	OGS	2,360	6.5
Garfield County									
20N-08W-07 DAB 1	361325098052001	06-04-85	1150	110CMTA	100	USGS	OGS	425	7.3
20N-08W-23 CC 1	361128098014401	12-13-50	--	110CMTA	104	ODEQ	ODWQL	424	--
20N-08W-30 BAA 1	361110098053701	07-18-85	1510	110CMTA	--	OWRB	ODEQ	480	7.5
21N-08W-19 CBB 1	361651098061001	07-23-86	1340	110CMTA	56	OWRB	ODEQ	1,100	7.5
		06-09-88	1030	110CMTA	56	USGS	ODEQ	581	7.4
21N-08W-19 CCC 1	361633098060901	03-14-50	0850	110CMTA	180	--	ODWQL	2,090	7.7
21N-08W-30 CCC 1	361545098061001	08-25-87	0925	110CMTA	105	OWRB	ODEQ	700	8.6

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Alfalfa County—Continued												
06-07-85	16.5	510	--	150	--	33	--	63	--	4.7	--	--
06-11-86	16.5	1,100	--	260	--	120	--	170	--	1.3	--	--
06-13-85	17.5	310	--	86	--	23	--	44	--	3.4	--	--
04-05-61	--	220	--	59	--	17	--	32	--	1.4	260	0
06-06-85	17.0	690	--	170	--	63	--	47	--	7.2	--	--
11-15-66	21.0	270	--	--	--	--	--	--	44	--	304	0
06-04-85	19.5	400	--	110	--	30	--	20	--	5.4	--	--
06-06-85	16.5	1,900	--	500	--	170	--	170	--	14	--	--
11-15-66	21.0	320	--	--	--	--	--	--	18	--	276	0
12-05-66	14.5	1,700	--	--	--	--	--	--	380	--	36	0
06-06-85	17.0	600	--	130	--	66	--	260	--	2.1	--	--
06-12-86	17.5	590	--	130	--	65	--	260	--	2.4	--	--
06-12-86	17.0	610	--	160	--	50	--	250	--	1.2	--	--
Garfield County—Continued												
06-04-85	18.5	140	--	37	--	12	--	21	--	5.2	--	--
12-13-50	--	190	--	44	--	20	--	--	19	--	228	0
07-18-85	25.0	200	66	--	10	--	31	--	--	--	--	--
07-23-86	17.0	290	60	--	36	--	110	--	--	--	--	--
06-09-88	16.5	270	--	75	--	19	--	14	--	2.3	--	--
03-14-50	16.5	330	--	61	--	42	--	--	330	--	245	0
08-25-87	18.0	230	40	--	29	--	110	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Alfalfa County—Continued												
06-07-85	E140	69	100	--	1.4	0.37	14	1,040	83.0	--	--	--
06-11-86	322	1,100	120	--	0.30	0.27	26	2,260	7.40	--	--	--
06-13-85	E279	30	38	--	1.2	0.12	13	480	12.0	--	--	--
04-05-61	213	18	20	--	1.0	--	23	331	5.20	--	--	--
06-06-85	E154	200	240	--	0.40	0.10	20	1,300	29.0	--	--	--
11-15-66	249	31	61	--	--	--	--	417	--	--	--	--
06-04-85	E263	39	59	--	0.40	0.12	15	526	17.0	--	--	--
06-06-85	E295	150	1,300	--	0.40	4.7	19	3,520	14.0	--	--	--
11-15-66	226	110	12	--	--	--	--	462	--	--	--	--
12-05-66	30	2,400	40	--	--	--	--	3,660	--	--	--	--
06-06-85	--	330	430	--	0.40	0.34	19	1,530	5.90	--	--	--
06-12-86	285	310	390	--	0.30	0.36	19	1,490	6.10	--	--	--
06-12-86	308	260	350	--	0.70	0.46	20	1,470	26.0	--	--	--
Garfield County—Continued												
06-04-85	E147	8.6	23	--	0.20	0.10	20	230	1.50	--	--	--
12-13-50	187	16	6.0	--	--	--	--	243	5.90	--	--	--
07-18-85	204	<20	61	0.3	--	--	--	368	--	<0.500	--	--
07-23-86	198	43	210	--	0.42	--	--	608	--	3.80	--	--
06-09-88	213	<20	13	0.3	--	0.010	--	379	--	15.4	0.020	--
03-14-50	201	210	430	--	0.50	--	15	1,240	1.20	--	--	--
08-25-87	182	270	150	0.3	--	--	--	863	--	6.70	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Alfalfa County—Continued												
06-07-85	<140	--	<10	--	--	--	--	110	--	2.4	--	<14
06-11-86	<140	--	<10	--	10	--	--	600	--	1.2	--	<14
06-13-85	<140	--	<10	--	--	--	--	110	--	1.0	--	<14
04-05-61	--	--	--	--	--	--	--	150	--	--	--	--
06-06-85	<140	--	<10	--	--	--	--	220	--	12	--	<14
11-15-66	--	--	--	--	--	--	--	20	--	--	--	--
06-04-85	<140	--	<10	--	--	--	--	100	--	3.2	--	<14
06-06-85	310	--	<10	--	--	--	--	190	--	7.5	--	<14
11-15-66	--	--	--	--	--	--	--	160	--	--	--	--
12-05-66	--	--	--	--	--	--	--	3,700	--	--	--	--
06-06-85	<140	--	<10	--	150	--	--	120	--	<6.0	--	<14
06-12-86	<140	--	<10	--	20	--	--	110	--	1.5	--	<14
06-12-86	<140	--	<10	--	80	--	--	230	--	<6.0	--	<14
Garfield County—Continued												
06-04-85	<140	--	<10	--	--	--	--	60	--	<10	--	<14
12-13-50	--	--	--	--	--	--	--	--	--	--	--	--
07-18-85	--	<10	--	400	--	--	--	--	<2	--	<10	--
07-23-86	--	<10	--	400	--	--	--	--	<5	--	<10	--
06-09-88	<300	--	<10	--	520	--	--	<500	--	<5.0	--	<14
03-14-50	--	--	--	--	--	--	--	--	--	--	--	--
08-25-87	--	<10	--	200	--	--	--	--	<5	--	<10	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Alfalfa County—Continued												
06-07-85	--	--	--	<14	--	10	--	<100	--	--	<10	--
06-11-86	--	--	--	<10	--	200	--	<100	--	--	<10	--
06-13-85	--	--	--	<14	--	260	--	<100	--	--	<10	--
04-05-61	--	--	--	--	--	110	--	--	--	--	--	--
06-06-85	--	--	--	<14	--	80	--	<100	--	--	<10	--
11-15-66	--	--	--	--	--	--	--	--	--	--	--	--
06-04-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
06-06-85	--	--	--	15	--	180	--	<100	--	--	10	--
11-15-66	--	--	--	--	--	--	--	--	--	--	--	--
12-05-66	--	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	<14	--	20	--	<100	--	--	<10	--
06-12-86	--	--	--	<10	--	20	--	<100	--	--	<10	--
06-12-86	--	--	--	<10	--	40	--	<100	--	--	<10	--
Garfield County—Continued												
06-04-85	--	--	--	<14	--	20	--	<100	--	--	170	--
12-13-50	--	--	--	--	--	--	--	--	--	--	--	--
07-18-85	--	--	17	--	<100	--	<20	--	--	20	--	--
07-23-86	--	--	<10	--	870	--	<45	--	--	<10	--	--
06-09-88	--	<100	--	<10	--	360	--	<45	--	--	510	--
03-14-50	--	--	--	--	<100	--	--	--	--	--	--	--
08-25-87	--	--	17	--	60	--	<45	--	--	<10	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molybdenum, total recoverable (µg/L as Mo)	Molybdenum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recoverable (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recoverable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Alfalfa County—Continued											
06-07-85	--	--	--	--	--	--	<5	--	--	--	44
06-11-86	--	--	--	--	--	--	--	--	--	--	30
06-13-85	--	--	--	--	--	--	<5	--	--	--	88
04-05-61	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	--	--	--	<5	--	--	--	100
11-15-66	--	--	--	--	--	--	--	--	--	--	--
06-04-85	--	--	--	--	--	--	<5	--	--	--	420
06-06-85	--	--	--	--	--	--	<5	--	--	--	160
11-15-66	--	--	--	--	--	--	--	--	--	--	--
12-05-66	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	--	--	--	<10	--	--	--	25
06-12-86	--	--	--	--	--	--	--	--	--	--	94
06-12-86	--	--	--	--	--	--	--	--	--	--	260
Garfield Country—Continued											
06-04-85	--	--	--	--	--	--	<5	--	--	--	260
12-13-50	--	--	--	--	--	--	--	--	--	--	--
07-18-85	--	--	--	--	--	<5	--	--	--	20	--
07-23-86	--	--	--	--	--	<5	--	--	--	<5	--
06-09-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
03-14-50	--	--	--	--	--	--	--	--	--	--	--
08-25-87	--	--	--	--	--	5	--	--	--	<5	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number)	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Kingfisher County									
17N-05W-07 AAA 1	355812097460001	05-22-85	1020	110CMTA	83	USGS	OGS	573	7.1
17N-05W-07 CDD 1	355725097462401	07-10-85	1310	110CMTA	105	OWRB	OWRB	1,100	8.8
17N-05W-10 DCC 1	355724097430301	06-07-88	1000	110CMTA	45	USGS	NWQL	1,410	7.1
17N-05W-36 A 1	355436097404501	03-13-50	--	110CMTA	90	USGS	ODWQL	565	7.6
17N-06W-05 DDD 1	355816097511701	05-22-85	1310	110CMTA	41	USGS	OGS	592	7.3
17N-06W-11 DDD 1	355724097480001	06-08-88	1300	110CMTA	60	USGS	NWQL	935	7.0
18N-06W-07 AAC 1	360316097522401	06-08-88	1000	110CMTA	34	USGS	NWQL	914	7.1
18N-06W-08 CCB 1	360242097513501	05-29-85	1250	110CMTA	140	USGS	OGS	1,150	7.2
18N-07W-01 AB 1	360456097534501	07-09-45	--	110CMTA	48	--	--	--	--
18N-07W-01 DD 1	360405097534001	07-10-45	--	110CMTA	68	--	--	--	--
18N-07W-08 CCC 1	360243097584101	05-30-85	0910	110CMTA	53	USGS	OGS	670	7.1
18N-07W-13 AC 1	360201097534601	12-13-50	--	110CMTA	58	--	--	1,300	7.1
		05-18-72	--	110CMTA	58	--	--	1,090	7.7
18N-07W-15 A 1	360227097554301	10-05-50	--	110CMTA	60	--	--	809	--
18N-07W-24 AB 1	360140097534501	07-10-45	--	110CMTA	45	--	--	--	--
18N-07W-24 CD 1	360120097543501	07-10-45	--	110CMTA	50	--	--	--	--
18N-07W-28 C 1	360020097572001	10-04-50	--	110CMTA	31	--	--	E314	--
18N-07W-29 AAA 1	360045097574501	05-18-72	--	110CMTA	42	--	--	354	7.4
18N-07W-35 BAA 1	360000097545901	10-06-70	--	110CMTA	30	--	--	562	7.8
18N-08W-03 ABA 1	360418098021601	05-30-85	1400	110CMTA	53	USGS	OGS	960	7.3
18N-08W-11 D 1	360240098005801	10-04-50	--	110CMTA	25	--	--	1,770	--
19N-07W-17 ABC 1	360743097581201	05-23-85	1210	110CMTA	103	USGS	OGS	890	6.9
19N-07W-25 B 1	360555097540701	07-31-69	--	110CMTA	58	--	--	5,550	7.9
19N-07W-25 BA 1	360602097540001	07-09-45	--	110CMTA	50	--	--	--	--
19N-07W-30 D 1	360523097585201	10-05-50	--	110CMTA	81	--	--	713	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Kingfisher County—Continued												
05-22-85	17.0	180	--	52	--	13	--	55	--	1.9	--	--
07-10-85	18.0	290	71	--	23	--	110	--	--	--	--	--
06-07-88	18.0	460	--	120	--	36	--	160	--	3.0	--	--
03-13-50	--	160	--	41	--	13	--	59	--	4.6	215	0
05-22-85	16.0	220	--	60	--	17	--	47	--	2.1	--	--
06-08-88	17.5	310	--	84	--	24	--	92	--	1.8	--	--
06-08-88	15.5	290	--	71	--	28	--	98	--	1.7	--	--
05-29-85	16.5	400	--	91	--	42	--	72	--	2.3	--	--
07-09-45	--	250	--	72	--	18	--	--	40	--	208	6
07-10-45	18.5	720	--	200	--	55	--	--	160	--	419	0
05-30-85	17.0	180	--	57	--	10	--	30	--	4.7	--	--
12-13-50	--	420	--	110	--	34	--	93	--	3.0	266	0
05-18-72	17.0	350	--	--	--	--	--	--	86	--	262	0
10-05-50	16.0	330	--	91	--	25	--	--	42	--	275	0
07-10-45	18.0	420	--	100	--	40	--	--	79	--	289	0
07-10-45	18.0	490	--	140	--	32	--	--	170	--	296	0
10-04-50	--	120	--	35	--	9.1	--	--	15	--	117	0
05-18-72	16.5	120	--	--	--	--	--	--	21	--	122	0
10-06-70	--	220	--	--	--	--	--	--	34	--	220	0
05-30-85	16.0	250	--	78	--	14	--	86	--	5.6	--	--
10-04-50	--	540	--	160	--	37	--	--	170	--	344	0
05-23-85	17.5	250	--	63	--	22	--	83	--	3.6	--	--
07-31-69	24.0	1,400	--	--	--	--	--	--	660	--	284	0
07-09-45	--	280	--	60	--	32	--	--	190	--	334	4
10-05-50	16.0	220	--	62	--	15	--	--	73	--	298	0

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Kingfisher County—Continued												
05-22-85	E160	30	42	--	0.40	0.26	20	430	15.0	--	--	--
07-10-85	E218	78	180	--	0.22	--	--	649	--	3.70	--	--
06-07-88	E352	200	170	0.4	--	0.070	--	--	--	8.70	0.045	--
03-13-50	180	30	44	--	0.30	--	24	343	6.77	--	--	--
05-22-85	E176	36	35	--	0.50	0.24	19	424	17.0	--	--	--
06-08-88	230	48	150	0.3	--	0.080	--	--	--	12.2	0.060	--
06-08-88	346	81	64	0.4	--	0.070	--	--	--	2.80	0.020	--
05-29-85	E178	44	190	--	0.10	0.76	22	774	19.0	--	--	--
07-09-45	180	10	74	--	--	--	--	434	12.0	--	--	--
07-10-45	344	34	410	--	--	--	--	1,290	27.0	--	--	--
05-30-85	E87	65	55	--	0.40	0.22	22	336	6.00	--	--	--
12-13-50	218	25	250	--	0.30	--	22	825	5.90	--	--	--
05-18-72	215	39	190	--	--	--	--	620	8.40	--	--	--
10-05-50	226	13	36	--	--	--	--	578	37.0	--	--	--
07-10-45	237	39	220	--	--	--	--	740	2.70	--	--	--
07-10-45	243	36	380	--	--	--	--	1,250	13.0	--	--	--
10-04-50	96	14	4.0	--	--	--	--	202	11.0	--	--	--
05-18-72	100	36	15	--	--	--	--	230	1.40	--	--	--
10-06-70	180	38	37	--	--	--	--	332	5.40	--	--	--
05-30-85	E254	64	71	--	0.20	0.27	25	552	7.20	--	--	--
10-04-50	282	140	340	--	--	--	--	1,100	0.290	--	--	--
05-23-85	E278	53	46	--	0.50	0.29	17	502	9.40	--	--	--
07-31-69	233	460	1400	--	--	--	--	3,790	37.0	--	--	--
07-09-45	280	120	210	--	--	--	--	905	2.20	--	--	--
10-05-50	244	39	57	--	--	--	--	434	2.70	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Kingfisher County—Continued												
05-22-85	<140	--	<10	--	--	--	--	70	--	<6.0	--	<14
07-10-85	--	<10	--	<200	--	--	--	--	<2	--	<10	--
06-07-88	<300	--	<10	--	96	--	--	<500	--	<5.0	--	<14
03-13-50	--	--	--	--	--	--	--	--	--	--	--	--
05-22-85	<140	--	<10	--	--	--	--	5	--	3.8	--	<14
06-08-88	<300	--	<10	--	190	--	--	<500	--	<5.0	--	<14
06-08-88	<300	--	<10	--	200	--	--	<500	--	<5.0	--	<14
05-29-85	<140	--	<10	--	--	--	--	130	--	<3.0	--	<14
07-09-45	--	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	<140	--	<10	--	--	--	--	60	--	<6.0	--	<14
12-13-50	--	--	--	--	--	--	--	--	--	--	--	--
05-18-72	--	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--	--
05-18-72	--	--	--	--	--	--	--	--	--	--	--	--
10-06-70	--	--	--	--	--	--	--	100	--	--	--	--
05-30-85	<140	--	<10	--	--	--	--	60	--	<6.0	--	<14
10-04-50	--	--	--	--	--	--	--	--	--	--	--	--
05-23-85	<140	--	<10	--	--	--	--	90	--	<6.0	--	<14
07-31-69	--	--	--	--	--	--	--	490	--	--	--	--
07-09-45	--	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Kingfisher County—Continued												
05-22-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
07-10-85	--	--	6	--	<100	--	<20	--	--	<20	--	--
06-07-88	--	<100	--	<10	--	800	--	<45	--	--	280	--
03-13-50	--	--	--	--	50	--	--	--	--	--	--	--
05-22-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
06-08-88	--	<100	--	<10	--	11	--	<45	--	--	<10	--
06-08-88	--	<100	--	<10	--	24	--	<45	--	--	120	--
05-29-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
07-09-45	--	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
12-13-50	--	--	--	--	--	<100	--	--	--	--	--	--
05-18-72	--	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--	--
05-18-72	--	--	--	--	--	--	--	--	--	--	--	--
10-06-70	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	<14	--	20	--	<100	--	--	<10	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--	--
05-23-85	--	--	--	<14	--	<10	--	<100	--	--	10	--
07-31-69	--	--	--	--	--	--	--	--	--	--	--	--
07-09-45	--	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molybdenum, total recoverable (µg/L as Mo)	Molybdenum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recoverable (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recoverable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Kingfisher County—Continued											
05-22-85	--	--	--	--	--	--	<5	--	--	--	37
07-10-85	--	--	--	--	--	<5	--	--	--	20	--
06-07-88	<0.5	--	<100	--	<25	--	11	--	7.0	--	<5
03-13-50	--	--	--	--	--	--	--	--	--	--	--
05-22-85	--	--	--	--	--	--	<10	--	--	--	24
06-08-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
06-08-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
05-29-85	--	--	--	--	--	--	<10	--	--	--	62
07-09-45	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	--	--	--	<5	--	--	--	25
12-13-50	--	--	--	--	--	--	--	--	--	--	--
05-18-72	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--
07-10-45	--	--	--	--	--	--	--	--	--	--	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--
05-18-72	--	--	--	--	--	--	--	--	--	--	--
10-06-70	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	--	--	--	<10	--	--	--	31
10-04-50	--	--	--	--	--	--	--	--	--	--	--
05-23-85	--	--	--	--	--	--	<10	--	--	--	25
07-31-69	--	--	--	--	--	--	--	--	--	--	--
07-09-45	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Kingfisher County—Continued									
19N-07W-36 CD 1	360431097535901	07-09-45	--	110CMTA	47	--	--	--	--
19N-08W-03 DCD 1	360845098021001	07-23-86	1410	110CMTA	102	OWRB	ODEQ	750	7.6
		08-18-87	1000	110CMTA	102	OWRB	ODEQ	600	7.2
19N-08W-05 B 1	360903098050301	10-04-50	--	110CMTA	82	--	--	711	--
19N-08W-08 DDA 1	360758098041001	05-30-85	1630	110CMTA	109	USGS	OGS	850	7.1
19N-08W-17 DCD 1	360657098041701	06-09-88	1600	110CMTA	74	USGS	NWQL	715	7.3
19N-08W-20 BBB 1	360655098050501	10-05-50	--	110CMTA	48	--	--	670	--
Logan County									
16N-04W-04 ABB 1	355353097373901	11-20-77	1200	318GRBR	73	URE	URE	1,460	6.6
		06-06-85	1158	318GRBR	73	OWRB	ODEQ	550	6.4
16N-04W-18 ABA 1	355211097394201	05-22-85	1230	110CMTA	28	USGS	OGS	770	7.5
17N-02W-07 CBB 1	355748097273001	02-10-71	--	318GRBR	90	USGS	ODWQL	435	7.9
17N-03W-01 DCD 1	355818097280301	11-18-77	1400	318GRBR	170	URE	URE	890	6.4
17N-03W-23 DDD 1	355543097284701	06-03-85	1030	110CMTA	112	USGS	OGS	798	7.2
17N-03W-29 BBC 1	355528097330201	05-21-85	0915	110CMTA	45	USGS	OGS	1,500	6.8
17N-04W-06 AAA 1	355902097392601	12-04-77	1600	110CMTA	48	URE	URE	830	7.1
17N-04W-17 DAD 1	355652097382501	05-22-85	0930	110CMTA	105	USGS	OGS	790	6.8
17N-04W-19 BBC 1	355622097402301	11-11-77	1500	110CMTA	35	URE	URE	430	6.5
17N-04W-20 BBD 1	355617097390601	04-28-67	--	110CMTA	92	USGS	ODWQL	1,500	8.3
17N-04W-21 CCC 1	355542097381801	07-18-86	0830	110CMTA	80	OWRB	ODEQ	360	7.1
17N-04W-23 DCD 1	355543097353001	06-06-85	1259	110CMTA	203	OWRB	ODEQ	850	6.7
17N-04W-28 C 1	355457097380301	05-02-67	--	110CMTA	12	USGS	ODWQL	568	8.4
17N-04W-28 CCD 1	355445097380201	05-02-67	--	110CMTA	65	USGS	ODWQL	321	7.3
17N-04W-28 CDC 1	355445097375401	05-02-67	--	110CMTA	44	USGS	ODWQL	554	7.9

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Kingfisher County—Continued												
07-09-45	18.0	520	--	150	--	38	--	--	45	--	204	0
07-23-86	17.0	240	70	--	19	--	51	--	--	--	--	--
08-18-87	17.0	--	64	--	18	--	46	--	--	--	--	--
10-04-50	--	270	--	85	--	14	--	--	55	--	367	0
05-30-85	17.0	250	--	79	--	13	--	60	--	3.8	--	--
06-09-88	17.0	250	--	79	--	13	--	62	--	2.3	--	--
10-05-50	17.0	240	--	76	--	13	--	--	50	--	288	0
Logan County—Continued												
11-20-77	17.5	290	--	79	--	23	--	180	--	--	--	--
06-06-85	18.5	160	46	--	13	--	57	--	--	--	--	--
05-22-85	17.0	170	--	42	--	16	--	99	--	2.6	--	--
02-10-71	16.0	190	--	--	--	--	--	--	19	--	224	0
11-18-77	14.5	390	--	100	--	33	--	23	--	--	--	--
06-03-85	16.5	290	--	77	--	24	--	30	--	9.2	--	--
05-21-85	16.5	460	--	120	--	40	--	110	--	4.5	--	--
12-04-77	14.5	300	--	78	--	26	--	77	--	--	--	--
05-22-85	16.0	230	--	52	--	24	--	65	--	3.5	--	--
11-11-77	16.5	160	--	45	--	12	--	47	--	--	--	--
04-28-67	--	480	--	--	--	--	--	150	--	2.0	432	8
07-18-86	17.0	120	36	--	11	--	38	--	--	--	--	--
06-06-85	24.0	560	92	--	60	--	56	--	--	--	--	--
05-02-67	--	160	--	--	--	--	--	61	--	4.8	248	8
05-02-67	--	78	--	--	--	--	--	37	--	2.0	124	0
05-02-67	--	150	--	--	--	--	--	63	--	2.6	232	0

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Kingfisher County—Continued												
07-09-45	167	18	230	--	--	--	--	870	32.0	--	--	--
07-23-86	198	49	75	--	0.32	--	--	461	--	7.80	--	--
08-18-87	182	35	62	--	0.24	--	--	437	--	9.00	--	--
10-04-50	301	28	32	--	--	--	--	444	3.60	--	--	--
05-30-85	E205	40	87	--	0.30	0.41	23	476	4.40	--	--	--
06-09-88	283	26	42	0.2	--	0.040	--	--	--	9.40	0.020	--
10-05-50	236	25	58	--	--	--	--	409	2.30	--	--	--
Logan County—Continued												
11-20-77	228	33	--	--	--	--	--	--	--	--	--	--
06-06-85	153	22	53	0.2	--	--	--	--	--	8.60	--	--
05-22-85	E244	13	91	--	0.40	0.34	29	492	1.50	--	--	--
02-10-71	180	13	16	--	--	--	--	262	2.05	--	--	--
11-18-77	200	11	--	--	--	--	--	--	--	--	--	--
06-03-85	--	36	34	--	0.20	0.24	21	428	11.0	--	--	--
05-21-85	E272	69	160	--	0.40	0.44	14	950	39.0	--	--	--
12-04-77	317	26	--	--	--	--	--	--	--	--	--	--
05-22-85	E235	67	45	--	0.10	0.28	25	468	1.80	--	--	--
11-11-77	132	20	--	--	--	--	--	--	--	--	--	--
04-28-67	366	140	210	--	--	--	--	978	0.316	--	--	--
07-18-86	131	<20	27	0.2	--	--	--	--	--	4.70	--	--
06-06-85	238	360	17	0.2	--	--	--	--	--	<0.500	--	--
05-02-67	218	23	37	--	--	--	--	354	1.97	--	--	--
05-02-67	98	19	15	--	--	--	--	213	3.61	--	--	--
05-02-67	189	29	44	--	--	--	--	343	0.542	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Kingfisher County—Continued												
07-09-45	--	--	--	--	--	--	--	--	--	--	--	--
07-23-86	--	<10	--	300	--	--	--	--	<5	--	<10	--
08-18-87	--	<10	--	200	--	--	--	--	<5	--	<10	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	<140	--	<10	--	--	--	--	70	--	2.9	--	<14
06-09-88	<300	--	<10	--	260	--	--	<500	--	<5.0	--	<14
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--
Logan County—Continued												
11-20-77	<10	--	1	--	180	<1	--	60	--	--	--	<4
06-06-85	--	<10	--	<200	--	--	--	--	<2	--	<10	--
05-22-85	<140	--	20	--	--	--	--	160	--	3.1	--	<14
02-10-71	--	--	--	--	--	--	--	--	--	--	--	--
11-18-77	<10	--	<1	--	410	<1	--	60	--	--	--	<4
06-03-85	<140	--	<10	--	--	--	--	70	--	18	--	<14
05-21-85	<140	--	<10	--	--	--	--	190	--	2.5	--	<14
12-04-77	<10	--	<1	--	350	<1	--	50	--	--	--	<4
05-22-85	<140	--	<10	--	--	--	--	130	--	4.5	--	<14
11-11-77	<10	--	<1	--	160	<1	--	40	--	--	--	<4
04-28-67	--	--	--	--	--	--	--	260	--	--	--	--
07-18-86	--	<10	--	200	--	--	--	--	<5	--	<10	--
06-06-85	--	<10	--	<200	--	--	--	--	<2	--	<10	--
05-02-67	--	--	--	--	--	--	--	80	--	--	--	--
05-02-67	--	--	--	--	--	--	--	60	--	--	--	--
05-02-67	--	--	--	--	--	--	--	90	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Kingfisher County—Continued												
07-09-45	--	--	--	--	--	--	--	--	--	--	--	--
07-23-86	--	--	<10	--	550	--	<45	--	--	<10	--	--
08-18-87	--	--	190	--	580	--	<45	--	--	28	--	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	<14	--	10	--	<100	--	--	10	--
06-09-88	--	<100	--	<10	--	42	--	<45	--	--	28	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--
Logan County—Continued												
11-20-77	--	<2	--	3	--	<10	--	--	19	--	<2	--
06-06-85	--	--	21	--	<100	--	<20	--	--	<20	--	--
05-22-85	--	--	--	<14	--	740	--	<100	--	--	350	--
02-10-71	--	--	--	--	--	--	--	--	--	--	--	--
11-18-77	--	<2	--	2	--	<10	--	--	5	--	32	--
06-03-85	--	--	--	29	--	60	--	<100	--	--	10	--
05-21-85	--	--	--	14	--	<10	--	<100	--	--	<10	--
12-04-77	--	<2	--	2	--	<10	--	--	28	--	3	--
05-22-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
11-11-77	--	<2	--	150	--	<10	--	--	11	--	9	--
04-28-67	--	--	--	--	--	--	--	--	--	--	--	--
07-18-86	--	--	<10	--	30	--	<45	--	--	<10	--	--
06-06-85	--	--	53	--	<100	--	<20	--	--	<20	--	--
05-02-67	--	--	--	--	--	--	--	--	--	--	--	--
05-02-67	--	--	--	--	--	--	--	--	--	--	--	--
05-02-67	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molyb-denum, total recov-erable (µg/L as Mo)	Molyb-denum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recover-able (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recov-erable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Kingfisher County—Continued											
07-09-45	--	--	--	--	--	--	--	--	--	--	--
07-23-86	--	--	--	--	--	<5	--	--	--	<5	--
08-18-87	--	--	--	--	--	7	--	--	--	20	--
10-04-50	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	--	--	--	<10	--	--	--	26
06-09-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
10-05-50	--	--	--	--	--	--	--	--	--	--	--
Logan County—Continued											
11-20-77	--	--	<4	--	<4	--	<1	--	<2.0	--	13
06-06-85	--	--	--	--	--	<5	--	--	--	30	--
05-22-85	--	--	--	--	--	--	<5	--	--	--	16
02-10-71	--	--	--	--	--	--	--	--	--	--	--
11-18-77	--	--	<4	--	<4	--	<1	--	<2.0	--	1,000
06-03-85	--	--	--	--	--	--	<5	--	--	--	100
05-21-85	--	--	--	--	--	--	<5	--	--	--	64
12-04-77	--	--	<4	--	<4	--	<1	--	<2.0	--	92
05-22-85	--	--	--	--	--	--	<5	--	--	--	290
11-11-77	--	--	<4	--	<4	--	<1	--	<2.0	--	98
04-28-67	--	--	--	--	--	--	--	--	--	--	--
07-18-86	--	--	--	--	--	<5	--	--	--	30	--
06-06-85	--	--	--	--	--	<5	--	--	--	10	--
05-02-67	--	--	--	--	--	--	--	--	--	--	--
05-02-67	--	--	--	--	--	--	--	--	--	--	--
05-02-67	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Logan County—Continued									
17N-04W-31 CDD 1	355357097400201	07-11-83	--	110CMTA	57	OWRB	ODEQ	--	7.8
		06-04-85	--	110CMTA	57	OWRB	ODEQ	550	6.7
17N-04W-35 BBB 1	355446097361201	06-09-86	1130	110CMTA	117	USGS	NWQL	1,450	7.1
17N-04W-35 DCC 1	355358097353801	07-11-83	--	110CMTA	102	OWRB	ODEQ	--	7.2
		06-04-85	1445	110CMTA	102	OWRB	ODEQ	1,750	6.1
18N-03W-33 DDA 1	355915097305401	11-18-77	1500	318GRBR	67	URE	URE	900	6.8
Major County									
20N-09W-03 CC 1	361405098085701	06-07-50	--	110CMTA	32	--	--	1,070	--
20N-09W-06 BA 1	361440098121201	06-07-50	--	110CMTA	67	--	--	597	--
20N-09W-09 BAA 1	361348098100201	06-04-85	0900	110CMTA	60	USGS	OGS	850	7.1
20N-09W-25 DC 1	361036098063301	06-07-50	--	110CMTA	86	--	--	342	--
20N-09W-28 BC 1	361102098101701	06-07-50	--	110CMTA	45	--	--	428	--
20N-10W-03 DA 1	361418098125801	06-07-50	--	110CMTA	21	--	--	596	--
20N-10W-12 CDD 1	361302098130601	06-13-88	1400	110CMTA	54	USGS	ODEQ	1,250	7.3
20N-10W-13 BB 1	361300098133001	06-07-50	--	110CMTA	33	--	--	647	--
21N-09W-20 DDD 1	361631098103501	04-20-51	--	110CMTA	50	--	--	726	7.7
21N-09W-28 DC 1	361549098095901	01-16-51	--	110CMTA	59	--	--	948	--
21N-09W-29 BD 1	361616098111901	06-07-50	--	110CMTA	48	--	--	650	--
21N-09W-33 AA 1	361536098094301	06-07-50	--	110CMTA	53	--	--	767	--
21N-10W-05 AB 1	361958098173001	06-09-50	--	110CMTA	42	--	--	500	--
21N-10W-06 AAD 1	361950098180801	06-06-85	1000	110CMTA	43	USGS	OGS	630	7.0
21N-10W-16 CC 1	361723098164401	03-08-51	--	110CMTA	39	--	--	543	7.5
21N-10W-21 DCC 1	361642098162501	06-07-50	--	110CMTA	14	--	--	479	--
21N-10W-23 CCC 1	361632098144201	07-16-86	1300	110CMTA	44	OWRB	ODEQ	675	7.8

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Logan County—Continued												
07-11-83	--	110	23	--	7.0	--	38	--	--	--	--	--
06-04-85	20.0	170	62	--	100	--	53	--	--	--	--	--
06-09-86	17.5	650	--	170	--	54	--	45	--	2.8	--	--
07-11-83	--	390	89	--	37	--	130	--	--	--	--	--
06-04-85	--	550	86	--	38	--	150	--	--	--	--	--
11-18-77	18.5	410	--	100	--	37	--	35	--	--	--	--
Major County—Continued												
06-07-50	18.0	420	--	110	--	34	--	--	65	--	397	0
06-07-50	16.5	250	--	74	--	16	--	--	33	--	306	0
06-04-85	17.0	420	--	120	--	30	--	81	--	3.5	--	--
06-07-50	18.0	110	--	32	--	7.6	--	--	33	--	178	0
06-07-50	18.0	180	--	52	--	12	--	--	23	--	232	0
06-07-50	16.5	250	--	70	--	18	--	--	31	--	314	0
06-13-88	19.0	280	--	78	--	20	--	160	--	2.4	--	--
06-07-50	15.0	240	--	62	--	21	--	--	51	--	316	0
04-20-51	16.0	240	--	70	--	16	--	67	--	3.7	338	0
01-16-51	16.5	400	--	110	--	30	--	--	42	--	303	0
06-07-50	16.5	200	--	56	--	15	--	--	66	--	306	0
06-07-50	16.5	340	--	94	--	26	--	--	25	--	286	0
06-09-50	17.0	180	--	52	--	12	--	--	38	--	238	0
06-06-85	18.0	310	--	98	--	17	--	36	--	1.8	--	--
03-08-51	16.5	200	--	62	--	12	--	--	37	--	254	0
06-07-50	15.5	220	--	61	--	16	--	--	17	--	232	0
07-16-86	--	240	74	--	18	--	45	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Logan County—Continued												
07-11-83	115	<20	<10	0.3	--	--	--	--	--	8.70	--	--
06-04-85	166	29	36	0.4	--	--	--	--	--	9.50	--	--
06-09-86	204	510	21	--	0.10	0.16	36	1050	0.800	--	--	--
07-11-83	297	<20	230	<0.1	--	--	--	--	--	<0.100	--	--
06-04-85	329	<20	330	0.4	--	--	--	--	--	0.700	--	--
11-18-77	330	5.0	--	--	--	--	--	--	--	--	--	--
Major County—Continued												
06-07-50	326	47	120	--	--	--	--	635	3.40	--	--	--
06-07-50	251	24	15	--	--	--	--	360	7.20	--	--	--
06-04-85	E268	44	180	--	0.30	0.56	22	764	10.0	--	--	--
06-07-50	146	8.6	19	--	--	--	--	211	0.230	--	--	--
06-07-50	190	9.1	13	--	--	--	--	257	2.90	--	--	--
06-07-50	258	1.3	39	--	--	--	--	337	0.520	--	--	--
06-13-88	265	46	210	0.4	--	0.12	--	--	--	4.00	0.020	--
06-07-50	259	12	56	--	--	--	--	360	0.320	--	--	--
04-20-51	277	28	40	--	0.20	--	24	440	5.60	--	--	--
01-16-51	249	38	130	--	--	--	--	608	5.40	--	--	--
06-07-50	251	29	27	--	--	--	--	397	7.20	--	--	--
06-07-50	235	43	67	--	--	--	--	474	6.10	--	--	--
06-09-50	195	18	28	--	--	--	--	296	2.50	--	--	--
06-06-85	E180	38	100	--	0.20	0.12	23	556	9.50	--	--	--
03-08-51	208	19	22	--	0.10	--	17	334	9.00	--	--	--
06-07-50	190	18	8.8	--	--	--	--	295	9.50	--	--	--
07-16-86	225	<20	28	--	0.48	--	--	429	--	12.3	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Logan County—Continued												
07-11-83	--	<10	--	200	--	--	--	--	<2	--	<10	--
06-04-85	--	<10	--	<200	--	--	--	--	<2	--	<10	--
06-09-86	<140	--	<10	--	10	--	--	640	--	4.8	--	<14
07-11-83	--	<10	--	600	--	--	--	--	<2	--	<10	--
06-04-85	--	<10	--	600	--	--	--	--	<2	--	<10	--
11-18-77	10	--	<1	--	560	<1	--	120	--	--	--	<4
Major County—Continued												
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-04-85	140	--	<10	--	1400	--	--	90	--	1.6	--	<14
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-13-88	<300	--	<10	--	510	--	--	<500	--	<5.0	--	<14
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
04-20-51	--	--	--	--	--	--	--	--	--	--	--	--
01-16-51	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-09-50	--	--	--	--	--	--	--	--	--	--	--	--
06-06-85	<140	--	<10	--	--	--	--	60	--	5.5	--	<14
03-08-51	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
07-16-86	--	14	--	500	--	--	--	--	<5	--	<10	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Logan County—Continued												
07-11-83	--	--	6	--	310	--	<20	--	--	<20	--	--
06-04-85	--	--	11	--	<100	--	<20	--	--	<20	--	--
06-09-86	--	--	--	<10	--	50	--	<100	--	--	<10	--
07-11-83	--	--	10	--	<100	--	<20	--	--	30	--	--
06-04-85	--	--	96	--	<100	--	<20	--	--	<20	--	--
11-18-77	--	<2	--	4	--	<10	--	--	12	--	180	--
Major County—Continued												
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-04-85	--	--	--	<14	--	10	--	<100	--	--	<10	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-13-88	--	<100	--	<10	--	1500	--	<45	--	--	19	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
04-20-51	--	--	--	--	E100	--	--	--	--	--	--	--
01-16-51	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-09-50	--	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	<14	--	20	--	<100	--	--	<10	--
03-08-51	--	--	--	--	E100	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--	--
07-16-86	--	--	<10	--	30	--	<45	--	--	<10	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molybdenum, total recoverable (µg/L as Mo)	Molybdenum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recoverable (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recoverable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Logan County—Continued											
07-11-83	--	--	--	--	--	<5	--	--	--	50	--
06-04-85	--	--	--	--	--	<5	--	--	--	10	--
06-09-86	--	--	--	--	--	--	--	--	--	--	50
07-11-83	--	--	--	--	--	<5	--	--	--	20	--
06-04-85	--	--	--	--	--	<5	--	--	--	40	--
11-18-77	--	--	<4	--	<4	--	<1	--	<2.0	--	570
Major County—Continued											
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-04-85	--	--	--	--	--	--	<5	--	--	--	17
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-13-88	<0.5	--	<100	--	<25	--	14	--	<7.0	--	<5
06-07-50	--	--	--	--	--	--	--	--	--	--	--
04-20-51	--	--	--	--	--	--	--	--	--	--	--
01-16-51	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--
06-09-50	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	--	--	--	<5	--	--	--	57
03-08-51	--	--	--	--	--	--	--	--	--	--	--
06-07-50	--	--	--	--	--	--	--	--	--	--	--
07-16-86	--	--	--	--	--	<5	--	--	--	<5	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Major County									
21N-10W-23 CCC 1	361632098144201	08-20-87	0920	110CMTA	44	OWRB	ODEQ	600	8.1
21N-10W-26 BA 1	361629098143301	06-08-50	--	110CMTA	51	--	--	710	--
21N-11W-09 A 1	361859098224401	08-13-53	1550	110CMTA	100	--	--	532	--
22N-09W-17 AA 1	362320098105501	12-15-50	--	319CDHL	80	--	--	1,510	--
22N-10W-08 CCB 1	362334098180201	06-06-85	1340	110CMTA	232	USGS	OGS	640	7.2
22N-10W-14 D 1	362254098140801	12-14-50	--	110CMTA	206	--	--	680	--
22N-10W-16 D 1	362254098161701	10-05-50	--	110CMTA	43	--	--	835	--
22N-10W-24 CDC 1	362147098132201	05-30-85	1315	110CMTA	99	USGS	OGS	440	7.1
22N-10W-31 BAA 1	362045098183101	06-14-88	1400	110CMTA	51	USGS	NWQL	504	7.3
22N-11W-05 DDD 1	362421098232501	06-10-86	1200	110CMTA	64	USGS	OGS	654	6.6
22N-11W-08 BD 1	362406098241201	06-12-50	--	110CMTA	62	--	--	463	--
22N-11W-11 CCD 1	362332098210201	06-10-86	1400	110CMTA	101	USGS	OGS	790	7.4
22N-11W-14 A 1	362320098203501	08-07-50	--	110CMTA	80	--	--	457	--
22N-11W-22 D 1	362202098213901	08-07-50	--	110CMTA	67	--	--	485	--
22N-11W-22 DDA 1	362156098211701	06-11-86	0900	110CMTA	69	USGS	OGS	659	7.4
22N-11W-25 DD 1	362103098192301	08-07-50	--	110CMTA	61	--	--	501	--
22N-11W-32 BCA 1	362036098241401	06-11-86	1100	110CMTA	22	USGS	OGS	530	6.9
22N-12W-01 DDA 1	362427098253601	07-16-86	1420	110CMTA	43	OWRB	ODEQ	1,100	7.5
		08-17-87	1330	110CMTA	43	OWRB	ODEQ	1,100	7.5
		06-15-88	1000	110CMTA	43	USGS	NWQL	958	7.3
23N-11W-19 DAA 1	362716098243001	06-15-88	1400	110CMTA	55	USGS	NWQL	410	7.5
Woods County									
23N-13W-08 ACC 1	362905098364701	06-13-85	1215	110CMTA	55	USGS	OGS	404	6.8
23N-13W-26 AAB 1	362654098331701	06-04-85	1230	110CMTA	60	USGS	OGS	1,100	7.3

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Major County—Continued												
08-20-87	17.0	280	75	--	18	--	45	--	--	--	--	--
06-08-50	--	250	--	76	--	15	--	--	62	--	339	0
08-13-53	--	--	--	--	--	--	--	--	--	--	--	--
12-15-50	--	480	--	120	--	44	--	--	170	--	748	0
06-06-85	16.5	250	--	68	--	20	--	30	--	2.8	--	--
12-14-50	--	260	--	38	--	41	--	--	42	--	291	0
10-05-50	16.0	380	--	100	--	30	--	--	12	--	326	0
05-30-85	18.0	250	--	65	--	22	--	28	--	1.7	--	--
06-14-88	17.0	200	--	62	--	10	--	34	--	1.2	--	--
06-10-86	16.5	230	--	71	--	13	--	46	--	2.0	--	--
06-12-50	16.0	200	--	60	--	12	--	--	22	--	170	25
06-10-86	17.0	300	--	90	--	19	--	31	--	2.0	--	--
08-07-50	--	180	--	54	--	12	--	--	27	--	196	0
08-07-50	--	210	--	63	--	12	--	--	18	--	226	0
06-11-86	17.0	260	--	79	--	14	--	29	--	1.7	--	--
08-07-50	--	200	--	63	--	11	--	--	22	--	192	0
06-11-86	16.5	230	--	68	--	14	--	23	--	0.90	--	--
07-16-86	--	400	120	--	22	--	55	--	--	--	--	--
08-17-87	20.0	440	130	--	25	--	65	--	--	--	--	--
06-15-88	17.0	380	110	110	22	22	55	55	--	1.8	--	--
06-15-88	17.5	170	--	53	--	10	--	25	--	2.0	--	--
Woods County—Continued												
06-13-85	21.0	190	--	55	--	13	--	25	--	2.0	--	--
06-04-85	16.0	340	--	110	--	17	--	45	--	8.3	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Major County—Continued												
08-20-87	238	<20	37	--	0.40	--	--	461	--	16.2	--	--
06-08-50	278	29	42	--	--	--	--	430	5.00	--	--	--
08-13-53	--	--	23	--	--	--	--	--	--	--	--	--
12-15-50	614	32	140	--	--	--	--	867	0.020	--	--	--
06-06-85	E170	26	79	--	0.20	0.14	21	400	3.40	--	--	--
12-14-50	239	32	54	--	--	--	--	367	2.10	--	--	--
10-05-50	267	25	42	--	--	--	--	578	14.0	--	--	--
05-30-85	E186	22	45	--	0.20	0.13	22	406	12.0	--	--	--
06-14-88	163	<20	38	0.3	--	<0.010	--	--	--	6.80	0.020	--
06-10-86	245	18	33	--	0.20	0.12	26	368	6.40	--	--	--
06-12-50	181	13	28	--	--	--	--	286	3.60	--	--	--
06-10-86	139	16	130	--	0.30	0.66	22	538	6.70	--	--	--
08-07-50	161	22	30	--	--	--	--	282	4.50	--	--	--
08-07-50	185	13	26	--	--	--	--	297	2.90	--	--	--
06-11-86	181	14	72	--	0.20	0.12	27	420	6.40	--	--	--
08-07-50	157	19	35	--	--	--	--	300	6.80	--	--	--
06-11-86	212	19	22	--	0.20	0.070	21	324	6.70	--	--	--
07-16-86	230	30	170	--	0.23	--	--	756	--	4.70	--	--
08-17-87	252	40	190	--	0.16	--	--	753	--	7.50	--	--
06-15-88	231	34	150	0.2	--	0.020	--	--	--	6.60	0.050	<300
06-15-88	188	<20	<10	0.5	--	<0.010	--	--	--	4.60	0.020	--
Woods County—Continued												
06-13-85	E107	28	41	--	0.20	0.060	15	460	15.0	--	--	--
06-04-85	E127	48	180	--	0.30	0.15	19	734	6.10	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Major County—Continued												
08-20-87	--	<10	--	500	--	--	--	--	<5	--	<10	--
06-08-50	--	--	--	--	--	--	--	--	--	--	--	--
08-13-53	--	--	--	--	--	--	--	--	--	--	--	--
12-15-50	--	--	--	--	--	--	--	--	--	--	--	--
06-06-85	<140	--	<10	--	--	--	--	60	--	2.8	--	<14
12-14-50	--	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	--	--	--	--	--	--	--	--	--
06-14-88	<300	--	<10	--	260	--	--	<500	--	<5.0	--	<14
06-10-86	<140	--	<10	--	200	--	--	90	--	0.8	--	<14
06-12-50	--	--	--	--	--	--	--	--	--	--	--	--
06-10-86	<140	--	<10	--	1100	--	--	60	--	0.8	--	<14
08-07-50	--	--	--	--	--	--	--	--	--	--	--	--
08-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-11-86	<140	--	<10	--	1100	--	--	50	--	0.9	--	<14
08-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-11-86	<140	--	<10	--	550	--	--	80	--	1.0	--	<14
07-16-86	--	<10	--	500	--	--	--	--	<5	--	<10	--
08-17-87	--	<10	--	400	--	--	--	--	<5	--	<10	--
06-15-88	<300	<10	<10	300	330	--	<500	<500	<5	<5.0	<10	<14
06-15-88	<300	--	<10	--	260	--	--	<500	--	<5.0	--	<14
Woods County—Continued												
06-13-85	<140	--	--	--	--	--	--	50	--	2.0	--	<14
06-04-85	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Major County—Continued												
08-20-87	--	--	<10	--	30	--	<45	--	--	<10	--	--
06-08-50	--	--	--	--	--	--	--	--	--	--	--	--
08-13-53	--	--	--	--	--	--	--	--	--	--	--	--
12-15-50	--	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	<14	--	<10	--	<100	--	--	<10	--
12-14-50	--	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	--	--	--	--	--	--	--	--	--
06-14-88	--	<100	--	<10	--	50	--	<45	--	--	<10	--
06-10-86	--	--	--	<10	--	20	--	<100	--	--	<10	--
06-12-50	--	--	--	--	--	--	--	--	--	--	--	--
06-10-86	--	--	--	<10	--	20	--	<100	--	--	<10	--
08-07-50	--	--	--	--	--	--	--	--	--	--	--	--
08-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-11-86	--	--	--	<10	--	<10	--	<100	--	--	<10	--
08-07-50	--	--	--	--	--	--	--	--	--	--	--	--
06-11-86	--	--	--	<10	--	<10	--	<100	--	--	<10	--
07-16-86	--	--	<10	--	40	--	<45	--	--	<10	--	--
08-17-87	--	--	<10	--	40	--	<45	--	--	<10	--	--
06-15-88	<100	<100	<10	<10	<10	<10	<45	<45	--	<10	<10	<0.50
06-15-88	--	<100	--	<10	--	<100	--	<45	--	--	<10	--
Woods County—Continued												
06-13-85	--	--	--	51	--	40	--	<100	--	--	10	--
06-04-85	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molybdenum, total recoverable (µg/L as Mo)	Molybdenum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recoverable (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recoverable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Major County—Continued											
08-20-87	--	--	--	--	--	6	--	--	--	6	--
06-08-50	--	--	--	--	--	--	--	--	--	--	--
08-13-53	--	--	--	--	--	--	--	--	--	--	--
12-15-50	--	--	--	--	--	--	--	--	--	--	--
06-06-85	--	--	--	--	--	--	<5	--	--	--	14
12-14-50	--	--	--	--	--	--	--	--	--	--	--
10-05-50	--	--	--	--	--	--	--	--	--	--	--
05-30-85	--	--	--	--	--	--	--	--	--	--	--
06-14-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
06-10-86	--	--	--	--	--	--	--	--	--	--	19
06-12-50	--	--	--	--	--	--	--	--	--	--	--
06-10-86	--	--	--	--	--	--	--	--	--	--	46
08-07-50	--	--	--	--	--	--	--	--	--	--	--
08-07-50	--	--	--	--	--	--	--	--	--	--	--
06-11-86	--	--	--	--	--	--	--	--	--	--	21
08-07-50	--	--	--	--	--	--	--	--	--	--	--
06-11-86	--	--	--	--	--	--	--	--	--	--	23
07-16-86	--	--	--	--	--	<5	--	--	--	20	--
08-17-87	--	--	--	--	--	<5	--	--	--	50	--
06-15-88	<0.5	<100	<100	<25	<25	5	<5	<7	<7.0	10	13
06-15-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
Woods County—Continued											
06-13-85	--	--	--	--	--	--	--	--	--	--	110
06-04-85	--	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Woods County—Continued									
23N-14W-13 DCD 1	362754098383601	07-17-86	1530	110CMTA	95	OWRB	ODEQ	540	7.2
		08-25-87	1055	110CMTA	95	OWRB	ODEQ	350	7.8
		06-16-88	1030	110CMTA	95	USGS	NWQL	510	7.4
23N-14W-36 BD 1	362549098391001	05-24-72	--	110CMTA	30	USGS	ODWQL	421	7.8
24N-13W-10 CBB 1	363416098351201	06-05-85	1030	110CMTA	91	USGS	OGS	2,300	6.9
24N-13W-32 DAA 1	363042098363101	05-24-72	--	110CMTA	44	USGS	ODWQL	277	6.7
24N-14W-23 CCC 1	363209098402601	06-15-88	1700	110CMTA	60	USGS	NWQL	332	6.7
24N-15W-06 ABB 1	363538098503601	07-17-86	1215	110CMTA	58	OWRB	ODEQ	360	7.3
		08-25-87	1150	110CMTA	58	OWRB	ODEQ	325	7.2
		06-16-88	1400	110CMTA	58	USGS	NWQL	426	7.0
24N-15W-18 DAA 1	363324098501201	06-11-85	--	110CMTA	50	USGS	OGS	410	6.9
24N-15W-28 DAD 1	363133098481801	06-29-72	--	110CMTA	24	USGS	ODWQL	710	8.0
24N-16W-11 ACB 1	363429098524501	06-11-85	1400	110CMTA	55	USGS	OGS	925	7.1
25N-13W-08 CAB 1	363930098373201	06-06-85	1325	110CMTA	65	USGS	OGS	4,010	7.1
25N-13W-11 ADC 1	363935098334101	06-12-86	1330	110CMTA	27	USGS	OGS	1,460	6.7
25N-14W-07 DAD 1	363925098442301	06-13-85	--	110CMTA	26	USGS	OGS	1,000	7.2
25N-14W-19 ADD 1	363752098441801	06-17-86	1500	110CMTA	24	USGS	OGS	1,620	6.6
25N-14W-35 CB 1	363601098405701	05-24-72	--	110CMTA	38	USGS	ODWQL	704	8.0
25N-15W-08 DAC 1	363927098495301	06-11-85	--	110CMTA	25	USGS	OGS	2,800	7.2
25N-15W-32 CCD 1	363545098503201	06-19-86	1430	110CMTA	69	USGS	OGS	384	6.8
25N-16W-13 BBB 1	363907098524701	06-17-86	1215	110CMTA	47	USGS	OGS	4,200	7.0
25N-16W-29 ACA 1	363708098562701	06-11-85	1000	110CMTA	64	OWRB	ODEQ	850	6.4
25N-17W-01 CDD 1	364005098585501	06-12-85	1130	110CMTA	44	USGS	OGS	444	7.0
25N-17W-01 DCC 1	364004098584701	06-16-88	1700	110CMTA	70	USGS	ODEQ	693	7.3

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Woods County—Continued												
07-17-86	--	220	71	--	13	--	27	--	--	--	--	--
08-25-87	17.0	230	66	--	11	--	23	--	--	--	--	--
06-16-88	17.5	230	74	72	13	13	28	28	--	1.8	--	--
05-24-72	--	180	--	--	--	--	--	16	--	--	--	--
06-05-85	17.0	1,100	--	240	--	110	--	95	--	6.0	--	--
05-24-72	16.0	120	--	--	--	--	--	11	--	--	--	--
06-15-88	18.0	140	--	43	--	7.0	--	18	--	1.7	--	--
07-17-86	--	120	42	--	9.0	--	24	--	--	--	--	--
08-25-87	16.0	160	44	--	9.0	--	23	--	--	--	--	--
06-16-88	18.0	170	50	52	9.0	9.0	23	24	--	1.6	--	--
06-11-85	17.5	140	--	44	--	7.6	--	20	--	1.6	--	--
06-29-72	15.0	300	--	--	--	--	--	46	--	--	--	--
06-11-85	18.0	310	--	89	--	21	--	54	--	5.5	--	--
06-06-85	17.0	2,100	--	470	--	230	--	340	--	1.9	--	--
06-12-86	16.5	590	--	140	--	58	--	95	--	2.3	--	--
06-13-85	15.0	530	--	110	--	62	--	36	--	18	--	--
06-17-86	15.5	780	--	170	--	87	--	69	--	3.3	--	--
05-24-72	16.0	330	--	--	--	--	--	30	--	--	--	--
06-11-85	17.0	1,000	--	220	--	120	--	230	--	2.3	--	--
06-19-86	17.0	140	--	46	--	6.7	--	24	--	2.1	--	--
06-17-86	18.0	1,600	--	400	--	150	--	210	--	3.9	--	--
06-11-85	21.0	350	93	--	18	--	49	--	--	--	--	--
06-12-85	17.0	250	--	78	--	14	--	28	--	1.7	--	--
06-16-88	17.5	300	91	92	16	17	41	40	--	1.3	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Woods County—Continued												
07-17-86	216	<20	19	--	0.49	--	--	358	--	6.10	--	--
08-25-87	207	40	17	--	0.36	--	--	329	--	6.10	--	--
06-16-88	228	33	19	0.4	--	0.010	--	--	--	6.30	0.050	<300
05-24-72	170	42	16	--	--	--	--	262	--	--	--	--
06-05-85	E184	570	120	--	0.70	0.26	16	1860	89.0	--	--	--
05-24-72	86	45	8.0	--	--	--	--	185	--	--	--	--
06-15-88	113	23	16	0.2	--	<0.010	--	--	--	6.60	0.020	--
07-17-86	90	22	13	--	0.32	--	--	299	--	12.1	--	--
08-25-87	101	<20	16	--	0.27	--	--	289	--	15.3	--	--
06-16-88	116	39	15	0.3	--	0.010	--	--	--	13.4	0.090	<300
06-11-85	E115	27	7.2	--	0.30	0.050	21	260	9.20	--	--	--
06-29-72	324	97	21	--	--	--	--	480	--	--	--	--
06-11-85	E199	79	71	--	0.90	0.20	16	536	14.0	--	--	--
06-06-85	--	2,500	160	--	2.5	0.42	13	4,660	24.0	--	--	--
06-12-86	329	200	100	--	0.60	0.18	20	986	38.0	--	--	--
06-13-85	E196	260	40	--	0.50	0.14	16	918	30.0	--	--	--
06-17-86	256	600	35	--	1.2	0.040	13	1,290	14.0	--	--	--
05-24-72	306	89	25	--	--	--	--	460	--	--	--	--
06-11-85	E225	720	200	--	0.30	0.39	14	2,190	81.0	--	--	--
06-19-86	113	32	9.6	--	0.20	0.12	26	268	17.0	--	--	--
06-17-86	326	1,400	460	--	0.20	0.39	14	3,500	14.0	--	--	--
06-11-85	84	170	81	--	0.39	--	--	579	--	<0.00	--	--
06-12-85	E165	71	21	--	0.40	0.080	18	402	13.0	--	--	--
06-16-88	327	58	40	0.4	--	0.010	--	--	--	14.9	0.050	<300

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Woods County—Continued												
07-17-86	--	<10	--	200	--	--	--	--	<5	--	<10	--
08-25-87	--	<10	--	200	--	--	--	--	<5	--	<10	--
06-16-88	<300	<10	<10	200	220	--	<500	<500	<5	<5.0	<10	<14
05-24-72	--	--	--	--	--	--	--	--	--	--	--	--
06-05-85	170	--	<10	--	--	--	--	320	--	2.6	--	<14
05-24-72	--	--	--	--	--	--	--	--	--	--	--	--
06-15-88	<300	--	<10	--	160	--	--	<500	--	<5.0	--	<14
07-17-86	--	<10	--	100	--	--	--	--	<5	--	<10	--
08-25-87	--	<10	--	100	--	--	--	--	<5	--	<10	--
06-16-88	<300	<10	<10	200	170	--	<500	<500	<5	<5.0	<10	<14
06-11-85	<140	--	<10	--	--	--	--	60	--	1.7	--	<14
06-29-72	--	--	--	--	--	--	--	--	--	--	--	--
06-11-85	<140	--	<10	--	--	--	--	130	--	5.5	--	<14
06-06-85	210	--	<10	--	--	--	--	540	--	0.9	--	<14
06-12-86	<140	--	<10	--	40	--	--	210	--	0.9	--	<14
06-13-85	<140	--	<10	--	--	--	--	530	--	2.0	--	<14
06-17-86	<140	--	<10	--	<10	--	--	650	--	0.9	--	<14
05-24-72	--	--	--	--	--	--	--	--	--	--	--	--
06-11-85	<100	--	<10	--	--	--	--	670	--	4.5	--	<14
06-19-86	<140	--	<10	--	190	--	--	40	--	1.8	--	<14
06-17-86	<140	--	<10	--	<10	--	--	400	--	1.3	--	<14
06-11-85	--	--	--	--	--	--	--	--	--	--	--	--
06-12-85	<100	--	<10	--	--	--	--	70	--	3.1	--	<14
06-16-88	<300	<10	<10	100	130	--	<500	<500	<5	<5.0	<10	<14

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Woods County—Continued												
07-17-86	--	--	<10	--	80	--	<45	--	--	<10	--	--
08-25-87	--	--	<10	--	50	--	<45	--	--	<10	--	--
06-16-88	<100	<100	<10	<10	<10	<10	<45	<45	--	<10	<20	<0.50
05-24-72	--	--	--	--	--	--	--	--	--	--	--	--
06-05-85	--	--	--	32	--	10	--	<100	--	--	<10	--
05-24-72	--	--	--	--	--	--	--	--	--	--	--	--
06-15-88	--	<100	--	<10	--	23	--	<45	--	--	<10	--
07-17-86	--	--	<10	--	110	--	<45	--	--	<10	--	--
08-25-87	--	--	<10	--	20	--	<45	--	--	<10	--	--
06-16-88	<100	<100	<10	<10	10	10	<45	<45	--	<10	<10	<0.50
06-11-85	--	--	--	<14	--	10	--	<100	--	--	<10	--
06-29-72	--	--	--	--	--	--	--	--	--	--	--	--
06-11-85	--	--	--	14	--	60	--	<100	--	--	10	--
06-06-85	--	--	--	<14	--	330	--	<100	--	--	30	--
06-12-86	--	--	--	<10	--	<10	--	<100	--	--	<10	--
06-13-85	--	--	--	19	--	20	--	<100	--	--	<10	--
06-17-86	--	--	--	<10	--	20	--	<100	--	--	<10	--
05-24-72	--	--	--	--	--	--	--	--	--	--	--	--
06-11-85	--	--	--	<14	--	50	--	<100	--	--	<10	--
06-19-86	--	--	--	<10	--	10	--	<100	--	--	<10	--
06-17-86	--	--	--	<10	--	20	--	<100	--	--	<10	--
06-11-85	--	--	--	--	160	--	--	--	--	--	--	--
06-12-85	--	--	--	<14	--	10	--	<100	--	--	<10	--
06-16-88	<100	<100	<10	<10	70	16	<45	<45	--	<10	<10	<0.50

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molybdenum, total recoverable (µg/L as Mo)	Molybdenum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recoverable (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recoverable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Woods County—Continued											
07-17-86	--	--	--	--	--	<5	--	--	--	30	--
08-25-87	--	--	--	--	--	7	--	--	--	<5	--
06-16-88	<0.5	<100	<100	<25	<25	15	11	<7	<77	<5	<5
05-24-72	--	--	--	--	--	--	--	--	--	--	--
06-05-85	--	--	--	--	--	--	<5	--	--	--	180
05-24-72	--	--	--	--	--	--	--	--	--	--	--
06-15-88	<0.5	--	<100	--	<25	--	<5	--	<7.0	--	<5
07-17-86	--	--	--	--	--	<5	--	--	--	<5	--
08-25-87	--	--	--	--	--	<5	--	--	--	10	--
06-16-88	<0.5	<100	<100	<25	<25	<5	6	<7	<7.0	<5	<5
06-11-85	--	--	--	--	--	--	<5	--	--	--	150
06-29-72	--	--	--	--	--	--	--	--	--	--	--
06-11-85	--	--	--	--	--	--	<5	--	--	--	48
06-06-85	--	--	--	--	--	--	<5	--	--	--	65
06-12-86	--	--	--	--	--	--	--	--	--	--	65
06-13-85	--	--	--	--	--	--	<5	--	--	--	33
06-17-86	--	--	--	--	--	--	--	--	--	--	310
05-24-72	--	--	--	--	--	--	--	--	--	--	--
06-11-85	--	--	--	--	--	--	<5	--	--	--	660
06-19-86	--	--	--	--	--	--	--	--	--	--	63
06-17-86	--	--	--	--	--	--	--	--	--	--	440
06-11-85	--	--	--	--	--	--	--	--	--	--	--
06-12-85	--	--	--	--	--	--	<5	--	--	--	59
06-16-88	<0.5	<100	<100	<25	<25	<5	5	<7	<7.0	10	<5

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Local number	Site identification number	Date	Time	Geologic unit	Depth of well, total (feet)	Agency collecting sample	Agency analyzing sample	Specific conductance (µs/cm)	pH (standard units)
Woods County—Continued									
25N-17W-01 DCC 1	364004098584701	07-17-86	1320	110CMTA	70	OWRB	ODEQ	650	7.5
		08-25-87	1315	110CMTA	70	OWRB	ODEQ	590	7.9
26N-13W-04 CCB 1	364513098361601	06-18-86	1652	110CMTA	152	USGS	OGS	3,640	7.0
26N-13W-07 BBB 1	364514098385001	06-16-88	1900	110CMTA	81	USGS	NWQL	1,280	7.1
		08-25-87	1315	110CMTA	81	OWRB	ODEQ	1,080	7.6
26N-13W-09 BAA 1	364513098361701	06-12-85	--	110CMTA	23	USGS	NWQL	6,500	6.8
26N-13W-11 BAB 1	364512098341801	06-18-86	1530	110CMTA	35	USGS	OGS	643	7.2
26N-13W-15 CDD 1	364337098351001	12-20-66	--	110CMTA	60	--	--	1,840	7.6
26N-14W-08 BBA 1	364512098440601	06-13-85	--	110CMTA	62	USGS	OGS	550	7.1
26N-14W-18 CBB 1	364355098451701	06-18-86	1130	110CMTA	222	USGS	OGS	5,260	7.0
26N-17W-28 CBA 1	364210099021901	06-11-85	1030	110CMTA	27	USGS	OGS	1,030	6.5
27N-14W-34 BBD 1	364652098415401	06-19-86	0940	110CMTA	15	USGS	OGS	2,190	6.8

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Temperature, water (deg C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, total recoverable (mg/L as Ca)	Calcium, dissolved (mg/L as Ca)	Magnesium, total recoverable (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, total recoverable (mg/L as Na)	Sodium, dissolved (mg/L as Na)	Sodium + potassium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Bicarbonate, water wh fet lab (mg/L as HCO_3)	Carbonate, water wh fet lab (mg/L as CO_3)
Woods County—Continued												
07-17-86	16.0	270	88	--	16	--	36	--	--	--	--	--
08-25-87	16.0	300	86	--	16	--	35	--	--	--	--	--
06-18-86	18.0	1,600	--	410	--	130	--	120	--	5.4	--	--
06-16-88	19.5	540	150	150	49	41	90	89	--	3.7	--	--
08-25-87	16.0	530	150	--	51	--	73	--	--	--	--	--
06-12-85	15.5	2,800	--	610	--	320	--	370	--	4.8	--	--
06-18-86	16.5	320	--	90	--	24	--	60	--	3.3	--	--
12-20-66	4.5	560	--	--	--	--	--	170	--	3.9	364	0
06-13-85	16.5	400	--	110	--	30	--	38	--	3.3	--	--
06-18-86	17.0	1,900	--	450	--	190	--	340	--	3.9	--	--
06-11-85	19.0	610	--	200	--	27	--	49	--	14	--	--
06-19-86	16.5	940	--	230	--	89	--	150	--	2.2	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Alkalinity, water wh tot fet lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, total (mg/L as F)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Nitrogen, nitrate dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 total (mg/L as N)	Phosphorus, ortho total (mg/L as P)	Aluminum, total recoverable (µg/L as Al)
Woods County—Continued												
07-17-86	205	44	30	--	0.41	--	--	461	--	12.6	--	--
08-25-87	203	41	40	--	0.31	--	--	465	--	15.6	--	--
06-18-86	129	1,600	200	--	0.50	0.40	15	3,160	34.0	--	--	--
06-16-88	210	280	100	0.9	--	0.030	--	--	--	5.90	0.010	<300
08-25-87	262	69	86	--	1.2	--	--	869	--	6.50	--	--
06-12-85	--	2,000	1000	--	0.70	2.0	16	5,680	66.0	--	--	--
06-18-86	255	120	69	--	0.50	0.34	17	666	19.0	--	--	--
12-20-66	299	310	130	--	--	--	--	1,250	23.0	--	--	--
06-13-85	E362	34	19	--	0.20	0.080	9.9	450	1.00	--	--	--
06-18-86	223	2,000	610	--	0.20	1.1	13	4,660	65.0	--	--	--
06-11-85	E195	400	78	--	0.30	0.090	18	956	3.60	--	--	--
06-19-86	223	760	140	--	0.10	0.39	17	1,800	30.0	--	--	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Aluminum, dissolved (µg/L as Al)	Arsenic, total (µg/L as As)	Arsenic, dissolved (µg/L as As)	Barium, total recoverable (µg/L as Ba)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Boron, total recoverable (µg/L as B)	Boron, dissolved (µg/L as B)	Cadmium, total recoverable (µg/L as Cd)	Cadmium, dissolved (µg/L as Cd)	Chromium, total recoverable (µg/L as Cr)	Chromium, dissolved (µg/L as Cr)
Woods County—Continued												
07-17-86	--	<10	--	100	--	--	--	--	<5	--	<10	--
08-25-87	--	<10	--	100	--	--	--	--	<5	--	<10	--
06-18-86	<140	--	<10	--	<10	--	--	380	--	1.8	--	<14
06-16-88	<300	<10	<10	40	49	--	<500	<500	<5	<5.0	<10	<14
08-25-87	--	14	--	60	--	--	--	--	<5	--	18	--
06-12-85	220	--	<10	--	--	--	--	430	--	9.0	--	<14
06-18-86	<140	--	<10	--	170	--	--	170	--	1.6	--	<14
12-20-66	--	--	--	--	--	--	--	330	--	--	--	--
06-13-85	<140	--	<10	--	--	--	--	460	--	<0.5	--	<14
06-18-86	<140	--	<10	--	<10	--	--	950	--	2.0	--	<14
06-11-85	<140	--	<10	--	--	--	--	100	--	12	--	<14
06-19-86	<140	--	<10	--	40	--	--	190	--	4.8	--	<14

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Cobalt, total recoverable (µg/L as Co)	Cobalt, dissolved (µg/L as Co)	Copper, total recoverable (µg/L as Cu)	Copper, dissolved (µg/L as Cu)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Lead, total recoverable (µg/L as Pb)	Lead, dissolved (µg/L as Pb)	Lithium, dissolved (µg/L as Li)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Mercury, total recoverable (µg/L as Hg)
Woods County—Continued												
07-17-86	--	--	<10	--	240	--	<45	--	--	<10	--	--
08-25-87	--	--	34	--	410	--	<45	--	--	<10	--	--
06-18-86	--	--	--	<10	--	20	--	<100	--	--	<10	--
06-16-88	<100	<100	<10	<10	820	49	<45	<45	--	<10	<10	<0.50
08-25-87	--	--	89	--	11,000	--	<45	--	--	340	--	--
06-12-85	--	--	--	<14	--	2,400	--	<100	--	--	60	--
06-18-86	--	--	--	<10	--	10	--	<100	--	--	<10	--
12-20-66	--	--	--	--	--	--	--	--	--	--	--	--
06-13-85	--	--	--	<14	--	16,000	--	<100	--	--	190	--
06-18-86	--	--	--	<10	--	<10	--	<100	--	--	<10	--
06-11-85	--	--	--	14	--	80	--	<100	--	--	<10	--
06-19-86	--	--	--	<10	--	<10	--	<100	--	--	<10	--

Table 4. Physical properties, concentrations of common constituents, and selected trace elements of water from selected wells completed in the Cimarron River alluvium and terrace deposits and Permian geologic units—Continued

Date	Mercury, dissolved (µg/L as Hg)	Molybdenum, total recoverable (µg/L as Mo)	Molybdenum, dissolved (µg/L as Mo)	Nickel, total recoverable (µg/L as Ni)	Nickel, dissolved (µg/L as Ni)	Selenium, total (µg/L as Se)	Selenium, dissolved (µg/L as Se)	Silver, total recoverable (µg/L as Ag)	Silver, dissolved (µg/L as Ag)	Zinc, total recoverable (µg/L as Zn)	Zinc, dissolved (µg/L as Zn)
Woods County—Continued											
07-17-86	--	--	--	--	--	<5	--	--	--	60	--
08-25-87	--	--	--	--	--	<5	--	--	--	1,800	--
06-18-86	--	--	--	--	--	--	--	--	--	--	180
06-16-88	<0.5	<100	<100	<25	<25	7	7	<7	<7.0	--	--
08-25-87	--	--	--	--	--	<5	--	--	--	1,900	--
06-12-85	--	--	--	--	--	--	<5	--	--	--	1000
06-18-86	--	--	--	--	--	--	--	--	--	--	98
12-20-66	--	--	--	--	--	--	--	--	--	--	--
06-13-85	--	--	--	--	--	--	--	--	--	--	1200
06-18-86	--	--	--	--	--	--	--	--	--	--	550
06-11-85	--	--	--	--	--	--	<5	--	--	--	64
06-19-86	--	--	--	--	--	--	--	--	--	--	1100

Table 5. Organic chemical analyses of water from selected wells completed in the Cimarron River alluvium and terrace deposits

[Geologic unit: 110CMTA, Cimarron terrace and alluvial aquifer. Agency: USGS, U.S. Geological Survey; ODEQ, Oklahoma Department of Environmental Quality, formerly the Oklahoma State Department of Health. µg/L, micrograms per liter; µg/kg, micrograms per kilogram; PCB's, polychlorinated biphenyls; <, less than.]

Local number	Site identification number	County	Date	Time	Geologic unit	Well depth (feet)	Agency collecting sample	Agency analyzing sample	Aldrin, total (µg/L)	Parathion, total (µg/L)
17N-06W-11 DDD 1	355724097480001	Kingfisher	06-08-88	1300	110CMTA	60	USGS	ODEQ	<0.030	<0.100
17N-04W-31 CCC 1	355355097402301	Logan	06-06-88	1400	110CMTA	52	USGS	ODEQ	0.030	<0.100
23N-11W-19 DAA 1	362716098243001	Major	06-15-88	1400	110CMTA	55	USGS	ODEQ	<0.030	<0.100
24N-14W-23 CCC 1	363209098402601	Woods	06-15-88	1700	110CMTA	60	USGS	ODEQ	0.080	<0.100
26N-13W-07 BBB 1	364514098385001	Woods	06-16-88	1900	110CMTA	81	USGS	ODEQ	<0.030	<0.100

Local number	Aroclor 1016 PCB, total (µg/L)	Aroclor 1221 PCB, total (µg/L)	Aroclor 1232 PCB, total (µg/L)	Aroclor 1242 PCB, total (µg/L)	Aroclor 1248 PCB, total (µg/L)	Alpha benzene hexachloride total (µg/L)	Beta benzene hexachloride total (µg/L)	Delta benzene hexachloride total (µg/L)	Lindane total (µg/L)	Chlordane, total (µg/L)
17N-06W-11 DDD 1	<0.300	<0.300	<0.300	<0.300	<0.300	<0.020	<0.020	<0.020	<0.020	<0.200
17N-04W-31 CCC 1	<0.300	<0.300	<0.300	<0.300	<0.300	<0.020	<0.020	<0.020	<0.020	<0.200
23N-11W-19 DAA 1	<0.300	<0.300	<0.300	<0.300	<0.300	<0.020	<0.020	<0.020	<0.020	<0.200
24N-14W-23 CCC 1	<0.300	<0.300	<0.300	<0.300	<0.300	<0.020	<0.020	<0.020	<0.020	<0.200
26N-13W-07 BBB 1	<0.300	<0.300	<0.300	<0.300	<0.300	<0.020	<0.020	<0.020	<0.020	<0.200

Table 5. Organic chemical analyses of water from selected wells completed in the Cimarron River alluvium and terrace deposits—Continued

Local number	Chlordane CIS isomer total (µg/L)	Chlordane trans isomer total (µg/L)	Chlor-pyrifos total (µg/L)	Meth-oxychlor, total (µg/L)	Dacthal total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin total (µg/L)	Endo-sulfan alpha total (µg/L)	Endo-sulfan beta total (µg/L)
17N-06W-11 DDD 1	<0.100	<0.100	<0.100	<0.700	<0.100	<0.700	<0.050	<0.060	<0.200	<0.200
17N-04W-31 CCC 1	<0.100	<0.100	<0.100	<0.700	<0.100	<0.700	<0.050	<0.060	<0.200	<0.200
23N-11W-19 DAA 1	<0.100	<0.100	<0.100	<0.700	<0.100	<0.700	<0.050	<0.060	<0.200	<0.200
24N-14W-23 CCC 1	<0.100	<0.100	<0.100	<0.700	<0.100	<0.700	<0.050	<0.060	<0.200	<0.200
26N-13W-07 BBB 1	<0.100	<0.100	<0.100	<0.700	<0.100	<0.700	<0.050	<0.060	<0.200	<0.200

Local number	Endo-sulfan sulfate total (µg/L)	Endrin, total (µg/L)	Endrin aldehyde, total (µg/L)	Endrin ketone water whole total (µg/L)	Hepta-chlor total (µg/L)	Hepta-chlor epoxide total (µg/L)	Hexa-chloro-benzene total (µg/L)	Malathion, total (µg/L)	Choirdane non-achlor trans (µg/L)	O,P' DDD, total (µg/L)
17N-06W-11 DDD 1	<0.200	<0.030	<0.060	<0.060	<0.030	<0.030	<0.200	<0.400	<0.100	<0.200
17N-04W-31 CCC 1	<0.200	<0.030	<0.060	<0.060	<0.030	<0.030	<0.200	<0.400	<0.100	<0.200
23N-11W-19 DAA 1	<0.200	<0.030	<0.060	<0.060	<0.030	<0.030	<0.200	<0.400	<0.100	<0.200
24N-14W-23 CCC 1	<0.200	<0.030	<0.060	<0.060	<0.030	<0.030	<0.200	<0.400	<0.100	<0.200
26N-13W-07 BBB 1	<0.200	<0.030	<0.060	<0.060	<0.030	<0.030	<0.200	<0.400	<0.100	<0.200

Table 5. Organic chemical analyses of water from selected wells completed in the Cimarron River alluvium and terrace deposits—Continued

Local number	P,P' DDD, total (µg/L)	O,P' DDE, total (µg/L)	P,P' DDE, total (µg/L)	O,P' DDT, total (µg/L)	P,P' DDT, total (µg/L)	Methyl para-thion, total (µg/kg)	PCB, total (µg/L)	Arocior 1254 PCB, total (µg/L)	Arocior 1260 PCB, total (µg/L)	Tox-aphene, total (µg/L)
17N-06W-11 DDD 1	<0.200	<0.200	<0.200	<0.200	<0.200	<0.100	<0.300	<0.300	<0.300	<0.300
17N-04W-31 CCC 1	<0.200	<0.200	<0.200	<0.200	<0.200	<0.100	<0.300	<0.300	<0.300	<0.300
23N-11W-19 DAA 1	<0.200	<0.200	<0.200	<0.200	<0.200	<0.100	<0.300	<0.300	<0.300	<0.300
24N-14W-23 CCC 1	<0.200	<0.200	<0.200	<0.200	<0.200	<0.100	<0.300	<0.300	<0.300	<0.300
26N-13W-07 BBB 1	<0.200	<0.200	<0.200	<0.200	<0.200	<0.100	<0.300	<0.300	<0.300	<0.300

Local number	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Dicofal, total (µg/L)	2,4-DP, total (µg/L)
17N-06W-11 DDD 1	<20.00	<2.000	<2.000	<2.000
17E-04W-31 CCC 1	<20.00	<2.000	<2.000	<2.000
23N-11W-19 DAA 1	<20.00	<2.000	<2.000	<2.000
24N-14W-23 CCC 1	<20.00	<2.000	<2.000	<2.000
26N-13W-07 BBB 1	<20.00	<2.000	<2.000	<2.000

Table 6. Tritium analyses of water from selected wells in the Cimarron River alluvium and terrace deposits

[Geologic unit: 110CMTA, Cimarron terrace and alluvial aquifer. Agency: USGS, U.S. Geological Survey; NWQL, U.S. Geological Survey, National Water Quality Laboratory. pCi/L, picocuries per liter; 2SPE, two standard precision estimates.]

Local number	Site identification number	County	Date	Time	Geologic unit	Agency collecting sample	Agency analyzing sample	Tritium total (pCi/L ± 2SPE)
17N-06W-11 DDD 1	355724097480001	Kingfisher	06-08-88	1300	110CMTA	USGS	NWQL	32 ± 2.56
17N-07W-11 DAA 1	355743097542801	Kingfisher	06-08-88	1000	110CMTA	USGS	NWQL	64 ± 4.48
18N-06W-07 AAC 1	360316097522401	Kingfisher	06-08-88	1000	110CMTA	USGS	NWQL	20 ± 2.56
19N-08W-17 DCD 1	360657098041701	Kingfisher	06-09-88	1600	110CMTA	USGS	NWQL	7.0 ± 1.92
21N-09W-06 CCC 1	361907098123501	Major	06-10-88	1030	110CMTA	USGS	NWQL	5.1 ± 1.92
22N-10W-31 BAA 1	362045098183101	Major	06-14-88	1400	110CMTA	USGS	NWQL	42 ± 3.20
23N-14W-13 DCD 1	362754098383601	Woods	06-16-88	1030	110CMTA	USGS	NWQL	18 ± 2.56
24N-14W-23 CCC 1	363209098402601	Woods	06-15-88	1700	110CMTA	USGS	NWQL	32 ± 2.56
24N-15W-06 ABB 1	363538098503601	Woods	06-16-88	1400	110CMTA	USGS	NWQL	60 ± 3.84

Table 7. Base-flow discharge measurements and estimates of the Cimarron River and its tributaries

[*, denotes probable non-contributing drainage area within the river basin; **, denotes mean daily discharge from gaging station record; ***, mean daily flow estimate from median mean-daily 7-day low-flow computation from gaging-station record: 1961–67, 1974–79; mi^2, square mile; ft^3/s, cubic feet per second]

Study site number	Station number and stream name	Location	Drainage area (mi^2)	Measurement date	Discharge (ft^3/s)
1	364521099053901 Anderson Creek near Freedom, Okla.	Lat 36°45'17", Long 099°05'39" SE 1/4 SW 1/4 SW 1/4 sec. 01, T. 26 N., R. 18 W., Woods County, Hydrologic Unit 11050001. At county road bridge about 1 mile southeast of Freedom.	34.5	02-25-86 09-24-86 02-29-88 09-07-88	2.44 No flow 1.98 No flow
2	364244099070801 Long Creek near Freedom, Okla	Lat 36°42'39", Long 099°07'04" SW 1/4 SE 1/4 SE 1/4 sec. 22, T. 26 N., R. 18 W., Woodward County, Hydrologic Unit 11050001. About 1.8 miles along a winding county road to the bridge starting off of State Highway 50, 2 miles northeast of Alabaster Caverns State Park.	53.1	02-25-86 09-24-86 02-29-88 09-07-88	3.93 .17 3.19 .59
3	363823099065201 Doe Creek near Freedom, Okla.	Lat 36°38'19", Long 099°06'47", SW 1/4 SW 1/4 SW 1/4 sec. 14, T. 25 N., R. 18 W., Woodward County, Hydrologic Unit 11050001. 1 mile east, 0.5 mile south and 3 miles east on county road to bridge from State Highway 50 at a point 4 miles south of Alabaster Caverns State Park.	14.2	02-25-86 09-24-86 02-29-88 09-07-88	1.71 .18 .70 .06
4	363731099015301 Chimney Creek near Belva, Okla.	Lat 36°37'01", Long 099°01'53", SE 1/4 SW 1/4 NE 1/4 sec. 28 T. 25 N., R. 17 W., Woodward County, Hydrologic Unit 11050001. Turn west from U.S. Highway 281 onto blacktopped county road at a point 1.8 miles south of U.S. 281 bridge over the Cimarron River. Drive 3.5 miles west, 6 miles north and 2 miles west. Then turn north and follow winding county road about 5 miles to bridge.	27.5	02-25-86 09-24-86 02-29-88 09-07-88	2.88 .12 1.63 .18

Table 7. Base-flow discharge measurements and estimates of the Cimarron River and its tributaries—Continued

Study site number	Station number and stream name	Location	Drainage area (mi^2)	Measurement date	Discharge (ft^3/s)
5	363436098590301 Sand Creek near Belva, Okla.	Lat 36°34'45", Long 098°58'58" SE 1/4 SW 1/4 SE 1/4 sec. 02 T. 24 N., R. 17 W., Woodward County, Hydrologic Unit 11050001. West 3.5 miles on blacktop county road from U.S. Highway 281, 1.8 miles south of U.S. Highway 281 bridge over the Cimarron River, 5.8 miles south of Waynoka. Then drive 6 miles north and 2.2 miles west to county bridge.	54.1	02-26-86 09-24-86 02-29-88 09-07-88	3.24 No flow 2.25 No flow
6	362933098554201 West Creek near Waynoka, Okla.	Lat 36°29'32", Long 098°55'43" SW 1/4 SE 1/4 SE 1/4 sec. 05, T. 23 N., R. 16 W., Major County, Hydrologic Unit 11050001. At blacktopped county road bridge about 2.8 miles west of U.S. Highway 281, 1.7 miles south of U.S. Highway 281 bridge over the Cimarron River.	31.9	02-26-86 09-24-86 02-29-88 09-07-88	2.49 No flow 1.38 No flow
7	07158000 Cimarron River near Waynoka, Okla.	Lat 36°31'02", Long 098°52'45", SW 1/4 NW 1/4 NE 1/4 sec. 35, T. 24 N., R. 16 W., Woods County, Hydrologic Unit 11050001. At U.S. Highway 281 bridge 4 miles south of Waynoka.	13,334 (4,830)*	02-25-86 09-23-86 03-01-88 09-06-88	133 ** 5.6 ** 170 2.92
8	07158010 Main Creek near Waynoka, Okla.	Lat 36°29'32", Long 098°53'30", SE 1/4 SE 1/4 SE 1/4 sec. 03, T. 23 N., R. 16 W., Major County, Hydrologic Unit 11050001. At blacktopped county road bridge 0.6 mile west of U.S. Highway 281 from a point 1.7 miles south of the U.S. Highway 281 bridge over the Cimarron River, 5.7 miles south of Waynoka.	89.7 (revised)	02-25-86 09-24-86 02-29-88 09-07-88	7.63 3.67 8.86 4.51
9	362446098470001 Griever Creek near Waynoka, Okla.	Lat 36°24'46", Long 098°47'00", SE 1/4 SE 1/4 NE 1/4 sec. 03, T. 22 N., R. 15 W., Major County, Hydrologic Unit 11050001. At State Highway 15 bridge about 6 miles east of U.S. Highway 281 south of Waynoka.	88.8	02-25-86 09-24-86 03-01-88 09-07-88	2.10 .66 3.74 .48

Table 7. Base-flow discharge measurements and estimates of the Cimarron River and its tributaries—Continued

Study site number	Station number and stream name	Location	Drainage area (mi^2)	Measurement date	Discharge (ft^3/s)
10	362414098420201 Barney Creek near Orienta, Okla.	Lat 36°24'14", Long 098°42'02", NW 1/4 NW 1/4 NE 1/4 sec. 09, T. 22N., R. 14 W., Major County, Hydrologic Unit 11050001. 10 miles east of U.S. Highway 281 on State Highway 15, then 0.9 mile north and 0.5 mile east to county road bridge.	41.1	02-25-86 09-24-86 03-01-88 09-07-88	0.28 No flow .81 No flow
11	362137098370501 Cheyenne Creek near Orienta, Okla.	Lat 36°21'43", Long 098°37'09", NE 1/4 NW 1/4 NW 1/4 sec. 29, T. 22 N., R. 13 W., Major County, Hydrologic Unit 11050001. At State Highway 15 bridge about 8 miles west of Orienta.	38.8	02-25-86 09-24-86 03-01-88 09-07-88	0.29 .05 1.96 .08
12	07158105 Eagle Chief Creek at Cleo Springs, Okla.	Lat 36°24'20", Long 098°26'47", SW 1/4 SE 1/4 SE 1/4 sec. 02, T. 22 N., R. 12 W., Major County, Hydrologic Unit 11050001. At county road bridge 0.4 mile west of State Highway 8 in Cleo Springs.	480	02-25-86 09-24-86 03-01-88 09-07-88	24.7 16.0 25.9 10.4
13	362150098282301 Cottonwood Creek at Orienta, Okla.	Lat 36°21'54", Long 098°28'26", NW 1/4 SE 1/4 SW 1/4 sec. 22, T. 22 N., R. 12 W., Major County, Hydrologic Unit 11050001. At railroad bridge 0.35 mile north of State Highway 15 near northwest corner of Orienta.	54.3	02-25-86 09-24-86 03-01-88 09-07-88	0.27 No flow 3.33 No flow
14	361901098260701 Gypsum Creek near Fairview, Okla.	Lat 36°19'06", Long 098°26'07", NE 1/4 NE 1/4 NW 1/4 sec. 12, T. 21 N., R. 12 W., Major County, Hydrologic Unit 11050002. At county road bridge 4 miles north of Fairview on U.S. Highway 60, then 2.5 miles east.	13.8	02-25-86 09-03-86 09-09-87 03-01-88 09-07-88	0.05 No flow No flow .27 No flow
15	361835098252601 Sand Creek near Fairview, Okla.	Lat 36°18'35", Long 098°25'34", NW 1/4 NW 1/4 SW 1/4 sec. 07, T. 21 N., R. 11 W., Major County, Hydrologic Unit 11050002. At county road bridge 2 miles north of Fairview on U.S. Highway 60, then 3 miles east and 0.4 mile north.	41.8	02-24-86 09-23-86 09-09-87 03-01-88 09-07-88	1.14 .26 .91 3.96 .23

Table 7. Base-flow discharge measurements and estimates of the Cimarron River and its tributaries—Continued

Study site number	Station number and stream name	Location	Drainage area (mi^2)	Measurement date	Discharge (ft^3/s)
16	361723098175701 Indian Creek near Ringwood, Okla.	Lat 36°17'23", Long 098°18'00", SW 1/4 SW 1/4 SW 1/4 sec. 17 T. 21 N., R. 10 W., Major County, Hydrologic Unit 11050002. At county road bridge 0.6 mile north of State Highway 58 bridge over the Cimarron River on State High- way 58, then 1.1 mile east on the county road.	75.4	02-25-86 09-23-86 09-09-87 02-29-88 09-07-88	6.72 3.56 6.69 12.2 5.32
17	07158400 Salt Creek near Okeene, Okla.	Lat 36°06'11", Long 098°11'36", SW 1/4 sec. 20, T. 19 N., R. 09 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge 1 mile south of State Highway 51, 8 miles east of Okeene.	196	02-24-86 09-23-86 02-29-88 09-08-88	13.7 4.87*** 28.4 6.27
18	07158500 Preacher Creek near Dover, Okla.	Lat 36°02'30", Long 098°00'48" NW 1/4 NW 1/4 NW 1/4 sec. 13, T. 18 N., R. 08 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge 6.5 miles west of U.S. Highway 81 from a point 4 miles north of Dover.	14.5	02-24-86 09-23-86 09-09-87 02-29-88 09-07-88	2.34 .86 2.92 9.13 1.43
19	355902097594501 Cooper Creek near Dover, Okla.	Lat 35°58'58", Long 097°59'48" NE 1/4 NE 1/4 NE 1/4 sec. 01, T. 17 N., R. 08 W., Kingfisher County, Hydrologic Unit 11050002. At blacktopped county road bridge 5.3 miles west of intersection with U.S. Highway 81 at center of Dover, then 0.8 mile north.	116	02-24-86 09-22-86 09-09-87 03-01-88 09-07-88	3.44 .95 1.42 3.86 .79
20	355810097590501 Treaty Creek near Loyal, Okla.	Lat 35°58'06", Long 097°59'12", NW 1/4 NW 1/4 NE 1/4 sec. 07, T. 17 N., R. 07 W., Kingfisher County, Hydrologic Unit 11050002. At blacktopped county road bridge 4.7 miles west of intersection with U.S. Highway 81 at center of Dover.	6.86	02-24-86 09-22-86 09-09-87 03-01-88 09-07-88	0.12 .08 No flow .40 No flow
21	355842097551201 Turkey Creek at Dover, Okla.	Lat 35°58'42", Long 097°55'19", SE 1/4 SW 1/4 NW 1/4 sec. 02, T. 17 N., R. 07 W., Kingfisher County, Hydrologic Unit 11050002. At blacktopped county road bridge about 0.5 mile west of U.S. Highway 81 at the center of Dover.	428	02-24-86 09-23-86 09-09-87 03-01-88 09-07-88	28.4 9.92 13.2 38.0 8.85

Table 7. Base-flow discharge measurements and estimates of the Cimarron River and its tributaries—Continued

Study site number	Station number and stream name	Location	Drainage area (mi^2)	Measurement date	Discharge (ft^3/s)
22	07159100 Cimarron River near Dover, Okla.	Lat 35°57'06", Long 097°54'51", SW 1/4 NE 1/4 sec. 14, T. 17 N., R. 07 W., Kingfisher County, Hydrologic Unit 11050002. At U.S. Highway 81 bridge just south of Dover.	15,713 (4,926)*	02-25-86 09-24-86 09-09-87 03-01-88 09-07-88	304** 77** 314** 415 38.9
23	355342097541001 Kingfisher Creek near Kingfisher, Okla.	Lat 35°53'38", Long 097°54'19", NW 1/4 SW 1/4 NW 1/4 sec. 01, T. 16 N., R. 07 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge 2.9 miles north of Kingfisher on U.S. High- way 81, then 1.5 miles east and 0.3 miles south.	501	02-26-86 09-22-86 09-09-87 02-29-88 09-07-88	33.3 9.48 18.2 20.2 9.10
24	355421097521601 Trail Creek near Kingfisher, Okla.	Lat 35°54'26", Long 097°52'16" SE 1/4 SE 1/4 NE 1/4 sec. 31, T. 17 N., R. 06 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge about 3.5 miles east and 0.4 mile south U.S. Highway 81, 3 miles north of Kingfisher.	16.1	02-26-86 09-22-86 09-08-87 03-01-88 09-07-88	1.51 No flow .24 No flow No flow
25	355415097464801 Bird Creek near Kingfisher, Okla.	Lat 35°54'06", Long 097°46'55" NW 1/4 NW 1/4 SW 1/4 sec. 31, T. 17 N., R. 05 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge 8.5 miles east of U.S. Highway 81, 3 miles north of Kingfisher.	8.50	02-24-86 09-22-86 09-09-87 03-01-88 09-07-88	0.86 No flow 0.80 1.35 .16
26	355540097442301 West Fork Sooner Creek near Crescent, Okla.	Lat 35°55'37", Long 097°44'29", SW 1/4 SE 1/4 SW 1/4 sec. 21, T. 17 N., R. 05 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge 7.5 miles west of State Highway 74 at north end of Crescent on black-topped road, then 2 miles south and 0.8 miles west.	9.79	02-24-86 09-22-86 09-08-87 02-29-88 09-07-88	1.14 .07 .82 2.48 .39
27	355540097440701 East Fork Sooner Creek near Crescent, Okla.	Lat 35°55'37", Long 097°44'19", SW 1/4 SW 1/4 SE 1/4 sec. 21, T. 17 N., R. 05 W., Kingfisher County, Hydrologic Unit 11050002. At county road bridge 7.5 miles west of State Highway 74 at north end of Crescent on black-topped road, then 2 miles south and 0.5 miles west.	11.2	02-24-86 09-22-86 09-08-87 02-29-88 09-07-88	2.46 1.41 1.95 2.72 2.13

Table 7. Base-flow discharge measurements and estimates of the Cimarron River and its tributaries—Continued

Study site number	Station number and stream name	Location	Drainage area (mi^2)	Measurement date	Discharge (ft^3/s)
28	355032097432301 Campbell Creek near Cashion, Okla.	Lat 35°50'32", Long 097°43'31", SE 1/4 SW 1/4 SW 1/4 sec. 22, T. 16 N., R. 05 W., Kingfisher County, Hydrologic Unit 11050002. At State Highway 33 bridge 12.2 east of Kingfisher.	22.6	02-24-86 09-23-86 09-08-87 02-29-88 09-07-88	3.01 No flow .98 4.74 .13
29	355032097431501 Tributary to Campbell Creek near Cashion, Okla.	Lat 35°50'32", Long 097°43'15", SW 1/4 SE 1/4 SW 1/4 sec. 22, T. 16 N., R. 05 W., Kingfisher County, Hydrologic Unit 11050002. At State Highway 33 bridge 12.4 miles east of Kingfisher.	3.15	02-24-86 09-23-86 09-08-87 02-29-88 09-07-88	0.27 No flow No flow .60 No flow
30	355125097371501 Pawnee Creek near Crescent, Okla.	Lat 35°52'16", Long 097°36'47", SE 1/4 SE 1/4 SW 1/4 sec. 10, T. 16 N., R. 04 W., Logan County, Hydrologic Unit 11050002. At State Highway 33 bridge about 3.5 miles east of junction with State Highway 74.	13.1	02-24-86 09-23-86 09-08-87 02-29-88 09-07-88	0.84 No flow No flow 1.34 No flow
31	355217097361901 Cox Creek near Crescent, Okla.	Lat 35°52'17", Long 097°36'19", SW 1/4 SE 1/4 SE 1/4 sec. 10, T. 16 N., R. 04 W., Logan County, Hydrologic Unit 11050002. At State Highway 33 bridge about 4 miles east of Junction with State Highway 74.	7.47	02-24-86 09-23-86 09-08-87 02-29-88 09-07-88	0.36 No flow No flow 2.38 No flow
32	355217097315601 Gar Creek near Guthrie, Okla.	Lat 35°52'17", Long 097°31'56", SE 1/4 SE 1/4 SE 1/4 sec. 08 T. 16 N., R. 03 W., Logan County, Hydrologic Unit 11050002. At State Highway 33 bridge about 6.3 miles west of junction with U.S. Highway 77 in Guthrie.	10.6	02-24-86 09-23-86 09-08-87 02-29-88 09-07-88	1.07 .08 .63 2.89 .12
33	07160000 Cimarron River near Guthrie, Okla.	Lat 35°55'14", Long 097°25'32", NE 1/4 SE 1/4 sec. 29, T. 17 N., R. 02 W., Logan County, Hydrologic Unit 11050002. At U.S. Highway 77 bridge just north of Guthrie.	16,892 (4,926)*	02-25-86 09-23-86 09-08-87 02-29-88 09-07-88	466 162 ** 415** 682** 133

Table 8. Selected chemical analyses of water samples collected in conjunction with base-flow measurements of the Cimarron River and its tributaries

[Agencies: Field data collected by the U.S. Geological Survey; Water quality analysis by the Oklahoma Geological Survey. Units of physical and constituents parameters: µs/cm, microsiemens per centimeter; deg C, degrees Celcius; mg/L, milligrams per liter; µg/L , micrograms per liter; <, less than; -, no data; **, denotes mean daily discharge from gaging station records.]

Study site number	Station number	Stream Name	Date	Time	Discharge in cubic feet per second	Specific conductance (µS/cm)	pH (standard units)	Temperature water (deg C)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)
1	364521099053901	Anderson Creek near Freedom, Okla.	02-25-86	1450	2.44	2,950	8.0	19.0	470	90
			02-29-88	1030	1.98	3,010	7.6	7.0	--	--
2	364244099070801	Long Creek near Freedom, Okla.	02-25-86	1730	3.93	3,450	7.9	15.5	--	--
			09-24-86	1830	0.17	4,190	7.9	25.0	--	--
			02-29-88	1130	3.19	3,560	7.8	9.0	--	--
			09-07-88	1800	0.59	3,440	8.1	25.5	--	--
3	363823099065201	Doe Creek near Freedom, Okla.	02-25-86	1630	1.7	3,200	7.8	13.5	480	100
			09-24-86	1650	0.18	3,850	7.9	27.0	--	--
			02-29-88	1345	0.70	3,410	7.6	11.0	--	--
			09-07-88	1720	0.06	3,630	7.9	26.0	--	--
4	363731099015301	Chimney Creek near Belva, Okla.	02-25-86	1550	2.88	3,100	8.0	17.5	420	92
			09-24-86	1610	0.12	3,780	8.0	27.0	--	--
			02-29-88	1445	1.63	3,530	7.6	13.0	--	--
			09-07-88	1645	0.18	3,310	8.1	24.5	--	--
5	363436098590301	Sand Creek near Belva, Okla.	02-26-86	1015	3.24	3,250	8.1	11.5	480	100
			02-29-88	1600	2.25	3,300	7.5	14.0	--	--
6	362933098554201	West Creek near Waynoka, Okla.	02-26-86	0910	2.49	3,750	7.9	11.0	450	100
			02-29-88	1700	1.38	3,430	7.4	12.0	--	--,
7	07158000	Cimarron River near Waynoka, Okla.	02-24-86	1530	149	27,000	8.2	17.0	290	100
			03-01-88	1415	170	18,700	8.2	10.0	--	--
			09-06-88	1600	2.92	45,000	8.2	26.0	--	--
8	07158010	Main Creek near Waynoka, Okla.	02-25-86	1630	7.63	3,500	8.1	16.0	490	70
			09-24-86	1450	3.67	3,480	8.1	29.0	--	--
			02-29-88	1830	8.86	3,500	7.6	11.0	--	--
			09-07-88	1545	4.51	3,290	8.2	26.5	--	--
9	362446098470001	Griever Creek near Waynoka, Okla.	02-25-86	1238	2.10	4,000	8.0	16.0	450	130
			09-24-86	1315	0.66	4,700	7.9	27.0	--	--
			03-01-88	1145	3.74	4,270	7.7	8.0	--	--
			09-07-88	1400	0.48	4,220	8.1	26.0	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity lab (mg/L as $CaCO_3$)	Sulfate dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)
1	02-25-86	120	4.5	157	1,400	160	0.40	0.23	9.2	2,680
	02-29-88	--	--	--	--	--	--	--	--	--
2	02-25-86	--	--	176	1,400	310	0.40	0.33	--	3,000
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
3	02-25-86	110	3.4	206	1,600	150	0.40	0.27	13	3,000
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
4	02-25-86	120	4.1	162	1,500	160	0.30	0.18	8.2	2,890
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
5	02-26-86	120	4.5	173	1,600	160	0.30	0.18	8.1	2,920
	02-29-88	--	--	--	--	--	--	--	--	--
6	02-26-86	120	4.5	214	1,800	230	0.30	0.28	8.0	3,420
	02-29-88	--	--	--	--	--	--	--	--	--
7	02-24-86	5,400	9.6	173	940	9,100	0.50	2.2	10	16,600
	03-01-88	--	--	--	--	--	--	--	--	--
	09-06-88	--	--	--	--	--	--	--	--	--
8	02-25-86	160	2.5	138	1,600	260	0.30	0.25	12	3,120
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
9	02-25-86	290	5.6	191	1,800	370	0.30	0.32	5.8	3,640
	09-24-86	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Nitrogen, nitrate dissolved (mg/L as N)	Boron, dissolved (µg/L as B)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Zinc, dissolved (µg/L as Zn)
1	02-25-86	0.800	290	2.1	<20	<10	<10	<100	80	<12
	02-29-88	--	--	--	--	--	--	--	--	--
2	02-25-86	2.00	--	--	--	--	--	--	--	--
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
3	02-25-86	1.50	340	<0.5	<20	<10	<10	<100	210	<12
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
4	02-25-86	0.900	390	<0.5	<30	<10	<10	<100	90	<15
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
5	02-26-86	1.10	390	0.7	<20	<10	<10	<100	110	<12
	02-29-88	--	--	--	--	--	--	--	--	--
6	02-26-86	1.80	590	1.7	<20	<10	20	<100	210	<12
	02-29-88	--	--	--	--	--	--	--	--	--
7	02-24-86	0.400	330	4.5	<30	<10	<10	110	10	<15
	03-01-88	--	--	--	--	--	--	--	--	--
	09-06-88	--	--	--	--	--	--	--	--	--
8	02-25-86	1.00	300	2.8	<30	<10	<10	<100	100	<15
	09-24-86	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
9	02-25-86	1.60	670	0.5	100	<10	<10	<100	110	<15
	09-24-86	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Station number	Stream Name	Date	Time	Discharge in cubic feet per second	Specific conductance (µS/cm)	pH (standard units)	Temperature water (deg C)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)
10	362414098420201	Barney Creek near Orienta, Okla.	02-25-86	1200	0.28	7,200	7.9	12.0	480	230
			03-01-88	1400	0.81	7,200	8.1	7.5	--	--
11	362137098370501	Cheyenne Creek near Orienta, Okla.	02-25-86	1120	0.29	5,950	7.9	10.5	440	270
			09-24-86	1130	0.05	8,580	7.9	25.0	--	--
			03-01-88	1300	1.96	4,890	8.0	9.0	--	--
			09-07-88	1307	0.08	7,010	8.1	23.0	--	--
12	07158105	Eagle Chief Creek at Cleo Springs, Okla.	02-25-86	1100	24.7	2,150	8.1	13.0	200	110
			09-24-86	1000	16.0	1,400	8.0	24.0	130	64
			03-01-88	0930	25.9	1,730	7.9	8.0	--	--
			09-07-88	2000	10.4	1,180	8.4	23.0	--	--
13	362150098282301	Cottonwood Creek at Orienta, Okla.	02-25-86	1030	0.27	5,400	7.9	10.5	340	230
			03-01-88	1040	3.33	4,820	8.1	7.5	--	--
14	361901098260701	Gypsum Creek near Fairview, Okla.	02-25-86	0900	0.05	6,200	7.9	8.0	370	320
			03-01-88	1125	0.27	6,060	8.0	7.0	--	--
15	361835098252601	Sand Creek near Fairview, Okla.	02-24-86	1645	1.14	3,200	8.7	13.5	290	140
			09-23-86	1700	0.26	1,960	9.3	28.0	120	67
			09-09-87	1915	0.91	3,890	8.3	24.5	--	--
			03-01-88	1200	3.96	3,540	8.2	8.0	--	--
			09-07-88	0930	0.23	1,680	8.9	18.5	--	--
16	361723098175701	Indian Creek near Ringwood, Okla.	02-25-86	0940	6.72	1,530	8.1	9.5	110	47
			09-23-86	1545	3.56	1,540	8.4	29.0	--	--
			09-09-87	1800	6.69	1,240	8.3	26.0	--	--
			02-29-88	1800	12.2	1,440	8.2	12.5	--	--
			09-07-88	1145	5.32	1,180	8.5	21.5	--	--
17	07158400	Salt Creek near Okeene, Okla.	02-24-86	1535	13.7	10,300	8.7	16.0	340	90
			02-29-88	1645	28.4	10,400	8.1	16.0	--	--
			09-08-88	0930	6.27	5,800	8.0	18.5	--	--
18	07158500	Preacher Creek near Dover, Okla.	02-24-86	1505	2.34	975	8.0	13.5	82	22
			09-23-86	1345	0.86	1,100	8.2	27.0	--	--
			09-09-87	1620	2.92	957	8.4	25.5	--	--
			02-29-88	1525	9.13	921	7.8	13.0	--	--
			09-07-88	0830	1.43	838	8.4	18.5	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity lab (mg/L as $CaCO_3$)	Sulfate dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)
10	02-25-86	740	5.2	240	2,500	1,200	0.20	0.74	0.90	6,190
	03-01-88	--	--	--	--	--	--	--	--	--
11	02-25-86	580	3.8	259	2,400	760	0.30	0.60	1.0	5,350
	09-24-86	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
12	02-25-86	120	3.3	264	780	130	0.30	0.29	6.2	1,670
	09-24-86	77	3.9	233	360	81	0.40	0.20	9.6	924
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
13	02-25-86	620	4.4	298	2,000	700	0.30	0.62	1.7	4,650
	03-01-88	--	--	--	--	--	--	--	--	--
14	02-25-86	670	5.0	257	2,700	700	0.30	1.2	0.90	5,860
	03-01-88	--	--	--	--	--	--	--	--	--
15	02-24-86	270	6.2	210	1,400	220	0.30	0.37	9.4	2,680
	09-23-86	210	10	89	630	190	0.10	0.25	6.9	1,380
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
16	02-25-86	150	2.4	266	160	240	0.40	0.39	11	926
	09-23-86	--	--	--	--	--	--	--	--	--
	09-09-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
17	02-24-86	2,400	4.8	168	1,200	3,800	0.30	3.0	5.3	8,270
	02-29-88	--	--	--	--	--	--	--	--	--
	09-08-88	--	--	--	--	--	--	--	--	--
18	02-24-86	80	2.4	272	44	110	0.50	0.32	16	506
	09-23-86	--	--	--	--	--	--	--	--	--
	09-09-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Nitrogen, nitrate dissolved (mg/L as N)	Boron, dissolved (µg/L as B)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Zinc, dissolved (µg/L as Zn)
10	02-25-86	0.900	1500	1.7	<30	43	<10	<100	220	<15
	03-01-88	--	--	--	--	--	--	--	--	--
11	02-25-86	1.60	1500	<0.5	<30	<10	<10	<100	60	<15
	09-24-86	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
12	02-25-86	3.40	450	8.0	<30	<10	<10	<100	40	<15
	09-24-86	1.60	340	5.0	<20	<10	<10	<100	30	<12
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
13	02-25-86	1.10	1,200	<0.5	<30	<10	<10	<100	460	<15
	03-01-88	--	--	--	--	--	--	--	--	--
14	02-25-86	2.20	950	<0.5	<30	<10	30	<100	90	<15
	03-01-88	--	--	--	--	--	--	--	--	--
15	02-24-86	3.00	1,000	<0.5	<30	<10	<10	<100	170	<15
	09-23-86	0.800	660	5.0	<20	<10	20	<100	20	<12
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
16	02-25-86	3.70	230	1.2	<30	<10	<10	<100	70	<15
	09-23-86	--	--	--	--	--	--	--	--	--
	09-09-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
17	02-24-86	1.90	910	0.5	<30	<10	<10	<100	50	<15
	02-29-88	--	--	--	--	--	--	--	--	--
	09-08-88	--	--	--	--	--	--	--	--	--
18	02-24-86	1.60	90	1.4	<30	<10	270	<100	90	<15
	09-23-86	--	--	--	--	--	--	--	--	--
	09-09-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Station number	Stream Name	Date	Time	Discharge in cubic feet per second	Specific conductance (µS/cm)	pH (standard units)	Temperature water (deg C)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)
19	355902097594501	Cooper Creek near Dover, Okla.	02-24-86	1435	3.44	3,000	8.8	16.0	120	83
			09-22-86	1635	0.95	2,520	8.4	28.0	--	--
			09-09-87	1400	1.42	2,850	8.7	28.0	--	--
			03-01-88	1030	3.86	3,350	8.0	11.0	--	--
			09-07-88	1255	0.79	2,150	--	21.5	--	--
20	355810097590501	Treaty Creek near Loyal, Okla.	02-24-86	1400	0.12	4,000	8.3	17.5	230	140
			09-22-86	1525	0.08	3,780	8.2	26.0	--	--
			03-01-88	0945	0.40	3,500	8.1	10.0	--	--
21	355842097551201	Turkey Creek at Dover, Okla.	02-24-86	1230	28.4	2,100	8.1	9.0	88	55
			09-23-86	1000	9.92	2,150	8.1	24.0	89	45
			09-09-87	1300	13.2	1,920	8.5	24.0	78	44
			03-01-88	1200	38.0	1,800	8.2	10.0	--	--
			09-07-88	1400	8.85	1,400	--	24.0	--	--
22	07159100	Cimarron River near Dover, Okla.	02-26-86	1500	304**	12,100	8.1	18.0	240	89
			09-09-87	--	314**	1,920	8.5	24.0	--	--
			03-01-88	1535	415	13,000	8.0	12.0	--	--
			09-07-88	1210	38.9	8,680	8.2	23.5	--	--
23	355342097541001	Kingfisher Creek at Kingfisher, Okla.	02-26-86	0900	33.3	2,100	8.0	11.0	160	68
			09-22-86	1120	9.48	1,580	7.9	24.0	110	50
			09-09-87	1130	18.2	1,680	8.2	22.0	120	54
			02-29-88	1730	20.2	2,200	8.1	12.0	--	--
			09-07-88	1125	9.10	1,620	--	20.5	--	--
24	355421097521601	Trail Creek near Kingfisher, Okla.	02-26-86	0940	1.51	1,600	7.7	11.0	100	61
			09-08-87	1800	0.24	1,550	8.2	23.5	--	--
25	355415097464801	Bird Creek near Kingfisher, Okla.	02-24-86	1220	0.86	1,020	8.1	15.0	68	39
			09-09-87	1000	0.80	871	8.0	21.0	--	--
			03-01-88	1300	1.35	1,130	8.0	10.0	--	--
			09-07-88	1010	0.16	810	--	18.0	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity lab (mg/L as $CaCO_3$)	Sulfate dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO2)	Solids, residue at 180 deg. C dissolved (mg/L)
19	02-24-86	400	3.0	277	570	440	0.30	0.74	4.3	1,930
	09-22-86	--	--	--	--	--	--	--	--	--
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
20	02-24-86	510	3.7	260	1100	560	0.50	1.0	4.0	3,010
	09-22-86	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
21	02-24-86	280	2.6	356	150	350	0.30	0.55	5.3	1,140
	09-23-86	270	5.0	331	120	360	0.40	0.49	11	1,150
	09-09-87	280	3.9	290	120	330	0.40	0.53	8.4	1,040
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
22	02-26-86	3400	7.6	193	780	5700	0.40	2.0	5.1	10,600
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
23	02-26-86	220	3.2	283	530	230	0.30	0.51	4.3	1,460
	09-22-86	150	5.5	301	310	120	0.40	0.29	13	988
	09-09-87	170	4.8	302	330	130	0.40	0.35	12	1,030
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
24	02-26-86	140	2.6	279	340	140	0.20	0.42	7.5	1,030
	09-08-87	--	--	--	--	--	--	--	--	--
25	02-24-86	85	1.5	227	95	100	0.20	0.36	20	562
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Nitrogen, nitrate dissolved (mg/L as N)	Boron, dissolved (µg/L as B)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Zinc, dissolved (µg/L as Zn)
19	02-24-86	0.500	720	<0.5	<30	<10	<10	<100	80	<15
	09-22-86	--	--	--	--	--	--	--	--	--
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
20	02-24-86	2.10	1100	<0.5	<30	<10	<10	<100	260	<15
	09-22-86	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
21	02-24-86	1.30	230	2.6	<30	<10	10	<100	120	<15
	09-23-86	0.900	260	5.5	<20	<10	<10	<100	140	<12
	09-09-87	1.40	250	--	<8	11	<8	<90	200	<12
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
22	02-26-86	0.500	380	5.5	<20	<10	<10	<100	30	36
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
23	02-26-86	1.90	890	<0.5	<20	<10	10	<100	230	<12
	09-22-86	1.10	920	3.5	<20	<10	10	<100	100	<12
	09-09-87	3.70	880	--	<8	14	<8	<90	140	<12
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
24	02-26-86	2.80	820	<0.5	<20	<10	10	<100	70	<12
	09-08-87	--	--	--	--	--	--	--	--	--
25	02-24-86	5.20	340	<0.5	<30	<10	<10	<100	10	<15
	09-09-87	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Station number	Stream Name	Date	Time	Discharge in cubic feet per second	Specific conductance (µS/cm)	pH (standard units)	Temperature water (deg C)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)
26	355540097442301	West Fork Sooner Creek near Crescent, Okla.	02-24-86	1050	1.14	1,650	8.2	9.0	100	40
			09-22-86	1310	0.07	1,520	8.1	26.0	--	--
			09-08-87	1630	0.82	1,460	8.3	29.0	--	--
			02-29-88	1200	2.48	1,700	8.2	12.0	--	--
			09-07-88	1505	0.39	1,150	--	22.0	--	--
27	355540097440701	East Fork Sooner Creek near Crescent, Okla.	02-24-86	0945	2.46	990	8.2	9.0	76	26
			09-22-86	1422	1.41	896	8.3	26.0	--	--
			09-08-87	1600	1.95	914	8.3	26.0	--	--
			02-29-88	1345	2.72	1,370	7.9	12.0	--	--
			09-07-88	1535	2.13	840	--	24.5	--	--
28	355032097432301	Campbell Creek near Cashion, Okla.	02-24-86	1150	3.01	1,500	7.9	12.0	120	49
			09-08-87	1430	0.98	1,590	8.1	25.5	--	--
			02-29-88	1320	4.74	1,340	7.7	13.5	--	--
			09-07-88	0918	0.13	1,400	--	18.0	--	--
29	355032097431501	Tributary to Campbell Creek near Cashion, Okla.	02-24-86	1125	0.27	1,240	8.0	10.0	89	43
			02-29-88	1230	0.60	1,130	7.7	10.5	--	--
30	355125097371501	Pawnee Creek near Crescent, Okla.	02-24-86	1045	0.84	2,200	7.7	9.0	110	76
			02-29-88	1115	1.34	1,480	7.5	8.5	--	--
31	355217097361901	Cox Creek near Crescent, Okla.	02-24-86	0950	0.36	1,850	7.6	7.5	180	81
			02-29-88	1015	2.38	2,020	7.6	9.0	--	--
32	355217097315601	Gar Creek near Guthrie, Okla.	02-24-86	0900	1.07	765	7.4	7.5	99	42
			09-23-86	0740	0.08	816	7.9	24.0	--	--
			09-08-87	1300	0.63	1,590	7.8	22.0	--	--
			02-29-88	0900	2.89	880	7.4	7.5	--	--
			09-07-88	0815	0.12	1,440	7.9	19.0	--	--
33	07160000	Cimarron River near Guthrie, Okla.	02-25-86	1400	466	12,000	8.4	16.0	200	79
			02-29-88	1000	682**	1,900	8.0	11.0	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity lab (mg/L as $CaCO_3$)	Sulfate dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide dissolved (mg/L as Br)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)
26	02-24-86	170	3.4	287	180	220	0.40	0.80	5.3	948
	09-22-86	--	--	--	--	--	--	--	--	--
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
27	02-24-86	97	1.7	288	70	100	0.40	0.45	17	564
	09-22-86	--	--	--	--	--	--	--	--	--
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
28	02-24-86	140	2.4	260	340	100	0.20	0.31	20	1,000
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
29	02-24-86	110	0.90	306	150	110	0.20	0.41	27	736
	02-29-88	--	--	--	--	--	--	--	--	--
30	02-24-86	260	1.5	417	330	280	0.30	1.4	4.8	1,400
	02-29-88	--	--	--	--	--	--	--	--	--
31	02-24-86	140	2.8	319	550	130	0.20	0.39	5.2	1,390
	02-29-88	--	--	--	--	--	--	--	--	--
32	02-24-86	38	1.2	306	130	40	0.20	0.19	8.0	574
	09-23-86	--	--	--	--	--	--	--	--	--
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
33	02-25-86	1900	6.4	210	650	3600	0.40	1.3	6.1	7,090
	02-29-88	--	--	--	--	--	--	--	--	--

Table 8. Selected chemical analyses of water samples collected in conjunction with low-flow measurements of the Cimarron River and its tributaries—Continued

Study site number	Date	Nitrogen, nitrate dissolved (mg/L as N)	Boron, dissolved (µg/L as B)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Zinc, dissolved (µg/L as Zn)
26	02-24-86	0.800	110	<0.5	<30	<10	10	170	20	<15
	09-22-86	--	--	--	--	--	--	--	--	--
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
27	02-24-86	6.60	140	3.0	<30	<10	40	<100	30	<15
	09-22-86	--	--	--	--	--	--	--	--	--
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
28	02-24-86	3.40	750	<0.5	<30	<10	<10	<100	10	<15
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
29	02-24-86	1.90	360	<0.5	<30	<10	10	<100	<10	<15
	02-29-88	--	--	--	--	--	--	--	--	--
30	02-24-86	1.20	880	0.6	<30	<10	20	<100	170	<15
	02-29-88	--	--	--	--	--	--	--	--	--
31	02-24-86	1.10	780	<0.5	<30	<10	<10	<100	70	<15
	02-29-88	--	--	--	--	--	--	--	--	--
32	02-24-86	1.50	80	2.1	<30	<10	10	<100	80	<15
	09-23-86	--	--	--	--	--	--	--	--	--
	09-08-87	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--
33	02-25-86	0.500	420	1.0	<30	<10	<10	<100	40	<15
	02-29-88	--	--	--	--	--	--	--	--	--

Table 9. Records of continuous precipitation-gage measurements at selected sites in Kingfisher and Woods Counties, Oklahoma

[--, missing data]

Site ID: 355743097544002; Local number: 17N–07W–11 DBA 2
Location: lat 35°57'43" long 097°54'40"; Hydrologic unit 11050002
Owner: Dean Hodgen
Datum: Altitude of land-surface datum is 1020 feet NGVD.
Period of record: October 1987 to January 1989

Day	Accumulated precipitation, in inches, October 1987 to September 1988											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.00	0.00	0.10	0.10	0.00	0.60	2.00	0.10	0.00	0.10	0.00	0.00
2	.00	.00	.10	.00	.00	2.00	.10	.10	.00	.00	.10	.40
3	.20	.00	.00	.30	.00	.10	.00	.00	.00	.00	.10	.00
4	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.50	.00
5	.00	.00	.00	.00	.00	.40	.10	.00	.00	.00	.00	.00
6	.70	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.10	.00	.00	.00	.00	.20	.00	.00	.00	.00	.10	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60	.10	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.30	.00	.00	.00	.10	.00	.00	.00	.00
12	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00
15	.10	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00	.50
16	.00	.00	.10	.00	.00	.00	.00	.20	.30	.40	.00	1.60
17	.00	.00	.00	.00	.00	.10	.30	.00	.00	.10	.00	.10
18	.00	.00	.00	.00	.00	.00	.10	.00	.00	.10	.00	8.28
19	.50	.00	1.00	.10	.00	.00	.10	.00	.00	.10	.70	.00
20	.00	.00	.00	.00	.00	.00	.00	.10	.00	.10	.00	.10
21	.00	.00	.10	.00	.00	.00	.00	.00	.00	.10	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.10	.00	.20	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00	.20
24	.00	.00	.00	.00	.00	.00	.20	.00	.00	.10	.00	.00
25	.00	.00	.00	.00	.00	.00	.50	.00	.00	.20	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.20	.20	.00	.00
27	.00	.10	.10	.00	.00	.00	.00	.00	1.60	.50	.10	.10
28	.00	.00	.10	.10	.00	.30	.00	.10	.10	.00	.64	.00
29	.00	.00	.00	.00	.00	.10	.20	.00	.00	.00	.00	.00
30	.00	.00	.10	.00	---	.00	.00	.00	.30	.00	.00	.00
31	.00	---	.00	.00	---	1.20	---	.90	---	.00	.00	---
Total	1.70	0.10	1.70	1.10	0.00	5.00	3.60	1.70	2.50	3.50	2.34	11.28

Table 9. Records of continuous precipitation-gage measurements at selected sites in Kingfisher and Woods Counties, Oklahoma—Continued

Site ID: 355743097544002; Local number: 17N–07W–11 DBA 2—Continued

Day	Accumulated precipitation, in inches, October 1988 to January 1989											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.40	0.00	0.00	0.00	---	---	---	---	---	---	---	---
2	.00	.00	.00	.00	---	---	---	---	---	---	---	---
3	.00	.00	.00	.00	---	---	---	---	---	---	---	---
4	.20	.00	.00	---	---	---	---	---	---	---	---	---
5	.10	.00	.00	---	---	---	---	---	---	---	---	---
6	.10	.00	.00	---	---	---	---	---	---	---	---	---
7	.60	.00	.20	---	---	---	---	---	---	---	---	---
8	.10	.00	.00	---	---	---	---	---	---	---	---	---
9	.00	.00	.00	---	---	---	---	---	---	---	---	---
10	.00	.00	.00	---	---	---	---	---	---	---	---	---
11	.00	1.00	.00	---	---	---	---	---	---	---	---	---
12	.00	.00	.10	---	---	---	---	---	---	---	---	---
13	.00	.00	.10	---	---	---	---	---	---	---	---	---
14	.00	.00	.00	---	---	---	---	---	---	---	---	---
15	.00	.10	.00	---	---	---	---	---	---	---	---	---
16	.10	.00	.00	---	---	---	---	---	---	---	---	---
17	.00	.00	.00	---	---	---	---	---	---	---	---	---
18	.00	.00	.00	---	---	---	---	---	---	---	---	---
19	.00	.30	.00	---	---	---	---	---	---	---	---	---
20	.50	.20	.00	---	---	---	---	---	---	---	---	---
21	.00	.00	.00	---	---	---	---	---	---	---	---	---
22	.00	.00	.10	---	---	---	---	---	---	---	---	---
23	.00	.00	.00	---	---	---	---	---	---	---	---	---
24	.00	.00	.00	---	---	---	---	---	---	---	---	---
25	.00	.00	.00	---	---	---	---	---	---	---	---	---
26	.00	.00	.20	---	---	---	---	---	---	---	---	---
27	.00	.00	.10	---	---	---	---	---	---	---	---	---
28	.00	.00	.00	---	---	---	---	---	---	---	---	---
29	.00	---	.00	---	---	---	---	---	---	---	---	---
30	.00	---	.00	---	---	---	---	---	---	---	---	---
31	.00	---	.00	---	---	---	---	---	---	---	---	---
Total	2.10		0.80	---	---	---	---	---	---	---	---	---

Table 9. Records of continuous precipitation-gage measurements at selected sites in Kingfisher and Woods Counties, Oklahoma—Continued

Woods County

Site ID: 363102098495302; Local number: 24N–15W–32 BBD 2
Location: lat 36°31'02" long 098°49'53"; Hydrologic unit 11050001
Owner: Tuttle and Barbee Oil
Datum: Altitude of land-surface datum is 1395 feet NGVD.
Period of record: November 1987 to January 1989

Day	Accumulated precipitation, in inches, November 1987 to September 1988.											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	---	---	0.00	0.00	---	0.10	1.20	0.00	0.10	0.20	0.00	0.00
2	---	---	.00	.00	---	1.80	.00	.00	.00	.00	.00	.00
3	---	---	.00	.00	---	.40	.00	.00	.00	.00	.00	.00
4	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
5	---	---	.00	.00	---	.70	.00	.00	.00	.00	.00	.00
6	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
7	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
8	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
9	---	---	.00	.00	---	.00	.10	.00	.00	.00	.00	.00
10	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
11	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
12	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
13	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
14	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	1.20
15	---	---	.00	.00	---	.00	.00	.00	.00	.00	.00	1.10
16	---	---	.00	.00	---	.00	.00	.00	.10	.10	.00	.10
17	---	---	1.00	2.00	---	.20	1.70	.00	.00	.00	.00	.00
18	---	---	.00	.00	---	.00	.20	.00	.00	.00	.00	.40
19	---	---	2.00	.00	---	.00	.00	.00	.00	.10	.30	.00
20	---	---	1.00	---	---	.00	.00	.00	.00	.00	.00	.00
21	---	---	.00	---	---	.00	.00	.10	.00	.00	.00	.00
22	---	---	.00	---	---	.00	.00	.00	.00	.00	.00	.00
23	---	---	.00	---	---	.00	.00	.00	.00	.00	.00	.20
24	---	.00	.00	---	.00	.00	.60	.10	.00	.00	.00	.10
25	---	.00	.00	---	.00	.00	.50	.00	.00	.00	.00	.00
26	---	.00	.00	---	.00	.00	.00	.00	.10	.00	.00	.00
27	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.10	.10
28	---	.00	.00	---	.00	.00	.00	.00	.00	.00	.00	.40
29	---	.00	.00	---	.00	.10	.40	.00	.00	.00	.00	.00
30	---	.00	.00	---	---	.00	.00	.00	.20	.00	.00	.00
31	---	---	.00	---	---	.60	---	1.50	---	.00	.00	---
Total	---	---	4.00	---	---	3.90	4.70	1.70	0.50	0.40	0.40	3.60

Table 9. Records of continuous precipitation-gage measurements at selected sites in Kingfisher and Woods Counties, Oklahoma—Continued

Site ID: 363102098495302; Local number, 24N–15W–32 BBD 2—Continued

Day	Accumulated precipitation, in inches, October 1988 to January 1989.											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.10	0.00	0.00	0.00	---	---	---	---	---	---	---	---
2	.00	.00	.00	.00	---	---	---	---	---	---	---	---
3	.00	.00	.00	---	---	---	---	---	---	---	---	---
4	.20	.00	.00	---	---	---	---	---	---	---	---	---
5	.10	.00	.00	---	---	---	---	---	---	---	---	---
6	.10	.00	.20	---	---	---	---	---	---	---	---	---
7	.70	.00	.00	---	---	---	---	---	---	---	---	---
8	.00	.00	.00	---	---	---	---	---	---	---	---	---
9	.00	.00	.00	---	---	---	---	---	---	---	---	---
10	.00	.00	.00	---	---	---	---	---	---	---	---	---
11	.00	.10	.00	---	---	---	---	---	---	---	---	---
12	.00	.00	.00	---	---	---	---	---	---	---	---	---
13	.00	.00	.00	---	---	---	---	---	---	---	---	---
14	.00	.00	.00	---	---	---	---	---	---	---	---	---
15	.00	.10	.00	---	---	---	---	---	---	---	---	---
16	.00	.00	.00	---	---	---	---	---	---	---	---	---
17	.00	.00	.00	---	---	---	---	---	---	---	---	---
18	.00	.00	.00	---	---	---	---	---	---	---	---	---
19	.00	.00	.00	---	---	---	---	---	---	---	---	---
20	.20	.40	.00	---	---	---	---	---	---	---	---	---
21	.00	.00	.00	---	---	---	---	---	---	---	---	---
22	.00	.00	.10	---	---	---	---	---	---	---	---	---
23	.00	.00	.00	---	---	---	---	---	---	---	---	---
24	.00	.00	.00	---	---	---	---	---	---	---	---	---
25	.00	.00	.00	---	---	---	---	---	---	---	---	---
26	.00	.10	.10	---	---	---	---	---	---	---	---	---
27	.00	.00	.00	---	---	---	---	---	---	---	---	---
28	.00	.00	.00	---	---	---	---	---	---	---	---	---
29	.00	.00	.00	---	---	---	---	---	---	---	---	---
30	.00	.00	.00	---	---	---	---	---	---	---	---	---
31	.00	---	.00	---	---	---	---	---	---	---	---	---
Total	1.40	0.70	0.40	---	---	---	---	---	---	---	---	---

*U.S. GOVERNMENT PRINTING OFFICE: 1994-668-273-No Program