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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CHEMICAL ANALYSES OF SURFACE WATERS IN OKLAHOMA
SEPTEMBER - DECEMBER, 1944

Prepared in cooperation with the
Oklahoma Planning and Resources Board and
with the Oklahoma A. & M. College Engi-
neering Experiment Station and Department
of Chemistry.

Austin, Texas
May, 1945

**ANALYSES OF WATERS FROM STREAMS IN OKLAHOMA
FROM SEPTEMBER TO DECEMBER, 1944**

A preliminary survey of the industrial quality of surface waters in Oklahoma was started in August, 1944, by the U. S. Geological Survey in cooperation with the Oklahoma Resources and Planning Board, with the Oklahoma A. & M. College, Engineering Experiment Station and Department of Chemistry.

From September to December, 1944, three hundred and fifteen samples were obtained at eighty-four points where gages are maintained for measurement of discharge. Daily samples were collected at six stations, namely:

Illinois River near Gore, Oklahoma
Cimarron River near Oilton, Oklahoma
Canadian River near Whitefield, Oklahoma
Washita River near Durwood, Oklahoma
Red River near Gainesville, Texas
Red River at Denison Dam, Texas

Spot samples were collected at the remainder of the stations. The analyses of the spot samples were made largely in a laboratory provided by the Oklahoma A. & M. College, under the supervision of Dr. O. M. Smith, Head, Department of Chemistry; Dr. S. R. Wood, Associate Professor of Chemistry; and W. W. Hastings, U. S. Geological Survey. The daily samples were analyzed in the water resources laboratory of the Geological Survey at Austin, Texas. These data have been summarized in a report to the Oklahoma Planning and Resources Board prepared by the U. S. Geological Survey, March 1, 1945.

The streams of Oklahoma are classified into two major drainage basins: the Arkansas River and the Red River and their tributaries. The attached analyses are arranged in geographical order for their respective drainage basins, with records listed in downstream order for stations on the main stem first, followed by the analyses for the tributaries. When available, the mean daily discharge is given for the analyses.

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944

ARKANSAS RIVER BASIN

Analyzed by Geological Survey at Stillwater, Oklahoma, and Austin, Texas, in cooperation with the Oklahoma Resources and Planning Board and with the Oklahoma A. & M. College, Engineering Experiment Station and Department of Chemistry.

Parts per million														
Date of collection	Mean discharge (Sec. cond. feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity

ARKANSAS RIVER AT RALSTON, OKLA.

Aug. 16	1,990	167	---	87	26	185	170	211	258	4.0	967	324	8.0	---
Sept. 7	5,560	182	9.0	74	18	276	157	126	422	3.5	1,010	258	7.2	2,200
Oct. 11	5,530	174	7.5	69	20	213	148	106	344	.0	927	254	7.6	540
Oct. 19	2,880	244	9.0	103	28	353	223	159	559	1.5	1,320	372	7.6	360
Nov. 2	1,760	256	10	110	33	370	172	206	606	5.0	1,430	410	7.2	19
Nov. 16	2,000	188	11	108	29	300	237	167	475	3.5	1,210	388	7.6	170

ARKANSAS RIVER AT TULSA, OKLA.

Sept. 27	1,720	292	8.0	98	35	464	170	212	734	4.0	1,630	389	7.2	45
Nov. 16	3,230	227	11	98	36	316	201	143	542	2.0	1,250	392	7.6	435

ARKANSAS RIVER NEAR WEBBERS FALLS, OKLA.

Dec. 12	56,000#	47.6	4.0	32	6.3	43	94	23	68	2.0	225	106	7.2	950
Aug. 23	8,500#	169	7.0	67	28	247	138	170	374	.0	956	282	7.3	---

SALT FORK OF ARKANSAS RIVER AT TONKAWA, OKLA.

Aug. 15	30	651	---	166	50	1,030	151	191	1,800	2.0	3,310	620	7.6	---
Nov. 15	220	482	8.5	123	35	986	193	236	1,550	3.0	3,040	451	7.2	157

Equivalents per million

ARKANSAS RIVER AT RALSTON, OKLA.

Aug. 16	1,990	---	---	4.34	2.14	8.04	2.79	4.39	7.28	0.06	---	---	---	---
Sept. 7	5,560	---	---	3.69	1.48	11.93	2.57	2.62	11.90	.06	---	---	---	---
Oct. 11	5,530	---	---	3.44	1.64	9.26	2.43	2.21	9.70	.00	---	---	---	---
Oct. 19	2,880	---	---	5.14	2.30	15.33	3.67	3.31	15.77	.02	---	---	---	---
Nov. 2	1,760	---	---	5.49	2.71	16.07	2.82	4.28	17.09	.08	---	---	---	---
Nov. 16	2,000	---	---	5.39	2.38	13.06	3.89	3.48	13.40	.06	---	---	---	---

ARKANSAS RIVER AT TULSA, OKLA.

Sept. 27	1,720	---	---	4.89	2.88	20.19	2.79	4.41	20.70	.06	---	---	---	---
Nov. 16	3,230	---	---	4.89	2.96	13.74	3.29	2.98	15.29	.03	---	---	---	---

ARKANSAS RIVER NEAR WEBBERS FALLS, OKLA.

Dec. 12	56,000#	---	---	1.60	.52	1.05	1.54	.48	1.92	.03	---	---	---	---
Aug. 23	8,500#	---	---	3.34	2.30	10.73	2.26	3.54	10.55	.00	---	---	---	---

SALT FORK OF ARKANSAS RIVER AT TONKAWA, OKLA.

Aug. 15	30	---	---	8.29	4.11	44.96	2.48	3.98	50.77	.03	---	---	---	---
Nov. 15	220	---	---	6.14	2.88	42.02	3.16	4.91	43.72	.05	---	---	---	---

#- Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 CONTINUED

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec. cond. feet)	Specific conductance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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CHICKASKIA RIVER NEAR BLACKWELL, OKLA.

Aug. 15	51	129	---	92	22	128	137	37	315	2.8	828	320	7.6	---
Oct. 11	268	80.0	4.5	66	23	66	218	54	118	2.0	498	259	7.5	---
Nov. 15	144	97.8	13	77	24	92	238	64	160	3.0	572	290	7.4	101

RED ROCK CREEK NEAR RED ROCK, OKLA.

Sept. 7	3#	31.6	7	19	7.2	34	92	11	44	2.0	184	77	7.4	2,200
Oct. 11	---	43.7	6.5	36	18	38	168	28	56	.0	298	164	7.5	---
Nov. 15	3#	54.0	10	45	11	64	209	33	62	3.5	332	158	7.0	275
Dec. 5	---	7.4	4.5	9.1	4.5	7.8	43	6.8	8.0	5.5	88	41	6.6	1,660

BLACK BEAR CREEK NEAR PAWNEE, OKLA.

Aug. 16	5#	38.6	---	65	27	64	267	22	119	1.8	478	273	7.6	---
Oct. 11	500#	30.3	3.0	33	22	3.9	67	6.8	84	1.0	239	173	6.8	4,800
Nov. 2	12#	68.8	11	58	20	4.1	234	16	76	1.5	350	226	7.4	26
Dec. 8	700	25.2	6.0	23	8.6	20	90	11	34	5.0	152	93	7.0	800

CLEVELAND LAKE AT CLEVELAND, OKLA.

Sept. 20	---	20.8	4.5	24	7.7	12	106	8.8	14	1.0	131	92	7.2	25
Nov. 19	---	20.6	7.0	25	5.7	16	112	8.2	14	1.5	133	86	7.2	41

Equivalents per million

CHICKASKIA RIVER NEAR BLACKWELL, OKLA.

Aug. 15	51	---	---	4.59	1.81	5.55	2.25	0.77	8.88	0.05	---	---	---	---
Oct. 11	268	---	---	3.29	1.89	2.89	3.59	1.12	3.33	.03	---	---	---	---
Nov. 15	144	---	---	3.84	1.97	3.98	3.90	1.33	4.51	.05	---	---	---	---

RED ROCK CREEK NEAR RED ROCK, OKLA.

Sept. 7	3 $\frac{1}{2}$	---	---	.95	.59	1.47	1.51	.23	1.24	.03	---	---	---	---
Oct. 11	---	---	---	1.80	1.48	1.66	2.78	.58	1.58	.00	---	---	---	---
Nov. 15	3 $\frac{1}{2}$	---	---	2.25	.90	2.77	3.42	.69	1.75	.06	---	---	---	---
Dec. 5	---	---	---	.45	.37	.34	.70	.14	.23	.09	---	---	---	---

BLACK BEAR CREEK NEAR FAWNIE, OKLA.

Aug. 16	5 $\frac{1}{2}$	---	---	3.24	2.22	2.77	4.38	.46	3.36	.03	---	---	---	---
Oct. 11	500 $\frac{1}{2}$	---	---	1.65	1.81	.17	1.10	.14	2.37	.02	---	---	---	---
Nov. 2	12 $\frac{1}{2}$	---	---	2.89	1.64	1.80	3.84	.33	2.14	.02	---	---	---	---
Dec. 8	700	---	---	1.15	.71	.89	1.48	.23	.96	.08	---	---	---	---

CLEVELAND LAKE AT CLEVELAND, OKLA.

Sept. 20	---	---	---	1.20	.63	.50	1.74	.18	.39	.02	---	---	---	---
Nov. 19	---	---	---	1.25	.47	.70	1.84	.17	.39	.02	---	---	---	---

Estimated.

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec. cond. feet)	Specific conductance $\times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
CIMARRON RIVER NEAR MOCAHE, OKLAHOMA														
Aug. 11	8	323	16	78	49	492	214	223	750	2.0	1,950	396	7.6	10
Oct. 6	---	216	9.0	86	50	279	254	171	455	1.0	1,180	420	7.6	750
CIMARRON RIVER NEAR WAYNOKA, OKLAHOMA														
Aug. 9	2	2,240	12	389	125	4,900	197	885	7,830	3.0	14,200	1,480	7.5	5
Oct. 9	---	2,640	6.5	420	275	5,360	192	1,110	8,880	3.0	16,100	2,180	7.7	85
Dec. 20	88	2,400	--	311	93	5,030	237	754	7,880	6.5	14,200	1,160	8.1	---
CIMARRON RIVER NEAR GUTHRIE, OKLAHOMA														
Aug. 14	91	1,765	--	175	51	1,310	175	441	2,050	2.0	4,120	646	7.9	---
Sept. 6	199	807	11	200	45	1,510	123	400	2,440	4.0	4,670	684	7.3	1,260
Oct. 10	779	436	5.0	124	31	814	94	278	1,300	5.0	2,600	437	7.2	1,280
Oct. 18	119	1,250	7.0	236	74	2,420	206	419	3,940	2.0	7,200	893	7.5	120
Nov. 1	58	1,020	12	380	105	2,100	212	503	3,680	3.5	6,880	1,330	7.5	93
Dec. 9	851	744	6.5	160	41	1,470	114	358	2,330	8.0	4,420	568	7.4	2,400

Equivalents per million

CIMARRON RIVER NEAR MOCAHE, OKLAHOMA

Aug. 11	8	---	---	3.89	4.03	21.41	3.51	4.64	21.15	0.03	---	---	---	---
Oct. 6	---	---	---	4.29	4.11	12.11	4.17	3.56	12.84	0.02	---	---	---	---

CIMARRON RIVER NEAR WAYNOKA, OKLAHOMA

Aug. 9	2	---	---	19.42	10.28	213.06	3.23	18.42	220.06	0.05	---	---	---	---
Oct. 9	---	---	---	20.96	22.61	233.10	3.16	23.11	250.40	0.05	---	---	---	---
Dec. 20	88	---	---	15.52	7.65	218.77	3.89	15.70	222.24	0.11	---	---	---	---

CIMARRON RIVER NEAR GUTHRIE, OKLAHOMA

Aug. 14	91	---	---	8.73	4.19	56.98	2.87	9.18	57.82	0.03	---	---	---	---
Sept. 6	199	---	---	9.98	3.70	65.55	2.02	8.33	68.82	0.06	---	---	---	---
Oct. 10	779	---	---	6.19	2.55	35.37	1.54	5.74	36.70	0.08	---	---	---	---
Oct. 18	119	---	---	11.78	6.08	109.40	3.38	81.72	111.13	0.03	---	---	---	---
Nov. 1	58	---	---	18.97	8.63	91.20	3.48	10.47	103.79	0.06	---	---	---	---
Dec. 9	851	---	---	7.99	3.37	63.81	1.87	7.46	65.71	0.13	---	---	---	---

ANALYSES OF SAMPLES FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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CIMARRON RIVER AT OILTON, OKLAHOMA

Sept. 1-8	208	1,090	6.0	346	125	1,300	163	298	3,410	6.5	6,080	1,380	7.6	---
Sept. 9-10	440	506	6.0	163	42	824	150	139	1,480	5.1	2,730	580	7.5	---
Sept. 11-20	136	1,330	3.0	455	113	2,310	158	275	4,370	3.5	7,610	1,600	7.4	---
Sept. 21-27	64	2,060	6.0	689	154	3,550	170	285	6,800	2.8	11,600	2,350	7.6	---
Sept. 28-29	453	733	7.0	259	62	1,380	126	125	2,600	1.5	4,500	902	7.8	---
Sept. 30, Oct. 1-10	2,774	216	12	100	17	327	108	149	535	3.2	1,190	320	8.1	---
Oct. 11, 14	610	449	11	158	30	731	103	190	1,280	3.5	2,450	518	8.0	---
Oct. 12-13, 15-16	608	684	8.0	203	38	1,170	116	269	2,000	3.2	3,750	662	8.1	---
Oct. 17-20	247	1,120	9.0	303	61	2,000	165	330	3,450	3.5	6,240	1,010	8.0	---
Oct. 21-31	152	1,330	4.0	389	97	2,300	212	313	4,130	4.5	7,340	1,370	7.8	---
Nov. 1-4	134	1,470	9.0	465	105	2,590	211	306	4,760	4.0	8,340	1,590	7.9	---
Nov. 5-6, 8	1,877	205	6.0	73	16	300	108	56	528	3.0	1,040	248	8.1	---
Nov. 7, 9-10	1,837	140	7.0	59	12	201	95	52	352	8.6	768	196	7.7	---
Nov. 11-12	935	308	8.0	95	22	494	115	99	850	5.5	1,630	328	8.0	---
Nov. 13-20	329	1,000	1.0	270	62	1,790	158	267	3,110	4.5	5,580	929	8.0	---
Nov. 21-28	240	1,350	9.0	349	88	2,540	227	320	4,410	5.5	8,480	1,230	7.9	---
Nov. 29-30	496	492	10	150	41	827	184	132	1,440	7.0	2,700	543	8.1	---
Dec. 1-4, 10	570	905	3.0	238	60	1,680	172	228	2,900	7.5	5,200	840	8.2	---
Dec. 5-9	5,654	200	6.0	60	14	324	116	66	538	3.8	1,030	207	8.2	---
Dec. 11-13	1,063	554	6.0	147	37	968	126	235	1,600	5.5	3,060	519	7.9	---
Dec. 14-20	643	1,080	7.0	217	64	2,090	193	281	3,450	5.5	6,210	804	8.3	---
Dec. 21-31	433	1,080	7.0	219	67	2,070	244	285	3,400	7.5	6,170	822	8.1	---

Equivalents per million

GIMARRON RIVER AT OILTON, OKLAHOMA

Sept. 1-8	208	---	---	17.27	10.28	76.10	2.67	6.20	96.17	0.10	---	---	---	---
Sept. 9-10	440	---	---	8.14	3.45	34.00	2.46	2.89	41.74	0.08	---	---	---	---
Sept. 11-20	136	---	---	22.71	9.29	98.58	2.59	5.73	123.25	0.06	---	---	---	---
Sept. 21-27	64	---	---	34.39	12.66	152.55	2.79	5.93	191.78	0.05	---	---	---	---
Sept. 28-29	453	---	---	12.93	5.10	59.70	2.07	2.60	73.33	0.02	---	---	---	---
Sept. 30,	2,774	---	---	4.99	1.40	13.50	1.77	3.10	15.09	0.05	---	---	---	---
Oct. 1-10														
Oct. 11, 14	610	---	---	7.89	2.47	30.99	1.69	3.96	36.10	0.06	---	---	---	---
Oct. 12-13,	608	---	---	10.13	3.12	50.44	1.91	5.60	56.41	0.05	---	---	---	---
15-16														
Oct. 17-20	247	---	---	15.12	5.02	86.44	2.71	6.87	97.30	0.06	---	---	---	---
Oct. 21-31	152	---	---	19.42	7.98	98.48	3.48	6.52	116.48	0.07	---	---	---	---
Nov. 1-4	134	---	---	23.21	8.63	111.82	3.49	6.37	134.25	0.06	---	---	---	---
Nov. 5-6, 8	1,877	---	---	3.64	1.32	12.75	1.77	1.17	14.89	0.05	---	---	---	---
Nov. 7, 9-10	1,837	---	---	2.94	0.99	8.34	1.56	0.87	9.93	0.14	---	---	---	---
Nov. 11-12	935	---	---	4.74	1.81	21.47	1.89	2.06	23.97	0.09	---	---	---	---
Nov. 13-20	329	---	---	13.48	5.10	76.80	2.60	5.56	87.71	0.07	---	---	---	---
Nov. 21-28	240	---	---	17.42	7.24	109.30	3.75	6.66	124.38	0.09	---	---	---	---
Nov. 29-30	496	---	---	7.49	3.37	35.30	3.02	2.75	40.61	0.11	---	---	---	---
Dec. 1-4, 10	570	---	---	11.88	4.93	72.09	2.83	4.75	81.79	0.12	---	---	---	---
Dec. 5-9	5,654	---	---	2.99	1.15	14.18	1.90	1.37	15.17	0.06	---	---	---	---
Dec. 11-13	1,063	---	---	7.34	3.04	41.39	2.07	4.89	45.13	0.09	---	---	---	---
Dec. 14-20	643	---	---	10.83	5.26	89.84	3.18	5.85	97.30	0.09	---	---	---	---
Dec. 21-31	433	---	---	10.93	5.51	89.05	4.01	5.93	95.89	0.12	---	---	---	---

ANALYSES OF SAMPLES FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec-conduct)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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CROOKED CREEK NEAR FRYE, KANSAS

Aug.	11	14	186	17	133	22	214	284	95	392	3.0	1,010	424	7.4	190
Oct.	6	--	369	7.0	102	29	683	166	301	997	3.0	2,200	374	7.6	10

COTTONWOOD CREEK NEAR GUTHRIE, OKLAHOMA

Dec.	9	3#	54.7	11	67	26	23	345	9.5	18	3.0	328	274	7.6	16
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COUNCIL CREEK NEAR STILLWATER, OKLAHOMA

Oct.	12	0	16.2	2.0	15	17	4.1	115	7.7	10	0.5	132	108	6.8	200
Dec.	9	0.9	28.1	8.0	27	14	10	138	15	11	4.0	162	125	7.4	105

LAGOON CREEK NEAR OILTON, OKLAHOMA

Sept.	8	2#	48.4	6.0	44	26	3.2	116	18	78	0.5	276	217	7.1	---
Oct.	12	0	51.8	5.0	37	16	40	123	16	90	0.0	311	158	7.1	80
Dec.	8	3#	34.0	5.0	22	7.7	39	73	13	68	2.0	197	88	7.0	260

Equivalents per million

CROOKED CREEK NEAR NYE, KANSAS

Aug.	11	14	---	---	6.64	1.81	9.30	4.66	1.98	11.06	0.05	---	---	---	---
Oct.	6	--	---	---	5.09	2.38	29.70	2.73	6.27	28.12	0.05	---	---	---	---

COTTONWOOD CREEK NEAR GUTHRIE, OKLAHOMA

Dec.	9	3#	---	---	3.34	2.14	1.00	5.67	0.20	0.51	0.05	---	---	---	---
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COUNCIL CREEK NEAR STILLWATER, OKLAHOMA

Oct.	12	0	---	---	0.75	1.40	0.18	1.88	0.16	0.28	0.01	---	---	---	---
Dec.	9	0.9	---	---	1.35	1.15	0.44	2.26	0.31	0.31	0.06	---	---	---	---

LAGOON CREEK NEAR OILTON, OKLAHOMA

Sept.	8	2#	---	---	2.20	2.14	0.14	1.90	0.37	2.20	0.01	---	---	---	---
Oct.	12	0	---	---	1.85	1.32	1.72	2.02	0.33	2.54	.00	---	---	---	---
Dec.	8	3#	---	---	1.10	.63	1.69	1.20	.27	1.92	.03	---	---	---	---

Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean dis- charge (Se- cond- feet)	Specif- ic conduc- tance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magne- sium (Mg)	Sodium and Potas- sium (Na+K) (Calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Dis- solved solids	Total hard- ness as CaCO ₃	pH	Tur- bid- ity
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POLE CAT CREEK NEAR SAPULPA, OKLAHOMA

Aug. 23	3#	987	7.5	350	113	1,620	123	64	3,320	15	5,550	1,340	6.6	---
Nov. 16	30#	72.0	7.0	24	10	101	48	9.1	191	1.5	385	101	6.6	550

VERDIGRIS RIVER NEAR LENAPAH, OKLAHOMA

Sept. 27	38	44.6	6.0	40	11	26	100	58	42	0.0	284	145	7.4	---
Nov. 17	204	76.1	10	63	13	65	281	44	88	2.0	440	260	7.6	34
Dec. 6	20,000	32.1	3.0	33	6.2	25	102	18	42	3.0	193	108	7.2	1,430

VERDIGRIS RIVER NEAR SAGEEYAH, OKLAHOMA

Aug. 10	964	61.1	15	59	10	53	166	36	92	1.5	400	188	7.4	90
Dec. 14	2,980	61.2	--	77	11	25	222	35	50	3.8	338	237	8.0	---

VERDIGRIS RIVER NEAR CLAREMORE, OKLAHOMA

Aug. 10	100	66.1	10	65	11	54	187	33	96	0.5	440	207	7.5	35
Sept. 19	66	41.9	5.0	27	6.6	56	131	23	59	1.0	272	94	7.2	---
Oct. 17	746	60.6	12	60	17	43	228	25	70	1.0	374	220	7.5	45
Nov. 15	1,660	59.5	9.0	44	10	68	173	29	86	2.0	341	151	7.2	800
Dec. 14	3,070	60.6	--	76	10	31	214	34	60	3.2	347	230	8.0	---

Equivalents per million

POLE CAT CREEK NEAR SAPULPA, OKLAHOMA

Aug. 23	3#	---	---	17.47	9.30	70.46	2.02	1.33	93.64	0.24	---	---	---	---
Nov. 16	30#	---	---	71.20	.82	4.37	.79	.19	5.39	.02	---	---	---	---

VERDIGRIS RIVER NEAR LENAP, OKLAHOMA

Sept. 27	38	---	---	2.00	0.90	1.13	1.64	1.21	1.18	0.00	---	---	---	---
Nov. 27	204	---	---	3.14	1.07	2.83	4.61	0.92	2.48	.03	---	---	---	---
Dec. 6	20,000	---	---	1.65	.52	1.10	1.67	.37	1.18	.05	---	---	---	---

VERDIGRIS RIVER NEAR SAGEEY, OKLAHOMA

Aug. 10	964	---	---	2.94	0.82	2.32	2.72	0.75	2.59	0.02	---	---	---	---
Dec. 14	2,080	---	---	3.84	.90	1.10	3.64	.73	1.41	.06	---	---	---	---

VERDIGRIS RIVER NEAR CLAREMORE, OKLAHOMA

Aug. 10	100	---	---	3.24	0.90	2.33	3.06	0.69	2.71	0.01	---	---	---	---
Sept. 19	66	---	---	1.35	.54	2.42	2.15	.48	1.66	.02	---	---	---	---
Oct. 17	746	---	---	3.00	1.40	1.85	3.74	.52	1.97	.02	---	---	---	---
Nov. 15	1,660	---	---	2.20	.82	2.97	2.84	.60	2.42	.03	---	---	---	---
Dec. 14	3,070	---	---	3.79	.82	1.35	3.51	.71	1.69	.05	---	---	---	---

Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-feet)	Specific conductance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
CANEY RIVER NEAR HULDAH, OKLAHOMA														
Sept. 27	3	40.3	5.0	50	8.6	28	200	13	29	1.0	245	160	7.2	35
Nov. 16	44	66.8	12	88	16	35	332	32	38	2.5	387	286	7.6	7
BIRD CREEK NEAR SPERRY, OKLAHOMA														
Aug. 9	174	73.0	11	40	13	82	92	16	170	2.0	454	154	7.0	260
Aug. 23	7	416	5	154	45	656	162	25	1,300	4.0	2,270	570	7.2	---
Oct. 10	94	74.7	10	28	17	92	98	12	174	1.0	469	140	7.0	140
Nov. 16	73	87.5	9.0	49	12	103	108	20	202	2.0	476	172	7.1	240
HOMINY CREEK NEAR SPERRY, OKLAHOMA														
Oct. 10	25#	65.7	10	38	11	79	97	10	156	2.0	398	140	6.8	156
Nov. 15	30#	59.5	15	46	11	66	184	59	63	1.0	358	160	7.6	90
NEOSHO RIVER NEAR COMMERCE, OKLAHOMA														
Aug. 27	20,500	13.2	5.0	16	6.3	12	66	23	10	1.0	161	66	6.2	1,200
Sept. 21	233	41.4	7.0	54	10	19	175	51	14	3.0	289	176	7.5	45
Oct. 20	624	47.2	6.0	40	25	28	213	59	19	2.0	305	203	7.5	60
Nov. 2	334	53.9	8.5	50	13	44	207	64	226	2.5	331	178	7.5	43
Dec. 77	19,300	18.6	44.0	21	5.9	7.6	72	20	7.0	3.5	121	76	6.8	1,200

Equivalents per million

CANEY RIVER NEAR HULDAH, OKLAHOMA

Sept. 27	3	---	---	2.50	0.90	1.20	3.28	0.27	0.82	0.02	---	---	---	---
Nov. 16	44	---	---	4.39	1.32	1.51	5.44	0.67	1.07	.04	---	---	---	---

BIRD CREEK NEAR SPERRY, OKLAHOMA

Aug. 99	174	---	---	2.00	1.08	3.58	1.51	0.33	4.79	0.03	---	---	---	---
Aug. 23	7	---	---	7.69	3.70	28.51	2.66	.52	36.66	0.06	---	---	---	---
Oct. 10	94	---	---	1.40	1.40	3.99	1.61	0.25	4.91	0.02	---	---	---	---
Nov. 16	73	---	---	2.44	.99	4.49	1.77	.42	5.70	.03	---	---	---	---

HOMINY CREEK NEAR SPERRY, OKLAHOMA

Oct. 10	25#	---	---	1.90	0.90	3.43	1.59	0.21	4.40	0.03	---	---	---	---
Nov. 15	30#	---	---	2.30	.90	2.85	3.02	1.23	1.78	.02	---	---	---	---

NEOSHO RIVER NEAR COMMERCE, OKLAHOMA

Aug. 27	20,500	---	---	0.80	0.52	0.54	1.08	0.48	0.28	0.02	---	---	---	---
Sept. 21	233	---	---	2.70	.82	.84	2.86	1.06	.39	.05	---	---	---	---
Oct. 20	624	---	---	2.00	2.06	1.23	3.49	1.23	.54	.03	---	---	---	---
Nov. 2	334	---	---	2.50	1.07	1.92	3.39	1.33	.73	.04	---	---	---	---
Dec. 7	19,300	---	---	1.05	.48	.33	1.18	.42	.20	.06	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec-feet)	Specific conductance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
NEOSHO RIVER NEAR LANGLEY, OKLAHOMA														
Aug. 6	1,240	29.4	7.5	41	6.5	12	114	40	12	4.0	240	129	7.2	---
Sept. 17	1,020	27.6	5	36	6.5	17	116	42	10	2.0	200	116	7.2	---
Oct. 18	6,400	28.2	10	30	11	15	116	41	11	2.0	177	120	7.2	25
Nov. 23	2,200	26.8	5.0	34	6.8	12	96	40	12	2.5	179	113	7.4	17
Dec. 13	6,140	27.7	--	39	6.6	4.1	99	40	6.0	2.8	164	124	7.1	---
NEOSHO RIVER NEAR CHOTEAU, OKLAHOMA														
Aug. 7	2,580	27.4	7.0	38	6.3	12	112	38	9.6	4.0	200	121	7.3	---
Sept. 18	1,000	27.6	7.0	38	6.6	9.7	119	37	10	1.0	171	127	7.6	---
Dec. 8	6,750	26.3	3.0	33	6.9	12	99	37	10	3.5	156	111	7.4	31
NEOSHO RIVER NEAR WAGONER, OKLAHOMA														
Aug. 8	3,800	32.7	9.5	43	6.6	5.3	82	52	11	12	260	134	6.9	30
Sept. 18	1,400	29.8	6.0	38	7.1	13	95	57	10	7.0	216	124	7.1	---
Dec. 20	10,700	28.8	--	38	6.6	7.2	92	45	8.0	5.0	168	122	6.9	---
SPRING RIVER NEAR QUAPAW, OKLAHOMA														
Aug. 25	268	48.4	7.0	55	15	24	126	128	11	0.3	326	199	7.0	---
Oct. 20	248	45.1	10	56	15	16	133	106	8.2	7.0	305	202	7.4	15
Dec. 16	251	50.9	--	75	9.7	14	117	141	7.0	6.9	330	227	7.7	---

Equivalents per million

NEOSHO RIVER NEAR LANGLEY, OKLAHOMA

Aug. 6	1,240	---	---	2.05	0.53	0.52	1.87	0.83	0.34	0.06	---	---	---	---
Sept. 17	1,020	---	---	1.80	.53	.75	1.90	.87	.28	.03	---	---	---	---
Oct. 18	6,400	---	---	1.50	.90	.66	1.87	.85	.31	.03	---	---	---	---
Nov. 23	2,200	---	---	1.70	.56	.52	1.57	.83	.34	.04	---	---	---	---
Dec. 13	6,140	---	---	1.947	.543	.180	1.623	.833	.169	.045	---	---	---	---

NEOSHO RIVER NEAR CHOTEAU, OKLAHOMA

Aug. 7	2,580	---	---	1.90	0.52	0.54	1.84	0.79	0.27	0.06	---	---	---	---
Sept. 18	1,000	---	---	1.90	.54	.42	1.89	.77	.28	.02	---	---	---	---
Dec. 8	6,750	---	---	1.65	.57	.51	1.62	.77	.28	.06	---	---	---	---

NEOSHO RIVER NEAR WAGONER, OKLAHOMA

Aug. 8	3,800	---	---	2.15	0.54	0.23	1.34	1.08	0.31	0.19	---	---	---	---
Sept. 18	1,400	---	---	1.90	.58	.56	1.56	1.19	.28	.11	---	---	---	---
Dec. 20	10,700	---	---	1.897	.543	.312	1.508	0.937	.226	.081	---	---	---	---

SPRING RIVER NEAR QUAPAW, OKLAHOMA

Aug. 25	268	---	---	2.75	1.23	1.06	2.06	2.66	0.31	0.01	---	---	---	---
Oct. 20	248	---	---	2.80	1.23	.71	2.19	2.21	.23	.11	---	---	---	---
Dec. 16	251	---	---	3.74	.80	.63	1.92	2.94	.20	.11	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collec- tion	Mean dis- charge (Se- cond- feet)	Specif- ic conduc- tance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potas- sium (Na/K) (Calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Dis- solved solids	Total hard- ness as CaCO ₃	pH	Tur- bid- ity
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ELK RIVER NEAR TIFF CITY, MISSOURI

Aug. 26	287	24.8	11	32	6.8	6.1	132	5.5	5.0	0.4	149	108	7.6	---
Sept. 21	152	25.5	7.0	46	3.2	7.1	154	4.7	6.6	3.0	167	128	7.5	---
Oct. 19	255	25.8	8.0	46	3.2	8.1	153	5.5	7.8	4.0	158	128	7.6	10
Nov. 3	157	26.7	6.0	28	2.9	30	158	3.6	9.0	2.0	159	82	7.4	2
Dec. 15	222	27.7	--	51	3.2	1.9	156	5.0	6.0	3.8	167	140	8.1	---

BIG CABIN CREEK NEAR VINITA, OKLAHOMA

Sept. 20	10#	30.7	8.0	48	7.7	11	147	39	9.2	1.0	218	152	7.2	25
Nov. 12	40#	36.4	12	50	9.5	9.4	106	78	11	1.5	230	164	7.0	24

SPAVINAW CREEK NEAR SPAVINAW, OKLAHOMA

Aug. 30	80#	16.9	6.0	30	2.8	9.0	110	7.9	5.5	0.0	118	82	7.4	10
Nov. 21	20#	26.4	8.0	33	2.6	18	110	24.0	24.0	1.0	147	93	7.4	6

PRYOR CREEK NEAR PRYOR, OKLAHOMA

Oct. 6	25#	30.2	7.5	18	7.6	32	25	35	62	1.0	207	76	6.1	---
Nov. 7	3#	55.7	9.0	20	9.7	76	50	42	1200	1.0	314	90	6.8	88

Equivalents per million

ELK RIVER NEAR TIFF CITY, MISSOURI

Aug. 26	287	---	---	1.60	0.56	0.27	2.17	0.11	0.14	0.01	---	---	---	---
Sept. 21	152	---	---	2.30	.26	.31	2.53	.10	.19	.05	---	---	---	---
Oct. 19	255	---	---	2.30	.26	.35	2.52	.11	.22	.06	---	---	---	---
Nov. 3	157	---	---	1.40	.24	1.30	2.59	.07	.225	.03	---	---	---	---
Dec. 15	222	---	---	2.54	.26	.08	2.55	.10	.16	.06	---	---	---	---

BIG CABIN CREEK NEAR VINITA, OKLAHOMA

Sept. 20	10#	---	---	2.40	0.63	0.47	2.41	0.81	0.26	0.02	---	---	---	---
Nov. 12	40#	---	---	2.50	.78	.41	1.74	1.62	.31	.02	---	---	---	---

SPAVINAW CREEK NEAR SPAVINAW, OKLAHOMA

Aug. 30	80#	---	---	1.50	0.23	0.39	1.80	0.16	0.16	0.00	---	---	---	---
Nov. 21	20#	---	---	1.65	.21	.77	1.80	.08	.73	.02	---	---	---	---

PRYOR CREEK NEAR PRYOR, OKLAHOMA

Oct. 6	25#	---	---	0.90	0.63	1.38	0.41	0.73	1.75	0.02	---	---	---	---
Nov. 7	3#	---	---	1.00	.80	3.29	.82	.87	3.38	.02	---	---	---	---

Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec-conduct-feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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SPRING CREEK NEAR PEGGS, OKLAHOMA

Sept. 14	---	15.2	11	26	1.8	9.0	93	7.7	5.0	1.0	116	72	6.9	---
Nov. 14	10#	15.0	10	21	1.3	4.8	73	3.7	6.0	1.5	91	63	7.0	---

ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA

Aug. 7	810	15.8	770	28	1.4	6.9	87	9.4	4.6	4.0	120	76	7.0	100
Sept. 19	146	18.2	7.5	30	2.5	10	115	6.3	5.4	.0	128	86	7.2	---
Oct. 11	436	18.7	7.0	24	6.1	9.4	108	7.4	5.7	2.0	113	85	7.2	---
Nov. 14	155	20.4	11	35	2.8	1.4	102	4.9	9.0	1.5	116	94	7.2	13
Dec. 5	174	19.3	5.0	35	3.0	3.9	112	4.0	8.0	2.0	116	100	7.4	2

ILLINOIS RIVER NEAR GORE, OKLAHOMA

Sept. 1-10	676	18.3	9.8	31	1.6	6.6	95	5.0	6.0	4.4	114	84	7.9	---
Sept. 11-20	287	19.9	12	32	2.7	6.4	100	4.7	4.0	0.8	120	91	7.9	---
Sept. 21-30	204	20.9	11	34	4.1	8.5	119	4.2	4.0	.5	128	102	7.9	---
Oct. 1-10	766	20.7	13	32	2.3	7.7	104	4.9	6.0	1.8	119	89	8.0	---
Oct. 11-20	495	20.2	8.1	33	1.9	7.7	101	5.0	6.0	1.2	116	90	8.1	---
Oct. 21-31	280	20.1	7.3	33	1.7	6.3	102	4.8	7.0	1.5	119	89	7.9	---
Nov. 1-10	243	24.2	8.2	34	2.1	6.6	108	4.5	9.0	1.0	122	94	8.4	---
Nov. 11-20	253	20.8	8.0	37	2.4	5.8	116	4.8	8.0	1.2	131	102	8.3	---
Nov. 21-30	233	20.5	7.8	33	2.7	7.4	107	4.9	7.0	2.5	122	93	8.2	---
Dec. 1-10	312	20.8	6.6	34	2.4	8.1	105	4.8	9.0	2.8	122	95	7.8	---
Dec. 11-20	463	20.6	6.5	34	2.1	6.9	104	5.3	6.0	5.0	123	94	7.5	---
Dec. 21-31	235	20.6	8.0	38	2.3	10	107	6.0	13	1.8	134	104	7.4	---

Equivalents per million

SPRING CREEK NEAR PEGGS, OKLAHOMA

Sept. 14	---	---	---	1.30	0.15	0.39	1.52	0.16	0.14	0.02	---	---	---	---
Nov. 14	10 [#]	---	---	1.05	.11	.21	1.20	.08	.17	.02	---	---	---	---

ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA

Aug. 7	810	---	---	1.40	0.12	0.30	1.43	0.20	0.13	0.06	---	---	---	---
Sept. 19	146	---	---	1.50	.21	.45	1.88	.13	.15	.00	---	---	---	---
Oct. 11	436	---	---	1.20	.50	.41	1.77	.15	.16	.03	---	---	---	---
Nov. 14	155	---	---	1.75	.23	.06	1.67	.10	.25	.02	---	---	---	---
Dec. 5	174	---	---	1.75	.25	.17	1.84	.08	.22	.03	---	---	---	---

ILLINOIS RIVER NEAR GORE, OKLAHOMA

Sept. 1-10	676	---	---	1.547	0.132	0.239	1.557	0.104	0.169	0.071	---	---	---	---
Sept. 11-20	287	---	---	1.597	.222	.234	1.638	.098	.113	.013	---	---	---	---
Sept. 21-30	204	---	---	1.697	.337	.321	1.951	.087	.113	.008	---	---	---	---
Oct. 1-10	766	---	---	1.597	.189	.299	1.705	.102	.169	.029	---	---	---	---
Oct. 11-20	495	---	---	1.647	.156	.295	1.656	.104	.169	.019	---	---	---	---
Oct. 21-31	280	---	---	1.647	.140	.245	1.672	.100	.197	.024	---	---	---	---
Nov. 1-10	243	---	---	1.697	.173	.258	1.780	.094	.254	.016	---	---	---	---
Nov. 11-20	253	---	---	1.847	.197	.221	1.908	.100	.226	.019	---	---	---	---
Nov. 21-30	233	---	---	1.647	.222	.286	1.753	.102	.197	.040	---	---	---	---
Dec. 1-10	312	---	---	1.697	.197	.316	1.721	1.100	.254	.045	---	---	---	---
Dec. 11-20	463	---	---	1.697	.173	.266	1.705	.110	.169	.081	---	---	---	---
Dec. 21-31	335	---	---	1.897	.189	.414	1.754	.125	.367	.029	---	---	---	---

Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-feet)	Specific conductance $K \times 10^5$ at $25^\circ C$	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids	Total hardness as $CaCO_3$	pH	Turbidity
DIRTY CREEK NEAR WARNER, OKLAHOMA														
Aug. 23	0.01	18.3	7.5	12	6.7	20	97	5.3	11	0.0	121	58	6.8	---
Oct. 4	---	4.7	4.0	4.2	3.7	12	42	10	3.7	0.0	80	26	6.0	1,600
Nov. 22	6	15.4	6.5	18	6.6	5.5	39	23	18	3.0	100	72	6.2	66
CANADIAN RIVER NEAR NEWCASTLE, OKLAHOMA														
Aug. 5	---	148	--	80	26	152	121	301	159	1.5	874	306	7.6	---
Nov. 24	51	88.1	13	86	27	71	196	232	53	3.0	606	326	7.2	440
CANADIAN RIVER AT CALVIN, OKLAHOMA														
Aug. 19	---	869	--	304	95	1,290	137	44	2,690	1.5	4,490	1,150	7.4	---

Equivalents per million

DIRTY CREEK NEAR WARNER, OKLAHOMA

Aug. 23	0.01#	---	---	0.60	0.55	0.86	1.59	0.11	0.31	0.00	---	---	---	---
Oct. 4	---	---	---	.21	.30	.50	.69	.21	.11	.00	---	---	---	---
Nov. 22	6	---	---	.90	.54	.24	.64	.48	.51	.05	---	---	---	---

CANADIAN RIVER NEAR NEWCASTLE, OKLAHOMA

Aug. 5	---	---	---	3.99	2.14	6.62	1.98	6.27	4.48	0.02	---	---	---	---
Nov. 24	51	---	---	4.29	2.22	3.07	3.21	4.83	1.49	.05	---	---	---	---

CANADIAN RIVER AT CALVIN, OKLAHOMA

Aug. 19	---	---	---	15.17	7.81	56.08	2.25	0.92	75.87	0.02	---	---	---	---
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Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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CANADIAN RIVER NEAR WHITEFIELD, OKLAHOMA

Sept. 1-2, 7-10	1,943	540	13	190	49	850	102	50	1,680	4.2	2,890	676	7.8	---
Sept. 3-6	899	987	5.0	358	86	1,650	89	42	3,330	3.8	5,520	1,250	7.9	---
Sept. 11-20	1,404	307	10	156	47	433	178	284	740	6.2	1,760	583	7.8	---
Sept. 21-30	245	598	10	226	61	860	161	148	1,680	1.8	3,070	815	8.4	---
Oct. 1-2, 4	5,278	613	7.0	218	59	895	147	83	1,770	2.8	3,110	786	8.3	---
Oct. 3, 5-7	11,508	198	6.0	85	21	258	114	85	462	2.8	977	298	8.2	---
Oct. 8-10	8,817	102	8.5	56	14	128	97	59	225	3.0	582	198	8.1	---
Oct. 11-12, 17-20	1,770	190	5.0	88	22	261	114	62	500	4.8	1,000	310	7.8	---
Oct. 13-16	2,060	314	5.0	122	29	463	102	55	905	4.2	1,630	424	7.8	---
Oct. 21-24	604	263	1.0	122	27	380	150	56	740	3.2	1,400	416	7.9	---
Oct. 25-31	426	460	1.0	184	44	700	140	53	1,400	3.0	2,450	640	7.7	---
Nov. 1-7	327	766	8.0	242	62	1,000	135	45	2,030	.8	3,460	859	7.6	---
Nov. 8-10	791	1,020	---	344	83	1,450	132	44	2,950	2.0	4,940	1,200	8.1	---
Nov. 11-13	1,230	972	8.0	340	83	1,580	103	44	3,160	6.5	5,270	1,190	8.0	---
Nov. 14-20	1,448	459	8.0	170	42	675	85	30	1,380	5.3	2,350	597	8.2	---
Nov. 21-24, 29-30	912	584	9.0	211	54	904	126	42	1,810	4.0	3,100	748	8.2	---
Nov. 25-28	1,854	870	5.0	326	86	1,380	125	55	2,840	5.5	4,760	1,170	8.2	---
Dec. 1-7	2,943	385	8.0	145	37	573	125	37	1,140	4.6	2,010	514	8.2	---
Dec. 8-9	6,537	163	5.0	75	19	193	110	30	390	3.8	906	265	8.3	---
Dec. 11-16	2,930	198	7.0	94	26	373	126	93	510	4.6	1,070	342	8.2	---
Dec. 17-20	1,225	363	5.0	153	42	532	163	111	1,020	5.8	1,950	554	7.8	---
Dec. 21-31	965	587	6.0	245	67	881	203	121	1,760	8.2	3,190	887	7.7	---

Equivalents per million

CANADIAN RIVER NEAR WHITEFIELD, OKLAHOMA

Sept. 1-2, 7-10	1,943	---	---	9.48	4.03	36.14	1.67	1.04	47.38	0.07	---	---	---	---
Sept. 3-6	899	---	---	17.87	7.07	70.63	1.46	.87	93.92	.06	---	---	---	---
Sept. 11-20	1,404	---	---	7.79	3.87	17.87	2.92	5.91	20.87	.10	---	---	---	---
Sept. 21-30	245	---	---	11.28	5.02	36.14	2.65	3.08	47.38	.03	---	---	---	---
Oct. 1-2, 4	5,278	---	---	10.88	4.85	37.65	2.41	1.73	49.92	.05	---	---	---	---
Oct. 3, 5-7	11,508	---	---	4.24	1.73	10.20	1.87	1.77	13.03	.05	---	---	---	---
Oct. 8-10	8,817	---	---	2.80	1.15	4.83	1.59	1.23	6.35	.05	---	---	---	---
Oct. 13-16	2,060	---	---	6.09	2.38	19.77	1.67	1.15	25.52	.07	---	---	---	---
Oct. 11-12, 17-20	1,770	---	---	4.39	1.81	10.95	1.87	1.29	14.10	.08	---	---	---	---
Oct. 21-24	604	---	---	6.09	2.22	15.98	2.46	1.17	20.87	.05	---	---	---	---
Oct. 25-31	426	---	---	9.18	3.62	29.78	2.29	1.10	39.48	.05	---	---	---	---
Nov. 1-7	327	---	---	12.08	5.10	42.78	2.21	.94	57.25	.01	---	---	---	---
Nov. 8-10	791	---	---	17.17	6.83	61.36	2.17	.92	83.20	.03	---	---	---	---
Nov. 11-13	1,230	---	---	16.97	6.83	67.30	1.70	.92	89.12	.10	---	---	---	---
Nov. 14-20	1,448	---	---	8.49	3.45	28.73	1.39	.62	38.92	.09	---	---	---	---
Nov. 21-24, 29-30	912	---	---	10.53	4.44	38.81	2.07	.87	51.05	.06	---	---	---	---
Nov. 25-28	1,854	---	---	16.27	7.07	59.68	2.06	1.15	80.10	.09	---	---	---	---
Dec. 1-7	2,943	---	---	7.24	3.04	24.57	2.05	.77	32.15	.07	---	---	---	---
Dec. 8-9	6,537	---	---	3.74	1.56	7.94	1.81	.62	11.00	.06	---	---	---	---
Dec. 11-16	2,930	---	---	4.69	2.14	11.27	2.06	1.94	14.38	.07	---	---	---	---
Dec. 17-20	1,225	---	---	7.64	3.45	22.26	2.68	2.31	28.77	.09	---	---	---	---
Dec. 21-31	965	---	---	12.23	5.51	37.28	3.33	2.52	49.64	.13	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec-conduct-feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na ₂ K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
LITTLE RIVER NEAR SASAKWA, OKLAHOMA														
Aug. 18	5	2,300	---	908	241	4,400	142	60	8,970	1.8	14,700	3,260	7.2	---
Sept. 13	10	1,480	4.5	548	170	2,550	146	72	5,260	5.0	8,680	2,070	7.2	---
Oct. 10	203	485	4.0	302	583	1,450	97	21	2,940	4.5	4,850	1,090	6.8	3,200
Oct. 20	21	2,790	4.5	1,060	294	5,170	113	54	10,600	5.5	17,200	3,850	7.1	5
Nov. 9	235	411	4.5	256	81	1,290	116	18	2,590	5.5	4,300	977	7.0	2,900
Dec. 1	59	1,740	6.0	729	204	3,450	136	41	7,100	3.5	11,600	2,660	7.0	68
GAINES CREEK NEAR KREBS, OKLAHOMA														
Aug. 9	--	43.8	5.0	27	16	47	67	155	13	0.1	294	134	6.6	---
Sept. 21	--	26.2	6.0	17	11	25	68	70	10	0.0	174	88	6.6	40
Oct. 4	7	22.2	4.5	14	9.8	43	122	53	8.7	0.0	193	76	6.4	840
Oct. 25	--	15.1	7.0	12	5.6	13	62	12	11	2.5	114	53	6.4	160
Nov. 23	2	16.6	7.0	14	7.1	12	82	11	8.0	2.0	110	64	6.6	36
Dec. 13	30	12.6	4.0	9.9	3.3	20	50	20	9.0	1.5	93	38	6.5	60
NORTH CANADIAN RIVER NEAR GUYMON, OKLAHOMA														
Oct. 17	--	58.7	17	49	28	63	294	63	18	2.0	386	238	7.6	3
Nov. 11	4	55.5	17	51	28	28	272	52	17	1.5	343	242	7.7	10

Equivalents per million

LITTLE RIVER NEAR SASAKWA, OKLAHOMA

Aug. 18	5	---	---	45.32	19.82	191.45	2.33	1.25	252.98	0.03	---	---	---	---
Sept. 13	10	---	---	27.35	13.98	110.97	2.39	1.50	148.35	.08	---	---	---	---
Oct. 10	203	---	---	15.07	6.82	63.13	1.59	.44	82.92	.07	---	---	---	---
Oct. 20	21	---	---	52.91	24.18	224.92	1.85	1.12	298.95	.09	---	---	---	---
Nov. 9	235	---	---	12.78	6.66	55.97	1.90	.37	73.05	.09	---	---	---	---
Dec. 1	59	---	---	36.39	16.78	150.21	2.23	.85	200.24	.06	---	---	---	---

GAINES GREEK NEAR KREBS, OKLAHOMA

Aug. 9	---	---	---	1.35	1.32	2.03	1.10	3.23	0.37	0.00	---	---	---	---
Sept. 21	---	---	---	.85	.90	1.10	1.11	1.46	.28	.00	---	---	---	---
Oct. 4	7	---	---	.70	.81	1.87	2.03	1.10	.25	.00	---	---	---	---
Oct. 25	---	---	---	.60	.46	.56	1.02	.25	.31	.04	---	---	---	---
Nov. 23	2	---	---	.70	.59	.54	1.34	.23	.23	.03	---	---	---	---
Dec. 13	30	---	---	.49	.27	.85	.82	.42	.25	.02	---	---	---	---

NORTH CANADIAN RIVER NEAR GUYMON, OKLAHOMA

Oct. 17	---	---	---	2.45	2.30	1.95	4.73	1.31	0.31	0.02	---	---	---	---
Nov. 11	4	---	---	2.55	2.30	1.21	5.56	1.09	.48	.02	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-foot)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
NORTH CANADIAN RIVER AT WOODWARD, OKLAHOMA														
Oct. 9	---	60.0	4.0	56	13	53	157	86	64	0.0	353	194	7.6	95
Nov. 16	8	169	16	142	40	180	249	322	262	1.0	1,090	519	7.6	75
NORTH CANADIAN RIVER NEAR EL RENO, OKLAHOMA														
Aug. 5	292	53.3	--	42	11	38	137	49	48	1.0	287	150	7.6	---
Sept. 4	0.03	113	12	76	38	116	241	227	115	1.0	743	346	7.4	---
Oct. 11	259	44.5	7.0	39	11	40	150	42	44	1.5	269	142	7.4	4,000
Oct. 13	---	48.9	--	45	11	36	156	45	42	2.2	283	158	7.1	---
Nov. 24	73	137	13	97	28	111	230	193	148	1.0	746	357	7.4	280
NORTH CANADIAN RIVER NEAR OKLAHOMA CITY, OKLAHOMA														
Sept. 11	58	2,590	---	---	--	---	---	---	10,700	--	---	---	6.8	---
NORTH CANADIAN RIVER NEAR WETUMPKA, OKLAHOMA														
Aug. 17	93	581	--	178	59	835	121	57	1,660	2.5	3,830	686	7.2	---
Sept. 12	83	1,096	3.0	408	119	1,800	98	148	3,670	3.0	6,200	1,510	7.0	---
Oct. 11	203	442	5.5	150	38	666	120	40	1,300	7.0	2,270	530	7.1	3,600
Nov. 10	223	1,790	6.5	984	301	4,380	86	64	9,260	15	15,100	3,690	6.8	2,100
Dec. 1	166	583	7.4	213	68	917	121	41	1,880	10	3,200	811	6.8	630

Equivalents per million

NORTH CANADIAN RIVER AT WOODWARD, OKLAHOMA

Oct. 9	---	---	---	2.80	1.07	2.29	2.57	1.79	1.00	0.00	---	---	---	---
Nov. 16	8	---	---	7.09	3.29	7.82	4.09	6.70	7.39	.02	---	---	---	---

NORTH CANADIAN RIVER NEAR EL RENO, OKLAHOMA

Aug. 5	292	---	---	2.09	0.90	1.63	2.24	1.02	1.35	0.01	---	---	---	---
Sept. 4	0.03	---	---	3.79	3.12	5.03	3.95	4.73	3.24	.02	---	---	---	---
Oct. 11	259	---	---	1.95	.90	1.74	2.46	.87	1.24	.02	---	---	---	---
Oct. 13	---	---	---	2.24	.90	1.56	2.55	.93	1.18	.03	---	---	---	---
Nov. 24	73	---	---	4.84	2.30	4.84	3.77	4.02	4.17	.02	---	---	---	---

NORTH CANADIAN RIVER NEAR OKLAHOMA CITY, OKLAHOMA

Sept. 11	58	---	---	--	--	---	--	--	--	--	---	---	---	---
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NORTH CANADIAN RIVER NEAR WETUMPKA, OKLAHOMA

Aug. 17	93	---	---	8.88	4.85	36.30	1.98	1.19	44.82	0.04	---	---	---	---
Sept. 12	83	---	---	20.36	9.79	78.09	1.61	3.08	103.50	.05	---	---	---	---
Oct. 11	203	---	---	7.49	3.12	28.96	1.97	.83	36.66	.11	---	---	---	---
Nov. 10	223	---	---	49.11	24.75	190.28	1.41	1.33	261.16	.24	---	---	---	---
Dec. 1	166	---	---	10.63	5.59	39.85	1.98	.85	53.08	.16	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na/K) (Calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids	Total hardness as $CaCO_3$	pH	Turbidity
KIOWA CREEK NEAR LOGAN, OKLAHOMA														
Nov. 24	4	75.6	20	68	21	73	268	54	98	0.5	478	256	7.6	9
CLEAR CREEK NEAR MAY, OKLAHOMA														
Aug. 30	5#	51.6	25	47	11	47	190	26	57	0.5	313	162	7.6	--
WOLF CREEK NEAR FORT SUPPLY, OKLAHOMA														
Oct. 9	--	78.5	7.0	75	21	67	186	166	66	0.0	505	274	7.6	50
INDIAN CREEK NEAR WOODWARD, OKLAHOMA														
Nov. 25	5	167	14	183	29	163	310	346	223	1.0	1,110	576	7.6	4
PERSIMMON CREEK NEAR RICHMOND, OKLAHOMA														
Nov. 25	6	97.1	15	137	30	61	371	202	58	1.5	722	466	7.6	9

Equivalents per million

KIOWA CREEK NEAR LOGAN, OKLAHOMA

Nov. 24	4	---	----	3.39	1.73	3.17	4.40	1.12	2.76	0.01	---	---	---	---
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CLEAR CREEK NEAR MAY, OKLAHOMA

Aug. 30	5#	---	---	2.35	0.90	2.03	3.12	0.54	1.61	0.01	---	---	---	---
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WOLF CREEK NEAR FORT SUPPLY OKLAHOMA

Oct. 9	---	---	----	3.74	1.73	2.91	3.06	3.46	1.86	0.00	---	---	---	---
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INDIAN CREEK NEAR WOODWARD, OKLAHOMA

Nov. 25	5	---	---	9.13	2.38	7.09	5.09	7.20	6.29	0.02	---	---	---	---
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PERSIMMON CREEK NEAR RICHMOND, OKLAHOMA

Nov. 25	6	---	---	6.84	2.47	2.66	6.11	4.20	1.64	0.02	---	---	---	---
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Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids	Total hardness as $CaCO_3$	pH	Turbidity
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DEEP FORK NEAR DENVER, OKLAHOMA

Aug. 17	16	131	---	60	24	176	158	15	345	0.2	756	248	7.2	---
Sept. 12	79	240	5.0	80	18	356	66	25	684	4.0	1,200	274	7.5	---
Oct. 11	388	63.1	4.0	21	13	63	80	12	117	1.5	293	106	6.8	4,000
Oct. 21	66	50.8	5.0	29	13	65	111	12	115	2.5	310	126	7.0	600
Nov. 10	252	275	5.5	106	33	415	138	11	833	4.0	1,620	400	6.8	20
Nov. 30	284	163	4.0	61	24	217	126	20	424	1.5	893	250	7.0	680

SALLISAW CREEK NEAR SALLISAW, OKLAHOMA

Aug. 23	---	17.6	7.5	12	10	122	99	6.5	6.0	0.0	109	72	6.9	---
Dec. 12	37	17.8	3.0	31	1.6	5.1	95	7.3	6.0	1.0	102	84	7.2	2

POTEAU RIVER NEAR WISTER, OKLAHOMA

Aug. 8	---	8.0	7.5	3.7	2.9	12	41	5.1	6.5	0.2	54	21	6.4	---
Sept. 21	6	6.5	5.5	4.8	3.8	6.9	36	4.4	5.6	0.0	49	28	6.2	30
Oct. 3	0.5	7.4	7.5	5.2	3.9	9.7	43	6.8	5.8	0.0	64	29	6.2	35
Oct. 24	---	7.1	3.0	6.0	3.4	6.0	29	4.6	8.5	1.0	47	29	6.2	49
Nov. 24	26	6.4	5.0	7.1	4.4	4.6	38	6.0	5.0	1.0	65	35	6.2	13

Equivalents per million

DEEP FORK NEAR DEWAR, OKLAHOMA

Aug. 17	16	---	---	2.99	1.97	7.67	2.59	0.31	9.73	0.00	---	---	---	---
Sept. 12	79	---	---	3.99	1.48	15.48	1.08	1.52	19.29	.06	---	---	---	---
Oct. 11	388	---	---	1.05	1.07	2.76	1.31	.25	3.30	.02	---	---	---	---
Oct. 21	66	---	---	1.45	1.07	2.83	1.82	.25	3.24	.04	---	---	---	---
Nov. 10	252	---	---	5.29	2.71	18.04	2.26	.23	23.49	.06	---	---	---	---
Nov. 30	284	---	---	3.04	1.97	9.44	2.06	.42	11.95	.02	---	---	---	---

SALLISAW CREEK NEAR SALLISAW, OKLAHOMA

Aug. 23	---	---	---	0.60	0.82	0.51	1.62	0.14	0.17	0.00	---	---	---	---
Dec. 12	37	---	---	1.55	.13	.22	1.56	.15	.17	.02	---	---	---	---

POTEAU RIVER NEAR WISTER, OKLAHOMA

Aug. 8	---	---	---	0.18	0.24	0.54	0.67	0.11	0.18	0.00	---	---	---	---
Sept. 21	6	---	---	.24	.31	.30	.59	.09	.16	.00	---	---	---	---
Oct. 3	0.5	---	---	.26	.32	.42	.70	.14	.16	.00	---	---	---	---
Oct. 24	---	---	---	.30	.28	.26	.48	.10	.24	.02	---	---	---	---
Nov. 24	26	---	---	.35	.36	.20	.63	.12	.14	.02	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

ARKANSAS RIVER BASIN (CONTINUED)

Parts per million

Date of collec- tion	Mean- dis- charge (Se- cond- fer.)	Specif- ic conduc- tance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potas- sium (Na/K) (Calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Dis- solved solids	Total hard- ness as CaCO ₃	pH	Tur- bid- ity
POTEAU RIVER AT POTEAU, OKLAHOMA														
Aug. 8	---	8.7	9.0	5.0	2.6	11	34	7.9	7.0	0.3	68	23	6.4	---
Sept. 21	10	9.0	6.0	5.8	4.4	9.7	39	9.0	7.8	1.0	63	32	6.4	30
Oct. 3	2	9.3	5.0	5.4	3.7	13	40	8.8	8.8	3.0	67	28	6.2	25
Oct. 24	2	9.7	6.5	5.8	3.7	8.7	28	7.5	10	4.5	62	30	6.2	34
Nov. 24	30	7.8	6.0	5.4	4.0	6.0	34	6.7	5.0	1.5	55	30	6.4	---
FOURCHE M/LINE NEAR RED OAK, OKLAHOMA														
Aug. 9	---	21.1	8.0	14	9.2	18	99	18	8.6	0.0	130	13	6.8	24
Sept. 21	---	22.9	4.5	14	9.3	26	109	25	10	.0	142	73	6.8	30
Nov. 23	0.1	20.9	6.0	12	10	19	101	14	10	1.0	133	71	6.6	49
Dec. 13	2	24.5	5.0	14	9.8	22	71	45	12	1.0	160	76	6.6	16

Equivalents per million

POTEAU RIVER AT POTEAU, OKLAHOMA

Aug. 8	---	---	---	0.25	0.21	0.46	0.56	0.16	0.20	0.00	---	---	---	---
Sept. 21	10	---	---	.29	.36	.42	.64	.19	.22	.02	---	---	---	---
Oct. 3	2	---	---	.27	.30	.57	.66	.18	.25	.05	---	---	---	---
Oct. 24	2	---	---	.29	.30	.38	.46	.16	.28	.07	---	---	---	---
Nov. 24	30	---	---	.27	.33	.26	.56	.14	.14	.02	---	---	---	---

FOURCHE M.LINE NEAR RED OAK, OKLAHOMA

Aug. 9	---	---	---	0.70	0.76	0.77	1.62	0.37	0.24	0.00	---	---	---	---
Sept. 21	---	---	---	.70	.76	1.13	1.79	.52	.28	.00	---	---	---	---
Nov. 23	0.1	---	---	.60	.82	.83	1.66	.29	.28	.02	---	---	---	---
Dec. 13	2	---	---	.70	.81	.95	1.16	.94	.34	.02	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944

RED RIVER BASIN

Analyzed by Geological Survey at Stillwater, Oklahoma, and Austin, Texas, in cooperation with the Oklahoma Resources and Planning Board and with the Oklahoma A. & M. College Engineering Experiment Station and Department of Chemistry.

Parts per million

Date of collection	Mean discharge (Se- cond- feet)	Specific conductance ($K \times 10^5$ at $25^\circ C$)	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids	Total hardness as $CaCO_3$	pH	Turbidity
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RED RIVER NEAR GAINESVILLE, TEXAS

Sept. 1-2, 7-10	794	377	--	215	54	532	110	519	910	2.8	2,290	758	--	---
Sept. 3-6	1,606	188	--	118	27	232	102	253	398	3.2	1,080	406	--	---
Sept. 11-15	377	407	--	216	63	571	122	480	1,020	1.8	2,410	798	--	---
Sept. 16-20	296	630	--	366	93	933	107	940	1,600	1.2	3,990	1,300	--	---
Sept. 21-22, 24-30	276	753	--	384	86	1,240	144	940	2,070	1.8	4,790	1,310	--	---
Oct. 1-10	---	118	--	66	15	145	96	113	243	3.8	633	226	--	---
Oct. 11-13	---	282	--	137	37	360	103	314	612	3.2	1,510	494	--	---
Oct. 14-20	---	397	--	211	51	588	132	495	985	2.8	2,400	736	--	---
Oct. 21-31	---	429	--	222	58	622	138	487	1,080	3.0	2,540	792	--	---
Nov. 1-7	---	468	9.0	242	75	647	159	522	1,160	3.2	2,740	241	8.0	---
Nov. 8-10	---	171	5.5	90	24	214	123	155	365	3.2	996	323	8.0	---
Nov. 11-14	---	162	8.5	88	25	200	122	149	348	1.2	956	322	8.0	---
Nov. 15-20	---	333	4.0	175	56	444	147	353	800	1.2	1,910	667	7.9	---
Nov. 21-24	---	583	--	284	81	860	156	639	1,500	2.8	3,440	1,040	--	---
Nov. 25-30	---	187	--	94	27	226	104	163	410	4.7	976	346	--	---
Dec. 1	---	183	--	92	28	241	115	138	445	4.7	1,010	344	--	---
Dec. 2-10	---	352	--	177	53	467	153	346	840	4.7	1,960	660	--	---
Dec. 11-15-20	---	588	--	306	74	880	168	683	1,510	4.1	3,540	1,070	--	---
Dec. 21-25,	---	581	--	316	80	885	214	675	1,530	6.9	3,600	1,120	--	---

Equivalents per million

RED RIVER NEAR GAINESVILLE, TEXAS

Sept. 1-2,	794	---	---	10.73	4.44	23.15	1.80	10.81	25.66	0.05	---	---	---	---
7-10														
Sept. 3-6	1,606	---	---	5.89	2.22	10.10	1.67	5.27	11.22	.05	---	---	---	---
Sept. 11-15	377	---	---	10.78	5.18	24.33	2.00	9.99	28.77	.03	---	---	---	---
Sept. 16-20	296	---	---	18.27	7.65	40.55	1.75	19.57	45.13	.02	---	---	---	---
Sept. 21-22,	276	---	---	19.17	7.07	54.10	2.36	19.57	58.38	.03	---	---	---	---
24-30														
Oct. 1-10	---	---	---	3.29	1.23	6.31	1.57	2.35	6.85	.06	---	---	---	---
Oct. 11-13	---	---	---	6.84	3.04	15.66	1.69	6.54	17.26	.05	---	---	---	---
Oct. 14-20	---	---	---	10.53	4.19	25.58	2.16	10.31	27.78	.05	---	---	---	---
Oct. 21-31	---	---	---	11.08	4.77	27.06	2.26	10.14	30.46	.05	---	---	---	---
Nov. 1-7	---	---	---	12.08	6.17	27.88	2.61	10.87	32.72	.05	---	---	---	---
Nov. 8-10	---	---	---	4.49	1.97	8.95	2.02	3.23	10.29	.05	---	---	---	---
Nov. 11-14	---	---	---	4.39	2.06	8.24	2.00	3.10	9.81	.02	---	---	---	---
Nov. 15-20	---	---	---	8.73	4.61	18.61	2.41	7.35	22.56	.02	---	---	---	---
Nov. 21-24	---	---	---	14.18	6.66	37.37	2.56	13.30	42.30	.05	---	---	---	---
Nov. 25-30	---	---	---	4.69	2.22	9.82	1.70	3.39	11.56	.08	---	---	---	---
Dec. 1	---	---	---	4.59	2.30	10.49	1.88	2.87	12.55	.08	---	---	---	---
Dec. 2-10	---	---	---	8.83	4.36	20.29	2.51	7.20	23.69	.08	---	---	---	---
Dec. 11,	---	---	---	15.27	6.09	38.27	2.75	14.22	42.59	.07	---	---	---	---
15-20														
Dec. 21-25,	---	---	---	15.77	6.58	38.47	3.51	14.05	43.15	.11	---	---	---	---
27, 29, 31														

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-foot)	Specific conductance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
RED RIVER NEAR COLBERT, OKLAHOMA														
Sept. 1-10	89.6	244	--	148	37	316	170	326	515	3.5	1,430	522	7.6	---
Sept. 11-20	126	207	---	129	33	260	170	264	430	2.8	1,200	458	7.7	---
Sept. 21-30	117	197	---	124	33	233	170	248	390	4.4	1,120	445	7.7	---
Oct. 2-3, 5-7, 9-10	---	167	---	110	31	190	163	219	320	3.0	953	402	7.9	---
Oct. 13-14, 16-17, 19-20	---	162	---	108	30	187	163	216	312	2.0	935	393	8.2	---
Oct. 21-22, 24-28, 30-31	---	161	---	110	30	192	165	219	320	1.8	954	398	8.0	---
Nov. 1-10	---	166	3.5	114	28	200	166	225	320	1.8	975	400	8.2	---
Nov. 11-20	---	170	--	112	31	187	153	231	315	3.0	954	407	8.2	---
Nov. 21-30	---	168	--	110	33	195	156	230	328	3.8	977	410	8.1	---
Dec. 1, 4-6, 8-9	---	169	--	114	30	198	160	234	328	3.2	986	408	8.1	---
Dec. 11-20	---	172	--	106	29	210	154	235	332	2.0	990	384	8.2	---
Dec. 21-31	---	187	--	117	34	229	168	284	352	1.5	1,100	432	8.2	---

RED RIVER AT ARTHUR CITY, TEXAS

Sept. 13	---	144	7	92	34	159	270	135	251	0.0	893	370	7.5	---
Dec. 20	492	110	--	85	20	105	200	116	167	1.2	609	294	8.1	---

Equivalents per million

RED RIVER NEAR COLBERT, OKLAHOMA

Sept. 1-10	89.6	---	---	7.39	3.04	13.73	2.79	6.79	14.52	0.06	---	---	---	---
Sept. 11-20	126	---	---	6.44	2.71	11.32	2.79	5.50	12.13	.05	---	---	---	---
Sept. 21-30	117	---	---	6.19	2.71	10.12	2.79	5.16	11.00	.07	---	---	---	---
Oct. 2-3, 5-7, 9-10	---	---	---	5.49	2.55	7.28	2.68	4.56	9.03	.05	---	---	---	---
Oct. 13-14, 16-17, 19-20	---	---	---	5.39	2.47	8.14	2.67	4.50	8.80	.03	---	---	---	---
Oct. 21-22, 24-28, 30-31	---	---	---	5.49	2.47	8.36	2.70	4.56	9.03	.03	---	---	---	---
Nov. 1-10	---	---	---	5.69	2.30	8.21	2.72	4.58	9.03	.03	---	---	---	---
Nov. 11-20	---	---	---	5.59	2.55	8.11	2.51	4.81	8.88	.05	---	---	---	---
Nov. 21-30	---	---	---	5.49	2.71	8.46	2.56	4.79	9.25	.06	---	---	---	---
Dec. 1, 4-6, 8-9	---	---	---	5.69	2.47	8.63	2.62	4.87	9.25	.05	---	---	---	---
Dec. 11-20	---	---	---	5.29	2.38	9.13	2.52	4.89	9.36	.03	---	---	---	---
Dec. 21-31	---	---	---	5.84	2.80	9.97	2.75	5.91	9.93	.02	---	---	---	---

RED RIVER AT ARTHUR CITY, TEXAS

Sept. 13	---	---	---	4.59	2.80	6.91	4.41	2.81	7.08	0.00	---	---	---	---
Dec. 20	492	---	---	4.24	1.64	4.55	3.28	2.42	4.71	.02	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec-conduct-feet)	Specific conductance $\times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
ELM FORK OF NORTH FORK OF RED RIVER NEAR MCGUM, OKLAHOMA														
Sept. 29	---	473	5.0	431	85	471	89	912	1,010	2.0	2,960	1,420	7.2	9,000
NORTH FORK OF RED RIVER NEAR HEADRICK, OKLAHOMA														
Sept. 6	104	492	7.0	207	44	822	113	528	1,280	3.0	2,940	698	7.4	---
ELK CREEK NEAR HOBART, OKLAHOMA														
Aug. 9	5#	168	--	206	88	150	405	552	205	7.5	1,410	876	8.2	---
Oct. 18	10#	199	5.0	262	90	106	376	745	120	4.0	1,520	1,020	7.5	16
Nov. 24	10#	159	15	201	85	115	463	552	102	3.5	1,320	851	7.6	18
CACHE CREEK NEAR WALTERS, OKLAHOMA														
Aug. 18	---	58.8	--	48	9.2	58	198	35	54	10	343	158	7.4	---
Sept. 8	24	63.3	6.0	50	11	70	249	27	58	10	355	170	7.2	130
Nov. 23	17	65.8	10	52	16	70	248	34	69	15	402	196	7.0	75
Dec. 5	60	36.3	7.0	34	7.8	38	163	17	33	3.5	221	117	7.0	1,100
BEAVER CREEK NEAR WAURIKA, OKLAHOMA														
Aug. 10	3#	43.8	--	48	15	23	184	44	23	2.5	268	182	7.6	---
Nov. 23	10#	130	12	131	49	123	338	229	198	2.0	928	528	7.6	79

Equivalents per million

ELM FORT OF NORTH FORK OF RED RIVER NEAR MINGUM, OKLAHOMA

Sept. 29	---	---	---	21.51	6.99	20.46	1.46	18.99	28.48	0.03	---	---	---	---
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NORTH FORK OF RED RIVER NEAR HEALDRICK, OKLAHOMA

Sept. 6	104	---	---	10.33	3.62	35.74	1.85	10.99	36.10	0.05	---	---	---	---
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ELK CREEK NEAR HOBART, OKLAHOMA

Aug. 9	5#	---	---	10.28	7.24	6.51	6.64	11.49	5.78	0.12	---	---	---	---
Oct. 18	10#	---	---	13.08	7.40	4.63	6.16	15.51	3.38	.06	---	---	---	---
Nov. 24	10#	---	---	10.03	6.99	5.02	7.61	11.49	2.88	.06	---	---	---	---

CACHE CREEK NEAR WALTERS, OKLAHOMA

Aug. 18	---	---	---	2.40	0.76	2.50	3.25	0.73	1.52	0.16	---	---	---	---
Sept. 8	24	---	---	2.50	.90	3.04	4.08	.56	1.64	.16	---	---	---	---
Nov. 23	17	---	---	2.60	1.32	3.04	4.06	.71	1.95	.24	---	---	---	---
Dec. 5	60	---	---	1.70	.64	1.67	2.67	.35	.93	.06	---	---	---	---

BEAVER CREEK NEAR WAURIKA, OKLAHOMA

Aug. 10	3#	---	---	2.39	1.23	0.99	3.01	0.90	0.64	0.04	---	---	---	---
Nov. 23	10#	---	---	6.54	4.03	5.35	5.54	4.77	5.58	.03	---	---	---	---

Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Sec. cond. feet)	Specific conductance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
MUD CREEK NEAR GRADY, OKLAHOMA														
Aug. 10	0.4	27.7	--	25	12	13	124	14	16	1.2	175	112	7.4	---
Nov. 23	3#	29.1	9.0	28	14	15	153	18	11	1.5	192	128	7.0	170
WASHITA RIVER NEAR CHEYENNE, OKLAHOMA														
Oct. 3	---	99.7	9.0	100	30	81	233	282	46	0.0	678	374	7.4	1,400
WASHITA RIVER NEAR CLINTON, OKLAHOMA														
Sept. 26	8	161	7.0	226	99	44	240	807	21	0.5	1,320	971	7.6	15
Dec. 6	161	148	12	182	69	61	248	590	36	3.5	1,080	738	7.4	1,920
WASHITA RIVER AT CARNEGIE, OKLAHOMA														
Aug. 16	70	173	15	212	54	116	316	533	134	1.5	1,220	750	7.5	170
Oct. 3	690	44.2	6.0	---	---	---	122	119	16	2.0	319	---	7.2	8,800
Nov. 24	60	185	18	244	66	86	360	602	102	4.0	1,300	880	7.6	53
WASHITA RIVER NEAR TABLER, OKLAHOMA														
Oct. 4	2,850	46.4	4.5	87	17	35	249	139	10	1.0	416	287	7.0	4,400
Nov. 2	62	139	14	165	49	73	248	414	97	2.0	933	614	7.3	60
Nov. 22	324	121	15	186	44	51	326	405	46	2.0	910	645	7.5	108

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-foot)	Specific conductance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na, K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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MUD CREEK NEAR GRADY, OKLAHOMA

Aug. 10	0.4	27.7	--	25	12	13	124	14	16	1.2	175	112	7.4	---
Nov. 23	3#	29.1	9.0	28	14	15	153	18	11	1.5	192	128	7.0	170

WASHITA RIVER NEAR CHEYENNE, OKLAHOMA

Oct. 3	---	99.7	9.0	100	30	81	233	282	46	0.0	678	374	7.4	1,400
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WASHITA RIVER NEAR CLINTON, OKLAHOMA

Sept. 26	8	161	7.0	226	99	44	240	807	21	0.5	1,320	971	7.6	15
Dec. 6	161	148	12	182	69	61	248	590	36	3.5	1,080	738	7.4	1,920

WASHITA RIVER AT CARNEGIE, OKLAHOMA

Aug. 16	70	173	15	212	54	116	316	533	134	1.5	1,220	750	7.5	170
Oct. 3	690	44.2	6.0	---	---	---	122	119	16	2.0	319	---	7.2	8,800
Nov. 24	60	185	18	244	66	86	360	602	102	4.0	1,300	880	7.6	53

WASHITA RIVER NEAR TABLER, OKLAHOMA

Oct. 4	2,850	46.4	4.5	87	17	35	249	139	10	1.0	416	287	7.0	4,400
Nov. 2	62	139	14	165	49	73	248	414	97	2.0	933	614	7.3	60
Nov. 22	324	121	15	186	44	51	326	405	46	2.0	910	645	7.5	108

Equivalents per million

MUD CREEK NEAR GRADY, OKLAHOMA

Aug. 10	0.4	---	---	1.24	0.98	0.55	2.03	0.29	0.45	0.01	---	---	---	---
Nov. 23	3#	---	---	1.40	1.15	.66	2.51	.37	.31	.02	---	---	---	---

WASHITA RIVER NEAR CHEYENNE, OKLAHOMA

Oct. 3	---	---	---	5.00	2.47	3.52	3.82	5.87	1.30	0.00	---	---	---	---
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WASHITA RIVER NEAR CLINTON, OKLAHOMA

Sept. 26	8	---	---	11.28	8.14	1.93	3.94	16.81	0.59	0.01	---	---	---	---
Dec. 6	161	---	---	9.08	5.67	2.67	4.06	12.28	1.02	.06	---	---	---	---

WASHITA RIVER AT CARNEGIE, OKLAHOMA

Aug. 16	70	---	---	10.58	4.44	5.05	5.18	11.09	3.78	0.02	---	---	---	---
Oct. 3	690	---	---	---	---	---	2.00	2.48	.45	.03	---	---	---	---
Nov. 24	60	---	---	12.18	5.43	3.76	5.90	12.53	2.88	.06	---	---	---	---

WASHITA RIVER NEAR T. BLER, OKLAHOMA

Oct. 4	2,850	---	---	4.34	1.40	1.53	4.08	2.89	0.28	0.02	---	---	---	---
Nov. 2	62	---	---	8.24	4.03	3.18	4.06	8.62	2.74	.03	---	---	---	---
Nov. 22	324	---	---	9.28	3.62	2.21	5.35	8.43	1.30	.03	---	---	---	---

Estimated

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collec- tion	Mean dis- charge (Se- cond- feet)	Specif- ic conduc- tance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potas- sium (Na+K) (Calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Dis- solved solids	Total hard- ness as CaCO ₃	pH	Tur- bid- ity
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WASHITA RIVER NEAR PAULS VALLEY, OKLAHOMA

Dec. 2	236	122	12	163	50	51	359	331	58	3.0	907	612	7.6	134
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WASHITA RIVER NEAR DURWOOD, OKLAHOMA

Sept. 1-10	648	62.7	--	69	24	23	173	126	32	3.0	406	270	--	--
Sept. 11-20	301	88.9	--	109	34	35	211	244	42	3.0	618	412	--	--
Sept. 21-30	213	82.2	--	92	37	31	193	222	41	1.2	519	382	--	--
Oct. 1-10	---	50.9	--	58	19	22	154	104	24	3.2	340	222	--	--
Oct. 11-20	---	51.4	--	56	17	22	156	91	23	2.8	328	210	--	--
Oct. 21-31	---	76.4	--	85	31	33	218	166	42	1.8	516	340	--	--
Nov. 1-10	---	89.7	12	99	37	47	224	214	62	.8	615	399	8.2	--
Nov. 11-12, 16-17	---	72.8	11	84	28	36	203	155	45	2.8	509	324	8.1	--
Nov. 13-15, 18-20	---	108	14	117	41	64	328	197	84	1.8	737	460	7.9	--
Nov. 21-24	---	95.9	--	88	39	63	392	65	89	4.2	580	380	--	--
Nov. 25-30	---	56.4	--	62	18	25	167	94	33	1.8	346	228	--	--
Dec. 1-5	---	89.3	--	87	30	40	212	173	51	2.8	514	340	--	--
Dec. 6-10	---	48.9	--	56	16	20	166	73	24	3.8	275	206	--	--
Dec. 11-20	---	79.7	--	100	28	32	218	184	43	3.5	540	364	--	--
Dec. 21-31	---	98.2	--	102	40	55	230	245	64	5.0	624	419	--	--

SADDLE MOUNTAIN CREEK NEAR CARNEGIE, OKLAHOMA

Dec. 8	5	66.4	9.5	74	23	39	300	34	54	8.0	389	279	7.6	15
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Equivalents per million

WASHITA RIVER NEAR PAULS VALLEY, OKLAHOMA

Dec.	2	236	---	---	8.14	4.11	2.22	5.89	6.89	1.64	0.05	---	---	---	---
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WASHITA RIVER NEAR DURWOOD, OKLAHOMA

Sept. 1-10	648	---	---	3.44	1.97	1.00	2.84	2.62	0.90	0.05	---	---	---	---
Sept. 11-20	301	---	---	5.44	2.80	1.54	3.47	5.08	1.18	.05	---	---	---	---
Sept. 21-30	213	---	---	4.59	3.04	1.34	3.17	4.62	1.16	.02	---	---	---	---
Oct. 1-10	---	---	---	2.89	1.56	.97	2.52	2.17	.68	.05	---	---	---	---
Oct. 11-20	---	---	---	2.80	1.40	.95	2.56	1.89	.65	.05	---	---	---	---
Oct. 21-31	---	---	---	4.24	2.55	1.45	3.57	3.46	1.18	.03	---	---	---	---
Nov. 1-10	---	---	---	4.94	3.04	1.71	3.67	4.46	1.75	.01	---	---	---	---
Nov. 11-12 ^{""}	---	---	---	4.19	2.30	1.24	3.33	3.23	1.27	.05	---	---	---	---
Nov. 13-15,	---	---	---	5.84	3.31	2.45	5.38	4.10	2.37	.03	---	---	---	---
18-20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nov. 21-24	---	---	---	4.39	3.21	2.76	6.43	1.35	2.51	.07	---	---	---	---
Nov. 25-30	---	---	---	3.09	1.48	1.09	2.74	1.96	.93	.03	---	---	---	---
Dec. 1-5	---	---	---	4.34	2.47	1.75	3.47	3.60	1.44	.05	---	---	---	---
Dec. 6-10	---	---	---	2.79	1.31	.86	2.72	1.52	.67	.06	---	---	---	---
Dec. 11-20	---	---	---	4.99	2.30	1.38	3.57	3.83	1.21	.06	---	---	---	---
Dec. 21-31	---	---	---	5.09	3.29	2.38	3.77	5.10	1.81	.08	---	---	---	---

RAVINE MOUNTAIN CREEK NEAR CARNEGIE, OKLAHOMA

Dec.	8	5	---	---	3.69	1.89	1.70	4.92	0.71	1.52	0.13	---	---	---	---
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^{""} Also Nov. 16-17.

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collection	Mean discharge (Second-foot)	Specific conductance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (Calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids	Total hardness as CaCO ₃	pH	Turbidity
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POND CREEK NEAR FORT COBB, OKLAHOMA

Aug. 15	5	77.5	16	104	23	66	270	190	24	3.5	560	354	8.0	---
Oct. 3	61	44.1	13	59	12	22	193	63	12	4.0	284	196	7.1	2,960
Nov. 24	40	70.3	17	108	23	34	340	123	20	3.5	499	364	7.6	66

LITTLE WASHITA RIVER NEAR CHICKASHA, OKLAHOMA

Nov. 21	10	225	17	327	43	201	291	672	347	4.0	1,750	993	7.5	71
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RUSH CREEK AT PURDY, OKLAHOMA

Nov. 2	6	128	8.5	98	68	93	326	168	200	1.5	838	524	7.5	29
Dec. 7	19	214	8.5	126	55	237	322	140	456	2.5	1,180	540	7.6	270

WILDHORSE CREEK NEAR HOOVER, OKLAHOMA

Sept. 29	290	26.8	3.0	34	13	5.3	126	22	16	1.0	170	138	7.0	3,200
Dec. 2	50#	43.8	6.5	53	18	10	202	33	20	1.0	256	206	7.4	155

CADDO CREEK NEAR ARDMORE, OKLAHOMA

Sept. 11	---	113	6.5	59	20	134	117	32	276	2.5	604	229	7.2	550
Dec. 2	8	54.7	7.5	72	12	32	239	29	50	1.0	325	229	7.6	57

Equivalents per million

POND CREEK NEAR FORT COBB, OKLAHOMA

Aug.	15	5	---	---	5.19	1.89	2.86	4.44	3.96	0.68	0.06	---	---	---	---
Oct.	3	61	---	---	2.94	.99	.94	3.16	1.31	.34	.06	---	---	---	---
Nov.	24	40	---	---	5.39	1.89	1.49	5.59	2.56	.56	.06	---	---	---	---

LITTLE WASHITA RIVER NEAR CHICKASHA, OKLAHOMA

Nov.	21	10	---	---	16.32	3.54	8.76	4.78	13.99	9.79	0.06	---	---	---	---
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RUSH CREEK AT PURDY, OKLAHOMA

Nov.	2	6	---	---	4.89	5.59	4.03	5.35	3.50	5.64	0.02	---	---	---	---
Dec.	7	19	---	---	6.29	4.52	10.29	5.28	2.92	12.86	.04	---	---	---	---

WILDHORSE CREEK NEAR HOOVER, OKLAHOMA

Sept.	29	290	---	---	1.70	1.07	0.23	2.07	0.46	0.45	0.02	---	---	---	---
Dec.	2	50#	---	---	2.64	1.48	.44	3.31	.69	.56	.02	---	---	---	---

CADDO CREEK NEAR ARDMORE, OKLAHOMA

Sept.	11	---	---	---	2.94	1.64	5.83	1.92	0.67	7.78	0.04	---	---	---	---
Dec.	2	8	---	---	3.59	.99	1.38	3.93	.60	1.41	.02	---	---	---	---

Estimated.

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collec- tion	Mean dis- charge (Sec- ond- feet)	Specif- ic conduc- tance K x 10 ⁵ at 25°C	Silica (SiO ₂)	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potas- sium (Na+K) (Calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Dis- solved solids	Total hard- ness as CaCO ₃	pH	Tur- bid- ity
PENNINGTON CREEK NEAR TISHOMINGO, OKLAHOMA														
Aug. 31	---	72.7	10	22	9.6	46	204	9.3	12	1.5	214	94	7.5	---
BLUE RIVER NEAR BLUE, OKLAHOMA														
Sept. 16	---	46.9	7.0	46	33	15	320	6.4	9.0	1.0	275	250	7.6	---
Dec. 20	62	51.5	--	58	24	3.1	281	11	5.0	1.8	250	243	8.3	---
MUDDY BOGGY RIVER NEAR FARRIS, OKLAHOMA														
Sept. 13	11	22.2	7	16	7.9	18	76	22	18	1.0	149	72	6.8	---
Dec. 21	19	14.4	--	9.8	6.6	5.2	331	15	15	.8	163	52	7.7	---
CLEAR BOGGY CREEK NEAR CANEY, OKLAHOMA														
Sept. 13	17	84.7	6.5	52	20	87	176	14	171	1.0	520	212	7.5	---
Dec. 22	56	101	--	96	23	74	301	32	152	.8	533	334	7.8	---
KIAMICHI RIVER NEAR BELZONI, OKLAHOMA														
Sept. 14	25	6.1	6	3.2	3.4	8.7	32	6.0	6.0	0.5	50	22	6.6	---
Dec. 21	274	5.8	--	3.5	3.2	2.5	14	7.8	5.0	.8	66	22	5.8	---

Equivalents per million

PENNINGTON CREEK NEAR TISHOMINGO, OKLAHOMA

Aug. 31	---	---	---	1.10	0.79	2.02	3.36	0.19	0.34	0.02	---	---	---	---
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BLUE RIVER NEAR BLUE, OKLAHOMA

Sept. 16	---	---	---	2.30	2.71	0.64	5.25	0.13	0.25	0.02	---	---	---	---
Dec. 20	62	---	---	2.89	1.97	.13	4.60	.22	.14	.02	---	---	---	---

MUDDY BOGGY RIVER NEAR FARRIS, OKLAHOMA

Sept. 13	11	---	---	0.80	0.65	0.79	1.25	0.46	0.51	0.02	---	---	---	---
Dec. 21	19	---	---	0.48	0.54	.22	.50	.31	.42	.01	---	---	---	---

CLEAR BOGGY CREEK NEAR CANEY, OKLAHOMA

Sept. 13	17	---	---	2.60	1.64	3.79	2.90	0.29	4.82	0.02	---	---	---	---
Dec. 22	56	---	---	4.79	1.89	3.22	4.93	.67	4.29	.01	---	---	---	---

KLAMICHI RIVER NEAR BELZONI, OKLAHOMA

Sept. 14	25	---	---	0.16	0.28	0.38	0.52	0.12	0.17	0.01	---	---	---	---
Dec. 21	274	---	---	.17	.26	.10	.22	.16	.14	.01	---	---	---	---

ANALYSES OF SAMPLES COLLECTED FROM STREAMS IN OKLAHOMA IN 1944 (CONTINUED)

RED RIVER BASIN (CONTINUED)

Parts per million

Date of collec- tion	Mean dis- charge (Se- cond- feet)	Specif- ic conduc- tance $K \times 10^5$ at 25°C	Silica (SiO ₂)	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potas- sium (Na/K) (Calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Dis- solved solids	Total hard- ness as CaCO ₃	pH	Tur- bid- ity
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LITTLE RIVER NEAR IDABEL, OKLAHOMA

Aug. 29	---	22.5	12.1	14	3.8	34	49	24	42	0.0	143	50	6.6	---
Sept. 27	---	12.3	8.0	8.7	3.8	18	51	5.9	20	.0	90	37	6.5	15
Oct. 14	---	17.8	7.0	11	3.4	20	42	4.1	32	1.5	102	42	6.6	4
Oct. 26	---	20.2	7.5	12	3.7	23	46	5.2	37	.5	112	45	6.6	3
Nov. 14	440	5.7	7.5	7.0	4.0	3.4	24	6.3	10	2.0	66	34	6.0	---
Dec. 27	4,740	5.3	--	3.2	1.9	15	11	4.1	25	.5	56	16	6.0	---

MOUNTAIN FORK RIVER NEAR EAGLETOWN, OKLAHOMA

Aug. 29	---	7.3	9.0	5.5	1.4	13	32	8.7	8.7	0.0	67	19	6.6	---
Oct. 26	0.3	9.0	3.0	6.3	2.7	9.7	19	2.7	20	1.0	59	26	6.4	2
Dec. 27	3,980	3.6	--	3.4	1.8	3.3	11	4.0	2.0	.8	44	16	8.1	---

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Equivalents per million

LITTLE RIVER NEAR IDABEL, OKLAHOMA

Aug. 29	---	---	---	0.70	0.31	1.47	0.80	0.50	1.18	0.00	---	---	---	---
Sept. 27	---	---	---	.43	.31	.78	.84	.12	.56	.00	---	---	---	---
Oct. 14	---	---	---	.55	.28	.86	.69	.08	.90	.02	---	---	---	---
Oct. 26	---	---	---	.60	.30	1.01	.75	.11	1.04	.01	---	---	---	---
Nov. 14	440	---	---	.35	.33	.15	.39	.13	.28	.03	---	---	---	---
Dec. 27	4,740	---	---	.16	.15	.66	.18	.08	.70	.00	---	---	---	---

MOUNTAIN FORK RIVER NEAR EAGLETOWN, OKLAHOMA

Aug. 29	---	---	---	0.27	0.11	0.56	0.52	0.18	0.24	0.00	---	---	---	---
Oct. 26	0.3	---	---	.31	.22	.42	.31	.06	.56	.02	---	---	---	---
Dec. 27	3,980	---	---	.17	.14	.01	.18	.08	.05	.01	---	---	---	---