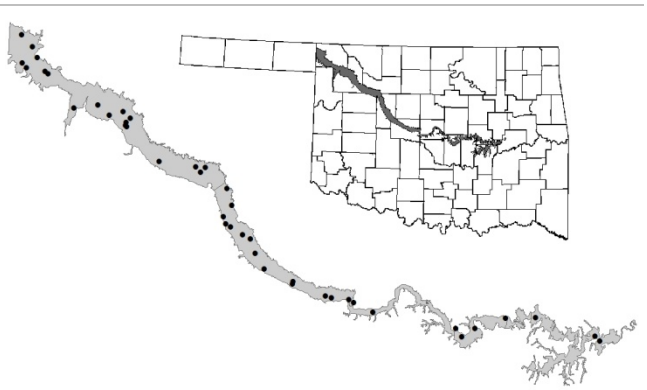
North Canadian River Aquifer

Baseline Sample Period	Sampling Sites	Water Level Sites
August-September 2015	41	67



General	
Location	runs Northwest through Central Oklahoma
Area (km^2)	4,427
Capacity (acre-feet)	8,210,000
Primary Uses	Public Supply; Irrigation
Category	Alluvial & Terrace

Parameters — General Field

Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Well Depth (ft)	64.4	3.07	7.9	46.5	56	80	130	n=71
Depth to Water (ft)	22.47	1.69	6.59	11.88	17.98	32.34	59.83	Below ground surface
Temperature (°C)	19.55	0.321	16.62	18.36	18.99	20.23	25.95	
Specific Conductance (µS/cm)	835	84.8	183	437	684	1010	2620	
Dissolved Oxygen (mg/L)	5.22	0.504	0.09	2.29	6.28	7.75	9.33	n=40
pH (units)	6.84	0.052	6.17	6.68	6.88	7.12	7.28	SMCL: 6.5-8.5; 9 under
Reduction Potential (mV)	314	18.7	53.2	284	345	394	504	n=40
Alkalinity (mg/L)	238	23.4	49.0	126	210	328	635	n=40
Hardness (mg/L)	329	31.8	48.0	171	283	444	930	
Calculated Bicarbonate (mg/L)	290	28.5	60.0	153.8	256.5	400.3	775	n=40
Total Dissolved Solids (mg/L)	509	54.3	118	264	396	574	1670	SMCL: 500; 14 over

Parameters — Nutrient Constituents

Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Ammonia (mg/L)	All Values <0.1, except 6 (0.22, 0.36, 0.37, 0.4, 0.55, 0.67)							
Nitrate & Nitrite (mg/L)	6.27	0.792	<0.05	1.87	6.56	10.0	20.8	MCL: 10; 10 over
Total Dissolved Phosphorus (mg/L)	0.113	0.014	0.025	0.061	0.095	0.136	0.433	

Parameters — Mineral Constituents

Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Bromide (µg/L)	320	30.3	<100	199	278	380	759	
dissolved Calcium (mg/L)	85.7	7.21	10.4	59.9	80.7	108	212	
Chloride (mg/L)	46.7	8.70	<10	14.8	25.5	60.4	281	SMCL: 250; 1 over
Fluoride (mg/L)	0.247	0.038	<0.2	<0.2	<0.2	0.32	1.29	MCL: 4; 0 over
dissolved Magnesium (mg/L)	23.9	3.17	3.6	9.9	16.5	31.6	91.0	
dissolved Potassium (mg/L)	2.56	0.375	0.9	1.3	1.9	2.7	12.5	
dissolved Silica (mg/L)	29.1	1.03	21.7	24.9	27.7	30.3	54.9	
dissolved Sodium (mg/L)	51.1	9.54	9.1	20.7	27.9	47.2	276	
Sulfate (mg/L)	101	18.1	<10	23.9	48.5	147	454	SMCL: 250; 5 over

Parameters	Metal & Trace Element Constituents	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
		dissolved Arsenic (µg/L)	2.68	0.377	<1	<1	1.8	3.8	9.8	MCL: 10; 0 over
		dissolved Barium (µg/L)	181	19.8	34.6	104	150	227	690	MCL: 2000; 0 over
		dissolved Beryllium (µg/L)	All Values <1, except 1 (1.2)							MCL: 4; 0 over
		dissolved Boron (µg/L)	109	19.7	<20	34.3	61.7	113	586	HA: 6000; 0 over
		dissolved Chromium (µg/L)	11.2	2.03	<1	<1	5.4	17.7	45.1	MCL: 100; 0 over
		dissolved Copper (µg/L)	5.45	1.83	<1	<1	1.6	4.2	59.9	MCL: 1300; 0 over
		dissolved Iron (µg/L)	322	137	<20	<20	<20	29.4	5040	SMCL: 300; 8 over
		dissolved Lead (µg/L)	All Values <0.5, except 10 (0.5, 0.6, 0.7, 0.7, 0.8, 0.8, 0.8, 1, 1.1, 1.4)							MCL: 15; 0 over
		dissolved Manganese (µg/L)	139	53.8	<5	<5	<5	24.5	1850	SMCL:50; 10 over HA:300; 7 over
		dissolved Mercury (µg/L)	All Values <0.05, except 1 (0.07)							MCL: 2; 0 over
		dissolved Molybdenum (µg/L)	All Values <5, except 7 (5.6, 6.3, 7.5, 7.6, 7.7, 8.4, 9.5)							HA: 40; 0 over
		dissolved NIckel (µg/L)	1.66	0.331	<1	<1	<1	1.8	8.7	HA: 100; 0 over
		dissolved Selenium (µg/L)	3.39	0.924	<1	1.2	2.4	3.1	37.9	MCL: 50; 0 over
		dissolved Uranium (µg/L)	4.20	0.884	<1	<1	2.7	5.2	26.2	MCL: 30; 0 over
		dissolved Vanadium (µg/L)	11.2	1.14	<5	6.3	8.4	15.9	28	
		dissolved Zinc (µg/L)	27.0	8.40	<5	<5	7.5	25.5	252	SMCL: 5000; 0 over HA: 2000; 0 over

Parameters	Parameters Below Detectable Limits				
		Aluminum Antimony	Cadmium	Cobalt Silver	Thallium

[i] Standard Error of the Mean