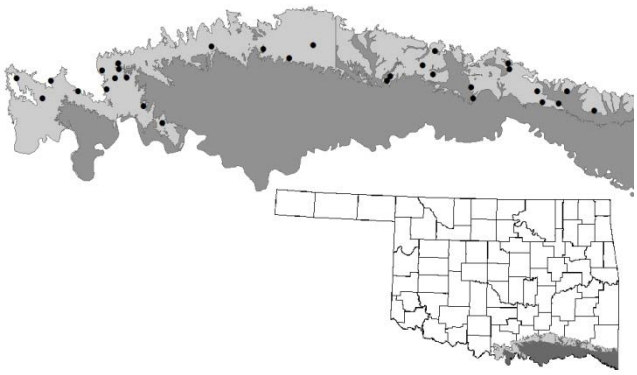
Antlers Aquifer outcrop

Baseline Sample Period	Sampling Sites	Water Level Sites
August 2015	30	32



General		
	Location	South Central to Southeast Oklahoma
	Area (km^2)	1,093
	Capacity (acre-feet)	53,500,000
	Primary Uses	Public Supply; Irrigation; Domestic; Industrial
	Category	Bedrock – sandstone

Parameters	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
General Field	Well Depth (ft)	130	11.9	20	100	116.5	146.3	380	n=36
	Depth to Water (ft)	54.46	6.83	0.00	27.05	46.94	79.57	132.10	Below ground surface
	Temperature (°C)	20.93	0.224	18.49	20.13	20.94	21.64	22.87	
	Specific Conductance (µS/cm)	511	75.6	31.0	113	456	784	1570	
	Dissolved Oxygen (mg/L)	3.09	0.462	0.18	0.48	3.31	5.49	7.43	
	pH (units)	6.52	0.158	4.48	6.02	6.68	7.18	7.93	SMCL: 6.5-8.5; 12 under
	Reduction Potential (mV)	378	33.4	82.5	239	362	536	880	
	Alkalinity (mg/L)	153	22.9	<10	32.4	125	260	378	
	Hardness (mg/L)	148	25.7	<10	38.0	94.0	213	510	n=29
	Calculated Bicarbonate (mg/L)	187	27.8	<12	39.5	153	317	461	
	Total Dissolved Solids (mg/L)	275	37.5	15.0	71.6	254	410	694	SMCL: 500; 6 over

Parameters	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Nutrient Constituents	Ammonia (mg/L)	All values <0.1, except 6 (0.14, 0.25, 0.26, 0.26, 0.28, 0.56)							
	Nitrate & Nitrite (mg/L)	0.768	0.188	<0.05	<0.05	0.15	1.09	3.43	MCL: 10; 0 over
	Total Dissolved Phosphorus (mg/L)	0.024	0.006	<0.005	<0.005	0.014	0.028	0.157	

Parameters	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Mineral Constituents	Bromide (µg/L)	290	47.5	<100	<100	248	362	1080	
	dissolved Calcium (mg/L)	42.9	7.46	1.1	8.8	31.2	60.8	133	
	Chloride (mg/L)	28.1	7.87	<10	<10	13.2	23.7	191	SMCL: 250; 0 over
	dissolved Magnesium (mg/L)	8.48	1.70	<0.5	2.3	4.5	11.6	37.6	
	dissolved Potassium (mg/L)	1.64	0.203	<0.5	0.8	1.4	2.3	5.6	
	dissolved Silica (mg/L)	17.9	0.840	9.44	13.9	18.5	21.4	26.1	
	dissolved Sodium (mg/L)	48.3	12.4	1.1	6.0	23.6	54.4	293	
	Sulfate (mg/L)	39.1	8.66	<10	<10	17.9	47.6	165	SMCL: 250; 0 over

Parameters	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Metal & Trace Element Constituents	dissolved Aluminum (µg/L)	All values <50, except 1 (323)							SMCL: 200; 1 over
	dissolved Arsenic (µg/L)	All values <1, except 4 (1, 1.1, 1.3, 2.9)							MCL: 10; 0 over
	dissolved Barium (µg/L)	49.6	8.62	<1	16.9	30.0	61.1	176	MCL: 2000; 0 over
	dissolved Beryllium (µg/L)	All values <1, except 1 (1.5)							MCL: 4; 0 over
	dissolved Boron (µg/L)	80.0	25.9	<20	<20	30.5	73.3	716	HA: 6000; 0 over
	dissolved Chromium (µg/L)	4.66	1.40	<1	<1	<1	5.4	33.7	MCL: 100; 0 over
	dissolved Cobalt (µg/L)	All values <5, except 1 (16.7)							
	dissolved Copper (µg/L)	7.67	2.45	<1	<1	2.6	9.7	69.4	MCL: 1300; 0 over
	dissolved Iron (µg/L)	166	51.9	<20	<20	28.3	187	1180	SMCL: 300; 5 over
	dissolved Lead (µg/L)	0.582	0.140	<0.5	<0.5	<0.5	<0.5	3.2	MCL: 15; 0 over
	dissolved Manganese (µg/L)	109	37.8	<5	6.2	31.7	99.7	920	SMCL: 50; 12 over HA: 300; 2 over
	dissolved Nickel (µg/L)	1.70	0.256	<1	<1	1.4	1.9	5.7	HA: 100; 0 over
	dissolved Selenium (µg/L)	1.71	0.316	<1	<1	1.2	1.6	7.6	MCL: 50; 0 over
	dissolved Uranium (µg/L)	All values <1, except 6 (1.1, 2.0, 2.2, 2.8, 3.2, 8.3)							MCL: 30; 0 over
	dissolved Vanadium (µg/L)	All values <5, except 4 (5.3, 6.9, 8.4, 15.3)							
	dissolved Zinc (µg/L)	29.5	10.8	<5	<5	6.8	16.1	279	SMCL: 5000; 0 over HA: 2000; 0 over

Parameters	Parameters Below Detectable Limits				
		Antimony Cadmium	Fluoride Mercury	Molybdenum Silver	Thallium

[i] Standard Error of the Mean