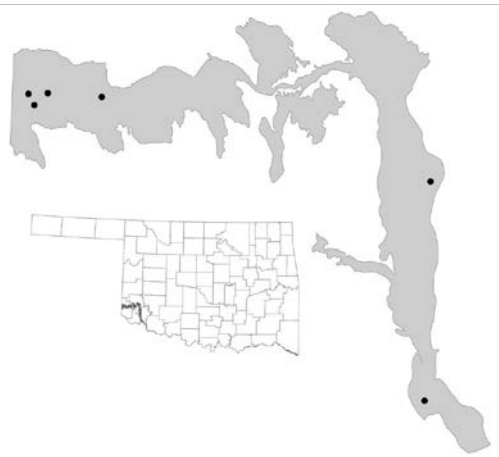
Salt Fork of the Red River Aquifer

Baseline Sample Period	Sampling Sites	Water Level Sites
August 2014	6	6



General	
Location	runs through Southwestern Oklahoma
Area (km^2)	754.3
Capacity (acre-feet)	not available
Primary Uses	Agriculture
Category	Alluvial & Terrace

Parameters — General Field

Parameter	Mean	SEM[1]	Minimum	25%	Median	75%	Maximum	Comments
Well Depth (ft)	100.4	22.69	40	55	80	98	230	n=9
Depth to Water (ft)	40.83	10.59	8.15	18.65	47.62	58.99	69.8	Below ground surface
Temperature (°C)	21.19	0.775	18.36	20.09	21.9	21.97	23.54	
Specific Conductance (µS/cm)	2340	1257	488	532	634.7	3298	7957	
Dissolved Oxygen (mg/L)	5.77	1.27	0.17	5.28	6.49	7.03	9.4	
pH (units)	7.03	0.096	6.67	6.89	7.06	7.22	7.27	
Reduction Potential (mV)	370.1	42.45	188.8	331.5	420.3	425.1	462.5	
Alkalinity (mg/L)	229.3	14.24	183	210.3	228	243.5	284	
Hardness (mg/L)	787.3	369.2	182	233.3	259.5	1163	2334	
Calculated Bicarbonate (mg/L)	282.3	17.62	225	258.8	280.5	300	350	
Total Dissolved Solids (mg/L)	1754	965.9	303	352	402.5	2349	6080	SMCL: 500; 2 over

Parameters — Nutrient Constituents

Parameter	Mean	SEM[1]	Minimum	25%	Median	75%	Maximum	Comments
Nitrate & Nitrite (mg/L)	10.14	1.23	6.26	8.71	9.73	11.18	15.1	MCL: 10; 3 over
Total Dissolved Phosphorus (mg/L)	0.034	0.010	<0.00	0.013	0.044	0.05	0.059	

Parameters — Mineral Constituents

Parameter	Mean	SEM[1]	Minimum	25%	Median	75%	Maximum	Comments
Bromide (µg/L)	1477	949.0	265	295	301.5	1276	6100	
dissolved Calcium (mg/L)	161.2	58.69	56.6	72.28	78.2	237.1	394	
Chloride (mg/L)	340	234.6	<10	<10	<10	466.3	1400	SMCL: 250; 2 over
Fluoride (mg/L)	0.33	0.059	<0.2	0.26	0.345	0.445	0.48	MCL: 4; 0 over
dissolved Magnesium (mg/L)	68.18	39.10	9.2	10.45	13.3	94.68	242	
dissolved Potassium (mg/L)	3.73	0.881	2	2.2	2.65	5.28	6.9	
dissolved Silica (mg/L)	19.19	4.0	7.12	11.58	19.7	26.25	31.3	
dissolved Sodium (mg/L)	274.8	169.4	29.7	30.85	35.95	367.6	1040	
Sulfate (mg/L)	647.8	420.3	27.2	34.6	37.8	947.5	2500	SMCL: 250; 2 over

Parameters	Parameter	Mean	SEM[i]	Minimum	25%	Median	75%	Maximum	Comments
Metal & Trace Element Constituents	dissolved Arsenic (µg/L)	2.97	0.983	1.3	1.45	1.8	3.58	7.4	MCL: 10; 0 over
	dissolved Barium (µg/L)	104.1	31.64	10.1	32.95	129.5	165	178	MCL: 2000; 0 over
	dissolved Boron (µg/L)	359.5	188.0	48.1	80.65	94.35	536.8	1160	HA: 6000; 0 over
	dissolved Copper (µg/L)	All values <5, except 1 (10)							MCL: 1300; 0 over
	dissolved Iron (µg/L)	All values < 20, except 1 (304)							SMCL: 300; 1 over
	dissolved Manganese (µg/L)	113.3	52.57	<5	<5	<5	125.1	504	SMCL: 50; 2 over. HA: 300; 1 over.
	dissolved Molybdenum (µg/L)	All values <5, except 1 (6)							HA: 40; 0 over
	dissolved Selenium (µg/L)	15.27	9.23	<10	<10	<10	9.05	61.2	MCL: 50; 1 over
	dissolved Uranium (µg/L)	9.15	4.52	<1	1.93	4.2	13	28.9	MCL: 30; 0 over
	dissolved Vanadium (µg/L)	21.3	11.42	5.2	6.63	6.95	21.3	76.1	
	dissolved Zinc (µg/L)	14.07	4.66	<5	<5	12	23.2	28.8	SMCL: 5000; 0 over. HA: 2000; 0 over.

Parameters					
Parameters Below Detectable Limits	Aluminum Ammonia Antimony	Beryllium Cadmium Chromium	Cobalt Lead Mercury	Nickel Silver	

[i] Standard Error of the Mean