

# Comanche



Sample Period	Times Visited	Sampling Sites
October 2007 - July 2008	4	3

Lake Data	Location	Stephens County
	Impoundment	1960
	Area	184 acres
	Capacity	2,500 acre-feet
	Purposes	Water Supply and Recreation

Parameters	Parameter	Result	Notes/Comments	
	Average Turbidity	10 NTU	All values < 25 NTU	
	Average True Color	34 units	All values < OWQS of 70	
	Average Secchi Disk Depth	87 cm		
	Water Clarity Rating	good		
	Trophic State Index	49	Previous value = 46	
	Trophic Class	mesotrophic		
	Profile	Salinity	0.12 - 0.18 ppt	
		Specific Conductivity	254 – 359 µS/cm	
		pH	7.39 – 8.46 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	18 to 625 mV	
		Dissolved Oxygen	36% of water column < 2 mg/L in July	Occurred at site 1, the dam
	Nutrients	Surface Total Nitrogen	0.52 mg/L to 0.88 mg/L	
		Surface Total Phosphorus	0.017 mg/L to 0.025 mg/L	
		Nitrogen to Phosphorus Ratio	30:1	Phosphorus limited

Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates, Chlorides & TDS	En,ecal coli, & E. coli	Chlor-a
	Fish & Wildlife Propagation	S	S	S					
	Aesthetics				S	S	S		
	Agriculture							S	
	Primary Body Contact Recreation								S
	Public & Private Water Supply								

*S = Fully Supporting*  
*NS = Not Supporting*  
*NEI = Not Enough Information*

**Notes**

NTU = nephelometric turbidity units  
 µS/cm = microsiemens per centimeter  
 E. coli = Escherichia coli  
 OWQS = Oklahoma Water Quality Standards  
 mV = millivolts  
 Chlor-a = Chlorophyll-a  
 mg/L = milligrams per liter  
 µS/cm = microsiemens/cm  
 ppt = parts per thousand  
 En = Enterococci