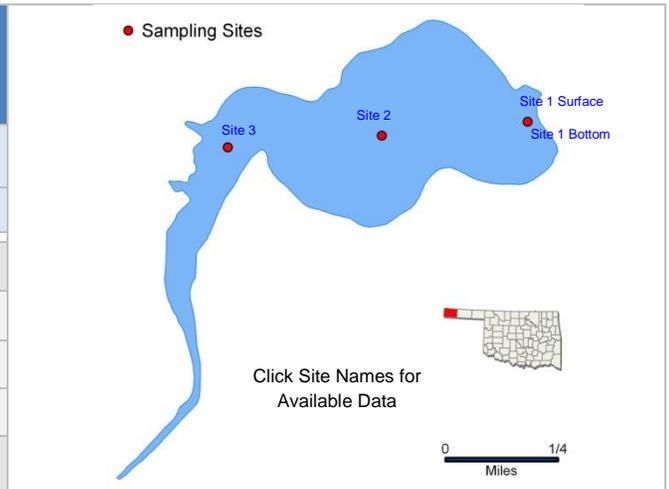


# Carl Etling

Sample Period	Times Visited	Sampling Sites
October 2012 – August 2013	4	3

General	Location	Cimarron County	Click map for site data
	Impoundment	1958	
	Area	159 acres	
	Capacity	1717 acre-feet	
	Purposes	Recreation	



Parameters	In Situ	Parameter ( <i>Descriptions</i> )	Result	Notes/Comments	
		Average Turbidity	37 NTU	25% of values > OWQS of 25 NTU	
		Average Secchi Disk Depth	26 cm		
		Water Clarity Rating	fair		
		Chlorophyll-a	45 mg/m <sup>3</sup>		
		Trophic State Index	68	Previous value = 72	
	Trophic Class	Hypereutrophic			
	Profile	Salinity	0.12 – 0.25 ppt		
		Specific Conductivity	259 – 517 µS/cm		
		pH	6.22 – 8.49 pH units	6% of recorded values < 6.5 pH units	
		Oxidation-Reduction Potential	-168 – 194 mV		
		Dissolved Oxygen	Up to 33% < 2mg/L in August		
	Nutrients	Surface Total Nitrogen	1.33 mg/L to 2.33 mg/L		
		Surface Total Phosphorus	0.074 mg/L to 0.18 mg/L		
		Nitrogen to Phosphorus Ratio	18:1	Phosphorus limited	

Beneficial Uses	<a href="#">Click to learn more about Beneficial Uses</a>	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enterococci & E. coli	Chlor-a
	Fish & Wildlife Propagation	NS	NS	S	S							
	Aesthetics					NEI	*					
	Agriculture							NS	NS	NS		
	Primary Body Contact Recreation										S	
	Public & Private Water Supply											

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

**Notes** \*The lake is listed in the WQS as a NLW indicating that the Aesthetics beneficial use is considered threatened by nutrients until studies can be conducted to confirm non-support status. \*\*Standards revision, true color is for permitting purposes only.

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