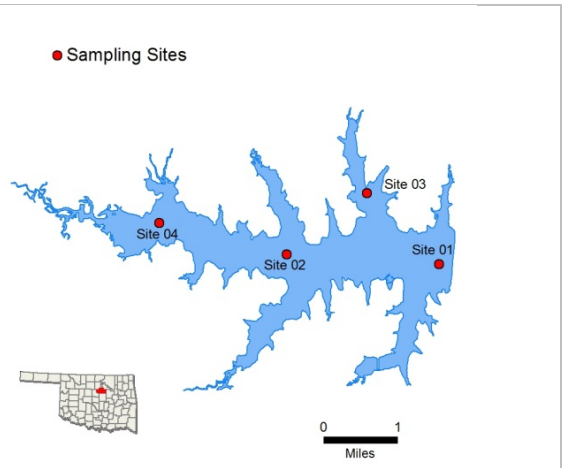
Carl Blackwell

Sample Period	Times Visited	Sampling Sites
November 2017 – August 2018	4	4



General

Location	Payne County
Impoundment	1937
Area	3,370 acres
Capacity	61,500 acre-feet
Purposes	Water Supply and Recreation

Parameters

	Parameter (Descriptions)	Result	Notes/Comments
In Situ	Average Turbidity	13 NTU	13% of values > 25 NTU
	Average Secchi Disk Depth	64 cm	
	Water Clarity Rating	Average	
	Chlorophyll-a	15.9 mg/m3	
	Trophic State Index	58	Previous value = 57
	Trophic Class	Eutrophic	
Profile	Salinity	0.18 – 0.24 ppt	
	Specific Conductivity	375.0 – 491.3 µS/cm	
	pH	7.02 – 8.42 pH units	Neutral to slightly alkaline
	Oxidation-Reduction Potential	-22.8 – 480.4 mV	
	Dissolved Oxygen	Up to 63% of water column < 2.0 mg/L in summer	
Nutrients	Surface Total Nitrogen	0.66 mg/L to 0.98 mg/L	
	Surface Total Phosphorus	0.027 mg/L to 0.076 mg/L	
	Nitrogen to Phosphorus Ratio	22:1	Phosphorus limited

Beneficial Uses

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

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

Notes

*Standards revision, true color is for permitting purposes only.

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

Sampling and Assessment by the Oklahoma Water Resources Board – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov