

Coalgate City

| Sample Period | Times Visited | Sampling Sites |
|--------------------------------|---------------|----------------|
| December 2014 – September 2015 | 4 | 3 |

| General | Location | Coal County |
|---------|-------------|--|
| | Impoundment | 1965 |
| | Area | 352 acres |
| | Capacity | 3,437 acre-feet |
| | Purposes | Water Supply, Recreation and Flood Control |



| Parameters | In Situ | Parameter (<i>Descriptions</i>) | Result | Notes/Comments |
|------------------------------|---------------|-----------------------------------|--|--------------------------------|
| | | Average Turbidity | 34 NTU | 75% of values > OWQS of 25 NTU |
| | | Average Secchi Disk Depth | 38 cm | |
| | | Water Clarity Rating | Poor | |
| | | Chlorophyll-a | 11 mg/m ³ | |
| | | Trophic State Index | 54 | Previous value = 47 |
| | Trophic Class | Eutrophic | | |
| | Profile | Salinity | 0.04 – 0.06 ppt | |
| | | Specific Conductivity | 92.7 – 136.6 μS/cm | |
| | | pH | 6.64– 7.69 pH units | Neutral to slightly alkaline |
| | | Oxidation-Reduction Potential | 133.7 to 422.9 mV | |
| | | Dissolved Oxygen | Up to 50% of water column < 2 mg/L in June | |
| | Nutrients | Surface Total Nitrogen | 0.65 mg/L to 1.09 mg/L | |
| Surface Total Phosphorus | | 0.030 mg/L to 0.087 mg/L | | |
| Nitrogen to Phosphorus Ratio | | 16:1 | Phosphorus limited | |

| Beneficial Uses | Click to learn more about Beneficial Uses | Turbidity | pH | Dissolved Oxygen | Metals | TSI | True Color | Sulfates | Chlorides | Total Dissolved Solids | Enterococci & E. coli | Chlor-a |
|-----------------|--|-----------|--|------------------|--------|-----|------------|----------|-----------|------------------------|-----------------------|---------|
| | Fish & Wildlife Propagation | NS | S | NS | NS | | | | | | | |
| | Aesthetics | | | | | S | * | | | | | |
| | Agriculture | | | | | | | S | S | S | | |
| | Primary Body Contact Recreation | | | | | | | | | | S | |
| | Public & Private Water Supply | | | | | | | | | | | |
| | <i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i> | Notes | *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