## New Spiro

### Sample Period
- **October 2005 – July 2006**
- **Times Visited**: 4
- **Sampling Sites**: 5

### General
- **Location**: Le Flore County
- **Impoundment**: 1960
- **Area**: 254 acres
- **Capacity**: 2,160 acre-feet
- **Purposes**: Water Supply, Recreation

### Parameters

#### In Situ
- **Average Turbidity**: 18 NTU
- **Average True Color**: 26 units
- **Average Secchi Disk Depth**: 47 cm
- **Water Clarity Rating**: Good
- **Trophic State Index**: 68
- **Trophic Class**: Hypereutrophic

#### Profile
- **Salinity**: 0.04 – 0.09 ppt
- **Specific Conductivity**: 106.8 – 155.4 µS/cm
- **pH**: 7.09 – 9.24 pH units
- **Oxidation-Reduction Potential**: 121 - 483 mV
- **Dissolved Oxygen**: Up to 33% of water column < 2 mg/L in August

#### Nutrients
- **Surface Total Nitrogen**: 0.98 mg/L to 1.68 mg/L
- **Surface Total Phosphorus**: 0.076 mg/L to 0.170 mg/L
- **Nitrogen to Phosphorus Ratio**: 11:1

### Beneficial Uses

#### Click to learn more about Beneficial Uses

- **Fish & Wildlife Propagation**
- **Aesthetics**
- **Agriculture**
- **Primary Body Contact Recreation**
- **Public & Private Water Supply**

- **Turbidity**: S
- **pH**: S
- **Dissolved Oxygen**: NS
- **TSI**: S
- **True Color**: S
- **Sulfates**: S
- **Chlorides**: S
- **Total Dissolved Solids**: S
- **Enterococci**: S
- **Chlor-a**: S

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

**Notes/Comments**
- 8% of values > OWQS of 25 NTU
- 100% of values < OWQS of 70 NTU
- 10% of values > 9.0 pH units

**Fish & Wildlife Propagation**: S

**Aesthetics**: NEI

**Agriculture**: S

**Primary Body Contact Recreation**: S

**Public & Private Water Supply**: NS

**Notes**
- Fish & Wildlife Propagation
- Aesthetics
- Agriculture
- Primary Body Contact Recreation
- Public & Private Water Supply

**NTU = nephelometric turbidity units**
**µS/cm = microsiemens per centimeter**
**E. coli = Escherichia coli**

**OWQS = Oklahoma Water Quality Standards**
**mg/L = milligrams per liter**
**µS/cm = microsiemens/cm**
**Chlor-a = Chlorophyll-a**

**pH = parts per thousand**
**En = Enterococci**

---

*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.*

---


Bathy map available: [http://www.owrb.ok.gov/maps/PMG/owrbdata_Bathy.html](http://www.owrb.ok.gov/maps/PMG/owrbdata_Bathy.html)