Regional 17+ County Study Area
- 90 Super-type well logs (post 1980, > 400’ Arbuckle penetration)
  - Acquired, scanned, 70% digitized
- 1400 Type wells (< 400’ Arbuckle penetration)
  - Acquired, scanned, and to be digitized
- Key wells (good sample descriptions)
  - Sample descriptions acquired & being digitized (LAS 3.0)
- Cross sections constructed
  - Using well log data, insoluble residue logs, and sample descriptions
- Mississippian & Arbuckle formation top correlated and mapped
  - Maps - Structure isopach, 3rd order trend residual
- Selection of candidate sites for CO2 sequestration – in progress
  - 1st Simulation Exercise in Progress - Oxy-Chem Disposal well #2 site has been selected for geomodeling & simulation
    - Built flow-unit based geomodel
    - Started reservoir simulation studies – to evaluate CO2 sequestration potential
- Gravity/Magnetic Analysis
  - Reprocessed existing data
  - Characterize basement fault/fracture systems – in progress
- Remote sensing Analysis – Landsat Imagery analysis
  - Interpretation completed
  - Interpreted data have been uploaded – available as layers at Project’s web-based interactive map
- Inventory of Class 1 disposal wells in Arbuckle
  - Well data scanned
  - Digital data archiving in progress
- Arbuckle DST data
  - Acquired available data
  - Mapped pressure distribution in Arbuckle – demonstrated underpressurization
  - Analysis consistent with USGS publication
- Arbuckle salinity data
  - Available data collected
  - Salinity vs depth plots generated
• Wellington Field Area
  • Geologic data collection – completed
    • Logs – acquired, scanned, and digitized
    • Anson-Bates field (adjoining Wellington to the north, location of donated 3D seismic) – logs acquired, scanned, digitized
    • Mississippian core analysis – digitized for callibration
  • Geologic Modeling
    • Initial mapping of Mississippian reservoir – underway
    • Structural mapping of underlying Arbuckle aquifer – underway
    • Cross-section and flow-unit indentification – underway
  • Multi-component 3D seismic survey (12 sq miles)
    • Acquisition and P-wave processing – completed
    • Merged Wellington 3D volume with donated 3D volume from Anson-Bates field to the north
    • Interpretation of merged P-wave seismic volume – underway
    • Volumetric coherency attribute analysis - started
  • Gravity/Magnetic survey
    • Gravity acquisition & interpretation – completed
    • Magnetic survey – to start
  • Engineering data collection
    • Scout card, well completion details, field oil production history – completed
    • Well plugging history – collected
    • Well-level data collection (water injection, water production, oil production) – to start
  • Technology Transfer
    • Presented project details and progress to various stake holders – public, legislators, regulators, O&G industry professionals
    • Project web site – created
      • Interactive tools for display of maps, well data, cross-sections, remote sensing data, gravity/magnetic – prototypes developed
  • Integrated wireline log analysis tool – WELLPROFILE
    • WELLPROFILE tool developed and in use in the project
    • Data archiving in LAS 3 (ASCII) format – developed and in use
      • Archive original log and computed data (including flow-units)
      • Archive formation tops and sample descriptions