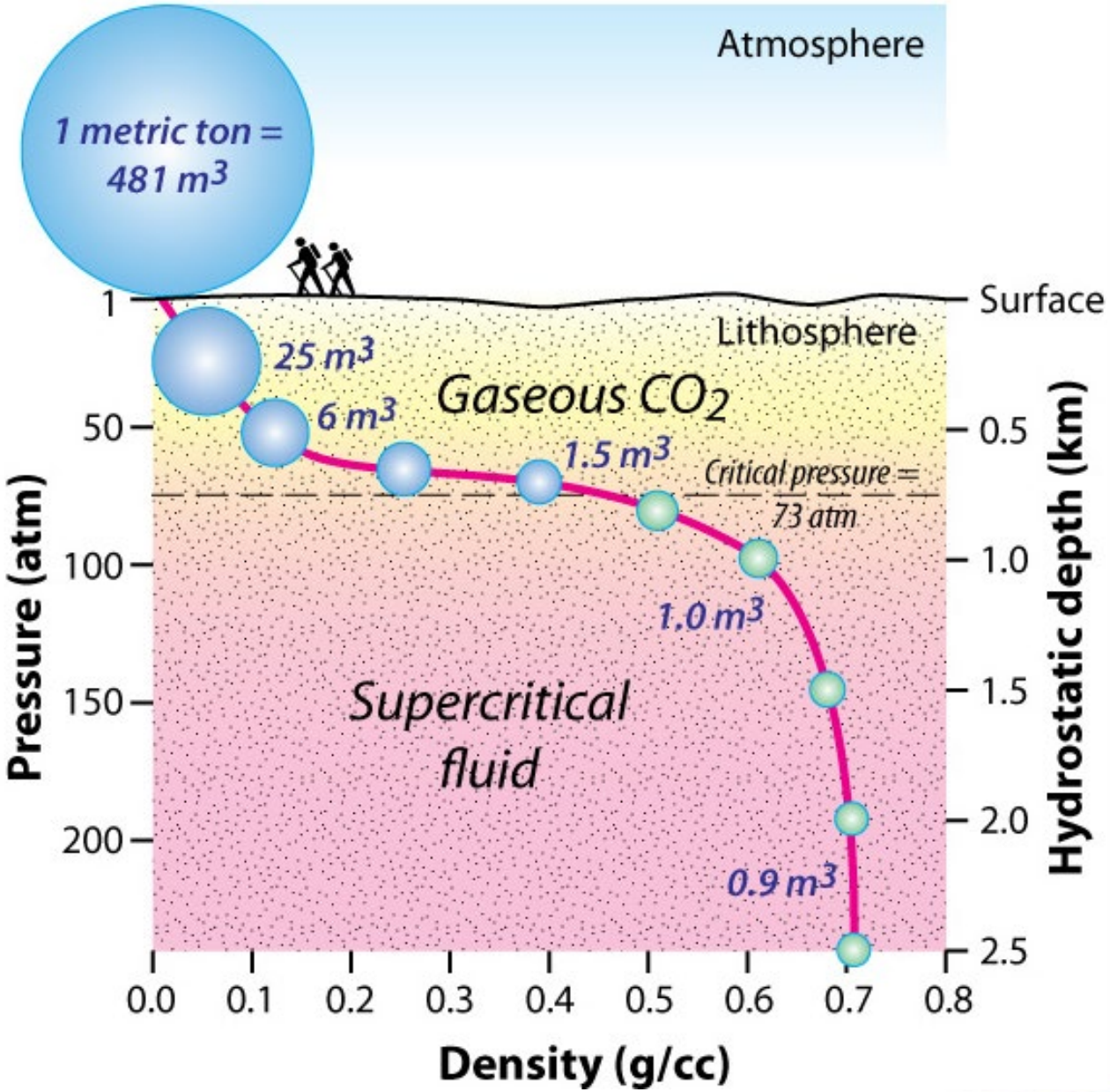
US Emits 6 Gt/yr
17 Balloons/person

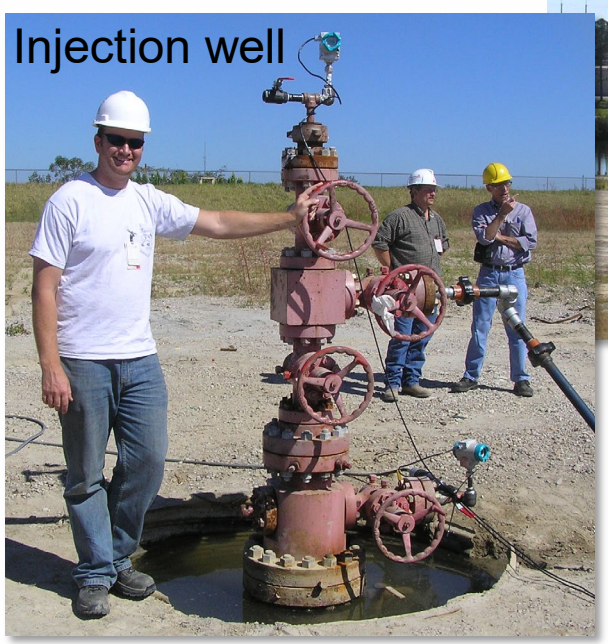


Geologic CO_2 Storage

Injection Targets

- ✓ Saline formations (sandstone, carbonate)
- ✓ Mature oil and gas reservoirs
- ✓ Enhanced oil and gas recovery
- ✓ Unconventional targets (shale, coal)

- ✓ Secure reservoir seals
- ✓ Protect underground sources of drinking water

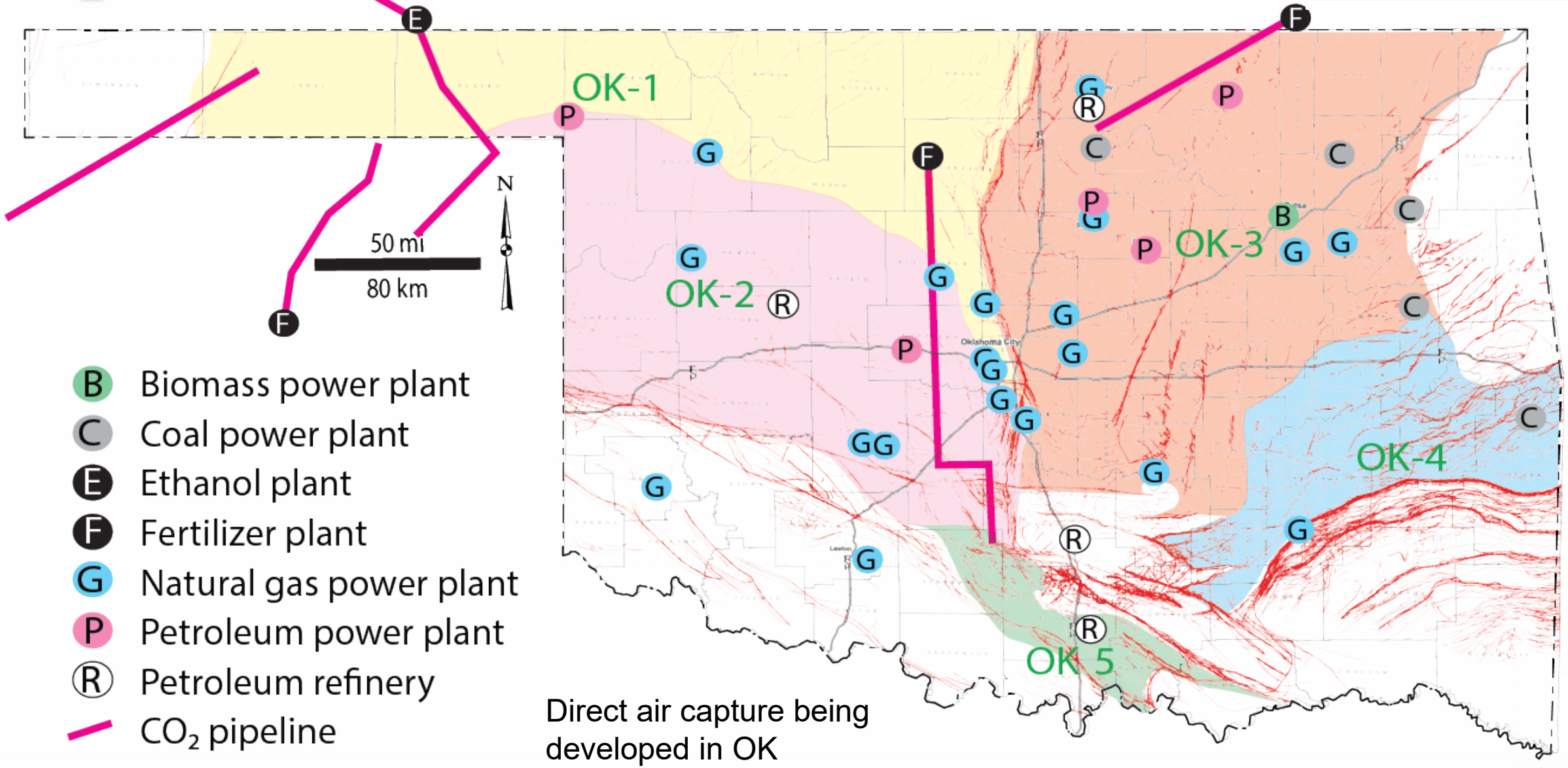


SECARB
Southeast Regional Carbon Sequestration Partnership

CO_2 Sources

OK industrial CO_2 emissions ~50 Mt/yr

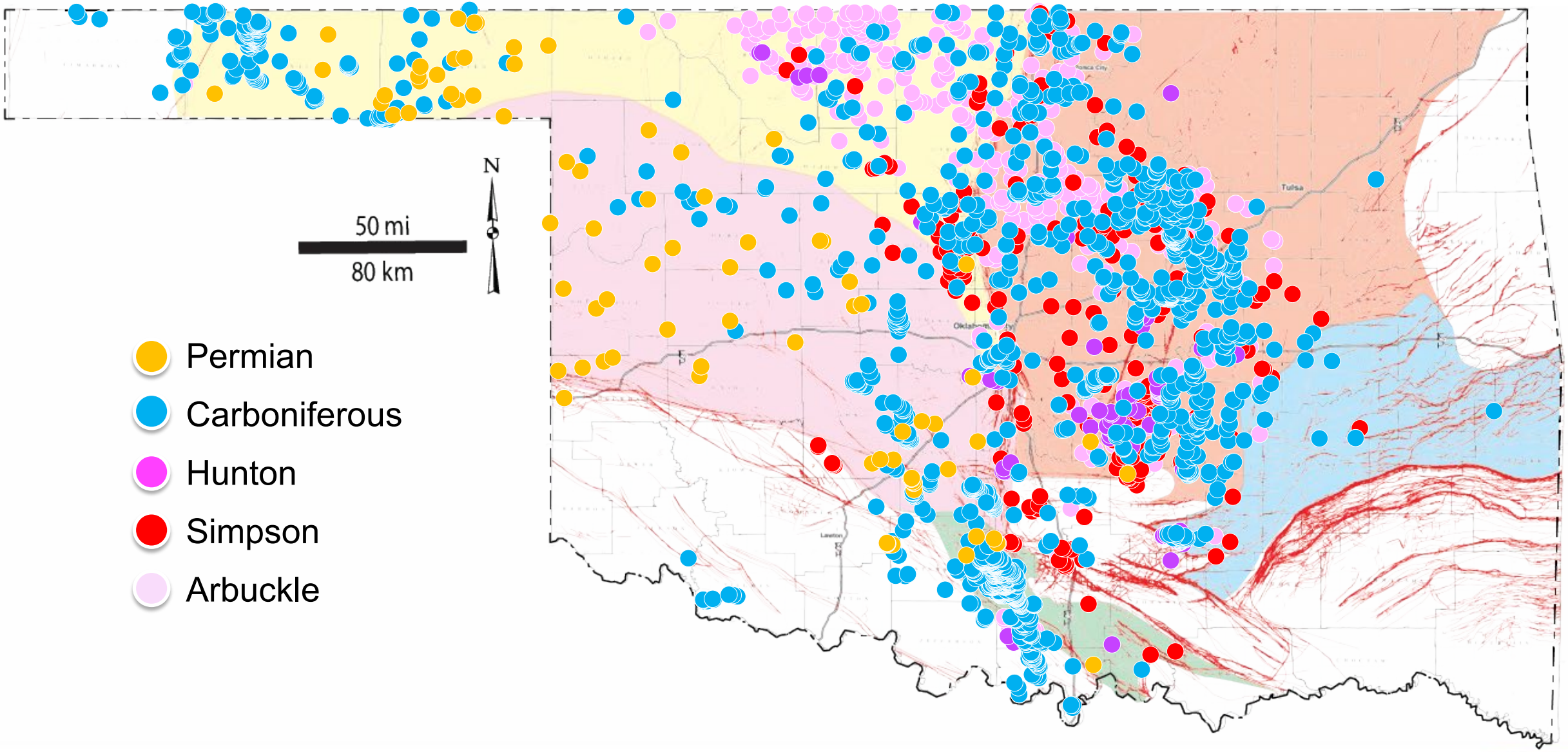
SOUTHEAST REGIONAL CO_2 UTILIZATION
SECARB-USA
and STORAGE ACCELERATION PARTNERSHIP



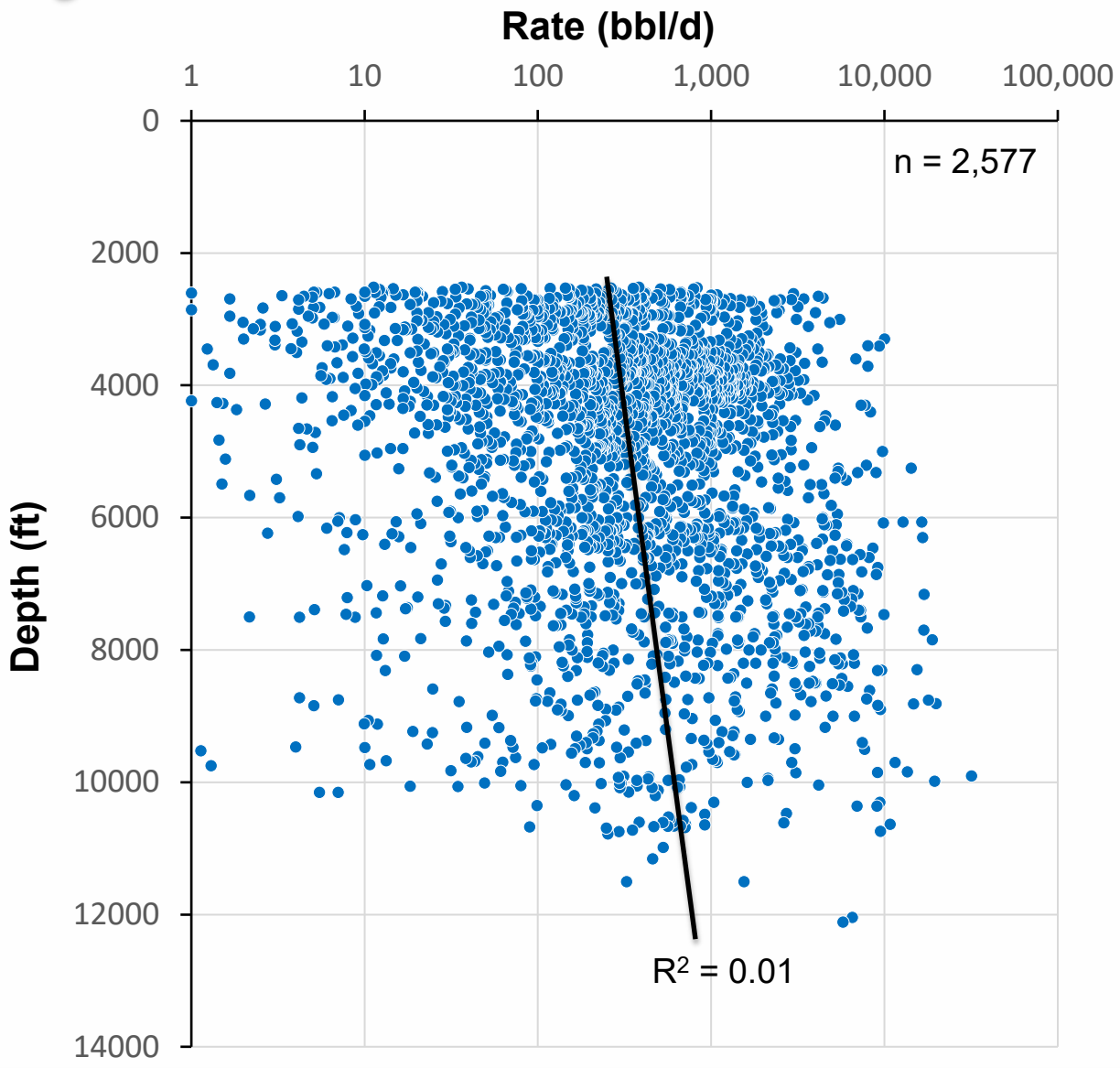
Direct air capture being developed in OK

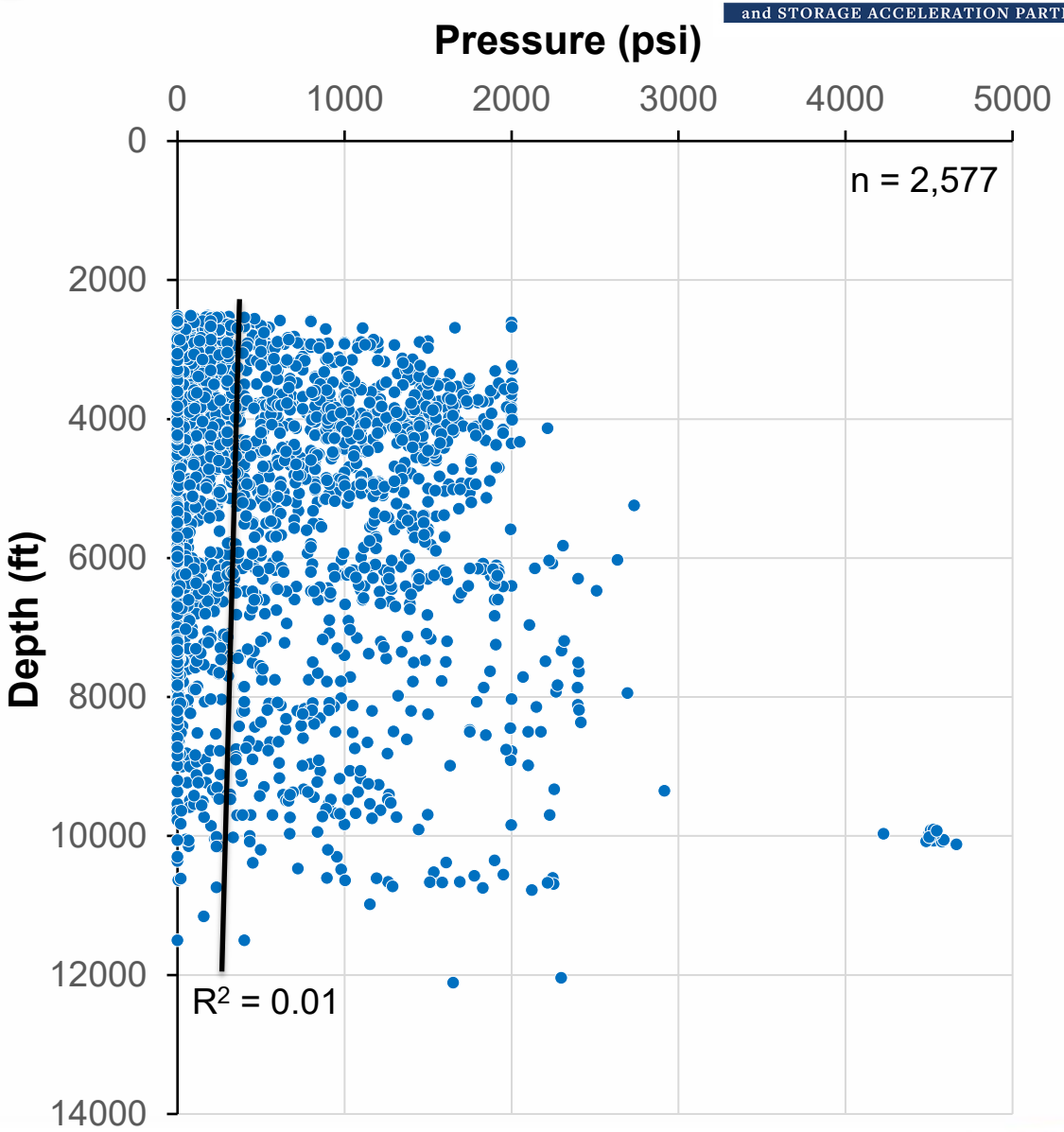
Injection zones

SOUTHEAST REGIONAL CO_2 UTILIZATION
SECARB-USA
and STORAGE ACCELERATION PARTNERSHIP



Injection Rate and Pressure





Issues affecting implementation, acceptance

- ✓ Public perceptions regarding induced seismicity.
- ✓ Competition for pore space — synergy with petroleum and UIC activity.
- ✓ Pre-existing wellbores throughout state—Potential leakage risk offset by potential assets for monitoring and CO_2-enhanced resource recovery.

We’ve got a lot going for us!

- ✓ Abundant CO_2 sinks with stacked storage potential, including CO_2-EOR — Just about every possibility is in play statewide.
- ✓ Significant saline potential in strata lacking faults-basis for identified priority areas.
- ✓ USDWs in OK tend to be shallow; risk limited by abundant reservoir seals.
- ✓ UIC experience demonstrates low reservoir pressure and high injectivity—helps keep costs of development low.
- ✓ Numerous CO_2 sources in region with budding pipeline infrastructure.