



SOUTHWEST RESEARCH INSTITUTE



Permian Basin Consortium

The Permian Basin is a vast (~75,000 sq mi) oil- and gas-producing region covering parts of West Texas and New Mexico. With burgeoning activity focused on self-sourced, low-permeability, unconventional reservoirs, there is an increased need to understand the influence of Permian Basin geology on exploration and production.

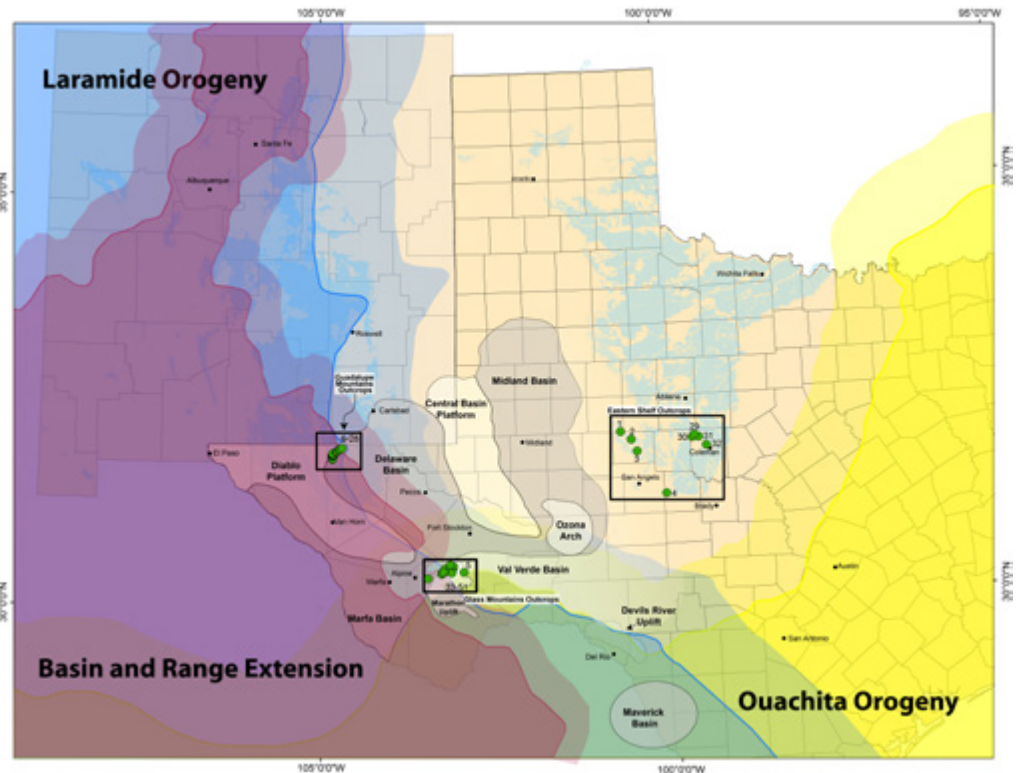
Southwest Research Institute® (SwRI®) geoscientists formed the Permian Basin Consortium to help the oil and gas industry make informed decisions around the Permian Basin geology and geomechanics, including the tectonic, structural, stress, and mechanical stratigraphic factors.

Permian Basin Geology

Formed in 2017 as a joint industry project, the consortium builds upon our outcrop investigations of deformation and Permian Basin stratigraphy.

We focus on mechanical stratigraphy in strata exposed in and around the region with analysis characterizing the distribution, mechanisms, and orientations of small-scale deformation related to the Ancestral Rocky Mountains, Ouachita, Laramide, and Basin and Range tectonic events and associated paleostress conditions.

Investigations continue into the subsurface, relating deformation to tectonic setting, structural position, and mechanical stratigraphy, with consortium member companies setting priorities for subsurface focus areas.



Consortium Data and Insights

The consortium currently includes seven companies focused on oil and gas exploration and production in the Permian Basin, with particular emphasis on the heavily targeted Wolfcamp and Bone Spring Formations and other reservoirs in the Delaware Basin and Midland Basin, and surrounding region.

Participants draw upon SwRI’s considerable experience in researching the tectonic history of the western U.S., and expertise analyzing unconventional reservoirs. SwRI has performed detailed outcrop and core characterization, stress analysis, and geomechanical analysis to address complications related to fracture permeability, mud loss, water production, drilling azimuth, landing zone selection, and other factors.

Member Benefits

- Access to project data and technical reports arising from consortium projects
- Participation in annual program review meetings and field trips
- Membership on the Consortium Advisory Committee
- Setting priorities for membership-fee funded research
- Networking opportunities with researchers and colleagues
- Early access to the latest consortium research
- Eligibility to initiate and participate in separate training and technical projects that leverage consortium results

Membership Duration and Cost

Membership is offered in sequential two-year phases.

- Phase 1 is primarily focused on outcrop-based investigations, but also includes subsurface investigations.
- Phase 2, guided by member interests and priorities, is expected to increasingly focus on subsurface characterization and analysis.

Phase 1 membership is \$100K (\$50K/year).

We welcome your inquiries.

For additional information or to join the consortium, please contact:

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SOUTHWEST RESEARCH INSTITUTE®

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government,
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public through
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