

GEOLOGY

GUIDED WORK EXPERIENCES



PetroSkills Guided Work Experiences (GWEs) enable technical professionals to deliver a tangible work product through specific deliverables and performance measures. GWEs have been developed by industry experts and deliver the on-the-job connection between knowledge and action.

Basin Modeling

- Fluid Flow
- Overpressure Origins And Interpretations
- Stratigraphic Seal Occurrence And Effectiveness
- Petroleum Migration
- "Modeling Source Rock Maturity And Timing Of Petroleum Generation - Part1"
- "Modeling Source Rock Maturity And Timing Of Petroleum Generation - Part 2"
- Hydrocarbon Charge
- Basin Modeling Techniques

Basin Analysis

- Basin Analysis Principles
- Petroleum System Modeling and Principles

Stratigraphy

- Sample And Outcrop Observation And Interpretation
- Two, Three, and Four-Dimensional Mapping Of Stratigraphic Units And Components
- Stratigraphic Correlation
- Sequence Stratigraphic Concepts
- Basic Stratigraphic Concepts Part 1
- Basic Stratigraphic Concepts Part 2

Reservoir Characterization - Geologic Model

- Build Reservoir Model
- Integrate Dynamic Data
- Upscaling Model (Combine with Reservoir Simulation)

Sedimentary Petrology and Sedimentology

- Rock Sample Acquisitions, Use And Interpretation
- Rock Properties And Porperm Distribution
- Depositional Environments
- Principles Of Diagenesis
- Nature Of Carbonate Porosity And Its Evolution
- Carbonate Systems And Carbonate Sedimentology
- Deep Water Deposition: Turbidites; Debris Flows; and Fine-grained Sedimentation/ Mudstones
- "Fluviodeltaic And Shallow Marine Clastic Systems And Reservoirs-Part 1"
- "Fluviodeltaic And Shallow Marine Clastic Systems And Reservoirs-Part 2"
- "Fluviodeltaic And Shallow Marine Clastic Systems And Reservoirs-Part 3"
- Non-Marine Depositional Systems And Reservoirs
- Rock Properties And Acoustic Response
- 3-D Rock Property Modeling
- Probability Theory And Applied Geostatistics

Structural Geology

- Structural Construction Techniques
- Palinspastic Reconstruction, Validation And Structural Modeling
- Principles Of Stress And Strain
- Faults And Fractures As Barriers, Conduits, Seals, And Filters
- Plate Tectonics And Regional Processes
- Extensional Tectonics
- Compressional (Fold, Thrust And Inversion) Tectonics



PetroSkills Guided Work Experiences (GWEs) enable technical professionals to deliver a tangible work product through specific deliverables and performance measures. GWEs have been developed by industry experts and deliver the on-the-job connection between knowledge and action.

Geochemistry

- Wellbore Geochemical Principles, Techniques
- Geochemical Analytical Techniques
- Geological Controls On Source Rock Deposition
- Petroleum Generation And Source Rock Maturity
- Natural Gas
- Geochemical Correlation
- Applying Geochemistry In An Exploration Program
- Reservoir Architecture: Principles Of Fluid-Based Techniques
- Mud Gas Logging For Identifying And Characterizing Pay Zones

Characterizing Prospect and Play Volumes, Risk, and Uncertainty

- Principles of Geological Risk and Uncertainty
- Prospect Volume Calculation- Part 1
- Prospect Volume Calculation- Part 2
- Play Analysis Principles, Techniques

Well Operations

- HC Wellsite Operations Wire-line Logging
- HC Wellsite Operations Mud logging
- HC Wellsite Operations Drilling
- Conventional Exploration Well Design
- Appraisal Well Design
- Development Well Design
- Well Design: Pore Pressure, Geomechanics and Wellbore Stability
- Horizontal Well Design
- Drilling Operations
- Geo-Steering Horizontal Wells Monitoring

Prospect Portfolio Management

- Managing Geologic Projects
- Field Development Plan / Optimization