



## ADVANCED GOHFER TRAINING COURSE AGENDA (3 Day)

GOHFER v9.0 – Multi-Well Fully 3D Geo-Mechanical Model

**Objective:** This course is intended for **EXPERIENCED GOHFER USERS ONLY**. This course will discuss and demonstrate the new GOHFER v9.0 Multi-Well Fully 3D Geo-Mechanical Model. This course assumes the students have received previous GOHFER training and are proficient with the current customer version. Basic/beginner topics and other modules will not be covered.

### Day 1: AM

#### Introductions

#### *Polleverywhere Class Survey*

#### **GOHFER Software - Horizontal Transverse Shale Model & Production Example**

##### **Treatment / Reference Wells**

- 3D Surveys
- LAS (Shale / Carbonate Log Processing)

##### **Treatment Stage**

- Asymmetric modeling
- Longitudinal vs. Transverse Fractures
  - Building Geologic Structure
  - Offset Depletion
- Breakdown Pressure
- Fracture Orientation
  - Breakdown Gradient / Breakdown Angle

### Day 1: PM

#### **GOHFER Software - Horizontal Transverse Shale Model & Production Example (cont.)**

##### **Treatment Design**

- Perforations
- Interference / Stress Shadowing
  - Single Transverse stage (multiple clusters)
  - Multiple Transverse stages (individual treatments)
- Stress Anisotropy
  - Ball Drop Transverse stages (single treatment / multiple stages)

##### **Engine Output Viewer**

- 3D Grid Output

##### **Production**

- Longitudinal / Transverse production parameters

**Day 2: AM**

**GOHFER 3D Software – Multi-Well Fully 3D Geo-Model**

**3D Example 1 – Multi-Well Model w/ Reference Logs only (No Geologic Model)**

Site & Well Location Entry  
Log Processing & Integration  
Grid Setup & Map View

**GOHFER 3D Software – Multi-Well Fully 3D Geo-Model**

**3D Example 1 – Add 2D Surface Map to Previous Example**

Grid Setup & Map View

**Day 2: PM**

**GOHFER 3D Software – Multi-Well Fully 3D Geo-Model**

**3D Example 1 – Add 3D Geologic Model to Previous Example**

Create Core to Replace Reference LAS  
LAS Mapping from Core (Full 3D Distribution vs. Reference LAS (Layer Cake))  
Import Geologic Model / Requirements  
Offset Depletion / Well Bashing  
Zipper frac simulations

**Day 3:**

**GOHFER 3D Software – Multi-Well Fully 3D Geo-Model**

**Fully 3D Geo-Model Example**

Individual Multi-Well Fully 3D GeoModel Class Exercise

**Wrap Up - Summary and Conclusions**