



Continuing Education Program

## Gas Lift Fundamentals

Monday, June 2<sup>nd</sup> and Tuesday Jun 3<sup>rd</sup>, 2025

Instructors: Greg Stevenson and Matt Young

Taught by two industry-leading experts, Greg Stevenson and Matt Young, this two-days course will provide comprehensive insights and practical knowledge in the field of Gas Lift. Together, Greg and Matt will guide participants through a series of engaging lectures, hands-on exercises, and real-world case studies to enhance their skills and expertise in Gas Lift. Join us on this exciting journey of learning and discovery with two of the best in the field!

On day 1, participants learn about the basics of gas lift and continuous flow gas lift systems, along with the purpose, advantages, and limitations of gas lift. There will also be information regarding downhole equipment, types of installations, valve mechanics, inflow and outflow performance, and nodal analysis techniques.

Day 2 of the course includes practical guidance on gas lift design, operations, troubleshooting, and best practices. Overall, this comprehensive training equips professionals with essential knowledge for effective gas lift operations in the oil and gas industry.

### Course Outline

Day 1	Day 2
Section I: Basic Principles of Oil Production and Artificial Lift	Section V: Gas Lift Design - Injection Pressure Operated
Introductions - Instructors & Class	Day 1 Recap, Q&A
Safety, Course Plan, Admin BS	Into to Design
Overview of Artificial Lift	Overview of IPO Design
Check Your Understanding	Mandrel Spacing
GL History & Documentation	Valve Calculations
Section II: Introduction to Gas Lift	Break
Types of Gas Lift	Section VI: Gas Lift Optimization and Troubleshooting
Overview of Cont. Flow	Troubleshooting GL Wells
Lifting From Bottom	Check Your Understanding
Purpose, Optimal Conditions, Applications, Advantages of GL	Lunch
Why Select GL vs Other Lift Methods	Bongo #1 Maze Problem
Disadvantages of GL	Section VII: Special Applications
Surface Facilities	Special Applications

GL System Application Considerations	Break
Break	Section VIII: Best Practices
DH Equipment Overview	Overview of Best Practices
Intermittent FlowGL	Section IX: Operational Procedure
Check Your Understanding	Overview of Operational Procedures
Design Guidelines	Course Wrap-Up
Types of Gas Lift Installations	Course Wrap-Up
GL Operating Considerations	
Unloading GL Wells	
Section Wrap-Up	
Lunch	
Section III: Gas Lift Mechanics	
Overview of GL Valves, Mandrels and Accessories	
Force Balance for IPO Valves	
Setting an IPO Valve	
Intro to Valve Performance	
Section Wrap-Up	
Break	
Section IV: Well Performance	
Section Objectives	
Well Performance Overview	
Inflow Performance Overview	
Outflow Performance	
Intro to Nodal Analysis	
Day 1 Wrap-Up	

## Instructor Profiles

### Greg Stevenson



Greg Stephenson is the Chief Production Engineer at Occidental Petroleum, with functional responsibility for the production engineering discipline. In this role, he leads a team of artificial lift subject matter experts and sponsors the Oxy Engineering Development Program for recent engineering graduates.

With 29 years of experience, Stephenson is an industry-recognized specialist in artificial lift who has taught numerous courses around the world and a published author of a variety of technical publications on the subject.

In addition to his work at Oxy, Stephenson serves on the Board of Directors of the Artificial Lift Research and Development Council and the SPE Production and Facilities Advisory Board. From 2018-2023, Greg served on both the *JPT* Editorial Committee as Technical Editor for Artificial Lift and as chairperson for API Task Group 19G/11S, which managed 25 product standards, recommended practices and technical reports related to artificial lift technology. He also serves on advisory boards for the Texas Tech Department of Petroleum

Engineering, Texas Tech Gas Lift Consortium, Tulsa University Horizontal Wells Artificial Lift Projects (TUHWALP) and the LSU Valve Performance Clearinghouse.

Stephenson holds a BS in Petroleum Engineering from Texas Tech University.

## Matt Young

Matt Young serves as the Technical Sales Director for Flowco Production Solutions, a Houston-based company specializing in artificial lift services and manufacturing.



Knowledge and Experience include:

- NODAL Analysis
- Multiphase Flow Calculation
- Gas Lift Design
- Production Engineering and Operations

Upon graduating from Texas A&M University in 2006, Matt launched his career as a field engineer with BJ Services in Hobbs, New Mexico. He then joined International Lift Systems (ILS), gaining valuable experience in gas lift and plunger lift as a Field Service Technician. Following Lufkin Industries' acquisition of ILS, Matt progressed to Mid-Continent Operations Manager, providing technical support and overseeing installations. He further advanced to North American Operations and Sales Manager during the Lufkin/GE Oil & Gas transition.

Since joining Flowco in 2014, Matt has directed technical sales, contributing to numerous gas lift and plunger lift installation and optimization projects across Texas, New Mexico, Oklahoma, Colorado, and Louisiana. He has also undertaken international assignments in Canada and the MENA region.

Matt is a dedicated member of the Society of Petroleum Engineers (SPE) and the Artificial Lift Research and Development (ALRDC), actively participating as a presenter, lecturer, and conference attendee.

