

# FREDDY ALVARADO, Ph.D.

# Reservoir Engineer

Direct: 713.308.0349

Freddy.Alvarado@millerandlents.com

# Every day at Miller and Lents brings new opportunities to serve clients with insight and integrity. \*\*?

# **EDUCATION**

- Ph.D. Petroleum Engineering, Pennsylvania State University, 2005
- M.S. Petroleum Engineering, Pennsylvania State University, 2002
- B.S. Petroleum Engineering, Universidad Central de Venezuela, 1999

## RELEVANT AREAS OF EXPERTISE

#### International and North American Experience:

Petroleum engineer with more than 18 years' diverse experience in geologic, reservoir engineering, and economic analysis. Experience includes a wide variety of reservoir engineering, simulation, contingent and prospective resources evaluations, reserves evaluations, audits, and certifications for oil and gas projects in the Middle East, North Sea, South America (Trinidad, Brazil, Venezuela, Colombia and Argentina), and United States (Alaska North Slope and San Joaquin Basin). Deepwater experience includes fields in Brazil, in addition to knowledge of unconventional plays with shale oil in Argentina.

#### **EXPERIENCE**

2017 – Present Miller and Lents, Ltd. — Houston, Texas

Reservoir Engineer

Responsible for oil and gas reserves evaluations and economic determinations of domestic and international projects, both onshore and offshore, for a variety of clients.

2011 – 2017 Chevron — Houston, Texas

2016 – 2017 Reserves Advisor — Houston, Texas

Delivered reserves booking and assurance for the following countries in Latin America: Trinidad and Colombia (gas), Brazil (offshore), Venezuela (heavy oil), and Argentina (conventional and unconventional).

# 2014 – 2016 Reserves Coordinator — Kuwait

Supervised reserves bookings for eight carbonate and sandstone reservoirs in Saudi Arabia and Kuwait. Improved partner relationships with stakeholders and government agencies. Worked with multiple stakeholders to preserve project value on reserves replacement and major capital projects. Streamlined the reserves booking process. Provided technical reviews and recommendations for steamflood booking.

## EXPERIENCE (continued)

# 2011 – 2014 Chemical EOR Project Manager — Houston, Texas

Designed a chemical enhanced oil recovery (CEOR) process for an onshore asset. Subsurface Lead for IOR/EOR evaluations of Latin American assets. Evaluated potential CEOR opportunities for Organic Resource Opportunities (ORO). Evaluated recovery factors, production forecasts and analysis of a target reservoir to leverage a contract extension for multiple fields.

#### 2004 – 2011 BP — Houston, Texas

#### 2006 – 2011 Reservoir Engineer

Improved conformance and increased the recovery factor in Argentinian and Egyptian fields. Conducted heavy oil thermal/compositional simulation to design pilot alternatives for several Venezuelan fields in the Cerro Negro area of the Orinoco Belt.

### 2005 Simulation Engineer Intern

Used 4D seismic to guide numerical simulation. Employed simulation design to history-match Norway's Valhall Field.

#### 2004 Simulation Engineer Intern

Tested and implemented novel techniques to reduce simulation cycle-time while preserving history match.

#### 1997 – 1999 Ingenieria Tecnosinergia — Caracas, Venezuela

# 1997 – 1999 Reservoir Engineer

Evaluated the potential of several marginal fields in support of Non-Operating Joint Ventures with Venezuela's NOC. Identified workover opportunities to increase production in marginal fields in Venezuela. Conducted technical assessments for reserves booking in mature Venezuelan fields. Evaluated gas-life optimization, and water flooding response in marginal fields in Venezuelan fields.

# **OTHER**

Nationality: Venezuelan and US citizen
Language Skills: Spanish and English

Years with Firm: Since 2017Program Languages: C and C++

• Software Skills: Proficient in Petrel, Eclipse, CMG, OFM,

Visual Basic, Microsoft Project, and Spotfire.

