SEISMIC INTERPRETATION

DRPT302

TRAINIT ACADEMY

COURSE TITLE

SEISMIC INTERPRETATION

COURSE DATE/VENUE

19th-23rd Feb 24'

London, UK

COURSE REFERENCE

DRPT302

COURSE DURATION

05 Days

DISCIPLINE

Drilling, Reservoir & Petroleum Training

COURSE INTRODUCTION

This intensive 5-day program is designed to equip participants with essential skills for interpreting seismic data, a cornerstone in the exploration and production of hydrocarbons. Through a blend of theoretical insights, practical exercises, and real-world case studies, participants will gain a comprehensive understanding of seismic interpretation techniques.

COURSE OBJECTIVE

This course aims to provide participants with a comprehensive understanding of the principles and techniques involved in seismic interpretation. By the end of the program, participants will:

- ✓ Grasp the Basics of Seismic Exploration
- ✓ Master Seismic Data Processing and Imaging
- ✓ Develop Skills in Structural Interpretation
- ✓ Excel in Stratigraphic Interpretation
- ✓ Explore Advanced Seismic Interpretation Techniques
- ✓ Apply Knowledge through Practical Exercises and Case Studies
- ✓ Enhance Problem-Solving and Decision-Making Skills
- ✓ Promote Collaboration and Communication

- ✓ Gain Confidence in Seismic Interpretation Competencies

COURSE AUDIENCE

The target audience includes but not limited to:

- ✓ Geoscientists
- ✓ Petroleum Engineers:
- ✓ Exploration and Production Teams
- ✓ Energy Industry Professionals
- ✓ Graduate Students and Researchers
- ✓ Oil and Gas Managers

COURSE CONTENT

Day 1: Introduction to Seismic Interpretation

- ✓ Overview of seismic data acquisition
- ✓ Types of seismic waves (P-waves and S-waves)
- ✓ Introduction to seismic sections and gathers
- ✓ Understanding reflection and refraction
- ✓ Basic seismic attributes (amplitude, frequency, phase)
- ✓ Seismic velocity and travel time

Day 2: Seismic Data Processing and Imaging

- ✓ Pre-stack and post-stack processing
- ✓ Common data processing techniques
- ✓ Quality control in seismic data
- ✓ Migration techniques
- ✓ Time migration vs. depth migration
- ✓ Imaging pitfalls and challenges

Day 3: Structural Interpretation

- ✓ Principles of structural geology
- ✓ Faults, folds, and other structural features
- ✓ Relationship between seismic and subsurface structures

- ✓ Identifying faults and folds in seismic data
- ✓ Estimating dip and strike directions

Day 4: Stratigraphic Interpretation

- ✓ Overview of stratigraphy
- ✓ Unconformities and stratigraphic traps
- ✓ Sequence stratigraphy
- ✓ Recognizing stratigraphic features in seismic data
- ✓ Mapping depositional environments

Day 5: Advanced Topics and Case Studies

- ✓ AVO (Amplitude versus Offset) analysis
- ✓ Inversion techniques
- ✓ Seismic reservoir characterization
- ✓ Real-world examples of seismic interpretation
- ✓ Participants apply knowledge to provided datasets

COURSE CERTIFICATE

TRAINIT ACADEMY will award an internationally recognized certificate(s) for each delegate on completion of training.

COURSE FEES

£5,750 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

COURSE METHODOLOGY

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development

of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions

COURSE VENUE IMAGES

Thistle Marble Arch, London, UK