Best Technology Solutions **BTS**

Integrated Reservoir Analysis Techniques

Training Program

Introduction:

Petroleum exploration depend on geophysical and geological integration, in this course we will explain in details how to interpret seismic data and geological interpretations, seismic is one of the most powerful techniques for subsurface imaging. Through the study of acoustic waves propagated through the earth's layers and echoed back to the surface, we can learn about the structure, Stratigraphy, and lithology of the Earth. This course will provide first-hand experience with seismic data acquisition, processing, and interpretation. The course will be delivered in a way to meet the specific background and needs of the participants. The content can be tuned to the geological setting in which participants operate, and focus on those interpretation techniques that are most likely to be successful there. The course can be extended with extra time for coaching participants on their own seismic interpretation projects. The course uses a mixture of lectures, exercises and case histories.

Who Should Attend?

Geologists, Geophysicists, Reservoir Engineers, Production Engineers, Petrophysicists, Petroleum Engineers, Drilling Engineers, Field Development Engineers, Managers, Asset Managers, Oil & Gas Engineers, Reservoir Operators, Surveillance Engineers, Technicians, Engineering Trainees, Technical Managers, Technical Assistants, Technicians, Chemists, Physicists, Technical Supervisors, Service Company Personnel responsible for improving the performance of petroleum reservoirs, Engineers involved in the evaluation of 2D and 3D seismic data, Technical and business professionals such as Landmen, Administrators, Executive Assistants, and Finance and Planning Professionals working in the oil and gas industry who would like the basics of the science of oil business, Land and royalty owners, as well as recent geology and geophysics graduates who would like an overview of the petroleum geophysics

Course Objectives:

By the end of this course, delegates will be able to:

- Have a solid foundation in integration petroleum exploration and workflows
- Learn the necessary foundation required for subsequent use of such tools in a professional manner
- Plan and execute an interpretation project
- Avoid the most common pitfalls
- Be familiar with interpretation QAQC

Course Outline:

Petroleum Geology

- The distribution of porosity and permeability in reservoirs produced in different depositional environments
- How rock characteristics are related to modern geological processes and applied to the ancient record
- Reservoir management concepts
- Reservoir management process

Well Log Interpretation

- Reservoir characterization
- Petrophysical analysis
- Basic log interpretation concepts & logging evolution

Well Seismic Ties

- Check shot
- Sonic
- Integration sonic and check shot
- Generation synthetic in different application

Principles of Seismic Interpretations

- Different Horizon auto picking algorithm
- Fault interpretation (manual, semi manual, auto)
- 3D visualization for seismic interpretations

Principles of Geological Practical Interpretation

- Working with well data
- Creating Geological Section
- Mapping and Volumetrics