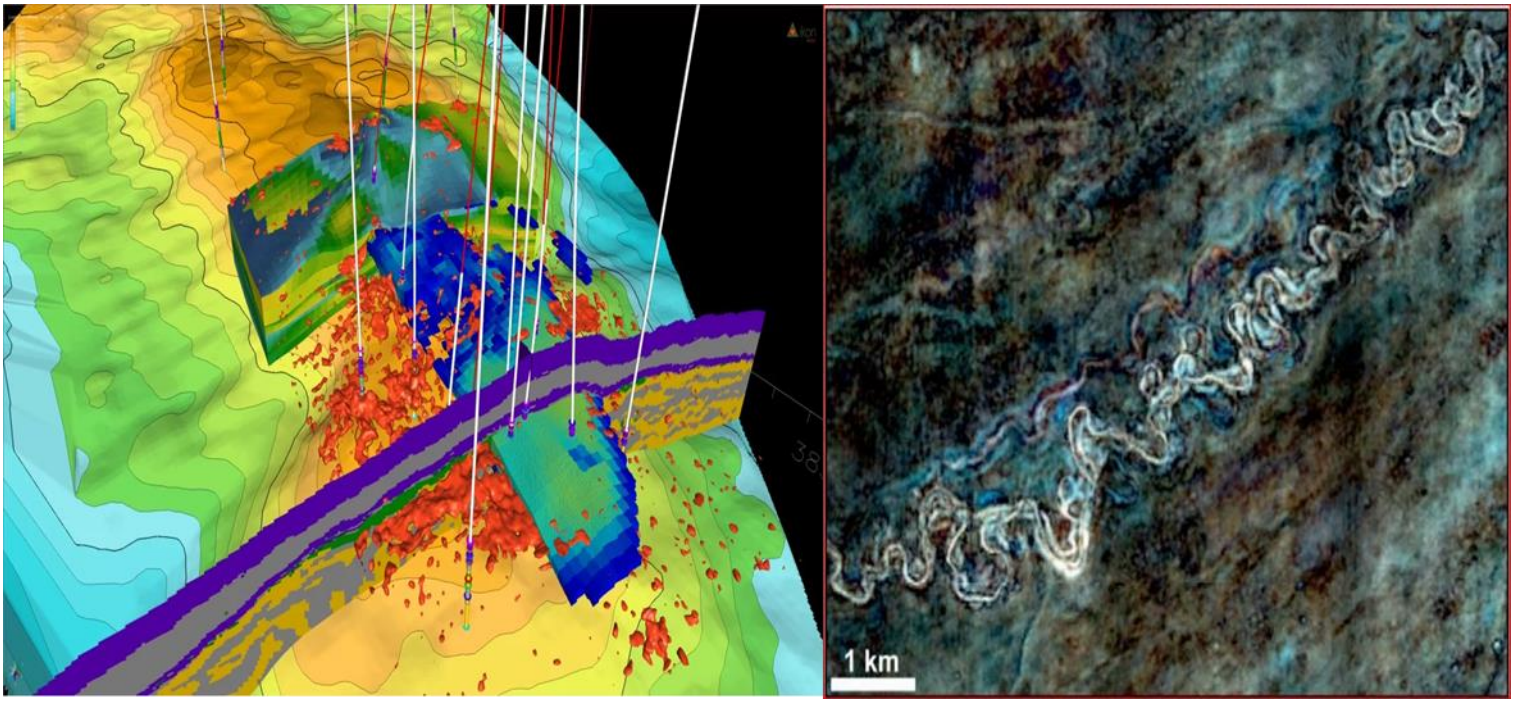
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Reservoir Fluid Sampling & Analysis Techniques

Course Introduction:

Reservoir fluid sampling and analysis are critical components in the exploration and production of hydrocarbons. Accurate sampling techniques and thorough analysis are essential for understanding reservoir behavior, fluid properties, and optimizing production strategies. This course aims to equip participants with the knowledge and skills required to effectively sample and analyze reservoir fluids, ensuring reliable data for decision-making in oil and gas operations.

Course Objectives:

Upon the successful completion of this course, each participant will be able to:-

- ✓ Understand the principles and importance of reservoir fluid sampling.
- ✓ Learn various sampling techniques and their applications.
- ✓ Gain insight into laboratory analysis methods for reservoir fluids.
- ✓ Develop skills in interpreting fluid properties and behavior.
- ✓ Discuss case studies to illustrate best practices in fluid sampling and analysis.

Who Should Attend?

- Petroleum engineers and geoscientists
- Reservoir engineers and production technologists
- Laboratory technicians and analysts
- Professionals interested in reservoir engineering and fluid dynamics.

Course Outline:

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Day 1: Introduction to Reservoir Fluids

- **Morning Session:**
  - Overview of reservoir fluids (oil, gas, water)
  - Fluid properties and their significance in reservoir engineering
  - The role of fluid sampling in reservoir characterization
- **Afternoon Session:**
  - Types of reservoirs and fluid behavior
  - Introduction to phase behavior and fluid properties

Day 2: Sampling Techniques

- **Morning Session:**
  - Overview of sampling methods (surface vs. downhole sampling)

- Best practices for reservoir fluid sampling
- Equipment and tools used in fluid sampling

- **Afternoon Session:**
  - Demonstration of sampling techniques
  - Safety considerations and regulatory compliance in sampling

Day 3: Laboratory Analysis of Reservoir Fluids

- **Morning Session:**
  - Overview of laboratory analysis methods (PVT analysis, chromatography)
  - Techniques for measuring fluid properties (density, viscosity, composition)
- **Afternoon Session:**
  - fluid property measurement
  - Data interpretation and analysis

Day 4: Advanced Analysis Techniques

- **Morning Session:**
  - Introduction to advanced analytical methods (NMR, spectroscopy)
  - Applications of simulation in fluid analysis
- **Afternoon Session:**
  - Case studies on advanced analysis techniques
  - Group discussions on challenges and best practices

Day 5: Applications and Case Studies

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- **Morning Session:**
  - Integrating sampling and analysis into reservoir management
  - Real-world applications of fluid sampling and analysis in decision-making
- **Afternoon Session:**
  - Final project presentations by participants
  - Course wrap-up and feedback session

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts

- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionaires
- Group Work
- Discussion
- Presentation

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

To be advised as per course locations. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session

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