Petrogenium. Academy

Upstream (Reservoir Engineering)

Reserves and Resources Assessment

Consultant / Trainer

Wim Swinkels/Thorsten Viertel

The Petrogenium (in collaboration with EPTS) Reserves and Resources Assessment course will allow participants to gain an understanding of how reserves and resources assessment underpins the valuation of exploration and production projects and companies. They will learn how this discipline connects with exploration, field development, production, economics, contracts, and regulations. The course will also update them on recent developments in classification, assessment, and reporting standards, focusing on the SPE Petroleum Resource Management System and SEC regulations for proved reserves.

Participants

This **Petrogenium**. course is designed for petroleum and reservoir engineers as well as explorationists and geoscientists who will be involved in the estimation, classification and reporting of oil and gas reserves and resources.

The course is also useful for Petroleum Engineering team leaders, IT staff and support staff who require more than general knowledge of reserves and resource estimation methods.

Learning Objectives

At the end of this Hydrocarbon Reserves training, the participants will have a deeper knowledge of modern reserves and resource assessment requirements and methods.

In the course the principles and practices of reserves and resources estimation, classification and reporting will be addressed. The approach will be based on the SPE-PRMS (Petroleum Resource Management System).

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Learning Objectives

Course content

- The SPE-PRMS system of resource classification
- Other regulatory systems, including SEC.
- Reserves definitions
- Probabilistic and deterministic methods
- Commercial and technical maturity
- Volumetric and performance based reserves assessment
- Decline Curve Analysis (DCA) basics
- DCA Practical issues and application to reserves assessment
- Use of reservoir simulation in reserves assessment
- Reserves under production sharing contracts

Programme

Day 1

Reserves and Resources Principles and Practices

1. Course Introduction: the SPE PRMS approach to reserves determination
2. Project basis for resource determination
3. Developed vs. undeveloped reserves
4. Other regulatory systems: SEC rules
5. Exercises classification of resources
6. Volumetric and Performance based methods
7. P/z and material balance methods
8. Decline Curve Analysis general theory
9. Role of Simulation in reserves and resources assessment
10. Resource assessment exercises

Why select Petrogenium.?

The above support will be provided by principal consultants with 30+ years world-class experience in the technology and hands-on know-how from operation of refinery units.

Because Experience Matters

Contact Petrogenium.:

Email: training@petrogenium.com
Website:https://www.petrogenium.com/training/

Programme

Day 2

Handling uncertainty - special topics

1. Uncertainty in reserves and resources
2. Probabilistics
3. Aggregation
4. Pitfalls and Good practices
5. Special topics (Amortization, Contractual systems, Industry practices, Undeveloped reserves)
6. Discussion of participant cases (Exchange of experience on Reserves and Resources determination)

Day 3

Decline Curve Analysis Practicalities (optional)

1. Decline models, selection of decline model, DCA limitations
2. Stabilisation time
3. Matching period
4. Starting point
5. Multi well declines and heterogeneity
6. Gas wells
7. impact of well treatment
8. Integrated analysis - Ratio plots, BSW, GOR
9. Uptime, Calendar days vs. Producing days
10. Discussion of participant cases (Exchange of experience on general DCA cases)

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