Integrated Reservoir Studies

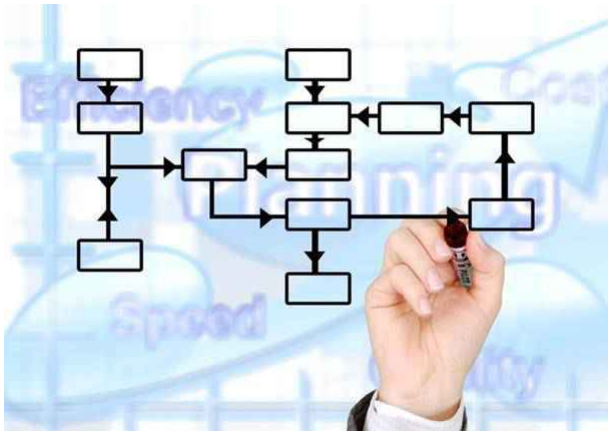
The Project Management Approach

(Three or four days)

Presenter: John H Martin MA PhD

Companies rely on close integration of technical disciplines to plan and carry out successful reservoir studies

This creates significant challenges in ensuring that all team members understand their role and the role of others in the overall project and in ensuring control over the project. Many technical experts have developed informal techniques and procedures to plan, schedule and control their own activities, but this is no longer adequate as the activities of all team members need to be known to the others. This includes knowledge of what activities are to be done, when they need to be completed and using what data. More formal techniques are needed.



Exercises are included in planning and scheduling; and their application to integrated reservoir studies ranging from special core analysis studies to formulating an overall strategy for reservoir modelling and simulation. Time will be set aside to address specific planning problems which you may bring along. Computer-based planning packages will also be demonstrated.

This workshop gives valuable insight into integrated reservoir studies and how tried and tested Project Management techniques can be applied (or adapted) to maximise their benefits

What you'll learn

- **The team approach to Integrated Reservoir Studies:** Some problems that may arise.
- **Overview of Project Management:** What is a project. Key aspects of Project Management.
- **Defining the project:** Purpose and scope. How to set objectives.
- **Planning:** The use of network diagrams for improved logic and to identify relationships.
- **Scheduling:** Estimating work content and durations. Identifying critical path activities.
- **Monitoring progress and controlling the project:** Plotting the course of the project. Identifying the effects of slippages. Evaluating alternatives for recovery.
- **The importance of integration in reservoir studies:** How to use Project Management techniques to ensure integration. The activities and disciplines involved. What needs to be integrated. Benefits of the planned approach. Network diagrams for reservoir studies.
- **Strategies for integrated reservoir studies**: Identifying objectives. Formal techniques for evaluating data. Geological studies. 'Classical' reservoir engineering approaches. When to use more sophisticated models.
- **Facilitating integration:** Effective data display and communication. Company structure and personnel roles in project-based work. The problems of out-sourcing. Integrating consultants and contractors.
- **Applying PM Techniques to Reservoir Studies:** Differences between reservoir studies and traditional projects. Tailoring the techniques. How to assure quality. Troubleshooting project problems. Advantages and disadvantages of Stage Gate processes

Integrated Reservoir Studies

The Project Management Approach

.

Who should attend?

Staff of all disciplines who may work as part of an integrated study team involved with petroleum reservoirs (geophysics, geology, petrophysics and reservoir engineering). You will benefit from this course if you work on any of the following topics:

- Evaluation of discoveries
- Development of new fields
- Re-evaluation of mature fields, including the construction and history matching of large simulation models.

It will be particularly appropriate if you serve as a Project Manager or Project Engineer within a study team but have had little previous exposure to planning methods.

Feedback

Participant feedback is universally favourable, with generally 'excellent' scores for content, instructor, presentation and value of material:

> 'I wish I attended this course 8 years back, my career would have been different and better. I strongly recommend this course for all technical people at early stage of career to understand things from the other side of the table.'
>
> 'Excellent delivery of information'
>
> 'Excellent trainer'
>
> 'Everything was clear and concise'
>
> 'Very interesting and valuable'

Further information: www.jhma-reservoir.com

Presenter

This workshop was originally compiled in by John H Martin and Jess Stiles, combining interests and expertise in geoscience and petroleum engineering respectively.

John H Martin graduated with a first class honours degree in Geology from Oxford University in 1977, and obtained a PhD in Sedimentology and Economic Geology at the University of Edinburgh (1981). He worked as a Reservoir Geologist in the Production Geology Department of Shell Research Laboratories in The Hague, specialising in the study of complex clastic reservoirs in Oman, including support for EOR projects. From 1985–1989, as Senior, later Principal Geologist with International Petroleum Engineering Consultants Ltd in London, his responsibilities included reservoir geological evaluation, input to integrated field studies and, latterly, the management of engineering projects.

He has authored, edited and reviewed several papers concerning integrated geological and engineering evaluation of complex reservoirs. Till 1992 he held the post of Senior Lecturer in Development Geology at Imperial College, London, where he taught reservoir geology at MSc level.

Since 1989 he has been an independent reservoir development consultant/advisor; Director of John H Martin Associates Ltd since 1996. Roles include responsibility for technical management, presentation and reporting of major integrated field studies and assists clients with asset acquisition and divestment/farm-outs. He is regularly involved in North Sea and international unitisation and equity redeterminations, both in Expert and advisory roles.

His worldwide project experience includes more than 30 countries and he has presented around 100 public and in-house training workshops and courses in over two dozen locations.

John H Martin Associates Ltd

RESERVOIR DEVELOPMENT CONSULTANTS