

Module	Topic	Module Description
Basics		
1.00	Section 1 Front	
1.01	Rig Type Basics	A description of the main types of rigs and platforms.
1.02	Basic Rig Components	The main components of a rig and how they work. How do they contribute to the drilling process?
1.03	Basic Drilling Components	Description of the tools and equipment used to drill a well including drillstring, bits, LWD, mud etc. Overview of drilling and tripping processes and the completion of a well.
1.04	Personnel and Services	Who are the personnel you would find on a rig and what do they do?
Fundamentals		
2.00	Section 2 front	
2.01	HSE	Health, Safety and Environment and the importance to the wellsite and operations geology roles.
2.02	Depth	One of the most fundamental measurements at the wellsite. How do we measure depth? How accurate is it and how do we record it?
2.03	ROP	Rate of penetration. Describes how it is calculated, what influences it and what we can do with it.
2.04	Sample Lag	Describes how we match samples with depth and how we can calculate the lag time.
2.05	Samples and Sampling	Describes what samples are collected, how they are collected and how best to ensure that they are representative.
2.06	Basics of Logs	Logs are one of the key ways of presenting geological and drilling data. This module describes what they are.
2.07	Directional Drilling	Wells are now commonly deviated from vertical. This module describes how and why it is done. The tools and processes.
2.08	Planning a well	Basics of how a well is planned (very brief introduction to a topic discussed in detail in Module 4.01.
2.09	Testing and Completing a Well	Essentials of how a well is tested and completed
2.10	Coring	Description of why we core and the way coring and sidewall coring is performed. Through description of the coring tools. Core point selection and processing are discussed in module 3.07.
2.11	Wireline	Basics of wireline tools, tool families and what they do.
2.12	Mudlogging	A description of mudlogging services and what data they provide.
2.13	LWD	A description of LWD services and what data they provide
2.14	Formation Pressures	Brief introduction to what formation pressure evaluation is, why it is necessary and some basic definitions of terms.
Wellsite and Operations Geology		
3.00	Section 3 Front	
3.01	Operations Geoscience	A description of the wellsite and operations geology team and associated roles, how they interact with other roles.
3.02	Operations Geology	A description of the role of the operations geologist. How the role is changing.
3.03	Wellsite Geology	A description of the role of the wellsite geologist.
3.04	Data Management	An increasing amount of time is taken up with data management. This module described how this affects the wellsite and operations geology roles.
3.05	Sample description and interpretation	How cuttings and core samples should be described. What affects cuttings quality.
3.06	Show description	The background to hydrocarbons and how they are measured and described at the wellsite.
3.07	Coring	Describes core point selection, core processing and analysis
3.08	Sidewall Coring	Describes the process of picking sidewall core points and subsequent processing.
3.09	Wireline Logging QC	The general procedures for the quality control of wireline logging
3.10	Quick-Look evaluation	Quick look log evaluation (in progress)
Advanced Topics		
4.00	Section 4 front	
4.01	Well Planning	A generic description of the operations geologist role in well planning process. Pore pressure forecasting, contract handling, drilling risk evaluation, pre well documentation and preparation
4.02	Well Surveillance	Operations and wellsite geology role in well surveillance
4.03	ERD and Geosteering	A description of extended reach drilling and geosteering and the role of wellsite and operations geologists in these processes
4.04	Pore Pressure Fundamentals	Definitions of terms, overburden, fracture and pore pressure and a description of how overpressure is developed. Review of stresses, wellbore instability and how to identify stress or pore pressure related issues. How we calculate overburden and fracture pressures.
4.05	Pore Pressure Mechanisms	Description of the mechanisms involved in over- and underpressure development and their influence on pore pressure estimations and how to identify them. Discussion of processes which affect pore pressure - centroid, hydrodynamics, seal risk analysis and pressure cells.
4.06	Pore Pressure Methods and Prediction	Common pore pressure algorithms and how they are used. Predictive methods and tools.
4.07	Pore Pressure Evaluation	Describes all the processes and indicators used to evaluate pore pressure from pre-well forecasting, through wellsite evaluation and post well documentation. Curve trend analysis. Both direct and indirect indicators - gas events, hole conditions and shale caving etc.
4.08	Influxes/Kicks	A description of the processes involved when an influx occurs together with the roles of the wellsite and operations geologists
4.09	HTHP/Deepwater wells	Advanced pore pressure evaluation and the special processes involved with HTHP wells.
4.10	Deepwater Wells	Evaluation and special processes involved with deepwater wells
Glossary, Abbreviations and Equations		
5.01	Glossary	Common drilling and geological abbreviations. Glossary of drilling terminology. Useful equations.
5.02	Operations Abbreviations	
5.03	Geological Abbreviations	
5.04	Useful Equations	