High-Pressure, High-Temperature (HPHT) - Planning and Operation

Introduction:
As oil and gas exploration ventures deeper, High-Pressure, High-Temperature (HPHT) environments are becoming increasingly encountered
Drilling and operating in these extreme conditions pose unique challenges that require specialized knowledge, skills, and planning
This comprehensive 5-day training program, delivered by Global Business Minds, equips engineers, drilling professionals, and other stakeholders with the essential understanding and expertise to navigate the complexities of HPHT well planning and operation

Program Goals:
• Enhance participants' knowledge of HPHT well characteristics, challenges, and risks

• Develop the ability to plan and design HPHT wells effectively, considering technical, safety, and economic factors

• Empower participants to execute HPHT well operations safely and efficiently, ensuring wellbore integrity and environmental protection

• Foster collaboration and communication skills for successful project execution within multidisciplinary teams

Course Agenda:
Day 1: Fundamentals of HPHT Wells:
• Defining HPHT characteristics and classifications

• Understanding the impact of high pressure and temperature on rock formations, fluids, and wellbore integrity

• Identifying key challenges and risks associated with HPHT operations, including wellbore stability, fluid management, and equipment limitations

• Exploring regulatory requirements and industry best practices for HPHT well planning and operation

Day 2: HPHT Well Planning and Design:
• Advanced wellbore stability analysis considering HPHT conditions

• Casing and cementing design considerations for HPHT wells

• Wellbore completion design and selection of materials for extreme environments

• Fluid selection and management strategies for HPHT drilling and production

• Utilizing specialized HPHT well planning software and tools

Day 3: HPHT Well Drilling Operations:
• Rig selection and modification for HPHT operations

• Managing drilling fluids and pressure control in HPHT environments

• Wellbore cleaning and tripping procedures for HPHT wells

• Contingency planning and emergency response for potential HPHT drilling hazards

• Real-time data monitoring and analysis for safe and efficient drilling

Day 4: HPHT Well Completion and Production:
• Completion techniques and equipment selection for HPHT wells

• Sand control and artificial lift considerations in HPHT production

• Flow assurance and hydrate management strategies for HPHT pipelines

• Well integrity management throughout the well lifecycle in HPHT environments

• Optimizing production and maximizing recovery from HPHT reservoirs

Day 5: Case Studies and Future Trends:
• Analyzing real-world HPHT well planning and operation case studies

• Discussing emerging technologies and innovations in HPHT drilling and production

• Sustainable practices and environmental considerations for HPHT operations

• Career development opportunities and professional networking in the HPHT field

Target Audience:
This training program is designed for:
• Petroleum engineers and drilling engineers involved in HPHT well planning and design

• Wellbore stability specialists and geomechanics engineers

• Drilling supervisors and crew members working on HPHT rigs

• Production engineers and reservoir engineers managing HPHT assets

• Project managers and decision-makers overseeing HPHT well projects

• Non-technical professionals seeking a comprehensive understanding of HPHT operations

Additional Notes:
• The training program can be customized to address specific needs and interests of the target audience

• Pre-requisites for participants may include basic knowledge of petroleum engineering, drilling operations, and reservoir engineering

• Global Business Minds can provide on-site training at your company's location or deliver the program virtually

We believe this detailed training program will equip you with the necessary knowledge and skills to confidently navigate the complex and rewarding world of HPHT well planning and operation