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PETROGROUP
training & consulting company

SAND CONTROL COMPLETIONS

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Bogotá, Colombia

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ABOUT THIS COURSE

This course will teach the principles covering causes of sand production, various sand control methods, and design approach to sand control applications in well completions & field execution techniques.

At the end of the course program, candidate will be have acquired the proficiency sand control principles, various methods and guidelines for appropriate technique selection, the proficiency in designing gravelpacking operations, understand the full functionality of gravelpacking systems including surface pumping equipment, fluids systems, downhole tools and sand screen technology. Candidates will also be introduced to the various advanced sand control systems technologies currently available in the industry.

TARGET AUDIENCE

Entry /intermediate level Completion Engineers; Drilling Engineers; Production Technologist; Well-site leaders; Supervisors; and other candidates engaged in sand control completions operations.

COURSE CONTENT

1. Sand control in the oilfield

- Impact of sand production in the oilfield
- Causes of sand production
- Sand production prediction techniques
- Produced sand monitoring and management
- Sand control methods and selection guideline

2. Sand prevention techniques

- Production rate restriction
- Perforating for sand management
- Chemical consolidation

3. Sand exclusion techniques

- Sand screen technology - Natural sand packing

- ✓ Types of screens: slotted liners, wire-wrapped, pre-packed, premium mesh screens.
- ✓ Design and selection process
- ✓ Advances in sand screens, Sand screen systems- Expandable sand screens (ESS), Inflow control devices
- Gravelpacking systems
 - ✓ Introduction to gravelpacking
 - ✓ Gravelpack surface pumping equipments
 - ✓ Downhole tools (Services tools, packers, mechanical fluid loss devices, accessories)
 - ✓ Fluid systems (Completions brines, carrier gels, fluid loss control materials)
- Gravelpack designs and applications
 - ✓ Gravelpack design objectives and calculations
 - ✓ Gravel selection- particle distribution analysis, gravel properties etc...
 - ✓ Fluid selection criteria
 - ✓ Placement techniques - (high rate waterpack, slurry packs), considerations for high angle and openhole horizontal wells, Alternate path screen technology
 - ✓ Well stimulation with gravelpacks - The "Frac and Pack" technique

4. Field executions:-what to consider

- Drilling practices
- Wellbore preparation & completions fluids
- QA/QC and effective job preparation

5. Advance sand control systems

- Single trip perforate & gravelpack systems

LECTURER

Dickson Omonze is the Operating Director and founder of PetroCompletions. He has over 20 years of international industry experience in the oil and gas industry assuming field and technical engineering leadership roles with Schlumberger and Halliburton and has engineering specialization in the field of Well Completions Design and Productivity with special emphasis on Advance Sand Control Completions, Deepwater, HPHT, tubular design and Downhole Equipment Quality assurance and control. Dickson has taught numerous industry training programs in the field of Completions Engineering and has authored SPE and industry articles in the field of Advance Completions Engineering. Dickson has Bachelors of Engineering degree in the field of Mechanical Engineering from the University of Benin, Nigeria.