JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Hydraulic Fracturing Candidate Screening Training Course

19 – 23 April 2027
Milan

Hydraulic Fracturing Candidate Screening Training Course

Ref: 2443_92297 **Date:** 19 – 23 April 2027 **Location:** Milan **Fees:** 7200 GBP

Hydraulic Fracturing Candidate Screening is a 1-week training course for completion and reservoir engineers who decide which wells and intervals receive a fracture treatment, built around a stimulation candidate screening sheet that ranks wells by expected incremental rate and risk. Poorly chosen wells waste pumping capacity, proppant and rig time. Jupiter Prime Training places Hydraulic Fracturing Candidate Screening at the centre of stimulation planning.

Why Hydraulic Fracturing Candidate Screening Matters Now

Three forces shape stimulation choices today: maturing fields where many wells already carry an old treatment, tighter capital reviews that ask for evidence of incremental barrels before pumping begins, and closer scrutiny of water use and well integrity. An operator that screens well chooses wells with remaining drainable reserves, sound cement and a clear cause of underperformance. One that screens badly fractures wells whose real problem is depletion or water breakthrough. The course rests on pressure transient analysis, nodal analysis and decline curve analysis, applied as an evidence chain.

Who Gains Most from Hydraulic Fracturing Candidate Screening

- Engineers who propose wells for stimulation and defend the expected uplift
- Reservoir specialists who estimate drainable reserves and pressure support around each well
- Completion staff who confirm casing, cement and wellhead limits before treatment
- Production technologists who track post-job performance against forecast
- Asset planners who rank intervention spend across a well stock

Subsurface and well teams gain most when reservoir, completion and production members attend together and agree one ranking method.

Hydraulic Fracturing Candidate Screening Capabilities

Participants learn to separate wells limited by near-wellbore damage or low permeability from wells limited by depletion, water or mechanical condition.

- Diagnose the cause of low productivity from skin, pressure and rate evidence — the go or no-go call on each well
- Calculate expected incremental rate with a simple inflow model — the uplift case put to asset managers
- Weigh acid fracturing against proppant fracturing for a given lithology — the treatment type chosen
- Assess well integrity and barrier condition before pumping — the completion sign-off
- Test refracturing candidates against original treatment records — the restimulation shortlist
- Build a ranked screening sheet with risk flags — the intervention budget decision

Key Hydraulic Fracturing Candidate Screening Terms

- Skin factor — a dimensionless number describing extra pressure drop near the wellbore caused by damage or stimulation.
- Fracture conductivity — the product of propped fracture width and proppant pack permeability, controlling how easily fluid flows along the fracture.
- Dimensionless conductivity — fracture conductivity divided by formation permeability and fracture half-length, used to judge whether a fracture is balanced.
- Productivity index — the rate a well delivers per unit of drawdown, the baseline against which uplift is measured.
- Refracturing — a second fracture treatment in a previously stimulated well to restore or extend contact with the reservoir.
- Acid fracturing — fracturing carbonate rock with acid that etches uneven faces, keeping the fracture open without proppant.

Hydraulic Fracturing Candidate Screening Day by Day

Day 1: Why Wells Underperform

- Production History Review — Separating Decline From Damage
- Pressure Transient Test Interpretation — Quantifying Skin And Permeability
- Nodal Analysis Of Inflow And Outflow — Locating The Rate Restriction
- Water And Gas Cut Trends — Ruling Out Breakthrough Wells
- Drainable Reserves Estimate — Confirming Volume Worth Stimulating

Day 2: Reservoir Types and Fracture Response

- Tight Sandstone Response — Long Half-Length Versus Conductivity Trade-Off
- Conventional Permeable Reservoirs — Short Wide Fractures For Bypassing Damage
- Dimensionless Conductivity Targets — Sizing The Fracture To The Rock
- In-Situ Stress Profile And Barriers — Predicting Height Growth Into Water
- Natural Fracture Presence — Expecting Leak-Off And Complex Geometry

Day 3: Choosing the Treatment Type

- Carbonate Versus Clastic Lithology — Acid Or Proppant Fracture Choice
- Acid Etched Conductivity Under Closure Stress — Limits Of Acid Fracturing
- Proppant Type And Concentration — Matching Pack Strength To Stress
- Matrix Acidising Alternative — When A Fracture Is Not Needed
- Well Integrity And Barrier Check — Pressure Rating Before Pumping

Day 4: Refracturing and Post-Job Evaluation

- Original Treatment Records Audit — Spotting Under-Stimulated Intervals
- Refracture Candidate Indicators — Depleted Versus Bypassed Rock
- Diversion And Isolation Options — Reaching New Rock In Old Wells
- Post-Stimulation Rate Transient Analysis — Measuring Real Fracture Performance
- Forecast Versus Actual Lookback — Calibrating The Next Screening Round

Day 5: Practising the Stimulation Candidate Screening Sheet

- Applied Damage Diagnosis On A Well Set — Shortlisting Candidates
- Incremental Rate Forecast For Each Candidate — Ranking By Uplift
- Treatment Type Assignment Per Well — Acid Or Proppant Decision
- Risk Flags For Integrity And Water — Removing Unsafe Candidates
- Stimulation Candidate Screening Sheet — Ranked List For Budget Approval

Applying Hydraulic Fracturing Candidate Screening After the Course

- Run a skin and drainable reserves review on the lowest-performing wells of one field and flag those worth a treatment.
- Hold a lookback on the last stimulation campaign, comparing forecast and actual uplift to recalibrate the ranking criteria.

Hydraulic Fracturing Candidate Screening Questions FAQ

What is Hydraulic Fracturing Candidate Screening and why does it matter now?

Hydraulic Fracturing Candidate Screening is the evidence-based choice of which wells to fracture. It matters now because capital reviews demand proof of incremental production before treatment, and many mature wells carry problems a fracture will not fix.

Which roles gain most from Hydraulic Fracturing Candidate Screening?

Completion and reservoir engineers gain most, with production technologists and asset planners close behind. Anyone who proposes, approves or evaluates well stimulation will apply the ranking methods directly.

How does Hydraulic Fracturing Candidate Screening differ from a fracture treatment design course?

Hydraulic Fracturing Candidate Screening decides which wells deserve a treatment and which type, while a design course sizes pump schedules and fluid systems. Here you work upstream of design, on diagnosis, ranking and lookback.

What do you bring back from Hydraulic Fracturing Candidate Screening?

You bring back a ranked screening sheet built on your own well data, with uplift forecasts, treatment type and risk flags, ready for the next budget discussion.

Hydraulic Fracturing Candidate Screening: The Way Forward

The stimulation candidate screening sheet first informs which wells enter the next stimulation campaign and which are sent for water shut-off or abandonment review. Reservoir, completion and asset staff use it to agree spend. After the first campaign, revisit its uplift assumptions against measured post-job rates, so the ranking grows more reliable with each round of treatments.