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COURSE BROCHURE

# Producing Well Skin Diagnosis and Matrix Acidising Training Course

15 – 19 March 2027
Dar es Salaam

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**Ref:** 2855_109353 **Date:** 15 – 19 March 2027 **Location:** Dar es Salaam **Fees:** 7900 GBP

Producing Well Skin Diagnosis and Matrix Acidising is a 1-week training course for production and petroleum engineers who must find out why a producer underperforms and choose the right remedy, ending in a well stimulation candidate review. Mature fields depend on restoring lost inflow from existing wells, and a poorly chosen acid job can cost more output than it recovers. Jupiter Prime Training delivers this skin diagnosis and matrix acidising course.

## Why Producing Well Skin Diagnosis Matters Now

Three pressures shape the subject today. Asset owners want more barrels from existing wellstock before approving new drilling, so every underperforming producer must be explained. Service budgets are tight, so a treatment must be justified with an inflow forecast rather than habit. Safety teams scrutinise acid handling and spent fluid disposal closely. Operators that separate true formation damage from completion or mechanical skin pick the right wells and fluids; those that do not repeat failed jobs. The course rests on established inflow performance relationship methods, skin decomposition and pressure transient evidence.

## Who Gains Most from Producing Well Skin Diagnosis

- Engineers who monitor producer rates and flag wells falling below expected inflow
- Engineers who propose and justify acid treatments for sandstone or carbonate wells
- Engineers who interpret build-up tests to separate damage from other skin components
- Engineers who supervise treatment execution and approve flowback and clean-up plans

The course gains most when production, reservoir and well intervention engineers from one asset attend together and agree a single way of ranking candidates.

## Producing Well Skin Diagnosis Capabilities

Participants leave able to trace an inflow shortfall to its cause and match it to a treatment with a measurable target.

- Calculate total skin and split it into damage, completion and rate-dependent parts — the decision to treat
- Assess likely damage mechanisms from well history — the choice of treating fluid
- Build damaged and stimulated inflow forecasts — the expected gain shown to the asset manager
- Design a staged matrix acid treatment with diversion — the job proposal for the service company
- Weigh matrix acidising against hydraulic fracturing for a given reservoir — the stimulation route approved by the asset team
- Evaluate a treatment after the job — the lessons carried into the next candidate

## Key Producing Well Skin Diagnosis Terms

- Skin factor — a dimensionless number describing extra pressure drop near the wellbore compared with an ideal, undamaged well.
- Formation damage — loss of near-wellbore permeability caused by fines, scale, emulsions or filtrate invasion.
- Pseudo-skin — apparent skin caused by partial penetration, perforation geometry or well deviation rather than damage.
- Inflow performance relationship IPR — the curve linking flowing bottomhole pressure to the rate a well can deliver.
- Matrix acidising — injection of acid below fracture pressure to dissolve damage or create flow paths near the wellbore.
- Diversion — chemical or mechanical means of spreading acid evenly across treated intervals.

## Producing Well Skin Diagnosis Day by Day

### Day 1: The Inflow Shortfall

- Producer Performance Screening Against Type Wells — Which Wells Underdeliver
- Inflow Performance Relationship Curves — Expected Versus Actual Rate
- Productivity Index Trends Over Well Life — Gradual Versus Sudden Loss
- Nodal Analysis of Tubing and Surface Limits — Reservoir or Wellbore Constraint
- Well History Timeline of Drilling and Workovers — Clues to Damage Onset

### Day 2: Diagnosing Skin and Damage

- Build-Up Test Interpretation for Skin — Quantifying Near-Wellbore Losses
- Skin Decomposition Into Damage and Pseudo-Skin — What Treatment Can Remove
- Rate-Dependent Skin in Gas Wells — Separating Turbulence From Damage
- Damage Mechanism Matrix for Fines, Scale and Emulsions — Fluid Selection Basis
- Core, Water and Deposit Sample Analysis — Confirming the Suspected Mechanism

### Day 3: Designing Matrix Acid Treatments

- Sandstone Acid Systems and Mineral Sensitivity — Avoiding Secondary Precipitation
- Carbonate Acid Systems and Wormhole Growth — Injection Rate Choice
- Treatment Staging With Preflush, Main Acid and Overflush — Volume Design
- Chemical and Mechanical Diversion Options — Coverage of Long Intervals
- Pumping Schedule Below Fracture Pressure — Rate and Pressure Limits

### Day 4: Choosing the Stimulation Route

- Matrix Versus Fracture Stimulation Decision Chart — Permeability and Skin Thresholds
- Hydraulic Fracturing Fit for Low-Permeability Producers — When Acid Falls Short
- Incremental Rate and Payback Estimate — Ranking Competing Interventions
- Acid Handling, Flowback and Spent Fluid Plan — Safety and Disposal Choices
- Post-Job Evaluation From Rate, Pressure and Returns — Treatment Effectiveness

## Day 5: Practising the Stimulation Candidate Review

- Applying Performance Screening to Participants' Own Wells — Shortlist Selection
- Applying Skin Decomposition to Shortlisted Wells — Removable Skin Estimate
- Applying the Decision Chart and Payback Estimate — Route and Priority
- Peer Challenge of Draft Treatment Proposals — Testing Fluid and Volume Choices
- Stimulation Candidate Review Completion — Ranked Wells With Treatment Outline

## Applying Producing Well Skin Diagnosis After the Course

- Screen producers against type wells and decompose skin on the five weakest.
- Run a post-job evaluation on the last three acid treatments and record which damage mechanism each one addressed.

## Producing Well Skin Diagnosis Questions FAQ

### What is producing well skin diagnosis and why does it matter now?

Producing well skin diagnosis is the work of measuring extra near-wellbore pressure loss and finding its cause. It matters now because operators want more output from existing wells and cannot afford treatments aimed at the wrong problem.

### Which roles gain most from skin diagnosis and matrix acidising training?

Production, reservoir and well intervention engineers gain most. They spot weak producers, interpret tests, propose treatments and judge results.

### How does a matrix acidising course differ from a hydraulic fracturing course?

It centres on diagnosing damage and removing it with acid below fracture pressure. Fracturing appears only as an alternative route, chosen when permeability is too low for acid to deliver the needed gain.

### What do you bring back from skin diagnosis and matrix acidising training?

You bring back a ranked list of your own wells. Each one carries a skin breakdown, a likely damage mechanism, a proposed treatment route and an expected rate gain.

## Producing Well Skin Diagnosis: The Way Forward

The well stimulation candidate review gives each participant a defensible ranking of wells worth treating. Its first use is deciding which producers enter the next intervention budget. Engineers use it with the service company to draft job proposals. After the first treatments, the post-job results should be fed back to recalibrate damage mechanism assumptions and payback estimates.