

From Four Runs to One: First Single-Trip Multizone Gravel Pack Lower Completion Enables Sand Control, Zonal Isolation, Saves \$5 Million USD in Rig Time

Objectives

- Economically develop two marginal small-pool gas reservoirs from a single wellbore while improving project economics and reducing development cost.
- Enable individual or comingled production from both reservoirs based on the depletion plan to maximize recovery and extend production life.
- Reduce rig time and completion complexity by eliminating unnecessary trips and separate gravel-pack pumping operations.
- Maintain effective zonal isolation to help prevent crossflow and reduce the risk of early water breakthrough.

Our Approach

- Selected an openhole, shunted-screen lower completion to provide sand control across both producing intervals.
- Designed the lower completion for single-trip installation and one gravel-pack pumping operation to reduce rig time and simplify execution.
- Incorporated an openhole mechanical zonal isolation packer and shunted swellable packer to provide positive isolation between the two reservoirs.
- Used 5 1/2-in shunted openhole screens, integral seal bore screens, blanks, ETS, zonal isolation SZE packer, shunted swell packer, and 4.562-in and 4.250-in seal units.
- Positioned seal assemblies after the lower-completion installation and gravel packing to enable individual or comingled production based on the depletion plan.

Value to Customer

- Installed the lower completion in a single trip, with the zonal isolation packer set and both producing intervals gravel packed during one pumping operation.
- Reduced lower-completion trips from four to one, eliminating three additional runs and saving approximately seven rig days.
- Delivered more than \$5 million USD in rig-time cost savings while helping make marginal small-pool gas reservoirs economically viable.
- Enabled controlled individual or comingled production from both zones while mitigating crossflow and early water-breakthrough risk.
- Delivered the first single-trip, multizone lower completion in Trinidad and Tobago, establishing a benchmark for future small-pool gas developments in the region.

LOCATION

Trinidad and Tobago

WELL TYPE

Development, producer

FORMATION

Unconsolidated sandstone reservoirs separated by competent shales

RIG TYPE

Jack-up

CASING SIZE AND TYPE

9-5/8 in, 53.5 lb/ft casing

DEPTH

7,715 ft (2,352 m)

PRODUCTS/SERVICES

- Shunted openhole screen
- Shunted screens with integral seal bore
- Shunted openhole zonal isolation SZE packer

