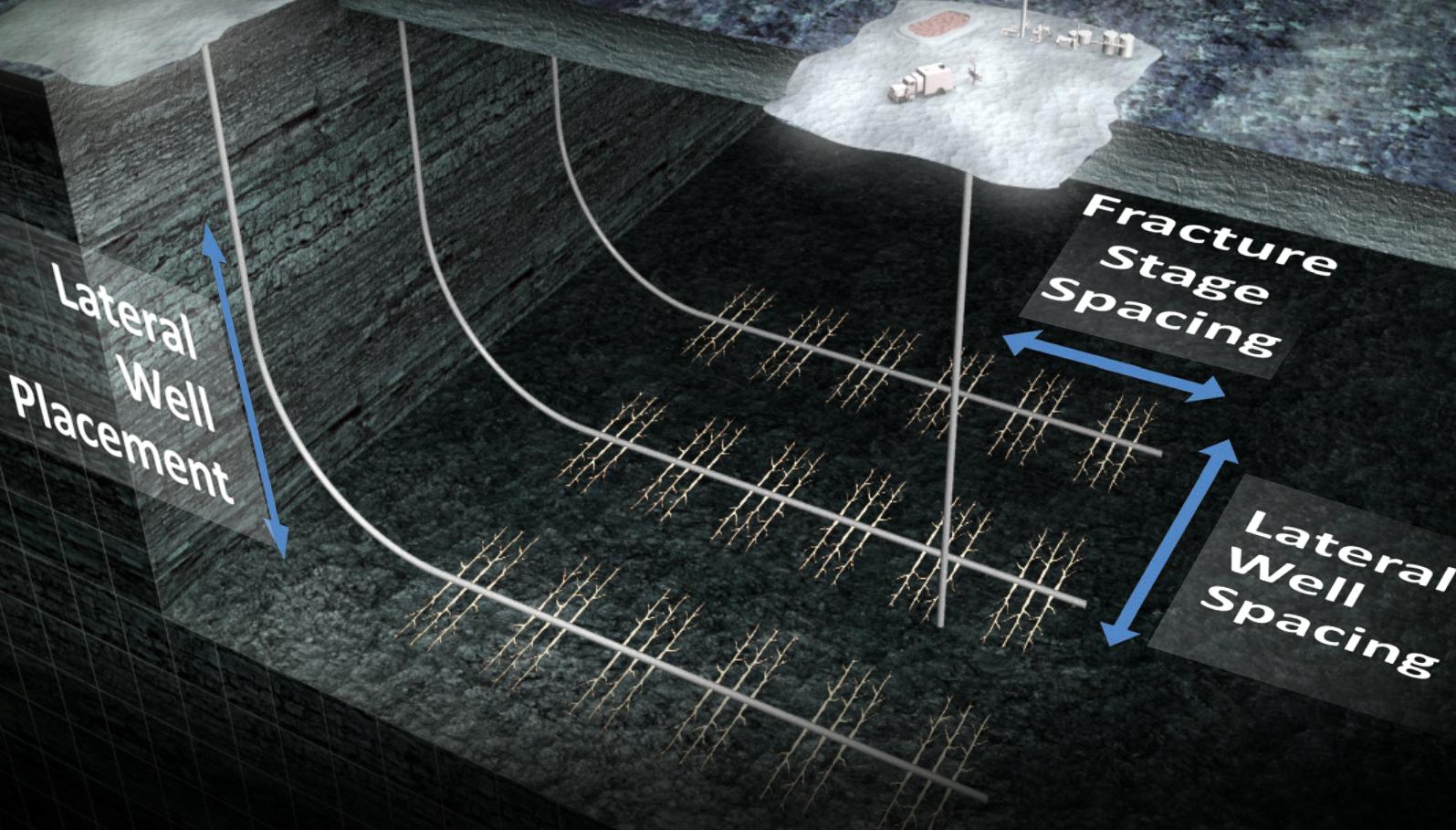




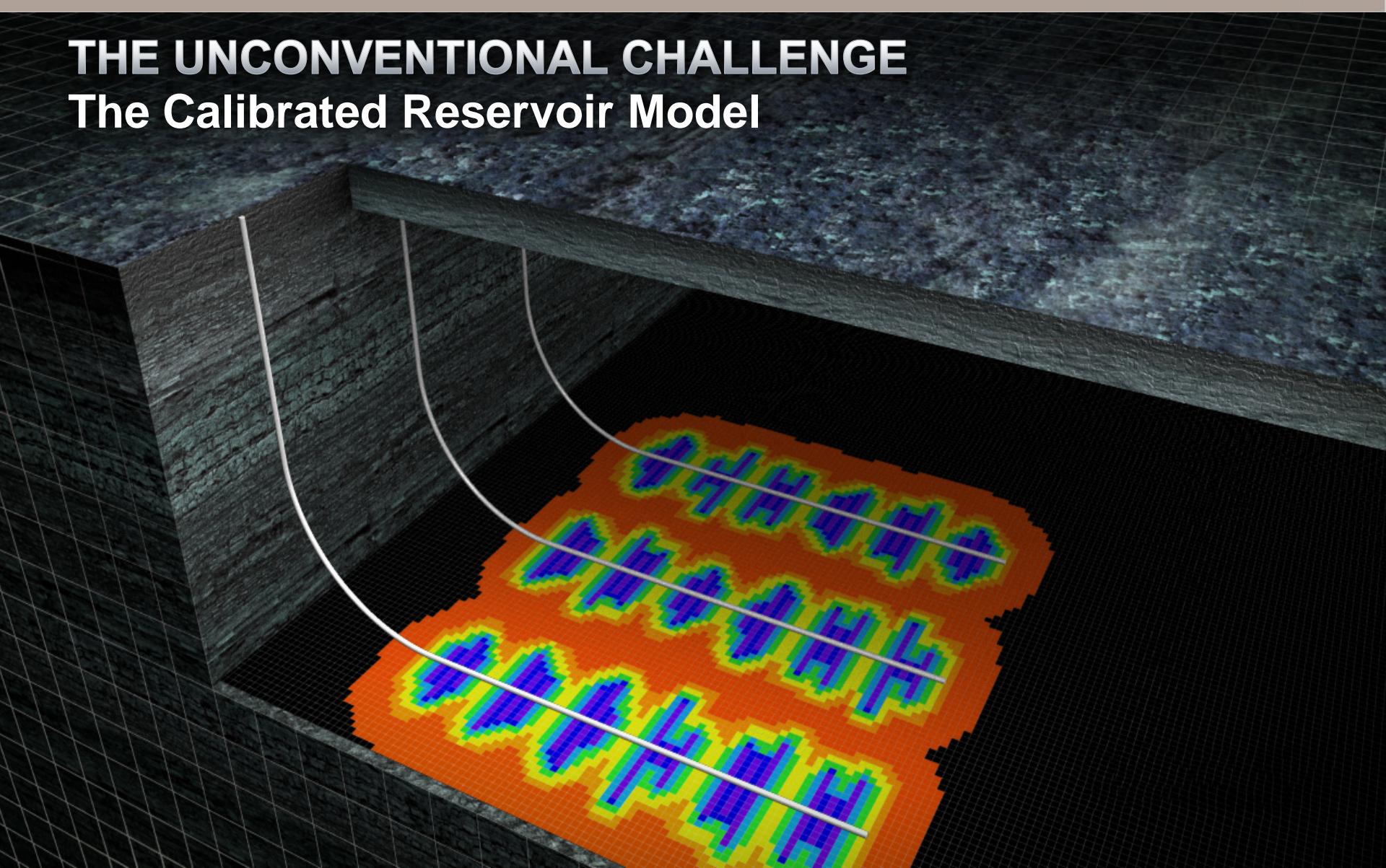
THE UNCONVENTIONAL CHALLENGE





THE UNCONVENTIONAL CHALLENGE

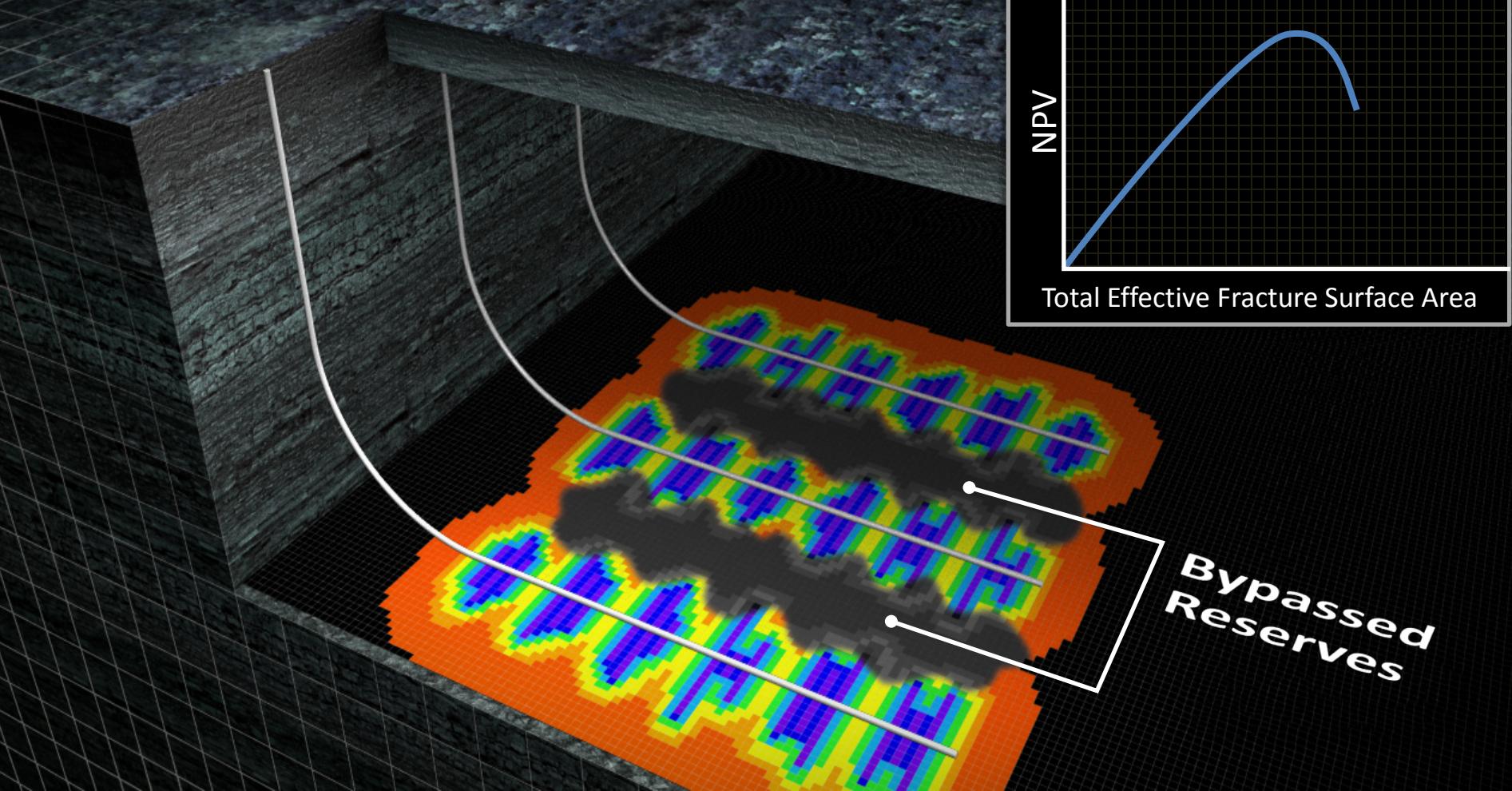
The Calibrated Reservoir Model





THE UNCONVENTIONAL CHALLENGE

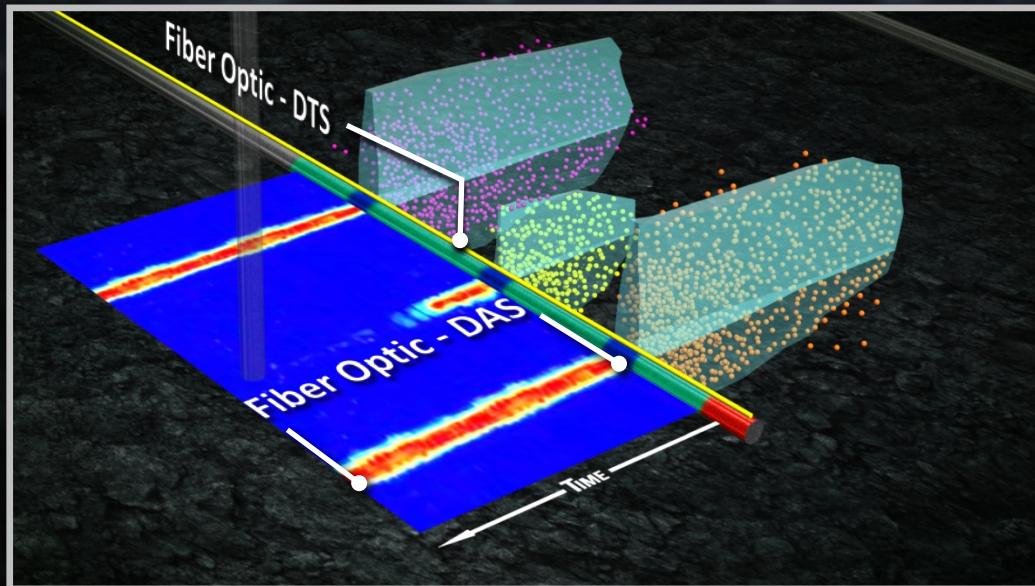
The Calibrated Reservoir Model





SOLVING THE CHALLENGE

Near Wellbore Results



**NEAR WELBORE FLUID DISTRIBUTION
CLUSTER EFFICIENCY
COMPLETION EFFECTIVENESS**

Fracture Initiation

Fracture Mapping

Fracture Model
Calibration

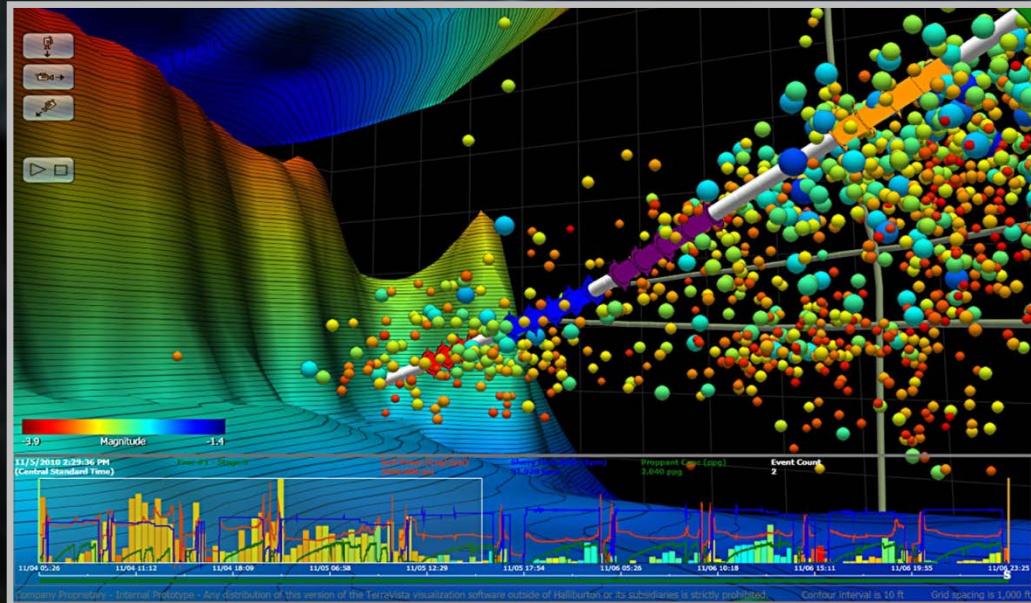
Production Monitoring

Reservoir Model
Calibration



SOLVING THE CHALLENGE

Far Field Results



Fracture Initiation

Fracture Mapping

Fracture Model
Calibration

Production Monitoring

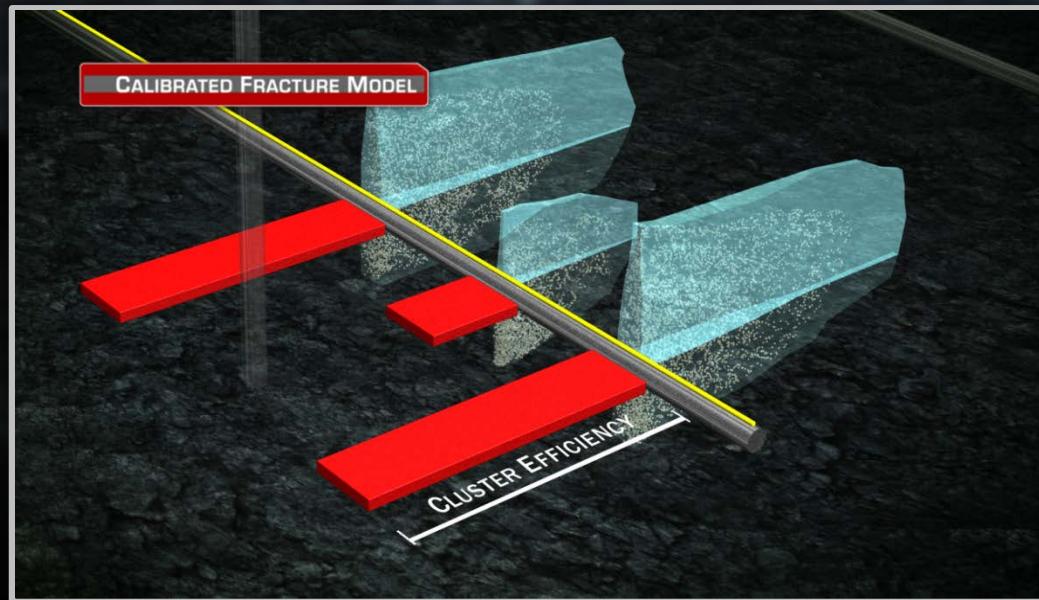
Reservoir Model
Calibration

**HYDRAULIC FRACTURE GEOMETRY
GEOHAZARD IDENTIFICATION**



SOLVING THE CHALLENGE

Calibrated Fracture Modeling



Fracture Initiation

Fracture Mapping

Fracture Model
Calibration

Production Monitoring

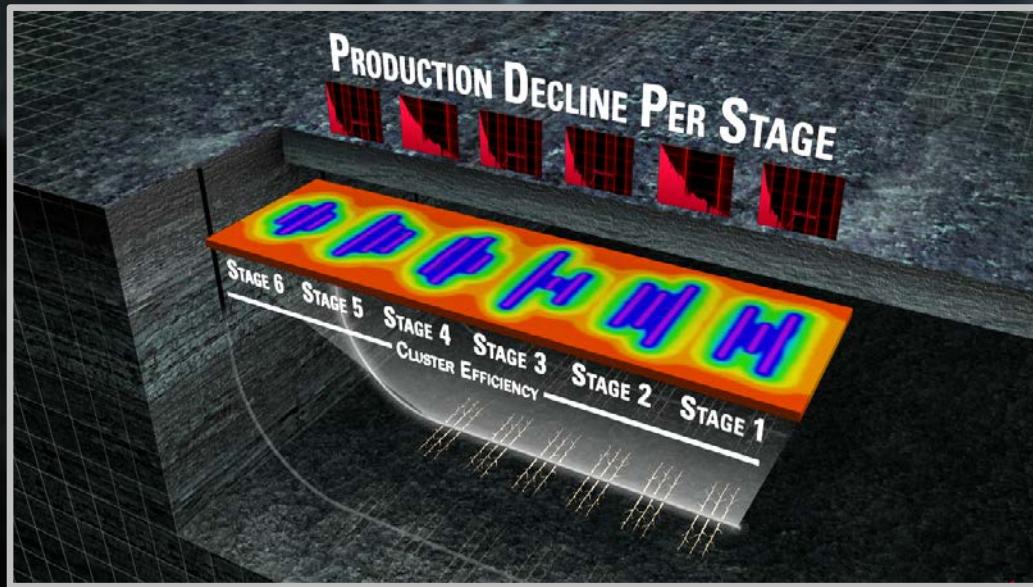
Reservoir Model
Calibration

**PROPPANT FRACTURE GEOMETRY
RESERVOIR MODEL INPUTS**



SOLVING THE CHALLENGE

Production Monitoring



FIBER OPTIC PRODUCTION
TRANSIENT ANALYSIS BY STAGE

Fracture Initiation

Fracture Mapping

Fracture Model
Calibration

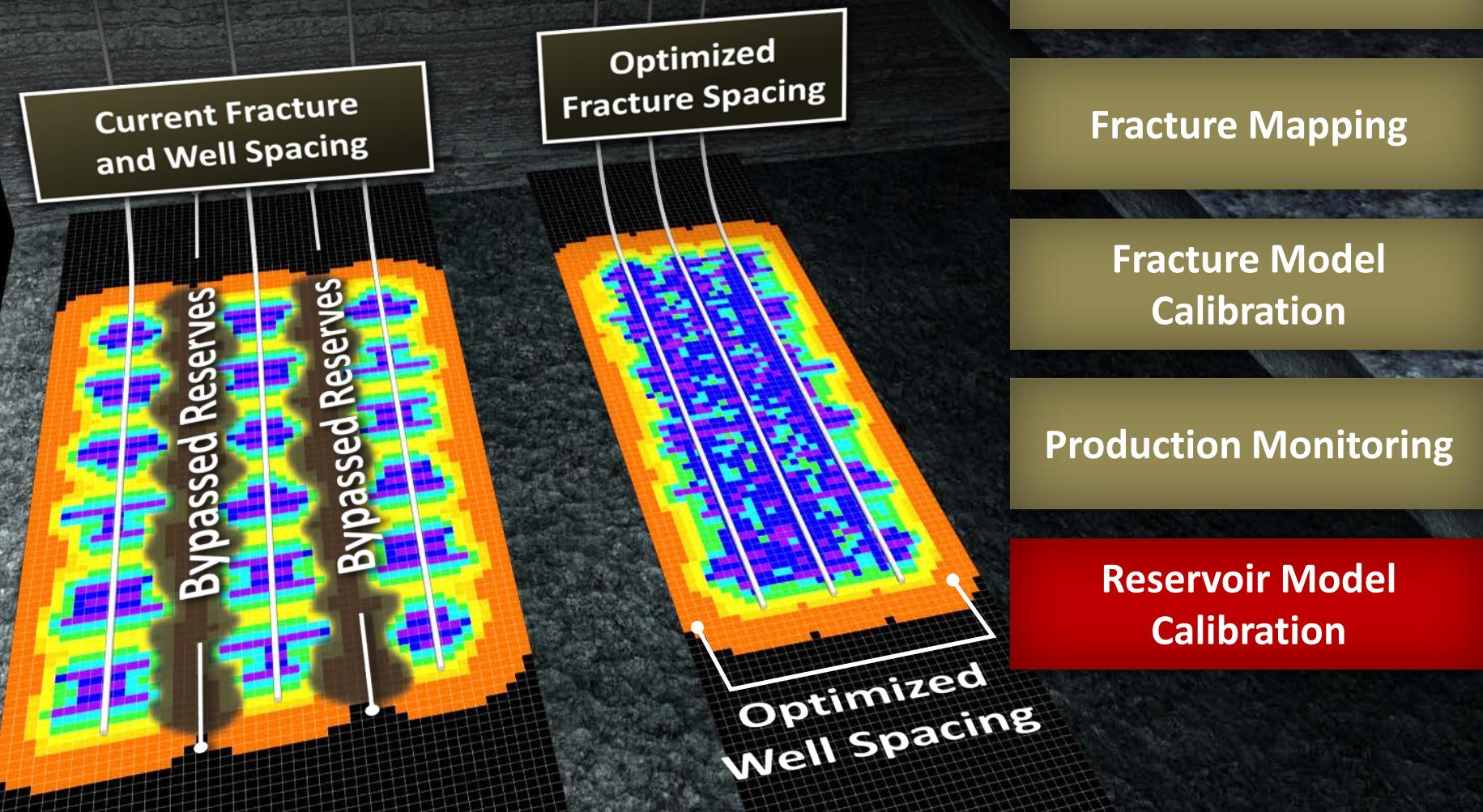
Production Monitoring

Reservoir Model
Calibration



SOLVING THE CHALLENGE

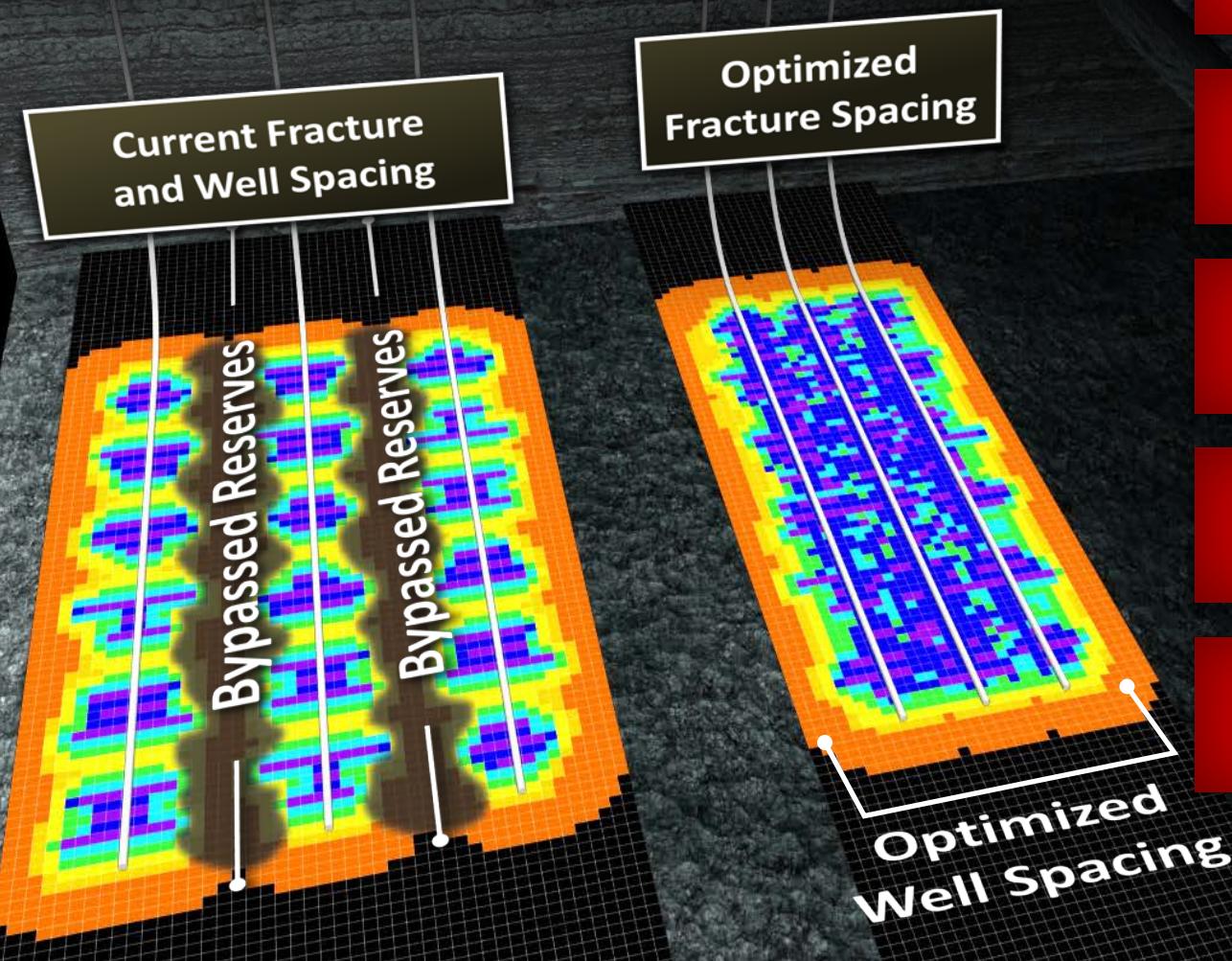
Calibrated Reservoir Model





SOLVING THE CHALLENGE

Integrated Sensor Diagnostics



Fracture Initiation

Fracture Mapping

Fracture Model
Calibration

Production Monitoring

Reservoir Model
Calibration

