

Stimulation Services

PROGRAMMING

ACID (perforating) WASHING MATRIX ACIDIZING hydrochloric acid hydrochloric- hydrofluoric acid **ORGANIC ACIDS** formic and acetic acids **ACID MIXTURES** acetic- hydrochloric blends formic hydrofluoric blends RETARDED ACID SYSTEM gelled acids foamed acids chemically retarded acids emulsified acids FRACTURING FLUIDS - water base: hydrochloric acid hydrochloracetic blends

GRAVEL PACK low density system high density system

JET PERFORATING JET CUTTING

DESIGN

DEFINITION
well conditions
definition of formations and fluid properties
type of treatment
volume to be pumped
material and equipment
FINE TUNING OF JOB DESIGN
IMPLEMENTATION OF FINAL JOB DESIGN

LABORATORY

testing of acid mixtures
testing of additives
testing of rock properties and fluid properties
fluid testing (rheology for fracturing fluids)
compatibility testing
corrosion testing at low temperatures
laser determination of particle size
proppant properties
scale control properties
geothermal properties and oil field water
analysis

