



RESTORE AND REJUVENATE MATURE ASSETS RIG-FREE

Colin Jordan

Global Business Director - Completions



OPENHOLE COMPLETIONS

CEMENTATION



LINER SYSTEMS



SAND CONTROL



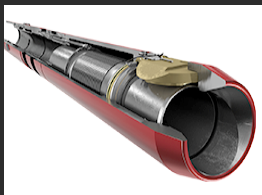
ROBUST PRODUCT PORTFOLIO

FOR TOTAL SOLUTIONS

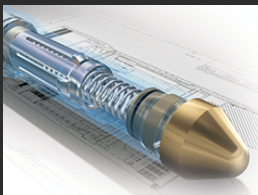


CASED-HOLE COMPLETIONS

SAFETY
VALVES



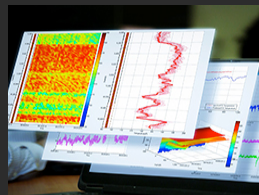
FLOW
CONTROL



GAS-LIFT
SYSTEMS



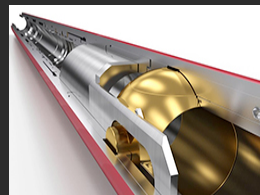
RESERVOIR
MONITORING



PRODUCTION
PACKERS



ISOLATION
BARRIER VALVES



ROBUST PRODUCT PORTFOLIO FOR TOTAL SOLUTIONS



WELL SERVICES



ROBUST PRODUCT PORTFOLIO

FOR TOTAL SOLUTIONS



38%

**OF ALL GLOBAL WELLS ARE
IN NEED OF SOME SORT
OF INTERVENTION HELP**

Casing & Tubing Integrity

Safety Valve & WH Integrity

Liquid Loading

Zonal Isolation

Scale & Corrosion



INDUSTRY CHALLENGES

ASSURE WELL INTEGRITY

Helping to protect our clients' investments with reliable life-of-well technologies and solutions

LOWER PRODUCTION COST

Providing technologies that reduce the need for intervention and reduce overall NPT

OPTIMISE RECOVERY

Rejuvenating aging wells with the least amount of intervention



GOING RIGLESS

LOCATION: NORTH SEA

Weatherford Insert Gas Lift System

**AVERAGE 2,500
BOPD ADDED
PER WELL
DEPLOYED**

Gas Lift Introduction and
Well geometry change - Rigless

LOCATION: OFFSHORE NETHERLANDS

Surface-Controlled Safety Valves

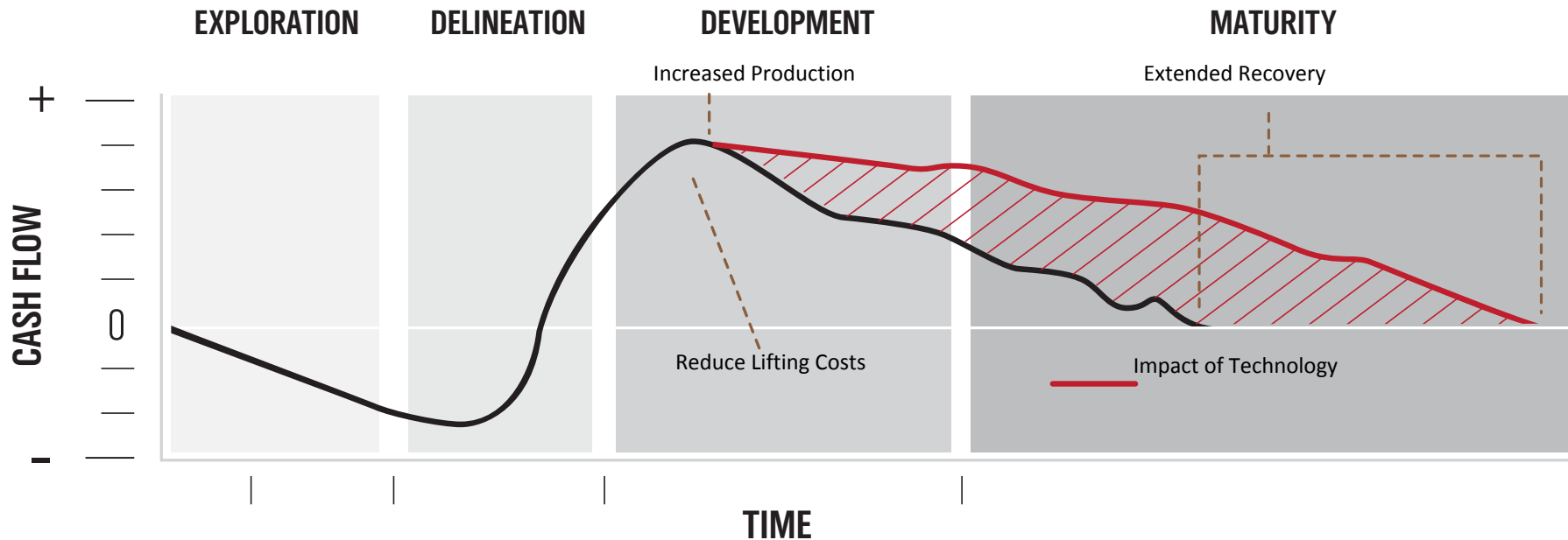
**ELIMINATED
\$50 MILLION
IN WORKOVER
EXPENSES**

Over a 2-year period for 27 wells with
blocked or damaged control lines





EXTENDED RECOVERY





WHAT IS PRODUCTION WELL SERVICES?

A SINGLE-SOURCE RIGLESS RESTORATION SOLUTION



FIND IT

Evaluate
and diagnose
downhole issues



SECUREVIEW® CASING AND
CEMENT EVALUATION SYSTEM



FIX IT

Repair wells
and restore
productivity



ISO EXTREME BRIDGE PLUG



GO BEYOND

Increase
recoverable
reserves
CAPEX-free



RENAISSANCE® IGLS



INTEGRATED WORKFLOW

Seamless integration and execution



EVALUATE

UNDERSTAND CLIENT'S
PERCEIVED WELL
PROBLEMS; CONFIRM
VIA DATA ACQUISITION



DESIGN

COLLABORATE ON A
TECHNICAL SOLUTION



EXECUTE

SAFE AND EFFECTIVE
OPERATIONS



VERIFY

WAS THE SOLUTION
SUCCESSFUL?



RENAISSANCE® SYSTEMS

Restore safety-valve functionality and productivity without pulling the tubing

Based on the industry-leading Optimax™ safety valve, Renaissance® systems retrofit a new safety-valve control line where original failed and enhance production by enabling the delivery of downhole treatment fluids.

- Replace damaged control lines
- Retrofit capillary injection or high-volume water-injection systems
- Retrofit wells without safety valves

ELIMINATED

WORKOVER

INCREASED PRODUCTION BY

3,500 BOPD

ENABLED

THE INSTALLATION OF
GAS LIFT INTO A WELL





MATURE WELL SOLUTIONS - RIGLESS

- CT – Thru Tubing Obstruction Removal and Fishing Services
- WL – Heavy Duty Fishing Services
- Safety Valve Repair Systems
- Solutions to address Liquid Loading
- Zonal Isolation & Tubular Integrity
- Well Barrier Packages
- Capillary Reservoir Data Services
- Capillary Chemical Placement
- Remedial Sand Control
- Stimulation Straddle Solutions





OmniCap™ APPLICATIONS

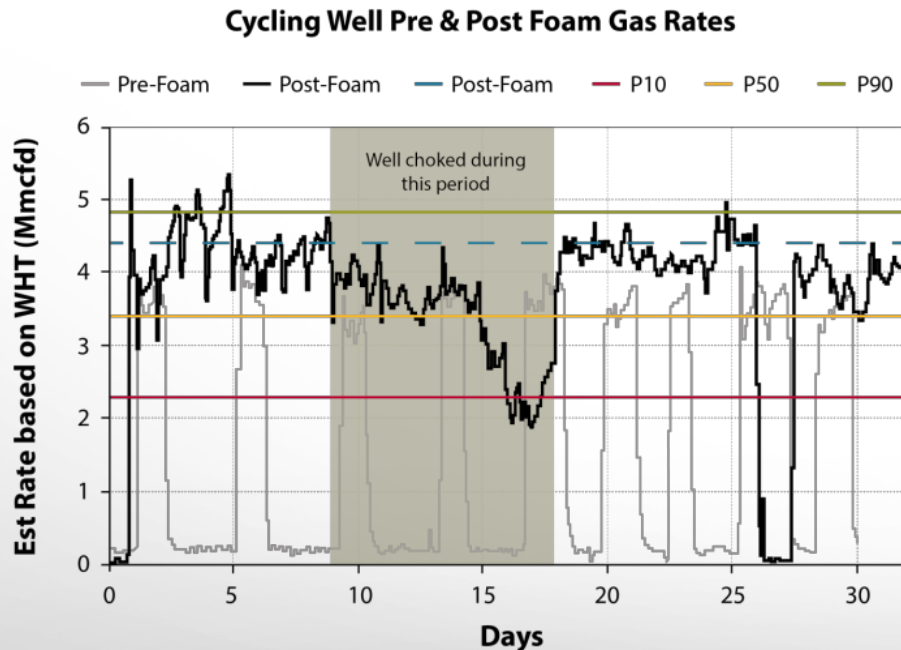
- Daily production
- Casing leak detection
- Injectivity performance
- Optimized lift performance
- Water and steam breakthrough
- Chemical treatment performance
- Optimized field and reservoir management
- Static and dynamic pressures and temperatures





DELIQUIFICATION – CASE STUDY EUROPE

Prior to Weatherford Production Well Services – this well produced for only **1 out of 3 days**



TODAY,
EVERY DAY



SUCCESS IN ASIA-PAC

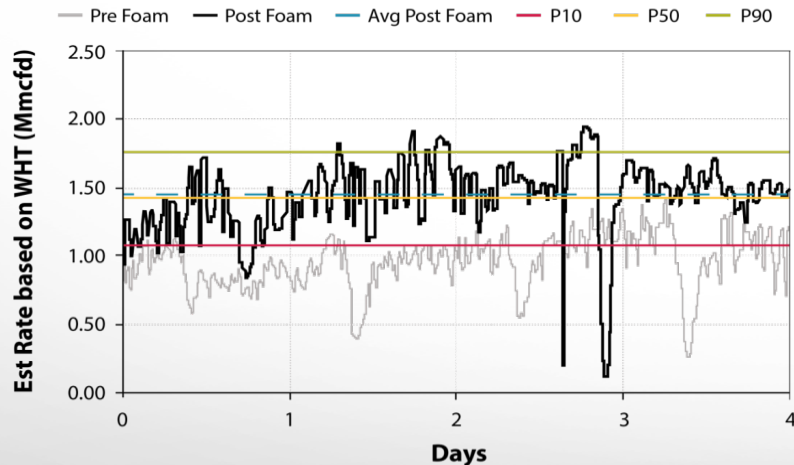
200 WELL PROJECT
OF UNDERPERFORMING
GAS WELLS

MIN DOUBLE
PRODUCTION
FROM THE FIELD

OFFSHORE
BARGES

PRODUCTION
TARGET IN
120 WELLS

Continuous Producing Well Pre and Post Foam

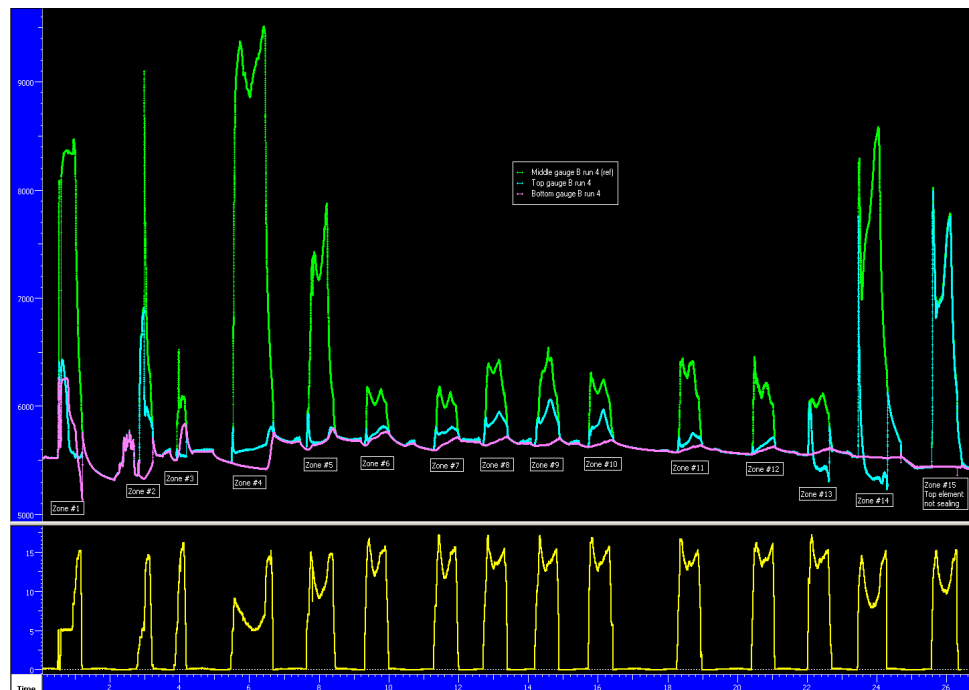




PIN-POINT CHEMICAL STIMULATION

MULTIZONE ACID STIMULATION

- Deploy Surge Frac CT Straddle System
- Perform acid squeeze in each zone independently
 - 14 Zones single trip
 - 7,500 psi @ 15 BPM
- 110% Increase in production
- 190% Increase in BHP





VO RETRIEVABLE STRADDLE SOLUTION

ISOLATE A 350m WATER BEARING INTERVAL IN GAS PRODUCER

- Mill out nipple restrictions in upper completion
- Run and set lower WidePak packer inside 7 in. liner
- Run Latch, Seal Assembly, 400m of 2 7/8 in. CT and upper Widepack packer
- Entire operation carried out on a live well using a CT tower
- ROI estimated at 30 days
- Extended platform life by minimum 22 months

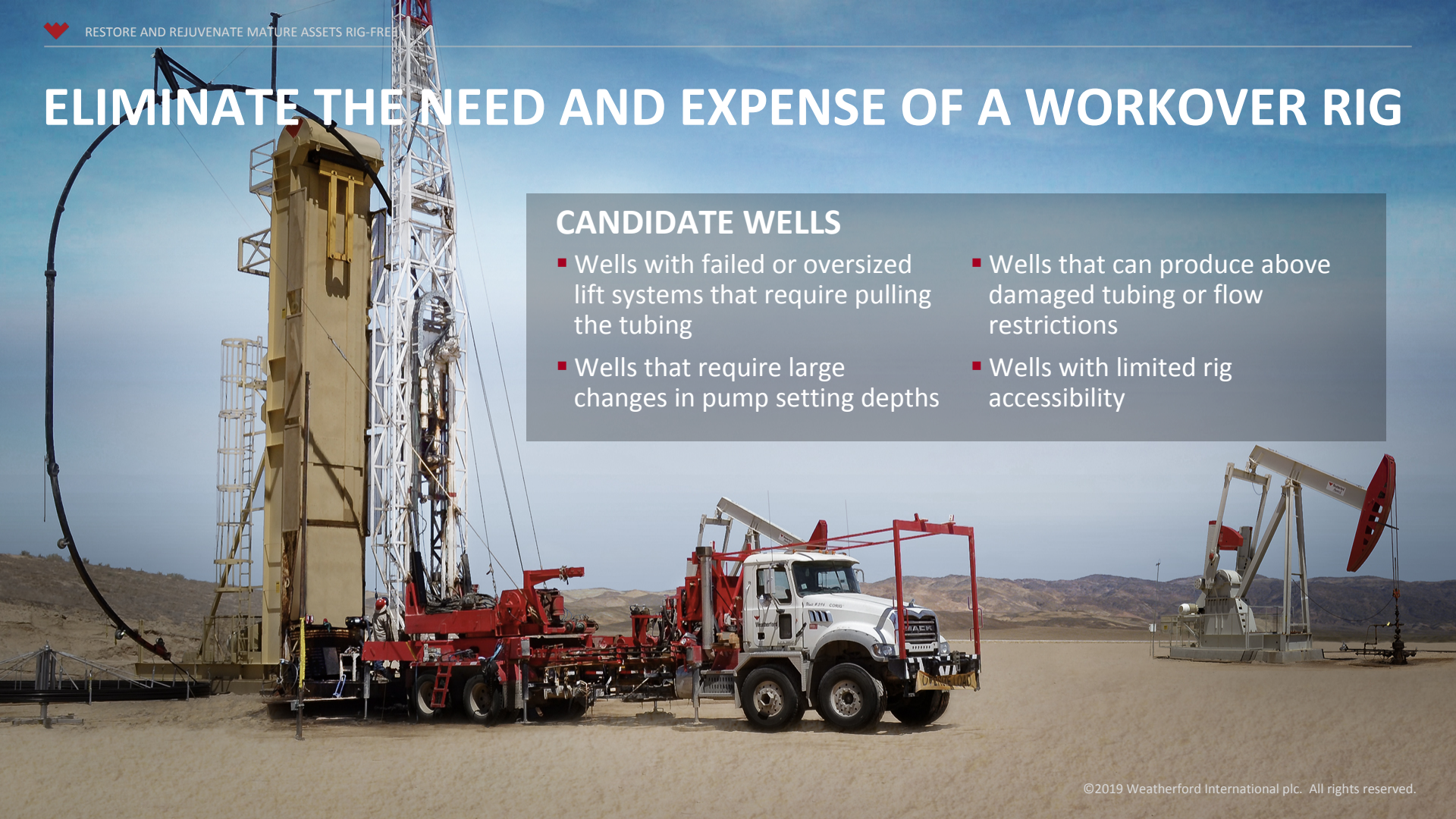




ELIMINATE THE NEED AND EXPENSE OF A WORKOVER RIG

CANDIDATE WELLS

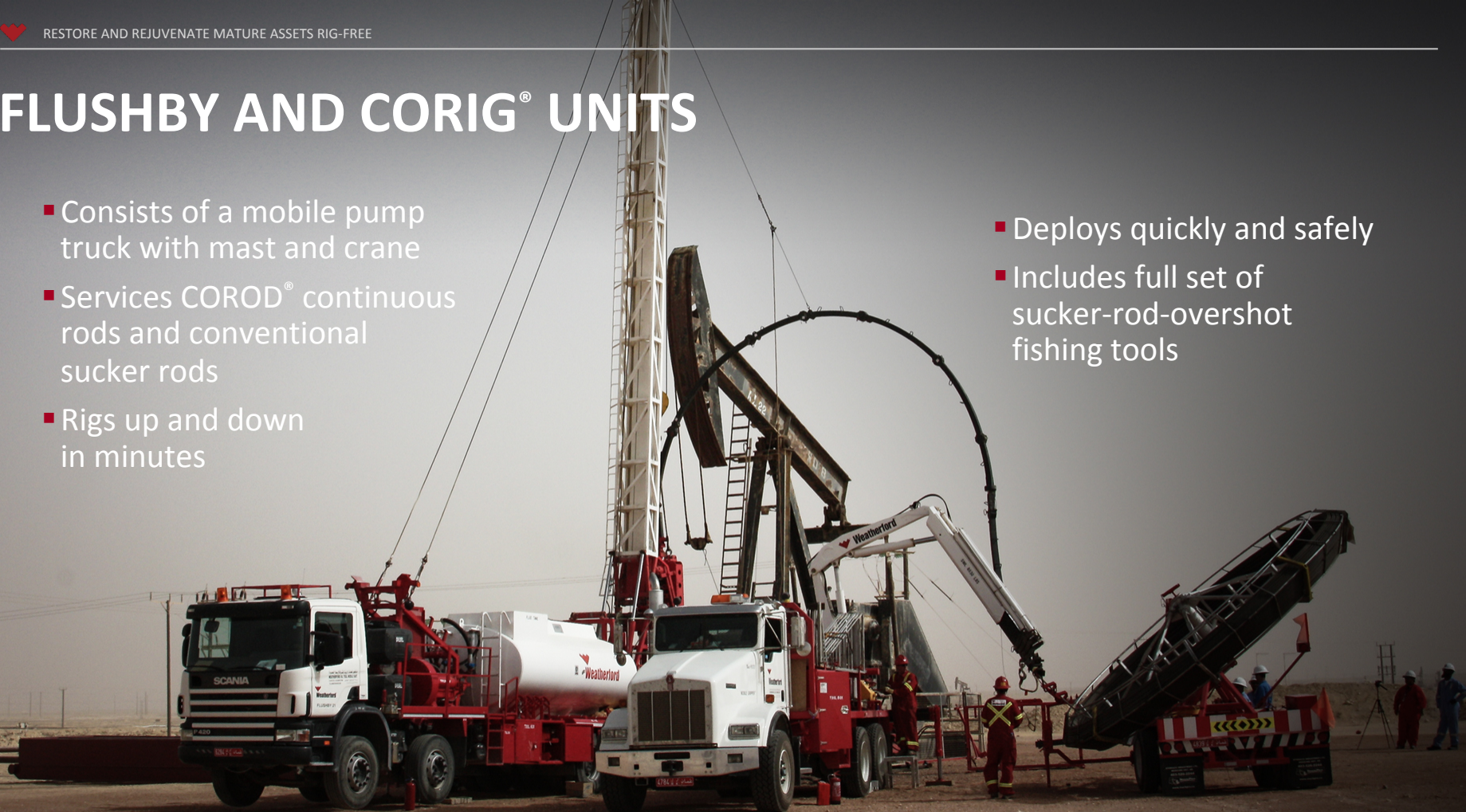
- Wells with failed or oversized lift systems that require pulling the tubing
- Wells that require large changes in pump setting depths
- Wells that can produce above damaged tubing or flow restrictions
- Wells with limited rig accessibility





FLUSHBY AND CORIG[®] UNITS

- Consists of a mobile pump truck with mast and crane
- Services COROD[®] continuous rods and conventional sucker rods
- Rigs up and down in minutes
- Deploys quickly and safely
- Includes full set of sucker-rod-overshot fishing tools





OUR VALUE PROPOSITION

Enhance recovery in mature assets capex-free



MINIMIZING OVERALL COSTS



OUR VALUE PROPOSITION

Enhance recovery in mature assets capex-free



MAXIMIZING RECOVERY OF RESERVES



OUR VALUE PROPOSITION

Enhance recovery in mature assets capex-free



DELIVERING SUPERIOR TECHNOLOGY & SERVICE



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RENAISSANCE® IGLS



**Field
Operations**

+

**OMV Well
Delivery Team**

=

**Production
Enhancement**



OPTIMIZED ASSET



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**MULTUMESC
THANK YOU**