

LANTERN AWARDS CATEGORY Q-1:  
Integrated Marketing Communications Program, Budget under \$99,000

# Schlumberger HiWAY Fact Campaign

## Website

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**Services & Products**

- Completions
- Stimulation
- Conventional Sandstone Reservoirs
  - Flow-Channel Hydraulic Fracturing
  - Scale Control
  - Polymer-Free Fracturing Fluids
  - Gelled-Oil Fracturing Fluid
  - Organic Clay Acid Stimulation Fluid
  - Matrix Acidizing Diverter
  - High-Water-Cut Acidizing Diverter
  - OneSTEP Simplified Sandstone Acidizing System
  - Fiber-based proppant flowback control
  - Proppant Flowback Control

**HiWAY Flow-Channel Hydraulic Fracturing Increases Production Using Less Water and Proppant**

[Overview](#) [Efficiency Facts](#) [Library](#)

**How it Works**

The average HiWAY channel fracturing job increases production by more than 20%.

PRODUCTION ↑ 20% INCREASE

PROPPANT ↓ 40% DECREASE

WATER ↓ 60% DECREASE

On average, the HiWAY service helps operators use 40% less proppant per job.

Compared to slickwater treatments, the HiWAY service uses up to 60% less water.

Read the [HiWAY infographic](#) and see how channel fracturing is creating new efficiencies in stimulation.

**Create infinite fracture conductivity**

HiWAY technology fundamentally changes the way proppant fractures generate conductivity. The first technique of its kind, HiWAY fracturing creates open pathways inside the fracture, enabling hydrocarbons to flow through the stable channels rather than the proppant. This optimizes connectivity between the reservoir and the wellbore—resulting in infinite fracture conductivity.

*"Petrohawk has converted 100% of frac services provided by Schlumberger in the Eagle Ford to the HiWAY technique."*  
Dick Stoneburner, COO and President, Petrohawk

**Improve performance in vertical and horizontal wells**

The HiWAY fracturing technique has improved time to sales, fluid recovery, initial production rate, and average-well estimated ultimate recovery (EUR) in more than 4,000 jobs worldwide—including the Rocky Mountain region of the US and the Sierras Blancas formation in Argentina.

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**How it Works**

Since 2010, the HiWAY\* flow-channel hydraulic fracturing service has helped operators increase production while using less water and proppant. The first technique of its kind, the HiWAY fracturing service creates stable channels within the fractures—decoupling fracture conductivity from the proppant pack. This results in infinite fracture conductivity.

*"Petrohawk has converted 100% of frac services provided by Schlumberger in the Eagle Ford to the HiWAY technique."*  
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**Use HiWAY Fracturing with Your Own Crew and Equipment**

Conventional hydraulic fracturing methods rely on larger proppant sizes and resin coating to improve conductivity.

HiWAY flow-channel fracturing uses specialized blending equipment and control systems to pump proppant in pulses—creating stable, infinite-conductivity flow channels within the fractures.

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**HiWAY Flow-Channel Fracturing**

HiWAY fracturing incorporates proprietary fibers that ensure flow-channel stability.

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**Worldwide Operations**

5,000+ stages | 40+ customers | 10 countries

Distribution of US HiWAY stages by state:

Since its inception, HiWAY fracturing has conserved:

250,000,000 gallons of water > 1,700+ households<sup>†</sup> annual water usage

Since 2010, HiWAY fracturing has saved:

340,000 tons of proppant > 3,400 railroad cars  
100 Boeing 747 jumbo jets

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## HiWAY Landing Page

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**How it Works**

A New Approach to Generating Fracture Conductivity

**Case Studies**

- Williston Basin Operator Produces 26% More Oil with HiWAY Channel Fracturing Service
- Increasing Average Initial Well Production by 53% in Argentina
- Increasing EUR by 47% for YPF, S.A.
- Channel Fracturing Gives Encana 24% More Gas Production
- Increasing 2-Year Cumulative Gas Production by 29% in Argentina
- Channel Fracturing Increases Production by 37% for Petrohawk in the Eagle Ford Shale
- HiWAY Technique Increases Condensate Production by 43% in the Eagle Ford Shale
- IHSA Increases Sustained Production up to 132%
- PEMEX Increases Tight Gas Production 32% While Reducing Operational Footprint

**Industry Articles**

- New Treatment Creates Infinite Fracture Conductivity
- Schlumberger Introduces Nueva Técnica de Estimulación
- Fracturing Technique Boosts Production
- Flow-Channel Fracturing

**Product Sheets**

- HiWAY Vertical Product Sheet (0.20 MB PDF)

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## HiWAY Library Tab



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## Advertisement

**HiWAY**  
FLOW-CHANNEL HYDRAULIC  
FRACTURING SERVICE

**Increase production.  
Save water, proppant, and time.**

HiWAY® flow-channel hydraulic fracturing creates infinitely conductive pathways within the proppant pack, enhancing productivity and operational efficiency. On average, HiWAY jobs increase production 20%, use 40% less water, and consume 60% less proppant.

To date, HiWAY technology has been used in more than 8,000 stages. It has helped

- conserve more than 320 million gallons of water
- save 1 billion pounds of proppant
- prevent more than 300 screenouts
- eliminate more than 47,000 road journeys.

[www.slb.com/HiWAY](http://www.slb.com/HiWAY)

Global Expertise | Innovative Technology | Measurable Impact

Schlumberger

## Brochure

**HiWAY**

**Flow-channel hydraulic fracturing service**

How it works

The new HiWAY technique omits proppant pack permeability altogether, mitigating limitations to fracture conductivity. It revolutionizes conventional hydraulic fracturing through the creation of open flow channels.

Interior Spread

REVIEWING CONVENTIONAL HYDRAULIC FRACTURING

Traditional losses in proppant pack conductivity from crushing, fines, fluid damage, multiphase flow, and noz-Darcy effects are eliminated, ensuring more fluid and polymer recovery, and increased production.

HOW IT WORKS

HiWAY channel fracturing provides more fracture conductivity and optimized proppant placement and injection equipment enables the use of HiWAY channel fracturing to create open flow channels within the rock matrix until the fracture has closed and the proppant pack is removed.

Exterior Spread

## Interior Spread

## Industry Articles

**CHALLENGE**  
Flow-channel fracturing service, a new paradigm for the stimulation of low-permeability oil, tight-gas formations

**SOLUTION**  
HiWAY service combines state-of-the-art advanced fiber technology and five-purpose surface equipment to achieve better fracture conductivity and increase effectively stimulated rock volume.

**RESULTS**  
With the HiWAY service, oil and gas rates are increased from the actual fracture conductivity and the resulting permeability of the proppant pack.

**BENEFITS**  
With the HiWAY service, oil and gas rates are increased from the actual fracture conductivity and the resulting permeability of the proppant pack.

**HIGHLIGHTS**  
The HiWAY service is designed to stimulate low-permeability oil and gas reservoirs by 25% – and to estimate longer recovery – than conventional methods.

**OUTCOMES**  
Under development since 2003, the HiWAY service has been tested in laboratory and field setting. Actual field applications began in 2007 for stimulating wells in the Eagle Ford Shale and in carbonate reservoirs. In Argentina\*, for example, the HiWAY service has been placed in wells with an initial production rate of 0 bbl/d compared to 4 bbl/d for conventional stimulation.

\*Argentina, wells fractured with the HiWAY service in the Neuquén Basin had an initial production rate of 0 bbl/d compared to 4 bbl/d for conventional stimulation. Based on a test well in Neuquén Basin, Argentina, the HiWAY service produced 10 times more oil per day than conventional stimulation.

The HiWAY service creates highly conductive flow channels, so hydrocarbon flow is no longer limited by propped pack conductivity.

## Case Studies

**CHALLENGE**  
Improve oil and gas production and reduce water consumption by 50%

**SOLUTION**  
Apply HiWAY® flow-channel hydraulic fracturing technique to increase the effective stimulated rock volume by 40% and to eliminate flow channels within the proppant pack.

**RESULTS**  
The HiWAY® flow-channel fracturing technique increased 80-day cumulative oil production by 40% and reduced water and proppant consumption per acre by 80% and 35%, respectively.

**BENEFITS**  
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## Oil and Gas Journal Article

**CHALLENGE**  
Improve stimulation effectiveness in horizontal completions

**SOLUTION**  
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**RESULTS**  
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## HiWAY Eagle Ford Shale

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## HiWAY Three Forks Shale

**CHALLENGE**  
Operator needed to stimulate tight oil production from Three Forks shale reservoir

**SOLUTION**  
HiWAY channel fracturing eliminates screenouts while using 55% less proppant and 15% less water than offset wells

**RESULTS**  
The well stimulated with HiWAY channel fracturing service showed 2% higher 240-day cumulative oil production than the offset well.

**BENEFITS**  
The well stimulated with HiWAY channel fracturing service showed 2% higher 240-day cumulative oil production than the offset well.

**HIGHLIGHTS**  
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## Hart Energy Playbook Article

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## HiWAY Nejo Field

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## HiWAY Palmito Field

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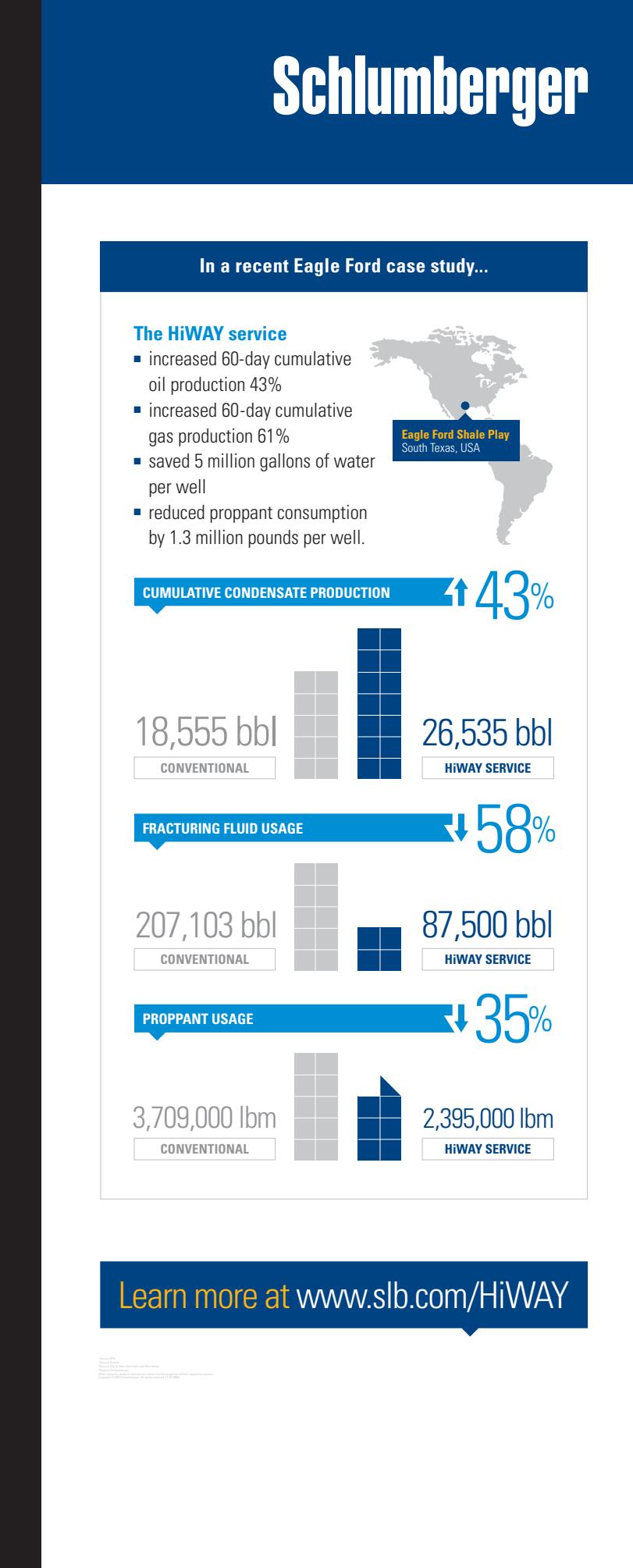
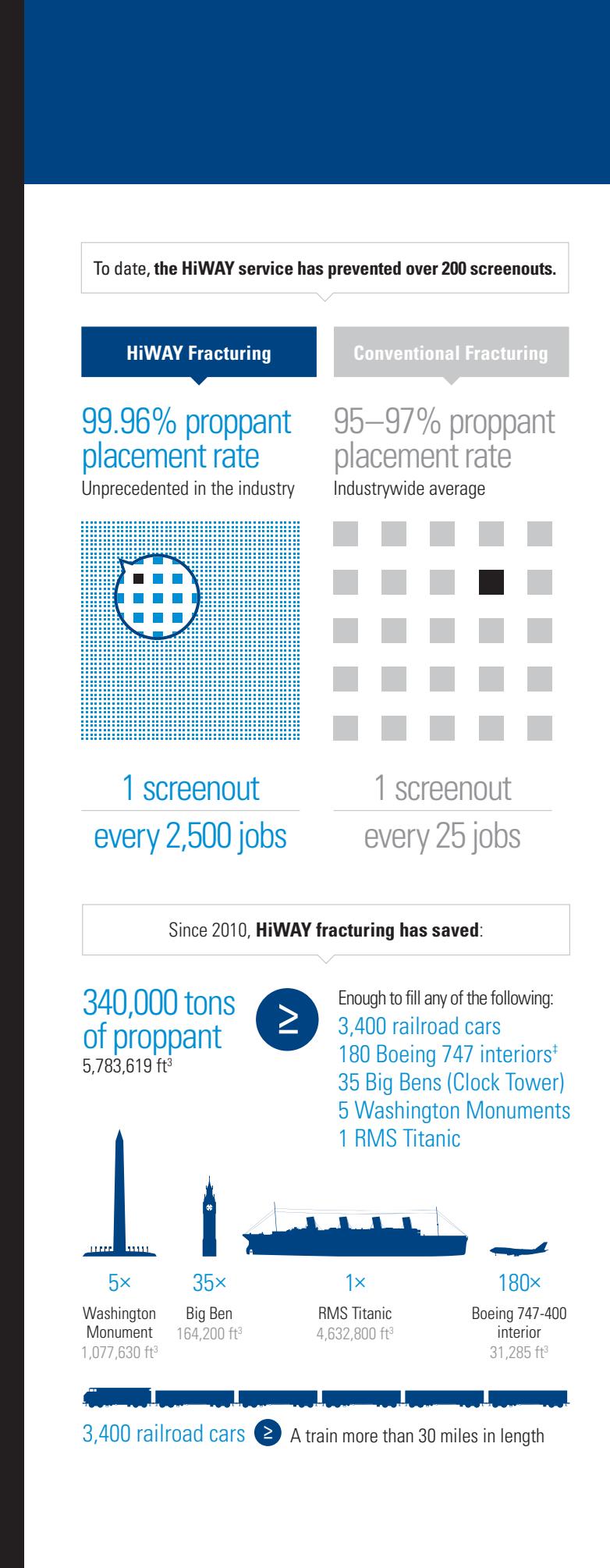
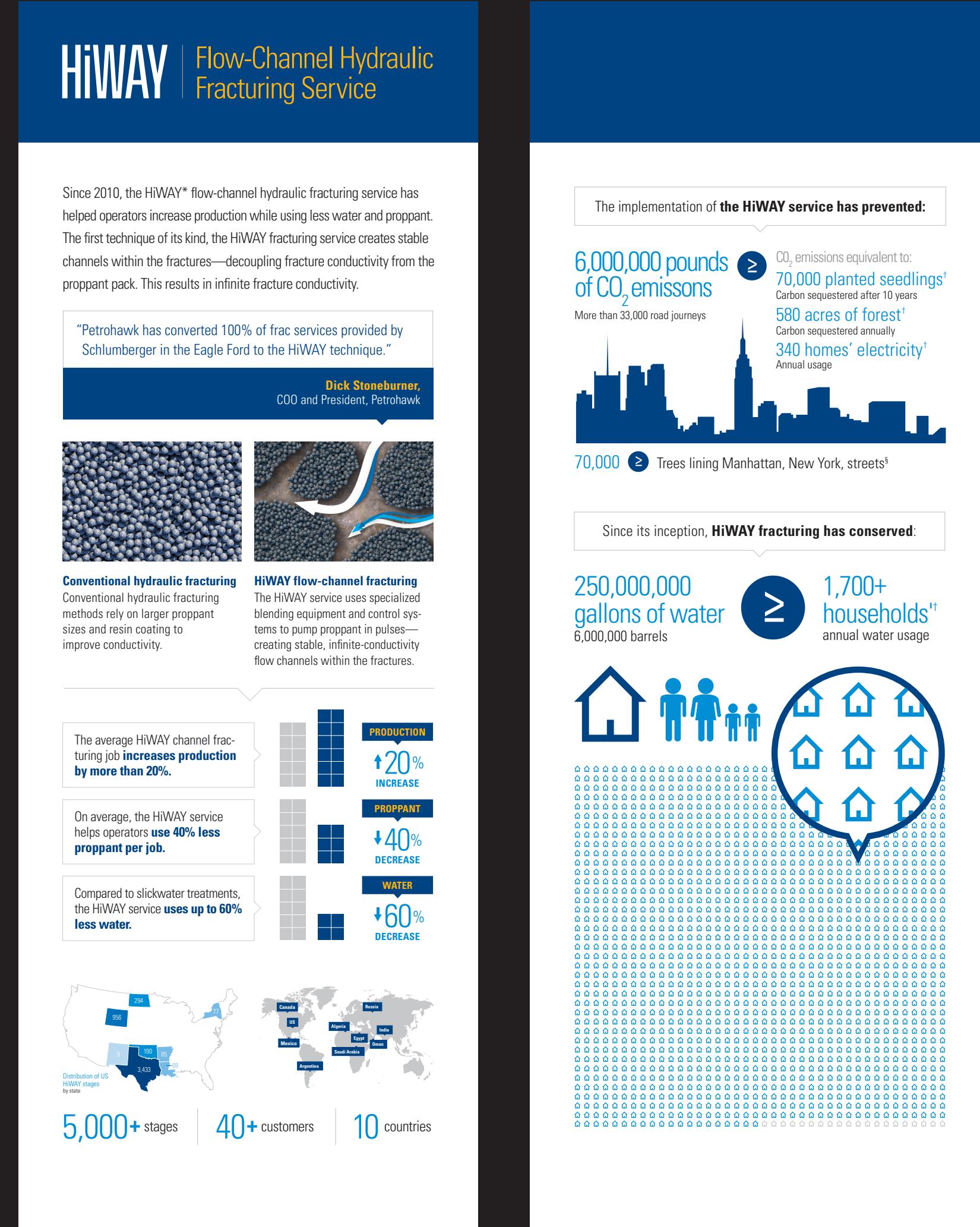


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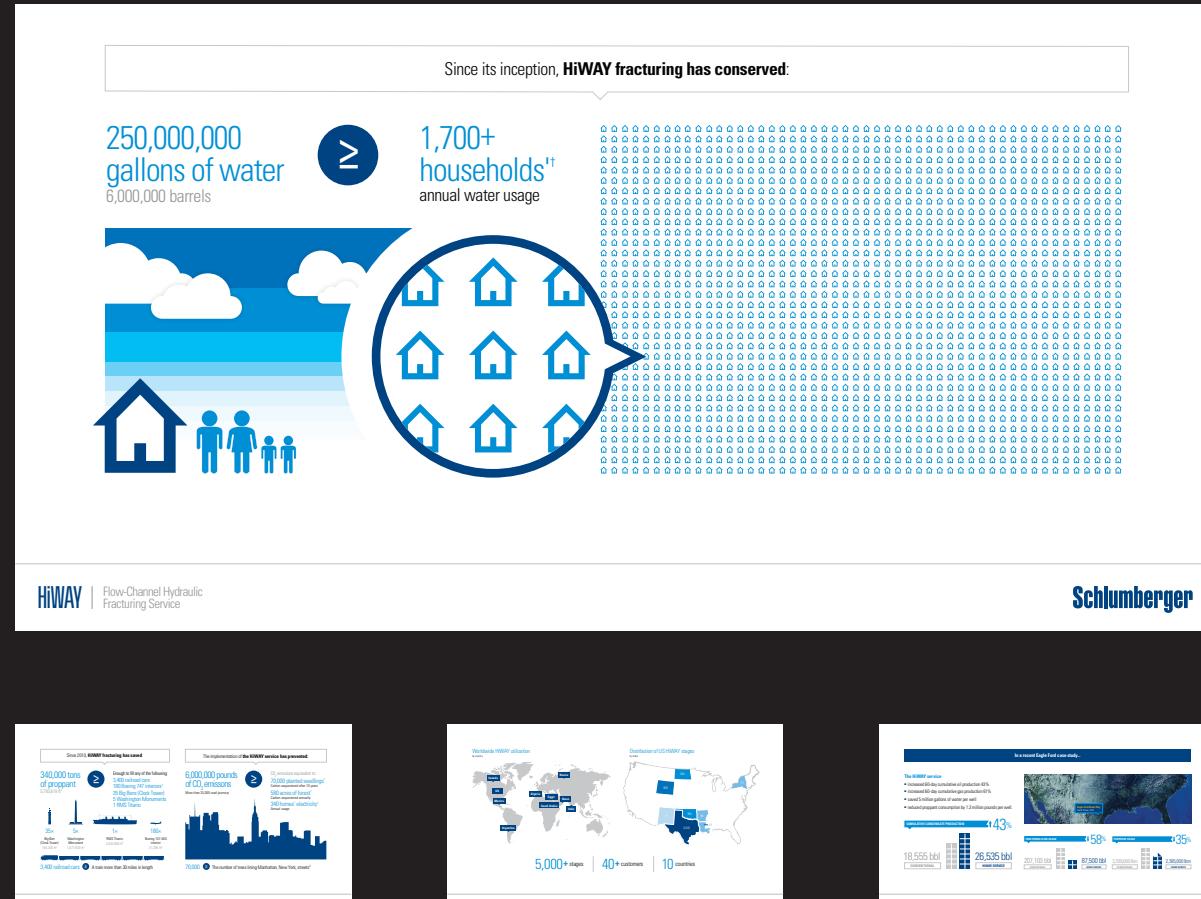
Rotating Display



Orient Banners (Set of Four)



Animated Presentation



Tradeshow Model



Additional Presentation Screens

Promo Water Bottles



Window Clings

