

# PerLift\*

## Perforated-zone gas lift system

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\* Patent Pending

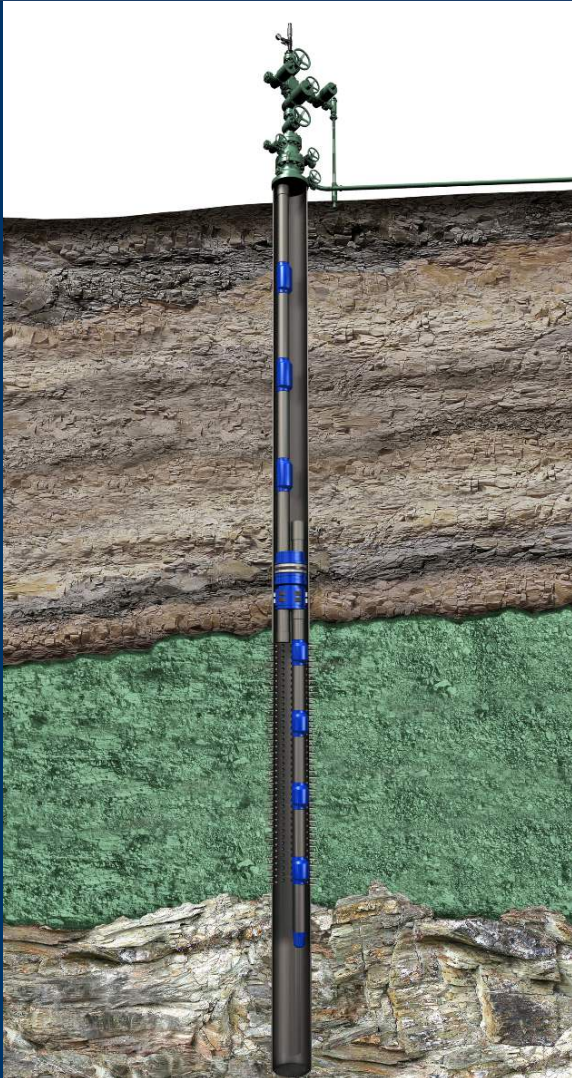
# Schlumberger

# Overview



- Applications
- Advantages
- How it Works
- Case Studies

# PerfLift

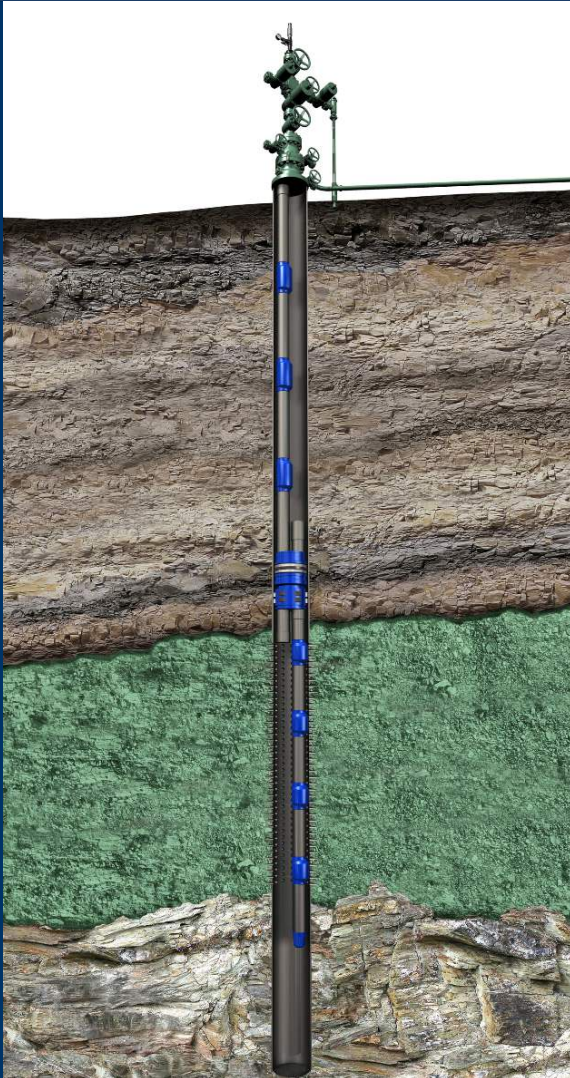


**Maximize production from brownfields**

## Applications

- Gas-lifted wells with a long production interval
- Liquid-loaded gas and coalbed methane wells
- Gas-lifted oil wells

# PerfLift



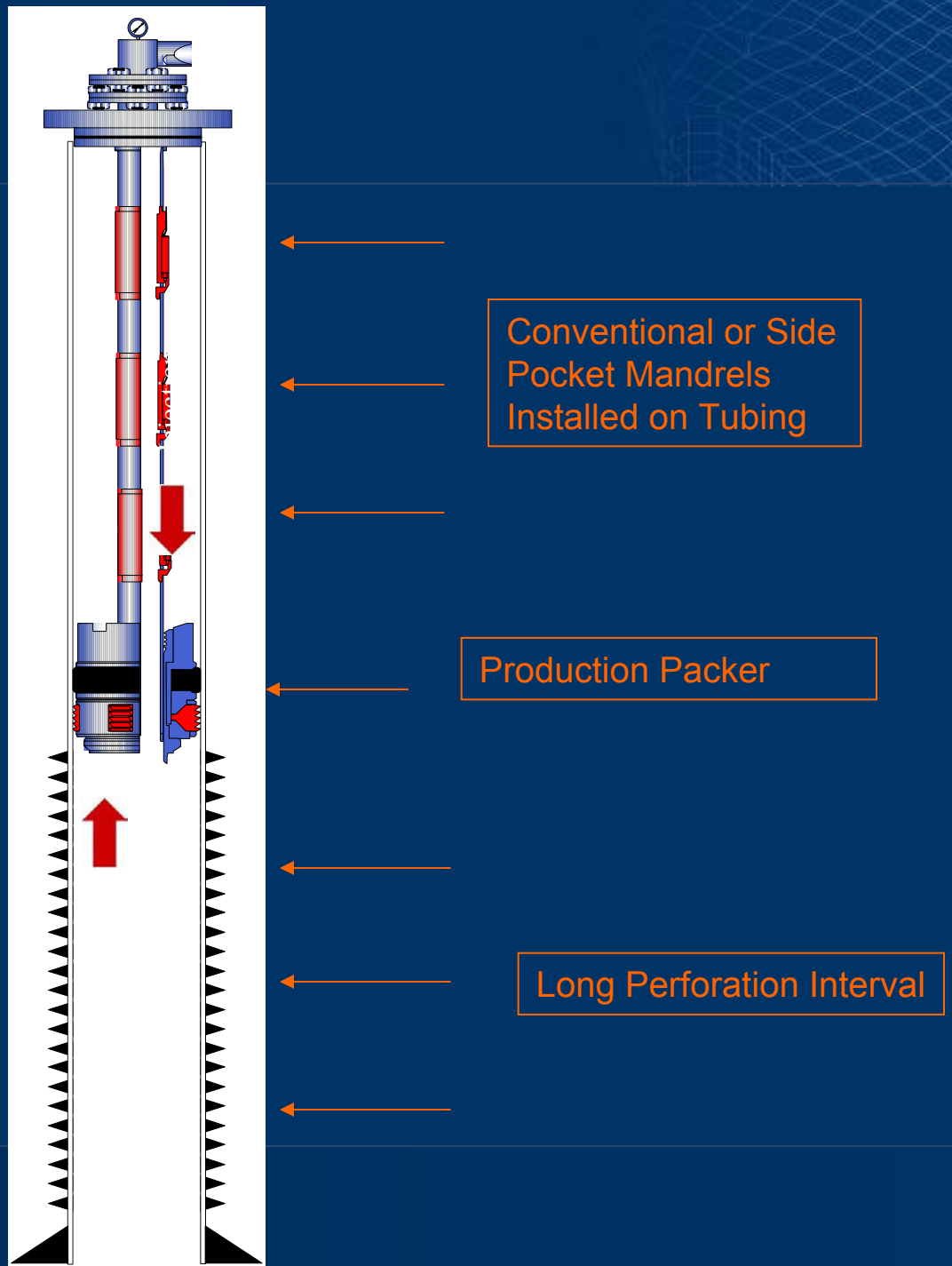
**Reduce cost and complexity of liquid removal**

## Advantages

- Gas lift from the bottom of the perfs to increase production and reduce operating costs
- Enables chemical and fluid treatments
- Reduces total well investment for accelerated payout and improved NPV

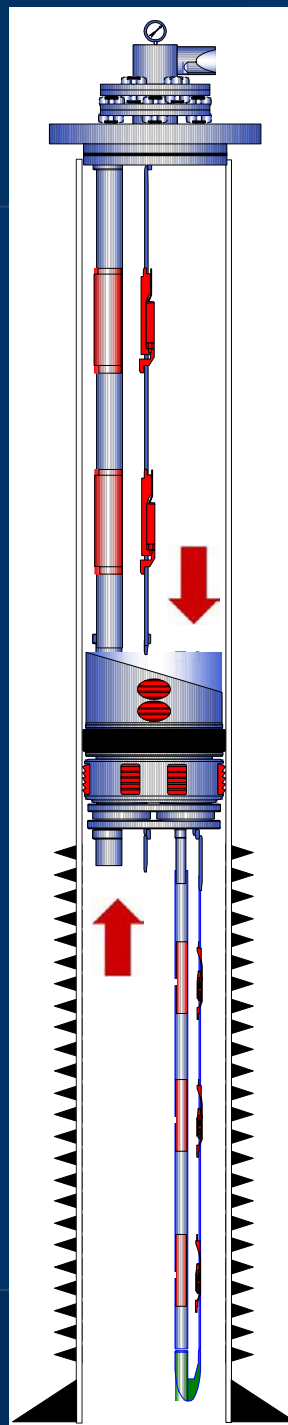
# Traditional Gas Lift

- Gas Injection down casing tubing annulus to the packer.
- Limited by packer depth and perforation depth.



# PerfLift

- Injection down casing to the packer. Then through packer into perfs.
- Not Limited by packer depth and perf depth.



Conventional or  
Side Pocket  
Mandrels Installed  
on Tubing

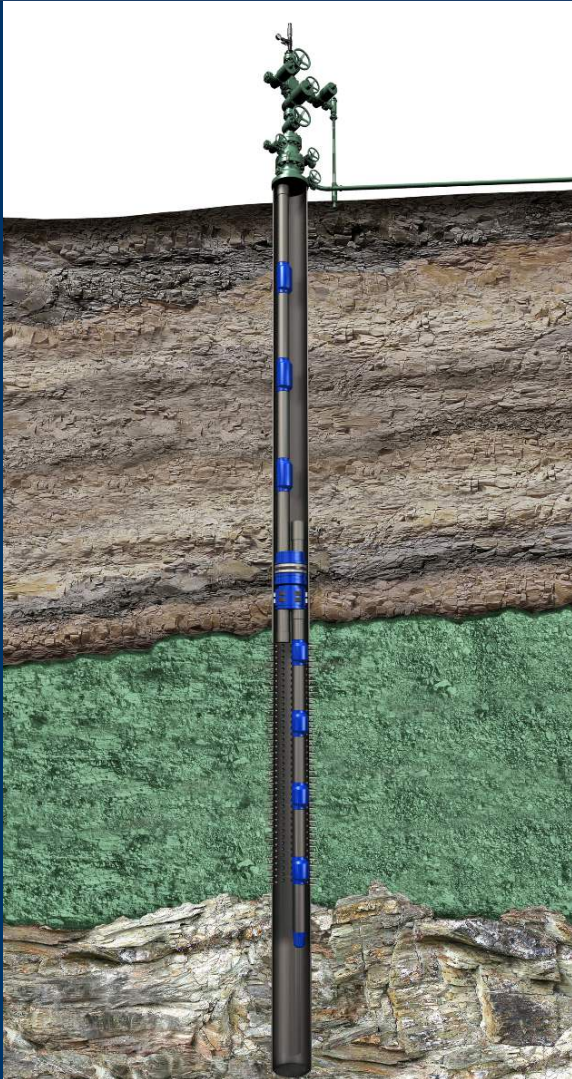
4 1/2", 5 1/2", or 7" Ported  
or Parallel Flow Packer

1 1/4" to 3 1/2" Tubing  
Below Packer –  
Depends on  
Packer/Casing Size

Internal Mount  
Mandrels For  
Various Tubing  
Sizes

Bull Plug at End of Tubing

# PerfLift



## Features

- Time and field-proven gas lift application
- Innovative completion design for a cost-effective deliquifying solution
- Option for real-time downhole monitoring

# PerfLift

## How it works



## Case Studies

# 4 1/2" PerfLift

## Previous Production

10 BWPD

50 MCF/D Gas

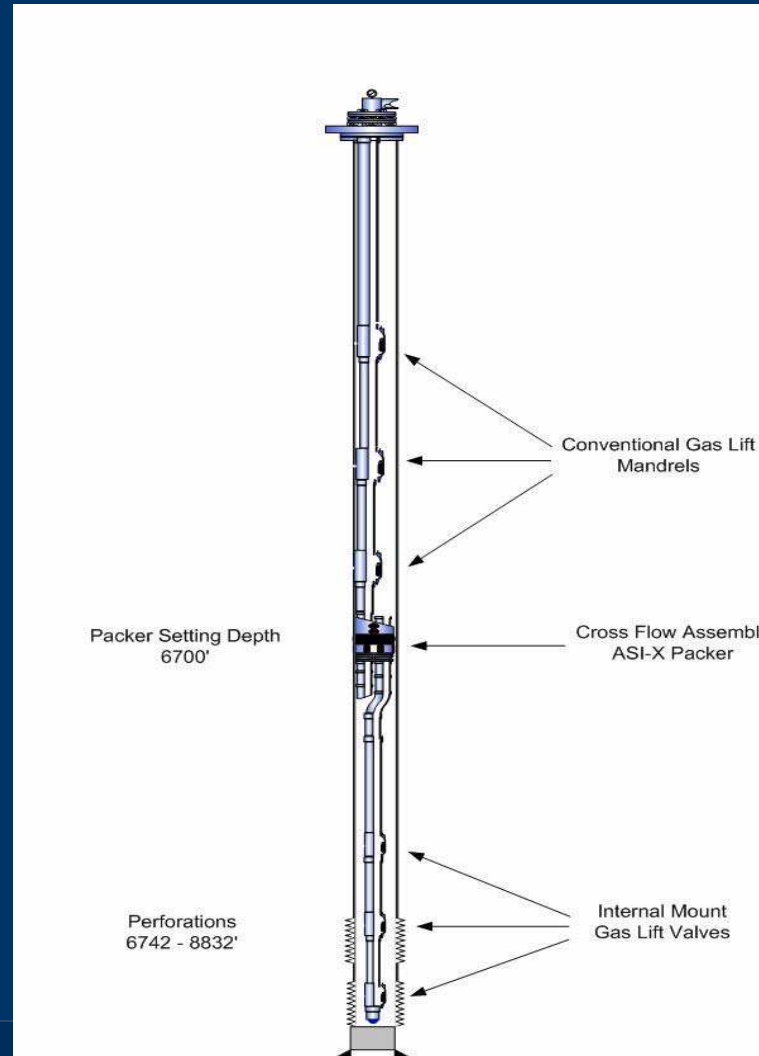
Well eventually

Killed Itself

## Current Production

75 BWPD

225 Net MCF/D



Pwh = 50 Psi

Pso = 900 Psi

4 1/2" Casing

2 3/8" Tubing above packer

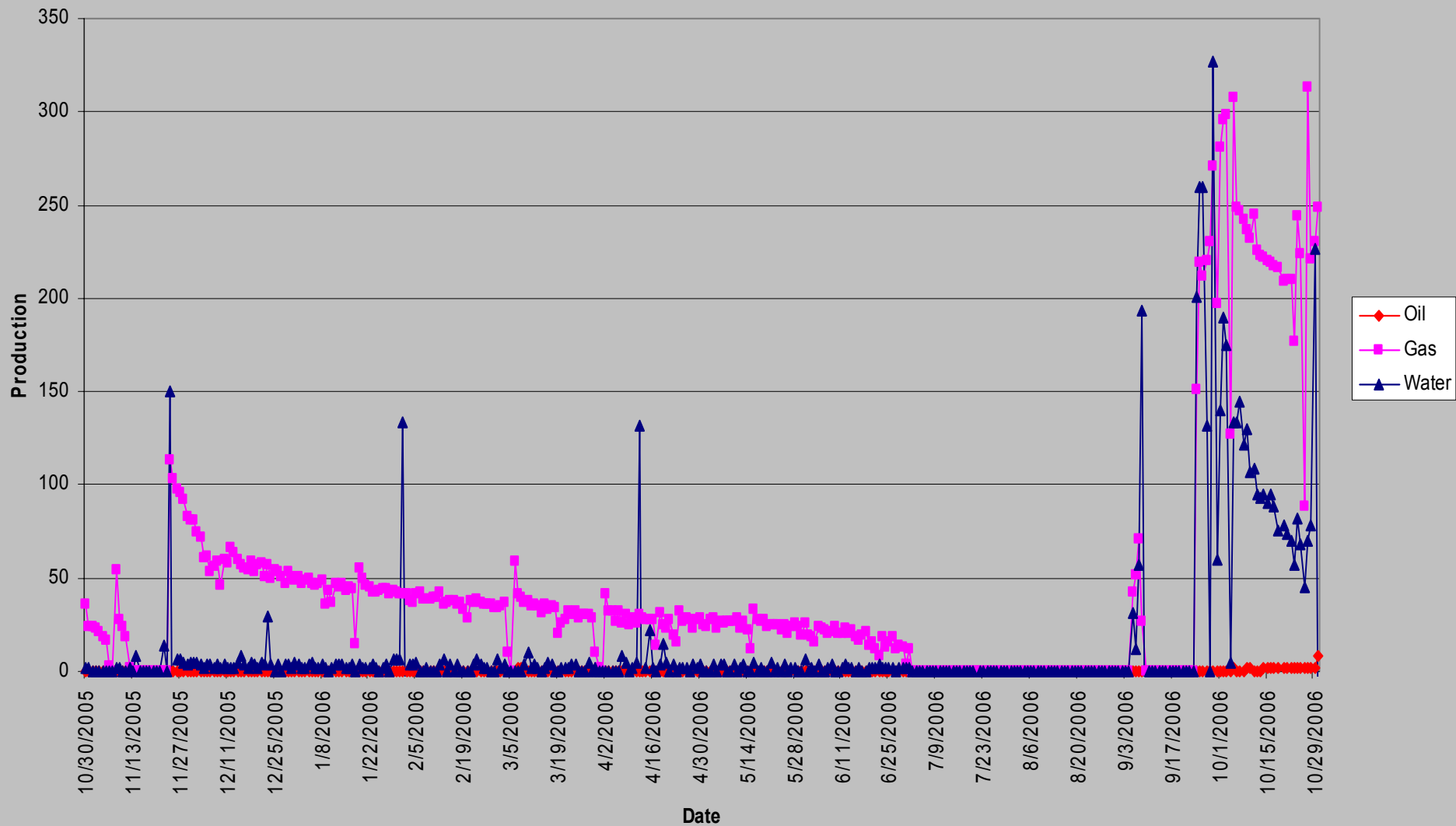
2 3/8" Tubing below packer

Perfs 6742' – 8832'

2090' Interval

Packer @ 6700'

# 4 1/2" PerfLift North Louisiana



# 4 1/2" PerfLift

## Previous Production

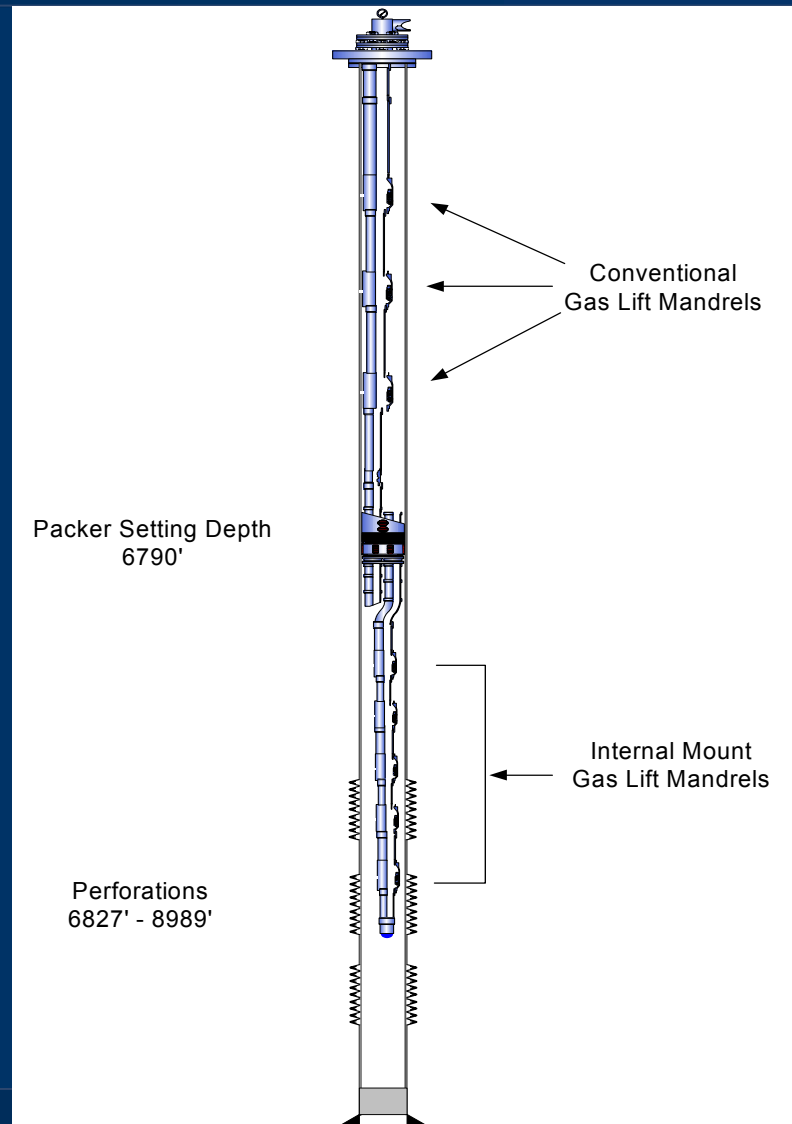
25 BWPD

60 MCF/D Gas

## Current Production

60 BWPD

150 Net MCF/D



$P_{wh} = 60$  psi

$P_{so} = 800$  psi

4 1/2" Casing

2 3/8" Tubing above packer

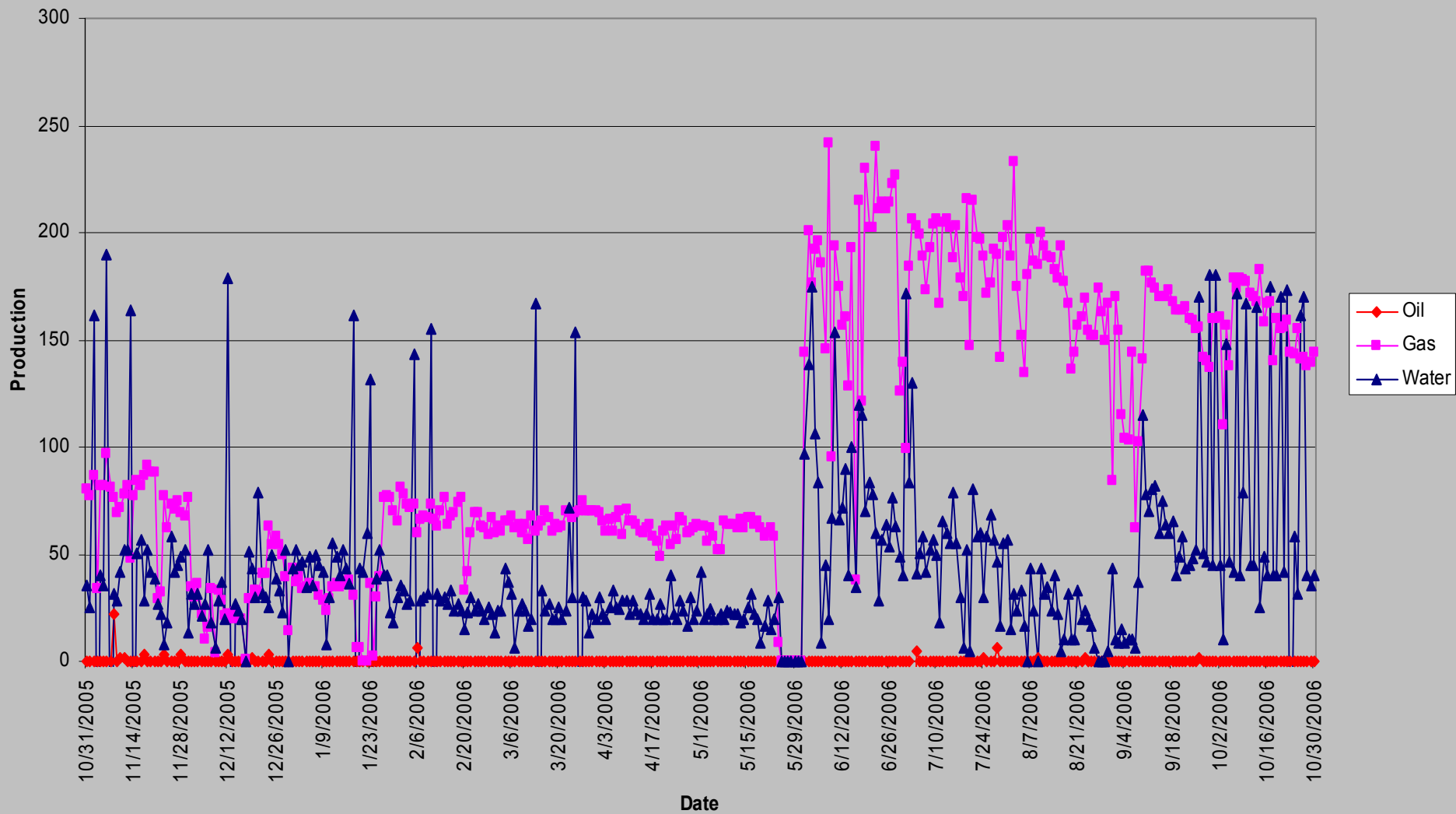
2 3/8" Tubing below packer

Perfs 6827' – 8989'

2162' Interval

Packer @ 6790'

### 4 1/2" PerfLift North Louisiana



# 5 1/2" PerfLift

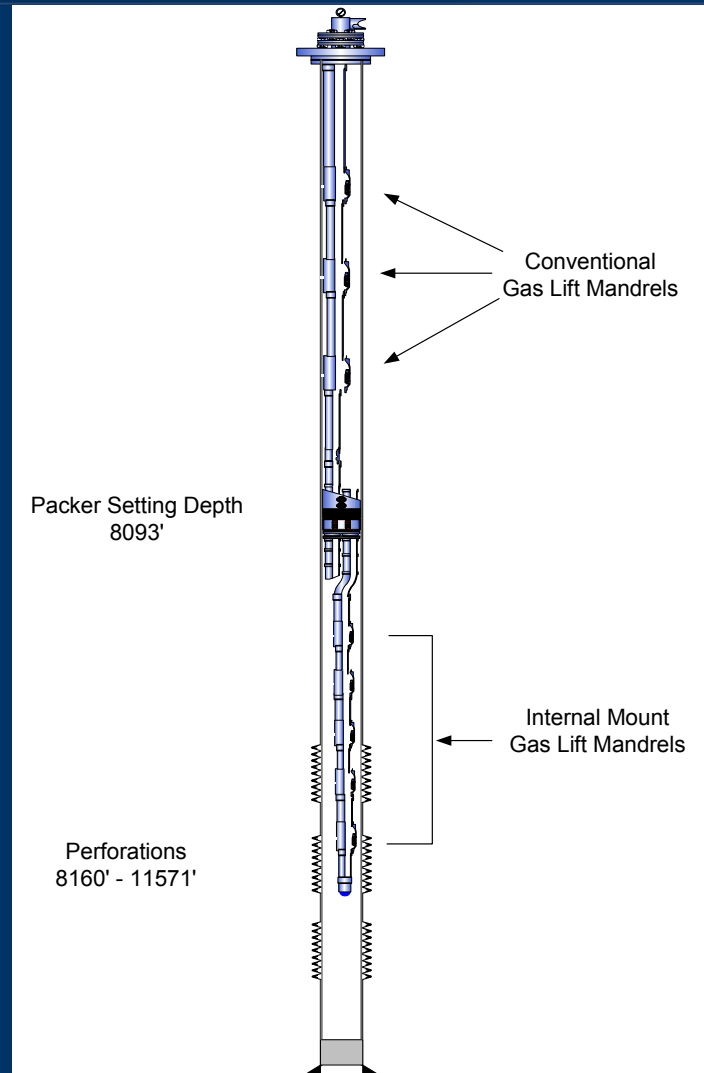
## Previous Production

Well had to be shut in for 3 days then it would flow for 1 day

## Current Production

160 BWPD

492 Net MCF/D



Pwh = 280 psi

Pso = 1000 psi

5 1/2" Casing

2 3/8" Tubing above packer

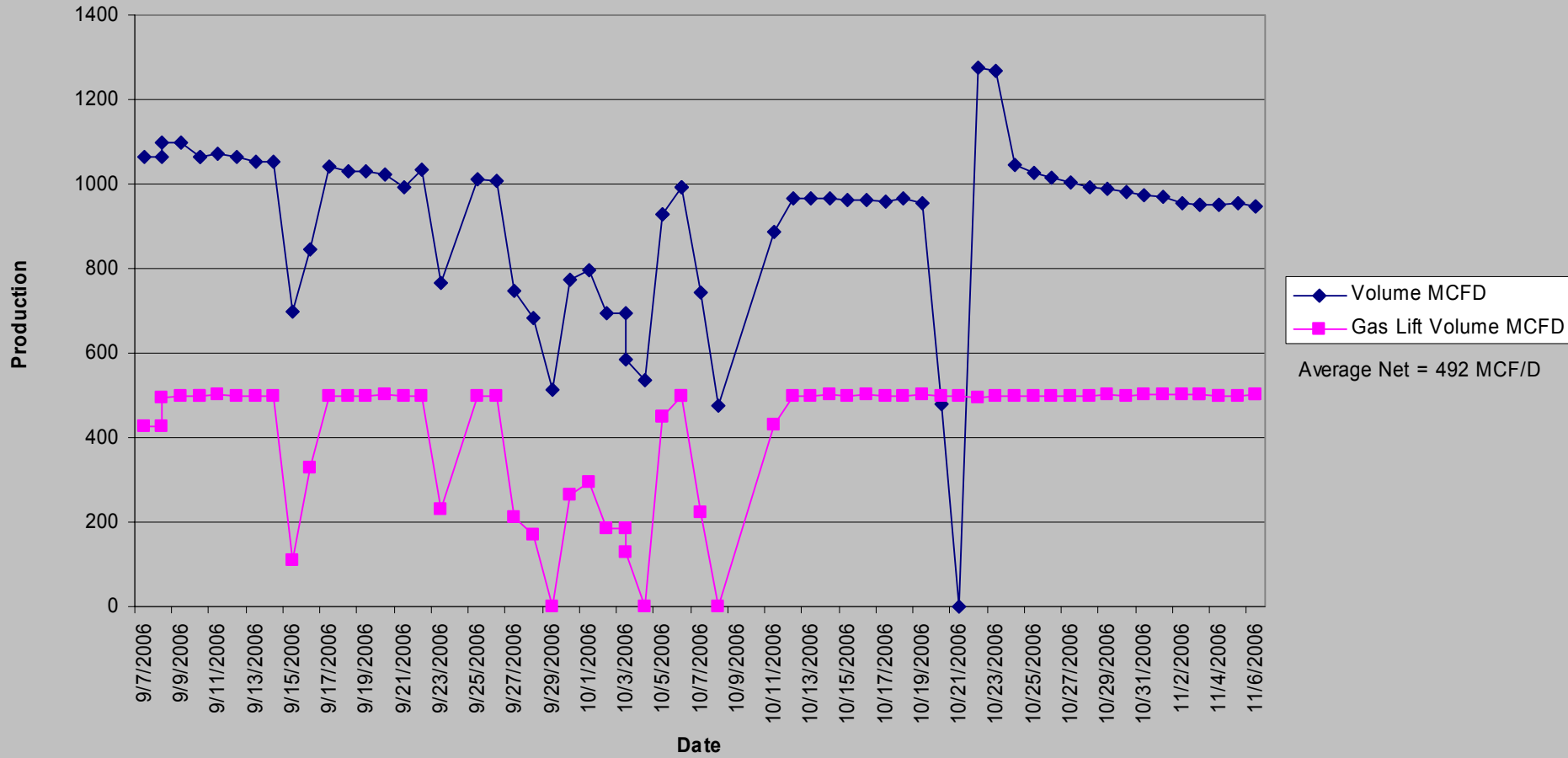
2 3/8" Tubing below packer

Perfs 8160' – 11571'

3411' Interval

Packer @ 8093'

## North Colorado



# 7" PerfLift

## Previous Production

79 BWPD

0 BOPD

146 MCF/D Gas

## Current Production

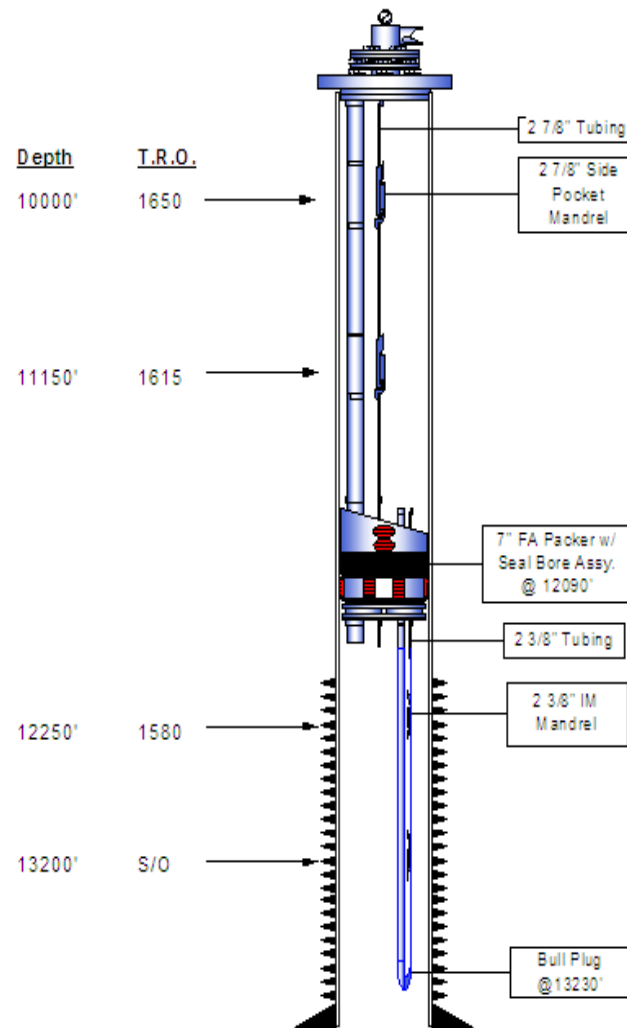
159 BWPD

0 BOPD

367 Net MCF/D

Pcsg = 1160 Psi

Ptbg = 130 Psi



Pwh = 200 psi

Pso = 1500 psi

7" Casing

2 7/8" Tubing above packer

2 3/8" Tubing below packer

Perfs 12338' – 13340'

Packer @ 12090'

**Thank You!**  
**Questions?**