



Raise Production Inc.

The  
**Next  
Technology**  
in Oil and Gas

# Forward Looking Statement

*This written and accompanying oral presentation is being supplied to you solely for your information and may not be reproduced or forwarded to any other person, or published (in whole or in part) for any other purpose.*

*This written and accompanying oral presentation contains certain forward-looking statements which are provided for the purpose of presenting information about management's current expectations and plans. Readers are cautioned that such statements may not be appropriate for other purposes. Forward-looking statements include statements that are predicative in nature, depend upon or refer to future events or conditions, or include words such as "expects", "anticipates", "plans", "believes", "estimates", "intends", "targets", "projects", "forecasts" or negative versions thereof and other similar expressions, or future or conditional verbs such as "may", "will", "should", "would" and "could". These statements may include, without limitation, statements regarding current and projected cash resources and cash flow anticipated sales, the development, manufacturing, functioning, effectiveness and commerciality of the HARP™, REAL™ and HART™ systems or other products under development, plans for raising capital, and the operations, business, financial condition, priorities, ongoing objectives, strategies and outlook of Raise Production. This information is based upon certain material factors or assumptions that were applied in developing the forward-looking statements, including the design specifications of products under development, management's current plans, its perception of historical trends, current conditions and expected future developments, as well as other factors that are believed to be appropriate in the circumstances.*

*Although these forward-looking statements are based upon management's current reasonable expectations and assumptions, they are subject to numerous risks and uncertainties. Some of the factors that could cause results or events to differ from current expectations include, but are not limited to, risks associated with customer adoption of Raise products, product development risks, counterparty risks and operational risks. We caution that the foregoing list of factors that may affect future results is not exhaustive. Raise Production's actual results could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur. The forward-looking statements contained in this presentation are based on assumptions that were considered reasonable at the time of delivery.*

*The forward-looking statements contained in this presentation are stated as of the date of this presentation. The forward-looking information contained in this presentation is expressly qualified by this cautionary statement. Other than as specifically required by law, Raise Production undertakes no obligation to update any forward-looking statements to reflect events or circumstances after such date or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results, or otherwise.*

*Certain information contained herein has been prepared by third-party sources, and such information has not been independently audited or verified by Raise Production. Raise Production has used its best efforts to ensure the accuracy and completeness of the information presented.*

*US Securities Matters: The securities have not been registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), and may not be offered or sold in the United States or to U.S. persons unless the securities are registered under the U.S. Securities Act, or an exemption from the registration requirements to the U.S. Securities Act is available. This presentation shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any states in the United States in which such offer, solicitation or sale would be unlawful. The term "United States" is defined in Rule 902 of Regulation S under the U.S. Securities Act.*

*General Risk: This presentation does not constitute, and may not be used for or in connection with, an offer to sell or solicitation of an offer to buy by anyone in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it is unlawful to make such offer or solicitation. No securities commission or similar regulatory authority has passed (or will pass) on the merits of any securities which may be offered nor has it reviewed the presentation and any representation to the contrary is an offence.*



- **THE RAISE STORY:** In the last 5 years, the Company's Management Team have envisioned & commercialized a number of patented products designed to enhance and increase well production and reserve recovery in horizontal wells. In a challenging environment for the upstream segment of the Energy Sector, the Company's superior product line is gaining broader market acceptance and is generating increased sales on a quarter to quarter basis.
- **Raise Production** is a technologically driven, publicly listed Oil & Gas Service Company (TSX Venture – Symbol: RPC) headquartered in Calgary, Alberta

Basic Shares Outstanding	113.6MM
Fully Diluted Shares	120.3MM
Current Share Price	\$0.09 (52 Week High: \$0.35/Low: \$.07)
Market Capitalization	\$10.8MM
Insider Ownership	22%
Largest Shareholder (Endurance Lift Solutions)	12%
Cash Position	\$800K
Debt	NIL



# Raise Management Team

## **Eric Laing**

President & CEO

Eric has 39 Years of experience in the Energy Services Market

Our thought-leader with a relentless commitment to optimizing production from the well bore

## **Geoff Steele**

Chief Technical Officer

Geoff integrates his over 20 years of oilfield experience with the process of maximizing production from the well bore

Our engineer with a critical and progressive ambition to break new ground in Artificial Lift Systems

## **Susan Scullion**

Chief Financial Officer

Susan brings over 20 years of experience in both regulatory and financial institutions

Our best line of defense, Susan ensures best practices and provides strong oversight

## **Clint Booth**

VP Commercial Development

Clint has over 15 years experience in USA and Canada

Our “Boots on Ground”, he is a catalyst in our Business Development

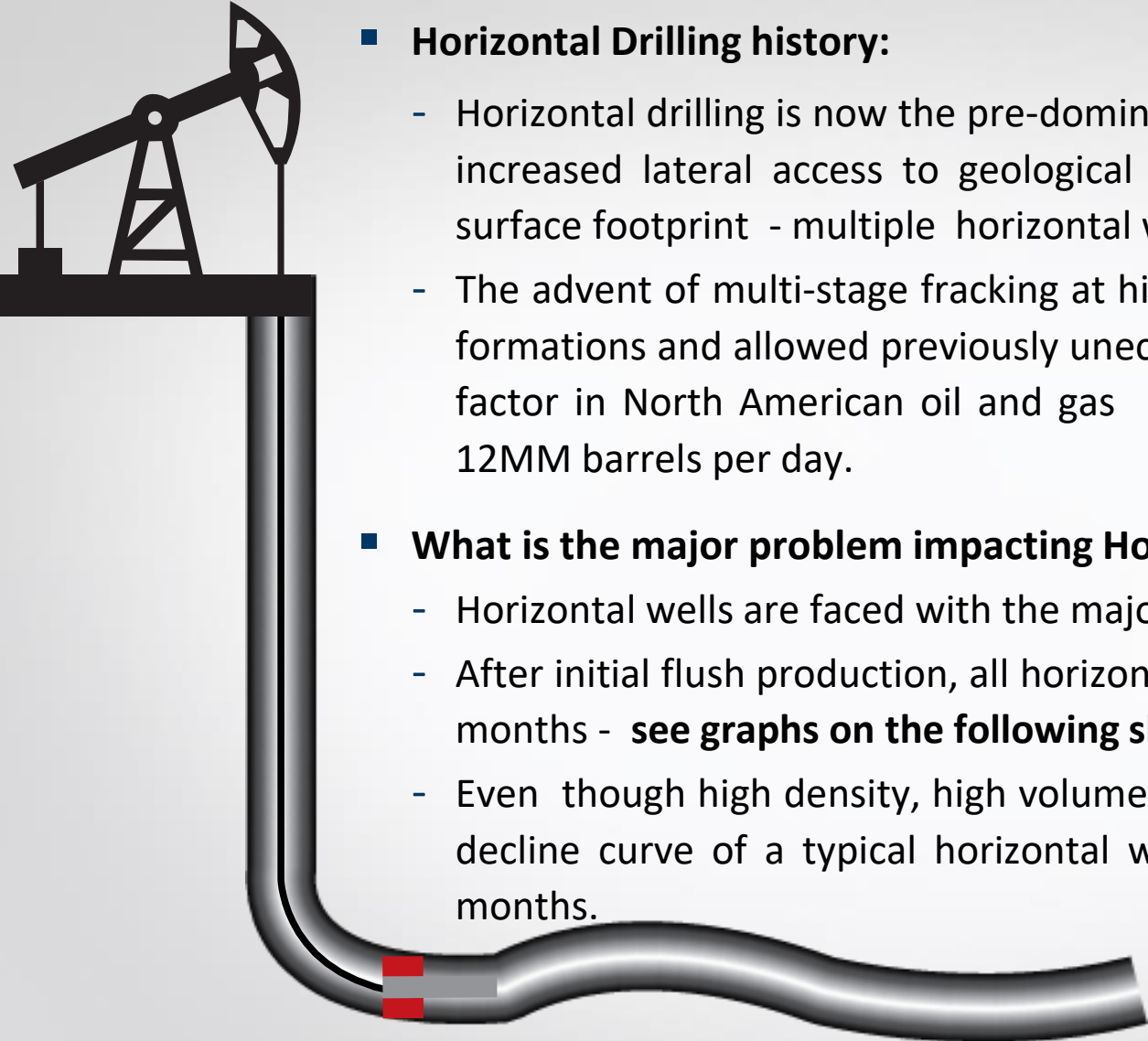
# Horizontal Oil Drilling – Overview

## ■ Horizontal Drilling history:

- Horizontal drilling is now the pre-dominant choice for drilling oil & gas wells for the following reasons; increased lateral access to geological formations, reduced drilling costs per foot and a reduced surface footprint - multiple horizontal wells can be drilled from the same surface location.
- The advent of multi-stage fracking at high pressure has rejuvenated mature and depleted oil and gas formations and allowed previously uneconomic “tight” shales and sandstones to become a significant factor in North American oil and gas production. Witness US Oil Production’s climb from 5MM to 12MM barrels per day.

## ■ What is the major problem impacting Horizontal Wells?

- Horizontal wells are faced with the major problem of restricted horizontal well flow.
- After initial flush production, all horizontal wells exhibit the same precipitous decline curves over 6-24 months - **see graphs on the following slides.**
- Even though high density, high volume fracs have increased initial production rates substantially, the decline curve of a typical horizontal well remains relatively consistent at 60-80% in the first 6-24 months.



# Existing Artificial Lift Technology – The Reality



## FACT:

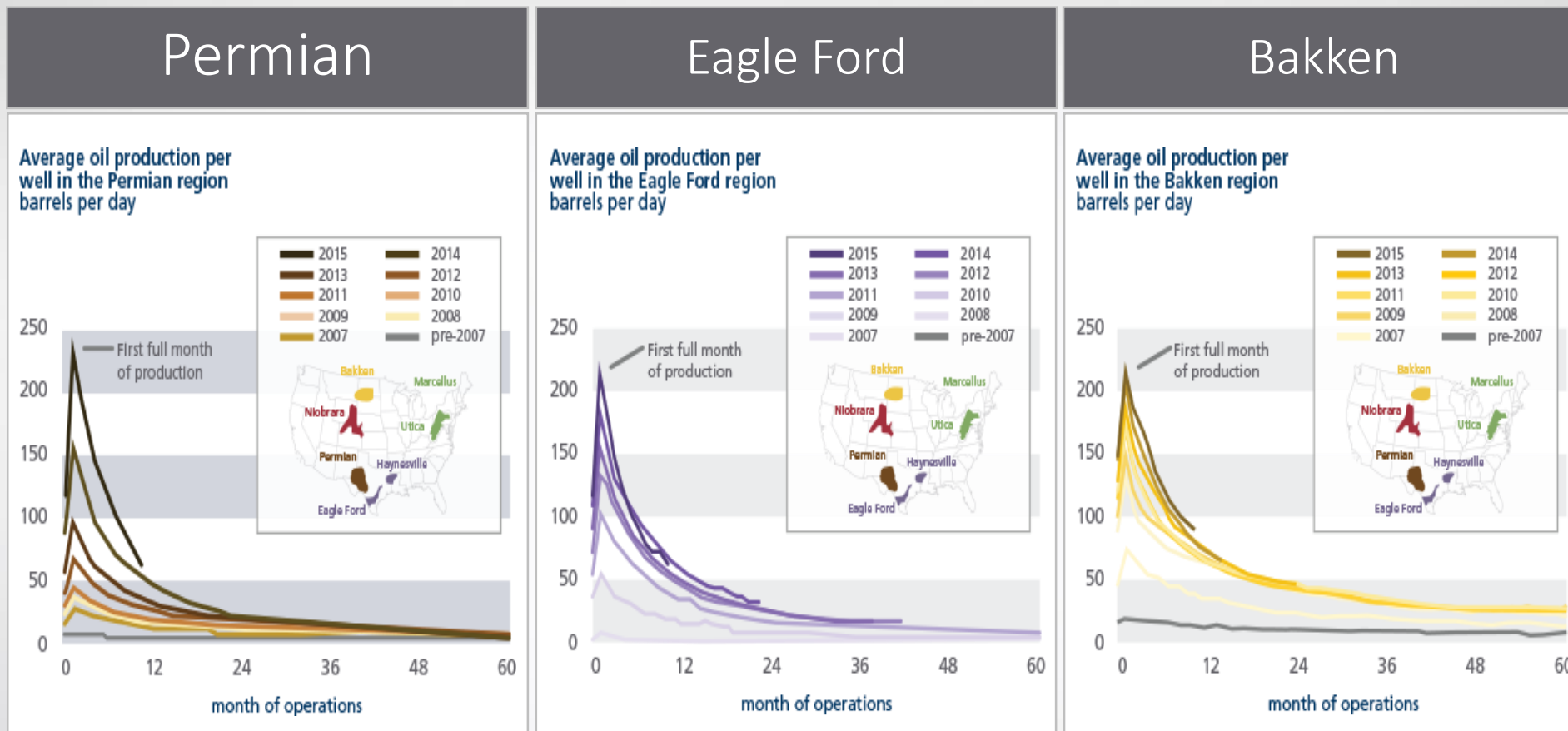
### 90% OF ALL WELLS DRILLED IN NORTH AMERICA REQUIRE SOME FORM OF ARTIFICIAL LIFT TO HELP PRODUCE OIL & GAS

---

- After initial flush production, vertical pumps or some other method of removing liquids from the well bore are required. This is due to the producing zone pressure being too low to lift a column of fluid to surface.
- Flow regimes and methods of lifting oil & gas liquids to surface in vertical well bores have been developed and understood by the industry for over 80 years.
- **However, flow regimes in horizontal well bores are very complex and multi-stage fracking has made the problem more complicated.** Over the last several years, the oil & gas industry has been looking with little to no success to modify vertical well solutions to solve these new and challenging flow regimes posed by the prevalence of horizontal drilling.

# Restricted Horizontal Well Flow

## Regional Production Decline Rates



# Our Strategy: Exploit A Massive Untapped Opportunity

**Raise's  
specialized  
recovery and  
pumping  
solutions  
optimize  
capital  
efficiency**

Constant innovation in the drilling & fracking of horizontal wells in North America has not altered the fact that, after initial flush production, very little has been done to innovate and maximize well production management. Until now, existing vertical lift technologies have failed to address the Horizontal Well Flow Issue

## **MATERIAL VOLUMES OF OIL & GAS RESERVES ARE BEING LEFT BEHIND**

Due to the nature of phase flow (oil, gas and water flow) behavior in horizontal wells, Raise's specialized recovery and pumping solutions can now offer producers the potential for:

- Capital efficiency optimization
- Reduction in corporate production declines
- Large increases in incremental free cash flow and profits
- Increased reserves recognitions

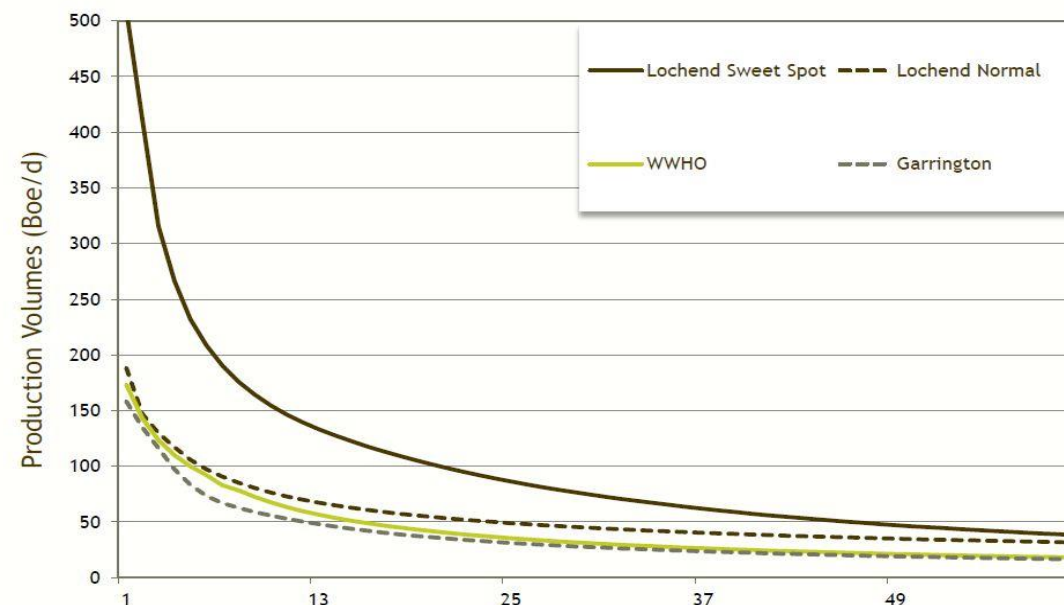


# Current Producer Challenges

- Weak Energy Environment: Limited Access to Capital
- Issue of Growth = constant need to replace Reserves
- Steep Production Declines
- High Operating Costs
- Challenge of meeting Shareholder expectations

## Cardium Type Curves

WESTWARD HO, GARRINGTON & LOCHEND TYPE CURVES

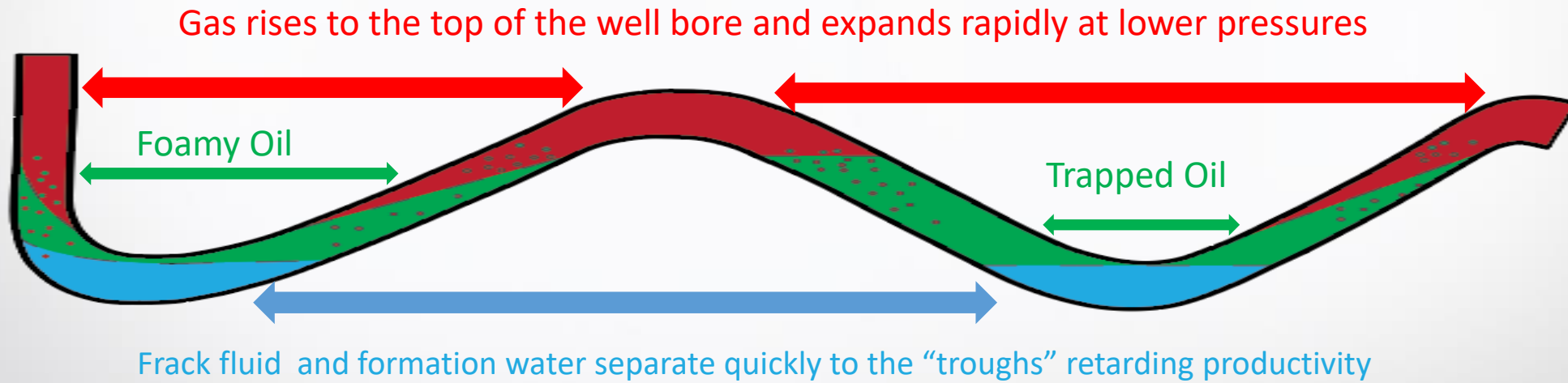


# Steep Production Declines & Stranded Reserves

## – *Why Is This Happening?*

Flow regime and production rate changes over time are affected by:

- Well bore trajectory
- Decreasing Bottom Hole Pressure
- Gas expansion and interference
- Natural separation of all fluids
- Liquid traps in “troughs” prevent efficient flow and retards maximum recoverable reserves



# Producer Challenges & The Raise Solutions

## Challenge

- Access to Capital
- Replacing reserves
- Production Declines
- Operating Cost
- Shareholder expectations

## Raise Solutions

- Optimize capital already deployed
- Proven ability to access stranded reserves vs. re-frack or new drills
- **Reduce finding costs = potential to improve specific area "type curve"**  
**Demonstrated ability to materially reduce well decline curves**
- Lower strokes per minute = reduced electrical costs;  
Eliminate gas locking = higher pump and lift efficiency;  
Reduces completion component wear = longer pump life
- Increase cash flow from accelerated and accretive production
- Lower operating costs = increased netbacks
- Improved recycle ratio and higher capital efficiency

# Existing Artificial Lift Products

## – *Not A Solution to the Problem*

### What is Artificial Lift Solutions?

Any method used to pump, or flow hydrocarbons to surface from a well bore when formation pressure is unable to do so.

**Existing vertical lift technologies are unable to prevent the steep production declines experienced in horizontal wells.**

**THIS HAS CREATED A MULTI-BILLION PROBLEM IN THE OILPATCH:**

**HOW TO GET OIL & GAS TO FLOW BETTER ALONG THE  
HORIZONTAL LEG OF A WELL BORE**





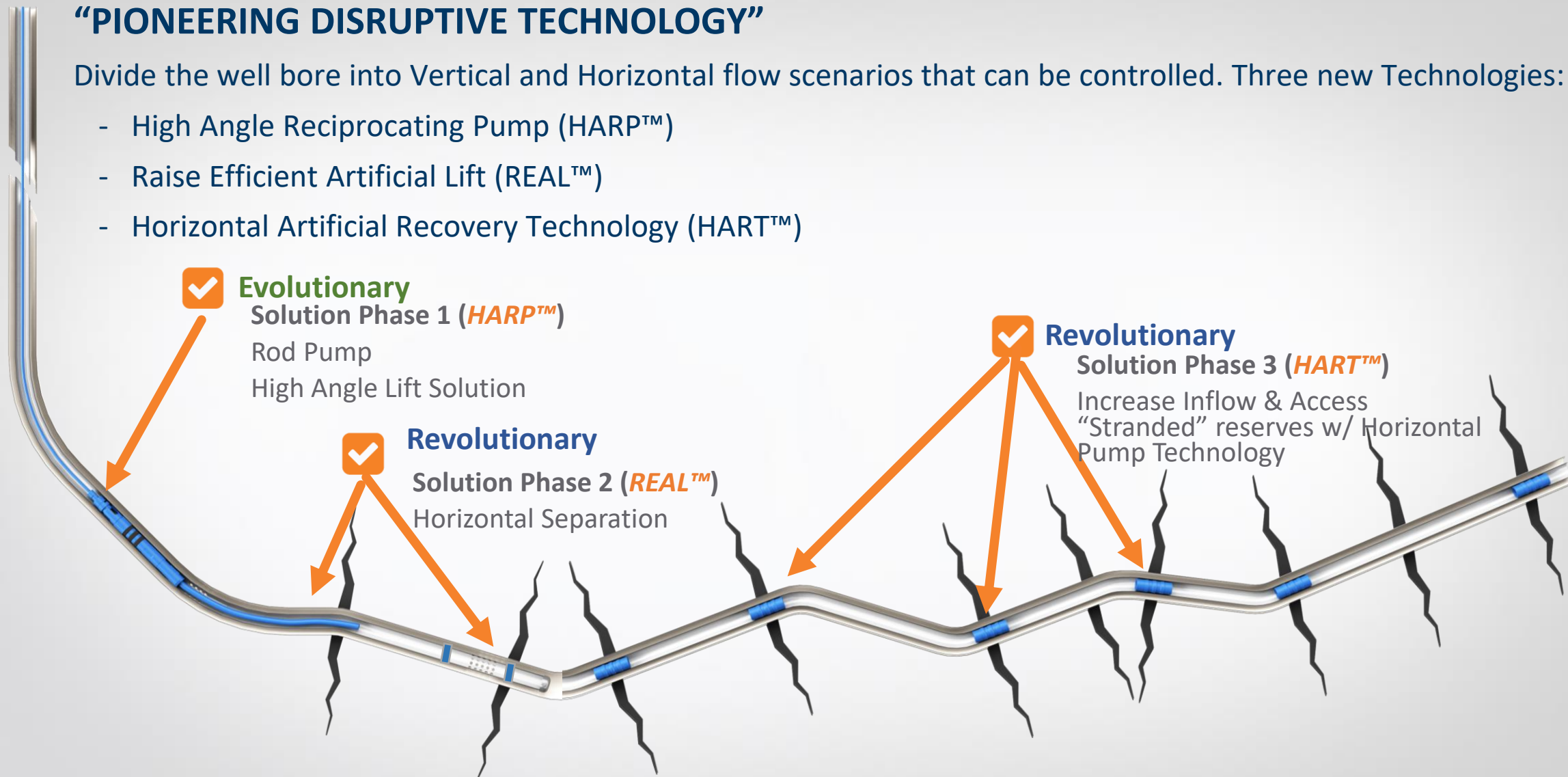
# Invented & Developed a three (3) step solution

*- to address & solve the Horizontal Flow Issue*

## “PIONEERING DISRUPTIVE TECHNOLOGY”

Divide the well bore into Vertical and Horizontal flow scenarios that can be controlled. Three new Technologies:

- High Angle Reciprocating Pump (HARP™)
- Raise Efficient Artificial Lift (REAL™)
- Horizontal Artificial Recovery Technology (HART™)



# Phase #1 - High Angle Reciprocating Pump (HARP™)

## Features

### Gas Mitigation

- Normally closed valves open on every stroke
- Controlled auto tap/tag prevents damage

### Spring Assisted Valves

- Energized to ensure valve will reseal
- Lapped for a perfect seal
- Seats at any angle 0-90°
- High efficiency = lower SPM, less tbg & rod wear

### Articulated Plunger

- Up to 15° articulation
- Furnished with various configurations and seals
- Allows pump placement in doglegs

### Engineered Flow Tube Extension

- Extension for extreme deviations
- Land intake on low side of well
- Access quality fluid



# Phase #1 - Ramping Up Sales (HARP™)

## HARP™ Installations



### Alberta

Slave Point  
Viking  
Lloydminster  
Glaucconitic  
Basal Quartz  
Cardium  
Mannville  
Sparky  
Charlie Lake



### Saskatchewan

Midale  
Torquay  
Viking

### Texas



### Granite Wash



### Permian Basins

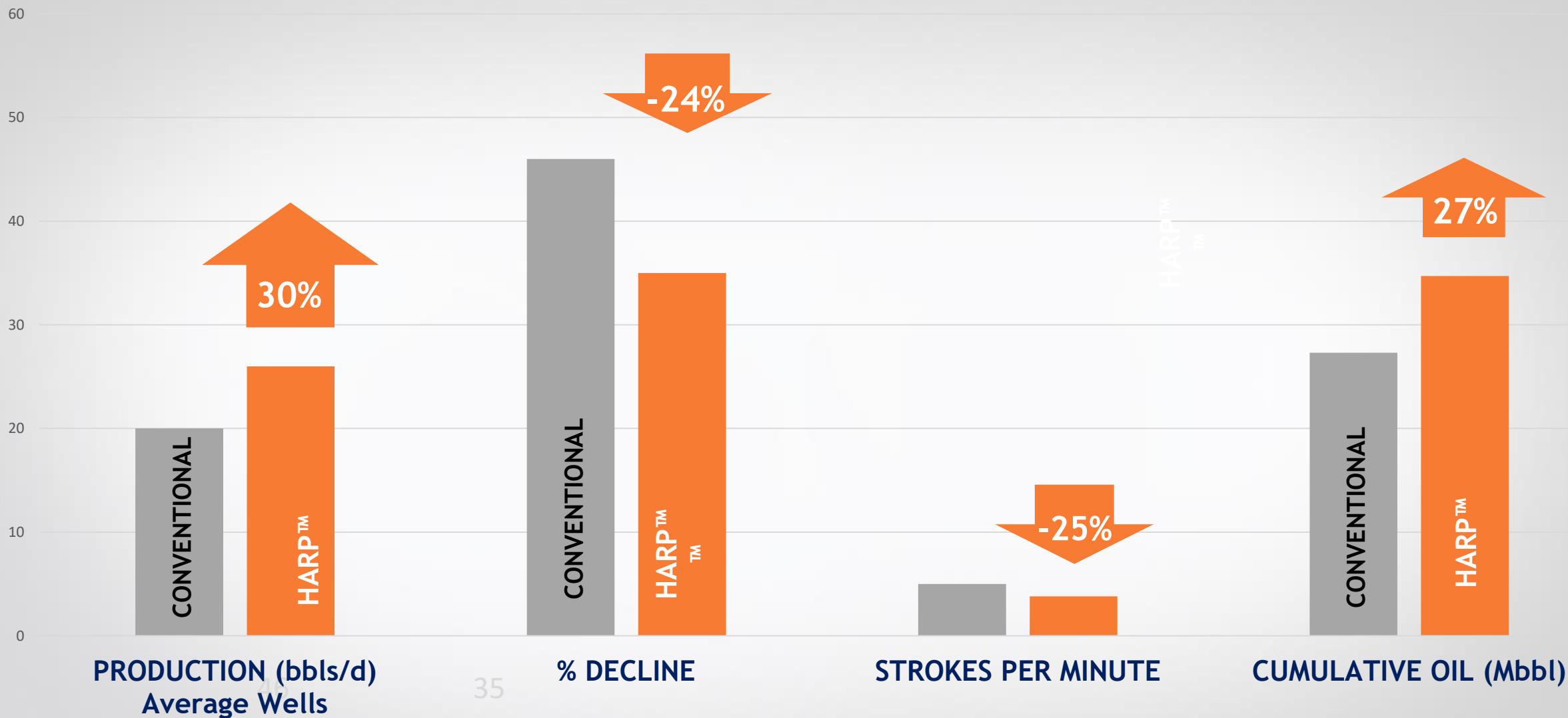


### Eagle Ford

## US – HARP™ Installations

# HARP™ vs. Conventional Pumps

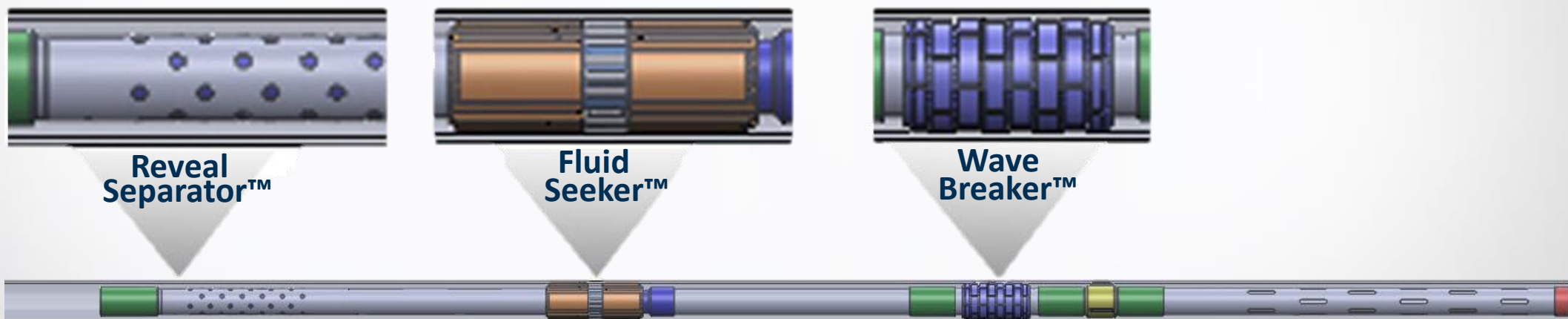
*A Superior Product In Every Way*





## Phase #2 - REAL™ (Revolutionary Technology)

- 🔥 REAL™ System is designed to increase production over the life of the well and minimize production declines & optimize hydrocarbon mix prioritizing preferential recovery of oil
- 🔥 REAL™ is a low-cost option that provides a production optimization solution which offers high impact on production, free cash flow and profitability. Accretive production vs accelerated production.



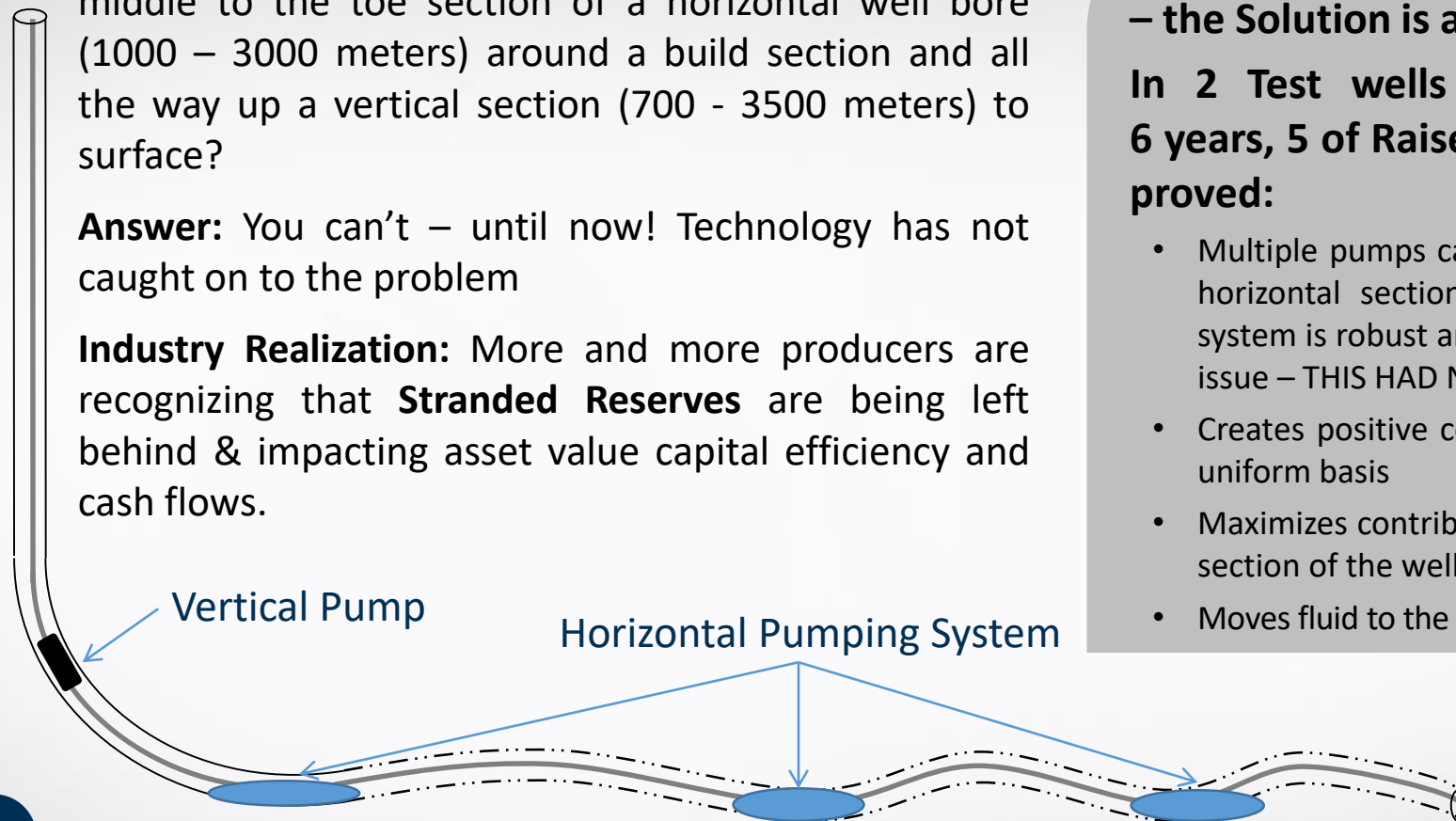
# Phase 3 Pre-Commercial Revolutionary Technology - *Refining & Exploiting the Horizontal Artificial Recovery Technology ("HART™")*

**RAISE HAS  
DEVELOPED  
AN  
INNOVATIVE  
SOLUTION  
TO RECOVER  
MAXIMUM  
RESERVES**

**The Issue:** How do you access reserves from the middle to the toe section of a horizontal well bore (1000 – 3000 meters) around a build section and all the way up a vertical section (700 - 3500 meters) to surface?

**Answer:** You can't – until now! Technology has not caught on to the problem

**Industry Realization:** More and more producers are recognizing that **Stranded Reserves** are being left behind & impacting asset value capital efficiency and cash flows.



## **RAISE TESTING of the HART™ System – the Solution is at hand**

**In 2 Test wells that had produced for 6 years, 5 of Raise technology deployments proved:**

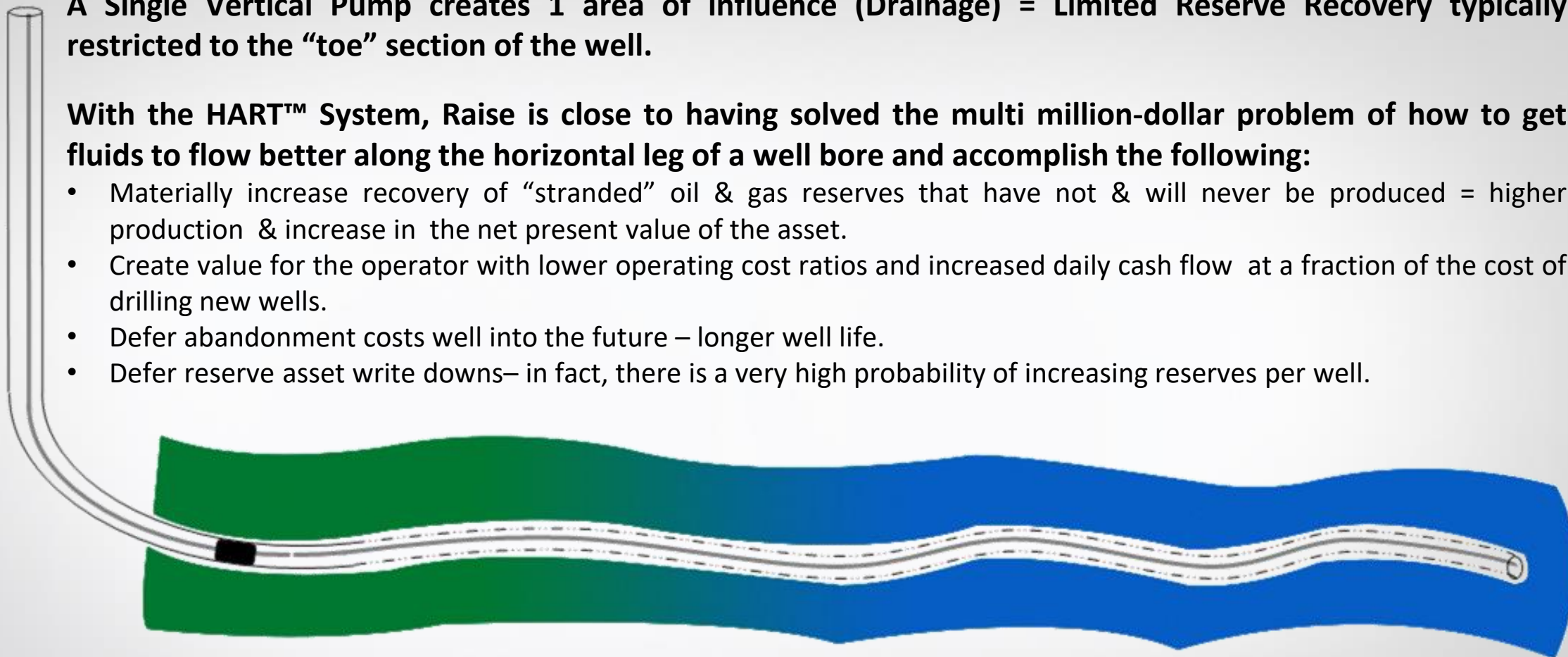
- Multiple pumps can be run along the length of the horizontal section and retrieved without issue – system is robust and can be run & retrieved without issue – THIS HAD NEVER BEEN DONE BEFORE
- Creates positive control of drawdown (inflow) on a uniform basis
- Maximizes contribution from entire length of lateral section of the well bore
- Moves fluid to the HARP™ Vertical Lift System

# Phase 3 Pre-Commercial Revolutionary Technology - *The HART™ System & Why We Need It?*

A Single Vertical Pump creates 1 area of influence (Drainage) = Limited Reserve Recovery typically restricted to the “toe” section of the well.

**With the HART™ System, Raise is close to having solved the multi million-dollar problem of how to get fluids to flow better along the horizontal leg of a well bore and accomplish the following:**

- Materially increase recovery of “stranded” oil & gas reserves that have not & will never be produced = higher production & increase in the net present value of the asset.
- Create value for the operator with lower operating cost ratios and increased daily cash flow at a fraction of the cost of drilling new wells.
- Defer abandonment costs well into the future – longer well life.
- Defer reserve asset write downs– in fact, there is a very high probability of increasing reserves per well.



# Evolution and Revolution together: HARP™ - REAL™ - HART™

- 10 Exclusive International Patents on Methods and Devices

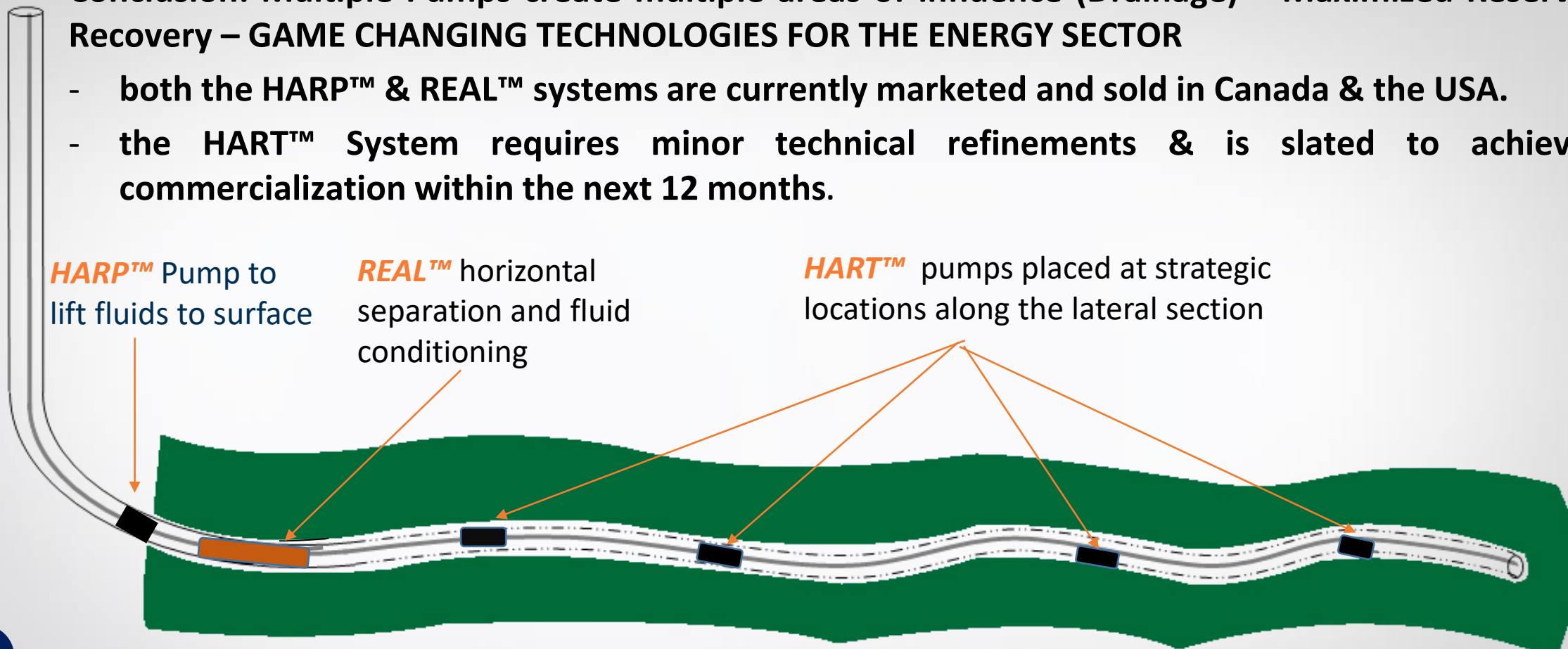
**Conclusion: Multiple Pumps create multiple areas of influence (Drainage) = Maximized Reserve Recovery – GAME CHANGING TECHNOLOGIES FOR THE ENERGY SECTOR**

- both the HARP™ & REAL™ systems are currently marketed and sold in Canada & the USA.
- the HART™ System requires minor technical refinements & is slated to achieve commercialization within the next 12 months.

**HARP™** Pump to  
lift fluids to surface

**REAL™** horizontal  
separation and fluid  
conditioning

**HART™** pumps placed at strategic  
locations along the lateral section





# RAISE the GOAL!

A 10,000 BOE/d oil focused producer(80% oil/ngls) with a current capital efficiency of \$26000 BOE/day and a 25% corporate decline, needs to replace 2,500 BOE/day of declines per annum at a capital cost of \$65 million. Raise can offer the potential to both reduce corporate declines and improve capital efficiencies.

	<u>Capital Efficiency</u>			
<u>Decline</u>	\$25,000 BOE/d	\$24,000 BOE/d	\$23,000 BOE/d	\$22,000 BOE/d
<b>24%</b>	\$60.0mm	\$57.6mm	\$55.2mm	\$52.8mm
<b>23%</b>	\$57.5mm	\$55.2mm	\$52.9mm	\$50.6mm
<b>22%</b>	\$55.0mm	\$52.8mm	\$50.6mm	\$48.4mm
<b>21%</b>	\$52.5mm	\$50.4mm	\$48.3mm	\$46.2mm



Such a business would have a run rate cash flow in the order of \$85million per annum. Reducing 'stand still capital' from \$65mm to even just \$55mm causes a 50% increase in annual free cash flow(\$20mm to \$30mm). Raise can also further optimize corporate commodity mix and minimize cash operating expenses per BOE, for even more free cash flow improvement. In the longer term Raise may also allow for reduced surface lift needs(pump size).

**Estimated standstill capital requirements at various assumed improved capital efficiencies and corporate declines**

# Raise Production – Realizing The Potential

## High Margin / High ROE business:

### ✓ Significant Value

- Meaningful value creation for customer
  - Increase in production, cash flow and NPV
- Pricing power for RAISE

### ✓ Cost Benefits

Simple low cost mechanical system

- Readily available materials & components
- In house manufacturing capability (10,000 ft<sup>2</sup> facility)
- Low capital requirements

### ✓ Competitive Advantage

- Limited existing competition
- Patent protection Canadian Patents for device and method issued (USA & International patents submitted)
- Significant proprietary in-house design knowledge

## Large Market Potential – North America & International

- New and existing horizontal wells



(1) Source: CIBC World Markets research "Too Much of A Good Thing..." Aug. 2012. Comprised of over 17,000 existing wells + 26,000 forecasted wells over next 3 to 5 years

# Canadian Corporate Outlook

- 🔥 Canada has a horizontal well count of over 40,000 wells, many of which are HARP™ candidates.
- 🔥 Raise needs a small percentage of the available Canadian wells for a significant financial growth.
- 🔥 Raise's 2020 HARP™ sales projections = 30-50 per month.



# USA Corporate Outlook

- 🔥 Endurance Lift Solutions (ELS) is the major shareholder of Raise and the exclusive distributor of its products in the USA.
- 🔥 ELS has a growing need for the HARP™ and REAL™ products.
- 🔥 ELS is currently servicing approximately 600 pumps per month (25% or 150 are new pump sales) out of 20 service centers throughout the USA
- 🔥 Raise only needs 15% of ELS new pump sales of this market to sell 270 HARPs™ annually.
- 🔥 Small share of a big market = Achievable Target.



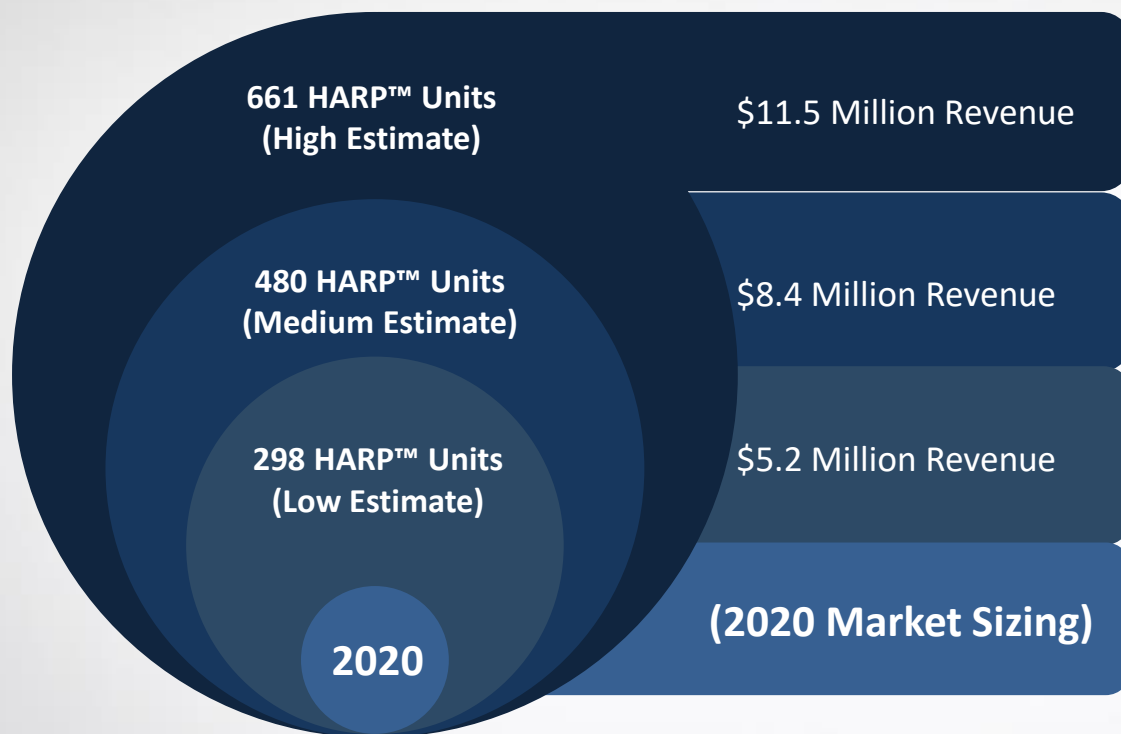
# Near-Term Catalysts

- 🔥 HARP™ sales projected to rapidly increase in the last quarter of 2019 and early 2020.
- 🔥 REAL™ sales projected to begin in the last quarter of 2019.
- 🔥 E&P capital expenditures now stabilized and expected to increase.
- 🔥 E&P spending increasingly focused on maintenance and mitigating decline rates.

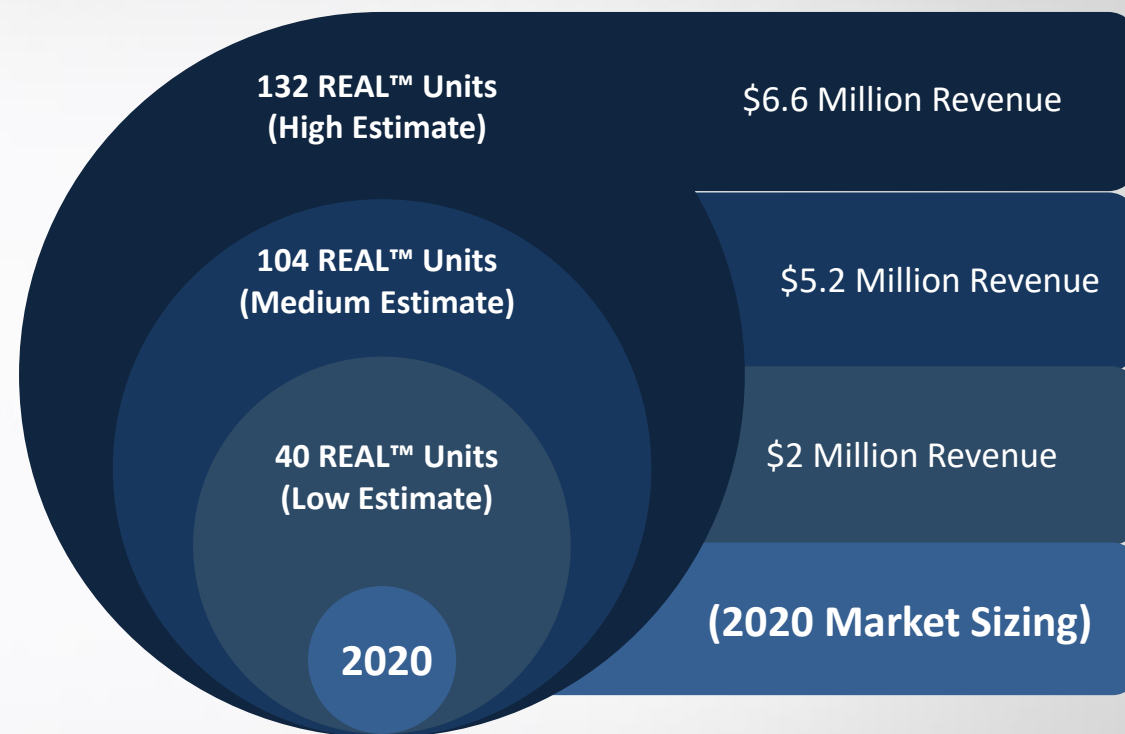


# Market and Revenue Analysis - HARP™ & REAL™

## HARP™



## REAL™



\*Market Analysis independently conducted by Quittitut Consulting (Houston) for Raise Production