

ECONOMIC ANALYSIS

Raise Production created the High Angle Lift Solution (HALS) to address the production challenges and downtime associated with current artificial lift technology, while creating an overall positive outcome in the value chain with significant economic upside. The economic analysis, based on customer driven metrics and incremental production gains, is summarized in the table below. The highlighted column represents **typical results with an annualized estimated value of \$133,000 per well**.

ECONOMIC METRICS					
	Capital	\$22,000 *	1		
	Netback	\$30/bbl			
	Discount Rate	10%			
	Nominal Decline	20%			
ECONOMIC RESULTS					
		INCREMENTAL PRODUCTION (bbl/d)			
		5	10	15	20
12 Month NPV ₁₀ (Annualized Value)		\$39,000	\$86,000	\$133,000	\$181,000
Time to Payout NPV ₁₀ (Months)		< 4	< 3	< 2	< 2
NPV ₁₀ 12 Month Recycle Ratio		1.8	3.9	6.1	8.2
12 Month Undiscounted Recycle Ratio		1.9	4.2	6.4	8.7

* based on specific customer well

MORE ECONOMICS THAT ARE QUANTIFIABLE ON AN INDIVIDUAL BASIS ARE:

- Higher Pump Efficiency \longrightarrow More Production and Cashflow
- No Gas Locking → Less Downtime & Maintenance
- Deeper Landing Depths > $50^{\circ} \longrightarrow$ Increased Drawdown, Greater Production and More Cashflow
 - → Horsepower Savings, Reduced Rod Wear & Maintenance Savings
- Articulated Plunger \rightarrow Less Barrel Friction & Wear

Raise's HALS artificial lift has been cycle tested for more than three million cycles which translates to more than 18 months of run life without failure at 3.5 SPM.

Contact

Raise Production Inc. 2620, 58th Avenue SE Calgary AB T2C 1G5

Slower Pumping



Phone: 403-699-7675 Fax: 403-699-0085 Email: <u>sales@raiseproduction.com</u> Website: <u>www.raiseproduction.com</u>



CASE STUDY

The graph below represents a case study where traditional artificial lift equipment was swapped out in kind for Raise's HALS artificial lift. The total cost of the operation was approximately \$22,000. The high GOR led to pump gas locking, which hampered production. The HALS artificial lift alleviated this problem and the associated downtime, resulting in a two-fold increase in both pump efficiency and production rate. The result was an **incremental production gain of 15 bbl/d and the payout was less than two months.**



Contact

Raise Production Inc. 2620, 58th Avenue SE Calgary AB T2C 1G5



Phone: 403-699-7675 Fax: 403-699-0085 Email: <u>sales@raiseproduction.com</u> Website: <u>www.raiseproduction.com</u>