



**2025 GAS LIFT
WORKSHOP**

Marriage of New and Old: Surface Controlled Gas Lift *Through* a Side Pocket Mandrel

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Renaissance

Embracing the old
...through the lens of the new



Renaissance

- High Pressure Compression (NEW)
 - Single Point Gas Lift (OLD)
- High volume fracking (NEW)
 - Fracking (OLD)
- Completions: Plug & Perf, Ball Drop, Dissolvables, Swellables (NEW)
 - Fracking (OLD)
- Rotary Steerable (NEWish) / Complex Well Profiles (NEW)
 - Horizontal (OLD)
- Surface control (NEW) ...



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Agenda....

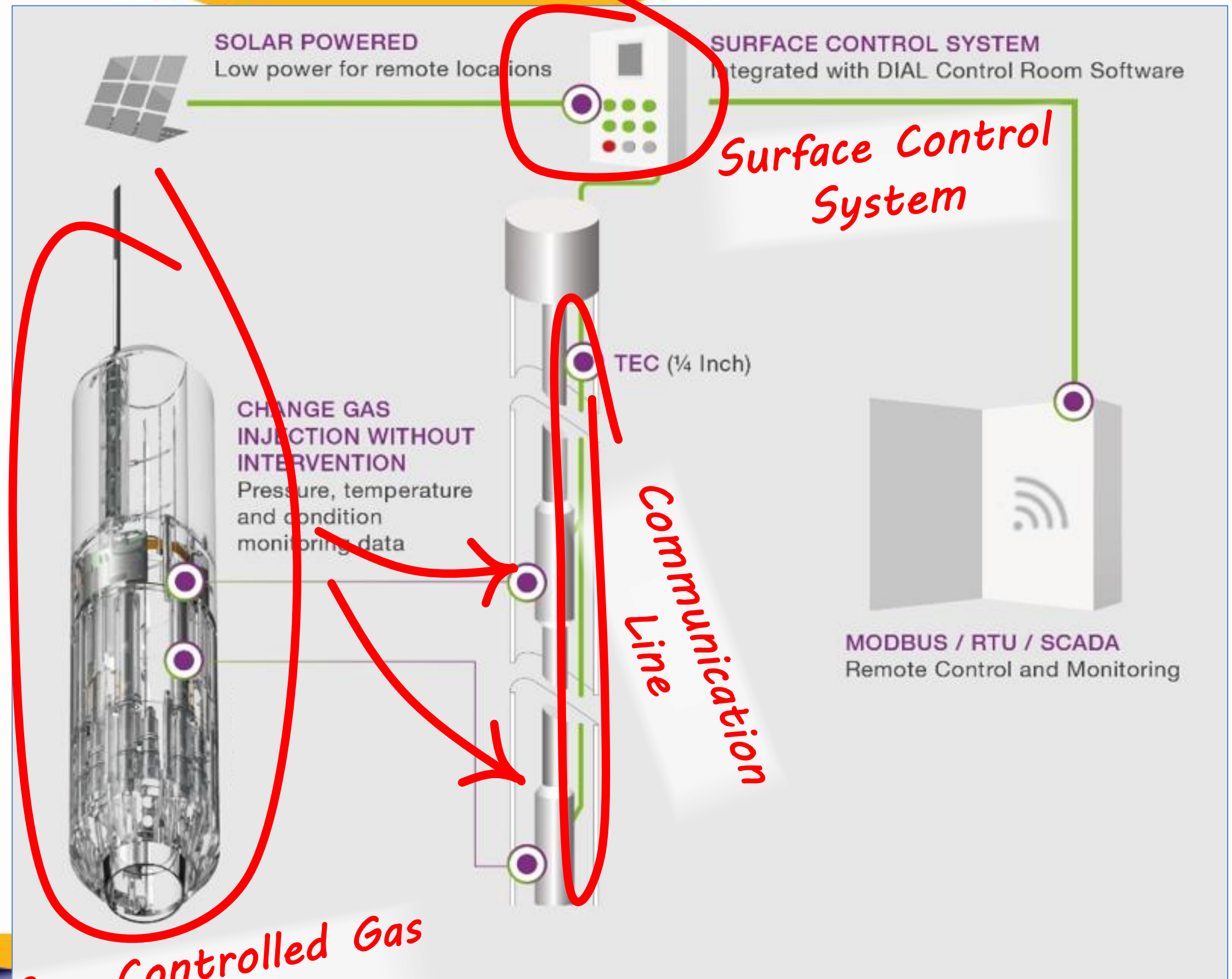
- The New: Surface Controlled Gas Lift
- The Old: Side Pocket Mandrel
- Together at Last
- Conclusion



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Surface Controlled Gas Lift: Essential Components:

- Surface Controlled Gas Lift Valve
- Surface Control System
- Communication Line (Hydraulic or Electric)

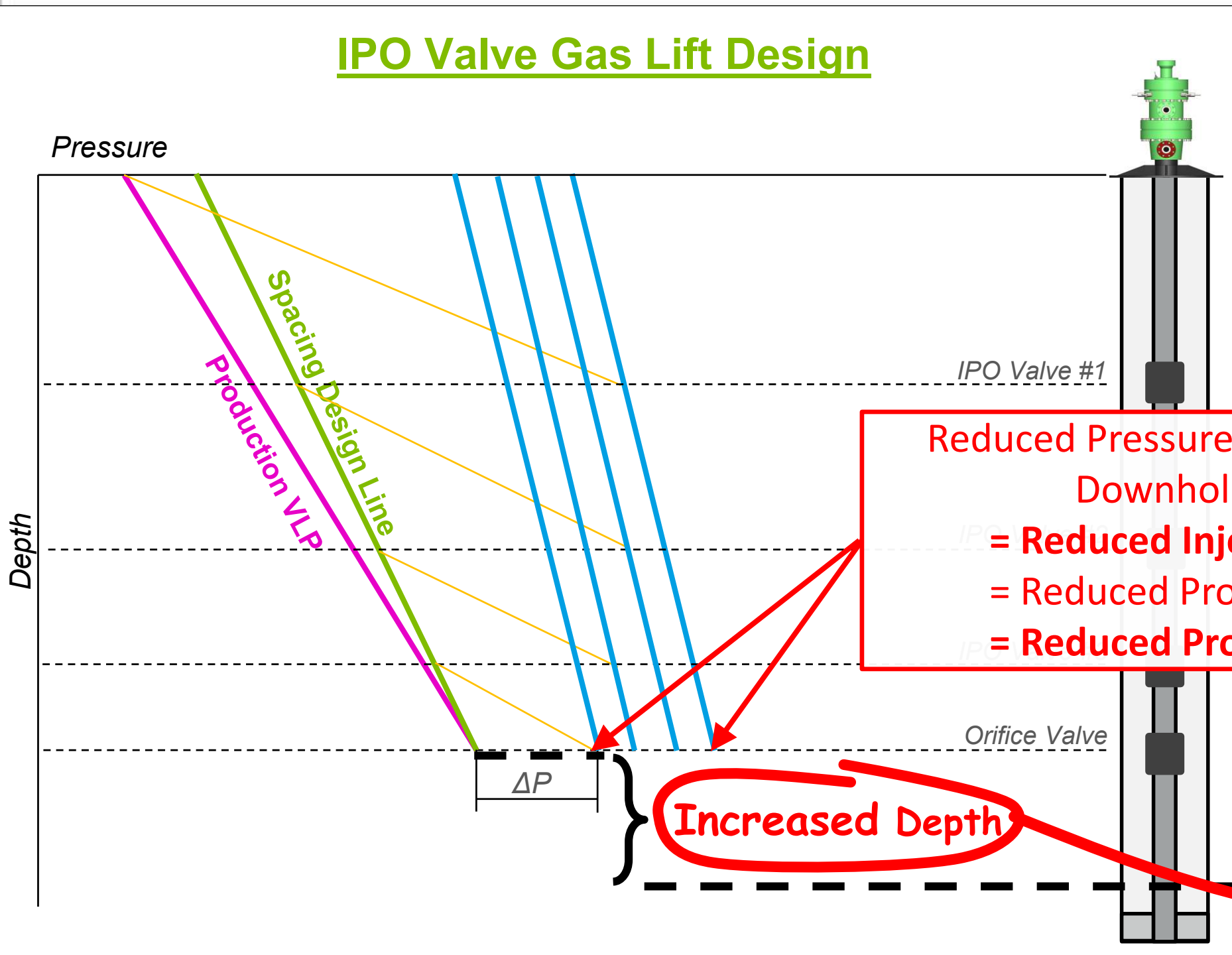


Surface Controlled Gas
Lift Valve

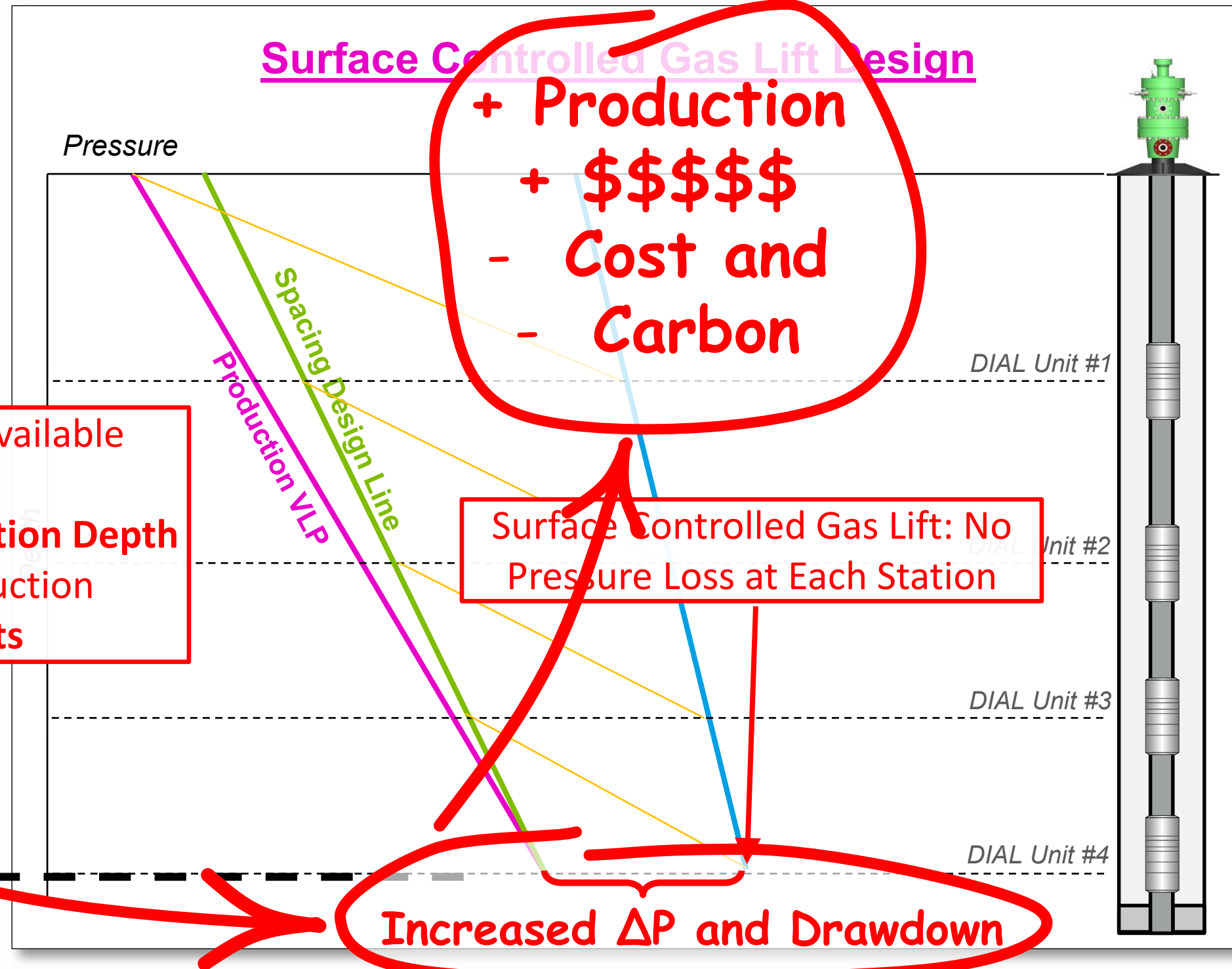


Surface Controlled vs IPO Design

IPO Valve Gas Lift Design



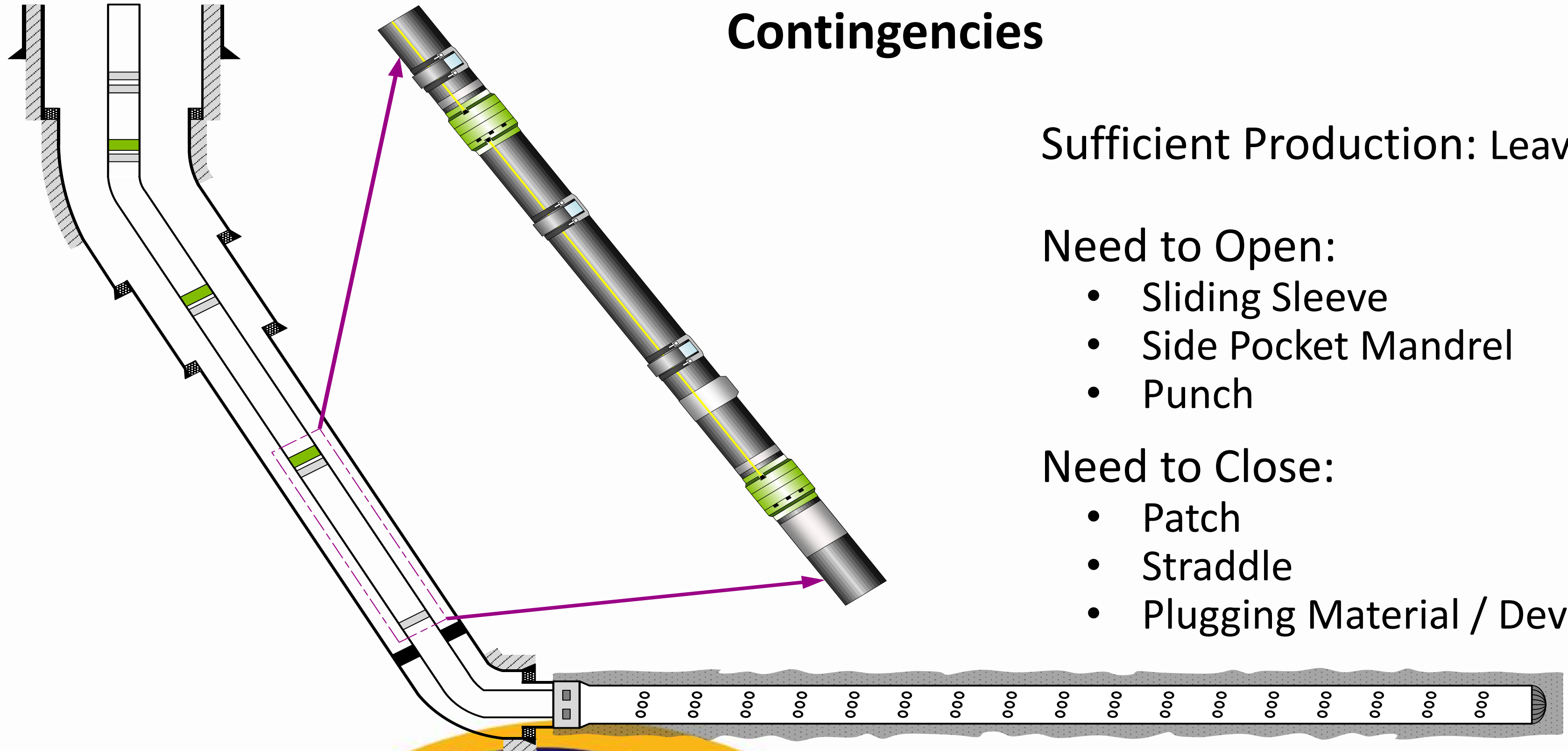
Surface Controlled Gas Lift Design





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Contingencies



Sufficient Production: Leave it

Need to Open:

- Sliding Sleeve
- Side Pocket Mandrel
- Punch

Need to Close:

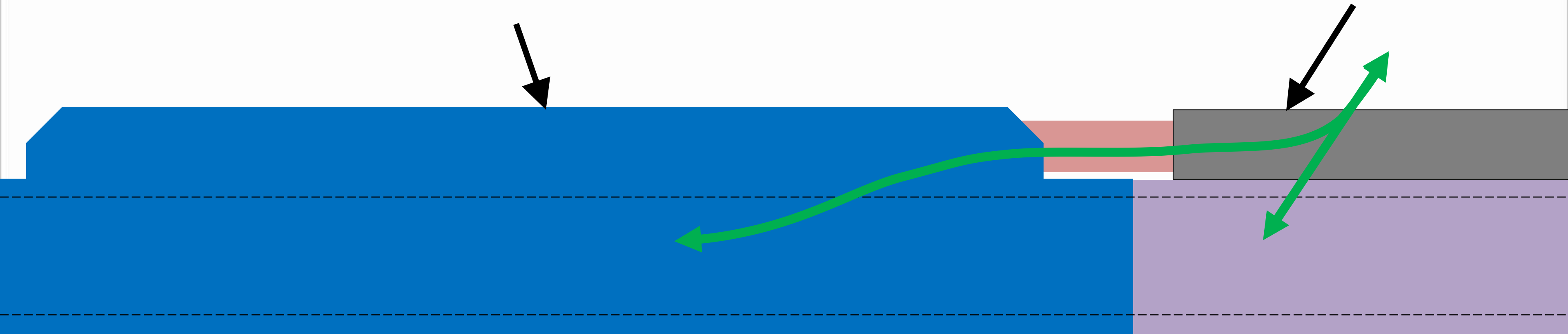
- Patch
- Straddle
- Plugging Material / Device



Marriage of Side Pocket Mandrel And Surface Control Gas Lift

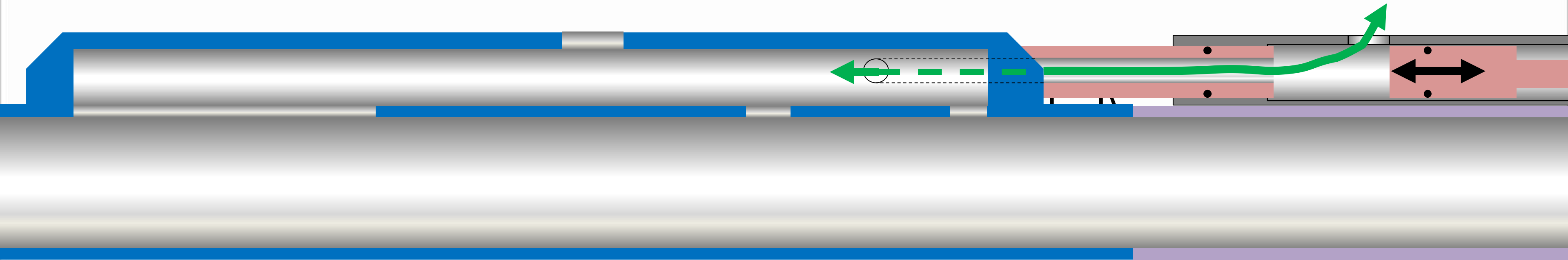
Contingency Side
Pocket Mandrel

Surface Controlled Gas
Lift Valve

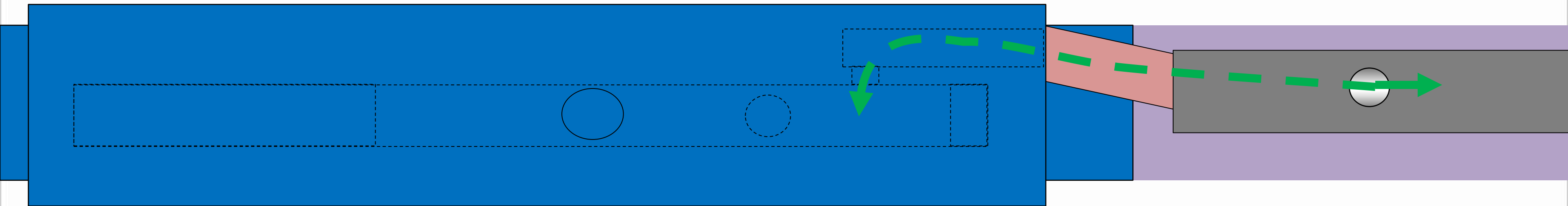




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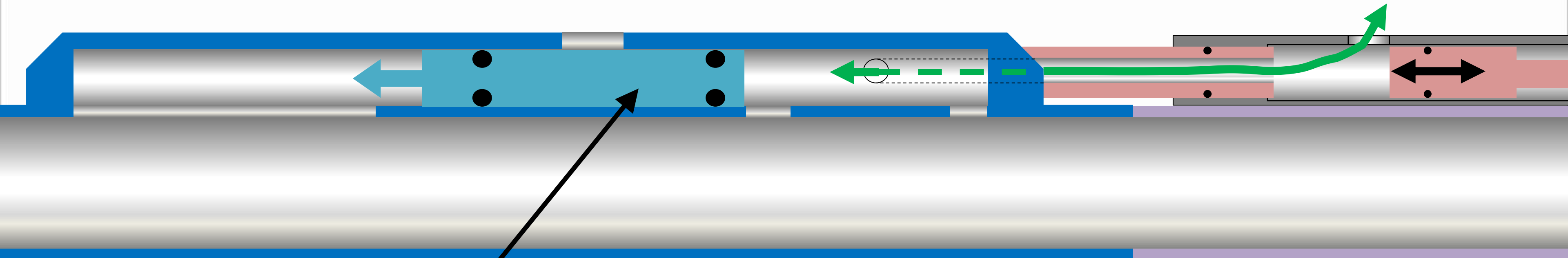
Rotating 90 Degrees to
view from top



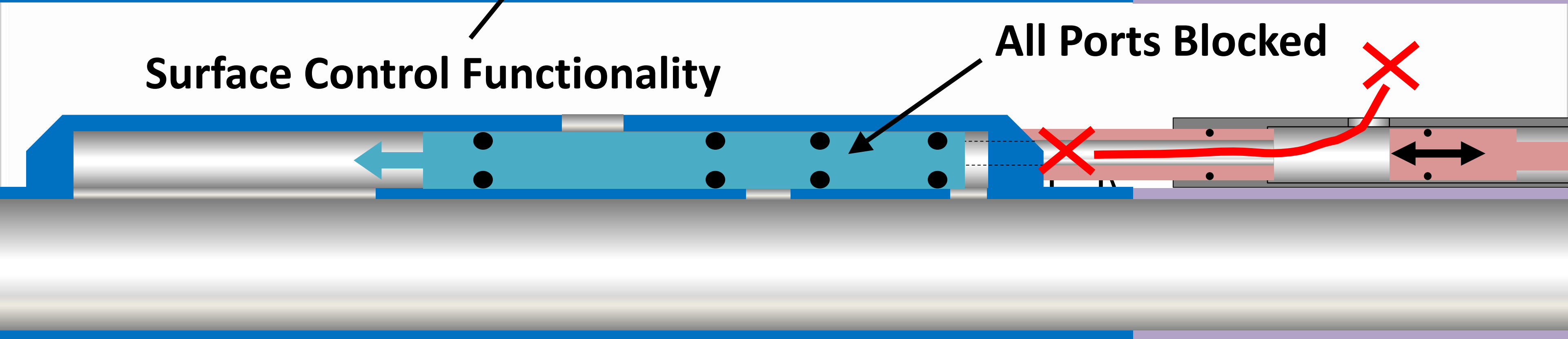


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Basic Insert Options



Surface Control Functionality

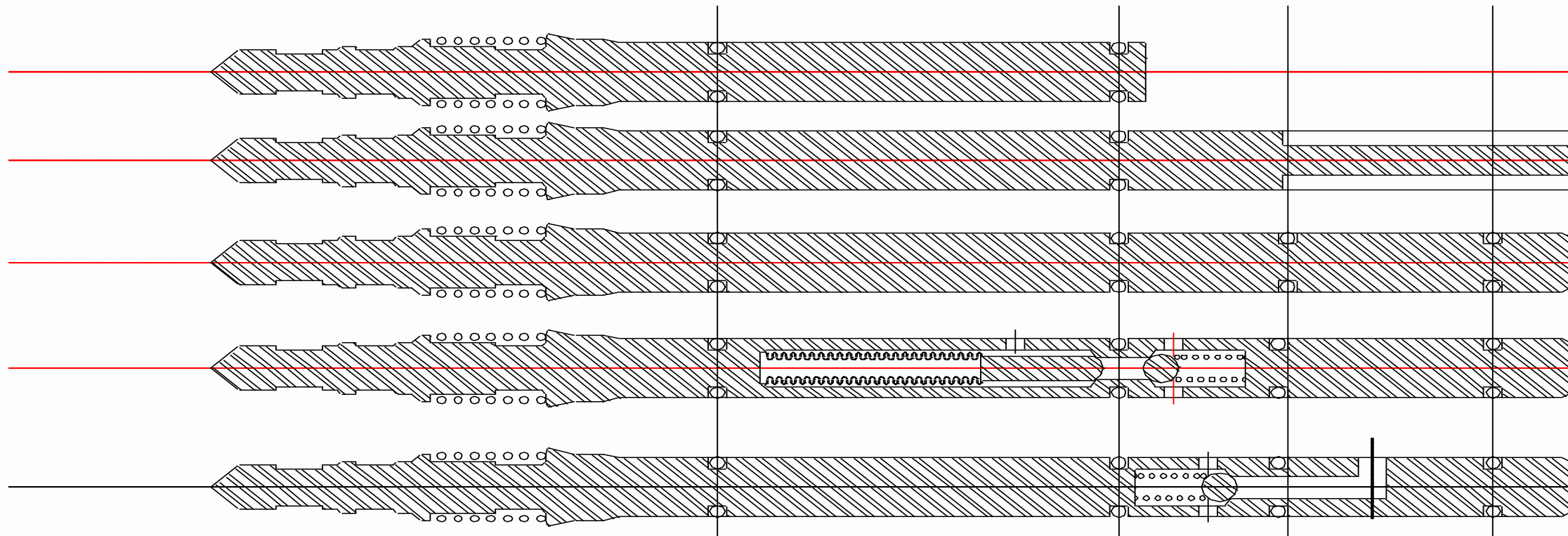
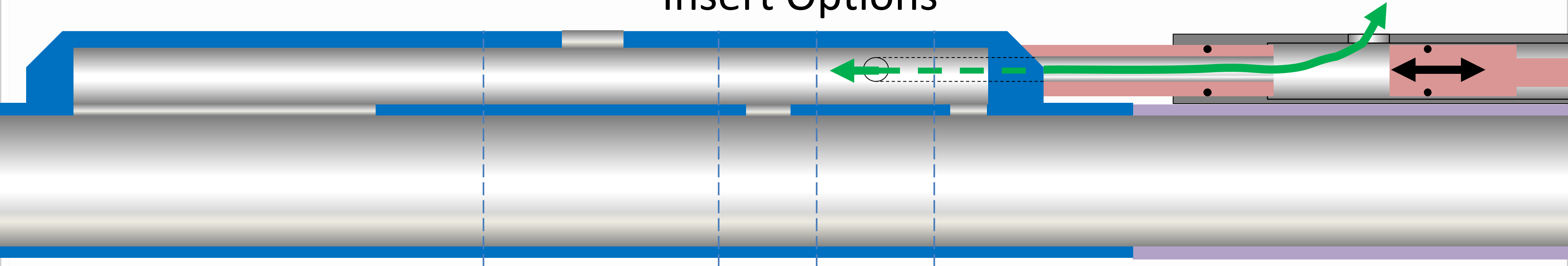


All Ports Blocked



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Insert Options



- Surface Control (Normal)
- Blocked
- Checked to Annulus
- Checked to Tubing
- Orifice
- Dissolvable
- Piloted

Conclusions

Always look for opportunities to combine technologies

- Do not dismiss proven technologies
- Keep an eye out for new advancements

There are costs and risks with any new technology

- Risk is scary / requires effort
- Incentives not worth the effort
- Reluctance to try new products

Derisk using proven and accepted technologies (*for that region*)



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Question Time



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