

Case Study

CONVERTING PUMPJACKS TO PLUNGER LIFTS — PROVEN RESULTS IN THE CARDIUM

Central Optimization recently completed three (3) separate pumpjack-to-plunger lift conversions in West-Central Alberta's Cardium formation — and each one of them delivered *measurable* success to the clients.

THE CHALLENGE

Producers operating mature Cardium wells often face:

- Rising gas-to-oil ratios
- Frequent workovers (1–2 per year, ~\$45,000 each)
- Increasing chemical and lifting costs
- Declining oil production

What appears to be a natural production decline often hides a bigger opportunity — one that can be unlocked through the right optimization approach.

THE SOLUTION

Central Optimization applied its proprietary predictive analysis tool to identify the best candidates for conversion. This calculator — perfected over years by Central Opt — forecasts plunger lift performance *before* any capital is committed, helping to de-risk every installation.

Each conversion followed a similar two-day process:

- 1 day for rig and wireline setup
- 1 day for plunger lift installation and calibration
- 2–3 short follow-up visits for fine-tuning

Once optimized, the wells require only minimal ongoing maintenance (2x /year).





THE RESULTS

Formation: Cardium (West-Central Alberta)

Wells Converted: 3

Pre-Conversion Metrics (Average):

- GOR increased from 3,100 to >12,000 m³ gas per 1 m³ oil
- Oil output: 3–4 bbl/day
- Frequent workovers, wax buildup, rising chemical costs

Post-Conversion Results (Average):

- 20% increase in oil production (now 4–5 bbl/day)
- 80% of gas production maintained
- \$60,000/year reduction in lifting & operating costs
- \$31,000/year increase in new revenue
- \$102,000/year total added value per well

Conversion cost: ~\$55,000 per well

Payback: Just < 7 months

THE TAKEAWAY

Not every well is right for a plunger lift — but with the right analysis, the right team, and the right approach, results can be transformational.

Central Optimization's expertise and predictive testing tools **reduce risk, cut costs, and uncover hidden production potential — *before* a single dollar is spent.**

WHY IT WORKED

1. Predictive Analytics

Candidate success was modeled *before* investment

2. Consistent Conditions

Ideal gas-to-oil ratio (3:1) in the Cardium formation

3. Field-Proven Process

Experienced techs, efficient turnaround, and reliable optimization