

Thermoflex® Tubing
Liquid Lifting Case Study¹
Comparison with Shut In Cycling

Background:

Well was producing between 9 and 11 MCF/day and would need to be shut in one day per week to push water back into the formation. Required two visits per week by personnel and utilized 1 1/2" production tubing. Well depth is 2,200ft.

Solution:

A one inch Thermoflex® tube was installed to just above the upper perforations. The well was shut in to build pressure and kicked off at 26 MCF per day rate and settled to a continuous 20 MCF/day rate lifting between five and twenty gallons of fluid per day. Casing pressures stabilized and tubing pressures varied with gathering line pressures.

Benefits:

- Payback: 4.70 months
- Internal Rate of Return: 253% for one year
- Incremental Revenue: \$16,320/yr
- Initial Investment: \$6,450
- Continuous flow without ongoing maintenance

POLYFLOW INC.

TECHNOLOGY FOR FLUID TRANSPORT

Assumptions for Case Study 10

Capital Cost for Thermoflex® Installation

Tubing Cost (2,200ft)(\$2.50/ft)	\$4,400
Couplings (2)(\$175 ea)	350
Counterweight	100
Installation	<u>500</u>
Total Containment	\$6,450

Price of Gas	\$4.00/MCF
Month	30 days

Shut in Technique

Costs of Process (\$50/visit)(2visits/week)(4weeks)	
Revenues (\$4.00/MCF)(26day uptime)(10MCF/day)	<u>\$1040/month</u>
Net Revenue	\$1,040/month

Thermoflex®

Monthly Revenues (30days)(20MCF/day)(\$4.00/MCF) \$2,400/month

Incremental Monthly Revenues (\$2,400/month)-(\$1,040/month) =
\$1,360/month gain

Same Example with 4,500ft of Tubing

Tubing Cost (4,500ft)(\$2.50/ft)	\$11,250
Couplings (2)(\$175 ea)	350
Counterweight	100
Installation	<u>700</u>
Total Containment	\$12,350

Payback: 9.1 months, IRR 132% for one year