

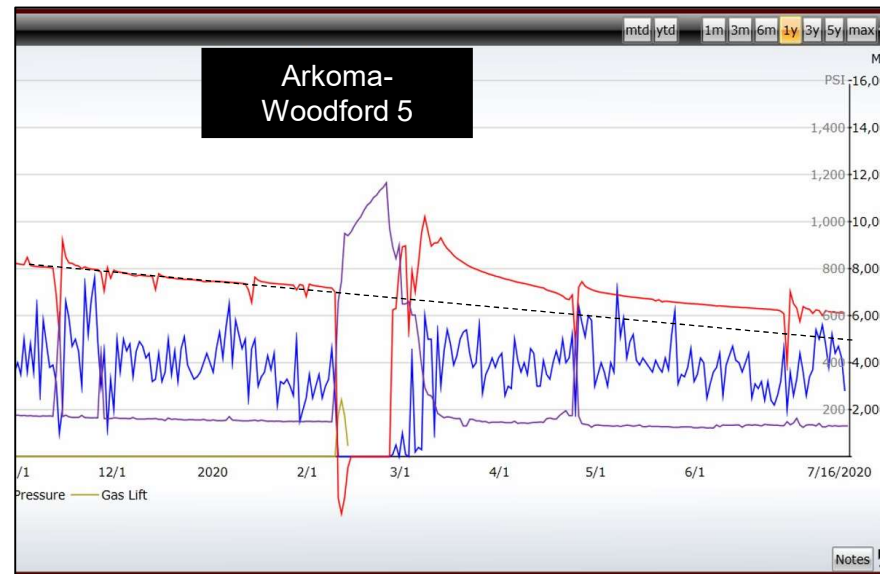
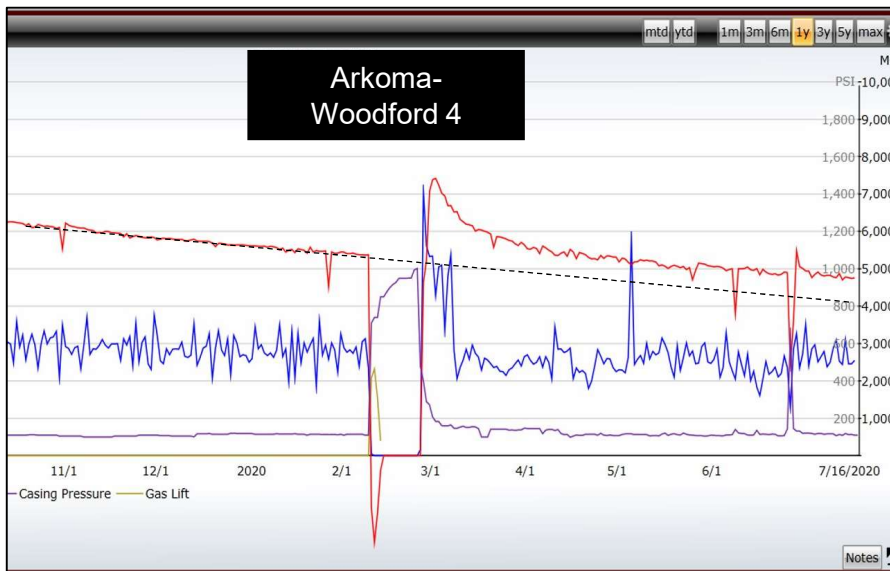
Arkoma-Woodford HnP Wells 3-5

Economic in a low-price environment

3-Well Dry Gas Case Study

Arkoma-Woodford Wells 3-5 are dry gas wells with ~1-mile laterals and were less than a year old when treated with nanoActiv®. The wells were treated as a multi-well package using field gas in February 2020 before the COVID shutdown. The Production Company supplied the field gas & compressor.

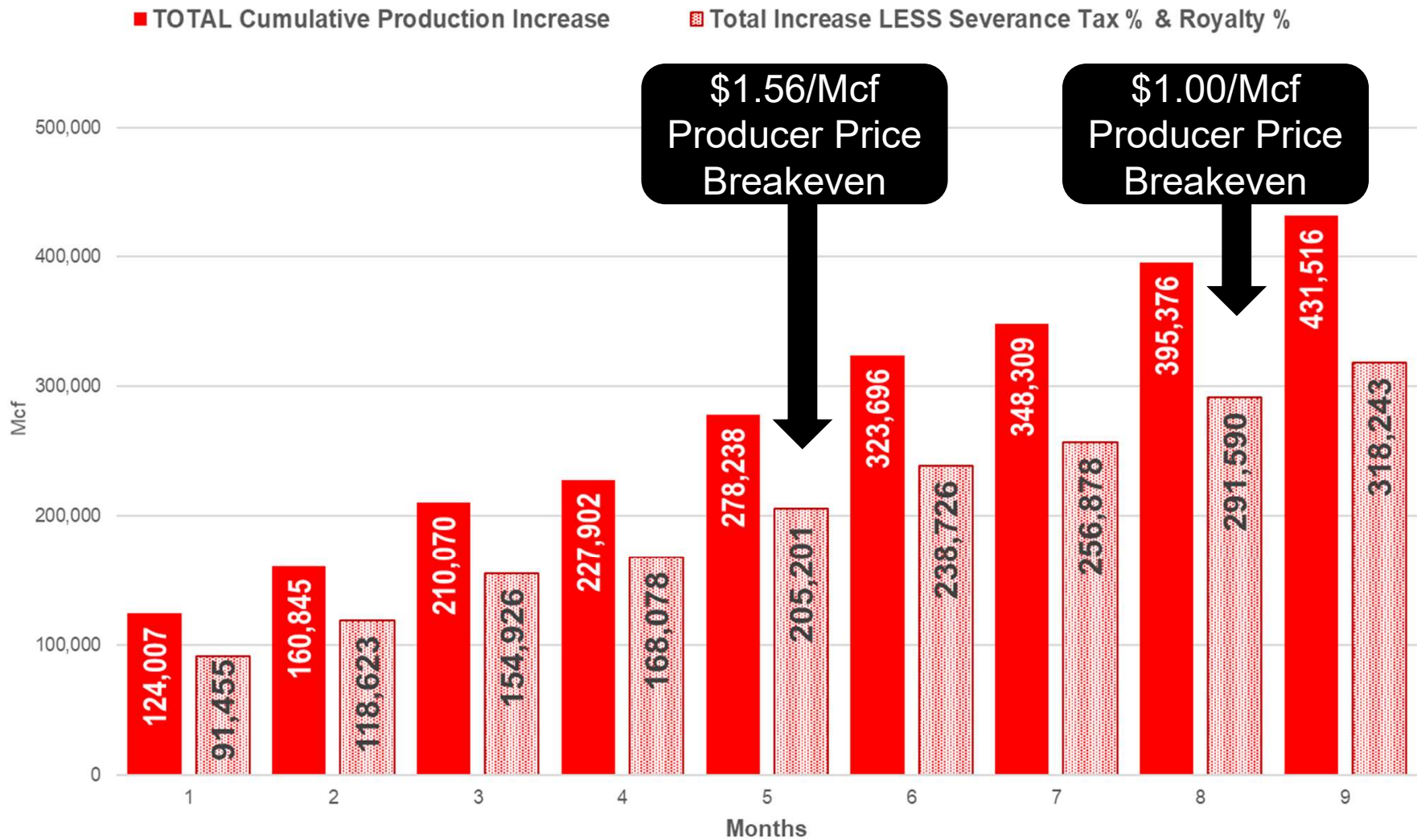
- Decline curves appear to be flattening
- 9 months post-treatment, production is up more than 430,000 Mcf over forecast
 - **430,000 x \$3.00 NYMEX Strip = \$1.3MM**



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9-Month TOTAL Cumulative Increase in Dry Gas Production (in Mcf)

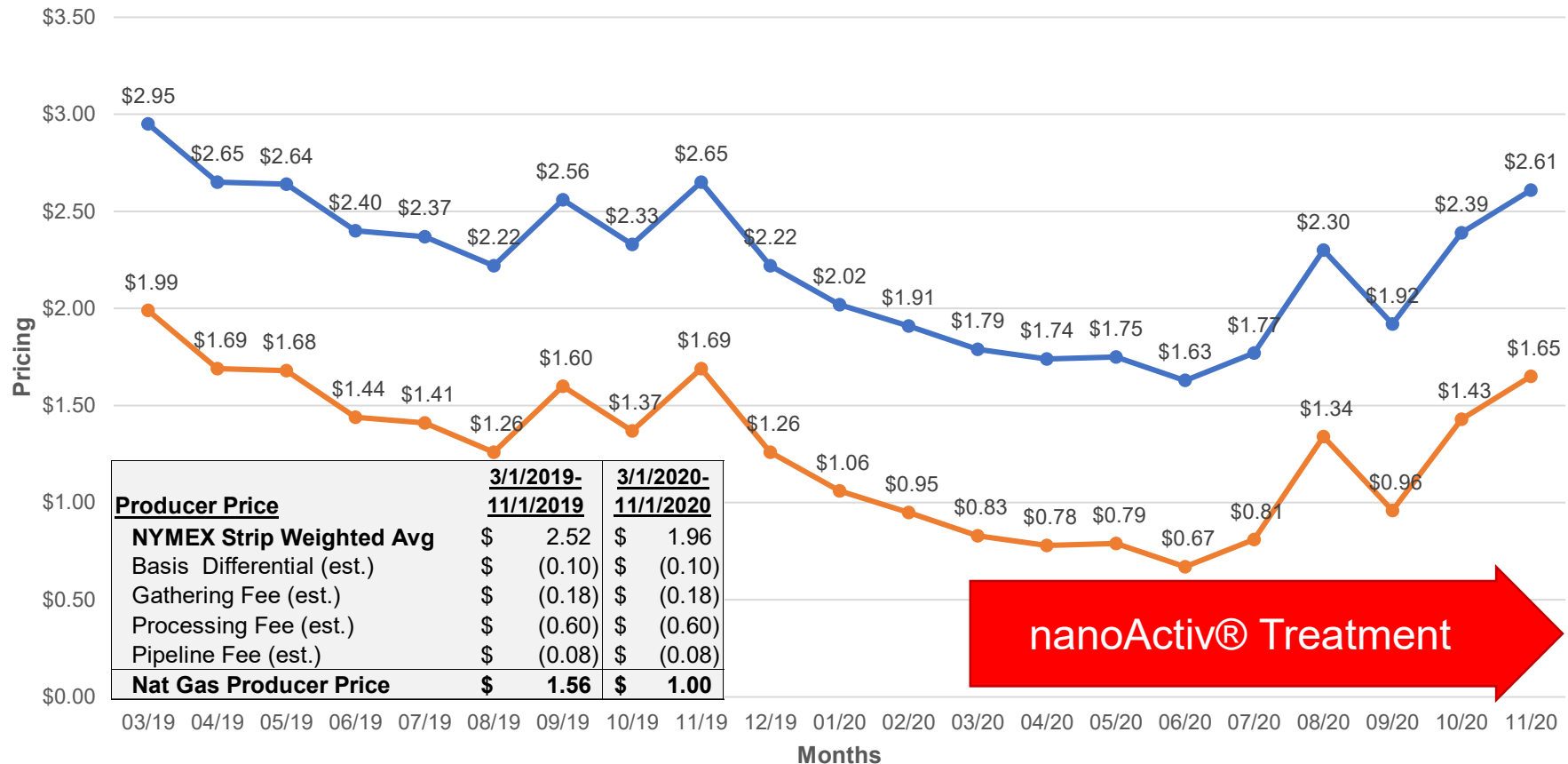


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Economic in a low-price environment

Using a \$1.00/Mcf Producer price (see below) while considering the severance tax and royalty, the treatment had a 240-day payback (at \$1.56/Mcf there is a 140-day payback).

Weighted Average NYMEX Pricing- Based on Producer's Volume



● NYMEX ● Producer Price less Basis, Tport, G&P

Arkoma-Woodford HnP Wells 3-5

Economic Comparison:

Assumptions

- First 9 months of Drilling/Completion versus the increase in production in the first 9 months of nanoActiv® HnP
- Drilling/Completion costs est. \$5.0MM per well multiplied by 3 wells, totaling \$15.0MM.
- nanoActiv® HnP cost \$100,000 per treatment, totaling \$300,000.
- Pricing assumptions (see gray table below)

Producer Economics	New Drill/ Completion	Post nanoActiv® Tx	Producer Price	
<i>Volume Dates</i>	<i>3/1/2019-11/1/2019</i>	<i>3/1/2020-11/1/2020</i>	<i>3/1/2019- 11/1/2019</i>	<i>3/1/2020- 11/1/2020</i>
Actual Production Year 1	8,016,144	431,516	NYMEX Strip Weighted Avg	\$ 2.52 / \$ 1.96
less Severance Tax	7.50%	7.50%	Basis Differential (est.)	\$ (0.10) / \$ (0.10)
less Royalty	18.75%	18.75%	Gathering Fee (est.)	\$ (0.18) / \$ (0.18)
Production for the Producer	5,911,906	318,243	Processing Fee (est.)	\$ (0.60) / \$ (0.60)
			Pipeline Fee (est.)	\$ (0.08) / \$ (0.08)
			Nat Gas Producer Price	\$ 1.56 / \$ 1.00

Economic Comparison	New Drill	nanoActiv® Tx	nanoActiv® Tx
First Year of Gas Owned by the Producer	5,911,906	318,243	318,243
Total Price Per Mcf	x \$ 1.56	\$ 1.56	\$ 1.00
Est. Cash Flow to the Producer	\$ 9,215,681	\$ 496,089	\$ 318,243
Cost to Drill Est. / Cost for nanoActiv® HnP Treatment	\$ 15,000,000	\$ 300,000	\$ 300,000
Total Price Per Mcf	÷ \$ 1.56	\$ 1.56	\$ 1.00
MCF to Breakeven (including Severance & Royalty Deducts)	9,622,576	192,452	300,000
Breakeven Achieved in Days-Using Actual Data	600	150	240
9-Month Producer Economic Metrics			
9 Month: Cost per Mcf Year (Cost divided by Producer Production)	\$ 2.54	\$ 0.94	\$ 0.94
9 Month: xIRR (Internal Rate of Return)	-25%	111.6%	9.2%
9 Month: xNPV using 5.0% Cost of Capital	\$ (6,507,078)	\$ 180,105	\$ 7,990
9 Month: Multiple on Invested Capital (MOIC)	0.6x	1.7x	1.1x

One year post treatment Arkoma-Woodford Wells 3-5 are still performing above volume forecast