

Chart of the Week #2023-19

Dallas Fed Survey: U.S. Crude Oil Production Costs Are Rising



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Dallas Fed Survey: U.S. Crude Oil Production Costs Are Rising

Dallas Fed Quarterly Energy Survey - 1Q2020 Responses				
Required WTI Price To* ...				
	Permian	Eagle Ford	Other U.S. Shale	Other U.S. Non-Shale
... Maintain Operations	28.01	23.38	30.44	35.53
... Achieve Profitability	48.90	46.00	51.00	51.00
* These are averages based on a wide range of replies and number of respondents				

Dallas Fed Quarterly Energy Survey - 1Q2023 Responses				
Required WTI Price To* ...				
	Permian	Eagle Ford	Other U.S. Shale	Other U.S. Non-Shale
... Maintain Operations	32.21	28.67	33.08	44.87
... Achieve Profitability	62.70	56.43	60.91	63.28
* These are averages based on a wide range of replies and number of respondents				

<i>Analysis based on Dallas Fed Data</i>		<i>EPRINC</i>
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Dallas Fed Quarterly Energy Survey - Implied Annual Producer Inflation Rate from 1Q20 to 1Q23 <u>Required WTI Price To* ...</u>				
	Permian	Eagle Ford	Other U.S. Shale	Other U.S. Non-Shale
... Maintain Operations	4.8%	7.0%	2.8%	8.1%
... Achieve Profitability	8.6%	7.0%	6.1%	7.5%
* These are averages based on a wide range of replies and number of respondents				
<i>Analysis based on Dallas Fed Data</i>			<i>EPRINC</i>	



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- Each quarter the Dallas Federal Reserve Bank publishes surveys of U.S. crude oil and natural gas producers. It seeks to gauge and present a variety of metrics that are material to one of the key economic sectors of its district. These include production growth, employment rates, capital expenditures in the oil and gas industry, as well as its practitioners' views on their current and future operating costs and profitability.
- When the COVID pandemic set in during the first quarter of 2020, a huge negative demand shock immediately followed. With interest rates at 0 and labor being plentiful, producers' production costs troughed.
- Based on the wide range of answers from respondents in the first quarter of 2020, the average required WTI (West Texas Intermediate crude oil benchmark price) to maintain U.S. operations was \$29/bbl (per barrel). In order to be profitable, the average response came in at \$49/bbl.
- Following a sharp downward spike in the first quarter of 2020, WTI prices averaged \$40/bbl during 2020, and then as the pandemic began to recede and the economy recovered proceeded to rise throughout 2021 to a peak of over \$120/bbl in early 2022.
- ... continuing

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- continuing ...
- The Dallas Fed's first quarter 2023 survey produced significantly higher results reflecting recent inflationary trends. While results vary by producing region, the average breakeven WTI price reported was \$35/bbl; the average WTI price required for profitability was \$61/bbl. After declining from their early 2022 peaks, WTI prices have been range-bound since November 2022, fluctuating between the upper \$60s and the low \$80s.
- Based on the Dallas Fed's surveys and in the aggregate, the implied annualized producer inflation rate for U.S. oil and gas production has been 5.8% for operating costs and 7.3% for required profitability. For this same period the BLS (U.S. Bureau of Labor Statistics) Total Mining Industry Producer Price Index showed an annualized increase of 15.9%.
- The expanded version of this slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Larry Goldstein (larryg@eprinc.org) or Max Pyziur (maxp@eprinc.org).