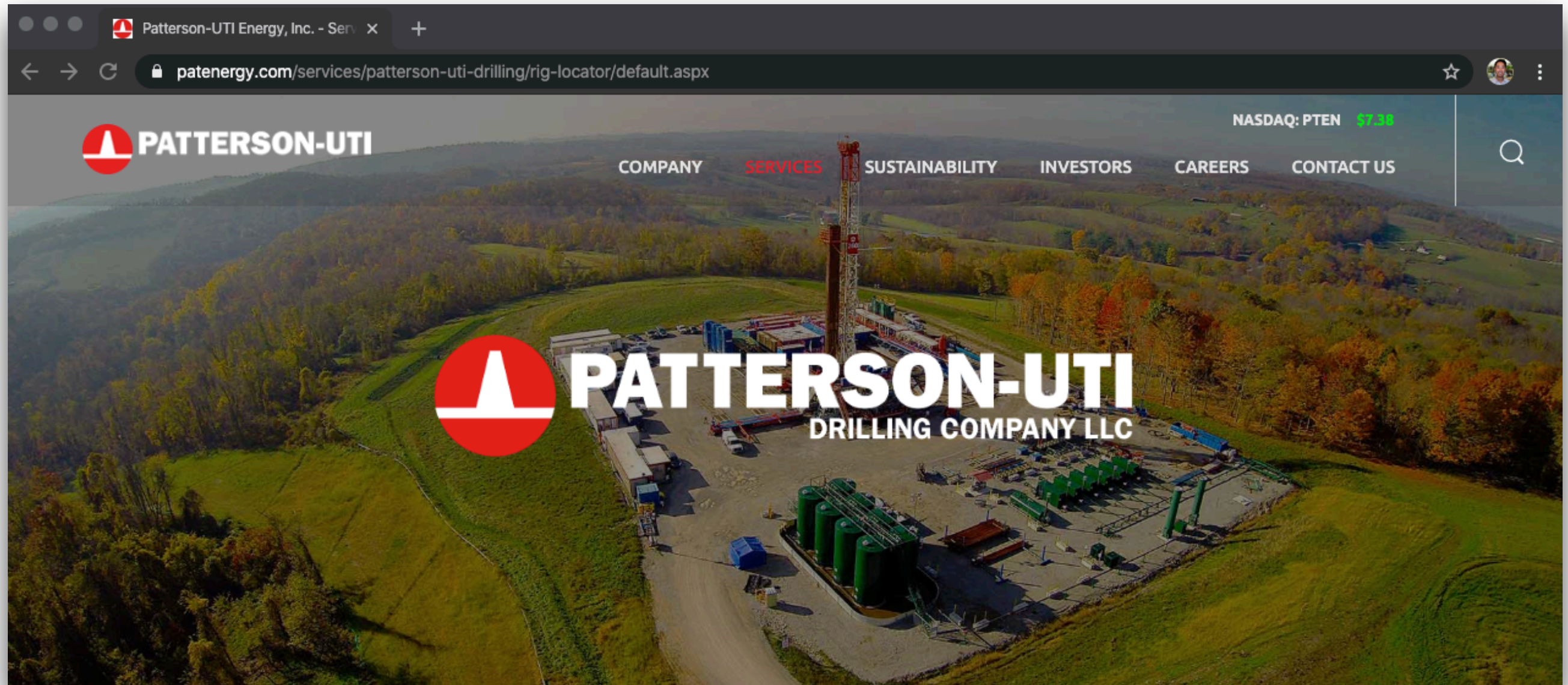


# Patterson-UTI Energy Rig Count

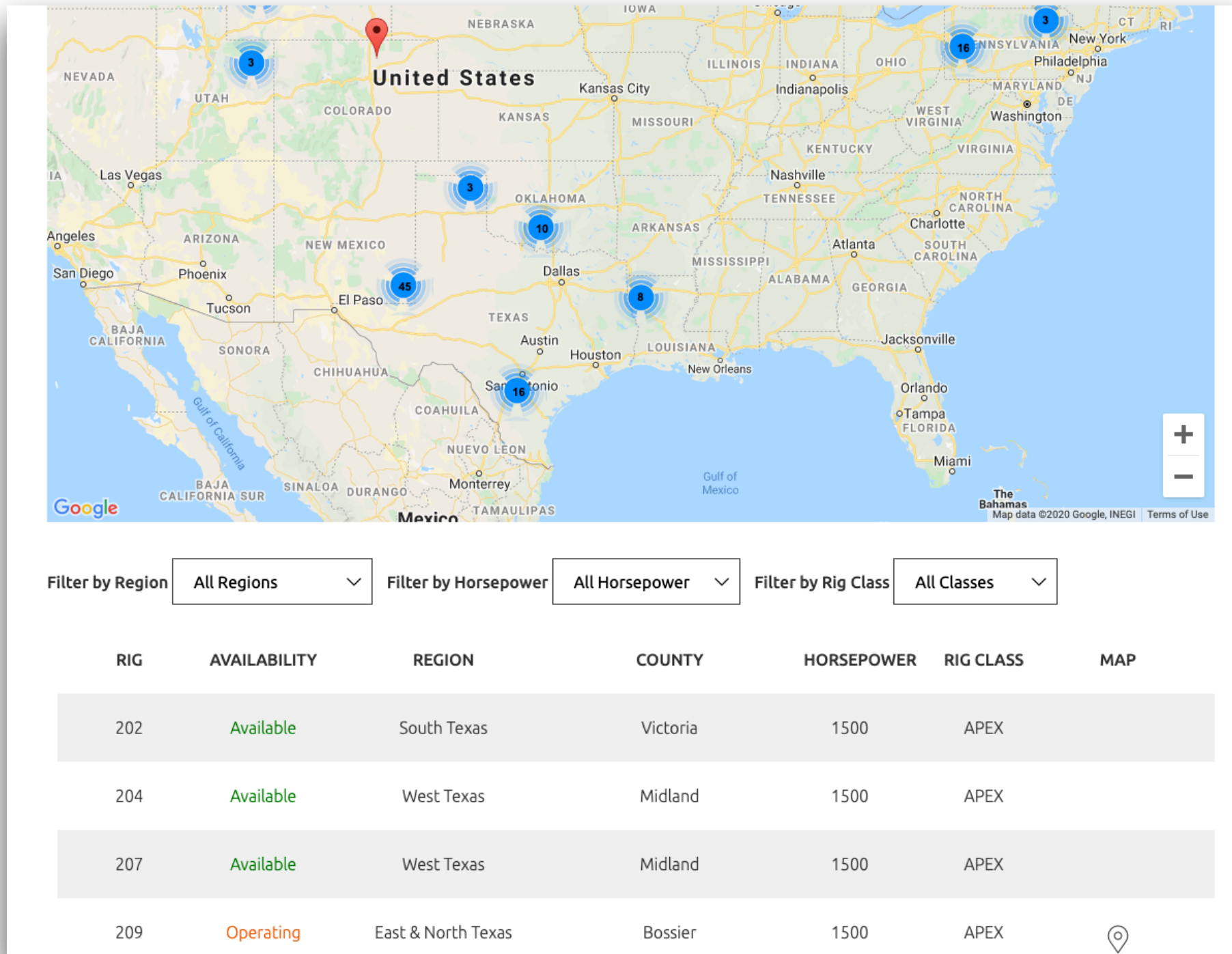
## *Web Scraping Project*



By: Paul Choi

# What's the site?

- We decided to scrape the [Patterson-UTI Energy rig locator](#) section of their site to collect data on the company's entire rig fleet





# Who is Patterson-UTI Energy?

Market Summary > Patterson-UTI Energy, Inc.  
NASDAQ: PTEN

+ Follow

**7.38** USD **+0.33 (4.68%)** ↑

Closed: Feb 7, 4:47 PM EST · Disclaimer  
After hours 7.38 0.00 (0.00%)

1 day 5 days 1 month 6 months YTD **1 year** 5 years Max



Open	6.96	Div yield	2.17%
High	7.44	Prev close	7.05
Low	6.87	52-wk high	16.27
Mkt cap	1.44B	52-wk low	6.87
P/E ratio	-		

→ [Financial news, comparisons and more](#)

- Patterson-UTI Energy (PTEN) is the second largest land drilling company in the US for oil & gas
- The company's primary business is land drilling (63% of revenues), with a secondary business of pressure pumping (e.g. "fracking")
- They place GPS sensors on their rigs and update their site daily to help customers and investors know the status of their rigs and where they are located

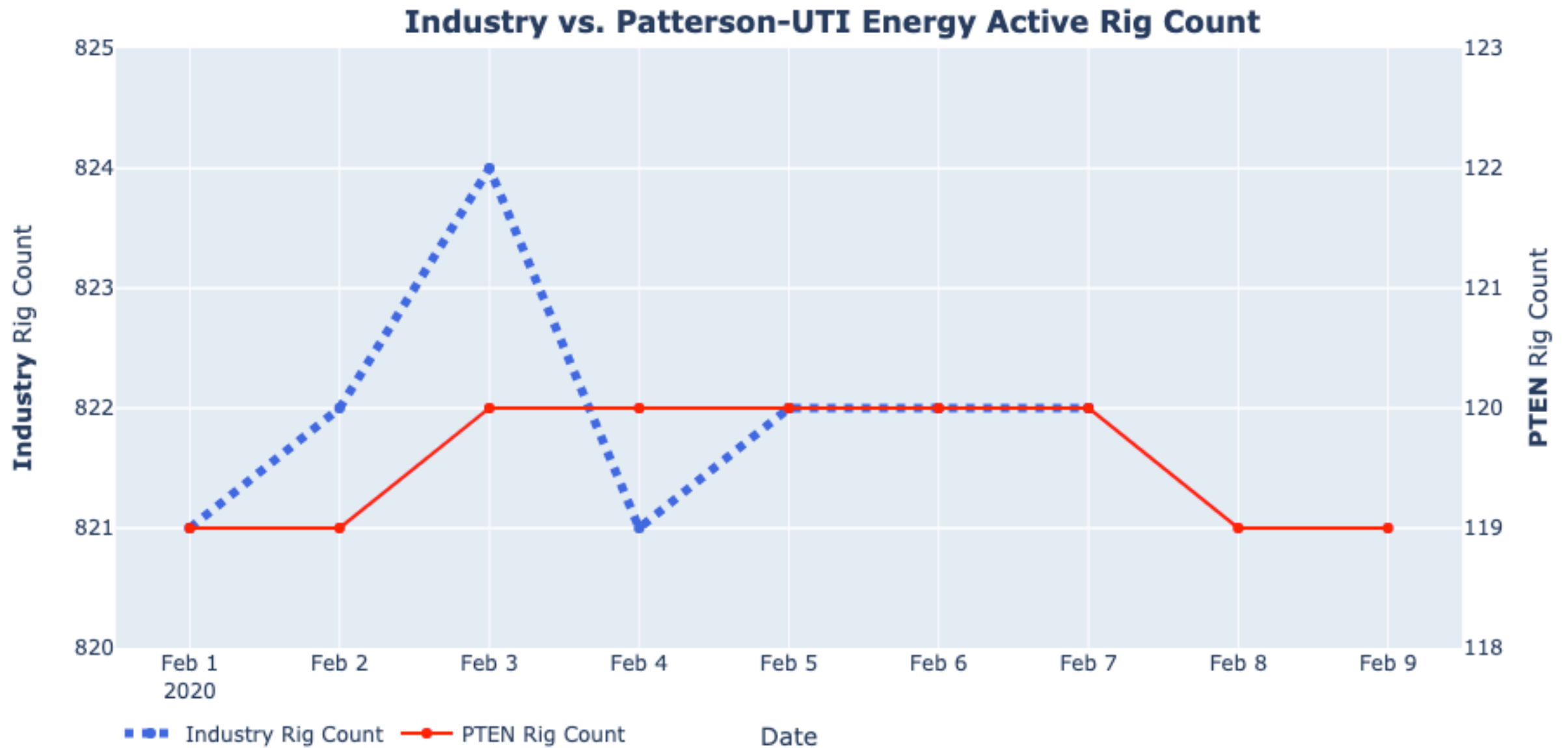
Source: [PTEN 2/6/2020 8-K](#)

# Why scrape this site?

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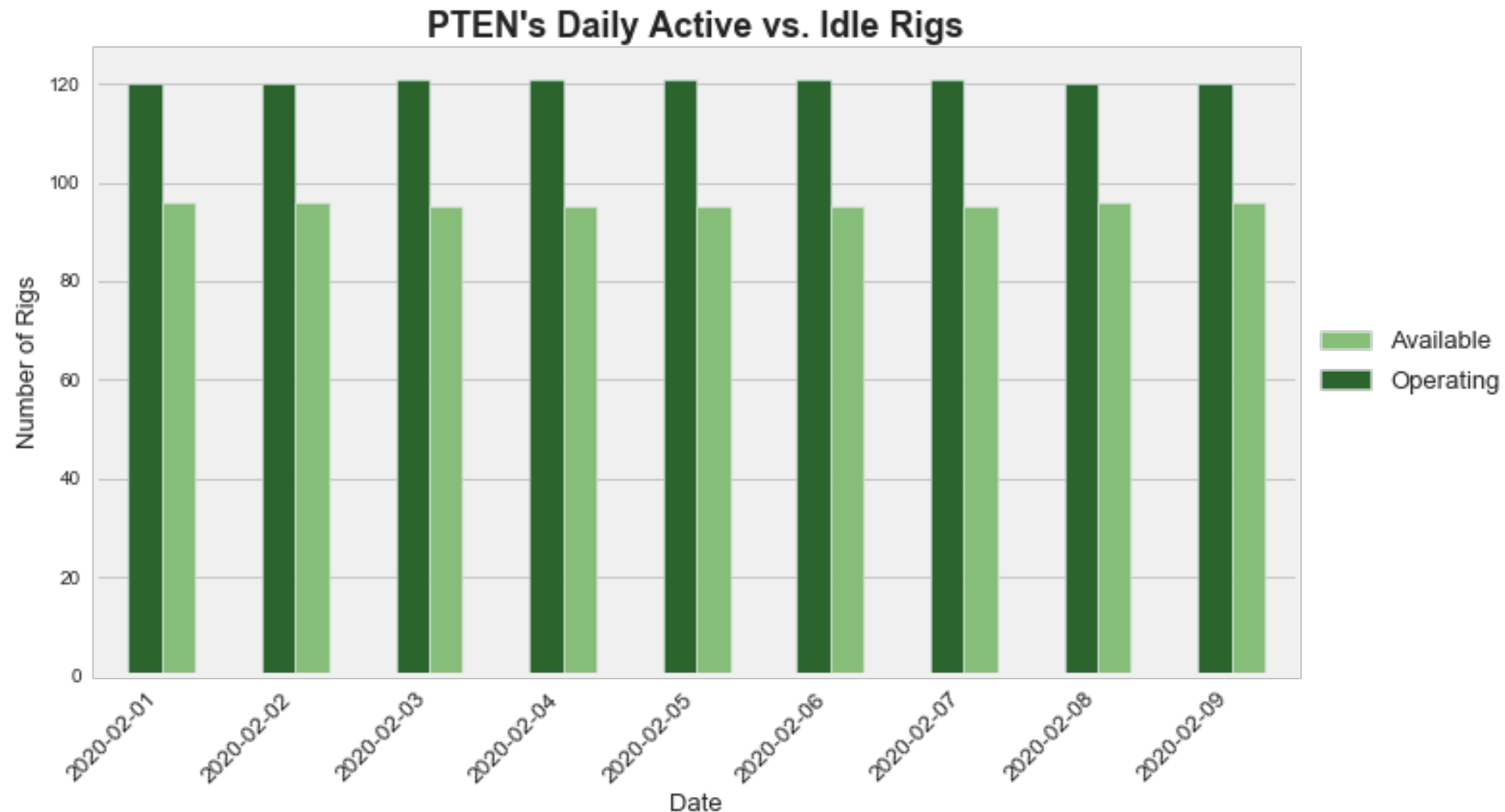
- Scraping this site daily and monitoring the changes in PTEN's rig fleet in real-time can give investors some confidence in whether or not:
  - **(1)** they can hit their rig activity guidance in the upcoming quarter, and / or
  - **(2)** confirm or disprove current market conditions for the company
- This is important because deviation from market expectations / sentiment can affect the company's near-term stock performance
- The whole point is to get ahead of this deviation, if it happens
- Some quick examples: [PTEN 4Q19 Earnings Call Transcript](#)

# Data Takeaways



Source: <https://www.enverus.com/dailyrigcount/>

# Data Takeaways

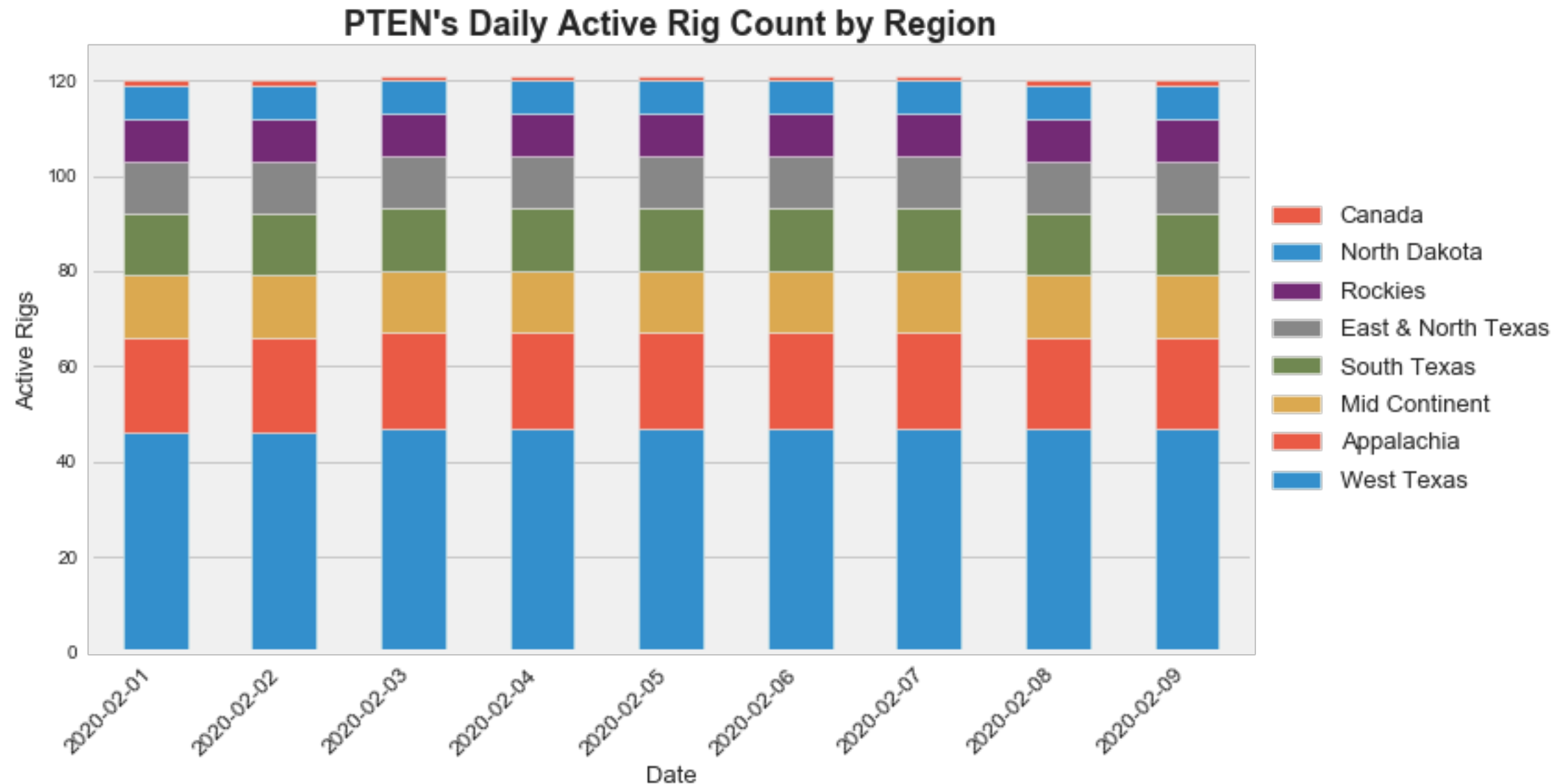


## PTEN 4Q19 Earnings Conference Call — Andy Hendricks, CEO

Despite falling activity early in the fourth quarter, we were encouraged as our average rig count improved in December for the first time in a year. Nonetheless, our average rig count for the fourth quarter fell to 123 rigs, as we experienced greater-than-expected fluctuations in rig activity, which also negatively impacted our drilling operating costs. To provide some perspective on the magnitude of fluctuation in our rig count, our count decreased a net of 10 rigs from the beginning to the end of the quarter. We stacked 23 rigs, primarily early in the quarter, of which, 10 rigs were later reactivated in the same quarter.

In total, we reactivated 13 rigs during the fourth quarter. These changes in our rig count within the quarter were highly unusual and substantially affected our rig operating cost. As mentioned, 10 rigs that were stacked early in the quarter were subsequently reactivated later in the quarter. On these rigs, we recognize both revenues and expenses related to the demobilization and subsequent mobilization.

# Data Takeaways

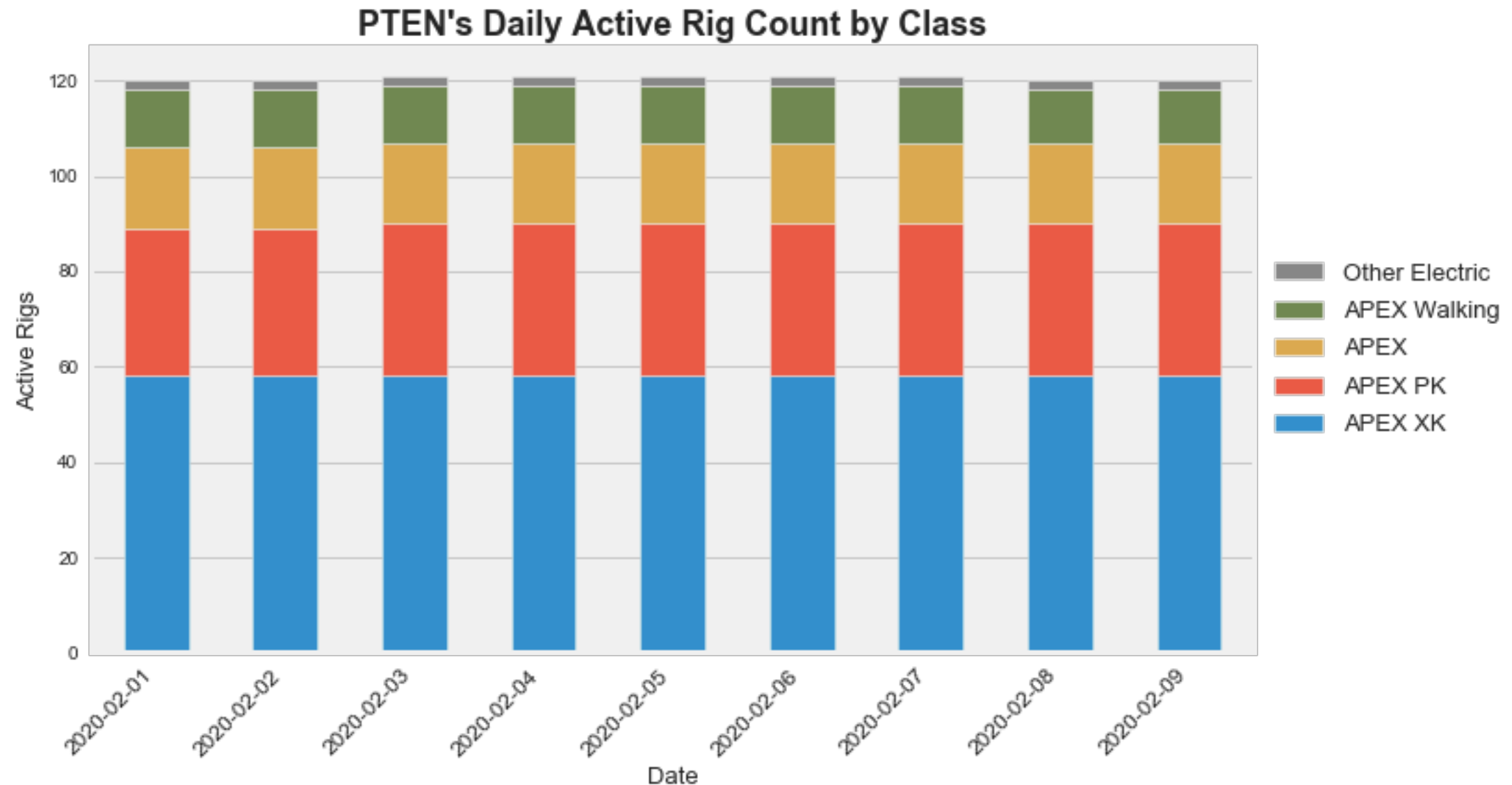


## PTEN 4Q19 Earnings Conference Call — Andy Hendricks, CEO

For the first quarter, we expect the level of geographic fluctuation in our rig count to remain relatively elevated, primarily as an improving rig count in the Permian will continue to offset softness in most other markets. In the Permian Basin, we believe super-spec utilization is starting to tighten. Currently, all of our APEX-XKs in the Permian are working and our last two available APEX PKs in the basin are contracted to go back to work in the first quarter.

- This is forward-looking guidance that we can track in real-time with this scrape

# Data Takeaways



## PTEN 4Q19 Earnings Conference Call — Andy Hendricks, CEO

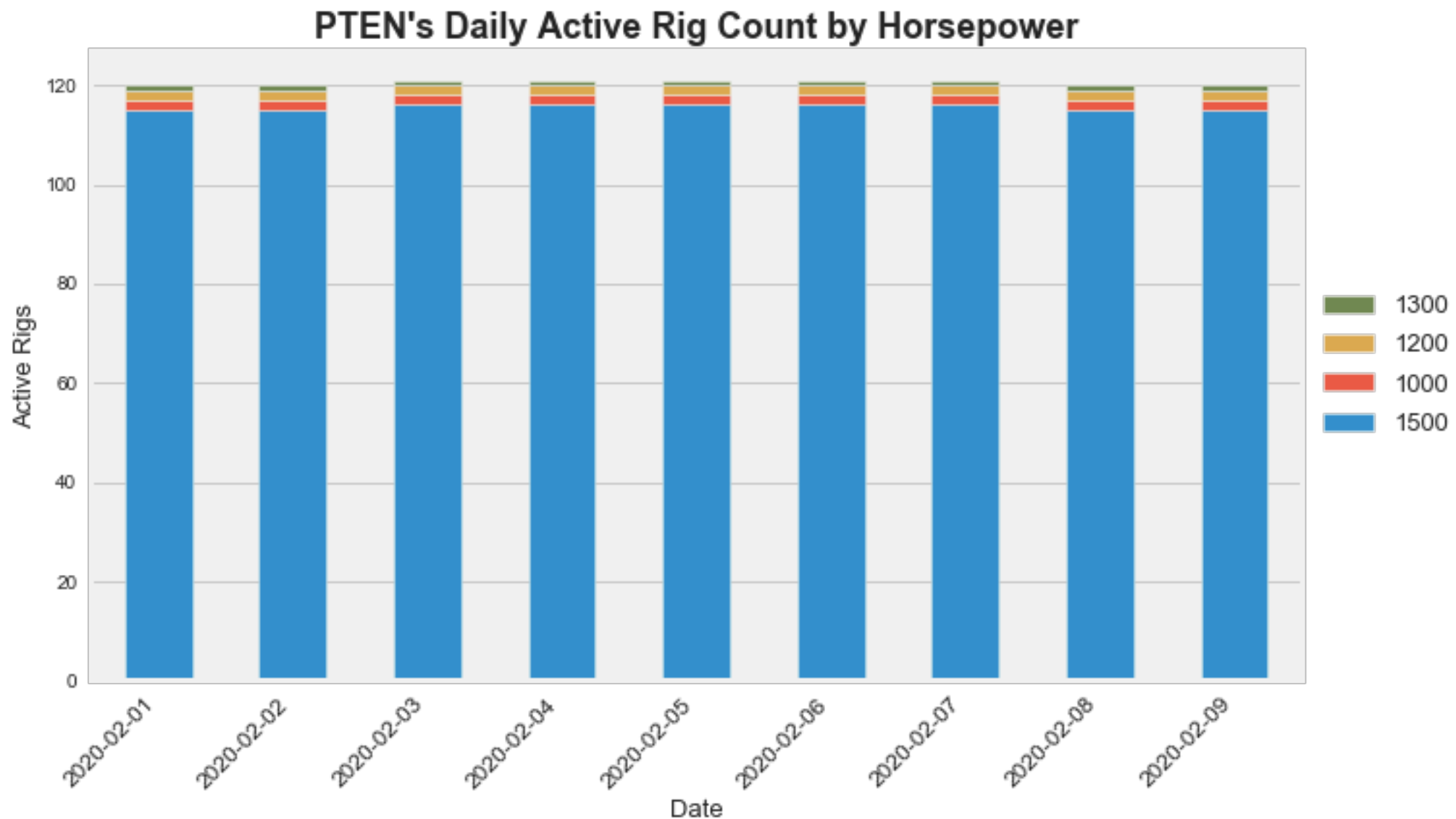
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# Data Takeaways

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## PTEN 4Q19 Earnings Conference Call — Andy Hendricks, CEO

The one transition we made in 2019 is when we said we were retiring the horsepower that we retired, then we, all of a sudden, had components that are available. Good components are still on pump trailers or blenders that we can use in the maintenance process. And so we've had cost savings in the range of, call it, \$6 million to \$8 million of capital cost savings because we were able to reuse some of them in 2019. We still think we'll be able to reuse more components in 2020.

# Final Thoughts

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- The insights from this data will be most impactful when scraping this data every day throughout the quarter
  - Collecting this data over time creates even more value when generating other metrics (e.g. Y/Y change, Q/Q change, etc)
- Scraping PTEN's daily rig fleet helps us understand the underlying fundamentals of their drilling business, however, we would need to make an assumption of their drilling day rates
- Just one tool to track the company from a data perspective (e.g. geo-location, proprietary rig broker data, etc), but at no cost