Great American Group

MAY 2020

Monitor
Oil & Gas

OIL ROCKED BY COVID-19, HIGH SUPPLY

UNPRECEDENTED PRICE VOLATILITY FOR CRUDE
WTI futures traded at negative values for the first time in history due to storage scarcity and a lack of oil demand

COVID-19 SHUTS DOWN GLOBAL ECONOMY
Oil demand falters as consumers limit travel and purchases, and as governments order businesses to close

RIG COUNT FALLS TO LOWEST LEVEL EVER
Drilling rig count declines to a record low due to falling oil prices driven by COVID-19 and high supply levels

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Deals are a moving target. A constantly shifting mix of people, numbers and timing. We're here to simplify this process for you. Our experts are dedicated to tracking down and flushing out the values you need even on the most complex deals, so you can leverage our hard-won knowledge to close the deal.

Overview

The outbreak of the novel coronavirus in Asia in early 2020 negatively impacted worldwide demand for crude oil and refined products. Uncertainty regarding when and to what extent the pandemic could be contained pushed the front-month West Texas Intermediate ("WTI") crude oil contract below $50 per barrel in early March 2020.

Simultaneously, negotiations between the Organization of Petroleum Exporting Countries ("OPEC") and Russia to raise and extend production cuts broke down on March 5, 2020, with Russia announcing it would not agree to restrictions on its production levels. In response, Saudi Arabia announced plans to increase production from around 9.5 million barrels per day to 12 to 13 million barrels per day by April, while also reducing export prices. The combination of these supply-and-demand developments sent crude prices down dramatically, with front-month WTI contracts trading below $20 per barrel at the end of March 2020.

As the virus spread, quarantines and stay-at-home measures were adopted all over the world, and travel between affected areas was severely restricted. Crude oil demand in April 2020 is estimated to be approximately 30% below year-ago levels. OPEC+, which includes OPEC, Russia, and various other oil-producing countries, announced plans to begin to cut upwards of 10 million barrels of production per day beginning in May 2020, but these actions are insufficient to offset the decrease in demand, resulting in elevated storage levels. Physical delivery requirements for expiring futures contracts combined with the supply-and-demand fundamentals created a "perfect storm" in late April 2020, sending the May WTI contract to a price of negative $37 per barrel the day before expiration – the first time the commodity future had ever traded at a negative value. WTI prices have remained extremely volatile, increasing by over 100% from late April to early May 2020. U.S. producers began to shut-in uneconomic wells as storage capacity became increasingly scarce and demand started to tick up as certain communities lifted stay-at-home restrictions. Front-month WTI was trading at approximately $25 per barrel as of May 7, 2020.

WTI prices are expected to rebound to $31 per barrel by year-end 2020 and to $43.50 per barrel by the end of 2021, but these forecasts are significantly below prior estimates that suggested oil prices would be well above $50 per barrel through 2021 and are generally below full-cycle breakeven costs for the majority of U.S. shale producers.

In response to the abrupt drop in commodity prices, at the end of the first quarter of 2020, U.S. exploration and production ("E&P") companies announced plans to decrease capital spending, generally in a range of 30% to 50% compared to initial forecasts. An earlier decrease in E&P capital spending had already resulted in a decline of over 25% in the overall U.S. rig count from the end of 2018 to the end of 2019, with the rig count remaining steady around those levels through early March 2020. The rig count then began an abrupt decline in response to the recently revised capital spending plans. Publicly traded oilfield service companies are bracing for activity levels to be down as much as 50% in the second quarter of 2020 on a sequential basis, and the chief executive officer of Schlumberger noted that he expects the second quarter of 2020 to be "the most uncertain and disruptive quarter the industry has ever seen." The U.S. rig count as of May 8, 2020 was 374, which represents a 62% decrease from year-ago levels. The recent count has eclipsed the lows of 2016 by 30 rigs and now sits at the lowest weekly level ever recorded, with further decreases expected over the coming weeks.

Natural gas prices decreased throughout 2019, as continued growth in production in the U.S. offset increased demand in the electric sector as well as higher liquified natural gas and pipeline exports. A mild winter, combined with steady production, sent front-month New York Mercantile Exchange prices below $2.00 per thousand cubic feet, an anomaly during the winter. March natural gas prices were approaching trough levels experienced over the past six years. Forecasts suggest prices will gradually increase through the shoulder season, then further improve over the back half of the year.

Rig Counts

U.S. RIG COUNT - MAY 8, 2020

	Current Week	Weekly Change	Prior Week	12-Month Change	12 Months Prior
Location					
Land	359	(33)	392	(605)	964
Inland Waters	0	0	0	(4)	4
Offshore	15	(1)	16	(5)	20
Total	374	(34)	408	(614)	988
Type					
Oil	292	(33)	325	(513)	805
Gas	80	(1)	81	(103)	183
Miscellaneous	2	0	2	2	0
Total	374	(34)	408	(614)	988
Directional	27	4	23	(44)	71
Horizontal	338	(36)	374	(534)	872
Vertical	9	(2)	11	(36)	45
Total	374	(34)	408	(614)	988
State					
Alaska	3	0	3	(6)	9
California	5	0	5	(10)	15
Colorado	8	0	8	(25)	33
Louisiana	38	(1)	39	(23)	61
New Mexico	70	4	66	(32)	102
North Dakota	20	(6)	26	(36)	56
Ohio	8	(1)	9	(8)	16
Oklahoma	13	(2)	15	(92)	105
Pennsylvania	23	0	23	(20)	43
Texas	173	(28)	201	(312)	485
Utah	0	0	0	(7)	7
West Virginia	7	0	7	(14)	21
Wyoming	4	0	4	(26)	30

	Current Week	Weekly Change	Prior Week	12-Month Change	12 Months Prior
Major Basins					
Ardmore Woodford	3	(1)	4	(2)	5
Arkoma Woodford	0	0	0	(3)	3
Barnett	2	0	2	1	1
Cana Woodford	4	0	4	(43)	47
DJ-Niobrara	7	0	7	(22)	29
Eagle Ford	27	(3)	30	(47)	74
Granite Wash	2	0	2	(6)	8
Haynesville	32	0	32	(20)	52
Marcellus	30	0	30	(33)	63
Mississippian	0	0	0	(6)	6
Permian	198	(21)	219	(259)	457
Utica	8	(1)	9	(9)	17
Williston	20	(6)	26	(36)	56

Source: Baker Hughes

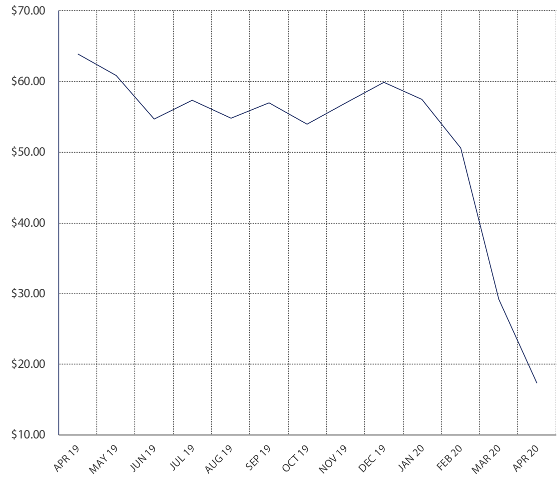
The U.S. drilling rig count for the week of May 8, 2020 totaled 374 rigs, which represents decreases of 34 and 614 units versus the prior week and year, respectively. The recent figure represents the lowest weekly rig count ever recorded by Baker Hughes, dating back to 1940.

Oil rigs decreased 33 and 513 units versus the prior week and year, respectively, while natural gas rigs decreased one unit and 103 units versus the prior week and year, respectively.

The count in the major U.S. oil- and gas-producing basins either decreased or remained flat versus the prior week. Year-over-year, all basins registered large decreases, with the exception of the Barnett region, which experienced a one-rig increase.

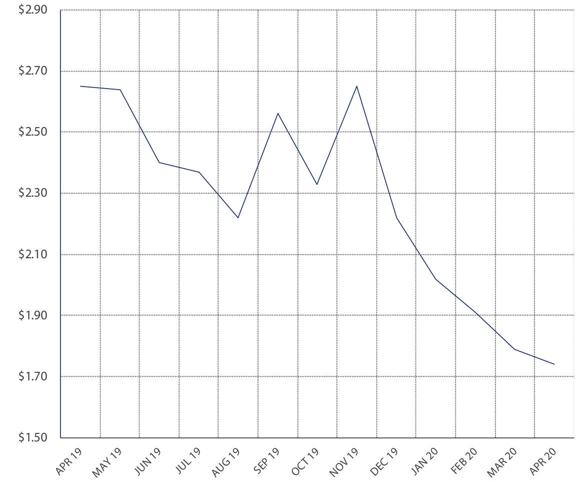
Oil and Natural Gas Prices

1 Average Monthly WTI Crude Oil Prices April 2019 to April 2020 ($ Per Barrel)



Source: U.S. Energy Information Administration

2 Average Monthly Henry Hub Natural Gas Prices April 2019 to April 2020 ($ Per MMBTU)



Source: U.S. Energy Information Administration

Texas Drilling Activity

Texas oil and gas completions largely trended upward at the end of 2019 and into early 2020 before declining in March and April 2020 as geopolitical events and the coronavirus pandemic impacted operators in the U.S. Operating rigs, meanwhile, have declined for several months as E&P companies reduced capital expenditures. The pandemic hastened this trend in March and April 2020.

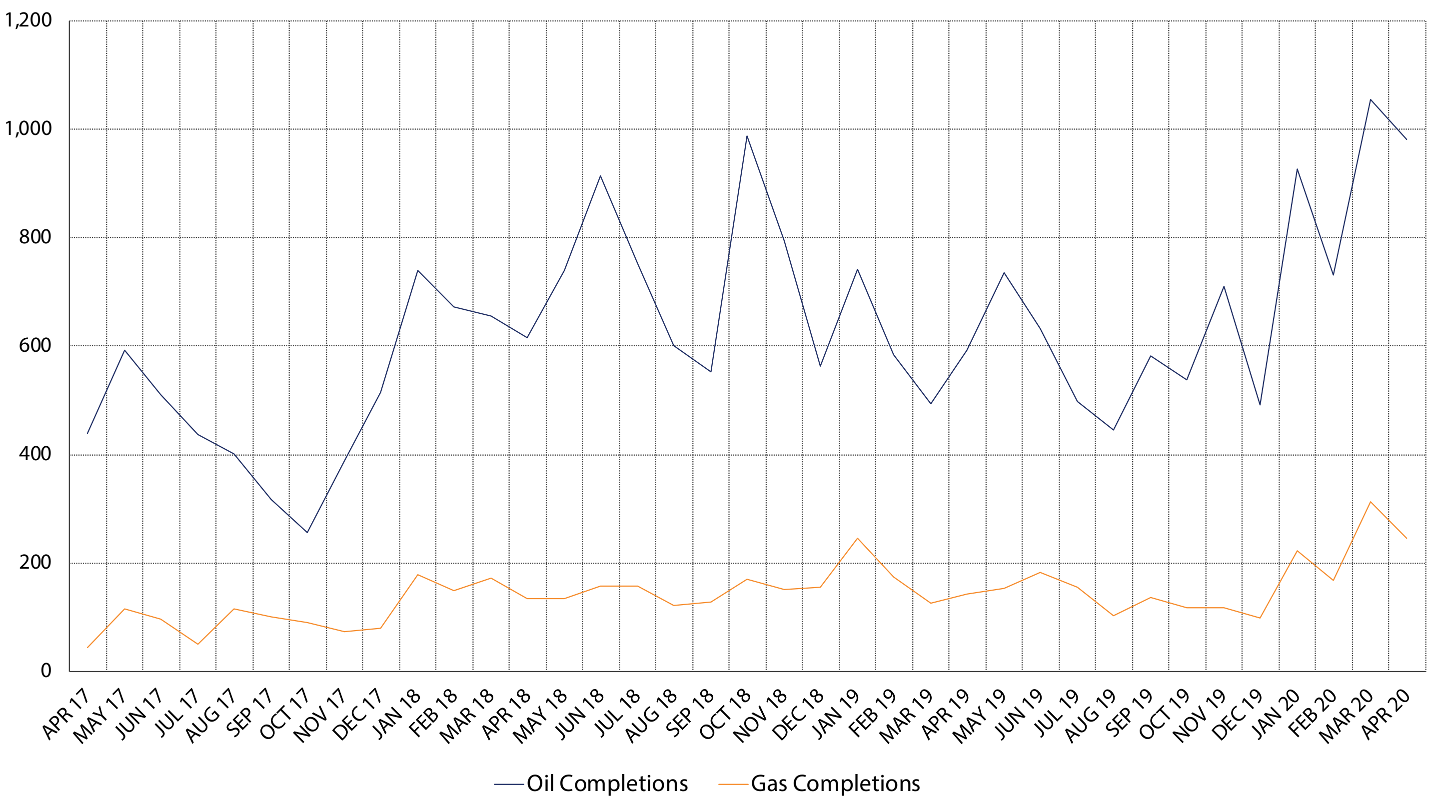
3 Texas - Total Completions versus Rigs
April 2017 to April 2020

Source: Railroad Commission of Texas

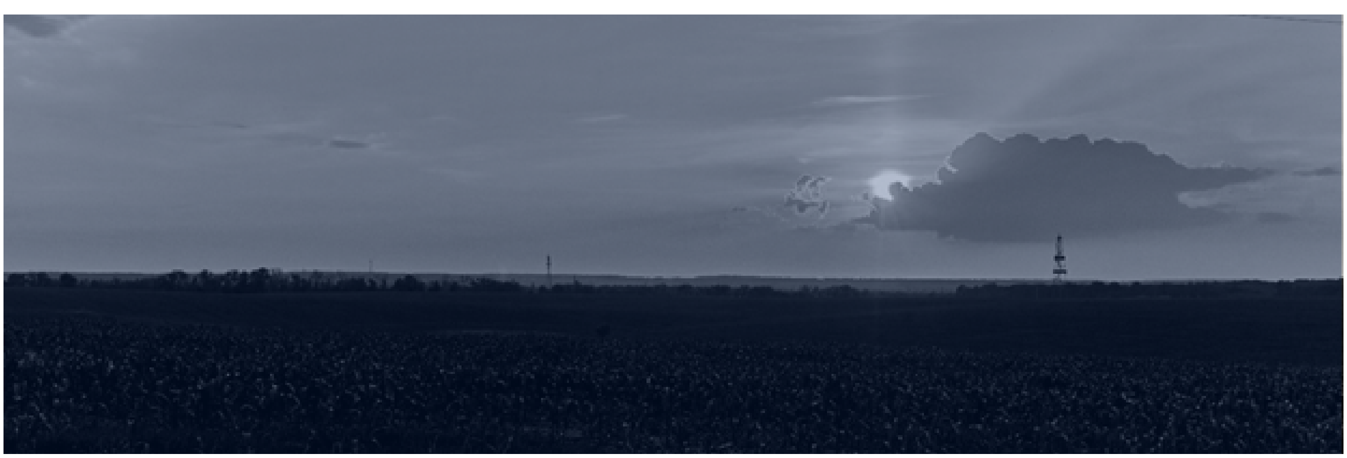
Texas Drilling Activity

Texas oil and gas completions largely rose in the last quarter of 2019 and in the first two months of 2020 before declining in March and April 2020 as geopolitical events and the coronavirus pandemic impacted operators in the U.S. Gas completions mirrored oil completions, albeit with less extreme swings.

4 Texas - Oil versus Gas Completions
April 2017 to April 2020



Source: Railroad Commission of Texas

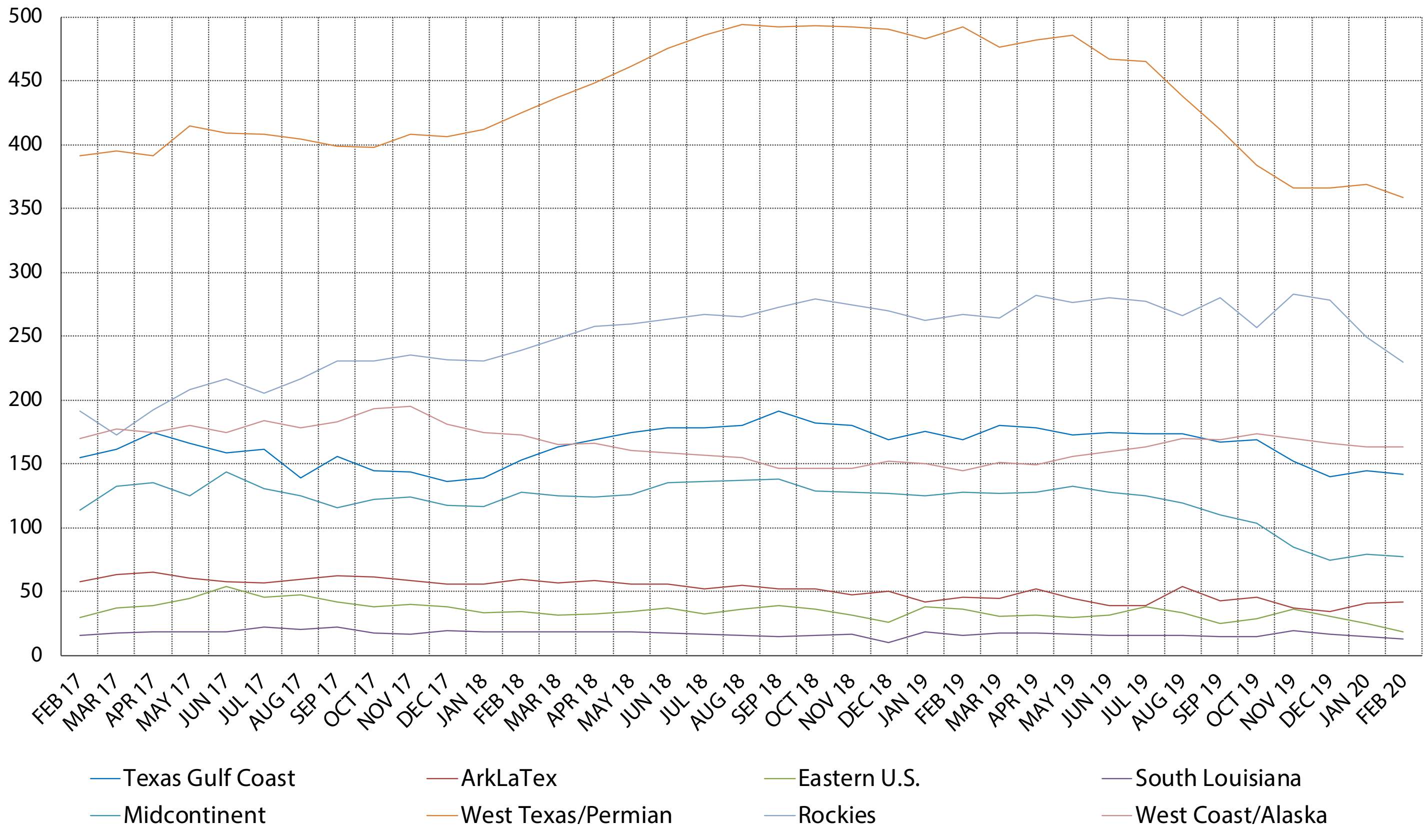


Well Service Rigs

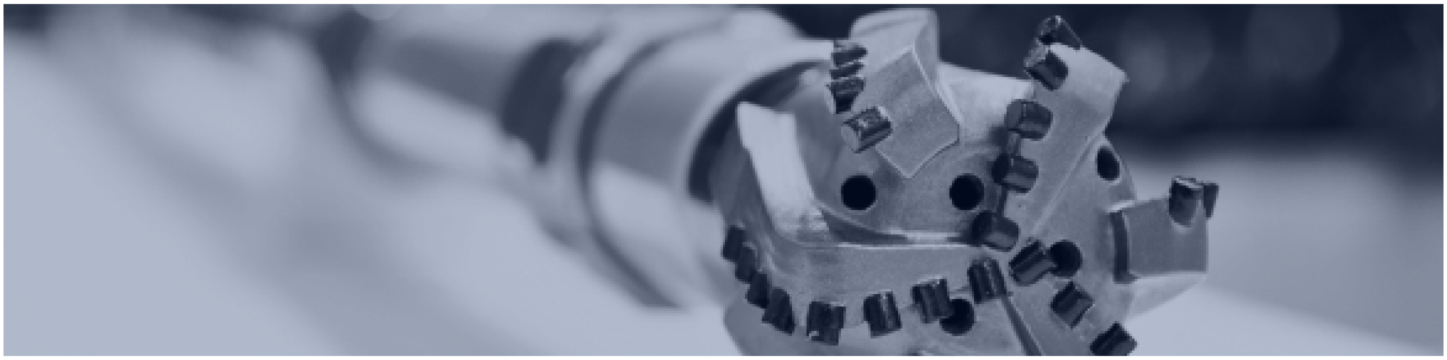
Well service rig counts through February 2020 are shown by region below. The well service rig count for all regions as of February 2020 decreased versus February 2019, 2018, and 2017.

The West Texas/Permian Basin region continues to lead the count; however, the region's count has fallen drastically over the past year. The Permian Basin accounts for approximately one-third of the total count.

5 Well Service Rigs
February 2017 to February 2020



Source: Association of Energy Service Companies

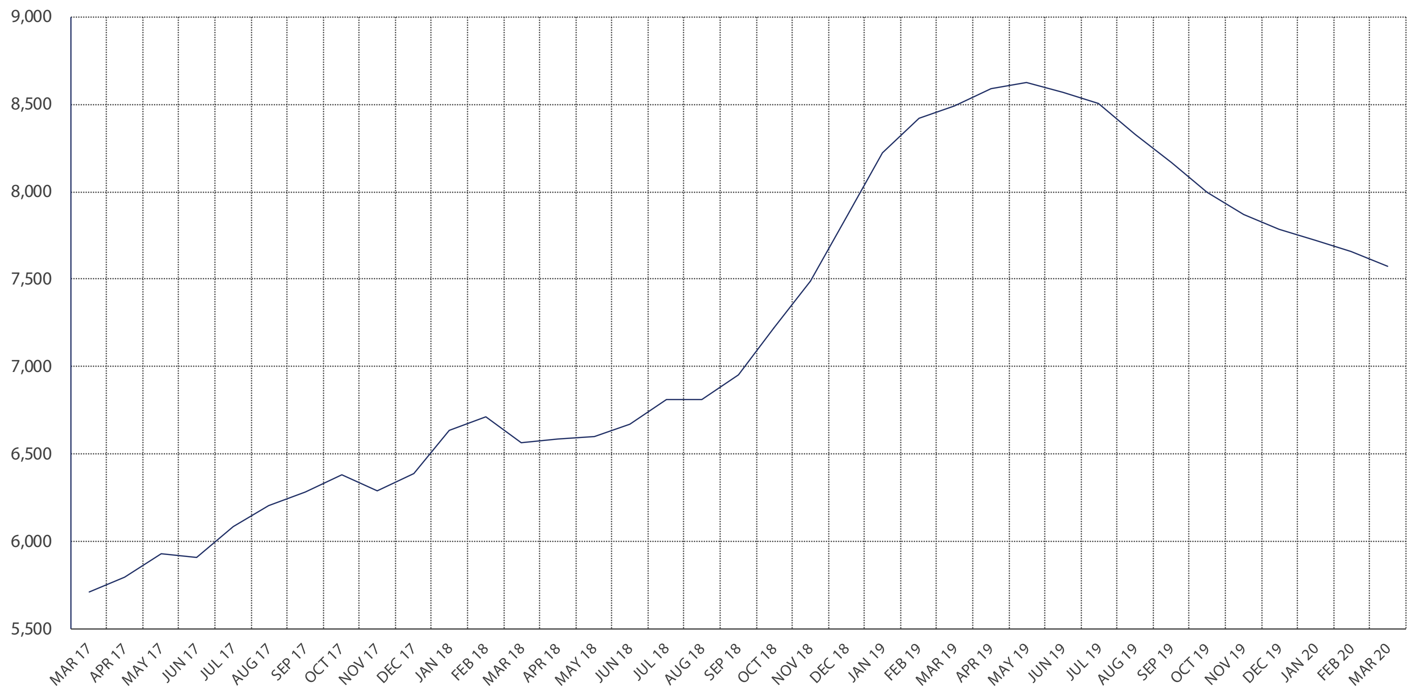


Drilled But Uncompleted Wells

The amount of drilled but uncompleted wells ("DUCs") plateaued in mid-2019, then began to decline through the end of the year and into early 2020. This represents a departure from the trend of steady increases in uncompleted wells since late 2016.

The DUC count decrease has lagged behind the rig count decline, as operators continued to complete wells at a steady rate for most of 2019, even as drilling activity fell off. The decline in completions during the fourth quarter of 2019 mimicked the rig count declines and flattened the DUC count. DUCs are concentrated in Texas, primarily in the Permian and Eagle Ford basins.

6 Drilled But Uncompleted Wells
March 2017 to March 2020



Source: U.S. Energy Information Administration

Monitor Information

GA's *Oil & Gas Monitor* relates information covering the oil and gas sectors, including industry trends and their relation to our valuation process. Due to the dynamic nature of the oil and gas industry, timely reporting is necessary to understand an ever-changing marketplace. GA strives to contextualize important indicators in order to provide a more in-depth perspective of the market as a whole. GA welcomes the opportunity to make our expertise available to you in every possible way. Should you need any further information or wish to discuss recovery ranges for a particular segment, please feel free to contact your GA Business Development Officer.

The information contained herein is based on a composite of GA's industry expertise, contact with industry personnel, liquidation and appraisal experience, and data compiled from a variety of respected sources believed to be reliable. GA does not make any representation or warranty, expressed or implied, as to the accuracy or completeness of the information contained in this issue. Neither GA nor any of its representatives shall be liable for use of any of the information in this issue or any errors therein or omissions therefrom.

Experience

GA has worked with and appraised a number of companies within the oil and gas industry. GA has built a quality team to deliver both tangible and intangible valuations across the oil and gas platform.

GA's extensive experience includes valuations across a broad range of assets, as well as a variety of services, including:

Machinery, equipment, and other inventory valuations

- Pressure pumping units
- Drilling and well service equipment
- Frac tank rental/manufacturing
- Well logging tools
- Pipeline equipment
- Compression equipment
- Rental tools
- Transportation assets
- Wire line services
- Saltwater disposal wells
- Valves
- Tubular goods

Corporate Advisory Services

- Fairness Opinions and Solvency Opinions
- Buy-side, Sell-side, and Merger advisory services
- Deal Screening and Target Identification
- Quality of Earnings analysis and reports
- Market-sizing and commercial due diligence
- Operational, financial, and technical due diligence
- Complex financial modeling
- 100-day operating plans
- Interim management (CEO/CFO/CRO/COO)
- Transaction Support ("arms and legs")

Experience

Valuation Services

- Fair Value Measurements & Disclosures (ASC 820)
- Intangibles, Goodwill and Other (ASC 350)
- Business Combinations (ASC 805)
- Derivatives & Hedging (ASC 815)
- Financial Instruments (ASC 825)
- Long-lived asset impairment (ASC 360)
- Stock Compensation (ASC 718)
- Property transferred for services (IRC 83 (b))
- Stock purchases treated as asset acquisitions (IRC 338)
- Compensation (IRC 409A)
- Transfer Pricing (IRC 482)

In addition, GA maintains experts within the oil and gas industry, such as Jon Donnel, Dan Daitchman, and Taylour Bennett.

Jon Donnel, based in Houston, Texas, serves as Managing Director of Oilfield Services with B. Riley Financial's Great American Group, specializing in oil and gas company appraisals and asset valuations. With over 20 years of experience across the energy sector value chain, Jon has held corporate roles for oilfield service and integrated oil and gas companies, as well as finance positions for an energy-focused investment bank and an accounting firm specializing in litigation support services. Prior to joining the firm, Jon was director of investor relations at Weatherford International, an integrated oilfield services provider with operations in over 80 countries, as well as a director of equity research at Scotia Howard Weil where he covered over 50 companies across the oilfield services and utility sectors. He previously held roles in downstream investment appraisals and upstream financial planning and budgeting with ConocoPhillips. Jon earned both his MBA and BA in Economics and Managerial Studies from Rice University.

Dan Daitchman is a Director in Great American Group's Corporate Advisory & Valuation Services practice. He has over 12 years of financial advisory and consulting experience helping clients resolve complex financial issues. He specializes in transaction and advisory services related to enterprises, derivatives, fractional equity interests, pre-deal diligence, and intangible assets. These services are used for strategic planning, transaction financing, financial statement reporting, capital raising, tax, litigation, bankruptcy, fairness opinions, solvency opinions, and merger and acquisition advisory. Prior to joining Great American Group, Dan spent four years as a financial analyst with Hilco Valuation Services and one year as an analyst in the Alternative Investment Products group at US Bancorp. Dan earned his BS in Finance and Real Estate from Marquette University and an MBA in Finance from DePaul University. He is also an Accredited Senior Appraiser with the American Society of Appraisers.

Taylour Bennett has valued more than $2 billion in assets and businesses, providing valuation, advisory, and litigation services to clients. Throughout his career, Taylour has specialized in valuing and providing services to firms within the energy complex. Taylour is actively involved in Young Professionals in Energy and is working toward his designation as an Accredited Senior Appraiser, and as a Chartered Financial Analyst. Prior to joining Great American Group, Taylour served as a finance intern at Chick-Fil-A. Taylour received his BA and MS in Finance from Texas Tech University.

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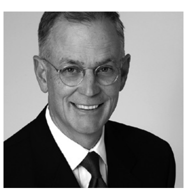

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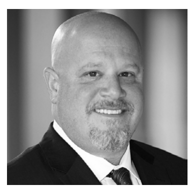

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Great American Group is a leading provider of asset disposition solutions and valuation and appraisal services to a wide range of retail, wholesale, and industrial clients, as well as lenders, capital providers, private equity investors, and professional services firms. In addition to the *Oil & Gas Monitor*, GA also provides clients with industry expertise in the form of monitors for the construction and transportation, chemicals and plastics, metals, food, and building products sectors, among many others. For more information, please visit www.greatamerican.com.

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