Monitor
Oil & Gas

OIL PRICES SURGE AS DEMAND RISES

INVENTORY LEVELS REMAIN LEAN
Companies work to keep supplies in line with demand, while supply constraints limit vendors’ ability to fill some orders.

OIL DEMAND RETURNS BUT COVID-19 LINGERS
Economic recovery continues but breakthrough COVID-19 cases dampen hopes for a rapid return to normal.

RIG COUNT NEARS THE 500-UNIT MARK
The U.S. drilling rig count rises to 491 rigs to reach its highest level since April 2020, when the count was 565 units.

AUGUST 2021
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.
NOLVs: NOLVs are flat to slightly up over the first half of 2021. This is primarily related to higher commodity prices for crude oil, natural gas, and steel, as well as a limited market recovery as travel and general restrictions related to COVID-19 eased somewhat in early 2021. Companies have also managed to lower inventory levels, which, coupled with improved sales activity, has led to lower weeks of supply.

Sales Trends: Sales have improved in recent months as the economy recovers from COVID-19; however, overall sales versus the prior Oil & Gas Monitor are down, as a portion the prior sales figures included pre-pandemic sales, and sales were subject to inertia and backlogs during the first two months of the pandemic. Uncertainty surrounding global demand persists due to COVID-19 variants.

Gross Margin: Gross margins have been slightly lower over the first half of 2021, driven primarily by higher freight and material costs coupled with customer price sensitivity. Companies continue to focus on reducing and managing operating costs to move revenue to the bottom line.

Inventory: Inventory has decreased as companies continue to focus on managing inventory levels against the current market demand and reduced activity levels. Many companies are also experiencing supply constraints as vendors are unable to meet demand, particularly with pipe inventory. Shipping costs and delays have also impacted the level of inventory carried by companies.
**Trend Tracker - Machinery & Equipment**

<table>
<thead>
<tr>
<th>Trends (Since Publication of Prior Monitor in January 2021)</th>
</tr>
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<tbody>
<tr>
<td><strong>Used Pricing</strong></td>
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<tr>
<td><strong>Used Trade Movement</strong></td>
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<tr>
<td><strong>OEM Pricing</strong></td>
</tr>
<tr>
<td><strong>Technological Advancement</strong></td>
</tr>
<tr>
<td><strong>Auction Activity</strong></td>
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</table>

- **Used Pricing/Movement**: The current market pricing for used equipment remains stagnant as activity and demand remain low, despite steady increases in oil prices. The U.S. rig count has increased but remains well below levels just before the pandemic. There continues to be a surplus of used equipment in the market spurred by corporate spending freezes, bankruptcy filings, and distress-related mergers or buyouts.

- **OEM Pricing**: The pandemic, coupled with a lack of demand for new equipment, has negatively affected OEM pricing. In general, new equipment orders are down and pricing is discounted. Although the economy opened up slightly in the spring and summer of 2021, OEM orders remain slow as the industry works through an excess supply of used equipment. Due to the Delta COVID-19 variant, new orders could remain stagnant throughout the remainder of 2021, which could hold down prices.

- **Technological Advancement**: There is a continued emphasis on industry participants to utilize new technology already available, most notably duel fuel and electric fracturing pump equipment. The industry continues to trend toward cost saving and efficiency practices that can yield higher profits throughout the life cycle of a well, such as the use of advanced software solutions, automation, and artificial intelligence.

- **Auction Activity**: While auction activity has increased during the first half of 2021, many of the sales have been limited to online channels, mostly due to restrictions and less frequent travel connected to the COVID-19 pandemic. However, the overall level of in-person auctions has increased since January 2021. Sales have seen a mix of older, surplus assets being retired, as well as some late-model assets. Auction activity is generally infrequent.
Overview

Americans have taken to the sky and hit the road this summer after a year of lockdowns related to the COVID-19 pandemic. Passenger traffic at U.S. airports in July 2021 was up over 200% versus a year ago. In addition, traffic on U.S. roads is near pre-pandemic levels.

The flurry of human activity boosted the price of West Texas Intermediate (“WTI”) crude oil, the U.S.’s benchmark grade of crude, to over $72 per barrel in July, a 78% increase versus July 2020 and a massive improvement versus April 2020, when the price of WTI averaged $16.55 per barrel as lockdown measures took hold and people sheltered in place to avoid contracting COVID-19. In addition, the rising demand for gasoline has sent the average U.S. price of regular gasoline to $3.14 per gallon and to a whopping $4.30 per gallon in California.

Nonetheless, the economic optimism that took hold this spring and summer thanks to the availability of COVID-19 vaccines has been dampened by the quickly evolving novel coronavirus. New disease variants have arisen, including the Delta variant, which medical experts say is more contagious than previous versions of the virus and has the ability to break through the defenses provided by vaccines. However, experts note that the vaccines generally help people avoid the worst effects of the virus and will likely keep them out of the hospital. The outlook for the oil and gas industry largely hinges on the continued effectiveness of the vaccines and the outlook for disease variants, as future lockdowns and a reduction in economic activity could reduce demand for the industry’s products.

Despite the strong price of oil, as well as natural gas, which averaged $3.84 per million British thermal units in July 2021, U.S. producers continue to exert capital discipline and have refrained from massively increasing the number of active drilling rigs. The drilling rig count averaged 483 units in July 2021, which represents a large increase versus a year ago. However, the count remains well below pre-pandemic levels. The rig count averaged 771 units in March 2020, the month the pandemic was officially declared.

The U.S. active frac spread count, a primary indicator of completion activity, dropped from over 300 in March 2020 to as low as 45 by mid-May 2020 following the decline in front-month oil prices. The frac spread count hit a low of 41 in February 2021 when temperatures plummeted in Texas and Oklahoma, which shut in wells, limited mobility, and led to a spike in natural gas prices. Active frac spreads increased to 243 at the end of July 2021, down about 20% from the end of 2019. In comparison, the U.S. rig count is down almost 40% over the same period.

The Organization of Oil Exporting Countries (“OPEC”) and a group of other oil-producing countries led by Russia, collectively referred to as OPEC+, has agreed to put more oil on the market as demand ramps up, which could keep a lid on oil prices. The OPEC+ deal, reached in July 2021, stipulates that the group will increase production by 400,000 barrels per day each month through the end of 2022. The deal involved a compromise between OPEC members Saudi Arabia and the United Arab Emirates (“UAE”), which had argued for a higher baseline production level for the UAE than Saudi Arabia had originally proposed, with the public disagreement causing short-term volatility in commodity prices. The deal represents a reversal from the past year and a half, when OPEC+ cut production to stabilize oil prices as worldwide oil demand fell dramatically due to lockdowns and economic impacts resulting from COVID-19.
## Rig Counts

### U.S. RIG COUNT - AUGUST 6, 2021

<table>
<thead>
<tr>
<th>Location</th>
<th>Current Week</th>
<th>Weekly Change</th>
<th>Prior Week</th>
<th>12-Month Change</th>
<th>12 Months Prior</th>
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<td>473</td>
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<td>1</td>
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<tr>
<td>Total</td>
<td>491</td>
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<table>
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<tr>
<th>Type</th>
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<th>Weekly Change</th>
<th>Prior Week</th>
<th>12-Month Change</th>
<th>12 Months Prior</th>
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<tr>
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<td>103</td>
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<td>Miscellaneous</td>
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<td>1</td>
<td>1</td>
<td>(1)</td>
<td>2</td>
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<tr>
<td>Total</td>
<td>491</td>
<td>3</td>
<td>488</td>
<td>244</td>
<td>247</td>
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</table>

<table>
<thead>
<tr>
<th>Directional</th>
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<th>Prior Week</th>
<th>12-Month Change</th>
<th>12 Months Prior</th>
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<tr>
<td>Vertical</td>
<td>15</td>
<td>(2)</td>
<td>17</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>491</td>
<td>3</td>
<td>488</td>
<td>244</td>
<td>247</td>
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### Major Basins

<table>
<thead>
<tr>
<th>Basins</th>
<th>Current Week</th>
<th>Weekly Change</th>
<th>Prior Week</th>
<th>12-Month Change</th>
<th>12 Months Prior</th>
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<tr>
<td>Ardmore Woodford</td>
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<tr>
<td>Permian</td>
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<td>243</td>
<td>121</td>
<td>122</td>
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<tr>
<td>Utica</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Williston</td>
<td>19</td>
<td>0</td>
<td>19</td>
<td>8</td>
<td>11</td>
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</table>

The U.S. drilling rig count for the week of August 6, 2021 totaled 491 rigs, which represents an increase of three units versus the prior week and an increase of 244 units versus the prior year. In the August 6, 2021 count, oil rigs totaled 387 units versus 103 units for natural gas. The count for oil rigs increased two and 211 units versus the prior week and year, respectively, while the count for natural gas rigs remained unchanged versus the prior week and increased 34 units versus the prior year.

The rig count has increased significantly since a pandemic-induced record low count of 244 rigs during the week of August 14, 2020. However, the current count remains well below pre-pandemic levels. For instance, the average count for March 2020, when the pandemic was officially declared, was 771 rigs.
Oil and Natural Gas Prices

1. Average Monthly WTI Crude Oil Prices
   July 2020 to July 2021 ($ Per Barrel)

2. Average Monthly Henry Hub Natural Gas
   Prices July 2020 to July 2021 ($ Per MMBTU)

Source: EIA
Texas Drilling Activity

The number of drilling rigs operating in Texas, the U.S.'s top oil-producing state, dropped significantly as the COVID-19 pandemic took hold in March 2020. Total completions dropped as well. The rig count has increased gradually since September 2020 as the economy reopened.

Texas - Total Completions versus Rigs
July 2019 to July 2021

Source: Railroad Commission of Texas
Note: (1) Includes new drill, re-enter, and re-completions
Texas Completion Activity

After decreasing throughout the second half of 2020 due to the pandemic-related economic impacts, Texas oil and gas completions have largely been mixed on a monthly basis; however, the trend for gas completions has been slightly upward since April 2021.

Texas - Oil versus Gas Completions¹
July 2018 to July 2021

Source: Railroad Commission of Texas

Note: (1) Includes new drill, re-enter, and re-completions
Active well service rigs totaled 950 rigs in May 2021, the highest total since the start of the COVID-19 pandemic in March 2020, according to data from the Energy Workforce & Technology Council ("EWTC"). The May 2021 count has more than doubled since a pandemic-induced low of 456 in April 2020, the EWTC noted.

The count for every region has increased over the past year, with the West Texas/Permian Basin region, the top oil-producing region in the U.S., increasing 129% since May 2020. The West Texas/Permian Basin region led the count with 319 rigs, followed by the Rocky Mountain region with 204 rigs.
Drilled But Uncompleted Wells

A high level of drilled but uncompleted wells ("DUCs") can impact the size and timing of the domestic oil supply response to a continued or sudden rise in oil prices even without large changes in the number of active drilling rigs. Total U.S. DUCs have declined significantly over the past year as exploration and production companies have shifted from drilling to completion activity in order to maintain production while total capital budgets remain constrained.
Monitor Information

B. Riley Advisory Services’ 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. B. Riley Advisory Services strives to contextualize important indicators in order to provide a more in-depth perspective of the market as a whole. B. Riley Advisory Services 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 B. Riley Advisory Services Business Development Officer.

The information contained herein is based on a composite of B. Riley Advisory Services’ industry expertise, contact with industry personnel, liquidation and appraisal experience, and data compiled from a variety of respected sources believed to be reliable. B. Riley Advisory Services does not make any representation or warranty, expressed or implied, as to the accuracy or completeness of the information contained in this issue. Neither B. Riley Advisory Services 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

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

B. Riley Advisory Services’ extensive experience includes valuations across a broad range of assets 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

TRANSACTION 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, B. Riley Advisory Services 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 Advisory Services, 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 with B. Riley Advisory Services. 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 B. Riley Advisory Services, 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 B. Riley Advisory Services, 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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About B. Riley Advisory Services

B. Riley Advisory Services works with lenders, law firms, private equity sponsors and companies of all types. Our Advisory Services are a unique mix of Valuation and Appraisal Services including asset-based lending (ABL) Valuations; Restructuring and Turnaround Management; Forensic Accounting and Litigation Support; Operations Management; Compliance, Risk & Resilience Services; and Transaction Support Services including Due Diligence and Quality of Earnings Reviews. B. Riley Advisory Services is the trade name for GlassRatner Advisory & Capital Group, LLC, Great American Group Advisory & Valuation Services, LLC, Great American Group Machinery & Equipment, LLC, and Great American Group Intellectual Property, LLC.
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B. Riley Financial ("B. Riley") provides collaborative solutions tailored to fit the capital raising and business advisory needs of its clients and partners. B. Riley operates through several subsidiaries that offer a diverse range of complementary end-to-end capabilities spanning investment banking and institutional brokerage, private wealth and investment management, financial consulting, corporate restructuring, operations management, risk and compliance, due diligence, forensic accounting, litigation support, appraisal and valuation, auction and liquidation services. B. Riley Financial is headquartered in Los Angeles with offices across the U.S. as well as an international presence.

In February 2021, B. Riley acquired National Holdings Corporation. The combination created an enhanced wealth management platform, and as a result of the acquisition, B. Riley has a synergistic footprint with offices now expanding from coast to coast.

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• Forensic Accounting & Litigation Support
• Operations Management Services
• Restructuring & Turnaround Management
• Transaction Support

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• Restructuring & Recapitalization
• Mergers & Acquisitions (M&A)
• Sales & Trading
• Equity Research

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• Lease Restructuring
• Real Estate Advisory Services
• Capital Solutions & Acquisitions
• Financial Advisory Services

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• Inventory Clearance
• Appraisal & Valuation Services
• Real Estate Solutions

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VENTURE CAPITAL
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Strategic financial advisory services to address the various needs of individuals, families, business owners, foundations and endowments.
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• Business Client Services

WHOLESALE & INDUSTRIAL SOLUTIONS
Provides equipment management and capital recovery solutions through a suite of services in various industries.
• Auctions, Private Treaty & Liquidation
• Valuations
• Asset Planning & Recovery Strategies