



MERCER CAPITAL

# 2021 Energy Purchase Price Allocation Study

December 2021

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# About Mercer Capital

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## **Mercer Capital is a national business valuation and financial advisory firm.**

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## Industry Segments

- Exploration & Production
- Oilfield Services
- Midstream
- Refining & Marketing

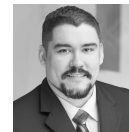
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# Oil and Gas Industry Resources

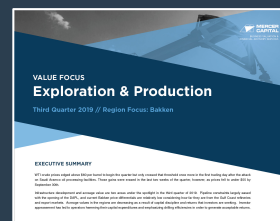
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## Quarterly E&P Newsletter

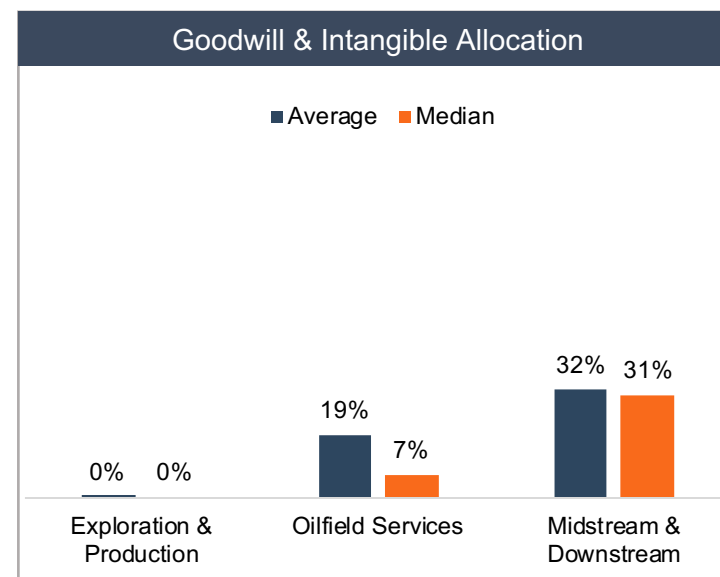
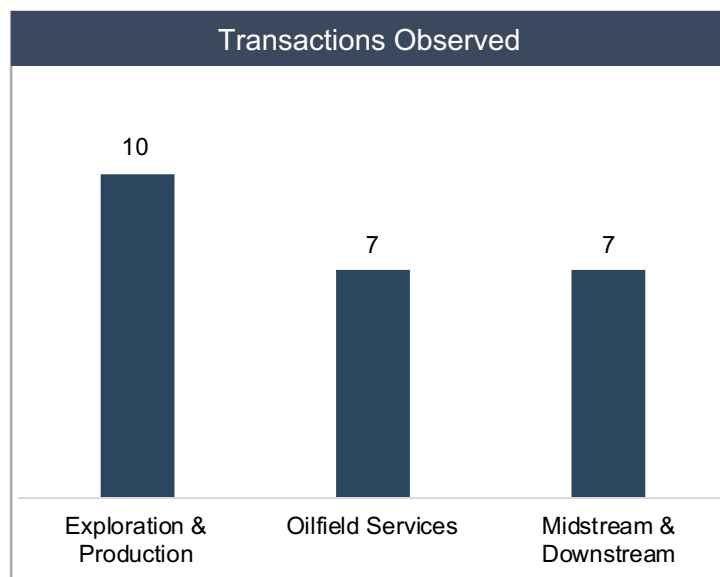


This newsletter provides an overview of the industry through supply and demand analysis, commodity pricing, and public market performance. In addition, each quarter focuses on a different region (Eagle Ford, Permian, Bakken, and Appalachia).

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# Summary

- Intangibles comprised 90% of S&P's total market value in 2020 according to a study by Ocean Tomo. Prior analysis has suggested intangible concentration for the energy sector is under half of that (36%), and this year's study suggests an even smaller share of intangibles in light of a weak commodity price environment and restrained investment. No subsectors we analyzed exceeded that percentage benchmark this year, including midstream and oilfield services.
- M&A activity lagged in most sectors in 2020 due, in large part, to the varying effects of COVID-19. In particular, the collision of COVID-19 and OPEC+ policy in March 2020 plunged prices into the \$20's for oil and below \$2 for gas for a period. As such it is no surprise that transaction activity dropped as well. The energy sector for 2020, as compared to 2019, endured weak commodity price conditions as shareholders increasingly demanded capital discipline which impacted M&A activity.



# Exploration & Production

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# Key Themes

## Exploration & Production

- Nearly 90% of Fair Value was encapsulated in PP&E – specifically dominated by oil & gas reserve values (Level 3 inputs).
  - All 10 transactions reported reserve values
  - Five (5) of 10 transactions reported proved (PDP, PDNP, & PUD) reserves
  - Two (2) of the five (5) transactions reporting proved reserves also reported a split between proved (PDP, PDNP, & PUD) and unproved (Probable, Possible)
  - Of the five that did not report a split, two were offshore Gulf of Mexico acquisitions. Due to the commodity price environment in 2020, it is likely the absence of meaningful Fair Value for unproved reserves was a reason for the lack of reporting in this year.
  - Wherein a split was recorded, far more reserves were proved vs. unproved in both transactions. (77% to 5% for the PDC / SRC transaction and 81% to 7% for the Southwestern / Montage transaction)
- Four transactions recorded PP&E other than reserves (PDC, Chevron, Southwestern, Contango). Only one (Chevron / Noble) was significant by acquiring integrated midstream assets.
- Only one out of 10 had intangibles and it was insignificant (Painted Pony Energy / Canadian Natural Resources at 2%).
  - Listed as “Exploration and evaluation assets” it was ascribed a \$15mm value out of \$969 million of consideration.
- The discounted cash flow method was the most cited valuation method for all reserve categories. The market method was also cited for arriving at Fair Value for unproven reserves.

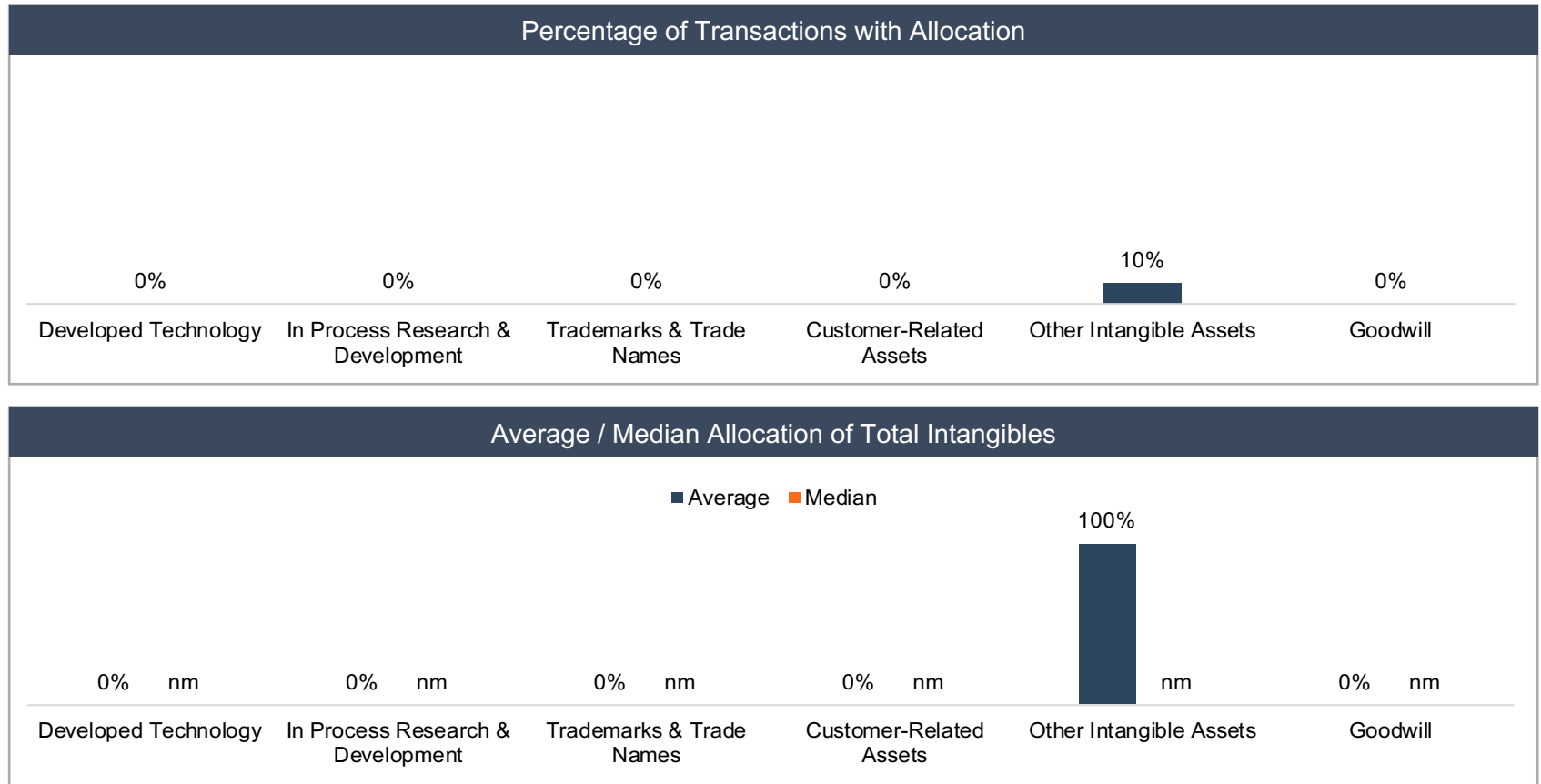
# Transactions

## Exploration & Production

					Identifiable Intangibles					
					Developed Technology	In Process Research & Development	Trademarks & Trade Names	Customer-Related Assets	Other Intangible Assets	Goodwill
Target	Acquirer	Announce Date	Basin	Purchase Consideration						
Dollar Allocation (\$000s)										
SRC Energy	PDC Energy, Inc.	8/19/2019	Wattenburg	\$2,086,444	-	-	-	-	-	
New Horizon Properties	U.S. Energy Corp.	3/5/2020	Bakken	636	-	-	-	-	-	
LLOG Properties	Talos Energy Inc	3/11/2020	Gulf of Mexico	17,421	-	-	-	-	-	
Castex Energy 2005 Holdco, LLC	Talos Energy Inc	6/19/2020	Gulf of Mexico	46,626	-	-	-	-	-	
FieldPoint Petroleum Corporation	U.S. Energy Corp	7/10/2020	Permian	500,000	-	-	-	-	-	
Noble Energy, Inc.	Chevron Corp.	7/20/2020	DJ Basin	19,697,000	-	-	-	-	-	
Painted Pony Energy LTD.	Canadian Natural Resources LTD	8/10/2020	Northeast British Columbia	969,211	-	-	-	-	-	15,000
Montage Resources	Southwestern Energy Company	8/12/2020	Appalachia	1,244,000	-	-	-	-	-	
Mid-Con Energy GP, LLC	Contango Oil & Gas Company	10/25/2020	Powder River	183,311	-	-	-	-	-	
Chevron Appalachia Assets	EQT Corp.	10/27/2020	Appalachian Basin	822,670	-	-	-	-	-	
Count				10	-	-	-	-	-	1
Percentage				na	-	-	-	-	-	10%
Average				\$2,556,732	-	-	-	-	-	\$1,500
Median				\$661,335	-	-	-	-	-	-
Percentage Allocation										
SRC Energy	PDC Energy, Inc.	8/19/2019	Wattenburg	\$2,086,444	-	-	-	-	-	
New Horizon Properties	U.S. Energy Corp.	3/5/2020	Bakken	636	-	-	-	-	-	
LLOG Properties	Talos Energy Inc	3/11/2020	Gulf of Mexico	17,421	-	-	-	-	-	
Castex Energy 2005 Holdco, LLC	Talos Energy Inc	6/19/2020	Gulf of Mexico	46,626	-	-	-	-	-	
FieldPoint Petroleum Corporation	U.S. Energy Corp	7/10/2020	Permian	500,000	-	-	-	-	-	
Noble Energy, Inc.	Chevron Corp.	7/20/2020	DJ Basin	19,697,000	-	-	-	-	-	
Painted Pony Energy LTD.	Canadian Natural Resources LTD	8/10/2020	Northeast British Columbia	969,211	-	-	-	-	-	2%
Montage Resources	Southwestern Energy Company	8/12/2020	Appalachia	1,244,000	-	-	-	-	-	
Mid-Con Energy GP, LLC	Contango Oil & Gas Company	10/25/2020	Powder River	183,311	-	-	-	-	-	
Chevron Appalachia Assets	EQT Corp.	10/27/2020	Appalachian Basin	822,670	-	-	-	-	-	
Average					-	-	-	-	-	0%
Median					-	-	-	-	-	

# Intangible Allocations

## Exploration & Production



# PP&E and Reserves Detail

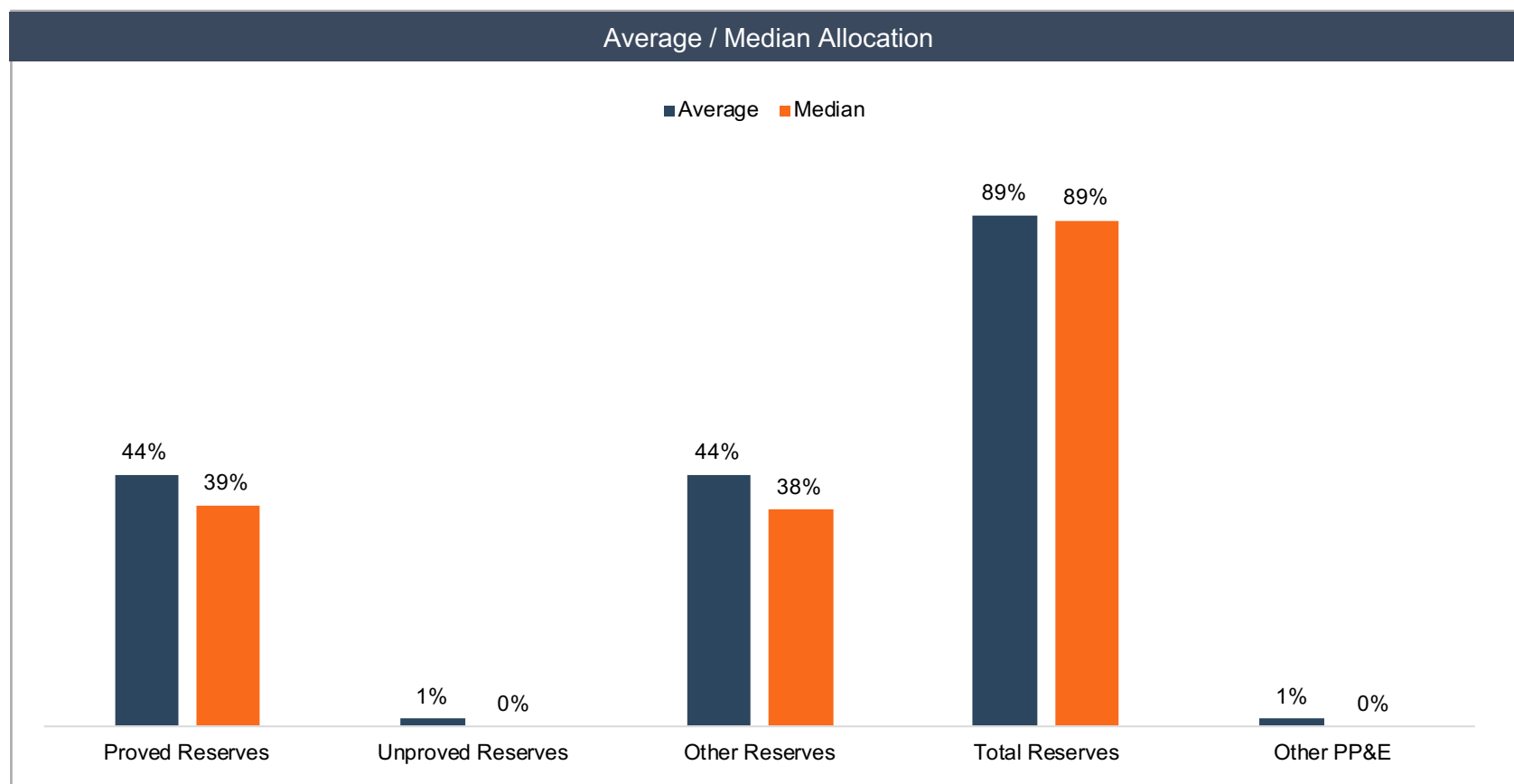
## Exploration & Production

Target	Acquirer	Basin	Purchase Consideration	Proved Reserves	Unproved Reserves	Other Reserves	Total Reserves	Other PP&E
<b>Dollar Allocation (\$000s)</b>								
SRC Energy	PDC Energy, Inc.	Wattenburg	\$2,086,444	\$1,613,674	\$109,615	-	\$1,723,289	\$16,242
New Horizon Properties	U.S. Energy Corp.	Bakken	636	564	-	-	564	-
LLOG Properties	Talos Energy Inc	Gulf of Mexico	17,421	-	-	17,421	17,421	-
Castex Energy 2005 Holdco, LLC	Talos Energy Inc	Gulf of Mexico	46,626	-	-	46,626	46,626	-
FieldPoint Petroleum Corporation	U.S. Energy Corp	Permian	500,000	500,000	-	-	500,000	-
Noble Energy, Inc.	Chevron Corp.	DJ Basin	19,697,000	-	-	14,935,000	14,935,000	1,768,000
Painted Pony Energy LTD.	Canadian Natural Resources LTD	Northeast British Columbia	969,211	-	-	750,000	750,000	-
Montage Resources	Southwestern Energy Company	Appalachia	1,244,000	1,012,000	90,000	-	1,102,000	28,000
Mid-Con Energy GP, LLC	Contago Oil & Gas Company	Powder River	183,311	172,607	-	-	172,607	730
Chevron Appalachia Assets	EQT Corp.	Appalachian Basin	822,670	-	-	720,315	720,315	-
<b>Count</b>			<b>10</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>10</b>	<b>4</b>
<b>Percentage</b>			<b>na</b>	<b>50%</b>	<b>20%</b>	<b>50%</b>	<b>100%</b>	<b>40%</b>
<b>Average</b>			<b>\$2,556,732</b>	<b>\$329,885</b>	<b>\$19,962</b>	<b>\$1,646,936</b>	<b>\$1,996,782</b>	<b>\$181,297</b>
<b>Median</b>			<b>\$661,335</b>	<b>\$282</b>	<b>-</b>	<b>\$8,711</b>	<b>\$610,158</b>	<b>-</b>
<b>Percentage Allocation</b>								
SRC Energy	PDC Energy, Inc.	Wattenburg	\$2,086,444	77%	5%	-	83%	1%
New Horizon Properties	U.S. Energy Corp.	Bakken	636	89%	-	-	89%	-
LLOG Properties	Talos Energy Inc	Gulf of Mexico	17,421	-	-	100%	100%	-
Castex Energy 2005 Holdco, LLC	Talos Energy Inc	Gulf of Mexico	46,626	-	-	100%	100%	-
FieldPoint Petroleum Corporation	U.S. Energy Corp	Permian	500,000	100%	-	-	100%	-
Noble Energy, Inc.	Chevron Corp.	DJ Basin	19,697,000	-	-	76%	76%	9%
Painted Pony Energy LTD.	Canadian Natural Resources LTD	Northeast British Columbia	969,211	-	-	77%	77%	-
Montage Resources	Southwestern Energy Company	Appalachia	1,244,000	81%	7%	-	89%	2%
Mid-Con Energy GP, LLC	Contago Oil & Gas Company	Powder River	183,311	94%	-	-	94%	0%
Chevron Appalachia Assets	EQT Corp.	Appalachian Basin	822,670	-	-	88%	88%	-
<b>Average</b>				<b>44%</b>	<b>1%</b>	<b>44%</b>	<b>89%</b>	<b>1%</b>
<b>Median</b>				<b>39%</b>	<b>-</b>	<b>38%</b>	<b>89%</b>	<b>-</b>

Note: Not all transactions included a breakout of reserves and other PP&E. If only PP&E was listed, we have assumed 100% of this value is attributable to reserves.

# PP&E and Reserves Detail *(Continued)*

## Exploration & Production



Note: Not all transactions included a breakout of reserves and other PP&E. If only PP&E was listed, we have assumed 100% of this value is attributable to reserves.

# Oilfield Services

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# Key Themes

## Oilfield Services

- While Oilfield Services purchase price allocations are typically much more heavily weighted toward goodwill and other intangible assets, as compared to the tangible asset intensive E&P and Midstream industries, that typical gap was much lower among the 2019/2020 transactions found in our current study. Our prior PPA studies showed average intangible assets' contribution to purchase prices in the 50% to 70% range. However, that average plunged in the current study to only 21%.
- As in the past, a wider variety of intangible assets are found among the Oilfield Services purchase price allocations with value being allocated to Goodwill, Customer Related and Trademarks & Tradenames for all transactions for which the intangible asset details were available. Allocations to Developed Technology were notably less prevalent than in prior studies.
- As a percentage of intangible assets, goodwill again led with an average of 72% for all transactions. Customer Related and Developed Technology followed with averages of 7% and 4%, respectively. Trademarks & Tradenames averaged 1%. Other Intangibles (often unspecified) were more prevalent in this year's study, with an average of 16%.
- Looking to the various intangible asset values in relation to the purchase price, Goodwill averaged 14%, Customer Related 1%, Developed Technology 1% and Trademarks & Tradenames <1%. Other Intangibles averaged 3% of the purchase price across all transactions.
- The useful lives assigned to the various intangible assets ranged from 2 years to 15 years, broken down as follows:
  - Customer Related asset lives ranged from 8 to 15 years and averaged 12 years
  - Trademarks & Tradenames asset lives ranged from 2 years to 15 years and averaged 9 years
  - Developed Technology asset life was only reported in regard to one transaction with an assigned life of 7 years.

# Transactions

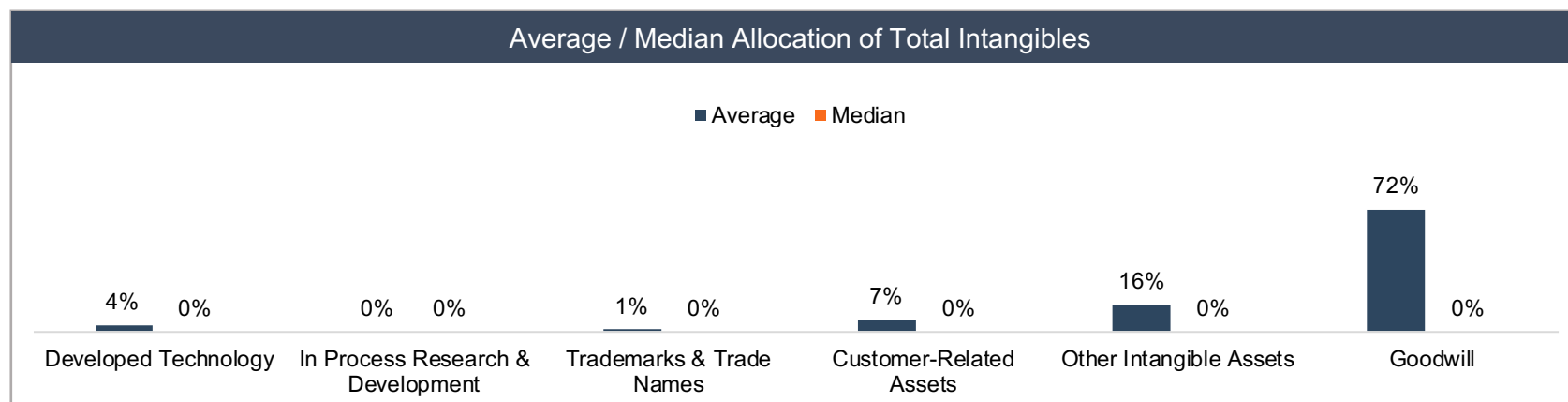
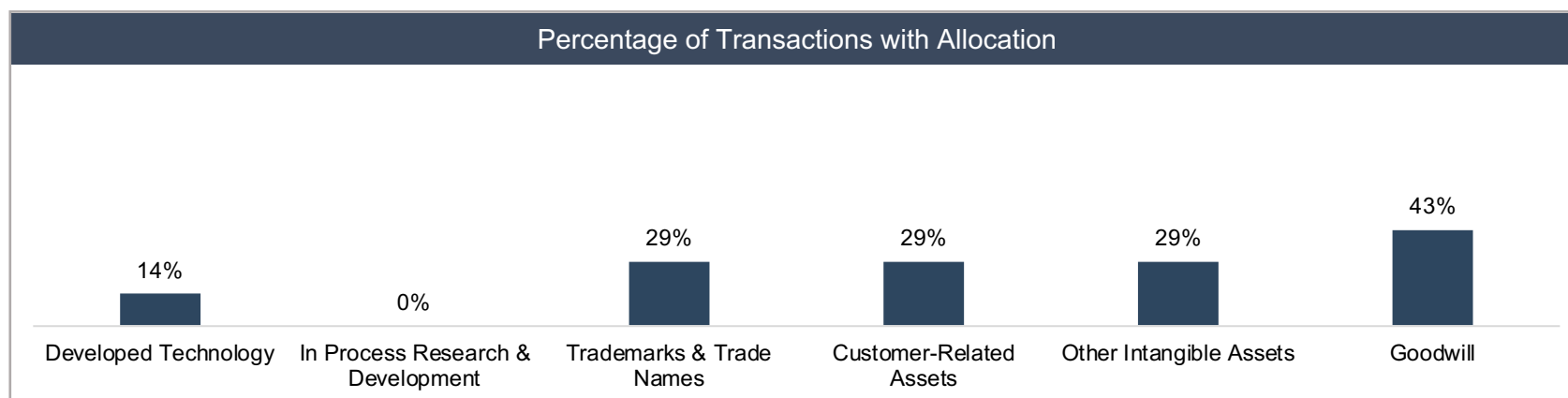
## Oilfield Services

					Identifiable Intangibles					
		Announce		Purchase	In Process		Customer-	Other		
Target	Acquirer	Date	Target Subsector	Consideration	Developed Technology	Research & Development	Trademarks & Trade Names	Related Assets	Intangible Assets	Goodwill
Dollar Allocation (\$000s)										
IPSCO Tubulars, Inc	Tenasris S.A.	3/22/2019	Tubing	\$1,172,000	-	-	-	-	\$170,000	\$357,000
Ecolab Upstream Division	ChampionX Corp	12/19/2019	Laboratory Testing	2,375,794	120,000	-	25,000	145,000	-	386,686
Era Group Inc.	Bristow Group Inc.	1/24/2020	Survey	428,182	-	-	-	-	-	-
Sahara Petroleum Services Company	NESR	2/25/2020	Diversified	95,946	-	-	440	2,900	-	46,157
Quintana Energy Services Inc.	KLX Energy Services	3/4/2020	Diversified	124,600	-	-	-	-	-	-
Schlumberger "OneStim" Business	Liberty Oilfield Services Inc	9/1/2020	Fracking & Pumping	806,422	-	-	-	-	54,000	-
Eagle Proppants Holdings	Smart Sand Inc	9/18/2020	Sand	72,880	-	-	-	-	-	-
Count				7	1	-	2	2	2	3
Percentage				na	14%	-	29%	29%	29%	43%
Average				\$725,118	\$17,143	-	\$3,634	\$21,129	\$32,000	\$112,835
Median				\$428,182	-	-	-	-	-	-
Percentage Allocation										
IPSCO Tubulars, Inc	Tenasris S.A.	3/22/2019	Tubing	\$1,172,000	-	-	-	-	15%	30%
Ecolab Upstream Division	ChampionX Corp	12/19/2019	Laboratory Testing	2,375,794	5%	-	1%	6%	-	16%
Era Group Inc.	Bristow Group Inc.	1/24/2020	Survey	428,182	-	-	-	-	-	-
Sahara Petroleum Services Company	NESR	2/25/2020	Diversified	95,946	-	-	0%	3%	-	48%
Quintana Energy Services Inc.	KLX Energy Services	3/4/2020	Diversified	124,600	-	-	-	-	-	-
Schlumberger "OneStim" Business	Liberty Oilfield Services Inc	9/1/2020	Fracking & Pumping	806,422	-	-	-	-	7%	-
Eagle Proppants Holdings	Smart Sand Inc	9/18/2020	Sand	72,880	-	-	-	-	-	-
Average					1%	-	0%	1%	3%	14%
Median					-	-	-	-	-	-



# Intangible Allocations

## Oilfield Services



# Midstream and Downstream

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# Key Themes

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## Midstream and Downstream

- The seven midstream and downstream transactions occurred throughout the value chain, with no particular emphasis on any single subsector
  - Two transactions occurred in the logistics space
  - Two transactions occurred in the traditional midstream space: one gathering & processing pipeline system and one transportation pipeline
  - There was only one refining transaction, PBF's acquisition of Shell's Martinez refinery located in Northern California (owned by Shell subsidiary Equilon Enterprises)
  - One transaction consisted of NGL storage and rail-to-truck terminals
  - One transaction occurred in the biofuels space
- Three of the seven transactions reported no goodwill or intangible value, with assets being allocated predominately to PP&E and current assets for those transactions
- Customer-related assets were the most common (tied with catch-all "Other Intangibles") identifiable intangible recognized
  - Only one transaction specified the value associated with customer-related assets, though two additional transactions indicated that customer relationships were the primary component of identifiable intangible value
- Only one transaction included an allocation to goodwill

# Transactions

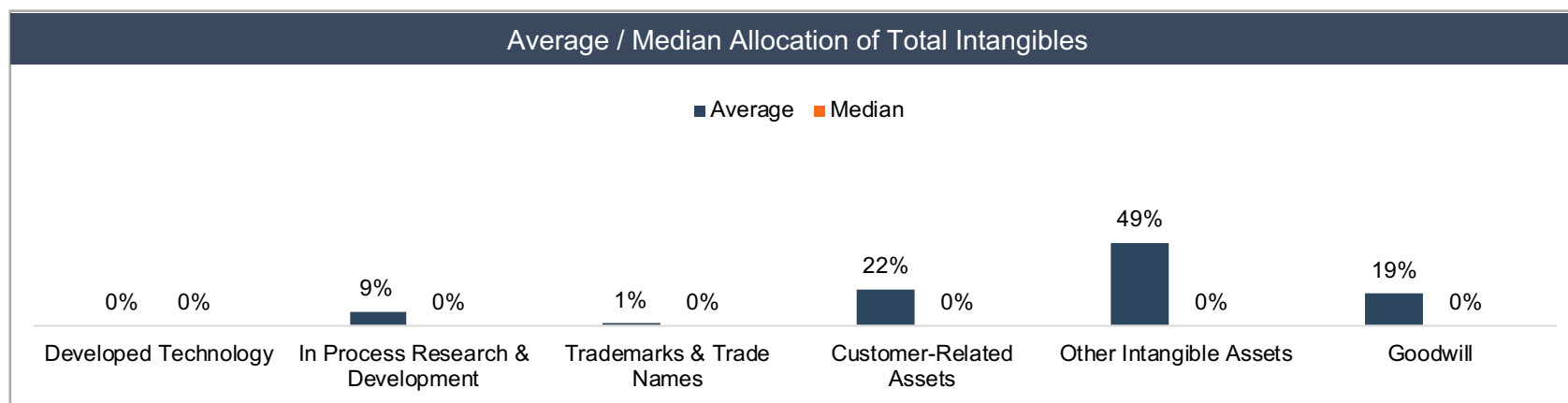
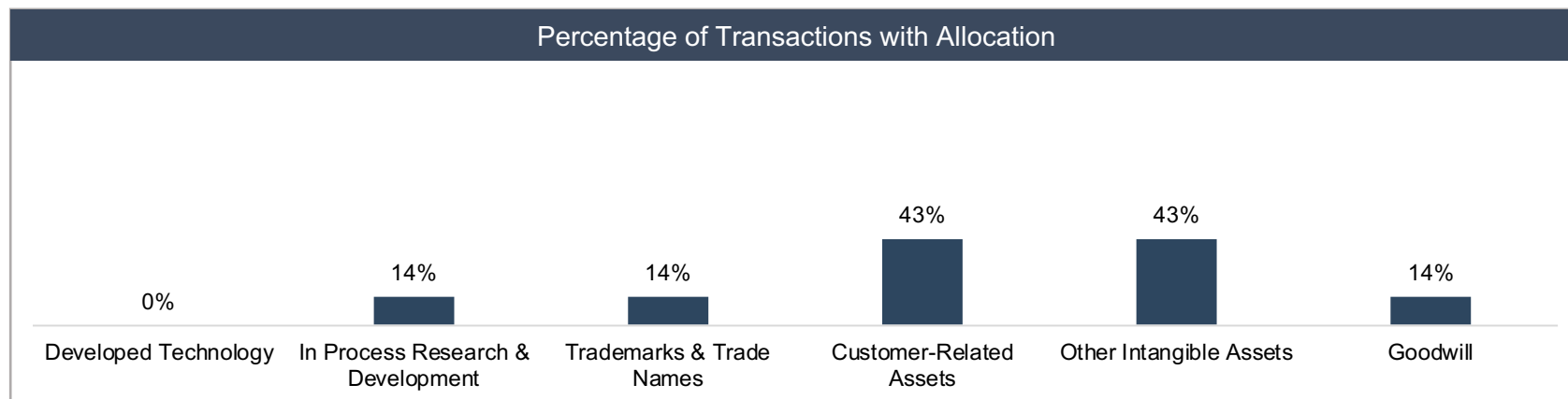
## Midstream and Downstream

					Identifiable Intangibles					
		Announce Date	Target Subsector	Purchase Consideration	Developed Technology	In Process Research & Development	Trademarks & Trade Names	Customer-Related Assets	Other Intangible Assets	Goodwill
Target	Acquirer									
Dollar Allocation (\$000s)										
Equilon Enterprises LLC	PBF Energy Inc.	6/11/2019	Refining	\$1,352,400	-	-	-	-	-	-
Universal Weather and Aviation, Inc.	World Fuel Services Corp.	8/22/2019	Logistics	170,000	-	-	-	ua	44,300	79,100
Felix Midstream LLC	Plains All American Pipeline LP	2/4/2020	Gathering & Processing	302,000	-	-	-	-	187,000	-
NGL Terminal Assets of Plains All American	Crestwood Equity Partners	4/1/2020	Terminals	162,000	-	-	-	ua	50,000	-
Crystal Energy, LLC	Vertex Energy Inc	6/1/2020	Logistics	2,930	-	-	-	-	-	-
Fluid Quip Technologies, LLC.	Green Plains Inc.	12/9/2020	Biofuels	50,256	-	10,469	1,409	18,925	-	-
VEX Express Pipeline, LLC	Adams Resources & Energy Inc.	12/23/2020	Pipelines	21,635	-	-	-	-	-	-
Count				7	-	1	1	3	3	1
Percentage				na	-	14%	14%	43%	43%	14%
Average				\$294,460	-	\$1,496	\$201	\$3,785	\$40,186	\$11,300
Median				\$162,000	-	-	-	-	-	-
Percentage Allocation										
Equilon Enterprises LLC	PBF Energy Inc.	6/11/2019	Refining	\$1,352,400	-	-	-	-	-	-
Universal Weather and Aviation, Inc.	World Fuel Services Corp.	8/22/2019	Logistics	170,000	-	-	-	na	26%	47%
Felix Midstream LLC	Plains All American Pipeline LP	2/4/2020	Gathering & Processing	302,000	-	-	-	-	62%	-
NGL Terminal Assets of Plains All American	Crestwood Equity Partners	4/1/2020	Terminals	162,000	-	-	-	na	31%	-
Crystal Energy, LLC	Vertex Energy Inc	6/1/2020	Logistics	2,930	-	-	-	-	-	-
Fluid Quip Technologies, LLC.	Green Plains Inc.	12/9/2020	Biofuels	50,256	-	21%	3%	38%	-	-
VEX Express Pipeline, LLC	Adams Resources & Energy Inc.	12/23/2020	Pipelines	21,635	-	-	-	-	-	-
Average					-	3%	0%	8%	17%	7%
Median					-	-	-	-	-	-

Note: In the table above, "ua" indicates that value was allocated to an intangible category, but the amount is unknown. We have included these allocations in the number of transactions with an intangible category, but the value of these identifiable intangibles are captured in "Other Intangible Assets."

# Intangible Allocations

## Midstream and Downstream



# Appendix

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# Screening Criteria & Methodology

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- Acquirer company universe based on companies listed on major U.S. exchanges categorized in the following S&P Capital IQ industry classifications:
  - Oil and Gas Exploration and Production
  - Oil and Gas Drilling
  - Oil and Gas Equipment and Services
  - Oil and Gas Storage and Transportation
  - Oil and Gas Refining and Marketing
- Reviewed 2020 10-K filings of acquirer companies for disclosures regarding purchase price allocations
- Purchase consideration defined as total assets acquired (i.e., not net of liabilities assumed)

# Disclaimers

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A black and white photograph of an oil pumpjack in a field, with a blue geometric overlay at the bottom.

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