

# Structures for Deploying Private Capital in Upstream Oil and Gas Projects

Energy Leadership Series  
September 25, 2018

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S. Jordan Smith is a member of the Energy practice group and concentrates his practice in the areas of oil, gas and natural resources law, with an emphasis on negotiating transactions pertaining to upstream financing, acquisitions and divestitures. Jordan represents exploration and production companies, private equity clients, and other financial institutions in complex transactions across the energy sector, with a particular focus on alternative financing and joint ventures to develop upstream and midstream oil and gas assets, including drill-co transactions, volumetric production payments, equity joint ventures and farmout arrangements.

Jordan works as a strategic partner with his clients to provide proactive legal solutions to accomplish their business objectives, address specific challenges, meet critical deadlines, and maximize financial results.

“Best Lawyers in Dallas 2018” list by *D Magazine*

“Best S.A. Lawyers 2015” list by *S.A. Scene*

“*Rising Stars 2015*” list by *S.A. Scene*

Texas Bar Foundation, Fellow

# Jackson Walker LLP

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For more than 125 years, Jackson Walker has played a vital role in the growth and development of Texas business. Since our founding in 1887, our attorneys have represented some of the most influential companies in the state in key industries that shaped the course of Texas history, including railroads, the media, and oil and gas exploration. Today, we remain firmly rooted in Texas, while serving clients around the globe. With more than 360 attorneys in our seven offices, we serve clients around the world in a broad range of practices and industries. Our clients know they can count on us to deliver personalized service, legal expertise, and added value.

But because we've chosen to keep our offices in Texas, we have lower overhead costs than just about every firm our size or larger. In fact, both PricewaterhouseCoopers and Citi Research have cited Jackson Walker as a Best Practice model in overhead cost structure compared to our peers. We pass that value along to our clients by keeping our rates competitive. Our cost structure also means we attract and retain top-notch talent, so our clients get the benefit of top-tier legal expertise without breaking their budgets.

# Jackson Walker LLP

## Fund Formation

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Jackson Walker's fund formation and investment management practice is an interdisciplinary team of lawyers offering a comprehensive package of services to private equity fund sponsors and other participants in alternative investment transactions.

The group advises firm clients at every stage of the investment fund life cycle, including:

- Fund structuring and formation, including counsel with respect to foreign and domestic tax considerations and ERISA, securities, investment adviser, investment company, broker-dealer, commodity pool operator and other regulatory matters
- Structuring and documentation of carried interest and other incentive arrangements with fund general partners and principals, as well as related estate planning matters
- Fund capital raising, including the preparation of offering and subscription materials, negotiation of placement agent agreements, negotiation of side letters and coordination of fund closings
- Fund management, governance and ongoing regulatory compliance
- Negotiation of fund credit arrangements, including capital commitment-backed subscription line of credit facilities and acquisition financing arrangements
- Deployment of fund capital through portfolio transactions, including counsel with respect to related regulatory, tax and ERISA considerations
- Secondary market transactions
- Portfolio company spin-offs, initial public offerings and roll-ups
- Liquidation of portfolio investments and fund winding up and dissolution

# Jackson Walker LLP

## Energy / Oil & Gas

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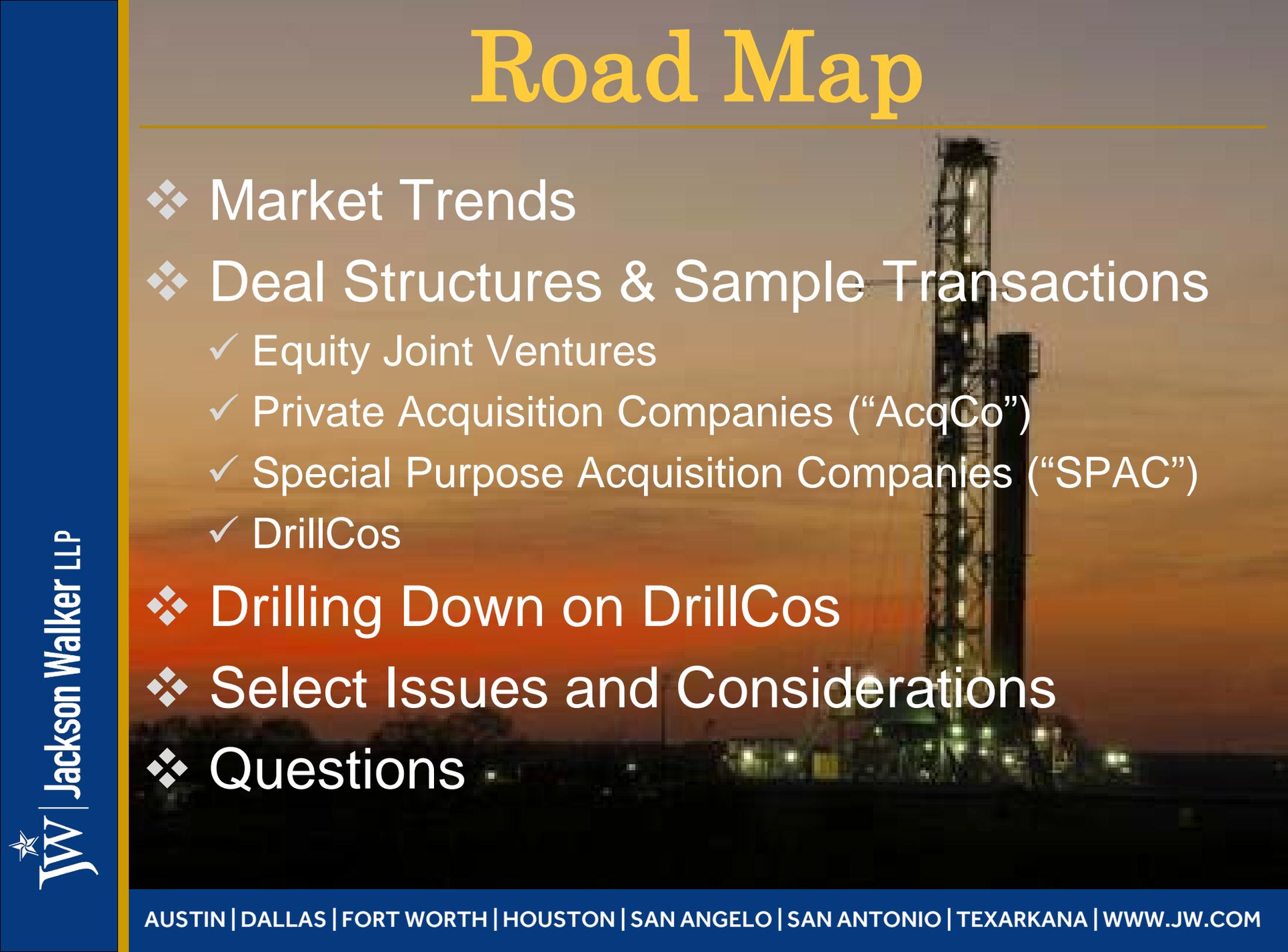
Jackson Walker's upstream oil and gas practice has been nationally recognized as one of the top practices in this area of law, receiving a "Tier One" national ranking and a "Tier One" metropolitan rating in Houston for Oil and Gas Law in the 2010 edition of the U.S. News – Best Lawyers "Best Law Firms" guide.

Jackson Walker's upstream oil and gas clients include both U.S. and non-U.S. major and independent oil and natural gas companies, the entire spectrum of oilfield service companies, and institutional and individual mineral and land owners. We also represent financial institutions, investors, private equity funds, and other providers of financing and investment vehicles to participants in the upstream oil and gas business.

Jackson Walker regularly assists our upstream oil and gas clients in all aspects of a very broad range of transactions relating to the ownership, use, exploration, development, and operation of U.S. and non-U.S. oil and gas assets, the production of hydrocarbons from these assets, and the financing of these types of transactions, including:

- Acquisition and disposition of U.S. and non-U.S. oil and gas properties, licenses, concessions, production sharing contracts, and other upstream assets and related infrastructure
- Financing of U.S. and non-U.S. upstream oil and gas acquisitions, operations, and activities
- U.S. and non-U.S. exploration, farm-out, farm-in, participation, and similar agreements
- Organization and documentation of both public and private joint ventures, limited liability companies, and partnerships
- Onshore and offshore (including deepwater) joint operating agreements
- Crude oil and natural gas sales, purchase, exchange, and other marketing agreements, including derivative contracts and other price risk management structures

# Road Map



- ❖ Market Trends
- ❖ Deal Structures & Sample Transactions
  - ✓ Equity Joint Ventures
  - ✓ Private Acquisition Companies (“AcqCo”)
  - ✓ Special Purpose Acquisition Companies (“SPAC”)
  - ✓ DrillCos
- ❖ Drilling Down on DrillCos
- ❖ Select Issues and Considerations
- ❖ Questions

# Market Trends

# Market Trends

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- E&P companies are still consolidating positions and off-loading non-core assets
- Traditional financing sources are less available than before the downturn
- Private equity firms (acting as lenders and participants); several PE Investors and PE-backed companies have started to sell assets developed under preliminary funds
- Bankruptcies provide opportunities for acquisitions through Sec. 363 sales (EXCO, Enduro)
- New “financing” opportunities through the private market (DrillCos; PE-backed management teams; equity JVs; PE financing; resource funds)
- Redevelopment of historic fields with horizontal drilling (Haynesville, Gulf Coast plays)
- Influx of foreign investment

# Market Trends

## Permian Acreage Prices Continue to Rise

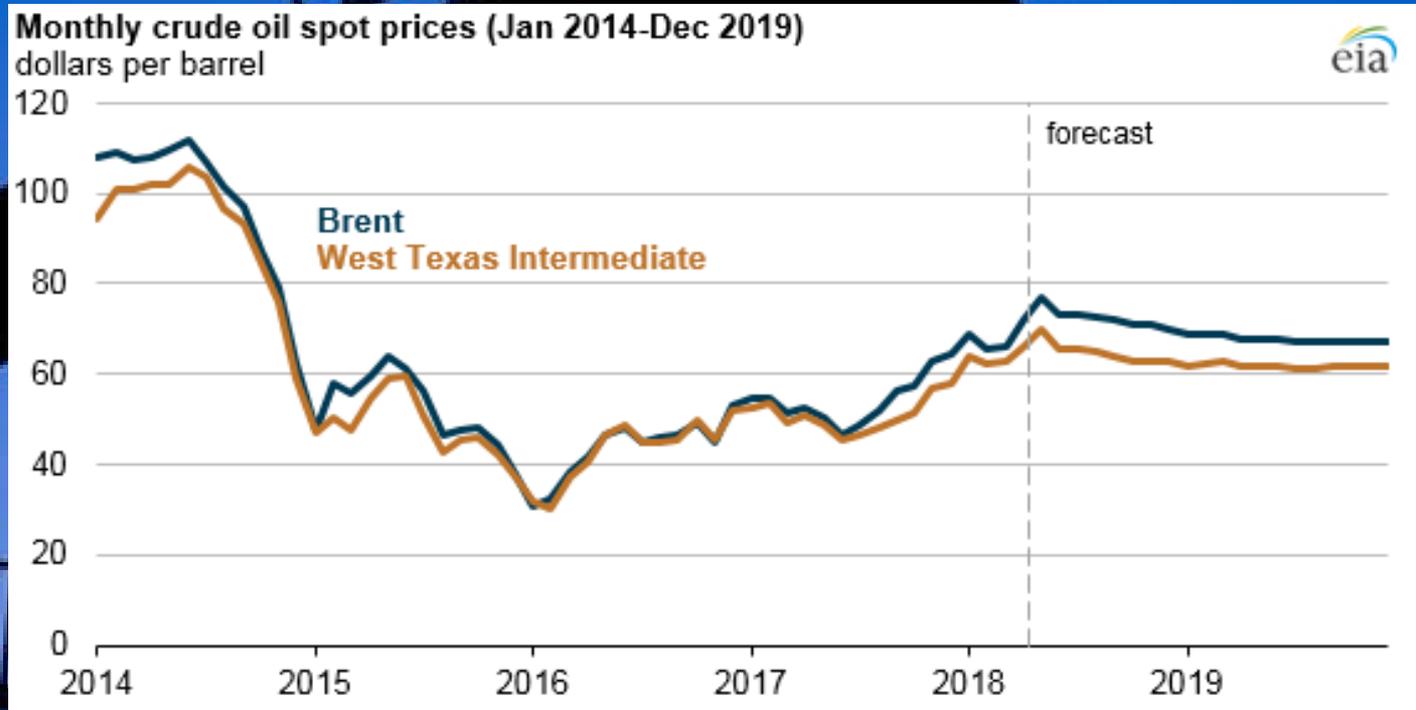
“The price to access unexplored shale assets on the New Mexico side of the Permian Basin soared to **\$95,001 an acre** in a federal government auction, a record high for North America’s biggest oil field. The state’s previous record was \$40,001 an acre set in December, according to a statement by the U.S. Department of the Interior Thursday. Overall, the two-day auction saw bids on 142 parcels of land and raised \$972 million, more than the whole of 2017 and double the 2008 record...The New Mexico auction’s high price is ‘tremendous positive read-through’ for Permian oil stocks, which have an average valuation of about \$32,000 an acre, according to analysts at Seaport Global Securities LLC. The leases are for a 10-year term and a royalty of 12.5 percent, according to the Bureau of Land Management. That gives operators better terms than Texas properties on the other side of the border, where leases typically last up to five years with about 25 percent royalties. The \$95,001 price tag for the drilling rights is about 16 percent higher than what Concho paid earlier this year for RSP Permian Inc.”

Kevin Crowley and Ryan Collins, *Permian Oil Auction Gets Record \$1 Billion as Bidding Soars*, Bloomberg, September 6, 2018,

<https://www.bloomberg.com/news/articles/2018-09-06/permian-shale-drilling-rights-fetch-95-000-an-acre-in-auction>

# Market Trends

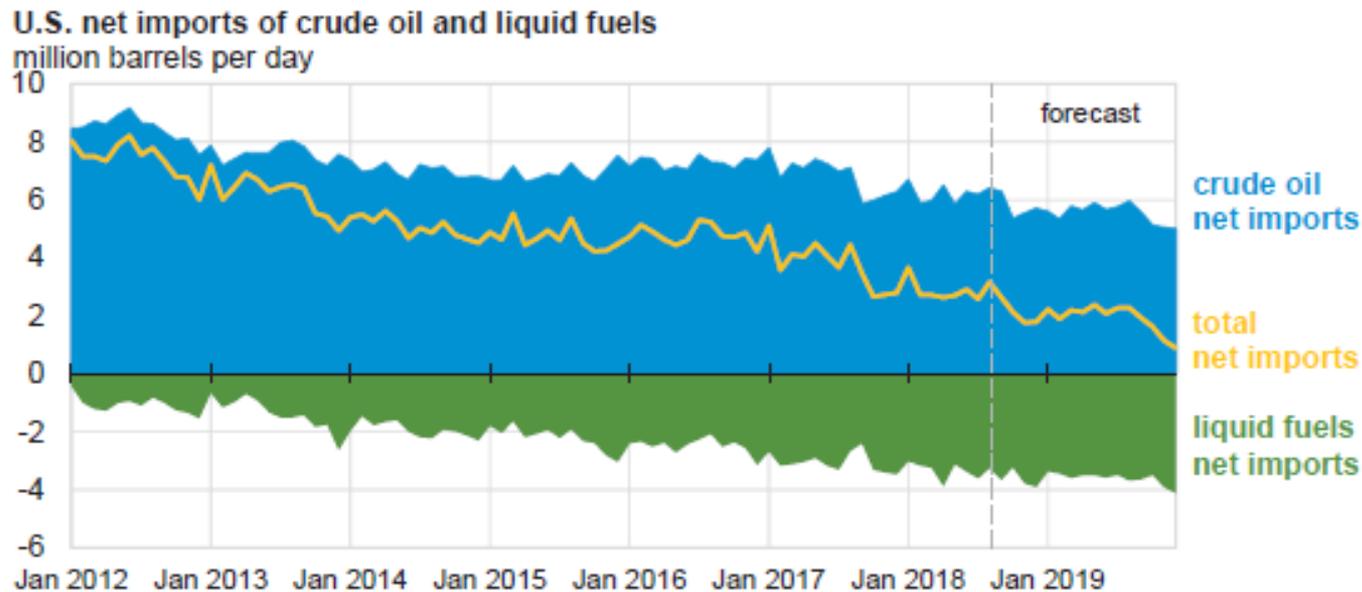
In the June 2018 update of its Short-Term Energy Outlook (STEO), EIA forecasts “Brent crude oil prices will average \$71 per barrel (b) in 2018 and \$68/b in 2019. The updated 2019 forecast price is \$2/b higher than in the May STEO. Brent crude oil spot prices averaged \$77/b in May, an increase of \$5/b from April and the highest monthly average price since November 2014. West Texas Intermediate (WTI) prices are forecast to average almost \$7/b lower than Brent prices in 2018 and \$6/b lower in 2019.”



U.S. Energy Information Administration, Today in Energy, June 15, 2018, <https://www.eia.gov/todayinenergy/detail.php?id=36493#>

# Market Trends

“U.S. crude oil exports increased by 787,000 b/d (almost 80%) from the first half of 2017 to the first half of 2018 and set a new monthly record of at 2.2 million b/d in June. Destinations in Asia and Oceania were the largest recipients of U.S. crude oil exports in the first half of 2018, and U.S. crude oil exports to China more than doubled—increasing by 193,000 b/d—from the first half of 2017. U.S. crude oil exports to South Korea and India also increased significantly during this period, up 81,000 b/d and 72,000 b/d, respectively.”



Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

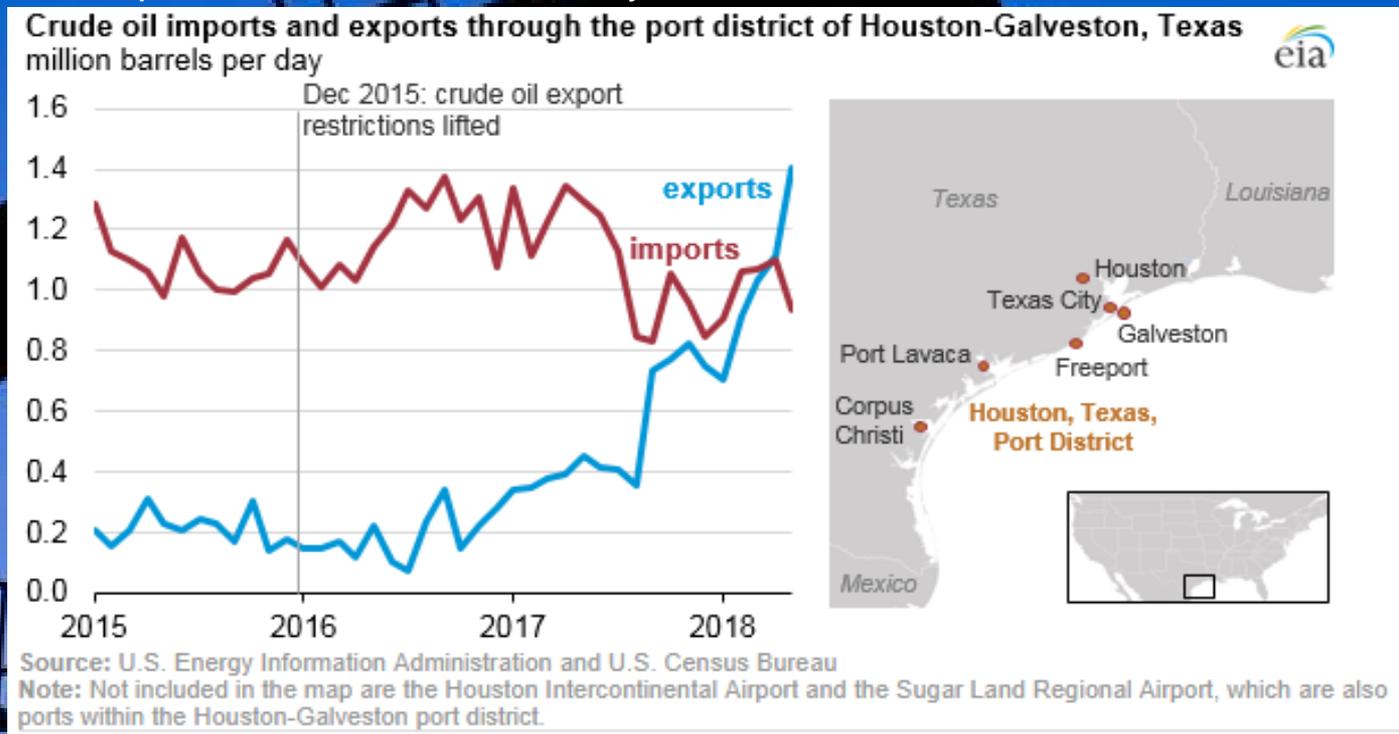
Source: Short-Term Energy Outlook, September 2018



U.S. Energy Information Administration, Short-Term Energy Outlook, September 11, 2018,  
[https://www.eia.gov/outlooks/steo/pdf/steo\\_full.pdf](https://www.eia.gov/outlooks/steo/pdf/steo_full.pdf)

# Market Trends

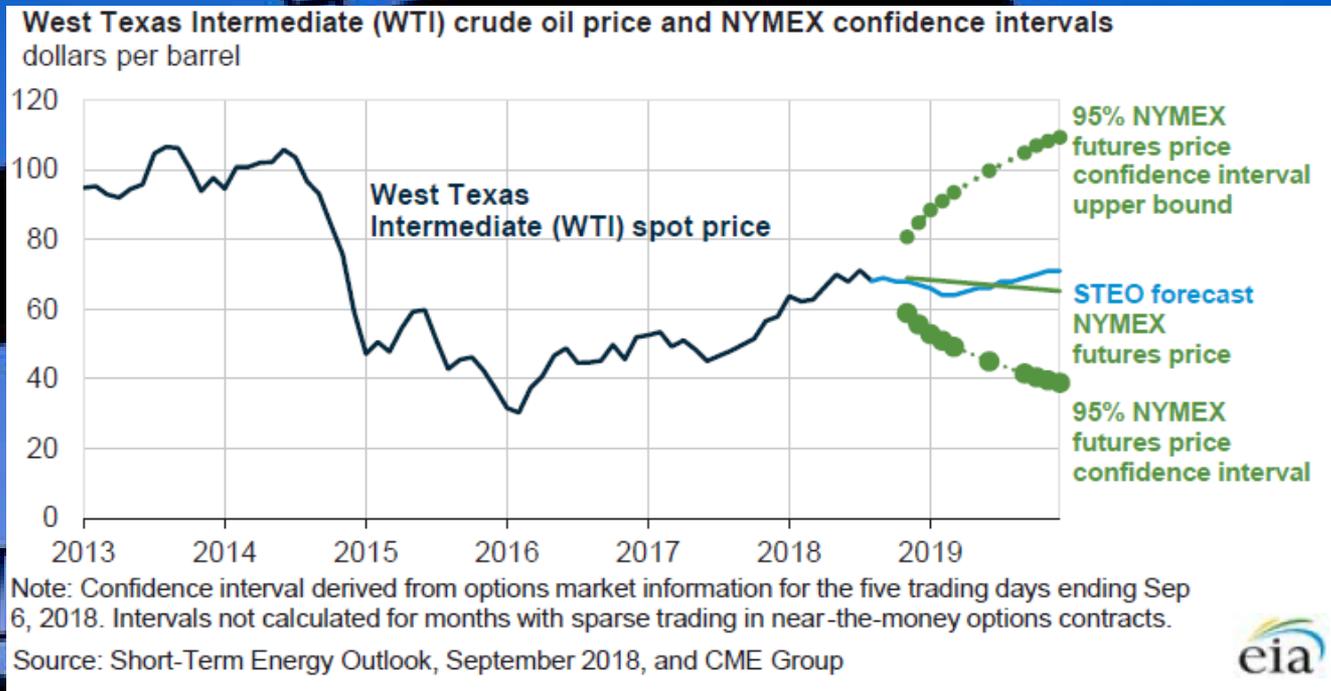
“The U.S. port district of Houston-Galveston in Texas recently began exporting more crude oil than it imported for the first time on record. Crude oil exports from the Houston-Galveston port district have increased since the restrictions on U.S. crude oil exports were lifted at the end of 2015. In April 2018, crude oil exports from Houston-Galveston surpassed crude oil imports by 15,000 barrels per day (b/d). In May 2018, the difference between crude oil exports and imports increased substantially to 470,000 b/d.”



U.S. Energy Information Administration, Today in Energy, August 20, 2018,  
<https://www.eia.gov/todayinenergy/detail.php?id=36932>

# Market Trends

In the September 2018 update of its Short-Term Energy Outlook (STEO), EIA indicates that “Brent crude oil spot prices averaged \$73 per barrel (b) in August, down almost \$2 from July. EIA expects Brent spot prices will average \$73/b in 2018 and \$74/b in 2019. EIA expects West Texas Intermediate (WTI) crude oil prices will average about \$6/b lower than Brent prices in 2018 and in 2019. NYMEX WTI futures and options contract values for December 2018 delivery that traded during the five-day period ending September 6, 2018, suggest a range of \$56/b to \$85/b encompasses the market expectation for December WTI prices at the 95% confidence level.”



U.S. Energy Information Administration, Short-Term Energy Outlook, September 11, 2018, [https://www.eia.gov/outlooks/steo/pdf/steo\\_full.pdf](https://www.eia.gov/outlooks/steo/pdf/steo_full.pdf)

# Most Active PE Groups in the E&P Space

ArcLight	First Reserve	Parallel Resources Partners
Bayou City Energy	Five States Energy Capital	Pearl Energy Investments
Blue Tip Energy	Intervale Capital	Petro Capital Securities
Blue Water Energy	IOG Capital	PetroCap
BlueRock Energy Partners	Kayne Anderson	Pine Brook Partners
Chiron Financial	Kimmeridge Energy	Post Oak Energy Capital
CSG Investments	KKR	Quantum Energy Partners
Denham Capital	Lime Rock Management	Riverstone Holdings
EnCap	Natural Gas Partners	Sage Road Capital
Energy Trust Partners	Old Ironsides Energy	Scout Energy Partners
		Talara Capital Management
		White Deer Energy

# Deal Structures

# Benefits of Joint Ventures

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- ❖ Improve capital efficiency
- ❖ Avoid additional equity issuance or debt
- ❖ Accelerate development and production
- ❖ Synergize expertise from multiple organizations
- ❖ Mitigate exploration risk
- ❖ Increase flexibility to generate new prospects
- ❖ Optionality for future opportunities
- ❖ Preserve capital and increase cash flow for other development projects

# Types of JV Structures

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## 1) Equity JV

- New entity is formed and assets and development capital are contributed by Operator and Investor

## 2) Acquisition Company

- A new private entity is created with acquisition and development capital contributed by Investor

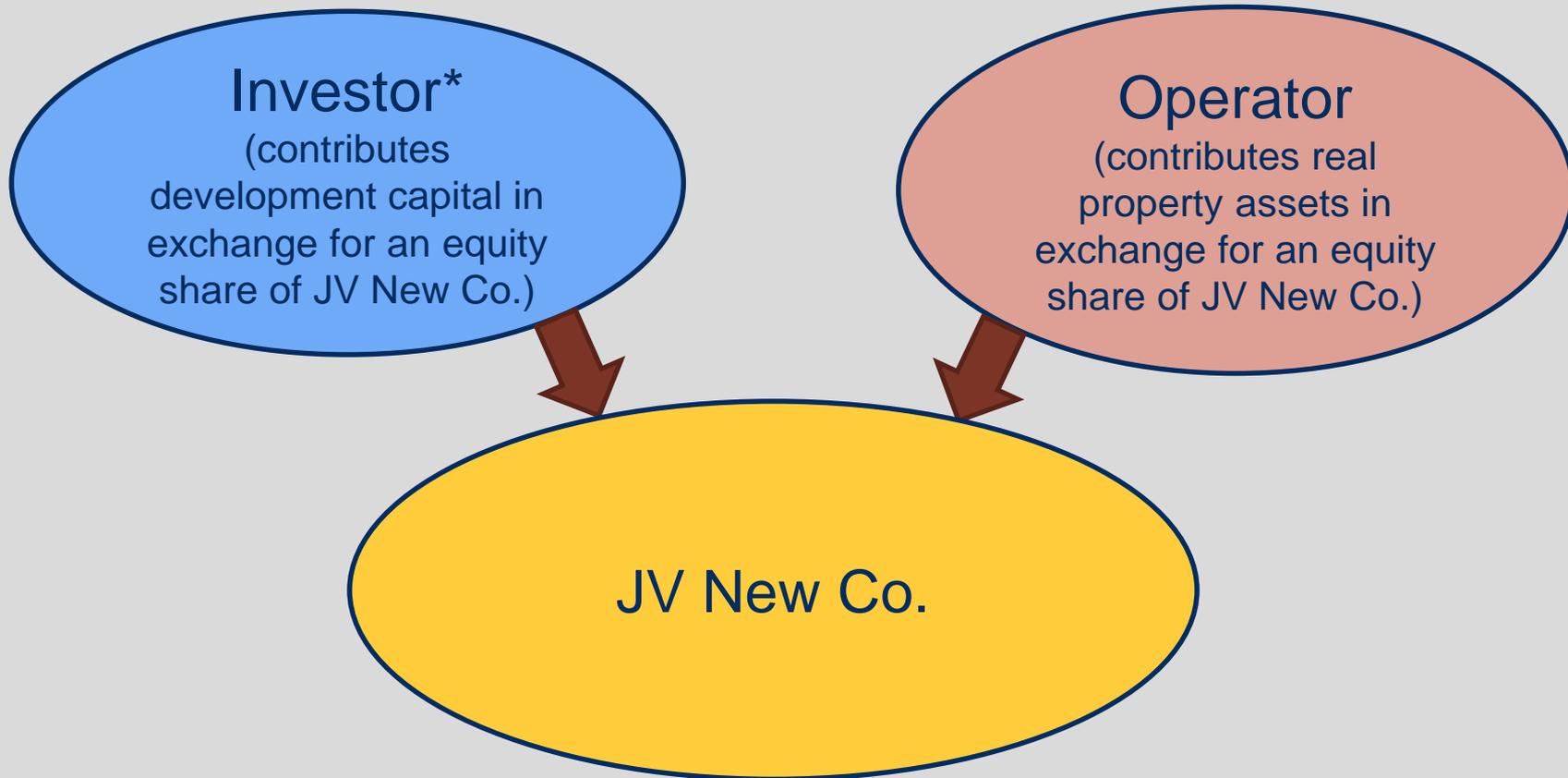
## 3) SPAC (special purpose acquisition company)

- A publicly-traded “blank check company” formed to make a business combination within 18-24 months of initial funding
- SPACs accounted for almost 20% of all IPOs in 2017

## 4) DrillCo

- No new entity is actually formed; Investor commits to fund a development program and carry all or a portion of Operator’s costs (e.g., 50 for 30 promote means Investor pays 50% of drilling costs in exchange for a 30% working interest).
- Investor’s interests are subject to reversion upon “Payout”

# Structures – Equity JV



\* Another common equity JV structure involves two E&P companies each contributing oil and gas assets and capital to develop a single play or Contract Area.

# Structures – Equity JV

## Overview:

- ❖ This is a variation of a traditional joint venture arrangement.
  - ✓ Operator contributes real property interests it already owns to a newly formed entity, typically a limited liability company (“NewCo”), in exchange for membership interests in NewCo.
  - ✓ Investor contributes cash to NewCo to fund development of the Operator-contributed assets in exchange for membership interests in NewCo.
- ❖ The primary transaction documents will be a Contribution Agreement and the Company Agreement for NewCo.
- ❖ Utilizing this structure has the potential benefit of avoiding consents to assignment and triggering existing preferential rights if the underlying instruments include carve-outs for affiliate transfers.
- ❖ Contribution Agreement:
  - Contains provisions typical of asset purchase agreements, including seller reps and warranties, title and environmental defect mechanisms, consent and pref rights requirements, etc.
- ❖ LLC Agreement:
  - Sets forth how development decisions are made and transfer restrictions on ownership of membership interests in NewCo.

# Structures – Equity JV

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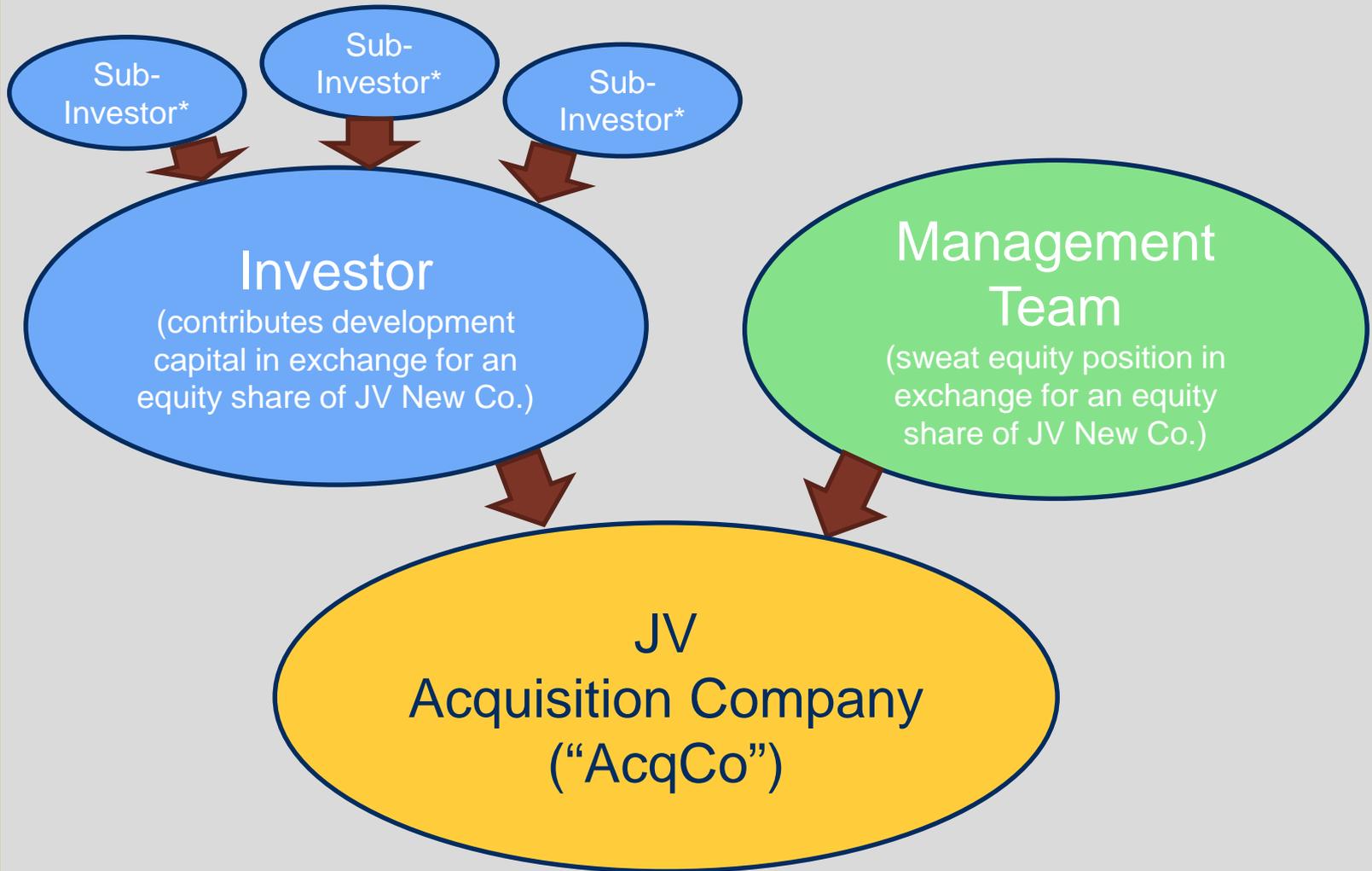
## Key Deal Terms:

- ❖ Development Plan and Budget
- ❖ Transfer restrictions
- ❖ Key-man provisions typically focused on those whose operational expertise is being relied upon to oversee the proposed development
- ❖ Management and control
- ❖ Additional capital contributions
- ❖ Termination of NewCo
- ❖ Distribution waterfall
- ❖ Rights to distributions in kind
- ❖ Exit ramps

# Sample Equity JV Deals

<u>Investor</u>	<u>Operator</u>	<u>Commitment</u>	<u>Structure</u>
Blue Stone Oil & Gas	Abraxas Petroleum Corporation	\$75M capital from Blue Stone  \$25M in assets from Abraxas	NewCo Owned:  75% Blue Stone 25% Abraxas
Lime Rock	Petroleum Development Corporation	\$45M capital from Lime Rock  \$158.5M in assets from PDC	NewCo Owned:  50% Lime Rock 50% PDC
Harbinger Group	EXCO Resources	\$573M capital from Harbinger  \$119M in assets from EXCO	NewCo Owned:  74.5% Harbinger 25.5% EXCO

# Structures – AcqCo.



# Structures – AcqCo

## Overview:

- ❖ Typically, a new limited liability company (LLC) is formed by Investor and a sponsored management team (referred to herein as an acquisition company (“AcqCo”).
- ❖ Similar to the equity JV model, except the oil and gas assets are acquired with capital contributed to the AcqCo rather than existing oil and gas assets being contributed to the AcqCo by the Operator.
- ❖ Investor’s capital commitment contemplates the acquisition of leasehold interests identified by either a sponsored management team or an existing E&P company which will run the day-to-day operations of the AcqCo following formation.
- ❖ Investor typically owns 100% of the equity in the AcqCo until certain pre-established returns are met and will control a majority of the seats on the board. Typically, the sponsored management team will earn a promoted interest in the AcqCo upon satisfaction of Investor’s investment hurdle(s).
- ❖ If the operating team is an existing E&P company, that company may have an option to participate in future acquisitions within a predetermined working interest range and preferential rights related to any subsequent asset sales by the AcqCo.

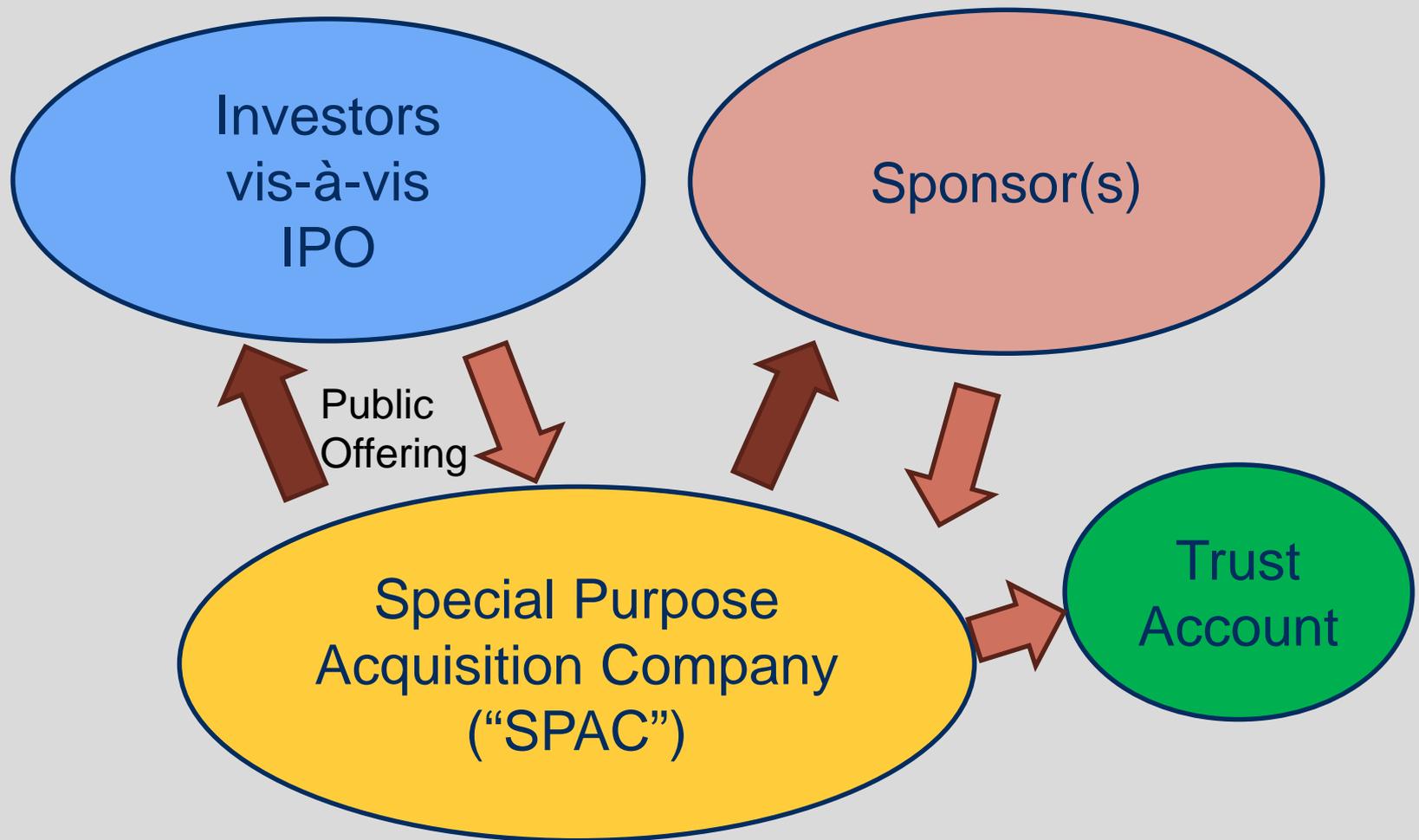
# Structures – AcqCo

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## Key Deal Terms:

- ❖ Development Plan and Budget
- ❖ Transfer restrictions – Operators typically want a ROFR/ROFO to purchase assets acquired by the AcqCo, especially for those projects where Operator has acquired undivided interests alongside the AcqCo.
- ❖ Key-man provisions typically focused on those whose operational expertise is being relied upon to run day-to-day operations of the AcqCo and oversee the proposed development
- ❖ Management and control
- ❖ Additional capital contributions
- ❖ Termination of the AcqCo
- ❖ Distribution waterfall

# Structures – SPAC



# Structures – SPAC

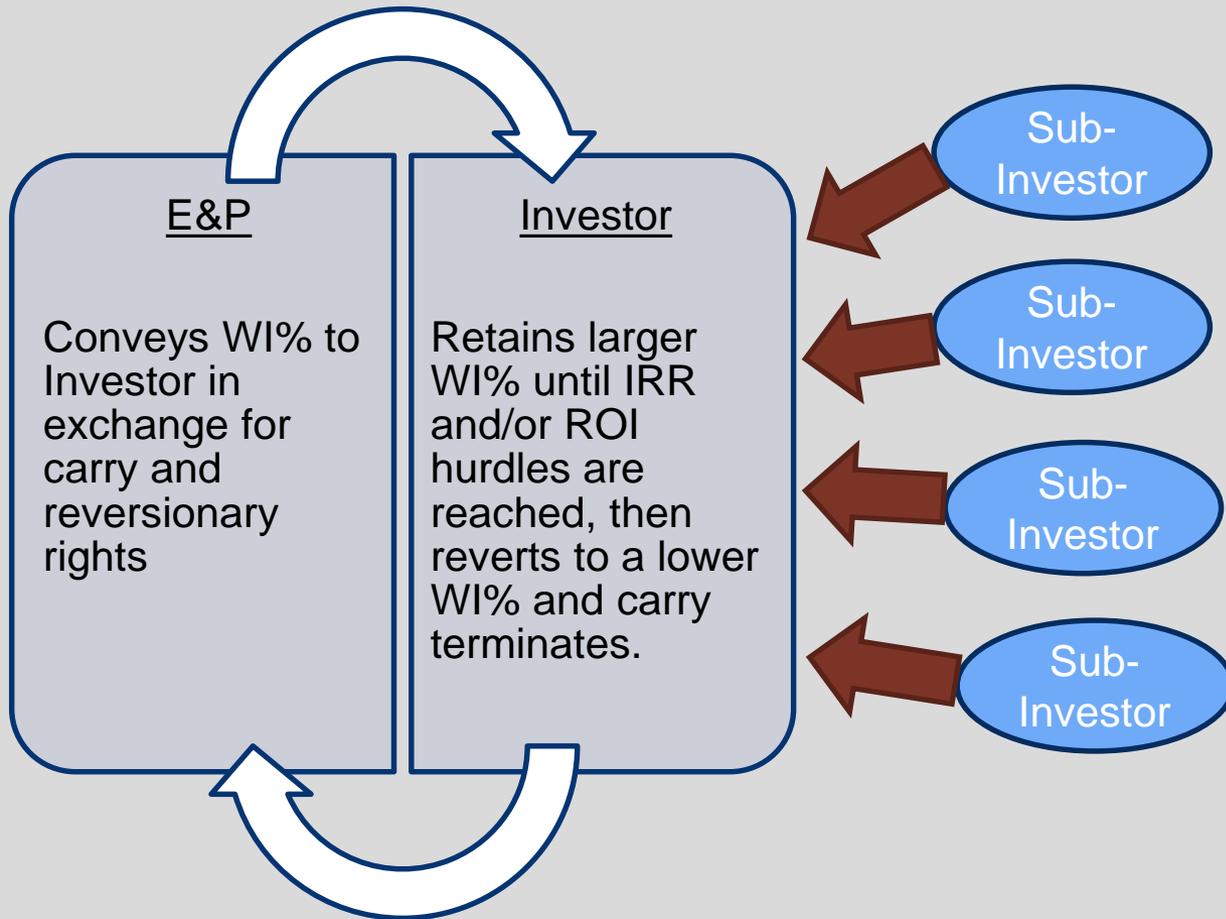
## Overview:

- ❖ Referred to as “blank check companies” since they have no assets or active operations at the time of the initial public offering (IPO).
- ❖ Investor (“Sponsor”) backs a manager or management team with a track record of successful ventures in the industry to make one or more acquisitions or mergers following initial funding through the IPO.
- ❖ SPACs typically only have 18-24 months to identify and complete a business combination (often a merger of a target entity with and into the publicly-traded SPAC). This route can be attractive to private entities looking to avoid a longer IPO process by seeking underwriters and applying with the Securities and Exchange Commission (SEC).
- ❖ At least 90% of invested funds are parked in a trust account until a target acquisition has been identified and approved.
- ❖ At least 80% of IPO proceeds must be used in the first merger or acquisition.
- ❖ If a major transaction is not completed within the 18-24 month timeframe, the money held in trust is returned to investors with interest but Sponsors will forfeit any contributions held in the trust account.

# Recent SPAC Deals

<u>SPAC</u>	<u>Sponsor(s) / Manager</u>	<u>IPO Proceeds</u>	<u>Acquisition</u>
Silver Run Acquisition Corp. I	Riverstone Holdings LLC / Mark Papa	\$500 million	Acquired Centennial Resource Development, Inc.
Silver Run Acquisition Corp. II (Alta Mesa Resources, Inc.)	Riverstone Holdings LLC / Jim Hackett	\$900 million	Merged with Alta Mesa Holdings, LP and Kingfisher Midstream, LLC in early 2018
Kayne Anderson Acquisition Corp. (Altus Midstream Company)	Kayne Anderson Capital Advisors LP / Robert Pugason	\$350 million	Announced acquisition of midstream assets from Apache Corporation in the Delaware Basin
Vantage Energy Acquisition Corp.	Natural Gas Partners / Roger Beimans	\$480 million	Targeting a domestic upstream O&G company
TPG Pace Energy Holdings Corp. (Magnolia Oil & Gas Corp.)	TPG Capital / Steve Chazen	\$600 million	Announced acquisition of Eagle Ford assets from EnerVest Ltd.,
Osprey Energy Acquisition Corp. (Falcon Minerals Corporation)	Osprey Sponsor LLC / Jonathan Cohen	\$275 million	Announced acquisition of Royal Resources L.P. (Eagle Ford minerals)
KLR Energy Acquisition Corp. (Rosehill Resources Inc.)	KLR Energy Sponsor LLC / Gary Hanna	\$85.1 million	Merged with Tema Oil and Gas Company in 2017
Pure Acquisition	HighPeak Energy Partners LP / Jack Hightower	\$414 million	Targeting a domestic upstream O&G company within 18 months of its April 2018 IPO

# Structures – DrillCo



# Structures – DrillCo

## Overview:

- A hybrid of the traditional farmout arrangement and a traditional joint venture between two E&P companies, except no new company is actually created.
- The DrillCo structure deviates from the typical E&P joint venture arrangement in that a financial backer (Investor) will commit a certain amount of capital (usually deployed in tranches) in exchange for an undivided portion of the assets owned by an E&P Company (Operator), rather than two Operators combining acreage for development purposes.
- Favorable to smaller Operators with limited access to traditional RBL financing or larger Operators seeking to hold acreage or develop portions of its portfolio which would not otherwise be developed as quickly due to cash/funding constraints.
- The interests assigned to Investor will either completely or partially revert to Operator once Investor has achieved a pre-determined return on investment (usually 8%-25% IRR).

# Structures – DrillCo

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- The Joint Development Agreement (“JDA”) is the primary transaction document and functions as a hybrid purchase and sale agreement and exploration and development agreement. Also referred to as Joint Exploration Agreements, Participation Agreements, etc.
- There is no standard industry form; each JDA is customized for the particular transaction and many are fairly complex and intended to govern the parties’ relationship for several years.
- Existing Operator continues to operate its own properties with Investor as the majority non-operating working interest owner until “Payout” occurs and all or a majority of Investor’s interests revert to Operator.
- Investor acquires a portion of Operator’s assets and agrees to carry costs for a set number of wells until Investor realizes a pre-determined return which triggers a reversion of Operator’s interests, either in whole or in part.

# Structures – DrillCo

- Carry Obligation – Can range from a carry of all or a majority of Operator’s interest; Investor’s capital commitment may be allocated among multiple tranches with the option to increase/reduce Investor’s carry obligation in subsequent tranches.
- Availability Period – Investor’s carry obligation will continue through a predetermined “Availability/Commitment Period”, either based on an exclusive, predetermined set of development wells or an agreed upon initial set of wells with more wells to be drilled based on subsequent proposals of one or more of the parties and prospective acquisitions within the AMI.
- Payout Hurdle(s) / Reversion Parameters – Investor’s carry obligation ends and all or a portion of Investor’s interests revert to Operator upon Investor establishing “Payout”; after which point, the parties are heads-up at APO interest levels.
  - Single or multiple hurdles – there may be one or more “payouts” or “hurdles”
  - Are hedging gains/losses considered
  - Pre-payment right for Operator
- “BPO” & “APO”– the designations “BPO” and “APO” refer to the parties’ interests “Before Payout” and “After Payout” following one or more reversions.

# DrillCo – Primary Components

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- Development plan and budget
- Operating committee
- Standard PSA provisions for upstream asset acquisition (seller's reps, defect mechanisms for title and environmental matters, etc.)
- Capital commitment / carry obligations
- Payout hurdles / reversion parameters
- Investor and reversion assignments
- Well proposal requirements
- Joint operating agreement
- Management services agreement
- Tax partnership agreement
- Financial assurances / security
- Area of mutual interest
- Contract area
- Transfer restrictions
- Indemnification

# Sample DrillCo Deals

<u>Investor</u>	<u>Operator</u>	<u>Commitment</u>	<u>Structure</u>
Apollo Global Management	EP Energy Corp.	\$450 million	Costs: 60 / 40 BPO: 50 / 50 APO: 15 / 85 Hurdle: 12% IRR
GSO Capital Partners L.P.  (Blackstone)	Linn Energy	\$500 million	Costs: 100 / 0 BPO: 85 / 15 APO: 5 / 95 Hurdle: 15% IRR
Bayou City Energy	Alta Mesa Energy	Max \$3.2M per well up to 40 wells	Costs: 100 / 0 BPO: 80 / 20 APO(1): 15 / 85 APO(2): 7.5 / 92.5 Hurdle(1): 15% IRR Hurdle(2): 25% IRR
TPG Special Situation Partners	Legacy Reserves	\$150 million (1 <sup>st</sup> tranche)	Costs: 95 / 5 BPO: 87.5 / 12.5 APO(1): 37 / 63 APO(2): 15 / 85 Hurdle(1): 1X ROI Hurdle(2): 15% IRR
BCE Roadrunner LLC / Bayou City Energy	Chaparral Energy	\$100 million (1 <sup>st</sup> tranche)	Wells: 30 in STACK Costs: 100 / 0 BPO: 85 / 15 APO: 25 / 75 Hurdle: 14% IRR



# Issues & Considerations

# Operator Considerations

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- Alternative to traditional financing and equity/debt issuance with Operator's costs partially or completely carried as to development wells.
- Opportunity to develop proved reserves and/or retain acreage and return to a majority position for the remainder of the productive life of assets.
- Potential to sell to Investor prior to development and again subsequent to development.
- Limit as many expenses in Payout / IRR Hurdle formula as possible.
- Wellbore only assignments preferred.
- Negotiate for maximum reversion of interests following Payout.
- Drilling plans should be based on reasonable development timeframes with outs to allow for delays due to rig and completion crew availability.
- Negotiate for mutual AMI, preferential right and drag/tag obligations.
- Negotiate for deductibles rather than thresholds for title/environmental defects.

# Security & Financial Assurances

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Operators may require Investors to provide financial assurances that the committed capital will be available and timely deployed.

Typical security mechanisms include:

- Right to cash call capital commitment
- Mortgages covering Investor's working interests
- JOA lien rights
- Reassignment covenants
- Parent guaranty
- Performance bonds or irrevocable letters of credit
- Deposit capital commitment, or portions thereof on a regular basis, into an operating escrow account
- Require equity commitment letters from sub-investors funding Investor

# Investor Considerations

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- Leasehold assignments preferred to wellbore only assignments to allow for additional return on subsequent sale of assets.
- Capture as many expenses as possible in Payout formula – including costs related to acquisitions, engineering and related due diligence, drilling, completion, equipping, gathering, hedging losses, pre-drill costs.
- Retain overriding royalty and/or working interests following Payout to market following development to provide additional gains in addition to the IRR/ROI Payout returns.
- Exit strategies are important; allocation of purchase price proceeds in the event of a sale prior to Payout should be negotiated in advance.
- Investor better protected from Operator bankruptcy because property interests are owned directly by Investor.
- Negotiate for \$1 thresholds rather than deductibles for title/environmental defects.
- Negotiate for termination events due to commodity price declines, poor production performance and/or Operator defaults.

# Investor Exit Strategies

Investor will seek mechanisms to be able to suspend or reduce its capital commitment and carry obligations and/or exit the JV arrangement entirely should any of the following occur:

- a) Material default by Operator in its drilling obligations;
- b) Unexpected commodity price declines which render the previous economic assumptions invalid;
- c) Inability to agree on development plans or budgets in later years; or
- d) Poor production performance of Development Wells.

In addition to remedies associated with poor performance, as noted above, Investors will want the following exit rights pertaining to a future sale of the jointly-owned assets:

- Drag rights
- Tag rights
- Preferential purchase rights (ROFR, ROFO, etc.)

# Select Issues

- The subsequent bankruptcy of the Operator could result in the suspension of drilling and/or completion activities; Investors should consider including completion and equipping commencement and completion deadlines in addition to drilling commencement deadlines.
- Management teams (engineers, geologists, etc.) – past litigation from prior partnerships may have implications on future acquisitions.
- Wellbore only assignments – Investors should obtain ratifications of any wellbore only assignments delivered prior to development.
- Foreign investment – typically a greater focus on environmental matters; sources of funding should be scrutinized.
- Memo of JDA – beneficial for the Operator to file of record a memo of the JDA reflecting its future rights to re-assignment following payout and reversion.
- “Deemed” execution of form JOA – can result in failure to execute JOAs and memoranda thereof on a unit-by-unit or well-by-well basis and thus failure to perfect liens granted to the parties in the JOA.
- If hedging gains, losses and/or rollover expenses are included in the Payout calculation, Operator may want to establish parameters in the JDA for approved hedging strategies of Investor (e.g., “Approved Hedges”).

# Select Issues

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- Consent rights – transfer restrictions are typical during the carry period
- Drag/Tag rights
- Preferential purchase rights
- Non-compete by Operator
- Inspection rights – often broader than provided under the JOA
- Drainage protection
- Access rights
- Audit rights
- Walkaway right – Investors will want the right to terminate future capital commitments if the results of Initial Wells are poor or Operator materially defaults on its obligations

# Title Issues

- The JDA will contain title and environmental due diligence provisions and mechanisms and representations typical of an acquisition of upstream assets.
- Given the parties' joint ownership of the assets following closing, the JDA may provide for post-closing due diligence and defect adjustments which is a deviation from the typical procedures in a normal buyer-seller transaction.
- Title Defect (where Operator operates adjacent interests) – “If the presence of an Existing Well producing in the Target Formation materially impedes the development of a Well on the Leases or undermines its economics by, for example, imposing regulatory restrictions on its location or allowable or increasing its cost, then that fact shall constitute a title defect which Operator shall cure by plugging the Existing Well in the Target Formation.”
- Title Defect Period – typically 30-60 days, depending on the urgency of the drilling operations and the status of Operator's title records, although post-closing due diligence is sometimes negotiated.
- Individual Title Defect Deductible/Threshold – can vary from transaction to transaction (typically a definitive amount but can be stated as a percentage of the allocated value of an asset). Investors will want to establish a low threshold to capture as many defects as possible.
- Aggregate Title Defect Deductible/Threshold – typically in the 1%-5% range, although DrillCo transactions tend to err on the lower end due to the nature of the transaction.

# Defaults & Remedies

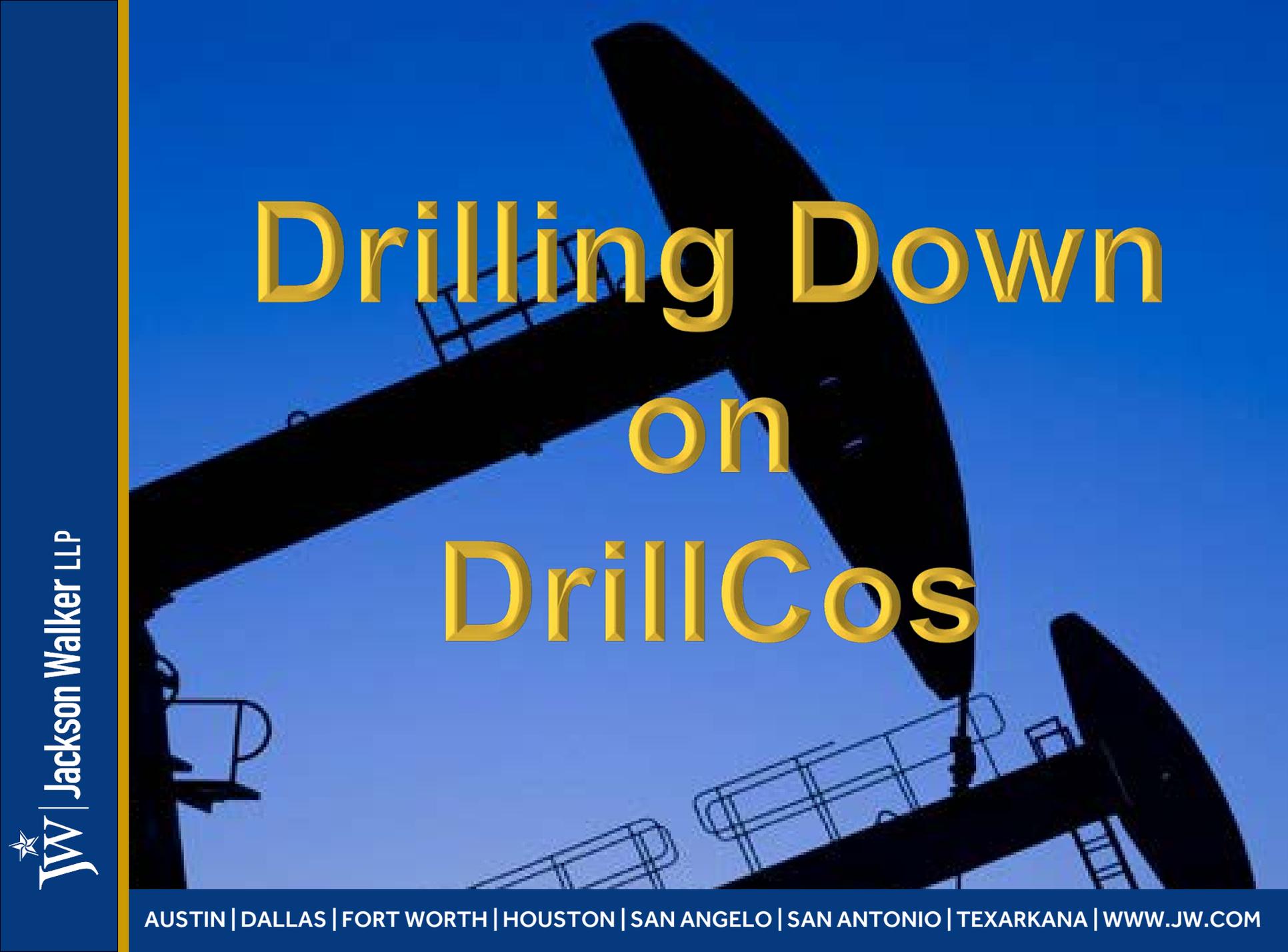
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Common consequences of Operator defaults include:

- a) Termination of Investor's carry obligation;
- b) Reduction of the carry percentage;
- c) Reduction of the Availability Period;
- d) Operator's obligation to repurchase Investor's interests at a predetermined price; and/or
- e) Removal as operator.

Common consequences of Investor defaults include:

- a) An automatic reversion of Investor's interest;
- b) Loss of right to participate in additional development wells;
- c) Right of setoff to recover unpaid expenses out of future production, typically with a penalty;
- d) Operator's ability to avail itself to any financial assurance protections negotiated in the JDA; and/or
- e) Reduction of participation in future tranches.



# Drilling Down on DrillCos

# Availability Period

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- Investor's capital commitment is limited in amount and the period during which such funds are available to deploy pursuant to the JDA and Investor's underlying investment and subscription agreements. This is typically referred to as the "Commitment Period" or "Availability Period".
- Investor's obligation to fund all or a portion of development costs will typically last until the earlier of (i) the exhaustion of all committed funds; (ii) the end of a predetermined Availability Period (several months to a few years); or (iii) an early termination event triggered pursuant to the JDA.
- In most cases, any committed funds not used for development purposes by the end of Availability Period will be no longer be available to Operator.
- The JDA should set forth defaults which trigger a termination or suspension of the Availability Period and the corresponding carry obligation in the event of a material default by Operator.

# Availability Period

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“Availability Period’ means the period from the date of this Agreement until the earlier of (i) the date on which all Wells have been Drilled and Completed; or (ii) [\_\_\_\_], 202[\_] provided that Investor may terminate the Availability Period earlier by delivery of written notice to Operator at any time if and when Operator has, without the consent of the Operating Committee:

- a) failed to conduct Drilling Operations for the Wells within sixty (60) days following the end of Operations for one Well and the commencement of Drilling Operations for the next Well;
- b) failed to conduct Completion Operations for a Well within sixty (60) days following the end of Drilling Operations for such Well;
- c) failed to deliver Well Proposals for Wells after the Initial Wells so as to permit the commencement of Drilling a subsequent group of Wells within ninety (90) days from Completion of Drilling Operations for the previous group of Wells; or
- d) failed to conduct Drilling Operations on the subsequent Wells within the time frame provided above for the Wells.”

# Memorandum of JDA

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- Most JDAs contemplate the filing of a Memorandum of JDA which may address one or more of the following:
  - a) places third parties on notice of Operator's reversionary interests in Investor's share of the assets;
  - b) places third parties on notice of Investor's right to earn additional undivided interests in the assets;
  - c) places third parties on notice of any AMI or preferential rights granted pursuant to the JDA; and
  - d) perfects any security interests granted in the JDA (although separate security instruments such as deeds of trust and assignments of production may also be filed).
- Memoranda of the JDA and JOA(s) should be filed in each county in which real property interests are located. For security interests granted in production, proceeds and other personal property, UCC financing statements should be filed with the Secretary of State for each state in which assets are located.

# Carry Obligation

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The costs that are covered by Investor's carry obligation are typically limited to "Well Costs" (i.e., those costs incurred to drill, complete and equip a well), with variations of certain related costs.

- Carry Obligation – Can range from a carry of all or a majority of Operator's interest; Investor's capital commitment may be allocated among multiple tranches with the option to increase/reduce Investor's carry obligation in subsequent tranches.
- Carefully define the extent of the carry obligation. The carry can apply to casing point, to or through completion or through the tanks. The parties should clearly define what specific operations and costs are included in the carry.
- An alternative to defining the carry obligation relative to a particular stage of development is to limit the carried costs for each well to a specific dollar amount.

# Defining Costs

An alternative to defining the carry obligation relative to a particular stage of development is to limit the carried costs for each well to a specific dollar amount. *Compare:*

- “Well Costs’ means the expenses to Drill, Complete and Equip a Joint Well in accordance with the applicable Development Plan and DrillCo Operating Agreement, including (a) Third Party title review, assessments and examination costs (excluding title curative costs); (b) environmental site or impact assessments, well site preparation, and other well location costs; (c) site reclamation and related costs; and (d) permitting costs. Notwithstanding the foregoing, for the avoidance of doubt, “Well Costs” for a Joint Well shall (a) be limited to those costs related to items addressed or included in the applicable AFE for such Joint Well and otherwise meeting the definition of Well Costs; and (b) not include capital costs incurred by Company or its Affiliates associated with constructing, maintaining and repairing Central Production Facilities, Midstream Facilities and Water Treatment and Disposal Facilities. Operator will pay the capital costs associated with, and will retain ownership of, all Central Production Facilities, Midstream Facilities and Water Treatment and Disposal Facilities;” *with*
- “Well Costs’ means the expenses to Drill, Complete and Equip a Joint Well and any other costs and expenses included in an AFE attributable to such Joint Well in accordance with the Operating Agreement, including the costs of: pad construction (fixed, irrespective of the costs incurred by Operator for pad construction, at [\$100,000] for each Joint Well); permitting, Drilling, logging, Deepening and Sidetracking (each as defined in the Operating Agreement), Completing, casing, perforating, fracturing, stimulating, and testing wells on the Units on which the Development Wells are located; site reclamation and related costs; Taxes, title review and examination and curative costs; frac water sourcing and produced water handling (fixed, irrespective of the costs incurred by Operator for frac water sourcing and produced water handling, at [\$0.50/bbl] of sourced water); and costs and expenses of Equipping such Joint Well for production (including proportionate costs and expenses relating to surface equipment associated with Development Wells that may have been incurred by Operator prior to the Execution Date).”

# Defining Costs

Typically, pre-drilling costs, including acquisition costs, are not covered by Investor's carry obligation but may be factored into the Payout calculation. General overhead and administrative costs are typically excluded from these definitions.

- “Pre-Drill Costs’ consist of reasonable out-of-pocket costs for regulatory approval of a Drilling Unit, broker title work, obtaining a drilling title opinion, surface damages, location construction, staking the Well location, and obtaining drilling Permits for a Well, all to the extent not included in the definition of Acquisition Costs or in the Development AFE for the affected Well.”
- “Acquisition Costs’ shall mean all costs and expenses incurred and paid by an Acquiring Party in connection with the identification, evaluation, and acquisition by such Acquiring Party of one or more Oil and Gas Interests, including: (a) the lease bonus, purchase price, and/or other cash consideration paid by the Acquiring Party for the relevant Oil and Gas Interests; and (b) the following costs and expenses actually paid by the Acquiring Party in connection with such Oil and Gas Interests: (i) costs of environmental surveys and site assessments; (ii) external due diligence expenses, including engineering, accounting, and other consulting costs; (iii) abstract and recording fees; (iv) fees paid to lease brokers; (v) fees paid to outside attorneys and landmen for title examination and title opinions, reports, or other title due diligence; (vi) costs of preparing or obtaining title curative materials; (vii) costs of maps, reproductions, and the like; (viii) reasonable fees and expenses of attorneys (other than the fees referred to in clause (v) above) incurred in connection with the negotiation of the purchase of the relevant Oil and Gas Interests and the preparation of the relevant purchase and closing documentation; and (ix) other reasonable actual out-of-pocket costs incurred by the Acquiring Party. For purposes of this Agreement, Acquisition Costs shall not include any allocation of general overhead and administrative expenses of the Acquiring Party.”

# Controlling Costs

The parties to the JDA will agree on an initial development plan with AFEs for the initial wells attached. Investor will want to limit its carry obligation to the agreed-upon costs for each development well, subject to reasonable cost increases and emergency costs.

- “‘Maximum Well Cost’ means (i) with respect to the Commitment Wells, an amount equal to 108% of the Investor Share of the combined total Well Costs for the Commitment Wells included in the Development Plan and, (ii) with respect to the Additional Wells (upon Investor’s election to participate in the Subsequent Wells), an amount equal to 108% of the Investor Share of the combined total Well Costs for the Additional Wells included in the Development Plan. For the Development Wells Drilled, Completed and Equipped by Operator, Investor shall be obligated to fund the Investor Share of Well Costs for such Development Wells up to the Maximum Well Cost; provided that Investor shall be required to fund the Investor Share of Emergency Costs irrespective of whether such costs exceed the Maximum Well Cost. Operator shall be obligated to fund the Investor Share of the Well Costs, if any, in excess of the Maximum Well Cost.”

# Determining Payout

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The triggering event for the revision(s) of Investor's interest to Operator is referred to as "Payout" or a "Hurdle," and there may be multiple payout events triggering various levels of reversion of Operator's interests.

- Single Payout Hurdle – The Payout Hurdle shall have been reached when Investor achieves a 8% - 25% Internal Rate of Return (IRR) (or other metric for measuring Investor's return on investment).
- Multiple Payout Hurdles – The First Payout Hurdle shall have been reached when Investor achieves a 8% - 25% IRR (or other metric for measuring Investor's return on investment). The Second Payout Hurdle have been reached when Investor achieves a [1x – 2x] Return on Investment (ROI) (or other metric for measuring Investor's return on investment).
- Sample Payout Calculation – Including an exhibit to the JDA which sets forth a sample payout calculation can be helpful to inform the parties' understanding prior to closing and serve as a useful reference for subsequent calculations.

The inputs to the Payout calculation will fluctuate throughout the term of the JDA as additional wells are added to the initial development plan and other additional costs captured by the Payout formula are incurred. Investor and Operator should communicate regularly regarding the status of Payout and projections for achieving Payout based on current development plans and the production profiles of joint development wells.

# Tax Partnership Agreements

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- No partnership entity is actually created under state law; solely for federal tax purposes. The transaction documents should disclaim any other type of partnership relationship between the parties.
- Allows an Investor to deduct intangible drillings costs (IDCs) as to the costs carried for the benefit of the Operator which would otherwise be limited to its fractional ownership share pursuant to the “fractional interest rule.”
- Recent revisions to the Tax Code directly impact tax partnerships and the language that needs to be included in the JDA and the Tax Partnership Agreement. The tax partnership exhibit to the A.A.P.L. JOA forms may not be up to date and should not be relied upon.
- Tax attorneys should be consulted at the preliminary stages of the negotiations to ensure the deal terms will comport with the “complete payout rule” or other exception to the “fractional interest rule” that would allow Investor to deduct all of the IDCs associated with funding development.

# Development Plans

The Development Plan typically sets forth, at least, the following:

- a) the number of Development Wells expected to be Drilled, Completed and Equipped (or, in the case of the Initial Wells, that have been Drilled prior to the Execution Date), and the expected productive lateral length for each such Joint Well;
  - b) projected spud and completion dates (or, in the case of the Initial Wells, actual spud dates) for informational purposes only;
  - c) estimated Well Costs for the Development Wells included therein for purposes of calculating the Maximum Well Cost;
  - d) a proposed drilling plat designating the surface hole location, penetration point, first take point, last take point and terminus of the proposed well; and
  - e) the BPO and APO working and net revenue interests of the parties.
- “Development Plan. The Drilling Plan will be based on: (a) no more than one (1) drilling rig running at any time (provided, however, that with the consent of all Parties, two (2) drilling rigs may be in operation at the same time), and (b) no more than six (6) Drilling Locations being approved by the Drilling Committee and deemed to be Prospects at any time. The Drilling Plan will be adjusted periodically by (x) deleting Drilling Locations for which (i) a well has been Completed, (ii) the Prospect Well Proposal was not approved by the Parties before the Prospect Election Date, and (iii) Actual Drilling Operations were not commenced for a proposed well on the relevant Prospect within ninety (90) days from the applicable Prospect Election Date; and (y) adding Drilling Locations that (i) have been approved by the Drilling Committee or (ii) are associated with an Independent Prospect Well Proposal.”

# Development Committee

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At meetings of the Operations Committee, the Operator typically:

- a) presents information regarding the historical drilling, completion and performance results;
- b) presents recommendations for future drilling activities, including contemplated future wells;
- c) provides projections of production rates and volumes for contemplated future wells;
- d) reports on all engineering and geological issues relating to development activities;
- e) reports on any disputes or other issues involving governmental authorities, lessors, landowners, or other persons;
- f) presents information regarding lease acquisition activities and regarding lease and land management activities, including any details requested by a party;
- g) presents recommendations for the construction or modification of facilities;
- h) presents such other information as it may deem significant to the activities hereunder or which may be reasonably requested by Investor; and
- i) provides an overview of hedging transactions for the preceding quarter and a plan for anticipated hedging transactions for the following quarter.

# Drilling and Completion Timeline

- “Drill” or “Drilling” means any activity related to moving in, rigging up, logging and testing a Well, including, but not limited to, constructing and upgrading access roads, obtaining and preparing the drillsite, obtaining Permits and division order or drill site title opinions, obtaining drilling contractor services and consultants necessary for the drilling of a Well, obtaining mud, chemicals, pipe and supplies, and any other activities related to the foregoing.
- “Complete” and “Completing” and “Completion” means any activity related to preparing a Well drilled to total depth (or to the terminus of a horizontal well) for production, including, without limitation, installation of production casing, perforating, conducting fracture stimulation and drilling out of fracture plugs or, in the event the Well is not completed as a Well capable of producing in paying quantities, plugging such Well, including restoring and reseeded of the Well location and any associated roads as required by regulation, lease, or contract.
- “Equip” or “Equipping” means any activity related to equipping the Well, including installing tubing and any other equipment or activities required to bring the Well to first sale, including artificial lift.
- “Commence Drilling Operations” and “Commencement of Drilling Operations” occurs on the date on which a drilling rig capable of Drilling a Well to total depth has rigged up on location and has commenced the actual Drilling of a Well.

# Investor Assignments

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- Typically delivered at the time funds are issued by Investor.
- Scope of conveyances varies:
  - a) all leases as to all/certain depths and related assets, *including* existing wells;
  - b) all leases as to all/certain depths and related assets, *excluding* existing wells;
  - c) all leases as to target depths only;
  - d) leases only to the extent of the acreage included in units for development wells; or
  - e) wellbore only.
- Timing of delivery is a key consideration.
- Wellbore only assignments granted prior to drilling should be ratified by a recordable instrument following completion of the well.
- Some transactions are structured with an initial conveyance of the lesser APO interest in all leases to Investor with additional wellbore only assignments conveying the additional interest (difference between BPO and APO) to follow completion of each development well.

# Wellbore Assignments

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## Wellbore Assignments:

- “As to the Initial Wells, upon execution hereof, and as to all other Test Wells, upon delivery by Investor of its Election to Participate in any Test Well, Operator shall execute, acknowledge and deliver to Investor a Wellbore Assignment of the Additional Wellbore Interest in all Leases and other rights and properties of Operator that are associated with that Test Well to the extent of the wellbore for such Test Well, based on the information available to Operator at the time.”

## Ratification of Wellbore Assignments:

- “Within thirty (30) days after a Test Well reaches total depth, for a vertical Well, or is drilled to the terminus of its lateral, for a horizontal Well, Operator shall execute and deliver to Investor a ratification, substantially in the form attached as Exhibit B-3, of the previously delivered Wellbore Assignment as to such Test Well (a “Ratification”).”

## Reversion Assignment:

- “Effective as of the first day of the month following Payout, Investor shall reconvey to Operator (by assignment without any representation of warranty except warranty of title as against claimants by, through or under Investor, and not otherwise) the Additional Wellbore Interests in the Test Wells conveyed to Investor by Operator pursuant to the Wellbore Assignments, effective as of Payout (the “Reversion”).”

# Well Proposals

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Each Well Proposal shall include:

- a) the geographic boundaries of the relevant Prospect and the prospective objective zones or formations underlying such Prospect;
- b) a copy of all relevant Geological Data and Geophysical Data, to the extent available, and a plat detailing the Prospect area to be evaluated;
- c) a unit plat or acreage allocation plat depicting the separate tracts included in the Prospect and the likely Production Unit for the proposed well;
- d) an AFE for the proposed well;
- e) a drilling title opinion;
- f) a drilling and completion schedule;
- g) the proposed WI / NRI (BPO and APO) of Investor and Operator;
- h) the material terms of all applicable Leases covering the lands covered by the Prospect, including royalty burdens and drilling and/or other operational deadlines applicable to such Leases;
- i) reservoir analysis and any other engineering analysis, to the extent available; and
- j) the Drilling Location of the proposed well and its Objective Depth.

# Additional Wells

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- Parties typically prohibited from proposing any “Additional Wells” (wells other than Development Wells) until the Development Wells have been drilled and completed.
- Third-party proposals are not within control of the parties and are often expressly carved out of the carry obligations, subject to Investor’s election to include them within the drilling program.
- Some JDAs provide that Additional Wells will be included in the Payout calculation and/or subject to Investor’s carry obligation as long as the Additional Well is proposed and approved during the Availability Period with sufficient funds remaining to be deployed.

# Joint Operating Agreements

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- JOAs should be executed on a well-by-well or unit-by-unit basis to allow for an easier sale of specific wells at a later date.
- An all too common practice is to agree in the JDA that the JOA attached as an exhibit thereto is binding as between the parties for future operations whether or not JOAs are actually signed. While this may indeed be binding as between the parties, failure to execute and file of record memoranda of JOA will result in a failure to perfect the security interests granted pursuant to the standard JOA.
- The JDA should provide for the JOA and related filings to be executed, delivered and properly filed by both parties at the time of the applicable assignment.
- The JDA often contains many of the terms typically included in Art. XV of the JOA, such as what constitutes “good cause” for removal of Operator by Investor, non-consent provisions, preferential rights, etc.
- The A.A.P.L. Form 610-1989, Model Form Operating Agreement with Horizontal Modifications and the recently released A.A.P.L. Form 610-2015, Model Form Operating Agreement (which already includes horizontal modifications) are most frequently used.

# Tag/Drag Along Rights

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To the extent drag and/or tag rights are included in the deal, the parties will likely be prohibited from utilizing them until the initial development program is complete or the Availability Period has expired.

## Drag Rights:

- Drag rights can be a particularly important off-ramp for Investors looking to maximize value and enlarge the pool of prospective purchasers in a subsequent sale. Typically, the drag right is only triggered if a party is selling all of its interests, rather than just an undivided portion.
- The drag mechanism can be structured to require the non-selling party either to (a) sell all of its interests directly to the buyer on the same terms; or (b) sell all of its interests to the selling party on terms and at the price agreed to by the buyer.

## Tag Rights:

- Tag along rights allow a party to participate in the sale of assets negotiated by their counterparty/co-owner with a prospective purchaser.

# Preferential Rights

Operators typically want an option to purchase the undivided interests of Investor in order to preserve Operator's pre-JDA ownership position in the prospect in the event Investor decides to sell its proportionate share.

- Right of First Refusal – provides a party with the opportunity to acquire the other party's interests on the same terms and conditions as the selling party has agreed to with a third party purchaser.
- Right of First Offer – provides a party with the opportunity to make the first offer to acquire the other party's interests if such party indicates a desire to sell.
  - "Right of First Offer. If Investor intends to Transfer all or any undivided portion of its ownership interests in the Joint Wells to a Third Party, then Investor must provide notice of such proposed Transfer to Operator prior to the execution and delivery of definitive agreements with respect to such Transfer. Operator shall have the right, within 15 days of receiving such notice, to provide a written offer, specifying the purchase price, for such Joint Wells. Investor may undertake negotiations with Operator regarding such offer. In no event may Investor Transfer the applicable Joint Wells to another Person at a purchase price that does not exceed the purchase price proposed by Operator or on materially worse terms within six calendar months of the date of receipt of such offer from Operator. If Investor fails to Transfer the applicable Joint Wells within such six calendar months, then such Joint Wells shall again be subject to this Section prior to Investor's permitted Transfer of such Joint Wells."

# Areas of Mutual Interest

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AMI provisions are often included in the JDA. The AMI contemplates future acquisitions by a party to the JDA in a designated area and can be specific to the existing assets and contract area or broadened to include a larger potential development area.

- “Area of Mutual Interest. The Parties agree that, for a period of three (3) years following the Effective Date, any leasehold or mineral acreage within the AMI that is acquired or that is the subject of a contractual or other right to be acquired by Operator (an “Additional Lease”) shall be subject to the terms and conditions of this Article, and if Investor elects to participate in the acquisition of any such Additional Leases as provided below, such Additional Leases shall be subject to the terms and conditions of this Agreement as if such Additional Lease was included in the Leases on the Effective Date; provided, however, that the Investor Share of any Additional Lease conveyed to Investor pursuant to this Section shall not be subject to and is expressly excluded from the Reversion.”

# Drainage Protection

In situations where Operator has existing wells and operations adjacent to the Contract Area subject to the JDA which are not part of Investor's development program, Investor should consider including offset well obligations and drainage protection covenants in the JDA.

- “Drainage Protection. Unless otherwise agreed by the Parties, Operator shall (a) not intentionally Complete and produce Hydrocarbons from any portion of the Completed Lateral of a non-Joint Well located closer than [550’] to an existing Completed and producing lateral of a Joint Well and, (b) absent some special circumstance such as a constraint created by a property line, Operator shall not seek a drilling permit for (or propose under an operating agreement) a non-Joint Well that would be Completed and produce Hydrocarbons from any portion of the Completed Lateral of such non-Joint Well located closer than [550’] to an existing Completed and producing lateral of a Joint Well; in each case, except with respect to the toe stage or heel of a non-Joint Well that abuts the toe stage or heel of a Joint Well (the “Spacing Requirements”). Operator shall not propose any well under an operating agreement that would violate the Spacing Requirements; provided, however, that this Section will not restrict operations by Third Parties to the extent such operations are not proposed by Operator. Without the consent of Investor, the average inner well spacing between any non-Joint Well as proposed by Operator and a Joint Well will be no closer than [650’] (measured on the entire Completed Lateral of the applicable wells), excluding, for the avoidance of doubt, the toe stage or heel of a non-Joint Well that abuts the toe stage or heel of a Joint Well.”

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# Questions?

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