



# Joint Exploration and Development Agreements

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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 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 acquisitions, divestitures, and joint ventures involving upstream and midstream oil and gas assets.

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“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*

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# Road Map

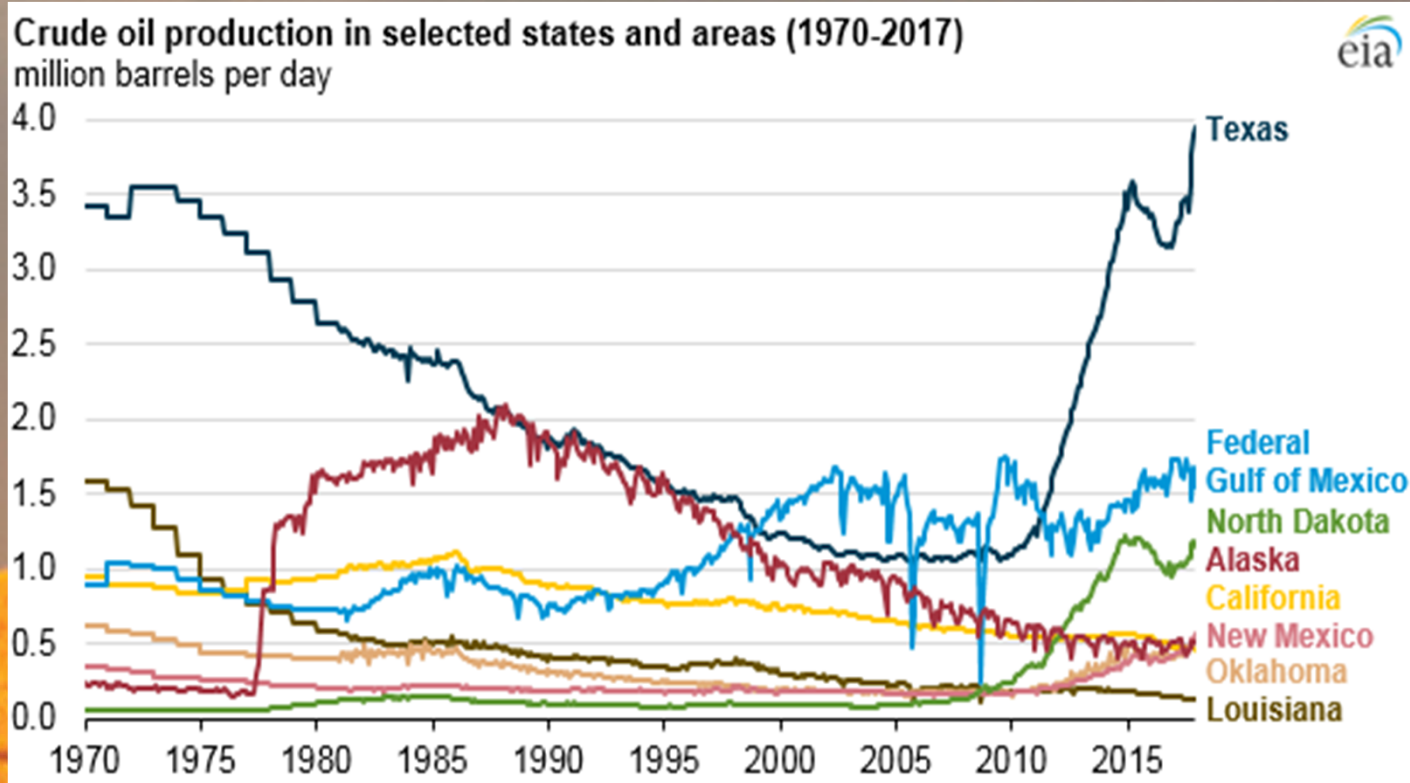
- Market Trends
- Financing Structures
  - ✓ DrillCo
  - ✓ Equity Joint Venture
  - ✓ Sponsored Management Teams
- Joint Development Agreements
- Issues to Consider
- Questions

# Market Trends

- Public 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)
- Redevelopment of historic fields with horizontal drilling (Haynesville, Gulf Coast plays)
- Influx of foreign investment

# Market Trends

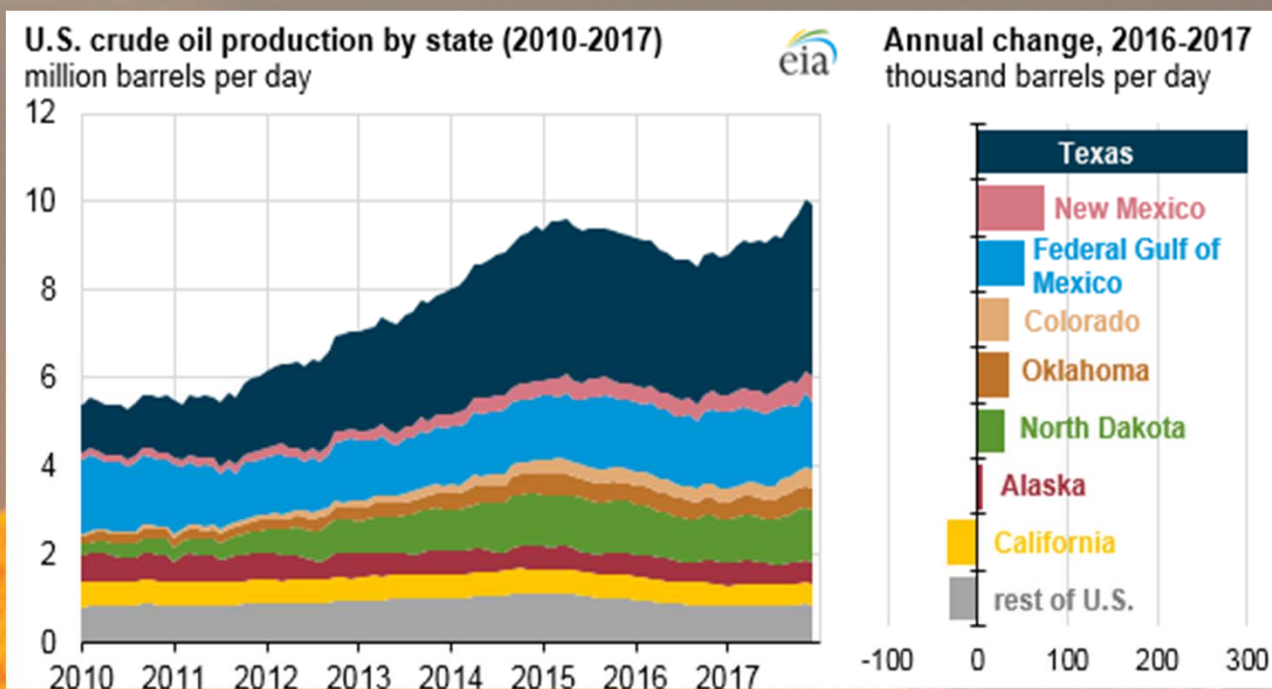
“Annual average U.S. crude oil production reached 9.3 million barrels per day (b/d) in 2017, an increase of 464,000 b/d from 2016 levels after declining by 551,000 b/d in 2016. EIA projects that U.S. crude oil production will continue to grow in 2018 and 2019, averaging 10.7 million b/d and 11.3 million b/d, respectively.”



U.S. Energy Information Administration, Today in Energy, April 4, 2018, <https://www.eia.gov/todayinenergy/detail.php?id=35632>

# Market Trends

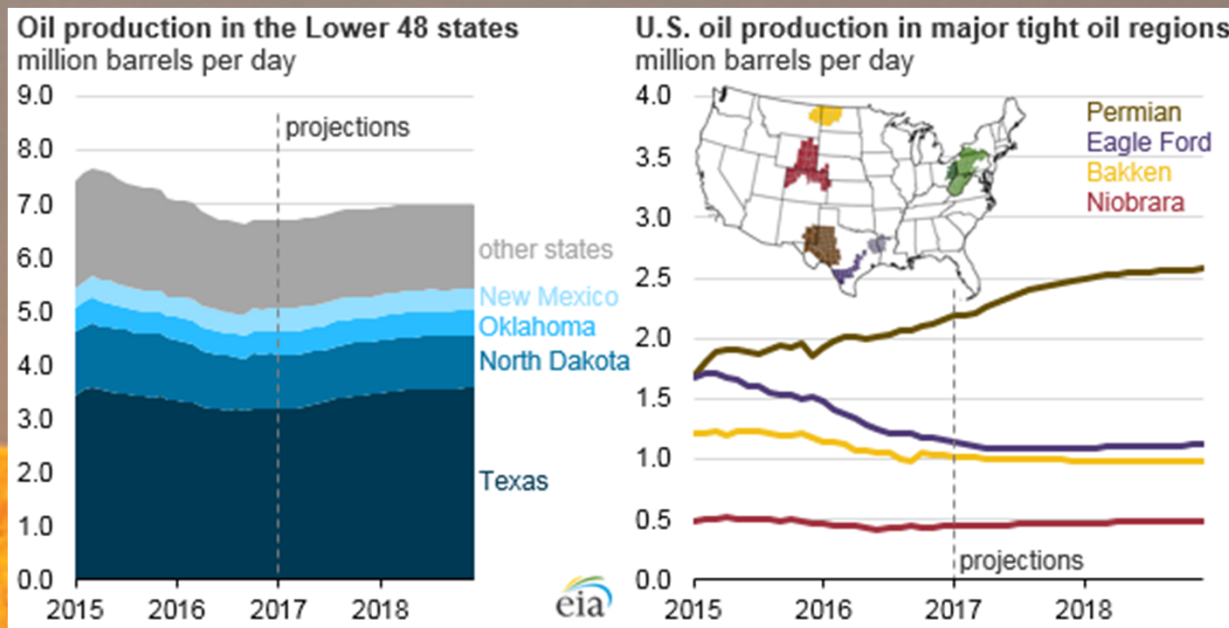
“Although much has changed since 1970, Texas continues to produce more crude oil than any other state or region of the United States. Texas crude oil production averaged 3.5 million b/d in 2017 and reached a record high monthly level of 3.95 million b/d in December 2017. Texas’s 2017 annual production increase of nearly 300,000 b/d—driven by significant growth within the Permian region—was more than all other states and the Federal Gulf of Mexico combined.”



U.S. Energy Information Administration, Today in Energy, April 4, 2018, <https://www.eia.gov/todayinenergy/detail.php?id=35632>

# Market Trends

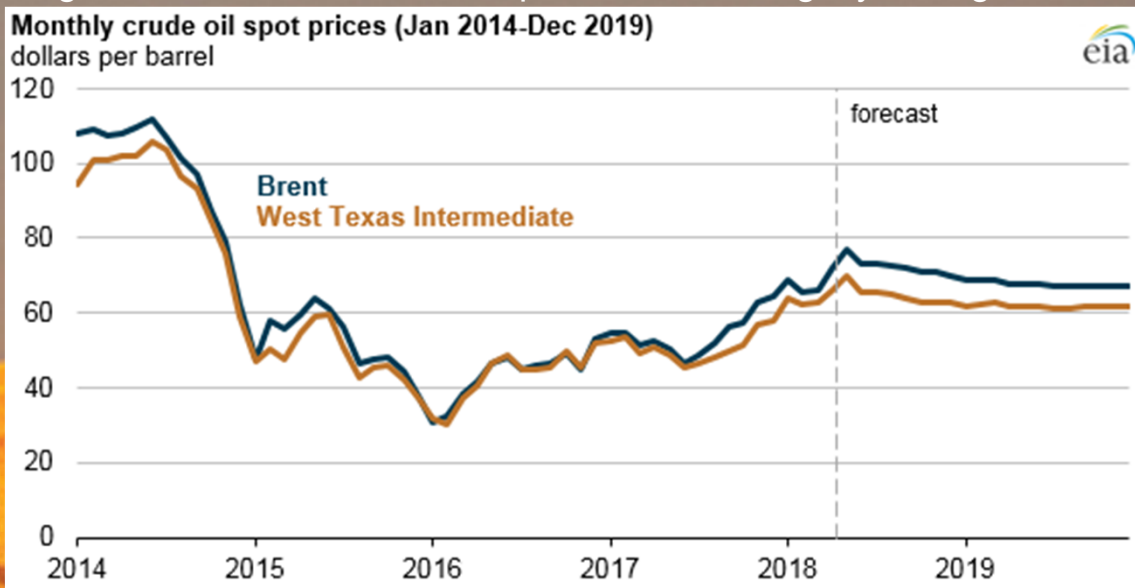
“Production in Texas, the largest oil-producing state, is driven by two major oil-producing regions, the Permian and the Eagle Ford...Although overall U.S. oil production has been declining since mid-2015, production has continued to increase in the Permian region. In 2016, Permian production averaged 2.0 million b/d, a 5% increase from the level in 2015. EIA expects this trend to continue, with Permian production projected to average 2.3 million b/d in 2017 and 2.5 million b/d in 2018.”



U.S. Energy Information Administration, Today in Energy, January 31, 2017, <https://www.eia.gov/todayinenergy/detail.php?id=29752>

# 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. Crude oil prices have reached high levels as global oil inventories have generally declined from January 2017 through April 2018. Even though the 2019 oil price forecast is higher than it was in the May STEO, EIA expects oil prices to decline in the coming months because global oil inventories are expected to rise slightly during the second half of 2018 and in 2019.”



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



# Market Trends

## Drilled But Uncompleted Wells (DUCs)\*

<u>Region</u>	<u>July 2016**</u>	<u>June 2018***</u>	<u>Change</u>
Anadarko	Not reported	908	N/A
Appalachia	Not reported	748	N/A
Bakken	811	769	(42)
Eagle Ford	1,297	1,537	240
Haynesville	145	182	37
Niobrara	712	431	(281)
Permian	1,310	3,368	2,058

\*“A drilled but uncompleted well (DUC) is a new well after the end of the drilling process, but its first completion process has not been concluded.” EIA Estimates of Drilled but Uncompleted Wells (DUCs), Sept. 12, 2016, [https://www.eia.gov/petroleum/drilling/pdf/duc\\_supplement.pdf](https://www.eia.gov/petroleum/drilling/pdf/duc_supplement.pdf)

\*\*U.S. Energy Information Administration, Drilling Productivity Report, September 12, 2016, [https://www.eia.gov/petroleum/drilling/archive/2016/09/pdf/duc\\_supplement.pdf](https://www.eia.gov/petroleum/drilling/archive/2016/09/pdf/duc_supplement.pdf) (the first reporting of DUC statistics by the EIA, which is now included as a supplement to the EIA’s monthly Drilling Productivity Report (DPR)).

\*\*\*U.S. Energy Information Administration, Drilling Productivity Report, July 16, 2018, <https://www.eia.gov/petroleum/drilling/#tabs-summary-3>

# Market Trends

## 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, Inc.	Lime Rock Management	Quantum Energy Partners
Denham Capital	Natural Gas Partners	Riverstone Holdings
EnCap	Old Ironsides Energy	Sage Road Capital
Energy Trust Partners		Scout Energy Partners
		Talara Capital Management
		White Deer Energy

# Types of JV Structures

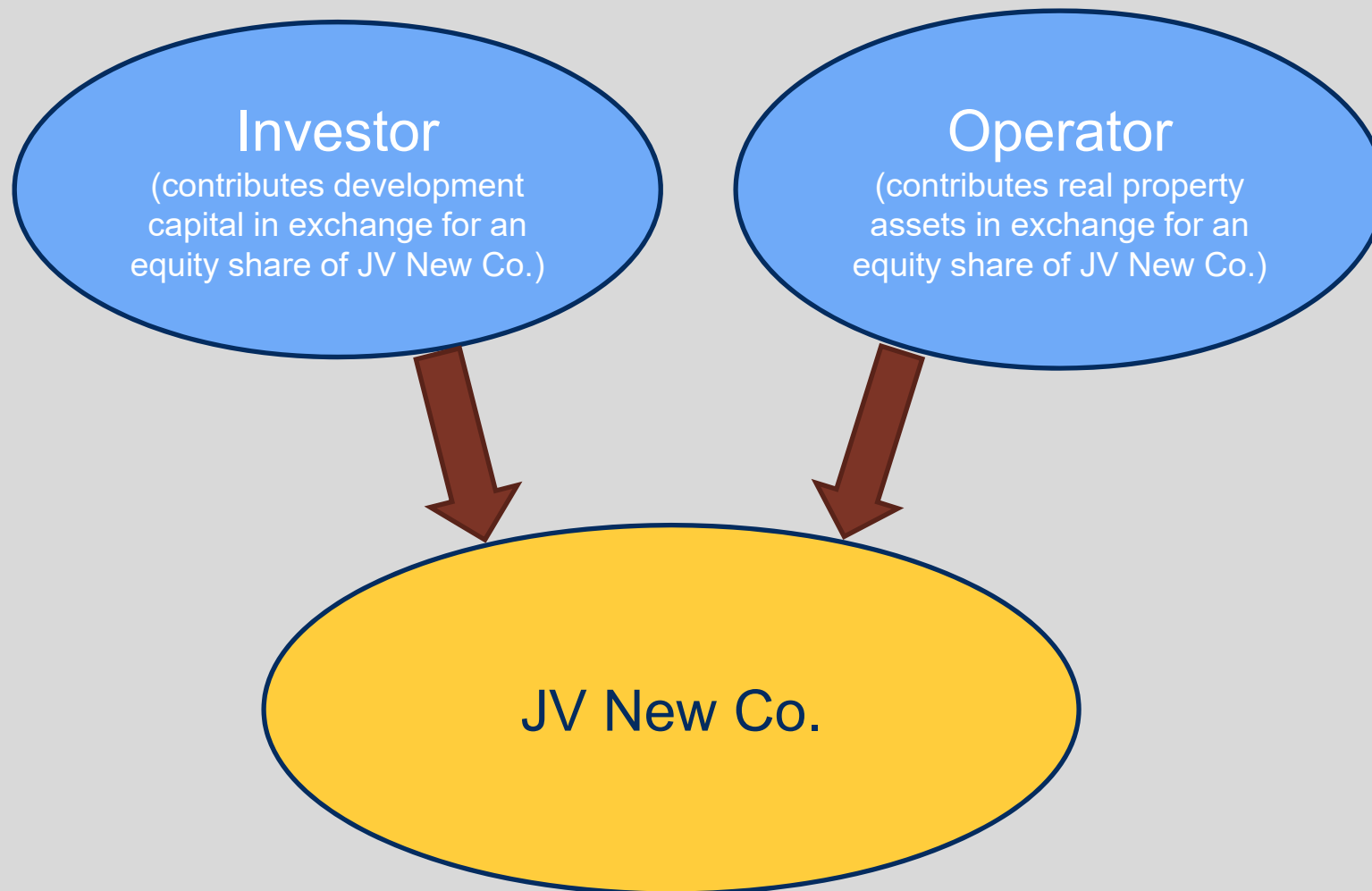
## Asset-focused JVs

- Drill to earn (farmout)
- Acquire and drill (DrillCo)

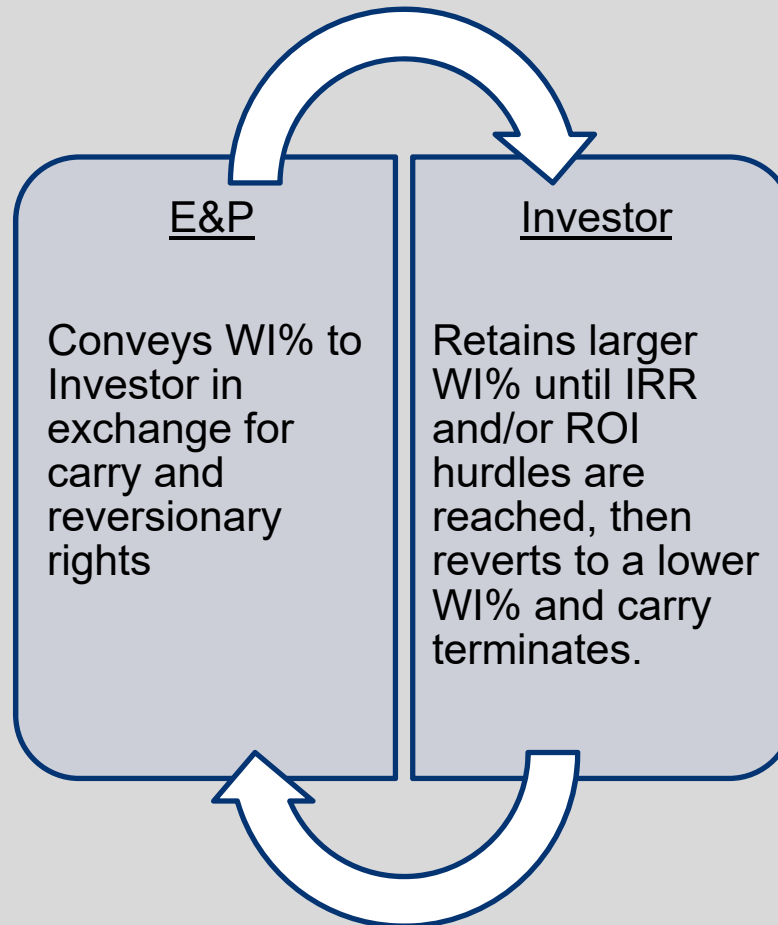
## Equity-focused JVs

- JV New Co. (contribution of assets and capital from respective parties to a newly created entity)
- Utilizes subscription agreements, contribution agreements, LLC agreements and joint operating agreements, rather than a Joint Development Agreement
- Typically avoids consent to assignment and preferential rights issues attendant to asset-level transactions

# Structures – Equity JV



# Structures – DrillCo



# Structures – DrillCo

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- A hybrid of the traditional farmout arrangement and a traditional joint venture between two E&P Companies.
- 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 traditional 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%).

# Structures – DrillCo

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## Key Deal Terms:

- Purchase Price
- Capital Commitment
- Before Payout Working Interests and Net Revenue Interests
- Payout Hurdles
- After Payout Working Interests and Net Revenue Interests
- Calculation of “Carried Costs” and Costs included in Payout Calculation
- Development Plan
- Rights of First Refusal
- Drag/Tag Rights
- Working Interest Adjustments
- Area of Mutual Interest
- Operating Committee Mechanics
- Ownership of Pipelines and Facilities

# DrillCo: Operator Considerations

- 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.



# DrillCo: Investor Considerations

- 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.
- Exist 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 poor production performance and/or Operator defaults.

# Joint Development Agreements (JDAs)

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## Overview:

- 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 Operator’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.

# JDAAs: 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
- Assignments
- Area of mutual interest
- Contract area
- Transfer restrictions
- Indemnification

# JDA Exhibits & Schedules

Exhibit A-1	Description of Leases
Exhibit A-2	Existing Wells
Exhibit A-3	Contracts
Exhibit A-4	Excluded Assets
Exhibit B-1	Form of Investor Assignment
Exhibit B-2	Form of Wellbore Assignment
Exhibit B-3	Form of Ratification
Exhibit B-4	Form of Letter-in-Lieu of Transfer Order
Exhibit C	Tax Partnership Agreement
Exhibit D	Memorandum of Agreement
Exhibit E	Initial Wells
Exhibit F	Joint Operating Agreement
Exhibit G	Area of Mutual Interest
Exhibit H	Initial Well Proposals & AFEs
Exhibit I	Planned Test Well Units
Exhibit J	Existing JOAs
Exhibit K	Firm Transportation Agreements
Exhibit L	Hedge Specifications
Exhibit M	Initial Production Forecast
Exhibit N	Insurance Requirements
Exhibit O	Management Services Agreement
Exhibit P	Secondment Agreement
Schedule 1A	Sample Payout Calculation
Schedule 5.3(c)	Material Contracts
Schedule 5.3(d)	Taxes
Schedule 5.3(h)	Litigation

# Memorandum of JDA

- 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.

# JDA's: Carry Obligation

- 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.

# JDAAs: Defining Costs

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.

*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)."

# JDAAs: 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.”



# JDA: Availability Period

- 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 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.

# JDA: Availability Period

“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.”

# JDA's: Determining Payout

- 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 [1.5x – 3x] 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.

# JDAAs: 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.”

# JDAAs: Development Committee

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The parties create an Operating Committee with appointed representatives to meet regularly and make decisions regarding future well proposals, prospect acquisitions, changes to the development plan and other issues.

- “Drilling Committee. Each Party, as well as the Operator, shall designate one (1) individual to serve as its primary representative and one (1) individual to serve as its alternate representative on the Drilling Committee, each of whom shall serve for an indefinite term at the pleasure of the appointing Party. The Drilling Committee shall be limited to a total of four (4) representatives, one from each Party and one from the Operator; provided that each Party shall be entitled, in its sole discretion, to substitute its alternate representative for its primary representative at any time and for all purposes hereunder. A total of three (3) representatives (either primary or alternate) representing at least two (2) of the Parties as well as the Operator shall constitute a quorum for a meeting of the Drilling Committee. Each Party’s representative shall have one (1) vote on the Drilling Committee, but the Operator shall not be entitled to vote. Any actions or approvals of the Drilling Committee shall be determined by a majority vote of the representatives of the Parties on the Drilling Committee.”
- “Meetings. At each Drilling Committee meeting referenced below, the Drilling Committee will vote on each proposed Drilling Location, and a Drilling Location with a majority of votes in favor will be deemed to constitute a Prospect; provided, however, that an approved Drilling Location may be removed from the Drilling Plan after such approval by the mutual consent of all of the member(s) of the Drilling Committee who voted in favor of such Drilling Location.”

# JDAAs: Development Committee

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.

# JDAAs: 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.

# JDA's: 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.”



# JDAAs: Investor Assignments

- 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.

# JDAAs: Wellbore Assignments

## 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”).”

# JDAAs: Well Proposals

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.

# JDAs: 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.
- Some JDAs provide that Additional Wells will be included in the Payout calculation and/or subject to Investors carry obligation as long as the Additional Well is proposed and approved during the Availability Period with sufficient funds remaining to be deployed.

# JDA: Joint Operating Agreements

- JOAs should be executed on a well-by-well or unit-by-unit basis.
- 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.

# JDAAs: Financial Assurances

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- Right to cash call capital commitment
- Parent guaranty
- Post irrevocable letters of credit
- Deposit capital commitment into an operating escrow account
- Require equity commitment letters from sub-investors funding Investor

# JDAAs: Force Majeure

“Force Majeure Event’ means any cause or event *not reasonably within the control of the Drilling Party whose performance is sought to be excused thereby, **AND** which, by the exercise of commercially reasonable diligence, such Drilling Party is unable to prevent, avoid or overcome.* The following causes and events (the list of which is not exhaustive) will be considered Force Majeure Events if and to the extent such causes and events present the characteristics described above: acts of God, strikes, lockouts or other industrial disputes or disturbances, acts of the public enemy, wars, blockades, insurrections, civil disturbances and riots, epidemics, landslides, lightning, hail storms, earthquakes, fires, tornadoes, hurricanes, winter storms, floods, washouts and warnings for any of the foregoing which may necessitate the precautionary shut-down of wells, plants, pipelines, gathering systems or other related facilities; arrests, orders, requests, directives, restraints and requirements of governments and Governmental Authorities; any application of government conservation or curtailment rules and regulations; explosions, sabotage, breakage or accidents to equipment, machinery, gathering systems, plants, facilities or lines of pipe; outages (shutdown) for the making of repairs; inability to secure labor or materials; delays in construction of gathering systems and pipelines; inability to secure saltwater or flowback disposal; or any other causes, whether of the kind enumerated herein or otherwise that are outside of the reasonable control of the Drilling Party whose performance is sought to be excused thereby, and which, by the exercise of commercially reasonable diligence, such Drilling Party is unable to prevent, avoid or overcome.”

# JDA: Force Majeure

In light of the drilling deadlines established in the JDA, Operators will want to include riders to the “Force Majeure Event” definition to allow for regulatory delays and to provide sufficient time to negotiate and obtain the necessary rights-of-way. The following is a suggested Operator-friendly provision:

- “Such term [Force Majeure Event] will likewise include, if and to the extent such causes and events present the characteristics described above, in those instances where either Drilling Party is required to obtain servitudes, rights-of-way, grants, permits or licenses to enable such Drilling Party to fulfill its obligations hereunder, the inability of such Drilling Party to acquire, or delays on the part of such Drilling Party in acquiring such servitudes, rights-of-way, grants, permits or licenses, and in those instances where either Drilling Party is required to secure permits or permissions from any Governmental Authority to enable such Drilling Party to fulfill its obligations hereunder, the inability of such Drilling Party to acquire, or delays on the part of such Drilling Party in acquiring, at reasonable cost, such permits and permissions.”



# JDA's: 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; and
- d) Operator's obligation to repurchase Investor's interests at a predetermined price.

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; and
- d) Operator's ability to avail itself to any financial assurance protections negotiated in the JDA.

# JDAAs: Limitations on Damages

**“Limitation on Damages.** NEITHER DRILLING PARTY (NOR THEIR RESPECTIVE INDEMNIFIED PARTIES) WILL BE ENTITLED TO RECOVER FROM THE OTHER DRILLING PARTY, OR SUCH DRILLING PARTY’S RESPECTIVE AFFILIATES, ANY INDIRECT, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OR DAMAGES FOR LOST PROFITS THAT CONSTITUTE CONSEQUENTIAL DAMAGES ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT, THE ASSOCIATED AGREEMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY, EXCEPT TO THE EXTENT ANY SUCH DRILLING PARTY SUFFERS SUCH DAMAGES (INCLUDING COSTS OF DEFENSE AND REASONABLE ATTORNEYS’ FEES INCURRED IN CONNECTION WITH THE DEFENDING OF SUCH DAMAGES) TO A THIRD PARTY, WHICH DAMAGES (INCLUDING COSTS OF DEFENSE AND REASONABLE ATTORNEYS’ FEES INCURRED IN CONNECTION WITH DEFENDING AGAINST SUCH DAMAGES) WILL NOT BE EXCLUDED BY THIS PROVISION AS TO RECOVERY HEREUNDER. SUBJECT TO THE PRECEDING SENTENCE, EACH DRILLING PARTY, ON BEHALF OF ITSELF, ITS INDEMNIFIED PARTIES AND EACH OF ITS AFFILIATES, WAIVES ANY RIGHT TO RECOVER PUNITIVE, SPECIAL, EXEMPLARY AND CONSEQUENTIAL DAMAGES, INCLUDING DAMAGES FOR LOST PROFITS THAT CONSTITUTE CONSEQUENTIAL DAMAGES, ARISING IN CONNECTION WITH OR WITH RESPECT TO THIS AGREEMENT, THE ASSOCIATED AGREEMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY. **NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, NOTHING IN THIS SECTION SHALL BE CONSTRUED TO LIMIT A DRILLING PARTY’S RECOVERY OF LOST PROFITS TO THE EXTENT SUCH LOST PROFITS CONSTITUTE DIRECT DAMAGES.**”

# JDA: Tax Partnership Agreements

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- No partnership entity is actually created under state law; solely for federal tax purposes. The JDA 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.

# JDA's: Areas of Mutual Interest

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.”

# JDAAs: Additional Rights

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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 default on its obligations

# JDAAs: Tag Along Rights

“Tag Along Right. If a Party enters into an agreement to convey or transfer, directly or indirectly, to a non-Affiliate third Person its interest in all or any portion of the Oil and Gas Interests in the AMI that is permitted or consented to hereunder, the transferring Party shall provide to the other Parties written notice of the proposed transfer, setting forth full particulars of the proposed transfer, including the identity of the proposed transferee, the proposed consideration for the transfer, and the interests that are the subject of the transfer. Each non-transferring Party shall have ten (10) days after its receipt of such notice within which to elect whether to request the transferring Party to assist such non-transferring Party in conveying to the same transferee in a simultaneous transaction, as applicable, the non-transferring Party’s interests in the Oil and Gas Interests subject to the proposed transfer. The failure of a Party to respond to any such notice from the transferring Party within such ten-day period shall constitute an election by the non-transferring Party not to participate in the proposed transfer. If a Party elects to request the transferring Party to assist such Party in participating in the proposed transfer as provided in this Section, the transferring Party shall notify the prospective transferee of such Party’s interest and shall use reasonable commercial efforts to cooperate with and assist such Party in consummating such a transfer to the transferee of such Party’s interests in a transaction simultaneous with the transferring Party’s transaction; provided, however, that the transferring Party shall have no obligation or Liability to any other Party if the transferring Party fails, for any reason, to consummate its proposed transfer, nor shall any other Party have any obligation or Liability to the transferring Party if such other Party fails, for any reason, to consummate its proposed transfer.”

# JDAAs: Drag Along Rights

- Typically, the drag right is only triggered if a party is selling all of its interests, rather than just an undivided portion.
- 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.
- 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.
- “Drag Along Right. If Investor directly, or indirectly through one or more Affiliates, enters into an Arms-Length Sale of all of Investor’s interest in Assets, then Operator, upon receipt of written request from Investor, shall enter into a definitive written agreement with the counter-party in Investor’s sale on the same terms, adjusted for respective interests, as those applicable to Investor’s sale providing for the sale of the interests of Operator in the Assets that are the subject of the Investor sale and shall consummate such transaction in accordance with the terms of such agreement, provided that if Investor fails to consummate its sale, then Operator shall not be obligated to proceed with their sales to such counter-party and their definitive agreements may include such condition. Notwithstanding anything in this Agreement to the contrary, any sale by Investor pursuant to this Section shall not require the consent of any other Party.”

# JDA's: 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.”



# JDA's: 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."

# JDA's: 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.

# JDAs: 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 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”).

# Additional Sources

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John B. Connally IV and Patrick T. Maguire, RECENT TRENDS IN JOINT VENTURES FOR SHALE OIL AND GAS AND OTHER CAPITAL-INTENSIVE OIL AND GAS PROJECTS, Rocky Mountain Mineral Law 57<sup>th</sup> Annual Institute (2011).

Jeffrey S. Munoz, EMERGING TRENDS IN OIL AND GAS: IT'S ALL ABOUT SHALE, CAIL Institute for Energy Law 64<sup>th</sup> Annual Oil and Gas Law Conference (2013).

Michael P. Darden, Robin S. Fredrickson, Michael R. King, and Jeffrey S. Munoz, U.S. UPSTREAM JOINT VENTURES, The University of Texas Journal of Oil, Gas and Energy Law 10<sup>th</sup> Annual TJOGEL Symposium (February 19, 2015).

Michael J. Byrd, Cody R. Carper, Rahul D. Vashi, and Gonzalo D. Castro, ACQUIRING UPSTREAM ASSETS VIA JOINT VENTURES: AN IN-DEPTH STUDY OF DEAL STRUCTURES, KEY NEGOTIATING POINTS, DRAFTING TIPS, AND RELEVANT LAW, Institute for Energy Law 2<sup>nd</sup> Mergers & Acquisitions / Acquisitions & Disposals Conference (April 14, 2015).

David H. Sweeney, Preston Cody, Susan Lindberg, and Michael P. Darden, FRACTURING RELATIONSHIPS: THE IMPACT OF RISK AND RISK ALLOCATION ON UNCONVENTIONAL GAS PROJECTS, CAIL Institute for Energy Law 65<sup>th</sup> Annual Oil and Gas Law Conference (2014).

The background of the slide is a photograph of an oil drilling rig silhouetted against a sunset sky. The sun is low on the horizon, creating a bright glow and casting long shadows. The rig's lattice structure is clearly visible against the darkening sky.

# Questions?

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