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Transformation of the BPX Energy Portfolio SPEGC BD Study Group

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### Agenda

- BPX Energy Overview
- Acquisition of BHP Onshore Shale Business
- Post-BHP Divestments
  - 1. SWOOP
  - 2. East Texas (Woodlawn, Glenwood, Oak Hill fields)
  - 3. San Juan
  - 4. Wamsutter
  - Anadarko
  - 6. Arkoma
  - 7. Diversified Minerals/ORRI Package
- Conclusion & Q&A

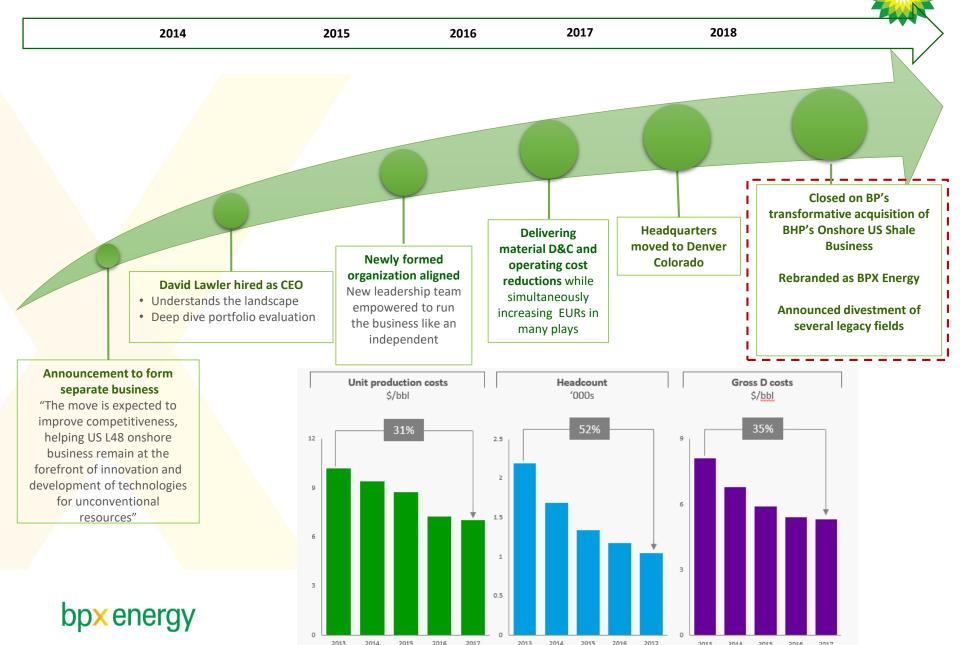
### BPX Energy core values, mission, and strategy





### **BPX Energy Onshore Journey**

BPX Energy transformation to an onshore shale independent



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Acquisition of BHP Onshore Shale Business

### Acquisition of BHP Onshore Shale Entity New liquids-focused plays materially re-position business



**Combined drilling inventory** 

**BPX Energy** 100% **BPX Energy** Post-Deal BHP US Onshore assets Current production Wamsutter 500mboed 75% After-tax IRR<sup>(1)</sup> (27% liquids) Resources San Juan 12.7bn boe 50% Woodford (35% liquids) Anadarko Acres Haynesville 25% **6.3**m **Drilling locations** Permian Delaware 11,600 0% **Eagle Ford** (37% liquids) 2.000 4.000 6.000 8,000 0 BPX Energy Cumulative well count BHP US Onshore assets (1) Calculated at \$2.75 Henry Hub **BPX Energy RPX** Energy

	before acquisition (2018)	post-integration (2021)
Operated wells	9,400	3,500
Basins	6	3
Capital budget	~\$950m	~\$2-2.5bn
Production <sup>1</sup>	315mboed ~500mboed	
Oil % of production mix	~5%	~25%

### Acquired asset – Permian Delaware



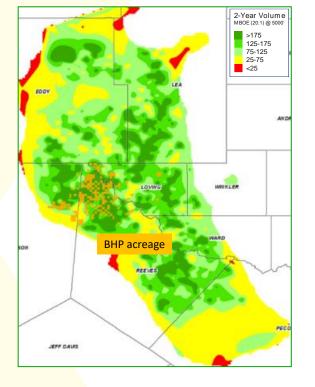
### Key highlights

Current production **41**mboed (71% liquids)

Gross drilling locations **3,390** 

Acreage **83**k

After-tax IRRs<sup>(1)</sup> **28-50%** 



(1) Weighted average after-tax IRR for new wells, calculated at \$2.75 Henry Hub / \$55 WTI

- Material position in heart of Delaware's overpressured and liquids-rich window
- Stacked benches (Bone Springs, Wolfcamp A, B, C/D) offer deep drilling inventory – over 240 rig years
- Significant potential for capital efficiency improvement with multilateral drilling
- BPX Energy team experienced in infrastructure development and liquids management

### Acquired asset – Liquids-rich Eagle Ford



### **Key highlights**

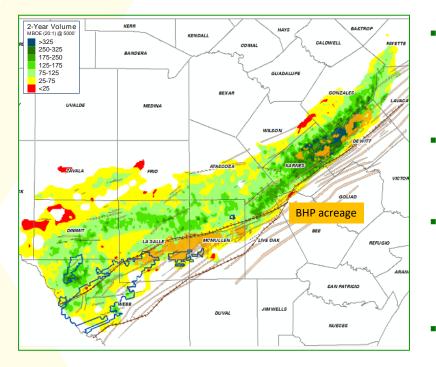
Current production

87mboed (71% liquids)

Gross drilling locations **1,402** 

Acreage **201**k

After-tax IRRs<sup>(1)</sup> **39-95%** 



(1) Weighted average after-tax IRR for new wells, calculated at \$2.75 Henry Hub / \$55 WTI

- Core acreage in both the liquids-rich Karnes Trough and Eagle Ford wet gas window
- Builds on BPX Energy's experience in the Eagle Ford
- Opportunity to develop with multilaterals in Eagle Ford benches and Austin Chalk
- Can reduce cost with Intelligent
  Operations model for base production and midstream

### Acquired asset – Haynesville



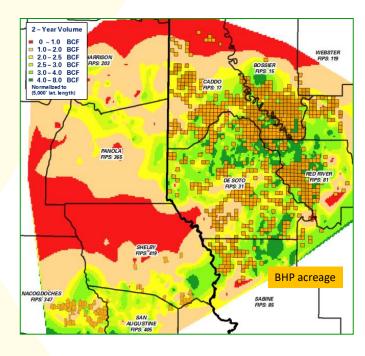
### **Key highlights**

Current production **61**mboed (100% gas)

Gross drilling locations **727** 

Acreage **194**k

After-tax IRRs<sup>(1)</sup>



- Doubles BPX Energy's production in the Haynesville, and more than triples acreage position
- Builds on BPX Energy's material expansion of the Haynesville – the most revenue generative gas play in the US
- Opportunity to transfer BPX Energy completion technology
- Leverages economies of scale with existing operations

(1) Weighted average after-tax IRR for new wells, calculated at \$2.75 Henry Hub / \$55 WTI

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**Post-BHP Divestments** 

### **Divestment Summary**

- BP is offering several of its US onshore assets for sale in multiple packages comprising core positions in the San Juan, Wamsutter, Anadarko, Arkoma, legacy East Texas and its SWOOP positions as well as diversified nonoperated royalty and working interests across BPX Energy
- Highlights:
  - **SWOOP.** New, highly economic, de-risked, contiguous Shallow Woodford Oklahoma Oil Play (SWOOP), near the SCOOP and STACK plays, with strong well results and extensive running room
  - **East Texas.** Three operated East Texas fields (Glenwood, Woodlawn, Oak Hill) comprising ~45k largely contiguous acres, in a stacked pay basin with development and recompletion opportunities in the Cotton Valley, Haynesville, and several other horizons
  - San Juan, Leading position in the San Juan basin. Strong cash flow from low-decline production base. Additional upside growth opportunities in the Mancos and CBM redevelopment
  - Wamsutter. Premier position in the Northern Greater Green River basin. Existing cash flow from liquids-rich low decline base production complements horizontal redevelopment of Lewis and Almond
  - Arkoma. Two large core gas positions with extensive undeveloped horizontal potential in the Woodford Shale in the West and strong legacy cash flow and production in the East
  - Anadarko. Massive operated position in the core of Western Anadarko basin with stacked pay upside, high margins, material base production and Operating Cash Flow (OCF)
  - Legacy Non-op Mineral and HBP Leasehold Assets in multiple basins offering a variety of royalty, overriding royalty and working interest opportunities

#### Legacy Non-Op Minerals/Leasehold - Multiple Basins \$18m OCF 1.320k Acres

#### Wamsutter

38 Mboe/d \$187m OCF 69% Gas 21% NGL 10% Oil 2,500 Wellbores (Vt 99%) 500kAcres

#### San Juan





#### Arkoma

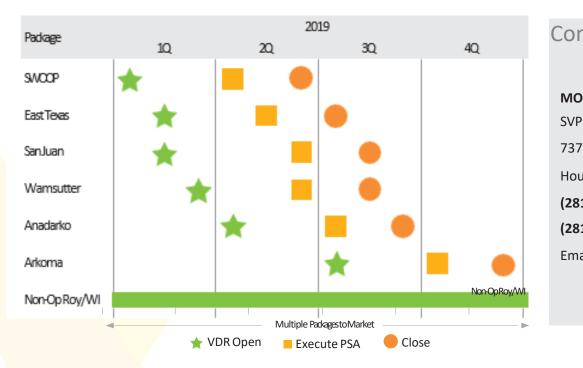
34 Mboe/d \$103m OCF 100% Gas 0% NGL 0% Oil 1,800 Wellbores (Vt 67%) 440kAcres

#### EastTexas

6 Mboe/d \$35m OCF 75% Gas 20% NGL 5% Oil 600 Wellbores (Vt 77%) 45k Acres

Note - Unless otherwise stated, all production and acreage figures are net to BP. Production figures 2018LE. OCF is annualized based on 2018 YTD Actuals through October

### **Divestment Process Timeline**

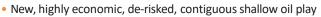




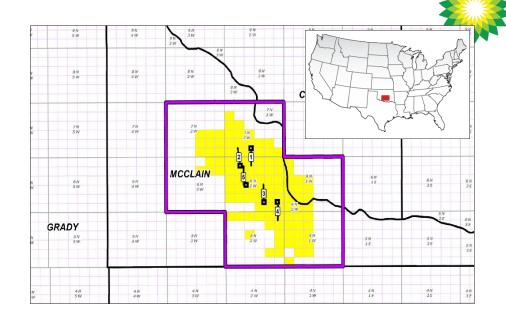
- VDRs are expected to open from January 2019
- Upon execution and return of the Confidentiality Agreement, bidders will receive customary due diligence and support materials, including:
  - -Reserve report from NSAI, Inc
  - 3P & resource ARIES database with development plans and costs
  - -Environmental information including Phase 1 environmental study reports
  - -Financial information including 24 months of LOSs
  - -Asset information including master well list and acreage shape files
  - Dataroom presentation / Confidential Information Memorandum

• BP is intending to provide a staple financing package and hedging/marketing services to interested parties

### SWOOP

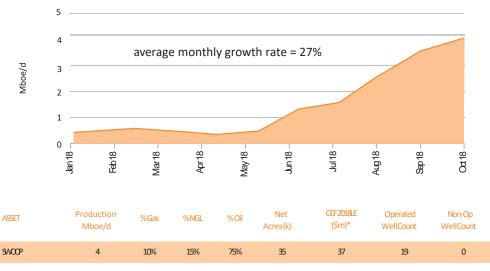


- Unconventional Woodford play near SCOOP and STACK
- ~35k net acres in McClain & Cleveland Counties, OK
- Current production of ~4 net Mboe/d
- Acreage is 60% Held by Production (HBP) as of Nov 1, 2018
- High operated working interest of over 80%
- Strong well results have delineated play across acreage
  - No.1 Parker: IP30: 680 boe/d (88% oil)
  - No.2 Boechat: IP30: 930 boe/d (87% oil)
  - No.3 Brown: IP3<mark>0: 918 boe/d (84% oil)</mark>
  - No.4 Norton: IP30: 1,005 boe/d (88% oil)
  - No.5 Brandt IP30: 915 boe/d (77% oil)
- Highly attractive F&D costs and operating margins
  - Woodford at only 7.5kft TVD drives ~\$8m D&C cost (10k ft lateral)
    Rich gas stream of 1,450+ BTU
  - Crude oil quality, 40-48 API gravity oil
  - Crude quality and location drive attractive differential of ~\$1.10/bbl
  - Low lifting costs due to location and available services
- Extensive running room in current Woodford play (many drill ready) and upside in Hunton and other horizons
  - Over 15 rig years of drilling inventory in Woodfordalone



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#### SWOOP Net Production



\* OCF2018 LE is annualized based on 2018 YTD through October



Frac on the Boechat well

### **EastTexas**

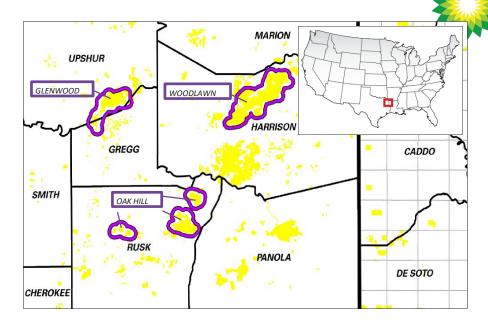
- Contiguous operated legacy fields
  - ~45k net acres total for all three fields
  - High average working interest of over 85%
  - 100% HBP to develop at own pace
- Material Cotton Valley and Haynesville undeveloped potential
  - Activity in area increasing with extended laterals and larger fracs
  - Over 50 horizontal upside locations identified to-date (50% Cotton Valley and 50% Haynesville)
  - Proven Haynesville at shallower depths than in the Shelby Trough
  - Active offset operators: Covey Park, RockCliff, Sabine, Sheridan, XTO, CCI, Valence, Tanos, and others
  - Attractive midstream terms and legacy pipeline close to Henry Hub contribute to attractive upside economics (Basin Diff ~ \$0.20/mcf)
- Extensive behind pipe and cost reduction options
  - Stacked pay basin with Haynesville, Cotton Valley, Travis Peak, Pettet, James Lime, and others behind pipe for recompletions
  - Potential for further lifting cost reduction with small independent operating model
- Experienced & capable staff with significant knowledge of assets

\* OCF2018 LE is annualized based on 2018 YTD through October

ASSET

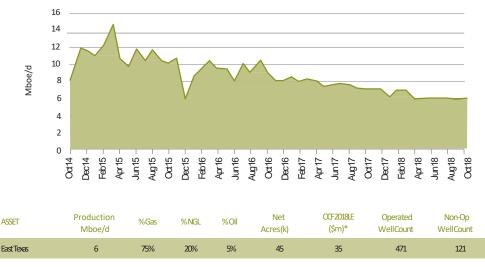


F12 Drill site in EastTexas



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East Texas NetProduction



### San Juan

- Leading position in the San Juan Basin
  - Approximately 570k net acres in San Juan and Rio Arriba counties, NM and La Plata and Archuleta counties, CO
  - Stacked pay basin with ~9,500 wellbores and ~11,900 completions\*\* (40% operated)
  - Average WI of ~71% for operated wells. Overall BP WI in the entire field is ~35%
  - 100% ownership in Florida River Midstream System
  - 50% ownership in Hilcorp-operated San Juan gas processing plant with surplus gas processing capacity
- Solid cash flow and low base decline (~5% over past 5 years) production profile
  - 2018 Latest Estimate (LE) OCF of \$239m\*
  - 2018 LE total BP net production of ~102 Mboe/d (94% gas)
- Additional low-risk growth opportunities
  - Predominantly HBP status affords buyer flexibility
  - Proven upside in CBM and dry gas Mancos
  - Potential Mesaverde downspacing
- Experienced & capable staff with significant knowledge of the basin \* OCF 2018 LE is annualized based on 2018 YTD through October \*\* Excludes wells where BP only has an ORI/RI



ASSET

North (CO)

South (NIM)

Total San Juan

38

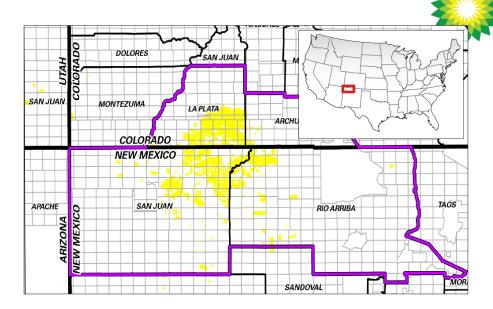
102

81%

94%

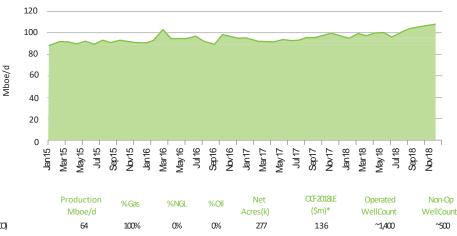
Aztec drilling rig in Arboles, Colorado

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1%

0%

18%

6%

290

567

103

239

~2.600

4,000

~5,000

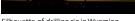
5,500

### Wamsutter

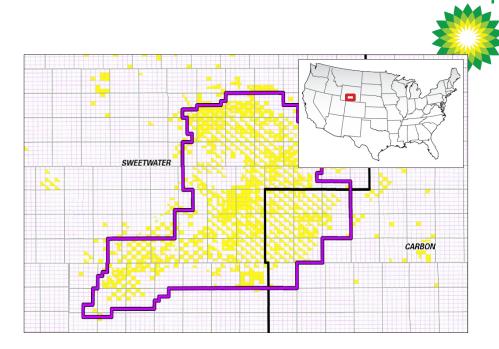
- Premier position in the Northern Greater Green RiverBasin
  - Approximately 500k net acres in Sweetwater and Carbon Counties WY
  - Stacked pay basin with interests in ~2,500 wellbores (99% vertical)
  - High average WI in operated wells (~79%)
  - HBP leases with low royalty burdens (average 15%)
- Opportunity to enter during early stages of basin horizontal redevelopment
  - Outstanding well results since inception of horizontal program in 2015 BP first to drill successful single section horizontal, extended reach horizontal and co-planar multilateral in thebasin
  - Fox Hills/Lewis horizontal IP30's consistently exceeding 2 Mboe/d (over 40% Liquids)
  - Offset operators demonstrating excellent well results on adjacent acreage
- Solid cash flow from liquids rich low decline base funds development
  - 2018 LE OCF of ~\$187m
- Thousands of identified horizontal locations
  - Multiple distinct reservoir targets
  - ranging from dry gas to rich condensate allows buyer to adjust drilling with commodity prices
  - Existing idle wet gas processing and residue export capacity
- Experienced & capable staff with significant knowledge of the basin



\* OCF 2018 LE is annualized based on 2018YTD through October

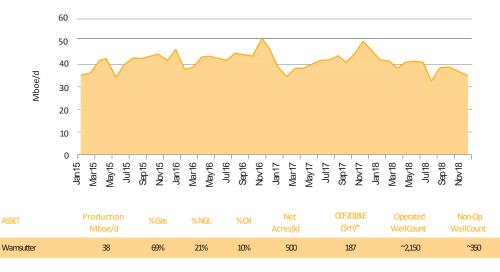


Silhouette of drilling rig in Wyoming



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#### Wamsutter Net Production





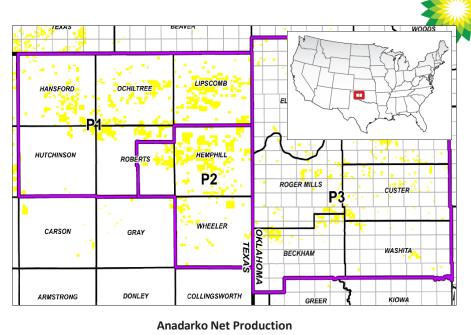
### Anadarko

- Massive operated position in the core of the Western Anadarko basin
  - Over 500k net acre position in 13 counties inTX and OK
  - Contiguous, high operated working interests, and high net revenue interests in long held legacy position
  - Three separate sub-packages will be offered to better align with play boundaries (BP has a preference for a single buyer)
  - Over 98% HBP allows time to develop at buyer's pace
- Material production and cash flow underpin asset for years to come
  - ~19 Mboe/d net production (~38% liquids of which 7% is oil) - 2018 LE OCF of ~\$91m
  - Further operating cost reduction opportunities identified
- Stacked pay provides numerous opportunities
  - With BP's development focus on other basins, numerous upside opportunities are still available to a new owner
  - Offset operators developing Oswego, Atoka, Cleveland, Granite Wash, Marmaton and others
  - New completion designs and extended laterals accelerating existing plays while new plays have been identified
  - Both oil- and gas-weighted plays provide product diversification
- Experienced & capable staff with significant knowledge of the basin \* OCF 2018 LE is annualized based on 2018 YTD through October

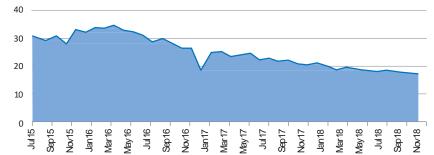


Storage tank and a pumping jack at Anadarko operation site

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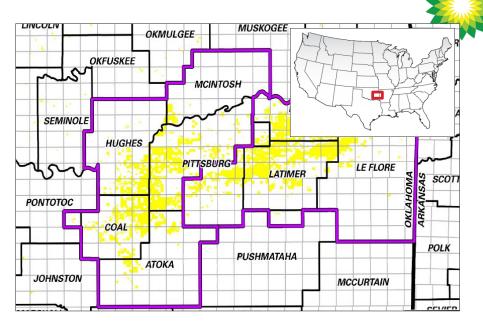


Mboe/d

ASSET	Production Mboe/d	%Gas	%NGL	%Oil	Net Acres(k)	OCF2018LE (\$m)*	Operated WellCount	Non-Op WellCount
Cleveland/	7	61%	29%	10%	286	36	1274	412
Marmathon (P1)	1	01/0	2370	10/0	200	30	1,274	412
Granite Wash (P2)	8	56%	37%	7%	147	40	592	572
Western CK(P3)	4	76%	20%	4%	78	14	285	487
Total Anadarko	19	62%	31%	7%	511	91	2,151	1,471

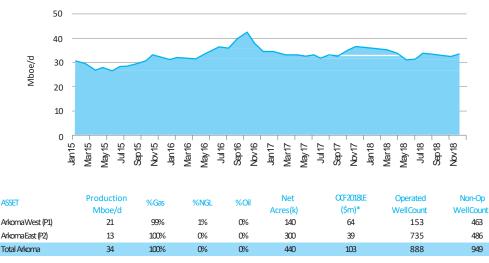
### Arkoma

- Two large core gas positions with extensive undeveloped potential
  - ~440k net acres (Arkoma West ~140k oftotal)
  - Arkoma West a core of the core unconventional Woodfordhorizontal play with attractive IRRs and material running room
  - Arkoma East a largely conventional dry gas position in the Atoka, Spiro, Brazil, and Harthshorne Coal formations
  - High operated WI with average over 80% for both packages
- Highly economic Woodford horizontal development opportunity
  - Enhancements in completion design and longer laterals have improved returns and energized development in the area
  - BP's recent Resh Unit wells have IRRs greater than 35% at 12/5/18 Strip price
  - Frederick 26-7H has extended the play to the North and East
  - Strong offset operator activity in the area by Newfield, Bravo, Trinity, Canyon Creek, Calyx, Corterra, Antioch, and others
  - Emerging horizontal plays in Mayes and Caney horizons
- Substantial base production and operating cash flow
  - 2018 LE OCF of ~\$103m with shallow base production declines (13%)
  - Smaller independent operating model could unlock LOE savings
- Experienced & capable staff with significant knowledge of the basin



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**Arkoma Net Production** 



\* OCF 2018 LE is annualized based on 2018 YTD through October

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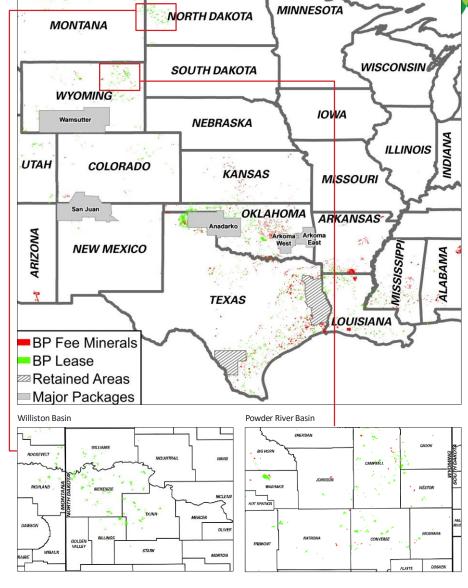
Arkoma Resh 3 well pad

### Diversified Non-Op Royalty and Working Interest Opportunities

- Interests in legacy mineral and leaseholds in non-operated assets in multiple BPX Energy basins
  - Assets in 6 unconventional trends:
    - 1 Powder River 2 Williston
    - 3 Eagle Ford 4 Haynesville
    - 5 Stack/Scoop 6 Denver-Julesburg
  - Conventional assets in multiple states from Alabama to Utah
  - ~2/3 HBP Leasehold, 1/3 Minerals
  - Current OCF primarily Royalty/ORR
  - Some WI <mark>holdings in Willistonbasin</mark>
  - Proximity to existing production/infrastructure
- Initial Packages will be Powder River Basin (PRB) and Williston Basin
  - PRB primarily retained undeveloped deep rights
  - Williston ~250 ORR and 3-5% WI wells
  - Expect marketing 1Q2019
  - Additional packages planned for remainder of 2019

ASSET	OCF2018LE(\$m)*	Net Acres(k)
PowderRiverBasin	0.5	51
Williston Basin	24	27
Remainder	14.7	1,242
Total Non-Op Roy/WI	17.6	1,320

\* OCF 2018 LE is annualized based on 2018 YTD through October



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### In Conclusion



- BP has transformed its US onshore business over the course of 5 years
- It is now a separate entity rebranded as BPX Energy
- Acquisition of the BHP Onshore Shale Business has added numerous high return and liquids focused assets
- **Divestment** of several material heritage assets will occur over 2019-2020
- BPX has greatly expanded its Haynesville position and is more excited than ever about the play and its future
- **BPX Energy is well on its way in building a premier independent onshore business**