

PENN VIRGINIA CORP  
Form 425  
December 04, 2018



Cautionary Statements No Offer or Solicitation This presentation relates in part to a proposed business combination transaction (the "Transaction") between Denbury Resources Inc. ("Denbury") and Penn Virginia Corporation ("Penn Virginia"). This communication is for informational purposes only and does not constitute

## Edgar Filing: PENN VIRGINIA CORP - Form 425

an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval, in any jurisdiction, pursuant to the Transaction or otherwise, nor shall there be any sale, issuance, exchange or transfer of the securities referred to in this document in any jurisdiction in contravention of applicable law. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended. Important Additional Information In connection with the Transaction, Denbury is to file with the U.S. Securities and Exchange Commission ("SEC") a registration statement on Form S 4, that includes a joint proxy statement of Denbury and Penn Virginia and a prospectus of Denbury. The Transaction is to be submitted to Denbury's stockholders and Penn Virginia's shareholders for their consideration. Denbury and Penn Virginia may also file other documents with the SEC regarding the Transaction. The definitive joint proxy statement/prospectus is to be sent to the stockholders of Denbury and shareholders of Penn Virginia. This document is not a substitute for the registration statement and joint proxy statement/prospectus that is to be filed with the SEC or any other documents that Denbury or Penn Virginia may file with the SEC or send to stockholders of Denbury or Penn Virginia in connection with the Transaction. INVESTORS AND SECURITY HOLDERS OF DENBURY AND PENN VIRGINIA ARE URGED TO READ THE REGISTRATION STATEMENT AND THE JOINT PROXY STATEMENT/PROSPECTUS REGARDING THE TRANSACTION WHEN IT BECOMES AVAILABLE AND ALL OTHER RELEVANT DOCUMENTS THAT ARE FILED OR WILL BE FILED WITH THE SEC, AS WELL AS ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE TRANSACTION AND RELATED MATTERS. Investors and security holders will be able to obtain free copies of the registration statement and the joint proxy statement/prospectus (when available) and all other documents filed or that will be filed with the SEC by Denbury or Penn Virginia through the website maintained by the SEC at <http://www.sec.gov>. Copies of documents filed with the SEC by Denbury will be made available free of charge on Denbury's website at [www.denbury.com](http://www.denbury.com) or by directing a request to John Mayer, Director of Investor Relations, Denbury Resources Corporation, 5320 Legacy Drive, Plano, TX 75024, Tel. No. (972) 673 2383. Copies of documents filed with the SEC by Penn Virginia will be made available free of charge on Penn Virginia's website at [www.pennvirginia.com](http://www.pennvirginia.com), under the heading "SEC Filings," or by directing a request to Investor Relations, Penn Virginia Corporation, 16285 Park Ten Place, Suite 500, Houston, TX 77084, Tel. No. (713) 722 6540. Participants in the Solicitation Denbury, Penn Virginia and their respective directors and executive officers may be deemed to be participants in the solicitation of proxies in respect to the Transaction. Information regarding Denbury's directors and executive officers is contained in the proxy statement for Denbury's 2018 Annual Meeting of Stockholders filed with the SEC on April 12, 2018, and certain of its Current Reports on Form 8 K. You can obtain a free copy of this document at the SEC's website at <http://www.sec.gov> or by accessing Denbury's website at [www.denbury.com](http://www.denbury.com). Information regarding Penn Virginia's executive officers and directors is contained in the proxy statement for Penn Virginia's 2018 Annual Meeting of Stockholders filed with the SEC on March 28, 2018, and its Current Report on Form 8 K filed on September 12, 2018. You can obtain a free copy of this document at the SEC's website at [www.sec.gov](http://www.sec.gov) or by accessing Penn Virginia's website at [www.pennvirginia.com](http://www.pennvirginia.com). Investors may obtain additional information regarding the interests of those persons and other persons who may be deemed participants in the Transaction by reading the joint proxy statement/prospectus regarding the Transaction when it becomes available. You may obtain free copies of this document as described above. NYSE:DNR 2 [www.denbury.com](http://www.denbury.com)

---

Cautionary Statements (Cont.) Forward Looking Statements and Cautionary Statements: The following slides contain “forward looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical

## Edgar Filing: PENN VIRGINIA CORP - Form 425

fact, included in this communication that address activities, events or developments that Denbury or Penn Virginia expects, believes or anticipates will or may occur in the future are forward looking statements. Words such as “estimate,” “project,” “predict,” “believe,” “expect,” “anticipate,” “potential,” “create,” “intend,” “could foresee,” “plan,” “will,” “guidance,” “look,” “outlook,” “goal,” “future,” “assume,” “forecast,” “build,” “focus,” “work,” “continue” or the negative of such terms or other variations of these words and terms of similar substance used in connection with any discussion of future plans, actions, or events identify forward looking statements. However, the absence of these words does not mean that the statements are not forward looking. These forward looking statements include, but are not limited to, statements regarding the advantages of the proposed Transaction, and conducting EOR in the Eagle Ford formations held by Penn Virginia, pro forma descriptions of the combined company and its operations, integration and transition plans, synergies, opportunities and anticipated future performance, including future years’ combined production levels, operating cash flow and development capital, the EOR potential in the Eagle Ford for recoverable reserves, EUR increases, EOR well capex and projected performance of EOR wells. There are a number of risks and uncertainties that could cause actual results to differ materially from the forward looking statements included in this communication. These include the expected timing and likelihood of completion of the Transaction, including the timing, receipt and terms and conditions of any required governmental and regulatory approvals of the Transaction that could reduce anticipated benefits or cause the parties to abandon the Transaction, the ability to successfully integrate the businesses, the occurrence of any event, change or other circumstances that could give rise to the termination of the merger agreement, the possibility that stockholders of Denbury may not approve the issuance of new shares of common stock in the Transaction or the amendment of Denbury’s charter or that shareholders of Penn Virginia may not approve the merger agreement, the risk that the parties may not be able to satisfy the conditions to the Transaction in a timely manner or at all, the risk that any announcements relating to the Transaction could have adverse effects on the market price of Denbury’s common stock or Penn Virginia’s common stock, the risk that the Transaction and its announcement could have an adverse effect on Denbury’s and Penn Virginia’s operating results and businesses generally, or cause them to incur substantial costs, the risk that problems may arise in successfully integrating the businesses of the companies, which may result in the combined company not operating as effectively and efficiently as expected, the risk that the combined company may be unable to achieve synergies or it may take longer than expected to achieve those synergies and other important factors that could cause actual results to differ materially from those projected. All such factors are difficult to predict and are beyond Denbury’s or Penn Virginia’s control, including those detailed in Denbury’s annual reports on Form 10 K, quarterly reports on Form 10 Q and current reports on Form 8 K that are available on its website at [www.denbury.com](http://www.denbury.com) and on the SEC’s website at <http://www.sec.gov>, and those detailed in Penn Virginia’s annual reports on Form 10 K, quarterly reports on Form 10 Q and current reports on Form 8 K that are available on Penn Virginia’s website at [www.pennvirginia.com](http://www.pennvirginia.com) and on the SEC’s website at <http://www.sec.gov>. In addition, Denbury’s Form 10 Q for the period ended September 30, 2018 (filed with the SEC on November 9, 2018) contains risks and uncertainties related to forward looking statements regarding Denbury, its operations and its financial condition. All forward looking statements are based on assumptions that Denbury or Penn Virginia believe to be reasonable but that may not prove to be accurate. Any forward looking statement speaks only as of the date on which such statement is made, and Denbury and Penn Virginia undertake no obligation to correct or update any forward looking statement, whether as a result of new information, future events or otherwise, except as required by applicable law. Readers are cautioned not to place undue reliance on these forward looking statements that speak only as of the date hereof. Statement Regarding Non GAAP Financial Measures: This presentation also contains certain non GAAP financial measures including adjusted cash flows from operations and adjusted EBITDAX. Any non GAAP measure included herein is accompanied by a reconciliation to the most directly comparable U.S. GAAP measure along with a statement on why the Company believes the measure is beneficial to investors, which statements are included at the end of this presentation. Note to U.S. Investors: Current SEC rules regarding oil and gas reserves information allow oil and gas companies to disclose in filings with the SEC not only proved reserves, but also probable and possible reserves that meet the SEC’s definitions of such terms. We disclose only proved reserves in our filings with the SEC. Denbury’s proved reserves as of December 31, 2016 and December 31, 2017 were estimated by DeGolyer and MacNaughton, an independent petroleum engineering firm. In this presentation, we may make reference to probable and possible reserves, some of which have been estimated by our independent engineers and some of which have been estimated by Denbury’s internal staff of engineers. In this presentation, we also may refer to one or more of estimates of original oil in place, resource or reserves “potential,” barrels recoverable, “risked” and “unrisked” resource potential, estimated ultimate recovery (EUR) or other descriptions of volumes potentially recoverable, which in addition to reserves generally classifiable as probable and possible (2P and 3P reserves), include estimates of resources that do not rise to the standards for possible reserves, and which SEC guidelines strictly prohibit us from including in filings with the SEC. These estimates, as well as the estimates of probable and possible reserves, are by their nature more speculative than estimates of proved reserves and are subject to greater uncertainties, and accordingly the likelihood of recovering those reserves is subject to substantially greater risk. NYSE:DNR 3 [www.denbury.com](http://www.denbury.com)

---

Uncommon Company, Extraordinary Potential » Industry Leading Oil Weighting Extreme Oil Gearing »Top Tier Operating Margin  
»Favorable Crude Quality & High Exposure to LLS Pricing » Vertically Integrated CO2 Supply and Infrastructure Operating Advantages

## Edgar Filing: PENN VIRGINIA CORP - Form 425

»Cost Structure Largely Independent from Industry » Operating Outside Constrained Basins Significant Organic »Newly Sanctioned EOR Project at CCA  
»Significant EOR Development Potential Growth Potential »Growing Portfolio of Short Cycle Opportunities »Strong Liquidity Rapidly De Levering  
»No Near Term Maturities » Reduced Debt/Improved Balance Sheet NYSE:DNR 4 [www.denbury.com](http://www.denbury.com)

---

Denbury –What We Are A Unique Energy Business Rocky Mountain • ~60% of production via CO2 enhanced oil recovery (EOR) Region • Vertically integrated CO2 supply and distribution • Cost structure largely independent from industry 3Q18 Production Extraordinarily Geared to Crude Oil

## Edgar Filing: PENN VIRGINIA CORP - Form 425

59,181 BOE/d • 97% oil production, high exposure to LLS pricing YE17 Proved O&G Reserves Value Sustaining with Organic Growth Upside 260 MMBOE •  
Over 1 Billion BOE proved + EOR and exploitation potential YE17 Proved CO2 Reserves Intensely Focused on Execution and Results 6.4 Tcf •  
Highly economic project portfolio at \$50 oil Plano HQ • Significant improvements in cost structure since 2014 Gulf Coast •  
Track record of spending within cash flow Region A Carbon Conscious Producer • Annually injecting over 3 million tons of industrial sourced  
Denbury Owned Fields Current Pipelines CO2 into our reservoirs CO2 Sources Planned Pipelines NYSE:DNR 5 [www.denbury.com](http://www.denbury.com)

---

Gulf Coast Region Reserves Summary(1) (MMBOE) Proved + Tertiary Potential Tertiary Reserves Proved 127 Potential 306 Non Tertiary Reserves Proved 21  
Total MMBOE(2) 454 Tertiary Potential by Field(3) Mature Area 25 – 30 Citronelle 25 Conroe 130 Delhi 30 Hastings 30 –70 Heidelberg 25 Manvel 8 –12

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Oyster Bayou 15 Tinsley 25 Denbury Operated Pipelines Denbury Owned Fields – Current CO Floods 2 Thompson 20 –40 Denbury Planned Pipelines  
Denbury Owned Fields –Potential CO2 Floods Naturally Occurring CO2 Source Fields Owned by Others –CO2 EOR Candidates Webster 40 –75 Industrial CO2  
Sources W. Yellow Creek 5 –10 Note: See “Slide Notes” on slide 35 in the appendix to this presentation for footnote explanations. NYSE:DNR 6 [www.denbury.com](http://www.denbury.com)

---

Rocky Mountain Region Reserves Summary(1) (MMBOE) Proved + Tertiary Potential Tertiary Reserves Proved 26 Potential 534 Non Tertiary Reserves Proved  
86 Total MMBOE(2) 646 Tertiary Potential by Field(3) Bell Creek 20 –40 Cedar Creek 400 –500 Anticline Area Denbury Operated Pipelines Gas Draw 10

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Denbury Planned Pipelines Grieve 5 Pipelines Owned by Others CO2 Resources Owned or Contracted Hartzog Draw 30 –40 Denbury Owned Fields – Current CO2  
Floods Denbury Owned Fields –Potential CO2 Floods Salt Creek 25 –35 Fields Owned by Others –CO2 EOR Candidates  
Note: See “Slide Notes” on slide 35 in the appendix to this presentation for footnote explanations. NYSE:DNR 7 [www.denbury.com](http://www.denbury.com)

---



Edgar Filing: PENN VIRGINIA CORP - Form 425

Tinsley (Cotton Valley) Hartzog Draw Deep Financial Houston Surface Acreage Sales Extend Bank Line & Maintain Liquidity  
A Foundation of Strong Execution Safety & Environment Value Culture Project Delivery Capital Discipline Reservoir Management NYSE:DNR 8  
[www.denbury.com](http://www.denbury.com)

---

2018E Capital Plan & Production Guidance 2018 Development Capital Budget (1) 2018 Production Guidance (BOE/d) In Millions \$300 \$325 Million ~\$45  
60,100 60,600 60,298 ~\$20 ~ \$155 Tertiary \$241 MM (2) ~\$300 325 MM 2 \$95 CapEx CapEx Non Tertiary ~ CO2 Sources & Other Other Capitalized Items(2)

## Edgar Filing: PENN VIRGINIA CORP - Form 425

FY20162017 20172018 2018 1) Excludes ~\$30 million of capitalized interest. 2)

Includes capitalized internal acquisition, exploration and development costs and pre production tertiary startup costs. NYSE:DNR 9 [www.denbury.com](http://www.denbury.com)

---

Sanctioning CO2 EOR Development at CCA Cedar Creek Anticline Overview EOR Formation Details Red River Initial Formations Targeted Interlake  
Stony Mountain 1930's (Discovery) Field Discovery Timeframe (Oil) 1950's (Development) Formation Type Carbonate Depth 7,000 – 9,000 ft

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Original Reservoir Pressure 3,600 – 4,140 psi CO2 Flood Type Miscible API Gravity 29 – 38 Average Perm 5 md Average Porosity 11.4% OOIP ~5 Billion Barrels  
Oil Recovered to Date ~700 Million Barrels Note: The information included in slides 10 through 14, other than historical facts, are forward looking statements  
based on current estimates. See slide 3, “Cautionary Est. Tertiary Recovery Factor 8 – 15% Statements” for risks and uncertainties related to this  
forward looking information. NYSE:DNR 10 www.denbury.com

---



## Edgar Filing: PENN VIRGINIA CORP - Form 425

Targets ~30 MMBbbls of recoverable oil; first tertiary production expected late Est. 5 Billion Bbbls OOIP 2021/early 2022 •  
Excluding CO2 pipeline, ~\$100 MM development capital to initial tertiary production; ~\$400 MM total capital over 15 year period •  
Requires \$150 MM CO2 pipeline that will service all future CCA EOR development Phase 2 EOR Target •  
Pipeline cost represents <\$0.50/Bbl across total CCA EOR potential ~100 MMBbbls oil •  
Expect to internally fund development using available cash flow, will also evaluate external capital sources for pipeline • Phase 2  
Cabin Creek development in Interlake, Stony Mountain and Red River formations Phase 1 EOR Target • Targets ~100 MMBbbls of recoverable oil ~30 MMBbbls oil  
• Development estimated to begin in 2022; fully funded from Phase 1 cash flow • Estimated total capital of \$500 – \$600 MM over multiple decades • Future Phases –  
Remainder of CCA • > 300 MMBbl EOR potential in multiple formations ~110 mi. CO2 Pipeline from Bell Creek  
Note: See “Note” on slide 10 related to the forward looking information included on this slide. NYSE:DNR 11 www.denbury.com

---



## Edgar Filing: PENN VIRGINIA CORP - Form 425

Potential to significantly increase production over Future EOR Potential time subject to CO2 availability and other factors • Planned Phase 2  
Phase 1 investment, including full CO2 pipeline, attractive Phase 1 at \$50 oil 2020 2022 2024 2026 2028 2030 2032 2034 2036 2038 2040 •  
Initial pipeline investment benefits all incremental development • Phase 1 payout expected within 2 years after first Est. Cumulative Net Cash Flow @ \$60 oil  
production; future phases funded from project cashflow \$ in millions ~\$3 Billion 2,000 ~\$3 billion @ \$60, ~\$4 billion @ \$70 •  
Potential to generate ~\$3 billion of cumulative free cash 1,500 flow from Phases 1 and 2 at \$60 oil 1,000 • Expect tertiary LOE to average \$10 \$15/Bbl 500  
(500) 2018 2020 2022 2024 2026 2028 2030 2032 2034 2036 2038 2040

Note: See "Note" on slide 10 related to the forward looking information included on this slide. NYSE:DNR 12 www.denbury.com

---

Exploitation –A New Dimension for Growth Size of circles = Cost to test Costs per test range from \$0.5MM – \$8MM Testing in 2018 20  
Large Short Cycle Opportunity Set 30 2818 • Numerous exploitation targets across Denbury’s 600,000 acre asset base 16 •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Potential 65 MMBOE risked; 135 MMBOE 14 unrisked 12 • Adding new opportunities as team works (1) 10 extensive proprietary 3D seismic data set MMBOE  
8 • Spending ~\$30MM – \$40MM in 2018 to EUR, accelerate program 6 Potential 4

Note: See “Note” on slide 10 related to the forward looking information included on this slide. 2 0 Lower Increasing Probability of Success Higher NYSE:DNR 13  
[www.denbury.com](http://www.denbury.com)

---

Mission Canyon Exploitation Q4 Activity Update • Successful tests at both Cabin Creek and Cedar Creek with 24 hour rates ~1,000 BOPD per well  
Cedar Creek Anticline • Potential to add up to five additional Cabin Creek Well 6 (Oct 18) locations and two Cedar Creek locations •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Tested southern extent at Coral Creek & encountered Wells 2/3 (Apr 18) increased fracturing resulting in anomalous water rates. Similar behavior observed in down dip Pennel well. Well 8 (Nov 18) Well 1 (Dec 17) • Planning well intervention to isolate water influx Wells 4/5 (Oct 18) • Currently drilling Little Beaver Mission Canyon and Cabin Well 7 (Nov 18) Planned wells 4Q18 Creek Charles B prospects; results expected late 2018 Previously drilled wells Areas with Mission Canyon 1 well development potential • Planning to demobilize one rig after Little Beaver well to manage capital spend in current commodity environment Note: See “Note” on slide 10 related to the forward looking information included on this slide. NYSE:DNR 14 www.denbury.com

---

Recent Debt Transactions Further Improve Leverage Profile Net Debt Principal Reduction Since 12/31/14 9/30/18 Debt Maturity Profile (In millions)  
AUGUST 2018 TRANSACTIONS (In millions) Over \$1 Billion Net Debt Reduction » Amended and Extended Bank Credit \$615 Million Undrawn

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Bank Credit Facility Facility to Dec. 2021 \$553 Million of Bank Line Availability at 9/30/18 after LOCs \$3,548 » Issued \$450 million of New 7½% Sr. \$395 Secured 2nd Lien Notes; Proceeds Used to Fully Repay Credit Facility \$324 \$2,514 \$2,475 \$194 ACCOMPLISHMENTS \$415 \$202 »  
Extended Credit Facility Maturity to \$456 Dec. 2021 and Streamlined Bank \$615 \$1,521 Group \$2,852 \$1,071 » Extended Overall Debt Maturity Profile \$450 \$315 \$308 \$826 \$826 » Maintained Same Access to \$204 \$(23) \$ \$(67) Liquidity, \$615 Million Undrawn Credit Bank Facility 12/31/14 6/30/18 9/30/18 2018 2019 2020 2021 2022 2023 2024 Sr. Secured Bank Credit Facility Pipeline / Capital Lease Debt Sr. Secured 2nd Lien Notes Sr. Subordinated Notes  
Cash & Cash Equivalents NYSE:DNR 15 www.denbury.com

---

Significantly Improving Leverage Metrics TTM Leverage Ratio 3Q18 Annualized Leverage Ratio Trailing 12 months Trailing 12 months 3Q18 3Q18 in millions  
(incl. hedges) (excl. hedges) (incl. hedges) (excl. hedges) Adjusted EBITDAX(1) \$601 \$760 \$148 \$210 3Q18 Annualized 593 839 9/30/18 Net Debt Principal(2)

## Edgar Filing: PENN VIRGINIA CORP - Form 425

2,475 2,475 2,475 2,475 Debt/Adjusted EBITDAX(1) 4.1x 3.3x 4.2x 2.9x 1)

A non GAAP measure. See press release attached as Exhibit 99.1 to the Form 8 K filed November 8, 2018 for additional information, as well as slide 50 indicating why the Company believes this non GAAP measure is useful for investors. 2)

Total debt principal balance as of September 30, 2018 is net of cash & cash equivalents. NYSE:DNR 16 www.denbury.com

---



The Combination of Denbury & Penn Virginia Adds High Value Investment Diversity Rocky Mountain •  
Adds new core area in the oil window of the prolific Eagle Ford Shale play Region • Large development inventory – ~560 Gross Lower Eagle Ford locations •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Expands high return, short cycle investment opportunity set Combined Pro Forma Highlights Enhances Growth While Delivering Free Cash Flow 3Q18 Production

- Rapidly growing Eagle Ford production base 82 MBOE/d • Eagle Ford asset base expected to generate free cash flow in 2019 91% Oil •
- Increases Denbury's already top tier operating margin Leverages and Expands EOR Platform YE17 Proved O&G Reserves 343 MMBOE •
- Multiple ongoing nearby rich hydrocarbon gas EOR pilots and projects • Opportunity to apply Denbury's leading EOR expertise to the Eagle Ford Gulf Coast Shale Region Plano HQ Increases Financial Strength Penn • Immediately accretive to cash flow and key per share metrics Virginia Acreage •
- Path to < 2.5X debt / EBITDAX by year end 2019 at mid \$60's oil prices • Free cash flow profile provides optionality for the utilization of capital •
- Increased size and scale and enhanced credit metrics should reduce long term cost of capital Denbury Owned Fields Current Pipelines CO2 Sources Planned Pipelines NYSE:DNR 18 [www.denbury.com](http://www.denbury.com)

---

Why We Like the Eagle Ford . Expansive play with large oil window . Light Louisiana Sweet (LLS) premium oil pricing Oil Condensate .  
Well developed midstream infrastructure Denbury's Gulf Dry Gas Coast Assets . Significant upside potential through: Penn Virginia Assets .

Edgar Filing: PENN VIRGINIA CORP - Form 425

Enhanced oil recovery . Upper Eagle Ford . Austin Chalk . Close proximity to Denbury's Gulf Coast operations . Follow on consolidation potential NYSE:DNR 19  
[www.denbury.com](http://www.denbury.com)

---

Why We like Penn Virginia . Large and contiguous acreage position in Eagle Ford oil window – 98,600 gross (84,700 net) acres Penn Virginia Fayette County  
Other Operator EOR Pilots . 90% Liquids / 77% oil production Gonzales County . Receives LLS premium pricing . Strong growth trajectory Lavaca County .

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Substantial lower Eagle Ford inventory estimated at 560 gross (461 net) locations . Top tier operating margin . Ongoing nearby EOR pilots Dewitt County .  
Knowledgeable and experienced operating team NYSE:DNR 20 [www.denbury.com](http://www.denbury.com)

---

Transaction Overview Transaction Value (10/26/18): \$1.7 Billion; 68% Stock and 32% Cash •  
\$833 million equity; 12.4 shares of Denbury for each share of Penn Virginia (est. 191.8 million shares) • \$400 million cash; \$25.86 for each share of Penn Virginia •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

\$483 million net debt assumed by Denbury • Denbury shareholders will own 71% of combined company Approvals and Timing •  
Subject to Denbury and Penn Virginia shareholder approvals as well as HSR approval • Closing expected in Q1 2019 Pro +Forma Enterprise Value (Billions)(1)  
\$4.5 \$1.5 \$6.0 YE17 Proved Reserves (MMBOE) 260 83(2) 343 3Q18 Production (MBOE/d) 59 23 82 3Q18 Liquids Production % 97% 90% 95%  
3Q18 Annualized EBITDAX (Millions) \$593 \$340 \$933 (1) FactSet data as of 10/26/18. (2)  
Pro forma for the acquisition of Eagle Ford assets located primarily in Gonzales and Lavaca Counties, Texas, from Hunt Oil Company on March 1, 2018  
NYSE:DNR 21 www.denbury.com

---

Combination Maintains Industry Leading Oil Weighting... 100% 97% 3Q18 % Liquids Production Oil Production 95% 90% NGL Production 90% 91% 80% 78%  
70% 60% 50% 40% 30% 20% 10% 0% DNR(1) Pro PVAC CPG JAG WLL CRZO HPR CPE(1) WPX OXY CDEV OAS(1) EPE CRC AMR XOG LPI SN SRCI

## Edgar Filing: PENN VIRGINIA CORP - Form 425

PDCE SM NFX MUR CLR(1) Forma Source: Bloomberg and Company filings for period ended 9/30/2018. 1)  
NGL production is not reported separately for this entity. NYSE:DNR 22 www.denbury.com

---

...While Delivering Top Tier Operating Margins.... 3Q18 Peer Operating Margins (\$/BOE) \$50 \$45 \$40 \$35 \$30 \$25 \$20 \$15 \$10 \$5 \$ Pro PVAC OAS CRZO  
CPE DNR HPR JAG CLR WPX WLL AMR CRC MUR EPE XOG CDEV OXY PDCE SRCL LPI SM NFX SN Forma Operating Margin per BOE (1) 49.59

## Edgar Filing: PENN VIRGINIA CORP - Form 425

43.22 42.60 41.25 41.23 40.76 40.73 40.41 37.55 36.47 35.76 35.05 33.49 33.36 33.08 32.82 31.21 30.39 30.31 30.02 27.86 27.62 27.55 25.81  
Lifting Cost per BOE (2) 10.43 23.79 15.01 9.77 8.96 28.97 7.36 6.23 9.06 12.17 11.62 8.31 22.46 9.66 12.59 7.71 9.36 15.72 6.56 5.57 6.53 10.64 10.58 13.03  
Revenue per BOE (3) 60.02 67.01 57.61 51.02 50.19 69.73 48.09 46.64 46.61 48.64 47.38 43.36 55.95 43.02 45.67 40.53 40.57 46.11 36.87 35.59 34.39 38.26  
38.13 38.84 Highest revenue per BOE in the peer group Source: Company filings for the period ended 9/30/2018. 1)  
Operating margin calculated as revenues less lifting costs (see 2 below). 2)  
Lifting cost calculated as lease operating expenses, marketing/transportation expenses and production and ad valorem taxes. 3)  
Revenues exclude gain/loss on derivative settlements. NYSE:DNR 23 www.denbury.com

---

....and Creating a Leading Mid Cap Oil Producer 3Q18 Production (MBOE/d) 200 202 150 136 130 124 100 110 85 82 76 71 65 63 50 59 49 36 35 33 30  
23 0 NFX CRC WLL WPX PDCE OAS Pro XOG LPI CRZO CDEV DNR SRCI JAG CPE AMR HPR PVAC Forma Note:



• EOR Opportunity in the Eagle Ford Up to 140 MMBO EOR Potential on PVAC Acreage Significantly de-risked through more than 25 projects covering ~200 wells  
• Gonzales County EOR focus with 12 projects • Successful peer projects immediately offsetting PVA acreage, focused on oil window EOR Projects •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Projected EUR increases of 30% – 70+% over primary recovery • Potential 60 MMBO to 140 MMBO recoverable through EOR on PVAC acreage  
Currently estimated \$1 1.5MM aggregated EOR capex per well EOR process proven to be commercial, optimization opportunities still abundant NYSE:DNR 25  
[www.denbury.com](http://www.denbury.com)

---

Applying Leading EOR Capabilities to the Eagle Ford Gonzales County Pilot Primary and EOR Oil Production 14,000 EOR Production The EOR Process  
EOR Forecast 12,000 Primary Production • Rich hydrocarbon gas or CO is injected into a producing well and is Primary forecast bopd 2 10,000

## Edgar Filing: PENN VIRGINIA CORP - Form 425

allowed to soak for a period before the well is returned to production Wells), 8,000 (9 • While all projects to date have used rich hydrocarbon gas, 6,000 Rate  
Oil simulation work indicates that CO2 should provide greater recovery 4,000 • Planning to conduct both CO and rich hydrocarbon gas pilots Gross 2 2,000 •  
For example, a 1 2 month injection period could be followed by several weeks of soaking and then a 2 4 month producing period 2012 2014 2016 2018 2020 2022  
2024 2026 2028 Gonzales County EOR Pilot • The cycle is repeated over multiple years until incremental recovery Primary and EOR Recovery  
reaches an economic limit 9,000 8,000 7,000 Oil production is enhanced through several processes 3.3 MMBO 6,000 66% incremental •  
Injected gas provides lift energy to depleted wells 5,000 MBbls 4,000 • The gas is miscible with oil, reducing viscosity and swelling the oil 3,000 •  
Gas will adsorb onto the shale that it contacts, expelling oil from the 2,000 shale 1,000 2010 2012 2014 2016 2018 2020 2022 2024 2026 2028 NYSE:DNR 26  
[www.denbury.com](http://www.denbury.com)

---

Eagle Ford is Ideally Suited for EOR Penn Virginia's Drivers of EOR Niobrara Bakken Permian Eagle Ford Completion Complexity &  
Contact Area for Miscible Gas 2,500 lb/ft fracs 1,200 lb/ft fracs 1,500 lb/ft fracs 2,000 lb/ft fracs Geology Homogenous Fractured Sandstone Heterogenous

Edgar Filing: PENN VIRGINIA CORP - Form 425

Horizontal Gas Containment Low Permeability Medium High Permeability Medium/High Permeability Permeability Vertical Gas Containment Play Maturity  
Industry EOR Development NYSE:DNR 27 www.denbury.com

---

Historic Eagle Ford EOR Project Performance 6000 BOPD • 8 Gonzales County Projects with Long term Performance ~ 2.5X •  
6,000 BOPD incremental from EOR from 88 Incremental wells Production • Average incremental production per well of 40 – 110 BOPD Rate NYSE:DNR 28



Penn Virginia Acreage EOR Timeline Estimate • Eagle Ford stands out amongst other oily unconventional plays as the best EOR candidate •  
Good containment of injected fluid • Miscible across wide range of the oil window • ~1,000 wells expected on Penn Virginia acreage over field life •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

De-risked by offset operators • Progressed from pilot stage to development stage • Significant opportunity to optimize process and accelerate development Phase 1  
Phase 2 Phase 3 Laboratory testing, pilot Multiple infield pilots Initiate full scale planning and facility across oil window, development scoping including CO2  
evaluation 4Q18 3Q19 2H19 2020 2021+ NYSE:DNR 29 www.denbury.com

---

Pro Forma Combined Capital Structure Financing Commitment Letter from JP Morgan Chase • \$1.2 billion new senior secured bank credit facility • \$0.4 billion senior secured 2nd lien bridge loan Est. Pro Forma for (1) In millions, as of 9/30/18, unless otherwise noted Transaction Bank Credit Facility \$

## Edgar Filing: PENN VIRGINIA CORP - Form 425

\$283 \$483 Second Lien Notes / Term Loan 1,521 200 1,921 Pipeline Financings / Capital Lease Obligations 194 194 Senior Subordinated Notes 826 826  
Total Debt \$2,541 \$483 \$3,424 Liquidity and Credit Statistics Availability under credit facility \$553 \$654 3Q18 Annualized EBITDAX 593 \$340 933  
3Q18 Annualized EBITDAX (excluding hedge 839 401 1,240 settlements) (2) Net Debt /EBITDAX 4.2x 1.4x 3.6x (2) Net Debt  
/EBITDAX (excluding hedge settlements) 2.9x 1.2x 2.7x 1)  
Pro forma adjustments reflect \$400 million cash outlay for the transaction, excluding fees and expenses. 2)  
Net debt balances are net of cash and cash equivalents of \$67 million and \$8 million for DNR and PVAC, respectively. NYSE:DNR 30 www.denbury.com

---

Preliminary Combined Pro Forma Estimates Average Daily Production Original Estimates thru 2020 assuming \$60 – \$70 WTI oil price (BOE/d) 104,000 – 112,000 • >10% annual production growth 92,000 – 100,000 82,600 – 83,600 • 85% – 90% oil production mix • Top tier operating margins • Significant free cash flow generation

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Estimated 2018 Estimated 2019 Estimated 2020 • Targeting ~2.0x or lower Debt / EBITDAX by end of 2020 Operating Cash Flow(1) (in billions) •  
2019 capital assumes ~\$150 MM for CCA pipeline \$1.0 – \$1.4 Operational and Financial Flexibility to Successfully Navigate a Lower \$0.9 – \$1.2  
Oil Price Environment ~\$0.7 • Intend to adjust capital spending to levels within cash flow • Both companies have limited firm capital commitments for 2019  
Estimated 2018 Estimated 2019 Estimated 2020 Development Capital(2) 1)  
Cash flow before working capital, net of ~\$85 million interest treated as debt in Denbury’s financial statements, and excluding transaction (in billions) costs. 2)  
Excludes capitalized interest and acquisitions/divestitures. \$0.9 – \$1.0 \$0.7 – \$0.8 Note:  
These preliminary combined pro forma estimates are estimates based on assumptions that Denbury deems reasonable as ~\$0.7  
of the date of their preparation in early November 2018. Such assumptions are inherently uncertain and difficult or impossible to  
predict or estimate and many of them are beyond Denbury’s control. The preliminary combined pro forma estimates also reflect  
assumptions regarding the continuing nature of certain business decisions that, in reality, would be subject to change. Future  
results of Denbury or Penn Virginia may differ, possibly materially, from the preliminary combined pro forma estimates. Estimated 2018 Estimated 2019  
Estimated 2020 NYSE:DNR 31 www.denbury.com

---

Combined 2019 & 2020 Hedge Positions 2019 2020 Detail as of November 28, 2018 1H 2H 1H 2H WTI NYMEX Volumes Hedged (Bbls/d) 3,500 Denbury  
Swap Price(1) \$59.05 WTI NYMEX – Volumes Hedged (Bbls/d) 6,433 6,398 6,000 6,000 Swaps (1) Penn Virginia Swap Price \$54.47 \$54.50 \$54.09 \$54.09

Edgar Filing: PENN VIRGINIA CORP - Form 425

Price Argus LLS Volumes Hedged (Bbls/d) 4,000 4,000 Denbury Swap Price(1) \$71.40 \$71.40 Fixed Argus LLS – Volumes Hedged (Bbls/d) 5,000 5,000  
 Penn Virginia Swap Price(1) \$59.17 \$59.17 Volumes Hedged (Bbls/d) 8,500 12,000 1,000 1,000 (1)(2) WTI NYMEX Sold Put Price/Floor Price/Ceiling Price  
 \$47/\$55/\$66.71 \$47/\$55/\$66.23 \$50.00/\$60.00/\$82.50 \$50.00/\$60.00/\$82.50 Denbury Volumes Hedged (Bbls/d) 10,000 10,000  
 Sold Put Price/Floor Price/Ceiling Price(1)(2) \$50.40/\$58.40/\$72.69 \$50.40/\$58.40/\$72.69 Collars Volumes Hedged (Bbls/d) 3,000 3,000 1,000 1,000 Way 3  
 (1)(2) Argus LLS Sold Put Price/Floor Price/Ceiling Price \$54/\$62/\$78.50 \$54/\$62/\$78.50 \$55.00/\$65.00/\$86.80 \$55.00/\$65.00/\$86.80 Denbury  
 Volumes Hedged (Bbls/d) 2,500 2,500 Sold Put Price/Floor Price/Ceiling Price(1)(2) \$55.60/\$64.40/\$81.65 \$55.60/\$64.40/\$81.65 Total Volumes Hedged 42,933  
 42,898 8,000 8,000 1) Averages are volume weighted. 2)

If oil prices were to average less than the sold put price, receipts on settlement would be limited to the difference between the floor price and sold put price.  
 NYSE:DNR 32 www.denbury.com







Slide Notes Slide 6 –Gulf Coast Region Slide 7 –Rocky Mountain Region 1) Proved tertiary and non tertiary oil and natural gas reserves based upon 1) Proved tertiary and non tertiary oil and natural gas reserves based upon year end 12/31/17 SEC pricing. Potential includes probable and possible

## Edgar Filing: PENN VIRGINIA CORP - Form 425

year end 12/31/17 SEC pricing. Potential includes probable and possible tertiary reserves estimated by the Company as of 12/31/16 (with the tertiary reserves estimated by the Company as of 12/31/16 (with the exception of West Yellow Creek, estimated as of 3/31/17), using the mid exception of Salt Creek, estimated as of 6/30/17), using the mid point of point of ranges, based upon a variety of recovery factors and long term oil ranges, based upon a variety of recovery factors and long term oil price price assumptions, which also may include estimates of resources that do assumptions, which also may include estimates of resources that do not rise not rise to the standards of possible reserves. See slide 3, "Cautionary to the standards of possible reserves. See slide 3, "Cautionary Statements" Statements" for additional information. for additional information. 2) Total reserves in the table represent total proved plus potential tertiary 2) Total reserves in the table represent total proved plus potential tertiary reserves, using the mid point of ranges, plus proved non tertiary reserves, reserves, using the mid point of ranges, plus proved non tertiary reserves, but excluding additional potential related to non tertiary exploitation but excluding additional potential related to non tertiary exploitation opportunities. opportunities. 3) Field reserves shown are estimated proved plus potential tertiary reserves. 3) Field reserves shown are estimated proved plus potential tertiary reserves. NYSE:DNR 35 www.denbury.com

---

CO<sub>2</sub> EOR Process CO<sub>2</sub> Injection Well Production Well CO EOR can produce about as much oil as CO Pipeline 2 2 primary or secondary recovery(1) Primary  
~20% Place in Secondary Oil ~18% (Waterfloods) CO EOR Oil Formation 2 ~17% Original (Tertiary) ("OOIP") of Recovery CO<sub>2</sub>

## Edgar Filing: PENN VIRGINIA CORP - Form 425

moves through formation mixing with oil, expanding 1) Based on OOIP at Denbury's Little Creek Field and moving it toward producing wells NYSE:DNR 36  
[www.denbury.com](http://www.denbury.com)

---

CO2 EOR is a Proven Process (1) CO2 EOR Oil Production by Region Significant CO2 EOR Operators by Region 300 Gulf Coast Region Gulf Coast/Other 250  
Mid Continent » Denbury Resources » Hilcorp Rocky Mountains Permian Basin Region 200 Permian Basin » Occidental » Kinder Morgan

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Rocky Mountain Region 150 MBbls/d » Denbury Resources » FDL 100 » Devon » Chevron Canada 50 » Whitecap » Apache 0 Significant CO2  
Supply by Region 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 Gulf Coast Region »  
Jackson Dome, MS (Denbury Resources) DGC » Air Products (Denbury Resources) » Nutrien (Denbury Resources) Lost Cabin » Petra Nova (Hilcorp) LaBarge  
Permian Basin Region » Bravo Dome, NM (Kinder Morgan, Occidental) McElmo Dome Sheep Mountain » McElmo Dome, CO (ExxonMobil, Kinder Morgan)  
Bravo Dome » Sheep Mountain, CO (ExxonMobil, Occidental) Rocky Mountain Region Jackson Dome » LaBarge, WY (ExxonMobil, Denbury Resources)  
Nutrien » Lost Cabin, WY (ConocoPhillips) Air Products Naturally Occurring CO Source Petra Nova Canada 2 Industrial Sourced CO2 »  
Dakota Gasification (Whitecap, Apache) 1) Source: Advanced Resources International NYSE:DNR 37 www.denbury.com

---

Significant Running Room with CO2 EOR Up to 83 Billion Barrels of Technically Recoverable Oil –U.S Lower 48(1)(2) 2.8 to 6.6 MT Billion Barrels ND  
Rocky Mountain Region(2) 33 83 Billion of Technically WY Recoverable Oil(1,2) (amounts in billions of barrels) Permian 9 21 East & Central Texas 6 15

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Mid Continent 6 13 Denbury's fields represent California 3 7 ~10% of total potential(3) South East Gulf Coast 3 7 Rockies 2 6 MS Other 0 5

Existing Denbury CO2 Pipelines Michigan/Illinois 2 4 Planned Denbury CO2 Pipeline TX CO2 Pipeline owned by Others Williston 1 3 LA

Denbury owned oil fields CO2 Source Owned or Contracted Appalachia 1 2 3.7 to 9.1 1) Source: 2013 DOE NETL Next Gen EOR. 2)

Total estimated recoveries on a gross basis utilizing CO2 EOR. Billion Barrels 3) Using approximate mid points of ranges, based on a variety of recovery factors.  
Gulf Coast Region(2) NYSE:DNR 38 www.denbury.com

---

Abundant CO2 Supply & No Significant Capital Required for Several Years Gulf Coast CO2 Supply Rocky Mountain CO2 Supply Jackson Dome LaBarge Area  
(1) o Estimated field size: 750 square miles o Proved CO2 reserves as of 12/31/17: ~5.2 Tcf o Estimated recoverable CO2: 100 Tcf o Additional probable CO2

## Edgar Filing: PENN VIRGINIA CORP - Form 425

reserves as of 12/31/17: ~1.0 Tcf Shute Creek –ExxonMobil Operated Industrial Sourced CO<sub>2</sub> o Proved reserves as of 12/31/17: ~1.2 Tcf Current Sources o  
Denbury has a 1/3 overriding royalty interest and o Air Products (hydrogen plant): ~45 MMcf/d could receive up to ~115 MMcf/d of CO<sub>2</sub> by 2021 at  
current plant capacity o Nutrien (ammonia products): ~20 MMcf/d Future Potential Sources Lost Cabin – ConocoPhillips Operated (2) o  
Lake Charles Methanol (methanol plant) o Denbury could receive up to ~36 MMcf/d of CO<sub>2</sub> at current plant capacity 1) Reported on a gross (8/8th's) basis. 2)  
Planned but not currently under construction. Estimated CO<sub>2</sub> capture date could be as early as 2021, with estimated potential CO<sub>2</sub> volumes >200 MMcf/d.  
NYSE:DNR 39 www.denbury.com

---

Senior Secured Bank Credit Facility Info . Borrowing Base / Commitment level: \$615 million Commitments & borrowing base .  
Lender group comprised of 14 banks with largest individual commitment representing ~11% of the total Scheduled redeterminations . Semiannually –May 1st

## Edgar Filing: PENN VIRGINIA CORP - Form 425

and November 1st Maturity date . December 9, 2021, subject to springing maturities beginning in February 2021 . Up to \$225 million of bond repurchases –  
–\$148 million of repurchases currently permitted Permitted bond repurchases –

Additional ~\$77 million of repurchases permitted when total leverage ratio is below 4x after giving effect to such repurchases .

Up to \$1.65 billion of junior lien debt (subject to customary requirements) (~\$129 million Junior lien debt remaining) Anti hoarding provisions .

If > \$250 million borrowed, unrestricted cash held in accounts is limited to \$225 million Borrowing Base Libor margin ABR margin Undrawn Level Utilization  
(bps) (bps) pricing (bps) V> 90.0% 375.0 275.0 50.0 Pricing grid IV < 90.0% 350.0 250.0 50.0 III < 75.0% 325.0 225.0 50.0 II < 50.0% 300.0 200.0 50.0 I <  
25.0% 275.0 175.0 50.0 . Total Debt / EBITDAX: < 5.25x with step down to < 4.5x at 3/31/2021 . Senior Secured Debt(1) / EBITDAX: < 2.50x Covenants .  
Interest Coverage Ratio: > 1.25x . Current Ratio: > 1.00x 1) Based solely on bank debt. NYSE:DNR 40 www.denbury.com

---

Originally Budgeted 2018E CapEx and Cash Flow @ \$55 Oil In millions, unless otherwise noted Est. Cash Flow Range @ \$55/Bbl  
2018E Budgeted Sources & Uses \$400 (Including Hedges)(1) In millions 2018E(1) Capital Budget Adjusted cash flow from operations(2) \$430 – \$480 \$350

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Interest payments treated as debt reduction (90) Adjusted total, net \$340 – \$390 \$300 Development capital \$300 – \$325 Capitalized interest 30 \$250  
Total capital costs \$330 – \$355 Net excess cash flow \$10 – \$35 \$200 Development Capital Budget (\$300MM – \$325MM)(1) 1)  
Estimated ranges based on assumed \$55/Bbl NYMEX oil prices, forecasts and Capitalized Interest (\$30MM) assumptions as of February 9, 2018.  
Adjusted Cash Flow(2), less interest payments treated as debt 2) Cash flow from operations before working capital changes (a non GAAP measure).  
See press release attached as Exhibit 99.1 to the Form 8 K filed November 8, 2018 for additional information, as well as  
slide 49 indicating why the Company believes Excluding hedges, each \$5 change in oil price this non GAAP measure is useful for investors.  
impacts cash flow by ~\$100 million NYSE:DNR 41 www.denbury.com

---

Production by Area Average Daily Production (BOE/d) Field 2016 1Q17 2Q17 3Q17 4Q17 2017 1Q18 2Q18 3Q18 Delhi 4,155 4,991 4,965 4,619 4,906 4,869  
4,169 4,391 4,383 Hastings 4,829 4,288 4,400 4,867 5,747 4,830 5,704 5,716 5,486 Heidelberg 5,128 4,730 4,996 4,927 4,751 4,851 4,445 4,330 4,376

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Oyster Bayou 5,083 5,075 5,217 4,870 4,868 5,007 5,056 4,961 4,578 Tinsley 7,192 6,666 6,311 6,506 6,241 6,430 6,053 5,755 5,294 Bell Creek 3,121 3,209 3,060 3,406 3,571 3,313 4,050 4,010 3,970 Salt Creek — — 23 2,228 2,172 1,115 2,002 2,049 2,274 Other Tertiary 11 14 10 19 7 13 57 142 246 Mature area(1) 8,241 7,502 7,171 6,893 6,763 7,078 6,726 6,725 6,612 Total tertiary production 37,760 36,475 36,153 38,335 39,026 37,506 38,262 38,079 37,219 Gulf Coast non tertiary 6,271 6,158 6,454 5,394 5,810 5,952 5,692 6,236 5,992 Cedar Creek Anticline 16,322 15,067 15,124 14,535 14,302 14,754 14,437 15,742 14,208 Other Rockies non tertiary 1,844 1,626 1,475 1,514 1,533 1,537 1,485 1,490 1,409 Total non tertiary production 24,437 22,851 23,053 21,443 21,645 22,243 21,614 23,468 21,609 Total continuing production 62,197 59,326 59,206 59,778 60,671 59,749 59,876 61,547 58,828 Property divestitures(2) 1,806 607 568 550 473 549 462 447 353 Total production 64,003 59,933 59,774 60,328 61,144 60,298 60,338 61,994 59,181 1)

Mature area includes Brookhaven, Cranfield, Eucutta, Little Creek, Mallalieu, Martinville, McComb, and Soso fields. 2)

ry production in the Rocky Mountain region related to the sale of assets in the Williston Basin of North Dakota and Montana (“Williston Assets”), which closed in the third quarter of 2018. NYSE:DNR 42 www.denbury.com

NYMEX Oil Differential Summary Another quarter of company wide positive differential to NYMEX Crude Oil Differentials \$ per barrel 2016 1Q17 2Q17 3Q17 4Q17 2017 1Q18 2Q18 3Q18 Tertiary Oil Fields Gulf Coast Region \$(1.35) \$(1.58) \$(1.01) \$(0.10) \$2.84 \$0.06 \$1.87 \$0.85 \$3.01 Rocky Mountain Region (2.16)

Edgar Filing: PENN VIRGINIA CORP - Form 425

(1.74) (1.75) (0.83) (1.09) (0.96) 0.22 (1.10) (0.86) Gulf Coast Non Tertiary (1.89) (0.42) 0.59 0.90 4.18 1.26 3.26 2.73 4.42 Cedar Creek Anticline (3.77) (2.08)  
(1.93) (0.96) (0.57) (1.43) (0.11) (0.67) (0.31) Other Rockies Non Tertiary (8.63) (3.41) (3.20) (2.08) (1.65) (2.72) (1.30) (1.96) (1.92) Denbury Totals \$(2.29)  
\$(1.64) \$(1.16) \$(0.34) \$1.70 \$(0.32) \$1.29 \$0.39 \$1.84 During 3Q18, ~60% of our crude oil was based on, or partially tied to, the LLS index price NYSE:DNR  
43 www.denbury.com

---

Analysis of Total Operating Costs Total Operating Costs \$ per BOE 2016 1Q17 2Q17 3Q17 4Q17 2017 1Q18 2Q18 3Q18 CO2 Costs \$2.16 \$2.86 \$2.36 \$3.22  
\$3.02 \$2.86 \$3.09 \$2.92 \$2.63 Power & Fuel 5.29 5.93 6.04 6.18 5.72 5.97 6.68 6.19 6.31 1) Normalized LOE excludes special or Labor & Overhead 5.41 6.34

## Edgar Filing: PENN VIRGINIA CORP - Form 425

6.41 6.24 6.24 6.32 6.38 6.47 6.99 unusual items and Thompson Field repair costs (see footnotes 2 and 3 below). Repairs & Maintenance 0.84 0.95 0.83 0.76 0.84  
 0.84 0.80 0.91 1.09 Chemicals 1.02 1.15 1.05 2) Special or unusual items consist of 1.01 0.95 1.04 1.00 1.05 1.17 cleanup and repair costs associated with  
 Workovers 1.87 2.65 2.68 2.26 2.20 2.44 2.84 2.21 3.20 Hurricane Harvey (\$3MM) in 3Q17, and an adjustment for pricing related to one of Other 0.97 1.23 1.09  
 1.07 0.88 1.06 1.01 1.59 1.11 our industrial CO2 sources (\$7MM) in 4Q17. Total Normalized LOE(1) \$17.56 \$21.11 \$20.46 \$20.74 \$19.85 \$20.53 \$21.80  
 \$21.34 \$22.50 3) Represents repair costs to return (2) Special or Unusual Items ———0.48 (1.21) (0.18) ——— Thompson Field to production following  
 Thompson Field Repair weather related flooding in 2Q16. (3) 0.15 — — ——— Costs 4) Excludes derivative settlements. Total LOE \$17.71 \$21.11 \$20.46 \$21.2  
 \$20.35 \$21.80 \$21.34 \$22.50 Oil Pricing NYMEX Oil Price \$43.41 \$51.95 \$48.32 \$48.12 \$55.47 \$50.96 \$62.96 \$67.85 \$69.60 Realized Oil Price(4) \$41.12  
 \$50.31 \$47.16 \$47.78 \$57.17 \$50.64 \$64.25 \$68.24 \$71.44 NYSE:DNR 44 www.denbury.com

---

CO2 Cost & NYMEX Oil Price \$0.50 \$110 \$0.45 \$100 \$0.40 \$90 \$80 Bbl \$0.35 / (1) \$70 Mcf \$0.30 Price / \$60 Oil \$0.25 Costs \$50 2 Crude \$0.20 CO  
\$40 \$0.15 \$30 NYMEX \$0.10 \$20 \$0.05 \$10 \$0.00 (2) (2) (2) \$0 1Q14 2Q14 3Q14 4Q14 1Q15 2Q15 3Q15 4Q15 1Q16 2Q16 3Q16 4Q16 1Q17 2Q17 3Q17

Edgar Filing: PENN VIRGINIA CORP - Form 425

4Q17 1Q18 2Q18 3Q18 Industrial Industrial Sourced Sourced CO CO2 % % 16% 16% 15% 15% 18% 22% 22% 23% 23% 25% 22% 22% 26% 24% 25% 28%  
 29% 34% 29% Tax 0.028 0.031 0.039 0.030 0.025 0.038 0.045 0.040 0.047 0.053 0.052 0.048 0.045 0.040 0.041 0.042 0.043 0.046 0.047 OPEX Purchases Tax  
 NYMEX Crude Oil Price Purchases 0.243 0.300 0.285 0.207 0.171 0.183 0.169 0.161 0.163 0.233 0.215 0.184 0.222 0.200 0.207 0.073 0.185 0.216 0.190  
 1)OPEX Excludes DD&A on CO2 wells and 0.111 facilities; 0.120 includes 0.113 Gulf 0.113 Coast & 0.120 Rocky Mountain 0.148 0.131 industrial 0.185 source  
 0.124 CO2 costs. 0.144 0.138 0.160 0.142 0.140 0.209 0.166 0.167 0.183 0.171 2) CO  
 include workovers carried out at Jackson Dome in 3Q17 and 4Q15 of \$3 million (\$0.08 per Mcf) and \$3 million (\$0.05 per Mcf), respectively, and a downward adjustment in 4Q17 for pr  
 NYMEX2 Crude Oil related to one of our industrial 98.60 CO2 sources 103.0 of \$7 97.31 million 73.04 (\$0.12 per 48.83 Mcf) 57.99 46.70 42.15 33.73 45.56  
 45.02 49.25 51.95 48.32 48.12 55.48 62.96 67.85 69.60 NYSE:DNR 45 www.denbury.com

---

Tinsley Perry Sand Well 2 Overview Recovery Factor • Proven light tight oil accumulation with low historical North Fault Block vertical well recovery; below current producing horizon Well 1 (2Q18) • Successful first well with strong pressure support and high fluid deliverability •

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Based on first well results, expecting development wells to West Fault IP30 at >200 BOPD average with shallow decline Block •  
Estimated >20% IRR at \$50 flat oil price East Fault • Drilling second well in 4Q18 Block • Drill and complete cost estimated at ~\$4 million per well Mississippi •  
6,000 prospective acres in North and West Fault Blocks; Up to 18 potential horizontal locations identified to date • Upside CO2  
EOR potential after primary production Planned well 4Q18 Previously drilled wells NYSE:DNR 46 [www.denbury.com](http://www.denbury.com)

---

Powder River Basin Stacked Pay In Hartzog Draw Unit Hartzog Draw Exploitation North Dakota Shannon: • 20,700 gross / 12,900 net acres in Campbell & 449 BOED IP Rate, 94% Oil Johnson Counties, WY Montana Wyoming South Parkman: • Dakota Significant nearby successes from Turner, 1,166 BOED

## Edgar Filing: PENN VIRGINIA CORP - Form 425

IP Rate, 96% Niobrara, Shannon, Parkman, and Mowry Oil formations HDU • Recent acreage transactions valued at between Nebraska \$4,000 – \$12,000 per acre  
x x x • Acreage held by Hartzog Draw Unit production x Turner/Frontier • Production & transport infrastructure in place 1,393 BOED IP x Rate, 91% Oil •  
Planning to begin drilling activities to test deeper horizons in 4Q18 Mowry: Niobrara: 1,336 BOED IP 1,617 BOED IP Rate, 83% Oil Rate, 81% Oil  
NYSE:DNR 47 www.denbury.com

---

Houston Area Land Sales Conroe Webster o ~3,400 surface acres consisting of 7 parcels for o ~800 surface acres consisting of 11 commercial commercial and residential development parcels o Multiple parcels along I 45 frontage road Pasadena Conroe Sam Houston 45 Tollway 45 1314 Surface Acreage

Edgar Filing: PENN VIRGINIA CORP - Form 425

Pearland Surface 242 Acreage League City The Woodlands NYSE:DNR 48 www.denbury.com

---

Non GAAP Measures

Reconciliation of net income (GAAP measure) to adjusted cash flows from operations (non GAAP measure) to cash flows from operations (GAAP measure) 2017

## Edgar Filing: PENN VIRGINIA CORP - Form 425

2018 In millions	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Net income (GAAP measure)	\$22	\$14	\$0	\$127	\$163	\$40	\$30	\$78			
Adjustments to reconcile to adjusted cash flows from operations	Depletion, depreciation, and amortization	51	51	52	53	208	52	53	51	Deferred income taxes	35	16								
(15)	(132)	(96)	15	10	18	Stock based compensation	45	33	15	33	4	15	33	4	15	33	4			
						Noncash fair value adjustments on commodity derivatives	(52)	(22)	25	78	30	15	41	(17)	Other					
						Adjusted cash flows from operations (non GAAP measure)	\$62	\$65	\$68	\$134	\$329	\$125	\$134	\$135						
						Net change in assets and liabilities relating to operations	(38)	(12)	(2)	(10)	(62)	(33)	20	13	Cash flows from operations (GAAP measure)	\$24	\$53	\$66	\$124	\$267
											\$92	\$154	\$148							

Adjusted cash flows from operations is a non GAAP measure that represents cash flows provided by operations before changes in assets and liabilities, as summarized from the Company's Consolidated Statements of Cash Flows. Adjusted cash flows from operations measures the cash flows earned or incurred from operating activities without regard to the collection or payment of associated receivables or payables.

Management believes that it is important to consider this additional measure, along with cash flows from operations, as it believes the non GAAP measure can often be a better way to discuss changes in operating trends in its business caused by changes in production, prices, operating costs and related factors, without regard to whether the earned or incurred item was collected or paid during that period.  
 NYSE:DNR 49 www.denbury.com

Non-GAAP Measures (Cont.) Reconciliation of net income (GAAP measure) to adjusted EBITDAX (non-GAAP measure) 2017 2018 In millions Q3 Q4 FY Q1 Q2  
Q3 TTM Net income (GAAP measure) \$0 \$127 \$163 \$40 \$30 \$78 \$275 Adjustments to reconcile to Adjusted EBITDAX Interest expense 25 23 99 17 16 19 75

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Income tax expense (benefit) (14) (134) (117) 14 9 16 (95) Depletion, depreciation and amortization 52 53 207 52 53 51 209

Noncash fair value adjustments on commodity 25 78 29 15 41 (17) 117 derivatives Stock based compensation 331533413 Noncash, non recurring and other(1) 11  
7 25 11(3)6 Adjusted EBITDAX (non GAAP measure) \$102 \$157 \$421 \$142 \$153 \$148 \$600

1) Excludes proforma adjustments related to qualified acquisitions or dispositions under the Company's senior secured bank credit facility.

Adjusted EBITDAX is a non GAAP financial measure which management uses and is calculated based upon (but not identical to) a financial covenant related to "Consolidated EBITDAX" in the Company's senior secured bank credit facility, which excludes certain items that are included in net income, the

most directly comparable GAAP financial

measure. Items excluded include interest, income taxes, depletion, depreciation and amortization, and items that the Company believes affect the comparability of operating results such as items whose timing and/or amount cannot be reasonably estimated or are non recurring. Management believes Adjusted EBITDAX may be helpful to investors in order to assess the Company's operating performance as compared to that of other companies in its industry, without regard to

financing methods, capital structure or historical

costs basis. It is also commonly used by third parties to assess leverage and the Company's ability to incur and service debt

and fund capital expenditures. Adjusted EBITDAX

should not be considered in isolation, as a substitute for, or more meaningful than, net income, cash flow from operations, or any other measure reported in accordance with

GAAP. Adjusted EBITDAX may not be comparable to similarly titled measures of another company because all companies may not calculate Adjusted EBITDAX, EBITDAX or EBITDA in the same manner. NYSE:DNR 50 www.denbury.com

---



Forward Looking and Cautionary Statements Certain statements contained herein that are not descriptions of historical facts are “forward-looking” statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We use words such as “guidance,” “projects,” “estimates,” “expects,” “continues,” “intends,” “plans,” “believes,” forecasts, “future,” “potential,” and variations of such words or similar expressions in this presentation to identify forward-looking statements. Because such statements include assumptions, risks, uncertainties and contingencies, actual

## Edgar Filing: PENN VIRGINIA CORP - Form 425

results may differ materially from those expressed or implied by such forward-looking statements. These risks, uncertainties and contingencies include, but are not limited to, the following: the impact of our pending merger with Denbury Resources Inc. and our ability to complete the transaction as expected and realize its anticipated benefits; risks related to acquisitions, including the Company's ability to realize their expected benefits; our ability to realize the expected benefits of our cost management strategy, including slickwater, saltwater disposal and gas lift; our ability to satisfy our short-term and long-term liquidity needs, including our ability to generate sufficient cash flows from operations or to obtain adequate financing to fund our capital expenditures and meet working capital needs; negative events or publicity adversely affecting our ability to maintain our relationships with our suppliers, service providers, customers, employees, and other third parties; plans, objectives, expectations and intentions contained in this presentation that are not historical; our ability to execute our business plan in volatile and depressed commodity price environments; any decline in and volatility of commodity prices for oil, NGLs, and natural gas; our anticipated production and development results; our ability to develop, explore for, acquire and replace oil and natural gas reserves and sustain production; our ability to generate profits or achieve targeted reserves in our development and exploratory drilling and well operations; any impairments, write-downs or write-offs of our reserves or assets; the projected demand for and supply of oil, NGLs and natural gas; our ability to contract for drilling rigs, frac crews, supplies and services at reasonable costs; our ability to obtain adequate pipeline transportation capacity for our oil and gas production at reasonable cost and to sell the production at, or at reasonable discounts to, market prices; the uncertainties inherent in projecting future rates of production for our wells and the extent to which actual production differs from that estimated in our proved oil and natural gas reserves; drilling and operating risks; concentration of assets; our ability to compete effectively against other oil and gas companies; leasehold terms expiring before production can be established and our ability to replace expired leases; environmental obligations, results of new drilling activities, locations and methods, costs and liabilities that are not covered by an effective indemnity or insurance; the timing of receipt of necessary regulatory permits; the effect of commodity and financial derivative arrangements with other parties and counterparty risk related to the ability of these parties to meet their future obligations; the occurrence of unusual weather or operating conditions, including force majeure events and hurricanes; our ability to retain or attract senior management and key employees; especially with respect to environmental, health and safety matters; physical, electronic and cybersecurity risks and breaches; litigation that impacts us, our assets or our midstream service providers; uncertainties relating to general domestic and international economic and political conditions; and other risks set forth in our filings with the SEC, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and Quarterly Reports on Form 10-Q, which are available on our website at [www.pennvirginia.com](http://www.pennvirginia.com) under Investors – SEC Filings. Additional information concerning these and other factors can be found in our press releases and public filings with the SEC. Many of the factors that will determine our future results are beyond the ability of management to control or predict. Readers should not place undue reliance on forward-looking statements, which reflect management's views only as of the date hereof. The statements in this presentation speak only as of the date of this presentation and have not been updated for any information or events subsequent to that date. We undertake no obligation to revise or update any forward-looking statements, or to make any other forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable law. Oil and Gas Reserves Statements of reserves are only estimates and may not correspond to the ultimate quantities of oil and gas recovered. Investors are urged to consider closely the disclosure in Penn Virginia's public filings with the SEC, including its Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and subsequent Quarterly Reports on Form 10-Q, which are available on its website at [www.pennvirginia.com](http://www.pennvirginia.com) under Investors – SEC Filings. You can also obtain these reports from the SEC's website at [www.sec.gov](http://www.sec.gov). Definitions Proved reserves are those quantities of oil and gas which, by analysis of geosciences and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulation before the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. Estimated ultimate recovery (EUR) is the sum of reserves remaining as of a given date and cumulative production as of that date. EUR is a measure that by its nature is more speculative than estimates of reserves prepared in accordance with SEC definitions and guidelines and accordingly is less certain. Cautionary Statements The estimates and guidance presented in this presentation are based on assumptions of capital expenditure levels, prices for oil, natural gas and NGLs, current indications of supply and demand for oil, well results and operating costs. IP 24-hour and IP 30-day production rate results might not be indicative of production over longer periods in the life of the well. The guidance, estimates and type curves provided or used in this presentation do not constitute any form of guarantee or assurance that the matters indicated will be achieved. Statements regarding inventory are based on current information, drilling program and economics or subject to material change. Past results are not necessarily indicative of future results, which may differ materially. The number of locations in the Company's current estimated inventory or that will use enhanced oil recovery (EOR) is not a guarantee of the number of wells that will actually be drilled and completed or economic. While we believe these estimates and the assumptions on which they are based are reasonable, they are inherently uncertain and are subject to, among other things, significant business, economic, operational and regulatory risks and uncertainties and are subject to material revision. Actual results may differ materially from estimates and guidance. Reconciliation of Non-GAAP Financial Measures This presentation contains references to certain non-GAAP financial measures. Reconciliations between GAAP and non-GAAP financial measures are available in the appendix to this presentation. The non-GAAP financial measures presented may not provide information that is directly comparable to that provided by other companies, as other companies may calculate such financial results differently. The Company's non-GAAP financial measures are not measurements of financial performance under GAAP and should not be considered as alternatives to amounts presented in accordance with GAAP. The Company views these non-GAAP financial measures as supplemental and they are not intended to be a substitute for, or superior to, the information provided by GAAP financial results. 1

---

Penn Virginia Overview Pure Play Eagle Ford Shale Operator . 98,500 gross / 84,700(1) net acres in Gonzales, Lavaca and Dewitt Counties; 99% Operated; 92% HBP . Substantial Lower Eagle Ford inventory estimated at 560 gross locations (461 net)(2) . Production is 77% oil / 90% liquids, sells in LLS market and generates robust adjusted EBITDAX margins . Active 3-rig program . Targeting Y-o-Y production growth of ~120%(3) for 2018 with current development program; 50-60% for 2019 1) As of November 8, 2018. 2) As of August 3, 2018. 3) Mid-point of production guidance, pro forma for Oklahoma asset sale.

Edgar Filing: PENN VIRGINIA CORP - Form 425

Guidance as of November 8, 2018 and the Company is not confirming guidance. 2

---

Strong Operational and Financial Performance Third Quarter 2018 Highlights . Continued Operational Excellence in 3Q'18 . Drilled and turned to sales 10 gross (9.7 net) wells in the Eagle Ford . 2.1 MMBOE (77% oil), or 22,912 BOEPD . 9% increase in oil production over Q2'18 . Continue to be low cost operator - LOE of \$4.70 per BOE Eagle Ford Net Acreage: 84,700(1) (92% HBP) . Impressive Financial Performance Drilling Locations: Est. 560 gross/461 net(2) Proved Reserves: 83 MMBOE(3) . Adjusted EBITDAX(4) of \$85.1 MM, up ~12% from Q2'18 . Selling 100% of oil into LLS market; realized \$2.24 per barrel premium

## Edgar Filing: PENN VIRGINIA CORP - Form 425

over WTI . Adjusted direct operating expenses per BOE(4) of \$12.84 Houston Office . Realized cash operating margin per BOE(4) of \$47.31 . On Track to Meet 2018 Goals and Setting Foundation for 2019 . Anticipate ~120%(5) production growth over 2017 . Expect to grow production ~29% in Q4'18 over Q3'18(6) . Estimate a LTM leverage ratio (debt to adjusted EBITDAX(7)) of ~1.5x by year-end . Expect 2019 production growth of 50% - 60%, drilling within cash flow(8) 1) As of November 8, 2018. 2) As of August 3, 2018. 3) As of December 31, 2017, pro forma for Hunt acquisition. 4) Non-GAAP financial measures reconciled in the appendix of this presentation. 5) Mid-point of production guidance, pro forma for Oklahoma asset sale. Guidance as of November 8, 2018 and the Company is not confirming guidance. 6) Calculated using actual production for 3Q'18 to mid-point of 4Q'18 guidance. Guidance as of November 8, 2018 and the Company is not confirming guidance. 3 7) Pro forma for acquisitions. 8) Based on \$65 WTI

---

Key Slickwater Completions & Well Results 22 Choke PVA Rigby Unit (1) PVA Axis Unit 3 Well IP-24: 5,183 BOE/D 3 Well IP-24: 6,341 BOE/D GEN 4 IP-30: 3,928 BOE/D IP-30: TBD GEN 4 PVA Kudu Unit PVA Hawg Hunter Unit 4 Well IP-24: 5,889 BOE/D 3 Well IP-24: 11,532 BOE/D IP-30: 3,343 BOE/D IP-30: 5,575 BOE/D GEN 4 GEN 3 PVA Sable Unit PVA Bertha Unit 3 Well IP-24: 6,540 BOE/D 3 Well IP-24: 5,705 BOE/D IP-30: 2,918 BOE/D IP-30: 2,806 BOE/D GEN 4 GEN 2 PVA Schacherl-Effenberger PVA Lott Unit 2 Well IP-24: 3,075 BOE/D 3 Well IP-24: 4,286 BOE/D IP-30: 2,117 BOE/D IP-30: 2,958

## Edgar Filing: PENN VIRGINIA CORP - Form 425

BOE/D GEN 4 GEN 4 22 Choke PVA Pilsner Unit (1) PVA Schacherl-Vana 1 Well IP-24: 1,469 BOE/D 2 Well IP-24: 3,027 BOE/D GEN 4 IP-30: TBD IP-30: TBD GEN 4 PVA Southern Hunter Amber TEAL Molnoskey Unit (2) 2 Well IP-24: 5,092 BOE/D 2H : IP-24: 2,171 BOE/D (W-2 form) IP-30: 4,028 BOE/D GEN 4 PVA Raab Fojtik (SA) PVA Amber-Porter (SA) 2 Well Pad: Drilling 2 Well 24-IP: 3,979 BOE/D IP-30: TBD GEN 4 PVA D.Raab-Netardus 2 Well Pad: Drilling PVA Cinco J Ranch LTD Unit 3 Well IP-24: 5,798 BOE/D PVA Mc Creary-Technik Unit IP-30: 3,547 BOE/D GEN 3 3 Well IP-24: 5,426 BOE/D IP-30: 3,843 BOE/D GEN 4 PVA L & J Lee Unit 3 Well IP-24: 3,877 BOE/D PVA Heatwave (SA) IP-30: 2,299 BOE/D GEN 3 2 Well Pad: WOC GEN 4 PVA Lager PVA Sharktooth 1 Well IP-24: 2,511 BOE/D 2 Well IP-24: 3,366 BOE/D IP-30: 1,846 BOE/D GEN 4 IP-30: 2,423 BOE/D GEN 4 PVA Geo Hunter Unit RCR Shiner Unit (1) Preliminary Rates; additional 2 Well IP-24: 5,478 BOE/D 1H : Flowing Back choke changes likely before IP-24 IP-30: 3,786 BOE/D GEN 4 finalized (2) RCR Kloesel Unit (2) Data from Texas Railroad PVA Carol-Robin Unit 1H : IP 1,303 BOE/D (G-5 form) 2 Well Pad: on Flowback Commission GEN 4 RCR Five Star Unit (2) PVA Marcia-Shelly (SA) 1H : IP 1,479 BOE/D (G-5 form) 2 Well Pad: Drilling PVA Medina Unit 3 Well IP-24: 5,209 BOE/D IP-30: 3,827 BOE/D Offset Operator GEN 4/GEN 5 EOR Project 4

---

Large Inventory of Locations With Attractive Returns Eagle Ford Economics by Area Capital Efficiency of XRLs Provides Superior ROR + + [67]% (1) Update  
Note: Based on management's internal estimates as of June 30, 2018; economics based on \$60 WTI, \$3 natural gas and Gen 4 completion. Drilling locations as of  
August 3, 2018. 5

---

Selling into LLS Market LLS – Commanding Significant Premium Over WTI and Midland Prices • Q3'18 Production: 90% Liquids; ~77% Oil • Receives LLS Pricing, Premium Over WTI and Midland • Realized \$71.67 per barrel in 3Q'18 • Blended Oil Yields ~43 Degree API Gravity Q3'18 Production Mix Q3'18 – LLS vs. WTI and Midland Pricing Oil NGLs Natural Gas LLS 10% WTI 13% Mid 77% 6

Crude Oil Delivery Optionality • Geographic Location Provides PVAC's Production Access to LLS Markets and Pricing Flatonia • Three Delivery Points Enterprise Products Line • Kinder Morgan Pipeline • Houston Ship Channel • Phillips 66 Refinery - Sweeny • Enterprise Products Line (Eagle Ford Crude Oil System) • Trucked from wellhead or CDP to multiple markets • ~84% of PVAC Oil Production on Pipe Kinder Morgan Line to Houston Ship Channel or Phillips 66 Refinery Ample Takeaway Capacity 7



Production Growth Targeting 120+% (1) Year-Over-Year Production Growth (pro forma for Oklahoma sale) Lower Adjusted Increasing Increasing Realized  
Direct Operating Lower Production Cash Operating Margin Expenses per Leverage Metric 120+% Y-O-Y per BOE BOE Peer Leading 2018 Production  
Growth(2) 28,500 – 30,500 BOEPD 22,912 BOEPD 22,200 BOEPD 16,145 BOEPD 12,340 BOEPD 4Q17A 1Q18A 2Q18A 3Q18A 4Q18E 2019 Production  
Growth Expected to be 50-60% Note: Guidance as of November 8, 2018 and the Company is not confirming guidance. 1) Assumes mid-point of production

## Edgar Filing: PENN VIRGINIA CORP - Form 425

guidance, pro forma for Oklahoma sale. 2) Peers include: CRZO, ESTE, LONE, SN, SNDE and WRD. 8

---

Declining Adjusted Direct Operating Expenses(1) per BOE Lower Adjusted Increasing Increasing Realized Direct Operating Lowers Production Cash Operating Expenses per Leverage Metric 120+% Y-O-Y BOE Margin per BOE • LOE per BOE declined by ~18% from 2017 • Adjusted Cash G&A(2) per BOE declined by ~31% from 2017 \$14.41 \$13.25 \$13.05 \$12.84 \$11.63 2017A 4Q17A 1Q18A 2Q18A 3Q18A Adjusted Direct Operating Expenses per BOE Expected to Decrease Significantly by Year-End 1) Adjusted Direct Operating Expenses per BOE is comprised of the sum of (Lease Operating Expense + GPT Expense + Adjusted

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Cash G&A Expense(2) + Production and Ad Valorem Taxes)/Total Production. 2) Adjusted Direct Operating Expenses per BOE and Adjusted Cash G&A per BOE are non-GAAP financial measures. Definitions of non-GAAP financial measures and reconciliations of non-GAAP financial measures to the closest GAAP-based financial measures appear at the end of this presentation. 9

---

Strong Realized Cash Operating Margin(1) per BOE Lower Adjusted Increasing Increasing Realized Direct Operating Lowers Production Cash Operating Margin  
Expenses per Leverage Metric 120+% Y-O-Y per BOE BOE LLS Pricing and Low Cost Structure Yield Strong Cash Operating Margins \$47.31 \$43.39 \$39.94  
\$34.44 \$27.79 2017A 4Q17A 1Q18A 2Q18A 3Q18A 1) Realized Cash Operating Margin per BOE is a non-GAAP financial measure. Definitions of non-GAAP  
financial measures and reconciliations of non-GAAP financial measures to the closest GAAP-based financial measures appear at the end of this presentation. 10



Balance Sheet Improvement LTM Net Debt to Adjusted EBITDAX Increasing Lower Adjusted Lowers Direct Operating Increasing Realized Cash Leverage  
Production Operating Margin per BOE 120+% Y-O-Y Expenses per Metric BOE 2.6x(1)(1) • Expect to Spend Within Cash Flow in 2019 2.6x • Targeting Leverage  
Ratio of ~1.5x (Debt / (2) 2.4x LTM Adj. EBITDAX) 2.2x(2) 1.9x(2) ~1.5x(2) PF YE17A 1Q18A 2Q18A 3Q18A YE18E Strong Cash Flow Growth Rapidly  
Improves Balance Sheet 1) Pro forma for Devon and Hunt Acquisition (2017 year-end debt / Adjusted EBITDAX was 2.3x). 2) Pro forma for acquisitions. 11





Updated Hedge Portfolio(1) Mitigating Commodity Price Volatility Through Proactive Hedging Program 12,000 \$57.05 10,000 8,000 \$65.27 \$54.48 \$54.09 6,000  
\$59.17 4,000 Oil Oil Barrels Per Day 2,000 0- Q3-Q4 2018 2019 2020 WTI WTI LLS LLS Volumes Average Price Volumes Average Price (Bbls / Day) (\$ / Bbl)  
(Bbls / Day) (\$ / Barrel) Q3-Q4 2018 10,455 \$57.05 6,000 \$65.27 2019 6,415 \$54.48 5,000 \$59.17 2020 6,000 \$54.09 - - 1) As of 08/08/2018. 13

---

Non-GAAP Reconciliation – Adjusted EBITDAX - Unaudited Reconciliation of GAAP "Net income (loss)" to Non-GAAP "Adjusted EBITDAX" Adjusted EBITDAX represents net income (loss) before interest expense, income tax expense, depreciation, depletion and amortization expense and share-based compensation expense, further adjusted to exclude the effects of gains and losses on sales of assets, non-cash changes in the fair value of derivatives, and special items including acquisition and divestiture transaction costs, executive retirement costs and restructuring expenses. We believe this presentation is commonly used

## Edgar Filing: PENN VIRGINIA CORP - Form 425

by investors and professional research analysts for the valuation, comparison, rating, and investment recommendations of companies within the oil and gas exploration and production industry. We use this information for comparative purposes within our industry. Adjusted EBITDAX is not a measure of financial performance under GAAP and should not be considered as a measure of liquidity or as an alternative to net income (loss). Adjusted EBITDAX as defined by Penn Virginia may not be comparable to similarly titled measures used by other companies and should be considered in conjunction with net income (loss) and other measures prepared in accordance with GAAP, such as operating income or cash flows from operating activities. Adjusted EBITDAX should not be considered in isolation or as a substitute for an analysis of Penn Virginia's results as reported under GAAP. Three Months Ended Nine Months Ended September 30, June 30, September 30, September 30, September 30, 2018 2018 2017 2018 2017 (in thousands, except per unit amounts)

Net income (loss)	\$ 16,276	\$ (2,521)	\$ (5,947)	\$ 24,050	\$ 43,463
Adjustments to reconcile to Adjusted EBITDAX:					
Interest expense, net	7,322	6,150	1,202	18,073	3,014
Income tax (benefit) expense	(10)	-	-	153	-
Depreciation, depletion and amortization	35,016	31,273	10,659	88,370	31,545
Share-based compensation expense (equity-classified)	1,021	875	1,013	3,472	2,707
(Gain) loss on sales of assets, net	(2)	(4)	(9)	(81)	60
Adjustments for derivatives: Net losses (gains)	40,689	52,241	12,275	111,725	(15,802)
Cash settlements, net	(15,214)	(12,401)	788	(35,191)	(1,670)
Adjustment for special items: Acquisition, divestiture and strategic transaction costs	44	56	1,505	531	1,505
Executive retirement costs	-	-	250	-	-
Other, net	(80)	-	(80)	-	(80)
Restructuring expenses	-	-	(20)	-	-
<b>Adjusted EBITDAX</b>	<b>\$ 85,062</b>	<b>\$ 75,669</b>	<b>\$ 21,486</b>	<b>\$ 211,272</b>	<b>\$ 64,802</b>
<b>Adjusted EBITDAX per BOE</b>	<b>\$ 40.35</b>	<b>\$ 37.46</b>	<b>\$ 24.85</b>	<b>\$ 37.85</b>	<b>\$ 24.51</b>

---

Non-GAAP Reconciliation – Adjusted Cash G&A - Unaudited Reconciliation of GAAP "General administrative expenses" to Non-GAAP "Adjusted cash general and administrative expenses" Adjusted cash general and administrative expense ("Adjusted cash G&A") is a supplemental non-GAAP financial measure that excludes certain non-recurring expenses and non-cash share-based compensation expense. We believe that the non-GAAP measure of Adjusted cash G&A is useful to investors because it provides readers with a meaningful measure of our recurring G&A expense and provides for greater comparability

## Edgar Filing: PENN VIRGINIA CORP - Form 425

period-over-period. Three Twelve Three Months Ended Nine Months Ended Months Ended Months Ended September 30, June 30, September 30, September 30, December 31, December 31, 2018 2018 2017 2018 2017 2017 2017 (in thousands, except per unit amounts) General and administrative expenses - direct \$ 5,134 \$ 4,447 \$ 5,919 \$ 14,476 \$ 12,034 \$ 2,360 \$ 14,453 Share-based compensation - equity-classified awards 1,021 875 1,013 3,472 2,707 1,102 3,809 GAAP General and administrative expenses 6,155 5,322 6,932 17,948 14,741 3,462 18,262 Less: Share-based compensation - equity-classified awards (1,021) (875) (1,013) (3,472) (2,707) (1,102) (3,809) Significant special charges: Acquisition, divestiture and strategic transaction costs (44) (56) (1,505) (531) (1,505) 165 (1,340) Executive retirement costs - - - (250) - - - Restructuring expenses - - - - 20 - 20 Adjusted cash-based general and administrative expenses \$ 5,090 \$ 4,391 \$ 4,414 \$ 13,695 \$ 10,549 \$ 2,525 \$ 13,133 GAAP General and administrative expenses per BOE \$ 2.92 \$ 2.63 \$ 8.02 \$ 3.22 \$ 5.58 \$ 3.05 \$ 4.83 Adjusted cash-based general and administrative expenses per BOE \$ 2.41 \$ 2.17 \$ 5.11 \$ 2.45 \$ 3.99 \$ 2.22 \$ 3.48 15

---

Non-GAAP Reconciliation – Adjusted Direct Operating Expenses - Unaudited Reconciliation of GAAP "Operating expenses" to Non-GAAP "Adjusted direct operating expenses" Adjusted direct operating expenses and adjusted direct operating expenses per BOE are a supplemental non-GAAP financial measure that excludes certain non-recurring expenses and non-cash expenses. We believe that the non-GAAP measure of Adjusted direct operating expense per BOE is useful to investors because it provides readers with a meaningful measure of our cost profile and provides for greater comparability period-over-period. Three Twelve

## Edgar Filing: PENN VIRGINIA CORP - Form 425

Three Months Ended Nine Months Ended Months Ended Months Ended September 30, June 30, September 30, September 30, September 30, December 31,  
 December 31, 2018 2018 2017 2018 2017 2017 2017 (in thousands, except per unit amounts) Operating expenses \$ 63,149 \$ 55,694 \$ 26,912 \$ 162,142 \$ 75,097  
 \$ 33,085 \$ 108,243 Less: Share-based compensation - equity-classified awards (1,021) (875) (1,013) (3,472) (2,707) (1,102) (3,809) Depreciation, depletion and  
 amortization (35,016) (31,273) (10,659) (88,370) (31,545) (17,104) (48,649) Significant special charges: Acquisition, divestiture and strategic transaction costs  
 (44) (56) (1,505) (531) (1,505) 165 (1,340) Executive retirement costs - - - (250) - - - Restructuring expenses - - - 20 - 20 Non-GAAP Adjusted direct operating  
 expenses \$ 27,068 \$ 23,490 \$ 13,735 \$ 69,519 \$ 39,360 \$ 15,044 \$ 54,465 Non-GAAP Adjusted direct operating expenses per BOE \$ 12.84 \$ 11.63 \$ 15.89 \$  
 12.46 \$ 14.89 \$ 13.25 \$ 14.41 16

---

Non-GAAP Reconciliation – Realized Cash Operating Margin Unaudited Reconciliation of GAAP "Income (loss) before income taxes" to Non-GAAP "Realized cash operating margin" Realized cash operating margin and realized cash operating margin per BOE are a supplemental non-GAAP financial measure that excludes certain non-recurring expenses, certain non-operating items and non-cash expenses. We believe that the non-GAAP measure of realized cash operating margin per BOE is useful to investors because it provides readers with a meaningful measure of our operating profitability and provides for greater comparability

## Edgar Filing: PENN VIRGINIA CORP - Form 425

period-over-period. Three Twelve Three Months Ended Nine Months Ended Months Ended Months Ended September 30, June 30, September 30, September 30,  
 September 30, December 31, December 31, 2018 2018 2017 2018 2017 2017 2017 (in thousands, except per unit amounts) Income (loss) before income taxes \$  
 16,266 \$ (2,521) \$ (5,947) \$ 24,203 \$ 43,463 \$ (15,744) \$ 27,719 Plus: Interest expense, net 7,322 6,150 1,202 18,073 3,014 3,378 6,392 Derivatives 40,689  
 52,241 12,275 111,725 (15,802) 33,621 17,819 Other, net (241) 16 17 (167) (45) (13) (119) Share-based compensation - equity classified awards 1,021 875 1,013  
 3,472 2,707 1,102 3,809 Acquisition, divestiture and strategic transaction costs 44 56 1,505 531 1,505 (165) 1,340 Executive retirement costs - - - 250 - - -  
 Restructuring expenses - - - (20) - (20) Depreciation, depletion and amortization 35,016 31,273 10,659 88,370 31,545 17,104 48,649 Less: (Gain) loss on sales of  
 assets, net (2) (4) (9) (81) 60 (24) 36 Other revenues, net (380) (415) (117) (937) (462) (159) (621) Non-GAAP Realized cash operating margin \$ 99,735 \$ 87,671  
 \$ 20,598 \$ 245,439 \$ 65,965 \$ 39,100 \$ 105,004 Non-GAAP Realized cash operating margin per BOE \$ 47.31 \$ 43.40 \$ 23.83 \$ 43.98 \$ 24.95 \$ 34.44 \$ 27.79 17

---

