

QEP Resources (QEP)

Summary

I believe QEP Resources shares (QEP) are a compelling value. Shares trade at \$9.22 versus a sum of the parts valuation of \$16 per share, representing upside of 78%. The market is currently valuing QEP's top-tier Permian assets at sub-\$13,000 per acre. A nearby transaction two days ago (FANG for EGN) valued similar acreage at ~4x. QEP is cheap relative to Permian peers, trading at EV/EBITDA of 5.3x versus 7.8x.* The stock currently trades below the level at which the company bought back shares in Q2.

Unconventional E&Ps remain extremely out-of-favor and QEP shares' deep discount to net asset value is being masked by a strategic transition into a pure-play Permian basin producer. Activist firm Elliott Management is involved (11.7m voting shares, or 4.9%).

On February 28th, QEP announced it will be divesting significant Bakken (~115k net acres) and Haynesville assets (~50k net acres plus midstream). Proceeds will be used to (a) fund a Permian (~51k net acres in core northern Midland Basin) development program, (b) reduce debt, and (c) return cash to shareholders through a \$1.25 billion share repurchase program.

The reallocation of capital from legacy assets to solely core-of-the-core Permian acreage should provide a catalyst for a material upward re-pricing of shares, through (a) elimination of the 'spread-too-thin' discount, (b) improved cash operating margins via higher oil mix and increased capital efficiencies, and/or (c) multiple expansion, as the recent success of QEP's "tank-style" development program is further validated.

On Management

QEP management had previously been criticized for poor capital allocation and lack of strategic direction. The company was historically perceived as overly diversified, operating in six geographic areas of the U.S. In 2014, JANA Partners (no longer involved) successfully pressured QEP to sell off its field services and Bakken midstream business to Tesoro for \$2.5B.

JANA, however, did not attempt to address value creation in QEP's upstream business – ostensibly because the quality of the company's assets has never been questioned. QEP's assets are top-tier. That said, it is fortunate that Elliott has gotten involved, because those assets otherwise risked ending up stranded. It would be too expensive to develop them all, and at some point, QEP was going to have to focus and allocate capital solely to core-of-the-core inventory. So, it is an eminently rational strategy to monetize very good assets, accelerate cash flows from the best asset, reduce leverage and buyback shares.

Compensation-performance targets prior to 2017 were weighted heavily towards production/reserve growth, as well as some poorly defined M&A/portfolio optimization efforts. Now, however, management is appropriately incentivized.

Specifically, management compensation has been formally linked to factors including (a) returns and cost controls, via the use of a 'drilling rate of return' metric to measure capital efficiency and capital allocation over the full-cycle, (b) Debt/EBITDA, and (c) EBITDA per boe, ensuring a focus on high margins. There are no employment agreements with management, nor any excessive perqs and bennies. Underwater options may not be re-priced w/o shareholder

*Permian peer group consists of CPE, CDEV, XEC, CXO, FANG, EGN, JAG, LPI, PE, and PXD.



approval. With regards to a potential change in control, QEP managers have no “golden parachute” excise tax gross-ups, nor accelerated vesting. So, management has no incentive to sell the company while it’s trading so cheaply. QEP’s completion engineers in particular will also be important to unlocking value in the Permian. While harder for an outsider to assess, I would point to significant historical increases in asset values and recent results in the Permian as strong positive indicators regarding the quality of talent in the company’s engineering shop.

The imminent sale of non-Permian assets should go a long way towards absolving management of earlier sins. Elliott’s presence is also an excellent deterrent for any potential moves that would otherwise impair value at QEP. The task before management now is simply to keep developing some of the most valuable oil acreage in the country. And to make sure their bankers sell QEP’s Bakken and Haynesville assets at good prices. As discussed more later, this should be no problem.

Why Are Shares Mispriced?

That QEP shares are trading at a deep discount to asset value does not seem to be in dispute. That has been the case for some about a year now (see: management commentary, \$1.25B buyback, Elliott). Opinions seem to differ, though, as to why.

Sentiment for the sector remains extremely negative. After three years of getting whipsawed, energy investors have PTSD and generalists remain gun-shy due to volatility and complexity. Nonetheless, the market will be forced to recognize value at QEP via asset sales, significant debt reduction, and a massive buyback program.

Macro angst, investor fatigue and/or the prior sins of management don’t adequately explain the size of the current valuation discount, however. Other factors could include the following:

- The complexity and scope of the company’s current transformation.
 - Commentary: QEP is taking dramatic steps to unlock value, specifically by selling ~ 80% of the company’s production/reserves to become a pure-play Permian producer by the end of 2019. This may represent execution risk to some investors.

- QEP is a relatively new entrant to the Permian, developing acreage via ‘tank-style’ drilling, but is often compared on the sellside to longer-tenured basin peers who may develop via in-fill drilling.

- Commentary: Peer comparisons are not quite apples-to-apples.

Tank-style development is a comprehensive, manufacturing-based approach to extracting oil that boosts volumes while decreasing unit costs. It is heavy on geoscience and based on very aggressive downspacing patterns, with in some cases 30+ wells tapping four different subsurface zones, all drilled from a single pad. This contrasts with traditional infill pads containing 6-8 wells. Infill drilling also typically results in recovering approximately 10% of the original oil in place. Tank-style development could drive recovery rates into the high-teens. That would represent a step-change in operational efficiency - although this methodology is relatively new and still being refined. It also can be more challenging for analysts to model. More on this later.

- Sellside uncertainty exists around the potential for well-interference issues, given the tight well spacing assumptions in QEP’s tank-style development plan for the Permian.



- Commentary: QEP has reported no well interference issues in the Permian. It's the uncertainty around the issue in the industry more broadly that is the source of concern - because well interference causes unexpected variations in well productivity, which lowers project IRRs and reduces the number of viable drilling locations, among other things. This concern can be exacerbated with tank-style drilling, which considers tight well spacing a feature, not a bug.

It is true that wells spaced too tightly can cause interference issues. It is also true that the geology underlying acreage in the Midland Basin is relatively homogenous, so a company like QEP that uses tighter well spacing than its peers is liable to raise an eyebrow. However, QEP develops its acreage using a 'tank-style' methodology distinct from its peers. By lumping QEP into a single cohort that develops via infill drilling, sellside analysts "over-risk" QEP's production and understate the company's true value.

Fortunately, the intricacies of advanced completion techniques in the Permian are irrelevant – at least to me, for now.

The large margin of safety in QEP shares mitigates the risk of taking the company at its word when it comes to its ability to minimize well interference. And, incidentally, management's word is in stark contrast to industry and sellside concerns. QEP believes its tank-style development model can control, mitigate and/or eliminate well interference issues. That's one of its major advantages.

Back to that margin of safety - the market is currently assigning a *ridiculously low value* to QEP's Permian holdings.

Backing into the implied value of QEP's Permian acreage via sum of the parts analysis shows the market is valuing that asset at just \$12,600 per acre.

Which, again, is ridiculous.

The Midland Basin is some of the best oily acreage in this hemisphere. Operators routinely realize triple digit IRRs on wells in the area. Two days ago the best operator in the area (Diamondback) bought another Permian player (Energen) for ~ \$58,000 per acre. QEP owns 51,000 acres. Yet the market is effectively pricing QEP acres at *twenty cents on the dollar*.

Well-interference is absolutely something to keep an eye on longer-term. But it's not an issue in the field for QEP right now, management believes it can control it in the future, and in the meantime...the market is huffing paint fumes over in the corner.

- "Investors are skeptical about the shale business model and its ability to create free cash flow."
 - Commentary: I'm not an apologist for all shale companies, but (a) this sort of take is relatively easy to disprove for those willing to look, and (b) misses that the shale industry is visibly transitioning from an earlier, chaotic land-grab driven by the terms of HBP ("Held By Production") leases to a phase emphasizing internal economic returns.



But that's a different write-up.

At QEP, management anticipates being briefly free cash flow positive in 2H:18 after recently releasing all rigs and spreads in the Bakken and Haynesville. The company's plan for the rest of 2018 is to drop from six to four rigs in the Permian and for the Permian asset (ex. allocated G&A) to reach cash flow neutrality in Q4:18. Corporate outspend in Q1:19 is expected to be modest (timing of capex), and management expects to return to cash flow neutrality in Q2:19+. While details are light and variables are many, that free cash flow goal is nonetheless consistent with (a) the presence of Elliott, and (b) the company's need to carry and produce more cash, regardless, given an expected reduction to their credit line post-Bakken sale (i.e. their revolver is partially secured by some current reserves that are about to be sold).

- Anxiety around the company's debt.

- Commentary: You should have seen some of these E&Ps back in 2014, Slick. QEP's debt is notable, but not a concern. It's well-supported by asset value and is about to be reduced, in any case. And management's pledge to lower debt can be taken seriously because a significant reduction in debt post-Bakken sale will be needed to counter decreased EBITDA, anyway.

Net debt/EBITDA is now ~3.0x, improved from 3.3x at YE17 due largely to a big EBITDA beat of \$280M in Q2 (consensus of \$232M). Management is targeting a post-divestiture level closer to 2.0x. QEP's total debt is termed out satisfactorily for now, with no material maturities (\$398M) until 2021. The company had been actively redeeming notes in Q4:17. A \$1.25B revolver (\$575M drawn at the end of Q2) matures in 2022. Other maturities: \$500M in 2022, \$650M in 2023, and \$500M in 2026.

- Uncertainty about the potential impact of pipeline congestion on the company's 2H:18 revenue.

- Commentary: QEP has high flow assurance for Permian oil takeaway. More than 95% of expected '18 and '19 production has dedicated or firm takeaway capacity. The company is positioned well due to (a) Gulf Coast-linked contracts (i.e. selling to refiners with existing, long-term capacity on pipes out of the basin), and (b) the contiguous nature of its acreage, which allowed QEP to build its own infill gathering system. Incremental production will still be exposed to Midland pricing, but basis has been hedged on an additional ~ 70% of 2H:18 oil volumes and ~30% of '19. They will add as needed for '19.

- Concern about potential difficulties sourcing and distributing water in the Permian.

- Commentary: QEP has built its own water supply/recycling/disposal system in the Permian to support its future development plans – which, incidentally, is a significantly lower cost option than traditional options.



- “They have hedged away some upside from higher oil prices.”
 - Commentary: QEP’s exposure to higher oil prices in 2019 is limited to the extent that ~ 68% exposure of 2019 pro forma oil volume has been hedged at an average price of \$52.66/bbl. It’s understandable, given the debt, WTI volatility and early efforts with tank-style development. I expect a less conservative hedging program post-debt reduction and divestures - and would also note the ability of the buyback program to mitigate the per-share opportunity cost of those hedges as oil continues to rise in 2019.

There may be other reasons that traders point to in an attempt to explain why QEP shares are cheap, but at this point, even after controlling for other factors, the current valuation is an outlier.

Is This Mispricing Temporary or Permanent?

Q2 results should have merited increased confidence that QEP’s valuation gap will close. Positive developments during the quarter, however, were instead outweighed by traders’ disappointment that the company did not announce the sale of its Bakken assets as part of Q2 results. This seemed an unrealistic expectation, however, given (a) the company had articulated no timeline for the sale, (b) the large size of the asset (i.e. it has a limited buying pool), and (c) the Williston package had only been marketed for ~ three months. Despite a significant production/EBITDA beat and subsequent bump up in guidance, QEP shares are down 13% since news of the “delay” in the Bakken sale.

You yankees. Always in a rush.

I believe this current dip in price will prove temporary, and represents a particularly opportunistic time to consider QEP shares, given the strategic transformation announced in late February, as well as the following:

- recent comparable transactions (like FANG for EGN) that underscore a significant, unwarranted value gap between QEP and its peers;
- growing Mid-Cush differentials have spooked Permian investors, but will decrease heading into 2019, and WTI should grind higher - representing an appealing time to buy shares of undervalued E&Ps with top-tier acreage and assured, in-place takeaway capacity, like QEP;
- the high refrac potential of the Bakken and Haynesville - as recently demonstrated by QEP and other operators – should trigger positive incremental re-evaluations of both basins – increasing the odds of highly successful QEP asset sales;
- QEP’s recent decision to lay down rigs and spreads in the Bakken and Haynesville, resulting in unexpected near-term free cash flow as a result;
- Q2 results demonstrating better-than-expected success in “tank-style” development, the economics of which are still not being assessed correctly by the market and which should continue to improve;
- QEP is poised to realize dramatic declines in certain operating expenses – specifically, a 33% reduction in LOE and transport in 2018 (from \$10 to \$7) - as QEP abandons more higher cost vertical wells, moves to gas lift to reduce artificial lift-related workover costs, and takes advantage of new surface facilities to gather product from wells and recycle water;



- operating margins will further expand as oil continues to increase as a percent of total production volume (liquids have gone from less than 15% of total production in 2011 to approximately 50% today);
- QEP bought back 592,310 shares at a weighted average price of \$9.37 per share for \$5.6 million, higher than today's share price;
- and finally - though not material to this thesis - the high probability that WTI prices head significantly higher over the course of the next year+, representing a further increase in asset value at QEP.

The original chronology of initiatives anticipated by management was as follows: asset sales, paydown of the revolver, funding of any operational outspend, paydown of debt...and then scaling up the share buyback.

Other near-term catalysts include an update to the company's Permian type curve; the sale of Bakken and/or Haynesville assets at better-than-expected pricing; and/or additional investor activism.

Asset Overview

Permian:

QEP's 51k of net Permian acreage is located in Martin and Andrews counties in the northern portion of the Midland Basin. This Midland area (and Martin County in particular) is top tier, core-of-the-core acreage in North America's most prolific onshore play. QEP's acreage maps as among the most valuable assets on a \$ per fully developed acre basis in U.S. shale - due to its unique combination of well productivity, drilling economics, and remaining inventory life.

In 2014, QEP acquired the County Line acreage in the Permian for \$950M @ ~ \$21k per acre. In 2016, QEP bought Mustang Springs in the Permian \$595 million, paying ~ \$60k per acre. In July of 2017, the company acquired another ~14k acres in the core of the northern Midland Basin in Texas @ ~\$51k per acre and an aggregate purchase price of \$720M. These acres were proximate to QEP's '16 Midland assets, creating meaningful scale and finalizing QEP's efforts to acquire rare, top-quality, blocked-up acreage in the heart of North America's most prolific oil basin.

QEP has not yet finalized 2H:18 and 2019+ plans for the development of the company's dominant asset in the Permian, nor identified capital requirements. Capital sourcing for that effort is also unclear given pending divestitures. Building formal NAV and/or EBITDA models to value the company at this stage is premature.

Fortunately, we can quantify the discount in QEP's shares via a simpler, high-conviction approach through a sum of the parts analysis.

With regards to the Permian asset, a precedent transaction analysis is robust in light of a good number of recent, relevant transactions in Andrew and Martin counties.

My valuation of Permian assets was done using precedent transactions based on a recent set of transactions in the Martin and Andrew County areas of the Midland Basin, where QEP's assets are located. These were 2016 and 2017 transactions reflecting working interests in oil and gas properties that included significant undeveloped acreage.



Based on those precedent transactions, the standalone value of QEP's 50,900 net acres in the Permian at multiple range of \$25,000 to \$35,000 per acre has a mid-point value of **\$1.53 billion**.

My valuation also included an estimate of existing production from QEP's Permian assets. Those transaction multiples were calculated in the same manner, separating out the implied values for acreage and existing production. QEP's current Permian production of 44.1Mboed at a multiple of \$40,000/boepd represents **\$1.76 billion** in additional value.

In total, I am valuing QEP's Permian asset at \$3.29 billion.

Bakken:

Currently on the block, QEP's McKenzie County in the Williston Basin is also top-tier. Natural fractures create high pressure and high porosity, making this one of the most productive parts of the Bakken. The company's core-of-the-core South Antelope acreage is maturing, but has extensive development inventory (~28,000 net acres and 1,100 potential drilling locations, as per data room docs). The FBIR (Fort Berthold Indian Reservation) is also of high quality with a long runway, containing ~68,800 net acres and 1,200+ potential drilling locations.

The company will sell the two Williston assets separately or as a whole. This is largely contiguous, highly economic acreage with net production in April of ~45,000 boe/d and annual cash flow of ~\$500M, not including additional growth from 11 recently drilled uncompleted wells.

The company has reported considerable interest in these assets from private equity firms, but has balked doing a deal to date, choosing to wait for a higher price. QEP continues to engage in discussions with several potential buyers while publicly underscoring the quality and value of their Bakken holdings, specifically citing the ability to achieve pre-tax rates of return from 55% to 65% on recent recompletions ("refracs"). The company sees 340 gross candidates for refracs on their acreage.

Also relevant as a read-thru for QEP: on its Q2 call, Continental Resources (CLR) noted extremely positive results from their own recent refrac efforts in the Bakken. Specifically, management cited a refrac of an old, open hole well that subsequently produced 100,000 boe, which was more than that well had produced over its first ten years of production. CLR management is of the strong opinion that wells in the Williston Basin have been historically under-stimulated, going so far as to increase the company's type curve in the Bakken by 9% to 1.2 mmboe - to reflect new, more intense 60-stage completions that are realizing 175% rates of return at \$70 WTI.

That news will likely spark a positive re-assessment of the refrac potential of all of the Bakken. If so, QEP may soon see more motivated buyers re-emerge. I believe they'll be able to sell it soon enough, and for an attractive price.

Management has given no guidance on the amount of expected proceeds, and compared to the Permian, precedent transaction quality in the Bakken is less robust, due to factors including the size of this potential sale.

My view on Bakken value is informed by several factors, including these two comparative transactions:

1 – Halcon's (HK) July 2017 sale of its Bakken assets for \$1.4B to a private equity firm. QEP's acreage (~115k net acres) is comparable in size to HK's (~104k net acres), but has a higher percentage of core-of-the-core DSUs. QEP's acreage is also more blocked up than HK's, and existing production from QEP's asset was ~2x HK's production at



the time of sale (~46,500 boe/d for QEP and 28,800 for HK prior to sale). Given the significant flowing volumes of QEP, its asset could conceivably sell for \$2.5B, based on this prior transaction.

2 – Whiting's (WLL) \$3.8B purchase of Williston-centric Kodiak Oil & gas in July 2014. Kodiak at the time of purchase had 167mmboe in proved reserves, 34 mboepd in production and ~180k net Williston acres. QEP's Bakken asset has 147mmboe in proved reserves, 45 mboepd in production and ~ 115k net acres. Assuming \$50k per boepd (due to that higher oil price in 2014) then WLL paid ~ \$24k per production adjusted acre. Using that same acreage metric, \$25k per boepd, implies a value of approximately \$3.5B for QEP's Bakken asset.

However, I would also note that transaction occurred at a time when WTI traded at \$100 per barrel, the Bakken was earlier in its maturity, and the Permian had not yet reached peak desirability.

In addition, a back-of-the-envelope 'blowdown' of the Bakken asset – i.e. if QEP decided not to sell it and instead invested enough capital every year just to maintain current production while passively collecting cash flows - would produce more than \$1B in cash flow over the next four years.

[Field-level Williston assets: \$784M in annualized revenue – \$230M in direct cash opex - \$240M in maintenance capex = \$314M in annual free cash flow]

A theoretical buyer at 5x free cash flow would then value the Bakken asset at \$1.57B.

However, at this point in the cycle, any prospective buyer would create significantly more value by growing the Bakken asset instead of harvesting it. So that's a less relevant approach – though it may be quite relevant to QEP.

Specifically, it shows that should QEP for whatever reason not sell the Bakken asset for an acceptable price, milking the asset to fund the Permian build-out would be an acceptable outcome.

Also to consider: QEP's FBIR acreage in the Bakken will be valued lower than its Williston package. FBIR wells are, on balance, less productive and have higher per-well costs. That package may have to be discounted, ironically, given the higher quality of the company's own wells for sale next door. Also, there are several other large Bakken assets on the block at the moment. Whiting (WLL) is currently shopping its Bakken assets, though these are second-tier, and Oasis (OAS) is also a seller in the Bakken. So an incremental discount to reflect a limited buying pool for QEP's asset does seem appropriate. Ultimately, I expect private equity to absorb this asset.

In the end, I estimate the Bakken asset to be worth between \$1.7B and \$2.2B, and use the mid-point of that range in the SOTP valuation.

Haynesville:

QEP had previously expected to begin marketing this asset in 2H:18, but appears to have accelerated that process in response to a number of inbound inquiries. The company has entered into confidentiality agreements and begun providing data to several parties, and on the Q2 call management underscored the possibility that Haynesville could sell before Bakken.

I had previously believed that a sale of Haynesville was unlikely until 2019, due to potential tax liability. QEP had sufficient NOLs and IDCs to facilitate a tax-free sale of Bakken in 2018, but a Haynesville sale this year seemed likely to result in a ~\$250M tax liability. I am attempting to clarify this.



The Haynesville asset is also top-tier. Exclusively a natural gas play, it has also attracted capital from operators as basis differentials in the Marcellus blew out to over \$1/mmbtu, as that basin's production growth overwhelmed local takeaway capacity. Haynesville differentials have remained narrow in the \$0.15 - \$0.20/mmbtu range by contrast, due to its close proximity to Henry Hub in Louisiana.

20% of U.S. natural gas consumption is centered in Texas and Louisiana. Local demand growth forecasts are very robust, as most of the 10 bcf/d of LNG export capacity coming online over the next few years is located in those two states. Industrial demand from new chemical plants in the area will also increase, as well.

QEP's Haynesville asset should sell easily, and at an attractive price. Their position consists of ~ 50k net acres, in an area which has also seen solid success in refracted wells. Based on current production and \$12,500 - \$15,000 per flowing and using ~ \$250M for undeveloped acreage (strip), Haynesville should sell in a range of \$550M to \$920M.

I used the midpoint of \$735M for Haynesville acreage in the SOTP valuation.

In addition, QEP also owns a gas gathering system in the basin which management estimates will generate ~ \$45M of EBITDA this year.

At a multiple of 9.0x, this Haynesville midstream asset would be worth another \$400M to QEP.

'Tank-Style' Development

QEP develops its Permian properties "tank-style." Engineers call this "recovering a higher percentage of the original oil in place on a per DSU basis," but what it ultimately represents is an economically superior way to get more oil out of each square mile of acreage.

Tank-style development is essentially the next iteration of unconventional oil production – arriving after the sequential, well-by-well "infill development" programs of recent years. Besides QEP, other operators like Encana (ECA) and WPX are also developing acreage similarly.

Picture a large, imaginary, three-dimensional underground cube, or tank. Multiple horizontal layers of oil run through that tank, and at the surface, QEP drills multiple wells, of differing lengths, to intersect those different layers oil, in different areas inside the tank. And then all wellbores are tapped for oil simultaneously.

So, rather than drill a few lonely wells to hold acreage, and then return later to drill "infill" wells closer to that first well, QEP uses large multi-well "pads" to simultaneously drill all primary zones in a DSU (drilling spacing unit). This takes more planning and time upfront, but it's worth it, because it really maximizes the efficiency and utilization of equipment, crews and infrastructure. By simultaneously using multiple drilling rigs, for instance, the company can reduce or eliminate the costly, unproductive downtime of those rigs – and get more oil out of the same ground.

Tank-style development also appears to help mitigate one serious problem with traditional infill drilling – that of parent/child well interference, also called a "frac-hit", which decreases the productivity of wells drilled too close to each other. When a second or 'child' well is drilled too close to the first or 'parent' well, the child well may tap into an already-depleted section of oil reservoir around the original well, decreasing the oil that comes out of that child well. In addition, completion fluids from the child well can leak into the oil reservoir of the parent, requiring the original well to be shut in and cleaned. All of which costs money and time.



QEP says it uses the pressure differences in its wellbores to create a “pressure wall” separating producing wells from wells undergoing completion. And that pressure wall acts as a buffer to minimize the interference between other wells. QEP also cites microseismic data that it says shows that wells developed tank-style had higher initial flowing pressure and additional frac complexity downhole than traditional infill wells - both of which are good for project economics. In addition, the company has reported that after day 120, oil flow rates out of some tank-style wells exceeded those of parent wells. Also good news.

Why This Is Relevant:

To be clear, none of this drives my current valuation of QEP. It will down the road, however. And tank-style development should not be confused with a real competitive advantage, either – for QEP, nor any other operator. The only real competitive advantage in this industry is in a company’s rocks. But since the development of those rocks is all about efficiencies, a scaled-up, manufacturing-like approach to drilling makes a lot of strategic sense.

I think it’s important to at least superficially grok tank-style development for the two reasons:

1 - It will be the major operational lever driving the creation of value at QEP, after those pending asset sales.

With tank-style drilling will come improved production economics, which will become evident in the company’s margins – on both an absolute basis, and, eventually, relative to peers using infill drilling, too. We’re seeing those improvements already at QEP in 2018, and they should continue into next year and beyond.

2 – It may help explain why this is an exploitable opportunity.

Specifically, tank-style development requires tweaks to many existing sellside E&P valuation models. Highly granular, well-by-well production models need to be recalibrated to better reflect certain idiosyncrasies of tank-style development – like, for instance, that peak production is at 90 days, not 30. Tank-style completions also increase the lead-times between large, pad-based projects - which will make production growth lumpy in many granular models.

QEP estimates it has 1,900 potential drilling locations in the Permian – a number driven largely by estimates that it will drill between 32 and 45 wells per section in its Mustang Spring operating area. Those spacing assumptions are higher than other Midland Basin peers that average ~ 28 wells per section - but those peers also develop largely via more traditional infill drilling (i.e. less incremental production, higher unit costs).

In a nod to the sellside’s concerns about well spacing (justified or not), QEP management has already incorporated ~ 20% to 25% risking of their Permian wells, to stay ahead of any possible interference they might see. So an analyst who ‘normalizes’ QEPs wells per section figure down to the peer average is ostensibly dinging the company twice – which can significantly understate production growth and QEP’s ultimate value.

But perhaps we shouldn’t tell anyone. Until the Street better grasps some important nuances of tank-style development, it will likely be that much easier for QEP to beat consensus expectations. See Q2 results.



Valuation

QEP: Sum of the Parts Valuation	
Est. Cash	\$155
+ <i>Pending Divestitures</i>	
Haynesville	\$735
Haynesville: Midstream	\$400
Bakken (FBIR + Williston)	\$1,950
+ <i>Continuing Operations</i>	
Permian: Acreage	\$1,527
Permian: Production	\$1,764
- Debt	\$2,649
= Equity Value	\$3,882
Shares Outstanding	237
Current Share Price	\$9.22
Intrinsic Value per share	\$16
Upside	78%
Implied Value per Permian Acre	\$12,600

Notes:

Estimated cash from post-Q2 Uinta sale

Details on values and comps found in Asset Overview section

Values (ex bottom three rows) in Mil.

Current share price as of market close on 8/15/18

Debt and s/o from Q2'18 10-Q

Permian acreage valued on a standalone basis

The above is relatively simplistic, but it accurately reflects QEP's current reality: the company is selling off large pieces of itself.

There are certainly nuances to each pending deal, and there is subjectivity inherent in these values and multiples. I intend to more formally model EBITDA and complete an NAV+ model after the current divestitures are announced and as further details of the company's Permian development plans in 2019+ become known. At the moment, though, there are too many significant unknown variables to have confidence in either of those more traditional approaches.

Nonetheless, this approximation serves us well enough for now.

Also, the implied value of QEP's Permian acreage is determined as follows:



(Equity of \$3,882) – (cash + Haynesville + Bakken of \$3,240) = \$642 million divided by QEP's 51,000 net acre per share = \$12,600 per share.

I would also note that the comps I used in the Permian figures above were derived from '16 & '17. More recent comps would reflect a higher Permian asset value for QEP.

Please let me know of any questions: csmith@islainvest.com