FULCRUM
ENERGY CAPITAL

# Comparison of Upstream Oil & Gas Asset Level Ownership Interest Structures in the Current Market Environment

# Types of Asset Ownership Structures in Oil and Gas

FULCRUM ENERGY CAPITAL

## PRIMARY TYPES OF UNDERLYING UPSTREAM OIL AND GAS ASSET OWNERSHIP STRUCTURES

### Operated Working Interests

- Ownership whereby an oil and gas company operates the oil and gas wells and has primary decision-making capabilities and control over the assets (i.e. in-fill drilling timing, ability in increase or decrease costs, etc.)
- A percentage of ownership in an oil and gas lease granting its owner the right to explore, drill and produce oil and gas from a tract of property
- Working interest owners are obligated to pay a corresponding percentage of the cost of leasing, drilling, producing and operating a well or unit

### Non-Operated Working Interests

- Ownership whereby the owner owns a minority, non-controlling ownership interest in oil and gas wells and pays a portion of the operating company's direct overhead
- A percentage of ownership in an oil and gas lease which includes revenue and cost sharing pursuant to an asset-level Joint Operating Agreement with the operator
- Non-operated working interest owners are obligated to pay a corresponding percentage of the cost of leasing, drilling, producing and operating a well or unit

### Mineral Interests and Royalties

- Interest that grants oil and gas ownership under a tract of land
- Royalty structure can vary between ORRI, NEPI, NEMI, etc. all of which include slight structural variations
- Represents the right to drill, explore, and produce oil and gas on the tract of land, usually through a lease agreement with an exploration and production company. ORRIs/NPIs are most often term limited to the life of a lease agreement, unless held by production
- Lease agreement generally consists of an upfront bonus for a specified term (typically three years) and a cost-free royalty

# Comparison Of Oil and Gas Ownership Structures

EACH TYPE OF UPSTREAM OIL AND GAS ASSET OWNERSHIP STRUCTURE POSSESSES DIFFERENT FEATURES AND RETURN PROFILES

FULCRUM ENERGY CAPITAL

| | Operated Working Interest | Non-Operated Working Interest | Royalties and Mineral Interests |
|---|---|---|---|
| **Level of Control** | • High | • Low | • None |
| **Pros** | • Relatively high return today<br>• Control of business plan<br>• High alpha given valuations | • Higher return than minerals<br>• Passive relative to operating | • Lowest risk<br>• Non cost-bearing |
| **Cons** | • Cost of operations<br>• More-time intensive than passive investments<br>• Required operational expertise | • Uncertain capital outlay<br>• Cost bearing<br>• Difficult to exit<br>• Operator counterparty risk | • Operator counterparty risk<br>• Non-control<br>• Wells may not be drilled, and royalty income is uncertain |
| **Risk Profile** | • Low to Moderate for assets with current cash flow (PDP)<br>• Medium for assets with no cash flow (Drilling) | • Moderate for assets with current cash flow (PDP)<br>• High for assets with no cash flow (Drilling) | • Low for assets with current cash flow (PDP)<br>• Moderate for assets with no cash flow (Drilling) |
| **Targeted Investor Returns** | • Current Yield: 15%+<br>• IRR: 20%<br>• ROI: 2x | • Current Yield: 8% - 12%<br>• IRR: 15%<br>• ROI: 1.5x | • Current Yield: 0%-12%<br>• IRR: 12%<br>• ROI: 1.5x |
| **Current Mid-Cap Public Company Trading Multiples** | • 4x TEV/EBITDA | • 5x TEV/EBITDA | • >10x TEV/EBITDA |

# High Valuations in the Minerals and Royalties Space(1)

**SELLER'S MARKET FOR ROYALTIES AND MINERALS GIVEN HIGH VALUATIONS AND UNCERTAINTY AROUND FUTURE PRODUCTION GROWTH**

FULCRUM ENERGY CAPITAL

| | BLACK STONE MINERALS | Dorchester Minerals (2) | Falcon Minerals | | Brigham Minerals | VIPER Energy Partners | Franco-Nevada (4) | ALLIANCE RESOURCE PARTNERS, LP (3) |
|---|---|---|---|---|---|---|---|---|
| **Asset Location** | | | | | | | | |
| Permian | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| SCOOP/STACK | ✓ | ✓ | | ✓ | ✓ | | ✓ | ✓ |
| Eagle Ford | ✓ | ✓ | ✓ | ✓ | | ✓ | | |
| Williston | ✓ | ✓ | | ✓ | ✓ | | | ✓ |
| Haynesville | ✓ | ✓ | | ✓ | | | | |
| Appalachia | ✓ | ✓ | | ✓ | | | ✓ | ✓ |
| DJ/PRB | ✓ | ✓ | | ✓ | ✓ | | | |
| **Enterprise Value ("EV") ($Bn)** | $3.9 | $0.6 | $0.8 | $0.9 | $1.1 | $4.1 | $18.4 | $2.5 |
| **Total NRA 1/8 (000's)** | 7,400 | NA | 28 | 144 | 72 | 168 | NA | 43 |
| **2019E EBITDA ($MM)** | $408 | NA | $69 | $76 | $78 | $296 | $630 | $655 |
| **EV/EBITDA (2019E)** | 9.6x | NA | 11.0x | 11.5x | 14.1x | 13.9x | 29.3x | 3.8x |
| **Prod. Growth (2019 – 20E)** | 2% | NA | 22% | 10% | 29% | 20% | NA | NA |
| **Distribution / Dividend Yield** | 10.46% | 10.84% | 6.47% | 10.66% | 6.65% | 6.50% | 0.99% | 14.05% |

The public mineral & royalty universe continues to expand with IPO's (Kimbell, Brigham), SPAC's (Falcon), and large, legacy companies entering the space (Franco-Nevada, Alliance). Expansion should continue as mineral companies seek to IPO over the near-term (e.g., Fortis, Kimmeridge/Desert) and other large mineral vehicles determine their exit strategy over the longer term (e.g., Continental/TMRC, LongPoint, etc.).

1. Source: Wall Street consensus estimates and industry research. All values in USD.
2. Dorchester does not disclose NRA 1/8, and consensus estimates are not available for this company.
3. The majority of Alliance's business is driven by coal operations.
4. Franco-Nevada has publicly disclosed multiple US acquisitions totaling ~50,000 NRA 1/8, however, the company does not disclose their total NRA 1/8. The majority of Franco-Nevada's business is driven by precious metals royalties.

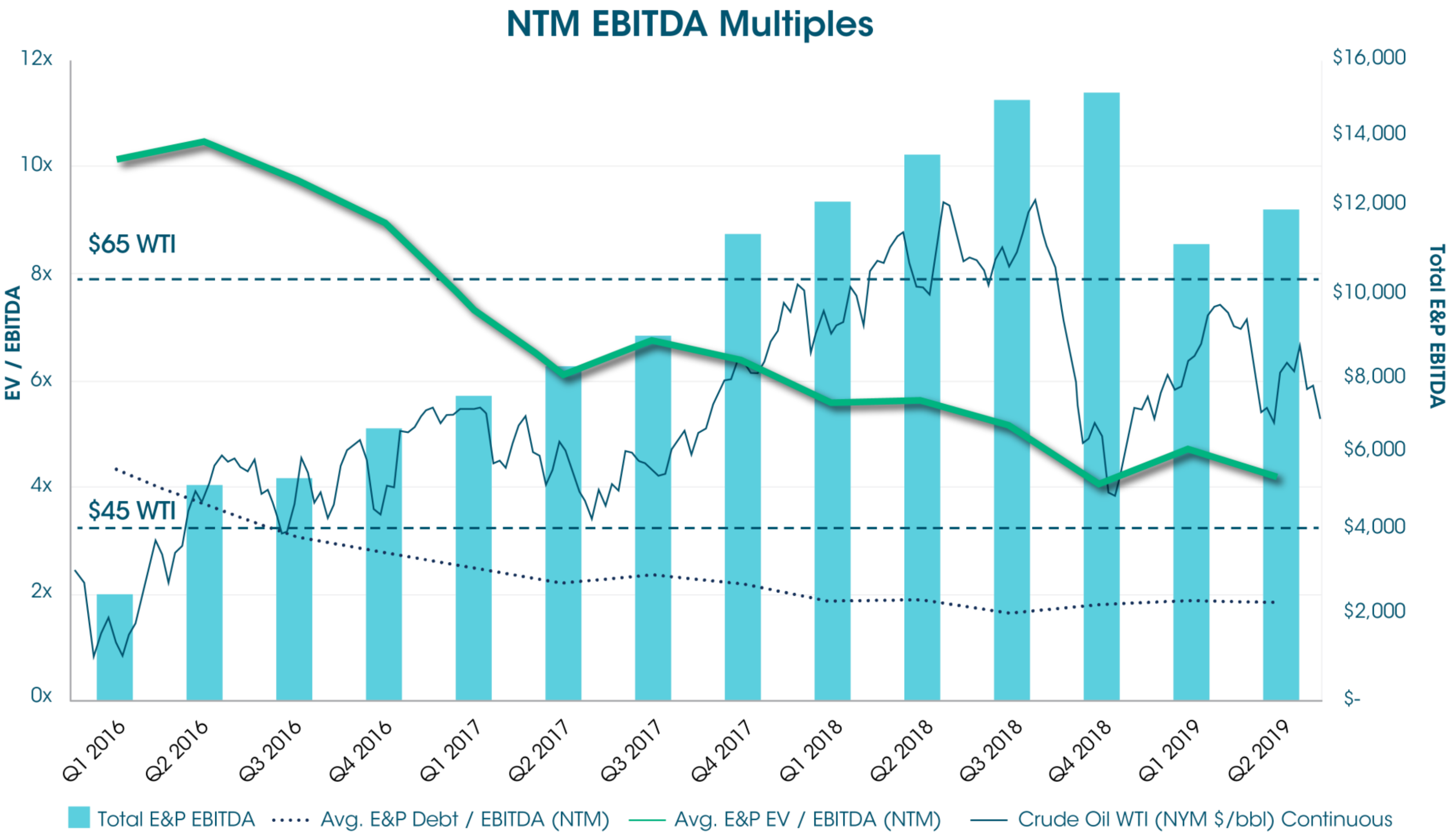
# Valuations for Operated Assets Are at Historic Lows

**BUYER'S MARKET FOR OPERATED OIL & GAS ASSETS GIVEN LOW VALUATIONS AND THE MARKET'S DISREGARD OF CONTROL PREMIUMS**

- The retrenchment of capital and abundance of sellers has pushed EV/EBITDA multiples to historical lows, and well below levels during the lowest point of oil prices in the recent downturn in 1Q16

- Fulcrum continues to see opportunities in the private space trading even lower in the less efficient lower middle market

- The combination of a lack of available capital and forced sellers at low valuations creates significant opportunity for Fulcrum




Source: Seaport Global Securities

# Fulcrum's Views on Ideal Oil and Gas Investment Structures

FULCRUM ENERGY CAPITAL

## HIGHEST RISK ADJUSTED RETURNS IN THE CURRENT MARKET CONDITIONS ARE COMPRISED OF OPERATED WORKING INTERESTS

Fulcrum believes the highest risk adjusted returns can be achieved in the current market by acquiring producing assets, oil and gas wells, where the underlying assets are comprised of confirmed proven reserves

### SIGNIFICANT OPPORTUNITY TO ACQUIRE OPERATED ASSETS AT DEEP VALUATION DISCOUNTS

- Operated oil and gas assets provide control features that allow for investors to control their destiny rather than invest in managers that are making passive investments
- Operated assets are slightly higher risk than minerals given the cost component; however, returns are over two-times higher and valuations of operated assets are less than half of the current multiples being paid for minerals
- Operated assets that are currently producing free cash flow (i.e. PDP assets) present the highest risk adjusted return
- Operated assets that are drilling intensive are higher return than PDP however lower return than operated PDP assets on a risk adjusted basis given current market conditions and required development capital for drilling programs
- The majority of assets that can be acquired from distressed and over-leveraged sellers are operated properties, there are very few attractive buying opportunities in the minerals or non-operated spaces today
- Cash flows are much easier to predict on PDP assets whereas royalty income relating to cash flow from an undeveloped inventory of wells is more nebulous and relies on broader assumptions (i.e. timing of drilling which can only be controlled by the operator, future well results, etc.)