



# Independent Stock Idea

September 22, 2015

## Cross Timbers Royalty Trust (CRT) Low Risk 7.5% Income

|  |         |  |       |
|--|---------|--|-------|
| <i>Symbol</i>  | CRT     | <i>Ebitda Next Twelve Months ending 9/30/16 (US\$mm)</i> | 10    |
| <i>Rating</i>  | Buy     | <i>North American Natural Gas/Ebitda (%)</i>             | 50    |
| <i>Price (US\$/sh)</i>   | 15.25   | <i>Natural Gas and Oil Production/Ebitda (%)</i>         | 100   |
| <i>Pricing Date</i>  | 9/21/15 | <i>Adjusted Reserves/Production NTM</i>                  | 12.4  |
| <i>Shares (mm)</i>   | 6.00    | <i>EV/Ebitda</i>   | 9.6   |
| <i>Market Capitalization (US\$mm)</i>  | 91      | <i>PV/Ebitda</i>   | 19.5  |
| <i>Debt (US\$mm)</i>   | 0       | <i>Undeveloped Reserves (%)</i>                          | 0     |
| <i>Enterprise Value (EV) (US\$mm)</i>  | 91      | <i>Natural Gas and Oil Ebitda (US\$/mcf)</i>             | 2.89  |
| <i>Present Value (PV) (US\$mm)</i>   | 186     | <i>Present Value Proven Reserves(US\$/boe)</i>           | 35.83 |
| <i>Net Present Value (US\$/unit)</i>   | 31      | <i>Oil and Gas Ebitda Margin (%)</i>                     | 50    |
| <i>Debt/Present Value</i>  | 0.00    | <i>Earnings Next Twelve Months (US\$/un)</i>             | 1.14  |
| <i>McDep Ratio - EV/PV</i>   | 0.49    | <i>Price/Earnings Next Twelve Months</i>                 | 13    |
| <i>Distribution Yield (%/year)</i>   | 7.5     | <i>Distribution Next Twelve Months (US\$/sh)</i>         | 1.14  |
| Note: Estimated cash flow and earnings tied to one-year futures prices for natural gas.                              |         |  |       |
| Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.        |         |  |       |
| Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.50 a million btu. |         |  |       |
| For historical analysis of CRT since 2000 see <a href="http://www.mcdep.com/4crt.htm">www.mcdep.com/4crt.htm</a>     |         |  |       |

### Summary and Recommendation

We recommend current purchase of the common units of **Cross Timbers Royalty Trust (CRT)** for 7.5% yield from a diversified suite of high-quality oil and gas properties when the price of the commodity has just declined sharply and, in our opinion, is in the process of turning up again. We calculate the cash yield of 7.5% by assuming an oil price of \$48 a barrel over the next twelve months, which is the futures settlement price as of September 21. Moreover, all of the current distribution is directly proportional to oil and gas price because the trust has a “Top Line” percentage of revenue royalty on the underlying oil and gas production. If the price of oil is \$70, our long-term expectation, the cash yield would be 10.9%, assuming proportional increase in natural gas price as well. By the same rationale if the price of oil went to \$20 as widely feared, unlikely in our view, the cash yield would still be 3.1% for the next year on current stock price. In addition, CRT has “Bottom Line” royalties that pay a percentage of cash flow after operating and drilling expense. There are no Bottom Line royalties now, but there surely would be at higher oil price. Meanwhile, the official estimate is that annual production will decline along with annual cash yield. Realistically, rising oil price and improving technology have resulted in stable volume well in excess of conservative official estimates. In short, we believe the probability is high that CRT will be a rewarding investment. Following this simplified rationale, we undertake a more technical explanation next.



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## More Reasons to Buy CRT

We recommend current purchase of the common units of **Cross Timbers Royalty Trust (CRT)** for 7.5% yield on estimated twelve months distribution and McDep Ratio of 0.49 that points to 103% unlevered upside on \$70 oil. Because the stock price of \$90 million micro-cap CRT is extra-sensitive to the size of trade, we also recommend **Permian Basin Royalty Trust (PBT)** and **Sabine Royalty Trust (SBR)** as close substitutes at cash yields of 6.5% and 8.1% and McDep Ratios of 0.58 and 0.58 (see Tables 1-4 on page 6-9). Estimated distribution of \$1.14 a unit for CRT arises entirely from Top Line royalties on oil and gas production in Texas, Oklahoma and New Mexico (see table Operating and Financial Estimates on page 3). There is upside to the distribution from Bottom Line royalties in Texas and Oklahoma when cash flow exceeds reinvestment as a result of higher price and /or reduced drilling. Top Line Royalties are 82% of estimated Net Present Value (NPV) of \$31 a unit for CRT (see table Present Value on page 4). Firm volume and stable price drive revenue for the three trusts (see charts Volume, Price and Revenue on pages 4 and 5). Timing of cash receipts, industry pricing and operating reliability contribute to past volatility. Revenue translates directly to Top Line distributions. Operating and capital costs must be covered before Bottom Line distributions are paid. Like CRT, PBT has Top Line reliability along with Bottom Line upside while SBR's royalties are all Top Line. In any case, the timing looks good to us to make new commitments to CRT, PBT, SBR and other oil and gas stocks. We think oil price will be higher in a few months and gains lie ahead.

Kurt H. Wulff, CFA



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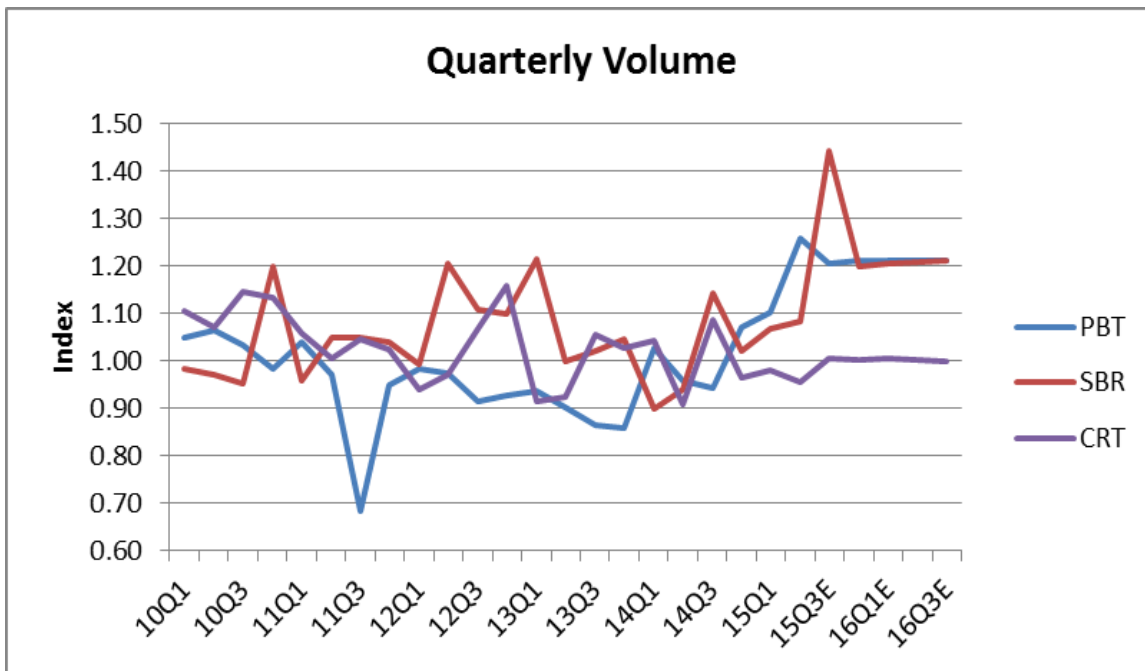
| Cross Timbers Royalty Trust                            |              |         |         |         |          |             |         |         |         |                          |
|--|--------------|---------|---------|---------|----------|-------------|---------|---------|---------|--------------------------|
| Next Twelve Months Operating and Financial Performance |              |         |         |         |          |             |         |         |         |                          |
|  | Year         | Q1      | Q2      | Q3E     | Q4E      | Year        | Q1E     | Q2E     | Q3E     | Next<br>Twelve<br>Months |
|  | 2014         | 3/31/15 | 6/30/15 | 9/30/15 | 12/31/15 | 2015        | 3/31/16 | 6/30/16 | 9/30/16 | 9/30/16                  |
| <b>Volume</b>  |              |         |         |         |          |             |         |         |         |                          |
| Natural Gas (bcf)                                      | 1.63         | 0.37    | 0.34    | 0.40    | 0.39     | 1.50        | 0.39    | 0.38    | 0.37    | 1.53                     |
| Natural Gas (mmcf)                                     | 4.5          | 4.0     | 3.8     | 4.3     | 4.3      | 4.1         | 4.2     | 4.1     | 4.1     | 4.2                      |
| Days   | 366          | 92      | 91      | 91      | 92       | 366         | 92      | 91      | 91      | 366                      |
| Oil (mb)   | 221          | 60      | 59      | 58      | 58       | 235         | 60      | 59      | 61      | 238                      |
| Oil (mbd)  | 0.61         | 0.65    | 0.66    | 0.63    | 0.64     | 0.64        | 0.65    | 0.66    | 0.66    | 0.65                     |
| Days   | 365          | 92      | 90      | 92      | 91       | 365         | 92      | 90      | 92      | 365                      |
| Total (bcf)  | 2.96         | 0.73    | 0.70    | 0.74    | 0.74     | 2.91        | 0.75    | 0.73    | 0.74    | 2.96                     |
| <b>Price</b>   |              |         |         |         |          |             |         |         |         |                          |
| Natural Gas (HH lagged three months)                   |              |         |         |         |          |             |         |         |         |                          |
| Henry Hub (\$/mmbtu)                                   | 4.32         | 4.02    | 2.99    | 2.66    | 2.76     | 3.11        | 2.67    | 2.90    | 2.77    | 2.77                     |
| Differential (%)                                       | (62)         | (42)    | (31)    | (43)    | (43)     | (40)        | (43)    | (43)    | (43)    | (43)                     |
| CRT (\$/mcf)   | 7.00         | 5.69    | 3.91    | 3.81    | 3.96     | 4.34        | 3.83    | 4.16    | 3.97    | 3.98                     |
| Oil (\$/bbl) (WTI lagged two months)                   |              |         |         |         |          |             |         |         |         |                          |
| WTI Cushing  | 97.76        | 60.83   | 51.06   | 56.70   | 45.13    | 53.43       | 47.47   | 49.12   | 50.25   | 47.99                    |
| CRT  | 91.46        | 63.07   | 49.87   | 54.28   | 43.20    | 52.68       | 45.44   | 47.02   | 48.10   | 45.97                    |
| Total (\$/mcf)   | 10.70        | 8.08    | 6.14    | 6.26    | 5.48     | 6.49        | 5.63    | 5.94    | 5.98    | 5.76                     |
| <b>Revenue (\$mm)</b>                                  |              |         |         |         |          |             |         |         |         |                          |
| Natural Gas  | 11.40        | 2.10    | 1.35    | 1.51    | 1.56     | 6.51        | 1.48    | 1.57    | 1.47    | 6.09                     |
| Oil  | 20.21        | 3.78    | 2.94    | 3.15    | 2.50     | 12.38       | 2.72    | 2.78    | 2.93    | 10.93                    |
| Total  | 31.61        | 5.88    | 4.29    | 4.65    | 4.06     | 18.88       | 4.20    | 4.35    | 4.41    | 17.02                    |
| <b>Cost (\$mm)</b>                                     |              |         |         |         |          |             |         |         |         |                          |
| Tax, transport & other                                 | 3.89         | 0.74    | 0.60    | 0.65    | 0.57     | 2.56        | 0.59    | 0.61    | 0.62    | 2.38                     |
| Production   | 5.75         | 1.75    | 1.53    | 1.53    | 1.53     | 6.34        | 1.53    | 1.53    | 1.50    | 6.09                     |
| Total  | 9.64         | 2.49    | 2.13    | 2.18    | 2.10     | 8.90        | 2.12    | 2.14    | 2.12    | 8.47                     |
| <b>Cash flow (\$mm)</b>                                |              |         |         |         |          |             |         |         |         |                          |
| Development  | 3.37         | 0.65    | 1.15    | 0.90    | 0.90     | 3.59        | 0.90    | 0.90    | 0.90    | 3.60                     |
| Excess or other  | (0.54)       | (0.45)  | (1.05)  | (0.63)  | (1.03)   | (3.16)      | (0.92)  | (0.88)  | (0.77)  | (3.61)                   |
| Recovery of excess                                     |              |         |         |         |          |             |         |         |         |                          |
| <b>Net proceeds (\$mm)</b>                             | <b>19.14</b> | 3.20    | 2.06    | 2.20    | 2.10     | <b>9.56</b> | 2.10    | 2.19    | 2.16    | <b>8.56</b>              |
| <b>Royalty income (\$mm)</b>                           |              |         |         |         |          |             |         |         |         |                          |
| Royalty/Net proceeds                                   | 86%          | 88%     | 90%     | 85%     | 85%      | 87%         | 85%     | 85%     | 85%     | 85%                      |
| Administration   | 0.52         | 0.26    | 0.11    | 0.11    | 0.11     | 0.59        | 0.11    | 0.11    | 0.11    | 0.44                     |
| <b>Distributable income (\$mm)</b>                     | <b>15.88</b> | 2.57    | 1.74    | 1.76    | 1.67     | <b>7.73</b> | 1.68    | 1.75    | 1.73    | <b>6.83</b>              |
| <b>Units (millions)</b>                                |              |         |         |         |          |             |         |         |         |                          |
| <b>Units (millions)</b>                                | <b>6.0</b>   | 6.0     | 6.0     | 6.0     | 6.0      | <b>6.0</b>  | 6.0     | 6.0     | 6.0     | <b>6.0</b>               |
| <b>Royalty income (\$/unit)</b>                        |              |         |         |         |          |             |         |         |         |                          |
| Natural Gas  |              |         |         |         |          |             |         |         |         |                          |
| TL TX  | 0.26         | 0.06    | 0.02    |         | 0.04     |             | 0.03    | 0.04    | 0.03    |                          |
| TL OK  | 0.21         | 0.05    | 0.04    |         | 0.03     |             | 0.03    | 0.03    | 0.03    |                          |
| TL NM  | 0.89         | 0.13    | 0.08    |         | 0.12     |             | 0.12    | 0.12    | 0.12    |                          |
| BL TX  | 0.00         | -       | -       |         |          |             |         |         |         |                          |
| BL OK  | 0.00         | 0.00    | -       |         |          |             |         |         |         |                          |
| Oil  |              |         |         |         |          |             |         |         |         |                          |
| TL TX  | 0.64         | 0.12    | 0.09    |         | 0.08     |             | 0.09    | 0.09    | 0.09    |                          |
| TL OK  | 0.19         | 0.06    | 0.07    |         | 0.02     |             | 0.03    | 0.03    | 0.03    |                          |
| TL NM  | 0.08         | 0.02    | 0.01    |         | 0.01     |             | 0.01    | 0.01    | 0.01    |                          |
| BL TX  | 0.14         | -       | -       |         |          |             |         |         |         |                          |
| BL OK  | 0.34         | 0.03    | -       |         |          |             |         |         |         |                          |
| Administration   | 0.08         | 0.04    | 0.01    |         | 0.02     |             | 0.02    | 0.02    | 0.02    |                          |
| <b>Distribution (\$/unit)</b>                          | <b>2.65</b>  | 0.43    | 0.29    | 0.29    | 0.28     | <b>1.29</b> | 0.28    | 0.29    | 0.29    | <b>1.14</b>              |



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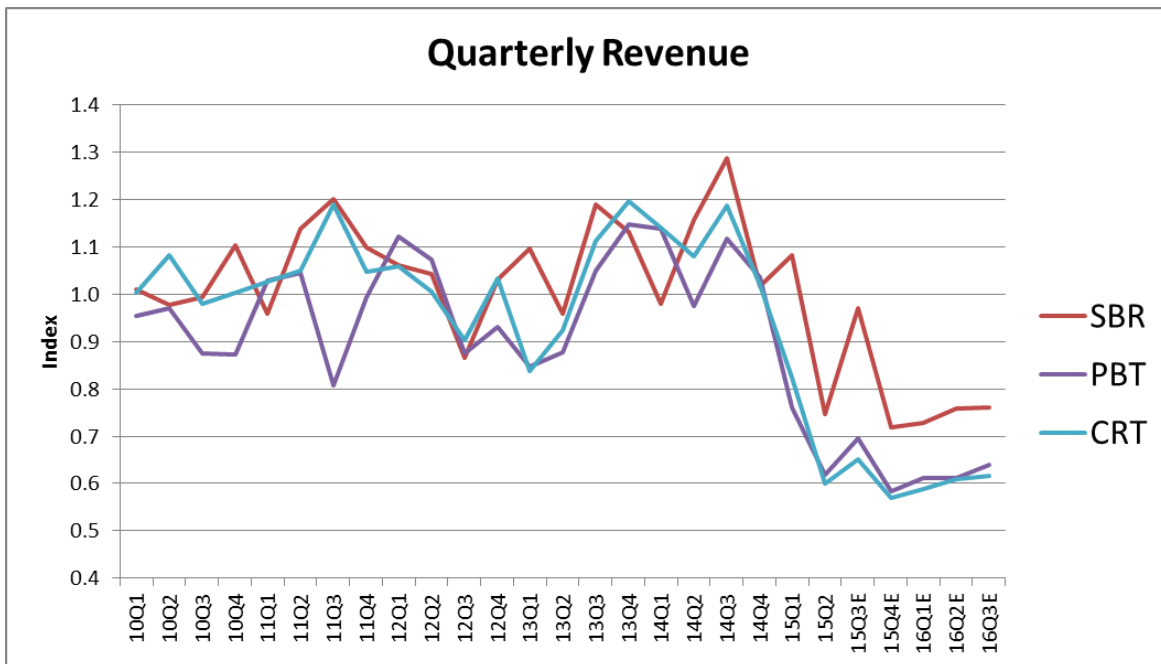
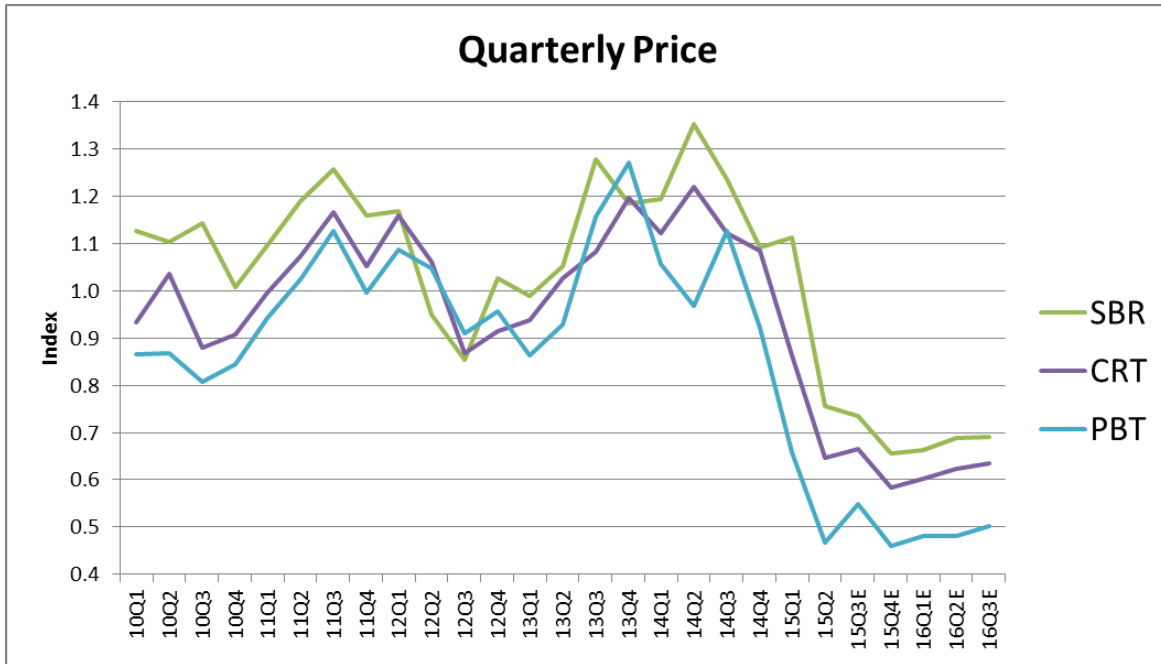
| Cross Timbers Royalty Trust  |                   |                 |               |                 |      |
|--|-------------------|-----------------|---------------|-----------------|------|
| Functional Cash Flow and Present Value   |                   |                 |               |                 |      |
|  | <i>NTM Ebitda</i> | <i>Adjusted</i> | <i>PV/</i>    | <i>Present</i>  |      |
|  | <i>(US\$mm)</i>   | <i>R/P</i>      | <i>Ebitda</i> | <i>Value</i>    |      |
|  |                   |                 |               | <i>(US\$mm)</i> |      |
| Top Line Natural Gas   | 4                 | 14.7            | 27.2          | 107             | 58%  |
| Top Line Oil   | 3                 | 9.5             | 16.4          | 46              | 25%  |
| Bottom Line Oil  | 3                 | 12.2            | 11.8          | 33              | 18%  |
|  | 10                | 12.4            | 19.5          | 186             | 100% |
| Debt (US\$mm)  |                   |                 |               |                 | -    |
| Net Present Value (US\$mm)   |                   |                 |               |                 | 186  |
| Shares (mm)  |                   |                 |               |                 | 6    |
| Net Present Value (US\$/sh)  |                   |                 |               |                 | 31   |
| NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)      |                   |                 |               |                 | 39   |
| Top Line Approximation at 1.5 times Cash Flow Multiple Depending on Reserve Life |                   |                 |               |                 |      |





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| Symbol/Rating                   |         | Price<br>(US\$/sh)<br>21-Sep<br>2015 | EV/<br>Market<br>Cap | Enterprise<br>Value<br>(\$mm) | Present Value by Segment (%) |                  |               |                 | Dist.<br>Yield<br>NTM<br>(%) | McDep<br>Ratio |
|---------------------------------|---------|--------------------------------------|----------------------|-------------------------------|------------------------------|------------------|---------------|-----------------|------------------------------|----------------|
|                                 |         |                                      |                      |                               | North<br>Amer.               | Rest of<br>World | Oil<br>Prod'n | Down-<br>stream |                              |                |
|                                 |         |                                      |                      |                               | Natural<br>Gas               | Natural<br>Gas   |               |                 |                              |                |
| <b>Global Integrated</b>        |         |                                      |                      |                               |                              |                  |               |                 |                              |                |
| Exxon Mobil Corporation         | XOM     | 73.39                                | 1.27                 | 393,000                       | 8                            | 10               | 62            | 20              | 4.0                          | 0.83           |
| Royal Dutch Shell (BG pro form) | RDS-A   | 49.42                                | 1.64                 | 316,000                       |                              |                  |               |                 | 7.6                          | 0.81           |
| Chevron Corporation             | CVX B   | 78.09                                | 1.38                 | 202,000                       | 3                            | 6                | 68            | 23              | 5.5                          | 0.77           |
| Total S.A.                      | TOT B   | 45.55                                | 1.56                 | 162,000                       |                              | 12               | 60            | 28              | 6.0                          | 0.74           |
| <i>Total or Median</i>          |         |                                      | <i>1.47</i>          | <i>1,073,000</i>              |                              |                  | <i>62</i>     | <i>23</i>       | <i>5.7</i>                   | <i>0.79</i>    |
| <b>Large Independent</b>        |         |                                      |                      |                               |                              |                  |               |                 |                              |                |
| EOG Resources, Inc.             | EOG     | 76.52                                | 1.15                 | 48,500                        | 16                           | 2                | 82            |                 | 0.9                          | 0.96           |
| Occidental Petroleum Corp.      | OXY     | 66.80                                | 1.17                 | 59,900                        | 5                            | 1                | 78            | 17              | 4.5                          | 0.91           |
| ConocoPhillips                  | COP     | 48.75                                | 1.62                 | 98,000                        | 16                           | 9                | 75            |                 | 6.1                          | 0.80           |
| Devon Energy Corporation        | DVN B   | 40.33                                | 1.68                 | 27,800                        | 29                           |                  | 54            | 17              | 2.4                          | 0.73           |
| Marathon Oil Corporation        | MRO B   | 16.11                                | 1.85                 | 20,200                        | 9                            | 1                | 90            |                 | 5.2                          | 0.63           |
| <i>Total or Median</i>          |         |                                      | <i>1.62</i>          | <i>254,000</i>                | <i>16</i>                    |                  | <i>78</i>     |                 | <i>4.5</i>                   | <i>0.80</i>    |
| <b>Small Independent</b>        |         |                                      |                      |                               |                              |                  |               |                 |                              |                |
| Cimarex Energy Company          | XEC     | 103.59                               | 1.12                 | 10,900                        | 41                           |                  | 59            |                 | 0.6                          | 0.96           |
| Range Resources                 | RRC     | 35.91                                | 1.69                 | 10,100                        | 80                           |                  | 20            |                 | 0.4                          | 0.81           |
| California Resources            | CRC     | 3.27                                 | 6.44                 | 8,100                         | 12                           |                  | 88            |                 | 1.2                          | 0.76           |
| Continental Resources (32%)     | CLR B   | 28.25                                | 1.68                 | 5,600                         | 21                           |                  | 79            |                 | -                            | 0.61           |
| Whiting Petroleum Corporation   | WLL B   | 17.44                                | 2.49                 | 9,200                         | 5                            |                  | 95            |                 | -                            | 0.56           |
| <i>Total or Median</i>          |         |                                      | <i>1.69</i>          | <i>44,000</i>                 | <i>21</i>                    |                  | <i>79</i>     |                 | <i>0.4</i>                   | <i>0.76</i>    |
| <b>Income</b>                   |         |                                      |                      |                               |                              |                  |               |                 |                              |                |
| San Juan Basin Royalty Trust    | SJT     | 9.11                                 | 1.00                 | 430                           | 100                          |                  | -             |                 | 4.9                          | 0.61           |
| Dorchester Minerals, L.P.       | DMLP    | 16.93                                | 1.00                 | 520                           | 38                           |                  | 62            |                 | 5.6                          | 0.60           |
| Permian Basin RT                | PBT     | 7.01                                 | 1.00                 | 330                           | 23                           |                  | 77            |                 | 6.5                          | 0.58           |
| Sabine Royalty Trust            | SBR B   | 32.03                                | 1.00                 | 470                           | 43                           |                  | 58            |                 | 8.1                          | 0.58           |
| Cross Timbers Royalty Trust     | CRT B   | 15.25                                | 1.00                 | 90                            | 58                           |                  | 42            |                 | 7.5                          | 0.49           |
| <i>Total or Median</i>          |         |                                      | <i>1.00</i>          | <i>1,800</i>                  | <i>43</i>                    |                  | <i>58</i>     |                 | <i>6.5</i>                   | <i>0.58</i>    |
| <b>Canada</b>                   |         |                                      |                      |                               |                              |                  |               |                 |                              |                |
| Imperial Oil Limited (30%)      | IMO     | 32.47                                | 1.33                 | 11,000                        | 1                            |                  | 67            | 32              | 1.2                          | 0.85           |
| EnCana Corporation              | ECA     | 7.18                                 | 2.47                 | 14,800                        | 56                           |                  | 44            |                 | 3.9                          | 0.75           |
| Cenovus Energy Inc.             | CVE     | 15.56                                | 1.38                 | 17,700                        | 9                            |                  | 74            | 17              | 3.1                          | 0.74           |
| Birchcliff Energy Ltd.          | BIREF B | 4.92                                 | 1.73                 | 1,300                         | 77                           |                  | 23            |                 | -                            | 0.54           |
| Canadian Oil Sands Limited      | COSWF B | 5.14                                 | 2.14                 | 5,300                         |                              |                  | 100           |                 | 2.9                          | 0.50           |
| <i>Total or Median</i>          |         |                                      | <i>1.73</i>          | <i>50,000</i>                 |                              |                  | <i>67</i>     |                 | <i>2.9</i>                   | <i>0.74</i>    |

Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.50 a million btu.  
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses



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|  |                        |   | <i>Price</i><br>(US\$/sh)    |                              | <i>Market</i><br><i>Cap</i> | <i>Net</i><br><i>Present</i><br><i>Value</i> | <i>Debt/</i><br><i>Present</i><br><i>Value</i> | <i>McDep</i><br><i>Ratio</i> |
|--|------------------------|---|------------------------------|------------------------------|-----------------------------|--|--|------------------------------|
|  | <i>Symbol/Rating</i>   |   | <i>21-Sep</i><br><i>2015</i> | <i>Shares</i><br><i>(mm)</i> | <i>(US\$mm)</i>             | <i>(US\$/sh)</i>                             |  |                              |
|  | B = Buy                |   |                              |                              |                             |  |  |                              |
| <b>Global Integrated</b>   |                        |   |                              |                              |                             |  |  |                              |
| Exxon Mobil Corporation  | XOM                    |   | 73.39                        | 4,200                        | 308,000                     | 92.00  | 0.18   | 0.83                         |
| Royal Dutch Shell (BG pro forma)   | RDS-A                  |   | 49.42                        | 3,900                        | 193,000                     | 68.00  | 0.32   | 0.81                         |
| Chevron Corporation  | CVX                    | B | 78.09                        | 1,877                        | 147,000                     | 111.00                                       | 0.21   | 0.77                         |
| Total S.A.   | TOT                    | B | 45.55                        | 2,292                        | 104,000                     | 71.00  | 0.26   | 0.74                         |
|  | <i>Total or Median</i> |   |                              |                              | <i>752,000</i>              |  | <i>0.24</i>                                    | <i>0.79</i>                  |
| <b>Large Independent</b>   |                        |   |                              |                              |                             |  |  |                              |
| EOG Resources, Inc.  | EOG                    |   | 76.52                        | 550                          | 42,100                      | 80.00  | 0.13   | 0.96                         |
| Occidental Petroleum Corp.   | OXY                    |   | 66.80                        | 766                          | 51,200                      | 75.00  | 0.13   | 0.91                         |
| ConocoPhillips   | COP                    |   | 48.75                        | 1,241                        | 61,000                      | 68.00  | 0.31   | 0.80                         |
| Devon Energy Corporation   | DVN                    | B | 40.33                        | 411                          | 16,600                      | 65.00  | 0.30   | 0.73                         |
| Marathon Oil Corporation   | MRO                    | B | 16.11                        | 677                          | 10,910                      | 34.00  | 0.29   | 0.63                         |
|  | <i>Total or Median</i> |   |                              |                              | <i>181,800</i>              |  | <i>0.29</i>                                    | <i>0.80</i>                  |
| <b>Small Independent</b>   |                        |   |                              |                              |                             |  |  |                              |
| Cimarex Energy Company   | XEC                    |   | 103.59                       | 95                           | 9,800                       | 108.00                                       | 0.10   | 0.96                         |
| Range Resources  | RRC                    |   | 35.91                        | 166                          | 6,000                       | 50.00  | 0.33   | 0.81                         |
| California Resources   | CRC                    |   | 3.27                         | 382                          | 1,300                       | 10.00  | 0.64   | 0.76                         |
| Continental Resources (32%)  | CLR                    | B | 28.25                        | 119                          | 3,400                       | 58.00  | 0.25   | 0.61                         |
| Whiting Petroleum Corporation  | WLL                    | B | 17.44                        | 212                          | 3,700                       | 52.00  | 0.33   | 0.56                         |
|  | <i>Total or Median</i> |   |                              |                              | <i>24,000</i>               |  | <i>0.33</i>                                    | <i>0.76</i>                  |
| <b>Income</b>  |                        |   |                              |                              |                             |  |  |                              |
| San Juan Basin Royalty Trust   | SJT                    |   | 9.11                         | 47                           | 430                         | 15.00  | -  | 0.61                         |
| Dorchester Minerals, L.P.  | DMLP                   |   | 16.93                        | 31                           | 520                         | 28.00  | -  | 0.60                         |
| Permian Basin RT   | PBT                    |   | 7.01                         | 47                           | 330                         | 12.00  | -  | 0.58                         |
| Sabine Royalty Trust   | SBR                    | B | 32.03                        | 15                           | 470                         | 55.00  | -  | 0.58                         |
| Cross Timbers Royalty Trust  | CRT                    | B | 15.25                        | 6                            | 90                          | 31.00  | -  | 0.49                         |
|  | <i>Total or Median</i> |   |                              |                              | <i>1,800</i>                |  | <i>-</i>                                       | <i>0.58</i>                  |
| <b>Canada</b>  |                        |   |                              |                              |                             |  |  |                              |
| Imperial Oil Limited (30%)   | IMO                    |   | 32.47                        | 255                          | 8,300                       | 40.00  | 0.21   | 0.85                         |
| EnCana Corporation   | ECA                    |   | 7.18                         | 841                          | 6,000                       | 13.00  | 0.45   | 0.75                         |
| Cenovus Energy Inc.  | CVE                    |   | 15.56                        | 826                          | 12,900                      | 23.00  | 0.20   | 0.74                         |
| Birchcliff Energy Ltd.   | BIREF                  | B | 4.92                         | 155                          | 800                         | 12.00  | 0.23   | 0.54                         |
| Canadian Oil Sands Limited   | COSWF                  | B | 5.14                         | 485                          | 2,500                       | 16.00  | 0.27   | 0.50                         |
|  | <i>Total or Median</i> |   |                              |                              | <i>31,000</i>               |  | <i>0.23</i>                                    | <i>0.74</i>                  |
| Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.50 a million btu. |                        |   |                              |                              |                             |  |  |                              |
| McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses                               |                        |   |                              |                              |                             |  |  |                              |



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| Table 3                          |                     |   |           |             |             |             |            |
|----------------------------------|---------------------|---|-----------|-------------|-------------|-------------|------------|
| McDep Energy Stocks              |                     |   |           |             |             |             |            |
| Value Multiples and Dividend     |                     |   |           |             |             |             |            |
| Ranked by EV/Ebitda              |                     |   |           |             |             |             |            |
|                                  |                     |   | Price     | Adjustd     |             |             |            |
|                                  |                     |   | (US\$/sh) | Resrvs/     | PV/         | EV/         | Dividend   |
|                                  | Symbol/Rating       |   | 21-Sep    | Prod        | Ebitda      | Ebitda      | P/E        |
|                                  | B = Buy             |   | 2015      | NTM         | NTM         | NTM         | NTM        |
|                                  |                     |   |           |             |             |             | (\$/sh)    |
| <b>Global Integrated</b>         |                     |   |           |             |             |             |            |
| Exxon Mobil Corporation          | XOM                 |   | 73.39     | 14.6        | 10.7        | 8.9         | 20         |
| Chevron Corporation              | CVX                 | B | 78.09     | 9.1         | 8.7         | 6.6         | 27         |
| Total S.A.                       | TOT                 | B | 45.55     | 10.1        | 7.8         | 5.7         | 11         |
| Royal Dutch Shell (BG pro forma) | RDS-A               |   | 49.42     |             |             |             | 3.76       |
|                                  | <i>Median</i>       |   |           | <i>10.1</i> | <i>8.7</i>  | <i>6.6</i>  | <i>20</i>  |
| <b>Large Independent</b>         |                     |   |           |             |             |             |            |
| EOG Resources, Inc.              | EOG                 |   | 76.52     | 9.0         | 13.3        | 12.8        | 153        |
| Occidental Petroleum Corp.       | OXY                 |   | 66.80     | 9.1         | 12.6        | 11.4        | 121        |
| Devon Energy Corporation         | DVN                 | B | 40.33     | 10.3        | 14.7        | 10.8        | 63         |
| ConocoPhillips                   | COP                 |   | 48.75     | 11.1        | 12.3        | 9.9         | 2.96       |
| Marathon Oil Corporation         | MRO                 | B | 16.11     | 12.1        | 13.4        | 8.4         | 0.84       |
|                                  | <i>Median</i>       |   |           | <i>10.3</i> | <i>13.3</i> | <i>10.8</i> | <i>121</i> |
| <b>Small Independent</b>         |                     |   |           |             |             |             |            |
| California Resources             | CRC                 |   | 3.27      | 12.5        | 21.4        | 16.2        | 0.04       |
| Cimarex Energy Company           | XEC                 |   | 103.59    | 7.9         | 16.5        | 15.9        | 0.64       |
| Range Resources                  | RRC                 |   | 35.91     | 14.0        | 20.1        | 16.3        | 101        |
| Whiting Petroleum Corporation    | WLL                 | B | 17.44     | 11.5        | 18.4        | 10.3        | -          |
| Continental Resources (32%)      | CLR                 | B | 28.25     | 11.4        | 14.4        | 8.9         | 106        |
|                                  | <i>Median</i>       |   |           | <i>11.5</i> | <i>18.4</i> | <i>15.9</i> | <i>103</i> |
| <b>Income</b>                    |                     |   |           |             |             |             |            |
| San Juan Basin Royalty Trust     | SJT                 |   | 9.11      | 8.4         | 26.1        | 15.9        | 20         |
| Dorchester Minerals, L.P.        | DMLP                |   | 16.93     | 7.8         | 22.0        | 13.3        | 28         |
| Sabine Royalty Trust             | SBR                 | B | 32.03     | 8.0         | 21.1        | 12.3        | 12         |
| Permian Basin RT                 | PBT                 |   | 7.01      | 9.7         | 16.2        | 9.5         | 15         |
| Cross Timbers Royalty Trust      | CRT                 | B | 15.25     | 12.4        | 19.5        | 9.5         | 13         |
|                                  | <i>Median</i>       |   |           | <i>8.4</i>  | <i>21.1</i> | <i>12.3</i> | <i>15</i>  |
| <b>Canada</b>                    |                     |   |           |             |             |             |            |
| EnCana Corporation               | ECA                 |   | 7.18      | 6.4         | 15.6        | 11.7        | 74         |
| Cenovus Energy Inc.              | CVE                 |   | 15.56     | 16.5        | 14.6        | 10.8        | 0.48       |
| Imperial Oil Limited (30%)       | IMO                 |   | 32.47     | 27.2        | 12.6        | 10.7        | 16         |
| Canadian Oil Sands Limited       | COSWF               | B | 5.14      | 17.5        | 18.5        | 9.3         | 0.15       |
| Birchcliff Energy Ltd.           | BIREF               | B | 4.92      | 12.4        | 15.2        | 8.3         | -          |
|                                  | <i>Median</i>       |   |           | <i>16.5</i> | <i>15.2</i> | <i>10.7</i> | <i>45</i>  |
|                                  | <i>Grand Median</i> |   |           | <i>11</i>   | <i>15</i>   | <i>11</i>   |            |

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended September 30, 2016; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses





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| Table 4                                      |                     |   |         |         |        |          |        |           |        |       |
|--|---------------------|---|---------|---------|--------|----------|--------|-----------|--------|-------|
| McDep Energy Stocks                          |                     |   |         |         |        |          |        |           |        |       |
| Total Return Year-to-Date 2015               |                     |   |         |         |        |          |        |           |        |       |
| Ranked by Unlevered Total Return             |                     |   |         |         |        |          |        |           |        |       |
|  |                     |   | Price   | Price   |        |          | Equity | Unlevered |        |       |
|  |                     |   | (\$/sh) | (\$/sh) | Price  | Cash     | Total  | Debt      | Return | McDep |
|  | Symbol/Rat          |   | 21-Sep  | 29-Dec  | Change | Distrib. | Return | (\$/sh)   | (%)    | Ratio |
|  |                     |   | 2015    | 2014    | (%)    | (%)      | (%)    |           |        |       |
| <b>Global Integrated</b>                     |                     |   |         |         |        |          |        |           |        |       |
| Total S.A.                                   | TOT                 | B | 45.55   | 52.74   | (14)   | 4        | (10)   | 25        | (7)    | 0.74  |
| Exxon Mobil Corporation                      | XOM                 |   | 73.39   | 93.07   | (21)   | 2        | (19)   | 20        | (15)   | 0.83  |
| Royal Dutch Shell (BG pro forma)             | RDS-A               |   | 49.42   | 68.31   | (28)   | 4        | (24)   | 32        | (16)   | 0.81  |
| Chevron Corporation                          | CVX                 | B | 78.09   | 113.32  | (31)   | 3        | (28)   | 29        | (22)   | 0.77  |
|  | <i>Median</i>       |   |         |         | (24)   |          | (21)   |           | (16)   | 0.79  |
| <b>Large Independent</b>                     |                     |   |         |         |        |          |        |           |        |       |
| Occidental Petroleum Corp.                   | OXY                 |   | 66.80   | 81.71   | (18)   | 3        | (16)   | 11        | (14)   | 0.91  |
| EOG Resources, Inc.                          | EOG                 |   | 76.52   | 94.33   | (19)   | 0        | (19)   | 12        | (16)   | 0.96  |
| ConocoPhillips                               | COP                 |   | 48.75   | 70.11   | (30)   | 3        | (27)   | 30        | (19)   | 0.80  |
| Devon Energy Corporation                     | DVN                 | B | 40.33   | 61.15   | (34)   | 1        | (33)   | 27        | (23)   | 0.73  |
| Marathon Oil Corporation                     | MRO                 | B | 16.11   | 28.58   | (44)   | 2        | (41)   | 14        | (28)   | 0.63  |
|  | <i>Median</i>       |   |         |         | (30)   |          | (27)   |           | (19)   | 0.80  |
| <b>Small Independent</b>                     |                     |   |         |         |        |          |        |           |        |       |
| Cimarex Energy Company                       | XEC                 |   | 103.59  | 110.27  | (6)    | 0        | (6)    | 12        | (5)    | 0.96  |
| California Resources                         | CRC                 |   | 3.27    | 5.77    | (43)   | 1        | (43)   | 18        | (10)   | 0.76  |
| Continental Resources (32%)                  | CLR                 | B | 28.25   | 38.26   | (26)   | -        | (26)   | 19        | (17)   | 0.61  |
| Range Resources                              | RRC                 |   | 35.91   | 56.00   | (36)   | 0        | (36)   | 25        | (25)   | 0.81  |
| Whiting Petroleum Corporation                | WLL                 | B | 17.44   | 34.09   | (49)   | -        | (49)   | 26        | (28)   | 0.56  |
|  | <i>Median</i>       |   |         |         | (36)   |          | (36)   |           | (17)   | 0.76  |
| <b>Income</b>                                |                     |   |         |         |        |          |        |           |        |       |
| Sabine Royalty Trust                         | SBR                 | B | 32.03   | 36.68   | (13)   | 7        | (6)    | -         | (6)    | 0.58  |
| Cross Timbers Royalty Trust                  | CRT                 | B | 15.25   | 18.07   | (16)   | 6        | (10)   | -         | (10)   | 0.49  |
| Permian Basin RT                             | PBT                 |   | 7.01    | 9.12    | (23)   | 3        | (20)   | -         | (20)   | 0.58  |
| Dorchester Minerals, L.P.                    | DMLP                |   | 16.93   | 25.16   | (33)   | 4        | (29)   | -         | (29)   | 0.60  |
| San Juan Basin Royalty Trust                 | SJT                 |   | 9.11    | 13.97   | (35)   | 2        | (33)   | -         | (33)   | 0.61  |
|  | <i>Median</i>       |   |         |         | (23)   |          | (20)   |           | (20)   | 0.58  |
| <b>Canada</b>                                |                     |   |         |         |        |          |        |           |        |       |
| Birchcliff Energy Ltd.                       | BIREF               | B | 4.92    | 6.75    | (27)   | -        | (27)   | 4         | (18)   | 0.54  |
| Cenovus Energy Inc.                          | CVE                 |   | 15.56   | 20.95   | (26)   | 3        | (23)   | 6         | (18)   | 0.74  |
| Imperial Oil Limited (30%)                   | IMO                 |   | 32.47   | 43.49   | (25)   | 1        | (25)   | 11        | (20)   | 0.85  |
| Canadian Oil Sands Limited                   | COSWF               | B | 5.14    | 9.20    | (44)   | 1        | (43)   | 6         | (26)   | 0.50  |
| EnCana Corporation                           | ECA                 |   | 7.18    | 13.94   | (48)   | 2        | (47)   | 11        | (27)   | 0.75  |
|  | <i>Median</i>       |   |         |         | (27)   |          | (27)   |           | (20)   | 0.74  |
|  | <i>Grand Median</i> |   |         |         | (27)   |          | (27)   |           | (18)   | 0.74  |
| <b>Natural Gas (\$/mmbtu)</b>                |                     |   | 2.58    | 3.19    | (19)   |          |        |           |        |       |
| <b>Oil -West Texas Intermediate (\$/bbl)</b> |                     |   | 46.48   | 53.69   | (13)   |          |        |           |        |       |

Source: McDep LLC, Yahoo, CME Group, Bloomberg



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