McDep LLC

# Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

August 23, 2011

## Petrobras (PBR – Contrarian Buy)
## Product Price Controls Delay Cash Growth

### Summary and Recommendation

The main investment attraction of a growing oil volume serving a growing domestic economy offered in contrarian buy recommended **Petrobras (PBR)** comes with a restrictive Brazilian government policy in delaying crude oil price increases to be passed along to refined product consumers. Though unlevered cash flow (Ebitda) tracked rising crude oil price in the second quarter according to results released on August 17, the gains were reduced by lower cash flow from downstream (Other) operations (see table Next Twelve Months Operating and Financial Estimates on page 2). Some of the opportunity loss ought to be recovered in future quarters. Meanwhile, oil and gas volume remains steady ahead of a doubling by 2020. Until then the stock has dropped deep into contrarian territory with enterprise value down to 0.80 times its 200-day average. Unlevered cash flow multiple (EV/Ebitda) under six times gives little recognition to the large volumes of oil under development (see table of valuation measures on page 3). Those strongly indicated quantities help take our estimate of Net Present Value (NPV) to $62 a share compared to current stock price under $27 (see table Functional Cash Flow and Present Value on page 3). To cushion the wait, dividends and "interest on capital" distributions imply an income yield of 4.7% for the next twelve months.

### Gold Price May Portend Higher Oil Stock Price

Continuing advances in the price of gold to near $1900 an ounce are reminiscent of 1979-1980 when confidence was also low in U.S. political leadership and in the future of the world's leading economy. Ultimately after the gold price peaked in January 1980, oil and gas stock prices made further strong advances for the rest of 1980 before settling back after the election of a new government. In the course of the advances there were also sharp, but temporary setbacks such as we may be in now for the stock market and oil price. We think investors can take comfort in an asset allocation approach that implies adding oil and gas stocks to rebuild gradually to a predetermined weighting. Though it is beyond our oil and gas competence, we think investors might also be trimming holdings of gold to a predetermined weighting in portfolios with a gold position if that weighting is now exceeded.

After a sharp drop, oil price for the next six years is $89 a barrel compared to the 40-week average of $98 (see chart Six-Year and One-Year Natural Gas and Oil Futures on page 9). Natural gas price holds better at $5.20 a million Btu for the next six-years compared to the 40-week average of $5.42. Buy recommended stocks sport high appreciation potential measured by low McDep Ratios and low cash flow multiples (see Tables 1-3 on pages 4-6). All buys are trading below 200-day averages (see Table 4 on page 7).

Kurt H. Wulff, CFA

**Petrobras**

**Next Twelve Months Operating and Financial Estimates**

(International Financial Reporting Standards beginning 2010, US$)

| | | | | | | | | | ***Next Twelve Months*** |
|---|---|---|---|---|---|---|---|---|---|
| | *Q2* | *Q1* | *Q2* | *Q3E* | *Q4E* | ***Year*** | *Q1E* | *Q2E* | |
| | *6/30/10* | *3/31/11* | *6/30/11* | *9/30/11* | *12/31/11* | ***2011E*** | *3/31/12* | *6/30/12* | ***6/30/12*** |
| **Volume** | | | | | | | | | |
| Natural Gas (mmcfd) | 2,538 | 2,604 | 2,688 | 2,688 | 2,688 | **2,667** | 2,604 | 2,604 | **2,646** |
| Oil (mbd) | 2,156 | 2,184 | 2,142 | 2,142 | 2,142 | **2,152** | 2,142 | 2,142 | **2,142** |
| Total gas & oil (mmb) | 235 | 236 | 236 | 238 | 238 | **948** | 234 | 234 | **945** |
| Total gas & oil (mbd) | 2,579 | 2,618 | 2,590 | 2,590 | 2,590 | **2,597** | 2,576 | 2,576 | **2,583** |
| **Price** | | | | | | | | | |
| Natural gas ($/mcf) | 3.11 | 1.74 | 2.05 | 2.05 | 2.05 | **1.97** | 2.05 | 2.05 | **2.05** |
| Oil ($/bbl) | | | | | | | | | |
| WTI Cushing | 77.85 | 94.10 | 102.55 | 89.01 | 84.64 | **92.58** | 85.81 | 87.13 | **86.65** |
| Brent | 78.30 | 104.97 | 117.36 | 101.87 | 96.87 | **105.27** | 98.20 | 99.71 | **99.16** |
| Company | 72.30 | 93.61 | 107.93 | 93.69 | 89.09 | **96.05** | 90.32 | 91.70 | **91.20** |
| Total gas & oil ($/bbl) | 63.50 | 79.83 | 91.39 | 79.61 | 75.80 | **81.64** | 77.17 | 78.32 | **77.73** |
| NY Harbor 3-2-1 ($/bbl) | 12.13 | 17.69 | 27.68 | 35.42 | 30.92 | **27.93** | 29.60 | 31.20 | **31.79** |
| **Revenue** (mm$) | | | | | | | | | |
| Natural gas | 718 | 408 | 501 | 506 | 506 | **1,921** | 485 | 485 | **1,982** |
| Oil | 14,184 | 18,401 | 21,039 | 18,463 | 17,557 | **75,459** | 17,604 | 17,875 | **71,499** |
| Total production | 14,903 | 18,809 | 21,539 | 18,969 | 18,063 | **77,380** | 18,089 | 18,360 | **73,481** |
| Other | 15,059 | 14,006 | 16,879 | 16,879 | 16,879 | **64,642** | 16,879 | 16,879 | **67,515** |
| Total | 29,961 | 32,814 | 38,418 | 35,848 | 34,941 | **142,022** | 34,968 | 35,239 | **140,996** |
| **Expense** | | | | | | | | | |
| Production | 7,326 | 10,215 | 11,794 | 10,543 | 10,040 | **42,591** | 10,054 | 10,205 | **40,842** |
| Other | 13,738 | 12,963 | 16,538 | 15,079 | 15,079 | **59,658** | 15,079 | 15,079 | **60,315** |
| **Ebitda** (mm$) | | | | | | | | | |
| Production | 7,577 | 8,594 | 9,746 | 8,426 | 8,023 | **34,789** | 8,035 | 8,155 | **32,639** |
| Other | 1,321 | 1,042 | 341 | 1,800 | 1,800 | **4,984** | 1,800 | 1,800 | **7,200** |
| Total Ebitda | 8,898 | 9,637 | 10,087 | 10,226 | 9,823 | **39,772** | 9,835 | 9,955 | **39,839** |
| Exploration | 350 | 564 | 749 | 749 | 749 | **2,812** | 749 | 749 | **2,998** |
| Deprec., Deplet., & Amort. | 2,025 | 2,131 | 2,554 | 2,554 | 2,554 | **9,794** | 2,554 | 2,554 | **10,218** |
| Other non cash | 132 | (1,816) | (2,367) | | | | | | |
| **Ebit** | 6,391 | 8,758 | 9,150 | 6,922 | 6,519 | **31,349** | 6,531 | 6,651 | **26,624** |
| **Ebt** | 6,391 | 8,758 | 9,150 | 6,922 | 6,519 | **31,349** | 6,531 | 6,651 | **26,624** |
| Income Tax | 1,735 | 2,180 | 2,311 | 2,423 | 2,282 | **9,196** | 2,286 | 2,328 | **9,318** |
| **Net Income** (mm$) | | | | | | | | | |
| Production | 4,548 | 5,824 | 6,863 | | | | | | |
| Other | 108 | 754 | (24) | | | | | | |
| Total Net Income | 4,657 | 6,578 | 6,839 | 4,499 | 4,238 | **22,153** | 4,245 | 4,323 | **17,306** |
| **Shares** (millions) | 4,387 | 6,539 | 6,513 | 6,513 | 6,513 | **6,521** | 6,513 | 6,513 | **6,513** |
| Per share ($) | 1.06 | 1.01 | 1.05 | 0.69 | 0.65 | **3.40** | 0.65 | 0.66 | **2.66** |
| Ebitda Margin (E&P) | 51% | 46% | 45% | 44% | 44% | **45%** | 44% | 44% | **44%** |
| Tax Rate | 27% | 25% | 25% | 35% | 35% | **29%** | 35% | 35% | **35%** |

# Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

August 23, 2011

| | | | |
|---|---|---|---|
| *Symbol* | PBR | *Ebitda Next Twelve Months ending 6/30/12 (US$mm)* | 39,800 |
| *Rating* | Contrarian Buy | *North American Natural Gas/Ebitda (%)* | 0 |
| *Price (US$/sh)* | 26.89 | *Natural Gas and Oil Production/Ebitda (%)* | 82 |
| *Pricing Date* | 8/22/11 | *Adjusted Reserves/Production NTM* | 13.5 |
| *Shares (mm)* | 6513 | *EV/Ebitda* | 5.9 |
| *Market Capitalization (US$mm)* | 175,000 | *PV/Ebitda* | 11.7 |
| *Debt (US$mm)* | 61,000 | *Undeveloped Reserves (%)* | 40 |
| *Enterprise Value (EV) (US$mm)* | 236,000 | *Natural Gas and Oil Ebitda (US$/boe)* | 34.50 |
| *Present Value (PV) (US$mm)* | 465,000 | *Present Value Proven Reserves(US$/boe)* | 17.83 |
| *Net Present Value (US$/share)* | 62 | *Present Value Proven Reserves(US$/mcfe)* | 2.97 |
| *Debt/Present Value* | 0.13 | *Earnings Next Twelve Months (US$/sh)* | 2.66 |
| *McDep Ratio - EV/PV* | 0.51 | *Price/Earnings Next Twelve Months* | 10 |
| *Dividend Yield (%/year)* | 4.7 | *Indicated Annual Dividend (US$/sh)* | 1.26 |

Note: Estimated cash flow and earnings tied to one-year futures prices for oil and 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$100 a barrel and natural gas, $8 a million btu.
The Brazilian Government has voting control and with public sector entities owns 48% of Petrobras' equity.

**Petrobras**
**Functional Cash Flow and Present Value**

| | *NTM Ebitda (US$mm)* | *Adjusted R/P* | *PV/ Ebitda* | *Present Value (US$mm)* | |
|---|---|---|---|---|---|
| Natural Gas | 880 | 12.9 | 9.1 | 8,000 | 2% |
| Oil | 31,760 | 13.7 | 8.7 | 277,000 | 60% |
| Downstream | 7,200 | | 6.9 | 50,000 | 11% |
| Pre Salt Deep Water Oil | | | | 130,000 | 28% |
| | 39,840 | 13.5 | 11.7 | 465,000 | 100% |
| Debt (US$mm) | | | | | 61,000 |
| Net Present Value (US$mm) | | | | | 404,000 |
| Shares (mm) | | | | | 6,513 |
| Net Present Value - Standard Estimate (US$/sh) | | | | | 62 |
| NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US$/sh) | | | | | 58 |

McDep LLC

# Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

August 23, 2011

**Table 1**

**McDep Large Cap Energy Stocks**

**Geographic Domicile and Business Segments**

| | | | Price (US$/sh) 22-Aug 2011 | EV/ Market Cap | Enterprise Value ($mm) | *Present Value by Segment (%)* North Amer. Natural Gas | Rest of World Natural Gas | Oil Prod'n | Down-stream | McDep Ratio |
|---|---|---|---|---|---|---|---|---|---|---|
| | Symbol/Rating | | | | | | | | | |
| | B = Buy, CB (see below) | | | | | | | | | |
| **U.S. Integrated** | | | | | | | | | | |
| Exxon Mobil Corporation | XOM | CB | 70.18 | 1.21 | 416,000 | 9 | 19 | 56 | 16 | 0.67 |
| ConocoPhillips | COP | CB | 63.33 | 1.48 | 130,000 | 14 | 11 | 59 | 16 | 0.63 |
| Chevron Corporation | CVX | CB | 93.30 | 1.15 | 215,000 | 3 | 10 | 78 | 9 | 0.58 |
| *Total or Median* | | | | | *761,000* | | | *59* | | *0.63* |
| **Europe** | | | | | | | | | | |
| BG Group | BRGXF | | 20.40 | 1.21 | 84,200 | | 34 | 45 | 21 | 0.84 |
| Royal Dutch Shell plc | RDS-A | CB | 63.08 | 1.32 | 260,000 | 3 | 22 | 54 | 21 | 0.72 |
| Statoil ASA (33%) | STO | CB | 22.35 | 1.53 | 35,900 | | 34 | 66 | - | 0.61 |
| Total S.A. | TOT | CB | 46.72 | 1.43 | 150,000 | | 20 | 67 | 13 | 0.56 |
| BP plc | BP | | 38.35 | 1.71 | 209,000 | 5 | 9 | 67 | 20 | 0.55 |
| *Total or Median* | | | | | *739,000* | | | *66* | | *0.61* |
| **Brazil/Russia/Australia/China** | | | | | | | | | | |
| Woodside Petroleum Ltd. | WOPEY | | 36.47 | 1.22 | 34,000 | | 63 | 37 | - | 0.84 |
| CNOOC Limited (36%) | CEO | | 180.00 | 1.06 | 30,700 | | 9 | 91 | - | 0.73 |
| PetroChina Company Ltd (14%) | PTR | CB | 119.31 | 1.31 | 39,900 | | 13 | 69 | 18 | 0.63 |
| Petrobras | PBR | CB | 26.89 | 1.35 | 236,000 | | 2 | 83 | 15 | 0.51 |
| Gazprom (50%) | OGZPY | CB | 11.33 | 1.30 | 84,000 | | 80 | 20 | - | 0.47 |
| Lukoil Oil Company | LUKOY | CB | 55.15 | 1.12 | 48,600 | | | 67 | 33 | 0.39 |
| *Total or Median* | | | | | *473,000* | | | *69* | | *0.57* |
| **U.S. Independent** | | | | | | | | | | |
| Chesapeake Energy Corp. | CHK | | 28.42 | 1.72 | 36,800 | 83 | | 17 | - | 0.91 |
| Southwestern Energy Company | SWN | | 35.74 | 1.12 | 14,000 | 100 | | | - | 0.86 |
| Anadarko Petroleum Corp. | APC | | 65.43 | 1.64 | 53,700 | 36 | | 61 | 3 | 0.81 |
| EOG Resources, Inc. | EOG | CB | 86.35 | 1.23 | 26,700 | 43 | 4 | 53 | - | 0.71 |
| Occidental Petroleum Corp. | OXY | CB | 80.46 | 1.12 | 73,300 | 8 | 1 | 85 | 6 | 0.68 |
| Devon Energy Corporation | DVN | CB | 62.97 | 1.20 | 32,000 | 55 | | 45 | - | 0.61 |
| Marathon Oil Corporation | MRO | CB | 25.30 | 1.28 | 23,200 | 7 | 4 | 89 | - | 0.53 |
| *Total or Median* | | | | | *260,000* | | | *61* | | *0.71* |
| **Canada** | | | | | | | | | | |
| Cenovus Energy Inc. | CVE | CB | 33.05 | 1.27 | 31,900 | 16 | | 74 | 9 | 0.72 |
| Penn West Exploration | PWE | | 17.37 | 1.51 | 11,800 | 17 | | 83 | - | 0.67 |
| Imperial Oil Limited (30%) | IMO | CB | 39.21 | 1.16 | 11,600 | 3 | | 86 | 11 | 0.67 |
| EnCana Corporation | ECA | CB | 23.66 | 1.63 | 28,500 | 90 | | 10 | - | 0.59 |
| Suncor Energy | SU | CB | 29.14 | 1.29 | 59,700 | 3 | | 81 | 17 | 0.52 |
| Canadian Oil Sands Limited | COSWF | CB | 20.94 | 1.14 | 11,600 | | | 100 | - | 0.43 |
| *Total or Median* | | | | | *155,000* | | | *83* | | *0.63* |
| | | | | | | | | | | |
| ***Composite*** | | | | | *2,388,000* | *9* | *15* | *62* | *13* | *0.61* |

CB=Contrarian Buy, Stock Price may be in downtrend compared to 200-day average.

**Table 2**

**McDep Large Cap Energy Stocks**

**Net Present Value and McDep Ratio**

| | Symbol/Rating | | *Price (US$/sh) 22-Aug 2011* | *Shares (mm)* | *Market Cap (US$mm)* | *Net Present Value (US$/sh)* | *Debt/ Present Value* | *McDep Ratio* |
|---|---|---|---|---|---|---|---|---|
| B = Buy, CB (see below) | | | | | | | | |
| **U.S. Integrated** | | | | | | | | |
| Exxon Mobil Corporation | XOM | CB | 70.18 | 4,912 | 345,000 | 112.00 | 0.11 | 0.67 |
| ConocoPhillips | COP | CB | 63.33 | 1,388 | 88,000 | 119.00 | 0.20 | 0.63 |
| Chevron Corporation | CVX | CB | 93.30 | 2,009 | 187,000 | 170.00 | 0.07 | 0.58 |
| *Total or Median* | | | | | *620,000* | | *0.11* | *0.63* |
| **Europe** | | | | | | | | |
| BG Group plc | BRGXF | | 20.40 | 3,410 | 69,600 | 25.00 | 0.15 | 0.84 |
| Royal Dutch Shell plc | RDS-A | CB | 63.08 | 3,114 | 196,000 | 96.00 | 0.18 | 0.72 |
| Statoil ASA (33%) | STO | CB | 22.35 | 1,050 | 23,500 | 44.00 | 0.21 | 0.61 |
| Total S.A. | TOT | CB | 46.72 | 2,256 | 105,000 | 100.00 | 0.17 | 0.56 |
| BP plc | BP | | 38.35 | 3,186 | 122,000 | 93.00 | 0.23 | 0.55 |
| *Total or Median* | | | | | *516,000* | | *0.18* | *0.61* |
| **Brazil/Russia/Australia/China** | | | | | | | | |
| Woodside Petroleum Ltd. | WOPEY | | 36.47 | 774 | 28,200 | 45.00 | 0.15 | 0.84 |
| CNOOC Limited (36%) | CEO | | 180.00 | 161 | 29,000 | 250.00 | 0.04 | 0.73 |
| PetroChina Company Ltd (14%) | PTR | CB | 119.31 | 256 | 30,600 | 210.00 | 0.15 | 0.63 |
| Petrobras | PBR | CB | 26.89 | 6,513 | 175,100 | 62.00 | 0.13 | 0.51 |
| Gazprom (50%) | OGZPY | CB | 11.33 | 5,750 | 65,100 | 28.00 | 0.11 | 0.47 |
| Lukoil Oil Company | LUKOY | CB | 55.15 | 786 | 43,400 | 150.00 | 0.04 | 0.39 |
| *Total or Median* | | | | | *371,000* | | *0.12* | *0.57* |
| **U.S. Independent** | | | | | | | | |
| Chesapeake Energy Corp. | CHK | | 28.42 | 751 | 21,300 | 33.00 | 0.38 | 0.91 |
| Southwestern Energy Company | SWN | | 35.74 | 350 | 12,500 | 42.00 | 0.09 | 0.86 |
| Anadarko Petroleum Corp. | APC | | 65.43 | 500 | 32,700 | 90.00 | 0.32 | 0.81 |
| EOG Resources, Inc. | EOG | CB | 86.35 | 250 | 21,600 | 130.00 | 0.13 | 0.71 |
| Occidental Petroleum Corp. | OXY | CB | 80.46 | 813 | 65,400 | 123.00 | 0.07 | 0.68 |
| Devon Energy Corporation | DVN | CB | 62.97 | 423 | 26,600 | 112.00 | 0.10 | 0.61 |
| Marathon Oil Corporation | MRO | CB | 25.30 | 717 | 18,140 | 54.00 | 0.12 | 0.53 |
| *Total or Median* | | | | | *198,200* | | *0.12* | *0.71* |
| **Canada** | | | | | | | | |
| Cenovus Energy Inc. | CVE | CB | 33.05 | 758 | 25,100 | 49.00 | 0.15 | 0.72 |
| Penn West Exploration | PWE | | 17.37 | 440 | 7,800 | 31.00 | 0.23 | 0.67 |
| Imperial Oil Limited (30%) | IMO | CB | 39.21 | 256 | 10,100 | 62.00 | 0.09 | 0.67 |
| EnCana Corporation | ECA | CB | 23.66 | 739 | 17,500 | 51.00 | 0.23 | 0.59 |
| Suncor Energy | SU | CB | 29.14 | 1,587 | 46,300 | 64.00 | 0.12 | 0.52 |
| Canadian Oil Sands Limited | COSWF | CB | 20.94 | 485 | 10,200 | 52.00 | 0.05 | 0.43 |
| *Total or Median* | | | | | *117,000* | | *0.14* | *0.63* |

CB=Contrarian Buy, Stock Price may in downtrend compared to 200-day average.

McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses

Estimated present value presumes a long-term price for oil of US$100 a barrel and natural gas, $8 a million btu.

**Table 3**

**McDep Large Cap Energy Stocks**

**Value Multiples and Distribution Yield**

| | Symbol/Rating | B = Buy, CB (see below) | *Price (US$/sh) 22-Aug 2011* | *Adjustd Resrvs/ Prod NTM* | *PV/ Ebitda NTM* | *EV/ Ebitda NTM* | *P/E NTM* | *Divd or Distrib NTM (%)* |
|---|---|---|---|---|---|---|---|---|
| **U.S. Integrated** | | | | | | | | |
| Exxon Mobil Corporation | XOM | CB | 70.18 | 14.1 | 7.9 | 5.3 | 9 | 2.7 |
| ConocoPhillips | COP | CB | 63.33 | 12.0 | 8.0 | 5.0 | 9 | 4.2 |
| Chevron Corporation | CVX | CB | 93.30 | 8.5 | 7.2 | 4.2 | 8 | 3.3 |
| *Total or Median* | | | | *12.0* | *7.9* | *5.0* | *9* | *3.3* |
| **Europe** | | | | | | | | |
| BG Group plc | BRGXF | | 20.40 | 17.1 | 9.9 | 8.4 | 15 | 1.1 |
| Royal Dutch Shell plc | RDS-A | CB | 63.08 | 9.0 | 7.1 | 5.1 | 8 | 5.3 |
| Statoil ASA (33%) | STO | CB | 22.35 | 6.8 | 7.2 | 4.4 | 9 | 5.1 |
| Total S.A. | TOT | CB | 46.72 | 9.9 | 7.8 | 4.3 | 7 | 7.0 |
| BP plc | BP | | 38.35 | 11.1 | 7.8 | 4.3 | 6 | 4.4 |
| *Total or Median* | | | | *9.9* | *7.8* | *4.4* | *8* | *5.1* |
| **Brazil/Russia/Australia/China** | | | | | | | | |
| Woodside Petroleum Ltd. | WOPEY | | 36.47 | 22.5 | 13.9 | 11.7 | 21 | 2.9 |
| Petrobras | PBR | CB | 26.89 | 13.5 | 11.7 | 5.9 | 10 | 4.7 |
| PetroChina Company Ltd (14%) | PTR | CB | 119.31 | 13.4 | 7.9 | 5.0 | 10 | 4.5 |
| CNOOC Limited (36%) | CEO | | 180.00 | 6.5 | 5.9 | 4.3 | 8 | 3.3 |
| Gazprom (50%) | OGZPY | CB | 11.33 | 30.2 | 7.1 | 3.3 | 5 | 2.9 |
| Lukoil Oil Company | LUKOY | CB | 55.15 | 16.1 | 6.6 | 2.6 | 4 | 3.2 |
| *Total or Median* | | | | *14.8* | *7.5* | *4.7* | *9* | *3.3* |
| **U.S. Independent** | | | | | | | | |
| Chesapeake Energy Corp. | CHK | | 28.42 | 10.8 | 11.6 | 10.6 | 19 | 1.2 |
| Southwestern Energy Company | SWN | | 35.74 | 7.6 | 11.4 | 9.9 | 22 | - |
| Anadarko Petroleum Corp. | APC | | 65.43 | 7.2 | 8.5 | 6.9 | | 0.6 |
| Occidental Petroleum Corp. | OXY | CB | 80.46 | 11.5 | 9.0 | 6.1 | 12 | 2.3 |
| EOG Resources, Inc. | EOG | CB | 86.35 | 9.3 | 8.2 | 5.8 | 24 | 0.7 |
| Devon Energy Corporation | DVN | CB | 62.97 | 10.2 | 9.5 | 5.8 | 11 | 1.1 |
| Marathon Oil Corporation | MRO | CB | 25.30 | 10.3 | 7.1 | 3.8 | 10 | 2.4 |
| *Total or Median* | | | | *10.2* | *9.0* | *6.1* | *15* | *1.1* |
| **Canada** | | | | | | | | |
| Cenovus Energy Inc. | CVE | CB | 33.05 | 22.3 | 11.9 | 8.6 | 25 | 2.4 |
| Imperial Oil Limited (30%) | IMO | CB | 39.21 | 43.3 | 12.8 | 8.5 | 13 | 1.1 |
| EnCana Corporation | ECA | CB | 23.66 | 12.3 | 14.0 | 8.2 | 34 | 3.4 |
| Penn West Exploration | PWE | | 17.37 | 8.6 | 10.5 | 7.1 | 20 | 6.3 |
| Canadian Oil Sands Limited | COSWF | CB | 20.94 | 26.4 | 12.7 | 5.5 | 9 | 5.8 |
| Suncor Energy | SU | CB | 29.14 | 25.2 | 10.3 | 5.3 | 14 | 1.5 |
| *Total or Median* | | | | *23.8* | *12.3* | *7.6* | *17* | *2.9* |

CB=Contrarian Buy, Stock Price may be in downtrend compared to 200-day average.
EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2012; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

McDep LLC

# Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

August 23, 2011

**Table 4**

## McDep Large Cap Energy Stocks
## Rank by Enterprise Value to 200 Day Average

| | | | *Price* | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | *($/sh)* | *Enterprise Value/* | | | | |
| | *Symbol* | | *22-Aug* | *52Wk* | *52Wk* | *50 Day* | *200 Day* | *McDep* |
| | | *Rating* | *2011* | *High* | *Low* | *Avg.* | *Avg.* | *Ratio* |
| **U.S. Integrated** | | | | | | | | |
| Chevron Corporation | CVX | CB | 93.30 | 0.87 | 1.24 | 0.93 | 0.96 | 0.58 |
| ConocoPhillips | COP | CB | 63.33 | 0.84 | 1.14 | 0.92 | 0.92 | 0.63 |
| Exxon Mobil Corporation | XOM | CB | 70.18 | 0.82 | 1.17 | 0.91 | 0.90 | 0.67 |
| *Median* | | | | *0.84* | *1.17* | *0.92* | *0.92* | *0.63* |
| **Europe** | | | | | | | | |
| Statoil ASA (33%) | STO | CB | 22.35 | 0.82 | 1.13 | 0.96 | 0.94 | 0.61 |
| Royal Dutch Shell plc | RDS-A | CB | 63.08 | 0.85 | 1.15 | 0.93 | 0.93 | 0.72 |
| BG Group plc | BRGXF | | 102.00 | 0.82 | 1.22 | 0.94 | 0.93 | 0.84 |
| BP plc | BP | | 38.35 | 0.85 | 1.07 | 0.93 | 0.91 | 0.55 |
| Total S.A. | TOT | CB | 46.72 | 0.79 | 1.05 | 0.91 | 0.88 | 0.56 |
| *Median* | | | | *0.83* | *1.14* | *0.93* | *0.92* | *0.62* |
| **Brazil/Russia/Australia/China** | | | | | | | | |
| PetroChina Company Ltd (14%) | PTR | CB | 119.31 | 0.80 | 1.09 | 0.89 | 0.90 | 0.63 |
| Lukoil Oil Company | LUKOY | CB | 55.15 | 0.75 | 1.04 | 0.89 | 0.88 | 0.39 |
| Woodside Petroleum Ltd. | WOPEY | | 36.47 | 0.74 | 1.08 | 0.89 | 0.85 | 0.84 |
| Gazprom (50%) | OGZPY | CB | 11.33 | 0.71 | 1.10 | 0.86 | 0.85 | 0.47 |
| Petrobras | PBR | CB | 26.89 | 0.70 | 1.07 | 0.88 | 0.81 | 0.51 |
| CNOOC Limited (36%) | CEO | | 180.00 | 0.68 | 1.08 | 0.83 | 0.79 | 0.73 |
| *Median* | | | | *0.72* | *1.08* | *0.88* | *0.85* | *0.57* |
| **U.S. Independent** | | | | | | | | |
| Chesapeake Energy Corp. | CHK | | 28.42 | 0.87 | 1.22 | 0.95 | 0.98 | 0.91 |
| Anadarko Petroleum Corp. | APC | | 65.43 | 0.84 | 1.23 | 0.91 | 0.92 | 0.81 |
| Southwestern Energy Company | SWN | | 37.95 | 0.75 | 1.15 | 0.86 | 0.90 | 0.86 |
| EOG Resources, Inc. | EOG | CB | 86.35 | 0.75 | 1.01 | 0.89 | 0.87 | 0.71 |
| Occidental Petroleum Corp. | OXY | CB | 80.46 | 0.71 | 1.10 | 0.83 | 0.83 | 0.68 |
| Devon Energy Corporation | DVN | CB | 62.97 | 0.71 | 1.05 | 0.85 | 0.80 | 0.61 |
| Marathon Oil Corporation | MRO | CB | 25.30 | | | | | 0.53 |
| *Median* | | | | *0.75* | *1.12* | *0.87* | *0.89* | *0.71* |
| **Canada** | | | | | | | | |
| Cenovus Energy Inc. | CVE | CB | 33.05 | 0.85 | 1.25 | 0.93 | 0.96 | 0.72 |
| Imperial Oil Limited (30%) | IMO | CB | 39.21 | 0.73 | 1.09 | 0.90 | 0.88 | 0.67 |
| EnCana Corporation | ECA | CB | 23.66 | 0.77 | 1.02 | 0.88 | 0.84 | 0.59 |
| Penn West Exploration | PWE | | 17.37 | 0.71 | 1.01 | 0.87 | 0.80 | 0.67 |
| Suncor Energy | SU | CB | 29.14 | 0.66 | 1.00 | 0.82 | 0.78 | 0.52 |
| Canadian Oil Sands Limited | COSWF | CB | 20.96 | 0.62 | 1.01 | 0.79 | 0.75 | 0.43 |
| *Median* | | | | *0.73* | *1.02* | *0.87* | *0.84* | *0.67* |

CB=Contrarian Buy, Stock Price may be in downtrend compared to 200-day average.

McDep LLC

# Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

August 23, 2011

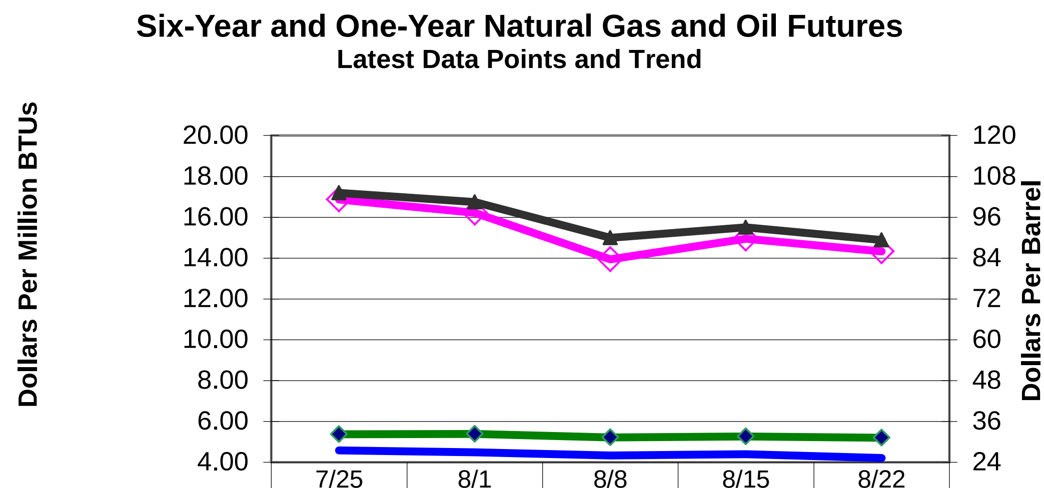
## Index of Recent Research

| | | | |
|---|---|---|---|
| **Stock Ideas** | | | |
| *Date* | *Symbol* | *Subject* | *Theme* |
| 19-Aug | DMLP | Dorchester Minerals, L.P. | Preferred Risk 7% Income with Oil and Gas Upside (ISCW) |
| 16-Aug | COSWF | Canadian Oil Sands Limited | Undervalued Laggard (Meter Reader) |
| 9-Aug | HK | Petrohawk | Discontinue on Pending Acquisition at NPV Premium (ISCW) |
| 9-Aug | RRC | Range Resources | Raise NPV to $70 from $60 a Share (Income and Small Cap) |
| 9-Aug | XEC | Cimarex Energy | Confirm NPV at $120 a Share (Income and Small Cap) |
| 2-Aug | CVX | Chevron | Raise NPV to $170 from $154 on Cash Flow Margin |
| 2-Aug | TOT | Total | Lower NPV to $100 from $111 on Cash Flow Margin (MReade |
| 29-Jul | WLL | Whiting Petroleum | Appreciation Potential after Stock Price Decline (ISCW) |
| 27-Jul | APC | Anadarko Petroleum | Raise NPV to $90 from $78 on Oil Growth |
| 26-Jul | ECA | Encana | High Margin at Low Natural Gas Price (Meter Reader) |
| 19-Jul | COP | ConocoPhillips | Downstream Spinoff Promises to Unlock Value (Meter Reader |
| 5-Jul | DVN | Devon Energy | Thermal Oil Growth in Canada (Meter Reader) |
| 28-Jun | MRO | Marathon Oil | Buy New U.S. Independent Producer (Meter Reader) |
| 24-Jun | HGT, SJT, MTR | Hugoton, San Juan, Mesa RTrust | Income Enhancers (ISC Weekly) |
| 21-Jun | WOPEY | Woodside Petroleum | Remove Buy on Costs and Delay (Meter Reader) |
| 17-Jun | PEYUF | Peyto Exploration | Update Growth (Income and Small Cap) |
| 14-Jun | CVE | Cenovus Energy | Accelerating Deep Oil Sands (Meter Reader) |
| 7-Jun | IMO | Imperial Oil | Double Oil Production by 2020 (Meter Reader) |
| 31-May | OXY | Occidental Petroleum | Triple California Oil Production by 2020 (Meter Reader) |
| 24-May | STO | Statoil | Nordic Oil and Gas Stalwart (Meter Reader) |
| 20-May | SBR | Sabine Royalty Trust | Raise NPV to $70 from $59 on Rising Volume (ISCW) |
| 17-May | PBR | Petrobras | Out-of-Favor Oil Growth (Meter Reader) |
| 10-May | EOG | EOG Resources | High-Profit Light Sweet North American Oil (Meter Reader) |
| 29-Apr | BIREF | Birchcliff Energy | Independent Engineer Confirms Natural Gas Upside (ISCW) |
| 22-Apr | ERF | Enerplus Corporation | New Buy - Bakken and Marcelllus with 7% Income (ISCW) |
| 29-Mar | XOM | Exxon Mobil | Natural Gas Enhanced by Nuclear (Meter Reader) |
| 22-Mar | PTR | PetroChina | Overlooked Oil in PTR Stock (Meter Reader) |
| 15-Mar | LUKOY | Lukoil | Lukoil and Russia Ride the Rise of Oil (Meter Reader) |
| 22-Feb | OGZPY | Gazprom | Nearer Accord on Natural Gas to China (Meter Reader) |
| | For historical research by stock, go to mcdep.com, click on Stock Ideas, click on stock by name. | | |
| **Meter Reader** | | | |
| 16-Aug | COSWF | Canadian Oil Sands Ltd. | Undervalued Laggard |
| 9-Aug | | | Buy Oil and Gas on the Decline |
| 2-Aug | TOT | Total | Lower NPV to $100 from $111 on Cash Flow Margin |
| 26-Jul | ECA | Encana | High Margin at Low Natural Gas Price |
| | For earlier editions, go to mcdep.com, click on Meter Reader. | | |
| **Income and Small Cap Weekly** | | | |
| 19-Aug | DMLP | Dorchester Minerals, L.P. | Preferred Risk 7% Income with Oil and Gas Upside |
| 12-Aug | BRY, DNR, LGCY | Berry, Denbury, Legacy | Raise NPV |
| 5-Aug | RRC, XEC, HK | Range, Cimarex, Petrohawk | Market Motion May Mean Near-Term Downtrend |
| 29-Jul | WLL | Whiting Petroleum | Appreciation Potential after Stock Price Decline |
| | For earlier editions, go to mcdep.com, click on Energy Income. | | |

# Meter Reader

A Weekly Analysis of Large Cap Oil and Gas Stocks

August 23, 2011




| | 7/25 | 8/1 | 8/8 | 8/15 | 8/22 |
|---|---|---|---|---|---|
| 12 Mo Natural Gas | 4.58 | 4.49 | 4.32 | 4.39 | 4.21 |
| 72 Mo Natural Gas | 5.36 | 5.38 | 5.21 | 5.26 | 5.20 |
| 12 Month Oil Strip | 101.23 | 97.33 | 83.61 | 89.65 | 86.00 |
| 72 Month Oil Strip | 103.15 | 100.48 | 89.92 | 93.06 | 89.31 |

**Disclaimer:** This analysis was prepared by Kurt Wulff, Manager of McDep LLC. The firm used sources and data believed to be reliable, but makes no representation as to their accuracy or completeness. This analysis is intended for informational purposes and is not a solicitation to buy or sell a security. Past performance is no guarantee of future results.

McDep or its employees may take positions in stocks the firm covers for research purposes. No trades in a subject stock shall be made within a week before or after a change in recommendation.

**Certification:** I, Kurt H. Wulff, certify that the views expressed in this research analysis accurately reflect my personal views about the subject securities and issuers. No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research analysis.

**Research Methodology/Ratings Description:** McDep LLC is an independent research originator focused on oil and gas stocks exclusively. The firm applies the forty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation. Hold recommendations assume the attributes of the underlying business are reflected in the current price of the stock. Sell recommendations are expected to deliver a total return less than inflation.