

Rating: Buy  
S&P 500: 1177

## Anadarko Petroleum Corporation Asset Upgrade

|                                       |          |   |       |
|---------------------------------------|----------|---|-------|
| <i>Symbol</i>                         | APC      | <i>Ebitda Next Twelve Months ending 12/31/05 (US\$mm)</i> | 5,350 |
| <i>Rating</i>                         | Buy      | <i>North American Natural Gas/Ebitda (%)</i>              | 55    |
| <i>Price (US\$/sh)</i>                | 68.37    | <i>Natural Gas and Oil Production/Ebitda (%)</i>          | 100   |
| <i>Pricing Date</i>                   | 11/23/04 | <i>Adjusted Reserves/Production NTM</i>                   | 10.9  |
| <i>Shares (mm)</i>                    | 253      | <i>EV/Ebitda</i>  | 4.4   |
| <i>Market Capitalization (US\$mm)</i> | 17,300   | <i>PV/Ebitda</i>  | 5.6   |
| <i>Debt (US\$mm)</i>                  | 6,000    | <i>Undeveloped Reserves (%)</i>                           | 31    |
| <i>Enterprise Value (EV) (US\$mm)</i> | 23,300   | <i>Natural Gas and Oil Ebitda (US\$/boe)</i>              | 27.45 |
| <i>Present Value (PV) (US\$mm)</i>    | 29,800   | <i>Present Value Proven Reserves(US\$/boe)</i>            | 11.86 |
| <i>Net Present Value (US\$/share)</i> | 94       | <i>Present Value Proven Reserves(US\$/mcf)</i>            | 1.98  |
| <i>Debt/Present Value</i>             | 0.20     | <i>Earnings Next Twelve Months (US\$/sh)</i>              | 7.38  |
| <i>McDep Ratio - EV/PV</i>            | 0.78     | <i>Price/Earnings Next Twelve Months</i>                  | 9     |
| <i>Dividend Yield (%/year)</i>        | 0.8      | <i>Indicated Annual Dividend (US\$/sh)</i>                | 0.56  |

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.

### Summary and Recommendation

We continue to recommend current purchase of the common shares of **Anadarko Petroleum Corporation (APC)** for its representation in North American natural gas and global oil. About half of value is concentrated on the premium fuel resource that is also expected to be the most important source of volume growth. An asset realignment program upgrades the mix of reserves at an active time for the property market. We see potential appreciation to net present value of \$94 a share. That estimate assumes a constant real oil price of \$35 a barrel when the average futures price for the next six years is \$41 a barrel. The stock's McDep Ratio ranks it among buy recommendations with more than average appreciation potential.

### Concentrating on Longer-Life North American Natural Gas

The company's natural gas resources may be worth slightly more than the company's oil resources (see table Functional Cash Flow and Present Value). The overall adjusted reserve life of 10.9 years exceeds the median of 10.6 years for peer companies. Undeveloped reserves account for a moderate 31% of the total, disproportionately concentrated in Algerian oil. Our adjustment counts undeveloped reserves at half the weight of developed reserves because the development investment has not yet been made.

By year end management expects to complete the sale of about 11% of reserves that account for as much as 22% of production. That could lengthen reserve life to as much as 13.0 years. Instead management expects an increase in production from remaining reserves that would lower the life index back to perhaps 12.2 years.

The longer life index would support a higher cash flow multiple. Yet cash flow would be reduced from what it otherwise would be. As a result we have made no adjustment to our estimate of

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present value. We like longer life and we like the increased emphasis that management appears to be placing on its growth potential in the remaining natural gas properties.

Tight gas, as management calls it, accounts for a majority of North American natural gas production and perhaps more than 40% of oil and gas production combined pro forma. Tight gas would provide perhaps half of the growth management expects next year from the 2004 base adjusted for asset sales. In particular the Vernon field in Louisiana is being developed rapidly to be a large contributor to value enhancement.

**Anadarko Petroleum Corporation**  
**Functional Cash Flow and Present Value**

|                             | <i>NTM Ebitda</i><br><i>(US\$mm)</i> | <i>Adjusted</i><br><i>R/P</i> | <i>PV/</i><br><i>Ebitda</i> | <i>Present</i><br><i>Value</i><br><i>(US\$mm)</i> |      |
|-----------------------------|--------------------------------------|-------------------------------|-----------------------------|---|------|
| North American Natural Gas  | 2,930                                | 10.3                          | 5.3                         | 15,500  | 52%  |
| Oil                         | 2,420                                | 11.6                          | 5.9                         | 14,300  | 48%  |
|                             | 5,350                                | 10.9                          | 5.6                         | 29,800  | 100% |
| Debt (US\$mm)               |                                      |                               |                             | 6,000   |      |
| Net Present Value (US\$mm)  |                                      |                               |                             | 23,800  |      |
| Shares (mm)                 |                                      |                               |                             | 253   |      |
| Net Present Value (US\$/sh) |                                      |                               |                             | 94  |      |

**Commodity Price Points to Further Gains**

Commodity price drives further gains in cash flow in our model (see table Next Twelve Months Operating and Financial Estimates). We hold volume constant in our projection without adjustment for properties being sold.

Projected cash flow becomes the base against which we apply a multiple to test the continuing validity of our estimate of present value. That multiple is low at 5.6 times. The level seems readily justifiable considering the adjusted reserve life index of 10.9 times. In the current correlation of present value with reserve life for 28 stocks, Anadarko's multiple could be considered low by 0.4 times. In other words, a slightly higher present value estimate might be justified.

Proceeds from properties sold will be applied to debt reduction and stock repurchase. That too, will change some of the valuation parameters. The 89% of reserves being retained ought to be worth 89% or more of the value we ascribe to the total before the sale.

Investors' greatest concern may be the sustainability of the current level of oil price. Energy consumers and energy investors should, in our opinion, take recent oil price action as a sign of a long term change to higher price. Recent softening of oil price is welcome relief for the economy while we adjust to the price increases that have occurred and prepare for those that may occur in the future.

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**Anadarko Petroleum Corporation**  
**Next Twelve Months Operating and Financial Estimates**

|                            | <i>Q1</i>      | <i>Q2</i>      | <i>Q3</i>      | <i>Q4E</i>      | <i>Year</i>  | <i>Q1E</i>     | <i>Q2E</i>     | <i>Q3E</i>     | <i>Q4E</i>      | <i>Next<br/>Twelve<br/>Months</i> |
|----------------------------|----------------|----------------|----------------|-----------------|--------------|----------------|----------------|----------------|-----------------|-----------------------------------|
|                            | <i>3/31/04</i> | <i>6/30/04</i> | <i>9/30/04</i> | <i>12/31/04</i> | <i>2004E</i> | <i>3/31/05</i> | <i>6/30/05</i> | <i>9/30/05</i> | <i>12/31/05</i> | <i>12/31/05</i>                   |
| <b>Volume</b>              |                |                |                |                 |              |                |                |                |                 |                                   |
| Natural Gas (mmcf)         | 1,723          | 1,786          | 1,813          | 1,813           | <b>1,784</b> | 1,813          | 1,813          | 1,813          | 1,813           | <b>1,813</b>                      |
| Oil (mbd)                  | 251            | 214            | 232            | 232             | <b>232</b>   | 232            | 232            | 232            | 232             | <b>232</b>                        |
| Total gas & oil (bcf)      | 294            | 279            | 295            | 295             | <b>1,163</b> | 288            | 292            | 295            | 295             | <b>1,170</b>                      |
| <b>Price</b>               |                |                |                |                 |              |                |                |                |                 |                                   |
| Natural gas (\$/mcf)       |                |                |                |                 |              |                |                |                |                 |                                   |
| Henry Hub (\$/mmbtu)       | 5.64           | 6.10           | 5.75           | 6.75            | <b>6.06</b>  | 7.56           | 6.62           | 6.64           | 6.94            | <b>6.94</b>                       |
| U.S. (or North America)    | 5.03           | 5.19           | 4.93           | 5.43            | <b>5.15</b>  | 5.83           | 5.36           | 5.38           | 5.52            | <b>5.52</b>                       |
| Company (\$/mcf)           | 5.03           | 5.19           | 4.93           | 5.43            | <b>5.15</b>  | 5.83           | 5.36           | 5.38           | 5.52            | <b>5.52</b>                       |
| Oil (\$/bbl)               |                |                |                |                 |              |                |                |                |                 |                                   |
| WTI Cushing                | 35.23          | 38.34          | 43.89          | 49.90           | <b>41.84</b> | 48.68          | 47.68          | 46.26          | 45.01           | <b>46.91</b>                      |
| Worldwide                  | 30.31          | 30.46          | 33.38          | 37.94           | <b>33.03</b> | 37.02          | 36.26          | 35.18          | 34.23           | <b>35.66</b>                      |
| Total gas & oil (\$/mcf)   | 5.04           | 5.14           | 5.20           | 5.82            | <b>5.31</b>  | 5.98           | 5.66           | 5.59           | 5.60            | <b>5.71</b>                       |
| <b>Revenue (\$mm)</b>      |                |                |                |                 |              |                |                |                |                 |                                   |
| Natural Gas                |                |                |                |                 |              |                |                |                |                 |                                   |
| Natural Gas                | 789            | 844            | 822            | 905             | <b>3,360</b> | 952            | 885            | 897            | 921             | <b>3,655</b>                      |
| Oil                        | 692            | 593            | 712            | 810             | <b>2,808</b> | 773            | 765            | 751            | 731             | <b>3,020</b>                      |
| Other                      | (21)           | 6              | 27             |                 | <b>13</b>    | -              |                |                |                 | <b>-</b>                          |
| Total                      | 1,460          | 1,443          | 1,562          | 1,715           | <b>6,180</b> | 1,725          | 1,651          | 1,647          | 1,652           | <b>6,674</b>                      |
| <b>Expense</b>             |                |                |                |                 |              |                |                |                |                 |                                   |
| Fixed                      | 217            | 199            | 158            | 158             | <b>733</b>   | 158            | 158            | 158            | 158             | <b>632</b>                        |
| Variable                   | 217            | 199            | 158            | 177             | <b>751</b>   | 178            | 171            | 170            | 171             | <b>690</b>                        |
| <b>Ebitda (\$mm)</b>       | 1,026          | 1,044          | 1,246          | 1,380           | <b>4,696</b> | 1,389          | 1,322          | 1,319          | 1,323           | <b>5,352</b>                      |
| Deprec., Deplet., & Amort. | 348            | 357            | 387            | 387             | <b>1,479</b> | 387            | 387            | 387            | 387             | <b>1,548</b>                      |
| Other non cash             | 9              | -              | -              | 107             | <b>116</b>   | 100            | 94             | 107            | 107             | <b>408</b>                        |
| <b>Ebit</b>                | 669            | 687            | 859            | 887             | <b>3,102</b> | 902            | 841            | 825            | 829             | <b>3,397</b>                      |
| Interest                   | 63             | 66             | 131            | 131             | <b>391</b>   | 131            | 131            | 131            | 131             | <b>524</b>                        |
| <b>Ebt</b>                 | 606            | 621            | 728            | 756             | <b>2,711</b> | 771            | 710            | 694            | 698             | <b>2,873</b>                      |
| Income Tax                 | 212            | 217            | 255            | 264             | <b>949</b>   | 270            | 248            | 243            | 244             | <b>1,005</b>                      |
| <b>Net Income (\$mm)</b>   | 394            | 404            | 473            | 491             | <b>1,762</b> | 501            | 461            | 451            | 454             | <b>1,867</b>                      |
| <b>Shares (millions)</b>   | 254            | 254            | 253            | 253             | <b>253</b>   | 253            | 253            | 253            | 253             | <b>253</b>                        |
| Per share (\$)             | 1.55           | 1.59           | 1.87           | 1.94            | <b>6.95</b>  | 1.98           | 1.82           | 1.78           | 1.79            | <b>7.38</b>                       |
| Ebitda Margin              | 70%            | 72%            | 80%            | 80%             | <b>76%</b>   | 81%            | 80%            | 80%            | 80%             | <b>80%</b>                        |
| Tax Rate                   | 35%            | 35%            | 35%            | 35%             | <b>35%</b>   | 35%            | 35%            | 35%            | 35%             | <b>35%</b>                        |

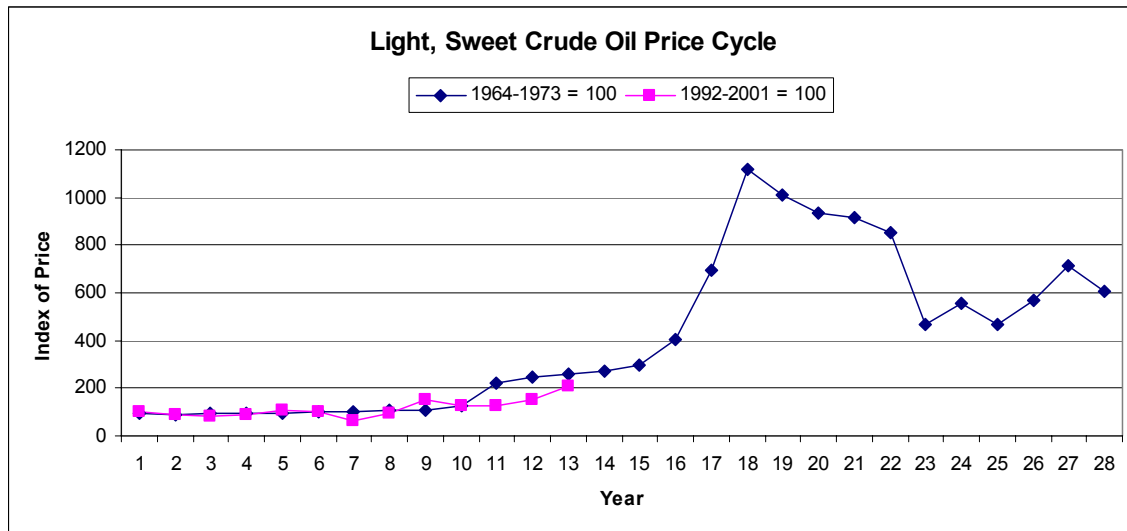
**Oil Price Move Possibly Just Starting**

To offset any inclination to underestimate further potential for oil and gas price, we compare the relatively stable price period from 1992 to 2001 to the period from 1964 to 1973. Each was a ten year period that immediately preceded a sharply lower stock market in 2002 and in 1974. After quiescence, oil price started moving up in each case. We may be in the early stages of a new historic move (see chart [Light, Sweet Crude Oil Price Cycle](#)).

Frankly, few investors would give much weight to the likelihood of continued oil price strength. Contrast that with the growing chorus for a weaker dollar. It may just be that oil price is not high, but the real value of the dollar is low. That, too, is a parallel to historical experience.

Let us imagine how the cycle might unfold. By the way we chose to draw the chart Year 13 corresponds to 1976 and 2004. Once the move got going in the previous cycle, the annual average oil price did not decline until Year 19 (1982). The annual peak of 1100, or 11 times the first ten year average, was too high to be sustained. It might be less disruptive economically if the peak ahead of us were lower and the decline shallower. The end point in Year 28 at 600 implies a tripling over the next 15 years. If higher oil price unfolded gradually it would give everyone time to adjust.

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Kurt H. Wulff, CFA

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