

Energy Sector
Exploration and Production
Anadarko Petroleum Corporation (NYSE: APC)

Analysts:

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Recommendation: SELL

Key Financials	
Current Share Price	\$ 70.11
Market Capitalization	\$17.341m
52 Week High	\$ 71.55
52 Week Low	\$ 44.79
Current EPS	3.72
EPS Growth (5Yr)	25%
P/E	10.7
PEG	1.12
ROA	6.64
ROE	16.73
Debt/Equity (book)	0.6
Current Intrinsic Value	\$ 76.79

Key Assumptions and Conclusions

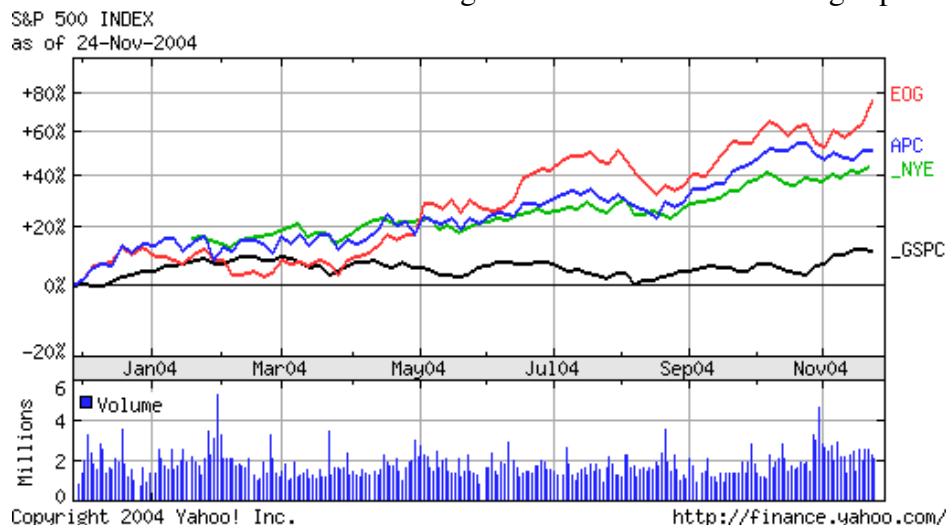
- Current appreciation of the stock is due to the market sentiment, not fundamentals
- Company's shifting strategic vision is a source of organizational tension and inefficiencies in operations
- The company is more volatile and weaker than most peers
- APC is valued virtually fair by the market
- Growth potential is limited

Positive Attributes

- High commodity prices
- Possibility of surprise earnings
- Restructuring may help create more efficient enterprise

Investment Thesis

We think that although Anadarko (NYSE:APC) still has some appreciation potential, we think that such potential is not adequate given the level of risk we see inherent in the company. Our DCF-based valuation shows that the company is priced virtually fair by the market. Our comparable analysis identifies APC as the weakest firm among its peers. We feel that the time is right to sell our share of the company. The available funds would be reinvested in the midstream sector of the oil and gas industry – the sector which we think will allow fund accretion given our forecast of oil and gas prices.



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Industry and Sector Outlook

In the third quarter, oil prices remained persistently in the high-\$40s. At these levels, we think that many companies with significant international production facilities may underperform, as escalating royalty payments and various tax regimens triggered by higher oil prices are expected to cause foreign operations to become less profitable. Thus, given current hydrocarbon price levels and our expectations for prices through 2005, we would favor companies with a dominant North American exposure and a concurrent dominant natural gas exposure. Lastly, it appears that the debt-financed merger activity that gave us pause in the spring will be comfortably digested via enhanced cash flows driven by higher commodity prices (S&P Industry Analysis).

Company Description

Anadarko Petroleum Corporation is an oil and gas exploration and production company. Major areas of operations are located in the United States, primarily in Texas, Louisiana, the mid-continent region and the western states, Alaska and in the shallow and deep waters of the Gulf of Mexico, as well as in Canada and Algeria. Anadarko also has production in Venezuela and Qatar. The Company is executing strategic exploration programs in several other countries. It actively markets natural gas, oil and natural gas liquids and owns and operates gas-gathering systems in its core producing areas. In addition, it engages in the hard minerals business through non-operated joint ventures and royalty arrangements in several coal, trona and industrial mineral mines located on lands within and adjacent to its Land Grant holdings (an eight-million-acre strip running through portions of Colorado, Wyoming and Utah).

Financial Statements Analysis and Forecast

Most line-items in the statements were calculated by using the ratio approach. Sales are grown using the rationale discussed in the DCF section of the report. We feel that the use of ratios, rather than using growth in the accounts or common size approach provides more internal consistency and connection between the statements and allows us to track the changes in one set of line-items to another set. Since the full discussion of the ratios would be unnecessary and would inflate the report, we choose not to do it. If one is curious as to how a particular account is forecasted we suggest he looks at our model made available through the class web-site. Pro forma financial statements are also given in the Exhibit 1.

Valuation Methods Used

We used several valuation methods in our attempt to quantify Anadarko's intrinsic values. Our methods, rationale for their use, critical assumptions, and results are given below.

Discounted Cash Flow methods (FCF to equity holders, FCF to all capital holders (levered with tax shield effects), FCF to all capital holders (unlevered without tax shield effects).

We chose to use DCF method of valuation since it is arguably the one that is most widely used, hence we felt that it would allow us not only forecast Anadarko's price per share, but would also provide us with valuable input on how the Street analysts perceive the firm. We feel that the model is most dependent on the following three inputs: beta, sales growth, terminal value:

- Beta – to better estimate the beta of Anadarko's stock we average betas provided by Reuters, Value Line, Hoover's, Bloomberg, and NYSE. We believe that this average allows us to smooth the deviations among the values from the pool. Next, we adjusted the

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beta towards one to get to the beta of 0.8 which we used in our calculations. We also conducted sensitivity analysis on the beta (Exhibit 3)

- Sales – Anadarko’s management announced that it will strive toward a 7-9% annual growth. We feel that although this goal is certainly achievable, it is an optimistic one. Current divestitures of oil properties in Canada, the change of CEOs, and recent restructuring lead us to believe that as Anadarko shifts its strategic direction the proposed growth is not achievable right away. We chose to forecast sales growth as gradually increasing to 8% (a goal announced by management) after which we gradually bring the growth down to 5% annual (our forecasted terminal growth rate). It is worth noting, that commodity prices are volatile and are results of many factors, many of which are beyond the company’s and humanity’s control. However, we believe that, if they occur, such unforeseen developments will offset each other (ex., high oil prices in one period may be followed by lower prices in the other period). We deal with the uncertainty of sales growth through the sensitivity analysis (Exhibit 3)
- Terminal Growth – we used 5% terminal growth rate which was agreed upon by the class as a whole. The effects of changes in terminal growth rate assumptions are given in the Exhibit 3.
- Other inputs in the DCF models are given below:

Economic Assumptions and Market Rates	
Risk-Free Rate	3.60%
Market Premium	7.00%
Beta	0.80
Terminal Growth Rate	5.00%
Effective Tax rate, per 10-K	37.00%
Company Specific Assumptions and Rates	
Borrowing Spread (BBB+)	1.63%
MV of Debt	\$ 5,181
MV Equity	\$ 17,341
Weight of Debt	23.00%
Weight of Equity	77.00%
Calculated Rates and Values	
AT WACC	8.11%
Re (CAPM Model)	9.55%
Cost of borrowing	5.23%
WACC (without tax shield)	8.56%

Residual income model. Studies show that this model is correlated better to stock returns than DCF models. Relative simplicity of the model made it a sure candidate to be included in our valuation methods. We feel that the model’s most critical inputs are those already discussed in the DCF section: beta, sales growth and terminal growth rate.

These models yielded the following results:

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Models Used for Valuation and Results	
Model	Share Price
Residual Income Model	\$ 75.82
FCF (Unlevered, to All Capital Holders)	\$ 78.61
FCF (Levered, to All Capital Holders)	\$ 69.67
EFCF	\$ 83.04
Deviation Across Models	19%
Intrinsic Value of APC per Share	\$ 76.79

Although our results show Anadarko as undervalued, the two models that we are most comfortable with (residual income and FCF to all capital holders (levered)) give us results virtually identical to the market price. Furthermore, we feel that potential gain on the security is not adequate given the risk inherent in the company. Recent restructuring and change of the company's strategic focus makes company's earnings more volatile. We think that the market, given the current attitude that you simply can't go wrong with any company in the E&P sector, is carrying APC along with the other companies in the pool, while we think that APC's share price has reached its maximum.

Comparable Company Analysis. One of the reasons for a proposed sell of our position in Anadarko's is our desire to rebalance our exposure in the Energy sector. We felt that one of the two E&P companies needed to be sold to make way for a midstream company. Comparable analysis allows us not only select a weaker firm among our holdings, but it also allows us to assess company's position and potential when compared to its peers. We chose the following firms as fair comparable candidates: Burlington Resources, Cabot Oil and Gas, Equitable Resources, and EOG Resources. These firms were chosen based on the following criteria: market capitalization, annual sales, areas of operation, and gas sales as a major component of revenue. We feel that these firms come the closest to matching Anadarko.

The results of our analysis are given in the table below

Comparable Analysis					
	<u>APC</u>	<u>EOG</u>	<u>BR</u>	<u>COG</u>	<u>EQT</u>
ROA	6.64	9.79	10.16	2.03	6.32
ROE	16.73	23.29	25.68	5.9	19.5
Price/Book	1.81	3.38	2.67	3.62	4.3
Price/Sales	2.98	4.16	3.39	2.97	3.13
Price/EBITDA	4.68	6.94	6.21	5.92	9.46
EV/EBITDA	5.2	7.29	5.65	7.12	11.12
EV/Sales	3.71	4.8	3.78	3.53	3.86
EV/NI	14.25	19.99	12.81	22.92	15.5
P/E	10.7	18.84	12.94	18.84	19.93

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We feel that although the company trades cheaper than its peers, it is also the least efficient one in our pool. This data only reinforces our belief that Anadarko has reached its stock appreciation limit and should be sold.

We also attempted to value Anadarko based on averages of comparable firms multiples. The results are given in Exhibit 4.

Conclusion

Our comparable analysis has reinforced our belief that Anadarko is the weakest firm in the E&P sub-sector of the fund. Our DCF and residual income models showed that the appreciation potential is small and that opportunity should exist elsewhere. With our desire to re-balance the Energy sector we propose that our position in Anadarko is sold.

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Exhibit 1.

Pro Forma Financial Statements
Anadarko Petroleum Corporation

Income Statement

	<u>2004E</u>	<u>2005E</u>	<u>2006E</u>	<u>2007E</u>	<u>2008E</u>	<u>2009E</u>	<u>Terminal</u>
Sales, Total	\$ 5,360	\$ 5,682	\$ 6,080	\$ 6,566	\$ 7,026	\$ 7,447	\$ 7,819
COGS	\$ (1,142)	\$ (1,154)	\$ (1,170)	\$ (1,188)	\$ (1,204)	\$ (1,218)	\$ (1,231)
EBITDA	\$ 4,218	\$ 4,527	\$ 4,910	\$ 5,378	\$ 5,822	\$ 6,229	\$ 6,589
Depreciation	\$ (1,410)	\$ (1,495)	\$ (1,600)	\$ (1,728)	\$ (1,849)	\$ (1,959)	\$ (2,057)
SG&A	\$ (384)	\$ (402)	\$ (430)	\$ (465)	\$ (497)	\$ (527)	\$ (553)
EBIT	\$ 2,424	\$ 2,630	\$ 2,880	\$ 3,186	\$ 3,476	\$ 3,743	\$ 3,978
Interest Expense	\$ (301)	\$ (367)	\$ (471)	\$ (516)	\$ (556)	\$ (587)	\$ (627)
Other Income	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19	\$ 19
Tax Provision	\$ (792)	\$ (845)	\$ (898)	\$ (995)	\$ (1,088)	\$ (1,175)	\$ (1,247)
Net Income	\$ 1,349	\$ 1,438	\$ 1,530	\$ 1,694	\$ 1,852	\$ 2,000	\$ 2,123

Implied Growth In Sales	5%	6.00%	7.00%	8.00%	7.00%	6.00%	5.00%
Implied Growth In COGS	1.78%	1.09%	1.31%	1.58%	1.32%	1.19%	1.04%
Implied Growth in EBITDA	5.45%	7.33%	8.45%	9.53%	8.26%	6.99%	5.77%
Implied Growth in EBIT	4.87%	8.53%	9.50%	10.61%	9.12%	7.67%	6.29%
Implied Growth in NI	0.07%	6.62%	6.36%	10.75%	9.32%	8.00%	6.15%
Residual Income	\$ 516	\$ 490	\$ 458	\$ 492	\$ 504	\$ 494	\$ 9,790

Balance Sheet

	<u>2004E</u>	<u>2005E</u>	<u>2006E</u>	<u>2007E</u>	<u>2008E</u>	<u>2009E</u>	<u>Terminal</u>
Cash	\$ 61	\$ 65	\$ 69	\$ 75	\$ 80	\$ 85	\$ 89
Accounts Receivable and Other CA	\$ 1,501	\$ 1,591	\$ 1,702	\$ 1,838	\$ 1,967	\$ 2,085	\$ 2,189
PP&E, Net	\$ 16,112	\$ 19,901	\$ 21,280	\$ 22,769	\$ 24,427	\$ 26,219	\$ 28,139
Other Assets	\$ 1,862	\$ 1,890	\$ 1,925	\$ 1,968	\$ 2,008	\$ 2,046	\$ 2,078
Total Assets	\$ 19,535	\$ 23,446	\$ 24,976	\$ 26,650	\$ 28,482	\$ 30,434	\$ 32,495
Current Liabilities	\$ 1,645	\$ 1,663	\$ 1,686	\$ 1,714	\$ 1,738	\$ 1,759	\$ 1,778
Current Portion of LT Debt	\$ -	\$ 200	\$ 262	\$ 650	\$ 477	\$ 514	\$ 549
LT Debt, Less Current Portion	\$ 4,339	\$ 6,888	\$ 7,337	\$ 7,829	\$ 8,367	\$ 8,941	\$ 9,546
Deferred Taxes and Other	\$ 4,504	\$ 5,406	\$ 5,759	\$ 6,144	\$ 6,567	\$ 7,017	\$ 7,492
Total Liabilities	\$ 10,488	\$ 14,157	\$ 15,044	\$ 16,337	\$ 17,149	\$ 18,231	\$ 19,366
Preferred Stock	\$ 85	\$ 80	\$ 76	\$ 72	\$ 69	\$ 65	\$ 62
Common Stock	\$ 5,526	\$ 5,526	\$ 5,526	\$ 5,526	\$ 5,526	\$ 5,526	\$ 5,526
Retained Earnings	\$ 4,409	\$ 5,699	\$ 7,072	\$ 8,593	\$ 10,256	\$ 12,053	\$ 13,960
Treasury Stock	\$ (923)	\$ (1,967)	\$ (2,693)	\$ (3,830)	\$ (4,469)	\$ (5,392)	\$ (6,370)
Other	\$ (171)	\$ (171)	\$ (171)	\$ (171)	\$ (171)	\$ (171)	\$ (171)
AOCI	\$ 122	\$ 122	\$ 122	\$ 122	\$ 122	\$ 122	\$ 122
Total Shareholders Equity	\$ 9,047	\$ 9,289	\$ 9,932	\$ 10,312	\$ 11,333	\$ 12,203	\$ 13,130

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Cash Flow Statement

	<u>2004E</u>	<u>2005E</u>	<u>2006E</u>	<u>2007E</u>	<u>2008E</u>	<u>2009E</u>	<u>Terminal</u>
NI	\$ 1,349	\$ 1,438	\$ 1,530	\$ 1,694	\$ 1,852	\$ 2,000	\$ 2,123
Depreciation	\$ 1,410	\$ 1,495	\$ 1,600	\$ 1,728	\$ 1,849	\$ 1,959	\$ 2,057
Other							
CF from Operations	\$ 1,745	\$ 3,735	\$ 3,358	\$ 3,656	\$ 3,977	\$ 4,276	\$ 4,538
CF from Investing	\$ (126)	\$ (5,284)	\$ (2,979)	\$ (3,217)	\$ (3,506)	\$ (3,752)	\$ (3,977)
CF from Financing	\$ (1,620)	\$ 1,552	\$ (375)	\$ (434)	\$ (466)	\$ (519)	\$ (556)
FCF to All Stakeholders (Levered)	\$ 1,797	\$ (1,330)	\$ 665	\$ 752	\$ 809	\$ 882	\$ 944
FCF to All Stakeholders (Unlevered)	\$ 1,908	\$ (1,194)	\$ 839	\$ 943	\$ 1,015	\$ 1,099	\$ 1,176
FCF to Equity Holders	\$ 900	\$ 1,096	\$ 743	\$ 1,004	\$ 581	\$ 719	\$ 15,272

Exhibit 2

Free Cash Flows Calculation

	<u>2004E</u>	<u>2005E</u>	<u>2006E</u>	<u>2007E</u>	<u>2008E</u>	<u>2009E</u>	<u>Terminal</u>
CF From Operations	\$ 1,745	\$ 3,717	\$ 3,305	\$ 3,582	\$ 3,897	\$ 4,191	\$ 4,447
Interest Expense, Net of Tax	\$ 190	\$ 231	\$ 297	\$ 325	\$ 351	\$ 371	\$ 396
Interest Income, Net of Tax	\$ (12)	\$ (12)	\$ (12)	\$ (12)	\$ (12)	\$ (12)	\$ (12)
Operations FCF	\$ 1,923	\$ 3,936	\$ 3,589	\$ 3,895	\$ 4,236	\$ 4,549	\$ 4,832
Net CF From Investing	\$ (126)	\$(5,284)	\$(2,979)	\$(3,217)	\$(3,506)	\$(3,752)	\$(3,977)
New Borrowings	\$ (719)	\$ 2,747	\$ 714	\$ 1,150	\$ 1,024	\$ 1,099	\$ 1,167
Repayments of Debt	\$ -	\$ -	\$ (200)	\$ (262)	\$ (650)	\$ (477)	\$ (515)
Interest Expense, Net of Tax	\$ (190)	\$ (231)	\$ (297)	\$ (325)	\$ (351)	\$ (371)	\$ (396)
Interest Income, Net of Tax	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12
Preferred Stock Retirements	\$ (4)	\$ (4)	\$ (4)	\$ (4)	\$ (4)	\$ (3)	\$ (3)
Preferred Stock Dividends	\$ 5	\$ 5	\$ 4	\$ 4	\$ 4	\$ 4	\$ 3
FCF to All Capital Holders Levered	\$ 1,797	\$(1,348)	\$ 611	\$ 679	\$ 730	\$ 798	\$ 855
FCF to All Capital Holders, Unlevered	\$ 1,908	\$(1,212)	\$ 785	\$ 869	\$ 936	\$ 1,015	\$ 1,088
FCF to Equity Holders	\$ 900	\$ 1,180	\$ 840	\$ 1,254	\$ 766	\$ 1,061	\$ 1,122

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Exhibit 3 Sensitivity Analysis

		Terminal Value				
		4%	4.5%	5%	5.5%	6%
Beta	0.6	\$ 82.82	\$ 95.09	\$ 113.04	\$ 142.21	\$ 199.84
	0.7	\$ 71.31	\$ 79.74	\$ 91.24	\$ 107.93	\$ 134.70
	0.8	\$ 62.90	\$ 69.06	\$ 76.79	\$ 87.95	\$ 103.64
	0.9	\$ 56.48	\$ 61.20	\$ 67.14	\$ 74.85	\$ 85.28
	1	\$ 51.43	\$ 55.18	\$ 59.78	\$ 65.58	\$ 73.11

		Sale Growth				
		6.0%	7.0%	8.0%	9.0%	10.0%
Beta	0.6	\$ 69.44	\$ 90.83	\$ 113.04	\$ 136.09	\$ 159.99
	0.7	\$ 56.65	\$ 73.62	\$ 91.24	\$ 109.51	\$ 128.47
	0.8	\$ 48.31	\$ 62.43	\$ 76.79	\$ 92.28	\$ 108.04
	0.9	\$ 42.44	\$ 54.56	\$ 67.14	\$ 80.19	\$ 93.72
	1	\$ 38.08	\$ 48.73	\$ 59.78	\$ 71.25	\$ 83.13

		Terminal Value				
		4.0%	4.5%	5.0%	5.5%	6.0%
Sales Growth	6%	\$ 40.13	\$ 43.69	\$ 48.31	\$ 54.55	\$ 63.50
	7%	\$ 51.31	\$ 56.14	\$ 62.43	\$ 70.94	\$ 83.20
	8%	\$ 62.90	\$ 69.06	\$ 76.79	\$ 87.95	\$ 103.64
	9%	\$ 74.92	\$ 82.46	\$ 92.28	\$ 105.61	\$ 124.86
	10%	\$ 87.38	\$ 96.35	\$ 108.04	\$ 123.91	\$ 146.87

Exhibit 4. Multiples and Multiples Valuation

Multiples					
	EOG	BR	COG	EQT	Average
Price/Book	22.43	28.40	20.95	17.63	22.35
Price/Sales	18.23	22.37	25.53	24.23	22.59
Price/EBITDA	10.93	12.21	12.81	8.02	10.99
EV/EBITDA	10.40	13.42	10.65	6.82	10.32
EV/Sales	15.80	20.06	21.48	19.65	19.25
EV/NI	3.79	5.92	3.31	4.89	4.48
P/E	4.02	5.86	4.02	3.80	4.43

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Anadarko's Price based on Average Multiples

<u>Multiple</u>	<u>Price</u>
Price/Book	40.46
Price/Sales	67.32
Price/EBITDA	51.44
EV/EBITDA	53.68
EV/Sales	71.40
EV/NI	63.82
P/E	47.39
Average	56.50