

Anadarko Petroleum Corporation
Buy for Natural Gas and Oil Resource Value

Symbol	Price (US\$/sh)		Market Cap (\$mm)	Net Present Value (\$/sh)		Debt/ Present Value	McDep Ratio	EV/ Sales NTM	EV/ Ebitda NTM	P/E NTM	Div'd NTM (%)	PV/ Ebitda NTM
	13-May 2003	Shares (mm)		Value	Value							
APC	46.76	258	12,100	60	0.30	0.85	4.1	5.7	10.0	0.9	6.8	

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

EV = Enterprise Value = Market Cap and Debt: US\$mm 18,800

Ebitda = Earnings before interest, tax, depreciation and amortization: US\$mm 3,280

NTM = Next Twelve Months Ended March 31, 2003; P/E = Stock Price to Earnings

PV = Present Value of energy businesses: US\$mm 22,200

Summary and Recommendation

We recommend current purchase of the common shares of Anadarko Petroleum Corporation for independent producer ownership of energy resources likely to be revalued higher should the dollar deflate further. Our new pick is Anadarko because it has a low McDep Ratio, an acceptable ratio of debt and large cap liquidity for large investors. Once higher than for peer companies, the McDep Ratio for Anadarko now appears to be slightly lower making new commitments appear timelier than was the case last year. Though the company has the second largest market cap among natural gas producers, it is still just a tenth the average of mega cap energy companies whose resource exposure is diluted with other businesses. North American natural gas, a particularly promising resource, accounts for 58% of projected cash flow. Anadarko's adjusted reserve life index of 10.5 years is longer than the median for 28 mega and large cap producers and producer/refiners in our coverage. Of course, energy investments have political, economic, business and financial risk.

A Leading Independent Natural Gas Producer Appears Timely Now

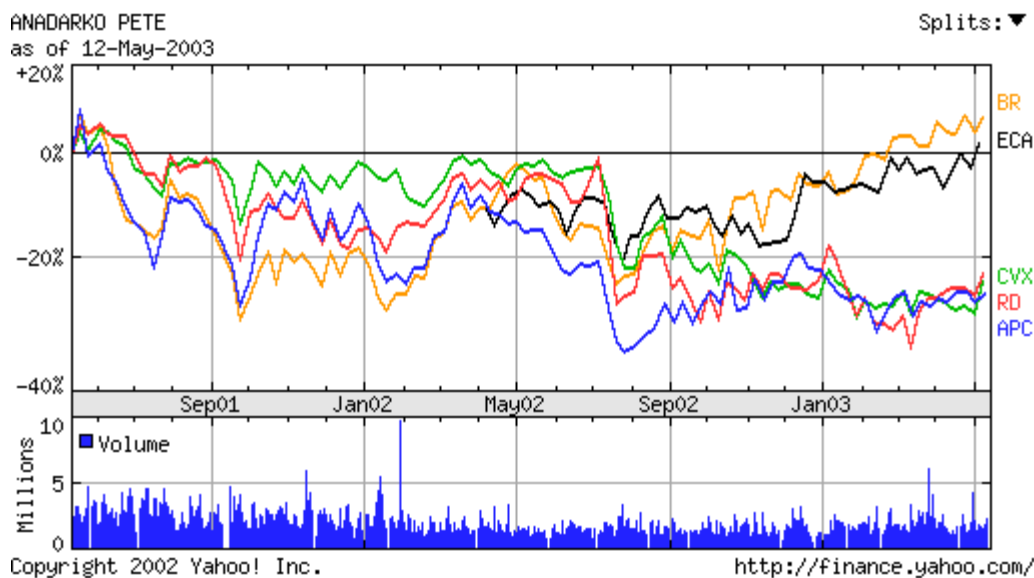
Our current recommendation of Anadarko is prompted by the sense that independents can outperform majors in the current stock market environment. The recent devaluation of the dollar tends to support that view. One of the implications is that the market is likely to price energy resources higher in dollars to offset currency decline. Independent producers are concentrated entirely on energy resources while major oil companies dilute resource ownership with refining businesses whose real value is more economically

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Mr. Wulff is not paid by covered companies. Neither Mr. Wulff nor his spouse act contrary to a buy or sell recommendation.

McDep Associates
Independent Stock Idea
May 14, 2003

sensitive. We think both groups have attractive potential, but we want to shift our emphasis toward independents.

Independents Encana (ECA) and Burlington Resources (BR) have outperformed majors Royal Dutch (RD) and ChevronTexaco (CVX) in the past six months. Yet Anadarko (APC) has performed like a major recently (see Chart). Thus, we can recommend APC hoping that the underperformance relative to ECA and BR is over. At the same time, APC still has the same stock price relative to RD and CVX. From here we expect all five recommended stocks to appreciate with BR, ECA and APC doing so perhaps more strongly than CVX and RD.



Recent Volume Decline May Be Reversing

An energy producer can report declining production and still offer an attractive rate of return. Yet, investors generally perceive higher volume better than lower volume. Anadarko reported a sharp drop in oil volume in the last quarter (see Table). Much of it was temporary while some of it was from properties that have been sold. Presumably the proceeds of the sale are reflected in the reduction of debt that would neutralize the unlevered valuation impact.

Management promises volume growth ahead. That would be positive compared to the outlook that we project close to a continuation of current levels.

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Mr. Wulff is not paid by covered companies. Neither Mr. Wulff nor his spouse act contrary to a buy or sell recommendation.

McDep Associates
Independent Stock Idea

May 14, 2003

The main feature of our projections is that we key prices to the futures market. Not only are quotes of natural gas and oil publicly available for the next twelve months, but also for the next six years as we detail every week.

Anadarko Petroleum Corporation
Next Twelve Months Operating and Financial Estimates

	<i>Q3</i>	<i>Q4</i>	<i>Q1</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Next</i>
	<i>9/30/02</i>	<i>12/31/02</i>	<i>3/31/03</i>	<i>6/30/03</i>	<i>9/30/03</i>	<i>12/31/03</i>	<i>2003E</i>	<i>3/31/04</i>	<i>Twelve</i>
									<i>Months</i>
									<i>3/31/04</i>
Volume									
Natural gas (bcf)	162	155	153	155	157	157	622	153	622
Natural Gas (mmcf/d)	1,764	1,682	1,705	1,705	1,705	1,705	1,705	1,705	1,705
Days	92	92	90	91	92	92	365	90	365
Oil (mmb)	21	23	19	20	21	21	81	20	81
Oil (mbd)	232	255	214	223	223	223	221	223	223
Total gas & oil (bcf)	290	296	271	277	280	280	1,108	274	1,111
Price									
Natural gas (\$/mcf)									
Henry Hub (\$/mmbtu)	3.21	4.30	6.38	5.26	5.49	5.59	5.68	5.61	5.48
U.S. (or North America)	2.64	3.50	4.62	4.06	4.17	4.22	4.27	4.23	4.17
Oil (\$/bbl)									
WTI Cushing	28.33	28.18	34.03	26.46	25.30	24.89	27.67	24.59	25.31
Worldwide	22.89	23.51	27.54	23.76	23.18	22.97	24.32	22.82	23.18
Total gas & oil (\$/mcf)	3.16	3.70	4.40	4.02	4.04	4.05	4.23	4.05	4.10
Revenue (\$mm)									
Natural Gas	428	542	709	630	655	663	2,656	650	2,597
Oil	489	552	530	482	475	471	1,959	458	1,887
Other	34	24	18	18	18	18	70	18	70
Total	951	1,117	1,257	1,129	1,148	1,152	4,686	1,125	4,554
Expense									
Fixed	143	129	154	154	154	154	618	154	618
Variable	143	129	154	144	147	147	592	144	581
Other	34	24	18	18	18	18	70	18	70
Ebitda (\$mm)	631	835	931	813	829	833	3,406	810	3,285
Deprec., Deplet., & Amort.	288	292	290	290	290	290	1,160	290	1,160
Other non cash	-	6	5	5	5	5	20	5	20
Ebit	343	537	636	518	534	538	2,226	515	2,105
Interest	49	57	60	60	60	60	240	60	240
Ebt	294	480	576	458	474	478	1,986	455	1,865
Income Tax	103	168	201	160	166	167	695	159	653
Net Income (\$mm)	191	312	374	298	308	310	1,291	296	1,212
Shares (millions)	258	258	258	258	258	258	258	258	258
Per share (\$)	0.74	1.21	1.45	1.15	1.19	1.20	5.00	1.15	4.70
Ebitda Margin	66%	75%	74%	72%	72%	72%	73%	72%	72%

We are grateful to futures traders for an informed consensus on price. At the same time we think that Anadarko and most independent producers use futures too much for fixing prices. Anadarko appears to have given away half of the natural gas upside in the quarter just ended. The company's gas price went up by only \$1.12 when the industry benchmark went up \$2.08. That translates to about 20% of natural gas revenue lost, a costly blunder in our opinion, but not as bad as some other producer debacles in the past.

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Mr. Wulff is not paid by covered companies. Neither Mr. Wulff nor his spouse act contrary to a buy or sell recommendation.

McDep Associates
Independent Stock Idea

May 14, 2003

While producers often sell forward short term, few make long-term commitments to sell at fixed price. As a result it is still a reasonable expectation that most of the increasing value of energy resources will be translated to increasing stock price for producers.

Long Reserve Life Justifies Higher Cash Flow Multiple

In the rising price environment that may be with us for a while in energy resources, there is less urgency to produce as rapidly as possible. If volume is a little disappointing while reserves are still solid, a higher multiple can compensate for lower cash flow in determining value and vice versa.

Because the primary usefulness of reserve estimates for us is in determining cash flow multiple, we take explicit recognition of reserves that are reported as undeveloped. To allow for the necessary development investment we count undeveloped reserves at half their stated volumes when computing a reserve life index (see Table).

Anadarko Petroleum Corporation
Natural Gas and Oil Reserves

	<i>Natural Gas</i>	<i>Oil</i>	<i>Total</i>	
	<i>(bcf)</i>	<i>(mmb)</i>	<i>(bcf)</i>	<i>(mmb)</i>
<i>Reserves (bcf or mmb)</i>				
Proven (P)	7180	1131	13966	2328
Proven Developed (PD)	5294	686	9410	1568
Proven Undeveloped (PUD)	1886	445	4556	759
<i>Production, NTM</i>				
	622	81	1111	185
<i>Reserve Life Index (years)</i>				
R/P P	11.5	13.9	12.6	12.6
R/P PD	8.5	8.4	8.5	8.5
R/P PUD	3.0	5.5	4.1	4.1
R/P PD+.5PUD	10.0	11.2	10.5	10.5

As a starting point we have a simple formula for determining cash flow multiple as a function of reserve life. The longer the reserve life, the higher the cash flow multiple. Because cash flow changes with futures prices, the formula is constantly changing as well. We last optimized our estimate of present value for Anadarko and peers a few weeks ago (see *Meter Reader*, Independent Natural Gas and Oil Producers, April 17, 2003). The impact of weekly change can be traced in the results of regular detailed calculations for three benchmark value stocks (see *Natural Gas Royalty Trusts*, A Weekly Analysis).

Kurt H. Wulff, CFA

Analyses are prepared from original sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Mr. Wulff is not paid by covered companies. Neither Mr. Wulff nor his spouse act contrary to a buy or sell recommendation.