

Rating: Buy  
S&P 500: 1100

## **ChevronTexaco Corporation**

### **Stock Price Lagging Oil Price**

<i>Symbol</i>	CVX	<i>Ebitda Next Twelve Months ending 3/31/05 (\$mm)</i>	26,800
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	9
<i>Price (\$/sh)</i>	98.66	<i>Natural Gas and Oil Production/Ebitda (%)</i>	70
<i>Pricing Date</i>	8/3/04	<i>Adjusted Reserves/Production NTM</i>	10.9
<i>Shares (mm)</i>	1065	<i>EV/Ebitda</i>	4.7
<i>Market Capitalization (\$mm)</i>	105,100	<i>PV/Ebitda</i>	5.8
<i>Debt (\$mm)</i>	21,100	<i>Undeveloped Reserves (%)</i>	30
<i>Enterprise Value (EV) (\$mm)</i>	126,200	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	20.10
<i>Present Value (PV) (\$mm)</i>	154,200	<i>Present Value Proven Reserves(\$/boe)</i>	9.00
<i>Net Present Value (\$/share)</i>	125	<i>Present Value Proven Reserves(\$/mcf)</i>	1.50
<i>Debt/Present Value</i>	0.14	<i>Earnings Next Twelve Months (US\$/sh)</i>	12.67
<i>McDep Ratio - EV/PV</i>	0.82	<i>Price/Earnings Next Twelve Months</i>	8
<i>Dividend Yield (%/year)</i>	3.2	<i>Indicated Annual Dividend (US\$/sh)</i>	3.20

Note: Estimated cash flow and earnings tied to one-year futures prices for oil, natural gas and refining crack.  
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 **ChevronTexaco (CVX)** for undervalued mega cap participation in a positive outlook for crude oil and refined products. In an illustrative present value calculation we suggest that the current stock price reflects a low oil price of \$26. On that basis our estimate of net present value of \$125 a share corresponds to oil at \$33. Should the long-term oil price settle at \$40 for a barrel of Light, Sweet Crude Oil in 2003 dollars as we have hypothesized, the corresponding stock price would be \$152. Relating stock price to oil price necessarily involves simplifications that can capture the dynamics only approximately.

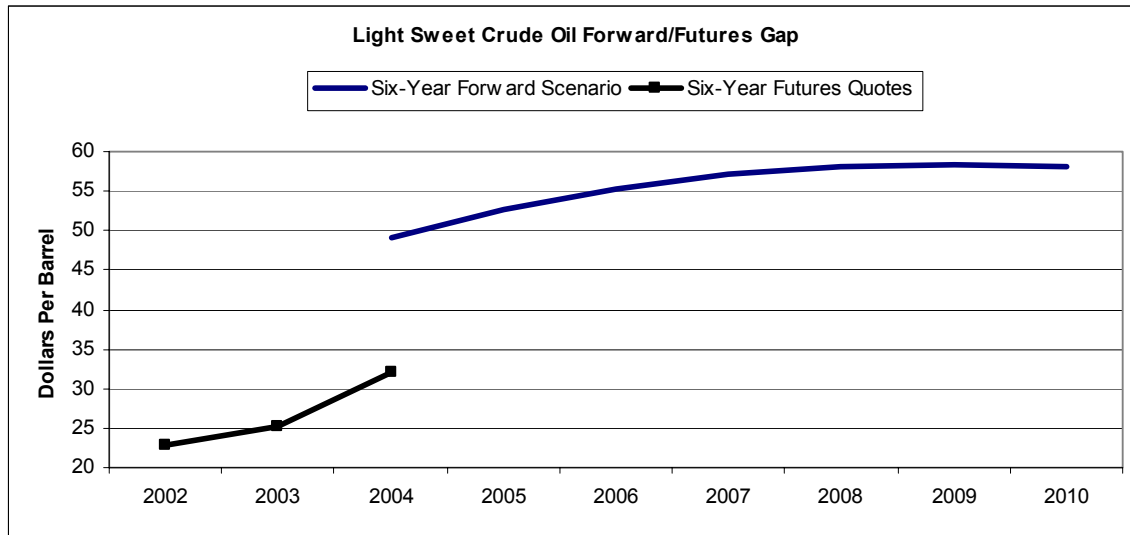
### **Oil Price Moving Sharply Higher**

The value of the company depends in large part on the future price of crude oil. Publicly traded in the commodity markets, futures contracts for delivery over the next six years continue in a steep uptrend. Whether the trend will slow for awhile we cannot know. Our scenario is that a move that began in the low \$20 and is now in the mid \$30 could reach \$50 (see chart).

To construct the scenario we assumed oil would peak in 2010 at \$50 in 2003 dollars. Then we applied 3% per year inflation and calculated six-year averages to build a forward curve.

Economics support the price trends. Oil demand is strong with world economic growth paced by developing countries, especially China. Supply is tight as the Middle East is showing maturity with the workhorse giant fields on the verge of peaking.

**Please see disclosures on the final page.**



Monetary factors favor oil investment as interest rates below inflation drive investors to real assets for protection against currency debasement. The authorities are unlikely to raise interest rates above inflation for the rest of the decade. We can be more confident of that as the official U.S. government determined inflation measure appears understated.

Environmental factors favor higher oil and gas price. Coal is still a quarter of world primary energy supply. Cleaner oil and gas are undervalued as long as we tolerate environmentally disadvantageous coal.

Political factors favor higher oil price in consuming countries and producing countries. In consuming countries, many view the use of military force as an attempt to hold down oil price at what we would term an artificially low level. Thirty years ago some of the same political leaders directed price controls in a failed attempt to hold oil price artificially low.

In producing countries we have seen time and again that oil production goes down when international oil companies are not welcome. After Iran, Iraq and Venezuela, now Saudi Arabia appears vulnerable to political change that may bring about production decline.

There may be a risk of oil stock price decline even if oil price remains firm. That happened in 1974 when economic activity and the stock market declined severely. We think the current parallel occurred in 2002 and is now behind us. Nonetheless the stock market may have begun a new moderate downward phase of its cycle. We liken that to the mid to late 1970s when oil price held and then took off again.

### **One-Year Futures Point to Higher Cash Flow and Profits**

As our next twelve months (NTM) cash flow model moves ahead to the period ending June 30, 2005 expectations also advance mainly because of advancing one-year futures. We relate oil price, natural gas price and refinery margin to the quotes for commodities traded on the New York Mercantile Exchange (see table Next Twelve Months Operating and Financial Estimates).

**Please see disclosures on the final page.**

**ChevronTexaco**  
**Next Twelve Months Operating and Financial Estimates**

	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Next Twelve 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>6/30/05</i>
<b>Volume</b>								
Natural Gas (mmcf)								
U.S. (or North America)	2,061	2,001	1,981	1,961	<b>2,001</b>	1,961	1,942	<b>1,961</b>
Overseas (or Int'l)	2,170	2,098	1,975	2,105	<b>2,086</b>	2,170	2,098	<b>2,086</b>
Total	4,231	4,099	3,956	4,066	<b>4,087</b>	4,131	4,040	<b>4,048</b>
Oil (mmb)	171	172	173	172	<b>688</b>	168	170	<b>683</b>
Oil (mbd)	1,896	1,891	1,882	1,872	<b>1,885</b>	1,872	1,863	<b>1,872</b>
Total gas & oil (mmb)	234	234	234	235	<b>937</b>	230	231	<b>930</b>
<b>Price</b>								
Natural gas (\$/mcf)								
Henry Hub (\$/mmbtu)	5.64	6.10	5.88	6.32	<b>5.99</b>	6.83	6.08	<b>6.28</b>
U.S. (or North America)	5.23	5.59	5.38	5.82	<b>5.50</b>	6.33	5.58	<b>5.78</b>
Overseas (or Int'l)	2.67	2.55	2.85	2.84	<b>2.72</b>	2.74	2.66	<b>2.77</b>
Total	3.92	4.03	4.12	4.28	<b>4.09</b>	4.44	4.07	<b>4.23</b>
Oil (\$/bbl)								
WTI Cushing	35.23	38.34	42.80	42.64	<b>39.75</b>	41.19	40.03	<b>41.67</b>
Worldwide	29.52	32.54	36.33	36.19	<b>33.66</b>	34.96	33.97	<b>35.37</b>
Total gas & oil (\$/bbl)	27.89	30.33	33.31	33.39	<b>31.23</b>	32.72	31.43	<b>32.72</b>
NY Harbor 3-2-1 (\$/bbl)	6.98	11.35	8.83	7.74	<b>8.72</b>	8.07	7.86	<b>8.13</b>
<b>Revenue (\$mm)</b>								
Natural Gas								
U.S. (or North America)	970	1,018	981	1,051	<b>4,019</b>	1,116	987	<b>4,134</b>
Overseas (or Int'l)	521	487	517	549	<b>2,075</b>	535	508	<b>2,110</b>
Total	1,492	1,505	1,498	1,600	<b>6,094</b>	1,651	1,495	<b>6,244</b>
Oil	5,038	5,599	6,288	6,233	<b>23,158</b>	5,890	5,758	<b>24,169</b>
Other	27,037	31,197	31,197	31,197	<b>120,629</b>	31,197	31,197	<b>124,789</b>
Total	33,566	38,301	38,983	39,030	<b>149,881</b>	38,739	38,450	<b>155,203</b>
<b>Expense</b>								
Production	2,629	2,904	3,040	2,950	<b>11,523</b>	2,891	2,834	<b>11,714</b>
Other	25,632	28,825	29,089	29,219	<b>112,765</b>	29,176	29,203	<b>116,687</b>
<b>Ebitda (\$mm)</b>								
Exploration and Production	3,900	4,200	4,746	4,884	<b>17,729</b>	4,650	4,419	<b>18,699</b>
Other	1,405	2,372	2,108	1,978	<b>7,863</b>	2,021	1,995	<b>8,102</b>
Total Ebitda	5,305	6,572	6,854	6,862	<b>25,593</b>	6,671	6,414	<b>26,801</b>
Exploration	84	165	165	165	<b>579</b>	165	165	<b>660</b>
Deprec., Deplet., & Amort.	1,192	1,251	1,251	1,251	<b>4,945</b>	1,251	1,251	<b>5,004</b>
Other non cash								
<b>Ebit</b>	4,029	5,156	5,438	5,446	<b>20,069</b>	5,255	4,998	<b>21,137</b>
Interest	93	93	93	93	<b>372</b>	93	93	<b>372</b>
<b>Ebt</b>	3,936	5,063	5,345	5,353	<b>19,697</b>	5,162	4,905	<b>20,765</b>
Income Tax	1,378	1,772	1,871	1,874	<b>6,894</b>	1,807	1,717	<b>7,268</b>
<b>Net Income (\$mm)</b>								
Exploration and Production	1,985	2,180						
Other	714	1,142						
Unallocated	(141)	(31)						
Total	2,558	3,291	3,474	3,479	<b>12,803</b>	3,355	3,188	<b>13,497</b>
<b>Shares (millions)</b>	1,066	1,065	1,065	1,065	<b>1,065</b>	1,065	1,065	<b>1,065</b>
Per share (\$)	2.40	3.09	3.26	3.27	<b>12.02</b>	3.15	2.99	<b>12.67</b>
Ebitda Margin (E&P)	60%	59%	61%	62%	<b>61%</b>	62%	61%	<b>61%</b>
Tax Rate	35%	35%	35%	35%	<b>35%</b>	35%	35%	<b>35%</b>

Please see disclosures on the final page.

Investors who want calendar year estimates can find 2004 in the table. For 2005 we suggest using the next twelve months as a rough estimate. Estimates can change frequently along with oil markets.

### **Present Value of Oil Reserves \$9.00 a Barrel**

NTM estimates determine the first year of projected cash flow that we discount to present value (see table Present Value of Oil and Gas Reserves). The calculation is set up on the basis of one barrel equivalent of reported proven reserves, 0.7 barrel developed and 0.3 barrel undeveloped. As a result, total present value, the number in the box, is also present value per barrel of proven reserves.

While there are many assumptions that could be discussed the most important may be discount rate, oil price and the quantity of reserves. Price escalation and discount rate interact. In this case we make the simplification of dealing in constant dollars. That assumes price escalation, cost escalation and discount rate are all net of inflation.

On discount rate we presume that earning a 5% real return per year on an unlevered basis is a decent achievement. That compares to the 2% real return per year offered by U.S. Treasury Inflation Protected Securities. For good measure we bump that up to 7%.

While first year oil price is from the futures market we hold it constant at an arbitrary level thereafter. The assumed price listed in the upper right hand corner is the commonly quoted benchmark Light, Sweet Crude. CVX receives an average price less than the benchmark, particularly for overseas natural gas production.

Reserves are undoubtedly understated. The reporting standard presumes a high probability that the stated numbers will actually be achieved. The standard may be suitable for lenders who need high assurance of repayment. A more relevant standard for equity investors would be "expected reserves" at a probability of 50% of being achieved.

The standardized calculation places present value at \$9.00 a barrel for equivalent reserves. When carried further to an estimate of net present value, also known as NPV, it relates to \$125 a share. That was the estimate we made in March when we raised present value of CVX and about 70 stocks. At that time we took an approach that multiplied next twelve months unlevered cash flow by a multiple that depended on adjusted reserve life. Because \$35 was the one-year futures oil price at the time we suggested that our estimates reflected constant oil price at \$35. Now we present a more detailed calculation that justifies \$125 a share at a constant real oil price of \$33 in 2003 dollars which is about \$35 today.

### **Net Present Value Relates to Oil Price**

We illustrate the calculation of NPV in a sensitivity table where each column is headed by a different oil price (see table Net Present Value Calculation). Perhaps the broader significance is that each change of a dollar per barrel may be worth three dollars a share. CVX stock is up \$9 a share since year-end 2001 while six-year oil is up \$16 a barrel.

Kurt H. Wulff, CFA

**Please see disclosures on the final page.**

**ChevronTexaco**  
**Present Value of Oil and Gas Reserves**

Volume Decline (%/yr):	10	Oil Price Post 2005 (2003\$/bbl)	33
Volume Enhancement (%/yr):	8	Real Discount Rate (%/yr):	7.0
Capex/Cash Flow (%):	20	Variable Cost (%):	23

Year	Basic (bbl)	Volume Enhanced (bbl)	Total (bbl)	CVX Price (\$/bbl)	Revenue (\$)	Fixed Cost (\$)	Var. Cost (\$)	Cash Flow (\$)	Cap Ex (\$)	Free CF (\$)	Disc Factor	Present Value (\$)
Total 2005 through 2024; years ending on 6/30												
	0.700	0.300	1.000	29.93	29.92	7.94	6.88	15.09	1.61	13.48	0.67	9.00
2005	0.078	0.000	0.078	32.72	2.56	0.40	0.59	1.57	0.31	1.26	0.97	1.22
2006	0.071	0.006	0.077	29.69	2.28	0.40	0.52	1.36	0.27	1.09	0.90	0.98
2007	0.064	0.012	0.076	29.69	2.24	0.40	0.52	1.33	0.27	1.06	0.84	0.90
2008	0.058	0.017	0.074	29.69	2.20	0.40	0.51	1.30	0.26	1.04	0.79	0.82
2009	0.052	0.021	0.073	29.69	2.16	0.40	0.50	1.27	0.25	1.02	0.74	0.75
2010	0.047	0.025	0.072	29.69	2.13	0.40	0.49	1.24	0.25	0.99	0.69	0.68
2011	0.042	0.028	0.070	29.69	2.09	0.40	0.48	1.21	0.00	1.21	0.64	0.78
2012	0.038	0.025	0.064	29.69	1.89	0.40	0.43	1.06	0.00	1.06	0.60	0.64
2013	0.034	0.023	0.057	29.69	1.70	0.40	0.39	0.91	0.00	0.91	0.56	0.51
2014	0.031	0.021	0.052	29.69	1.54	0.40	0.35	0.79	0.00	0.79	0.53	0.41
2015	0.028	0.019	0.047	29.69	1.39	0.40	0.32	0.67	0.00	0.67	0.49	0.33
2016	0.025	0.017	0.042	29.69	1.25	0.40	0.29	0.57	0.00	0.57	0.46	0.26
2017	0.023	0.015	0.038	29.69	1.13	0.40	0.26	0.47	0.00	0.47	0.43	0.20
2018	0.021	0.014	0.034	29.69	1.02	0.40	0.23	0.39	0.00	0.39	0.40	0.16
2019	0.019	0.012	0.031	29.69	0.92	0.40	0.21	0.31	0.00	0.31	0.37	0.12
2020	0.017	0.011	0.028	29.69	0.83	0.40	0.19	0.24	0.00	0.24	0.35	0.09
2021	0.015	0.010	0.025	29.69	0.75	0.40	0.17	0.18	0.00	0.18	0.33	0.06
2022	0.014	0.009	0.023	29.69	0.68	0.40	0.16	0.12	0.00	0.12	0.31	0.04
2023	0.012	0.008	0.021	29.69	0.61	0.40	0.14	0.07	0.00	0.07	0.29	0.02
2024	0.011	0.007	0.019	29.69	0.55	0.40	0.13	0.03	0.00	0.03	0.27	0.01

**ChevronTexaco**  
**Net Present Value Calculation**

Constant Oil Price (2003 dollars) (\$/bbl):	26	33	40	50
Present Value per Barrel (\$):	6.70	9.00	11.40	14.80
Oil and Gas reserves (million barrels equivalent):	11,964	11,964	11,964	11,964
Present Value of Oil and Gas Reserves (\$mm):	80,200	107,700	136,400	177,100
Present Value of Downstream Businesses (\$mm):	46,300	46,300	46,300	46,300
Total	126,500	154,000	182,700	223,400
Debt (\$mm):	21,100	21,100	21,100	21,100
Present Value of Equity (\$mm):	105,400	132,900	161,600	202,300
Shares (mm):	1,065	1,065	1,065	1,065
Net Present Value (\$/sh):	99	125	152	190

**Please see disclosures on the final page.**

**Research Methodology/Ratings Description:** McDep Associates is an independent research originator focused on oil and gas stocks exclusively. The firm applies the thirty 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 negative total return less than 7% per year including the effects of inflation.

**Disclaimer and Disclosure:** This analysis was prepared by Kurt Wulff doing business as McDep Associates. 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 does no investment banking business. McDep is not paid by covered companies including revenue from advertising, trading, consulting, subscriptions or research service. McDep shall not own more than 1% of outstanding stock in a covered company. No one at McDep is on the Board of Directors at a covered company nor is anyone at a covered company on the Board of Directors of McDep.

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.