Rating: Buy
S&P 500: 1089

Petro-Canada
Fountain of Cash

Symbol	PCZ	*Ebitda Next Twelve Months ending 3/31/05 (US$mm)*	4,300
Rating	Buy	*North American Natural Gas/Ebitda (%)*	20
Price (US$/sh)	43.80	*Natural Gas and Oil Production/Ebitda (%)*	84
Pricing Date	5/20/04	*Adjusted Reserves/Production NTM*	6.5
Shares (mm)	266	*EV/Ebitda*	3.2
Market Capitalization (US$mm)	11,700	*PV/Ebitda*	4.7
Debt (US$mm)	2,100	*Undeveloped Reserves (%)*	11
Enterprise Value (EV) (US$mm)	13,700	*Natural Gas and Oil Ebitda (US$/boe)*	28.50
Present Value (PV) (US$mm)	20,200	*Present Value Proven Reserves(US$/boe)*	19.52
Net Present Value (US$/share)	68	*Present Value Proven Reserves(US$/mcfe)*	3.25
Debt/Present Value	0.10	*Earnings Next Twelve Months (US$/sh)*	7.36
McDep Ratio - EV/PV	0.68	*Price/Earnings Next Twelve Months*	6
Dividend Yield (%/year)	1.0	*Indicated Annual Dividend (US$/sh)*	0.43

Note: Estimated cash flow and earnings tied to one-year futures prices for oil, natural gas and refinery crack.
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.

Summary and Recommendation

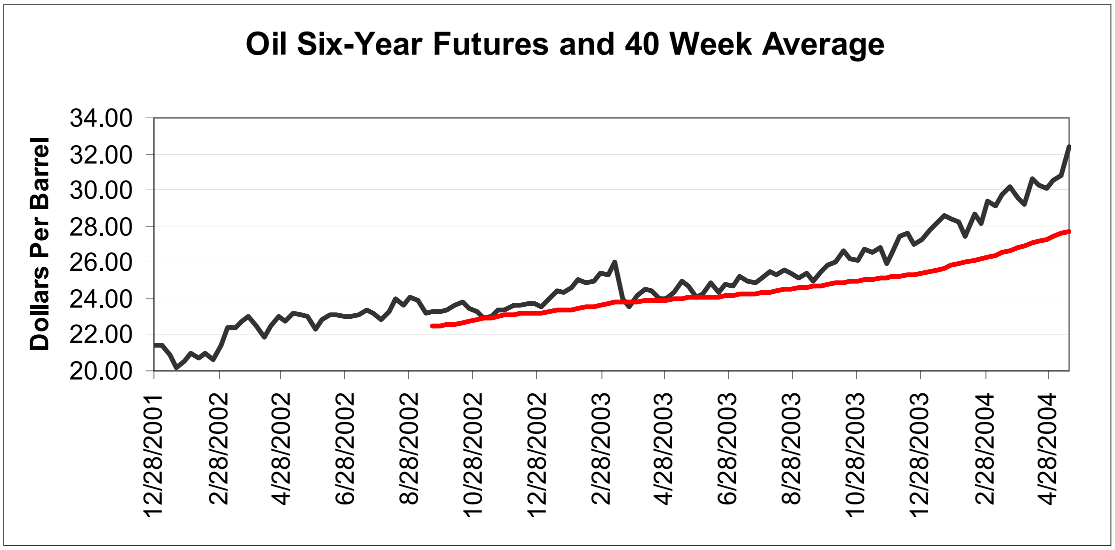
We initiate a "Buy" rating on the common shares of **Petro-Canada (PCZ)** for the highest cash flow generation among Canada's integrated oil companies. Reinvesting that cash flow is the greatest challenge to chief executive officer Ron Brenneman who has done well for shareholders since arriving from Imperial. The company's strengths are in North American natural gas, Syncrude, East Coast oil and international oil. An overall short reserve life limits the multiple investors can pay for cash flow. Taking that into account along with Petro-Canada's high profitability per unit we see possible appreciation in stock price of some 55% to reach our estimate of net present value.

Oil Looks Up by the Charts, Fundamentals, Inflation and Security

Six-year futures describe the commodity price trends most relevant to estimating resource value. The longer time horizon better matches the period during which more of current resources will actually be produced. The longer term measure also smoothes the frantic near-month fluctuations and has the potential to keep climbing even if near-month quotes drop back temporarily.

The plots of weekly results since the beginning of 2002 trace a trend of six-year oil price rising 16% a year (see chart). We measure momentum with the 40-week moving average.
The charts look good as long as the current six-year quote remains above the trailing average.

Fundamental factors 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.



Monetary factors also favor oil investment as interest rates below inflation drive investors to real assets for protection against currency debasement. Compared to Treasury Inflation Protected Securities that we also favor, oil price is likely to rise more than the official government determined inflation measure.

There appears to be little of the cost of maintaining global security reflected in the price of oil. As a result oil from safe areas like Canada has greater value than might appear in today's price.

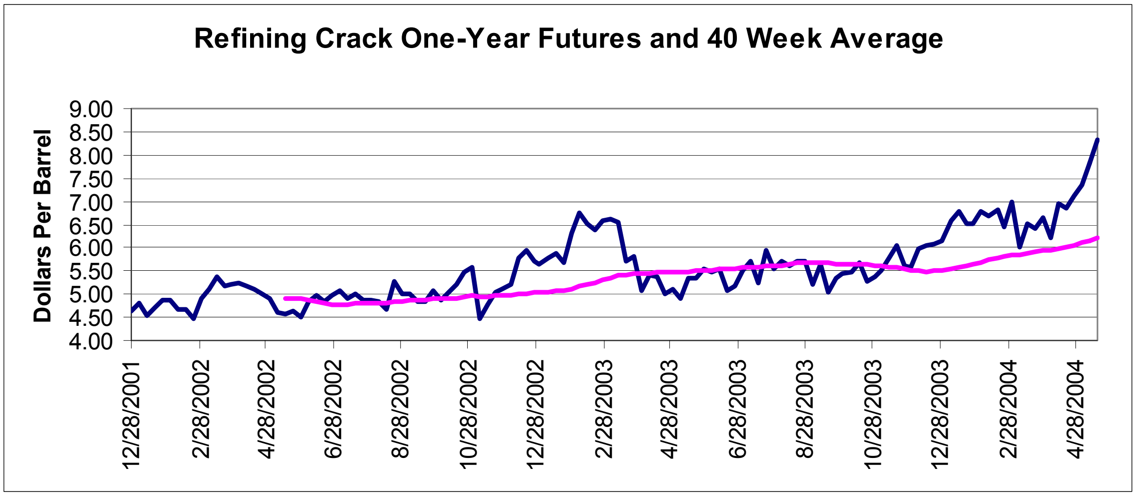
At some point oil price could be too strong and economic activity would be adversely affected. Six times in the past thirty years the annual gain in monthly price exceeded 70% briefly. June futures near $40 a barrel for Light, Sweet Crude Oil would have to exceed $52 a barrel to trigger a 70% warning.

Downstream Trends Also Strong

Industry people like to refer to the oil producing business as upstream and the oil refining/marketing business as downstream. Strong upstream business prospects captured in the rising trend of six-year futures are complemented by improving downstream prospects captured in the trend of one-year refining crack futures (see chart).

Compared to the two previous years, there has been no sign yet of a temporary peak in the trend. Perhaps there will be some falloff this year as in the past, but it would occur from a higher level.

The crack spread we measure is the price of two/thirds barrel of gasoline plus one/third barrel of heating oil minus a barrel of crude oil. While there are innumerable varieties of crude oil and products quoted around the world there is only one source of transparent, public quotes of futures prices for the next year, the New York Mercantile Exchange. As a result we use the Nymex quotes as an indicator of future downstream profitability globally, recognizing that markets are linked meaningfully, if not perfectly. Finally, the crack spread should be seasonally neutral because it always includes twelve months.



Volume, Price and Costs Translate to Attractive Cash Flow

Our process of estimating company-specific present value begins with an estimate of next twelve months cash flow. Current projections lead to a healthy level of unlevered cash flow, also known as Ebitda, short for earnings before interest, tax, depreciation and amortization (see table). We choose the next twelve months ending March 31, 2005 as the relevant time period.

For the next twelve months we project constant natural gas and oil volume at the first quarter 2004 level. That is sufficient for our valuation calculation. Management provides rich detail in conference calls, presentations and copious regulatory disclosures to put more color on a projection of growth for the rest of the decade.

We take the futures market at face value in projecting price for the next twelve months. Henry Hub quotes guide our projection of natural gas revenue. Light Sweet Crude quotes guide our projections of oil revenue. The refinery crack futures guide our projections of downstream cash flow. Because futures are constantly changing, our projection is adjusted accordingly. As a result, the specific amounts we project today may not be the amounts realized when the company next reports.

Assess Present Value Multiple Depending on Reserve Life

The important variables in the valuation of future production are captured in base year cash flow and a multiple of that cash flow that depends on reserve life. Indeed investors do differentiate on that basis as reflected in a high correlation of unlevered cash flow multiple with adjusted reserve life. We convert the market relationship to a formula that produces an anticipatory value with somewhat more sensitivity to reserve life.

Petro-Canada
Next Twelve Months Operating and Financial Estimates
(Canadian Dollars)

	Q1 *3/31/04*	*Q2E* *6/30/03*	*Q3E* *9/30/04*	*Q4E* *12/31/04*	***Year*** ***2004E***	*Q1E* *3/31/05*	***Next Twelve Months*** ***3/31/05***
Volume							
Natural Gas (mmcfd)							
U.S. (or North America)	508	508	508	508	**508**	508	**508**
Overseas	174	174	174	174	**174**	174	**174**
Total	682	682	682	682	**682**	682	**682**
Oil (mmb)	23.4	23.7	23.9	23.9	**94.9**	23.4	**94.9**
Oil (mbd)	260	260	260	260	**260**	260	**260**
Total gas & oil (mmb)	31.0	31.4	31.7	31.7	**125.8**	31.0	**125.8**
Total gas & oil (mbd)	345	345	345	345	**345**	345	**345**
Price							
Natural gas ($/mcf)							
Henry Hub ($/mmbtu)	5.64	6.14	6.52	6.69	**6.25**	6.88	**6.55**
Currency (US$/C$)	0.76	0.72	0.72	0.72	**0.73**	0.72	**0.72**
Henry Hub (C$/mmbtu)	7.43	8.57	9.11	9.34	**8.60**	9.61	**9.16**
U.S. (or North America)	6.46	7.45	7.92	8.12	**7.49**	8.35	**7.96**
Overseas	3.62	4.07	4.20	4.01	**3.98**	3.83	**4.03**
Total	5.74	6.59	6.97	7.07	**6.60**	7.20	**6.96**
Oil ($/bbl)							
WTI Cushing	35.23	39.60	40.90	39.00	**38.68**	37.26	**39.19**
WTI Cushing (C$/bbl)	46.41	55.34	57.15	54.49	**53.35**	52.07	**54.76**
Worldwide	41.17	49.09	50.69	48.33	**47.35**	46.19	**48.59**
Total gas & oil ($/bbl)	40.58	48.01	49.91	48.43	**46.76**	47.15	**48.38**
NY Harbor 3-2-1 ($/bbl)	6.98	11.95	9.90	7.07	**8.98**	7.01	**8.98**
Revenue ($mm)							
Natural Gas							
U.S. (or North America)	295	345	370	379	**1,389**	382	**1,476**
Overseas	57	64	67	64	**252**	60	**256**
Total	352	409	437	444	**1,642**	442	**1,732**
Oil	963	1,161	1,213	1,156	**4,494**	1,081	**4,611**
Downstream	2,134	2,134	2,134	2,134	**8,536**	2,134	**8,536**
Other	24		-	-	**24**	-	**-**
Total	3,473	3,704	3,784	3,734	**14,695**	3,657	**14,879**
Expense							
Upstream	302	331	339	334	**1,306**	326	**1,331**
Downstream	1,933	1,862	1,885	1,921	**7,600**	1,922	**7,589**
Other	24				**24**		**-**
Total	2,258	2,193	2,224	2,255	**8,930**	2,248	**8,919**
Ebitda ($mm)							
Upstream	1,014	1,239	1,311	1,266	**4,829**	1,196	**5,012**
Downstream	201	272	249	213	**936**	212	**947**
Total	1,215	1,512	1,560	1,479	**5,765**	1,409	**5,959**
Exploration	45	45	45	45	**180**	45	**180**
Deprec., Deplet., & Amort.							
Upstream	288	288	288	288	**1,152**	288	**1,152**
Downstream	67	67	67	67	**268**	67	**268**
Total	355	355	355	355	**1,420**	355	**1,420**
Ebit	815	1,112	1,160	1,079	**4,165**	1,009	**4,359**
Interest	37	37	37	37	**148**	37	**148**
Ebt	778	1,075	1,123	1,042	**4,017**	972	**4,211**
Income Tax	272	376	393	365	**1,406**	340	**1,474**
Net Income ($mm)							
Upstream	462						
Downstream	87						
Other	(44)						
Total	505	699	730	677	**2,611**	632	**2,737**
Shares (millions)	266	266	266	266	**266**	266	**266**
Per share ($)	1.90	2.63	2.74	2.55	**9.82**	2.38	**10.29**
Ebitda Margin (E&P)	81%	82%	83%	82%	**82%**	82%	**82%**
Tax Rate	35%	35%	35%	35%	**35%**	35%	**35%**

The adjusted reserve life index is the sum of developed and half undeveloped reserves divided by next twelve months production. When we last did an industry-wide upward revaluation on March 23, we estimated cash flow multiple equal to 2.5 plus 0.5 times reserve life. That approximates present value assuming constant commodity price near the one-year quotes at that time, about $35 a barrel for crude oil. Higher commodity prices since then imply higher cash flow and lower multiple by about 10%. Estimated present value provides a measure of appreciation potential should the market move toward that level as we expect.

Management Aims to Lengthen Reserve Life

At 64% of next twelve months cash flow, oil production accounts for nearly as high a proportion of value. The oil life index is a short 5.4 years. That means a lot of current cash generation relative to investment. Much of it is a payoff for the patient development of East Coast oil in part from the giant Hibernia platform. Much of it also results from a well-timed, opportunistic purchase of the producing properties that once belonged to the German company, Veba.

Petro-Canada owns 12% of the Syncrude Oil Sands plant that has a practically indefinite life. We arbitrarily limit the life of Syncrude reserves to 20 times in our calculation of present value thereby implying a multiple of about 11 times for that portion of the company’s cash flow.

Searching for more long-life properties, Petro-Canada is optimistic about its heavy oil project that it intends to develop in stages. The company had more ambitious plans for oil sands that were postponed as other operators incurred cost overruns.

Frontier Potential in North American Natural Gas

Natural gas accounts for 20% of our cash flow estimate. Reserve life is longer at an adjusted index of ten years. Some of that gas may be consumed in oil production. What is not counted yet are reserves that could be proven with the completion of a pipeline to the Arctic. The prospects of actual construction seem high, but it may be a few more years to be sure.

The People’s Oil Company

A former colleague of ours was instrumental in founding Petro-Canada as a government-owned oil company. The stock fell by a half after its initial public offering more than a decade ago to a particularly low McDep Ratio. From that low point, Petro-Canada gradually became a success as a capitalist enterprise. With the arrival of Mr. Brenneman in recent years the company appears to have completed a transformation.

Kurt H. Wulff, CFA

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 more than fully 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.

Standard Disclaimer: 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.