

Rating: Buy
S&P 500: 1135

Lukoil Oil Company SEC Standard Reduces Reserves

<i>Symbol</i>	(LKOH) LUKOY	<i>Ebitda Next Twelve Months ending 9/30/05 (US\$m)</i>	8,600
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	128.25	<i>Natural Gas and Oil Production/Ebitda (%)</i>	58
<i>Pricing Date</i>	10/4/04	<i>Adjusted Reserves/Production NTM</i>	12.2
<i>Shares (mm)</i>	209	<i>EV/Ebitda</i>	3.4
<i>Market Capitalization (US\$m)</i>	26,700	<i>PV/Ebitda</i>	5.3
<i>Debt (US\$m)</i>	2,200	<i>Undeveloped Reserves (%)</i>	40
<i>Enterprise Value (EV) (US\$m)</i>	29,000	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	7.86
<i>Present Value (PV) (US\$m)</i>	45,600	<i>Present Value Proven Reserves(US\$/boe)</i>	2.66
<i>Net Present Value (US\$/share)</i>	208	<i>Present Value Proven Reserves(US\$/mcf)</i>	0.44
<i>Debt/Present Value</i>	0.05	<i>Earnings Next Twelve Months (US\$/sh)</i>	21.72
<i>McDep Ratio - EV/PV</i>	0.64	<i>Price/Earnings Next Twelve Months</i>	6
<i>Dividend Yield (%/year)</i>	2.6	<i>Indicated Annual Dividend (US\$/sh)</i>	3.29

Note: Estimated cash flow and earnings tied to one-year futures prices for oil and refined products.

Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.

Summary and Recommendation

The resource potential of buy-recommended **Lukoil** became better defined when partner **ConocoPhillips (COP)** stated that it would adjust its share of the Russian company's stated reserves downward by as much as two-thirds to conform to the U.S. Securities and Exchange Commission standard. Our judgmental present value of \$208 a share remains justified, in our opinion, by a revised calculation that uses reserves within the range suggested by COP. As a result we no longer have a penalty for political risk that previously covered valuation questions. New estimates also take account of latest disclosures for the second quarter of 2004 that reported less cash flow from production than we had projected. Just as our quantitative case appears less powerful, the probability of realizing our present value seems greater with the COP connection.

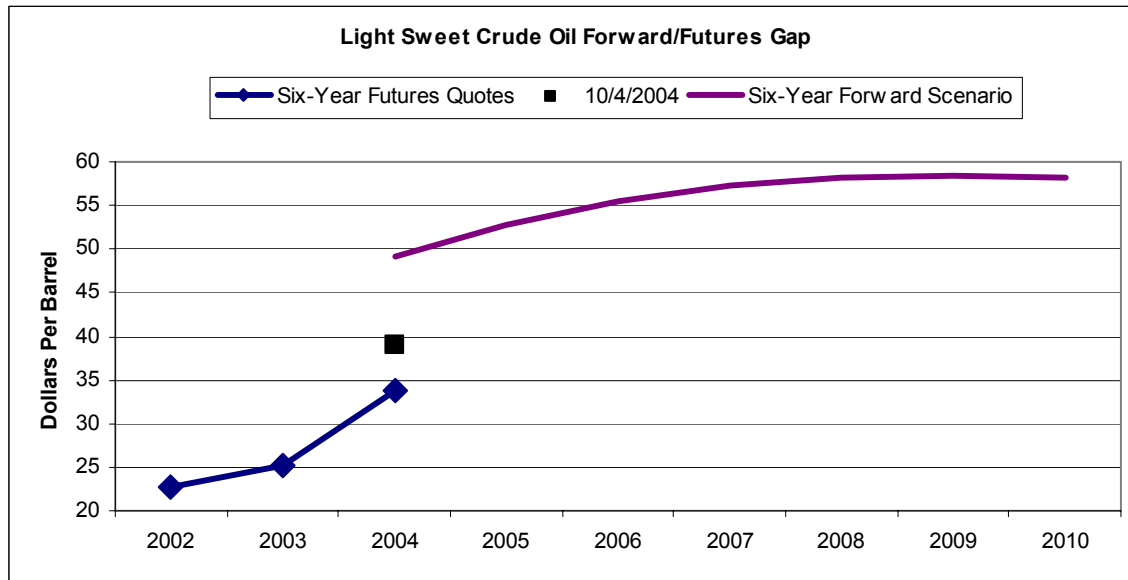
Moderate Oil Price Scenario

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 \$20s and is now in the upper \$30s could reach \$50 (see chart [Light Sweet Crude Oil Forward/Futures Gap](#)).

To construct the scenario we assumed oil would peak in 2010 at \$50 in constant dollars. That is more moderate than the peak in early 1981 at more than \$80 in constant 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 growth is limited as spare capacity has virtually disappeared. The largest producing fields in the Middle East are now mature. It will take time, large amounts of capital and a secure political climate to boost producing rates.

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Monetary factors favor oil investment as interest rates below inflation drive investors to real assets for protection against the dollar losing value. If similar past periods are any guide, the authorities may not raise interest rates above inflation for the rest of the decade.

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. Consuming governments often resort to artificial forces to hold down oil price that can appear to work temporarily.

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.

Cash Flow and Profits Depend on Access to International Markets

Lukoil's growing production volumes generate a projected cash flow margin of 19% that is just one-third of that for international peers (see table Next Twelve Months Operations). The most profitable production may be that which is accepted for transportation to international markets by the government controlled export pipelines. Rail transport is a high cost alternative for limited export volumes. Where Lukoil refines its own crude oil it can get the equivalent of an international price in some of its gasoline sales while some refined products are sold at prices limited by government regulation. Crude oil sold domestically receives a depressed price.

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Lukoil Oil Company
Next Twelve Months Operations

	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</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>9/30/05</i>	<i>9/30/05</i>
Volume									
Oil (mmb)	154	158	160	160	632	156	158	160	635
Oil (mbd)	1,706	1,739	1,739	1,739	1,731	1,739	1,739	1,739	1,739
Price									
Oil (\$/bbl)									
WTI Cushing	35.23	38.34	43.89	49.85	41.83	48.31	46.39	44.63	47.29
Lukoil export	28.05	32.50	37.21	42.26	35.08	40.95	39.32	37.83	40.09
NY Harbor 3-2-1 (\$/bbl)	6.98	12.23	7.83	6.91	8.49	7.64	7.75	7.75	7.51
Revenue (\$mm)									
Oil	4,307	5,142	5,952	6,760	22,160	6,408	6,222	6,051	25,441
Other	2,275	2,885	2,885	2,885	10,930	2,885	2,885	2,885	11,539
Total	6,582	8,027	8,837	9,644	33,090	9,293	9,106	8,936	36,980
Expense									
Fixed	1,871	2,286	2,286	2,286	8,728	2,286	2,286	2,286	9,142
Variable	1,871	2,286	2,645	3,004	9,807	2,848	2,765	2,690	11,308
Other	1,391	1,777	1,976	2,029	7,174	1,984	1,978	1,978	7,969
Ebitda (\$mm)									
Exploration and Production	564	571	1,021	1,469	3,625	1,274	1,171	1,076	4,990
Other	884	1,108	909	855	3,756	900	907	907	3,570
Total Ebitda	1,448	1,679	1,929	2,325	7,381	2,175	2,078	1,983	8,560
Exploration	30	57	57	57	201	57	57	57	228
Deprec., Deplet., & Amort.	248	266	266	266	1,046	266	266	266	1,064
Ebit	1,170	1,356	1,606	2,002	6,134	1,852	1,755	1,660	7,268
Interest	68	75	75	75	293	75	75	75	300
Ebt	1,102	1,281	1,531	1,927	5,841	1,777	1,680	1,585	6,968
Income Tax	276	397	536	674	1,883	622	588	555	2,439
Net Income (\$mm)									
Exploration and Production	286	259	522	785	1,853	671	610	555	2,621
Other	533	618	465	457	2,073	474	473	467	1,872
Unallocated	8	7	8	10	33	9	9	8	36
Total	827	884	995	1,252	3,959	1,155	1,092	1,030	4,529
Shares (millions)	209	209	209	209	209	209	209	209	209
Per share (\$)	3.96	4.24	4.77	6.01	18.98	5.54	5.24	4.94	21.72
Ebitda Margin	13%	11%	17%	22%	16%	20%	19%	18%	20%
Tax Rate	25%	31%	35%	35%	32%	35%	35%	35%	35%

Present Value at Real Price and Real Return

Next Twelve Months (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 a barrel of proven reserves, 0.6 developed and 0.4 undeveloped.

While there are many assumptions that could be discussed, discount rate and oil price are especially important. Price escalation and discount rate interact. We make the simplification of dealing in constant dollars. That assumes price escalation, cost escalation and discount rate are all net of inflation.

For discount rate we use a 7% real return per year on an unlevered basis. That means a buyer who pays present value would earn 7% per year above inflation if all the projections were to materialize as stated.

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Lukoil Oil Company
Present Value of Oil and Gas Reserves

Volume Decline (%/yr):	8	Nymex Oil Price Post 2005 (\$/bbl)	35
Volume Enhancement (%/yr):	10	Price/Nymex Post 2005 (%):	86
Variable Cost (%):	40	Real Discount Rate (%/yr):	7.0
Capex/Cash Flow (%):	15		

Year	Basic (bbl)	Volume Enhanced (bbl)	Total (bbl)	Price (\$/bbl)	Revenue (\$)	Fixed Cost (\$)	Var. Cost (\$)	Cash Flow (\$)	Cap Ex (\$)	Free CF (\$)	Disc Factor	Present Value (\$)
Total 2005 through 2034; years ending on 9/30												
	0.599	0.401	1.000	30.68	30.69	14.88	12.28	4.50	0.33	4.17	0.64	2.65
2005	0.058	0.000	0.058	40.09	2.33	0.94	0.93	0.46	0.07	0.39	0.97	0.37
2006	0.054	0.006	0.059	30.10	1.78	0.91	0.71	0.16	0.02	0.14	0.90	0.12
2007	0.049	0.011	0.061	30.10	1.82	0.88	0.73	0.22	0.03	0.18	0.84	0.16
2008	0.046	0.016	0.062	30.10	1.86	0.85	0.75	0.27	0.04	0.23	0.79	0.18
2009	0.042	0.021	0.063	30.10	1.91	0.82	0.76	0.32	0.05	0.27	0.74	0.20
2010	0.039	0.026	0.065	30.10	1.95	0.79	0.78	0.37	0.06	0.32	0.69	0.22
2011	0.036	0.030	0.066	30.10	1.99	0.77	0.80	0.43	0.06	0.36	0.64	0.23
2012	0.033	0.035	0.068	30.10	2.03	0.74	0.81	0.48	0.00	0.48	0.60	0.29
2013	0.030	0.032	0.062	30.10	1.88	0.72	0.75	0.41	0.00	0.41	0.56	0.23
2014	0.028	0.029	0.058	30.10	1.73	0.69	0.69	0.34	0.00	0.34	0.53	0.18
2015	0.026	0.027	0.053	30.10	1.60	0.67	0.64	0.29	0.00	0.29	0.49	0.14
2016	0.024	0.025	0.049	30.10	1.47	0.65	0.59	0.23	0.00	0.23	0.46	0.11
2017	0.022	0.023	0.045	30.10	1.36	0.63	0.54	0.19	0.00	0.19	0.43	0.08
2018	0.020	0.021	0.042	30.10	1.25	0.61	0.50	0.14	0.00	0.14	0.40	0.06
2019	0.019	0.020	0.038	30.10	1.16	0.59	0.46	0.11	0.00	0.11	0.37	0.04
2020	0.017	0.018	0.035	30.10	1.07	0.57	0.43	0.07	0.00	0.07	0.35	0.03
2021	0.016	0.017	0.033	30.10	0.98	0.55	0.39	0.04	0.00	0.04	0.33	0.01
2022	0.015	0.015	0.030	30.10	0.91	0.53	0.36	0.01	0.00	0.01	0.31	0.00
2023	0.014	0.014	0.028	30.10	0.84	0.51	0.33	-0.01	0.00	-0.01	0.29	0.00
2024	0.013	0.013	0.026	30.10	0.77	0.50	0.31	-0.03	0.00	-0.03	0.27	-0.01

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. A price of \$35 a barrel leads to present value of future cash flow from a barrel of reserves equal to \$2.65 (see box in right hand column). The estimate is particularly low mostly because limited access to export markets keeps much of Lukoil's production from realizing the price we project.

The producing business is not as profitable as it is likely to be. We gradually scale back fixed cost as a way of recognizing expected improvements in future performance.

Low Present Value per Barrel Leads to High Present Value per Share

We scale back the company's reported reserves of 20 billion barrels according to the Society of Petroleum Engineers standard to 10 billion barrels as an approximation of the SEC standard. Nonetheless a low unit present value translates into billions of dollars and high net present value per share. We illustrate the calculation of Net Present Value (NPV) in a sensitivity table where each column is headed by a different oil price (see table Net Present Value Calculation). Oil price corresponds to present value per barrel which then leads step by step to the final result. The

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price of \$35 a barrel corresponds to our standardized present value of \$208 a share. Turn the comparison around and it is evident that current stock price of \$128 corresponds to a constant real oil price of \$29 a barrel.

Lukoil Oil Company
Net Present Value Calculation

Constant Oil Price (\$/bbl):	29	35	40	50
Present Value per Barrel (\$):	0.99	2.65	3.90	6.50
Oil and Gas Reserves (million barrels equivalent):	10,000	10,000	10,000	10,000
Present Value of Oil and Gas Reserves (\$mm):	9,900	26,500	39,000	65,000
Political Risk (\$mm):				
Present Value of Other Businesses (\$mm):	19,000	19,000	19,000	19,000
Total Present Value (\$mm):	28,900	45,500	58,000	84,000
Debt (\$mm):	2,200	2,200	2,200	2,200
Present Value of Equity (\$mm):	26,700	43,300	55,800	81,800
Shares (mm):	209	209	209	209
Net Present Value (\$/sh):	128	208	268	392

Russian Companies Need to Adopt SEC Standard

Reducing reported reserves of Russian companies to the SEC standard would improve the credibility of those companies in the international stock market. Apparently much of the difference in Lukoil's case is attributed to license extension among other factors. That implies that Lukoil's legal right to produce some oil may run out before the reserves run out. Investors in Lukoil can now take some comfort that COP conducted some "due diligence" investigation.

We readily agree that the SEC standard understates likely future production. Yet conservative standards offer an essential minimum degree of assurance that usually forms the basis of our quantitative valuation. We can then consider less certain potential separately.

Strategic Appeal and Political Risk

Investment in Russia requires patience with the pace of evolution to a fully democratic and thriving capitalist society. Leading international oil companies see the opportunities and are proceeding at a controlled pace. Investors in ConocoPhillips are now participating in Russian production as the large cap producer/refiner invests an amount to give it 10% of Lukoil now and possibly 20% in the future. Investors in Lukoil can participate more directly on practically the same basis as through COP. We like the more direct investment approach and as the major oil companies do, we can control our risk by not having too much concentration in a single political jurisdiction.

Kurt H. Wulff, CFA

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