McDep Associates
Independent Stock Idea
September 9, 2003

Rating: Buy
S&P 500: 1032

CNOOC Limited
Raise Net Present Value to $40 a Share

Symbol	*Price ($/sh) 8-Sep 2003*	*Floating Shares (mm)*	*Market Cap ($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*
CEO	36.23	78	2,830	40.00	-	0.91	4.8	6.2	12.9	4.4	6.9

McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses		
EV = Enterprise Value = Market Cap and Debt:	$mm	2,800
Ebitda = Earnings before interest, tax, depreciation and amortization:	$mm	450
NTM = Next Twelve Months Ended December 31, 2004; P/E = Stock Price to Earnings		
PV = Present Value of energy businesses:	$mm	3,100
Shares, Market Cap, EV, Ebitda and PV for 19% of company publicly traded. 81% government owned.		

Summary and Recommendation

After recent appreciation, the stock of buy-recommended CNOOC Limited has scope for further gains to $40 a share or more, in our opinion. That price would value the company's cash flow at a low multiple of 6.9 times that is slightly higher than we assess as the median for present value of a dozen large independent natural gas and oil producers that include U.S. and non-U.S. entities. The new assessment removes much of the discount for political risk that investors no longer seem to require. An investment in the stock is (1) a preferred land owner's participation in practically all the oil and gas producing and prospective acreage offshore China, (2) concentration on growing high margin natural gas and oil production offshore China and (3) representation in producing profits of projects to deliver liquefied natural gas to China. Business risk is partly shifted to other companies and financial risk is low as there is no net debt on the company's balance sheet. Finally further stock price gains may not be immediate as one might expect some normal consolidation of the price trend and/or perhaps the sale of another *tranche* of government owned shares. A high dividend yield, 4.4%, is unusual among independent producers

An Independent Producer with Special Advantages

Last month at a conference in Denver we heard the management of **Ultra Petroleum (UPL)** speak enthusiastically about the developing potential on their exploratory blocks offshore China operated by Kerr-McGee. One of the attendees at the session had the impertinence to say that investors could get that participation in CNOOC and questioned why therefore should anyone be interested in Ultra for that reason. Perhaps we should discount some of the American company's enthusiasm. Nonetheless if the prospects are still attractive for the foreign company they must be really attractive for the local company that owns the basic land rights. The foreign company takes the exploration risk while CNOOC has the option to participate on the same basis if the project is successful. In words popularized recently, CNOOC can legally engage in "betting on a horse race after the horses cross the finish line". Normally in other countries, governments or national oil companies that are not publicly held usually retain the CNOOC position.

Valuation Models Suggest Further Potential

Our models essentially project cash flow at a continuation of current volumes and take account of energy prices in the futures market. Using current volumes should be conservative for a company that promises growth. Yet we note a little complication that management felt necessary to explain. Reported volumes actually declined slightly in the first two quarters of 2003 compared to the last two quarters of 2002 (see quarterly table). Apparently some of the volumes are associated with cost recovery in new fields and thus depend on oil price.

Cash flow, or Ebitda, is up to a new half-year high by a small margin (see semi-annual table). That measure erodes in future periods because we use the futures market for our price forecasts. Regardless of the actual price outcome, our comparisons have some consistency because we use the same futures prices for all companies. There is a slight inconsistency because we use the lower futures prices for the next twelve months ended 12/31/04 for CNOOC compared to 9/30/04 for other companies.

Reserve life index is the most obvious quantitative measure that determines cash flow multiple. We see some 70% of CNOOC's reserves are oil that is producing on a 9.3-year life index (see reserves table). That is not enough for a premium multiple, but prospects for adding new reserves appear favorable. The remaining reserves in natural gas have a longer life pointing to future growth and a higher multiple of current cash flow. CNOOC's overall index of 10.7 years compares to a median 10.0 for a dozen peers.

On balance, a superior cost and risk position combined with an above average reported reserve position justifies a better cash flow multiple. We assess the present value of CNOOC's reserves at a multiple slightly above that for peer companies.

Present value of $40 a share leaves some quantitative upside in CNOOC stock. Acknowledging the limitations of any analysis, we would still hold the stock possibly up to $48 a share where the McDep Ratio would be 1.20. Any higher price today would have to be justified by new considerations, which can unfold at any time. If we thought that natural gas and oil were overpriced in the futures market we might want to see lower

McDep Ratios for new purchases. On the contrary we look for higher commodity prices over the next several years and thus feel that a McDep Ratio of 0.91 for a quality company points to an attractive stock.

Buy Half Position in McDep Energy Portfolio

Our remaining mechanism for controlling the risk of an investment in CNOOC is to limit a new purchase to half a normal portfolio position weighted on an unlevered basis. Investors who now have a larger position as a result of appreciation might limit their holding to a full normal position. Since CNOOC has no net debt, it can represent a larger equity market value in a portfolio and still imply less financial risk that than that of a comparable stock with high debt.

Kurt H. Wulff, CFA

CNOOC Limited
Next Twelve Months Operations

	Q3 9/30/02	*Q4 12/31/02*	***Year 2002***	*Q1 3/31/03*	*Q2 6/30/03*	*Q3E 9/30/03*	*Q4E 12/31/03*	***Year 2003E***	***Next Twelve** Months 12/31/04*
Volume									
Natural gas (bcf)	27	30	**100**	22	26	26	26	**100**	**104**
Natural Gas (mmcfd)	291	325	**273**	242	284	284	284	**273**	**284**
Days	92	92	**365**	90	91	92	92	**365**	**365**
Oil (mmb)	31	30	**109**	28	28	28	28	**112**	**111**
Oil (mbd)	333	329	**299**	309	305	305	305	**306**	**305**
Total gas & oil (bcf)	211	212	**755**	189	193	195	195	**771**	**772**
Total gas & oil (mbd))	382	383	**345**	349	353	353	353	**352**	**353**
Price									
Natural gas ($/mcf)									
Henry Hub ($/mmbtu)	3.21	4.30	**3.36**	6.38	5.63	4.87	4.96	**5.46**	**4.95**
Company	3.19	2.67	**2.98**	2.99	2.88	2.88	2.88	**2.90**	**2.88**
Oil ($/bbl)									
WTI Cushing	28.33	28.18	**26.10**	34.03	29.07	30.59	29.36	**30.76**	**26.99**
Company	25.21	27.54	**24.35**	30.33	26.79	28.19	27.05	**28.09**	**24.86**
Total gas & oil ($/mcf)	4.07	4.32	**3.92**	4.82	4.25	4.45	4.29	**4.45**	**3.97**
Revenue ($mm)									
Natural Gas	85	80	**298**	65	74	75	75	**290**	**298**
Oil	772	833	**2,660**	843	744	792	760	**3,140**	**2,771**
Other									
Total	858	913	**2,958**	909	819	867	835	**3,430**	**3,069**

CNOOC Limited
Next Twelve Months Operating and Financial Estimates

	H1	*H2*	***Year***	*H1*	*H2E*	***Year***	***Next Twelve*** *Months*
	6/30/02	*12/31/02*	***2002***	*6/30/03*	*12/31/03*	***2003E***	*12/31/04*
Revenue (mmRMB)							
Natural Gas (from Q table)	1,094	1,366	**2,460**	1,153	1,242	**2,395**	**2,464**
Oil (from Q table)	8,714	13,271	**21,985**	13,123	12,827	**25,951**	**22,900**
Other	921	1,008	**1,929**	85	85	**170**	**170**
Total	10,729	15,645	**26,374**	14,361	14,154	**28,515**	**25,535**
Expense							
Fixed	1,297	1,813	**3,110**	1,499	1,499	**2,998**	**2,998**
Variable	1,297	1,813	**3,110**	1,499	1,477	**2,976**	**2,663**
Other	921	1,008	**1,929**			**-**	**-**
Ebitda	7,213	11,011	**18,225**	11,278	11,093	**22,371**	**19,703**
Exploration	635	683	**1,318**	392	392	**784**	**784**
Deprec., Deplet., & Amort.	1,590	2,430	**4,020**	2,144	2,144	**4,288**	**4,288**
Ebit	4,988	7,898	**12,887**	8,742	8,557	**17,299**	**14,631**
Interest	-	147	**147**	-	-	**-**	**-**
Ebt	4,988	7,751	**12,740**	8,742	8,557	**17,299**	**14,631**
Income Tax	1,373	2,168	**3,541**	2,408	2,995	**5,403**	**5,121**
Net Income	3,615	5,583	**9,199**	6,334	5,562	**11,896**	**9,510**
Shares (millions)	8,217	8,211	**8,213**	8,217	8,217	**8,217**	**8,217**
Per share (RMB)	0.44	0.68	**1.12**	0.77	0.68	**1.45**	**1.16**
Ebitda Margin	67%	70%	**69%**	79%	78%	**78%**	**77%**
Tax Rate	28%	28%	**28%**	28%	35%	**31%**	**35%**

CNOOC Limited
Natural Gas and Oil Reserves

	Natural Gas	*Oil*	*Total*	
	(bcf)	*(mmb)*	*(bcf)*	*(mmb)*
Reserves (bcf or mmb)				
Proven (P)	3250	1425	11800	1967
Proven Developed (PD)	825	657	4767	795
Proven Undeveloped (PUD)	2425	768	7033	1172
Production, Next Twelve Months	104	111	772	129
Reserve Life Index (years)				
R/P P	31.4	12.8	15.3	15.3
R/P PD	8.0	5.9	6.2	6.2
R/P PUD	23.4	6.9	9.1	9.1
R/P PD+.5PUD	19.7	9.3	10.7	10.7

