



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011

Raise Petrohawk NPV to \$24 from \$20

Symbol	HK	Ebitda Next Twelve Months ending 12/31/11 (US\$m)	877
Rating	Buy	North American Natural Gas/Ebitda (%)	89
Price (\$/sh)	20.44	Natural Gas and Oil Production/Ebitda (%)	100
Pricing Date	2/3/11	Adjusted Reserves/Production NTM	8.8
Shares (mm)	302	EV/Ebitda	10.9
Market Capitalization (\$mm)	6,170	PV/Ebitda	12.1
Debt (\$mm)	3,400	Undeveloped Reserves (%)	65
Enterprise Value (EV) (\$mm)	9,570	Natural Gas and Oil Ebitda (\$/boe)	20.30
Present Value (PV) (\$mm)	10,640	Present Value Proven Reserves(\$/boe)	18.80
Net Present Value (\$/share)	24	Oil and Gas Ebitda Margin (%)	72
Debt/Present Value	0.32	Earnings Next Twelve Months (US\$/sh)	0.34
McDep Ratio - EV/PV	0.90	Price/Earnings Next Twelve Months	60
Dividend Yield (%/year)	0.0	Indicated Annual Dividend (US\$/sh)	0.00
Note: Estimated cash flow and earnings tied to one-year futures prices for oil and natural gas.			
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.			
Estimated present value presumes a long-term price for oil of US\$100 a barrel and natural gas, \$8 a million btu.			

Summary and Recommendation

On the basis of higher proven reserves and little recognition of additional resource potential we raise estimated Net Present Value (NPV) for buy-recommended **Petrohawk (HK)** to \$24 a share. In a conference call on February 1, management disclosed details of an estimate of some 35 trillion cubic feet equivalent (tcf) of natural gas and oil resource in the Haynesville, Eagle Ford and Bossier shale formations net to Petrohawk's interest. Petrohawk drilled the first horizontal multi-frac well in the Texas Eagle Ford and built its Louisiana Haynesville position ahead of most competitors. Judging by HK's sale late last year of 1.4 tcf of Arkansas Fayetteville shale resource to ExxonMobil for \$650 million, the less developed 35 tcf might be worth perhaps \$15 billion. Investors can keep that in mind as speculative upside to our revised present value of \$10.6 billion, tied to proven reserves and next twelve months cash flow (see tables [Functional Cash Flow and Present Value](#) and [Next Twelve Months Operating and Financial Estimates](#) on page 2). Since most of the resource volumes are undrilled, there is exposure to rising cost of oil field equipment and services. Yet for long-term investors, the abundant growth prospects in natural gas can make the stock worth holding through ups and downs. In the near-term the company concentrates on Eagle Ford oil to take advantage of price that has broken through \$100 a barrel in the futures market beginning in January 2012. In an improving economic climate, McDep Ratios are close to 1.0 for HK and other small cap stocks (see [Tables 1-2](#) on pages 3-4). HK's unlevered cash flow multiple, EV/Ebitda, could be higher compared to some peers (see [Table 3](#) on page 5). Confidence and values are rising with stock prices in an uptrend (see [Table 4](#) on page 6). Rapidly depleting natural gas in storage as a result of colder than normal winter weather may suggest better pricing ahead (see chart on page 7).

Kurt H. Wulff, CFA



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011

Petrohawk Energy Corporation					
Functional Cash Flow and Present Value					
	NTM Ebitda	Adjusted	PV/	Present	
	(US\$m)	R/P	Ebitda	Value	
				(US\$m)	
North American Natural Gas	777	8.9	12.7	9,850	92%
Oil	100	8.1	8.0	800	8%
	877	8.8	12.1	10,650	100%
Debt (US\$m)					3,400
Net Present Value (US\$m)					7,250
Shares (mm)					302
Net Present Value - Standard Estimate (US\$/sh)					24
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					22

Petrohawk Energy Corporation									
Next Twelve Months Operating and Financial Estimates									
	Q4	Q3	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Next
	12/31/09	9/30/10	12/31/10	2010	3/31/11	6/30/11	9/30/11	12/31/11	Twelve
									Months
									12/31/11
Volume									
Natural Gas (mmcf)	576	654	680	636	680	680	680	680	680
Oil (mbd)	3.4	5.2	5.2	4.4	5.2	5.2	5.2	5.2	5.2
Total (mbd)	99	114	119	110	119	119	119	119	119
Price									
Henry Hub (\$/mmbtu)	4.16	4.38	3.80	4.40	4.30	4.47	4.58	4.79	4.53
Company (\$/mcf)	4.08	4.20	3.64	4.22	4.12	4.29	4.39	4.59	4.35
WTI Cushing (\$/bbl)	76.09	76.08	85.10	79.43	94.65	95.52	97.83	98.87	96.72
Company (\$/bbl)	72.65	58.12	65.00	62.63	72.30	72.96	74.73	75.52	73.89
Total (\$/bbl)	26.14	26.69	23.75	26.80	26.79	27.78	28.45	29.65	28.18
Revenue (\$mm)									
Natural Gas	216	253	228	979	252	265	275	287	1,079
Oil	23	28	31	100	34	34	36	36	140
Total	239	280	259	1,079	286	300	310	323	1,219
Expense									
Lease operating	24	19							
Production taxes	18	(3)							
General and administrative	25	40							
Total	67	56	72	254	80	84	87	91	341
Ebitda	172	224	186	825	206	216	223	233	877
Deprec., Deplet., & Amort.	106	108	108	423	108	108	108	108	432
Other	(48)	(16)		(37)					-
Ebit	114	132	78	438	98	108	115	125	445
Interest	58	72	72	269	72	72	72	72	288
Ebt	56	60	6	169	26	36	43	53	157
Income Tax	20	21	2	59	9	13	15	18	55
Net Income (\$mm)	36	39	4	110	17	23	28	34	102
Per Share (\$)	0.12	0.13	0.01	0.36	0.06	0.08	0.09	0.11	0.34
Shares (millions)	302	302	302	303	302	302	302	302	302
Ebitda Margin	72%	80%	72%	76%	72%	72%	72%	72%	72%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011

Table ISC-1											
McDep Income and Small Cap Energy Portfolio											
Debt, Segments, Cash Flow, Income and McDep Ratio											
			Price								
Symbol/Rating	(US\$/sh)	EV/	Enterprise	PV(%)	EV/	Dist.	Dist.				
B = Buy	3-Feb	Market	Value	Nat	Ebitda	NTM	Yield	McDep			
CB (see below)	2011	Cap	(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	Ratio		
Small Cap Independent Producers											
Cimarex Energy Company	XEC	B	103.87	1.07	9,540	50	50	8.0	0.32	0.3	1.04
Range Resources	RRC	B	49.67	1.27	9,890	77	23	15.7	0.16	0.3	0.99
Berry Petroleum Company	BRY		46.02	1.42	3,550	26	74	8.7	0.30	0.7	0.98
Peyto Exploration and Development	PEYUF		19.55	1.19	2,830	69	31	13.0	0.73	3.7	0.98
Denbury Resources Inc.	DNR		20.54	1.41	11,650	12	88	8.6	-	-	0.95
Ultra Petroleum	UPL		48.08	1.20	8,880	90	10	11.8	-	-	0.94
Petrohawk Energy Corporation	HK	B	20.44	1.55	9,570	92	8	10.9	-	-	0.90
Whiting Petroleum Corporation	WLL		125.91	1.16	8,610	11	89	7.3	-	-	0.86
Birchcliff Energy Ltd.	BIREF	B	12.15	1.22	1,890	62	38	13.5	-	-	0.80
<i>Total or Median</i>					66,400			10.9		-	0.95
Top Line Cash Payers											
Cross Timbers Royalty Trust	CRT		46.02	1.00	280	69	31		2.83	6.1	1.24
Sabine Royalty Trust	SBR		62.26	1.00	910	38	62		4.19	6.7	1.06
Permian Basin RT	PBT		21.56	1.00	1,010	31	69		1.62	7.5	0.98
Freehold Royalties Ltd.	FRHLF		21.20	1.07	1,320	20	80		1.70	8.0	0.97
Dorchester Minerals, L.P.	DMLP	B	28.22	1.02	880	60	40		1.80	6.4	0.94
<i>Total or Median</i>					4,400					6.7	0.98
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		39.10	1.39	7,960	38	62	18.4	2.64	6.8	1.26
Vanguard Natural Resources, LLC	VNR		31.17	1.37	1,270	31	69	10.4	2.24	7.2	1.11
Legacy Reserves L.P.	LGCY		29.47	1.32	1,570	13	87	11.0	2.08	7.1	1.04
Encore Energy Partners, L.P.	ENP		22.70	1.24	1,270	19	81	10.2	2.00	8.8	0.99
San Juan Basin Royalty Trust	SJT	B	24.10	1.00	1,120	100	-	13.8	1.43	5.9	0.96
Hugoton Royalty Trust	HGT	B	21.16	1.00	850	86	14	13.5	1.34	6.4	0.96
Pengrowth Energy Corporation	PGH		12.76	1.36	5,200	29	71	8.3	0.84	6.6	0.93
Mesa Royalty Trust	MTR		47.65	1.00	89	75	25	11.7	3.72	7.8	0.90
Enerplus Corporation	ERF		32.26	1.18	6,800	34	66	8.4	2.16	6.7	0.89
<i>Total or Median</i>					26,100			11.0		6.8	0.96
Composite											
<i>Enterprise Value Weighting</i>					96,900	48	52				0.96
<i>Equal Weighting</i>						49	51				0.99
<i>Equal Weighted Buys</i>						74	26				0.94

CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.

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

Present Value (PV) presumes long-term prices of \$100 a barrel for oil and \$8 a million btu for natural gas.

Dist. = Income distribution. NTM = Next Twelve Months Ended December 31, 2011. Enterprise Value = Market Cap and Debt.



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011

Table ISC-2

**McDep Income and Small Cap Energy Portfolio
Net Present Value and McDep Ratio**

			<i>Price</i>			<i>Net</i>		
			<i>(\$/sh)</i>		<i>Market</i>	<i>Present</i>	<i>Debt/</i>	
	<i>Symbol/</i>		<i>3-Feb</i>	<i>Shares</i>	<i>Cap</i>	<i>Value</i>	<i>Present</i>	<i>McDep</i>
	<i>Rating</i>		<i>2011</i>	<i>(mm)</i>	<i>(\$mm)</i>	<i>(\$/un)</i>	<i>Value</i>	<i>Ratio</i>
Small Cap Independent Producers								
Cimarex Energy Company	XEC	B	103.87	85.8	8,910	100.00	0.07	1.04
Range Resources	RRC	B	49.67	157.1	7,800	50.00	0.21	0.99
Berry Petroleum Company	BRY		46.02	54.4	2,500	47.00	0.29	0.98
Peyto Exploration and Development Corp	PEYUF		19.55	121.8	2,380	20.00	0.16	0.98
Denbury Resources Inc.	DNR		20.54	401.0	8,240	22.00	0.28	0.95
Ultra Petroleum	UPL		48.08	154.0	7,400	52.00	0.16	0.94
Petrohawk Energy Corporation	HK	B	20.44	302.0	6,170	24.00	0.32	0.90
Whiting Petroleum Corporation	WLL		125.91	59.0	7,430	150.00	0.12	0.86
Birchcliff Energy Ltd.	BIREF	B	12.15	127.3	1,550	16.00	0.14	0.80
<i>Total or Median</i>					<i>52,380</i>		<i>0.16</i>	<i>0.95</i>
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		46.02	6.0	280	37.00	-	1.24
Sabine Royalty Trust	SBR		62.26	14.6	910	59.00	-	1.06
Permian Basin RT	PBT		21.56	46.6	1,010	22.00	-	0.98
Freehold Royalties Ltd.	FRHLF		21.20	58.4	1,240	22.00	0.06	0.97
Dorchester Minerals, L.P.	DMLP	B	28.22	30.7	870	30.00	0.02	0.94
<i>Total or Median</i>					<i>4,310</i>			<i>0.98</i>
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		39.10	146.5	5,730	28.00	0.35	1.26
Vanguard Natural Resources, LLC	VNR		31.17	29.8	930	27.00	0.30	1.11
Legacy Reserves L.P.	LGCY		29.47	40.1	1,180	28.00	0.25	1.04
Encore Energy Partners, L.P.	ENP		22.70	45.3	1,030	23.00	0.19	0.99
San Juan Basin Royalty Trust	SJT	B	24.10	46.6	1,120	25.00	-	0.96
Hugoton Royalty Trust	HGT	B	21.16	40.0	850	22.00	-	0.96
Pengrowth Energy Corporation	PGH		12.76	299.0	3,820	14.00	0.25	0.93
Mesa Royalty Trust	MTR		47.65	1.9	89	53.00	-	0.90
Enerplus Corporation	ERF		32.26	177.5	5,730	37.00	0.14	0.89
<i>Total or Median</i>					<i>20,480</i>			<i>0.96</i>

B=Buy; CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.

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

Present Value presumes long-term prices of \$100 a barrel for oil and \$8 a million btu for natural gas.



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011

Table ISC-3

McDep Income and Small Cap Energy Portfolio

Value Multiples - Rank by EV/Ebitda

			<i>Price</i> <i>(\$/sh)</i>	<i>Revenue</i>	<i>Dist/</i>	<i>Adjstd</i>		
	<i>Symbol/</i>		<i>3-Feb</i>	<i>Royalty</i>	<i>Equity</i>	<i>Resrvs/</i>	<i>PV/</i>	<i>EV/</i>
	<i>Rating</i>		<i>2011</i>	<i>(%)</i>	<i>Ebitda</i>	<i>Prod</i>	<i>Ebitda</i>	<i>Ebitda</i>
						<i>NTM</i>	<i>NTM</i>	<i>NTM</i>
Small Cap Independent Producers								
Range Resources	RRC	B	49.67		-	16.8	15.8	15.7
Birchcliff Energy Ltd.	BIREF	B	12.15		-	17.6	17.0	13.5
Peyto Exploration and Development Corp	PEYUF		19.55		0.48	17.3	13.2	13.0
Ultra Petroleum	UPL		48.08		-	12.6	12.6	11.8
Petrohawk Energy Corporation	HK	B	20.44		-	8.8	12.1	10.9
Berry Petroleum Company	BRY		46.02		-	11.3	8.8	8.7
Denbury Resources Inc.	DNR		20.54		-	12.9	9.1	8.6
Cimarex Energy Company	XEC	B	103.87		-	6.2	7.7	8.0
Whiting Petroleum Corporation	WLL		125.91		-	9.3	8.5	7.3
	<i>Median</i>					<i>12.6</i>	<i>12.1</i>	<i>10.9</i>
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		46.02	84	0.97	13.1	12.6	15.7
Sabine Royalty Trust	SBR		62.26	100	1.00	7.8	14.1	14.9
Dorchester Minerals, L.P.	DMLP	B	28.22	77	0.87	6.7	14.4	13.6
Permian Basin RT	PBT		21.56	32	0.94	13.2	12.7	12.5
Freehold Royalties Ltd.	FRHLF		21.20	71	0.82	8.1	10.7	10.3
	<i>Median</i>					<i>8.1</i>	<i>12.7</i>	<i>13.6</i>
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		39.10		1.38	18.3	14.6	18.4
San Juan Basin Royalty Trust	SJT	B	24.10		0.82	13.6	14.3	13.8
Hugoton Royalty Trust	HGT	B	21.16		0.86	12.6	14.0	13.5
Mesa Royalty Trust	MTR		47.65		0.91	8.7	13.0	11.7
Legacy Reserves L.P.	LGCY		29.47		0.79	12.0	10.6	11.0
Vanguard Natural Resources, LLC	VNR		31.17		0.78	13.0	9.4	10.4
Encore Energy Partners, L.P.	ENP		22.70		0.89	13.5	10.3	10.2
Enerplus Corporation	ERF		32.26		0.55	9.7	9.5	8.4
Pengrowth Energy Corporation	PGH		12.76		0.53	9.6	8.9	8.3
	<i>Median</i>					<i>12.6</i>	<i>10.6</i>	<i>11.0</i>

B=Buy; CB=Contrarian Buy, Stock Price apparently in downtrend compared to 200-day average.

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation

and amortization; NTM = Next Twelve Months Ended December 31, 2011; P/E = Stock Price to

Earnings; PV = Present Value of oil and gas and other businesses

Top Line Cash Payers defined as those having Revenue Royalty (see fifth column from right).



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011

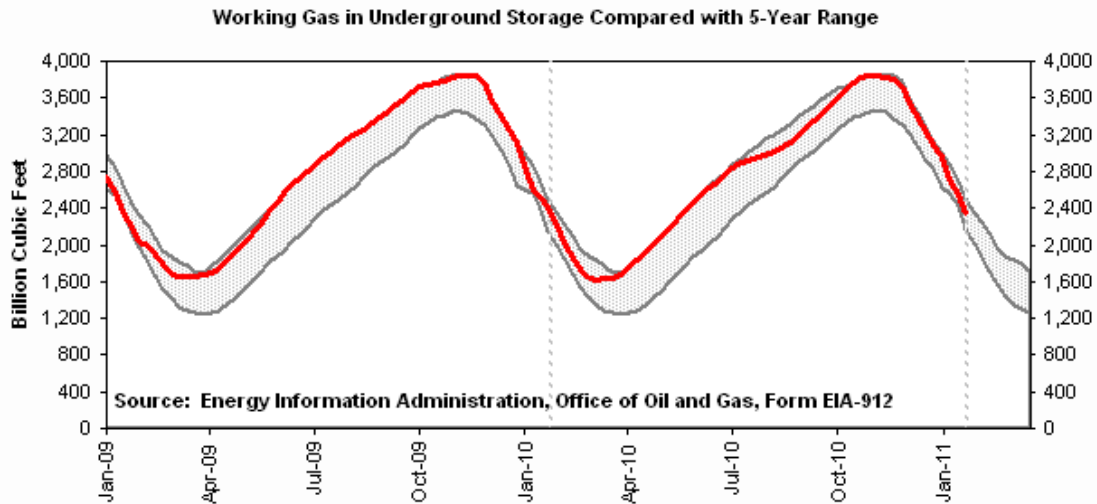
Table ISC-4									
Oil and Gas Income and Small Cap Stocks									
Rank by Enterprise Value to 200 Day Average									
			Price (\$/sh)	Enterprise Value/					
	Symbol/ Rating		3-Feb 2011	52Wk High	52Wk Low	50 Day Avg.	200 Day Avg.	McDep Ratio	
Small Cap Independent Producers									
	Cimarex Energy Company	XEC	B	103.87	0.98	1.98	1.13	1.32	1.04
	Whiting Petroleum Corporation	WLL		125.91	0.98	1.77	1.08	1.25	0.86
	Birchcliff Energy Ltd.	BIREF	B	12.15	1.00	1.43	1.17	1.24	0.80
	Berry Petroleum Company	BRY		46.02	0.96	1.50	1.05	1.22	0.98
	Peyto Exploration and Development Co	PEYUF		19.55	0.98	1.57	1.05	1.21	0.98
	Range Resources	RRC	B	49.67	0.93	1.38	1.08	1.14	0.99
	Denbury Resources Inc.	DNR		20.54	0.98	1.33	1.05	1.13	0.95
	Petrohawk Energy Corporation	HK	B	20.44	0.89	1.26	1.05	1.08	0.90
	Ultra Petroleum	UPL		48.08	0.91	1.23	1.01	1.06	0.94
	<i>Median</i>				0.98	1.43	1.05	1.21	0.95
Top Line Cash Payers									
	Cross Timbers Royalty Trust	CRT		46.02	0.99	1.63	1.11	1.22	1.24
	Freehold Royalties Ltd.	FRHLF		21.20	0.94	1.46	1.04	1.19	0.97
	Sabine Royalty Trust	SBR		62.26	0.96	1.50	1.05	1.16	1.06
	Permian Basin RT	PBT		21.56	0.91	1.50	0.97	1.07	0.98
	Dorchester Minerals, L.P.	DMLP	B	28.22	0.96	1.37	1.04	1.07	0.94
	<i>Median</i>				0.96	1.50	1.04	1.16	0.98
Bottom Line Cash Payers									
	Enerplus Corporation	ERF		32.26	0.97	1.94	1.04	1.21	0.89
	Linn Energy, LLC	LINE		39.10	0.98	1.95	1.03	1.17	1.26
	Vanguard Natural Resources, LLC	VNR		31.17	0.98	1.50	1.06	1.16	1.11
	Encore Energy Partners, L.P.	ENP		22.70	0.96	1.88	1.04	1.13	0.99
	Legacy Reserves L.P.	LGCY		29.47	0.97	1.47	1.04	1.13	1.04
	Pengrowth Energy Corporation	PGH		12.76	0.96	1.98	0.99	1.11	0.93
	Hugoton Royalty Trust	HGT	B	21.16	0.96	1.41	1.02	1.06	0.96
	Mesa Royalty Trust	MTR		47.65	0.88	1.31	0.97	1.02	0.90
	San Juan Basin Royalty Trust	SJT	B	24.10	0.84	1.22	1.00	0.99	0.96
	<i>Median</i>				0.96	1.50	1.03	1.13	0.96



Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

February 4, 2011



Disclaimer: This analysis was prepared by Kurt Wulff, Manager of McDep LLC. 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 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.

Research Methodology/Ratings Description: McDep LLC 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 total return less than inflation.