



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

November 23, 2011

## Whiting Petroleum (WLL) North Dakota Shale Oil

<i>Symbol</i>	WLL	<i>Ebitda Next Twelve Months ending 9/30/12 (US\$m)</i>	1,625
<i>Rating</i>	Contrarian Buy	<i>North American Natural Gas/Ebitda (%)</i>	6
<i>Price (\$/sh)</i>	44.30	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	11/22/11	<i>Adjusted Reserves/Production NTM</i>	8.7
<i>Shares (mm)</i>	119	<i>EV/Ebitda</i>	4.2
<i>Market Capitalization (\$mm)</i>	5,270	<i>PV/Ebitda</i>	7.6
<i>Debt (\$mm)</i>	1,610	<i>Undeveloped Reserves (%)</i>	29
<i>Enterprise Value (EV) (\$mm)</i>	6,880	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	54.40
<i>Present Value (PV) (\$mm)</i>	12,320	<i>Present Value Proven Reserves(\$/boe)</i>	40.40
<i>Net Present Value (\$/share)</i>	90	<i>Oil and Gas Ebitda Margin (%)</i>	72
<i>Debt/Present Value</i>	0.13	<i>Earnings Next Twelve Months (US\$/sh)</i>	5.42
<i>McDep Ratio - EV/PV</i>	0.56	<i>Price/Earnings Next Twelve Months</i>	8
<i>Dividend Yield (%/year)</i>	0.0	<i>Indicated Annual Dividend (US\$/sh)</i>	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

Contrarian Buy **Whiting Petroleum (WLL)** offers investors a top rank driller and producer of shale oil in rapidly growing North Dakota for a low McDep Ratio of 0.56. Dropping from a high of \$75 in April to a low of \$31 in October, Whiting stock is climbing back at the current price of \$44. Our estimated Net Present Value (NPV) of \$90 a share draws support from a resumption of volume growth in the third quarter after the difficult weather conditions in the first half of the year (see tables Functional Cash Flow and Present Value and Next Twelve Months Operating and Financial Results on page 2). Attesting to the company's technological capability, WLL scored a record 9,000 barrels a day initial 24-hour flow from a well that opens a new prospect area. Politically induced delays in approving transportation projects cause oil from North Dakota and nearby Canada to be priced at a discount. That negative may turn to a positive as alternatives are developed in the U.S and Canadians get serious about exporting to China to reduce dependence on U.S. political whims. Until then restrictions on crude oil transportation in North America tend to drive up global oil price as a consolation to all producers. In any case, new supplies of natural gas and oil from shale are game changers that enhance the real growth prospects for the U.S. economy. Along with a low McDep Ratio, Whiting has modest debt measured by either EV/Market Cap (Table ISC -1) or Debt/Present Value (Table ISC-2). Whiting has the lowest unlevered cash flow multiple (EV/Ebitda) at 4.2 times (see Tables ISC-3 on page 5). Stock price below the 200-day average triggers our Contrarian qualifier to our buy recommendation (see Table ISC-4 on page 6). We believe the company's shale oil prospects and our value measures are strong enough to justify contrarian purchase of the stock.

Kurt H. Wulff, CFA



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Whiting Petroleum Corporation					
Functional Cash Flow and Present Value					
	NTM Ebitda	Adjusted	PV/	Present	
	(US\$mm)	R/P	Ebitda	Value	
				(US\$mm)	
North American Natural Gas	100	8.2	13.0	1,300	11%
Oil	1,525	8.8	7.2	11,020	89%
	1,625	8.7	7.6	12,320	100%
Debt (US\$mm)					1,610
Net Present Value (US\$mm)					10,710
Shares (mm)					119
Net Present Value - Standard Estimate (US\$/sh)					90
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					103

Whiting Petroleum Corporation									
Next Twelve Months Operating and Financial Estimates									
	Q4	Q2	Q3	Q4E	Year	Q1E	Q2E	Q3E	Next Twelve Months
	12/31/10	6/30/11	9/30/11	12/31/11	2011E	3/31/12	6/30/12	9/30/12	9/30/12
<b>Volume</b>									
Natural Gas (mmcf)	80	69	74	81	76	90	90	90	88
Oil (mbd)	55	53	58	64	57	66	68	70	67
Total (mb)	6.2	5.8	6.5	7.2	25.4	7.4	7.5	7.8	30
Total (mbd)	68	64	71	78	70	81	83	85	82
<b>Price</b>									
Henry Hub (\$/mmbtu)	3.80	4.32	4.19	3.56	4.05	3.57	3.65	3.76	3.64
Differential (\$/mmbtu)	(0.54)	(0.62)	(0.81)	(0.69)	(0.74)	(0.69)	(0.70)	(0.72)	(0.70)
Company (\$/mcf)	4.34	4.94	5.00	4.25	4.78	4.26	4.36	4.49	4.34
WTI Cushing (\$/bbl)	85.10	102.55	89.76	93.56	94.99	96.80	96.93	96.65	95.98
Differential	10.57	10.05	8.80	9.18	10.21	9.49	9.51	9.48	9.39
Company (\$/bbl)	74.53	92.50	80.96	84.38	84.78	87.30	87.42	87.17	86.59
Total (\$/bbl)	65.06	81.21	72.07	74.11	74.64	75.92	76.39	76.58	75.78
<b>Revenue (\$mm)</b>									
Natural Gas	32	31	34	32	132	35	36	37	139
Oil	375	443	435	498	1,767	524	541	561	2,125
Total	406	474	469	530	1,899	559	576	598	2,264
<b>Expense</b>									
Lease operating	71	74	78						
Production taxes	27	34	35						
General and administrative	16	21	23						
Total	114	129	136	150	537	158	163	169	639
<b>Ebitda</b>	292	345	333	381	1,362	401	414	429	1,625
Exploration	21	20	19	19	80	19	19	19	76
Deprec., Deplet., & Amort.	104	110	123	123	464	123	123	123	492
Other	52	13	1		21				-
<b>Ebit</b>	116	202	190	239	797	259	272	287	1,057
Interest	13	15	16	16	61	16	16	16	64
<b>Ebt</b>	103	187	174	223	736	243	256	271	993
Income Tax	36	65	61	78	257	85	89	95	347
<b>Net Income (\$mm)</b>	67	121	113	145	478	158	166	176	645
Per Share (\$)	0.56	1.02	0.95	1.22	4.03	1.33	1.40	1.48	5.42
<b>Shares (millions)</b>	119	119	119	119	119	119	119	119	119
Ebitda Margin	72%	73%	71%	72%	72%	72%	72%	72%	72%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%



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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	22-Nov	Market	Value	Nat	Oil	Ebitda	NTM	Yield	McDep		
CB (see below)	2011	Cap	(\$mm)	Gas		NTM	(\$/un)	(%)	Ratio		
<b>Small Cap Independent Producers</b>											
PDC Energy	PETD		32.24	1.71	1,310	62	38	8.4	-	-	1.01
Range Resources	RRC	B	66.97	1.21	12,850	66	34	16.5	0.16	0.2	0.96
Peyto Exploration and Developmen	PEYUF		22.02	1.18	3,460	75	25	11.0	0.70	3.2	0.93
Birchcliff Energy Ltd.	BIREF	B	13.25	1.23	2,140	56	44	12.8	-	-	0.86
Berry Petroleum Company	BRY		39.06	1.67	3,580	21	79	6.0	0.32	0.8	0.68
Denbury Resources Inc.	DNR		15.02	1.41	8,540	4	96	5.7	-	-	0.62
Whiting Petroleum Corporation	WLL	CB	44.30	1.31	6,880	11	89	4.2	-	-	0.56
Cimarex Energy Company	XEC	CB	61.57	1.14	6,070	46	54	4.9	0.40	0.6	0.55
<i>Total or Median</i>					44,800			7.2			0.77
<b>Top Line Cash Payers</b>											
Cross Timbers Royalty Trust	CRT		47.66	1.00	290	87	13		2.92	6.1	1.06
Sabine Royalty Trust	SBR		65.53	1.00	960	51	49		4.18	6.4	0.94
Permian Basin RT	PBT		19.95	1.00	930	42	58		1.39	7.0	0.91
Freehold Royalties Ltd.	FRHLF		17.67	1.06	1,110	18	82		1.63	9.2	0.81
Dorchester Minerals, L.P.	DMLP	CB	23.42	1.00	720	61	39		1.93	8.2	0.78
<i>Total or Median</i>					4,000					7.0	0.91
<b>Bottom Line Cash Payers</b>											
Linn Energy, LLC	LINE		36.10	1.47	9,320	31	69	13.3	2.76	7.6	1.04
Vanguard Natural Resources, LLC	VNR		26.46	1.56	2,020	27	73	10.0	2.31	8.7	0.99
Hugoton RoyaltyTrust	HGT		21.21	1.00	850	88	13	16.7	1.13	5.3	0.96
San Juan Basin Royalty Trust	SJT	CB	23.95	1.00	1,120	100	-	15.8	1.16	4.8	0.96
Legacy Reserves L.P.	LGCY		26.32	1.44	1,660	22	78	8.1	2.18	8.3	0.91
Enduro Royalty Trust (40%)	NDRO		18.99	1.00	250	47	53	8.2	1.62	8.5	0.86
Mesa RoyaltyTrust	MTR		44.00	1.00	82	75	25	11.4	3.34	7.6	0.83
Enerplus Corporation	ERF	CB	25.04	1.29	5,800	29	71	7.7	2.10	8.4	0.73
<i>Total or Median</i>					21,100			10.7		8.0	0.93
<b>Composite</b>											
<i>Enterprise Value Weighting</i>					69,900	39	61				0.77
<i>Equal Weighting</i>						48	52				0.85
<i>Equal Weighted Buys</i>						45	55				0.77

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 September 30, 2012. Enterprise Value = Market Cap and Debt.



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Table ISC-2								
McDep Income and Small Cap Energy Portfolio								
Net Present Value and McDep Ratio								
			Price (\$/sh)	Shares	Market Cap (\$mm)	Net Present Value (\$/un)	Debt/ Present Value	McDep Ratio
	Symbol/ Rating	22-Nov 2011		(mm)				
<b>Small Cap Independent Producers</b>								
PDC Energy	PETD		32.24	23.8	770	32.00	0.42	1.01
Range Resources	RRC	B	66.97	159.0	10,650	70.00	0.17	0.96
Peyto Exploration and Development Cor	PEYUF		22.02	133.1	2,930	24.00	0.14	0.93
Birchcliff Energy Ltd.	BIREF	B	13.25	131.0	1,740	16.00	0.16	0.86
Berry Petroleum Company	BRY		39.06	54.7	2,140	70.00	0.27	0.68
Denbury Resources Inc.	DNR		15.02	403.0	6,050	28.00	0.18	0.62
Whiting Petroleum Corporation	WLL	CB	44.30	119.0	5,270	90.00	0.13	0.56
Cimarex Energy Company	XEC	CB	61.57	86.2	5,310	120.00	0.07	0.55
<i>Total or Median</i>					34,860		0.16	0.77
<b>Top Line Cash Payers</b>								
Cross Timbers Royalty Trust	CRT		47.66	6.0	290	45.00	-	1.06
Sabine Royalty Trust	SBR		65.53	14.6	960	70.00	-	0.94
Permian Basin RT	PBT		19.95	46.6	930	22.00	-	0.91
Freehold Royalties Ltd.	FRHLF		17.67	59.3	1,050	22.00	0.05	0.81
Dorchester Minerals, L.P.	DMLP	CB	23.42	30.7	720	30.00	-	0.78
<i>Total or Median</i>					3,950			0.91
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		36.10	176.0	6,350	34.00	0.33	1.04
Vanguard Natural Resources, LLC	VNR		26.46	48.8	1,290	27.00	0.36	0.99
Hugoton Royalty Trust	HGT		21.21	40.0	850	22.00	-	0.96
San Juan Basin Royalty Trust	SJT	CB	23.95	46.6	1,120	25.00	-	0.96
Legacy Reserves L.P.	LGCY		26.32	43.6	1,150	30.00	0.28	0.91
Enduro Royalty Trust (40%)	NDRO		18.99	13.2	250	22.00	-	0.86
Mesa Royalty Trust	MTR		44.00	1.9	82	53.00	-	0.83
Enerplus Corporation	ERF	CB	25.04	180.6	4,520	37.00	0.16	0.73
<i>Total or Median</i>					15,610			0.93
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.								



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Table ISC-3								
McDep Income and Small Cap Energy Portfolio								
Value Multiples - Rank by EV/Ebitda								
			Price (\$/sh)	Revenue	Dist/ Equity	Adjstd Resrvs/ Prod	PV/ Ebitda	EV/ Ebitda
	Symbol/ Rating		22-Nov 2011	Royalty (%)	Ebitda	NTM	NTM	NTM
<b>Small Cap Independent Producers</b>								
Range Resources	RRC	B	66.97		-	14.4	17.1	16.5
Birchcliff Energy Ltd.	BIREF	B	13.25		-	20.1	14.9	12.8
Peyto Exploration and Development Corp	PEYUF		22.02		0.35	13.5	11.8	11.0
PDC Energy	PETD		32.24		-	8.2	8.3	8.4
Berry Petroleum Company	BRY		39.06		-	11.6	8.8	6.0
Denbury Resources Inc.	DNR		15.02		-	13.0	9.2	5.7
Cimarex Energy Company	XEC	CB	61.57		-	7.1	9.0	4.9
Whiting Petroleum Corporation	WLL	CB	44.30		-	8.7	7.6	4.2
	<i>Median</i>					12.3	9.1	7.2
<b>Top Line Cash Payers</b>								
Cross Timbers Royalty Trust	CRT		47.66	80	0.97	13.9	14.9	15.8
Sabine Royalty Trust	SBR		65.53	100	1.00	7.4	16.7	15.7
Permian Basin RT	PBT		19.95	32	0.98	17.3	15.6	14.1
Dorchester Minerals, L.P.	DMLP	CB	23.42	77	0.86	6.1	13.3	10.4
Freehold Royalties Ltd.	FRHLF		17.67	71	0.85	6.7	11.4	9.3
	<i>Median</i>					7.4	14.9	14.1
<b>Bottom Line Cash Payers</b>								
Hugoton Royalty Trust	HGT		21.21		0.89	14.0	17.3	16.7
San Juan Basin Royalty Trust	SJT	CB	23.95		0.76	8.6	16.5	15.8
Linn Energy, LLC	LINE		36.10		1.04	16.2	12.8	13.3
Mesa Royalty Trust	MTR		44.00		0.87	13.8	13.7	11.4
Vanguard Natural Resources, LLC	VNR		26.46		0.86	8.7	10.1	10.0
Enduro Royalty Trust (40%)	NDRO		18.99		0.70	7.4	9.5	8.2
Legacy Reserves L.P.	LGCY		26.32		0.64	9.9	8.9	8.1
Enerplus Corporation	ERF	CB	25.04		0.60	8.5	10.6	7.7
	<i>Median</i>					9.3	11.7	10.7
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 September 30, 2012; 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).								



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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		22-Nov 2011	52Wk High	52Wk Low	50 Day Avg.	200 Day Avg.	McDep Ratio	
<b>Small Cap Independent Producers</b>									
	Range Resources	RRC	B	66.97	0.89	1.47	1.00	1.12	0.96
	Peyto Exploration and Development C	PEYUF		22.02	0.89	1.26	1.04	1.03	0.93
	Birchcliff Energy Ltd.	BIREF	B	13.25	0.88	1.32	1.01	1.02	0.86
	PDC Energy	PETD		32.24	0.76	1.46	1.16	0.98	1.01
	Berry Petroleum Company	BRY		39.06	0.75	1.15	0.98	0.89	0.68
	Denbury Resources Inc.	DNR		15.02	0.66	1.29	1.02	0.84	0.62
	Whiting Petroleum Corporation	WLL	CB	44.30	0.65	1.36	1.02	0.83	0.56
	Cimarex Energy Company	XEC	CB	61.57	0.56	1.18	0.99	0.74	0.55
	<i>Median</i>				<i>0.76</i>	<i>1.31</i>	<i>1.01</i>	<i>0.93</i>	<i>0.77</i>
<b>Top Line Cash Payers</b>									
	Cross Timbers Royalty Trust	CRT		47.66	0.98	1.26	1.03	1.06	1.06
	Sabine Royalty Trust	SBR		65.53	0.93	1.38	1.01	1.03	0.94
	Permian Basin RT	PBT		19.95	0.85	1.11	0.98	0.94	0.91
	Dorchester Minerals, L.P.	DMLP	CB	23.42	0.78	1.12	0.96	0.89	0.78
	Freehold Royalties Ltd.	FRHLF		17.67	0.74	1.27	1.02	0.87	0.81
	<i>Median</i>				<i>0.85</i>	<i>1.26</i>	<i>1.01</i>	<i>0.94</i>	<i>0.91</i>
<b>Bottom Line Cash Payers</b>									
	San Juan Basin Royalty Trust	SJT	CB	23.95	0.86	1.17	1.00	0.98	0.96
	Mesa RoyaltyTrust	MTR		44.00	0.86	1.13	1.01	0.97	0.83
	Linn Energy, LLC	LINE		36.10	0.91	1.11	0.99	0.97	1.04
	Hugoton RoyaltyTrust	HGT		21.21	0.86	1.10	0.97	0.95	0.96
	Vanguard Natural Resources, LLC	VNR		26.46	0.85	1.12	0.99	0.94	0.99
	Legacy Reserves L.P.	LGCY		26.32	0.84	1.13	0.97	0.93	0.91
	Enerplus Corporation	ERF	CB	25.04	0.80	1.12	0.96	0.88	0.73
	<i>Median</i>				<i>0.86</i>	<i>1.12</i>	<i>0.99</i>	<i>0.95</i>	<i>0.96</i>

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



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