

CDEP Income and Small Cap Weekly

Analysis of Oil & Gas Stocks April 15, 2011

Whiting Petroleum (WLL) New Buy on Chairman Volker's Prudhoe Bay

Symbol	WLL	Ebitda Next Twelve Months ending 3/31/12 (US\$mm)	1,409
Rating	Buy	North American Natural Gas/Ebitda (%)	8
Price (\$/sh)	69.81	Natural Gas and Oil Production/Ebitda (%)	100
Pricing Date	4/14/11	Adjusted Reserves/Production NTM	9.6
Shares (mm)	119	EV/Ebitda	6.7
Market Capitalization (\$mm)	8,310	PV/Ebitda	8.4
Debt (\$mm)	1,180	Undeveloped Reserves (%)	29
Enterprise Value (EV) (\$mm)	9,490	Natural Gas and Oil Ebitda (\$/boe)	52.10
Present Value (PV) (\$mm)	11,890	Present Value Proven Reserves(\$/boe)	39.00
Net Present Value (\$/share)	90	Oil and Gas Ebitda Margin (%)	65
Debt/Present Value	0.10	Earnings Next Twelve Months (US\$/sh)	4.68
McDep Ratio - EV/PV	0.80	Price/Earnings Next Twelve Months	15
Dividend Yield (%/year)	0.0	Indicated Annual Dividend (US\$/sh)	0.00
Note: Estimated cash flow a	nd earnings ti	ied to one-year futures prices for oil and natural gas.	
Reported results may	vary widely fr	rom estimates. Estimated present value per share revised only infreq	uently.
Estimated present valu	e presumes a	a long-term price for oil of US\$100 a barrel and natural gas, \$8 a mil	lion btu.

Summary and Recommendation

We recommend current purchase of the common stock of Whiting Petroleum (WLL) as the leading nearly pure play on rising North Dakota oil production that may surpass that of Alaska, astonishing as that may have seemed just a few years ago. The company is North Dakota's second largest producer primarily on its discovery of the Sanish field, one of the two most important sources of new production to date. A forty-year independent oil entrepreneur with a conservative financial streak, Chairman James Volker got our attention with his analysis of the resource potential in the prime Bakken/Three Forks area of west central North Dakota and eastern Montana (see map on page 2). Mr. Volker eyes the 8.4 million acres as providing for 39,000 wells on a spacing of six for each 1280 acre unit. Picking a mid-range 300,000 barrel reserve for each well, he sees almost 12 billion barrels recoverable, comparable in size to the Prudhoe Bay discovery that made Alaskan oil famous. So far, WLL has booked 75 million barrels equivalent of proven and probable reserves for the Bakken and Three Forks area, which is about 24% of its corporate total. Putting the possible quantities aside, we justify an increase in estimated Net Present Value (NPV) to \$90 a share from \$75 on the basis of proven and probable reserves (see tables Functional Cash and Present Value on page 2 and table Next Twelve Months Operating and Financial Performance on page 3). Volume growth can fuel gradual appreciation in WLL stock. On a more speculative basis, the world continues on the road to \$200 oil by November 2012 as it looks to us. Despite a doubling in stock price in the past 15 months, WLL offers competitive value by McDep Ratio and cash flow multiple (see Tables 1-4 on pages 4-8).

Kurt H. Wulff, CFA



MCDEP Income and Small Cap Weekly

Whiting Prospect Areas in Hydrocarbon System at Fe				WHITING
	Sanish / Parshall	Gross	Net	Net Undev.
	- Bakken and Three Forks Objectives	Acres	Acres	Acreage
Shadar Breaking Freid Freid Carlo Break	 182M Gross, 85M Net Acres 194 producing wells in Sanish 127 producing wells in Parshall 99 Wells in 2010, 106 in 2011 \$364MM capex in 2011 	182,315	84,700	5,151
	Lewis & Clark			
	Three Forks Objective 361M Gross, 235M Net Acres Control 164 1,280-acre spacing units 12 Wells in 2010, 51 in 2011 \$276MM capex in 2011	360,516	234,938	175,853
min of frinzis	Hidden Bench / Tarpon			
PARSHALL	Middle Bakken "C" Objective S3M Gross, 29M Net Acres Control 15 1,280-acre spacing units	53,123	28,433	27,273
Reter	12 Wells in 2011 S35MM capex in 2011 Starbuck Middle Bakken Objective 110M Gross, 88M Net Acres Control 75 1,280-acre spacing units 2 Wells in 2011	110,326	88,534	88,534
WHITING BAKKEN PROSPECTS WOGC Leaso Areas 2011 Panned Wells	St3MM capex in 2011 Cassandra Middle Bakken Objective 25M Gross, 12M Net Acres Control 91,280-acres spacing units 2 Wells in 2010, 2 in 2011 S6MM capex in 2011	24,767	12,249	8,286
2011 Planned Wells	Big Island	97.968	72.671	72.671
	 Multiple Objectives 98M Gross, 73M Net Acres 			
(1) Whiting's total acreage cost in 580M net acres (522M + 58M net	- Control 64 1,280-acre spacing units	829,015	521,525	377,768
acres of other Williston Basin acreage), is approximately \$141 million, or \$243 per net acre.	- 1 Well in 2011 - \$4MM capex in 2011			22

Whiting P	etroleum Co	orporation			
Functional Ca	sh Flow and	Present Va	alue		
				Present	
Ι	NTM Ebitda	Adjusted	<i>PV</i> /	Value	
	<u>(US\$mm)</u>	<u>R/P</u>	<u>Ebitda</u>	<u>(US\$mm)</u>	
North American Natural Gas	108	11.6	12.0	1,300	11%
Oil	1,301	12.6	8.1	10,590	89%
	1,409	12.4	8.4	11,890	100%
Debt (US\$mm)					1,180
Net Present Value (US\$mm)					10,710
Shares (mm)					119
Net Present Value - Standard Estimate (US\$/sh)					90
NPV Approx. by Cash Flow Multiple Depending of	on Proven and	l Probable R	eserve Lif	e (US\$/sh)	97



MCDEP Income and Small Cap Weekly Analysis of Oil & Gas Stocks

	NT 1 m		-	eum Corp		F 4 1 4			
	Next Tv	velve Mont	hs Opera	ting and I	financial	Estimates	5		••
									Next
	01	0.1	X 7	015	00.5	015	0.17	T 7	Twelve
	Q1	Q4	Year	Q1E	Q2E	Q3E	Q4E	Year	Months
	3/31/10	12/31/10	2010	3/31/11	6/30/11	9/30/11	12/31/11	2011E	3/31/12
Volume									
Natural Gas (bcf)	6.6	7.3	27	6.7	7.2	7.8	8.3	30	31.6
Natural Gas (mmcfd)	73	80	75	74	79	85	91	82	86
Days	90	92	365	90	91	92	92	365	366
Oil (mmb)	4.3	5.0	19	4.6	5.0	5.4	5.7	21	22
Oil (mbd)	48	55	52	51	55	58	62	57	59
Total (mb)	5.4	6.2	24	5.7	6.2	6.7	7.1	26	27
Total (mbd)	60	68	65	63	68	73	78	70	74
Price									
Henry Hub (\$/mmbtu)	5.32	3.80	4.40	4.11	4.42	4.59	4.83	4.49	4.60
Differential (\$/mmbtu)	(0.31)	(0.54)	(0.46)	(0.58)	(0.63)	(0.65)	(0.69)	(0.66)	(0.66)
Company (\$/mcf)	5.63	4.34	4.86	4.69	5.05	5.24	5.51	5.15	5.26
WTI Cushing (\$/bbl)	78.67	85.10	79.43	93.67	103.94	105.25	105.79	102.16	104.95
Differential	7.95	10.57	8.90	11.63	12.91	13.07	13.14	12.38	13.00
Company (\$/bbl)	70.72	74.53	70.53	82.04	91.03	92.18	92.65	89.78	91.94
Total (\$/bbl)	63.22	65.06	62.52	71.55	79.20	80.35	81.05	78.31	80.18
Revenue (\$mm)									
Natural Gas	37	32	133	31	36	41	46	154	166
Oil	303	375	1,342	377	452	495	533	1,856	2,002
Other			-					-	
Total	340	406	1,475	408	488	536	579	2,011	2,168
Expense									
Lease operating	61	71	269						
Production taxes	25	27	104						
General and administrative	14	16	64						
Total	100	114	437	143	171	188	202	704	759
Ebitda	240	292	1,038	265	317	348	376	1,307	1,409
Exploration	13	21	60	21	21	21	21	84	84
Deprec., Deplet., & Amort.	98	104	395	104	104	104	104	416	416
Other	9	52	78	101	101	101	101	-	-
Ebit	121	116	505	140	192	223	251	807	909
Interest	16	110	60	13	13	13	13	52	52
Ebt	105	103	445	127	179	210	238	755	857
Income Tax	37	36	156	44	63	74	83	264	300
Preferred Dividend	51	50	100		05	7 4	05	204	500
Net Income (\$mm)	68	67	289	83	117	137	155	491	557
Per Share (\$)	0.58	0.56	2.44	0.69	0.98	1.15	1.30	4.12	4.68
Shares (millions)	118	119	118	119	119	1.15	1.50	119	119
Lease operating (\$/bbl)	11.33	11.37	110	119	117	119	117	117	119
Production taxes (%rev)	7.3	6.6							
General and admin (\$/bbl)		2.56							
	2.60		1675	10.05	16.96	15.50	1457	16 20	15 20
Deprec., D,& A (\$/bbl) Ebitda Margin	18.20	16.65	16.75	18.25	16.86	15.59	14.57	16.20	15.39
Tax rate	71% 35%		70% 35%		65% 35%	65% 35%	65% 35%	65% 35%	65% 35%



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McI	Dep In	co	ome and	Small	Cap Ene	rgy H	Portf	folio			
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	giner		, cushi i				CD C	p 1100			
			Price								
Sym	bol/Rati	ng	(US\$/sh)	EV/	Enterprise	PV(<u>%)</u>	EV/	Dist.	Dist.	
	$\mathbf{B} = \mathbf{I}$	Buy	14-Apr	Market	Value	Nat		Ebitda	NTM	Yield	McDep
СВ	(see belo	ow)	2011	Cap	(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	Ratic
Small Cap Independent Producer	rs										
Petrohawk Energy Corporation	HK	В	25.14	1.45	10,990	87	13	11.1	-	-	1.03
Denbury Resources Inc.	DNR		22.35	1.38	12,390	12	88	8.4	-	-	1.01
Berry Petroleum Company	BRY		49.79	1.50	3,930	24	76	8.5	0.30	0.6	0.94
Cimarex Energy Company	XEC	В	107.79	1.07	9,900	45	55	7.0	0.30	0.3	0.90
Range Resources	RRC	В	52.79	1.29	10,670	72	28	14.6	0.16	0.3	0.90
Peyto Exploration and Developmen	PEYUF		20.33	1.16	2,980	76	24	12.3	0.75	3.7	0.87
Ultra Petroleum	UPL		48.30	1.20	8,920	92	8	11.2	-	-	0.83
Birchcliff Energy Ltd.	BIREF	В	12.60	1.23	1,960	62	38	10.8	-	-	0.82
Whiting Petroleum Corporation	WLL	В	69.81	1.14	9,490	11	89	6.7	-	-	0.80
Total or Median					71,200			10.8		-	0.90
Top Line Cash Payers											
Sabine Royalty Trust	SBR		63.25	1.00	920	38	62		4.64	7.3	1.07
Freehold Royalties Ltd.	FRHLF		23.20	1.06	1,440	20	80		1.76	7.6	1.05
Cross Timbers Royalty Trust	CRT		44.95	1.00	270	75	25		3.03	6.7	1.00
Permian Basin RT	PBT		21.60	1.00	1,010	31	69		1.79	8.3	0.98
Dorchester Minerals, L.P.	DMLP	В	28.58	1.00	880	61	39		1.85	6.5	0.95
Total or Median					4,500					7.3	1.00
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		38.69	1.43	8,190	36	64	15.2	2.64	6.8	1.24
Legacy Reserves L.P.	LGCY		32.12	1.33	1,830	15	85	11.3	2.10	6.5	1.11
Vanguard Natural Resources, LLC	VNR		31.28	1.61	1,630	28	72	12.5	2.24	7.2	1.09
Hugoton RoyaltyTrust	HGT	В	23.30	1.00	930	89	11	14.7	1.36	5.8	1.06
San Juan Basin Royalty Trust	SJT		25.98	1.00	1,210	100	-	14.7	1.50	5.8	1.04
Encore Energy Partners, L.P.	ENP		23.69	1.23	1,310	18	82	9.7	1.80	7.6	1.02
Pengrowth Energy Corporation	PGH		13.64	1.35	5,500	28	72	7.9	0.86	6.3	0.98
Mesa RoyaltyTrust	MTR		49.25	1.00	92	75	25	11.6	3.56	7.2	0.93
Enerplus Corporation	ERF		30.66	1.23	6,700	34	66	7.5	2.22	7.3	0.86
Total or Median					27,400			11.6		6.8	1.04
Composite											
Enterprise Value Weighting					103,100	47	53				0.94
Equal Weighting						49	51				0.98
Equal Weighted Buys						70	30				0.96
CB=Contrarian Buy, Stock Price ap	parently	ine	downtrend	compared	l to 200-dav a	verage.					
McDep Ratio = Market cap and Del											
Present Value (PV) presumes long-								r natural s	zas.		

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 March 31, 2012. Enterprise Value = Market Cap and Debt.



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			le ISC-2					
McDep Inc	ome an	d Si	mall Ca	p Ener	gy Port	folio		
Net P	resent V	Valu	ie and I	McDep	Ratio			
			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		14-Apr	Shares	Cap	Value	Present	McDep
	Ra	ting	2011	<i>(mm)</i>	(\$mm)	(\$/un)	Value	Ratic
Small Cap Independent Producers								
Petrohawk Energy Corporation	НК	В	25.14	302.0	7,590	24.00	0.32	1.03
Denbury Resources Inc.	DNR		22.35	402.0	8,980	22.00	0.28	1.01
Berry Petroleum Company	BRY		49.79	52.8	2,630	55.00	0.31	0.94
Cimarex Energy Company	XEC	В	107.79	85.8	9,250	120.00	0.06	0.90
Range Resources	RRC	В	52.79	157.0	8,290	60.00	0.20	0.90
Peyto Exploration and Development Con	PEYUF		20.33	125.7	2,560	24.00	0.12	0.87
Ultra Petroleum	UPL		48.30	154.0	7,440	60.00	0.14	0.83
Birchcliff Energy Ltd.	BIREF	В	12.60	126.0	1,590	16.00	0.16	0.82
Whiting Petroleum Corporation	WLL	В	69.81	119.0	8,310	90.00	0.10	0.80
Total or Median					56,640		0.16	0.90
Top Line Cash Payers								
Sabine Royalty Trust	SBR		63.25	14.6	920	59.00	-	1.07
Freehold Royalties Ltd.	FRHLF		23.20	58.4	1,360	22.00	0.06	1.05
Cross Timbers Royalty Trust	CRT		44.95	6.0	270	45.00	-	1.00
Permian Basin RT	PBT		21.60	46.6	1,010	22.00	-	0.98
Dorchester Minerals, L.P.	DMLP	В	28.58	30.7	880	30.00	-	0.95
Total or Median					4,440			1.00
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		38.69	148.3	5,740	28.00	0.37	1.24
Legacy Reserves L.P.	LGCY		32.12	43.0	1,380	28.00	0.27	1.11
Vanguard Natural Resources, LLC	VNR		31.28	32.4	1,010	27.00	0.41	1.09
Hugoton RoyaltyTrust	HGT	В	23.30	40.0	930	22.00	-	1.06
San Juan Basin Royalty Trust	SJT		25.98	46.6	1,210	25.00	-	1.04
Encore Energy Partners, L.P.	ENP		23.69	45.0	1,070	23.00	0.19	1.02
Pengrowth Energy Corporation	PGH		13.64	299.0	4,080	14.00	0.25	0.98
Mesa RoyaltyTrust	MTR		49.25	1.9	92	53.00	-	0.93
Enerplus Corporation	ERF		30.66	178.0	5,460	37.00	0.16	0.86
Total or Median					20,970			1.04
B=Buy; CB=Contrarian Buy, Stock Price	e apparentl	y in c	lowntrend	compared	to 200-day	v average.		
McDep Ratio = Market cap and $Debt$ to								



MCDEP Income and Small Cap Weekly Analysis of Oil & Gas Stocks

		Tal	ble ISC-3	5				
McDep Inco	ome an	d S	mall C	ap Ene	rgy Poi	tfolio		
Value	Multip	les	- Rank	by EV/	Ebitda			
	I .							
			Price			Adjstd		
				Revenue	Dist/	Resrvs/	PV/	EV
	Symbol/		14-Apr	Royalty	Equity	Prod	Ebitda	Ebitde
	Rat	ing	2011	(%)	Ebitda	NTM	NTM	NTN
Small Cap Independent Producers								
Range Resources	RRC	В	52.79		-	16.5	16.1	14.6
Peyto Exploration and Development Corp		D	20.33		0.44	19.7	14.2	12.3
Ultra Petroleum	UPL		48.30		-	27.1	13.5	11.2
Petrohawk Energy Corporation	HK	В	25.14		_	8.2	10.8	11.2
Birchcliff Energy Ltd.	BIREF	B	12.60		-	20.2	13.1	10.8
Berry Petroleum Company	BRY	Б	49.79		-	11.9	9.1	8.5
Denbury Resources Inc.	DNR	-	22.35		-	13.1	8.3	8.4
Cimarex Energy Company	XEC	В	107.79		-	7.3	7.8	7.0
Whiting Petroleum Corporation	WLL	B	69.81		-	9.6	8.4	6.7
Median	WLL	D	09.01		-	13.1	10.8	10.8
meutun						15.1	10.0	10.0
Top Line Cash Payers								
Cross Timbers Royalty Trust	CRT		44.95	80	0.97	13.7	14.4	14.4
Sabine Royalty Trust	SBR		63.25	100	1.00	7.7	12.7	13.6
Dorchester Minerals, L.P.	DMLP	В	28.58	77	0.87	7.6	14.0	13.4
Permian Basin RT	PBT		21.60	32	0.96	13.2	11.8	11.6
Freehold Royalties Ltd.	FRHLF		23.20	71	0.79	8.1	9.9	10.5
Median						8.1	12.7	13.4
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		38.69		1.16	19.0	12.3	15.2
Hugoton RoyaltyTrust	HGT	В	23.30		0.86	13.3	13.9	14.7
San Juan Basin Royalty Trust	SJT		25.98		0.85	9.1	14.1	14.7
Vanguard Natural Resources, LLC	VNR		31.28		0.95	13.1	11.4	12.5
Mesa RoyaltyTrust	MTR		49.25		0.84	8.8	12.4	11.6
Legacy Reserves L.P.	LGCY		32.12		0.77	13.2	10.2	11.3
Encore Energy Partners, L.P.	ENP		23.69		0.74	13.0	9.5	9.7
Pengrowth Energy Corporation	PGH		13.64		0.49	9.0	8.0	7.9
Enerplus Corporation	ERF		30.66		0.52	8.4	8.7	7.5
Median						13.0	11.4	11.6
B=Buy; CB=Contrarian Buy, Stock Price	annaranth	v in 4	lowntrend	compared	to 200-da	Vaverage		
EV = Enterprise Value = Market Cap and							'n	
and amortization; NTM = Next Twelve M							/11	
Earnings; $PV = Present Value of oil and g$				2012, F/E	- SIUCK PI			
Top Line Cash Payers defined as those has $\frac{1}{2}$				C" C.1	1	• 1 ()		



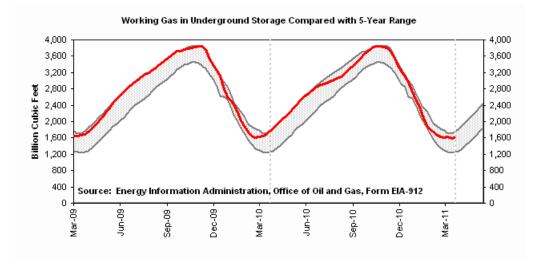
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		Ta	ble ISC-4	•				
Oil and	Gas Inc	om	e and S	Small C	ap Stoc	ks		
Rank by E					•			
	F							
			Price					
			(\$/sh)		Enterpris	e Value/		
	Symbol/		14-Apr	52Wk	52Wk		200 Day	McDep
		ting	2011	High	Low	Avg.	Avg.	Ratio
Small Cap Independent Producers								
	WLL	D	60.91	0.02	1 75	1.04	1.24	0.90
Whiting Petroleum Corporation Cimarex Energy Company		B B	69.81 107.79	0.93	1.75	1.04	1.24 1.23	0.80
	XEC HK	B	25.14	1.00	1.74 1.45	0.97	1.23	0.90
Petrohawk Energy Corporation	HK BIREF	_				1.10		0.82
Birchcliff Energy Ltd.		В	12.60	0.97	1.47	1.04	1.20	
Berry Petroleum Company	BRY		49.79	0.96	1.52	1.02	1.18	0.94
Peyto Exploration and Development C		D	20.33	0.95	1.65	1.02	1.17	0.87
Range Resources	RRC	В	52.79	0.91	1.43	1.01	1.16	0.90
Denbury Resources Inc.	DNR		22.35	0.89	1.37	0.97	1.14	1.01
Ultra Petroleum	UPL		48.30	0.91	1.24	1.03	1.07	0.83
Median				0.93	1.47	1.02	1.18	0.90
Top Line Cash Payers								
Freehold Royalties Ltd.	FRHLF		23.20	0.96	1.55	1.03	1.20	1.05
Cross Timbers Royalty Trust	CRT		44.95	0.93	1.45	0.97	1.12	1.00
Sabine Royalty Trust	SBR		63.25	0.97	1.49	1.01	1.11	1.07
Dorchester Minerals, L.P.	DMLP	B	28.58	0.95	1.27	1.03	1.07	0.95
Permian Basin RT	PBT		21.60	0.91	1.50	1.01	1.04	0.98
Median				0.95	1.49	1.01	1.11	1.00
Bottom Line Cash Payers								
Legacy Reserves L.P.	LGCY		32.12	0.98	1.50	1.03	1.14	1.11
Hugoton RoyaltyTrust	HGT	В	23.30	0.94	1.38	1.05	1.13	1.06
Encore Energy Partners, L.P.	ENP		23.69	0.99	1.95	1.03	1.12	1.02
Pengrowth Energy Corporation	PGH		13.64	0.95	2.06	1.03	1.11	0.98
Enerplus Corporation	ERF		30.66	0.93	1.82	0.98	1.08	0.86
Vanguard Natural Resources, LLC	VNR		31.28	0.96	1.40	0.99	1.08	1.09
Linn Energy, LLC	LINE		38.69	0.98	1.90	1.00	1.08	1.24
San Juan Basin Royalty Trust	SJT		25.98	0.91	1.25	1.02	1.06	1.04
Mesa RoyaltyTrust	MTR		49.25	0.91	1.21	1.03	1.04	0.93
Median				0.95	1.50	1.03	1.08	1.04
CB=Contrarian Buy, Stock Price appa	rently in de	wntr	end comp	ared to 20	0-day avera	œ		



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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.

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