



Independent Stock Idea

Intraday August 1, 2016

Whiting Petroleum (WLL) Remove Buy Designation

<i>Symbol</i>	WLL	<i>Ebitda Next Twelve Months ending /30/17 (US\$m)</i>	550
<i>Rating</i>		<i>North American Natural Gas/Ebitda (%)</i>	7
<i>Price (\$/sh)</i>	6.68	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	8/1/16	<i>Adjusted Reserves/Production NTM</i>	9.4
<i>Shares (mm)</i>	285	<i>EV/Ebitda</i>	12.2
<i>Market Capitalization (\$mm)</i>	1,900	<i>PV/Ebitda</i>	14.9
<i>Debt (\$mm)</i>	4,800	<i>Undeveloped Reserves (%)</i>	67
<i>Enterprise Value (EV) (\$mm)</i>	6,700	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	13.20
<i>Present Value (PV) (\$mm)</i>	8,200	<i>Present Value Proven Reserves(\$/boe)</i>	14.00
<i>Net Present Value (\$/share)</i>	12	<i>Oil and Gas Ebitda Margin (%)</i>	48
<i>Debt/Present Value</i>	0.58	<i>Earnings Next Twelve Months (US\$/sh)</i>	-1.02
<i>McDep Ratio - EV/PV</i>	0.82	<i>Price/Earnings Next Twelve Months</i>	-7
<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\$70 a barrel and natural gas, \$4.00 a million bt			
For historical analysis of Whiting since 2009 see www.mcdep.com/4wll.htm			

Summary and Recommendation

We remove our Buy designation for **Whiting Petroleum (WLL)** because reducing debt has proven to be more dilutive than we expected. On the basis of quarterly disclosures July 28, we reduce estimated Net Present Value (NPV) to \$12 a share (see tables Operating and Financial Estimates and Present Value on page 2). The resulting ratio of Debt to Present Value increases to 0.58, which is too speculative for us to recommend an official Buy. The upside may be more than NPV because we have discounted heavily for risk while the downside is further decline in stock price. As a result, WLL stock could be regarded as an option on higher oil price with corresponding volatility. In that case, holding the stock in small size might be justified.

Kurt H. Wulff, CFA



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Whiting Petroleum Corporation										
Next Twelve Months Operating and Financial Estimates										
	Q2	Year	Q1	Q2	Q3E	Q4E	Year	Q1E	Q2E	Next Twelve Months
	6/30/15	2015	3/31/16	6/30/16	9/30/16	12/31/16	2016E	3/31/17	6/30/17	6/30/17
Volume										
Natural Gas (mmcf)	117	113	115	119	104	99	109	99	99	100
Oil (mbd)	151	144	127	114	100	95	109	95	95	97
Total (mb)	15.5	59.6	13.2	12.3	10.8	10.3	46.7	10.1	10.3	42
Total (mbd)	170	163	147	134	118	112	128	112	112	113
Price										
Henry Hub (\$/mmbtu)	2.66	2.67	2.09	1.95	2.82	3.10	2.49	3.40	3.06	3.10
Differential (\$/mmbtu)	0.74	0.47	1.04	0.99	0.95	0.95	1.02	0.95	0.95	0.96
Company (\$/mcf)	1.92	2.20	1.05	0.96	1.87	2.15	1.47	2.45	2.11	2.14
WTI Cushing (\$/bbl)	57.94	48.79	33.47	45.66	42.65	43.09	41.22	45.03	46.21	44.25
Differential	12.03	10.81	9.45	14.29	14.29	14.29	13.21	14.29	14.29	14.31
Company (\$/bbl)	45.91	37.98	24.02	31.37	28.36	28.80	28.00	30.74	31.92	29.93
Total (\$/bbl)	41.99	35.13	21.69	27.59	25.84	26.46	25.27	28.38	29.08	27.41
Revenue (\$mm)										
Natural Gas	20	90	11	10	18	20	59	22	19	79
Oil	630	2,002	276	330	262	253	1,121	264	280	1,059
Total	651	2,093	286	341	280	272	1,180	286	299	1,138
Expense										
Lease operating	143	555	114	105	94	90	403	88	90	361
Production taxes	57	183	26	27	25	25	103	26	27	102
General and administrative	45	173	45	34	33	31	142	30	31	125
Total	245	911	185	166	152	145	648	144	147	588
Ebitda	406	1,182	101	175	128	127	532	142	152	550
Exploration	58	213	35	26	26	26	113	30	30	112
Deprec., Deplet., & Amort.	322	1,243	312	304	271	257	1,144	252	257	1,038
Other	(76)	(374)	(61)	9	(100)	(100)	(252)	(100)	(100)	(400)
Ebit	102	99	(185)	(164)	(69)	(56)	(474)	(40)	(35)	(200)
Interest	89	334	82	79	65	62	288	60	62	249
Ebt	13	(235)	(267)	(243)	(134)	(118)	(762)	(100)	(97)	(449)
Income Tax	4	(82)	(93)	(85)	(47)	(41)	(267)	(35)	(34)	(157)
Net Income (\$mm)	8	(153)	(173)	(158)	(87)	(77)	(495)	(65)	(63)	(292)
Per Share (\$)	0.04	(0.79)	(0.85)	(0.70)	(0.31)	(0.27)	(2.12)	(0.23)	(0.22)	(1.02)
Shares (millions)	204	193	204	226	285	285	233	285	285	285
Ebitda Margin	62%	56%	35%	51%	46%	47%	45%	50%	51%	48%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%

Whiting Petroleum Corporation					
Functional Cash Flow and Present Value					
	NTM Ebitda	Adjusted	PV/	Present	
	(US\$m)	R/P	Ebitda	Value	
	(US\$m)		(US\$m)	(US\$m)	
North American Natural Gas	38	11.3	21.0	800	10%
Oil	512	9.0	14.5	7,400	90%
	550	9.4	14.9	8,200	100%
Debt (US\$m)					4,800
Net Present Value (US\$m)					3,400
Shares (mm)					285
Net Present Value - Standard Estimate (US\$/sh)					12
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					17



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Table 1										
McDep Energy Stocks										
Enterprise Value, Segments, Yield and McDep Ratio										
Symbol/Rating	Price (US\$/sh)	EV/ Market Cap	Enterprise Value (\$mm)	Present Value by Segment (%)				Dist. Yield	NTM (%)	McDep Ratio
				Natural Gas	Natural Gas	Oil Prod'n	Down- stream			
Global Integrated										
Exxon Mobil Corporation	XOM	87.12	1.26	458,000	6	16	54	23	3.4	0.89
Chevron Corporation	CVX	100.95	1.35	254,000	2	14	65	19	4.2	0.80
Royal Dutch Shell	RDS-A B	50.23	1.68	338,000	2	21	54	24	7.5	0.74
Total S.A.	TOT B	47.27	1.53	172,000		20	58	22	5.8	0.63
<i>Total or Median</i>			<i>1.44</i>	<i>1,222,000</i>			<i>56</i>	<i>23</i>	<i>5.0</i>	<i>0.77</i>
Large Independent										
Devon Energy Corporation	DVN	36.72	1.63	29,400	25		65	9	0.7	1.07
EOG Resources, Inc.	EOG	80.06	1.17	51,100	10	2	88		0.8	1.06
Occidental Petroleum Corp.	OXY	74.09	1.17	66,100	3	2	85	10	4.0	0.99
Marathon Oil Corporation	MRO B	13.13	1.62	17,900	9	2	89		1.5	0.76
ConocoPhillips	COP B	39.96	1.80	89,000	13	13	75		2.5	0.71
<i>Total or Median</i>			<i>1.62</i>	<i>254,000</i>	<i>10</i>		<i>85</i>		<i>1.5</i>	<i>0.99</i>
Small Independent										
Cimarex Energy Company	XEC	117.28	1.11	12,100	32		68		0.3	1.26
Range Resources	RRC	39.33	1.46	9,600	70		30		0.2	0.96
California Resources	CRC	9.71	19.65	7,300	10		90		-	0.83
Continental Resources (32%)	CLR B	42.42	1.46	7,300	20		80		-	0.82
Whiting Petroleum Corporation	WLL	6.68	3.52	6,700	10		90		-	0.81
<i>Total or Median</i>			<i>1.46</i>	<i>43,000</i>	<i>20</i>		<i>80</i>		<i>-</i>	<i>0.83</i>
Income										
San Juan Basin Royalty Trust	SJT	6.28	1.00	290	100		-		8.4	0.79
Cross Timbers Royalty Trust	CRT	18.75	1.00	110	57		43		7.4	0.65
Sabine Royalty Trust	SBR B	36.75	1.00	540	38		62		6.6	0.61
Dorchester Minerals, L.P.	DMLP B	14.71	1.00	450	28		72		7.4	0.61
Permian Basin RT	PBT	6.43	1.00	300	23		77		9.1	0.59
<i>Total or Median</i>			<i>1.00</i>	<i>1,700</i>	<i>38</i>		<i>62</i>		<i>7.4</i>	<i>0.61</i>
Canada										
EnCana Corporation	ECA	7.75	2.29	15,100	43		57		0.8	1.11
Imperial Oil Limited (30%)	IMO	30.15	1.37	10,600	0		64	36	1.5	0.84
Suncor Energy	SU	26.30	1.36	59,800	-		84	16	3.4	0.80
Cenovus Energy Inc.	CVE	13.89	1.35	15,600	7		76	16	1.1	0.75
Birchcliff Energy Ltd.	BIREF B	7.21	1.56	1,700	74		26		-	0.75
<i>Total or Median</i>			<i>1.37</i>	<i>103,000</i>			<i>64</i>		<i>1.1</i>	<i>0.80</i>
Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.										
Estimated present value capped by unlevered cash flow multiple (EV/Ebitda)										
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses										
For historical research see www.mcdep.com										



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Table 2								
McDep Energy Stocks								
Net Present Value and McDep Ratio								
			Price (US\$/sh)	Shares	Market Cap (US\$mm)	Net Present Value (US\$/sh)	Debt/ Present Value	McDep Ratio
	Symbol/Rating		1-Aug 2016	(mm)				
	B = Buy							
Global Integrated								
Exxon Mobil Corporation	XOM		87.12	4,178	364,000	100.00	0.18	0.89
Chevron Corporation	CVX		100.95	1,872	189,000	135.00	0.21	0.80
Royal Dutch Shell	RDS-A	B	50.23	4,008	201,000	80.00	0.30	0.74
Total S.A.	TOT	B	47.27	2,379	113,000	90.00	0.22	0.63
	<i>Total or Median</i>				867,000		0.21	0.77
Large Independent								
Devon Energy Corporation	DVN		36.72	492	18,100	33.00	0.41	1.07
EOG Resources, Inc.	EOG		80.06	547	43,800	75.00	0.15	1.06
Occidental Petroleum Corp.	OXY		74.09	763	56,500	75.00	0.14	0.99
Marathon Oil Corporation	MRO	B	13.13	845	11,090	20.00	0.29	0.76
ConocoPhillips	COP	B	39.96	1,245	50,000	70.00	0.31	0.71
	<i>Total or Median</i>				179,500		0.29	0.99
Small Independent								
Cimarex Energy Company	XEC		117.28	93	10,900	90.00	0.13	1.26
Range Resources	RRC		39.33	167	6,600	42.00	0.30	0.96
California Resources	CRC		9.71	38	400	50.00	0.78	0.83
Continental Resources (32%)	CLR	B	42.42	118	5,000	56.00	0.26	0.82
Whiting Petroleum Corporation	WLL		6.68	285	1,900	12.00	0.58	0.81
	<i>Total or Median</i>				25,000		0.30	0.83
Income								
San Juan Basin Royalty Trust	SJT		6.28	47	290	8.00	-	0.79
Cross Timbers Royalty Trust	CRT		18.75	6	110	29.00	-	0.65
Sabine Royalty Trust	SBR	B	36.75	15	540	60.00	-	0.61
Dorchester Minerals, L.P.	DMLP	B	14.71	31	450	24.00	-	0.61
Permian Basin RT	PBT		6.43	47	300	11.00	-	0.59
	<i>Total or Median</i>				1,700		-	0.61
Canada								
EnCana Corporation	ECA		7.75	850	6,600	6.00	0.63	1.11
Imperial Oil Limited (30%)	IMO		30.15	255	7,700	38.00	0.23	0.84
Suncor Energy	SU		26.30	1,665	43,800	35.00	0.22	0.80
Cenovus Energy Inc.	CVE		13.89	833	11,600	20.00	0.20	0.75
Birchcliff Energy Ltd.	BIREF	B	7.21	153	1,100	11.00	0.27	0.75
	<i>Total or Median</i>				71,000		0.23	0.80
Estimated present value presumes a long-term price for oil of US\$70 a barrel and natural gas, \$4.00 a million btu.								
Estimated present value capped by unlevered cash flow multiple (EV/Ebitda)								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								
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Table 3							
McDep Energy Stocks							
Value Multiples and Dividend							
Ranked by EV/Ebitda							
			Price (US\$/sh)	Adjustd Resrvs/ Prod	PV/ Ebitda	EV/ Ebitda	Dividend NTM
	Symbol/Rating		1-Aug 2016	NTM	NTM	NTM	NTM
	B = Buy						(\$/sh)
Global Integrated							
Exxon Mobil Corporation	XOM		87.12	14.5	14.2	12.7	37
Chevron Corporation	CVX		100.95	9.2	14.3	11.5	70
Royal Dutch Shell	RDS-A	B	50.23	9.8	12.1	9.0	38
Total S.A.	TOT	B	47.27	9.9	11.3	7.1	17
	<i>Median</i>			9.8	13.2	10.2	38
Large Independent							
Devon Energy Corporation	DVN		36.72	9.2	18.2	19.4	0.24
EOG Resources, Inc.	EOG		80.06	8.1	15.9	16.8	0.67
Occidental Petroleum Corp.	OXY		74.09	8.2	15.7	15.5	3.00
Marathon Oil Corporation	MRO	B	13.13	13.2	20.0	15.1	0.20
ConocoPhillips	COP	B	39.96	11.2	18.6	13.1	1.00
	<i>Median</i>			9.2	18.2	15.5	
Small Independent							
Range Resources	RRC		39.33	14.4	21.0	20.1	0.08
Cimarex Energy Company	XEC		117.28	7.4	15.0	19.0	0.32
Continental Resources (32%)	CLR	B	42.42	11.4	19.4	15.9	-
California Resources	CRC		9.71	11.4	16.3	13.5	-
Whiting Petroleum Corporation	WLL		6.68	9.4	14.9	12.2	-
	<i>Median</i>			11.4	16.3	15.9	
Income							
Sabine Royalty Trust	SBR	B	36.75	9.5	24.6	15.0	15
Dorchester Minerals, L.P.	DMLP	B	14.71	6.8	20.1	12.3	18
Cross Timbers Royalty Trust	CRT		18.75	6.6	18.6	12.1	14
San Juan Basin Royalty Trust	SJT		6.28	9.9	14.6	11.5	12
Permian Basin RT	PBT		6.43	8.6	18.8	11.0	11
	<i>Median</i>			8.6	18.8	12.1	14
Canada							
EnCana Corporation	ECA		7.75	5.4	12.8	14.2	0.06
Imperial Oil Limited (30%)	IMO		30.15	35.8	15.4	12.9	0.46
Cenovus Energy Inc.	CVE		13.89	16.7	16.0	12.1	0.15
Birchcliff Energy Ltd.	BIREF	B	7.21	15.1	15.3	11.5	-
Suncor Energy	SU		26.30	21.6	13.7	11.0	0.89
	<i>Median</i>			16.7	15.3	12.1	
	<i>Grand Median</i>			10	16	13	

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2017; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

For historical research see www.mcdep.com



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Table 4										
McDep Energy Stocks										
Total Return Year-to-Date 2016										
Ranked by Unlevered Total Return										
			Price (\$/sh)	Price (\$/sh)	Price Change (%)	Cash Distrib. (%)	Equity Total Return (%)	Unlevered Total Return (\$/sh) (%)		McDep Ratio
	Symbol/Rati		1-Aug 2016	31-Dec 2015						
Global Integrated										
	Exxon Mobil Corporation	XOM	87.12	77.95	12	2	14	23	11	0.89
	Chevron Corporation	CVX	100.95	89.96	12	2	15	35	11	0.80
	Royal Dutch Shell	RDS-A B	50.23	45.79	10	4	14	34	8	0.74
	Total S.A.	TOT B	47.27	44.95	5	3	8	25	5	0.63
	<i>Median</i>				11		14		9	0.77
Large Independent										
	EOG Resources, Inc.	EOG	80.06	70.79	13	1	14	13	12	1.06
	Occidental Petroleum Corp.	OXY	74.09	67.61	10	2	12	13	10	0.99
	Devon Energy Corporation	DVN	36.72	32.00	15	1	16	23	9	1.07
	Marathon Oil Corporation	MRO B	13.13	12.58	4	1	5	8	3	0.76
	ConocoPhillips	COP B	39.96	46.69	(14)	1	(13)	32	(8)	0.71
	<i>Median</i>				10		12		9	0.99
Small Independent										
	Continental Resources (32%)	CLR B	42.42	22.98	85	-	85	19	46	0.82
	Range Resources	RRC	39.33	24.62	60	0	60	18	34	0.96
	Cimarex Energy Company	XEC	117.28	89.38	31	0	31	13	27	1.26
	California Resources	CRC	9.71	23.30	(58)	-	(58)	181	(7)	0.83
	Whiting Petroleum Corporation	WLL	6.68	9.44	(29)	-	(29)	17	(11)	0.81
	<i>Median</i>				31		31		27	0.83
Income										
	Dorchester Minerals, L.P.	DMLP B	14.71	9.89	49	6	55	-	55	0.61
	San Juan Basin Royalty Trust	SJT	6.28	4.14	52	3	54	-	54	0.79
	Cross Timbers Royalty Trust	CRT	18.75	13.01	44	5	49	-	49	0.65
	Sabine Royalty Trust	SBR B	36.75	26.26	40	4	44	-	44	0.61
	Permian Basin RT	PBT	6.43	5.06	27	3	30	-	30	0.59
	<i>Median</i>				44		49		49	0.61
Canada										
	Birchcliff Energy Ltd.	BIREF B	7.21	2.93	146	-	146	4	61	0.75
	EnCana Corporation	ECA	7.75	5.09	52	1	53	10	18	1.11
	Cenovus Energy Inc.	CVE	13.89	12.62	10	1	11	5	8	0.75
	Suncor Energy	SU	26.30	25.80	2	2	4	10	3	0.80
	Imperial Oil Limited (30%)	IMO	30.15	32.52	(7)	1	(7)	11	(5)	0.84
	<i>Median</i>				10		11		8	0.80
	<i>Grand Median</i>				13		14		11	0.80
	Natural Gas (\$/mmbtu)		2.82	2.33	21					
	Oil - West Texas Intermediate (\$/bbl)		40.89	37.06	10					
	S&P 500		2,175	2,044	6					

Source: McDep LLC, Yahoo, CME Group, Bloomberg

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