



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

September 21, 2012

## Whiting Petroleum (WLL)

Growing, Secure, Price-Sensitive, Light Oil

<i>Symbol</i>	WLL	<i>Ebitda Next Twelve Months ending 9/30/13 (US\$m)</i>	1,628
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	5
<i>Price (\$/sh)</i>	48.79	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	9/20/12	<i>Adjusted Reserves/Production NTM</i>	9.3
<i>Shares (mm)</i>	119	<i>EV/Ebitda</i>	4.7
<i>Market Capitalization (\$mm)</i>	5,810	<i>PV/Ebitda</i>	7.6
<i>Debt (\$mm)</i>	1,920	<i>Undeveloped Reserves (%)</i>	31
<i>Enterprise Value (EV) (\$mm)</i>	7,730	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	52.10
<i>Present Value (PV) (\$mm)</i>	12,390	<i>Present Value Proven Reserves(\$/boe)</i>	35.90
<i>Net Present Value (\$/share)</i>	88	<i>Oil and Gas Ebitda Margin (%)</i>	70
<i>Debt/Present Value</i>	0.16	<i>Earnings Next Twelve Months (US\$/sh)</i>	4.37
<i>McDep Ratio - EV/PV</i>	0.62	<i>Price/Earnings Next Twelve Months</i>	11
<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, \$6 a million btu.			

### Summary and Recommendation

Buy-recommended **Whiting Petroleum (WLL)** offers rapid growth in strategically-secure, high-quality, light oil that is especially profitable at current oil price. Whiting's production in the Bakken Shale oil trend in North Dakota grew to some 54% of total oil equivalent production in the second quarter. Bakken accounted for most of the 28% growth in corporate volume compared to the same quarter last year (see table Next Twelve Months Operating and Financial Estimates on page 2). At the current rate of 250 wells a year, management believes it has a ten year back log of locations to be drilled in the Bakken shale and related formations in the Northern Rockies region (see slide Locations on page 3). In Sanish, the most developed field, profitability is strong in the oil price range of \$80 to \$100 a barrel (see slide Production Profiles – Sanish on page 3). The fact that profitability drops sharply at lower oil price indicates that a sustained lower price is unlikely if oil demand grows with global economic activity. Though Sanish may be most profitable, the company appears to be getting favorable results in newer areas as well (see slide Lease Areas on page 4). As a result, Whiting stock at the current price of \$49 looks attractive compared to estimated Net Present Value (NPV) of \$88 a share (see table Functional Cash Flow and Present Value on page 4). Stock price has been volatile, yet it is above its 200-day average as we move into the fourth calendar quarter when the price has moved higher in three of the past four years.

Kurt H. Wulff, CFA



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Whiting Petroleum Corporation									
Next Twelve Months Operating and Financial Estimates									
	Q2	Year	Q2	Q3E	Q4E	Year	Q1E	Q3E	Next Twelve Months
	6/30/11	2011	6/30/12	9/30/12	12/31/12	2012E	3/31/13	9/30/13	9/30/13
<b>Volume</b>									
Natural Gas (mmcf)	69	72	70	70	70	71	70	70	70
Days	91	365	91	92	92	366	90	92	365
Oil (mmb)	4.8	20	6.3	6.5	6.6	26	6.6	7.0	27
Oil (mbd)	53	56	69	70	72	70	73	76	74
Total (mb)	5.8	24.8	7.3	7.6	7.7	29.9	7.6	8.1	31
Total (mbd)	64	68	81	82	83	82	85	88	86
<b>Price</b>									
Henry Hub (\$/mmbtu)	4.32	4.04	2.21	2.80	3.06	2.70	3.44	3.58	3.39
Differential (\$/mmbtu)	(0.62)	(0.88)	(1.04)	(1.31)	(1.43)	(1.12)	(1.61)	(1.68)	(1.59)
Company (\$/mcf)	4.94	4.92	3.25	4.12	4.49	3.82	5.05	5.25	4.97
WTI Cushing (\$/bbl)	102.55	95.12	93.32	92.84	96.41	96.37	97.35	96.95	97.10
Differential	10.05	10.20	18.13	18.04	18.73	18.06	18.92	11.91	15.31
Company (\$/bbl)	92.50	84.92	75.19	74.80	77.68	78.32	78.44	85.04	81.79
Total (\$/bbl)	81.21	75.07	67.12	67.66	70.57	70.33	71.81	77.92	74.70
<b>Revenue (\$mm)</b>									
Natural Gas	31	130	21	27	29	99	32	34	127
Oil	443	1,731	472	484	513	2,006	517	596	2,209
Total	474	1,861	493	511	542	2,105	549	630	2,336
<b>Expense</b>									
Lease operating	74	307	90						
Production taxes	34	140	41						
General and administrative	21	85	25						
Total	129	532	156	155	164	649	166	191	708
<b>Ebitda</b>	345	1,329	337	356	378	1,455	382	439	1,628
Exploration	20	84	28	28	28	112	28	28	112
Deprec., Deplet., & Amort.	110	468	161	161	161	639	161	161	644
Other	13	9	(4)			(10)			-
<b>Ebit</b>	202	767	152	167	189	714	193	250	872
Interest	15	62	18	18	18	72	18	18	72
<b>Ebt</b>	187	705	134	149	171	642	175	232	800
Income Tax	65	247	47	52	60	225	61	81	280
<b>Net Income (\$mm)</b>	121	459	87	97	111	417	114	151	520
Per Share (\$)	1.02	3.86	0.73	0.81	0.93	3.51	0.96	1.27	4.37
<b>Shares (millions)</b>	119	119	119	119	119	119	119	119	119
Ebitda Margin	73%	71%	68%	70%	70%	69%	70%	70%	70%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%

## Future Drilling Locations as of December 31, 2011<sup>(1)</sup>



### Total 3P Drilling Locations

	Gross	Net
Northern Rockies <sup>(2)</sup>	707	334
Central Rockies	421	283
Permian Basin	838	338
Mid-Continent	210	189
Gulf Coast	72	58
Michigan	16	13
<b>Total</b>	<b>2,264</b>	<b>1,215</b>

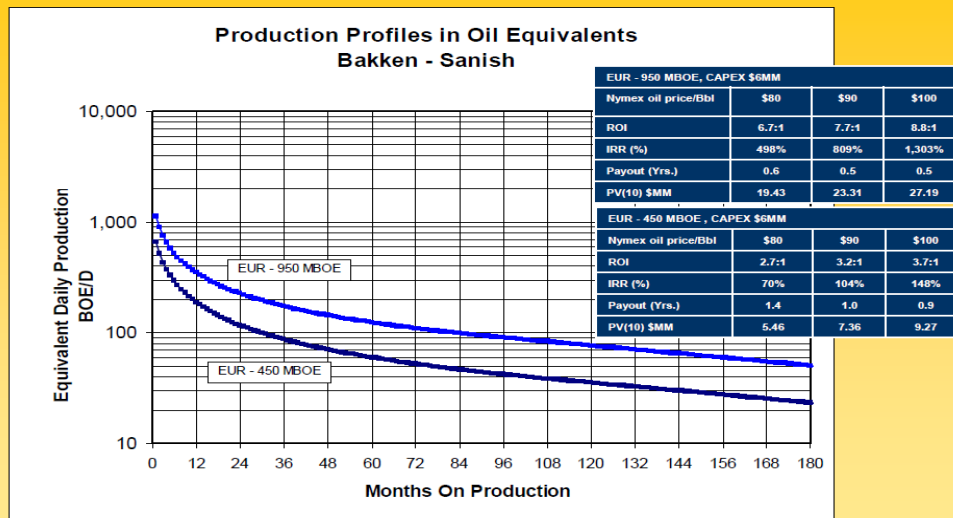
### Total Resource Drilling Locations

	Gross	Net
Northern Rockies	1,839	640
Central Rockies	1,416	889
Permian Basin	417	307
Mid-Continent	6	1
Gulf Coast	34	31
Michigan	29	22
<b>Total</b>	<b>3,741</b>	<b>1,890</b>

(1) Please refer to the beginning of this presentation for disclosures regarding "Forward Looking Statements" and "Reserve and Resource Information".  
 (2) Includes 203 gross (108 net) PUD locations.

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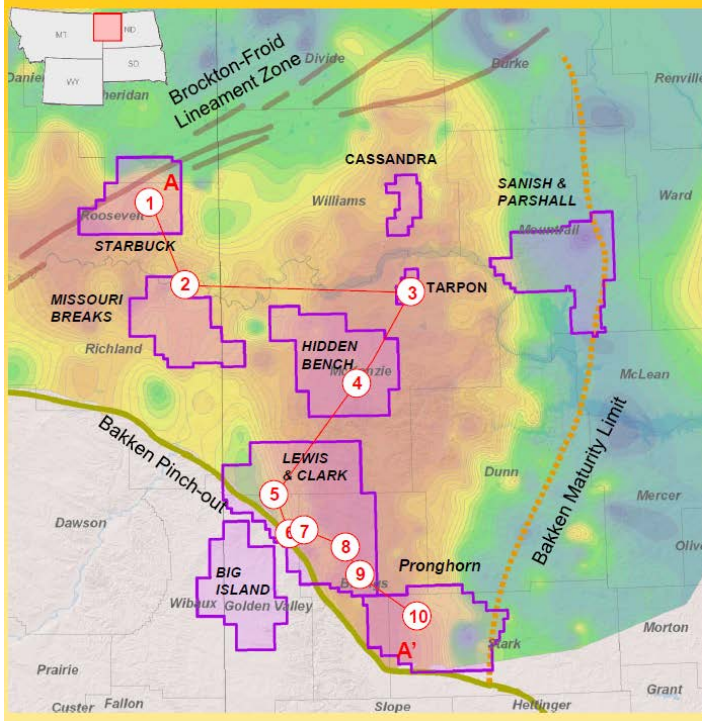
## Typical Bakken Production Profiles Sanish Field (1) (2)



(1) Please refer to the beginning of this presentation for disclosures regarding "Reserve and Resource Information." All volumes shown are un-risked. Our pretax PV10% values do not purport to present the fair value of our oil and natural gas reserves.  
 (2) EURs, ROIs, IRRs and PV10% values will vary well to well. Whiting holds an average WI of 60% and an average NRI of 50% in its operated Bakken wells in Sanish field.

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## All Whiting Lease Areas In Williston Basin Plays at June 30, 2012



	<u>Gross Acres</u>	<u>Net Acres</u>
<b>Sanish / Parshall</b>	177,192	83,007
-Middle Bakken / Three Forks Objectives		
<b>Pronghorn</b>	172,462	123,158
-Pronghorn Sand Objective		
<b>Lewis &amp; Clark</b>	208,941	138,287
-Three Forks Objective		
<b>Hidden Bench</b>	49,999	30,036
-Middle Bakken / Three Forks Objectives		
<b>Tarpon</b>	8,125	6,265
-Middle Bakken / Three Forks Objectives		
<b>Starbuck</b>	106,827	93,278
-Middle Bakken / Three Forks Objectives		
<b>Missouri Breaks</b>	89,580	61,794
-Middle Bakken / Three Forks Objectives		
<b>Cassandra</b>	30,347	13,946
-Middle Bakken / Three Forks Objectives		
<b>Big Island</b>	172,171	122,109
-Multiple Objectives		
<b>Other ND &amp; Montana</b>	<u>113,973</u>	<u>40,424</u>
	<b>1,129,617</b>	<b>712,304<sup>(1)</sup></b>

(1) As of 06/30/2012, Whiting's total acreage cost in 712,304 net acres is approximately \$358 million, or \$503 per net acre.

Whiting Petroleum Corporation					
Functional Cash Flow and Present Value					
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
North American Natural Gas	89	9.7	11.3	1,000	8%
Oil	1,539	9.3	7.4	11,390	92%
	1,628	9.3	7.6	12,390	100%
Debt (US\$mm)				1,920	
Net Present Value (US\$mm)				10,470	
Shares (mm)				119	
Net Present Value - Standard Estimate (US\$/sh)				88	
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)				87	





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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	20-Sep	Market	Value	Nat	Ebitda	NTM	Yield	McDep		
CB (see below)	2012	Cap	(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	Ratio	
<b>Small Cap Independent Producers</b>										
PDC Energy	PDCE	31.13	1.73	1,680	54	46	9.8	-	-	1.02
Continental Resources (32%)	CLR	79.79	1.19	5,450	25	75	7.8	-	-	1.00
Range Resources	RRC B	69.22	1.29	14,250	74	26	15.4	0.16	0.2	0.99
Peyto Exploration and Developmen	PEYUF	23.62	1.19	4,010	76	24	10.4	0.74	3.1	0.99
Halcón Resources	HK	7.22	1.35	2,830	12	88	6.6	-	-	0.78
Berry Petroleum Company	BRY	40.75	1.73	3,850	13	87	5.2	-	-	0.71
Denbury Resources Inc.	DNR	17.34	1.46	9,920	6	94	5.8	-	-	0.70
Birchcliff Energy Ltd.	BIREF CB	6.85	1.51	1,540	63	37	9.4	-	-	0.67
Whiting Petroleum Corporation	WLL B	48.79	1.33	7,730	8	92	4.7	-	-	0.62
Cimarex Energy Company	XEC CB	61.89	1.23	6,590	45	55	5.3	0.48	0.8	0.61
<i>Total or Median</i>				57,900			7.2			0.74
<b>Top Line Cash Payers</b>										
Freehold Royalties Ltd.	FRHLF	20.67	1.04	1,390	16	84		1.73	8.4	0.98
Dorchester Minerals, L.P.	DMLP CB	22.19	1.00	680	57	43		2.06	9.3	0.82
Sabine Royalty Trust	SBR	52.73	1.00	770	55	45		3.88	7.3	0.81
Permian Basin RT	PBT	15.29	1.00	710	37	63		1.09	7.1	0.76
Cross Timbers Royalty Trust	CRT	32.41	1.00	190	70	30		2.61	8.1	0.73
<i>Total or Median</i>				3,700					8.1	0.81
<b>Bottom Line Cash Payers</b>										
Linn Energy, LLC	LINE	40.63	1.75	14,080	40	60	13.1	2.90	7.1	1.18
Vanguard Natural Resources, LLC	VNR	28.56	1.69	2,530	23	77	10.3	2.40	8.4	1.08
Legacy Reserves L.P.	LGCY	28.69	1.32	1,800	24	76	8.8	2.24	7.8	0.97
Enerplus Corporation	ERF CB	16.96	1.57	5,200	30	70	6.8	1.11	6.6	0.87
Enduro Royalty Trust (40%)	NDRO	17.95	1.00	240	39	61	7.8	1.80	10.0	0.85
San Juan Basin Royalty Trust	SJT CB	13.81	1.00	640	100	-	9.8	1.01	7.3	0.66
Mesa RoyaltyTrust	MTR	24.03	1.00	45	75	25	8.3	2.14	8.9	0.60
Hugoton RoyaltyTrust	HGT	6.76	1.00	270	88	13	6.3	0.34	5.1	0.48
<i>Total or Median</i>				24,800			8.5		7.6	0.86
<b>Composite</b>										
<i>Enterprise Value Weighting</i>				86,400	38	62				0.84
<i>Equal Weighting</i>					45	55				0.82
<i>Equal Weighted Buys</i>					48	52				0.75

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 \$6 a million btu for natural gas.

Dist. = Income distribution. NTM = Next Twelve Months Ended September 30, 2013. Enterprise Value = Market Cap and Debt.





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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		20-Sep 2012	Royalty (%)	Ebitda	NTM	NTM	NTM
<b>Small Cap Independent Producers</b>								
Range Resources	RRC	B	69.22		-	14.7	15.6	15.4
Peyto Exploration and Development Corp	PEYUF		23.62		0.32	9.1	10.5	10.4
PDC Energy	PDCE		31.13		-	8.6	9.6	9.8
Birchcliff Energy Ltd.	BIREF	CB	6.85		-	20.9	14.1	9.4
Continental Resources (32%)	CLR		79.79		-	10.1	7.8	7.8
Halcón Resources	HK		7.22		-	5.6	8.5	6.6
Denbury Resources Inc.	DNR		17.34		-	13.0	8.3	5.8
Cimarex Energy Company	XEC	CB	61.89		-	7.7	8.6	5.3
Berry Petroleum Company	BRY		40.75		-	11.4	7.3	5.2
Whiting Petroleum Corporation	WLL	B	48.79		-	9.3	7.6	4.7
	<i>Median</i>					9.7	8.6	7.2
<b>Top Line Cash Payers</b>								
Sabine Royalty Trust	SBR		52.73	100	1.00	7.9	16.8	13.6
Cross Timbers Royalty Trust	CRT		32.41	78	0.96	17.9	16.2	11.9
Freehold Royalties Ltd.	FRHLF		20.67	71	0.96	5.6	11.6	11.5
Dorchester Minerals, L.P.	DMLP	CB	22.19	77	1.00	6.4	13.1	10.8
Permian Basin RT	PBT		15.29	47	0.73	9.4	13.4	10.3
	<i>Median</i>					7.9	13.4	11.5
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		40.63		1.08	15.1	11.2	13.1
Vanguard Natural Resources, LLC	VNR		28.56		0.92	14.0	9.5	10.3
San Juan Basin Royalty Trust	SJT	CB	13.81		0.71	8.6	14.8	9.8
Legacy Reserves L.P.	LGCY		28.69		0.68	11.4	9.1	8.8
Mesa RoyaltyTrust	MTR		24.03		0.74	7.7	13.8	8.3
Enduro Royalty Trust (40%)	NDRO		17.95		0.78	7.2	9.1	7.8
Enerplus Corporation	ERF	CB	16.96		0.41	6.3	7.8	6.8
Hugoton RoyaltyTrust	HGT		6.76		0.32	13.4	13.1	6.3
	<i>Median</i>					10.0	10.4	8.5
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, 2013; 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	20-Sep 2012	52Wk High	52Wk Low	50 Day Avg.	200 Day Avg.	McDep Ratio	
<b>Small Cap Independent Producers</b>								
Peyto Exploration and Development C	PEYUF		23.62	0.93	1.48	1.10	1.18	0.99
Range Resources	RRC	B	69.22	0.92	1.24	1.05	1.09	0.99
Continental Resources (32%)	CLR		79.79	0.85	1.65	1.09	1.04	1.00
Denbury Resources Inc.	DNR		17.34	0.86	1.39	1.08	1.02	0.70
PDC Energy	PDCE		31.13	0.86	1.43	1.07	1.01	1.02
Whiting Petroleum Corporation	WLL	B	48.79	0.81	1.44	1.07	1.01	0.62
Cimarex Energy Company	XEC	CB	61.89	0.75	1.26	1.05	0.98	0.61
Berry Petroleum Company	BRY		40.75	0.81	1.17	1.03	0.98	0.71
Birchcliff Energy Ltd.	BIREF	CB	6.85	0.55	1.23	1.02	0.84	0.67
Halcón Resources	HK		7.22	0.61		0.95		0.78
	<i>Median</i>			<i>0.83</i>	<i>1.39</i>	<i>1.06</i>	<i>1.01</i>	<i>0.74</i>
<b>Top Line Cash Payers</b>								
Freehold Royalties Ltd.	FRHLF		20.67	0.97	1.48	1.07	1.08	0.98
Dorchester Minerals, L.P.	DMLP	CB	22.19	0.83	1.12	1.00	0.97	0.82
Sabine Royalty Trust	SBR		52.73	0.78	1.16	0.99	0.92	0.81
Cross Timbers Royalty Trust	CRT		32.41	0.63	1.02	0.88	0.79	0.73
Permian Basin RT	PBT		15.29	0.66	1.05	0.88	0.78	0.76
	<i>Median</i>			<i>0.78</i>	<i>1.12</i>	<i>0.99</i>	<i>0.92</i>	<i>0.81</i>
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		40.63	1.00	1.16	1.02	1.04	1.18
Legacy Reserves L.P.	LGCY		28.69	0.95	1.17	1.04	1.03	0.97
Vanguard Natural Resources, LLC	VNR		28.56	0.98	1.16	1.01	1.03	1.08
Enerplus Corporation	ERF	CB	16.96	0.69	1.27	1.08	0.93	0.87
San Juan Basin Royalty Trust	SJT	CB	13.81	0.55	1.15	0.92	0.79	0.66
Mesa RoyaltyTrust	MTR		24.03	0.52	1.05	0.87	0.70	0.60
Hugoton RoyaltyTrust	HGT		6.76	0.29	1.18	0.97	0.57	0.48
	<i>Median</i>			<i>0.69</i>	<i>1.16</i>	<i>1.01</i>	<i>0.93</i>	<i>0.87</i>

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

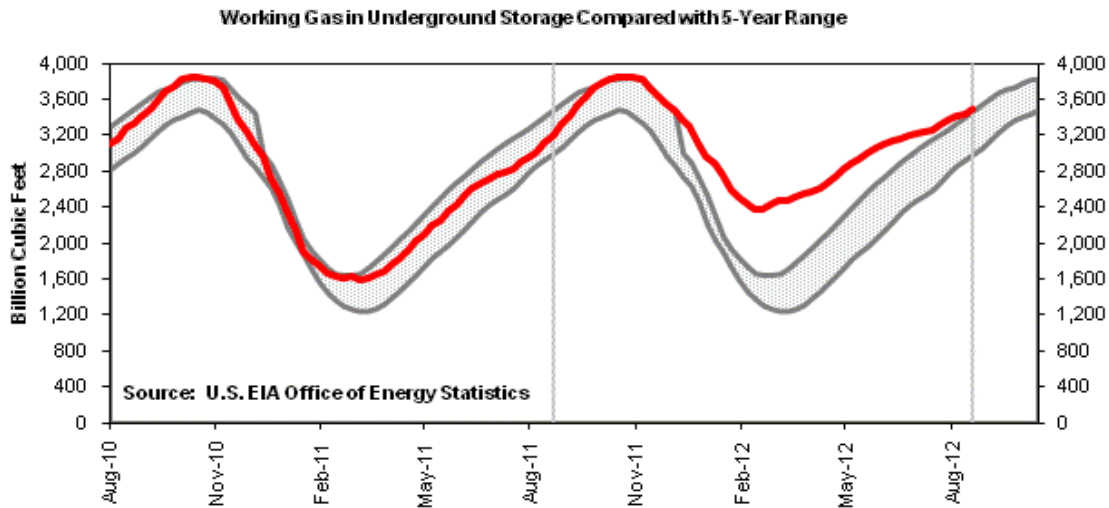




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