

Analysis of Oil & Gas Stocks April 27, 2012

#### Range Resources (RRC) - Shale Strength

Symbol	RRC	Ebitda Next Twelve Months ending 3/31/13 (US\$mm)	821
Rating	Buy	North American Natural Gas/Ebitda (%)	47
Price (\$/sh)	62.64	Natural Gas and Oil Production/Ebitda (%)	100
Pricing Date	4/26/12	Adjusted Reserves/Production NTM	14.5
Shares (mm)	160	EV/Ebitda	15.5
Market Capitalization (\$mm)	10,020	PV/Ebitda	16.9
Debt (\$mm)	2,690	Undeveloped Reserves (%)	53
Enterprise Value (EV) (\$mm)	12,720	Natural Gas and Oil Ebitda (\$/boe)	19.10
Present Value (PV) (\$mm)	13,890	Present Value Proven Reserves(\$/boe)	16.50
Net Present Value (\$/share)	70	Oil and Gas Ebitda Margin (%)	75
Debt/Present Value	0.19	Earnings Next Twelve Months (US\$/sh)	0.91
McDep Ratio - EV/PV	0.92	Price/Earnings Next Twelve Months	69
Dividend Yield (%/year)	0.3	Indicated Annual Dividend (US\$/sh)	0.16
Note: Estimated cash flow an	d earnings tied to one	e-year futures prices for oil and natural gas.	
Reported results may v	ary widely from estir	mates. Estimated present value per share revised only infr	equently.
Estimated present value	e presumes a long-ter	rm price for oil of US\$100 a barrel and natural gas, \$6 a n	nillion btu.

#### **Summary and Recommendation**

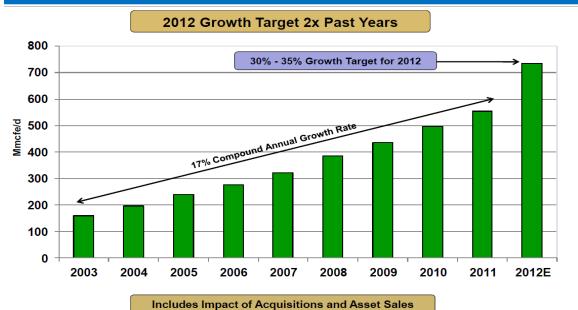
Targeting 30% volume growth in 2012, Buy-recommended Range Resources (RRC) would accelerate from a17% a year pace for the past nine years (see slide Production Growth on page 2). Current production derives from 5 trillion cubic feet equivalent (TCFe) of proven reserves and 44-60 TCFe net unproven resource potential predominantly in the Marcellus Shale. On the quarterly call on April 26, Chief Executive Jeff Ventura and Chief Operating Officer Ray Walker updated the increasing promise of five new areas for the application of shale gas and tight oil technology (see slide Enhancements to Portfolio on page 2). First, there are concrete signs that a lightly drilled portion of the Marcellus is "Super Rich" in liquid content, which is much more valuable than dry natural gas in today's market (see slide Southwest PA Wet Marcellus on page 3). Second, a formation above the Marcellus also appears to have a Super-Rich area that will be tested with two wells in 2012 (see slide Upper Devonian on page 3). Third, a formation below the Marcellus appears to have rich gas in Ohio that may extend onto Range lands in northwestern Pennsylvania (see slide Utica/Point Pleasant on page 4). Fourth, the company sees a billion barrel possibility in a core acreage position among the same oil fields near Ponca City, Oklahoma that launched Conoco in the 1920s (see slide Mississippian on page 4). Fifth, Range has legacy acreage well-positioned in the Cline Oil Shale in the Permian Basin of West Texas (see slide Cline on page 5). None of the five enhancements and little of the enumerated unproven potential is counted yet in estimated Net Present Value (NPV) of \$70 a share (see tables Functional Cash Flow and Present Value on page 5 and Next Twelve Months Operating and Financial Estimates on page 6). Unfolding with shale strength, NPV is up 55% from \$45 a share in December 2010. Looking ahead, we think further gains are likely for the company that discovered the Marcellus Shale (now 9% of U.S. natural gas production) and helped launch an energy revolution that may accelerate economic growth globally.

Kurt H. Wulff, CFA



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#### Nine Years of Double-Digit Production Growth



NANGE RESOURCE

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#### **Enhancements to Portfolio**

Range has five enhancements to the existing portfolio for 2012

- 1. Super-rich Marcellus 1,350 Btu or higher wet gas
- 2. Super-rich Upper Devonian
- 3. Wet Utica Shale
- 4. Horizontal Mississippian oil play
- 5. Cline Shale oil play

RAME APROVINCE

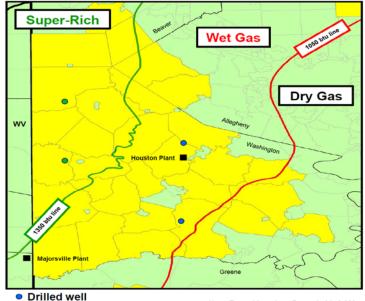
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#### Southwest PA Wet Marcellus Super-Rich 188 wells placed on 125,000 acres production in 2009, 2010 Wet Gas 0.000 acre and 2011 generally in the circled wet area of the Marcellus Shale: Average lateral length of 2.981 feet Average of 10 frac stages Average 281 Mbbls (24 Mbbls condensate and 257 Mbbls NGLs) and 4.2 Bcf With ethane, average 614 Mbbls (24 Mbbls condensate and 590 Mbbls NGLs) and 3.6 Bcf **Dry Gas** 235,000 acres Initial development has been near the Houston Plant

#### Southwest PA – Upper Devonian



- **Upper Devonian** prospective in Super-Rich, Wet and Dry areas
- Two wells drilled to date with average IP 3.8 Mmcfe/day
- Best well 4.7 Bcfe EUR
- Two tests scheduled for 2012 in Super-Rich area
- Cores on two new wells encouraging

- Planned to be drilled in 2012

Note: Townships where Range holds 3,000+ acres are shown in yellow

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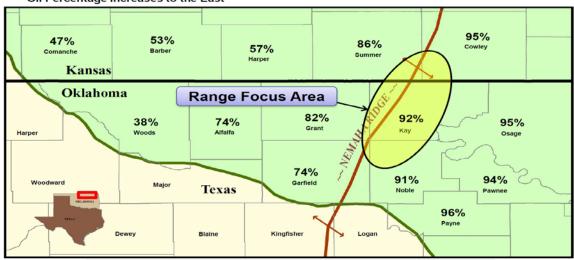


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# Northwest PA — Utica/Point Pleasant Potential | Continue | Contin

#### % of Mississippian Wells Classified as Oil

Oil Percentage Increases to the East



Range Acreage Increased to ~ 145,000 Net Acres

Source: Industry data using active well counts.

RANGE RESOURCES

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#### Midland Basin - Cline Oil Shale & Wolfberry **RANGE MIDLAND BASIN** ~ 100,000 net acres ~ 91% HBP RANGE 2012 Activity 3 Cline + 2 Wolfberry Cline Shale Horizontal P: 282 BOPD + 123 BNGLs + 476 MCF Locations 2011 Cline Shale Horizontal EUR: 340 MBOE Wolfberry Vertical 212 BOPD + 144 BNGLs + 969 MC 517 BOEPD Wolfberry Vertical IP:195 BOPD + 141 BNGLs + 954 MCi 495 BOEPD Potential Wolfberry Area Active Cline Locations TOM GREEN COUNTY

Range Re	esources Corp	poration							
Functional Ca	sh Flow and l	Present Val	ue						
	Present								
	NTM Ebitda	Adjusted	PV/	Value					
	(US\$mm)	<u>R/P</u>	<u>Ebitda</u>	(US\$mm)					
North American Natural Gas	388	14.7	25.0	9,700	70%				
Oil	433	13.6	9.7	4,190	30%				
	821	14.5	16.9	13,890	100%				
Debt (US\$mm)					2,690				
Net Present Value (US\$mm)					11,200				
Shares (mm)					160				
Net Present Value - Standard Estimate (US\$/sh)					70				
NPV Approximation by Cash Flow Multiple Depe	nding on Rese	rve Life (US	\$\( \sh\)		52				



		Range	Resourc	es Corpo	ration				
	Next Tw	elve Month				Estimates			
			•						Next
									Twelve
	Q1	Q4	Year	Q1	Q2E	Q3E	Year	Q1E	Months
	3/31/11	12/31/11	2011	3/31/12	6/30/12	9/30/12	2012E	3/31/13	3/31/13
Volume									
Natural Gas (mmcfd)	331	491	405	512	527	543	536	576	552
Days	90	92	365	91	91	92	366	90	365
Oil (mmb)	1.6	2.1	7	2.2	2.2	2.3	9	2.4	9
Oil (mbd)	17.4	22.3	20.2	23.9	24.6	25.4	25.0	26.9	25.7
Total (mmcfd)	436	625	526	655	675	695	686	738	706
Price									
Henry Hub (\$/mmbtu)	4.11	3.55	4.04	2.73	2.11	2.27	2.44	3.12	2.54
Differential (\$/mmbtu)	0.01	(0.11)	(0.11)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Company (\$/mcf)	4.10	3.66	4.15	2.75	2.12	2.29	2.46	3.15	2.57
WTI Cushing (\$/bbl)	94.10	94.06	95.12	102.93	103.03	103.86	103.58	104.65	104.01
Differential	37.29	33.86	36.27	42.11	42.15	42.49	42.36	42.81	42.54
Company (\$/bbl)	56.81	60.20	58.85	60.82	60.88	61.37	61.22	61.84	61.47
Total (\$/bbl)	32.33	30.15	32.74	26.20	23.26	24.15	24.93	28.28	25.50
Revenue (\$mm)									
Natural Gas	122	165	614	128	102	114	482	163	518
Oil	89	124	434	132	136	143	560	150	578
Total	211	289	1,048	260	238	257	1,043	313	1,095
Expense			Ĺ						
Lease operating	29	25	114	29					-
Production taxes	7	6	28	13					-
General and administrative	27	33	113	39					-
Total	63	64	255	81	60	64	277	78	274
Ebitda	148	225	793	179	179	193	766	235	821
Exploration	27	24	100	22	22	22	88	22	88
Deprec., Deplet., & Amort.	72	97	341	100	100	100	400	100	400
Other	(29)	(12)	(42)	(17)	(28)	(18)	(66)	10	(39)
Ebit	78	116	394	74	84	89	344	103	373
Interest	25	35	125	37	37	37	148	37	148
Ebt	53	81	269	37	47	52	196	66	225
Income Tax	19	28	94	13	17	18	68	23	79
Net Income (\$mm)	35	53	175	24	31	34	127	43	146
Per Share (\$)	0.22	0.33	1.10	0.15	0.19	0.21	0.80	0.27	0.91
Shares (millions)	158	160	159	160	160	160	160	160	160
Ebitda Margin	70%	78%	76%	69%	75%	75%	73%	75%	75%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%



				Table IS							
McI	Dep In	co	me and	Small	Cap Ene	rgy I	Portf	olio			
Debt, S	egmei	ıts	, Cash l	Flow, I	ncome ai	nd M	cDe	p Ratio	o		
			Price								
Syn	bol/Rati	ing	(US\$/sh)	EV/	Enterprise	PV(	%)	EV/	Dist.	Dist.	
~,	B = I		26-Apr	Market	Value	Nat		Ebitda	NTM	Yield	McDep
СВ	(see belo		2012	Сар	(\$mm)	Gas	Oil	NTM	(\$/un)	(%)	Ratio
Small Cap Independent Produce	•6										
Range Resources	RRC	В	62.64	1.27	12,710	70	30	15.5	0.16	0.3	0.92
PDC Energy	PETD	ь	34.21	1.60	1,290	54	46	7.4	0.10	-	0.91
Berry Petroleum Company	BRY		44.17	1.65	3,980	14	86	5.8	0.32	0.7	0.74
Denbury Resources Inc.	DNR		18.81	1.38	10,160	6	94	5.9	0.32	-	0.74
Peyto Exploration and Developmen		7	16.44	1.22	2,680	75	25	9.2	0.73	4.4	0.74
Whiting Petroleum Corporation	WLL	В	56.11	1.28	8,550	8	92	4.9	0.73	4.4	0.73
Cimarex Energy Company	XEC	CB		1.16	6,750	40	60	5.4	0.36	0.5	0.65
Birchcliff Energy Ltd.	BIREF			1.10	1,330	60	40	8.7	0.30	- 0.5	0.03
Total or Median	DIKLI	СБ	0.55	1.39	47,500	00	40	6.7			0.49
Total or Median					47,300			0.7			0.73
Top Line Cash Payers											
Permian Basin RT	PBT		21.12	1.00	980	37	63		1.43	6.8	1.06
Cross Timbers Royalty Trust	CRT		41.48	1.00	250	70	30		2.51	6.0	0.94
Freehold Royalties Ltd.	FRHLF	1	19.32	1.04	1,300	16	84		1.69	8.8	0.92
Sabine Royalty Trust	SBR		57.46	1.00	840	55	45		3.77	6.6	0.88
Dorchester Minerals, L.P.	DMLP	CB	23.49	1.00	720	57	43		1.95	8.3	0.87
Total or Median					4,100					6.8	0.92
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		39.53	1.62	12,350	38	62	11.6	2.90	7.3	1.18
Vanguard Natural Resources, LLC	VNR		28.70	1.44	2,150	20	80	10.0	2.35	8.2	1.10
Enduro Royalty Trust (40%)	NDRO		20.86	1.00	280	42	58	7.5	1.75	8.4	0.99
Legacy Reserves L.P.	LGCY		28.50	1.36	1,840	24	76	8.6	2.20	7.7	0.96
Mesa RoyaltyTrust	MTR		31.35	1.00	58	75	25	10.3	2.58	8.2	0.78
San Juan Basin Royalty Trust	SJT	СВ		1.00	760	100	-	15.0	0.69	4.2	0.78
Enerplus Corporation	ERF	CB		1.40	5,000	28	72	5.8	2.18	11.9	0.73
Hugoton RoyaltyTrust	HGT	СБ	13.00	1.00	520	88	12	15.9	0.68	5.2	0.77
Total or Median	1101		13.00	1.00	23,000	00	12	10.2	0.00	8.0	0.70
Composite											
Enterprise Value Weighting					74,500	36	64				0.82
Equal Weighting						46	54				0.85
Equal Weighted Buys						43	57				0.74
CB=Contrarian Buy, Stock Price ap	narently	in c	lowntrend	compared	to 200-day a	verage					
McDep Ratio = Market cap and De											
Present Value (PV) presumes long-								r natural <i>c</i>	196		
Dist. = Income distribution. NTM:										an and I	Debt



		Tab	le ISC-2					
McDep Inco	ome an	d Sı	mall Ca	p Ener	gy Port	folio		
Net Pr	resent `	Valu	e and l	McDep	Ratio			
			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		26-Apr	Shares	Cap	Value	Present	McDep
	Ra	ting	2012	(mm)	(\$mm)	(\$/un)	Value	Ratio
Small Cap Independent Producers								
Range Resources	RRC	В	62.64	160.0	10,020	70.00	0.19	0.92
PDC Energy	PETD		34.21	23.6	810	40.00	0.34	0.91
Berry Petroleum Company	BRY		44.17	54.7	2,420	70.00	0.29	0.74
Denbury Resources Inc.	DNR		18.81	393.0	7,390	28.00	0.20	0.74
Peyto Exploration and Development Cor	PEYUF		16.44	133.9	2,200	24.00	0.13	0.73
Whiting Petroleum Corporation	WLL	В	56.11	119.0	6,680	88.00	0.15	0.69
Cimarex Energy Company	XEC	СВ	67.75	86.2	5,840	110.00	0.09	0.65
Birchcliff Energy Ltd.	BIREF	CB	6.53	147.0	960	16.00	0.14	0.49
Total or Median					36,320		0.17	0.73
Top Line Cash Payers								
Permian Basin RT	PBT		21.12	46.6	980	20.00	_	1.06
Cross Timbers Royalty Trust	CRT		41.48	6.0	250	44.00	_	0.94
Freehold Royalties Ltd.	FRHLF		19.32	64.8	1,250	21.00	0.03	0.94
Sabine Royalty Trust	SBR		57.46	14.6	840	65.00	- 0.03	0.92
Dorchester Minerals, L.P.	DMLP	СВ	23.49	30.7	720	27.00	_	0.87
Total or Median	DIVILI	СБ	23.43	30.7	4,040	27.00	-	0.92
Total of Median					4,040			0.92
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		39.53	193.0	7,630	30.00	0.45	1.18
Vanguard Natural Resources, LLC	VNR		28.70	52.0	1,490	25.00	0.34	1.10
Enduro Royalty Trust (40%)	NDRO		20.86	13.2	280	21.00	-	0.99
Legacy Reserves L.P.	LGCY		28.50	47.5	1,350	30.00	0.25	0.96
Mesa RoyaltyTrust	MTR		31.35	1.9	58	40.00	-	0.78
San Juan Basin Royalty Trust	SJT	CB	16.29	46.6	760	21.00	-	0.78
Enerplus Corporation	ERF	CB	18.30	196.0	3,590	26.00	0.22	0.77
Hugoton RoyaltyTrust	HGT		13.00	40.0	520	17.00	-	0.76
Total or Median					15,680			0.87
D_Dury CD_Contaction Dury Ct1-D		ا منام	lorrmtnor-1	L-monmon-	to 200 da			
B=Buy; CB=Contrarian Buy, Stock Price McDep Ratio = Market cap and Debt to								
Present Value presumes long-term price							gae	



		Tab	le ISC-3	3				
McDep Inco	ome an	d S	mall C	ap Enei	gy Por	tfolio		
Value	Multip	les ·	Rank	by EV/	Ebitda			
	1			J =				
			Price			Adjstd		
				Revenue	Dist/	Resrvs/	PV/	EV/
	Symbol/		26-Apr	Royalty	Equity	Prod	Ebitda	Ebitda
	Ra	ting	2012	(%)	Ebitda	NTM	NTM	NTM
Small Cap Independent Producers								
Range Resources	RRC	В	62.64		-	14.5	16.9	15.5
Peyto Exploration and Development Corp			16.44		0.38	109.9	12.6	9.2
Birchcliff Energy Ltd.	BIREF	СВ	6.53		-	23.7	17.7	8.7
PDC Energy	PETD		34.21		-	8.1	8.2	7.4
Denbury Resources Inc.	DNR		18.81		-	14.1	8.0	5.9
Berry Petroleum Company	BRY		44.17		-	12.2	7.8	5.8
Cimarex Energy Company	XEC	СВ	67.75		-	8.2	8.3	5.4
Whiting Petroleum Corporation	WLL	В	56.11		_	9.7	7.1	4.9
Median	,,,		0 0.11			13.1	8.3	6.7
Transition Coal Decrees								
Top Line Cash Payers	CDT		41 40	70	0.06	162	1.0	150
Cross Timbers Royalty Trust	CRT		41.48	78	0.96	16.3	16.9	15.9
Sabine Royalty Trust	SBR		57.46	100	1.00	8.2	17.3	15.3
Permian Basin RT	PBT	CD	21.12	32	0.92	9.7	12.8	13.5
Dorchester Minerals, L.P.	DMLP	CB	23.49	77	1.00	6.1	13.8	12.0
Freehold Royalties Ltd.	FRHLF		19.32	71	0.75	5.9	9.2	8.5
Median						8.2	13.8	13.5
<b>Bottom Line Cash Payers</b>								
Hugoton RoyaltyTrust	HGT		13.00		0.83	12.8	20.8	15.9
San Juan Basin Royalty Trust	SJT	CB	16.29		0.64	8.8	19.3	15.0
Linn Energy, LLC	LINE		39.53		0.96	14.5	9.9	11.6
Mesa RoyaltyTrust	MTR		31.35		0.86	7.5	13.3	10.3
Vanguard Natural Resources, LLC	VNR		28.70		0.86	14.0	9.1	10.0
Legacy Reserves L.P.	LGCY		28.50		0.66	11.9	8.9	8.6
Enduro Royalty Trust (40%)	NDRO		20.86		0.63	5.2	7.5	7.5
Enerplus Corporation	ERF	CB	18.30		0.63	6.5	7.5	5.8
Median						10.3	9.5	10.2
B=Buy; CB=Contrarian Buy, Stock Price	annarentl	v in c	owntrend	l compared	to 200-da	v average		
EV = Enterprise Value = Market Cap and							n	
and amortization; NTM = Next Twelve M							/11	
Earnings; $PV = Present Value of oil and g$				2013,1/E-	- SIUCK FI	100 10		
Top Line Cash Payers defined as those ha				oo fifth as	lumn from	right)		

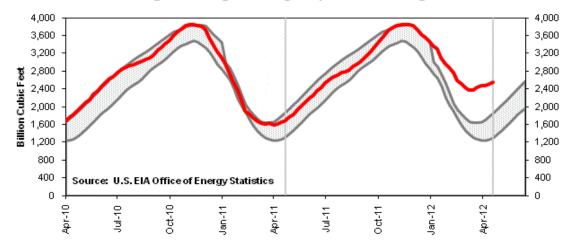


		Tal	ole ISC-4	l				
Oil and	Gas Inc	om	e and S	Small C	Cap Stoc	ks		
Rank by E	Cnterpri	ise \	Value t	o 200 I	Day Ave	rage		
•	_							
			Price					
			(\$/sh)		Enterpris	e Value/		
	Symbol/		26-Apr	52Wk	52Wk	50 Day	200 Day	McDep
	Ra	ting	2012	High	Low	Avg.	Avg.	Ratio
Small Cap Independent Producers								
Whiting Petroleum Corporation	WLL	В	56.11	0.81	1.61	1.01	1.10	0.69
Denbury Resources Inc.	DNR		18.81	0.87	1.50	1.00	1.08	0.74
PDC Energy	PETD		34.21	0.89	1.54	0.98	1.07	0.91
Range Resources	RRC	В	62.64	0.84	1.18	1.03	1.00	0.92
Cimarex Energy Company	XEC	CB	67.75	0.64	1.28	0.90	0.99	0.65
Berry Petroleum Company	BRY		44.17	0.81	1.23	0.93	0.98	0.74
Peyto Exploration and Development C	PEYUF		16.44	0.68	1.10	0.97	0.82	0.73
Birchcliff Energy Ltd.	BIREF	CB	6.53	0.50	1.09	0.78	0.62	0.49
Median				0.81	1.25	0.97	0.99	0.73
Top Line Cash Payers								
Freehold Royalties Ltd.	FRHLF		19.32	0.82	1.39	0.98	1.01	0.92
Permian Basin RT	PBT		21.12	0.90	1.17	0.95	1.00	1.06
Dorchester Minerals, L.P.	DMLP	CB	23.49	0.81	1.13	0.96	0.97	0.87
Cross Timbers Royalty Trust	CRT		41.48	0.81	1.15	0.95	0.91	0.94
Sabine Royalty Trust	SBR		57.46	0.81	1.21	0.93	0.91	0.88
Median				0.81	1.17	0.95	0.97	0.92
<b>Bottom Line Cash Payers</b>								
Linn Energy, LLC	LINE		39.53	0.98	1.15	1.02	1.03	1.18
Vanguard Natural Resources, LLC	VNR		28.70	0.89	1.20	1.02	1.03	1.10
Legacy Reserves L.P.	LGCY		28.50	0.88	1.20	0.99	1.01	0.96
Enerplus Corporation	ERF	CB	18.30	0.64	1.03	0.87	0.78	0.77
San Juan Basin Royalty Trust	SJT	CB	16.29	0.64	1.04	0.88	0.74	0.78
Mesa RoyaltyTrust	MTR		31.35	0.63	1.06	0.78	0.73	0.78
Hugoton RoyaltyTrust	HGT		13.00	0.54	1.06	0.90	0.68	0.76
Median				0.64	1.06	0.90	0.78	0.78



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#### Working Gas in Underground Storage Compared with 5-Year Range



**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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