

Value, Growth, Income and Momentum

						Preser	t Value by	Segmen	t (%)		
			Price			North	Rest of			Dist.	
			(US\$/sh)	EV/	Enterprise	Amer.	World			Yield	
S	ymbol/Rati	ing	9-May	Market	Value	Natural	Natural	Oil	Down-	NTM	McDep
			2016	Cap	(\$mm)	Gas	Gas	Prod'n	stream	(%)	Ratio
Royal Dutch Shell	RDS-A	В	49.60	1.72	316,000	1	17	44	37	7.6	0.74
Total S.A.	TOT	В	47.98	1.53	173,000		22	55	23	5.8	0.64
Marathon Oil Corporation	MRO	В	11.44	1.71	16,500	6	1	92		1.7	0.70
ConocoPhillips	COP	В	41.65	1.76	92,000	11	12	77		2.4	0.66
Continental Resources (32%)	CLR	В	38.74	1.50	6,900	20		80		-	0.77
Whiting Petroleum Corporation	WLL	В	10.02	2.54	6,900	5		95		-	0.56
Dorchester Minerals, L.P.	DMLP	В	13.21	1.00	410	23		77		7.2	0.55
Sabine Royalty Trust	SBR	В	32.32	1.00	470	38		62		6.2	0.54
Birchcliff Energy Ltd.	BIREF	В	3.85	1.98	1,200	77		23		-	0.51

Summary and Recommendation

Buy oil and gas producers for value, growth, income and momentum. Our nine buy recommendations have the lowest McDep Ratios in each of our five groups. The lower the McDep Ratio, the more value of resources relative to the market value of equity and the nominal amount of debt. We estimate the value of resources with the expectation of a long-term oil price of \$70 a barrel. For companies more sensitive to operating leverage when price declined, we scaled back our resource estimate from the \$70 case. We would restore the reductions with greater confidence in future price and costs. Meanwhile, strong volume growth in oil and gas from fracking shale and tight formations has temporarily stalled ahead of a pickup again in the next few years. **Continental** Resources (CLR), Birchcliff Energy (BIREF) and Whiting Petroleum (WLL) may see a return to high volume growth per share as they reinvest all of cash flow. On the income standard, Royal Dutch Shell (RDS-A) and Total (TOT) deliver stable cash return of 7.6% and 5.8% respectively. **Dorchester Minerals (DMLP)** and **Sabine Royalty Trust (SBR)** pay Top Line royalty income of 7.2% and 6.2% respectively that can grow with oil price and shale production in the Permian Basin. Finally, positive stock price momentum spreads as more companies win the sign of the golden cross after enduring the curse of the death cross for a year and a half. The 50-day average crossing above the 200-day average marks the former while the 50 day crossing below the 200 day marks the latter. Positive stock price momentum accentuates our fundamental conviction.

Kurt H. Wulff, CFA



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			Mcl	Dep En	ergy Stoc	ks					
En	terpris	e '	Value, S	Segmen	ts, Yield a	and Mo	Dep R	atio			
						D	. 17 1 1	C.	(0())		
			D 1				it Value by	v Segmer	it (%)	D	
			Price	F 177	F ()	North	Rest of			Dist.	
	1 1/0		(US\$/sh)	EV/	Enterprise	Amer.	World	0.1	D	Yield	16.0
Sj	mbol/Rati	ng	9-May	Market	Value	Natural			Down-	NTM	McDe
			2016	Сар	(\$mm)	Gas	Gas	Prod'n	stream	(%)	Ratio
Global Integrated	VOM		00.57	1.06	161.000		12	(2)	20	2.4	0.01
Exxon Mobil Corporation	XOM		88.57	1.26	464,000	5	13	63	20	3.4	0.91
Chevron Corporation	CVX	D	100.35	1.35	253,000	2	11	68	19	4.3	0.80
Royal Dutch Shell	RDS-A	B		1.72	316,000	1	17	44	37	7.6	0.74
Total S.A.	TOT	В	47.98	1.53	173,000		22	55	23	5.8	0.64
Total or Median				1.44	1,206,000			59	21	5.0	0.77
Large Independent				=							
EOG Resources, Inc.	EOG		78.64	1.17	50,300	10	2	88		0.9	1.04
Occidental Petroleum Corp.	OXY		75.54	1.17	67,200	3	2	85	10	4.0	1.01
Devon Energy Corporation	DVN		30.04	1.76	26,100	25		65	9	0.8	0.95
Marathon Oil Corporation	MRO	В		1.71	16,500	6	1	92		1.7	0.70
ConocoPhillips	COP	В	41.65	1.76	92,000	11	12	77		2.4	0.66
Total or Median				1.71	252,000	10		85		1.7	0.95
Small Independent											
Cimarex Energy Company	XEC		110.46	1.12	11,500	32		68		0.3	1.20
Range Resources	RRC		41.70	1.44	10,000	70		30		0.2	0.99
California Resources	CRC		1.63	12.13	7,500	10		90		-	0.85
Continental Resources (32%)	CLR	В	38.74	1.50	6,900	20		80		-	0.77
Whiting Petroleum Corporation	WLL	В	10.02	2.54	6,900	5		95		-	0.56
Total or Median				1.50	43,000	20		80		-	0.85
Income											
San Juan Basin Royalty Trust	SJT		6.15	1.00	290	100		-		4.2	0.77
Dorchester Minerals, L.P.	DMLP	В	13.21	1.00	410	23		77		7.2	0.55
Cross Timbers Royalty Trust	CRT		15.88	1.00	100	52		48		7.3	0.55
Permian Basin RT	PBT		5.99	1.00	280	23		77		6.8	0.54
Sabine Royalty Trust	SBR	В	32.32	1.00	470	38		62		6.2	0.54
Total or Median				1.00	1,600	38		62		6.8	0.55
Canada											
EnCana Corporation	ECA		5.96	2.58	13,200	44		56		1.0	1.00
Imperial Oil Limited (30%)	IMO		31.21	1.35	10,800	1		73	26	1.4	0.86
Suncor Energy	SU		25.65	1.43	58,200	-		84	16	3.5	0.80
Cenovus Energy Inc.	CVE		14.31	1.32	15,600	7		84	8	1.1	0.77
Birchcliff Energy Ltd.	BIREF	В		1.98	1,200	77		23		-	0.51
Total or Median				1.43	99,000			73		1.1	0.80
Estimated measure value are	a lana ta		mico for -	1 .61180	10 a hamal	 	\$4.00 -				
Estimated present value presumes						i naturai ga	is, \$4.00 a	minon	biu.		
Estimated present value capped by				• `	,						
McDep Ratio = \mathbf{M} arket \mathbf{c} ap and \mathbf{L} For historical research see www.	-		it value of o	m and gas	and other bus	inesses					



			Table 2					
	Mc	Dep	Energy	Stocks				
Net	Preser	nt Va	lue and	McDen	Ratio			
			Price			Net		
			(US\$/sh)		Market	Present	Debt/	
	Symbol/R	ating	9-May	Shares	Cap	Value	Present	McDe
	B	= Buy	2016	(mm)	(US\$mm)	(US\$/sh)	Value	Ratie
Global Integrated								
Exxon Mobil Corporation	XOM		88.57	4,178	370,000	100.00	0.18	0.91
Chevron Corporation	CVX		100.35	1,870	188,000	135.00	0.21	0.80
Royal Dutch Shell	RDS-A	В	49.60	3,700	184,000	80.00	0.31	0.74
Total S.A.	TOT	В	47.98	2,350	113,000	90.00	0.22	0.64
Total or Median					855,000		0.21	0.77
Large Independent					,			
EOG Resources, Inc.	EOG		78.64	547	43,000	75.00	0.15	1.04
Occidental Petroleum Corp.	OXY		75.54	763	57,600	75.00	0.14	1.01
Devon Energy Corporation	DVN		30.04	492	14,800	33.00	0.41	0.95
Marathon Oil Corporation	MRO	В	11.44	845	9,670	20.00	0.29	0.70
ConocoPhillips	COP	B	41.65	1,245	52,000	80.00	0.28	0.66
Total or Median	001	B	11.05	1,210	177,100	00.00	0.28	0.95
Small Independent					177,100		0.20	0.75
Cimarex Energy Company	XEC		110.46	93	10,300	90.00	0.13	1.20
Range Resources	RRC		41.70	167	7,000	42.00	0.30	0.99
California Resources	CRC		1.63	382	600	5.00	0.78	0.85
Continental Resources (32%)	CLR	В	38.74	118	4,600	56.00	0.26	0.02
Whiting Petroleum Corporation	WLL	B	10.02	271	2,700	30.00	0.20	0.56
Total or Median	W LL	Б	10.02	271	25,000	30.00	0.34	0.85
Income					25,000		0.50	0.85
San Juan Basin Royalty Trust	SJT		6.15	47	290	8.00	-	0.77
Dorchester Minerals, L.P.	DMLP	В	13.21	31	410	24.00		0.77
Cross Timbers Royalty Trust	CRT	D	15.21	6	100	24.00	-	0.55
	PBT		5.99	47	280		-	0.53
Permian Basin RT		В		47		11.00	-	0.54
Sabine Royalty Trust	SBR	В	32.32	15	470	60.00	-	
Total or Median					1,600		-	0.55
Canada	ECA		5.05	950	5 100	6.00	0.61	1.00
EnCana Corporation	ECA		5.96	850	5,100	6.00	0.61	1.00
Imperial Oil Limited (30%)	IMO		31.21	255	8,000	38.00	0.22	0.86
Suncor Energy	SU		25.65	1,583	40,600	35.00	0.24	0.80
Cenovus Energy Inc.	CVE	-	14.31	825	11,800	20.00	0.19	0.77
Birchcliff Energy Ltd.	BIREF	В	3.85	154	600	11.00	0.26	0.51
Total or Median					66,000		0.24	0.80
Estimated present value presumes a long-t	erm price	for oil	of US\$70 a	barrel and	natural gas. \$4	4.00 a millio	on btu.	
Estimated present value presumes a rong e								
McDep Ratio = $Market cap and Debt to pr$					nesses			
For historical research see www.mcdep.co			i una guo an		1103505			



Value N	Ault	Energy S iples and		d			
		*	Dividen	d			
Ra	nked						
		I DV EV/I	Ebitda				
		J					
		Price	Adjustd				
		(US\$/sh)	Resrvs/	PV/	<i>EV</i> /		Dividend
Symbol/Ra	ting	9-May	Prod	Ebitda	Ebitda	P/E	NTM
B =	Buy	2016	NTM	NTM	NTM	NTM	(\$/sh)
				12.8		30	3.00
CVX		100.35	9.3	12.1	9.7	41	4.28
TOT	B	47.98	9.8	11.3	7.2	15	2.78
RDS-A	B	49.60	8.9	8.8	6.5	15	3.76
1			9.6	11.7	8.4	22	
DVN		30.04	9.0	18.1	17.2		0.24
EOG		78.64	8.1	16.0	16.6		0.67
OXY		75.54	8.2	14.8	14.9		3.00
COP	B	41.65	11.3	20.4	13.4		1.00
MRO	В	11.44	13.2	9.9	6.9		0.20
1			9.0	16.0	14.9		
RRC		41.70	14.6	31.4	31.2		0.08
XEC		110.46	7.4	16.4	19.6		0.32
CLR	В	38.74	11.4	19.5	15.1		-
CRC		1.63	11.2	15.5	13.2		-
WLL	В	10.02	13.1	15.4			-
1			11.4	16.4	15.1		
SJT		6.15	10.0	26.8	20.7	24	0.26
	В					16	2.02
							0.95
	_						0.41
							1.16
		10100					1110
			0.0	_0.0	11.0	10	
CVE		14.31	17.0	21.1	16.2		0.15
							0.43
							0.06
							0.90
	R						
	D	5.05					
			17.0	15.0	15.7		
1			11	16	14		
					ion		
						-	
	B = XOM CVX TOT RDS-A N DVN EOG OXY COP MRO N RRC XEC CLR CRC WLL N SBR DMLP PBT CRT N SBR DMLP PBT CRT N CRT M SBR DMLP PBT CRT N SBR DMLP PBT CRT N DMLP PBT CRT N DMLP	CVX B TOT B RDS-A B DVN C EOG C OXY B COP B MRO B MRO B RRC C CLR B CRC C WLL B SJT S SBR B PBT C CRC C SJT S SBR B PBT C CRT C IMO C SU S SU S SU C SU C	U $(US\$/sh)$ Symbol/Rating 9-May B = Buy 2016 XOM 88.57 CVX 100.35 TOT B 47.98 RDS-A B 49.60 n - - DVN 30.04 EOG EOG 78.64 OXY OXY 75.54 - DVN 30.04 EOG EOG 78.64 - OXY 75.54 - COP B 41.65 MRO B 11.44 n - - RRC 41.70 XEC XEC 110.46 - CLR B 38.74 CRC 1.63 - WLL B 10.02 n - - SJT 6.15 SBR SBR B 32.32 DMLP B 13.21 <	(US\$/sh) Resrvs/ Symbol/Rating 9-May Prod B = Buy 2016 NTM XOM 88.57 13.7 CVX 100.35 9.3 TOT B 47.98 9.8 RDS-A B 49.60 8.9 n 9.6 9.6 9.6 DVN 30.04 9.0 9.6 DVN 30.04 9.0 9.0 EOG 78.64 8.1 0.2 OXY 75.54 8.2 0.0 COP B 41.65 11.3 MRO B 11.44 13.2 n 9.0 9.0 9.0 RRC 41.70 14.6 XEC 110.46 7.4 CLR B 38.74 11.4 CRC 1.63 11.2 WLL B 10.02 13.1 n 11.44 5.99 SBR	(US\$/sh) Resrvs/ PV/ Symbol/Rating 9-May Prod Ebitda B = Buy 2016 NTM NTM XOM 88.57 13.7 12.8 CVX 100.35 9.3 12.1 TOT B 47.98 9.8 11.3 RDS-A B 49.60 8.9 8.8 n 9.6 11.7 10 10 DVN 30.04 9.0 18.1 16.0 OXY 75.54 8.2 14.8 16.0 OXY 75.54 8.2 14.8 16.0 OXY 75.54 8.2 14.8 16.0 MRO B 11.44 13.2 9.9 n 9.0 16.0 11.3 20.4 MRO B 11.44 13.2 9.9 n 9.0 16.0 14.6 31.4 XEC 110.46 7.4 16.4 <td< td=""><td>(US\$/sh) Resrvs/ PV/ EV/ Symbol/Rating 9-May Prod Ebitda Ebitda B = Buy 2016 NTM NTM NTM XOM 88.57 13.7 12.8 11.6 CVX 100.35 9.3 12.1 9.7 TOT B 47.98 9.8 11.3 7.2 RDS-A B 49.60 8.9 8.8 6.5 n 9.6 11.7 8.4 DVN 30.04 9.0 18.1 17.2 EOG 78.64 8.1 16.0 16.6 OXY 75.54 8.2 14.8 14.9 COP B 41.65 11.3 20.4 13.4 MRO B 11.44 13.2 9.9 6.9 n 9.0 16.0 14.9 5.1 15.1 CRC 11.046 7.4 16.4 19.6 CLR B</td><td>U (US\$/sh) Resrvs/ PV/ EV/ Symbol/Rating 9-May Prod Ebitda Ebitda P/E B = Buy 2016 NTM NTM NTM NTM NTM XOM 88.57 13.7 12.8 11.6 30 CVX 100.35 9.3 12.1 9.7 41 TOT B 47.98 9.8 11.3 7.2 15 RDS-A B 49.60 8.9 8.8 6.5 15 n 9.6 11.7 8.4 2.2 14 17.2 EOG 78.64 8.1 16.0 16.6 13.4 14.9 OVN 30.04 9.0 18.1 17.2 14.6 14.4 14.9 14.8 14.9 14.9 14.4 13.4 14.9 14.4 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 15.1 16.0</td></td<>	(US\$/sh) Resrvs/ PV/ EV/ Symbol/Rating 9-May Prod Ebitda Ebitda B = Buy 2016 NTM NTM NTM XOM 88.57 13.7 12.8 11.6 CVX 100.35 9.3 12.1 9.7 TOT B 47.98 9.8 11.3 7.2 RDS-A B 49.60 8.9 8.8 6.5 n 9.6 11.7 8.4 DVN 30.04 9.0 18.1 17.2 EOG 78.64 8.1 16.0 16.6 OXY 75.54 8.2 14.8 14.9 COP B 41.65 11.3 20.4 13.4 MRO B 11.44 13.2 9.9 6.9 n 9.0 16.0 14.9 5.1 15.1 CRC 11.046 7.4 16.4 19.6 CLR B	U (US\$/sh) Resrvs/ PV/ EV/ Symbol/Rating 9-May Prod Ebitda Ebitda P/E B = Buy 2016 NTM NTM NTM NTM NTM XOM 88.57 13.7 12.8 11.6 30 CVX 100.35 9.3 12.1 9.7 41 TOT B 47.98 9.8 11.3 7.2 15 RDS-A B 49.60 8.9 8.8 6.5 15 n 9.6 11.7 8.4 2.2 14 17.2 EOG 78.64 8.1 16.0 16.6 13.4 14.9 OVN 30.04 9.0 18.1 17.2 14.6 14.4 14.9 14.8 14.9 14.9 14.4 13.4 14.9 14.4 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 15.1 16.0

Earnings; PV = Present Value of oil and gas and other businesses For historical research see www.mcdep.com



			Tab	le 4						
		Mc	Dep Ene	ergy Sto	ocks					
			eturn Ye	0.		16				
			y Unleve							
	Nank	ub	y Oneve	itu it						
			Price	Price			Equity	Un	levered	
			(\$/sh)	(\$/sh)	Price	Cash	Total		Total	
	Symbol/	Rati	9-May	31-Dec	Change	Distrib.	Return	Debt	Return	McDep
			2016	2015	(%)	(%)	(%)	(\$/sh)	(%)	Ratio
Global Integrated										
Exxon Mobil Corporation	XOM		88.57	77.95	14	1	15	23	11	0.91
Chevron Corporation	CVX		100.35	89.96	12	1	13	35	9	0.80
Royal Dutch Shell	RDS-A	В	49.60	45.79	8	2	10	36	6	0.74
Total S.A.	TOT	В	47.98	44.95	7	2	8	26	5	0.64
Median					10		12		8	0.77
Large Independent										
Occidental Petroleum Corp.	OXY		75.54	67.61	12	1	13	13	11	1.01
EOG Resources, Inc.	EOG		78.64	70.79	11	0	12	13	10	1.04
Devon Energy Corporation	DVN		30.04	32.00	(6)	1	(5)	23	(3)	0.95
Marathon Oil Corporation	MRO	В	11.44	12.58	(9)	0	(9)	8	(5)	0.70
ConocoPhillips	COP	В	41.65	46.69	(11)	1	(10)	32	(6)	0.66
Median					(6)		(5)		(3)	0.95
Small Independent					(. /		(-)		(-)	
Range Resources	RRC		41.70	24.62	69	0	69	18	40	0.99
Continental Resources (32%)	CLR	в	38.74	22.98	69	-	69	19	37	0.77
Cimarex Energy Company	XEC		110.46	89.38	24	0	24	13	21	1.20
Whiting Petroleum Corporation	WLL	в	10.02	9.44	6	-	6	15	2	0.56
California Resources	CRC		1.63	2.33	(30)	-	(30)	18	(3)	0.85
Median	ene		1.05	2.55	24		24	10	21	0.85
Income					27		27		21	0.05
San Juan Basin Royalty Trust	SJT		6.15	4.14	49	2	50	-	50	0.77
Dorchester Minerals, L.P.	DMLP	В	13.21	9.89	34	4	37	-	37	0.55
Cross Timbers Royalty Trust	CRT	B	15.88	13.01	22	4	26	-	26	0.55
Sabine Royalty Trust	SBR	В	32.32	26.26	23	2	25	-	25	0.55
Permian Basin RT	PBT	Б	5.99	5.06	18	1	20	-	20	0.54
Median	IDI		5.99	5.00	23	1	26	-	20	0.54
Canada					25		20		20	0.55
Birchcliff Energy Ltd.	BIREF	В	3.85	2.93	31	_	31	4	14	0.51
Cenovus Energy Inc.	CVE	Б	14.31	12.62	13	- 1	14	5	14	0.31
EnCana Corporation	ECA	+	5.96	5.09	13	1	14	9	6	1.00
Suncor Energy	SU	+	25.65	25.80	(1)	1	0	11	0	0.80
Imperial Oil Limited (30%)	IMO	+	31.21	32.52	(1)	0	(4)	11	(3)	0.80
Median	INIO		31.21	52.52	13	0	14	11	(3)	0.80
Median					15		14		0	0.80
Grand Median					13		14		10	0.77
Natural Gas (\$/mmbtu)		+	2.10	1 2 2	(10)		14		10	0.77
Oil -West Texas Intermediate (\$/bbl)		+	2.10	2.33	17					
S&P 500		+-+	43.38	37.06	17					
500 JUU		+	2,059	2,044	1					



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Date	Series	Symbol	<u>Subject</u>	<u>Theme</u>
26-Apr	ISI	CLR	Continental Resources	Disciplined Visionary
13-Apr	MR			Road to Profits
5-Apr	ISI	TOT	Total S.A.	Globally Diversified Income
22-Mar	Π	CRT, DMLP	, PBT, SBR, SJT	Income Payer Appreciation Potential 55%-110%
15-Mar	MR			Best Oil Outlook in Seven Years
7-Mar	Π	COP, MRO,	CLR, WLL	Buy Low
29-Feb	ISI	DMLP	Dorchester Minerals, L.P.	Oil Income for All Seasons
19-Feb	ISI	DVN	Devon Energy	Flexibility to Adapt
19-Feb	ISI	MRO	Marathon Oil	Flexibility to Adapt
9-Feb	MR			Outperforming in 2016
3-Feb	ISI	XOM	Exxon Mobil	For Nervous Investors Seeking Reliable Income
28-Jan	ISI	BIREF	Birchcliff Energy	Protection and Growth
22-Jan	П	CRT, PBT, S	BR, SJT, DMLP	Income Payer Surprises
21-Jan	ISI	SU	Suncor Energy Inc.	Likely Acquirer of Canadian Oil Sands
19-Jan	ISI	COSWF	Canadian Oil Sands Ltd.	Farewell
13-Jan	П	MRO, DVN,	COP, OXY, EOG	Wild Markets in Oil and Securities
1-Jan	MR			Lower Natural Gas to \$4.00 from \$4.50
21-Dec	П	DMLP, SBR	, CRT, SJT, PBT	Income Payers at Low Price
15-Dec	MR			Buys for 2016 and Beyond
8-Dec	ISI	RDS	Royal Dutch Shell plc	Buy on Acquisition Pro Forma
23-Nov	ISI	SJT	San Juan Basin Royalty Trust	Steep Price Decline Triggers Buy
18-Nov	П	MRO, DVN,	COP, OXY, EOG	Large Cap Independent Producers for Upside
12-Nov	ISI	BIREF	Birchcliff Energy	Encouraging Volume, Uncertain Price
10-Nov	MR	CLR, XEC, V	WLL, RRC, CRC	Small Cap Producers for the Upcycle
6-Nov	ISI	DMLP	Dorchester Minerals, L.P.	25% Volume Beat
2-Nov	ISI	XOM	Exxon Mobil	Potential Gain with Minimal Pain
27-Oct	ISI	COSWF	Canadian Oil Sands Ltd.	Deal Likely at Higher Price
21-Oct	ISI	SJT	San Juan Basin Royalty Trust	Southwest Bank Potential Successor Trustee
13-Oct	MR			Hedge Mideast Political Risk
5-Oct	ISI	COSWF	Canadian Oil Sands Ltd.	Suncor Makes Tender Offer at 0.57 McDep Ratio
1-Oct	ISI	SJT	San Juan Basin Royalty Trust	Trust Officer Resigns
29-Sep	П	COSWF, BI	REF, IMO, CVE, ECA	High-Torque Canadian Producers
22-Sep		CRT	Cross Timbers Royalty Trust	Low Risk 7.5% Income
-	MR			Endless Discussion
10-Sep		DMLP	Dorchester Minerals, L.P.	Raise Distribution to 6.3% Cash Yield
1-Sep	П	MRO, DVN,	COP, OXY, EOG	Resilient Large Cap Independent Producers
25-Aug	П		WLL, RRC, CRC	Small Cap Producer Survivors
11-Aug				Bottom May Be Near
3-Aug	Π	XOM, RDS,	CVX, TOT	Global Energy Stalwarts
	MR = N	leter Reader (published monthly on second or t	hird Tuesday)
		dependent Sto	ck Idea	
	II = Indu	istry Idea		



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