

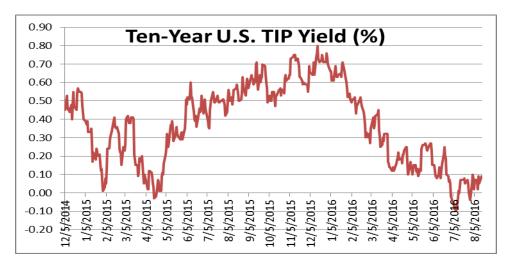
The Money Glut

						Preser	t Value by	Segmen	nt (%)		
			Price			North	Rest of			Dist.	
			(US\$/sh)	EV/	Enterprise	Amer.	World			Yield	
	Symbol/Rati	ing	15-Aug	Market	Value	Natural	Natural	Oil	Down-	NTM	McDep
			2016	Cap	(\$mm)	Gas	Gas	Prod'n	stream	(%)	Ratio
Royal Dutch Shell	RDS-A	В	50.02	1.68	337,000	2	21	54	24	7.5	0.74
Total S.A.	TOT	В	48.60	1.51	175,000		20	58	22	5.6	0.64
Marathon Oil Corporation	MRO	В	14.90	1.60	20,200	10	2	88		1.3	0.82
ConocoPhillips	COP	В	42.18	1.75	92,000	13	13	75		2.4	0.73
Continental Resources (32%)	CLR	В	47.54	1.40	7,900	22		78		-	0.89
Dorchester Minerals, L.P.	DMLP	В	15.81	1.00	490	28		72		7.4	0.66
Sabine Royalty Trust	SBR	В	39.15	1.00	570	38		62		6.2	0.65
Birchcliff Energy Ltd.	BIREF	В	6.96	1.58	1,700	74		26		-	0.73

Summary and Recommendation

Rising oil and stock price looks like a trend that can last a while in the eventual adjustment to a depreciation of money. Record low, often negative, interest rates attest to a glut of money spawned by global central bank policies. The real yield on the Ten-Year U.S. Treasury Inflation Protected Security bumps along the zero line (see chart below). More money translates to higher price for a resource like oil whose supply expands at a slower rate. Investors need to keep up with the trend to preserve and enhance inflation-adjusted portfolio value. Oil and gas stocks represent ownership of companies that hold and are creating assets whose price is on the rise, we believe. After positive performance in 2016, values remain attractive to us (see <u>Tables 1-4</u> on pages 2-5).

Kurt H. Wulff, CFA





					ble 1						
			Mcl	Dep En	ergy Stoc	ks					
En	terpris	e '	Value, S	Segmen	ts, Yield a	and Mo	Dep R	atio			
						D		6	. (0 ()		
							t Value by	v Segmer	ıt (%)		
			Price	T T 7 /	F	North	Rest of			Dist.	
	1.10		(US\$/sh)	EV/	Enterprise	Amer.	World			Yield	14.5
Sy	mbol/Rati	ng	0	Market	Value		Natural		Down-	NTM	McDe
			2016	Cap	(\$ <i>mm</i>)	Gas	Gas	Prod'n	stream	(%)	Ratio
Global Integrated	VOM		07.01	1.04	462.000		16			2.4	0.00
Exxon Mobil Corporation	XOM		87.81	1.26	462,000	6	16	55	23	3.4	0.90
Chevron Corporation	CVX	P	102.77	1.35	259,000	2	13	66	19	4.2	0.81
Royal Dutch Shell	RDS-A	B		1.68	337,000	2	21	54	24	7.5	0.74
Total S.A.	TOT	В	48.60	1.51	175,000		20	58	22	5.6	0.64
Total or Median				1.43	1,233,000			56	23	4.9	0.77
Large Independent											
EOG Resources, Inc.	EOG		90.55	1.15	56,900	11	1	87		0.7	1.18
Devon Energy Corporation	DVN		41.96	1.50	32,500	28		62	10	0.6	1.16
Occidental Petroleum Corp.	OXY		75.05	1.17	67,300	4	2	86	7	4.0	1.00
Marathon Oil Corporation	MRO	В		1.60	20,200	10	2	88		1.3	0.82
ConocoPhillips	COP	В	42.18	1.75	92,000	13	13	75		2.4	0.73
Total or Median				1.50	269,000	11		86		1.3	1.00
Small Independent											
Cimarex Energy Company	XEC		131.01	1.11	13,500	34		66		0.2	1.08
Range Resources	RRC		39.14	1.46	9,600	70		30		0.2	0.95
Continental Resources (32%)	CLR	В	47.54	1.40	7,900	22		78		-	0.89
Whiting Petroleum Corporation	WLL		8.27	3.03	7,100	10		90		-	0.87
California Resources	CRC		13.35	13.83	7,300	13		88		-	0.83
Total or Median				1.46	45,000	22		78		-	0.89
Income											
San Juan Basin Royalty Trust	SJT		6.24	1.00	290	100		-		7.7	0.78
Dorchester Minerals, L.P.	DMLP	В	15.81	1.00	490	28		72		7.4	0.66
Sabine Royalty Trust	SBR	В	39.15	1.00	570	38		62		6.2	0.65
Cross Timbers Royalty Trust	CRT		18.85	1.00	110	57		43		7.2	0.65
Permian Basin RT	PBT		7.02	1.00	330	23		77		8.6	0.64
Total or Median				1.00	1,800	38		62		7.4	0.65
Canada											
EnCana Corporation	ECA		9.55	2.05	16,600	43		57		0.6	1.22
Imperial Oil Limited (30%)	IMO		31.67	1.35	10,900	0		64	36	1.5	0.87
Suncor Energy	SU		28.35	1.34	63,300	-		84	16	3.2	0.85
Cenovus Energy Inc.	CVE		15.26	1.32	16,800	7		76	16	1.0	0.81
Birchcliff Energy Ltd.	BIREF	В		1.58	1,700	74		26		-	0.73
Total or Median		-		1.35	109,000			64		1.0	0.85
					,						
Estimated present value presumes						l natural ga	ıs, \$4.00 a	million	otu.		
Estimated present value capped by	y unlevere	d ca	sh flow m	ultiple (EV	V/Ebitda)						
McDep Ratio = Market cap and \mathbf{L}	bebt to pre	sen	t value of o	oil and gas	and other hus	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	15-Aug	Shares	Cap	Value	Present	McDe
	B	= Buy	2016	(mm)	(US\$mm)	(US\$/sh)	Value	Rati
Global Integrated								
Exxon Mobil Corporation	XOM		87.81	4,178	367,000	100.00	0.18	0.90
Chevron Corporation	CVX		102.77	1,872	192,000	135.00	0.21	0.81
Royal Dutch Shell	RDS-A	В	50.02	4,007	200,000	80.00	0.30	0.74
Total S.A.	TOT	В	48.60	2,379	116,000	90.00	0.22	0.64
Total or Median					875,000		0.21	0.77
Large Independent					,			
EOG Resources, Inc.	EOG		90.55	547	49,500	75.00	0.15	1.18
Devon Energy Corporation	DVN		41.96	516	21,600	33.00	0.39	1.16
Occidental Petroleum Corp.	OXY		75.05	764	57,300	75.00	0.15	1.00
Marathon Oil Corporation	MRO	В	14.90	847	12,630	20.00	0.31	0.82
ConocoPhillips	COP	B	42.18	1,245	53,000	70.00	0.31	0.73
Total or Median	001	B	12.10	1,213	194,000	70.00	0.31	1.00
Small Independent					174,000		0.51	1.00
Cimarex Energy Company	XEC		131.01	93	12,200	120.00	0.10	1.08
Range Resources	RRC		39.14	167	6,500	42.00	0.30	0.95
Continental Resources (32%)	CLR	В	47.54	118	5,600	56.00	0.26	0.95
Whiting Petroleum Corporation	WLL	Б	8.27	285	2,400	12.00	0.20	0.85
California Resources	CRC		13.35	40	2,400	50.00	0.38	0.87
Total or Median	CILL		15.55	40	27,000	50.00	0.30	0.89
Income					27,000		0.50	0.89
San Juan Basin Royalty Trust	SJT		6.24	47	290	8.00		0.78
	DMLP	В	0.24 15.81	31	490	24.00	-	0.78
Dorchester Minerals, L.P.							-	
Sabine Royalty Trust	SBR	В	39.15	15	570	60.00	-	0.65
Cross Timbers Royalty Trust	CRT		18.85	6	110	29.00	-	0.65
Permian Basin RT	PBT		7.02	47	330	11.00	-	0.64
Total or Median					1,800		-	0.65
Canada	201			0.50	0.100		0.10	
EnCana Corporation	ECA		9.55	850	8,100	6.00	0.63	1.22
Imperial Oil Limited (30%)	IMO		31.67	255	8,100	38.00	0.23	0.87
Suncor Energy	SU		28.35	1,665	47,200	35.00	0.22	0.85
Cenovus Energy Inc.	CVE		15.26	833	12,700	20.00	0.20	0.81
Birchcliff Energy Ltd.	BIREF	В	6.96	153	1,100	11.00	0.27	0.73
Total or Median					77,000		0.23	0.85
Estimated present value presumes a long-t	erm price	for oil	of US\$70 a	barrel and	natural gas. \$	4.00 a millio	on btu.	
Estimated present value capped by unlever					, ·			
McDep Ratio = \mathbf{M} arket \mathbf{c} ap and $\mathbf{D}\mathbf{e}$ bt to \mathbf{p} r					inesses			
For historical research see www.mcdep.co			- ma guo un					



			Table 3					
			Energy S					
	Value I	Mult	iples and	Dividen	d			
	Ra	nked	by EV/I	Ebitda				
			Price	Adjustd				
			(US\$/sh)	Resrvs/	PV/	EV/		Dividena
S	ymbol/Ra		15-Aug	Prod	Ebitda	Ebitda	P/E	NTM
	B =	Buy	2016	NTM	NTM	NTM	NTM	(\$/sh
Global Integrated	VOL		07.01	145	10.5	10.4	25	2.00
Exxon Mobil Corporation	XOM		87.81	14.5	13.7	12.4	35	3.00
Chevron Corporation	CVX	_	102.77	9.2	13.6	11.0	54	4.28
Royal Dutch Shell	RDS-A	B	50.02	9.8	11.9	8.7	34	3.76
Total S.A.	TOT	B	48.60	9.9	10.8	6.9	16	2.72
Median				9.8	12.7	9.9	35	
Large Independent								
EOG Resources, Inc.	EOG		90.55	8.2	15.5	18.2		0.67
Devon Energy Corporation	DVN		41.96	9.0	15.5	18.0		0.24
Occidental Petroleum Corp.	OXY		75.05	8.3	15.9	15.9		3.00
Marathon Oil Corporation	MRO	B	14.90	12.7	17.0	14.0		0.20
ConocoPhillips	COP	B	42.18	11.2	17.3	12.6		1.00
Median				9.0	15.9	15.9		
Small Independent								
Range Resources	RRC		39.14	14.4	22.4	21.4		0.08
Cimarex Energy Company	XEC		131.01	7.0	16.1	17.5		0.32
Continental Resources (32%)	CLR	B	47.54	11.4	18.5	16.5		-
California Resources	CRC		13.35	11.7	16.2	13.5		-
Whiting Petroleum Corporation	WLL		8.27	9.4	13.2	11.5		-
Median				11.4	16.2	16.5		
Income								
Sabine Royalty Trust	SBR	В	39.15	9.6	24.6	16.1	16	2.44
Dorchester Minerals, L.P.	DMLP	В	15.81	6.7	19.6	12.9	17	1.17
San Juan Basin Royalty Trust	SJT		6.24	9.9	16.1	12.6	13	0.48
Cross Timbers Royalty Trust	CRT		18.85	6.6	18.8	12.2	14	1.36
Permian Basin RT	PBT		7.02	8.6	18.1	11.6	12	0.61
Median				8.6	18.8	12.6	14	
Canada								
EnCana Corporation	ECA		9.55	5.4	12.7	15.5		0.06
Imperial Oil Limited (30%)	IMO		31.67	35.8	14.6	12.7		0.46
Cenovus Energy Inc.	CVE		15.26	16.7	14.4	11.6		0.15
Birchcliff Energy Ltd.	BIREF	В	6.96	15.1	15.3	11.3		-
Suncor Energy	SU		28.35	21.6	12.7	10.8		0.89
Median				16.7	14.4	11.6		
Grand Median				10	16	13		
EV = Enterprise Value = Market Cap and D	aht. Ehitd	$\mathbf{a} = \mathbf{E}\mathbf{a}$	rnings bafor	a interact to	v depropiet	ion		
EV = Enterprise Value = Market Cap and Land amortization; NTM = Next Twelve Mon								
Earnings: PV – Present Value of oil and ga								

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



			Tab							
		Mc	Dep Ene	ergy Sto	ocks					
			ar-to-D		16					
	Ranke	d b	y Unleve	ered To	tal Ret	urn				
		ĪĪ								
			Price	Price			Equity	Un	levered	
			(\$/sh)	(\$/sh)	Price	Cash	Total		Total	
	Symbol/	Rati	15-Aug	31-Dec	0	Distrib.	Return		Return	McDep
			2016	2015	(%)	(%)	(%)	(\$/sh)	(%)	Ratic
Global Integrated										
Chevron Corporation	CVX		102.77	89.96	14	2	17	36	12	0.81
Exxon Mobil Corporation	XOM		87.81	77.95	13	2	15	23	11	0.90
Royal Dutch Shell	RDS-A	В	50.02	45.79	9	4	13	34	8	0.74
Total S.A.	TOT	B	48.60	44.95	8	3	11	25	7	0.64
Median					11		14		9	0.77
Large Independent										
EOG Resources, Inc.	EOG		90.55	70.79	28	1	29	13	24	1.18
Devon Energy Corporation	DVN		41.96	32.00	31	1	32	21	19	1.16
Marathon Oil Corporation	MRO	B	14.90	12.58	18	1	19	9	11	0.82
Occidental Petroleum Corp.	OXY		75.05	67.61	11	2	13	13	11	1.00
ConocoPhillips	COP	В	42.18	46.69	(10)	1	(9)	32	(5)	0.73
Median					18		19		11	1.00
Small Independent										
Continental Resources (32%)	CLR	B	47.54	22.98	107	-	107	19	58	0.89
Cimarex Energy Company	XEC		131.01	89.38	47	0	47	14	40	1.08
Range Resources	RRC		39.14	24.62	59	0	59	18	34	0.95
Whiting Petroleum Corporation	WLL		8.27	9.44	(12)	-	(12)	17	(4)	0.87
California Resources	CRC		13.35	23.30	(43)	-	(43)	170	(5)	0.83
Median					47		47		34	0.89
Income										
Dorchester Minerals, L.P.	DMLP	В	15.81	9.89	60	6	66	-	66	0.66
San Juan Basin Royalty Trust	SJT		6.24	4.14	51	3	53	-	53	0.78
Sabine Royalty Trust	SBR	В	39.15	26.26	49	4	53	-	53	0.65
Cross Timbers Royalty Trust	CRT		18.85	13.01	45	5	50	-	50	0.65
Permian Basin RT	PBT		7.02	5.06	39	3	42	-	42	0.64
Median					49		53		53	0.65
Canada										
Birchcliff Energy Ltd.	BIREF	В	6.96	2.93	138	-	138	4	58	0.73
EnCana Corporation	ECA		9.55	5.09	88	1	88	10	30	1.22
Cenovus Energy Inc.	CVE		15.26	12.62	21	1	22	5	15	0.81
Suncor Energy	SU		28.35	25.80	10	2	12	10	8	0.85
Imperial Oil Limited (30%)	IMO		31.67	32.52	(3)	1	(2)	11	(1)	0.87
Median					21		22		15	0.85
Grand Median					24		25		17	0.83
Natural Gas (\$/mmbtu)			2.60	2.33	12					
Oil -West Texas Intermediate (\$/bbl)			45.82	37.06	24					
S&P 500			2,190	2,044	7					



			Index of 2015-201	6 Research
Date	<u>Series</u>	<u>Symbol</u>	<u>Subject</u>	<u>Theme</u>
11-Aug		XEC	Cimarex Energy	Raise NPV to \$120 from \$90
l-Aug	Π	XOM, RDS,		Real Return Standouts
1-Aug	ISI	WLL	Whiting Petroleum	Remove Buy Designation
22-Jul	П	CRT, DMLF	P, PBT, SBR, SJT	Income Payers in Uptrend
12-Jul	MR			Mid-Year Strategy
7-Jul	ISI	XOM	Exxon Mobil	Durable Real Return
22-Jun	ISI	BIREF	Birchcliff Energy	Half Billion Dollar Deal with Encana
21-Jun	ISI	SJT	San Juan Basin Royalty Trust	Record Administrative Costs
	ISI	PBT	Permian Basin Royalty Trust	Raise Distribution to 9%
14-Jun	MR			Good Year for Oil and Gas
10-Jun	ISI	SU	Suncor Energy Inc.	Revitalized after Wildfire
7-Jun	ISI	WLL	Whiting Petroleum	Looking Up Again
23-May	ISI	DMLP	Dorchester Minerals, L.P.	Raise Distribution to 9%
17-May		COP	ConocoPhillips	Strategy Reset to Low Risk Value
12-May	ISI	BIREF	Birchcliff Energy	Record Low Operating Cost
10-May	MR			Value, Growth, Income and Momentum
9-May	ISI	RRC	Range Resources	Restore Net Present Value to \$42 a Share
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, DMLF	P, 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	Π	CRT, PBT, S	SBR, 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, SBF	R, 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			, COP, OXY, EOG	Large Cap Independent Producers for Upside
12-Nov		BIREF	Birchcliff Energy	Encouraging Volume, Uncertain Price
10-Nov			WLL, RRC, CRC	Small Cap Producers for the Upcycle
5-Nov	ISI	DMLP	Dorchester Minerals, L.P.	25% Volume Beat
2-Nov	ISI	XOM	Exxon Mobil	Potential Gain with Minimal Pain
			published monthly on or about se	cond or third Tuesday)
		dependent Sto	ck Idea	
	II Ind	ustry Idea		



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.

McDep or its employees may take positions in stocks the firm covers for research purposes. No trades in a subject stock shall be made within a week before or after a change in recommendation.

Certification: I, Kurt H. Wulff, certify that the views expressed in this research analysis accurately reflect my personal views about the subject securities and issuers. No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research analysis.

Research Methodology/Ratings Description: McDep LLC is an independent research originator focused on oil and gas stocks exclusively. The firm applies the forty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation.