McDep LLC

Industry Idea

Analysis of Oil and Gas Stocks
Intraday November 8, 2018

Shale Players
CLR, XEC, HES, DVN, MRO

	Symbol/Rating	Price (US$/sh) 8-Nov 2018	Market Cap (US$mm)	Enterprise Value ($mm)	EV/ Market Cap	EV/ Ebitda NTM	PV/ Ebitda NTM	Oil Prod'n/ Ebitda (%)	Dist. Yield NTM (%)	McDep Ratio (EV/PV)
Hess Corporation	HES	59.36	17,700	26,800	1.52	8.6	8.1	90	1.7	1.05
Continental Resources	CLR	50.09	18,800	25,100	1.34	5.8	7.5	81	-	0.77
Cimarex Energy Company	XEC	90.70	8,700	10,000	1.16	5.6	8.3	83	0.8	0.68
Devon Energy Corporation	DVN	32.70	16,200	22,800	1.41	5.8	9.2	87	1.0	0.63
Marathon Oil Corporation	MRO	18.15	15,410	22,200	1.44	4.7	8.7	89	1.1	0.54
Total or Median			*76,800*	*106,900*	*1.41*	*5.8*	*8.3*	*87*	*1.0*	*0.68*

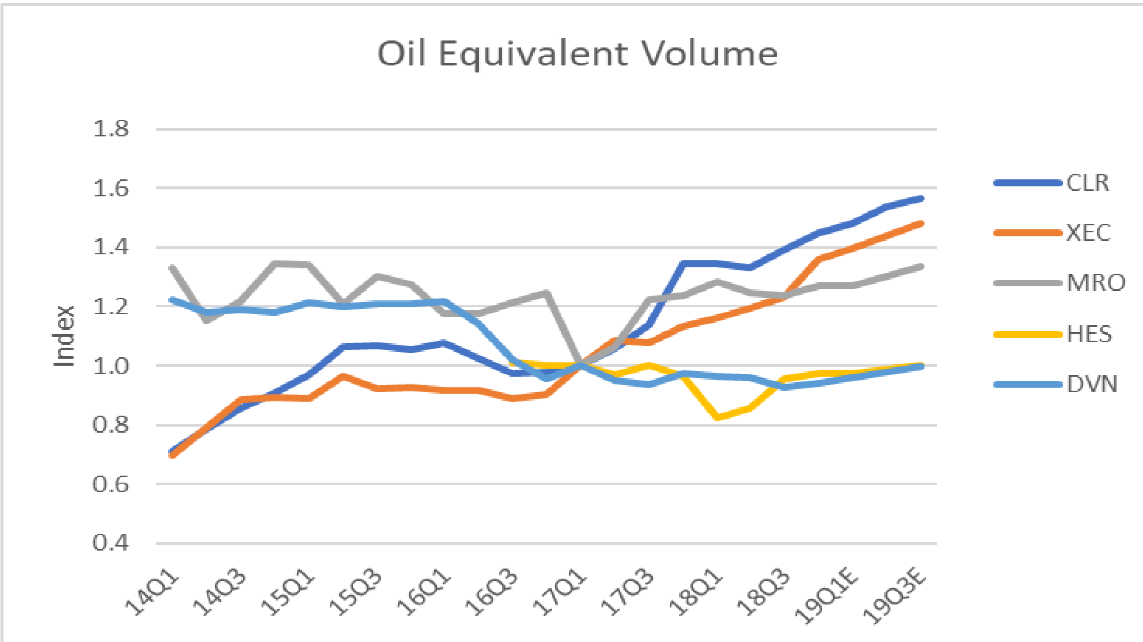
Summary and Recommendation

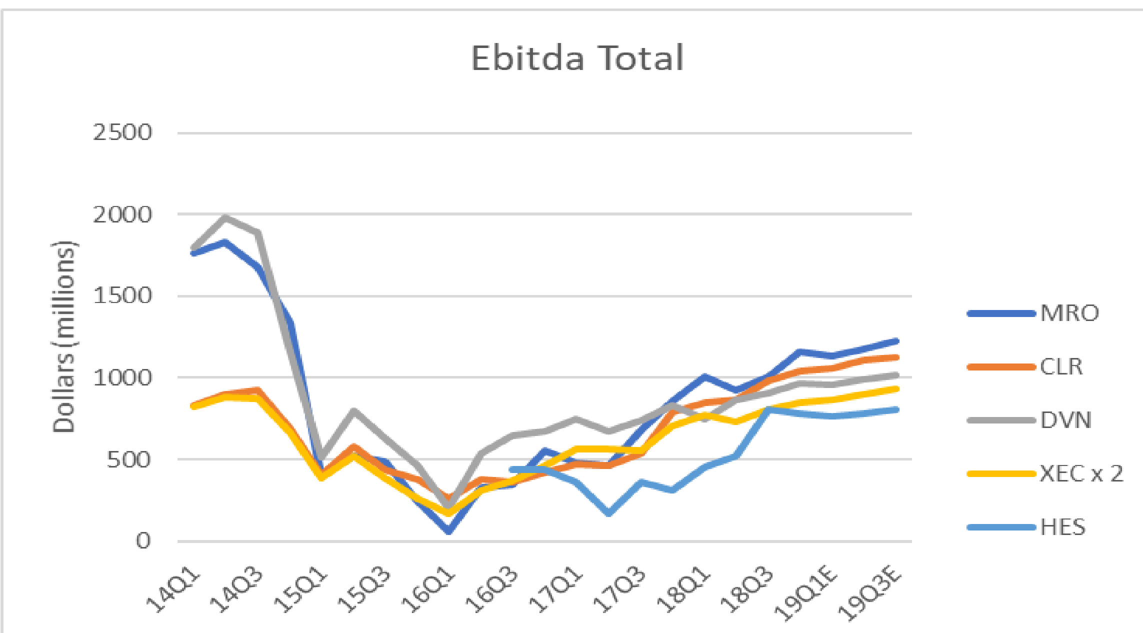
Five stocks in our Mid-Size Independent Group offer oil volume growth, price sensitivity and sustainable cash flow at a low median McDep Ratio of 0.68, down from 0.75 three months ago. **Continental Resources (CLR)** and **Cimarex Energy (XEC)** score the top historical volume trends (see chart Volume on page 2). **Hess Corporation (HES)**, **Devon Energy (DVN)** and **Marathon Oil (MRO)** are transforming to higher growth oil prospects. Depending on equivalent oil price, volume growth may drive cash flow higher (see chart Ebitda on page 2).

- XEC stock performs best in the past three months after lagging most in 2018. The company's conservative financial strategy delivers the best earnings trend (see chart EPS on page 3). Wide differentials for oil price and natural gas price in the Permian Basin for temporary lack of adequate pipeline capacity to markets remain a current challenge.
- CLR and DVN have each declined more than 20% in stock price since August 9 when we last featured mid-size stocks as a group. Most of that decline occurred in October and before the U.S. elections on November 6. We are optimistic about stock price gains in a more favorable phase of the election and seasonal cycles beginning about now.
- MRO is the McDep Ratio pick of the group. Stock price is down by 10%, which is near the peer median. Derived from third quarter results released on November 7, our estimated Ebitda of a billion dollars exceeded our estimate made three months ago by 7%, also near the peer median extra.
- HES at a McDep Ratio near 1.0 seems to reflect the value of currently producing properties. A giant oil find offshore Guyana may justify raising Net Present Value (NPV) to perhaps $80 a share from $55. Management plans an Investor Day on December 12 that will undoubtedly feature the South American discovery.

Third quarter results disclosed from October 30 to November 7 are included in updated abbreviated financial models for five companies (see tables Operating and Financial Performance on page 3-5). Valuation tables add context, including McDep Ratio and year-to-date performance, for all 22 stocks in our coverage (see Tables 1-4 on pages 6-9).

Kurt H. Wulff, CFA


Oil Equivalent Volume
Index
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
14Q1
14Q3
15Q1
15Q3
16Q1
16Q3
17Q1
17Q3
18Q1
18Q3
19Q1E
19Q3E
CLR
XEC
MRO
HES
DVN


Ebitda Total
Dollars (millions)
2500
2000
1500
1000
500
0
14Q1
14Q3
15Q1
15Q3
16Q1
16Q3
17Q1
17Q3
18Q1
18Q3
19Q1E
19Q3E
MRO
CLR
DVN
XEC x 2
HES

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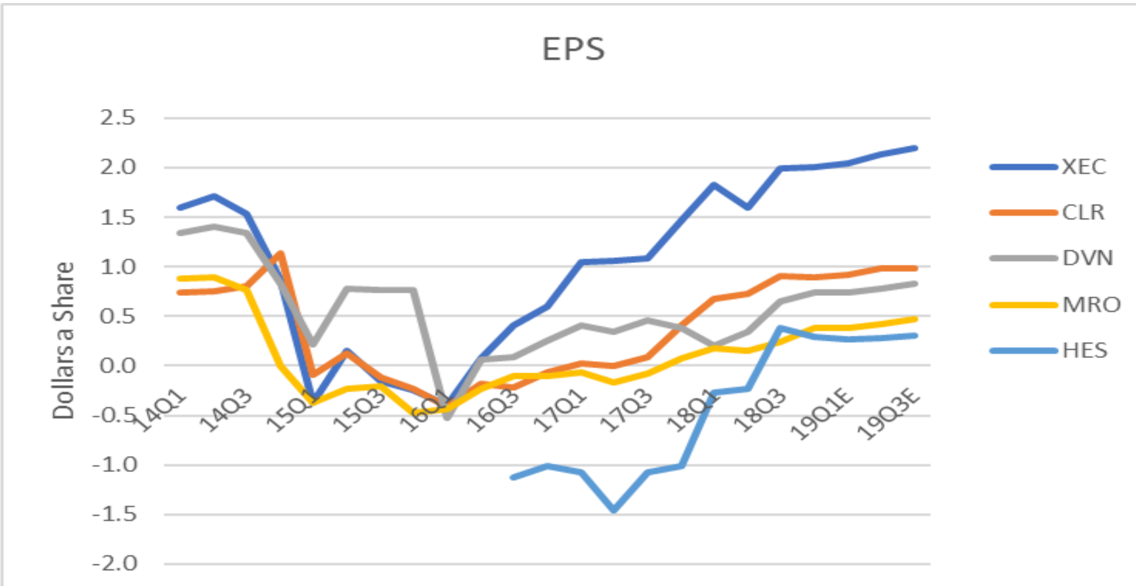

Cimarex Energy Company										
Next Twelve Months Operating and Financial Estimates										
										Next Twelve Months
	Q3	***Year***	*Q2*	*Q3*	*Q4E*	***Year***	*Q1E*	*Q2E*	*Q3E*	
	9/30/17	***2017***	*6/30/18*	*9/30/18*	*12/31/18*	***2017***	*3/31/19*	*6/30/19*	*9/30/19*	***9/30/19***
Volume (barrels oil equivalent)										
Daily (mboed)	191	**190**	212	219	241	**219**	248	255	263	**252**
Period (mmboe)	17.3	**68.9**	19.3	19.9	21.9	**79.6**	22.3	23.2	23.9	**91.3**
Price (US$/boe)	25.81	**26.98**	28.30	28.97	29.35	**29.14**	29.35	29.35	29.35	**29.35**
Expense (US$/boe)	9.69	**9.61**	9.30	8.79	9.92	**9.30**	9.92	9.92	9.92	**9.92**
Ebitda - Production (US$/boe)	16.12	**17.37**	19.01	20.18	19.43	**19.84**	19.43	19.43	19.43	**19.43**
Downstream VA (US$/boe)										
Ebitda - Total										
Unit (US$/boe)	16.12	**17.37**	19.01	20.18	19.43	**19.84**	19.43	19.43	19.43	**19.43**
Period (US$mm)	280	**1,197**	366	401	425	**1,579**	433	451	465	**1,774**
Deprec, Deplet,Amort, Other	112	**464**	162	149	171	**636**	174	181	187	**712**
Ebit (US$mm)	168	**733**	204	253	255	**943**	259	270	278	**1,062**
Interest	11	**51**	12	12	12	**48**	12	12	12	**48**
Ebt (US$mm)	157	**682**	192	241	243	**895**	247	258	266	**1,014**
Income Tax	55	**239**	40	51	51	**188**	52	54	56	**213**
Net Income (US$mm)										
Exploration and Production										
Other										
Unallocated										
Total	102	**443**	152	190	192	**707**	195	204	210	**801**
Shares (millions)	94	**95**	95	96	96	**96**	96	96	96	**96**
Earnings Per Share (US$)	1.09	**4.67**	1.59	1.99	2.01	**7.41**	2.05	2.13	2.20	**8.39**
Dividend (US$/share)	0.08	**0.32**	0.16	0.18	0.18	**0.68**	0.18	0.18	0.18	**0.72**
Present Value (US$mm)	12,703		14,935	14,719	14,719		14,719	14,719	14,719	
Debt (US$mm)	1,483		1,579	1,349	1,349		1,349	1,349	1,349	
Net Present Value (US$mm)	11,220		13,356	13,370	13,370		13,370	13,370	13,370	
NPV (US$/share)	120		140	140	140		140	140	140	**140**

Continental Resources
Next Twelve Months Operating and Financial Estimates

	Q3	***Year***	*Q2*	*Q3*	*Q4E*	***Year***	*Q1E*	*Q2E*	*Q3E*	***Next Twelve Months***
	9/30/17	***2017***	*6/30/18*	*9/30/18*	*12/31/18*	***2018***	*3/31/19*	*6/30/19*	*9/30/19*	***9/30/19***
Volume (barrels oil equivalent)										
Daily (mboed)	243	**243**	284	297	309	**295**	316	329	334	**322**
Period (mmboe)	22.3	**88.5**	25.8	27.4	28.4	**107.5**	28.4	29.9	30.8	**117.6**
Price (US$/boe)	31.98	**33.62**	42.13	44.84	45.42	**43.50**	45.88	45.88	45.42	**45.65**
Expense (US$/boe)	8.06	**8.18**	8.55	8.99	8.75	**8.68**	8.78	8.78	8.75	**8.76**
Ebitda - Production (US$/boe)	23.92	**25.44**	33.58	35.84	36.68	**34.82**	37.09	37.09	36.68	**36.88**
Downstream VA (US$/boe)										
Ebitda - Total										
Unit (US$/boe)	23.92	**25.44**	33.58	35.84	36.68	**34.82**	37.09	37.09	36.68	**36.88**
Period (US$mm)	534	**2,251**	868	980	1,043	**3,744**	1,055	1,110	1,129	**4,337**
Deprec, Deplet,Amort, Other	408	**1,657**	447	480	543	**1,924**	543	570	587	**2,242**
Ebit (US$mm)	127	**594**	421	500	501	**1,820**	513	539	542	**2,095**
Interest	75	**295**	74	73	74	**297**	74	74	74	**296**
Ebt (US$mm)	52	**299**	347	427	427	**1,523**	439	465	468	**1,799**
Income Tax	18	**105**	73	90	90	**320**	92	98	98	**378**
Net Income (US$mm)										
Exploration and Production										
Other										
Unallocated										
Total	34	**194**	274	338	337	**1,203**	347	368	370	**1,421**
Shares (millions)	373	**374**	375	375	375	**375**	375	375	375	**375**
Earnings Per Share (US$)	0.09	**0.52**	0.73	0.90	0.90	**3.21**	0.92	0.98	0.99	**3.79**
Dividend (US$/share)										
Present Value (US$mm)	27,557		32,559	32,424	32,424		32,424	32,424	32,424	
Debt (US$mm)	6,669		6,309	6,174	6,174		6,174	6,174	6,174	
Net Present Value (US$mm)	20,888		26,250	26,250	26,250		26,250	26,250	26,250	
NPV (US$/share)	56		70	70	70		70	70	70	**70**

Devon Energy
Next Twelve Months Operating and Financial Estimates

	Q3	***Year***	*Q2*	*Q3*	*Q4E*	***Year***	*Q1E*	*Q2E*	*Q3E*	***Next Twelve Months***
	9/30/17	***2017***	*6/30/18*	*9/30/18*	*12/31/18*	***2017***	*3/31/19*	*6/30/19*	*9/30/19*	***9/30/19***
Volume (barrels oil equivalent)										
Daily (mboed)	527	**544**	542	522	530	**534**	540	551	562	**546**
Period (mmboe)	48	**198**	49	48	49	**195**	49	50	52	**199**
Price (US$/boe)	25.68	**25.97**	31.83	33.49	34.35	**31.85**	34.35	34.35	34.35	**34.35**
Expense (US$/boe)	12.68	**13.03**	14.70	14.59	14.59	**14.72**	14.59	14.60	14.61	**14.60**
Ebitda - Production (US$/boe)	13.00	**12.94**	17.13	18.91	19.76	**17.12**	19.76	19.75	19.74	**19.75**
Downstream VA (US$/boe)	2.25	**2.14**	0.41	-	-	**0.74**	-	-	-	**-**
Ebitda - Total										
Unit (US$/boe)	15.24	**15.08**	17.53	18.91	19.76	**17.86**	19.76	19.75	19.74	**19.75**
Period (US$mm)	739	**2,992**	865	909	963	**3,485**	961	991	1,021	**3,935**
Deprec, Deplet,Amort, Other	238	**1,204**	514	377	376	**1,758**	376	376	376	**1,504**
Ebit (US$mm)	501	**1,789**	351	531	587	**1,727**	585	615	645	**2,431**
Interest	127	**496**	125	125	125	**500**	125	125	125	**500**
Ebt (US$mm)	374	**1,293**	226	406	462	**1,227**	460	490	520	**1,931**
Income Tax	131	**452**	47	85	97	**258**	97	103	109	**406**
Net Income (US$mm)										
Exploration and Production										
Other										
Unallocated										
Total	243	**840**	178	321	365	**970**	363	387	411	**1,526**
Shares (millions)	529	**529**	524	494	494	**503**	494	494	494	**494**
Earnings Per Share (US$)	0.46	**1.59**	0.34	0.65	0.74	**1.93**	0.74	0.78	0.83	**3.09**
Dividend (US$/share)	0.06	**0.18**	0.08	0.08	0.08	**0.24**	0.08	0.08	0.08	**0.32**
Present Value (US$mm)	31,551		36,160	36,267	36,267		36,267	36,267	36,267	
Debt (US$mm)	7,746		4,720	6,627	6,627		6,627	6,627	6,627	
Net Present Value (US$mm)	23,805		31,440	29,640	29,640		29,640	29,640	29,640	
NPV (US$/share)	45		60	60	60		60	60	60	**60**

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Hess Corporation

Next Twelve Months Operating and Financial Estimates

	Q3	***Year***	*Q2*	*Q3*	*Q4E*	***Year***	*Q1E*	*Q2E*	*Q3E*	***Next Twelve Months***
	9/30/17	***2017***	*6/30/18*	*9/30/18*	*12/31/18*	***2018***	*3/31/19*	*6/30/19*	*9/30/19*	***9/30/19***
Volume (barrels oil equivalent)										
Daily (mboed)	311	**305**	265	297	301	**280**	301	306	310	**305**
Period (mmboe)	28.6	**111.5**	24.1	27.3	27.7	**102.1**	27.1	27.8	28.6	**111.2**
Price (US$/boe)	35.13	**37.01**	44.93	47.88	48.21	**46.21**	48.21	48.21	48.21	**48.21**
Expense (US$/boe)	22.54	**26.18**	23.49	18.33	20.00	**21.14**	20.00	20.00	20.00	**20.00**
Ebitda - Production (US$/boe)	12.59	**10.83**	21.44	29.55	28.21	**25.08**	28.21	28.21	28.21	**28.21**
Downstream VA (US$/boe)										
Ebitda - Total										
Unit (US$/boe)	12.59	**10.83**	21.44	29.55	28.21	**25.08**	28.21	28.21	28.21	**28.21**
Period (US$mm)	360	**1,207**	517	807	782	**2,560**	765	785	805	**3,137**
Deprec, Deplet,Amort, Other	799	**3,110**	506	565	572	**2,100**	566	579	593	**2,311**
Ebit (US$mm)	(439)	**(1,903)**	11	242	210	**460**	199	206	213	**826**
Interest	79	**325**	98	99	99	**399**	99	99	99	**396**
Ebt (US$mm)	(518)	**(2,228)**	(87)	143	111	**61**	100	107	114	**430**
Income Tax	(181)	**(780)**	(18)	30	23	**13**	21	22	24	**90**
Net Income (US$mm)										
Exploration and Production										
Other										
Unallocated										
Total	(337)	**(1,448)**	(68)	113	87	**48**	79	84	90	**340**
Shares (millions)	315	**314**	298	297	297	**278**	297	297	297	**297**
Earnings Per Share (US$)	(1.07)	**(4.61)**	(0.23)	0.38	0.29	**0.17**	0.26	0.28	0.30	**1.14**
Dividend (US$/share)	0.25	**1.00**	0.25	0.25	0.25	**1.00**	0.25	0.25	0.25	**1.00**
Present Value (US$mm)			23,759	25,528	25,528		25,528	25,528	25,528	**25,528**
Debt (US$mm)			7,397	9,177	9,177		9,177	9,177	9,177	**9,177**
Net Present Value (US$mm)			16,363	16,352	16,352		16,352	16,352	16,352	**16,352**
NPV (US$/share)			55	55	55		55	55	55	**55**

Marathon Oil Corporation

Next Twelve Months Operating and Financial Estimates

	Q3	***Year***	*Q2*	*Q3*	*Q4E*	***Year***	*Q1E*	*Q2E*	*Q3E*	***Next Twelve Months***
	9/30/17	***2017***	*6/30/18*	*9/30/18*	*12/31/18*	***2018***	*3/31/19*	*6/30/19*	*9/30/19*	***9/30/19***
Volume (barrels oil equivalent)										
Daily (mboed)	410	**380**	418	415	426	**422**	426	437	449	**434**
Period (mmboe)	37.7	**138.5**	38.1	38.1	39.2	**154.2**	38.3	39.8	41.3	**158.5**
Price (US$/boe)	29.77	**30.33**	37.51	40.11	42.54	**39.87**	42.54	42.65	42.76	**42.62**
Expense (US$/boe)	11.77	**12.42**	13.16	13.74	13.00	**13.27**	13.00	13.00	13.00	**13.00**
Ebitda - Production (US$/boe)	18.00	**17.92**	24.35	26.37	29.54	**26.60**	29.54	29.65	29.76	**29.62**
Downstream VA (US$/boe)										
Ebitda - Total										
Unit (US$/boe)	18.00	**17.92**	24.35	26.37	29.54	**26.60**	29.54	29.65	29.76	**29.62**
Period (US$mm)	679	**2,482**	927	1,006	1,157	**4,101**	1,132	1,179	1,228	**4,695**
Deprec, Deplet,Amort, Other	749	**2,539**	700	690	682	**2,844**	666	666	666	**2,680**
Ebit (US$mm)	(70)	**(57)**	227	316	475	**1,257**	466	513	562	**2,015**
Interest	35	**270**	65	58	58	**226**	58	58	58	**232**
Ebt (US$mm)	(105)	**(327)**	162	258	417	**1,031**	408	455	504	**1,783**
Income Tax	(37)	**(114)**	34	54	88	**217**	86	96	106	**374**
Net Income (US$mm)										
Exploration and Production										
Other										
Unallocated										
Total	(68)	**(212)**	128	204	329	**815**	322	359	398	**1,409**
Shares (millions)	850	**850**	855	849	849	**851**	849	849	849	**849**
Earnings Per Share (US$)	(0.08)	**(0.25)**	0.15	0.24	0.39	**0.96**	0.38	0.42	0.47	**1.66**
Dividend (US$/share)	0.05	**0.20**	0.05	0.05	0.05	**0.20**	0.05	0.05	0.05	**0.20**
Present Value (US$mm)	23,194		40,912	40,704	40,704		40,704	40,704	40,704	
Debt (US$mm)	7,044		6,712	6,744	6,744		6,744	6,744	6,744	
Net Present Value (US$mm)	16,150		34,200	33,960	33,960		33,960	33,960	33,960	
NPV (US$/share)	19		40	40	40		40	40	40	**40**

Table 1

McDep Energy Stocks

Ranked by McDep Ratio

	Symbol/Rating	Price (US$/sh) 8-Nov 2018	Market Cap (US$mm)	Enterprise Value ($mm)	EV/ Market Cap	EV/ Ebitda NTM	PV/ Ebitda NTM	Oil Prod'n/ Ebitda (%)	Dist. Yield NTM (%)	McDep Ratio (EV/PV)
Integrated										
Exxon Mobil Corporation	XOM	81.91	350,000	440,000	1.26	7.8	8.4	50	4.0	0.93
Chevron Corporation	CVX	119.37	229,000	285,000	1.25	6.2	7.4	61	3.8	0.83
Suncor Energy	SU	33.99	55,000	74,000	1.33	5.8	7.9	76	3.2	0.74
Royal Dutch Shell	RDS-B	64.82	271,000	387,000	1.43	6.6	9.1	50	5.8	0.72
Total or Median			*905,000*	*1,186,000*	*1.30*	*6.4*	*8.1*	*56*	*3.9*	*0.78*
Large Independent										
Occidental Petroleum Corp.	OXY	72.42	55,300	69,000	1.25	7.2	7.4	65	4.3	0.97
ConocoPhillips	COP	66.85	78,000	99,000	1.26	6.1	7.0	77	1.8	0.86
EOG Resources, Inc.	EOG	104.95	61,100	68,200	1.12	6.4	7.8	90	0.8	0.82
Pioneer Natural Resources	PXD	156.91	26,800	29,400	1.10	7.7	9.6	94	0.2	0.80
Total or Median			*221,200*	*265,600*	*1.18*	*6.8*	*7.6*	*84*	*1.3*	*0.84*
Mid-Size Independent										
Hess Corporation	HES	59.36	17,700	26,800	1.52	8.6	8.1	90	1.7	1.05
Continental Resources	CLR	50.09	18,800	25,100	1.34	5.8	7.5	81	-	0.77
Cimarex Energy Company	XEC	90.70	8,700	10,000	1.16	5.6	8.3	83	0.8	0.68
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Marathon Oil Corporation	MRO	18.15	15,410	22,200	1.44	4.7	8.7	89	1.1	0.54
Total or Median			*76,800*	*106,900*	*1.41*	*5.8*	*8.3*	*87*	*1.0*	*0.68*
Small Independent										
California Resources	CRC	26.94	1,200	8,000	6.9	5.5	7.7	91	-	0.72
Range Resources	RRC	17.04	4,200	8,900	2.11	6.3	10.3	46	0.5	0.61
Whiting Petroleum Corporation	WLL	35.58	3,300	6,400	1.97	3.8	7.4	98	-	0.52
Birchcliff Energy Ltd.	BIREF	3.28	900	1,500	1.73	4.5	9.1	48	2.4	0.50
Total or Median			*9,600*	*24,800*	*2.04*	*5.0*	*8.4*	*69*	*0.2*	*0.57*
Income										
Dorchester Minerals, L.P.	DMLP	18.50	600	600	1.00	8.3	10.8	87	10.1	0.77
Sabine Royalty Trust	SBR	38.11	560	560	1.00	11.7	15.4	66	8.5	0.76
Permian Basin RT	PBT	7.38	340	340	1.00	11.0	15.0	80	9.0	0.74
San Juan Basin Royalty Trust	SJT	5.30	250	250	1.00	9.0	13.6	-	8.5	0.66
Cross Timbers Royalty Trust	CRT	14.87	90	90	1.00	8.1	13.6	38	10.1	0.59
Total or Median			*1,840*	*1,840*	*1.00*	*9.0*	*13.6*	*66*	*9.0*	*0.74*

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation, amort.
Estimated Ebitda (cash flow) tied to one-year prices of US$70 a barrel and $3 a milllion btu. NTM = Next Twelve Months ending 9/30/19.
Estimated Present Value (PV) presumes a long-term price for oil of US$70 a barrel and natural gas, $4.00 a million btu.
McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses. For historical research see www.mcdep.com

Table 2

McDep Energy Stocks

Unlevered Cash Flow (Ebitda)

Ranked by Total Ebitda

		Price (US$/sh) 8-Nov 2018	*Upstream NTM Volume (mmboe)*	*Upstream NTM Equiv. Price ($/boe)*	*Upstream NTM Ebitda Margin (%)*	*Upstream NTM Ebitda ($/boe)*	*Down-stream Uplift ($/boe)*	*Total Ebitda NTM ($mm)*	*Distrib./ Ebitda (%)*	*Distrib. NTM ($/sh)*
	Symbol/Rating									
Integrated										
Royal Dutch Shell	RDS-B	64.82	1374	48.98	63	31.00	11.64	58,594	27	3.76
Exxon Mobil Corporation	XOM	81.91	1436	54.05	50	27.10	12.26	56,513	25	3.28
Chevron Corporation	CVX	119.37	1105	54.62	63	34.60	7.24	46,234	19	4.48
Suncor Energy	SU	33.99	309	61.61	50	31.07	9.87	12,667	14	1.10
Total or Median			*4224*	*54.33*	*57*	*31.04*	*10.76*	*51,374*	*22*	
Large Independent										
ConocoPhillips	COP	66.85	485	54.41	61	33.40	0.00	16,207	9	1.22
EOG Resources, Inc.	EOG	104.95	294	48.63	74	36.13	0.00	10,637	5	0.88
Occidental Petroleum Corp.	OXY	72.42	259	46.30	57	26.30	10.88	9,638	25	3.12
Pioneer Natural Resources	PXD	156.91	120	44.71	72	32.10	0.00	3,842	1	0.32
Total or Median			*1159*	*47.46*	*67*	*32.75*	*0.00*	*10,138*	*7*	
Mid-Size Independent										
Continental Resources	CLR	50.09	118	45.65	81	36.90	0.00	4,340	-	-
Marathon Oil Corporation	MRO	18.15	159	42.62	69	29.60	0.00	4,695	4	0.20
Devon Energy Corporation	DVN	32.70	199	34.35	58	19.80	0.00	3,935	4	0.32
Hess Corporation	HES	59.36	111	48.21	58	28.20	0.00	3,137	9	1.00
Cimarex Energy Company	XEC	90.70	91	29.35	66	19.40	0.00	1,774	4	0.72
Total or Median			*678*	*42.62*	*66*	*28.20*	*0.00*	*3,935*	*4*	
Small Independent										
Whiting Petroleum Corporation	WLL	35.58	49	48.89	70	34.30	0.00	1,673	-	-
California Resources	CRC	26.94	49	56.79	51	29.20	0.00	1,444	-	-
Range Resources	RRC	17.04	141	21.68	46	10.00	0.00	1,413	1	0.08
Birchcliff Energy Ltd.	BIREF	3.28	23	19.94	75	14.90	0.00	337	6	0.08
Total or Median			*262*	*35.29*	*61*	*22.05*	*0.00*	*1,428*	*1*	
Income										
Dorchester Minerals, L.P.	DMLP	18.50	2.47	41.41	70	29.04	0.00	72	84	1.87
Sabine Royalty Trust	SBR	38.11	1.73	32.89	83	27.36	0.00	47	100	3.25
Permian Basin RT	PBT	7.38	1.16	44.12	61	26.81	0.00	31	100	0.67
San Juan Basin Royalty Trust	SJT	5.30	3.99	13.93	49	6.89	0.00	27	76	0.45
Cross Timbers Royalty Trust	CRT	14.87	0.39	44.45	63	27.92	0.00	11	82	1.50
Total or Median			*10*	*41.41*	*63*	*27.36*	*0.00*	*31*	*84*	

For historical research see www.mcdep.com

Table 3

McDep Energy Stocks
Net Present Value Per Share

	Symbol/Rating	Price (US$/sh) 8-Nov 2018	Shares (mm)	Debt ($mm)	P/E NTM	Devel. Resrvs/ Prod NTM	Undev/ Devel. Resrvs (%)	Nat Gas/ Ebitda (%)	Top Line/ Ebitda (%)	Net Present Value (US$/sh)
Integrated										
Chevron Corporation	CVX	119.37	1,917	56,349	12	6.8	57	26		150.00
Royal Dutch Shell	RDS-B	64.82	4,177	116,710	11	7.2	22	31		100.00
Exxon Mobil Corporation	XOM	81.91	4,271	90,130	13	9.7	52	28		90.00
Suncor Energy	SU	33.99	1,628	18,438	10	8.2	87			50.00
Median						*7.7*	*55*			
Large Independent										
Pioneer Natural Resources	PXD	156.91	171	2,600	23	7.5	9	6		200.00
EOG Resources, Inc.	EOG	104.95	582	7,071	14	4.6	43	10		130.00
ConocoPhillips	COP	66.85	1,173	20,375	11	7.2	31	23		80.00
Occidental Petroleum Corp.	OXY	72.42	763	13,700	14	7.4	35	7		75.00
Median						*7.3*	*33*			
Mid-Size Independent										
Cimarex Energy Company	XEC	90.70	96	1,349	11	4.5	35	17		140.00
Continental Resources	CLR	50.09	375	6,333	13	5.1	121	19		70.00
Devon Energy Corporation	DVN	32.70	494	6,627	11	8.7	24	13		60.00
Hess Corporation	HES	59.36	297	9,177		6.5	59	10		55.00
Marathon Oil Corporation	MRO	18.15	849	6,744	11	5.7	60	11		40.00
Median						*5.7*	*59*			
Small Independent										
Whiting Petroleum Corporation	WLL	35.58	92	3,170	13	6.9	84	2		100.00
California Resources	CRC	26.94	43	6,800		8.9	41	9		100.00
Range Resources	RRC	17.04	247	4,657	13	9.9	83	54		40.00
Birchcliff Energy Ltd.	BIREF	3.28	268	641	11	7.2	228	52		9.00
Median						*8.0*	*83*			
Income										
Sabine Royalty Trust	SBR	38.11	15	-	12	10.4	3	33	100	50.00
Cross Timbers Royalty Trust	CRT	14.87	6	-	10	13.2	-	69	82	25.00
Dorchester Minerals, L.P.	DMLP	18.50	32	-	13	6.5	-	16	71	24.00
Permian Basin RT	PBT	7.38	47	-	11	6.8	-	17	48	10.00
San Juan Basin Royalty Trust	SJT	5.30	47	-	12	10.5	-	100	-	8.00
Median						*10.4*				

P/E = Stock Price to Earnings. For historical research see www.mcdep.com.

Table 4

McDep Energy Stocks
Total Return Year-to-Date 2018
Ranked by Unlevered Total Return

	Symbol/Rati	*Price ($/sh) 8-Nov 2018*	*Price ($/sh) 29-Dec 2017*	*Price Change (%)*	*Cash Distrib. (%)*	*Equity Total Return (%)*	*Debt ($/sh)*	*Unlevered Total Return (%)*	*McDep Ratio*
Integrated									
Exxon Mobil Corporation	XOM	81.91	83.64	(2)	3	1	21	1	0.93
Royal Dutch Shell	RDS-B	64.82	68.29	(5)	4	(1)	28	(1)	0.72
Chevron Corporation	CVX	119.37	125.19	(5)	3	(2)	29	(2)	0.83
Suncor Energy	SU	33.99	36.72	(7)	2	(5)	11	(4)	0.74
Median				*(5)*		*(1)*		*(1)*	*0.78*
Large Independent									
ConocoPhillips	COP	66.85	54.89	22	2	23	17	18	0.86
Occidental Petroleum Corp.	OXY	72.42	73.66	(2)	3	1	18	1	0.97
EOG Resources, Inc.	EOG	104.95	107.91	(3)	0	(2)	12	(2)	0.82
Pioneer Natural Resources	PXD	156.91	172.85	(9)	0	(9)	15	(8)	0.80
Median				*(2)*		*(0)*		*(0)*	*0.84*
Mid-Size Independent									
Hess Corporation	HES	59.36	47.47	25	2	27	31	16	1.05
Marathon Oil Corporation	MRO	18.15	16.93	7	1	8	8	6	0.54
Continental Resources	CLR	50.09	52.97	(5)	-	(5)	17	(4)	0.77
Devon Energy Corporation	DVN	32.70	41.40	(21)	1	(20)	13	(15)	0.63
Cimarex Energy Company	XEC	90.70	122.01	(26)	0	(25)	14	(23)	0.68
Median				*(5)*		*(5)*		*(4)*	*0.68*
Small Independent									
Whiting Petroleum Corporation	WLL	35.58	26.48	34	-	34	34	15	0.52
California Resources	CRC	26.94	19.44	39	-	39	159	4	0.72
Range Resources	RRC	17.04	17.06	(0)	0	0	19	0	0.61
Birchcliff Energy Ltd.	BIREF	3.28	3.50	(6)	2	(5)	2	(3)	0.50
Median				*17*		*17*		*2*	*0.57*
Income									
Dorchester Minerals, L.P.	DMLP	18.50	15.20	22	9	31	-	31	0.77
Cross Timbers Royalty Trust	CRT	14.87	14.69	1	7	8	-	8	0.59
Sabine Royalty Trust	SBR	38.11	44.60	(15)	5	(10)	-	(10)	0.76
Permian Basin RT	PBT	7.38	8.87	(17)	5	(12)	-	(12)	0.74
San Juan Basin Royalty Trust	SJT	5.30	8.24	(36)	3	(32)	-	(32)	0.66
Median				*(15)*		*(10)*		*(10)*	*0.74*
Grand Median				*(4)*		*(2)*		*(1)*	*0.74*
Natural Gas ($/mmbtu)		3.55	2.95	20					
Oil -West Texas Intermediate ($/bbl)		60.66	60.09	1					
Total Stock Market - U.S.	VTI	143.31	137.25	4	1	6			
Developed Markets - ex US	VEA	40.40	44.86	(10)	2	(8)			
Emerging Markets	VWO	39.08	45.91	(15)	2	(13)			
Total Stock Market - World	VT	72.00	74.26	(3)	2	(1)			
Source: *McDep LLC, Yahoo, CME Group, Bloomberg*			For historical research see www.mcdep.com						

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